

# **Salt Lake City International Airport**

## **Tenant Design Standards**



## 1.0 Purpose and Procedure

The purpose of the Salt Lake City International Airport's Tenant Design Standards is to provide minimum required standards for new future development projects, and to ensure that the projects will be attractive, well designed, and will be consistent with design goals of the Airport. The Tenant Design Standards apply to areas that would primarily be viewed or accessed by the general public, or where design elements are important to maintain the aesthetics and general design of the Airport. The design guidelines are intended to be flexible in order to allow creative interpretation and accommodate project conditions. These standards are intended to be used in conjunction with Federal Aviation Administration (FAA) and Salt Lake City Department of Airports (Airport) policies, rules and regulations, Airline Use Agreements (AUA) or other related documents or standards. The Executive Director of the Airport reserves the right to modify or wave any or all of the requirements in this document, at any time.

### **The Tenant Design Standards are developed to:**

- A.** Ensure quality development of new construction and development proposals to enhance the quality of the traveler's experience, and to provide a safe and convenient facility for passengers.
  
- B.** Improve and maintain the design characteristics and goals of the Airport facilities by encouraging unifying design components through landscape, signage, building details, street furniture, art, and other design elements.
  
- C.** Promote a unified environment in which tenants can incorporate consistent, creative and harmonious design and at the same time maintain their identity.
  
- D.** Encourage site design that complements the site and setting of the surrounding area, and promotes a positive passenger experience.
  
- E.** Achieve design of new projects that is compatible with Airport operations and Federal Aviation Administration requirements, and improve and simplify wayfinding for customers
  
- F.** The Tenant Design standards are divided into five sections. Section A is Tenant Design Standards, Section B is Retail/Food and Beverage and Food Court Tenant Design Standards, Section C is Ground Transportation Design Standards, Section D is Rental Car Design Standards, and Section E is North Cargo Area Performance and Development Standards.

## 2.0 List of Acronyms

<b>ADA</b>	Americans with Disabilities Act
<b>AHJ</b>	Authority Having Jurisdiction
<b>ANSI</b>	American National Standards Institute
<b>AOA</b>	Airport Operations Area
<b>Arc Flash</b>	Arc Flash Hazard Analysis
<b>A/V</b>	Audio / Video
<b>BAS</b>	Building Automated System
<b>BIM</b>	Building Information Modeling
<b>BOCA</b>	Building Officials Code Administrators International, Inc.
<b>BOH</b>	Back of House
<b>CAD</b>	Computer Aided Design
<b>CBP</b>	Customs and Border Protection
<b>CEO</b>	Chief Executive Officer
<b>CD</b>	Compact Disk
<b>DPDT</b>	Double Pole Double Throw
<b>DRC</b>	Design Review Committee
<b>DVD</b>	Digital Visual Disk
<b>FAA</b>	Federal Aviation Administration
<b>FOH</b>	Front of House
<b>FRP</b>	Fiberglass Reinforced Panels
<b>FSC Certified</b>	Forest Stewardship Council Certified
<b>GC</b>	General Contractor
<b>GIS</b>	Geographic Information System
<b>HID</b>	High Intensity Discharge
<b>HVAC</b>	Heating, Ventilation, and Air Conditioning

<b>IBC</b>	International Building Code
<b>IMC</b>	International Mechanical Code
<b>IPC</b>	International Plumbing Code
<b>IT</b>	Information Technology
<b>LEED</b>	Leadership in Energy and Environmental Design
<b>LOD</b>	Landlord's Lease Outline drawing
<b>MAG</b>	Minimum Annual Guarantee
<b>NEC</b>	National Electric Code
<b>NFPA</b>	National Fire Protection Agency
<b>NTP</b>	Notice to Proceed
<b>OSHA</b>	Occupational Safety and Health Administration
<b>PBX</b>	Private Branch Exchange
<b>PDF</b>	Portable Document Format
<b>POS</b>	Point of Sale
<b>PPE FR</b>	Personal Protective Equipment, FR rated for electrical testing
<b>PVC</b>	Polyvinyl Chloride
<b>RMU</b>	Retail Merchandising Units
<b>Airport</b>	Salt Lake City Department of Airports
<b>SLC</b>	Salt Lake City
<b>TSA</b>	Transportation Security Administration
<b>UL</b>	Underwriters Laboratory
<b>VAV</b>	Variable Air Volume
<b>VCT</b>	Vinyl Composition tile
<b>VOC</b>	Volatile Organic Compound

### **3.0 Design Review Committee (DRC)**

**A.** The Salt Lake City Department of Airports established a Design Review Committee (DRC) to provide an approval process for new development proposals general design elements. Prior to the installation of new improvements, the DRC reviews and approves plans, specifications, and proposals of future development with their accompanying design elements.

**B.** The DRC typically meets weekly or as new submittals are presented for Committee review. The chair of the DRC may call special meetings if there is an emergency or special need.

#### **3.1 Role of the Design Review Committee (DRC)**

The role of the DRC is to assist in the planning, design, and construction of new projects, and to provide a review and approval process for design. The DRC also provides review and approvals for proposed modifications of existing facilities. The DRC has the responsibility for determining if individual designs meet the design standards. The DRC review applies to new construction, alteration, or modification of usage of airport facilities. The DRC does not typically review projects outside of general public areas or viewed by the public such as runways, taxiways, airfield, tenant offices, and temporary facilities unless there is a design element. Additionally the DRC would not typically review projects involving general maintenance work and repairs unless they will materially alter the appearance or function of an airport facility. The Department of Airports Executive Director reserves the right to overrule or modify any decision or finding of the Design Review Committee.

#### **3.2 Submittals to the Design Review Committee (DRC)**

**A.** To present a new project to the DRC, a conceptual site plan will be prepared and submitted that shows the location and design aspects of the proposal. The site plan will show the existing and planned improvements including items such as, structures, walks, driveways, parking, fences, walls, utilities, signage, screening, illumination, colors, fixtures, heights, and other design elements are planned to be used in the design. Any other sketches, diagrams, or concept notes can be included that may fully describe the intended concept. The site plan will be clearly named and include data and dimensions. A letter describing the project and design aspects will accompany the site plan.

**B.** Elevations of the proposal will be shown on the site plan. The elevations will clearly show the proposal, heights, dimensions, materials, equipment, and sizes of the proposal in relation to surrounding uses.

Samples of materials to be used including colors, textures, shapes, and description of materials will also be included.

**C.** If relevant, a landscape plan will be submitted showing structures, walkways, fences, walls, elevation changes, irrigation systems, vegetation, ground cover, and similar landscape elements will be shown on a landscape plan. Existing landscaped areas that would be removed or disturbed will be replaced and finished to match the surrounding buildings, structures, and areas.

**D.** Proposed signs will be shown on a site plan that indicate the size, dimensions, shape, colors, materials, illumination, text, and the proposed location. Proposed signs will be compatible with the existing design elements of the surrounding buildings and adjacent areas.

**E.** Photos of the existing conditions may also be submitted to help describe the proposed development action. Photos may also include adjacent spaces and uses that may be affected by the proposed action.

**F.** A materials board may also be submitted to the DRC to help describe the intended colors and materials to be used.

**G.** Following concept development, a design can be completed. Once the DRC has reviewed and approved the concept, the tenant should schedule a meeting with the Airport's Administration and Commercial Services Division prior to start of design to discuss the scope of work and the Airport's construction requirements.

### **3.3 Salt Lake City Zoning & Building Permits**

**A.** Airport property lies within the limits of Salt Lake City, Utah. The Salt Lake City Zoning map is available on the City's web site, or from the Planning division of Salt Lake City. Projects located on Salt Lake City Department of Airport's property will need to conform to the most current version of Salt Lake City zoning ordinance. The Salt Lake City International Airport is within the Salt Lake City A-Airport zoning district.

**B.** Building permits are issued by the Salt Lake City Building Services located at 451 South State Street, Salt Lake City, Utah, Room 215. Building permits will be obtained prior to start of construction.

### **3.4 ADA Requirements**

A. Design must incorporate ADA requirements. Each project must be evaluated to determine if the proposed design would create positive or negative impacts on ADA requirements. A Salt Lake City Policy entitled, “American with Disabilities (ADA)” can be found on the Salt Lake City web site. This policy describes the required ADA topics that require evaluation as part of a new project.

#### **Avoidance of Obstacles**

Public spaces should be free of physical obstacles that would reduce ease of movement to and from the terminals and concourses. Service elements should be well integrated and placed to avoid congestion in public circulation paths. Proposals for new projects should not impede the travelers approach, decision points, arrival, or waiting areas. Maintaining good visibility and clear circulation paths are essential to the Airport’s design and function. Obstacles must not be placed in areas that would hinder the flow of passengers.

#### **Consistency of materials**

Consistent use of materials throughout the terminal and concourses is required to achieve continuity and to avoid confusion of passengers. The intent is to maximize material consistency while at the same time allowing appropriate variations and development of feature elements within specific areas.

### **3.5 Durability**

The high traffic nature of the Airport environment requires appropriately selected, durable finish materials. Finish materials must withstand high use and impact from passenger luggage, luggage carts, wheelchairs, commercial maintenance equipment, and other similar equipment. Surfaces such as floors, walkways, lower wall sections, doors, elevators, and windows are especially susceptible to abuse and require particular attention in terms of durable finish material systems.

### **3.6 Ease of Access and Use**

Tenant provided services and amenities must be easy for travelers to find and use. Tenant services should be provided in areas that are easily accessible and do not clutter or confuse the primary activities in public spaces

### **3.7 FAA Requirements**

Proposals for new projects will meet the FAA criteria for design. If required by the FAA, projects will be presented to the FAA by submitting form 7460-1, entitled, "Notice of Proposed Construction." Projects will be designed to meet FAA heights, advisory circulars, requirements, and special conditions. Salt Lake City Department of Airports will submit the application for form 7460-1 on behalf of the tenant.

### **3.8 Landscaping**

The Airport has incorporated low water use vegetation throughout the facility. New proposed landscaping will be compatible with the existing low water use landscaping. Landscaping will be compatible with the adjacent types used at the facility. New proposed landscaping will not negatively impact aircraft operational safety, or increase maintenance of aircraft aprons, taxiways, or runways. New landscaping will not adversely impact airport operations or passenger way finding to and from Airport terminals, gates, and roads.

### **3.9 Life and Safety**

Design must incorporate life-safety elements to ensure the constructed project is safe for users, passengers, and employees. The Life Safety Code is the most widely used source for strategies to protect people based on building construction, protection, and occupancy features that minimize the effects of fire and related hazards.

### **3.10 Lighting**

Lighting from outdoor light fixtures shall be screened to prevent hazardous or unwanted glare from being visible from roadways, buildings, walkways, public areas, or that negatively is directed to aircraft, or the air traffic control tower. Outdoor lighting typically requires overhead shielding to reduce glare above the lighting fixtures.



### **3.11 Storage**

No permanent or temporary storage of tenant materials is allowed outside of the respective lease lines. Any dedicated storage spaces must be leased. Adequate storage space for materials and merchandise must be incorporated into the design.

### **3.12 Temporary Buildings**

Trailers, mobile office, storage, and other temporary structures may be permitted for a limited period of time. Each location, use, and circumstance will be reviewed and approved on a case-by-case basis by the Airport.

### **3.13 Way Finding**

The Tenant's message systems should be clear and easy to use and understand. Primary way finding signs, services signs, flight information displays, advertising, information boards, audio and television installations should not adversely affect the primary function of the terminal and concourses and general way finding and circulation of passengers. Areas where messages are to be read provide for circulation so the activity does not cause congestion or impede movement.

### **3.14 Sustainable Design**

The Airport has been designed and constructed according to USGBC's LEEDv2009 NC Gold Certification. As such, the airport encourages sustainable design practices. Areas of sustainable design should include, but are not limited to, water use reduction, construction waste management, the use of recycled materials, materials extracted from or manufactured within the region, rapidly renewable materials, certified wood use, and the use of low-emitting material, adhesives, sealants, paints, coatings, and carpet systems.

# Salt Lake City International Airport

## Tenant Design Standards

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# Section A. Tenant Design Standards



## **Section A. Tenant Design Standards**

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## **1.0 INTRODUCTION**

### **1.1 Purpose of Document**

**A.** The Salt Lake City Department of Airports (Airport) and its Airlines and Tenants (Airlines/Tenants) are responsible for the first impression of users and visitors. This first glimpse of the Intermountain Area and Salt Lake City is an opportunity to showcase local and regional themes, natural features, resources and history. These standards have been developed by the Airport to promote quality, functional, and tasteful facility designs that reflect the dynamic aesthetics of the surrounding environment and meet the high use demands of the facility. User experience should always be the overriding force in the design of airport facilities.

**B.** These standards govern Tenant improvements to facilities, floors, walls, ceiling, lighting, signage, etc.; the intent of which is to encourage quality design and consistent standards for Airlines and Tenants. Tenants must refer to lease documents and exhibits to determine the extent of work performed by the Airport and the work to be performed by the Airlines/Tenants.

**C.** Except for routine maintenance of tenant installed equipment and/or finishes; Airport approval is required any time a tenant desires to perform any modification to their leased space on Airport property. The Airport approval process and associated requirements are explained throughout this document. Additionally, tenants are required to apply for any/all local, State, and/or Federal permits that may be required. Tenant's are encouraged to submit concurrently to the respective permitting agency and the Airport for review. Airport project approval will not be granted until all permitting requirements, if required, are satisfied. Any modification to tenant leased space that is performed without the prior written approval of the Airport may, at the discretion of the Executive Director or authorized representative, be removed from the tenants leased premises and the leased premises restored to its prior condition at the sole expense of the tenant.

**D.** The Executive Director of the Airport reserves the right to modify or wave any or all of the design standards in this document at any time.

### **1.2 Use of Airline and Tenant Design Standards**

**A.** Tenants must become familiar with the intent, scope and detailed requirements of the design standards before the design process may begin. It is the responsibility of the Tenant and their design team to visit the site and verify existing conditions. Each Tenant's design must be approved by the Airport before any construction is allowed to commence. Submittal and approval procedures are outlined throughout this document.

**B.** The Criteria contained herein must be followed in the design of Airline/Tenant facilities to be constructed in the Salt Lake City International Airport terminals, concourses, and other airport facilities. The purpose of these standards is to provide a single, uniform and consistent source of the Airport's intent regarding the design and construction of facilities at the airport. Under no circumstances shall these documents be interpreted or utilized as design, bid, or construction documents. These standards only provide general guidance to design professional(s). The Airport does not assume any responsibility for the Tenant's design professional(s) to complete contractual and professional responsibilities or to provide complete professional services as required by any Tenant.

**C.** Additionally, it is not the intent of these standards to supersede any requirements set forth by the Federal Aviation Administration (FAA), Transportation Security Administration (TSA), the City and/or County of Salt Lake City, or other applicable federal, State, or local standards or codes, such as Americans with Disabilities Act (ADA). Conflicts shall be identified by the Tenant's design professional(s) and presented in writing to the Airport for resolution.

### **1.3 Design Intent**

**A.** It is the intent of these standards to ensure that a Tenant's facility design takes advantage of every available option to optimize the Tenant's space.

**B.** The information contained in these standards should be utilized by Tenants, their designers and contractors to coordinate the necessary information for the design and construction of their leasehold improvements. The results should be high quality, innovative designs consistent with the overall design theme identified in these standards. It is also important for the Tenant's design to complement the existing architectural qualities of the terminals and concourses, while still being compatible with adjacent spaces. Use of these standards should encourage the Tenant spaces to strike a balance between both variety and consistency. These standards should be met by proposing contemporary design solutions that are able to capture the "essence" and feel of the design guidelines, without necessarily being literal interpretations. This can be achieved through proper use of materials, color and design elements that relate to the overall theme established by these standards.

C. The Airport encourages the use of sustainable design practices. Tenant's should use proven energy and carbon reduction measures, water efficient fixtures, resource efficient and low emitting materials. Areas of sustainable design should include: ***(If Tenant is submitting for LEED-CI, refer to Appendix G of this document which provides recommendations consistent with the LEED certification of the project.)***

- Water Use Reduction: Maximize water efficiency within buildings to reduce the burden on municipal water supply and wastewater systems. High efficiency fixtures and valves, aerators, WaterSense™ certified fixtures and fixture fittings should be used where available. Target a water use reduction goal of 35% from typical commercial use baselines. Use local generation of domestic hot water, as much as possible, to eliminate long piping runs associated with recirculation piping - unless connecting to an existing hot water recirculating system. Tenant provided plumbing fixtures shall meet the flow requirements listed below:
  - Water Closets: Single flush set at 1.28 gpf max.
  - Urinals: Single flush set at 0.125 gpf max.
  - Lavatories in public core areas; Set at 0.09 gpm per 10 second cycle.
  - Break/Pantry Room Sinks: Set at 1.7 gpm max.
  - Showers: Set at 1.5 gpm max.
  - Kitchen Sink: Set at 1.7 gpm max.
  - Hand Sink: Set at 0.5 gpm max.
  - Pre-Rinse Spray Valve: Set at 1.6 gpm max.
  
- Airport HVAC Systems. The Airport HVAC systems provide outdoor air ventilation rates at least 30% above the minimum rates required by ASHRAE Standard 62.1. The Tenant HVAC design shall also provide outdoor air ventilation rates at least 30% above the minimum rates required by ASHRAE Standard 62.1.
  - The Tenant HVAC design shall meet the requirements of ASHRAE Standard 55.
  - The Tenant shall sufficiently exhaust each space where hazardous gases or chemicals may be present or used to create negative pressure with respect to adjacent spaces when the doors to the room are closed. The exhaust rate must be at least 0.50 cubic feet per minute (cfm) per square foot with no air recirculation. The pressure differential with the surrounding spaces must be at least 0.02 inches of water gauge on average and 0.004 inches of water at a minimum when the doors to the rooms are closed.
  - The Tenant shall refrigerants and heating, ventilating, air conditioning, and refrigeration (HVAC&R) that minimize or eliminate the emission of compounds that contribute to ozone depletion and global climate change. The Tenant HVAC&R equipment combined contributions to ozone depletion and global warming potential shall be less than 100 as defined by LEED BD+C v3-2009 Credit EAc4.



- The Tenant shall not operate or install fire suppression systems that contain ozone-depleting substances such as CFCs, hydro chlorofluorocarbons (HCFCs), or halons.
- Particle filters or air cleaning devices shall be provided to clean the outdoor air at any location prior to its introduction to occupied spaces. Filtration media shall be rated at a minimum efficiency reporting value (MERV) of 13 or higher in accordance with ASHRAE Standard 52.2.
- Construction Waste Management: Divert construction, demolition and land-clearing debris from disposal in landfills and incinerators. Redirect reusable, recyclable, and recovered resources to appropriate sites or back to the manufacturing process back to the manufacturing process. Redirect reusable materials to appropriate sites. Establish a goal of at least 75% for diversion from disposal in landfills and incinerators and adopt a construction waste management plan to achieve these goals during construction. Recycle cardboard, metal, brick, acoustical tile, concrete, plastic, clean wood, glass, gypsum wall board, carpet, insulation, batteries, light bulbs, toner cartridges, electrical wiring and electronics. Designate a specific area(s) on the construction site for segregated or commingled collection of recyclable materials, and track recycling efforts throughout the construction process. Identify construction haulers and recyclers to handle the designated materials. Note that diversion may include donation of materials to charitable organizations and salvage of materials on-site. Implement deconstruction planning and techniques into all demolition activities. Ensure that employees are aware of waste management and recycling procedures. When possible, evaluate the use of pre-cast or pre-fabricated units, as appropriate, to reduce on-site waste generation during construction.
- Recycled Content: Increase demand for building products that incorporate recycled content materials, thereby reducing impacts resulting from extraction and processing of virgin materials. Establish a project goal of at least 30% recycled content materials and identify material suppliers that can achieve this goal. During construction, ensure that the specified recycled content materials are installed. Consider a range of environmental, economic and performance attributes when selecting products and materials. Recycled content is calculated as the sum of post-consumer recycled content plus half of the pre-consumer recycled content. The recycled content value of a material assembly is determined by weight. The recycled fraction of the assembly is then multiplied by the cost of the assembly to determine the recycled content value.
- Regional Materials: Increase demand for building materials and products that are extracted and manufactured within the region, thereby supporting the use of indigenous resources and reducing the environmental impacts resulting from transportation. Establish a project goal of at least 20% locally sourced materials, and identify materials and material suppliers that can achieve this goal. During construction, ensure that the specified local materials are installed and quantify the total

percentage of local materials installed. Consider a range of environmental, economic and performance attributes when selecting products and materials. Regional materials are products that have been extracted, harvested or recovered, as well as manufactured within a 500 mile radius of the project site.

- **Rapidly Renewable Materials:** Reduce the use and depletion of finite raw materials and long-cycle renewable materials by replacing them with rapidly renewable materials. Establish a project goal for rapidly renewable materials and identify products and suppliers that can support achievement of this goal. Consider materials such as bamboo, wool, cotton insulation, agrifiber, linoleum, wheat board, straw board, and cork. During construction, ensure that the specified renewable materials are installed.
- **Certified Wood:** Encourage environmentally responsible forest management. Establish a project goal of at least 50% by cost for FSC- certified wood products and identify suppliers that can achieve this goal. During construction, ensure that the FSC-certified wood products are installed and quantify the total percentage of FSC-certified wood products installed.
- **Construction IAQ Management Plan – During Construction:** During construction, meet or exceed the recommended control measures of the Sheet Metal and Air Conditioning National Contractors Association (SMACNA) IAQ Guidelines for Occupied Buildings Under Construction, 2<sup>nd</sup> Edition 2007, ANSI/SMACNA 008-2008 (Chapter 3). Protect on-site and installed absorptive materials from moisture damage. Use filtration media with a minimum efficiency reporting value (MERV) of 8 at each return air grille. Replace all air filtration immediately prior to occupancy.
- **Low-Emitting Materials/ Adhesives & Sealants:** Reduce the quantity of indoor air contaminants that are odorous, irritating and/or harmful to the comfort and well-being of installers and occupants. Specify low-VOC materials in construction documents. Ensure that VOC limits are clearly stated in each section of the specifications where adhesives and sealants are addressed. Common products to evaluate include general construction adhesives, flooring adhesives, fire-stopping sealants, caulking, duct sealants, plumbing adhesives, and cove base adhesives.
- **Low-Emitting Materials / Paints & Coatings:** Reduce the quantity of indoor air contaminants that are odorous, irritating and/or harmful to the comfort and well-being of installers and occupants. Specify low-VOC paints and coatings in construction documents. Ensure that VOC limits are clearly stated in each section of the specifications where paints and coatings are addressed. Track the VOC content of interior paints and coatings during construction.
- **Low-Emitting Materials/ Carpet Systems:** Reduce the quantity of indoor air contaminants that are

odorous, irritating and/or harmful to the comfort and well-being of installers and occupants. Clearly specify requirements for product testing and/or certification in the construction documents. Flooring must meet the requirements of Green Label Plus, FloorScore, or an alternative compliance path outlined in the LEED v2009 for New Building Design and Construction reference guide. All adhesives must comply with the requirements listed above under “Low-Emitting Materials/ Adhesives & Sealants”. Specify Low-VOC carpet systems. Ensure that VOC limits are clearly stated where carpet systems are addressed. Be attentive to carpet installation requirements.

- Low-Emitting Materials/Composite Wood & Agrifiber Products: Reduce the quantity of indoor air contaminants that are odorous, irritating and/or harmful to the comfort and well-being of installers and occupants. Specify wood and agrifiber products that contain no added urea-formaldehyde resins. Specify laminating adhesives for field and shop applied assemblies that contain no added urea-formaldehyde resins. Review product cut sheets, MSD sheets, signed attestations or other official literature from the manufacturer.
- High performance lighting fixtures and controls: Reduce energy demands by utilizing high performance lighting fixtures and controls. Occupancy controls should also be utilized in selected areas. Allowing daylight into occupied areas should be maximized where feasible.
- Recycling: Airlines/Tenants are encouraged to develop a recycling plan where practical.
- Reduce the environmental and indoor air quality impacts of the furniture and equipment acquired for use in Tenant space. To the extent possible, utilize ENERGY STAR electronic equipment and/or sustainable furniture systems, such as GREENGUARD certified furniture.
- Reduce indoor air quality problems resulting from the construction/renovation process in order to help sustain the comfort and well-being of occupants. During construction, meet or exceed the recommended Design Approaches of the Sheet Metal and Air Conditioning National Contractors Association (SMACNA) IAQ Guideline for Occupied Buildings under Construction, 1995, Chapter 3. Protect stored on-site or installed absorptive materials from moisture damage. Sequence the installation of materials to avoid contamination of absorptive materials such as insulation, carpeting, ceiling tile, and gypsum wallboard. Minimize the use of air handlers during construction. If air handlers are used during construction, filtration media with a Minimum Efficiency Reporting Value (MERV) of 8 must be used at each return air grill, as determined by ASHRAE 52.2-1999. Prior to occupancy, perform a flush-out or test the air contaminant levels in Tenant space.

- The Airport is a non-smoking facility.
- These standards encourage a concerted effort on the part of every Tenant and architect to select finish materials, which are derived from the earth's renewable resources. Materials that are harmful to the environment are prohibited.

#### **1.4 Airport Work / Tenant Work**

**A.** The Airport will generally provide the leased area to each Tenant in an “as-is” condition subject to the following provisions:

1. The Airport will provide base finishes throughout the Tenant leased space except in exclusive use spaces (i.e. Airline Lounge/Club Room, Concession Space).
2. The Airport will provide base water and sanitary sewer utilities to the lease lines of spaces that require these utilities.

**B.** Tenant will be responsible for any demolition required, as well as any services, utilities or work not mentioned above, and other work as required to complete the build-out of Tenant's facilities.

**C.** Tenant will also be required to connect to the Airport's Life Safety System, BAS for energy management, system and monitoring, and Kilair program for emergency purposes. Tenant is responsible for contracting with its Designer, Architect, Engineers, Specialty Consultants, and General and Specialty Contractors. Tenant work shall conform to applicable codes, ordinances, regulations and statutes, as well as these standards and other Airport requirements. Any other work outside Tenant's leased premises shall require prior written authorization from the Airport. The Airport reserves the right to require changes in the Tenant's work when necessary by specific locations (proximity) to special use facilities or interface to any Airport systems.

**D.** It is the Tenant's responsibility to coordinate the interface and availability of telecommunication and data requirements with the Airport at the inception of the project. The Tenant is responsible for the complete design and construction of the premises including all fees, permits, taxes, insurance, licenses, bonds, partitions, finishes, structural modifications, signing, furnishings, equipment, lighting, plumbing and mechanical systems, electrical systems, security and airport systems interface. Where Tenant systems interface with airport systems, the interface shall be in accordance with these standards and at the direction of the Airport.

## **1.5 Tenant Payment and Performance Bond**

Each Tenant shall be required to provide the Airport with a full payment and performance bond for each project in an amount equal the total cost of improvements and minimum annual guarantee (MAG) for the duration of the Lease.

## **1.6 Interface Points and Utilities**

**A. Roof:** The Tenant shall provide any required supports, blocking, temporary flashing, counter flashing or other work necessary to complete the installation of Tenant's equipment on any roof and shall not interfere with any roof warranties. Any work that impacts the currently installed roof and its warranted needs to be coordinated with the Airport, and Airport approved Roofing Contractor, and the owner of the roofing warranty. The Tenant will be required to supplement existing construction to achieve assembly ratings, thermal values or additional criteria as required. Work shall conform to the requirements established in these standards. Penetrations must be sealed water tight. The time of cutting and/or penetrating the roof must be coordinated and approved by the Airport.

**B. Floors:** Most floors in the terminals and concourses are steel deck and concrete slab construction; floors must be x-rayed prior to any cutting, boring or penetration of any kind. Tenant must submit a written request along with documentation to the Airport for approval prior to commencing work. The Tenant is responsible for review of existing documentation available from the Airport archives and visual survey, to determine allowable loading of floors, roofs, etc. for Airline/Tenant's equipment, furnishings, etc. The time of cutting and/or penetrating the floor must be coordinated and approved by the Airport.

**C. Fire Ratings:** Existing fire ratings must be maintained during and after construction.

**D. Hardware/Keying:** Door hardware must be keyed to the Airport's master hardware system.

**E. Utility and Services:** The Tenant is responsible for utility connections to achieve a complete, approved and operating system. Tenants with systems or equipment that require utility connections to the Airport's uninterrupted or generator power system shall request this service through the Airport Tenant Coordinator. The Airport will review and approve these utility connections on a case by case basis.

**F. Special Equipment:** The Tenant shall provide any required alarm systems, security cameras, or other protective devices, conveyors, time clocks, fire extinguishers (concessions only), dry chemical fire protection systems or any other equipment specific to the Tenant's business needs or Tenant use. Only clocks connected to the Airport's master clock system may be installed by the Tenant if exposed to public view. Tenants requiring a radio system for communication must comply with the Airport and FAA requirements.

## **1.7 Insurance Requirements**

Tenant's consultants and contractors are required to provide general liability and automobile insurance as described below, the required amounts may be revised as deemed necessary by the Airport. This information will be disclosed to the consultants and contractors prior to engaging their services to ensure that they are able to meet these requirements. Contractors will not be permitted to be badged or receive access to the Airport unless proper insurance documentation has been received. The Airport shall be listed as an additional insured party on all policies.

**General Liability Coverage Insurance:** Access to non-aircraft operating areas, including landside, requires general liability insurance in the amount of \$5,000,000.

**Automobile Coverage:** Access to non-aircraft operating areas requires automobile insurance in the amount of \$5,000,000.

**Workers Compensation:** Proof of Workers Compensation Insurance and Workers Compensation statutory limits must be submitted to the Airport prior to the start of construction.

Salt Lake City Corporation, PO Box 145550, SLC, UT 84114-5550 must be listed as an additional insured on the certificates in the appropriate sections. This applies to certificates for consultants and contractors. Contractor insurance shall remain current and in force at all times during the project.

## **1.8 Architect / Engineer Selection**

The Tenant shall be required to engage an architect (including any separate design firm), herein after referred to as Tenant's designer, and engineers duly licensed to practice in the State of Utah, to prepare the designs, drawings, calculations, and construction documents. Construction Administration Services shall be provided for each project by the designer and appropriate engineers of record. The Tenant's designer, or engineer shall be on-site during the site evaluation process. If any existing fire protection system is to be modified in the Terminal, a licensed fire protection engineer shall be engaged for the design work.

## **1.9 Contractor Selection**

**A.** The Tenant shall be required to engage a qualified General Contractor (GC) or construction management firm, duly licensed to do business in the State of Utah to construct Tenant's space in accordance with the approved construction documents and the requirements and regulations contained in these standards.

**B.** Other contractors and firms hired by the Tenant independent of the GC that are performing work within the airport property shall be subject to the same insurance and licensing requirements as stated above. This may include, but not be limited to food service equipment installation, millwork or casework, merchandising, Audio / Video (A/V), etc.

## **1.10 Airport Document Review**

**A.** The Airport does not currently charge a fee for the application and review process. However, work completed without written Airport approval will be subject to Tenant charges or removal at the Tenant's expense. Project permitting and development costs, fees, and taxes required to complete the work are the responsibility of the Tenant and its contractor(s).

**B.** Tenants needing CAD or other record drawings shall submit their request to the Airport. CAD and record drawings, if available, are provided as a starting point for the Tenants. In coordination with the Airport, Tenants and their contractors are required to field verify existing conditions and pot hole, if necessary, to locate existing underground utilities and their depths prior to submitting documents for the Airport's review.

**C.** In general, the process described below and the submittals for each phase are required for all Tenant improvement projects.

### **Preliminary Design Review**

Prior to actual design, a pre-design meeting shall be held and attended by the Airport, the Tenant, and the Tenants design team. At this meeting, the Tenant will be expected to provide a high level overview of the proposed project and/or concept, and the overall scope of work. General requirements and procedures will be presented by the Airport. Where applicable, the Airport will review the proposed project and conformance with the Airport Master Plan. Any known or anticipated special conditions and concerns will be identified and discussed. Special conditions may include but are not limited to staging, work hours, environmental concerns, insurance, etc. The Tenant will be briefed on required review meetings, presentations, and submittals for each stage of the design review process.

Submittals required: A completed Tenant Improvement Application and any renderings or concept material representing the intended use of the space. The Tenant Improvement Application is included in the appendix.

The Airport will provide feedback and direction during the meeting, any additional comments will be provided in written form to the Tenant within ten (10) working days of the meeting.

### **Design Development Review (30% Submittal)**

The intent of this review is to ensure that the proposed project and/or concept are in compliance with Airport standards and expectations. A high-level review of the project will be performed by the Airport.

**Submittals required:** (1) electronic copy in PDF format submitted by the Tenant's design team into Unifier, plus one (1) material sample board meeting the following requirements:

1. Scaled Floor Plans showing existing and adjacent conditions. Floor plans must include floor finishes, furnishings and fixtures, equipment, seating, storage areas, etc.
2. Scaled Reflected Ceiling Plan indicating ceiling heights, materials and finishes, and overall fixture and other feature layout.
3. Signage elevations and sections showing type, location, colors and materials.
4. Scaled Mechanical Plan showing connections to existing systems for HVAC, new ventilation systems and other related information.
5. Scaled Plumbing Plan showing connections to existing systems for water and waste, the extent and quality of fixtures.
6. Scaled Structural drawings and details if required by scope of Tenant's work.
7. Scaled Electrical Plan showing connections to existing systems, proposed panel locations, locations and types for fixtures and cut sheets for each fixture.
8. Fire Protection drawings and details
9. Outline of specifications

The Airport will respond to the tenant within 15 working days and will provide tenant notification to proceed with construction document preparation, or to resubmit a revised design development package incorporating the review comments provided by the Airport.



### **Construction Document Review (100% Submittal)**

The Airport will conduct a detailed review of the entire project plan to ensure compliance with requirements. Plan changes are to be clouded and identified with a revision number. Revision number(s) shall also be recorded and dated in the revision block. Underground utilities, including electric, water, sewer, gas, etc. shall be shown on the construction documents.

**Submittals required:** one (1) electronic copy in PDF format submitted by the Tenant's design team into Unifier, meeting the following requirements:

1. Title page with site and vicinity location plan, overall airport diagram, project team and contact information.
2. Architectural drawings to scale
3. Structural drawings to scale, if required
4. Mechanical drawings to scale
5. Electrical drawings to scale
6. Plumbing drawings to scale
7. Fire Protection drawings to scale
8. Complete specifications

Drawings must be sealed and signed by professionals licensed in the State of Utah and all pages must be signed by the responsible party. The Airport will complete its review and respond in writing within 20 working days of receipt. Inaccurate or incomplete drawings will be returned to the Tenant and the process will recommence. **Additional reviews by the Airport may be billed to the Tenant at a rate of \$1,000.00 per review.** Tenant's are encouraged to submit concurrently to the Airport for review and the Salt Lake City Building Services Department for building, mechanical, electrical and plumbing permits.

### **1.11 Facility Construction Process**

Upon completion of the design review and permitting process, the project is ready to proceed to the construction phase. The process and procedures to be followed are outlined below.

#### **Pre-Construction**

After obtaining all required permits, a pre-construction meeting shall be held and attended by the Airport, the Tenant, and the Tenant's contractors and design team. The Airport's project manager

will schedule the meeting. At the meeting the Tenant and its contractor(s) will be briefed on rules, regulations, and procedures to be followed for the construction project. Contractors should be prepared to discuss the project in detail.

Submittals required:

1. Two (2) sets of sealed, stamped "Issued for Construction" plans and specifications, and one (1) electronic copy.
2. Copies of all necessary permits.
3. Insurance and bond certificates, if not already on file.
4. Detailed contact list with sufficient information for individuals involved with the project.
5. Detailed project schedule. The project schedule shall identify separate tasks that detail the scope of work from procurement to final acceptance. The schedule shall include work components, permit procurement, shop drawing submittal process, owner furnished items, interfaces with pertinent agencies and/or base building, milestones, substantial completion, and anticipated final acceptance dates.

#### **Notice to Proceed**

Upon satisfactory completion of the foregoing requirements the Airport will issue a Notice to Proceed (NTP) to Tenant in written and/or electronic formats. The NTP will not be issued until necessary reviews have been performed, all submittals have been received and all permits have been issued. Under no circumstances may Tenant or Tenant's contractor(s) commence any work without the issuance of the NTP.

#### **Final Inspection and Punch List**

When the Tenant determines the space is substantially complete and ready for an inspection, the Tenant shall notify the Airport or its designated representative, in writing, a minimum of seventy-two (72) hours prior to the requested inspection. The Airport or its designated representative will schedule the inspection with appropriate Airport staff, review the improvements, and prepare a written list of deficiencies (punch list) within twenty-four (24) hours of the inspection. When the Tenant has completed all punch list items the Tenant shall request a re-inspection of the premises and the Airport or its designated representative shall schedule the re-inspection. The Tenant is required to correct all noted deficiencies on the punch list within fifteen (15) days. If the punch list items are not corrected within fifteen (15) days of opening, the Airport reserves the right at its sole discretion, to close the premises until all outstanding items have been completed.

Once the Airport determines that the space is substantially complete, a verbal approval is given to

the Tenant. Punch list items which are prerequisites to final acceptance and/or occupancy, shall be completed and reviewed again with the Airport representatives prior to occupancy. When the Tenant determines the facility is ready for occupancy, the Tenant shall request a final walk-thru with the Airport. If approved, the Tenant shall be issued a written authorization by the Airport to occupy the premises. When final acceptance has been granted, the Tenant will be issued a written Letter of Acceptance of the space.

### **Project Close-out**

Upon completion of the project and final acceptance by the Airport, the Tenant shall provide the documents listed below. These drawings and specifications shall be delivered to the Airport within 45 days from the Letter of Acceptance issue.

#### **Submittals required:**

1. Final inspection reports issued by all jurisdictions (copies)
2. Copy of the Certificate of Occupancy (if applicable)
3. Copy of the Board of Health inspection report and certification (if applicable)
4. Final Unconditional Waivers of Lien from contractors, subcontractors and suppliers (copies)
5. Warranty Documents (if applicable)
6. Operation and Maintenance Manuals (if applicable).
7. Sustainability Report listing materials generated on site for salvage, reuse or recycling, quantity, and destination.
8. Warranty Documents, certified balance report and manufacture equipment start up sheet (if applicable).
9. Commissioning report for all mechanical equipment.

Failure to provide the above referenced documents will be considered non-compliance with contract terms. It is the Tenant's responsibility to ensure that its contractor and design team provide the documents within the prescribed timeframe.

## **1.12 Building Official, Approvals, Permits and Associated Fees**

**A.** The Tenant is responsible for compliance with applicable codes and standards adopted by Salt Lake City Corporation and Department of Airports at the time of design and construction. These include but are not limited to: International Building Code (IBC); International Plumbing Code (IPC); International

Mechanical Code (IMC); National Electric Code (NEC); National Fire Protection Agency (NFPA); and ADA Guidelines.

**B.** New construction or alterations of existing facilities requires a building permit issued by Salt Lake City Building Services. A separate permit will be issued by Salt Lake City for plumbing, mechanical, and electrical construction. These permits are in addition to the General Building Permit. For more information contact:

**Salt Lake City Building Services**  
**451 South State Street, Salt Lake City, Utah**  
**(801) 535-6000**

**C.** The Tenant is responsible to secure all permits and pay plan check, permit and license fees required for improvement and construction within the lease area.

- Natural gas is provided to the Airport through Dominion Energy.
- Electrical service to the airport is provided by Rocky Mountain Power.

**D.** Work must be performed by properly licensed personnel and comply with appropriate codes, rules, regulations, and policies of agencies having jurisdiction. The Airport reserves the right to restrict the hours of work if work is deemed to be excessively disruptive to the Airport, at no cost to the Airport. All materials and each portion of the work are subject to Airport inspection. Other federal, State and local agencies may require the contractor to have permits and inspections in addition to those required by the Airport.

### **1.13 Plan Modifications**

**A.** Once the construction documents have been approved by the Airport, any change must be submitted in writing to the Airport or designated representative for approval prior to proceeding with the change. This documentation must explain the reason for the requested change and be supported by adequate and appropriate information or drawings, as required. The Tenant shall allow ten (10) working days for a response from the Airport. If the change request is of the utmost importance to resolve quickly, the Airport will make every effort to work with the Tenant's architects and contractors to facilitate the change. The Airport will issue a written response to the change request. This includes any changes made either before the Salt Lake City Building Services reviews the plans for permit, or following receipt of the permit. Direction by the Salt Lake City Building Services Department to make a change in the drawings does not

constitute approval by the Airport. It is the Tenant's contractor's responsibility to notify and obtain Airport approval or concurrence with any such directives or changes. If changes are made without Airport approval, the Tenant's contractor may be required, at their own expense, to modify the work so that it conforms to the approved drawings.

#### **1.14 Field Verification**

The Tenant's designer is required to field verify, in person where possible, on-site conditions and dimensions for the 30% design submittal. This work shall be incorporated into the contract documents as the basis for the existing condition backgrounds. The verification includes in person research of existing plans in the Airport's Engineering GIS Department, visual inspection, and measure of existing space and surrounding areas. It may be necessary for the designer and/or any consulting engineers to make an additional inspection following demolition of the pre-existing conditions if conditions were concealed prior to such demolition.

#### **1.15 Airport Oversight**

**A.** The Airport may designate a project manager for each lease space. This project manager will be the contact and recipient for design questions, coordination, and submissions. The Airport will monitor the Tenant's construction project on a regular basis. The Airport shall have the right to inspect the work at any time of any day; the Tenant's lease space shall be available to the project manager at all times during all phases of construction. The project manager shall be responsible for scheduling review meetings and timelines for design and construction. The Tenant's contractor shall attend weekly progress meetings, which shall include a review of the progress to date, remaining schedule, plans and specifications being used in the project, coordination issues with the Airport, and any other issues that require resolution.

**B.** It is the express obligation and duty of the Tenant's contractor(s) to coordinate, cooperate and communicate with the Airport and/or their designated representatives. The Tenant's contractor(s) shall not impede, hinder, or delay any other parties in the performance of their work and shall remain solely and exclusively responsible for any damages or costs incurred as a result of any hindrance or delay. The Tenant's contractor(s) shall comply with all rules and regulations concerning safety and security. The Airport designated project manager will be the contact for construction-related correspondence after the commencement of construction. Construction meetings and inspections required shall be coordinated through the project manager.

### **1.16 Demolition**

Generally, demolition must be done between the hours of 1:00 am and 4:00 am, or as determined by the Airport in writing, especially those activities which generate excessive noise. Temporary construction walls, or airport approved construction barricades are required for demolition and construction where the premises adjoins or fronts public areas of the terminals, concourses and other facilities (see Airport Specification-Appendix F).

### **1.17 Hours of Work**

Tenant's contractor(s) are permitted to work at any time behind closed barricades with the exception of demolition. Any activities which generate excessive noise (hammer drills, saw cutting, heavy pounding, etc.) or offensive odors are subject to the demolition restrictions listed in 1.16 above.

### **1.18 Airport Holiday Observance**

For coordination purposes, the Airport observes the following holidays:

- New Year's Day
- Martin Luther King's Birthday
- President's Day
- Memorial Day
- Independence Day
- Pioneer Day
- Labor Day
- Veteran's Day
- Thanksgiving Day
- Day after Thanksgiving
- Christmas Day

### **1.19 Security Requirements**

Tenants are responsible for the security of their leased spaces and the construction materials and

equipment therein. Construction dust wall barricades must remain locked. Personnel working inside the construction barricade must be properly badged. Any person not permanently badged to work in secure areas of the airport must have a properly authorized escort who must remain in control of the temporary worker at all times. Failure to follow the security requirements and guidelines provide herein and elsewhere by the Airport may result in forfeiture of credentials, fines and/or imprisonment.

## **1.20 Safety Requirements**

**A.** The Tenant and its contractor shall download the “Airport Construction Safety and Security Manual” and be familiar with its contents. The manual describes the requirements for doing work within the Aircraft Operations Area, and general airfield and FAA requirements. The manual is available at:

[https://www.slairport.com/assets/pdfDocuments/Construction\\_Safety\\_Manual.pdf](https://www.slairport.com/assets/pdfDocuments/Construction_Safety_Manual.pdf)

**B.** The Airport is under the jurisdiction of the Salt Lake City Police and Fire Department, as well as the Department of Homeland Security Transportation and Safety Administration (TSA); all of which are located on the airport property. Incidents must be reported to the appropriate agency and to the Airport Operations Department. The Tenant is also responsible for complying with applicable provisions of the Occupational Safety and Health Administration (OSHA) Construction Safety and Health Regulations.

## **1.21 Other Safety Related Issues**

**A.** No cutting, welding, or burning is allowed during construction without proper written approval.

**B.** No fumes from paint (even latex), glues, adhesives, or dust are allowed to exit the designated construction area. Paint processes shall meet environmental requirements as required by OSHA. Paints, solvents, rags, and other painting refuse shall be properly disposed according to State and federal environmental regulations. Only latex water-based paints are allowed for interior use.

**C.** No power or powder actuated fasteners are allowed to be used in the Terminal or Concourse areas without prior written approval.

## **1.22 Security Badging**

**A.** Individuals working at the airport are required to go through the Airport's badging process. The process may take up to 14 days or more to complete. Airline/tenants and contractors should keep this in mind while creating project schedules. Fees associated with the issuance of identification badges are the

responsibility of the Tenant and its consultants and contractors. For information regarding the badging process, fees required, and an application please visit <https://slcairport.com/badging/>. You may also contact the Airport Access Control and ID Badging Office at (801) 575-2423.

### **1.23 Temporary Utilities**

Requirements for temporary utilities and/or utilities or systems required to be taken out of service must be coordinated through Airport Facilities and Engineering Departments and arranged by the Airport's project manager.

### **1.24 Conduct**

The Tenant is solely responsible for the conduct of its employees, agents, consultants, contractors, vendors, suppliers, etc. under their direction or contract. Safety and courtesy for the public, the Airport and its personnel must be a top priority. Among other things; loud music, lewd behavior, consumption of drugs or alcoholic beverages, and all weapons are strictly prohibited on Airport property. The Airport and all agencies within the Airport have a zero tolerance policy; any violation will be dealt with swiftly and may result in loss of privileges, fines and/or prosecution.

### **1.25 Delivery and Access for Concession Construction**

Most material deliveries must occur between the hours of 10:00 pm and 6:00 am, or as determined by the Airport in writing, and should enter and exit the terminal and concourse via designated delivery areas through the use of properly designated and authorized vehicles. Use of airport passenger elevators for deliveries is strictly prohibited; only designated freight elevators may be used for this purpose. Exceptions for material deliveries may be granted on a case by case basis and must be coordinated through the Airport designated project manager. Any deliveries entering from Terminal Drive must pass through security screening and be coordinated with the Airport and TSA at least 72 hours in advance.

### **1.26 Construction Debris**

Trash and debris from construction and demolition must be removed from the site between the hours of 10:00 pm and 6:00 am. In many instances the Airport will provide and locate trash and recycling dumpsters for Tenant use. Otherwise the Tenant shall provide its own covered dumpster placed in an area designated by the Airport. Loads must be covered during transit. Use of public passenger elevators by the Tenant or contractor is strictly prohibited. Designated service elevators are available for Tenant's use during construction; specifics will be coordinated at the pre-construction conference. Airside removal



of construction debris shall be coordinated and conducted under the direction of Airport Operations Department.

### **1.27 Cleanliness**

The Tenant is responsible for the cleanliness of the areas of the terminal and concourse impacted by Tenant construction at all times, strict adherence shall be enforced. Tenant and/or Tenant's contractor shall promptly and properly remove any debris and keep construction areas clean, including the use of Airport approved walk-off mats at the entrance to the construction site. The Airport will only issue one (1) warning, after which building maintenance will be contacted for clean-up and the cost charged back to the contractor or Tenant.

### **1.28 Contractor Parking and Staging**

Parking, staging and lay down requirements and location shall be coordinated with the Airport's project manager. Due to space limitations and airline commitments no contractor parking will be allowed anywhere on the AOA, unless authorized by the Airport. Contractors accessing the building from the AOA for delivery of materials and tools must remove their vehicles as soon as the delivery is complete and may not leave unattended vehicles on the AOA at any time. Any vehicles accessing the AOA are subject to security requirements and subject to search at any time.

### **1.29 Right of Inspection**

The Airport, its designees, as well as officials from any authority having jurisdiction (AHJ) shall have the right to inspect the work at any time. Primarily for safety, security and quality purposes; the Tenant and its contractor shall provide full access needed including ladders, temporary lighting, safety equipment, etc. Any comments will be issued immediately to the Tenant's contractor with a copy to the Tenant and its designer of record. It is the Tenant's sole responsibility to immediately address and remedy any issues raised during, or as a result of, an inspection of the premises.

### **1.30 Inspection, Verification and Acceptance by Airline/Tenant**

The Tenant's designer will inspect at a minimum the same inspections as required by the City permit process and verify the correctness of the work. Upon substantial completion of the work, the Tenant shall require its designer and appropriate engineers of record to conduct a thorough inspection and prepare a list of noted deficiencies (punch list) enumerating any areas of the work which are not in accordance with the approved plans or Tenant's lease agreement for the premises. A copy of this list shall be furnished to

the Airport within forty eight (48) hours of the inspection. Remedial work resulting from the punch list inspection shall be completed by Tenant's contractor within thirty (30) days of substantial completion. Any damage to adjacent tenancies or Airport property must be repaired prior to Tenant's occupancy of the premises. Upon final completion of the work, the Tenant's designer shall certify that work has been completed satisfactorily and in strict compliance with the contract documents. A copy of the certificate shall be delivered to the Airport within thirty (30) days of final completion of the project.

### **1.31 Record Drawings**

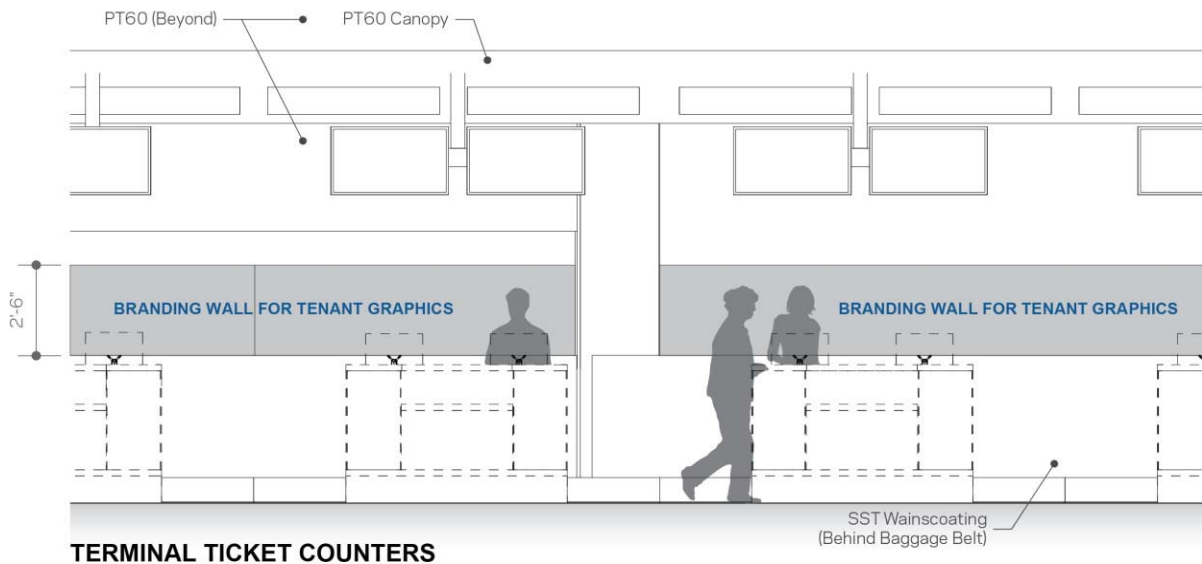
Within 120 days of completion of construction, the Tenant shall deliver to the Airport one (1) hard copy and two (2) electronic copies of corrected record drawings of Tenant's finished lease space with all modifications and corrections reflecting the true and accurate as-built condition of the facility. All electronic record drawings must be submitted in AutoCAD and AutoCAD REVIT format. AutoCAD REVIT files are required for Building Information Modeling (BIM) proposes. The submitted project must be 100% complete. All supporting files must be bound to each respective base drawing. This includes all xrefs, text fonts and any other supporting files needed to complete the set. The projects may be submitted on DVD's or CD's. Other portable storage media may be considered as technology changes. Projects created in other Non- AutoCAD formats, must be converted to an AutoCAD format before being submitted to the Airport.

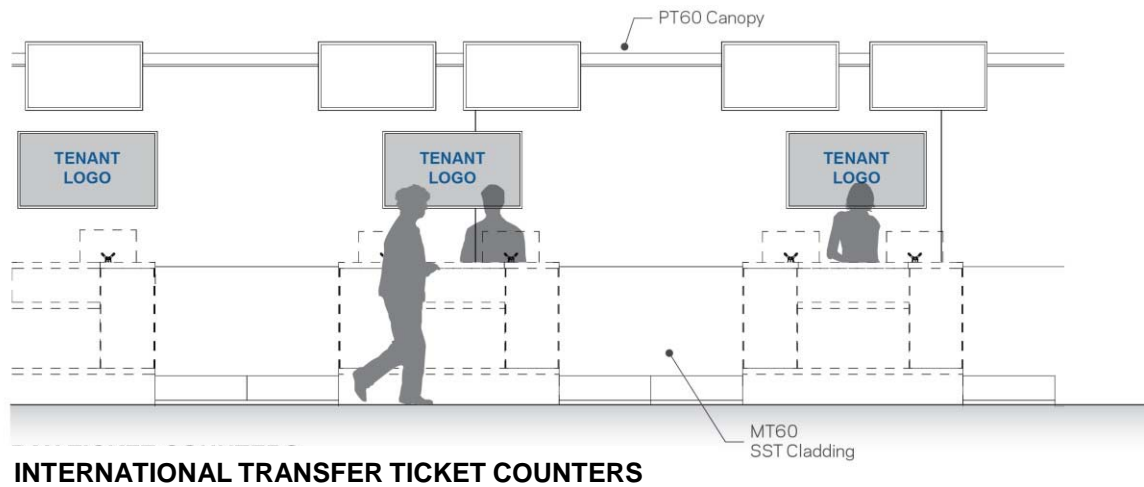
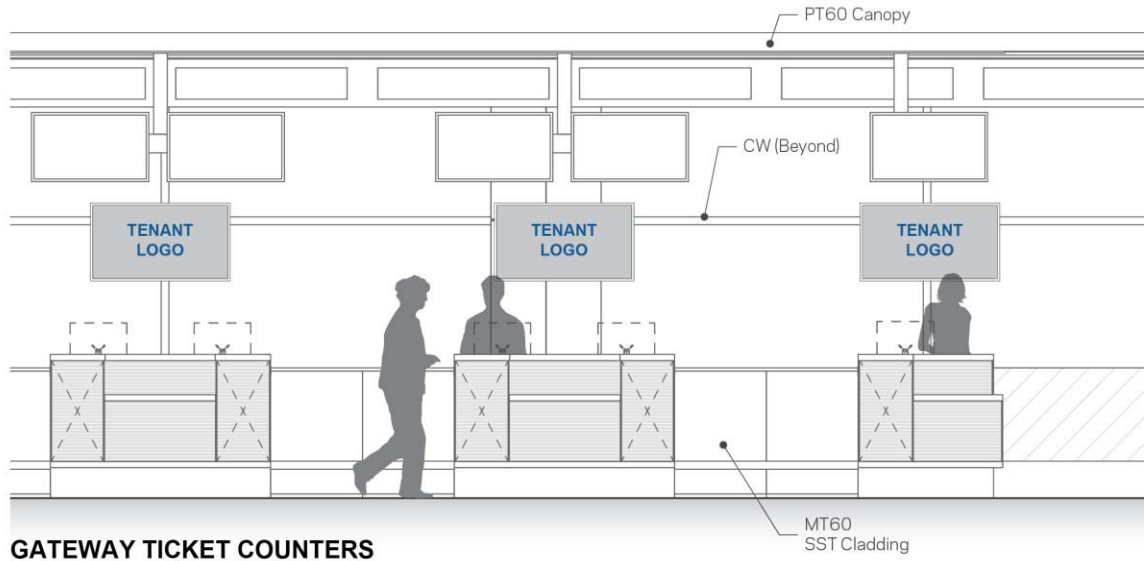
## 2.0 Tenant Terminal and Concourse Area Public Spaces

### 2.1 General Design Guidelines

The Airport Redevelopment Program (ARP) will define the airport campus' finish quality and aesthetic. The ARP will specify finish material in non-leased common areas of the airport campus and base finishes in Tenant's leased space (except in Airline Exclusively leased and Concession spaces). Tenant installed finishes in common areas of the terminal and concourse facility shall be complimentary and compatible with the overall airport aesthetic and shall be equivalent to ARP provided finish materials in terms of quality and durability. Tenant installed finishes are subject to the guidelines set forth in this section. Tenant improvements are made at the Tenant's expense and are subject to the Airport's design review process.

### 2.2 Tenant Back Wall Treatments





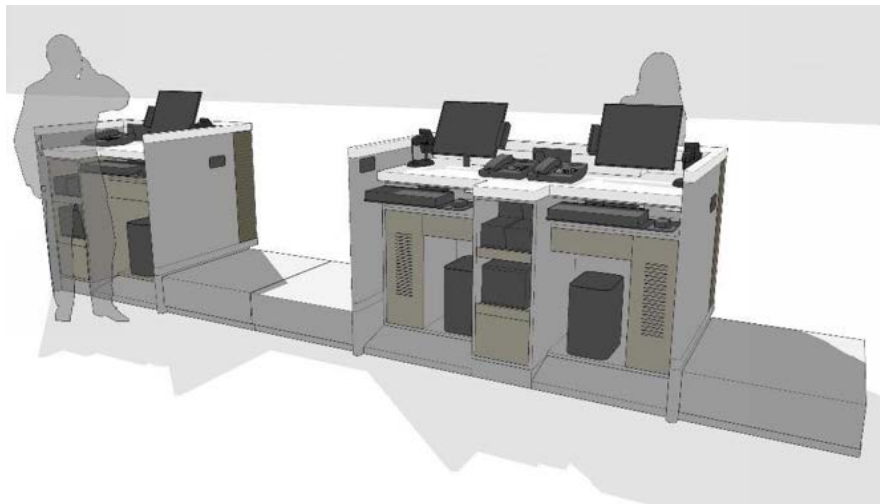
**Material Legend:**  
 PT60 – Typical Paint  
 MT60 – Stainless Steel, Brushed  
 SST – Stainless Steel  
 CW – Curtain Wall

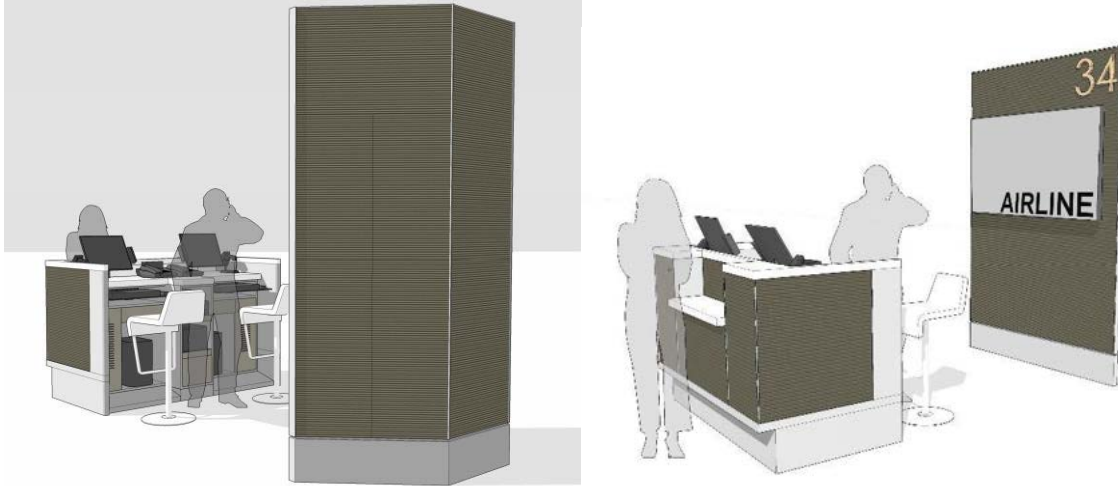
- A.** At airline ticket counter back wall niche corporate brand identifying colors, monitors and finishes are permitted within its leased space. Airline corporate alliance carrier logos are also allowed. Specific design and layout is the responsibility of the airline. Only ambient lighting shall be used to light the back wall.
- B.** Back wall finishes specific to branding are to be reviewed and approved by the Airport

C. Electronic signage may be installed on the Tenant back wall. Electronic signage shall not emit sounds or have messages that flash or are animated. Off-premises advertising is prohibited. Signs and messages to be conveyed must be approved by the Airport prior to installation.

D. Corporate signage and branding is not allowed outside of the Tenant's leased space.

### 2.3 Airline Counters and Millwork





**A.** The Airport has developed a uniform standard for public interface millwork, refer to item C. The design and material selection for the counters and millwork are provided by the airport. The design accommodates electrical/data items required by the Tenant hardware.

**B.** The millwork/counter is lockable. The Tenant is responsible for the security of their equipment at all times, whether open for operation or not.

**C.** Any revisions to millwork/counter material and design is subject to the Airport's design review process prior to modification.

## **2.4 Walls and Doors**

**A.** The Tenant shall provide and install corporate branding within their leased space. The Airport will provide and install wall treatments. The use of high quality durable material is required. Only material that can be easily repaired and is durable enough to withstand the high use demands of the airport environment shall be used.

**B.** The Airport will provide and install standard doors throughout the terminals and concourses. Tenant modifications to doors or door locations shall be installed by the Tenant at the Tenant's expense. Tenant installed doors shall be the same or equivalent type and color as the Airport provided doors in adjacent areas of the terminal and concourse. Doors shall be hollow metal doors and frames. The Airport may require kick plates, or heavy-duty protective plating to be installed.

**C.** Wall and door finish materials are subject to the Airport's design review process prior to installation.

## **2.5 Flooring**

**A.** Flooring composes a large portion of the terminal and concourse aesthetic. The Airport will provide flooring in the terminal lobby, including the space between the ticket counters and back wall, concourses and all hold rooms. The Tenant shall be permitted to install non-permanent flooring between the customer service counters and the Tenant back wall. Non-permanent flooring includes, fatigue mats, walk-off floor mats, etc. Airport provided flooring in these areas shall remain intact. Modifications that remove, break or change the Airport provided flooring in any way are not permitted. Tenant installed non-permanent floor material shall be provided by the Tenant.

**B.** Flooring modifications are subject to the Airport's design review process prior to modification.

## **2.6 Lighting**

General lighting design exists throughout the terminals and concourses. In addition to this ambient lighting, task lighting may be added by the Tenant to supplement existing lighting. Supplemental lighting shall be done as part of the Tenant's millwork. High quality display lighting systems are required, with fixtures and lamps designed to be integral with the overall design concept of the millwork. Mounting details and extensions of power to the light fixtures shall be concealed within the millwork and support structure.

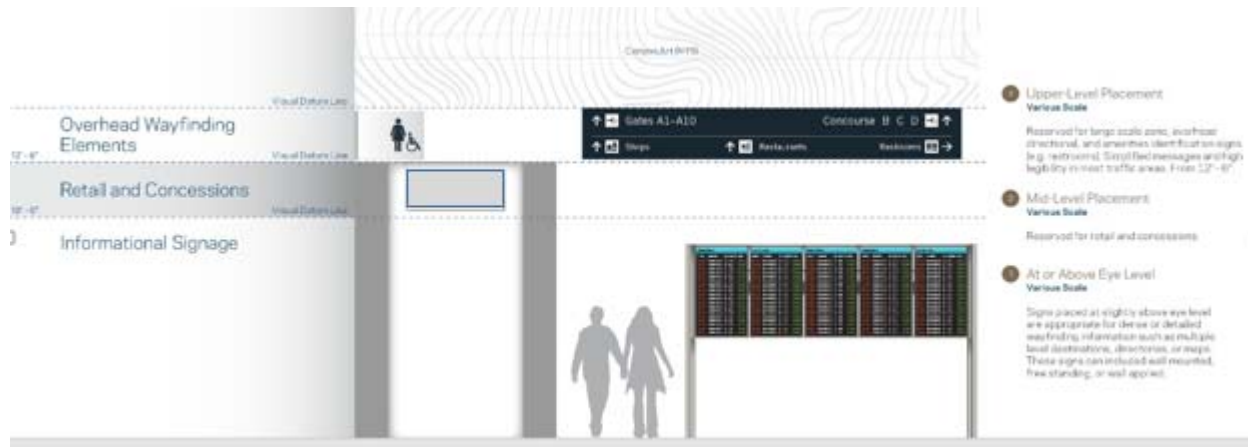
## **2.7 Stanchions and Stanchion Top Signs**

**A.** The Airport will provide and maintain stanchions in TSA checkpoint areas.

**B.** Tenants shall coordinate all passenger queuing area stanchion layouts with the Airport. The Airport reserves the right to modify or change passenger queuing area stanchion layouts at any time, if required.

**C.** Regulatory, wayfinding, directional, and operational signs are allowed on stanchion tops. Signs must be mounted in frames and firmly attached to stanchions. No signs shall be attached to the stanchion ribbon. Freestanding and tall stanchion queuing signs may be used in queuing areas to direct or identify specific queue locations or services. Advertising is not allowed on stanchion signage. Stanchion top sign size, design, layout and message requires Airport approval prior to installation.

## 2.8 Tenant Installed Signs - Public Spaces



A. Wayfinding signs located in public areas of the terminals and concourses are provided by the Airport.

B. Tenant installed signage is permitted within the Tenant's leased space. Signage shall reinforce the overall character and quality of the terminal and concourse. All tenant signage will be non-illuminated.

The following types of tenant installed signs are typically permitted:

- Surface-applied dimensional metals letter with indirect illumination
- Reverse style channel letters with halo illumination mounted on a non-reflective surface
- Routed metal or stone, acrylic, wood
- Non-illuminated dimensional letters of metal, stone, or wood

The following sign types are prohibited:

- All other types of internally illuminated signs
- Handwritten
- Flashing signs/lights
- Exposed neon
- Vacuum formed signs
- Miscellaneous signage such as credit card signs, sales signs, decals, symbols, artwork, any temporary signs, etc.
- Promotional signs not previously approved by the Airport
- Off-premises advertising



- Free standing pedestal signs (stand-up), single or double sided unless approved by the Airport
- Surface mounted box or cabinet signs of any type
- Signs outside of the tenant leased space
- Roof top signs, painted or installed
- Any sign installed without prior Airport approval

**D.** Regulatory information, promotional materials, and other operational signage may be displayed on or behind the customer service counter. Signs or sign stands/frame on the counters shall be freestanding and made from an acrylic, metal or similar rigid material. Signs shall not be handwritten, photocopied or taped to the counter top. Signs are not permitted on the face of the counter.

**E.** Tenant signage is subject to the Airport's design review process prior to installation

## **3.0 Tenant Terminal and Concourse Area Non-Public Spaces**

### **3.1 General Design Guidelines**

- A.** The Airport will provide base finishes in areas designated as Tenant leased space (except in Airline Exclusively leased and Concession spaces).
- B.** Tenant improvements are subject to the Airport's design review process prior to installation.

### **3.2 Tenant Office and Operational Space Base Finishes**

- A.** Airport provided base finishes (except in Airline Exclusively leased and Concession spaces) include:

1. Floor - Heavy duty carpet or vinyl composition tile (VCT)
2. Walls - Painted gypsum board
3. Ceiling - Lay-in acoustical tile
4. Doors- Hollow metal doors and frames
5. Lights - Airport standard florescent lights

- B.** Tenant proposed modifications to existing base finishes shall be made by the Tenant at the Tenant's expense (except in Airline Exclusively leased and Concession spaces). This includes, but is not limited to, changes in wall color, carpet or tile, any attachment, penetration, or modification to the lay-in acoustical tile, or any door or light fixture alteration. Modifications to existing base finishes are subject to Airport's design review process (except in Airline Exclusively leased and Concession spaces).

### **3.3 Tenant Office and Operational Space Modifications**

- A.** Improvements made by the Tenant within its leased space such as changes to flooring, wall, and ceiling finishes, office modifications, equipment, and corporate branding shall be made by the Tenant at the Tenant's expense. In the event the Tenant vacates its leased space, the Tenant shall restore leased space to the original finishes.

- B.** The Tenant shall provide standard white 2x2 ceiling tile or other approved ceiling tile. Ceiling heights and conditions throughout the Tenant leased space vary depending on location.

**C.** The Tenant shall coordinate any necessary tie-in(s) to existing mechanical, plumbing, and sprinkler equipment with the Airport.

**D.** Access panels shall be provided as required by code and/or the Airport. Ceiling access panels, grills, diffusers, light tracks, and fixtures shall be recessed into or above the ceiling and shall be finished to match the ceiling. New ceiling alterations, and access panels will be provided by the Tenant at the Tenant's expense.

**E.** New doors in the Tenant's leased space shall be provided by and installed at the tenant's expense. New doors shall be compatible and complementary with the overall design of the space. New doors shall be hollow metal doors and frames. The use of kick plates is encouraged, and some areas will be required.

**F.** Proposed walls within Tenant leased space shall consist of twenty gauge metal studs and 5/8 inch gypsum board. The Tenant shall finish walls to a minimum of six (6) inches above finished ceiling.

**G.** If a new demising wall is required, the wall shall be one (1) hour fire-rated construction with six (6) inch metal studs. The Tenant shall finish walls to a minimum of six (6) inches above the finished ceiling. The Airport shall oversee the coordination of utilities and duct work that passes through the demising wall.

**H.** Window coverings on exterior windows shall be provided by the Tenant at the Tenant's expense. Window coverings will be of high quality and durable materials; window coverings such as roller shades or operable blinds are to be professionally manufactured, installed, and maintained.

**I.** Tenant leased space modifications shall be made by the Tenant at their expense.

**J.** Tenant improvements are subject to the Airport's design review process prior to installation.

### **3.4 Airline Baggage Make-up Areas**

**A.** The overall design and layout of the airline baggage make-up area is primarily fixed by function. The Airport will provided base finishes throughout baggage make-up areas (except in Airline Exclusively leased and Concession spaces).

**B.** Tenant proposed modifications to existing base finishes shall be made by the Tenant at their expense (except in Airline Exclusively leased and Concession spaces). Modifications to existing base finishes are subject to the Airport's design review process prior to modification.

### **3.5 Tenant Installed Signs - Non-Public Space**

- A.** Tenant specific identification signage is permitted within the Tenant's leased space.
  
- B.** Flashing, noise emitting, moving, animated, and off premises advertising signs are not permitted. Signs must be displayed within the Tenant's leased space.
  
- C.** Any sign that the Airport deems distasteful, offensive, creates a potential operational or safety hazard, or does not conform with the overall terminal and concourse aesthetic will be removed, at the Tenant's expense, the determination will be made at the sole discretion of the Airport.
  
- D.** Tenant signage is subject to the Airport design review process prior to installation.

## **4.0 Tenant Common Use Space**

### **4.1 General Design Guidelines**

**A.** The Airport will provide and install finishes within common use space in the terminals and concourses, including, back wall treatments, electronic displays, counters and millwork, stanchions, etc.

**B.** Modifications to Airport installed finishes are not permitted without consultation and approval from the Airport.

**C.** Permanent tenant installed signage is not permitted within common use space. Temporary signs such as counter top informational signs will be reviewed and approved on a case by case basis prior to posting.

**D.** Temporary airline specific equipment and approved signs shall be removed from common use space daily or before another airline is scheduled to use the space.

**E.** Approved temporary signs shall conform to section 2.8 of these standards.

## Section B. Retail/Food and Beverage and Food Court Areas

## **Section B. Retail, Food and Beverage, and Food Court Areas**

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## 1.0 INTRODUCTION

### 1.1 Purpose of Document

**A.** The Salt Lake City Department of Airports (Airport) and its Concessionaires (Tenants) are responsible for the first impression of most visitors. This first glimpse of the Intermountain Area and Salt Lake City is an opportunity to showcase local and regional themes, natural features, resources and history. With this in mind, the objectives of the Airport relative to concessions include the provision of high quality, diverse products that, where possible, relate to or are produced in the Intermountain Area. The visitor experience should always be the overriding force in the concession layouts and design. These guidelines provide concessions maximum opportunities for branding and merchandising, while responding to traveler needs for clarity of wayfinding circulation and quality visitor services.

**B.** The Airport Tenant Improvement Guidelines and Design Standards and the Tenant Lease Agreement have been prepared to assist Tenants and their architects, designers and engineers to understand and respond to lease requirements regarding design and construction of various types of retail spaces at the Airport. The guidelines exhibited in this manual govern Tenant improvements to facilities; storefronts, floors, walls, ceiling, lighting, signage, etc.; the intent of which is to encourage quality design and consistent standards for Tenants. The renderings and diagrams contained in this document are conceptual only and are intended to assist Tenants in complying with these standards. Where a discrepancy exists between the diagrams in this document and the Airport's Lease Outline Drawings (LOD), the Airport's lease outline drawing will prevail. Tenants must refer to other lease documents and exhibits to determine the extent of work performed by the Airport and the work required by the Tenant.

**C.** Except for routine maintenance on tenant-installed equipment, Airport approval is required any time a Tenant desires to perform interior or exterior construction on Airport property. The approval process and requirements necessary are explained throughout this document. Airport approval is required prior to applying for any local, State, and/or federal permits. This requirement is to ensure that the documents are reviewed and approved according to Airport standards prior to being reviewed by other jurisdictions. Any tenant work undertaken without the prior written approval of the Airport may, at the discretion of the Executive Director, be removed from the Tenant's leased premises and the leased premises restored to its prior condition at the sole expense of the Tenant.

**D.** The Executive Director of the Airport reserves the right to modify or wave any or all of the design standards in this document at any time.

## **1.2 Use of Tenant Improvement Guidelines / Design Criteria Handbook**

**A.** Tenants must become familiar with the intent, scope and detailed requirements of the Criteria before the design process begins. It is the responsibility of the Tenants and their design teams to visit the sites and verify existing conditions. Tenant designs must be approved by the Airport before any construction commences. Submittal and approval procedures are outlined throughout this document.

**B.** The Criteria contained herein must be followed in the design of retail and food and beverage facilities to be constructed in the Airport's terminals and concourses. The purpose of the Criteria is to provide a single, uniform and consistent source of the Airports' intent regarding the design and construction of facilities at the airport. Under no circumstances shall these documents be interpreted or utilized as design, bid, or construction documents. The Airport is solely providing guidance to the design professional(s) and does not assume any responsibility for the Tenant's design professional(s) to complete contractual and professional responsibilities or to provide complete professional services as required by any Tenant.

**C.** Additionally, it is not the intent of these standards to supersede any requirements as set forth by the Federal Aviation Administration (FAA), Transportation Security Administration (TSA), the City and/or County of Salt Lake City, or other applicable federal, State, or local standards or codes, such as the Americans with Disabilities Act (ADA). Conflicts shall be identified by the Tenant's design professional(s) and presented in writing to the Airport for resolution.

## **1.3 Design Intent**

**A.** The intent of these standards is to ensure that a Tenant's facility design takes advantage of every available option to optimize the potential of the Tenant's space. Design should evoke a sense of personality along with a positive image that captures a customer's attention. The design should provide a complementary setting for the merchandise and a stimulating, but comfortable environment for the customer. Retail presentation within the airport will require careful consideration to scale, exposure to patrons, visibility and circulation patterns. Merchandising solutions should promote store identity and product recognition through the emphasis of storefront transparency, creative concession identity graphics, and vibrant merchandise displays. The application of glass and facade detailing of storefronts must reflect a standard of high environmental quality. At the same time, these facades and accompanying displays should suggest the independent character of individual retailers, the quality of services and types of merchandise and food which they provide.

**B.** These standards have been developed to provide a summary of design elements essential to the creation of a successful store design. The information contained in these standards should be utilized by Tenants, their designers and contractors to coordinate the necessary information for the design and construction of their leasehold improvements. The results should be high quality, durable, innovative designs consistent with the overall design theme identified in these standards. It is also important for the Tenant's design to complement the architectural qualities of the terminals and concourses, while still being compatible with adjacent tenancies. Use of these standards should encourage the Tenant spaces to strike a balance between both variety and consistency. These standards should be met by proposing contemporary design solutions that are able of capturing the "essence" and feel of the design guidelines, without necessarily being literal interpretations. This can be achieved through proper use of materials, color and design elements that relate to the overall theme established by these standards.

**C.** The Airport encourages the use of sustainable design practices. Tenant's should use proven energy and carbon reduction measures, water efficient fixtures, resource efficient and low emitting materials. Areas of sustainable design should include: ***(If Tenant is submitting for LEED-CI, refer to Appendix G of this document which provides recommendations consistent with the LEED certification of the project.)***

- Water Use Reduction: Maximize water efficiency within buildings to reduce the burden on municipal water supply and wastewater systems. High efficiency fixtures and valves, aerators, WaterSense™ certified fixtures and fixture fittings should be used where available. Target a water use reduction goal of 35% from typical commercial use baselines. Use local generation of domestic hot water, as much as possible, to eliminate long piping runs associated with recirculation piping - unless connecting to an existing hot water recirculating system. Tenant provided plumbing fixtures shall meet the flow requirements listed below:
  - Water Closets: Single flush set at 1.28 gpf max.
  - Urinals: Single flush set at 0.125 gpf max.
  - Lavatories in public core areas; Set at 0.09 gpm per 10 second cycle.
  - Break/Pantry Room Sinks: Set at 1.7 gpm max.
  - Showers: Set at 1.5 gpm max.
  - Kitchen Sink: Set at 1.7 gpm max.
  - Hand Sink: Set at 0.5 gpm max.
  - Pre-Rinse Spray Valve: Set at 1.6 gpm max.
  
- Airport HVAC Systems. The Airport HVAC systems provide outdoor air ventilation rates at least 30% above the minimum rates required by ASHRAE Standard 62.1. The Tenant HVAC design shall also provide outdoor air ventilation rates at least 30% above the minimum rates required by ASHRAE Standard 62.1.

- The Tenant HVAC design shall meet the requirements of ASHRAE Standard 55.
  - The Tenant shall sufficiently exhaust each space where hazardous gases or chemicals may be present or used to create negative pressure with respect to adjacent spaces when the doors to the room are closed. The exhaust rate must be at least 0.50 cubic feet per minute (cfm) per square foot with no air recirculation. The pressure differential with the surrounding spaces must be at least 0.02 inches of water gauge on average and 0.004 inches of water at a minimum when the doors to the rooms are closed.
  - The Tenant shall refrigerants and heating, ventilating, air conditioning, and refrigeration (HVAC&R) that minimize or eliminate the emission of compounds that contribute to ozone depletion and global climate change. The Tenant HVAC&R equipment combined contributions to ozone depletion and global warming potential shall be less than 100 as defined by LEED BD+C v3-2009 Credit EAc4.
  - The Tenant shall not operate or install fire suppression systems that contain ozone-depleting substances such as CFCs, hydro chlorofluorocarbons (HCFCs), or halons.
  - Particle filters or air cleaning devices shall be provided to clean the outdoor air at any location prior to its introduction to occupied spaces. Filtration media shall be rated at a minimum efficiency reporting value (MERV) of 13 or higher in accordance with ASHRAE Standard 52.2.
- Construction Waste Management: Divert construction, demolition and land-clearing debris from disposal in landfills and incinerators. Redirect reusable, recyclable, and recovered resources to appropriate sites or back to the manufacturing process back to the manufacturing process. Redirect reusable materials to appropriate sites. Establish a goal of at least 75% for diversion from disposal in landfills and incinerators and adopt a construction waste management plan to achieve these goals during construction. Recycle cardboard, metal, brick, acoustical tile, concrete, plastic, clean wood, glass, gypsum wall board, carpet, insulation, batteries, light bulbs, toner cartridges, electrical wiring and electronics. Designate a specific area(s) on the construction site for segregated or commingled collection of recyclable materials, and track recycling efforts throughout the construction process. Identify construction haulers and recyclers to handle the designated materials. Note that diversion may include donation of materials to charitable organizations and salvage of materials on-site. Implement deconstruction planning and techniques into all demolition activities. Ensure that employees are aware of waste management and recycling procedures. When possible, evaluate the use of pre-cast or pre-fabricated units, as appropriate, to reduce on-site waste generation during construction.
  - Recycled Content: Increase demand for building products that incorporate recycled content materials, thereby reducing impacts resulting from extraction and processing of virgin materials. Establish a project goal of at least 30% recycled content materials and identify material suppliers that can achieve this goal. During construction, ensure that the specified recycled content materials are

installed. Consider a range of environmental, economic and performance attributes when selecting products and materials. Recycled content is calculated as the sum of post-consumer recycled content plus half of the pre-consumer recycled content. The recycled content value of a material assembly is determined by weight. The recycled fraction of the assembly is then multiplied by the cost of the assembly to determine the recycled content value.

- **Regional Materials:** Increase demand for building materials and products that are extracted and manufactured within the region, thereby supporting the use of indigenous resources and reducing the environmental impacts resulting from transportation. Establish a project goal of at least 20% locally sourced materials, and identify materials and material suppliers that can achieve this goal. During construction, ensure that the specified local materials are installed and quantify the total percentage of local materials installed. Consider a range of environmental, economic and performance attributes when selecting products and materials. Regional materials are products that have been extracted, harvested or recovered, as well as manufactured within a 500 mile radius of the project site.
- **Rapidly Renewable Materials:** Reduce the use and depletion of finite raw materials and long-cycle renewable materials by replacing them with rapidly renewable materials. Establish a project goal for rapidly renewable materials and identify products and suppliers that can support achievement of this goal. Consider materials such as bamboo, wool, cotton insulation, agrifiber, linoleum, wheat board, straw board, and cork. During construction, ensure that the specified renewable materials are installed.
- **Certified Wood:** Encourage environmentally responsible forest management. Establish a project goal of at least 50% by cost for FSC- certified wood products and identify suppliers that can achieve this goal. During construction, ensure that the FSC-certified wood products are installed and quantify the total percentage of FSC-certified wood products installed.
- **Construction IAQ Management Plan – During Construction:** During construction, meet or exceed the recommended control measures of the Sheet Metal and Air Conditioning National Contractors Association (SMACNA) IAQ Guidelines for Occupied Buildings Under Construction, 2<sup>nd</sup> Edition 2007, ANSI/SMACNA 008-2008 (Chapter 3). Protect on-site and installed absorptive materials from moisture damage. Use filtration media with a minimum efficiency reporting value (MERV) of 8 at each return air grille. Replace all air filtration immediately prior to occupancy.
- **Low-Emitting Materials/ Adhesives & Sealants:** Reduce the quantity of indoor air contaminants that are odorous, irritating and/or harmful to the comfort and well-being of installers and occupants. Specify low-VOC materials in construction documents. Ensure that VOC limits are

clearly stated in each section of the specifications where adhesives and sealants are addressed. Common products to evaluate include general construction adhesives, flooring adhesives, fire-stopping sealants, caulking, duct sealants, plumbing adhesives, and cove base adhesives.

- Low-Emitting Materials / Paints & Coatings: Reduce the quantity of indoor air contaminants that are odorous, irritating and/or harmful to the comfort and well-being of installers and occupants. Specify low-VOC paints and coatings in construction documents. Ensure that VOC limits are clearly stated in each section of the specifications where paints and coatings are addressed. Track the VOC content of interior paints and coatings during construction.
- Low-Emitting Materials/ Carpet Systems: Reduce the quantity of indoor air contaminants that are odorous, irritating and/or harmful to the comfort and well-being of installers and occupants. Clearly specify requirements for product testing and/or certification in the construction documents. Flooring must meet the requirements of Green Label Plus, FloorScore, or an alternative compliance path outlined in the LEED v2009 for New Building Design and Construction reference guide. All adhesives must comply with the requirements listed above under “Low-Emitting Materials/ Adhesives & Sealants”. Specify Low-VOC carpet systems. Ensure that VOC limits are clearly stated where carpet systems are addressed. Be attentive to carpet installation requirements.
- Low-Emitting Materials/Composite Wood & Agrifiber Products: Reduce the quantity of indoor air contaminants that are odorous, irritating and/or harmful to the comfort and well-being of installers and occupants. Specify wood and agrifiber products that contain no added urea-formaldehyde resins. Specify laminating adhesives for field and shop applied assemblies that contain no added urea-formaldehyde resins. Review product cut sheets, MSD sheets, signed attestations or other official literature from the manufacturer.
- High performance lighting fixtures and controls: Reduce energy demands by utilizing high performance lighting fixtures and controls. Occupancy controls should also be utilized in selected areas. Allowing daylight into occupied areas should be maximized where feasible.
- Recycling: Airlines/Tenants are encouraged to develop a recycling plan where practical.
- Reduce the environmental and indoor air quality impacts of the furniture and equipment acquired for use in Tenant space. To the extent possible, utilize ENERGY STAR electronic equipment and/or sustainable furniture systems, such as GREENGUARD certified furniture.
- Reduce indoor air quality problems resulting from the construction/renovation process in order to

help sustain the comfort and well-being of occupants. During construction, meet or exceed the recommended Design Approaches of the Sheet Metal and Air Conditioning National Contractors Association (SMACNA) IAQ Guideline for Occupied Buildings under Construction, 1995, Chapter 3. Protect stored on-site or installed absorptive materials from moisture damage. Sequence the installation of materials to avoid contamination of absorptive materials such as insulation, carpeting, ceiling tile, and gypsum wallboard. Minimize the use of air handlers during construction. If air handlers are used during construction, filtration media with a Minimum Efficiency Reporting Value (MERV) of 8 must be used at each return air grill, as determined by ASHRAE 52.2-1999. Prior to occupancy, perform a flush-out or test the air contaminant levels in Tenant space.

- The Airport is a non-smoking facility.

**D.** These standards encourage a concerted effort on the part of every Tenant and architect to select finish materials, which are derived from the earth's renewable resources. Materials that are harmful to the environment are prohibited.

**E.** The following definitions are used throughout the Design Criteria and shall be interpreted as follows:

1. Storefronts shall be defined as the architectural facades of any Tenant-leased premises perimeter adjacent to public circulation areas of the terminal and concourses, including doorways. The storefront will be physically defined by Base-Building elements to be provided by the Airport that surround and frame the Concession/Tenant storefront; those elements include side (or neutral) piers, the upper fascia/bulkhead, and the floor surface at the lease line.
2. Permanent Tenant demising walls are those that mark the lease lines between independent Concession Tenant-leased areas or other separately designed spaces, including public spaces, service corridors, etc.
3. Lease lines are provided by Airport.
4. Common area is the space used by the general public that is designed and maintained by the Airport.

## **1.4 Airport Work / Tenant Work**

**A.** The Airport will generally provide the leased area to each Tenant in an "as-is" condition subject to the following provisions:



1. The Airport will provide the demised premises (rear and side walls, as applicable).
2. The Airport will provide base utilities to the lease line.

**B.** The Tenant will be responsible for any demolition required, as well as any services, utilities or work not mentioned above; and other work as required to complete the build-out of Tenant's facilities. In addition, F&B tenants will be required to provide and connect to required grease interceptors, fryer oil disposal systems, and exhaust and make-up air systems. Refer to Appendix C, D and H for specific requirements.

**C.** Tenant will also be required to connect to the Airport's Life Safety System, BAS for energy management, system and monitoring, and Kilair program for emergency purposes. Tenant is responsible for contracting with its Designer, Architect, Engineers, other Specialty Consultants, and General and Specialty Contractors. The Tenant's work shall conform to applicable codes, ordinances, regulations and statutes, as well as these standards, and other Airport requirements. The work shall be limited to the leased concession space unless a utility interface point is required outside the lease line. Any other work outside of the Tenant's leased premises shall require prior written authorization from the Airport. The Airport reserves the right to require changes in the Tenant's work when necessary as a result of the proximity of the leased premises to special use facilities or special requirements regarding the interface with the Airport's systems.

**D.** It is the Tenant's responsibility to coordinate the interface and availability of telecommunications and data requirements with the Airport at the inception of the project, see Appendix E. The Tenant is responsible for the complete design and construction of the premises, including fees, permits, taxes, insurance, licenses, bonds, partitions, finishes, structural modifications, signing, merchandising and fixturing, furnishings, equipment, lighting, plumbing and mechanical systems, electrical systems, security and Airport systems interface, and any beverage line between storage and retail space. Where Tenant systems interface with Airport systems, the interface shall be in accordance with these standards and at the direction of the Airport (See Appendix E for IT and Cable Standards).

**E.** Grease Waste piping shall be stainless steel. Tenant shall install stainless steel grease waste piping to match the Airport standard. Refer to Appendix D and H – Stainless Steel Grease Waste Piping and Josam Stainless Steel Specification for information on acceptable products, installation methods, maintenance requirements and other relevant information.

**F.** Used Cooking Oil/Cooking Waste Oil piping shall be Schedule 40 black steel, with screwed fitting 1-1/2" and smaller, welded 2" and larger. Cooking Waste Oil piping shall be insulated and heat traced and shall be heated to 140-degrees F. Refer to Appendix C-3 - Plumbing Design Guidelines.

## **1.5 Tenant Construction Payment and Performance Bond**

Each Tenant shall be required to provide the Airport with a payment performance bond for each project in an amount equal to the total cost of the improvements.

## **1.6 Interface Points and Utilities**

**A.** The Tenant shall provide any required supports, blocking, temporary flashing, counter flashing or other work necessary to complete the installation of Tenant's equipment on the Airport's roof and shall not interfere with any roof warranties. The Tenant shall engage the Airport's approved roofing contractor to perform the Work, or provide the Airport the opportunity to review the qualifications of a Tenant-provided roofing contractor. The Tenant will be required to supplement existing construction to achieve assembly ratings, thermal values or additional criteria as required. All work shall conform to the requirements established in these guidelines. Penetrations must be sealed water tight. Time of cutting and/or penetrating the roof must be coordinated and approved by the Airport.

**B.** Floors in the terminals and concourses are suspended concrete slab construction. Floors must be x-rayed prior to any cutting, boring or penetration of any kind. Tenant must submit a written request along with documentation to the Airport for approval prior to commencing work. The Tenant is responsible for review of existing documentation available from the Airport archives and visual survey, to determine allowable loading of floors, roofs, etc. for Tenant's equipment, furnishings, etc; cutting and/or penetrating the floor must be coordinated and approved by the Airport.

**C.** Existing fire ratings must be maintained during and after construction.

**D.** Door hardware must be keyed to the Airport's master hardware system.

**E.** Food & Beverage Tenants shall provide waterproofing throughout the leased premises. All other Tenants shall provide waterproofing at any room where water may be expected on the floor. The Tenant is solely and completely responsible for leaks.

**F.** Restaurant and bar facility floors shall have a waterproof membrane installed (refer to specific requirements in these standards). The Tenant is solely and completely responsible for leaks.

**G.** The Tenant is responsible for connections to base building utilities to achieve a complete, approved and operating system. Tenants with systems or equipment that require utility connections to the Airport's uninterrupted or generator power system shall request this service through the Airport Tenant Coordinator. The Airport will review and approve these utility connections on a case by case basis.

**H.** The Tenant shall provide any required alarm systems or other protective devices, conveyors, time clocks, delivery door buzzers, fire extinguishers, dry chemical fire protection systems or any other equipment specific to the Tenant's business needs or Tenant use. Only clocks connected to the Airport's master clock system may be installed by the Tenant if exposed to public view. Tenants requiring a radio system for communication must comply with Airport and FAA requirement, see SLCDA IT and Cable Standards in Appendix E.

## **1.7 Insurance Requirements**

**A.** The Tenant's consultants and contractors are required to provide general liability, workers' compensation, and automobile insurance as described below, the required amounts may be revised as deemed necessary by the Airport. Tenants shall disclose this information to consultants and contractors prior to engaging their services to ensure that they are able to meet these requirements. Contractor's badges and access will only be provided once the proper insurance documentation has been received. The Airport shall be listed as an additional insured party on all policies.

**B. General Liability Coverage Insurance:** Access to non-aircraft operating areas, including landside, requires general liability insurance in the amount of \$5,000,000.

**C. Automobile Coverage:** Access to non-aircraft operating areas requires automobile insurance in the amount of \$5,000,000.

**D. Workers Compensation:** Proof of Workers Compensation Insurance, statutory limits must be submitted to the Airport prior to the start of construction. Refer to the Agreement for additional insurance requirements.

**E. Salt Lake City Corporation, PO Box 145550, SLC, UT 84114-5550** must be listed as an additional insured on the insurance certificates in the appropriate sections. This requirement applies to certificates for consultants and contractors.

**F.** Contractor insurance shall remain current and in force during the entire project.

## **1.8 Architect / Engineer Selection**

The Tenant shall be required to engage an architect and potentially a design firm, herein after referred to as the Tenant's designer, and engineers duly licensed to practice in the State of Utah, to prepare the designs, drawings, calculations, and construction documents. Construction Administration Services shall be provided for each project by the designer and appropriate engineers of record. The Tenant's designer, or engineer shall be on-site during the site evaluation process. If existing fire protection systems are modified, a licensed fire protection engineer shall be engaged for the design work.

## **1.9 Contractor Selection**

**A.** The Tenant shall be required to engage a qualified general contractor or construction management firm, duly licensed to do business in the State of Utah to construct the Tenant's facility in accordance with the approved construction documents and the requirements and regulations contained in these standards.

**B.** Other contractors and firms hired by the Tenant independent of the general contractor (GC) that are performing work within the Airport's property shall be subject to the same insurance and licensing requirements as stated above. Contractors might include, but not be limited to those for food service equipment installation, millwork or casework fixturing, merchandising, etc.

## **1.10 Airport Document Review**

**A.** The Airport does not charge a fee for the initial application and review process. Work completed without written Airport approval will be subject to penalties or fees, or removal of the work at the Tenant's expense. Project permitting and development costs, fees, and taxes required to complete the work are the responsibility of the Tenant and its contractor(s).

**B.** Tenants needing CAD or other record drawings shall submit their request in writing to the Airport. CAD and record drawings are provided as a starting point for the Tenants. Tenants and their contractors are required to field verify existing conditions and pot hole, if necessary, to locate existing underground utilities and their depths prior to submitting documents for the Airport's review.

C. In general, the process described below and the submittals for each phase are required for each tenant improvement project.

### **Preliminary Design Review**

Prior to actual design, a pre-design meeting shall be held and attended by the Airport, the Tenant, and the Tenant's design team. At this meeting, the Tenant will be expected to provide a high level overview of the proposed project and/or concept, and the overall scope of work. The Airport will present general requirements and procedures. The Airport staff will review the proposed project and its conformance with the Master Plan. Any known or anticipated special conditions and concerns will be identified and discussed at this time. Special conditions may include but are not limited to staging, work hours, environmental concerns, insurance, etc. The Tenant will be briefed on required review meetings, presentations, and submittals for each stage of the design review process.

Submittals required: A completed Tenant Improvement Application and any renderings or concept materials expressing the intended use for the space. The Tenant Improvement Application is included in the appendix of this document.

The Airport will provide feedback and direction during the meeting and any additional comments will be provided in written form to the Tenant within ten (10) working days of the meeting.

### **Design Development Review (30% Submittal)**

The intent of the 30% design development review is to ensure that the preliminary design is in compliance with Airport standards and expectations based on the previously-submitted design concept and Airport comments. A high-level review of the project will be performed by the Airport.

**Submittals required:** one (1) electronic copy in PDF format (to scale) submitted by the Tenant's design team into Unifier, plus one (1) material sample board meeting the following requirements:

1. Scaled floor plans showing existing and adjacent conditions. Floor plans must include floor finishes, furnishings and fixtures, equipment, seating, storage areas, etc.
2. Scaled reflected ceiling plan indicating ceiling heights, materials and finishes, and overall fixture and other feature layout.
3. Scaled elevations of the storefront, interior walls and areas visible to the public, including identification of materials, signage and equipment.

4. Signage elevations and sections showing type, location, colors and materials.  
Proposed menu (board) format and design for food and beverage concepts shall also be presented.
5. Scaled mechanical plan showing connections to existing systems for HVAC, new ventilation systems and other related information.
6. Scaled plumbing plan showing connections to existing systems for water and waste, the extent and quality of all fixtures.
7. Scaled Fire Protection drawings and details.
8. Scaled structural drawings and details if required by scope of Tenant's work.
9. Scaled electrical plan showing connections to existing systems, proposed panel locations, locations and types of fixtures and cut sheets for each fixture.
10. Complete color and material sample board with actual samples of floor, wall, ceiling, casework, fixture and furniture finishes.
11. Outline of specifications.
12. Updated perspective and colored rendering of storefront and merchandise display (if applicable), incorporating information from previous comments.
13. Detailed preliminary project schedule. The project schedule shall identify separate tasks that detail the scope of work from procurement to final acceptance. The schedule shall include work components, permit procurement, shop drawing submittal process, owner furnished items, interfaces with pertinent agencies and/or base building, milestones, substantial completion, and anticipated final acceptance dates.

The Airport will attempt to respond to the tenant within 15 working days and will provide tenant notification to proceed with construction document preparation, or to resubmit a revised design development package incorporating the review comments provided by the Airport.

**Construction Document Review (100% Submittal)**

The Airport will conduct a detailed review of the project plan to ensure compliance. Plan changes are to be marked and identified with a revision number(s). Revision number(s) shall be recorded and dated in the revision block. Underground utilities, including electric, water, sewer, gas, etc., shall be shown on the plan.

**Submittals required:** one (1) electronic copy in PDF format (to scale) submitted by the Tenant's design team into Unifier, meeting the following requirements:

1. Title page with site and vicinity location plan, overall airport diagram, project team and contact information.
2. Architectural drawings to scale.
3. Structural drawings to scale, if required.
4. Food service equipment drawings, if applicable.
5. Mechanical drawings to scale.
6. Electrical drawings to scale.
7. Plumbing drawings to scale.
8. Complete specifications.

Drawings must be sealed and signed by professionals licensed in the State of Utah and all pages must be signed by the responsible party. The Airport will attempt to complete its review and respond in writing within 20 working days of receipt. Inaccurate or incomplete drawings will be returned to the Tenant and the process will recommence. **Additional reviews by the Airport may be billed to the Tenant at a rate of \$1,000.00 per review.** Concurrent with Airport review, the Tenant may apply for building, mechanical, electrical and plumbing permits from Salt Lake City Building Services. Additionally, food service concepts may require approval and permit by the Salt Lake County and/or State Health Department.

### **1.11 Facility Construction Process**

**A.** Upon completion of the design review and permitting process, the project is ready to proceed to the construction phase. The process and procedures to be followed are outlined below.

#### **Pre-Construction**

After obtaining the required permits, a pre-construction meeting shall be held and attended by the Airport, the Tenant, and the Tenant's contractors and design team. The Airport's project manager will schedule the meeting. At the meeting, the Tenant and its contractor(s) will be briefed on rules, regulations, and procedures to be followed for the construction project. Contractors should be prepared to discuss the project in detail.

Submittals required:

1. Two (2) sets of sealed, stamped "Issued for Construction" plans and specifications, and one (1) electronic copy.
2. Copies of all permits.
3. Insurance and bond certificates, if not already on file.
4. Detailed contact list with sufficient information for individuals involved with the project.
5. Detailed final project schedule. The project schedule shall be updated and identify separate tasks that detail the scope of work from procurement to final acceptance. The schedule shall include work components, permit procurement, shop drawing submittal process, owner furnished items, interfaces with pertinent agencies and/or base building, milestones, substantial completion, and anticipated final acceptance dates.

#### **Notice to Proceed**

Upon satisfactory completion of the foregoing requirements, the Airport will issue a Notice to Proceed (NTP) to Tenant in written and/or electronic formats. The NTP will not be issued until necessary reviews have been performed, submittals have been received and permits have been issued. The Airport will require copies of any/all applicable permits. Under no circumstances may the Tenant or the Tenant's contractor(s) commence any work without the issuance of the NTP.

#### **Final Inspection and Punch List**

When Tenant determines the space is substantially complete and ready for an inspection, the Tenant shall notify the Airport or its designated representative, in writing, a minimum of seventy-two (72) hours prior to the requested inspection. The Airport or its designated representative will schedule the inspection with all appropriate Airport staff, review the improvements, and prepare a written list of deficiencies (punch list) within twenty-four (24) hours of the inspection. When the Tenant has completed all punch list items, the Tenant shall request a re-inspection of the premises and the Airport or its designated representative shall schedule the re-inspection. The Tenant is required to correct noted deficiencies on the punch list within fifteen (15) days. If the punch list items are not corrected within thirty (30) days of opening, the Airport reserves the right, at its sole discretion, to close the premises until all outstanding items have been completed. Once the Airport determines that the space is substantially complete, approval is given to the tenant. Punch list items, are prerequisites to final acceptance and/or opening, shall be completed and reviewed again with the Airport representatives prior to opening. Following verbal approval, the Tenant may commence stocking of the facility and on-site training of employees. When



Tenant determines the facility is ready to open to the public, Tenant shall request a final walk-through with the Airport. If approved, Tenant shall be issued a written authorization by the Airport to open for business. When final acceptance has been granted by the Airport, the Tenant will be issued a written Letter of Acceptance of the space.

### **Project Close-out**

Upon completion of the project and final acceptance by the Airport, the Tenant shall provide the documents listed below. These drawings and specifications shall be delivered to the Airport within 45 days of the issuance by the Airport of a Letter of Acceptance of the space.

Submittals required:

1. Final inspection reports issued by all jurisdictions (copies).
2. Copy of the Certificate of Occupancy (if applicable).
3. Copy of the Board of Health inspection report and certification (if applicable).
4. Final Unconditional Waivers of Lien from contractors, subcontractors and suppliers (copies).
5. Certified Balance Report.
6. Operation and Maintenance Manuals (if applicable).
7. Sustainability Report listing materials generated on site for salvage, reuse or recycling, quantity, and destination.
8. Warranty documents and manufacture equipment start up sheet (if applicable).
9. Commissioning report for all mechanical equipment.

Failure to provide the above referenced documents will be considered non-compliance with contract terms. It is the Tenant's responsibility to ensure that its contractor and design team provide the documents within the prescribed timeframe.

## **1.12 Building Official, Approvals, Permits and Associated Fees**

A. The Tenant is responsible for compliance with applicable codes and standards adopted by Salt Lake City Corporation and Department of Airports at the time of design and construction. These include but are not limited to: International Building Code (IBC), International Plumbing Code (IPC), International Mechanical Code (IMC), National Electric Code (NEC), National Fire Protection Agency (NFPA), Americans with Disabilities Act (ADA), and American National Standards Institute (ANSI) guidelines.

**B.** New construction or alteration of existing facilities requires a building permit issued by Salt Lake City Corporation Building Services. A separate permit will be issued by Salt Lake City Corporation for plumbing, mechanical, and electrical construction. These permits are in addition to the General Building Permit. For more information contact:

**Salt Lake City Corporation Building Services**  
**451 South State Street, Salt Lake City, Utah 84111**  
**(801) 535-6000**

**C.** Review and approval of design and construction must also be secured from the Salt Lake County Health Department for food service related spaces. For more information contact:

**Salt Lake County Health Department**  
**2001 South State Street, Salt Lake City, Utah 94190**  
**(801) 468-2750**

**D.** For Tenants with locations that are permitted to serve alcohol, review and approval of design and construction must also be secured from the Utah Department of Alcohol Beverage Control. For more information contact:

**Utah Department of Alcohol Beverage Control**  
**1625 South 900 West Salt**  
**Lake City, Utah 84104**  
**(801) 977-6800**

**E.** The Tenant is responsible to secure permits and pay plan check, permit and license fees required for improvement and construction within the leased premises.

1. Natural gas is provided to the Airport through Dominion Energy Gas.
2. Electrical service to the airport is provided by Rocky Mountain Power.

**F.** Work must be performed by properly licensed personnel and comply with appropriate codes, rules, regulations, and policies of agencies having jurisdiction. The Airport reserves the right to restrict the hours of work if work is deemed to be excessively disruptive to the airport, at no cost to the Airport. All materials and each portion of the work are subject to Airport inspection. Other federal, State and local agencies may require the contractor to have permits and inspections in addition to those required by the Airport.

### **1.13 Plan Modifications**

Once the construction documents have been approved by the Airport, any change must be submitted in writing to the Airport or its designated representative for approval prior to proceeding with the change. This documentation must explain the reason for the requested change and be supported by adequate and appropriate information or drawings, as required. The Tenant shall allow ten (10) working days for a response from the Airport. If the change request is of the utmost importance to resolve quickly, the Airport will make every effort to work with the Tenant's architect and contractor(s) to facilitate the change. The Airport will issue a written response to the change request. This includes any changes made either before Salt Lake City Corporation Building Services reviews the plans for permit, or following receipt of the permit. Direction by the Salt Lake City Corporation Building Services Department to make a change in the drawings does not constitute approval by the Airport. It is the Tenant's architect and/or contractor's responsibility to notify and obtain Airport approval or concurrence with any such directives or changes. If changes are made without Airport approval, the Tenant's contractor may be required, at their own expense, to modify the work so that it conforms to the approved drawings.

### **1.14 Field Verification**

Where possible, the Tenant's designer shall be required to field verify, in person where possible, site conditions and dimensions for the 30% design submittal. This work shall be incorporated into the contract documents as the basis for the existing condition backgrounds. The verification includes in person research of existing plans in the Airport Engineering GIS Division, visual inspection, and measuring of existing space and surrounding areas. It may be necessary for the designer and/or consulting engineers to make an additional inspection following demolition of the pre-existing conditions if conditions were concealed prior to such demolition.

### **1.15 Airport Oversight**

**A.** The Airport may designate a project manager for each leased premises and Tenant. This project manager will be the contact and recipient for design questions, coordination, and submissions. The Airport will monitor the Tenant's construction project on a regular basis. The Airport shall have the right to inspect the work at any time of any day. The Tenant's leased premises shall be available to the project manager at all times during all phases of construction. The Tenant's contractor shall attend weekly progress meetings, which shall include a review of the progress to date, remaining schedule, project plans and specifications, coordination issues with the Airport, and any other issues that require resolution.

**B.** It is the express obligation and duty of the Tenant's contractor(s) to coordinate, cooperate and communicate with the Airport and/or their designated representatives. The Tenant's contractor(s) shall not impede, hinder, or delay any other parties in the performance of their work and shall remain solely and exclusively responsible for any damages or costs incurred as a result of any hindrance or delay. The Tenant's contractor(s) shall comply with rules and regulations concerning safety and security. The Airport designated project manager will be the contact for construction-related correspondence after the commencement of construction. Construction meetings and inspections required shall be coordinated through the project manager.

### **1.16 CAD Standards and Deliverables**

Review the Airport Engineering BIM standards and the Project BIM Execution Plan for a full description of the deliverable and file exchange requirements. Electronic Record Drawings must be submitted as Revit files and/or DWG/NWC exports as defined in the BIM Execution Plan, and it should include all support files to open the files seamlessly.

The project may be submitted to the client and consultants according to the file exchange procedures outlined in the BIM Execution Plan. Portable storage media (USB flash drive) may be considered as alternate means of exchanging the Electronic Record Drawings.

Models created in other authoring software must be exported to NWC files for coordination purposes, unless otherwise noted in the BIM Execution Plan.

### **1.17 Demolition**

Generally, demolition must be done between the hours of 1:00 a.m. to 4:00 a.m. or as determined in writing by the Airport, especially those activities that generate excessive noise. Demolition of any premises immediately adjacent to an existing Tenant will only be allowed when that Tenant is not in operation. Temporary construction walls, or dust wall construction barricades are required for demolition and construction where the premises adjoins or fronts public areas of the terminals, concourses, or other facilities – Refer to Appendix F for Dust Wall Barricade Standards.

### **1.18 Hours of Work**

Tenant's contractors are permitted to work at any time behind closed barricades. Any activities that generate excessive noise (hammer drills, saw cutting, heavy pounding, etc.) or offensive odors are subject to the demolition restrictions listed in 1.17 above.

## 1.19 Airport Holiday Observance

For coordination purposes, the Airport observes the following holidays:

- New Year's Day
- Martin Luther King's Birthday
- President's Day
- Memorial Day
- Independence Day
- Pioneer Day
- Labor Day
- Veteran's Day
- Thanksgiving Day
- Day after Thanksgiving
- Christmas Day

## 1.20 Security Requirements

Tenants are responsible for the security of their leased premises and the construction materials and the merchandise therein. Construction dust wall barricades must remain locked at all times. Personnel working inside the construction barricade must possess and display an Airport-issued identification badge. Any worker not issued an Airport identification badge must have a properly authorized escort who will remain in control of the temporary worker at all times in the secure areas of the Airport. Failure to follow the security requirements and guidelines provided herein and elsewhere by the Airport may result in forfeiture of credentials, fines, and/or imprisonment.

## 1.21 Safety Requirements

**A.** The Tenant and its contractor(s) shall download the "[Airport Construction Safety and Security Manual](#)" and be familiar with its contents. The manual describes the requirements for doing work within the AOA, and general airfield and Federal Aviation Administration (FAA) requirements. The manual is available at:

[https://www.slairport.com/assets/pdfDocuments/Construction\\_Safety\\_Manual.pdf](https://www.slairport.com/assets/pdfDocuments/Construction_Safety_Manual.pdf)

**B.** Safety incidents or accidents must be reported to the Airport Operations Division. Emergencies will be handled by Airport Police and/or Fire Department professionals.

## **1.22 Other Safety Related Issues**

- A.** No cutting, welding, or burning is allowed without Airport approval.
  
- B.** No vapors from paint (even latex), glues, adhesives, or dust are allowed to exit the designated construction area. Paint processes shall meet environmental requirements as required by the Occupational Safety and Health Administration (OSHA). Paints, solvents, rags, and other painting refuse shall be properly disposed according to State and federal environmental regulations. Only latex water-based paints are allowed for interior use.
  
- B.** No power or powder actuated fasteners are allowed to be used in the terminal or concourse areas without prior written approval.

## **1.23 Security Badging**

Individuals working at the Airport are required to go through an identification badge issuing process. The process may take several days to complete and may involve a background check and identity documentation. Tenants and contractors should keep this requirement in mind while creating project schedules. Fees associated with the issuance of identification badges are the responsibility of the Tenant and its consultants and contractors. For information regarding the identification badge issuing process, fees required, and an application, please visit <https://slcairport.com/badging/>. You may also call the Airport's Access Control and ID Badging office at (801) 575-2423.

## **1.24 Temporary Utilities**

Requirements for temporary utilities and/or utilities or systems required to be taken out of service must be coordinated in advance through the Airport project manager.

## **1.25 Conduct**

**A.** The Tenant is solely responsible for the conduct of its employees, agents, consultants, contractors, vendors, suppliers, etc. under their direction or contract. Safety and courtesy for the public, the Airport and their personnel must be a top priority. Among other things; loud music, lewd behavior, consumption of drugs or alcoholic beverages, and all weapons are strictly prohibited on Airport property. The Airport and agencies within the airport have a zero tolerance policy; any violation will be dealt with swiftly and may result in loss of privileges, fines, and/or prosecution.

## **1.26 Delivery and Access for Concession Construction**

Most material deliveries must occur between the hours of 1:00 a.m. and 6:00 a.m., or as determined in writing by the Airport, and should enter and exit the terminal and concourse via the AOA through the use of properly designated and authorized vehicles. Use of Airport passenger elevators for deliveries is strictly prohibited. Only designated freight elevators may be used for this purpose. Exceptions for

material deliveries may be granted on a case by case basis and must be coordinated through the Airport project manager. Any deliveries entering from Terminal Drive (in front of the Airport) must pass through the security screening process and be coordinated with TSA at least 72 hours in advance.

### **1.27 Construction Debris**

Trash and debris from construction and demolition must be removed from the site between the hours of 1:00 a.m. and 5:00 a.m., or as determined in writing by the Airport. In many instances, the Airport will provide trash and recycling dumpsters for Tenant use. Otherwise the Tenant shall provide its own dumpster placed in an area designated by the Airport, with an appropriate cover at all times. Loads must be covered during transit. Use of public passenger elevators by Tenant or contractor is strictly prohibited. Designated service elevators are available for Tenant's use during construction; Airside removal of construction debris shall be coordinated and conducted under the direction of the Airport Operations Division.

### **1.28 Cleanliness**

The Tenant shall be responsible for cleanliness of the terminal and concourses; the Airport will strictly enforce adherence. The Tenant and/or its contractor(s) shall promptly and properly remove any debris and keep the construction area clean, including the use of airport approved walk-off mats at the entrance to the construction site. The Airport will only issue one (1) warning, after which building maintenance will be contacted for clean-up and the cost will be charged to the Tenant.

### **1.29 Contractor Parking and Staging**

Parking, staging and lay down requirements and location shall be coordinated with the Airport's project manager. Due to space limitations and airline commitments, no contractor parking will be allowed anywhere on the Airport Operations Area (AOA), unless authorized by the Airport. Areas surrounding the airside terminal building and concourses are leased exclusively to the airlines. Contractors accessing the building from the AOA for delivery of materials and tools must remove their vehicles as soon as the delivery is complete and may not leave unattended vehicles on the AOA at any time. Any vehicles accessing the AOA are subject to existing security requirements and search at any time.

### **1.30 Right of Inspection**

The Airport, its designees, as well as officials from any Authority Having Jurisdiction (AHJ) shall have the right to inspect the work at any time. For safety, security and quality purposes, the Tenant and its contractor shall provide full access needed, including ladders, temporary lighting, safety equipment, etc. Any comments will be issued immediately to Tenant's contractor with a copy to the Tenant and its designer of record. It is the Tenant's sole responsibility to immediately address and remedy any issues raised during or as a result of an inspection of the premises.

### **1.31 Inspection, Verification and Acceptance by Tenant**

The Tenant's designer will conduct the same inspections (at a minimum) as required by the City permit process and verify the correctness of the work. Upon substantial completion of the work, the Tenant shall require its designer and appropriate engineers of record to conduct a thorough inspection and prepare a list of noted deficiencies (punch list) enumerating any areas of the work that are not in accordance with the approved plans or Tenant's lease agreement for the leased premises. A copy of this list shall be furnished to the Airport within forty eight (48) hours of the inspection. Remedial work resulting from the punch list inspection shall be completed by the Tenant's contractor within thirty (30) days of substantial completion. Any damage to adjacent tenancies or airport property must be repaired prior to Tenant's occupancy of the leased premises. Upon final completion of the work, the Tenant's designer shall certify that work has been completed satisfactorily and in strict compliance with the contract documents, and a copy of the certificate shall be delivered to the Airport within thirty (30) days of final completion of the project.

### **1.32 Record Drawings**

Within 120 days of completion of construction, the Tenant shall deliver to the Airport one (1) hard copy and two (2) electronic copies of corrected record drawings of Tenant's finished leased premises with modifications and corrections reflecting the true and accurate as-built condition of the facility. Electronic record drawings must be submitted in the format as determined by the Airport. The submitted project must be 100% complete. Supporting files must be bound to each respective base drawing. This includes external references, text fonts and any other supporting files needed to complete the set. The projects may be submitted on DVD's or CD's. Other portable storage media may be considered as technology changes. All projects created in other CAD programs, must be converted to an AutoCAD format.

### **1.33 Tenant's Statement of Cost**

A statement of cost reflecting costs associated with the build out of Tenant's leased premises shall be submitted to the Airport within 120 days of final acceptance per the lease agreement. The statement shall be prepared and certified by the Tenant's Chief Financial Officer (CEO) and signed by the Tenant's President.



## 2.0 STOREFRONT DESIGN

### 2.1 General

**A.** Storefront designs are extremely important to successful merchandising and attracting customers. Storefronts must be able to attract travelers/shoppers and encourage them to enter and explore the space.

**B.** A creative and cohesive store design is established at the storefront and then carried through the entire sales area. Imaginative use of materials and architectural elements, appropriate signs, along with creative merchandise presentation, are a few of the tools available for the Tenant's designer.

**C.** The finish materials identified in these standards have been developed to provide consistency with the Terminal(s) design and material, while still offering the Tenant flexibility in design. In determining the finishes to be used in the storefront design, one should consider:

- Quality of the material
- Appropriateness for the character of the store
- Durability and maintenance

### 2.2 Storefronts and Entry Areas and Closures

**A.** A key element of storefront design is the entrance. Equally important for the overall presentation of merchandise is the articulation of the entry with the surrounding storefront architecture. A fully concealed, motorized, overhead coiling gate is permitted. Overhead coiling gates (security grilles) shall be designed to allow convenient access to mechanical and electrical controls and equipment. The use of innovative materials is highly encouraged. Overhead coiling gates (security grilles) shall be self-supporting.

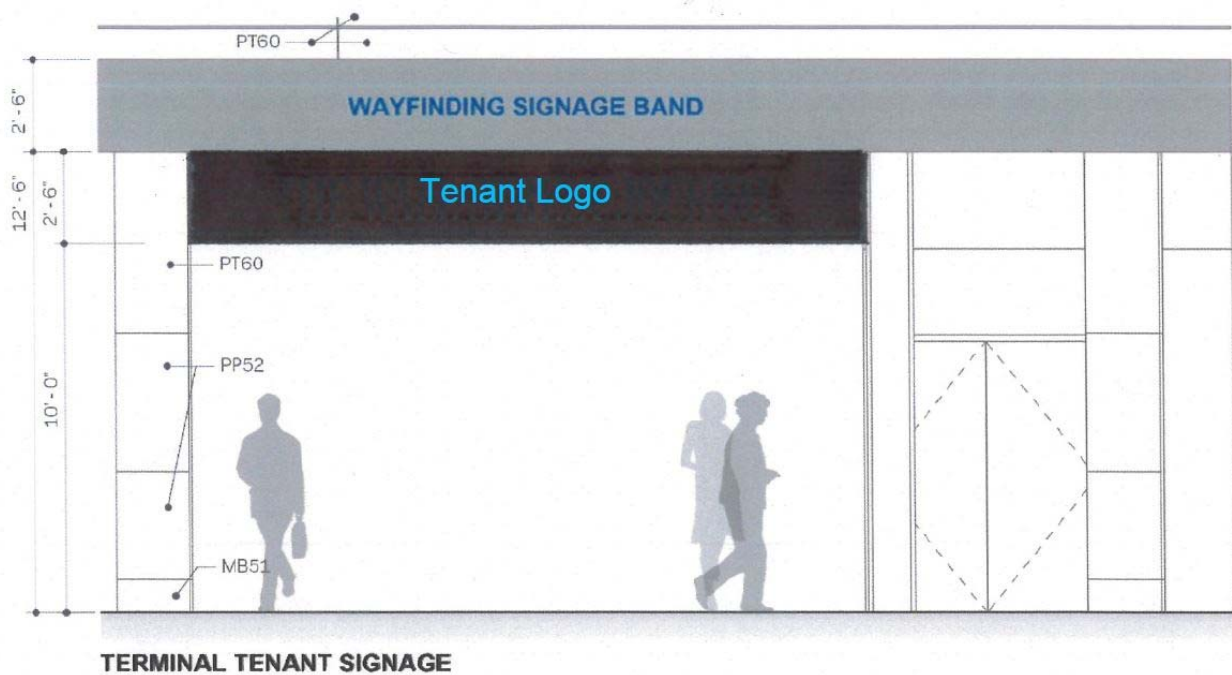
**B.** Glass plays an integral role in the storefront design. Properly treated, it contributes to the design's overall effectiveness, merchandising presentation and helps reduce "threshold resistance." Glass should be treated like any other material and should be used in a way that reinforces the store's complete design, style and character. In contemporary designs for example, full-height, butt-jointed glass is preferable to framed windows. Traditional designs could employ articulated moldings, muntins, or beveled glass. Leaded or stained glass also may be appropriate, but may not be used unless required by brand standards (trade dress). Silicone shall not be used unless required by code or ordinance, should complement the design and not detract from the beauty of a clean and uninterrupted view of the store and

merchandise. Minimal graphics will be permitted on glass storefronts and must be approved through the Design Review Process. Tenant shall submit shop drawings for proposed glass graphics to the Airport for review and approval prior to installation.

### 2.3 Display Areas

The use of creative display areas is strongly encouraged. Innovative merchandising, quality materials, and appropriate lighting should be used to convey the Tenant's merchandise identity and generate activity and excitement. Merchandise shall be displayed to maximize customer convenience in both clarity of definition and ease of access. Stocking of merchandise in storefront displays from public space shall not be allowed; display areas must be stocked from inside Tenant's space. No fluorescent lighting or acoustical ceilings are permitted in display areas. Fixtures must be professional and industry standard for display windows. No hand written signs, pegboard, electronic messaging, strobe or flashing lights may be used or posted in display areas without specific written approval of the Airport.

### 2.4 Storefront Design Criteria



**Material Legend:**  
PT60 – Typical Paint  
PP52 – Phenolic Panel, White  
MB51 – Stainless Steel Base

**A.** Storefront construction shall extend from the floor slab to the horizontal neutral bulkhead or ceiling above, the vertical demising systems at both sides of the demised Tenant premises, the full entry area(s), and the interior side of Tenant's storefront wall system and shall conform to the following minimum criteria:

1. No element of the Storefront may extend beyond the Tenant's lease line.
2. Storefront walls shall consist of a minimum of 20 gauge, six (6) inch metal studs, extending floor to deck, and shall be constructed at the Tenant's expense. Finishes must extend to a minimum of six (6) inches above the finished ceiling.

**B.** Storefronts shall have a ten-inch high base of durable and maintainable material integrated with the storefront design. Acceptable materials include brass, stainless steel, chrome, aluminum, natural stone, or hardwood. Outside corners shall be protected by metal integral to the finish material or specified outside corners made of the same material as the base.

**C.** The Tenants' overall Storefront area shall have a minimum of 75% visual transparency/openness unless specifically prohibited elsewhere in this document.

**D.** Any flooring between the lease line and the Tenant Storefront or closure line is the responsibility of the Tenant and must either match the adjacent Common Area flooring or match the Tenant floor finish. Common Area flooring finishes vary depending on the location in the Airport and may be terrazzo, carpet, or tile. The Tenant is responsible for transitions between similar and dissimilar materials; transitions must be smooth and flush. Where transition strips are used between materials, finish elevations shall be flush and smooth.

**E.** The soffit at the recessed entries shall be ten feet above the finished floor.

**F.** Storefront entry areas shall be lit with recessed lights directed down. Only incandescent or LED lighting is permitted. Fluorescent lighting of any kind is not allowed in storefront areas. Recessed lights shall have a specular or semi-specular Alzak cone and may be adjustable. Lamps shall not be below the ceiling line. The use of decorative lighting such as luminous ceilings, light coves, chandeliers, pendant or wall mounted units is permitted only if approved, by the Airport in advance of installation. Strobe, spinning, or chase-type lighting is not permitted.

Storefront closures shall use:

1. Sliding glass doors that stack behind each other and are pocketed in the storefront.

2. Overhead coiling grilles provided that they are fully concealed when open. Door tracks must be flush with wall finishes, and independently supported
3. Horizontal sliding grilles are not preferred. Any type of continuous floor mounted tracks, recessed or not, are not permitted.

**G.** Consideration must be given to customer interface at the storefront. Customer queues are not permitted outside of the Tenant's lease line. It is the Tenant's sole responsibility to control the customer flow and contain all customer queues within the leased premises.

**H.** Any existing or added structural columns must be contained within Tenant's storefront and concealed from view. The use of decorative columns in Tenant's storefront design will only be permitted with Airport approval prior to installation.

## **2.5 Storefront Finish Materials**

**A.** The following list of materials and finishes are allowed on and around Tenant storefronts.

1. Ornamental glass, etched (sealed), sandblasted (sealed), tinted, clear, glass block, frameless glazing of tempered or laminated safety glass with polished exposed edges.
2. Marble, granite, slate, sandstone, limestone and other natural stone.
3. Ceramic or porcelain tile.
4. Top grade quality stained or natural finished hardwood.
5. Natural metals such as polished chrome, stainless steel, brass, bronze anodized aluminum (no plated, coated or painted metals allowed).
6. Solid surfacing composite materials (minimally used).

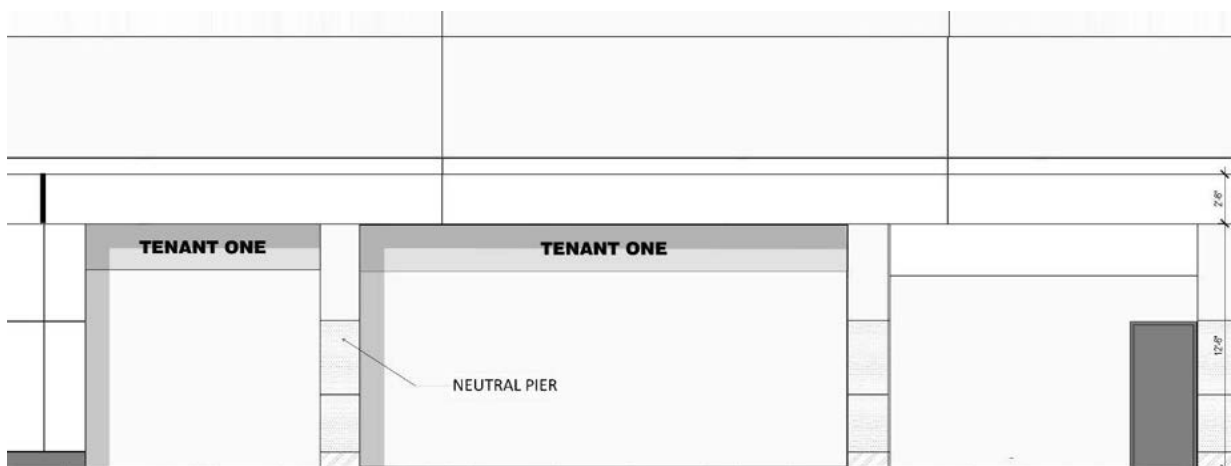
**B.** Materials that may not be used at storefronts, entries, and surrounding areas include:

1. Any artificial or manufactured versions of stone, marble, tile, metal, wood or any other natural material, mill finish aluminum or extruded metals without prior Airport approval.
2. Indoor/outdoor carpet.
3. Painted surfaces of any kind, fluorescent paint, special coatings such as Zolotone or Polymyx.

4. Vinyl tile or sheet vinyl.
5. Plastic laminates of any kind, including untreated wood grain, solid core, metal mica, etc.
6. Mirrors, Plexiglas, or fiberglass sheeting.
7. Rustic materials, such as rough sawn wood lumber or wood siding, plywood paneling, peg board, and particle board, unless explicitly approved by the Airport.
8. Exposed gypsum drywall, painted or otherwise.
9. Wall paper or wall coverings.
10. Cork or cork tile, carpet or fabrics.
11. Stucco.
12. Brick of any kind without prior Airport approval.
13. Obscured or translucent glass shall be sand blasted or etched—no films or appliques will be permitted without Airport approval.
14. Anything considered by the Airport as non-durable material, material lacking in visual quality, inappropriate finishes or anything incompatible with adjacent tenancies or Terminal finishes.
15. Anything considered a fire and/or safety hazard.

## 2.6 Neutral Piers and Details

Vertical neutral piers and fascia separating Tenant storefront construction are provided by the Airport on the public side. If an existing space is re-demised, it will be the Tenant's responsibility to construct a new neutral pier. Any soffit or neutral pier returns exposed by further recessing the storefronts shall be finished by Tenant to match the Airport's neutral surround construction and finishes at Tenant's cost.



## **3.0 STORE INTERIOR DESIGN**

### **3.1 General**

It is critical for the Tenant to develop a design to reinforce a brand image, while encouraging customer interaction in convenient and accessible surroundings. The essence of successful retail design involves vision to provide an enticing, retail space. The main objective is to lure the customer's focus to the merchandise or service. Except as noted below, improvements within the leased premises will be performed by the Tenant at its own expense. Interior tenant finishes in public view must be done in a professional and acceptable manner. The interior finishes should reflect the character and image established at the storefront. Materials shall be selected for their durability as well as aesthetic appearance.

### **3.2 Permanent Tenant Demising Partitions**

**A.** The Terminal and Concourses use the Covered Mall approach to occupancy separations per Chapter 4 of the IBC. Demising walls between Tenants are required to be Fire Partitions. Walls separating the Tenant from the "Mall" are not required to be rated. The "Mall" in this case is considered to be Airport Spaces and Public Spaces. Demising walls between leased premises and Concourse Hold Rooms are required to be Fire Partitions.

**B.** Corridor Demising Wall: Tenant finishes and modifications to rated walls shall maintain the integrity of the rated wall and shall be at the Tenant's expense.

**C.** Tenant Demising Walls: Walls between Tenants will be one (1) hour fire-rated partitions. These walls will be provided by the Airport at the Airport's expense and will typically consist of metal studs and gypsum board ready to receive the Tenant's applied finish. The Tenant shall provide at the Tenant's expense, mechanical and electrical penetrations finished to maintain the one (1) hour rating. The Airport will oversee the coordination of adjacent Tenants' use of the demising wall for mechanical and electrical purposes.

**D.** Tenant duct work that passes through a demising wall or corridor wall must maintain the construction requirements of a Fire Partition at the Tenant's expense. If Tenant plans to use a demising wall for the support of shelf-standards or heavy attachments, then Tenant must reinforce the wall as needed.

### 3.3 Wall Finishes

**A.** Walls and partitions within the Tenant's leased premises shall be provided by the Tenant and shall consist of 20 gauge metal studs and 5/8 inch fire-rated gypsum board. Tenant shall finish the walls to a minimum of six inches above the finished ceiling. Walls and partitions are required to be seismically braced. Fire separations and/or draft stops must be maintained by the Tenant. These walls and related work shall be constructed at the Tenant's expense.

**B.** The use of high-quality finish materials will be required throughout the interior of the leased premises. The finish materials selected should reflect the design and style established at the storefront. Materials used for construction must be original, new material. Used material of any kind is not permitted. This requirement is not intended to negate the use of professionally recycled materials and certain aged materials that are permitted subject to Airport approval. Painted gypsum board, vinyl wall covering, plastic laminates and other similar materials are not considered durable or high quality materials and may only be used in limited and specific applications. Painted or vinyl covered gypsum board may only be used for soffit finishes above eight feet in the store interior. Wood veneers may be used for slat wall displays only where sides/edges are not exposed. Exposed edges must be finished with dimensional hard wood. Plastic laminates or melamine may only be used in cabinet interiors; they are never permitted on the face of displays, casework, slat wall or merchandising units.

**C.** Acceptable and prohibited wall finishes for store interiors are listed in Section 2.5 above. Outside corners within the Tenant's leased premise must be protected from damage and abuse. Corner guards in public spaces must be designed and integrated into the finish materials; surface applied corner guards of any type are not permitted. Corner guards must be a durable and resilient material, must have a natural finish, and be embedded into the substrate such that the adjacent finishes are flush with the corner protection. Corners must be quarter round in nature or square edged. If square edged corners are used, the material must extend the same on either side of the corner. No flat stock metal is permitted for corner edge protection.

**D.** Columns within the Tenant leased premises must be framed and finished consistent with the surrounding areas. Finish materials may be selected to accent the column or obscure it. Column finish materials must be durable and resilient, highly resistant to damage and abuse. Square columns must have corner protection floor to ceiling. Columns should have a separate finish base material; recessed or surface applied and sealed to the floor, and should be the most durable of materials. Column finish materials may extend to the floor and base eliminated if presented during the Design Review process and approved by the Airport

**E.** Window coverings on exterior windows shall be provided by the Tenant at its expense, unless otherwise indicated. Window coverings shall match building standard roller shade. Modifications to exterior windows may be allowed, as approved through the Design Review Process (i.e., covering the exterior window with a display wall). The Tenant shall comply with any special requirements concerning modifications to exterior windows. Window coverings are not permitted on interior windows or in storefront windows.

**F.** The Tenant shall provide the wall base throughout the leased premises at its expense. The Tenant shall use high quality, durable materials such as stainless steel, tile, stone, or wood. Outside corners shall be protected by metal integral to the finish material or specified outside corners made of the same material as the base. The use of rubber base is not permitted in areas viewed by the public.

### **3.4 Doors**

Doors within the Tenant's leased premises shall be compatible with the overall design of the space. High quality doors such as solid core wood or hollow metal shall be used. Brass or chrome kick plates, or heavy-duty protective plating where appropriate, shall applied. No hollow core wood, plastic or fiberglass doors are permitted. Doors within Tenant's leased space shall be provided and installed at Tenant's expense.

### **3.5 Floor Finishes**

**A.** The Tenant will provide transitions between Airport materials and Tenant materials. The elevation of the Tenant's finish floor must match the adjacent common area flooring. Special attention will be given to transitions during the Design Review Process. The Airport will provide terrazzo in the public areas of the terminal complex, including the concourse corridors, ticket area, and bag claim lobby. Airport-provided flooring terminates at different points at the Tenant's lease line. See specific area descriptions for more detail.

**B.** Tenants shall provide flooring within their space, at the Tenant's expense. High quality and durable materials such as terrazzo, natural rectified stone, porcelain or ceramic tile, wood or heavy-duty commercial grade carpet are required. Dyed, stained, and properly sealed concrete floors are acceptable. Marmoleum and certain resin based products would be considered. Floor finish materials not permitted for use in public areas or areas visible to the public are vinyl composition tile (VCT) or sheet vinyl, rubber, or quarry tile. The use of innovative designs including inlays is strongly encouraged.



**C.** Any finish floor material within the Tenant's leased premises that contains a specific pattern shall be separated from the Airport-provided flooring with a single color, non-patterned border. The border shall be 18 inches wide and shall run the entire length of Tenant's entry. This threshold shall be provided at Tenant's expense.

**D.** The Tenant shall be responsible for transitions between floor materials within and bordering the Tenant's space. Transition strips shall be metal and flush with the finish floor height. If one material is recessed, the transition strip will be flush with the higher material. Rubber transitions strips in carpeted areas are not permitted. Direct glue-down installation is required and subfloors must be sloped to adjacent finish materials for smooth transitions. Any areas within Tenant's leased premises that contain any water related equipment or activities shall be required to have a waterproof floor. It is the Tenant's sole responsibility and cost to contain all liquids within Tenant leased premises. Compliance with the design standards is part of the lease, and therefore required throughout the terms of the lease.

**E.** The Tenant is required to properly install finish floor materials to expansion joints. Finish floor materials may not cover or conceal building expansion joints under any circumstances. Expansion joints must be water tight.

### **3.6 Ceiling Finishes**

**A.** The Airport provides ceiling finishes in public areas up to the Tenant's lease line. The Tenant is required to provide ceiling finishes throughout the leased premises and to repair or replace Airport-provided ceilings, as required. Exposed structure may be permitted in certain areas and must be approved by the Airport during the Design Review Process. Typical approved ceiling types are painted gypsum board or plaster, concealed spline acoustic tile, two feet (2) by two feet (2) acoustic tile with regular edge (flat or square edge not permitted). Creative design is encouraged and the Airport may consider other designs for ceiling treatments.

**B.** The Tenant will build in coordination with existing mechanical, plumbing, electrical, fire sprinkler equipment, valves, controls, etc., located above the Tenant's ceiling. Access panels shall be provided by the Tenant as required at locations determined by the Airport, and as required by code. Ceiling access panels, grills, diffusers, light tracks and fixtures shall be recessed into or above the ceiling and shall be finished to match the ceiling. Combustible materials are not permitted above finished ceilings. New ceilings, ceiling alterations, and access panels shall be provided at the Tenant's expense.

### 3.7 Lighting

**A.** Reflected ceiling plans and specifications shall indicate illuminating devices when submitted for review and approval, and shall be accompanied with catalogue cut sheets. The use of creative lighting design and fixture selection is encouraged. Lighting designs must meet local code and lighting compliance requirements. A certificate of compliance must be included in the construction documents. To retain and protect the visual environment of the area for the benefit of the Tenants, each Tenant shall control the brightness of the Tenant's lighting fixtures, which shall be subject to the approval of the Airport. Lighting for Tenant's leased premises, including general, display, specialty, accent, emergency, exit, etc., shall be provided at Tenant's expense. The use of high performance lighting fixtures and controls is highly encouraged.

**B.** No flashing, pulsating, rotating, motion-type lighting, or exposed neon is permitted. Colored lamps are not permitted. Only lighting for non-illuminated storefront signage may be installed in the terminal or concourse ceilings and must be approved by the Airport. A seven (7) day, calendar type, 24 hour timing device shall be provided by the Tenant to light the Tenant's storefront, display window areas and storefront signs. The Airport will stipulate the hours the signs shall be illuminated.

**C.** Display and specialty lighting using incandescent lamps are permitted. Lamps must not be visible from the terminal and concourse public areas. Self-illuminating showcases and display cases must be adequately lit and ventilated; direct visual exposure of lamps is not permitted.

**D.** Spotlights may be recessed LED, adjustable angle fixtures or track-mounted adjustable lights may be used on a limited basis. Adjustable units must be focused so that brightness is not visible from the public areas. Low voltage recessed or surface mounted track lighting is recommended for high impact on merchandise. Mounting of track and cable systems must use manufacturer's recommended methods. Mounting and connections will be reviewed by the Airport during the review process. Color selection for the track and track fixtures must match or complement the design of the interior. Every effort should be made to match the color of mounting surfaces. Fluorescent lamps or fixtures of any kind may not be used.

**E.** General store lighting shall be glare-free. Acrylic lenses or "egg-crates" are not permitted for public areas or any area visible by the public. No electrical components shall contain materials classified as hazardous material. Incandescent or fluorescent pendant units, chandeliers or wall brackets may only be used for general lighting if the Tenant has established an identity or trade-dress based on this theme or motif and must be approved by the Airport. Pendant units are acceptable as decorative lighting on a limited basis. Exposed fluorescent tube strip lighting is not permitted for use in any application.

### **3.8 Store Layout**

Careful consideration shall be given to the use of colors and materials on floor, wall, and ceiling surfaces. Layouts should facilitate passengers' limited time and impulse purchasing, ease of browsing, and speed of transaction. Displays should be attractive and call attention to the products featured, but must not interfere with customer circulation in the store. Aisle widths must be adequate for passengers with luggage or luggage carts and must also comply with the Americans with Disabilities Act (ADA). Countertop displays are not permitted on areas used for transactions and under counter storage must be concealed from view. Point of Sale (POS) stations should be configured to provide adequate queuing space and ensure that customer queues do not extend past the lease line.

### **3.9 Fixture / Casework**

**A.** Fixtures should complement and reflect the store theme/brand, reinforce the design concept, create visual order, and be adaptable in order to accommodate changing merchandise. Custom designed floor fixtures reinforce and enhance merchandise presentation. Custom fixtures should integrate with the store's surroundings so that the merchandise is the focus.

**B.** Perimeter or wall fixtures and casework shall have a minimum four (4) inch toe kick or base, set back four (4) inches from the case front and shall be sealed to the floor. They shall terminate at the ceiling or bulkhead above. They shall extend from side to side to appear built-in or recessed into the wall. The only exception to this requirement will be fixtures that are located against exterior window walls of the terminal or concourse. These units may not block exterior views, and no part of the fixture or merchandise may exceed four (4) feet six (6) inches in height above the finished floor. A list of acceptable and unacceptable materials for fixtures and casework can be found in Section 7.4 below.

**C.** Wall fixtures should be custom designed to complement merchandise presentation. Shelving should be dimensional or have a vertical edge. Glass shelves should be designed to support merchandise with polished edges. Imaginative design and use of materials in shelving systems is highly encouraged. When using cable suspension systems, shelves must not move if bumped. Shelving behind or in front of glazing sections must be open for maximum visibility. Standards must be fully recessed into the wall surface. The material finish should be selected to blend with adjacent finishes. ADA clearance requirements shall be maintained around fixtures / casework.

### **3.10 Non-Public Areas**

**A.** All non-public areas, such as, offices, storage areas, utility rooms, etc. within the Tenant's leased premises must receive a minimum level of finish as follows:

1. Floors must be sealed concrete, vinyl composition tile, sheet vinyl or similar. No exposed raw concrete is allowed.
2. Walls shall be covered in 5/8-inch fire-rated gypsum board, taped and finished to the Gypsum Board Finish Level 2, and painted. A minimum four (4) inch base of vinyl or tile must be used.
3. Ceilings must be either acoustic tile or painted gypsum board. Lighting can be surface mounted or recessed.

**B.** Storage and utility rooms must have a full, complete ceiling and the perimeter walls must extend tight from floor to the deck and have the same finish as listed above.

## **4.0 SIGNAGE AND GRAPHICS**

### **4.1 General**

**A.** Signage should reinforce the character and quality of the store design. Size, character, typography, composition and height are important factors that make every storefront sign unique. Tenants are required to design, fabricate, install and maintain storefront signs, which exhibit imagination, high fabrication quality, and compatibility with adjacent and facing storefronts. Signs shall be limited to trade name and logo only, as approved by the Airport. No corporate brand names, product names, web pages, or phrases (tag lines) may be used on storefront signs or in any area visible to public areas without written approval from the Airport. Signs must be UL approved; no exposed raceways, ballast, transformers, sign company names or labels are permitted. Available types of signs for Tenant spaces are a primary storefront sign and an hours of operation sign. No Tenant blade signs permitted. Storefront signs shall be proportionate to the overall size and scale of the storefront and adjacent storefronts. Signage design, size, typography, composition, height and location requires Airport approval prior to issuance of the Notice to Proceed.

**B.** Tenant will be required to construct the sign band at Tenant's cost as part of the storefront build out. The size of the sign band will vary depending upon location within the terminal and concourses and may be impacted by public ceiling heights, structural barriers or restrictions, and terminal design features. The bottom of the sign band shall begin ten (10) feet zero (0) inches above finished floor. The maximum height of the sign band shall not exceed two (2) feet six (6) inches in any location. Tenant shall present the specifics for its sign band during the Design Development presentation, which are subject to Airport approval.

**C.** Letter size and location should be appropriate in scale and in proportion to the overall storefront design. The overall length of the signage shall be proportionately sized to match the height and stroke of the letter; however, in no application shall the overall length of the Tenant's sign exceed 75% of the total storefront width.

### **4.2 Primary Storefront Signs**

**A.** The primary storefront sign will be provided and installed by the Tenant. Each Tenant space will be allowed one (1) storefront sign per public elevation and may include one (1) of the following options:

1. Surface applied dimensional letters and logo.

2. Dimensional letters mounted on surface mounted two (2) inches maximum away from the plane of the sign band using finished metal standoff devices. No part of the light fixture shall be visible from public view. Backlighting is acceptable.
3. Recessed box or cabinet signs for menu display at food and beverage facilities. Digital displays shall be limited to menu boards or other uses based on Airport approval.
4. In certain specific instances, the Airport will consider multiple storefront signs.
5. Acceptable materials are metal, stone, wood or (non-transparent) acrylic.
6. Sign band finishes shall be non-mirror.

**B.** The following are examples of prohibited sign types for exterior applications (storefront):

1. All other types of internally illuminated signs.
2. Flashing signs or lights.
3. Animated or signs with any motion, except rotational menu displays.
4. Exposed or skeletal neon.
5. Vacuum formed signs.
6. Plastic or Plexiglass signs, except for dimensional lettering under A.
7. Promotional signs not previously approved by the Airport.
8. Free standing pedestal signs (stand-up), single or double sided
9. Stanchion signs not previously approved by Airport.

#### **4.3 Blade Signs**

Tenant blade signs are not permitted.

## **5.0 RESTAURANT / BAR DESIGN**

### **5.1 General**

The criteria established in sections two (2), three (3) and four (4) above apply to the design requirements for restaurants and bars. Additional elements, specific to food and beverage concepts, are outlined in this section. The requirements described herein are the Tenant's sole responsibility and cost.

### **5.2 Storefront and Entries**

Depending on the style of food service and type of restaurant, the Tenant may desire to have a partial or full opening to the public areas. It is acceptable for up to 100% of the storefront to remain open without glazing, partitions or doors. However, security of the facility, especially the kitchen areas, must be included in Tenant's design. If the storefront is to remain open, the Tenant must provide a full height wall separating the sales or customer area from the service and storage areas or "back of house" (BOH). Openings in this wall shall be kept to a minimum in order to provide secure closure and block views into the BOH areas. Openings must be securable by means of lockable doors, security grilles or gates. Establishments selling alcoholic beverages must be designed in accordance with State and local requirements and restrictions. Space must be provided for alcoholic beverages to be controlled at all times and securely stored during closed periods.

### **5.3 Store Interiors**

**A.** Ceilings in the customer areas must conform to section three (3) above. Ceilings in food service storage, prep, cooking, serving areas, etc. must be continuous and have a smooth, washable surface in accordance with health codes.

**B.** Lighting in the customer areas must conform to section three (3) above. LED lighting shall be used in BOH areas. These fixtures must be shielded with solid covers. Fixtures visible to the public that are located above any service, prep or cooking areas must conform to section three (3) above and be fully shielded with approved lenses. Fluorescent lighting is never permitted.

**C.** Floors in the customer areas must conform to section three (3) above. In addition, finish floor materials in BOH and wet areas must be non-porous and may include ceramic or porcelain tile, resin or epoxy based floor coatings, or seam welded cushioned rubber. Quarry tile may be used in BOH areas not visible to the public. Tenant areas must have finished flooring.

**D.** Kitchens, bars, storage, prep and serving areas must have a continuous waterproof membrane installed prior to installation of finish floor materials. Waterproofing requirements will also apply to any Tenant provided restrooms within Tenant's premises, as well as any beverage stations or areas. If beverage stations or any other wet service areas are provided in the public or dining section of Tenant's premises, the entire area must be given a waterproof membrane. The waterproof membrane must extend up the wall a minimum of eight (8) inches past top of base material. Upon completion of the waterproof membrane installation, Tenant must request and receive inspection and approval from the Airport prior to proceeding with installation of finish floor materials. The Tenant maintains sole responsibility for the containment of liquids within Tenant's leased premises.

**E.** Wall finishes in the sales and serving area (including around front counters), as well as the prep, cooking, storage and utility areas in the BOH shall be ceramic tile or similar material, stainless wall paneling or fiberglass reinforced panels (FRP). FRP may only be used in areas not visible to the public. Tenant areas must have finished walls. Painted gypsum board or vinyl wall covering is not allowed in any application.

**F.** Sales and service counters must be durable and functional as well as attractive. The counter area shall be flexible and creative in design. Tenants shall provide a clearly definable area for ordering, queuing, and checkout. The counter front must be a durable, high-quality material consistent with the Tenant's overall design. Careful attention must be paid to the detailing of materials and how adjacent materials join and connect. The counter top height may not exceed 34 inches above finished floor. Counters shall comply with ADA standards. A minimum four (4) inch tall counter base (toe kick) must be a highly durable material (stone, tile or stainless steel), and must be set back four (4) inches from the face of the counter on exposed sides. The counter top must be a single, solid material such as stone, solid polymer (Corian, etc.), sealed concrete, stainless steel, etc. Plastic laminate, ceramic or porcelain tile are not permitted. The back side of sales and service counters should be designed to conceal trash, storage, utilities, etc. Open counters and storage compartments will not be permitted unless concealed from view. Trash receptacles may be designed as an integral part of sales and service counters. Integrated trash receptacles shall be concealed from public view under the counter with an access door or countertop cutout with stainless steel trim ring (or similar). Exposed trash containers, open or covered, are not permitted in public view.

**G.** Display cases of any type must be incorporated into the counter design and built into the counter where counters are provided. Counters abutting display cases of any type will not be permitted. Display cases built into counters may not exceed four (4) feet eight (8) inches in height above the finish floor. Display cases exceeding four (4) feet eight (8) inches in height must be designed and built into full height walls and remain separate from sales or serving counters. Built-in display cases may not exceed 25% of the overall width of the counter, and the aggregate total of display cases may not exceed 25% of the total storefront width. Typically, display cases shall not extend past the front of the counter and the



design of the displays must incorporate the continuous counter base.

**H.** The front counter must present a clean and clutter free appearance. Food service equipment must be concealed from view as much as possible, and built into the counter or countertop. Displays, advertising, Point of Sale (POS) systems and similar types of equipment must be designed and built into counters and countertops. No loose equipment or exposed wiring will be permitted. Open storage of paper goods, packaging and supplies is not permitted. Napkins, condiments, utensils, straws, trays, etc. must either be concealed from view or recessed into the countertop. Sneeze guards, where required, must be custom designed as an integral part of the counter and concept design and shall be constructed of tempered glass supported by stainless steel or brass.

**I.** Bar die and barfronts shall be designed for function and durability as well as design aesthetics. The backside of the bar die shall be completely covered with a non-permeable material, such as tile, stainless steel or fiberglass reinforced panels (FRP) and must conform to Health Department requirements; FRP may only be used if completely concealed from public view. The bar front shall contain a minimum six (6) inch base of metal, stone or tile if used in conjunction with an applied foot rest. Foot rests may be integral to the bar front with a minimum dimension of ten (10) inches by ten (10) inches and consist of finished concrete, metal or stone. The face of the front shall be finished in stone, metal, sealed wood or other durable and impervious material as approved by the Airport.

**J.** Customer queue control devices are required in certain food and beverage concepts to provide the necessary level of customer service and organized flow. They shall be used to moderate the circulation and flow of passengers through the Tenant's space. These devices must reside within the Tenant leased premises. Customer queue control devices shall be required as deemed necessary by the Airport for limited and self-service style contained and Retail Merchandising Unit (RMU) concessions to provide direction for and control of customer queues. Tenants shall provide attractive, fixed, high quality stanchions within their space and should adjust their use of queuing devices according to their peak periods. Fixed standards are to be single tube stainless steel, minimum one (1) and a half (1/2) inch pipe, or an approved decorative metal design. Standards shall be fixed to the floor using a concealed attachment. No exposed bolts or mounting hardware is permitted. The use of wood or painted steel in queuing devices is not permitted.

## 5.4 Interior Signage and Menu Boards

**A.** Tenants shall have storefront signs designed in a manner compatible with and complementary to their overall storefront design, adjacent and facing storefronts and the overall design concept of the terminal. Tenants are encouraged to have signs designed as an integral part of the storefront design with letter size and location appropriately scaled and proportioned to the overall storefront design. Store identification designs, and signs and logos must conform to Section four (4) of the Tenant Design Criteria and are subject to review and written approval by the Airport prior to fabrication.

**B.** Food service Tenants are required to provide one (1) primary menu board mounted on the rear wall of the sales area or suspended (rigid mount) from the rear most soffit. Menu boards must be professionally designed and fabricated. Tenants are encouraged to display prepared foods at the serving counter that may contain limited product identification or information. Under no circumstances will the Tenant be permitted to display other signs, advertising or displays such as are often made available from food or beverage suppliers. Beverage dispensing units may not bear any advertisements for the beverage companies, nor may they be incorporated into the menu boards.

**C.** Internally-illuminated box type menu signs are discouraged; however, they may be presented to the Airport and approved on an individual basis. This type of menu must be integrated into the overall design and recessed such that no portion of the unit projects beyond the recess. Provisions for changing pricing or product offering must be made in an undetectable manner.

**D.** Externally-illuminated menu boards must have directed lighting that is recessed in an alcove in front of the menu board and concealed from public view. Care must be given to the angle of the illumination source to the board and angle of the board to the customer so as not to create glare or reflection.

**E.** Menu boards and product photos shall be professionally designed and fabricated and be integrated with Tenant's graphics and design. Menu boards shall be appropriately sized and illuminated to be easily read and visible from the customer area. Storefront design elements shall not conceal or partially block visibility of the menu board. Hand-written or temporary menus are not permitted. Daily special or chalk-type menu boards will be considered on an individual basis. Menu board materials must be approved in writing by the Airport prior to any fabrication, installation, or implementation.

**F.** Tenants are encouraged to use digital (electronic) menu boards. The information displayed on these boards must be linked to the point-of-sale system used by the Tenant to ensure consistency in product pricing. Digital menu boards must display a static image without audio. However, the images can change or rotate. The use of streaming video or graphics may not be used in any fashion without the prior

approval of the Airport. No flashing, strobing, blinking, racing, etc. will be permitted under any circumstances. White, back-lighted Plexiglas will not be permitted.

**G.** All permanent information must be painted, silk-screened, etched, or applied to:

- Metal, neutral, painted or anodized.
- Wood, natural or painted.
- Plastic laminate, phenolic two color informational, or identifying signs where approved by the Airport.
- Glass-clear, second surface translucent or painted.

**H.** Changeable information may be displayed using vinyl, die-cut numerals or letters, chalk boards (if approved), etc. Changeable menu boards available through food and beverage advertising product suppliers are prohibited. Menu board selections and detailing are subject to review by the Airport. The Tenant must submit the proposed menu board design for review and approval prior to fabrication and implementation.

**I.** Full service style branded or licensed restaurant concepts shall use established menus. It is recommended that menus are easily washable and durable for use in an Airport environment. Tenants shall present all intended menu items and pricing for review and approval by the Airport prior to use.

## **5.5 Audio / Visual and Electronic Displays**

Audio, visual and electronic displays of any type may only be used within the Tenant's leased premises and must be contained within the leased premises. No audio, visual or electronic display devices may be used, mounted on or suspended from the storefront and may not be located within five (5) feet of the storefront lease line if detectable from the public corridor without the prior written approval of the Airport. Any approved audio and visual devices that can be heard outside the Tenant's leased premises may be deemed a violation and subject to removal.

## **6.0 FOOD COURT DESIGN CRITERIA**

### **6.1 General**

The Airport is responsible for creating the overall design and theme for food courts.

### **6.2 Common Seating Areas**

The entire seating and public area of the food court will conform to a single design and will be provided by the Airport.

### **6.3 Individual Tenant Sales / Service Counters**

Access through the front counter is not permitted unless a rear service door is not possible or access is required for egress.

### **6.4 Individual Tenant Design**

**A.** Each Tenant or concept within the food court shall have a separate and unique design consistent with the specific brand or conceptual identity. Where adjacent Tenants directly abut each other, concepts shall be separated by a contrasting vertical design feature or neutral pier, and each neutral pier within a food court shall be similar.

**B.** Lighting for the counter and front service areas of various concepts within the food court should be bright and properly illuminated to draw attention to the area. Each Tenant may have lighting that supports the concept or their individual brand identity. Lighting may include pendant or other decorative lighting, track or recessed lighting as approved by the Airport. Lighting directly over food preparation, service or workspace areas must be shielded and conform to Health Department requirements. Refer to sections 3.7 and 5.3 for additional lighting information.

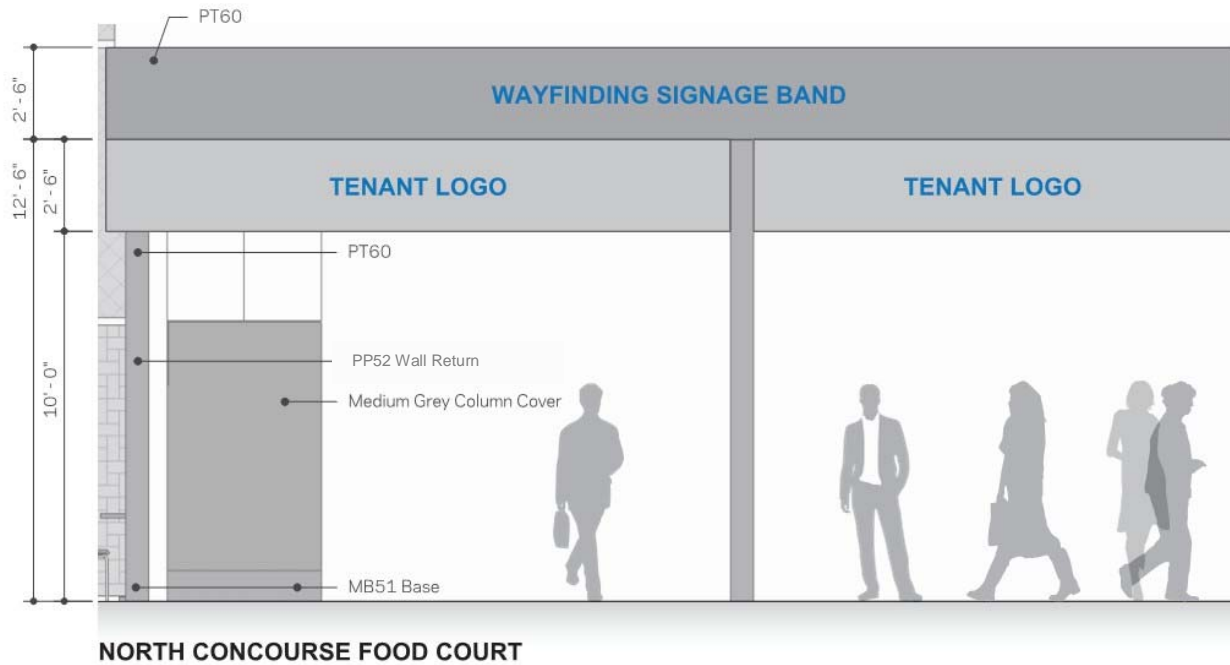
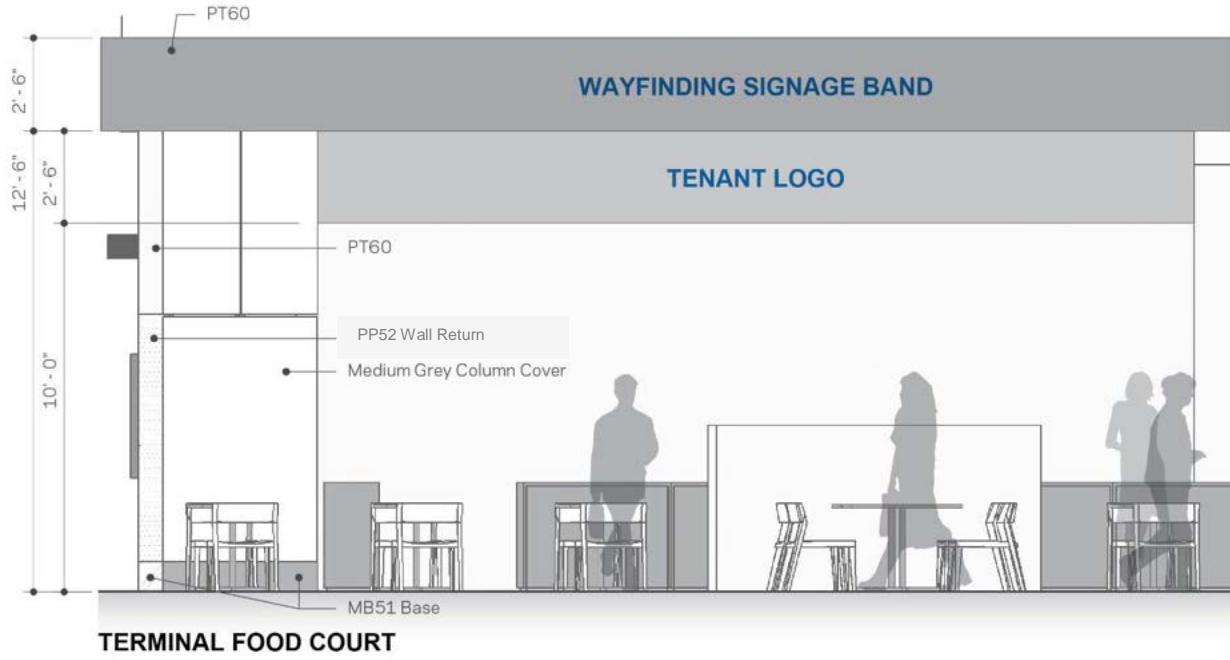
**C.** Each Tenant space in the food court must have finished ceilings throughout. Ceilings above the serving counter area and a minimum five (5) feet beyond the back of the front serving counter shall be a solid non-permeable surface that is durable and washable. Painted gypsum wall board or plaster is permitted in this application, provided semi-gloss or gloss paint is used. Additional materials may be submitted to the Airport for consideration. Ceiling designs and finishes are subject to Airport approval. The Tenant shall provide proper access to equipment, valves, controls, switches, junction boxes, etc.

above the ceiling in Tenant's space.

**D.** Floor design and construction must comply with the provisions and requirements set forth in sections 3.5 and 5.3 above. The entire area of each Tenant space in the food court must have a continuous waterproof membrane installed in accordance with the provisions herein. Tenants must provide materials or devices required to prevent the passage of water or liquids out of Tenant's space in any direction. The individual Tenant's flooring may not extend beyond the front serving counter. Quarry tile may not be used in any areas visible to the public. The use of vinyl composition tile or sheet vinyl in any food service facility is strictly prohibited.

**E.** Demising walls between Tenants are provided by the Airport and are to be full height and sealed to the floor and deck above with the required fire rating and acoustical sealant. Walls exposed to public view must be finished by the Tenant in tile, stone, glass materials, etc. Fiberglass reinforced panels (FRP) or similar materials are prohibited from use where visible to the public. Each Tenant space within a food court must separate the front sales area from the BOH (prep, production and storage areas) with a wall partition. Openings in the wall shall be kept to a minimum and openings must be securable by locking door, security grille, or other approved mechanisms. Final review and approval of food court security will be by the Airport.

## 6.5 Signage



**Material Legend:**  
 PT60 – Typical Paint  
 PP52 – Phenolic Panel, White  
 MB51 – Stainless Steel Base

**A.** Each Tenant or concept located in a food court will be allowed one (1) sign directly above the main serving counter on the concept sign band. These will be the only signs allowed in food court settings and under no circumstances will additional signage or concept logos (menu and directional signage excluded) be permitted without the written authorization of the Airport.

**B.** The food court tenant shall provide the backdrop for the concourse sign across the width of the store front lease line of the food court unit. The bottom of the finished structure shall be a minimum of nine (9) feet above finished floor, with ten (10) feet preferred, and the bottom of the sign band or suspended signage shall be a minimum nine (9) feet six (6) inches above finished floor or ten (10) feet six (6) inches preferred.

**C.** Tenant signs for the concourse sign band shall be submitted for approval per location. Signs may be of a different color or font, etc. as directed by specific brand requirements. However, Tenant concourse signs must be of similar type (reverse halo, push-through, dimensional metal letters, etc.) and size as permitted in Section 4.0 above. The Tenant shall coordinate the sign design to provide a cohesive and consistent sign program.

**D.** Each food court concept or Tenant may also have a secondary concept or brand sign located directly above the serving counter. The Tenant shall construct the secondary sign band in plane with the front of the serving counter at Tenant's cost. The sign band shall span the width of the store front from neutral pier to neutral pier. The bottom of the sign band shall be at nine (9) feet and top out at 12 feet above finished floor. The secondary Tenant sign may conform to the individual brand or concept design criteria independent of the other brands or Tenant's in the food court, but must conform to the requirements of Section 4.0 and 5.4 above. The use of internally-illuminated channel letters for the secondary sign above the serving counter is permitted, subject to Airport approval. In addition to meeting the requirements set forth above, internally-illuminated channel letters must adhere to the following criteria:

1. Letters must be constructed from single piece aluminum or painted steel.
2. Letter depth must be proportionate to the height and width, but may not exceed five (5) inches.
3. Letter can and trim must be the same color.
4. Letter faces may be a different color than the letter body, but no more than two (2) colors may be used for channel letters.

5. The use of clear faces is not permitted.
6. Channel letter signs must use LED lighting. Neon or fluorescent lighting is not permitted.

## **6.6 Menu Boards, Audio / Visual and Electronic Displays**

**A.** Tenants within a food court are required to provide one (1) menu board mounted on the rear wall of the sales area or suspended from a soffit or fascia above in accordance with section 5.4 above. Menu boards are not permitted above the front sales counter or lease line.

**B.** Audio systems of any kind are not permitted for individual use by Tenants within a food court. One (1) central music system for the entire food court seating area will be permitted.

**C.** Visual displays, POP (Point of Purchase) materials and other graphics may be used if incorporated into the Tenant's overall design. These elements must be presented during design development review and approved by the Airport. Non-static electronic displays are discouraged and may not be used without the prior written approval of the Airport.

## **6.7 Flight Information Display Systems (FIDS)**

As a convenience to Airport users, FIDS screens may be located within a food court seating area. Provisions for the design and implementation of the screens shall be presented and discussed during the design review process. If approved by the Airport, the Tenant will be responsible for providing the FIDs at its cost.



## **7.0 RETAIL MERCHANDISING UNIT (RMU) CRITERIA**

### **7.1 General**

**A.** An RMU is a free-standing concession unit, typically ranging in size from 100 to 400 square feet. They may be located in public areas where the Airport has provided ceiling and floor finish materials. Modifications to these materials will be limited where an RMU is located, and will need to be approved by the Airport.

**B.** It is important for the Tenant to note that public areas in the Terminal are constantly subject to a high concentration and movement of people. Therefore, the design of an RMU should not impede queuing and natural circulation. The Airport will carefully review the proposed floor plan and placement to ensure that adequate floor space has been maintained around the RMU for proper circulation and queuing.

**C.** Creative merchandising is encouraged, but, product may not be hung from an exterior rail of the RMU. Merchandise display shall be an integral element in the overall design and must be approved through the design review process. The overall objective is to create a clutter-free appearance. With the limited area available for an RMU, special attention must be given to the organization of each element, including the merchandise, menu boards (if applicable), equipment, and related accessories. These elements shall be designed as an integral part of an RMU. Supplies for the RMU shall not be visible to the public for any extended period of time. Design and layout shall accommodate sufficient space for supplies and excess inventory.

**D.** Occasionally special situations may warrant modification to these standards. A written request for an exception shall be submitted to the Airport, identifying the need for a variance. The Airport will evaluate each request and notify the Tenant, in writing, of its decision. RMUs are to be designed, fabricated and installed by the Tenant at the Tenant's expense.

### **7.2 Design Requirements and Restrictions**

In designing each RMU, the Airport has several priorities that must be maintained by the Tenant from design concept through construction, including:

1. The design of the RMU shall allow access to existing mechanical/electrical items located within or adjacent to the leased premises for the RMU.
2. The RMU shall be located and designed in such a way to preserve existing vistas at exterior windows, minimizing the obstruction of these windows to the greatest extent possible.
3. The design of the RMU shall be inclusive of functions required of the RMU. "Accessory" items such as condiment stations cannot be separate elements, and must be integrated with the overall RMU design.
4. Elements of the RMU must be designed to be fully lockable and secure. The Tenant is responsible for the security of their RMU, including all equipment and merchandise, at all times.
5. Some locations designated for RMU placement are adjacent to exterior windows or other existing features of the Airport. Each RMU design should respond to the surrounding architectural elements present at the lease location. Careful consideration of these features in the specific design of the RMU is required. Visual corridors and views to exterior windows should be obstructed as little as possible.
6. It shall be the responsibility of the Tenant to control, filter or otherwise contain odors and food smells to the leased premises.

### **7.3 Materials**

The design and material selection for the RMU are key elements that will reinforce the Tenant's brand, concept, and merchandise. Tenants are encouraged to be creative, while respecting the design quality and finish of the surrounding retail Tenants.

### **7.4 Counters and Counter Accessories**

**A.** Counters need to be durable, high quality, monolithic material, with decorative elements added, such as wood or metal. These elements can be utilized in various ways, including a bullnose edge or decorative accent band along the face of the counter top.

Suggested materials for counter fronts and tops include:

1. Stone.
2. Composite-solid surfacing.
3. Metals.
4. Glass; clear or with second surface application.
5. Tile (but not for counter top application).
6. High quality finished hard wood.

Unacceptable materials include:

1. Plastic laminates.
2. Metal laminates.
3. Vinyl, plastic, rubber materials of any kind.
4. Imitation or “look-like” materials.
5. Painted finishes.
6. Glass block.

**B.** The Tenant shall provide a highly durable counter base. The counter base should be set back from the counter front to add variety and depth to the overall counter design. The height of the counter shall be 34 inches high, with display cases not exceeding 54 inches in height. Display cases may occupy up to 30 percent of the counter area. The counter front shall be durable, high quality materials consistent with the overall RMU design. Counter top materials should be selected for their durability and wear. If necessary, they shall be protected from damage and normal wear. Careful attention should be paid to the detailing of materials and how they join and connect.

**C.** Counter accessories are to be custom designed. Sneeze guards, when used in RMU, must be flush with the front face of the counter line and shall be no higher than four (4) feet six (6) inches above the surface of the floor. Horizontal joints are to be butt glazed to provide maximum visibility. Cup and napkin dispensers, along with condiment containers, shall be recessed into the RMU counter surface.

## 7.5 Equipment

Required equipment shall be provided by the Tenant. The placement of this equipment is a key visual element to the overall design of the RMU. Careful attention should be given to each piece of equipment and how it is viewed by the public. Product names, logos, or advertisements shall be screened from

public view. Wood grain or other simulated material finishes are not permitted on equipment. Natural metal, glass or porcelain finishes are acceptable.

## **7.6 Signage**

Signs for RMUs shall be either obelisk or canopy-type signs. All other signage criteria outlined in this manual applies to RMUs.

## **7.7 Menu Boards and Displays**

Menu boards are a critical element for RMU food concessions. They are to be designed as an integral element of the overall RMU sign package, and shall tie into the architectural character of the RMU. The menu board must be professionally prepared. Hand lettered signs are not permitted. Materials for the menu board shall be of similar colors and style of those used throughout the RMU. Their design should tie directly into the design and materials of the primary sign and any other graphic materials. Non-glare materials are to be used. The Airport reserves the right to review all menu board designs for approval and compliance with TDS.

## **7.8 Lighting**

General lighting exists in areas of the Airport where RMUs will be located. This lighting is typically linear lensed LED. In addition to this ambient lighting, display and effect lighting may be added by the Tenant to supplement existing light. Should the Tenant choose to add lighting, it should be done as part of the Tenant's unit, either integrated into the display system or into the overhead portion of the unit. High-quality display lighting systems are recommended, with fixtures and lamps designed to integrate with the overall design concept of the unit. Mounting details and extensions of power to light fixtures shall be concealed within the unit and support structure.

# Section C. Ground Transportation Design Standards

## **Section C Ground Transportation Design Standards**

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## 1.0 Definitions

- **Airport** - The term as used in this document means the same as Owner, which is the Salt Lake City Department of Airports, together with any appurtenant properties and/or facilities associated therewith as the same may from time to time be enlarged or diminished or otherwise modified.
- **Airport Redevelopment Program** - A program that designs and a constructs a new terminal facility, parking structure, gateway building, and rental car service facilities, etc. for the Salt Lake City Department of Airports.
- **Approval** - Words such as "approve", "approved" and similar words shall mean that approval of the Airport, or Airport committee, is intended unless stated otherwise. Approval shall always be in writing and obtained prior to installation.
- **Booth** - Also referred to as Customer Service Booth or Kiosk, a free standing, self-contained, facility. Booths are intended to house equipment or staff. Booths may be installed by either the Airport or Tenant.
- **Common Areas** - Areas within the car rental facility that are not leased by a tenant or areas within tenant leased space that are visible to the public. This area includes but is not limited to, passenger queuing areas, public seating areas, public circulation corridors, tenant counters and back walls, etc.
- **Customer Service Booth** – See Booth
- **Customer Service Counter** - A counter at which customers can check-in, make or change reservations, or get necessary assistance or information from a rental car agency.
- **Design Review Process** - A policy where the Airport reviews projects and provides design guidelines to ensure continuity and integrity of real property and facility design at Salt Lake City International Airport and other properties under the management of the Salt Lake City Department of Airport.
- **Existing Conditions** - Refers to the conditions existing at the time of project completion.
- **Gateway Building** - A facility located north of the parking structure containing the rental car and ground transportation center on level one and airline check-in and baggage processing on level two.
- **Leased Space** - Areas that are leased to the Tenant.



- **Quick Turn Around Facility** - A facility housing individual rental car fuel, wash, and light maintenance and administrative areas.
- **Parking Structure Rental Car Area** - The first level of the parking structure which houses rental car agency leased space, customer service booths, ready and return stalls and vehicle and pedestrian circulation areas.
- **Quick Turn Around Facility (QTA)** - A rental car facility south of the parking structure that provides car washing, fueling and short-term rental car storage.
- **Rental Car Lobby - Common Area** - An area located on level one of the Gateway Building where rental car customers can make or change car reservations, pick-up keys, etc.
- **Rental Car Lobby - Office Space & Non-Public Areas** - An area located on level one of the Gateway Building that contains rental car agency office and support space.
- **Rental Car Service Sites** - An area to the south of the Parking Structure and QTA for the long-term storage and heavy vehicle maintenance of rental cars.
- **Tenant** - An entity that has a lease agreement with the Salt Lake City Department of Airport.
- **Tenant Back Wall** - The wall behind the tenant customer service counter that is visible to the public.

## **2.0 INTRODUCTION**

### **2.1 Purpose of Document**

**A.** These standards have been developed by the Airport to promote quality, functional, and tasteful facility designs that reflect the dynamic aesthetics of the surrounding environment and meet the high use demands of the Airport. Visitor experience should always be the overriding force in the design of all circulation paths and queuing areas.

**B.** The guidelines exhibited in this manual govern rental car facility improvements to all facilities, floors, walls, ceiling, lighting, signage, etc.; the intent of which is to encourage quality design and consistent standards for all rental car facility tenants (Tenants). The Tenant must refer to lease documents and exhibits to determine the extent of work performed by the Airport and the work by the Tenant.

**C.** Except for routine maintenance on Tenant installed equipment, Airport approval is required any time a Tenant desires to perform interior or exterior construction on Airport property. The approval process and requirements necessary are explained throughout this document. Airport approval is required prior to applying for any local, State, and/or Federal permits that may be required. This is to ensure that the documents are reviewed and approved according to Airport standards prior to being reviewed by other jurisdictions. Any Tenant work undertaken without the prior written approval of the Airport may, at the discretion of the Executive Director, be removed from the Tenant's leased premises and the leased premises restored to its prior condition at the sole expense of the Tenant.

**D.** The Executive Director of the Airport reserves the right to modify or wave any or all of the design standards in this document at any time.

### **2.2 Use of Ground Transportation Design Standards**

Each Tenant must become familiar with the intent, scope and detailed requirements of the design standards before the design process may begin. It is the responsibility of the Tenant and their Design Team to visit the site and verify all existing conditions. Each Tenant's design must be approved by the Airport before any construction is allowed to commence. Submittal and approval procedures are outlined throughout this document.

The Criteria contained herein must be followed in the design of all Tenant facilities to be constructed in the Salt Lake City International Airport terminals and concourses. The purpose of these standards is to provide a single, uniform and consistent source of the Airport's intent regarding the design and

construction of facilities at the airport. Under no circumstances shall these documents be interpreted or utilized as design, bid, or construction documents. The Airport is only providing guidance to the design professional(s) and does not assume any responsibility for the Tenant's design professional(s) to complete contractual and professional responsibilities or to provide complete professional services as required by any Tenant.

Additionally, it is not the intent of these standards to supersede any requirements as set forth by the Federal Aviation Administration (FAA), Transportation Security Administration (TSA), the City and/or County of Salt Lake City, or other applicable federal, state, or local standards or codes, such as Americans with Disabilities Act (ADA). All conflicts shall be identified by the Tenant's design professional(s) and presented in writing to the Airport for resolution.

### 2.3 Design Intent

- A. It is the intent of these standards to ensure that a Tenant's facility design takes advantage of every available option to optimize the potential of the Tenant's space
  
- B. The information contained in these standards should be utilized by Airlines/Tenants, their designers and contractors to coordinate the necessary information for the design and construction of their leasehold improvements. The results should be top quality, cutting edge designs from all Tenants, and consistent with the overall design theme identified in the standards. It is also important for the Tenant's design to complement the existing architectural qualities of the Terminals and Concourses, while still being compatible with adjacent spaces. Use of these standards should encourage the Tenant spaces to strike a balance between both variety and consistency. These standards should be met by proposing contemporary design solutions that are able to capture the "essence" and feel of the design guidelines, without necessarily being literal interpretations. This can be achieved through proper use of materials, color and design elements that relate to the overall theme established by these standards.
  
- C. The Airport encourages the practice of sustainable design in all design decisions of the Tenant's build-out. Areas of sustainable design to be incorporated into the Tenant's design should include: ***(If Tenant is submitting for LEED-CI, refer to Appendix G of this document which provides recommendations consistent with the LEED certification of the project.)***
  - Water Use Reduction: Maximize water efficiency within buildings to reduce the burden on municipal water supply and wastewater systems. High efficiency fixtures and valves, aerators, WaterSense™ certified fixtures and fixture fittings should be used where available. Target a water use reduction goal of 35% from typical commercial use baselines. Use local generation of domestic hot water, as

much as possible, to eliminate long piping runs associated with recirculation piping - unless connecting to an existing hot water recirculating system. Tenant provided plumbing fixtures shall meet the flow requirements listed below:

- Water Closets: Single flush set at 1.28 gpf max.
  - Urinals: Single flush set at 0.125 gpf max.
  - Lavatories in public core areas; Set at 0.09 gpm per 10 second cycle.
  - Break/Pantry Room Sinks: Set at 1.7 gpm max.
  - Showers: Set at 1.5 gpm max.
  - Kitchen Sink: Set at 1.7 gpm max.
  - Hand Sink: Set at 0.5 gpm max.
  - Pre-Rinse Spray Valve: Set at 1.6 gpm max.
- Airport HVAC Systems. The Airport HVAC systems provide outdoor air ventilation rates at least 30% above the minimum rates required by ASHRAE Standard 62.1. The Tenant HVAC design shall also provide outdoor air ventilation rates at least 30% above the minimum rates required by ASHRAE Standard 62.1.
    - The Tenant HVAC design shall meet the requirements of ASHRAE Standard 55.
    - The Tenant shall sufficiently exhaust each space where hazardous gases or chemicals may be present or used to create negative pressure with respect to adjacent spaces when the doors to the room are closed. The exhaust rate must be at least 0.50 cubic feet per minute (cfm) per square foot with no air recirculation. The pressure differential with the surrounding spaces must be at least 0.02 inches of water gauge on average and 0.004 inches of water at a minimum when the doors to the rooms are closed.
    - The Tenant shall refrigerants and heating, ventilating, air conditioning, and refrigeration (HVAC&R) that minimize or eliminate the emission of compounds that contribute to ozone depletion and global climate change. The Tenant HVAC&R equipment combined contributions to ozone depletion and global warming potential shall be less than 100 as defined by LEED BD+C v3-2009 Credit EAc4.
    - The Tenant shall not operate or install fire suppression systems that contain ozone-depleting substances such as CFCs, hydro chlorofluorocarbons (HCFCs), or halons.
    - Particle filters or air cleaning devices shall be provided to clean the outdoor air at any location prior to its introduction to occupied spaces. Filtration media shall be rated at a minimum efficiency reporting value (MERV) of 13 or higher in accordance with ASHRAE Standard 52.2.
  - Construction Waste Management: Divert construction, demolition and land-clearing debris from disposal in landfills and incinerators. Redirect reusable, recyclable, and recovered resources to appropriate sites or back to the manufacturing process back to the manufacturing process.

Redirect reusable materials to appropriate sites. Establish a goal of at least 75% for diversion from disposal in landfills and incinerators and adopt a construction waste management plan to achieve these goals during construction. Recycle cardboard, metal, brick, acoustical tile, concrete, plastic, clean wood, glass, gypsum wall board, carpet, insulation, batteries, light bulbs, toner cartridges, electrical wiring and electronics. Designate a specific area(s) on the construction site for segregated or commingled collection of recyclable materials, and track recycling efforts throughout the construction process. Identify construction haulers and recyclers to handle the designated materials. Note that diversion may include donation of materials to charitable organizations and salvage of materials on-site. Implement deconstruction planning and techniques into all demolition activities. Ensure that employees are aware of waste management and recycling procedures. When possible, evaluate the use of pre-cast or pre-fabricated units, as appropriate, to reduce on-site waste generation during construction.

- **Recycled Content:** Increase demand for building products that incorporate recycled content materials, thereby reducing impacts resulting from extraction and processing of virgin materials. Establish a project goal of at least 30% recycled content materials and identify material suppliers that can achieve this goal. During construction, ensure that the specified recycled content materials are installed. Consider a range of environmental, economic and performance attributes when selecting products and materials. Recycled content is calculated as the sum of post-consumer recycled content plus half of the pre-consumer recycled content. The recycled content value of a material assembly is determined by weight. The recycled fraction of the assembly is then multiplied by the cost of the assembly to determine the recycled content value.
- **Regional Materials:** Increase demand for building materials and products that are extracted and manufactured within the region, thereby supporting the use of indigenous resources and reducing the environmental impacts resulting from transportation. Establish a project goal of at least 20% locally sourced materials, and identify materials and material suppliers that can achieve this goal. During construction, ensure that the specified local materials are installed and quantify the total percentage of local materials installed. Consider a range of environmental, economic and performance attributes when selecting products and materials. Regional materials are products that have been extracted, harvested or recovered, as well as manufactured within a 500 mile radius of the project site.
- **Rapidly Renewable Materials:** Reduce the use and depletion of finite raw materials and long-cycle renewable materials by replacing them with rapidly renewable materials. Establish a project goal for rapidly renewable materials and identify products and suppliers that can support achievement of this goal. Consider materials such as bamboo, wool, cotton insulation, agrifiber, linoleum, wheat board, straw board, and cork. During construction, ensure that the specified renewable

materials are installed.

- Certified Wood: Encourage environmentally responsible forest management. Establish a project goal of at least 50% by cost for FSC- certified wood products and identify suppliers that can achieve this goal. During construction, ensure that the FSC-certified wood products are installed and quantify the total percentage of FSC-certified wood products installed.
- Construction IAQ Management Plan – During Construction: During construction, meet or exceed the recommended control measures of the Sheet Metal and Air Conditioning National Contractors Association (SMACNA) IAQ Guidelines for Occupied Buildings Under Construction, 2<sup>nd</sup> Edition 2007, ANSI/SMACNA 008-2008 (Chapter 3). Protect on-site and installed absorptive materials from moisture damage. Use filtration media with a minimum efficiency reporting value (MERV) of 8 at each return air grille. Replace all air filtration immediately prior to occupancy.
- Low-Emitting Materials/ Adhesives & Sealants: Reduce the quantity of indoor air contaminants that are odorous, irritating and/or harmful to the comfort and well-being of installers and occupants. Specify low-VOC materials in construction documents. Ensure that VOC limits are clearly stated in each section of the specifications where adhesives and sealants are addressed. Common products to evaluate include general construction adhesives, flooring adhesives, fire-stopping sealants, caulking, duct sealants, plumbing adhesives, and cove base adhesives.
- Low-Emitting Materials / Paints & Coatings: Reduce the quantity of indoor air contaminants that are odorous, irritating and/or harmful to the comfort and well-being of installers and occupants. Specify low-VOC paints and coatings in construction documents. Ensure that VOC limits are clearly stated in each section of the specifications where paints and coatings are addressed. Track the VOC content of interior paints and coatings during construction.
- Low-Emitting Materials/ Carpet Systems: Reduce the quantity of indoor air contaminants that are odorous, irritating and/or harmful to the comfort and well-being of installers and occupants. Clearly specify requirements for product testing and/or certification in the construction documents. Flooring must meet the requirements of Green Label Plus, FloorScore, or an alternative compliance path outlined in the LEED v2009 for New Building Design and Construction reference guide. All adhesives must comply with the requirements listed above under “Low-Emitting Materials/ Adhesives & Sealants”. Specify Low-VOC carpet systems. Ensure that VOC limits are clearly stated where carpet systems are addressed. Be attentive to carpet installation requirements.

- Low-Emitting Materials/Composite Wood & Agrifiber Products: Reduce the quantity of indoor air contaminants that are odorous, irritating and/or harmful to the comfort and well-being of installers and occupants. Specify wood and agrifiber products that contain no added urea-formaldehyde resins. Specify laminating adhesives for field and shop applied assemblies that contain no added urea-formaldehyde resins. Review product cut sheets, MSD sheets, signed attestations or other official literature from the manufacturer.
- High performance lighting fixtures and controls: Reduce energy demands by utilizing high performance lighting fixtures and controls. Occupancy controls should also be utilized in selected areas. Allowing daylight into occupied areas should be maximized where feasible.
- Recycling: Airlines/Tenants are encouraged to develop a recycling plan where practical.
- Reduce the environmental and indoor air quality impacts of the furniture and equipment acquired for use in Tenant space. To the extent possible, utilize ENERGY STAR electronic equipment and/or sustainable furniture systems, such as GREENGUARD certified furniture.
- Reduce indoor air quality problems resulting from the construction/renovation process in order to help sustain the comfort and well-being of occupants. During construction, meet or exceed the recommended Design Approaches of the Sheet Metal and Air Conditioning National Contractors Association (SMACNA) IAQ Guideline for Occupied Buildings under Construction, 1995, Chapter 3. Protect stored on-site or installed absorptive materials from moisture damage. Sequence the installation of materials to avoid contamination of absorptive materials such as insulation, carpeting, ceiling tile, and gypsum wallboard. Minimize the use of air handlers during construction. If air handlers are used during construction, filtration media with a Minimum Efficiency Reporting Value (MERV) of 8 must be used at each return air grill, as determined by ASHRAE 52.2-1999. Prior to occupancy, perform a flush-out or test the air contaminant levels in Tenant space.
- The Airport is a non-smoking facility.
- These standards encourage a concerted effort on the part of every Tenant and architect to select finish materials, which are derived from the earth's renewable resources. Materials that are prohibited or possibly harmful to the environment are prohibited.

## 2.4 Airport Work / Tenant Work

- A. The Airport will generally provide the leased area to each Tenant in an “as-is” condition subject to the following provisions.
- B. The Airport will provide base finishes (except in Airline Exclusively leased and Concession spaces) throughout the Tenant leased space.
- C. The Airport will provide base water and sanitary sewer utilities to the lease lines of spaces that require these utilities.
- D. Tenant will be responsible for any and all demolition required, as well as any services, utilities or work not mentioned above; and all other work as required to complete the build-out of Tenant’s facilities.
- E. Tenant will also be required to connect to the Airport’s Life Safety System, BAS for energy management, system and monitoring, and Kilair program for emergency purposes. Tenant is responsible for contracting its Designer, Architect, Engineers, other Specialty Consultant, and General and Specialty Contractors. All of the Tenant’s work shall conform to all applicable codes, ordinances, regulations and statutes, as well as these standards and other Airport requirements.
- F. Any other work outside of Tenant’s leased premises shall require prior written authorization from the Airport. The Airport reserves the right to require changes in the Tenant’s work when necessary by specific locations (proximity) to special use facilities or interface to any Airport systems.
- G. It is the Tenant’s responsibility to coordinate the interface and availability of all telecommunications and data requirements with the Airport at the inception of the project. The Tenant is responsible for the complete design and construction of the premises including all fees, permits, taxes, insurance, licenses, bonds, partitions, finishes, structural modifications, signing, furnishings, equipment, lighting, plumbing and mechanical systems, electrical systems, security and airport systems interface. Where Tenant systems interface with Airport systems, the interface shall be in accordance with these standards and at the direction of the Airport (See Appendix E for IT and Cable Standards).

## 2.5 Tenant Payment and Performance Bond

Each Tenant shall be required to provide the Airport with a full payment and performance bond for each project in an amount equal the total cost of improvements and MAG for the duration of the Lease.



**2.6 Interface Points and Utilities**

**Roof and Floor**

The Tenant shall provide any required supports, blocking, temporary flashing, counter flashing or other work necessary to complete the installation of Tenant’s equipment on any roof and shall not interfere with any roof warranties. The Tenant shall coordinate any work associated with roof assembly modifications and/or penetrations with Airport Facilities approved roofing contractor. The Tenant will be required to supplement existing construction to achieve assembly ratings, thermal values or additional criteria as required. All work shall conform to the requirements established in these standards. All penetrations must be sealed water tight.

Most floors in the Terminals and Concourses are suspended concrete slab construction; all floors must be x-rayed prior to any cutting, boring or penetration of any kind. Tenant must submit written request along with documentation to the Airport for approval prior to commencing work in this area. The Tenant is responsible for review of existing documentation available from the Airport archives and visual survey, to determine allowable loading of floors, roofs, etc. for Tenant’s equipment, furnishings, etc. Time of cutting and/or penetrating roof or floor must be coordinated and approved by the Airport.

**Fire Ratings**

All existing fire rated construction must be maintained during, as well as after construction.

**Hardware/Keying**

For security and fire reasons, door hardware must be keyed to the Airport's master hardware system.

**Utilities and Service**

The Tenant is responsible for all utility connections to achieve a complete, approved and operating system. Tenants with systems or equipment that require utility connections to the Airport's uninterrupted or generator power system shall request this service through the Airport Tenant Coordinator. The Airport will review and approve these utility connections on a case by case basis.

**Special Equipment**

The Tenant shall provide any required alarm systems or other protective devices, conveyors, time clocks, fire extinguishers, dry chemical fire protection systems or any other equipment

specific to the Tenant's business needs or Tenant use. Only clocks connected to the Airport's master clock system may be installed by the Tenant if exposed to public view. All Tenants requiring a radio system for communication must comply with the Airport and FAA requirements.

## 2.7 Insurance Requirements

All Tenant's consultants and contractors are required to provide general liability and automobile insurance as described below, the required amounts may be revised as deemed necessary by the Airport. This information should be disclosed to the consultants and contractors prior to engaging their services to ensure that they are able to meet these requirements. Contractors will not be permitted to be badged or receive access to the airport unless proper insurance documentation has been received. The Airport shall be listed as an additional insured party on all policies.

- General Liability Coverage Insurance: Access to all non-aircraft operating areas, including landside, requires general liability insurance in the amount of \$5,000,000.
- Automobile Coverage: Access to all non-aircraft operating areas requires automobile insurance in the amount of \$5,000,000.
- Workers Compensation: Proof of Workers Compensation Insurance, statutory limits.
- **Salt Lake City Corporation. PO Box 145550. SLC. UT 84114-5550** must be listed as an additional insured on the certificates in the appropriate sections. This applies to all certificates for all consultants and contractors.
- Contractor insurance shall remain current and in force at all times during the project.

Payment and Performance Bonds, Construction Deposits, etc. are outlined in the Construction section of this document.

## 2.8 Architect / Engineer Selection

The Tenant shall be required to engage an architect (including any separate design firm), herein after referred to as Tenant's designer, and engineers duly licensed to practice in the State of Utah, to prepare the designs, drawings, calculations, and construction documents. Construction Administration Services shall be provided for each project by the designer and appropriate engineers of record. The Tenant's designer, or engineer shall be on-site during the site evaluation process. If the existing fire protection system is to be modified in the Terminal, a licensed fire protection engineer shall be engaged for the design work.

## **2.9 Contractor Selection**

The Tenant shall be required to engage a qualified general contractor or construction management firm, duly licensed to do business in the State of Utah to construct the Tenant's space in accordance with the approved construction documents and the requirements and regulations contained in these standards.

All other contractors and firms hired by the Tenant independent of the GC that are performing work within the airport property shall be subject to the same insurance and licensing requirements as stated above. This may include, but not be limited to food service equipment installation, millwork or casework fixturing, merchandising, A/V, etc.

## **2.10 Airport Document Review**

The Airport does not currently charge a fee for the application and review process. However, work completed without written Airport approval will be subject to Tenant charges or removal at the Tenant's expense. All project permitting and development costs, fees, and taxes required to complete the work are the responsibility of the Tenant and its contractor.

Tenants needing CAD or other record drawings shall submit their request to the Airport in writing. CAD and record drawings are provided as a starting point for the Airlines/tenants. In coordination with the Airport, tenants and their contractors are required to field verify existing conditions and pot hole, if necessary, to locate existing underground utilities and their depths prior to submitting documents for the Airport's review. In general, the process described below and the submittals required during each phase are required for all Tenant improvement projects.

### **Preliminary Design Review**

Prior to actual design, a pre-design meeting shall be held and attended by the Airport, the Tenant, and the Tenants design team. At this meeting, the Tenant will be expected to provide a high level overview of the proposed project and/or concept, and the overall scope of work. General requirements and procedures will be presented by the Airport. The Airport will review the proposed project and conformance with the Master Plan. Any known or anticipated special conditions and concerns will be identified and discussed at this time. Special conditions may include but are not limited to staging, work hours, environmental concerns, insurance, etc. The Airport will be able to answer any questions that the tenant and design team may have. The Tenant will also be briefed on required review meetings, presentations, and submittals for each stage of the design review process.

**Submittals required:**

- A. Completed Tenant Improvement Application
- B. Any renderings or concept materials to present the intended use for the space.

The Airport will provide feedback and direction during the meeting, any additional comments will be provided in written form to the Tenant within ten (10) working days of the meeting.

**Design Development Review (30% Submittal)**

The intent of this review is to ensure that the proposed project and/or concept are in compliance with Airport standards and expectations. A high-level review of the project will be performed by the Airport.

**Submittals required:** one (1) electronic copy in PDF format submitted by the Tenant's design team into Unifier, plus one material sample board meeting the following requirements:

- A. Scaled Floor Plans showing all existing and adjacent conditions. Floor plans must include all floor finishes, furnishings and fixtures, equipment, seating, storage areas, etc.
- B. Scaled Reflected Ceiling Plan indicating all ceiling heights, materials and finishes, and overall fixture and other feature layout.
- C. Signage elevations and sections showing type, location, colors and materials.
- D. Scaled Mechanical Plan showing connections to existing systems for HVAC, new ventilation systems and other related information.
- E. Scaled Plumbing Plan showing connections to existing systems for water and waste, the extent and quality of all fixtures.
- F. Scaled Structural drawings and details if required by scope of Tenant's work.
- G. Scaled Electrical Plan showing connections to existing systems, proposed panel locations, locations and types for all fixtures and cut sheets for each fixture.
- H. Outline of specifications

The Airport will respond to the tenant within 15 working days and will provide tenant notification to proceed with construction document preparation, or to resubmit a revised design development package incorporating the review comments provided by the Airport.

### **Construction Document Review (100% Submittal)**

The Airport will conduct a detailed review of the entire project plan to ensure compliance with all requirements. Plan changes are to be clouded and identified with revision number. The revision number shall also be recorded and dated in the revision block. Show all underground utilities, including electric, water, sewer, gas, etc. Prior to submitting, conduct a careful plan check for accuracy.

**Submittals required:** one (1) electronic copy in PDF format submitted by the Tenant's design team into Unifier, meeting the following requirements:

- A. Title page with site and vicinity location plan, overall airport diagram, project team and contact information.
- B. Architectural drawings to scale
- C. Structural drawings to scale, if required
- D. Mechanical drawings to scale
- E. Electrical drawings to scale
- F. Complete specifications
- G. Sustainability Report listing all materials generated on site for salvage, reuse or recycling, quantity, and destination.

Drawings must be sealed and signed by professionals licensed in the State of Utah, all pages must be signed by the responsible party. The Airport will complete its review and respond in writing within 20 working days of receipt. Inaccurate or incomplete drawings will be returned to the Tenant and the process will recommence. **Additional reviews by the Airport may be billed to the Tenant at a rate of \$1,000.00 per review.** Once the Airport approval has been issued the Tenant may apply for building, mechanical, electrical and plumbing permits from SLC Building Services

### **2.11 Facility Construction Process**

Upon completion of the design review and permitting process, the project is ready to proceed to the construction phase. The process and procedures to be followed are outlined below.

### **Pre-Construction**

After obtaining all required permits, a pre-construction meeting shall be held and attended by the Airport, the Tenant, and the Tenant's contractors and design team. The Airport's project manager will schedule the meeting. At the meeting the Tenant and its contractor(s) will be briefed on rules, regulations, and procedures to be followed for the construction project. Contractors should be prepared to discuss the project in detail.

### **Submittals required:**

- A. Two (2) sets of sealed, stamped "Issued for Construction" plans and specifications, and one electronic copy
- B. Copies of all necessary permits
- C. Insurance and bond certificates, if not already on file (see "Insurance and Bonds" below for exact requirements)
- D. Detailed contact list with sufficient information for all individuals involved with the project
- E. Detailed project schedule. The project schedule shall identify separate tasks that detail the scope of work from procurement to final acceptance. The schedule shall include all work components, permit procurement, shop drawing submittal process, owner furnished items, interfaces with pertinent agencies and/or base building, milestones, substantial completion, and anticipated final acceptance dates.

### **Notice to Proceed**

Upon satisfactory completion of the foregoing requirements the Airport will issue a Notice to Proceed (NTP) to Tenant in written and/or electronic formats. The NTP will not be issued until all necessary reviews have been performed, all submittals have been received and all permits have been issued. Under no circumstances may Tenant or Tenant's contractor commence any work without the issuance of the NTP.

### **Final Inspection and Punch List**

When the Tenant determines the space is substantially complete and ready for an inspection, the Tenant shall notify the Airport or its designated representative, in writing, a minimum of seventy-two (72) hours prior to the requested inspection. The Airport or its designated representative will schedule the inspection with all appropriate airport staff, review the improvements, and prepare a written list of deficiencies (punch list) within twenty-four (24) hours of the inspection. When the

Tenant has completed all punch list items the Tenant shall request a re-inspection of the premises and the Airport or its designated representative shall schedule the re-inspection. The Tenant is required to correct all noted deficiencies on the punch list within fifteen (15) days. If the punch list items are not corrected within thirty (30) days of opening, the Airport reserves the right at its sole discretion, to close the premises until all outstanding items have been completed.

Once the Airport determines that the space is substantially complete, a verbal approval is given that day to the Tenant. Punch list items which are prerequisites to final acceptance and/or occupancy, shall be completed and reviewed again with the Airport representatives prior to occupancy. When the Tenant determines the facility is ready for occupancy, the Tenant shall request a final walk-thru with the Airport. If approved, the Tenant shall be issued a written authorization by the Airport to occupy the premises. When final acceptance has been granted by the airport, the Tenant will be issued a written Letter of Acceptance of the space.

### **Project Close-out**

Upon completion of the project and final acceptance by the Airport, the Tenant shall provide the documents listed below. These drawings and specifications shall be delivered to the Airport within 45 days from the Letter of Acceptance issue.

Submittals required:

- A. Final inspection reports issued by all jurisdictions (copies)
- B. Copy of the Certificate of Occupancy (if applicable)
- C. Copy of the Board of Health inspection report and certification (if applicable)
- D. Final Unconditional Waivers of Lien from all contractors, subcontractors and suppliers (copies)
- E. Warranty Documents (if applicable)
- F. Operation and Maintenance Manuals (if applicable). H. Sustainability Report
- G. Sustainability Report
- H. Warranty Documents, certified balance report and manufacture equipment start up sheet (if applicable).

Failure to provide the above referenced documents will be considered non-compliance with contract terms. It is the tenant's responsibility to ensure that its contractor and design team provide the documents within the prescribed timeframe.

## **2.12 Building Official, Approvals, Permits and Associated Fees**

The Tenant shall be responsible for compliance with all applicable codes and standards adopted by Salt Lake City Corporation and Department of Airports at the time of design and construction. These include but are not limited to: International Building Code (IBC); International Plumbing Code (IPC); International Mechanical Code (IMC); National Electric Code (NEC); National Fire Protection Agency (NFPA); and ADA Guidelines/ANSI.

All new construction or alteration of existing facilities requires a building permit issued by Salt Lake City Building Services. A separate permit will be issued by Salt Lake City for plumbing, mechanical, and electrical construction. These permits are in addition to the General Building Permit. For more information contact:

### **Salt Lake City Building Services**

**451 South State Street, Salt Lake City, Utah**

**(801) 535-6000**

- A.** The Tenant shall be responsible to secure all permits and pay all plan check, permit and license fees required for improvement and construction within the lease area.
- B.** Natural gas is provided to the Airport through Dominion Energy Gas.
- C.** Electrical service to the Airport is provided by Rocky Mountain Power.
- D.** All work must be performed by properly licensed personnel and comply with all the appropriate codes, rules, regulations, and policies of agencies having jurisdiction. The Airport reserves the right to restrict the hours of work if work is deemed to be excessively disruptive to the Airport, at no cost to the Airport. All materials and each portion of the Work are subject to Airport inspection. Other federal, state and local agencies may require the contractor to have permits and inspections in addition to those required by the Airport.

## **2.13 Plan Modifications**

Once the construction documents have been approved by the Airport, any change must be submitted in writing to the Airport Designated Representative for approval prior to proceeding with the change. This documentation must explain the reason for the requested change and be supported by adequate and appropriate information or drawings, as required. The Tenant's contractor shall allow ten (10) working days for a response from the Airport. If the change request is of the utmost importance to resolve quickly,



the Airport will make every effort to work with the Tenant's contractor to facilitate the change. The Airport will issue a written response to the change request. This includes any changes made either before the Salt Lake City Building Services reviews the plans for permit, or following receipt of the permit. Direction by the Salt Lake City Department Building Services to make a change in the drawings does not constitute approval by the Airport. It is the Tenant's contractor's responsibility to notify and obtain Airport approval or concurrence with any such directives or changes. If changes are made without Airport approval, the tenant's contractor may be required at their own expense to modify the work to conform to the approved drawings.

## **2.14 Field Verification**

Where possible, the Tenant's Designer shall be required to field verify, in person, all on-site conditions and dimensions for the 30% design submittal. This work shall be incorporated into the contract documents as the basis for the existing condition backgrounds. The verification includes in person research of existing plans in the Airport's Engineering GIS Department, visual inspection and measure of existing space and surrounding areas. It may be necessary for the Designer and/or any consulting engineers to make an additional inspection following demolition of the pre-existing conditions if conditions were concealed prior to such demolition.

## **2.15 Airport Oversight**

- A.** The Airport may designate a project manager for each lease space. This project manager will be the contact and recipient for all design questions, coordination and submissions. The Airport will monitor the Tenant's construction project on a regular basis. The Airport shall have the right to inspect the work at any time of any day; the Tenant's lease space shall be available to the project manager at all times during all phases of construction. The project manager shall be responsible for scheduling of review meetings and timeline for design and construction. The Tenant's contractor shall attend weekly progress meetings which shall include a review of the progress to date, remaining schedule, plans and specifications being used in the project, coordination issues with the Airport and any other issues that require resolution.
  
- B.** It is the express obligation and duty of the Tenant's contractor to coordinate, cooperate and communicate with the Airport and/or their designated representatives. The Tenant's contractor shall not impede, hinder, or delay any other parties in the performance of their work and shall remain solely and exclusively responsible for any damages or costs incurred as a result of any hindrance or delay. The Tenant's contractor(s) shall comply with all rules and regulations concerning safety and security. The Airport designated project manager will be the contact for all

construction-related correspondence after the commencement of construction. Construction meetings and inspections required shall be coordinated through the project manager.

- C. Generally, all demolition must be done between the hours of 1:00 a.m. and 5:00 a.m., or as determined in writing by the Airport, especially those activities which generate excessive noise. Temporary construction walls, or dust wall construction barricades are required for all demolition and construction where the premises adjoins or fronts public areas of the terminals or concourses.

## **2.16 Hours of Work**

Tenant's contractors are permitted to work at any time behind closed barricades with the exception of demolition. Any activities which generate excessive noise (hammer drills, saw cutting, heavy pounding, etc.) or offensive odors are subject to the demolition restrictions listed in 1.17 in Section A.

## **2.17 Airport Holiday Observance**

- New Year's Day
- Martin Luther King's Birthday
- President's Day
- Memorial Day
- Independence Day
- Pioneer Day
- Labor Day
- Veteran's Day
- Thanksgiving Day
- Day after Thanksgiving
- Christmas Day

## **2.18 Security Requirements**

All Tenants are responsible for the security of their leased spaces and the construction materials and equipment therein. All construction dust wall barricades must remain locked at all times. All personnel working inside the construction barricade must be properly badged at all times. Any person not

permanently badged to work in secure areas of the airport must have a properly authorized escort who must remain in control of the temporary worker at all times. Failure to follow the security requirements and guidelines provide herein and elsewhere by the Airport may result in forfeiture of credentials, fines and/or imprisonment.

## **2.19 Safety Requirements**

The Tenant and its contractor shall download the “Airport Construction Safety and Security Manual” and be familiar with its contents. The manual describes the requirements for doing work within the Aircraft Operations Area, and general airfield and FAA requirements. The manual is available at:

[https://www.slairport.com/assets/pdfDocuments/Construction\\_Safety\\_Manual.pdf](https://www.slairport.com/assets/pdfDocuments/Construction_Safety_Manual.pdf)

The Airport is under the jurisdiction of the Salt Lake City Police and Fire Department, as well as the Department of Homeland Security Transportation and Safety Administration (TSA); all of which are located on the airport property. All incidents must be reported to the appropriate agency and to the Airport Operations Department. The Tenant is also responsible for complying with all applicable provisions of the OSHA Construction Safety and Health Regulations.

## **2.20 Other Safety Related Issues**

- A.** No cutting, welding, or burning is allowed without proper approval.
- B.** No vapors from paint (even latex), glues, adhesives, or dust are allowed to exit the designated construction area. Paint processes shall meet environmental requirements as required by OSHA. All paints, solvents, rags, and other painting refuse shall be properly disposed according to State and Federal environmental regulations. Only latex-based paints are allowed for interior use.
- C.** No power or powder actuated fasteners are allowed to be used in the Terminal or Concourse areas without prior written approval.

## **2.21 Security Badging**

All individuals working at the airport are required to go through the Airport's badging process. The process may take several days to complete. Tenants and contractors should keep this in mind while creating project schedules. Fees associated with the issuance of identification badges are the responsibility of the Tenant and its consultants and contractors. For information regarding the badging

process, fees required, and an application please visit <https://slcairport.com/badging/>. You may also contact the Airport Access Control and ID Badging Office at (801) 575-2423.

## **2.22 Temporary Utilities**

Requirements for temporary utilities and/or all utilities or systems required to be taken out of service must be coordinated through the Airport and arranged by the Airport project manager.

## **2.23 Conduct**

The Tenant is solely responsible for the conduct of its employees, agents, consultants, contractors, vendors, suppliers, etc. under their direction or contract. Safety and courtesy for the public, Airport and their personnel must be a top priority at all times. Among other things; loud music, lewd behavior, consumption of drugs or alcoholic beverages and all weapons are strictly prohibited on airport property. The Airport and all agencies within the airport have a zero tolerance policy; any violation will be dealt with swiftly and may result in loss of privileges, fines and/or prosecution.

## **2.24 Delivery and Access for Tenant Construction**

Most material deliveries must occur between the hours of 1:00 a.m. and 6:00 a.m., or as determined in writing by the Airport, and should enter and exit the terminal and concourse via the Airport Operations Area (AOA) through the use of properly designated and authorized vehicles. Use of airport passenger elevators for deliveries is strictly prohibited; only designated freight elevators may be used for this purpose. Exceptions for material deliveries may be granted on a case by case basis and must be coordinated through the Airport designated project manager. Any deliveries entering from the Terminal Drive must pass through security screening and be coordinated with TSA at least 72 hours in advance.

## **2.25 Construction Debris**

All trash and debris from construction and demolition must be removed from the site between the hours of 1:00 a.m. and 5:00 a.m., or as determined in writing by the Airport. In many instances the Airport will provide and locate trash and recycling dumpsters for Tenant use. Otherwise the Tenant shall provide its own covered dumpster placed in an area designated by the Airport. All loads must be covered during transit. Use of public passenger elevators by the Tenant or contractor is strictly prohibited. Designated service elevators are available for Tenant's use during construction; specifics will be coordinated at the pre-construction conference. Airside removal of construction debris shall be coordinated and conducted under the direction of Airport Operations Department.

## **2.26 Cleanliness**

The Tenant shall be responsible for cleanliness of the terminal and concourses; the Airport will strictly enforce adherence. The Tenant and/or its contractor(s) shall promptly and properly remove any debris and keep the construction area clean, including the use of airport approved walk-off mats at the entrance to the construction site. The Airport will only issue one (1) warning, after which building maintenance will be contacted for clean-up and the cost will be charged to the Tenant.

## **2.27 Contractor Parking and Staging**

Parking, staging and lay down requirements and location shall be coordinated with the Airport's project manager. Due to space limitations and airline commitments, no contractor parking will be allowed anywhere on the Airport Operations Area (AOA), unless authorized by the Airport. Areas surrounding the airside terminal building and concourses are leased exclusively to the airlines. Contractors accessing the building from the AOA for delivery of materials and tools must remove their vehicles as soon as the delivery is complete and may not leave unattended vehicles on the AOA at any time. Any vehicles accessing the AOA are subject to existing security requirements and search at any time.

## **2.28 Right of Inspection**

The Airport, its designees, as well as officials from any authority having jurisdiction (AHJ) shall have the right to inspect the work at any time. Primarily for safety, security and quality purposes; the Tenant and its contractor shall provide full access needed including ladders, temporary lighting, safety equipment, etc. Any comments will be issued immediately to Tenant's contractor with a copy to the Tenant and its designer of record. It is the Tenant's sole responsibility to immediately address and remedy any issues raised during or as a result of an inspection of the premises.

## **2.29 Inspection, Verification and Acceptance by Tenant**

The Tenant's designer will inspect at a minimum the same inspections as required by the City permit process and verify the correctness of the work. Upon substantial completion of the work, the Tenant shall require its designer and appropriate engineers of record to conduct a thorough inspection and prepare a list of noted deficiencies (punch list) enumerating any areas of the work which are not in accordance with the approved plans or Tenant's lease agreement for the premises. A copy of this list shall be furnished to the Airport within forty eight (48) hours of the inspection. All remedial work resulting from the punch list inspection shall be completed by Tenant's contractor within thirty (30) days of substantial completion. Any damage to adjacent tenancies or Airport property must be repaired prior to Tenant's occupancy of the

premises. Upon final completion of the work, Tenant's design shall certify that all work has been completed satisfactorily and in strict compliance with the contract documents. A copy of the certificate shall be delivered to the Airport within thirty (30) days of final completion of the project.

### **2.30 Record Drawings**

Within 120 days of completion of construction, the Tenant shall cause to be delivered to the Airport one (1) hard copy and two (2) electronic copies of corrected record drawings of Tenant's finished lease space with all modifications and corrections reflecting the true and accurate as-built condition of the facility. All electronic record drawings must be submitted in AutoCAD format. The submitted project must be 100% complete. All supporting files must be bound to each respective base drawing. This includes all links, text fonts and any other supporting files needed to complete the set. The projects may be submitted on DVD's or CD's. Other portable storage media may be considered as technology changes. All projects created in other CAD programs, must be converted to AutoCAD.

## **3.0 Ground Transportation Counters - Common Areas**

### **3.1 General Design Guidelines**

The Airport Redevelopment Program (ARP) will define the Terminal and Ground Transportation area finish quality and aesthetic. The ARP will provide finish material in non-leased common areas of the Terminal Building and base finishes in tenant leased spaces (except in Airline Exclusively leased and Concession spaces). Tenant installed finishes in common areas of the Terminal Building shall be complimentary and compatible with the overall Terminal Building aesthetic and shall be equivalent to ARP provided finish material in terms of quality and durability. Tenant installed finishes are subject to the guidelines set forth in this section. Tenant improvements are made at the tenant's expense and are subject to the Airport's design review process.

### **3.2 Walls and Doors**

**A.** The tenant shall provide and install all wall treatments and corporate branding within their leased space. The Airport will provide and install all other wall treatments. The use of high quality durable material is required. All wall finishes shall be complimentary and compatible with finish material and color used in the Terminal. Only material that can be easily repaired and is durable enough to withstand the high use demands of the airport environment shall be used.

**B.** The Airport will provide and install standard doors in public areas of the Terminal Building. Doors within tenant leased space are provided by the Airport. Proposed door and wall modifications shall be complimentary and compatible with the Terminal Building aesthetic and provided by and installed at the Tenant's expense.

**C.** Wall and door finish modifications are subject to the Airport's design review process prior to installation.

### **3.3 Flooring**

Flooring composes a large portion of the Terminal Building aesthetic. The Airport will provide all flooring in the Terminal building lobby up to the tenant back wall. Flooring includes recessed, permanent fatigue mats behind customer service counter.

### 3.4 Signs

A. Wayfinding signs located in public areas of the Terminal Building are provided by the Airport.

B. Tenant installed signage is permitted with the tenant's leased space and on stanchion tops.

**The following types of tenant installed signs are typically permitted:**

- Electronic signs.
- Surface-applied dimensional metal letters with indirect illumination.

**The following sign types are prohibited:**

- All other types of internally illuminated signs other than those permitted above.
- Light conductive, edge-lit glass.
- Push through, illuminated letters where edges are illuminated and faces are opaque.
- Reverse style channel letters with halo illumination mounted on a non-reflective surface.
- Routed metal or stone.
- Non-illuminated dimensional letters of metal, stone, or wood.
- Handwritten.
- Flashing signs/light.
- Animated or signs with any motion.
- Exposed neon.
- Vacuum formed signs.
- Plastic or Plexiglass signs.
- Miscellaneous signage such as credit card signs, sales signs, decals, symbols, artwork, any temporary signs, etc.
- Promotional signs not previously approved by the Airport.
- Off-premises advertising.
- Free standing pedestal signs (stand-up), single or double sided.



- Surface mounted box or cabinet signs of any type.
- Signs outside of the tenant leased space.

**C.** Approved regulatory information, promotional materials, and other operational signage may be displayed on or behind the customer service counter. Signs or sign stands/frame on the counters shall be freestanding and made from an acrylic, metal or similar rigid material. Signs shall not be handwritten, photocopied or taped to the counter top. Signs are not permitted on the face of the counter.

**D.** Only approved regulatory, wayfinding, directional, and operational signs are allowed on stanchion tops. All signs must be mounted in frames and firmly attached to stanchions. No signs shall be attached to the stanchion ribbon. Freestanding and tall stanchion queuing signs may be used in queuing areas to direct or identify specific queue locations or services.

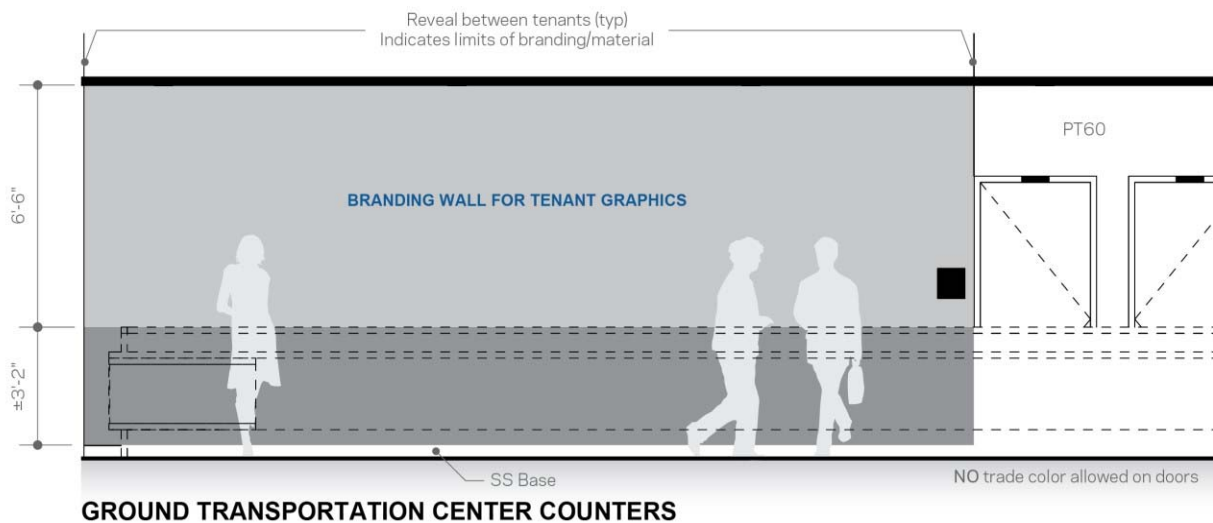
**E.** Tenant signage is subject to the Airport's design review process prior to installation.

### **3.5 Lighting**

**A.** General lighting in the Terminal Building is provided by the Airport. Flashing, rotating, strobe or any other lighting method that is distracting to customers or is not complementary with the overall lobby aesthetic is not permitted. High quality lighting systems are recommended, with fixtures and lamps that are integral with the overall design concept. All lighting fixtures and systems shall meet Airport Energy Efficiency Standards.

**B.** Tenant lighting is subject to the Airport's design review process prior to installation.

### 3.6 Tenant Back Wall and Customer Service Counter Finishes



**Material Legend:**  
PT60 – Typical Paint  
SS – Stainless Steel

**A.** Corporate brand identifying colors and finishes are permitted on the wall behind the tenant's counter space within the tenant's leased space. All finish material shall be designed to be compatible and complementary with the overall aesthetic of the Terminal Building and adjacent walls and finishes, consisting of a stainless steel base, phenolic wainscoting, and painted gypsum board above.

**B.** The Airport will provide base customer service transaction counters. The tenant is responsible for all counter inserts, and all necessary customer service equipment.

**C.** Ground Transportation operator corporate logo and branding is allowed on the wall behind the customer service counters. Corporate logo font and logo height shall be a maximum of 30". Electronic signage may be installed on the tenant back wall. Electronic signage shall not emit sounds or have messages that flash or are animated. Off-premises advertising is prohibited. All signs and messages to be conveyed must be approved by the Airport prior to installation.

**D.** Corporate signage and branding is not allowed outside of the tenant's leased space. Corporate signs and logos are not allowed on the façade or any windows of the Terminal Building.

E. All tenant back wall and counter finishes are subject to the Airport's design review process prior to installation.

### **3.7 Passenger Queuing Areas**

A. The Airport will provide all floor, wall, and column area finishes in public areas of the Terminal Building.

B. The Airport will provide and maintain all passenger queuing area stanchions.

C. Regulatory, wayfinding, directional, and operational signs are allowed on stanchion tops. All stanchion top signs shall conform to Airport standards.

## **4.0 Ground Transportation Office Space & Non-Public Areas**

### **4.1 General Design Guidelines**

**A.** The ARP will drive the overall aesthetic, and provide all finish material in common areas of the Terminal Building. The Airport will provide base finishes in areas the Airport designees as tenant leased space (except in Airline Exclusively leased and Concession spaces). All improvements made by the tenant within their leased space such as flooring, wall, and ceiling finishes, office modifications, equipment, and corporate branding shall be made by the tenant at the tenant's expense. In the event the tenant vacates their leased space, the tenant shall restore all leased space to the original finishes.

**B.** All tenant improvements are subject to the Airport's design review process prior to installation.

### **4.2 Base Finishes**

**A.** Airport provided base finishes (except in Airline Exclusively leased and Concession spaces) include:

1. Floor - Heavy duty carpet or vinyl composition tile (VCT).
2. Walls - Painted gypsum board.
3. Ceiling - Lay-in acoustical tile.
4. Doors- Hollow metal doors and frames.
5. Lights - Airport standard florescent lights.
6. Communications – Conduit only.

**B.** All tenant proposed modifications to existing base finishes shall be made by the tenant at the tenant's expense (except in Airline Exclusively leased and Concession spaces). This includes, but is not limited to, changes in wall color, carpet or tile, any attachment, penetration, or modification to the lay-in acoustical tile, or any door or light alteration. Modifications to existing base finishes are subject to the Airport's design review process prior to modification (except in Airline Exclusively leased and Concession spaces).

## Section D. Rental Car Design Standards

## **Section D Rental Car Facility Design Standards**

### **1.0 DEFINITIONS**

### **2.0 INTRODUCTION / PURPOSE**

- 2.1 Purpose of Document
- 2.2 Use of Rental Car Facilities Design Standards
- 2.3 Design Intent
- 2.4 Airport Work / Tenant Work
- 2.5 Tenant Payment and Performance Bond
- 2.6 Interface Points and Utilities
- 2.7 Insurance Requirements
- 2.8 Architect / Engineer Selection
- 2.9 Contractor Selection
- 2.10 Airport Document Review
- 2.11 Facility Construction Process
- 2.12 Building Official, Approvals, Permits and Associated Fees
- 2.13 Plan Modifications
- 2.14 Field Verification
- 2.15 Airport Oversight
- 2.16 Hours of Work
- 2.17 Airport Holiday Observance
- 2.18 Security Requirements
- 2.19 Safety Requirements
- 2.20 Other Safety Related Issues
- 2.21 Security Badging
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6.2 QTA Service Booths

6.3 Signs

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7.2 Landscaping / Screening

7.3 Exterior Walls

7.4 Signs

7.5 Tenant Branding

7.6 Vehicle Circulation Areas

7.7 Fencing and Sidewalks

7.8 Fleet Turnover Storage Areas

7.9 Wrecked Vehicle Storage Areas

7.10 Trash Collections Areas

7.11 Exterior Maintenance

7.12 Alarm Systems

7.13 Maintenance Bays

7.14 Used Fluid Collection Areas, Oil, Coolant, etc

7.15 Landscaping

7.16 Interior Office Space Base Finishes

7.17 Sustainable Design



## 1.0 Definitions

- **Airport** - The term as used in this document means the same as Owner, which is the Salt Lake City Department of Airports, together with any appurtenant properties and/or facilities associated therewith as the same may from time to time be enlarged or diminished or otherwise modified.
- **Airport Redevelopment Program** - A program that designs and a constructs a new terminal facility, parking structure, gateway building, and rental car service facilities, etc. for the Salt Lake City Department of Airports.
- **Approval** - Words such as "approve", "approved" and similar words shall mean that approval of the Airport, or the Airport committee, is intended unless stated otherwise. Approval shall always be in writing and obtained prior to installation.
- **Booth** - Also referred to as Customer Service Booth or Kiosk, a free standing, self contained, facility. Booths are intended to house equipment or staff. Booths may be installed by either the Airport or Tenant.
- **Common Areas** - Areas within the car rental facility that are not leased by a tenant or areas within tenant leased space that are visible to the public. This area includes but is not limited to, passenger queuing areas, public seating areas, public circulation corridors, tenant counters and back walls, etc.
- **Customer Service Booth** – See Booth
- **Customer Service Counter** - A counter at which customers can check-in, make or change reservations, or get necessary assistance or information from a rental car agency.
- **Design Review Process** - A policy where the Airport Design Review Committee reviews projects and provides design guidelines to ensure continuity and integrity of real property and facility design at Salt Lake City International Airport and other properties under the management of the Salt Lake City Department of Airport.
- **Existing Conditions** - Refers to the conditions existing at the time of project completion.
- **Gateway Building** - A facility located north of the parking structure containing the rental car and ground transportation center on level one and airline check-in and baggage processing on level two.

- **Leased Space** - Areas that are leased to the Tenant.
- **Quick Turn Around Facility** - A facility housing individual rental car fuel, wash, and light maintenance and administrative areas.
- **Parking Structure Rental Car Area** - The first level of the parking structure which houses rental car agency leased space, customer service booths, ready and return stalls and vehicle and pedestrian circulation areas.
- **Quick Turn Around Facility (QTA)** - A rental car facility south of the parking structure that provides car washing, fueling and short-term rental car storage.
- **Rental Car Lobby - Common Area** - An area located on level one of the Gateway Building where rental car customers can make or change car reservations, pick-up keys, etc.
- **Rental Car Lobby - Office Space & Non-Public Areas** - An area located on level one of the Gateway Building that contains rental car agency office and support space.
- **Rental Car Service Sites** - An area to the south of the Parking Structure and QTA for the long-term storage and heavy vehicle maintenance of rental cars.
- **Tenant** - An entity that has a lease agreement with the Salt Lake City Department of Airport.
- **Tenant Back Wall** - The wall behind the tenant customer service counter that is visible to the public.

## 2.0 INTRODUCTION

### 2.1 Purpose of Document

**A.** These standards have been developed by the Airport to promote quality, functional, and tasteful facility designs that reflect the dynamic aesthetics of the surrounding environment and meet the high use demands of the airport. Visitor experience should always be the overriding force in the design of all circulation paths and queuing areas.

**B.** The guidelines exhibited in this manual govern rental car facility improvements to all facilities, floors, walls, ceiling, lighting, signage, etc.; the intent of which is to encourage quality design and consistent standards for all rental car facility tenants (Tenants). The Tenant must refer to lease documents and exhibits to determine the extent of work performed by the Airport and the work by the Tenant.

**C.** Except for routine maintenance on Tenant installed equipment, Airport approval is required any time a Tenant desires to perform interior or exterior construction on Airport property. The approval process and requirements necessary are explained throughout this document. Airport approval is required prior to applying for any local, State, and/or Federal permits that may be required. This is to ensure that the documents are reviewed and approved according to Airport standards prior to being reviewed by other jurisdictions. Any Tenant work undertaken without the prior written approval of the Airport may, at the discretion of the Executive Director, be removed from the Tenant's leased premises and the leased premises restored to its prior condition at the sole expense of the Tenant.

**D.** The Executive Director of the Airport reserves the right to modify or wave any or all of the design standards in this document at any time.

### 2.2 Use of Rental Car Facility Design Standards

**A.** Each Tenant must become familiar with the intent, scope and detailed requirements of the design standards before the design process may begin. It is the responsibility of the Tenant and their Design Team to visit the site and verify all existing conditions. Each Tenant's design must be approved by the Airport before any construction is allowed to commence. Submittal and approval procedures are outlined throughout this document.

**B.** The Criteria contained herein must be followed in the design of all Tenant facilities to be constructed in the Salt Lake City International Airport terminals and concourses. The purpose of these standards is to provide a single, uniform and consistent source of the Airport's intent

regarding the design and construction of facilities at the airport. Under no circumstances shall these documents be interpreted or utilized as design, bid, or construction documents. The Airport is only providing guidance to the design professional(s) and does not assume any responsibility for the Tenant's design professional(s) to complete contractual and professional responsibilities or to provide complete professional services as required by any Tenant.

- C. Additionally, it is not the intent of these standards to supersede any requirements as set forth by the Federal Aviation Administration (FAA), Transportation Security Administration (TSA), the City and/or County of Salt Lake City, or other applicable federal, state, or local standards or codes, such as Americans with Disabilities Act (ADA). All conflicts shall be identified by the Tenant's design professional(s) and presented in writing to the Airport for resolution.

### 2.3 Design Intent

- A. It is the intent of these standards to ensure that a Tenant's facility design takes advantage of every available option to optimize the potential of the Tenant's space.
- B. The information contained in these standards should be utilized by Airlines/Tenants, their designers and contractors to coordinate the necessary information for the design and construction of their leasehold improvements. The results should be top quality, cutting edge designs from all Tenants, and consistent with the overall design theme identified in the standards. It is also important for the Tenant's design to complement the existing architectural qualities of the Terminals and Concourses, while still being compatible with adjacent spaces. Use of these standards should encourage the Tenant spaces to strike a balance between both variety and consistency. These standards should be met by proposing contemporary design solutions that are able to capture the "essence" and feel of the design guidelines, without necessarily being literal interpretations. This can be achieved through proper use of materials, color and design elements that relate to the overall theme established by these standards.
- C. The Airport encourages the practice of sustainable design practices. Tenant's should use proven energy and carbon reduction measures, water efficient fixtures, resource efficient and low emitting materials. Areas of sustainable design should include: ***(If Tenant is submitting for LEED-CI, refer to Appendix G of this document which provides recommendations consistent with the LEED certification of the project.)***
  - Water use reduction practices that maximize water efficiency within buildings to reduce the burden on municipal water supply and wastewater systems. High efficiency fixtures and valves, aerators. WaterSense™ certified fixtures and fixture fittings should be used where available. Use local generation of domestic hot water, as much as possible, to eliminate long piping runs associated with

recirculation piping - unless connecting to an existing hot water recirculating system. Tenant provided plumbing fixtures shall meet the flow requirements listed below:

- Water Closets: Single flush set at 1.28 gpf max.
  - Urinals: Single flush set at 0.125 gpf max.
  - Lavatories in public core areas; Set at 0.09 gpm per 10 second cycle.
  - Break/Pantry Room Sinks: Set at 1.7 gpm max.
  - Showers: Set at 1.5 gpm max.
  - Kitchen Sink: Set at 1.7 gpm max.
  - Hand Sink: Set at 0.5 gpm max.
  - Pre-Rinse Spray Valve: Set at 1.6 gpm max.
- Airport HVAC Systems. The Airport HVAC systems provide outdoor air ventilation rates at least 30% above the minimum rates required by ASHRAE Standard 62.1. The Tenant HVAC design shall also provide outdoor air ventilation rates at least 30% above the minimum rates required by ASHRAE Standard 62.1.
    - The Tenant HVAC design shall meet the requirements of ASHRAE Standard 55.
    - The Tenant shall sufficiently exhaust each space where hazardous gases or chemicals may be present or used to create negative pressure with respect to adjacent spaces when the doors to the room are closed. The exhaust rate must be at least 0.50 cubic feet per minute (cfm) per square foot with no air recirculation. The pressure differential with the surrounding spaces must be at least 0.02 inches of water gauge on average and 0.004 inches of water at a minimum when the doors to the rooms are closed.
    - The Tenant shall refrigerants and heating, ventilating, air conditioning, and refrigeration (HVAC&R) that minimize or eliminate the emission of compounds that contribute to ozone depletion and global climate change. The Tenant HVAC&R equipment combined contributions to ozone depletion and global warming potential shall be less than 100 as defined by LEED BD+C v3-2009 Credit EAc4.
    - The Tenant shall not operate or install fire suppression systems that contain ozone-depleting substances such as CFCs, hydro chlorofluorocarbons (HCFCs), or halons.
    - Particle filters or air cleaning devices shall be provided to clean the outdoor air at any location prior to its introduction to occupied spaces. Filtration media shall be rated at a minimum efficiency reporting value (MERV) of 13 or higher in accordance with ASHRAE Standard 52.2.
  - Construction Waste Management: Divert construction, demolition and land-clearing debris from disposal in landfills and incinerators. Redirect reusable, recyclable, and recovered resources to appropriate sites or back to the manufacturing process. Redirect reusable materials to appropriate sites. Establish a goal of at least 75% for diversion from disposal in landfills and incinerators and

adopt a construction waste management plan to achieve these goals during construction. Recycle cardboard, metal, brick, acoustical tile, concrete, plastic, clean wood, glass, gypsum wall board, carpet, insulation, batteries, light bulbs, toner cartridges, electrical wiring and electronics, including monitors,. Designate a specific area(s) on the construction site for segregated or commingled collection of recyclable materials, and track recycling efforts throughout the construction process. Identify construction haulers and recyclers to handle the designated materials. Note that diversion may include donation of materials to charitable organizations and salvage of materials on-site. Implement deconstruction planning and techniques into all demolition activities. Ensure that employees are aware of waste management and recycling procedures. When possible, evaluate the use of pre-cast or pre-fabricated units, as appropriate, to reduce on-site waste generation during construction.

- **Recycled Content:** Increase demand for building products that incorporate recycled content materials, thereby reducing impacts resulting from extraction and processing of virgin materials. Establish a project goal of at least 30% recycled content materials by cost and identify material suppliers that can achieve this goal. During construction, ensure that the specified recycled content materials are installed. Consider a range of environmental, economic and performance attributes when selecting products and materials. Recycled content is calculated as the sum of post-consumer recycled content plus half of the pre-consumer recycled content. The recycled content value of a material assembly is determined by weight. The recycled fraction of the assembly is then multiplied by the cost of the assembly to determine the recycled content value.
- **Regional Materials:** Increase demand for building materials and products that are extracted and manufactured within the region, thereby supporting the use of indigenous resources and reducing the environmental impacts resulting from transportation. Establish a project goal of at least 20% locally sourced materials based on cost, and identify materials and material suppliers that can achieve this goal. During construction, ensure that the specified local materials are installed and quantify the total percentage of local materials installed. Consider a range of environmental, economic and performance attributes when selecting products and materials. Regional materials are products that have been extracted, harvested or recovered, as well as manufactured within a 500 mile radius of the project site.
- **Rapidly Renewable Materials:** Reduce the use and depletion of finite raw materials and long-cycle renewable materials by replacing them with rapidly renewable materials. Establish a project goal for rapidly renewable materials and identify products and suppliers that can support achievement of this goal. Consider materials such as bamboo, wool, cotton insulation, agrifiber, linoleum, wheat board, straw board, and cork. During construction, ensure that the specified renewable materials are installed.

- Certified Wood: Encourage environmentally responsible forest management. Establish a project goal of at least 50% by cost for FSC- certified wood products and identify suppliers that can achieve this goal. During construction, ensure that the FSC-certified wood products are installed and quantify the total percentage of FSC-certified wood products installed.
- Construction IAQ Management Plan – During Construction: During construction, meet or exceed the recommended control measures of the Sheet Metal and Air Conditioning National Contractors Association (SMACNA) IAQ Guidelines for Occupied Buildings Under Construction, 2<sup>nd</sup> Edition 2007, ANSI/SMACNA 008-2008 (Chapter 3). Protect on-site and installed absorptive materials from moisture damage. Use filtration media with a minimum efficiency reporting value (MERV) of 8 at each return air grille. Replace all air filtration immediately prior to occupancy
- Low-Emitting Materials/ Adhesives & Sealants: Reduce the quantity of indoor air contaminants that are odorous, irritating and/or harmful to the comfort and well-being of installers and occupants. Specify low-VOC materials in construction documents. Adhesives, sealants, and sealant primers must comply with the South Coast Air Quality Management District (SCAQMD) Rule #1168 effective July 1, 2005. Ensure that VOC limits are clearly stated in each section of the specifications where adhesives and sealants are addressed. Common products to evaluate include general construction adhesives, flooring adhesives, fire-stopping sealants, caulking, duct sealants, plumbing adhesives, and cove base adhesives.
- Low-Emitting Materials / Paints & Coatings: Reduce the quantity of indoor air contaminants that are odorous, irritating and/or harmful to the comfort and well-being of installers and occupants. Specify low-VOC paints and coatings in construction documents. Architectural paints and coatings applied inside the weatherproofing barrier of the building must not exceed the VOC limits established by Green Seal Standard GS-11, Paints, 1<sup>st</sup> Edition, May 20, 1993. Anti-corrosive and anti-rust paints applied to interior ferrous metal substrates must not exceed VOC limits of 250 g/L (2 lb/gal). Clear wood finishes, floor coatings, stains, primers, sealers, and shellacs applied to interior elements must not exceed the VOC content limits established in the SCAQMC Rule 1113, Architectural Coatings, effective January 1, 2004. Ensure that VOC limits are clearly stated in each section of the specifications where paints and coatings are addressed. Track the VOC content of interior paints and coatings during construction.
- Low-Emitting Materials/ Carpet & Floor Systems: Reduce the quantity of indoor air contaminants that are odorous, irritating and/or harmful to the comfort and well-being of installers and occupants. Clearly specify requirements for product testing and/or certification in the construction documents Flooring must meet the requirements of Green Label Plus, FloorScore, or an alternative compliance path outlined in the LEED v2009 for New Building Design and Construction reference

guide. All adhesives must comply with the requirements listed above under “Low-Emitting Materials/ Adhesives & Sealants”. Specify Low-VOC carpet systems. Ensure that VOC limits are clearly stated where carpet systems are addressed. Be attentive to carpet installation requirements.

- Low-Emitting Materials/Composite Wood & Agrifiber Products: Reduce the quantity of indoor air contaminants that are odorous, irritating and/or harmful to the comfort and well-being of installers and occupants. Specify wood and agrifiber products that contain no added urea-formaldehyde resins. Specify laminating adhesives for field and shop applied assemblies that contain no added urea-formaldehyde resins. Review product cut sheets, MSD sheets, signed attestations or other official literature from the manufacturer.
- High performance lighting fixtures and controls: Reduce energy demands by utilizing high performance lighting fixtures and controls. Occupancy controls should also be utilized in selected areas. Allowing daylight into occupied areas.
- Recycling: Airlines/Tenants are encouraged to provide recycling stations throughout their leased space where practical.
- Reduce the environmental and indoor air quality impacts of the furniture and equipment acquired for use in tenant space. To the extent possible, utilize ENERGY STAR electric equipment and/or sustainable furniture systems, such as GREENGUARD certified furniture.
- Reduce indoor air quality problems resulting from the construction/renovation process in order to help sustain the comfort and well-being of construction workers and tenant space occupants. During construction, meet or exceed the recommended Design Approaches of the Sheet Metal and Air Conditioning National Contractors Association (SMACNA) IAQ Guideline for Occupied Buildings under Construction, 1995, Chapter 3. Protect stored on-site or installed absorptive materials from moisture damage. Sequence the installation of materials to avoid contamination of absorptive materials such as insulation, carpeting, ceiling tile, and gypsum wallboard. Minimize the use of air handlers during construction. If air handlers are used during construction, filtration media with a Minimum Efficiency Reporting Value (MERV) of 8 must be used at each return air grill, as determined by ASHRAE 52.2-1999. Prior to occupancy, perform a flush-out or test the air contaminant levels in the tenant space.
- The Airport is a non-smoking facility.
- These standards encourage a concerted effort on the part of every Tenant and architect to select finish materials, which are derived from the earth’s renewable resources. Materials that are prohibited or possibly harmful to the environment are prohibited.



## 2.4 Airport Work / Tenant Work

- A. The Airport will generally provide the leased area to each Tenant in an “as-is” condition subject to the following provisions.
- B. The Airport will provide base finishes throughout the Tenant leased space (except in Airline Exclusively leased and Concession spaces).
- C. The Airport will provide base water and sanitary sewer utilities to the lease lines of spaces that require these utilities.
- D. Tenant will be responsible for any and all demolition required, as well as any services, utilities or work not mentioned above; and all other work as required to complete the build-out of Tenant’s facilities.
- E. Tenant will also be required to connect to the Airport’s Life Safety System, BAS for energy management, system and monitoring, and Kilair program for emergency purposes. Tenant is responsible for contracting its Designer, Architect, Engineers, other Specialty Consultant, and General and Specialty Contractors. All of the Tenant’s work shall conform to all applicable codes, ordinances, regulations and statutes, as well as these standards and other airport requirements. Any other work outside of Tenant’s leased premises shall require prior written authorization from the Airport. The Airport reserves the right to require changes in the Tenant’s work when necessary by specific locations (proximity) to special use facilities or interface to any Airport systems.
- F. It is the Tenant’s responsibility to coordinate the interface and availability of all telecommunications and data requirements with the Airport at the inception of the project.
- G. The Tenant is responsible for the complete design and construction of the premises including all fees, permits, taxes, insurance, licenses, bonds, partitions, finishes, structural modifications, signing, furnishings, equipment, lighting, plumbing and mechanical systems, electrical systems, security and airport systems interface. Where Tenant systems interface with Airport systems, the interface shall be in accordance with these standards and at the direction of the Airport.

## **2.5 Tenant Construction Payment and Performance Bond**

Each Tenant shall be required to provide the Airport with a full payment and performance bond for each project in an amount equal the total cost of improvements.

## **2.6 Interface Points and Utilities**

### **Roof and Floor**

The Tenant shall provide any required supports, blocking, temporary flashing, counter flashing or other work necessary to complete the installation of Tenant's equipment on any roof and shall not interfere with any roof warranties. The Tenant shall coordinate any work associated with roof assembly modifications and/or penetrations with Airport Facilities approved roofing contractor. The Tenant will be required to supplement existing construction to achieve assembly ratings, thermal values or additional criteria as required. All work shall conform to the requirements established in these standards. All penetrations must be sealed water tight.

Most floors in the Terminals and Concourses are suspended concrete slab construction; all floors must be x-rayed prior to any cutting, boring or penetration of any kind. Tenant must submit written request along with documentation to the Airport for approval prior to commencing work in this area. The Tenant is responsible for review of existing documentation available from the Airport archives and visual survey, to determine allowable loading of floors, roofs, etc. for Tenant's equipment, furnishings, etc. Time of cutting and/or penetrating roof or floor must be coordinated and approved by the Airport.

### **Fire Ratings**

All existing fire rated construction must be maintained during, as well as after construction.

### **Hardware/Keying**

For security and fire reasons, door hardware must be keyed to the Airport's master hardware system.

### **Utilities and Service**

The Tenant is responsible for all utility connections to achieve a complete, approved and operating system. Tenants with systems or equipment that require utility connections to the Airport's uninterrupted or generator power system shall request this service through the Airport Tenant Coordinator. The Airport will review and approve these utility connections on a case by case basis.

### **Special Equipment**

The Tenant shall provide any required alarm systems or other protective devices, conveyors, time clocks, fire extinguishers, dry chemical fire protection systems or any other equipment specific to the Tenant's business needs or Tenant use. Only clocks connected to the Airport's master clock system may be installed by the Tenant if exposed to public view. All Tenants requiring a radio system for communication must comply with the Airport and FAA requirements.

## **2.7 Insurance Requirements**

All Tenant's consultants and contractors are required to provide general liability and automobile insurance as described below, the required amounts may be revised as deemed necessary by the Airport. This information should be disclosed to the consultants and contractors prior to engaging their services to ensure that they are able to meet these requirements. Contractors will not be permitted to be badged or receive access to the airport unless proper insurance documentation has been received. The Airport shall be listed as an additional insured party on all policies.

- General Liability Coverage Insurance: Access to all non-aircraft operating areas, including landside, requires general liability insurance in the amount of \$5,000,000.
- Automobile Coverage: Access to all non-aircraft operating areas requires automobile insurance in the amount of \$5,000,000.
- Workers Compensation: Proof of Workers Compensation Insurance, statutory limits.
- **Salt Lake City Corporation. PO Box 145550. SLC. UT 84114-5550** must be listed as an additional insured on the certificates in the appropriate sections. This applies to all certificates for all consultants and contractors.
- Contractor insurance shall remain current and in force at all times during the project.

Payment and Performance Bonds, Construction Deposits, etc. are outlined in the Construction section of this document.

## **2.8 Architect / Engineer Selection**

The Tenant shall be required to engage an architect (including any separate design firm), herein after referred to as Tenant's designer, and engineers duly licensed to practice in the State of Utah, to prepare the designs, drawings, calculations, and construction documents. Construction Administration Services

shall be provided for each project by the designer and appropriate engineers of record. The Tenant's designer, or engineer shall be on-site during the site evaluation process. If the existing fire protection system is to be modified in the Terminal, a licensed fire protection engineer shall be engaged for the design work.

## **2.9 Contractor Selection**

The Tenant shall be required to engage a qualified general contractor or construction management firm, duly licensed to do business in the State of Utah to construct the Tenant's space in accordance with the approved construction documents and the requirements and regulations contained in these standards.

All other contractors and firms hired by the Tenant independent of the GC that are performing work within the airport property shall be subject to the same insurance and licensing requirements as stated above. This may include, but not be limited to food service equipment installation, millwork or casework fixturing, merchandising, A/V, etc.

## **2.10 Airport Document Review**

The Airport does not currently charge a fee for the application and review process. However, work completed without written Airport approval will be subject to Tenant charges or removal at the Tenant's expense. All project permitting and development costs, fees, and taxes required to complete the work are the responsibility of the Tenant and its contractor.

Tenants needing CAD or other record drawings shall submit their request to the Airport in writing. CAD and record drawings are provided as a starting point for the Airlines/Tenants. In coordination with the Airport, tenants and their contractors are required to field verify existing conditions and pot hole, if necessary, to locate existing underground utilities and their depths prior to submitting documents for the Airport's review. In general, the process described below and the submittals required during each phase are required for all Tenant improvement projects.

### **Preliminary Design Review**

Prior to actual design, a pre-design meeting shall be held and attended by the Airport, the Tenant, and the Tenants design team. At this meeting, the Tenant will be expected to provide a high level overview of the proposed project and/or concept, and the overall scope of work. General requirements and procedures will be presented by the Airport. Any known or anticipated special conditions and concerns will be identified and discussed at this time. Special conditions may include but are not limited to staging, work hours, environmental concerns, insurance, etc. The

Airport will be able to answer any questions that the tenant and design team may have. The Tenant will also be briefed on required review meetings, presentations, and submittals for each stage of the design review process.

**Submittals required:**

- A. Completed Tenant Improvement Application
- B. Any renderings or concept materials to present the intended use for the space.

The Airport will provide feedback and direction during the meeting, any additional comments will be provided in written form to the Tenant within ten (10) working days of the meeting.

**Design Development Review (30% Submittal)**

The intent of this review is to ensure that the proposed project and/or concept are in compliance with Airport standards and expectations. A high-level review of the project will be performed by the Airport.

**Submittals required:** one (1) electronic copy in PDF format, submitted by the Tenant's design team into Unifier, plus one material sample board meeting the following requirements:

- A. Scaled Floor Plans showing all existing and adjacent conditions. Floor plans must include all floor finishes, furnishings and fixtures, equipment, seating, storage areas, etc.
- B. Scaled Reflected Ceiling Plan indicating all ceiling heights, materials and finishes, and overall fixture and other feature layout.
- C. Signage elevations and sections showing type, location, colors and materials.
- D. Scaled Mechanical Plan showing connections to existing systems for HVAC, new ventilation systems and other related information.
- E. Scaled Plumbing Plan showing connections to existing systems for water and waste, the extent and quality of all fixtures.
- F. Scaled Structural drawings and details if required by scope of Tenant's work.
- G. Scaled Electrical Plan showing connections to existing systems, proposed panel locations, locations and types for all fixtures and cut sheets for each fixture.
- H. Outline of specifications

The Airport will respond to the tenant within 15 working days and will provide tenant notification to proceed with construction document preparation, or to resubmit a revised design development

package incorporating the review comments provided by the Airport.

### **Construction Document Review (100% Submittal)**

The Airport will conduct a detailed review of the entire project plan to ensure compliance with all requirements. Plan changes are to be clouded and identified with revision number. The revision number shall also be recorded and dated in the revision block. Show all underground utilities, including electric, water, sewer, gas, etc. Prior to submitting, conduct a careful plan check for accuracy.

**Submittals required:** one (1) electronic copy in PDF format, submitted by the Tenant's design team into Unifier, meeting the following requirements:

- A.** Title page with site and vicinity location plan, overall airport diagram, project team and contact information.
- B.** Architectural drawings to scale
- C.** Structural drawings to scale, if required
- D.** Mechanical drawings to scale
- E.** Electrical drawings to scale
- F.** Complete specifications
- G.** Sustainability Report listing all materials generated on site for salvage, reuse or recycling, quantity, and destination.

Drawings must be sealed and signed by professionals licensed in the State of Utah, all pages must be signed by the responsible party. The Airport will complete its review and respond in writing within 20 working days of receipt. Inaccurate or incomplete drawings will be returned to the Tenant and the process will recommence. **Additional reviews by the Airport may be billed to the Tenant at a rate of \$1,000.00 per review.** Once the Airport approval has been issued the Tenant may apply for building, mechanical, electrical and plumbing permits from SLC Building Services.

## **2.11 Facility Construction Process**

Upon completion of the design review and permitting process, the project is ready to proceed to the construction phase. The process and procedures to be followed are outlined below.

### **Pre-Construction**

After obtaining all required permits, a pre-construction meeting shall be held and attended by the Airport, the Tenant, and the Tenant's contractors and design team. The Airport's project manager will schedule the meeting. At the meeting the Tenant and its contractor(s) will be briefed on rules, regulations, and procedures to be followed for the construction project. Contractors should be prepared to discuss the project in detail.

### **Submittals required:**

- A. Two (2) sets of sealed, stamped "Issued for Construction" plans and specifications, and one electronic copy
- B. Copies of all necessary permits
- C. Insurance and bond certificates, if not already on file (see "Insurance and Bonds" below for exact requirements)
- D. Detailed contact list with sufficient information for all individuals involved with the project
- E. Detailed project schedule. The project schedule shall identify separate tasks that detail the scope of work from procurement to final acceptance. The schedule shall include all work components, permit procurement, shop drawing submittal process, owner furnished items, interfaces with pertinent agencies and/or base building, milestones, substantial completion, and anticipated final acceptance dates.

### **Notice to Proceed**

Upon satisfactory completion of the foregoing requirements the Airport will issue a Notice to Proceed (NTP) to Tenant in written and/or electronic formats. The NTP will not be issued until all necessary reviews have been performed, all submittals have been received and all permits have been issued. Under no circumstances may Tenant or Tenant's contractor commence any work without the issuance of the NTP.

### **Final Inspection and Punch List**

When the Tenant determines the space is substantially complete and ready for an inspection, the Tenant shall notify the Airport or its designated representative, in writing, a minimum of seventy-two (72) hours prior to the requested inspection. The Airport or its designated representative will schedule the inspection with all appropriate airport staff, review the improvements, and prepare a written list of deficiencies (punch list) within twenty-four (24) hours of the inspection. When the Tenant has completed all punch list items the Tenant shall request a re-inspection of the premises

and the Airport or its designated representative shall schedule the re-inspection. The Tenant is required to correct all noted deficiencies on the punch list within fifteen (15) days. If the punch list items are not corrected within thirty (30) days of opening, the Airport reserves the right at its sole discretion, to close the premises until all outstanding items have been completed.

Once the Airport determines that the space is substantially complete, a verbal approval is given that day to the Tenant. Punch list items which are prerequisites to final acceptance and/or occupancy, shall be completed and reviewed again with the Airport representatives prior to occupancy. When the Tenant determines the facility is ready for occupancy, the Tenant shall request a final walk-thru with the Airport. If approved, the Tenant shall be issued a written authorization by the Airport to occupy the premises. When final acceptance has been granted by the airport, the Tenant will be issued a written Letter of Acceptance of the space.

### **Project Close-out**

Upon completion of the project and final acceptance by the Airport, the Tenant shall provide the documents listed below. These drawings and specifications shall be delivered to the Airport within 45 days from the Letter of Acceptance issue.

Submittals required:

- A. Final inspection reports issued by all jurisdictions (copies)
- B. Copy of the Certificate of Occupancy (if applicable)
- C. Copy of the Board of Health inspection report and certification (if applicable)
- D. Final Unconditional Waivers of Lien from all contractors, subcontractors and suppliers (copies)
- E. Warranty Documents (if applicable)
- F. Operation and Maintenance Manuals (if applicable).
- G. Sustainability Report
- H. Warranty Documents, certified balance report and manufacture equipment start up sheet (if applicable).
- I. Failure to provide the above referenced documents will be considered non-compliance with contract terms. It is the tenant's responsibility to ensure that its contractor and design team provide the documents within the prescribed timeframe.

## **2.12 Building Official, Approvals, Permits and Associated Fees**

The Tenant shall be responsible for compliance with all applicable codes and standards adopted by Salt



Lake City Corporation and Department of Airports at the time of design and construction. These include but are not limited to: International Building Code (IBC); International Plumbing Code (IPC); International Mechanical Code (IMC); National Electric Code (NEC); National Fire Protection Agency (NFPA); and ADA Guidelines/ANSI.

All new construction or alteration of existing facilities requires a building permit issued by Salt Lake City Building Services. A separate permit will be issued by Salt Lake City for plumbing, mechanical, and electrical construction. These permits are in addition to the General Building Permit. For more information contact:

**Salt Lake City Building Services**

**451 South State Street, Salt Lake City, Utah**

**(801) 535-6000**

- A.** The Tenant shall be responsible to secure all permits and pay all plan check, permit and license fees required for improvement and construction within the lease area.
- B.** Natural Gas is provided to the Airport through Dominion Energy.
- C.** Electrical service to the Airport is provided by Rocky Mountain Power.
- D.** All work must be performed by properly licensed personnel and comply with all the appropriate codes, rules, regulations, and policies of agencies having jurisdiction. The Airport reserves the right to restrict the hours of work if work is deemed to be excessively disruptive to the Airport, at no cost to the Airport. All materials and each portion of the Work are subject to Airport inspection. Other federal, state and local agencies may require the contractor to have permits and inspections in addition to those required by the Airport.

**2.13 Plan Modifications**

Once the construction documents have been approved by the Airport, any change must be submitted in writing to the Airport Designated Representative for approval prior to proceeding with the change. This documentation must explain the reason for the requested change and be supported by adequate and appropriate information or drawings, as required. The Tenant's contractor shall allow ten (10) working days for a response from the Airport. If the change request is of the utmost importance to resolve quickly, the Airport will make every effort to work with the Tenant's contractor to facilitate the change. The Airport will issue a written response to the change request. This includes any changes made either before the Salt Lake City Building Services reviews the plans for permit, or following receipt of the permit. Direction by the

Salt Lake City Department Building Services to make a change in the drawings does not constitute approval by the Airport. It is the Tenant's contractor's responsibility to notify and obtain Airport approval or concurrence with any such directives or changes. If changes are made without Airport approval, the tenant's contractor may be required at their own expense to modify the work to conform to the approved drawings.

#### **2.14 Field Verification**

Where possible, the Tenant's Designer shall be required to field verify, in person, all on-site conditions and dimensions for the 30% design submittal. This work shall be incorporated into the contract documents as the basis for the existing condition backgrounds. The verification includes in person research of existing plans in the Airport's Engineering GIS Department, visual inspection and measure of existing space and surrounding areas. It may be necessary for the Designer and/or any consulting engineers to make an additional inspection following demolition of the pre-existing conditions if conditions were concealed prior to such demolition.

#### **2.15 Airport Oversight**

The Airport may designate a project manager for each lease space. This project manager will be the contact and recipient for all design questions, coordination and submissions. The Airport will monitor the Tenant's construction project on a regular basis. The Airport shall have the right to inspect the work at any time of any day; the Tenant's lease space shall be available to the project manager at all times during all phases of construction. The project manager shall be responsible for scheduling of review meetings and timeline for design and construction. The Tenant's contractor shall attend weekly progress meetings which shall include a review of the progress to date, remaining schedule, plans and specifications being used in the project, coordination issues with the Airport and any other issues that require resolution.

It is the express obligation and duty of the Tenant's contractor to coordinate, cooperate and communicate with the Airport and/or their designated representatives. The Tenant's contractor shall not impede, hinder, or delay any other parties in the performance of their work and shall remain solely and exclusively responsible for any damages or costs incurred as a result of any hindrance or delay. The Tenant's contractor(s) shall comply with all rules and regulations concerning safety and security. The Airport designated project manager will be the contact for all construction-related correspondence after the commencement of construction. Construction meetings and inspections required shall be coordinated through the project manager.

Generally, all demolition must be done between the hours of 1:00 am and 5:00 am, or as determined by the Airport in writing, especially those activities which generate excessive noise. Temporary construction walls, or dust wall construction barricades are required for all demolition and construction where the premises adjoins or fronts public areas of the terminals or concourses.

## **2.16 Hours of Work**

Tenant's contractors are permitted to work at any time behind closed barricades with the exception of demolition. Any activities which generate excessive noise (hammer drills, saw cutting, heavy pounding, etc.) or offensive odors are subject to the demolition restrictions listed in Section A, 1.16.

## **2.17 Airport Holiday Observance**

- New Year's Day
- Martin Luther King's Birthday
- President's Day
- Memorial Day
- Independence Day
- Pioneer Day
- Labor Day
- Veteran's Day
- Thanksgiving Day
- Day after Thanksgiving
- Christmas Day

## **2.18 Security Requirements**

All Tenants are responsible for the security of their leased spaces and the construction materials and equipment therein. All construction dust wall barricades must remain locked at all times. All personnel working inside the construction barricade must be properly badged at all times. Any person not permanently badged to work in secure areas of the airport must have a properly authorized escort who must remain in control of the temporary worker at all times. Failure to follow the security requirements and guidelines provide herein and elsewhere by the Airport may result in forfeiture of credentials, fines and/or imprisonment.

## 2.19 Safety Requirements

The Tenant and its contractor shall download the “Airport Construction Safety and Security Manual” and be familiar with its contents. The manual describes the requirements for doing work within the Aircraft Operations Area, and general airfield and FAA requirements. The manual is available at:

[https://www.slairport.com/assets/pdfDocuments/Construction\\_Safety\\_Manual.pdf](https://www.slairport.com/assets/pdfDocuments/Construction_Safety_Manual.pdf)

The Airport is under the jurisdiction of the Salt Lake City Police and Fire Department, as well as the Department of Homeland Security Transportation and Safety Administration (TSA); all of which are located on the airport property. All incidents must be reported to the appropriate agency and to the Airport Operations Department. The Tenant is also responsible for complying with all applicable provisions of the OSHA Construction Safety and Health Regulations.

## 2.20 Other Safety Related Issues

- A. No cutting, welding, or burning is allowed without proper approval.
- B. No fumes from paint (even latex), glues, adhesives, or dust are allowed to exit the designated construction area. Paint processes shall meet environmental requirements as required by OSHA. All paints, solvents, rags, and other painting refuse shall be properly disposed according to State and Federal environmental regulations. Only latex-based paints are allowed for interior use.
- C. No power or powder actuated fasteners are allowed to be used in the Terminal or Concourse areas without prior written approval.

## 2.21 Security Badging

All individuals working at the airport are required to go through the Airport's badging process. The process may take several days to complete. Tenants and contractors should keep this in mind while creating project schedules. Fees associated with the issuance of identification badges are the responsibility of the Tenant and its consultants and contractors. For information regarding the badging process, fees required, and an application please visit <https://slairport.com/badging/>. You may also contact the Airport Access Control and ID Badging Office at (801) 575-2423.

## 2.22 Temporary Utilities

Requirements for temporary utilities and/or all utilities or systems required to be taken out of service must be coordinated through the Airport arranged by the Airport project manager.

## **2.23 Conduct**

The Tenant is solely responsible for the conduct of its employees, agents, consultants, contractors, vendors, suppliers, etc. under their direction or contract. Safety and courtesy for the public, Airport and their personnel must be a top priority at all times. Among other things; loud music, lewd behavior, consumption of drugs or alcoholic beverages and all weapons are strictly prohibited on airport property.

## **2.24 Delivery and Access for Tenant Construction**

Most material deliveries must occur between the hours of 1:00 a.m. and 6:00 a.m., or as determined in writing by the Airport, and should enter and exit the terminal and concourse via the Airport Operations Area (AOA) through the use of properly designated and authorized vehicles. Use of airport passenger elevators for deliveries is strictly prohibited; only designated freight elevators may be used for this purpose. Exceptions for material deliveries may be granted on a case by case basis and must be coordinated through the Airport designated project manager. Any deliveries entering from the Terminal Drive must pass through security screening and be coordinated with TSA at least 72 hours in advance.

## **2.25 Construction Debris**

All trash and debris from construction and demolition must be removed from the site between the hours of 1:00 am and 5:00 am, or as determined in writing by the Airport. In many instances the Airport will provide and locate trash and recycling dumpsters for Tenant use. Otherwise the Tenant shall provide its own dumpster placed in an area designated by the Airport. All loads must be covered during transit. Use of public passenger elevators by the Tenant or contractor is strictly prohibited. Designated service elevators are available for Tenant's use during construction; specifics will be coordinated at the pre-construction conference. Airside removal of construction debris shall be coordinated and conducted under the direction of Airport Operations Department.

## **2.26 Cleanliness**

The Tenant shall be responsible for the cleanliness of all areas of the terminal and concourse impacted by Tenant construction at all times, and strict adherence shall be enforced. Tenant and/or Tenant's contractor shall promptly and properly remove any debris and clean all areas at all times. The Airport will only issue one (1) warning, after which building maintenance will be contacted for clean-up and the cost charged back to the Tenant.

## **2.27 Contractor Parking and Staging**

All parking, staging and lay down requirements will be determined by the Airport on a case by case basis. Due to space limitations and airline commitments no contractor parking will be allowed anywhere on the

AOA. All areas surrounding the airside terminal building and concourses are leased exclusively to the airlines. Contractors accessing the building from the AOA for delivery of materials and tools must remove their vehicles as soon as the delivery is complete and may not leave unattended vehicles on the AOA at any time. Any vehicles accessing the AOA are subject to all security requirements and subject to search at any time.

### **2.28 Right of Inspection**

The Airport, its designees, as well as officials from any authority having jurisdiction (AHJ) shall have the right to inspect the work at any time. Primarily for safety, security and quality purposes; the Tenant and its contractor shall provide full access needed including ladders, temporary lighting, safety equipment, etc. Any comments will be issued immediately to Tenant's contractor with a copy to the Tenant and its designer or record. It is the Tenant's sole responsibility to immediately address and remedy any issues raised during or as a result of an inspection of the premises.

### **2.29 Inspection, Verification and Acceptance by Tenant**

The Tenant's designer will inspect at a minimum the same inspections as required by the City permit process and verify the correctness of the work. Upon substantial completion of the work, the Tenant shall require its designer and appropriate engineers of record to conduct a thorough inspection and prepare a list of noted deficiencies (punch list) enumerating any areas of the work which are not in accordance with the approved plans or Tenant's lease agreement for the premises. A copy of this list shall be furnished to the Airport within forty eight (48) hours of the inspection. All remedial work resulting from the punch list inspection shall be completed by Tenant's contractor within thirty (30) days of substantial completion. Any damage to adjacent tenancies or Airport property must be repaired prior to Tenant's occupancy of the premises. Upon final completion of the work, Tenant's design shall certify that all work has been completed satisfactorily and in strict compliance with the contract documents, a copy of the certificate shall be delivered to the Airport within thirty (30) days of final completion of the project.

### **2.30 Record Drawings**

Within 120 days of completion of construction, the Tenant shall cause to be delivered to the Airport one (1) hard copy and two (2) electronic copies of corrected record drawings of Tenant's finished lease space with all modifications and corrections reflecting the true and accurate as-built condition of the facility. All electronic record drawings must be submitted in AutoCAD format. The submitted project must be 100% complete. All supporting files must be bound to each respective base drawing. This includes all xrefs, text fonts and any other supporting files needed to complete the set. The projects may be submitted on DVD's or CD's. Other portable storage media may be considered as technology changes. All projects created in other CAD programs, must be converted to AutoCAD.

## 2.31 Rental Car Divisions

For ease of use, this document is divided into the five (5) basic sections of the Airport's rental car operation:

1. **Gateway Rental Car Counters - Common Areas**, where customers check-in, change, or make rental car reservations.
2. **Rental Car Lobby - Office Space & Non-Public Areas**, all rental car agency offices, break rooms, operational areas, and other areas generally not viewed by the public.
3. **Ground Transportation**
4. **Parking Structure Rental Car Area**, where customers pick-up and drop-off rental cars.
5. **Quick Turn Around Facility (QTA)**, where rental car agencies wash, fuel, and store cars.
6. **Rental Car Service Sites**, where rental car agencies perform light maintenance on rental cars.

## **3.0 Gateway Rental Car Counters - Common Areas**

### **3.1 General Design Guidelines**

The Airport Redevelopment Program (ARP) will define the terminal and rental car area finish quality and aesthetic. The ARP will provide finish material in non-leased common areas of the Gateway Building and base finishes in tenant leased spaces (except in Airline Exclusively leased and Concession spaces).

Tenant installed finishes in common areas of the Gateway Building shall be complimentary and compatible with the overall Gateway Building aesthetic and shall be equivalent to ARP provided finish material in terms of quality and durability. Tenant installed finishes are subject to the guidelines set forth in this section. Tenant improvements are made at the tenant's expense and are subject to the Airport's design review process.

### **3.2 Walls and Doors**

**A.** The tenant shall provide and install all wall treatments and corporate branding within their leased space. The Airport will provide and install all other wall treatments. The use of high quality durable material is required. All wall finishes shall be complimentary and compatible with finish material and color used in the Gateway Building lobby. Only material that can be easily repaired and is durable enough to withstand the high use demands of the airport environment shall be used.

**B.** The Airport will provide and install standard doors in public areas of the Gateway Building. Doors within tenant leased space are provided by the Airport. Proposed door and wall modifications shall be complimentary and compatible with the Gateway Building aesthetic and provided by and installed at the Tenant's expense.

**C.** Wall and door finish modifications are subject to the Airport's design review process prior to installation.

### **3.3 Flooring**

Flooring composes a large portion of the Gateway Building aesthetic. The Airport will provide all flooring in the Gateway building lobby up to the tenant back wall.



### 3.4 Signs

**A.** Wayfinding signs located in public areas of the ARP and Gateway Building are provided by the Airport. Tenant will provide appropriate branding logos to apply to wayfinding signage.

**B.** Tenant branding is permitted within the tenant's leased space and on stanchion tops. Signage and graphics will be located on the back wall in two (2) zones. Each tenant will be allowed the full use of the wall surface between the architectural reveals that indicated limits of branding.

**A.** Zone 1 – Upper wall surface that is 6'-6" high. Branding graphic wallcovering/panels and logo.

**B.** Zone 2 – Lower wall surface that is 3'-6" high. Single, painted brand color only.

**The following styles of tenant installed branding are typically permitted:**

- Digitally printed, vinyl wall covering using a tone-on-tone, single branding color graphic pattern.
- Digitally printed, direct to substrate wall panels using a tone-on-tone, single branding color graphic pattern.
- Paint aluminum panels with minimal seams.
- Single, primary logo in horizontal format located within 2'-6" band (see figure GATEWAY RAC COUNTERS diagram).

**The following types of tenant installed signs are typically permitted:**

- Electronic signs.
- Surface-applied dimensional metal letters with indirect illumination.

**The following sign types are prohibited:**

- All other types of internally illuminated signs other than those permitted above.
- Light conductive, edge-lit glass.
- Push through, illuminated letters where edges are illuminated and faces are opaque.
- Reverse style channel letters with halo illumination mounted on a non-reflective surface.
- Routed metal or stone.
- Non-illuminated dimensional letters of metal, stone, or wood.
- Handwritten.

- Flashing signs/lights.
- Animated or signs with any motion.
- Exposed neon.
- Vacuum formed signs.
- Plastic or Plexiglass signs.
- Miscellaneous signage such as credit card signs, sales signs, decals, symbols, artwork, any temporary signs, etc.
- Promotional signs not previously approved by the Airport.
- Off-premises advertising.
- Free standing pedestal signs (stand-up), single or double sided.
- Surface mounted box or cabinet signs of any type.
- Signs outside of the tenant leased space.

**C.** Regulatory information, promotional materials, and other operational signage may be displayed on or behind the customer service counter. Signs or sign stands/frame on the counters shall be freestanding and made from an acrylic, metal or similar rigid material. Signs shall not be handwritten, photocopied or taped to the counter top. Signs are not permitted on the face of the counter.

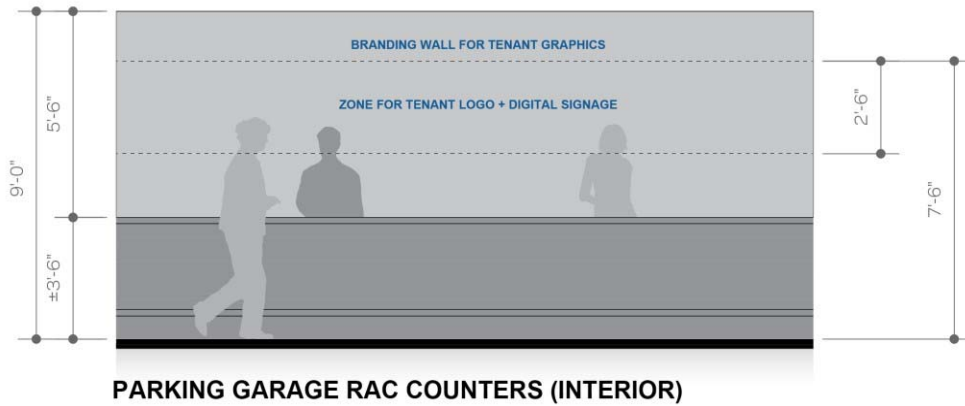
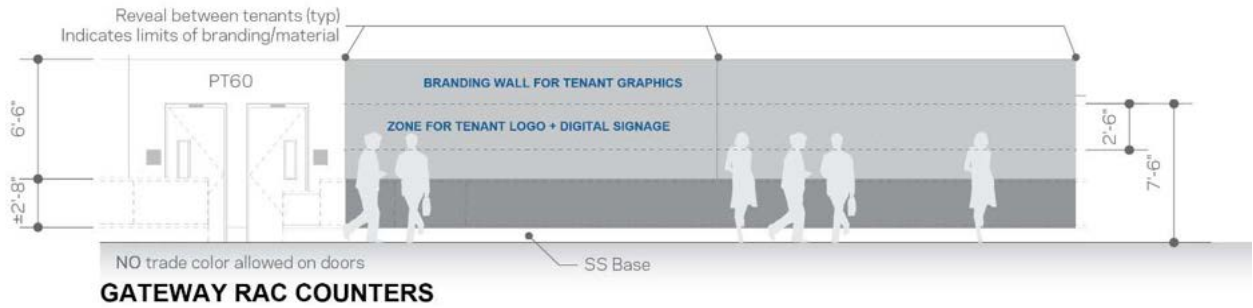
**D.** Tenant signage is subject to the Airport's design review process prior to installation.

### **3.5 Lighting**

**A.** General lighting in the Gateway Building lobby is provided by the Airport. Flashing, rotating, strobe or any other lighting method that is distracting to rental car customers or is not complementary with the overall lobby aesthetic is not permitted. High quality lighting systems are recommended, with fixtures and lamps that are integral with the overall design concept. All lighting fixtures and systems shall meet Airport Energy Efficiency Standards.

**B.** Tenant lighting is subject to the Airport's design review process prior to installation.

### 3.6 Tenant Back Wall and Customer Service Counter Finishes



**Material Legend:**

PT60 – Typical Paint  
SS – Stainless Steel

**A.** Corporate brand identifying colors and finishes are permitted on the wall behind the tenant's counter space within the tenant's leased space. All finish material shall be designed to be compatible and complementary with the overall aesthetic of the Gateway Building and adjacent walls and finishes.

**B.** The Airport will provide base customer service transaction counters. The tenant is responsible for all counter inserts, and all necessary customer service equipment.

**C.** Rental car operator corporate logo and branding is allowed on the wall behind the customer service counters. Corporate logo font and logo height shall be a maximum of 30". Electronic signage may be installed on the tenant back wall. Electronic signage shall not emit sounds or have messages that flash or

be re-animated. Off-premises advertising is prohibited. All signs and messages to be conveyed must have must be approved by the Airport prior to installation.

**D.** Corporate signage and branding is not allowed outside of the tenant's leased space. Corporate signs and logos are not allowed on the façade or any windows of the Gateway Building.

**E.** All tenant back wall and counter finishes are subject to the Airport's design review process prior to installation.

### **3.7 Passenger Queuing Areas**

**A.** The Airport will provide all floor, wall, and column area finishes in public areas of the Gateway Building.

**B.** The Airport will provide and maintain all passenger queuing area stanchions.

## **4.0 Rental Car Office Space & Non-Public Areas**

### **4.1 General Design Guidelines**

**A.** The ARP will drive the overall aesthetic, and provide all finish material in common areas of the Gateway Building. The Airport will provide base finishes in areas the Airport designates as tenant leased space (except in Airline Exclusively leased and Concession spaces). All improvements made by the tenant within their leased space such as flooring, wall, and ceiling finishes, office modifications, equipment, and corporate branding shall be made by the tenant at the tenant's expense. In the event the tenant vacates their leased space, the tenant shall restore all leased space to the original finishes.

**B.** All tenant improvements are subject to the Airport's design review process prior to installation.

### **4.2 Base Finishes**

**A.** Airport provided base finishes (except in Airline Exclusively leased and Concession spaces) include:

1. Floor - Heavy duty carpet or vinyl composition tile (VCT).
2. Walls - Painted gypsum board.
3. Ceiling - Lay-in acoustical tile.
4. Doors- Hollow metal doors and frames.
5. Lights - Airport standard florescent lights.
6. Communications – Conduit only.

**B.** All tenant proposed modifications to existing base finishes shall be made by the tenant at the tenant's expense (except in Airline Exclusively leased and Concession spaces). This includes, but is not limited to, changes in wall color, carpet or tile, any attachment, penetration, or modification to the lay-in acoustical tile, or any door or light alteration. Modifications to existing base finishes are subject to the Airport's design review process prior to modification (except in Airline Exclusively leased and Concession spaces).

## 5.0 Parking Structure Rental Car Area

### 5.1 Marking and Striping

A. The Airport will provide all required vehicle and pedestrian circulation, way-finding and parking pavement markings in the parking structure. Tenant to provide a striping plan for Airport review. Airport to provide initial striping based on parking plan.

B. Tenant required modifications to pavement markings will be made at the tenant's expense.

C. All tenant proposed modification to existing pavement markings are subject to the Airport's design review process prior to modification.

### 5.2 Lighting

A. General lighting throughout the parking structure is provided by the Airport. Any sign or device installed by the tenant shall not block or diminish the existing parking structure illumination in any way.

B. The tenant is responsible for any desired lighting modification or upgrade within their leased space. Lighting design in tenant lease space should complement and increase light levels in the parking structure. Flashing, rotating, strobe or any other lighting method deemed distracting to rental car customers is not permitted. This determination is made at the sole discretion of the Airport.

C. Tenant lighting is subject to the Airport's design review process prior to installation.

### 5.3 Signs



**A.** All general wayfinding signs located in main circulation areas of the parking structure are provided by the Airport.

**B.** Tenant specific identification signage is permitted within the tenant's leased space. Signs can be surface mounted to structural columns with compression fittings, freestanding, or suspended from the ceiling.

- Freestanding signage should be mounted on weighted base for mobility.
- All items suspended from the deck above must include seismic bracing with cables or unistrut, etc.
- Vertical supports should coordinate with embed locations provided in ceiling. Maximum two (2) vertical supports per structural bay.
- Hold all electrical conduits as close to deck and drops along vertical supports as close as possible.

**C.** Parking structure signs located above any vehicle circulation route shall be mounted so the bottom of the sign is eight (8) feet six (6) inches above the finished floor elevation of the parking structure or equal to the height restriction bar at the structure entrance.

**D.** Flashing, noise emitting, moving, animated, off premises advertising, or any other sign that may obstruct or impede sight lines to and from pedestrian or vehicle circulation corridors are not permitted. All signs must be displayed within the tenant's leased space.

**E.** Any sign that the Airport deems distasteful, offensive, creates a potential operational or safety hazard, or does not conform with the overall parking structure aesthetic will be removed, at the tenant's expense, the determination will be made at the sole discretion of the Airport.

**F.** Tenant is responsible for providing all traffic control, pedestrian, and life safety signs within Tenant's leased space. Traffic control and life safety signs must follow MUTCD and ADA guidelines.

**G.** Tenant signage is subject to the Airport design review process prior to installation.

## 5.4 Structural Penetrations

All structural penetrations to the parking structure are highly discouraged. In the event a structural penetration to the parking structure is required, the tenant must get written approval from the Airport before the penetration is made. All penetrations shall be kept to a minimum and shall not compromise the structural integrity of the structure. All penetrations require non-destructive inspection such as ferroskan or ground penetrating radar, to ensure the structural integrity of the parking structure is not compromised.

## 5.5 Pedestrian Circulation Areas

Safe, visible, efficient pedestrian circulation routes shall be provided by each rental car tenant to and from their rental car ready/return areas to the Gateway Building lobby. These routes shall connect with general pedestrian circulation routes provided throughout the parking structure. All pedestrian routes shall conform with ADA standards.

## 5.6 Customer Service and Gate Guard Booths

**A.** Customer service and gate guard booths are small free-standing structures within a Rental Car Agency's leased space that provides a safe and convenient location for customer service near the rental car staging area and for gate guards to allow controlled access to and from the staging area.

**B.** Customer service or gate guard booths shall not be located in any area that will impede safe vehicle circulation or obstruct sight lines to and from vehicle or pedestrian circulation routes.

**C.** Customer service and gate guard booths are highly visible elements in the parking structure. Customer service and gate guard booth finish material shall be complimentary and compatible with finish materials used in the terminal facility. All customer service and gate guard booths in the parking structure shall have compatible exterior design elements, with similar finish materials.

All customer service and gate guard booths shall be pre-engineered, relocatable kiosks, manufactured by BIG Enterprises or equivalent. Maximum height of booths shall not exceed 120".

- Tenant signage located within upper fascia or fascia integrated, internally illuminated sign cabinet. Customer Service center fascia shall be maximum 18" tall, gate guard booths shall be maximum 15" tall. Company logos and colors are permitted and final design will be approved by the Airport. A single color, brand logo permitted on the face of guard booth facing exit.



- Power for customer service booths drop from overhead on nearby columns. Where conduit drops down from above tenant will be responsible for providing a chase for concealing conduit or painting conduit to match column color. Power for guard booths will be provided in concrete slab.
- Tenants utilizing Electronic Reservation Monitors or Kiosks shall locate them on the north side of the Customer Service Booth. Monitor must be surface mounted and no wider than north elevation. Tenant branding graphics can be applied to the surround. Maximum one (1) monitor can be used for advertising. Graphics must be static with no sound, flashing or animations and can cycle at six (6) advertisements per hour.

**D.** Tenant branding is permitted within the tenant's leased space and on stanchion tops. Signage and graphics will be located on the back wall in two (2) zones. Each tenant will be allowed the full use of the wall surface between the architectural reveals that indicated limits of branding.

- Zone 1 – Upper wall surface that is 5'-6" high. Branding graphic wallcovering/panels and logo.
- Zone 2 – Lower wall surface that is 3'-6" high. Single, painted brand color only.

**The following styles of tenant installed branding are typically permitted:**

- Digitally printed, vinyl wall covering using a tone-on-tone, single branding color graphic pattern.
- Digitally printed, direct to substrate wall panels using a tone-on-tone, single branding color graphic pattern.
- Paint aluminum panels with minimal seams.
- Single, primary logo in horizontal format located within 2'-6" band (see figure PARKING GARAGE RAC COUNTERS diagram).

**E.** Queuing areas for all customer service booths shall not be located in or impede any vehicle or pedestrian circulation corridor.

F. Customer service and gate guard booth design and location are subject to the Airport's design review process.

### **5.7 Barricades/Barriers**

A. Safety or operational issues may require the use of barricades or barriers throughout the tenant's leased space. All barricades or barriers shall be installed at the tenant's expense. Barricades or Barriers shall not be permanently attached to the parking structure.

B. If a tenant's lease space is modified, either at the request of the tenant or the Airport, the tenant shall removal or relocate any affected barrier or barricades, at the tenant's expense.

C. Barricade type, location, and installation method is subject to the Airport design review process.

### **5.8 Pneumatic Tubes**

Pneumatic tubes are not allowed.

## **6.0 Quick Turn Around Facility (QTA)**

### **6.1 Tenant Improvements**

**A.** Tenants shall lease exclusive use space in the Quick Turn Around Facility (QTA) to support their rental car activities. SLC will provide base finishes throughout the QTA (except in Airline Exclusively leased and Concession spaces). This includes fuel islands, wash bays, and vehicle parking and circulation markings, etc. The tenant may construct, install or modify existing base finishes and add improvements, systems, or equipment at their own expense (except in Airline Exclusively leased and Concession spaces). All finish material shall be equivalent to adjacent QTA space in terms of quality, durability and aesthetics. Modifications to existing base finishes (except in Airline Exclusively leased and Concession spaces), additional improvements, systems, or equipment requires written approval from the Airport before the work is performed.

**B.** The tenant is responsible for maintaining their leased space. Tenant lease space shall be kept free from trash and debris. In the event the tenant vacates the space, the tenant shall restore all leased space to the original finishes.

### **6.2 QTA Service Booths**

**A.** QTA service booths are small free-standing structures within a rental car agency's leased space that provides a location for rental car agency employees to conduct and support QTA provided services.

**B.** QTA service booths shall not be located in any area that will impede safe vehicle circulation or obstruct sight lines to and from vehicle or pedestrian circulation routes.

**C.** QTA booth finish material shall be complimentary and compatible with finish materials used in adjacent areas of the QTA. In the event the tenant vacates the space, the tenant shall restore all leased space to the original finishes.

### **6.3 Signs**

**A.** Tenant specific identification signage is permitted within the tenant's leased space. Signs can be freestanding, surface mounted to structural columns with compression fittings, or hung from the ceiling. Any attachment that requires drilling into the parking structure is prohibited without prior written approval from the Airport.

**B.** Small way-finding signs may be located in tenant leased space to identify rental car staging areas, leased fuel islands, wash bays, etc. Proposed signage shall be consistent with other airport provided signs in the QTA and parking structure and conform with all current signage standards contained in the Airport Graphic and Signage Standards document.

**C.** Tenant identification branding and signs are prohibited on the exterior of the QTA facility.

**D.** QTA signs located above any vehicle circulation route shall be mounted so the bottom of the sign is a minimum of 7 feet 2 inches above the finished floor elevation or equal to the height restriction bar at the QTA entrance.

**E.** Flashing, noise emitting, moving, or animated signs are prohibited unless the tenant has prior written approval from the Airport. Signs that obstruct pedestrian or vehicle sightlines are prohibited.

**F.** Any sign that is deemed inappropriate, distasteful, offensive, creates a potential operational or safety hazard, or does not conform with the overall parking structure aesthetic will be removed, at the tenant's expense, the determination will be made at the sole discretion of the Airport.

**G.** Tenant signage is subject to the Airport's design review process prior to installation.

## **7.0 Rental Car Service Sites**

### **7.1 General Design Guidelines**

The Rental Car Service Sites (RSS) and buildings are not a true public space and the exterior is primarily a functional design. Due to the building and sites close proximity to the Terminal complex, the tenants shall use similar materials and finishes as those on the surrounding structures. Individual rental car companies will also lease a remote service site. The service sites will be allocated and a building(s) will be constructed to provide a location for administrative services, and an exclusive service facility for each tenant. The service site building may be designed and constructed as a common-use building or as a separate building. The remote site will also provide a location for each company's seasonal overflow parking, rental cars not in current use, car maintenance, employee parking, and associated places for equipment storage customarily associated with car rentals.

### **7.2 Landscaping / Screening**

The Airport will install and maintain perimeter landscaping outside tenant leased space. It is the responsibility of the tenant to keep leased storage yards, building perimeters, fence lines, and landscaping clean and free from debris. Screening is required to shield unsightly uses such as wrecked vehicle storage areas, refuse areas, and storage areas for car rental components from public view.

### **7.3 Exterior walls**

**A.** Material and colors that are complimentary and compatible with the surrounding terminal complex and parking garage shall be used on the façade of the RSS buildings. Exterior walls shall not be changed to represent individual rental car agency colors or corporate branding. Masonry or poured concrete walls are encouraged. Signs must be approved by the Airport and will be allowed only to provide identification and way-finding to RSS sites.

**B.** To protect exterior walls, 6-inch diameter painted steel bollards, filled with concrete and 42 inches high, shall be installed and maintained at the sides of overhead doors, leading edges of fuel dispensers, at the outside corners of buildings, at gas meters, and other necessary locations.

## **7.4 Signs**

**A.** Building signage is optional at the discretion of the Airport. Free-standing signs are not allowed. Tenant corporate identification signs are permitted on the front and rear building façade only.

**B.** Signs will be designed to be compatible with the building's architecture and surrounding site conditions. The Airport encourages the practice of sustainable design, illuminated signs shall use the latest high efficiency fixtures and design. Proposed signs and sign locations shall be submitted to the Airport for approval prior to installation.

## **7.5 Tenant branding**

Signs, banners, promotional signs, vehicle ramps, and other similar tenant advertising will not be permitted at the service sites or on fences. The tenant signs and brands will be permitted only as signs and will conform to section 6.3 of these standards.

## **7.6 Vehicle circulation areas**

Parking and circulation lanes are to be clearly painted and utilized by the tenants. Wheel stops will be used where damage from vehicles could occur to buildings, fences, lighting, curbs or other similar areas. Adequate vehicle turning space will be provided.

## **7.7 Fleet turnover storage areas**

Fleet turnover storage areas shall be striped and maintained to provide additional parking for seasonal and for normal vehicle inventory. Adequate space will be provided in the yards to maneuver and to park the vehicles.

## **7.8 Wrecked vehicle storage areas**

An area for a minimal number of wrecked vehicles will be designated by the tenant and will be screened from public view with opaque fencing, and/or perimeter landscaping and berming. Wrecked vehicles shall be removed from the leased site regularly and will not be allowed to accumulate on the leased site. Wrecked vehicle storage areas are to temporarily provide a place to stage wrecked vehicles until they can be removed from the Airport.

## **7.9 Trash collection areas**

Exterior trash collection containers will be constructed of a durable and substantial material. Soft plastic trash cans are not allowed. Trash collection containers must have a closed top. Trash collection areas must be screened from public view. Collection areas shall consist of 6 foot high (minimum) masonry walls enclosure with a front gate that will screen all trash containers.

Trash collection areas shall be well maintained. Trash and other debris shall be frequently removed around all trash collection areas. Trash bins will be removed regularly from the site and will not be permitted to accumulate on-site.

## **7.10 Exterior Maintenance**

The leased premises will be maintained by the Rental Car agency. Maintenance for windows, doors and frames, canopies, sectional overhead doors, bollards, entrances, storefronts, and service bays are included. Security and night time lighting will be maintained by the rental car company for the building and yard areas. All night lighting will be shielded to not allow light to interfere with the Airport's control tower and aircraft operations.

## **7.11 Alarm systems**

Alarm systems are acceptable for RSS buildings. Alarm systems will be designed to be compatible with the building's architecture and surrounding site conditions.

## **7.12 Maintenance Bays**

The maintenance portion of the facility will be located near vehicle service lanes. The maintenance facility consists of administrative and staff office areas, a parts and tool storage area, a lubrication storage area, and maintenance repair bays. Maintenance bays will be equipped with surface mounted automotive lifts. The bays will be equipped to allow general repair and inspection of all fleet vehicle, including seasonal vehicles. Each bay will be accessed through a 12' x 12' overhead motorized sectional garage door. Each door shall have windows to allow natural light into the maintenance bay. Windows shall be located low enough on the door for maintenance staff to see into the surrounding parking area. All maintenance bay doors shall match in terms of manufacture, window height, and color. Maintenance bays will have sealed concrete floors.

### **7.13 Used Fluid Collection Areas, Oil, Coolant, etc.**

Fluids will be collected and placed in containers designed for oil, anti-freeze, and other typical automotive fluids. Containers will be stored inside maintenance bays or building. Fluids will be removed regularly from the site and will not be permitted to accumulate on-site in buildings or outside of buildings.

### **7.14 Landscaping**

Landscaping around the perimeter of the rental car service sites will be installed and maintained by the Airports. Landscaping within tenant leased space shall be installed and maintained by the tenant. Tenant installed landscaping shall comply with the Landscape Overlay District requirement contained in Title 21A.34.040: AFPP Airport Flight Path Protection Overlay District of the Salt Lake City Zoning Ordinance. All tenant installed landscaping shall be approved by the Airport prior to installation.

### **7.15 Interior Office Space Base Finishes**

**A.** Airport provided base finishes (except in Airline Exclusively leased and Concession spaces) include:

1. Floor - Heavy duty carpet or vinyl composition tile (VCT)
2. Walls - Painted gypsum board
3. Ceiling - Lay-in acoustical tile
4. Doors- Hollow metal doors and frames
5. Lights - Airport standard florescent lights
6. Communications – Conduit only

**B.** Tenant proposed modifications to existing base finishes shall be made by the tenant at the tenant's expense (except in Airline Exclusively leased and Concession spaces). This includes, but is not limited to, changes in wall color, carpet or tile, any attachment, penetration, or modification to the lay-in acoustical tile, or any door or light alteration. Modifications to existing base finishes are subject to the Airport's Design Review Process and approval prior to installation.



## 7.16 Sustainable Design

The Airport encourages sustainable design practices. Areas of sustainable design should include, but are not limited to, water use reduction, construction waste management, the use of recycled materials, materials extracted from or manufactured within the region, rapidly renewable materials, certified wood use, and the use of low-emitting material, adhesives, sealants, paints, coatings, and carpet systems.

***(If Tenant is submitting for LEED-CI, refer to Appendix G of this document which provides recommendations consistent with the LEED certification of the project.)***

# Appendix A

## Doors, Frames, and Hardware

### Doors / Frames

Hollow metal doors and frames	Ceco, Apex, Republic, Steelcraft
Sectional doors	Wayne Dalton, Overhead, Haas Door
Fiberglass sandwich panel	Kalwall

### Hardware

Butts	Ives, Yale
Lockset	Corbin – Russwin
Closer	Falcon, Norton
Trim	Ives
Weather-strip	National Guard
Continuous hinges	Ives

# Appendix B

## Drainage Design Criteria

### Precipitation Rates

Use rainfall rates for the Salt Lake City International Airport as published by the NOAA Climatologist.

### Design Storm

Airside drainage collection system – 25 year, 3 hour event.

Landside drainage collection system – 10 year, 3 hour event.

Detention facilities – 100 year, 24 hour event

Detention facilities must be designed to empty within 48 hours after the design storm event to mitigate wildlife attraction.

### Pipe

Reinforced concrete pipe must be used on the airside

Reinforced concrete, PVC, or HDPE pipe may be used on the landside.

Corrugated metal pipe (CMP) is not allowed due to the corrosive nature of the in-situ soils.

Minimum pipe diameter allowed is fifteen (15) inches unless approved otherwise in writing by the Airport's Director of Engineering.

# Appendix C

## Structural & MEPS Criteria

**C-1** STRUCTURAL DESIGN GUIDELINES

**C-2** HVAC DESIGN GUIDELINES

**C-3** PLUMBING DESIGN GUIDELINES

**C-4** FIRE PROTECTION DESIGN GUIDELINES

**C-5** ELECTRICAL DESIGN GUIDELINES

# Appendix C-1

## Structural Design Guidelines

### 1.0 General

Alterations, additions, or modifications to the existing structure required to accommodate Tenant proposed improvements within Tenant leased space shall be made at the Tenant's expense. This includes the suspension or support of any element from the floor or roof of the existing building. Seismic restraint of equipment and finishes (ceilings etc.) shall also be at the expense of the Tenant. Additions and equipment placed on the floor or roof systems shall not exceed existing engineered design loading criteria. Temporary loads for building material or equipment shall not exceed the design floor and/or roof load.

### 1.1 Modifications and Alterations

Tenants shall, at their expense, enlist the services of a licensed structural engineer to perform calculations regarding the modifications to the existing structural system and the additional loading of floors and roofs caused by the equipment, finishes, and merchandise.

Tenants shall submit the following information for review by the Airport:

- Location, size, and weight of equipment.
- Rolling grille and storefront weight and supporting details.
- Location, size and weight of safes, ovens, fixtures, and other heavy furniture and equipment.

### 1.2 Roof and Floor Penetrations

**A.** Penetrations or installation of equipment will not be permitted without prior consultation with a structural engineer at the Tenant's expense and written Airport approval. The location of approved roof penetrations will be limited. Penetrations required by the Tenant and approved by the Airport will be performed by a contractor that is certified to maintain existing warranties. The Tenant shall be responsible for the costs and must meet all project standards and details. Any unauthorized penetrations will be removed and repaired at the Tenant's expense.

**B.** Prior to any penetration, finishes must be sampled for asbestos and other hazardous materials.

**C.** Floor and wall penetrations required by the Tenant and approved by the Airport must be sealed appropriately, to the Airport's satisfaction, particularly where the penetration is through a fire rated assembly or a waterproof membrane. Any floor penetrations in a concrete suspended slab need to be x-rayed prior to installation.

**D.** Floor penetrations must be sealed at the floor during the rough-in plumbing stage. The penetrations in the concrete shall be core drilled or cut with a slab saw. Floor sinks and floor drains shall be sealed directly to the floor without a sleeve: these penetrations shall be of precise size, as to allow the body of the fixture to be sealed at the penetration.

### **1.3 Design Loads**

**A.** Structural loading of floors and roofs imposed on a temporary or permanent basis shall not exceed the design live load or total load established for each lease space. Unless otherwise noted in lease documents, the following allowable live loads should not be exceeded:

- Floor 100 lbs/sq. ft.
- Loads from suspended structures shall be engineered.

**B.** Any suspended equipment or system (such as signage, equipment, ceilings, etc.) must be supported from the building steel only. No attachment to slab or deck is permitted.

**C.** The Tenant is responsible to coordinate heavy loads involved with transporting heavy equipment across skybridges and through Airport spaces. The Tenant is required to provide a travel path and plan verifying transport through Airport terminals and concourses to final destination including weight of equipment and materials, as well as confirm existing structural capacities are adequate to carry such loads. Damages to floors, tiles, walls, fixtures, or elevators as a result of moving heavy loads must be repaired to the Airport's satisfaction at the expense of the Tenant.

## **Appendix C-2**

### **Heating, Ventilation & Air Conditioning (HVAC)**

#### **1.0 General**

The Tenant shall use these standards for mechanical and electrical equipment. Modifications to HVAC systems shall comply with Airport standards, at the Tenant's expense. The Tenant's design and construction shall comply with all current federal, State, and local building codes, Federal Aviation Administration (FAA) requirements, and the Americans with Disabilities Act (ADA) standards. Contact the Department of Airports Engineering Division for more specific mechanical and electrical information and standards pertaining to specific locations within the Airport complex. The Tenant is responsible for complete design and installation of air conditioning system distribution, kitchen exhaust and smoke evacuation within their demised premises. The Tenant's contractor shall install duct work, diffusers, thermostat wiring, insulation and associated components to accommodate Tenant HVAC design. Safety walking treads shall be installed to all roof mounted HVAC equipment

#### **1.1 Licensed Professional Engineer**

The Tenant shall engage an architect (including sub-contractors) and/or engineers licensed to practice in the State of Utah, to prepare the designs, drawings, calculations, and construction documents. The Tenant's designer or engineer shall be present on-site during the site evaluation process.

#### **1.3 Mechanical Room Access**

The Airport prohibits access to areas not directly leased to a Tenant without prior written approval of the Airport. If a Tenant or a Tenant's contractor needs access to an area not directly leased, the Tenant may either coordinate limited access with the Airport or request a key to the space through the Airport Access Control Office. A Key and Lock Work Order Form must be completed by the Tenant. Completed forms shall be faxed to the Airport as indicated on the form, or delivered to the Airport Access Control Office. A deposit may be required. Please allow 3 business days for completion of any requests. When ready, keys shall be picked up by the Tenant in the Airport Access Control Office.

#### **1.4 Protection of Public and Adjacent Areas**

Dust wall barricades shall be placed around construction projects located within the terminals and concourses. Dust walls shall conform to Airport dust wall construction barricade specifications (See Appendix F for Dust Barricade Standards).

#### **1.5 Identification and Labeling**

Identification and labeling shall conform to current Airport standard practices. HVAC equipment, including roof top equipment, shall be labeled with plastic engraved labels to identify equipment and type, Tenant's name, and the electrical panel and circuit number that provides its power.

#### **1.6 Removal of Prior Tenant Improvements and Abandoned Utilities**

The removal of prior tenant improvements or abandoned utilities shall be made by a licensed contractor.

#### **1.7 Airport Central Heating and Cooling Systems (supply, metering, etc.)**

**A.** In general, the Airport has provided a central heating, ventilation, and air conditioning (HVAC) system for retail, specialty retail, food & beverage and food court Tenants to connect to. Each tenant space is provided with a source of conditioned supply air, chilled water piping, and heating water piping. Outdoor air is provided to each tenant space as a percentage of the conditioned supply air. The existing system is tied into Building Automation System (BAS) for energy management, system monitoring, and utilizes the Kilair program for emergency purposes. Tenants may augment the existing air system's capacity by utilizing the Airport's central hot and chilled water system. Variations to the base building system will require Airport approval and the work must be performed by an Airport designated contractor.

**B.** The Tenant shall provide energy and heat load calculations to the Airport to confirm adequate heating and cooling of space.

**C.** The Airport will provide access to the HVAC system as required by the Tenant. The Airport will provide engineering information, record drawings, and design information as requested by the Tenant.

**D.** The Airport HVAC systems provide outdoor air ventilation rates at least 30% above the minimum rates required by ASHRAE Standard 62.1. The Tenant HVAC design shall also provide outdoor air ventilation rates at least 30% above the minimum rates required by ASHRAE Standard 62.1.



## 1.8 Tenant's Work

**A.** The Airport will provide HVAC to serve the Tenant spaces as described. All hook-ups, variable air volume (VAV) boxes, re-heat coils, fan coil units and distribution of conditioned air shall be provided by the Tenant, at their expense. They must be consistent with Airport standards. HVAC controls shall be provided by Siemens or an Airport approved equivalent and shall be integrated into the airport BAS (Facility Management System).

**B.** If the Tenant's operation requires modification to the air handling system, hydronic hot water or chilled water system, facility management system, or other central utility, the modifications shall be consistent with Airport standards and be installed at the Tenant's expense. Due to the complexity of and variation in the Airport utility system, the Airport recommends that the Tenant contact and coordinate with the Airport's Engineering Division to determine specific requirements for the Tenant's space.

**C.** Exhaust systems provided by the Tenant shall be interconnected with the Airport Facility Management System in order to monitor fan status. These systems shall be consistent with Airport standards and provided at the Tenant's expense.

**D.** Tenants providing food service shall provide their own make-up air and kitchen exhaust system. The Tenant shall provide all components of the system including, hoods, duct work, insulation, controls, fire extinguishing system, and roof fan with grease trap. Exhaust air shall be filtered and directional so that the existing outdoor air intakes are not infiltrated with cooking odors. All hookups to the base building fire alarm system shall be the Tenant's responsibility.

**E.** Supply duct work and kitchen exhaust duct work shall be constructed to industry standards. The Tenant shall be responsible for a normal maintenance and repair schedule for the servicing of the Tenant HVAC system in accordance with the terms of a standard Air Conditioning Service Contract as used by any reputable service company in the Salt Lake area, excluding any Airport owned and operated system. The Tenant shall provide all necessary access to service their equipment and allow access to all base building systems. This includes placement of all equipment, fixtures, and structural modifications that may inhibit or deny physical access to devices and/ or controls included as part of the systems.

**F.** Temperature control devices and installation for the Tenant's HVAC system shall be consistent with existing Airport systems. Tenant shall employ qualified contractors who are approved by the Airport, for balancing and systems commissioning at its expense.

**G.** The Tenant will coordinate room thermostat location, supply and return air ducting coming from or tied to the BAS system. Room temperature sensors are not to be covered or placed next to heat generating objects.

**H.** The Tenant HVAC design shall meet the requirements of ASHRAE Standard 55.

**I.** The Tenant shall sufficiently exhaust each space where hazardous gases or chemicals may be present or used to create negative pressure with respect to adjacent spaces when the doors to the room are closed. The exhaust rate must be at least 0.50 cubic feet per minute (cfm) per square foot with no air recirculation. The pressure differential with the surrounding spaces must be at least 0.02 inches of water gauge on average and 0.004 inches of water at a minimum when the doors to the rooms are closed.

**J.** The Tenant shall refrigerants and heating, ventilating, air conditioning, and refrigeration (HVAC&R) that minimize or eliminate the emission of compounds that contribute to ozone depletion and global climate change. The Tenant HVAC&R equipment combined contributions to ozone depletion and global warming potential shall be less than 100 as defined by LEED BD+C v3-2009 Credit EAc4.

### **1.9 Kitchen Exhaust Systems and Requirements**

**A.** Each food service Tenant shall provide its own kitchen exhaust and make-up system that is fabricated and installed in accordance with the applicable codes and regulations. Ventilation systems should be of adequate size, strength, and capacity to effectively eliminate smoke and odors associated with food preparation, cooking, and presentation.

**B.** Kitchen exhaust fans shall be centrifugal, up-blast roof exhausters with drains and shall be installed in accordance with National Fire Protection Agency (NFPA) guidelines and applicable codes. Kitchen exhaust duct work shall be insulated with 2-hour wrap by thermal ceramics or equal and per NFPA and local codes.

**C.** Food and beverage tenant shall be responsible for maintaining a negative air balance or a pressure differential between tenant boundary and adjacent spaces to minimize odor migration. For tenant food and beverage spaces that are open to adjacent spaces, systems shall be balanced to an 800 cfm negative airflow. For enclosed tenant food and beverage spaces with a door separation operating with the door closed, systems shall be balanced to a differential pressure of 0.05" w.g. System balancing shall be performed with supply air at maximum flow and kitchen exhaust and make-up air systems operating.

**D.** Kitchen hoods shall be water wash grease extractor type. They shall be UL and Factory Mutual (FM) approved.

**E.** Tenant shall install and maintain, a CO2 fire extinguishing system, or an equivalent system, to protect kitchen hoods above cooking areas. The fire-extinguishing system must meet the requirements of NFPA and local fire codes.

**F.** Duct work for kitchen exhaust hoods (Type I and II) shall be a minimum sixteen (16) gauge, fully welded stainless steel. The ducts shall be continuously welded and liquid tight, and must be light tested. Construction standard shall be as required by NFPA standards. Openings will be provided with grease-tight access panels at each change of direction and at ten (10) foot intervals along straight duct runs. The tenant will provide dished pans at the bottom of the risers with two (2) inch half-coupling, removable plug, welded to bottom center of pan. Diverging and converging transitions shall not exceed 20° from the line of airflow. Horizontal duct sections shall not form grease traps and shall pitch toward the hood as required by NFPA. Vertical and horizontal interior installations shall have proper fire resistant covers and enclosures, spacing from combustible surfaces, etc. as defined by NFPA.

#### **1.10 Make-up Air System Requirements**

**A.** Water over flow equipment on make-up fans shall be plumbed to a drain.

**B.** Particle filters or air cleaning devices shall be provided to clean the outdoor air at any location prior to its introduction to occupied spaces. Filtration media shall be rated at a minimum efficiency reporting value (MERV) of 13 or higher in accordance with ASHRAE Standard 52.2.

#### **1.11 Air Balance Requirements**

**A.** The Tenant shall provide an electronic copy of a certified balancing report before the air balancing system is put into operation to ensure that the system properly directs exhaust. This report shall be reviewed with and filed with the Airport.

**B.** Air balancing work shall be performed by an Airport approved contractor.

## **Appendix C-3**

### **Plumbing Design Guidelines**

#### **1.0 General**

The Airport will provide separate domestic cold water, grease waste and vent, cooking waste oil and natural gas piping taps for all food service Tenants. Lease documents or available record drawings will identify the location of the taps.

#### **1.1 Licensed Professional Engineer**

Tenants are required to engage an architect and/or engineer (including any separate design firm), duly licensed to practice in the State of Utah, to prepare the designs, drawings, calculations, and construction documents. The architect and/or engineer shall be on-site during the site evaluation process.

#### **1.2 Mechanical Room Access and Connection to Main Utility Lines**

**A.** Tenant will have access to related mechanical rooms to make connections to utilities on an as needed basis. The Airport Facilities Maintenance Department will require a minimum of 72 hours' notice to gain access.

**B.** Connection to utilities will be made by an authorized contractor who will assure all connections are per the appropriate code.

#### **1.3 Protection of Public and Adjacent Areas**

Dust wall barricades shall be placed around all construction projects located within the terminals and concourses. All dust walls shall conform to Airport dust wall construction barricade specifications. Signs or graphics posted on the dust walls must be approved prior to posting by the Airport.

#### **1.4 Identification and Labeling**

All major utilities within a Tenant's leased space shall be labeled with a plastic engraved label providing identification of where the service comes from (Airport room number, utility identification, etc.). Disconnect labeling shall indicate what the utility serves and where service is coming from.

## **1.5 Removal of Prior Tenant Improvements and Abandoned Utilities**

The Tenant is responsible for the removal of existing utilities, if necessary, throughout their leased space whether installed by the previous Tenant, Airport or abandoned. All utilities shall be removed to the source panel. The cutting and capping of utilities within Tenant leased space is prohibited unless otherwise negotiated with the Airport prior to any activity.

## **1.6 Airport Water, Waste and Vent (supply, metering, etc.)**

Connection to Airport utilities are to be made by a licensed contractor. Sub-metering is to be provided if specified in the project. The Airport will provide domestic cold water, sanitary vent, cooking waste oil and natural gas to the Tenant's lease line. Grease waste lines will be provided under the tenant floor, in the ceiling of the space below. The Tenant shall connect to these lines per code requirements. Contaminated drains (grease) will be connected to the grease waste system.

## **1.7 Tenant's Work**

**A.** The Tenant is responsible for the design, furnishing, and installation of complete plumbing systems. The Tenant's contractor shall furnish and install all piping, fittings, valves, and associated components to accommodate the Tenant's plumbing design as follows:

- Domestic cold water will not be metered.
- Domestic hot water including water heaters shall be electric and may be located in the Tenant's ceiling space, yielding to all current Airport and Tenant Systems. Water heaters located in the Tenant's ceiling space shall have an adequate drain pan and be piped to an existing sanitary sewer drain. The Tenant is required to generate and supply adequate hot water to meet all code and Health Department regulations for food handling and preparation.

The Tenant will also provide:

- Grease waste and vent
- Sanitary waste and vents
- Natural gas (available for Food & Beverage Spaces)
- Natural gas meter (coordinate installation with the Airport)
- Piping insulation
- Plumbing fixtures

- Floor drains and floor sinks (where required and set in non-hardening sealant)
- Plumbing and piping in areas subject to freezing must be insulated and heat-traced
- Ice machine trays and pans
- Tenants using deep fryers, shall tie in or install and maintain a used cooking oil/liquid grease collection system where used cooking oil/liquid grease is transported from the food service location through piping to an external remote collection system.
- Where grease waste piping is not provided, grease traps/ interceptors are required to meet commercial requirements. Tenant is responsible to provide design calculations to the Airport to verify that the size is appropriate for the intended use and kitchen loads. Specifications and cut sheets are required to be submitted on all grease interceptors.

**B. Food and beverage Tenants must submit drawings for approval to Salt Lake City Corporation, the Department of Public Health, the Office of Food Protection, and all other authorities having jurisdiction. Specifications shall conform to the codes, regulations, and requirements of all authorities having jurisdiction.**

Materials shall be as follows:

- Plumbing fixtures as indicated on architectural and plumbing drawings. Each fixture, outlet and piece of equipment shall be separately trapped, using type and size of trap required by the plumbing code. Traps shall have clean-outs. Wall-mounted devices shall have chair carriers, which shall be securely bolted to floor slabs in accordance with the manufacturer's recommendations. Plumbing fixtures shall be manufactured by Kohler, Eljer or American Standard. The decision as to the type of fixture submitted being equal to that specified shall rest with the Tenant's architect.
- Hot and cold water piping (all sizes) shall be copper piping type-L, hard temper. At exposed fixtures, shall be chrome plated cast brass. Pressure fitting joints shall be soldered using silver content lead-free solder.
- Sanitary waste and vent piping shall be service-weight cast iron, no-hub soil piping conforming to latest standards. Type-L copper tube may be used for two (2) inch diameter piping and smaller. Drainage pipes shall be stainless steel. No-hub double clamps shall be "Clamp All."
- Grease Waste piping shall be stainless steel. **Refer to Appendix D and H for more information.**

- Cooking Waste Oil piping shall be Schedule 40 black steel, with screwed fitting 1-1/2" and smaller, welded 2" and larger. Cooking Waste Oil piping shall be insulated and heat traced and shall be heated to 140-degrees F.

### **1.8 Allowable and Required Materials, Fixtures and Fittings**

**A.** In spaces with multiple plumbing fixtures, such as kitchens, dish washing rooms, or restrooms, the Tenant shall install a waterproof membrane prior to the finished floor. In addition, a six (6) inches x six (6) inches metallic corner flashing shall be installed and sealed at perimeter walls where the rough floor meets the rough wall.

**B.** Plumbing and conduit penetrations shall be sleeved with a stainless or galvanized, seamless or welded seam, metallic sleeve to three (3) inches above the finished floor and flush with the bottom of the floor. The sleeve shall be precisely sized to fit opening in the concrete. In addition to sleeving, openings and sleeves shall be sealed with an epoxy-type, non-shrinking, waterproof adhesive.

**C.** Tenant provided plumbing fixtures shall meet the flow requirements listed below:

- Water Closets: Single flush set at 1.28 gpf max.
- Urinals: Single flush set at 0.125 gpf max.
- Lavatories in public core areas; Set at 0.09 gpm per 10 second cycle.
- Break/Pantry Room Sinks: Set at 1.7 gpm max.
- Showers: Set at 1.5 gpm max.
- Kitchen Sink: Set at 1.7 gpm max.
- Hand Sink: Set at 0.5 gpm max.
- Pre-Rinse Spray Valve: Set at 1.6 gpm max.

### **1.9 Fry Cooking – Used Oil Collection, Disposal and Recycling Requirements**

- The Tenant will be responsible for providing the design and specifications for collecting used cooking oil.
- The Tenant will be responsible for connecting to and using the central waste cooking oil system.
- Cooking Waste Oil piping shall be Schedule 40 black steel, with screwed fitting 1-1/2" and smaller, welded 2" and larger. Cooking Waste Oil piping shall be insulated and heat traced and shall be heated to 140-degrees F.

### 1.10 Trap/Grease Interceptors

- The Tenant shall submit a plan for connections to grease trap/interceptor systems for Airport approval prior to installation. If Tenant's location does not accommodate connection to an Airport provided grease interceptor, the Tenant is responsible for installing and maintaining grease trap/interceptor systems.
- Grease Waste piping shall be stainless steel. **Refer to Appendix D and H for more information.**



## **Appendix C-4**

### **Fire Protection Design Guidelines**

#### **1.0 General**

Fire protection is required in all Tenant spaces throughout the airport. Specific requirements for individual premises will be made on a case-by-case basis and will be delineated in the lease documents. Fire protection design shall be in accordance with Salt Lake City Building Services and Civil Enforcement Division requirements. The Airport will provide a central wet automatic sprinkler system for Tenant connections.

#### **1.1 Licensed Professional Engineer**

The Tenant will hire a licensed fire protection engineer that shall be engaged for fire protection design work.

#### **1.2 Mechanical Room Access**

The Airport prohibits access to areas not directly leased to a Tenant without prior written approval. If a Tenant or a Tenant's contractor needs access to an area not directly leased, the Tenant may either coordinate limited access with the Airport or request a key to the space through the Airport Access Control Office. A Key and Lock Work Order Form must be completed by the Tenant. A copy of the Key and Lock Work Order Form can be found on the Airport's website, ([www.slairport.com](http://www.slairport.com)). Completed forms shall be faxed to the number indicated at the top of the form for processing, or delivered to Airport Operations. A deposit may be required. Please allow three (3) business days for completion of any requests. The Access Control Office will issue and control keys.

#### **1.3 System Shut-down Procedures**

Tenants shall submit a written request to the Airport for a system shut-down of the central wet automatic sprinkler system at least 72 hours prior to the anticipated shut-down date. A fire watch shall be provided by the Tenant if the main system is to be shut-down overnight.

## **1.4 Identification and Labeling**

Major utilities within a Tenant's leased space shall be labeled with a plastic engraved label providing identification of where the service comes from (Airport room number, utility identification, etc.). Utility disconnects shall indicate what the utility serves and where service is coming from.

## **1.5 Removal of Prior Tenant Improvements and Abandoned Utilities**

The Tenant is responsible for the removal of existing utilities, if necessary, throughout their leased space whether installed by the previous Tenant, Airport or abandoned. Utilities shall be removed to the source panel. Cutting and capping of utilities within Tenant leased space, or reusing of existing, is prohibited unless otherwise negotiated with the Airport prior to any activity.

## **1.6 Airport Central Wet Automatic Sprinkler System**

Not all areas of the Airport's existing facilities have an automatic sprinkler system. Tenants may be required to run piping to the nearest riser large enough to meet the Fire Code.

## **1.7 Tenant's Work**

**A.** Tenants are required to design branch piping and head layout to coordinate with their ceiling and space layout. Approved wet chemical fire protection systems are required over cooking appliances and processes requiring protection as deemed necessary by the Airport. Wet chemical fire protection systems are required to connect to the Airport's fire alarm system. The Tenant shall provide hand fire extinguishers, as specified by the local fire marshal, in the space.

**B.** The Tenant shall obtain hydrant flow test information that fits National Fire Protection Agency (NFPA) standards and the insurance underwriter's requirements and shall also be in conformance with timing and requirements of the Airport. The systems shall be hydraulically designed and supported by hydraulic calculations. Sprinkler working drawings and complete hydraulic calculations shall be provided for approval showing the proposed layout of piping based on hydraulic calculations.

**C.** A 10-psig cushion shall be hydraulically designed into each system. Sprinkler heads should be 165°F rated or 212°F rated as noted, with an orifice diameter of one half (½) inch. Sprinkler spacing shall not exceed a maximum of 130 SF per head. Flushing connections shall be provided at the most hydraulically remote ends of the cross mains. Branch lines in gridded sprinkler systems shall be arranged to facilitate flushing. This requires that one end of each branch line be detachable.

**D.** Fire protection systems shall be designed in compliance with NFPA requirements, as required by the insurance underwriter, and the Salt Lake City Fire Department. Systems shall be designed to provide for the minimum required water densities over the most hydraulically demanding rectangular areas as follows, Ordinary Hazard, Group one (1) at 0.15 GPM/SF over the most hydraulically remote 1,500 SF for all retail and food Tenant areas, 250 GPM fire hose flows, inside and out shall be included at the base of all risers (at alarm check valves). Specifications shall conform to the codes and regulations and to requirements of authorities having jurisdiction.

**E.** Service piping shall be standard weight Schedule 40 black steel pipe (ASTMA/A 120/53, schedule ten (10) piping and rectanlic mechanical tee fittings are not permitted). Valves shall be standard weight and materials, as required by NFPA, Underwriters Laboratory (UL) listed, Factory Mutual (FM) approved. Valves shall be Jenkins, Mueller, Stockholm, or an approved equal. Tamper switches shall be provided on all normally open valves. They shall be double pole double throw (DPDT), self-restoring type. Seismic protection of sprinkler piping shall comply with the requirements of NFPA 13, 1994 edition and BOCA 1993, seismic hazard exposure Group IIC.

**F.** The Tenant shall not operate or install fire suppression systems that contain ozone-depleting substances such as CFCs, hydro chlorofluorocarbons (HCFCs), or halons.

### **1.8 Utility Summary Per Space**

Utility location, taps and piping connections shall be indicated on lease documents or provided on record drawings provided by the Airport for each Tenant space.

### **1.9 Fire Alarm Design**

Tenant shall connect now initiating devices and notification devices to the Airport Fire Alarm System. System shall be Tyco Simplex Grinnell to match building system. Tenant's Fire Alarm System shall be integrated into the base building Fire Alarm Event Matrix for proper actions under alarm conditions.

## **Appendix C-5**

### **Electrical Design Guidelines**

#### **1.0 General**

The Airport will provide electrical service to central distribution points to serve each Tenant location. Metering will be located within an Airport provided electrical distribution panelboard (located in Airport's electrical room). This electrical distribution panelboard, which is on normal power, will serve the tenant spaces. The Airport will provide two (2) 2" empty conduits from the Airport's electrical distribution panelboard to each tenant space for tenant use. In some cases, payment for electrical consumption will be incorporated into the lease agreement. Tenants shall provide new metering equipment and new feeder breaker for their tenant space at the Airport provided distribution panelboard. The metering equipment and feeder breaker shall comply with the Airport Standards and Guidelines.

#### **1.1 Licensed Professional Engineer**

The Tenant is required to engage an architect and/or engineer (including any separate design firm), duly licensed to practice in the State of Utah, to prepare the designs, drawings, calculations, and construction documents. The architect and/or engineer shall be on-site during the site evaluation process.

#### **1.2 Electrical Room Access**

The Airport prohibits access to areas not directly leased to a Tenant without prior written approval. If a Tenant or a Tenant's contractor needs access to an area not directly leased, the Tenant may either coordinate limited access with the Airport or request a key to the space through the Airport Access Control Office. A Key and Lock Work Order Form must be completed by the Tenant. A copy of the Key and Lock Work Order Form can be found on the Airport's website, ([www.slairport.com](http://www.slairport.com)). Completed forms shall be faxed to the number indicated at the top of the form for processing, or delivered to Airport Access Control Office. A deposit may be required. Please allow 3 business days for the process. The Access Control Office will issue and control keys.

### **1.3 Service Voltages**

Airport standard service voltage is 480/277, 3-phase, 4-wire. The electrical distribution panelboard described in Section 1.0 is 120/208, 3-phase, 4-wire. Three phase installations are required for tenant spaces.

### **1.4 Temporary Electrical**

Temporary electrical installations shall be in compliance with current prevailing version of the National Electrical Code (NEC) article 590, including all applicable State and Local Adoptions.

### **1.5 Identification and Labeling**

**A.** Electrical within Tenant leased space shall be labeled with a plastic engraved label providing identification, i.e., electrical panels shall be identified and indicate where service comes from (Airport room number, and panel I.D.); disconnects shall indicate what the utility serves and where service is coming from.

**B.** Electrical outlets and switches within Tenant leased space shall be labeled to indicate the service origin and circuit number.

### **1.6 Removal of Prior Tenant Improvements and Abandoned Utilities**

The Tenant is responsible for the removal of existing utilities, if necessary, throughout their leased space whether installed by the previous Tenant, Airport or abandoned. Utilities shall be removed to the source panel. Cutting, capping, or reusing of utilities within Tenant leased space is prohibited unless otherwise negotiated with the Airport prior to any activity.

## 1.7 Tenant's Work

**A.** Tenant electrical work shall be at the sole cost and responsibility of the Tenant. An electrical panel must be installed on demising walls or exterior walls only, electrical panels may not be installed on Tenant built partitions. Electrical work, such as recessed duplex outlets, is allowed in the dividing partitions between Tenants where no work conflicts with or damages work previously installed by adjoining Tenants; it may be permitted where codes and building department requirements do not restrict the proposed work. PVC conduits are not be allowed. Exposed, low voltage cable must be Teflon-coated or coated with a similar material acceptable for use in return air plenums in compliance with local and State codes.

**B.** An empty telephone service conduit has been provided for the Tenant space. The Tenant must consult directly with the telephone company and the Airport to arrange for individual service from the project service location to the Tenant's demised premises. Applications must be made through the local telephone company (see the project directory for address and telephone number). Telephone service will be provided by the Tenant at the Tenant's expense.

**C.** Temporary services and equipment are to be removed upon completion of the work and prior to operating in the space. The Tenant shall conform to Airport cabling installation standards. Tenants who install WIFI independent of the Airport's network must ensure there is no interference with Airport systems.

**D.** Tenant shall be responsible to conduct and provide an arc flash evaluation for all new electrical equipment such as switchboards, panel boards, motor control centers, transformers, and safety disconnects or similar equipment added as part of tenant improvements and/or modifications. Arc flash evaluation shall be completed by a professional engineer licensed in the state of Utah and shall include their stamp and signature on the final arc flash evaluation report. The arc flash evaluation shall include at minimum computer modeling of electrical system, fault current calculations, arc flash incident energy levels, arc flash boundaries, arc flash working distance, required Personal Protective Equipment Flame Resistant (PPE FR) clothing category, permanent arc flash labeling compliant with NFPA 70E (standard manufacturer arc flash warning labels complying with National Electrical Code (NEC) will not be accepted), and electronic copies of the model and report delivered to the Airport.

**E.** The Airport offers Tenant shared telecommunications and information technology (IT). Shared Tenant services are competitively priced and utilize the robust features that are available on large dynamic systems. Automated attendants, voice mail, shared T1 service, analog, as well as digital service are available through the Airport's shared Tenant system. Shared Tenant service allows Tenants to utilize

private branch exchange (PBX) features, lower cost for toll calls, and customized restriction tables, at the Tenant's request. Changes are included in the monthly port charge, and are maintained by the Airport. The Airport's response time for emergency repair situations is usually less than two (2) hours. A separate lease agreement for telecommunication service, with an itemized schedule of options, is available.

**F.** If a Tenant chooses to receive telecommunications and IT service from a provider other than the Airport, the Tenant is responsible for arranging service from a provider and complying with Airport codes. A copy of the Airport wiring and cabling standards is available. Telecommunications and IT services must be approved by the Airport in advance. Telecommunications and IT service providers must meet the security and insurance requirements to work in restricted areas of the Airport. The cost associated with telecommunications and IT services is the responsibility of the Tenant.

**G.** Storefront and interior reflected ceiling plans and specifications shall indicate illuminating devices when submitted to the Tenant's representative for approval. Copies of catalog cuts of fixtures shall be submitted to expedite approvals.

- Recessed LED down lights shall be used for storefront illumination and shall be accommodated with a specular or semi-specular alzak cone, and may be adjustable. Lamps shall not be at or below the ceiling line. The use of decorative type lighting, such as luminous ceilings, chandeliers, pendant or wall units, or clear-type glitter strips is permitted only if the location is approved in advance by the Airport. Strobe, spinner, or chase-type lighting is not allowed.
- Glare-free fixtures shall be used for general store lighting. Shielding shall be wither metal parabolic, plaster paracube, or parawedge types. Acrylic lenses are not allowed for general lighting. High intensity discharge (HID) lighting and fluorescent lighting is not permitted. No electrical components shall contain materials classified as hazardous.
- LED pendant units may be used for general lighting if the Tenant has established an identity based on this theme or motif and if the use is approved in advance, by the Airport.
- Exposed LED tube strip lighting is not allowed in sales or public areas. Lighting in food service areas shall have protective covers, globes or shields.
- Low-voltage recessed or surface track lighting is recommended for high impact on merchandise. Mounted track and cable systems shall use manufacturer's recommended methods for installation.

- To retain and protect the visual environment of the area, each Tenant shall control the brightness of their lighting fixtures. Lighting fixtures shall be approved by the Airport prior to installation.
- The Tenant shall provide emergency and exit lighting as required by State and local codes.

### **1.8 Raceways and Fittings**

**A.** Conduits shall be three quarter (3/4) inch minimum. Metal-clad cable is not allowed. Fittings shall be steel. Rigid galvanized steel (RGS) raceways shall be used in the following installations: outdoor installations from grade to ten feet above grade, in areas subject to vehicle traffic, near conveyors and similar equipment, and where bends are 22 degrees and larger in buried locations.

**B.** Electrical metallic tubing (EMT) shall be used for indoor and protected locations. Rigid nonmetallic conduit (PVC) shall be used for all underground installation not otherwise specified in these standards. Flexible metallic conduit shall be used near equipment subject to vibration or flexibility. Flexible nonmetallic conduit shall be used for installations in areas that are wet or damp and for motor connections.

### **1.9 Conductors**

Copper stranded THHN/THWN-2 conductors shall be used in all installations. Conductor insulations shall be color coded for all sizes. Neutral conductor phase identifiers shall be used in all installations.

### **1.10 Outlet Boxes**

Outlet boxes shall be galvanized steel and a minimum size of 4" Square, 2-1/8" deep. Gangable boxes are permitted. Above ground pull boxes shall be galvanized steel with continuous hinge cover with flush latch, sized as required by NEC. Underground pull boxes shall be concrete or fiber type, sized as required by NEC. Outlet boxes and pull boxes shall be traffic rated in area subject to vehicle or aircraft traffic.

### **1.11 Wiring Devices**

Wiring devices shall be 20 amp. The default color for wiring devices shall be white, unless other color is required to coordinate with tenant space finishes.



### **1.12 Motor and Motor Starters**

Motor and motor starters shall be Allen Bradley, Cutler-Hammer, General Electric , Siemens or other Airport approved equivalent, minimum size NEMA 1.

### **1.13 Disconnect Switches**

Disconnect switches shall be Allen Bradley, Cutler-Hammer, General Electric , Siemens or other Airport approved equivalent, minimum 30A, heavy-duty rated.

### **1.14 Panel Boards and Circuit Breakers**

Panel boards and circuit breakers shall be minimum 200 amp rated manufactured by Siemens, Square D or other Airport approved equivalent. Panel boards and circuit breakers shall have grounding kits, bolt-on circuit breakers, and fully hinged door-in-door door covers.

### **1.15 Grounding**

All branch circuits shall be provided with equipment ground conductors, sized per NEC Art 250. Ground conductors shall have a green color coded insulation. Solid conductor pig tails shall be included on all devices.

### **1.16 Transformers**

Transformers shall be placed on concrete pads that have been designed by taking into consideration all necessary seismic criteria. Transformers shall have copper windings.

### **1.17 Exit and Emergency Lights**

All emergency and exit light shall be connected to the Airport emergency (NEC Art 700) power source. The Airport will provide each tenant space with one (1) 277V emergency lighting circuit for tenant's use.

### **1.18 Fire Alarm System**

See Airport Fire Protection Design Guidelines (Appendix C-4).

# Appendix D

## Stainless Steel Piping

### SPECIFICATION 22 13 17 – TENANT GREASE WASTE

#### PIPING PART 1 - GENERAL

##### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

##### 1.2 SUMMARY

- A. This Section includes grease waste piping installed as part of the tenant fit-out.

##### 1.3 PERFORMANCE REQUIREMENTS

- A. Components and installation shall be capable of withstanding the following minimum working pressure unless otherwise indicated:
  - 1. Grease Waste: 10-foot head of water (30 kPa).

##### 1.4 SUBMITTALS

- A. Action Submittals
  - 1. Product Data: For each type of the following:
    - a. Stainless steel pipe and fittings.
    - b. Joining materials.
    - c. Piping specialties.
  - 2. Piping Support, Vibration Control and Seismic Bracing Shop Drawings:
    - a. Comply with the requirements of Section 22 05 30 "Hangers and Supports for Plumbing Piping and Equipment" and Section 22 05 45 "Vibration and Seismic Controls for Plumbing Piping and Equipment."

**3. LEED Submittals:**

- a.** Product Data for Credit IEQ 4.1: For solvent cements and adhesive primers, documentation including printed statement of VOC content.

**1.5 TRADE CONTRACTOR'S QUALITY ASSURANCE**

- A.** Pipe and fittings shall comply with ASTM 112.3.1
- B.** Grease waste pipes and fittings shall be marked with the following:
  - 1.** Manufacturer (Josam)
  - 2.** Stainless Steel grade
  - 3.** Applicable standards
- C.** The piping manufacturer shall provide the contractor a minimum of eight hours training and certification on the proper method of installation prior to commencing work.

**1.6 COORDINATION**

- D.** Points of Connection / Interface with Base Building System: Coordinate and review with OAR all POC's, pipe sizes, devices, and any additional requirements that may be required for grease waste piping installation and final connections to base building system.
- E.** Coordinate location of all return air plenum rated ceiling areas prior to commencing work as required for the installation of plenum rated PVDF piping.

**PART 2 - PRODUCTS**

**2.1 TENANT GREASE WASTE PIPING**

- A.** Manufacturers: Piping shall be Josam Push-Fit Austentic 316L Stainless Steel Drainage System. No alternate manufacturers are acceptable. All system components shall be manufactured by Josam, including:
  - a.** Pipe and fittings
  - b.** Clamps,
  - c.** Gaskets
  - d.** Pipe hangers
  - e.** Transition couplings

- f. Floor drains
  - g. Cleanouts
- B. Internal Sealing Rings: Josam gaskets shaped to fit socket groove. Contractor shall select proper sealing ring material (EPDM or FPM) based on Tenant's expected effluent.
  - C. Transition couplings for grease waste to grease vent piping shall be manufactured by Josam. Refer to specification.
  - D. Pipe Hangers: Grease waste piping shall use hangers manufactured by Josam.

## **PART 3 - EXECUTION**

### **3.1 PIPING INSTALLATION**

- A. Tenant grease waste piping shall connect to the grease waste piping provided as part of the base building. Contractor shall inspect the existing piping and point of connection and shall inform the OAR whether the existing system is adequate or list any deficiencies.
- B. Install in accordance with Josam recommendations, including:
  - 1. Install piping to permit system inspection and maintenance.
  - 2. Piping shall be cut square with the exterior surface free of burrs. Install with the minimum number of joints. Push fit joints shall be made with Josam lubricant. Mark the insertion depth on the spigot. Leave the insertion mark for the inspector's use in verifying proper installation.
  - 3. Pipe shall be securely braced including axial bracing to limit or prevent axial movement.
  - 4. Floor penetrations shall be securely braced to prevent vertical movement.
  - 5. Changes in direction and ends of pipe runs shall be braced to prevent joints from pushing apart.
- C. Do not enclose, cover, or put piping into operation until it is inspected and approved by the OAR and authorities having jurisdiction.
- D. Install sleeves for piping penetrations of walls, ceilings, and floors. Comply with requirements for sleeves specified in Section 22 05 16 "Sleeves and Sleeve Seals for Plumbing Piping."
- E. Install escutcheons for piping penetrations of walls, ceilings, and floors. Comply with requirements for escutcheons specified in Section 22 05 18 "Escutcheons for Plumbing Piping."

- F. Prior to testing, provide the OAR with a list of chemicals to be used and the rating from a current version of Josam's "Chemical Resistance Chart" in the appendix.

### **3.2. HANGER AND SUPPORT INSTALLATION**

- A. Comply with requirements for seismic- specified in Section 22 05 30 ", Hangers and Supports for Plumbing Piping and Equipment." For Grease waste piping, hangers shall be by Josam.

### **3.3 SEISMIC REQUIREMENTS**

- A. Comply with requirements for seismic-restraint devices specified in Section 22 05 45", "Vibration and Seismic Controls for Plumbing Piping and Equipment."

### **3.4 FIELD QUALITY CONTROL**

- A. During installation, notify authorities having jurisdiction at least 24 hours before inspection must be made. Perform tests specified below in presence of authorities having jurisdiction. Testing and inspection shall be completed and approved before making final connection to base building system.

1. OAR Inspection: OAR will inspect the first install, and will provide periodic inspections as work proceeds. Do no connect to the base building system until testing is complete and OAR final inspection sign-off.
2. Roughing-in Inspection: Arrange for inspection of piping before concealing or closing-in after roughing-in and before setting fixtures.
3. Final Inspection: Arrange for final inspection by authorities having jurisdiction to observe tests specified below and to ensure compliance with requirements.

- B. Re-inspection: If authorities having jurisdiction find that piping will not pass test or inspection, make required corrections and arrange for re-inspection at no cost to the Owner.

- C. Reports: Prepare inspection reports and have them signed by authorities having jurisdiction.

- D. Test tenant grease waste piping according to procedures of authorities having jurisdiction or, in absence of published procedures, as follows:

1. Test for leaks and defects in new piping.

2. Leave new piping uncovered and unconcealed until it has been tested and approved.
3. Roughing-in Plumbing Test Procedure: Test grease waste and vent piping on completion of roughing-in. Close openings in piping system and fill with water to point of overflow, but not less than 10-foot head of water (30 kPa). From 15 minutes before inspection starts to completion of inspection, water level must not drop. Inspect joints for leaks.
- 4., Repair leaks and defects with new materials and retest piping, or portion thereof, until satisfactory results are obtained.
5. Prepare reports for tests and required corrective action.

### **3.5 CLEANING AND PROTECTION**

- A. Clean interior of piping. Remove dirt and debris as work progresses.
- B. Protect drains during remainder of construction period to avoid clogging with dirt and debris and to prevent damage from traffic and construction work.
- C. Place plugs in ends of uncompleted piping at end of day and when work stops.
- D. Do not use Grease Waste piping for construction cleaning.

### **END OF SPECIFICATION 22 13 17**

Information from Josam is attached to this specification as an appendix (Appendix H) in this document. Contractor shall not rely on this information for bidding and construction. Contact Josam for current information.

# Appendix E

## IT and Cable Standards

### Section 1

#### **Purpose:**

Installation standards provide common understanding of Salt Lake City Department of Airports (SLCDA) requirements for tenant-installed communication devices requiring cabling, wireless and other communication devices and equipment at Salt Lake City International Airport (SLC), South Valley Regional Airport (SVRA), and Tooele Valley Airport (TVA). Installation standards ensure that all such installations and equipment are installed in accordance with SLCDA, FAA, FCC, City, and other agency standards. Cabling within tenant space is maintained by the tenant, in coordination with the SLCDA.

### Section 2

#### **Installation Standards:**

Prior to installation, tenant must submit to SLCDA drawings, plans and other documents which shall be used to understand the full scope of installation and determine approval of the installation. Documents must specify and show conduit and cable routes, equipment locations and specifications, penetrations (if any) through roof, electrical conduit and wire, antenna and support heights, and the contractor(s) who will complete the installation.

### Section 3

#### **Installation Requirements:**

The following is a brief list of installation requirements. Please note this list is not all inclusive and is subject to change based on the scope of each project.

1. SLCDA fiber optic standard is Single-mode fiber. When connecting to the SLCDA fiber optic backbone to access another location on campus Single-Mode fiber shall be required.
2. 50 micron multimode fiber optic cabling may be used within a leased space if necessary and when not requiring connection from one lease space to another via the SLCDA fiber optic backbone.

3. All network horizontal cabling shall meet the minimum requirement for Category 6 (CAT6) cabling standards. All horizontal cabling shall be terminated on patch panels, in a manufactured rack or cabinet.
4. Any additional backbone cabling required within the lease space for connectivity beyond the airport designated TCR shall be the tenants responsibility.
5. All cables, conduits, inner duct, junction boxes, and enclosures used outside of identified tenant lease space must be clearly marked with owner, contact number, origination, and destination points.
6. Field verify that existing Airport cable trays have the capacity (both space and weight) to handle any proposed new cabling.
7. No new enclosures, conduits junction boxes and enclosures can be added to Airport space without a preconstruction walk-through with proper SLCDA staff, written permission as to exact locations, and detailed as-built documents delivered to the Airport upon completion and final inspection of the project.
8. Ensure Airport receives as-built documents for its Airport Expansion Program.
9. Reprint all affected electrical panel schedules with new circuit information.
10. Cables are to be routed so as to not create a trip hazard in any direction.
11. Cable penetrations to the roof are to be flashed in by a licensed roofer compatible with existing roofing materials, so as to maintain roof warranties.
12. Cabling inside leased areas must be clearly labeled and identified with owner information, contact, and termination point.
13. All cables installed will be labeled according to industry cable management standards.
14. Tenants must complete the required labeling prior to final acceptance of the installation.



15. All cabling within tenant space shall be for tenant of record. No sub-letting (with or without compensation) to other parties will be permitted and any such installations may be removed at the discretion of SLCDA.

16. Comply with TIA/EIA-568-C and BICSI standards for fiber and copper cabling installation.

## **Section 4**

### **Identification/Tag Standards:**

All tenant-installed equipment and installations must be identified with tags that include the following:

1. Identification tags must be engraved plastic and weather proof.
2. Name of tenant.
3. Origination and termination points of the cable.
4. Contact information.

## **Section 5**

### **Wireless Policy:**

Tenants may install private unlicensed wireless systems within their own exclusively leased space, only by approval of SLCDA.

1. Tenant takes full responsibility of devices; Airport is not responsible for any wireless devices belonging to the tenant.
2. Tenant must coordinate any and all RF spectrum issues with SLCDA and if any interference occurs with SLCDA wi-fi, tenant must remove or remedy their system immediately.
3. Airport is not responsible for any detriments to the tenant's system that occurs as a result of lack of security.
4. Tenant is responsible for monitoring the RF spectrum to prevent any sort of passive attacks on their wireless system.

## Section 6

### **Contractor Requirements:**

SLCDA requires all installation work be completed by a licensed contractor authorized to do work in the state of Utah. All contractors shall submit to SLCDA, required insurance certificates as stated in the Tenant Improvement Guidelines. All contractors must be authorized to do work at the Airport. For insurance and other questions, please contact the Airport Contracts Manager, at (801) 575-2984.

SLCDA will not escort or authorize tenant's contractors to access Airport property. Tenant may escort contractor pursuant to standard escort procedures, or require contractor to be badged. For badging and other access questions, please contact the Access Control office at (801) 575-2423.

## Section 7

### **Plan Review/Permits:**

SLCDA shall, upon receipt of plans, review and comment on plans. Tenant shall address comments and submit revised plans for further review.

## Section 8

### **Airport Approval:**

Unauthorized work is strictly prohibited. SLCDA written approval is required prior to arranging for or conducting any type of work related to the installation of any type of antenna or satellite dish or supporting devices and cabling. Unauthorized equipment and supporting devices are subject to the immediate removal and disposal by SLCDA. SLCDA shall invoice tenant for any damage to Airport-owned property and labor costs associated with such work, which tenant shall promptly pay.

## Section 9

### **Definitions:**

**Airport:** Salt Lake City International Airport (SLC), South Valley Regional Airport (SVRA), and/or Tooele Valley Airport (TVA), collectively.

**Contractor:** An organization hired by a tenant at the Airport, authorized to do work for and on-behalf of tenant in the state of Utah.

**Salt Lake City Department of Airports:** Department of Salt Lake City which owns and operates Salt Lake City International Airport (SLC), South Valley Regional Airport (SVRA), and Tooele Valley Airport (TVA).

**Tenant:** An organization with an executed and current lease agreement at any of the three (3) airports SLCDA manages.

**Tenant Lease Space:** Space exclusively leased by the tenant in which all of the tenant’s passive and active networks can be housed. This space does not traverse any common areas such as hallways, stairs, etc.

**Section 10**

**Contacts:**

Access Control Office	(801) 575-2423
Property Management	(801) 575-3433
Contracts Management	(801) 575-2984
Facilities/Maintenance Management	(801) 531-4564
Planning & Environmental Management	(801) 575-2490
Airport Operations Management	(801) 575-2401
Engineering Management	(801) 575-2902
I.T. Management	(801) 575-2090
Telecommunications Management	(801) 575-2495
Technical Systems Management	(801) 322-6532

# Appendix F

## Dust Wall Barricade Standards

It is the intent of SLCDA that all dust walls / construction barricades are uniform in appearance and conforms to established construction standards. The following details and specifications shall be followed for the erection of dust wall barricades in conjunction with all construction projects located within the Airport.

Each dust wall must be completed within a maximum of three (3) nights work and shall be constructed to meet the following minimum specifications.

1. The bottom track of the dust wall shall be installed over 16 inch wide strips of  $\frac{3}{4}$  inch plywood; plywood shall be set atop 16 inch wide strips of non-slip rubber membrane. Bottom track shall be secured to plywood with two  $\frac{1}{2}$  inch pan head screws @ 24 inches on center. (See attached diagram)
2. Walls shall be constructed of 3 5/8 inch metal studs, minimum 20 gauge, at 24 inches on center. Walls shall be braced diagonally to the plywood base plate a minimum of every 6'-0" throughout the length of the wall.
3. All dust walls shall be full height to underside of airport ceiling taking care to avoid fire sprinklers, speakers, security cameras and other airport devices.
4. Top track shall fit tightly to underside of ceiling and be attached to the building structure above with counter sloping 12 gauge wire at 45 degrees minimum to horizontal at a maximum spacing of 6'-0" on center and shall conform to ASTM C636 2.1.4 and 2.3.2-4. Support wires shall be unobstructed; under no circumstances shall support wires attach to or bend around interfering equipment or material. (See attached diagram)
5. Walls shall be sheathed with either 5/8 inch gypsum wall board,  $\frac{1}{2}$  inch fire treated MDF board or  $\frac{1}{2}$  inch fire treated plywood. Seams shall be covered with minimum 3 inch wide masking tape.
6. Walls shall be finished with white semi-gloss paint and four inch black vinyl base.

7. All outside corners shall have corner guard protection in the form of a 3 inch by 3 inch metal plate matching the angle of the corner and extending a minimum of 4'-0" above finish floor.
8. Each dust wall barricade shall be equipped with a pair of inward opening, 3070 hollow metal doors and frame, commercial grade lever lock set with cipher key pad and tamper proof latch plate covers. Doors and frames shall remain unfinished.
9. The General Contractor for the project shall install a project sign on the inactive door identifying the contractor's name and contact information. The maximum size for this sign shall be 30 inches wide by 24 inches tall.
10. Tenant shall provide and cause to be installed upon the barricade an airport approved graphics package consisting of the concept name, rendering of the proposed facility and name of the concessionaire. Proposed graphics must be approved by SLCDA prior to commencement of the dust wall barricade and installation must be completed within the allotted (three night) timeframe.
11. Walk off mats must be maintained immediately inside the doors; mats must cover the full width of both doors and be changed regularly to ensure proper function.
12. Contractor is responsible for ensuring the area outside the dust walls is free of all debris, dust, footprints, etc. during the duration of the project.
13. Construction of dust walls may not commence until Tenant has received a Notice to Proceed (NTP) by SLCDA. Prior to issuance of the NTP Tenant shall submit for approval a properly dimensioned plan in ¼ inch scale or larger (floor and reflected ceiling) depicting the location of the proposed wall(s) in relation to the premises with the Lease Line clearly identified, along with full color elevation(s) illustrating proposed graphics and signage in ½ inch scale or larger.
14. Dust walls may not extend more than 3'-0" beyond Tenant's Lease Line from outside face of wall.
15. Prior to construction of the dust walls, Tenant and or Tenant's general contractor shall conduct an on-site meeting with SLCDA regarding the placement and configuration of the wall(s) to ensure no obstructions to passenger flow or infringement on neighboring Tenant's.

# Appendix G

## LEED Standards

Salt Lake City International Airport is a Gold certified building under the U.S. Green Building Council's Leadership in Energy and Environmental Design, New Building Design & Construction version 2009 rating system. The Landlord's sustainability guidelines address chemical use; indoor air quality; energy efficiency; water efficiency; recycling programs; to meet green building energy, water, indoor air quality, and lighting performance standards. Tenant's should use proven energy and carbon reduction measures, including energy efficient bulbs in task lighting; use of lighting controls; daylighting measures to avoid over lighting interior spaces; closing shades on the south side of the building to avoid over heating the space; turning off lights and equipment at the end of the work day; purchasing ENERGY STAR qualified equipment, including but not limited to lighting, office equipment, commercial and residential quality kitchen equipment, vending and ice machines; and purchasing products certified by the U.S. EPA's Water Sense program.

All sustainable design requirements are addressed in the appendices of the Tenant Design Standards. This section serves as a guide to explain the sustainable design strategies of Salt Lake City International Airport and to aid the Tenant should they choose to pursue LEED v4 for Commercial Interiors or Retail, or another sustainable design certification.

Highlights of the project include:

- The project site is within a ½ mile of a commuter rail station
- Bicycle storage and changing rooms
- Building materials include concrete with recycled fly ash, recycled steel, and regional materials
- Low flow restroom fixtures
- Use of local, drought tolerant landscaping so that potable irrigation water is reduced by 50%

### **SSp1 Construction Activity Pollution Prevention:**

The Salt Lake City International Airport team implemented a construction activity pollution prevention program that exceeded EPA requirements. Strategies included a reinforced silt fence, inlet protection, and temporary seeding.

### **SSc1 Site Selection:**

The core and shell building is not developed on prime farmland, within a flood plain or wetlands area, within a protected habitat, or former public parkland.

### **SSc3 Brownfield Redevelopment:**

The building has rehabilitated a site that previously contained environmental contaminants.

### **SSc4.1 Alternative Transportation, Public Transportation Access:**

Salt Lake City International Airport is located at the terminus of the TRAX Green Linen. TRAX and bus lines serve passengers and staff daily.

LEED CI (LTc3) - In pursuit of LEED for Commercial Interiors, the Tenant's of Salt Lake City International Airport may be able to pursue Location and Transportation Credit 3: Access to Quality Transit for being located within a half mile of the TRAX Station. (LTc3 up to 7 points)

### **SSc4.2 Alternative Transportation, Bicycle Storage and Changing Rooms:**

Secure Bicycle storage is available and showers have been provided for building users at Salt Lake City International Airport.

LEED CI (LTc4) – Tenant's of Salt Lake City International Airport who are pursuing LEED for Commercial Interiors may achieve Location and Transportation Credit 4: Bicycle Facilities. (LTc4 1 point)

### **SSc4.4 Alternative Transportation: Parking Capacity:**

Parking capacity at Salt Lake City International Airport does not exceed the local zoning requirements for the project use types.

LEED CI (LTc5) – Tenant's of Salt Lake City International Airport who are pursuing LEED for Commercial Interiors may be eligible for points from Location and Transportation Credit 5: Reduced Parking Footprint dependent on parking agreements defined by Landlord and Tenant. If Tenant chooses to pursue credit striping for car/vanpool will need to be implemented. (LTc5 up to 2 points)

### **SSc6.2 Stormwater Design, Quality Control:**

The Landlord has invested in a stormwater design to reduce the number of pollutants in stormwater runoff; pollutants can eventually enter local waterways and may cause significant disruption to the health of flora and fauna.

**WEc1 Water Efficient Landscaping:**

Salt Lake City International Airport incorporates climate tolerant plants and drip irrigation systems to reduce the use of potable water resources for landscape irrigation.

Water Use Reduction, 35% Reduction: Low flow fixtures were used for base building fixtures to reduce water usage in Salt Lake City International Airport. Water savings fixtures reduce potable water usage and minimize costs.

**Refer to Appendix C-3 for plumbing fixture requirements.**

**EAc1 Optimize Energy Performance:**

Salt Lake City International Airport has achieved points by demonstrating an improvement in the proposed building performance rating compared to the baseline building performance rating per ASHRAE/IESNA Standard 90.1-2007.

**Refer to Appendix C-2 for energy requirements.**

**EAc3 - Enhanced Commissioning:**

The design team of Salt Lake City International Airport has engaged a Commissioning Agent to ensure that not only are all building energy systems (i.e. Lighting, HVAC, Domestic Hot Water and installed and working properly, but that they are designed properly and that building engineering staff are trained in their ongoing maintenance and operations. (EAc2 5 points)

LEED CI (EAc1) - confirm commissioned systems are designed properly, installed and working properly, and that engineering staff are trained in their ongoing maintenance and operations (EAc1 up to 5 points)

**EAc3 - Enhanced Refrigerant Management:**

The design team of Salt Lake City International Airport has selected refrigerants and heating, ventilating, air conditioning and refrigeration (HVAC&R) that minimize or eliminate the emission of compounds that contribute to ozone depletion and global climate change.

**Refer to Appendix C-2 and C-4 for refrigerant requirements.**

**EAc5.1, 5.2 - Measurement & Verification, Base Building & Tenant Sub-metering:**

The design team of Salt Lake City International Airport developed and M&V plan and installed metering devices to track energy usage. The plan includes information on sub-metering for



tenants in order to monitor tenants energy usage.

LEED CI (EAc3) – It is recommended that Tenant install sub-metering be installed to record energy use. Additional points are available for LEED CI projects if energy costs are paid by the tenant and not included in the base rent. (EAc3 up to 2 points)

**EAc6- Green Power:**

The design team of Salt Lake City International Airport is engaging in at least a 2- year renewable energy contract to provide at least 50% of the tenant’s electricity from renewable sources, as defined by the Center for Resource Solutions’ Green-e energy product certification requirements or an equivalent.

LEED CI (EAc4) – Engage in a contract for qualified resources that have come online since January 1, 2005, for a minimum of five years, to be delivered at least annually. The contract must specify the provision of at least 50% or 100% of the project’s energy from green power, carbon offsets, or renewable energy certificates (RECs). (EAc4 2 points)

**MRp1 - Storage & Collection of Recyclables:**

A recycling infrastructure exists for building occupants.

Recyclables must include, at a minimum: Paper, Cardboard, Glass, Plastics, and Metals (i.e. aluminum and tin cans) and mercury containing items such as fluorescent tubes, CFL’s and batteries. The tenant is required to;

- Comply with all present and future laws, orders and regulations of the Federal, State, county, municipal or other governing authorities, departments, commissions, agencies, and boards regarding the collection, sorting, separation, and recycling of garbage, trash, rubbish, and other refuse
- To sort and separate its trash and recycling into such categories as are provided by law or
- Landlord reserves the right to refuse to collect or accept from the Tenant any waste that is not separated and sorted as required by law, and to require the Tenant to arrange for such collection at the Tenant’s sole cost and expense, utilizing a contractor satisfactory to the Landlord; and Tenant shall pay all costs, expenses, fines, penalties or damages that may be imposed on the Landlord or Tenant by reason of the Tenant’s failure to comply with the provisions.

LEED CI - In pursuit of LEED for Commercial Interiors, these requirements will contribute to Materials and Resources Prerequisite I. Collection points may be provided in any location that is practical for the design team. However, typical collection points are located at the following:

- Paper is collected in copy areas, recommended to be collected at work stations as well
- Glass, Plastics, Metals, cardboard and mixed paper are collected in vending areas, cafeterias, pantries or kitchens
- Small mercury containing items such as batteries are collected in office services or print room areas. Larger mercury items such as fluorescent tubes are collected in the loading dock area
- All collected recyclables will be stored in the loading dock area confirm STA 04 location of the building until pick-up.

**MRc2 - Construction Waste Management, Divert 75% From Disposal:**

The construction team for Salt Lake City International Airport targeted a 75% diversion rate from landfills.

LEED CI (MRc4) - Divert at least 50% or 75% of the total construction and demolition material from landfills; diverted materials must include at least three or four material streams. (MRc2 1 or 2 points)

**MRc4 - Recycled Content, 20% (post-consumer + 1/2 pre-consumer):**

Salt Lake City International Airport has integrated recycled materials within its design constituting at least 20% of Materials cost.

LEED CI (MRc3.2) - Use products and materials for which life cycle information is available and that have environmentally, economically, and socially preferable life cycle impacts. To reward project teams for selecting products verified to have been extracted or sourced in a responsible manner. (MRc3.2 1 or 2 points)

**MRc5 - Regional Materials, 20% Extracted, Processed & Manufactured Regionally:**

Salt Lake City International Airport has integrated materials that have been extracted and manufactured within 500 miles. Materials that must be transported to the project site over long distances have a higher embodied energy than local materials.

LEED CI (MRc3.2) - Use products and materials for which life cycle information is available and that have environmentally, economically, and socially preferable life cycle impacts. To reward project teams for selecting products verified to have been extracted or sourced in a responsible manner. (MRc3.2 1 or 2 points)

**MRc7 - Certified Wood:**

Salt Lake City International Airport has utilized at least 50% FSC wood for all wood materials and products used on the base building. FSC wood ensures that the wood is coming from a well-managed forest that responsibly utilizes the resource.

LEED CI (MRc3.2) - Use products and materials for which life cycle information is available and that have environmentally, economically, and socially preferable life cycle impacts. To reward project teams for selecting products verified to have been extracted or sourced in a responsible manner. (MRc3.2 1 or 2 points)

**IEQp2 - Environmental Tobacco Smoke (ETS) Control:**

Salt Lake City International Airport has a smoking ban in the building. It is the intent of the Landlord to minimize exposure of building occupants, indoor surfaces, and ventilation air distribution systems to Environmental Tobacco Smoke (ETS). Smoking is not permitted within 25' of operable windows, entries and intakes.

LEED CI - The tenant of Salt Lake City International Airport who is pursuing LEED for Commercial Interiors will receive Indoor Environmental Quality Prerequisite 2 for being located within a no-smoking building with appropriate designated non-smoking areas.

**IEQc1 – Outdoor Air Delivery Monitoring:**

Salt Lake City International Airport installed permanent monitoring systems to ensure that ventilation systems maintain design minimum requirements.

**IEQc2 - Increased Ventilation:**

Salt Lake City International Airport’s operating systems exceed ventilation rates required in ASHRAE 62.1-2007 by at least 30% in monitored areas. Studies show that increased ventilation improves employee productivity and reduces absenteeism.

**Refer to Appendix C-2 for ventilation requirements.**

**IEQc3 - Construction IAQ Management Plan, During Construction:**

The construction team implemented an IAQ management plan intended to ensure that indoor air

quality was preserved during construction activities. It is recommended that the tenant develop an IAQ management plan to prevent indoor air quality problems resulting from the construction/renovation process in order to help sustain the comfort and wellbeing of construction workers and building occupants.

Common IAQ management practices include:

- Sealed ductwork if HVAC systems are not used during construction.
- Ductwork must be kept free of particulate matter, food debris, smoke, etc. If the HVAC system is to be used during construction, then the contractor must install temporary filtration at each return air grille with a Minimum Efficiency Reporting Value of 8 (also called MERV 8 filters). These must be replaced immediately prior to occupancy. Some mechanical equipment warranties (e.g. VAV boxes) may be invalidated by the introduction of different filtration media. In this event, the credit is still achievable if the construction team does not use the mechanical equipment, or; leases temporary heating or cooling equipment for use during construction.
- Materials stored on site must be kept dry and clean. For example, drywall sheets should be placed on a pallet off of the ground or indoors, and covered. This is to prevent mold growth as well as to protect the integrity of the materials
- Wet materials, such as paint, should be kept covered when not in use. This prevents those materials from outgassing Volatile Organic Compounds (VOCs).
- Dry materials, such as carpet, should be installed after wet materials, such as paint, have been installed. This is to prevent the wet materials from outgassing VOCs that are then absorbed by the dry materials and released later, when the building is occupied.

LEED CI (IEQc3 and IEQc4): Tenants can implement a similar construction IAQ management plan during the construction of the tenant space to achieve one point in the LEED CI rating system (IEQc31 point).

After construction ends, tenants can also flush out the air in the tenant space, or conduct baseline IAQ testing as proscribed by the U.S. Environmental Protection Agency for an additional LEED CI point (EQ c4 up to 2 points).

#### **IEQc4.1 - 4.4 - Low-Emitting Materials for Adhesives & Sealants, Paints & Coatings, Carpet Systems, and Walls, Ceilings and Insulation:**

The Salt Lake City International Airport design and construction team specified the use of adhesives, sealants, paints, coatings, carpet, carpet cushion, carpet adhesives and composite wood products which meet specific standards for VOC limitations. Such materials have been properly installed in the base building to ensure that they had minimal impact on the air quality of the indoor environment.

LEED CI (IEQc2) - It is recommended that the tenant utilize the USGBC's LEED for Commercial Interiors guidance on low-emitting materials. Tenants can achieve up to 3 LEED-CI ratings system points by using low-emitting building materials for their tenant fit-out. Please refer to the LEED CI rating system/reference guide for specific information on low emitting materials (IEQc2 up to 3 points)

**IEQc5 - Indoor Chemical and Pollutant Source Control:**

The landlord has implemented measures to reduce the opportunities for the introduction of particulate matter and pollutants into future occupied space by following the credit requirements for Indoor Chemical and Pollutant Source Control. Salt Lake City International Airport has included the following in its project design:

- All areas of chemical concentration (e.g. janitor closets) are mechanically and physically separated from the remainder of occupied space.
- Filters with a Minimum Efficiency Reporting Value of 13 (also called MERV 13 filters) are required to be installed by Tenant at all return air grilles (Tenant Lease Agreement requirement)

**Refer to Appendix C-2 for ventilation requirements.**

**IEQc7 - Thermal Comfort Design and Verification:**

Salt Lake City International Airport is in compliance with ASHRAE standard 55 2004 which regulates temperature and humidity levels within the building base on the climate zone. The base buildings HVAC systems are designed to support this requirement. The temperature and humidity levels in the base building are optimized for maximum tenant staff productivity and comfort.

**Refer to Appendix C-2 for thermal comfort requirements.**

**IDc1.1 - Innovation in Design: Education Program:**

Salt Lake City International Airport has implemented a Green Building Education Program to inform building users of the sustainable design features and measures of the project. The base building contains a comprehensive signage program built into the building's spaces to educate the occupants and visitors of the benefits of the building. The Landlord has also development a case study to inform the design of other buildings based on the successes of this project.

LEED CI: In pursuit of LEED for Commercial Interiors, the tenant of Salt Lake City International

Airport would need to independently meet the requirements of this credit for their tenant space.

#### **IDc1.2 - Innovation in Design: Green Cleaning Policy:**

Salt Lake City International Airport has developed a Green Cleaning Policy to reduce the exposure of building occupants and maintenance personnel to potentially hazardous chemical, biological and particulate contaminants. Tenants are required to adhere to the requirements of the Green Cleaning Policy.

LEED CI: In pursuit of LEED for Commercial Interiors, the tenant of Salt Lake City International Airport can achieve an Innovation and Design credit for adhering to the requirements of the Green Cleaning Policy

#### **IDC1.3 - Innovation in Design: PBT source reduction – Mercury**

Salt Lake City International Airport has developed a policy to reduce mercury-containing products. Specific lamp types are prohibited and as part of the recycling program mercury containing products will be collected for proper disposal.

LEED CI: In pursuit of LEED for Commercial Interiors, the tenant of Salt Lake City International Airport can achieve an Innovation and Design credit for adhering to the requirements of the PBT source reduction – Mercury credit in the LEED for healthcare (v4) rating system

#### **IDc1.4 - Innovation in Design: Integrated Pest Management**

Salt Lake City International Airport has implemented a developed an indoor integrated pest management (IPM) plan, to manage indoor pests in a way that protects human health and the surrounding environment and that improves economic returns through the most effective, least-risk option. The IPM calls for using least-toxic chemical pesticides, minimum use of chemicals, use only in targeted locations and use only for targeted species.

**LEED CI:** In pursuit of LEED for Commercial Interiors, the tenant of Salt Lake City International Airport can achieve an Innovation and Design credit for adhering to the requirements of the Integrated Pest Management plan and credit requirements found in the LEED EBOM (v4) rating system.

# Appendix H

## Josam Stainless Steel Specification



Specification 22 13 17 "TENANT GREASE WASTE PIPING"  
APPENDIX



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# JOSAM



COMPLETE  
STAINLESS  
PUSH → FIT  
STEEL  
DRAINAGE SYSTEM™



PUSH-FIT STAINLESS STEEL DRAINAGE SYSTEM

[www.josam.com](http://www.josam.com)

## STAINLESS STEEL DRAINAGE PRODUCTS



Manufactured by ATT Inox

As a compliment to Josam Company's Push-Fit Pipe and Fittings, Josam Company also offers a complete line of stainless steel drains. Josam Company offers a complete range of 304 or 316L floor drains, retrofit liners, cleanouts, trench drains and slot and mini channels. All drainage products are available with an optional Push-Fit outlet (PFO) for an easy connection to the Josam Push-Fit Drainage System.

In addition to standard products, Josam Company welcomes inquiries for customized drainage products to suit individual requirements.

For more details on Josam Company's Stainless Steel Drainage System please refer to the product catalog, contact your local Josam representative or visit our website at [www.JOSAM.com](http://www.JOSAM.com).



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## Josam Company

Throughout its long history, Josam Company has stayed true to the vision of maintaining its reputation as the premier manufacturer of engineered and innovative plumbing and drainage products. Firms worldwide have trusted Josam Company to provide quality and competitive products that meet or exceed their customers' expectations.



Over 25 years ago Josam Company introduced the first Push-Fit stainless steel drainage system to the United States market. Whereas welded stainless steel systems had been available for many years, the advantage of the Josam Push-Fit system is that it enables the installer to obtain all the benefits of stainless steel while reducing the overall cost of installation.

## Chibro



Established in Italy in 1946, Chibro is a leading manufacturer of Push-Fit stainless steel plumbing and drainage systems. Chibro offers a full line of stainless steel pipe, fittings and accessories that provides solutions to various industries including the commercial, marine and industrial segments. Chibro's products are manufactured using innovative technology and in accordance with the internationally recognized ISO 9001 quality management standard.

## Josam Company's Push-Fit Stainless Steel Drainage System

As with all Josam Company products, our mission is to provide superior products that are offered at fair and competitive prices, supported by experience, service and technology.



## Corrosion Resistance



The austenitic chromium nickel steel, used in all Josam pipe and fittings, contains sufficient chromium to form a passive film of chromium oxide which aids in the prevention of surface corrosions. To preserve the chromium oxide layer and further enhance it's anti-corrosive nature, all Josam products are acid pickled. When maintained properly, austenitic 316L

is resistant to many chemical products and most cleaning agents. For further details, see the Chemical Resistance Chart on page 28.

## Fire and Heat Resistance

Due to the high chromium and nickel alloy content, stainless steel is able to retain its strength at extremely high temperatures and when exposed to fire. Additionally, there are no hazardous substances emitted from stainless steel when exposed to fire.

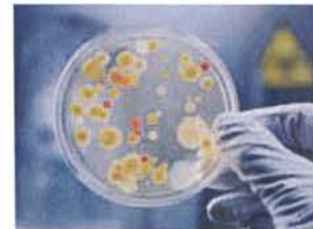


## Environmentally Friendly

Environmental issues have become important criteria for material selection. All Josam stainless steel products are 100% recyclable. In fact, over 50% of new stainless steel comes from end-of-life products.

## Non-Porous

The significantly lower growth of bacteria on stainless steel than on plastics, cast iron, copper or ordinary steel make it the idea solution for applications where hygiene is a concern. The smooth surface of stainless steel does not harbor bacteria, and although maintenance is less frequently required, it can be regularly sanitized with suitable chemicals and flushing without fear of corrosion.



## Durability

Traditionally, the selection of piping materials for a given application has been on the basis of the least expensive initial material cost. It has been recognized that the least expensive material cost may not be the most economic long term choice. The life expectancy of stainless steel piping systems is over 50 years.

### **Aesthetically Pleasing**

The bright and easily maintained surface of stainless steel provides a modern and attractive appearance. In fact stainless steel has been used for the construction of many well known sculptures, building facades and structures.

### **Impact Resistance**

Stainless steel's ability to resist impacts and shocks is excellent at all temperatures. Hard blows to the pipes may cause surface dents but it is extremely difficult to damage the steel or compromise its performance.



### **Thermal Stress Resistance**

Stainless steel has an extremely low coefficient of expansion factor. This benefit allows stainless steel pipes to retain their shapes at all normal temperatures during drainage installations.

### **Strength to Weight Ratio**

Stainless steel is considerably lighter in weight than products produced of other materials. The strength of stainless steel allows products to be made thinner and lighter while still providing a strong and durable system.

### **Part Numbers**

Part numbers are not intended to show compliance to any product standards.





Josam's Push-Fit joining method results in cost effective installations.

## Push-Fit the Josam Way

Josam's Push-Fit joint is accomplished by lubricating the joint and pushing the spigot and socket together. The result of this quick and easy joining method is a tight seal that has been tested and proven suitable for both gravity and vacuum applications. Additionally, test results have demonstrated that the Josam Push-Fit joint is pressure rated at least 4 times higher than other stainless steel push-fit systems.

## Product and Size Range

Josam Company offers a complete range of pipes, fittings and hanging accessories. Pipe and fittings are available in 1-1/2", 2", 3", 4", 6" and 8" nominal pipe sizes. Pipes are available in 8 different lengths ranging from 0.8 feet to 9.8 feet, allowing for minimal field cuts. A complete aaarange of stainless steel drains are also offered by Josam. For further details, please see Josam Company's Stainless Steel Drainage Product catalog

## Packaging

Each pipe length is individually wrapped in a protective plastic covering. Sizeable pipe shipments from Josam are crated for protection against damage during shipment. Small pipe shipments may be shipped in protective tubes.

## Markings

All Josam products are marked in accordance with applicable standards. Markings will include manufacturer's name and/or registered trademark, the grade of stainless steel, Josam name and part number and UPC®.

## Listings and Approvals

Products meet or exceed the performance requirements of ASME A112.3.1-2007 and IGC 275-10. Most Josam products are IAPMO listed under File #6780. Please refer to the IAPMO website or contact Josam Company for a copy of this listing or state and local code approvals. Additional approvals include Registro Italiano Navale, Lloyd's Register, American Bureau of Shipbuilding, Det Norske Veritas, Bureau Veritas and Russian Maritime Register of Shipping. All manufacturing and quality assurance is in accordance with the internationally recognized ISO 9001 standard

## Labor Savings

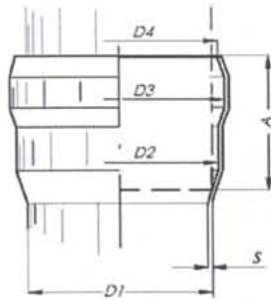
The Josam Push-Fit joining method allows joints to be made in a matter of seconds and does not require any tools. Connections are made by lubricating the spigot end and turning it into the socket end. Additionally, due to the fact that stainless steel is lighter in weight, the product is easier to handle and requires less manpower. Considering these two advantages with the life expectancy of the product, the Josam Push-Fit Stainless Steel System is an economical solution for most applications.



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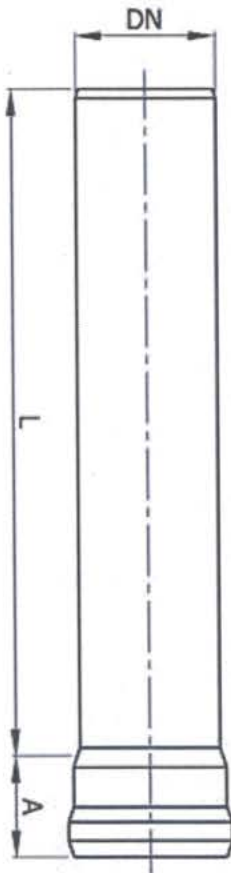




### DIMENSION OF SOCKETS

SERIES NUMBER	PIPE SIZE NOM.	A - MIN INSERT DEPTH	D1 (PIPE O.D.)	D2	D3	D4	S
JP-0100	1½"	1.2 (30)	1.7 (42)	1.8 (45)	1.9 (48)	1.8 (45)	.04 (1.0)
JP-0200	2"	1.5 (38)	2.1 (53)	2.2 (56)	2.4 (60)	2.2 (56)	.04 (1.0)
JP-0300	3"	2.2 (55)	2.9 (73)	3 (76)	3.2 (81)	3 (76)	.05 (1.25)
JP-0400	4"	2.8 (70)	4.0 (102)	4.2 (106)	4.5 (114)	4.2 (107)	.05 (1.25)
JP-0600	6"	3.1 (80)	6.3 (159)	6.5 (164)	6.9 (176)	6.6 (168)	.06 (1.5)
JP-0800	8"	4.7 (120)	8.6 (219)	8.8 (224)	9.5 (241)	8.9 (227)	.08 (2.0)

### PUSH-FIT PIPE WITH EPDM GASKETED SOCKET

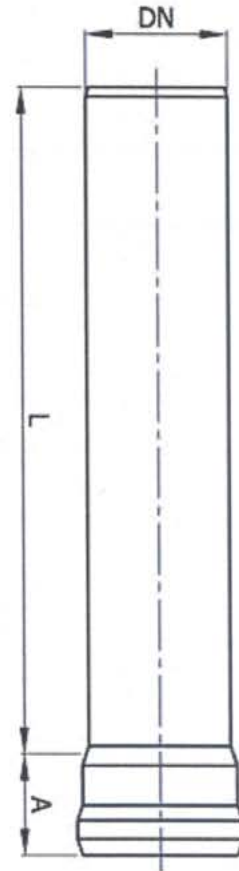


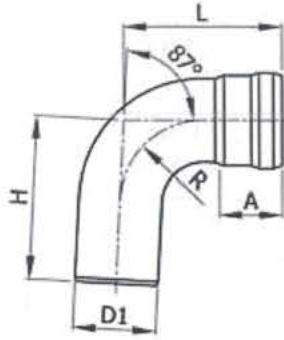
SERIES NUMBER	PIPE SIZE NOM.	A - MIN INSERT DEPTH	L FT.- (MM)	WT LBS.	DN PIPE O.D. IN. - (MM)
JP-0108	1½"	1.2 (30)	0.8 (250)	.75	1.7 (42)
JP-0116	1½"	1.2 (30)	1.6 (500)	1.3	1.7 (42)
JP-0125	1½"	1.2 (30)	2.5 (750)	1.9	1.7 (42)
JP-0133	1½"	1.2 (30)	3.3 (1,000)	2.4	1.7 (42)
JP-0149	1½"	1.2 (30)	4.9 (1,500)	3.5	1.7 (42)
JP-0166	1½"	1.2 (30)	6.6 (2,000)	4.7	1.7 (42)
JP-0182	1½"	1.2 (30)	8.2 (2,500)	6.3	1.7 (42)
JP-0198	1½"	1.2 (30)	9.8 (3,000)	6.7	1.7 (42)
JP-0208	2"	1.5 (38)	0.8 (250)	.93	2.1 (53)
JP-0216	2"	1.5 (38)	1.6 (500)	1.6	2.1 (53)
JP-0225	2"	1.5 (38)	2.5 (750)	2.2	2.1 (53)
JP-0233	2"	1.5 (38)	3.3 (1,000)	3.2	2.1 (53)
JP-0249	2"	1.5 (38)	4.9 (1,500)	4.3	2.1 (53)
JP-0266	2"	1.5 (38)	6.6 (2,000)	5.7	2.1 (53)
JP-0282	2"	1.5 (38)	8.2 (2,500)	6.9	2.1 (53)
JP-0298	2"	1.5 (38)	9.8 (3,000)	8.5	2.1 (53)
JP-0308	3"	2.2 (55)	0.8 (250)	1.6	2.9 (73)
JP-0316	3"	2.2 (55)	1.6 (500)	2.8	2.9 (73)
JP-0325	3"	2.2 (55)	2.5 (750)	4.5	2.9 (73)
JP-0333	3"	2.2 (55)	3.3 (1,000)	5.2	2.9 (73)
JP-0349	3"	2.2 (55)	4.9 (1,500)	7.6	2.9 (73)
JP-0366	3"	2.2 (55)	6.6 (2,000)	10.6	2.9 (73)
JP-0382	3"	2.2 (55)	8.2 (2,500)	12.5	2.9 (73)
JP-0398	3"	2.2 (55)	9.8 (3,000)	14.6	2.9 (73)

# PUSH-FIT STAINLESS STEEL PIPE

## PUSH-FIT PIPE WITH EPDM GASKETED SOCKET (CONT'D)

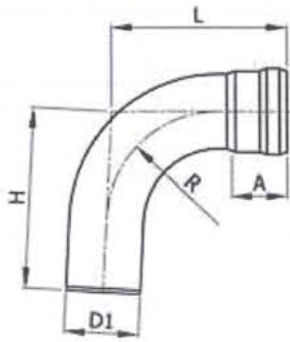
SERIES NUMBER	PIPE SIZE NOM.	A - MIN INSERT DEPTH	L FT. - (MM)	WT LBS.	DN PIPE O.D. IN. - (MM)
JP-0408	4"	2.8 (70)	0.8 (250)	2.4	4.0 (102)
JP-0416	4"	2.8 (70)	1.6 (500)	4.0	4.0 (102)
JP-0425	4"	2.8 (70)	2.5 (750)	5.6	4.0 (102)
JP-0433	4"	2.8 (70)	3.3 (1,000)	7.2	4.0 (102)
JP-0449	4"	2.8 (70)	4.9 (1,500)	10.5	4.0 (102)
JP-0466	4"	2.8 (70)	6.6 (2,000)	14.1	4.0 (102)
JP-0482	4"	2.8 (70)	8.2 (2,500)	16.5	4.0 (102)
JP-0498	4"	2.8 (70)	9.8 (3,000)	19.8	4.0 (102)
JP-0608	6"	3.1 (80)	0.8 (250)	4.6	6.3 (159)
JP-0616	6"	3.1 (80)	1.6 (500)	7.5	6.3 (159)
JP-0625	6"	3.1 (80)	2.5 (750)	10.6	6.3 (159)
JP-0633	6"	3.1 (80)	3.3 (1,000)	13.7	6.3 (159)
JP-0649	6"	3.1 (80)	4.9 (1,500)	19.8	6.3 (159)
JP-0666	6"	3.1 (80)	6.6 (2,000)	26.1	6.3 (159)
JP-0682	6"	3.1 (80)	8.2 (2,500)	32.2	6.3 (159)
JP-0698	6"	3.1 (80)	9.8 (3,000)	38.2	6.3 (159)
JP-0808	8"	4.7 (120)	0.8 (250)	11.0	8.6 (219)
JP-0816	8"	4.7 (120)	1.6 (500)	15.8	8.6 (219)
JP-0825	8"	4.7 (120)	2.5 (750)	21.6	8.6 (219)
JP-0833	8"	4.7 (120)	3.3 (1,000)	27.2	8.6 (219)
JP-0849	8"	4.7 (120)	4.9 (1,500)	36.6	8.6 (219)
JP-0866	8"	4.7 (120)	6.6 (2,000)	50.5	8.6 (219)
JP-0882	8"	4.7 (120)	8.2 (2,500)	63.1	8.6 (219)
JP-0898	8"	4.7 (120)	9.8 (3,000)	67.7	8.6 (219)





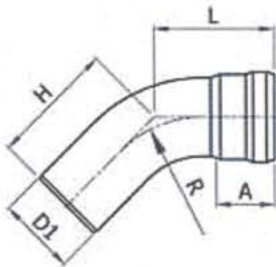
### PUSH-FIT SHORT 1/4 BEND

SERIES NUMBER	PIPE SIZE NOM.	D1 PIPE O.D.	A - MIN INSERT DEPTH	L	H	R	WT LBS
JF-0188	1½	1.7 (42)	1.2 (30)	3.3 (85)	3.5 (88)	1.7 (42)	.48
JF-0190	2	2.1 (53)	1.5 (38)	4.1 (103)	4.2 (106)	2.1 (53)	.70
JF-0192	3	2.9 (73)	2.2 (55)	5.4 (138)	5.6 (142)	2.9 (73)	1.5



### PUSH-FIT SWEEP 1/4 BEND

SERIES NUMBER	PIPE SIZE NOM.	D1 PIPE O.D.	A - MIN INSERT DEPTH	L	H	R	WT LBS
JF-0460	1½	1.7 (42)	1.2 (30)	4.0 (102)	4.1 (105)	2.5 (63)	.44
JF-0462	2	2.1 (53)	1.5 (38)	5.1 (130)	5.2 (133)	3.1 (80)	.77
JF-0464	3	2.9 (73)	2.2 (55)	6.8 (172)	6.9 (176)	4.3 (110)	1.7
JF-0468	4	4.0 (102)	2.8 (70)	7.1 (180)	7.3 (186)	4.0 (102)	2.2
JF-0472	6	6.3 (159)	3.1 (80)	9.6 (244)	9.9 (252)	6.3 (159)	7.6
JF-0474	8	8.6 (219)	4.7 (120)	17.4 (443)	17.8 (452)	12.0 (305)	21.2



### PUSH-FIT 1/8 BEND

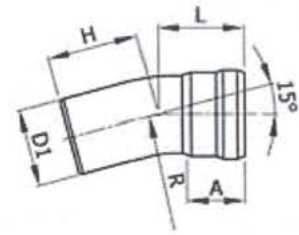
SERIES NUMBER	PIPE SIZE NOM.	D1 PIPE O.D.	A - MIN INSERT DEPTH	L	H	R	WT LBS
JF-0604	1½	1.7 (42)	1.2 (30)	2.7 (68)	2.8 (71)	2.5 (63)	.35
JF-0606	2	2.1 (53)	1.5 (38)	3.3 (85)	3.5 (88)	3.1 (80)	.57
JF-0608	3	2.9 (73)	2.2 (55)	4.4 (112)	4.6 (117)	4.3 (110)	1.3
JF-0610	4	4.0 (102)	2.8 (70)	4.7 (120)	5.0 (126)	4.0 (102)	1.7
JF-0614	6	6.3 (159)	3.1 (80)	6.2 (158)	6.5 (166)	6.3 (159)	4.8
JF-0616	8	8.6 (219)	4.7 (120)	10.7 (271)	11.0 (280)	12.0 (305)	13.0



# PUSH-FIT STAINLESS STEEL FITTINGS

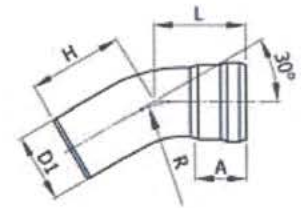
## PUSH-FIT 15 DEGREE BEND

SERIES NUMBER	PIPE SIZE NOM.	D1 PIPE O.D.	A - MIN INSERT DEPTH	L	H	R	WT LBS
JF-0650	1½	1.7 (42)	1.2 (30)	2.0 (51)	2.1 (54)	2.5 (63)	.24
JF-0652	2	2.1 (53)	1.5 (38)	2.4 (62)	2.6 (65)	3.1 (80)	.42
JF-0654	3	2.9 (73)	2.2 (55)	3.2 (82)	3.4 (86)	4.3 (110)	.88
JF-0656	4	4.0 (102)	2.8 (70)	3.8 (96)	4.0 (101)	4.0 (102)	1.2
JF-0660	6	6.3 (159)	3.1 (80)	4.5 (114)	4.8 (121)	6.3 (159)	3.7
JF-0662	8	8.6 (219)	4.7 (120)	6.9 (176)	7.3 (185)	12.0 (305)	8.8



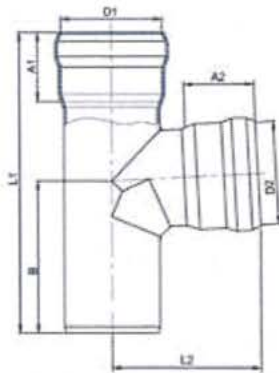
## PUSH-FIT 30 DEGREE BEND

SERIES NUMBER	PIPE SIZE NOM.	D1 PIPE O.D.	A - MIN INSERT DEPTH	L	H	R	WT LBS
JF-0720	1½	1.7 (42)	1.2 (30)	2.3 (59)	2.4 (62)	2.5 (63)	.26
JF-0722	2	2.1 (53)	1.5 (38)	2.9 (73)	3.0 (76)	3.1 (80)	.44
JF-0724	3	2.9 (73)	2.2 (55)	3.9 (98)	4.0 (102)	4.3 (110)	1.0
JF-0726	4	4.0 (102)	2.8 (70)	4.3 (110)	4.5 (115)	4.0 (102)	1.8
JF-0730	6	6.3 (159)	3.1 (80)	5.4 (136)	5.6 (143)	6.3 (159)	3.7
JF-0732	8	8.6 (219)	4.7 (120)	8.7 (221)	9.1 (230)	12.0 (305)	9.4



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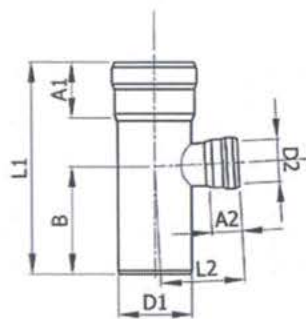
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### PUSH-FIT SANITARY SWEEP TEE

SERIES NUMBER	PIPE SIZE NOM.	D1 PIPE O.D.	D2 PIPE O.D.	A1 - MIN INSERT DEPTH	A2 - MIN INSERT DEPTH	L1	L2	B	WT LBS
JF-0810	2X2	2.1 (53)	2.1 (53)	1.5 (38)	1.5 (38)	6.6 (166)	3.2 (81)	3.3 (84)	.64
JF-0814	3X2	2.9 (73)	2.1 (53)	2.2 (55)	1.5 (38)	8.3 (210)	3.6 (91)	4.2 (106)	1.2
JF-0816	3X3	2.9 (73)	2.9 (73)	2.2 (55)	2.2 (55)	8.3 (210)	4.3 (109)	4.2 (106)	1.3
JF-0818	4X2	4.0 (102)	2.1 (53)	2.8 (70)	1.5 (38)	9.0 (228)	4.1 (105)	4.5 (115)	1.8
JF-0820	4X3	4.0 (102)	2.9 (73)	2.8 (70)	2.2 (55)	11.5 (293)	4.8 (123)	5.8 (147)	2.4
JF-0822	4X4	4.0 (102)	4.0 (102)	2.8 (70)	2.8 (70)	11.5 (293)	5.4 (138)	5.8 (147)	1.7

### PUSH-FIT TEE



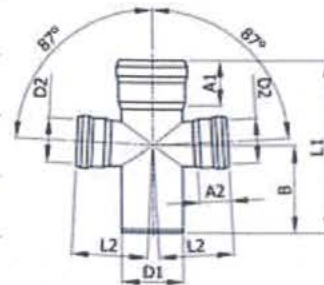
SERIES NUMBER	PIPE SIZE NOM.	D1 PIPE O.D.	D2 PIPE O.D.	A1 - MIN INSERT DEPTH	A2 - MIN INSERT DEPTH	L1	L2	B	WT LBS
JF-0902	1½X1½	1.7 (42)	1.7 (42)	1.2 (30)	1.2 (30)	5.4 (137)	2.6 (67)	2.8 (70)	.48
JF-0904	2X1½	2.1 (53)	1.7 (42)	1.5 (38)	1.2 (30)	6.5 (165)	2.9 (73)	3.3 (84)	.88
JF-0906	2X2	2.1 (53)	2.1 (53)	1.6 (38)	1.6 (38)	6.5 (165)	3.2 (81)	3.3 (84)	.81
JF-0908	3X1½	2.9 (73)	1.7 (42)	2.2 (55)	1.2 (30)	8.2 (209)	3.3 (83)	4.2 (107)	1.3
JF-0910	3X2	2.9 (73)	2.1 (53)	2.2 (55)	1.6 (38)	8.2 (209)	3.6 (91)	4.2 (107)	1.2
JF-0912	3X3	2.9 (73)	2.9 (73)	2.2 (55)	2.2 (55)	8.2 (209)	4.3 (109)	4.2 (107)	1.7
JF-0914	4X1½	4.0 (102)	1.7 (42)	2.8 (70)	1.2 (30)	8.5 (216)	3.8 (97)	4.4 (111)	1.7
JF-0916	4X2	4.0 (102)	2.1 (53)	2.8 (70)	1.5 (38)	8.5 (216)	4.1 (105)	4.4 (111)	2.1
JF-0918	4X3	4.0 (102)	2.9 (73)	2.8 (70)	2.2 (55)	11.4 (291)	4.8 (123)	5.8 (148)	2.6
JF-0920	4X4	4.0 (102)	4.0 (102)	2.8 (70)	2.8 (70)	11.4 (291)	5.4 (138)	5.8 (148)	3.3
JF-0926	6X3	6.3 (159)	2.9 (73)	3.1 (80)	2.2 (55)	13.5 (343)	6.0 (152)	6.9 (175)	5.0
JF-0928	6X4	6.3 (159)	4.0 (102)	3.1 (80)	2.8 (70)	13.5 (343)	6.5 (166)	6.9 (175)	5.2
JF-0930	6X6	6.3 (159)	6.3 (159)	3.1 (80)	3.1 (80)	15.9 (403)	7.0 (178)	8.1 (205)	6.6
JF-0934	8X4	8.6 (219)	4.0 (102)	4.7 (120)	2.8 (70)	17.4 (441)	7.7 (196)	8.9 (225)	12.7
JF-0936	8X6	8.6 (219)	6.3 (159)	4.7 (120)	3.1 (80)	17.4 (441)	8.2 (208)	8.9 (225)	11.2
JF-0938	8X8	8.6 (219)	8.6 (219)	4.7 (120)	4.7 (120)	19.3 (491)	9.8 (249)	9.8 (250)	22.0





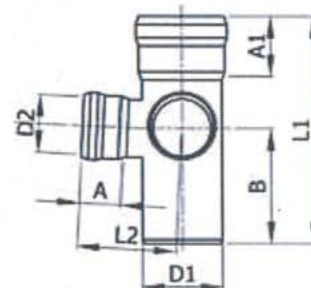
### PUSH-FIT CROSS

SERIES NUMBER	PIPE SIZE NOM.	D1 PIPE O.D.	D2 PIPE O.D.	A1 - MIN INSERT DEPTH	A2 - MIN INSERT DEPTH	L1	L2	B	WT LBS
JF-1851	2X1½	2.1 (53)	1.7 (42)	1.5 (38)	1.2 (30)	6.5 (165)	2.9 (73)	3.3 (84)	1.3
JF-1852	2X2	2.1 (53)	2.1 (53)	1.5 (38)	1.5 (38)	6.5 (165)	3.2 (81)	3.3 (84)	1.2
JF-1854	3X2	2.9 (73)	2.1 (53)	2.2 (55)	1.5 (38)	7.6 (192)	3.6 (91)	3.9 (98)	1.6
JF-1856	3X3	2.9 (73)	2.9 (73)	2.2 (55)	2.2 (55)	8.2 (209)	4.3 (109)	4.2 (107)	2.0
JF-1860	4X3	4.0 (102)	2.9 (73)	2.8 (70)	2.2 (55)	11.5 (291)	4.8 (123)	5.8 (148)	3.4
JF-1862	4X4	4.0 (102)	4.0 (102)	2.8 (70)	2.8 (70)	11.5 (291)	5.4 (138)	5.8 (148)	4.0
JF-1864	6X4	6.3 (159)	4.0 (102)	3.1 (80)	2.8 (70)	13.5 (343)	6.5 (166)	6.9 (175)	5.9
JF-1867	6X6	6.3 (159)	6.3 (159)	3.1 (80)	3.1 (80)	15.9 (403)	7.0 (178)	8.1 (205)	7.0
JF-1874	8X4	8.6 (219)	4.0 (102)	4.7 (120)	2.8 (70)	17.4 (441)	7.7 (196)	8.9 (225)	11.0
JF-1877	8X6	8.6 (219)	6.3 (159)	4.7 (120)	3.1 (80)	17.4 (441)	8.2 (208)	8.9 (225)	12.7
JF-1878	8X8	8.6 (219)	8.6 (219)	4.7 (120)	4.7 (120)	19.3 (491)	9.8 (249)	9.8 (250)	20.2



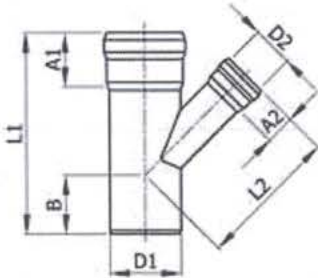
### PUSH-FIT OFFSET DOUBLE TEE

SERIES NUMBER	PIPE SIZE NOM.	D1 PIPE O.D.	D2 PIPE O.D.	A1 - MIN INSERT DEPTH	A2 - MIN INSERT DEPTH	L1	L2	B	WT LBS
JF-1920	2X1½	2.1 (53)	1.7 (42)	1.5 (38)	1.2 (30)	6.5 (165)	2.9 (73)	3.3 (84)	.90
JF-1922	2X2	2.1 (53)	2.1 (53)	1.5 (38)	1.5 (38)	6.5 (165)	3.2 (81)	3.3 (84)	.77
JF-1926	3X2	2.9 (73)	2.1 (53)	2.2 (55)	1.5 (38)	7.6 (192)	3.6 (91)	3.9 (98)	1.6
JF-1928	3X3	2.9 (73)	2.9 (73)	2.2 (55)	2.2 (55)	8.2 (209)	4.3 (109)	4.2 (107)	2.0
JF-1934	4X3	4.0 (102)	2.9 (73)	2.8 (70)	2.2 (55)	11.5 (291)	4.8 (123)	5.8 (148)	3.2
JF-1936	4X4	4.0 (102)	4.0 (102)	2.8 (70)	2.8 (70)	11.5 (291)	5.4 (138)	5.8 (148)	4.0
JF-1944	6X4	6.3 (159)	4.0 (102)	3.1 (80)	2.8 (70)	13.5 (343)	6.5 (166)	6.9 (175)	5.4
JF-1952	6X6	6.3 (159)	6.3 (159)	3.1 (80)	3.1 (80)	15.9 (403)	7.0 (178)	8.1 (205)	7.0
JF-1956	8X4	8.6 (219)	4.0 (102)	4.7 (120)	2.8 (70)	17.4 (441)	7.7 (196)	8.9 (225)	11.2
JF-1960	8X6	8.6 (219)	6.3 (159)	4.7 (120)	3.1 (80)	17.4 (441)	8.2 (208)	8.9 (225)	12.1
JF-1962	8X8	8.6 (219)	8.6 (219)	4.7 (120)	4.7 (120)	19.3 (491)	9.8 (249)	9.8 (250)	20.2



### PUSH-FIT 45 DEGREE WYE

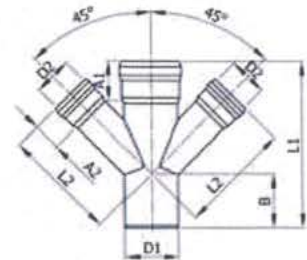
SERIES NUMBER	PIPE SIZE NOM.	D1 PIPE O.D.	D2 PIPE O.D.	A1 - MIN INSERT DEPTH	A2 - MIN INSERT DEPTH	L1	L2	B	WT LBS
JF-1312	1½X1½	1.7 (42)	1.7 (42)	1.2 (30)	1.2 (30)	6.1 (155)	3.9 (100)	2.2 (55)	.60
JF-1313	2X1½	2.1 (53)	1.7 (42)	1.5 (38)	1.2 (30)	7.8 (198)	5.8 (148)	2.6 (65)	.88
JF-1314	2X2	2.1 (53)	2.1 (53)	1.5 (38)	1.5 (38)	7.8 (198)	5.2 (133)	2.6 (65)	1.0
JF-1315	3X1½	2.9 (73)	1.7 (42)	2.2 (55)	1.2 (30)	8.1 (205)	5.7 (145)	2.4 (60)	1.3
JF-1316	3X2	2.9 (73)	2.1 (53)	2.2 (55)	1.5 (38)	9.1 (230)	6.1 (155)	3.0 (75)	1.3
JF-1318	3X3	2.9 (73)	2.9 (73)	2.2 (55)	2.2 (55)	10.0 (255)	6.7 (170)	3.3 (85)	2.0
JF-1319	4X1½	4.0 (102)	1.7 (42)	2.8 (70)	1.2 (30)	9.8 (250)	7.3 (185)	2.6 (65)	1.7
JF-1320	4X2	4.0 (102)	2.1 (53)	2.8 (70)	1.5 (38)	10.6 (270)	7.7 (195)	3.0 (75)	2.1
JF-1322	4X3	4.0 (102)	2.9 (73)	2.8 (70)	2.2 (55)	11.8 (300)	8.3 (210)	3.5 (90)	2.6
JF-1324	4X4	4.0 (102)	4.0 (102)	2.8 (70)	2.8 (70)	13.2 (335)	8.9 (225)	4.3 (110)	3.4
JF-1336	6X3	6.3 (159)	2.9 (73)	3.1 (80)	2.2 (55)	13.2 (335)	10.0 (255)	3.1 (80)	5.0
JF-1338	6X4	6.3 (159)	4.0 (102)	3.1 (80)	2.8 (70)	14.6 (370)	11.1 (281)	3.5 (89)	5.2
JF-1342	6X6	6.3 (159)	6.3 (159)	3.1 (80)	3.1 (80)	18.1 (460)	12.6 (320)	5.5 (140)	8.5
JF-1348	8X4	8.6 (219)	4.0 (102)	4.7 (120)	2.8 (70)	17.5 (445)	13.6 (345)	3.9 (100)	12.7
JF-1352	8X6	8.6 (219)	6.3 (159)	4.7 (120)	3.1 (80)	21.3 (540)	15.4 (390)	5.9 (150)	11.2
JF-1354	8X8	8.6 (219)	8.6 (219)	4.7 (120)	4.7 (120)	24.4 (620)	16.9 (430)	7.5 (190)	22.0





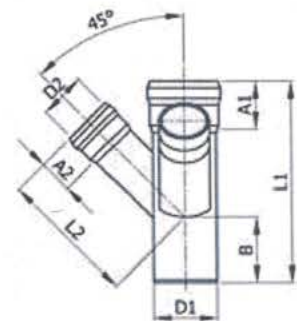
### PUSH-FIT 45 DEGREE DOUBLE WYE

SERIES NUMBER	PIPE SIZE NOM.	D1 PIPE O.D.	D2 PIPE O.D.	A1 - MIN INSERT DEPTH	A2 - MIN INSERT DEPTH	L1	L2	B	WT LBS
JF-1537	2X1½	2.1 (53)	1.7 (42)	1.5 (38)	1.2 (30)	7.8 (198)	5.8 (148)	2.6 (65)	.77
JF-1538	2X2	2.1 (53)	2.1 (53)	1.5 (38)	1.5 (38)	7.8 (198)	5.2 (133)	2.6 (65)	1.17
JF-1540	3X2	2.9 (73)	2.1 (53)	2.2 (55)	1.5 (38)	9.1 (230)	6.1 (155)	3.0 (75)	1.8
JF-1542	3X3	2.9 (73)	2.9 (73)	2.2 (55)	2.2 (55)	10.0 (255)	6.7 (170)	3.3 (85)	2.2
JF-1546	4X3	4.0 (102)	2.9 (73)	2.8 (70)	2.2 (55)	11.8 (300)	8.3 (210)	3.5 (90)	3.3
JF-1548	4X4	4.0 (102)	4.0 (102)	2.8 (70)	2.8 (70)	13.2 (335)	8.9 (225)	4.3 (110)	3.4
JF-1552	6X4	6.3 (159)	4.0 (102)	3.1 (80)	2.8 (70)	14.6 (370)	11.1 (281)	3.5 (89)	6.6
JF-1554	6X6	6.3 (159)	6.3 (159)	3.1 (80)	3.1 (80)	18.1 (460)	12.6 (320)	5.5 (140)	8.5
JF-1556	8X4	8.6 (219)	4.0 (102)	4.7 (120)	2.8 (70)	17.5 (445)	13.6 (345)	3.9 (100)	12.4
JF-1557	8X6	8.6 (219)	6.3 (159)	4.7 (120)	3.1 (80)	21.3 (540)	15.4 (390)	5.9 (150)	15.0
JF-1558	8x8	8.6 (219)	8.6 (219)	4.7 (120)	4.7 (120)	24.4 (620)	16.9 (430)	7.5 (190)	22.0



### PUSH-FIT 90 DEGREE OFFSET DOUBLE WYE

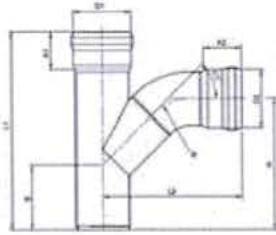
SERIES NUMBER	PIPE SIZE NOM.	D1 PIPE O.D.	D2 PIPE O.D.	A1 - MIN INSERT DEPTH	A2 - MIN INSERT DEPTH	L1	L2	B	WT LBS
JF-1602	2X1½	2.1 (53)	1.7 (42)	1.5 (38)	1.2 (30)	6.1 (168)	4.6 (118)	2.0 (50)	.77
JF-1604	2X2	2.1 (53)	2.1 (53)	1.5 (38)	1.5 (38)	7.4 (188)	5.2 (133)	2.6 (65)	1.0
JF-1608	3X2	2.9 (73)	2.1 (53)	2.2 (55)	1.5 (38)	9.1 (230)	6.1 (155)	3.0 (75)	1.9
JF-1610	3X3	2.9 (73)	2.9 (73)	2.2 (55)	2.2 (55)	10.0 (255)	6.7 (170)	3.3 (85)	2.2
JF-1616	4X3	4.0 (102)	2.9 (73)	2.8 (70)	2.2 (55)	11.8 (300)	8.3 (210)	3.5 (90)	4.2
JF-1618	4X4	4.0 (102)	4.0 (102)	2.8 (70)	2.8 (70)	13.2 (335)	8.9 (225)	4.3 (110)	5.3
JF-1626	6X4	6.3 (159)	4.0 (102)	3.1 (80)	2.8 (70)	14.6 (370)	10.8 (275)	3.7 (95)	6.6
JF-1630	6X6	6.3 (159)	6.3 (159)	3.1 (80)	3.1 (80)	18.1 (460)	12.6 (320)	5.5 (140)	10.8
JF-1632	8X4	8.6 (219)	4.0 (102)	4.7 (120)	2.8 (70)	17.5 (445)	13.6 (345)	3.9 (100)	13.3
JF-1636	8X6	8.6 (219)	6.3 (159)	4.7 (120)	3.1 (80)	21.3 (540)	15.4 (390)	5.9 (150)	18.0
JF-1638	8x8	8.6 (219)	8.6 (219)	4.7 (120)	4.7 (120)	24.4 (620)	16.9 (430)	7.5 (190)	26.0





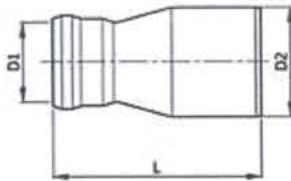
**PUSH-FIT COMBINATION WYE AND 1/8 BEND**

SERIES NUMBER	PIPE SIZE NOM.	D1 PIPE O.D.	D2 PIPE O.D.	A1 - MIN INSERT DEPTH	A2 - MIN INSERT DEPTH	L1	L2	H	B	WT LBS
JF-1698	2X2	2.1 (53)	2.1 (53)	1.5 (38)	1.5 (38)	7.8 (198)	5.5 (140)	5.2 (131)	2.6 (65)	1.0
JF-1700	3X2	2.9 (73)	2.1 (53)	2.2 (55)	1.5 (38)	9.1 (230)	5.9 (150)	5.9 (151)	3.0 (75)	1.5
JF-1702	3X3	2.9 (73)	2.9 (73)	2.2 (55)	2.2 (55)	10.0 (255)	7.4 (187)	6.9 (174)	3.3 (85)	2.1
JF-1704	4X2	4.0 (102)	2.1 (53)	2.8 (70)	1.5 (38)	10.6 (270)	6.5 (165)	6.5 (166)	3.0 (75)	2.2
JF-1706	4X3	4.0 (102)	2.9 (73)	2.8 (70)	2.2 (55)	11.8 (300)	8.0 (202)	7.6 (194)	3.5 (90)	2.9
JF-1708	4X4	4.0 (102)	4.0 (102)	2.8 (70)	2.8 (70)	13.2 (335)	9.5 (242)	9.1 (232)	4.3 (110)	3.7
JF-1722	6X4	6.3 (159)	4.0 (102)	3.1 (80)	2.8 (70)	14.6 (370)	10.7 (271)	9.4 (240)	3.5 (89)	6.6
JF-1726	6X6	6.3 (159)	6.3 (159)	3.1 (80)	3.1 (80)	18.1 (460)	13.7 (347)	13.0 (329)	5.5 (140)	9.2



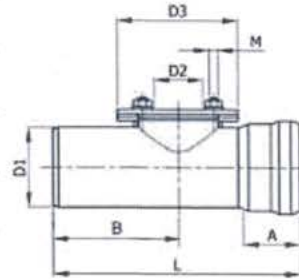
**PUSH-FIT CONCENTRIC METRIC ADAPTER**

SERIES NUMBER	PIPE SIZE MM X MM	D1 PIPE O.D.	D2 PIPE O.D.	L	WT LBS
JF-2003	53X50	53	50	98	.28
JF-2004	50X53	50	53	96	.29
JF-2005	73X75	73	75	137	.65
JF-2006	75X73	75	73	137	.64
JF-2007	102X110	102	110	190	1.1
JF-2008	159X160	159	160	210	2.6
JF-2009	219X200	219	200	300	5.3
JF-2010	219X250	219	250	315	5.3



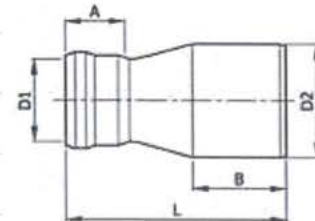
### PUSH-FIT ACCESS PIPE

SERIES NUMBER	PIPE SIZE NOM.	D1 PIPE O.D.	D2 PIPE O.D.	D3	A - MIN INSERT DEPTH	L	M	B	WT LBS
JF-2045	1½	1.7 (42)	1.7 (42)	2.8 (70)	1.2 (30)	5.4 (137)	M6	2.8 (70)	.77
JF-2046	2	2.1 (53)	2.1 (53)	3.1 (80)	1.5 (38)	6.5 (165)	M6	3.3 (84)	1.1
JF-2048	3	2.9 (73)	2.9 (73)	4.1 (105)	2.2 (55)	8.9 (225)	M8	4.5 (115)	2.0
JF-2050	4	4.0 (102)	3.5 (89)	4.9 (125)	2.8 (70)	11.5 (291)	M8	5.8 (148)	3.1
JF-2054	6	6.3 (159)	5.2 (133)	6.5 (165)	3.1 (80)	15.9 (403)	M8	8.1 (205)	7.0
JF-2056	8	8.6 (219)	5.2 (133)	6.5 (165)	4.7 (120)	17.4 (441)	M8	8.9 (225)	12.1



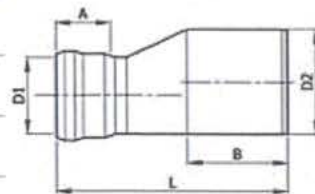
### PUSH-FIT CONCENTRIC REDUCER

SERIES NUMBER	PIPE SIZE NOM.	D1 PIPE O.D.	D2 PIPE O.D.	A - MIN INSERT DEPTH	L	B	WT LBS
JF-2138	2X1½	1.7 (42)	2.1 (53)	1.2 (30)	4.7 (120)	2.4 (62)	.42
JF-2139	3X1½	1.7 (42)	2.9 (73)	1.2 (30)	5.7 (145)	2.6 (65)	.51
JF-2140	3X2	2.1 (53)	2.9 (73)	1.5 (38)	5.5 (140)	2.6 (65)	.57
JF-2142	4X2	2.1 (53)	4.0 (102)	1.5 (38)	7.1 (180)	3.3 (85)	1.1
JF-2144	4X3	2.9 (73)	4.0 (102)	2.2 (55)	7.5 (190)	3.3 (85)	1.3
JF-2156	6X4	4.0 (102)	6.3 (159)	2.8 (70)	9.8 (250)	3.5 (90)	2.5
JF-2168	8X6	6.3 (159)	8.6 (219)	3.1 (80)	11.8 (300)	5.1 (130)	6.1

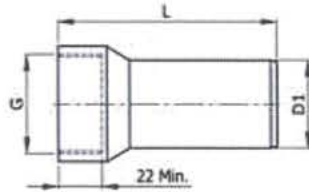


### PUSH-FIT ECCENTRIC REDUCER

SERIES NUMBER	PIPE SIZE NOM.	D1 PIPE O.D.	D2 PIPE O.D.	A - MIN INSERT DEPTH	L	B	WT LBS
JF-2188	2X1½	1.7 (42)	2.1 (53)	1.2 (30)	5.1 (130)	2.2 (55)	.42
JF-2190	3X2	2.1 (53)	2.9 (73)	1.5 (38)	6.3 (160)	2.6 (65)	.79
JF-2192	4X2	2.1 (53)	4.0 (102)	1.5 (38)	7.5 (190)	3.1 (80)	1.5
JF-2194	4X3	2.9 (73)	4.0 (102)	2.2 (55)	7.9 (200)	3.1 (80)	1.8

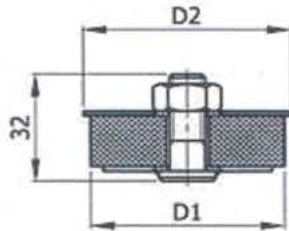


### PUSH-FIT FEMALE THREADED ADAPTER



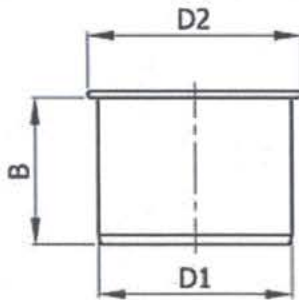
SERIES NUMBER	PIPE SIZE NOM.	D1 PIPE O.D.	G	L	WT LBS
JF-2300	1½"X1"	1.7 (42)	1"	5.5 (140)	.81
JF-2302	1½"X1¼"	1.7 (42)	1¼"	5.5 (140)	.68
JF-2306	1½"X1½"	1.7 (42)	1½"	5.5 (140)	.77
JF-2310	2"X1¼"	2.1 (53)	1¼"	5.5 (140)	.86
JF-2312	2"X1½"	2.1 (53)	1½"	5.5 (140)	.75
JF-2314	2"X2"	2.1 (53)	2"	5.5 (140)	1.2

### PUSH-FIT EXPANSION PLUG



SERIES NUMBER	PIPE SIZE NOM.	D1	D2	WT LBS
JF-2460	1½"	1.7 (43)	1.9 (47)	.18
JF-2462	2"	2.1 (54)	2.3 (58)	.26
JF-2464	3"	2.9 (74)	3.1 (79)	.44
JF-2466	4"	4.1 (105)	4.3 (110)	1.0

### PUSH-FIT BLIND PLUG

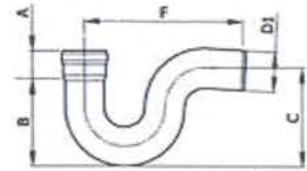


SERIES NUMBER	PIPE SIZE NOM.	D1 PIPE O.D.	D2	B	WT LBS
JF-2480	1½"	1.7 (42)	2.0 (50)	1.2 (30)	.15
JF-2482	2"	2.1 (53)	2.4 (60)	1.5 (38)	.22
JF-2484	3"	2.9 (73)	3.1 (80)	2.2 (55)	.46
JF-2486	4"	4.0 (102)	4.4 (112)	2.8 (70)	1.1
JF-2490	6"	6.3 (159)	6.9 (174)	3.1 (80)	1.9
JF-2492	8"	8.6 (219)	9.4 (239)	4.7 (120)	4.5



### PUSH-FIT P-TRAP

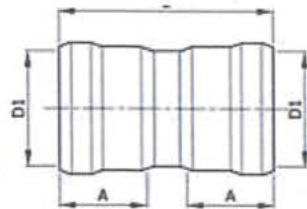
SERIES NUMBER	PIPE SIZE NOM.	D1 PIPE O.D.	A - MIN INSERT DEPTH	B	C	F	WT LBS
JF-2506	1½	1.7 (42)	1.2 (30)	3.0 (76)	4.1 (105)	6.8 (172)	1.0
JF-2508	2	2.1 (53)	1.5 (38)	3.6 (92)	5.2 (133)	8.3 (212)	1.2
JF-2510	3	2.9 (73)	2.2 (55)	4.7 (120)	7.2 (183)	11.3 (288)	2.7
JF-2512	4	4.0 (102)	2.8 (70)	6.3 (161)	10.2 (260)	15.4 (390)	5.0
JF-2514	6	6.3 (159)	3.1 (80)	9.2 (235)	15.6 (398)	22.0 (558)	11.2



\*\*CO option (P-Trap with Cleanout available upon request)

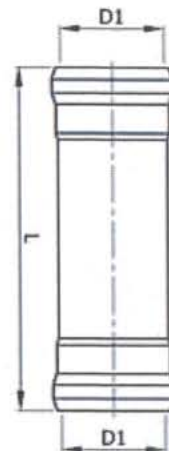
### PUSH-FIT DOUBLE COUPLING

SERIES NUMBER	PIPE SIZE NOM.	D1 PIPE O.D.	A - MIN INSERT DEPTH	L	WT LBS
JF-6499	1½	1.7 (42)	1.2 (30)	3.3 (84)	.26
JF-6500	2	2.1 (53)	1.5 (38)	3.7 (94)	.46
JF-6501	3	2.9 (73)	2.2 (55)	5.3 (135)	.73
JF-6502	4	4.0 (102)	2.8 (70)	7.1 (180)	1.3
JF-6504	6	6.3 (159)	3.1 (80)	7.9 (200)	4.1
JF-6505	8	8.6 (219)	4.7 (120)	11.4 (290)	7.2

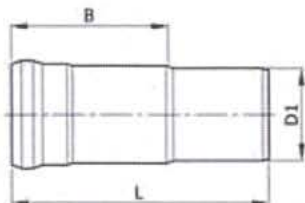


### PUSH-FIT SLIP COUPLING

SERIES NUMBER	PIPE SIZE NOM.	D1 PIPE O.D.	L	WT LBS
JF-6550	1½	1.7 (42)	5.6 (142)	.40
JF-6552	2	2.1 (53)	6.9 (176)	.62
JF-6554	3	2.9 (73)	10.0 (255)	.57
JF-6556	4	4.0 (102)	13.1 (334)	2.4
JF-6560	6	6.3 (159)	18.6 (473)	5.5
JF-6562	8	8.6 (219)	26.5 (673)	12.0

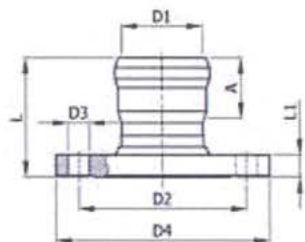


### PUSH-FIT LONG EXPANSION SOCKET



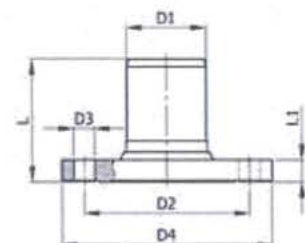
SERIES NUMBER	PIPE SIZE NOM.	D1 PIPE O.D.	B	L	WT LBS
JF-6570	1-1/2"	1.7 (42)	2.8 (70)	4.7 (120)	.31
JF-6572	2"	2.1 (53)	3.7 (95)	6.1 (155)	.51
JF-6574	3"	2.9 (73)	5.5 (140)	8.1 (205)	1.1
JF-6576	4"	4.0 (102)	5.9 (150)	9.4 (240)	2.1
JF-6580	6"	6.3 (159)	6.7 (170)	11.2 (285)	3.3
JF-6582	8"	8.6 (219)	9.8 (250)	15.7 (400)	10.6

### PUSH-FIT 150# FEMALE FLANGE ADAPTER



SERIES NUMBER	PIPE SIZE NOM.	D1 PIPE O.D.	D2	D3	D4	A - MIN INSERT DEPTH	L	L1	WT LBS
JF-9000	1-1/2"	1.7 (42)	3.9 (98)	.63 (16)	5.0 (127)	1.2 (30)	2.8 (71)	.69 (18)	4.2
JF-9002	2"	2.1 (53)	4.7 (121)	.75 (19)	6.0 (152)	1.5 (38)	3.1 (80)	.75 (19)	5.1
JF-9004	3"	2.9 (73)	5.5 (140)	.75 (19)	7.0 (178)	2.2 (55)	4.0 (101)	.87 (22)	7.9
JF-9006	4"	4.0 (102)	7.5 (191)	.75 (19)	9.0 (229)	2.8 (70)	4.6 (118)	.94 (24)	13.2
JF-9010	6"	6.3 (159)	9.5 (241)	.87 (22)	11.0 (279)	3.1 (80)	5.2 (131)	1.0 (25)	19.8
JF-9012	8"	8.6 (219)	11.8 (299)	.87 (22)	13.5 (343)	4.7 (120)	6.9 (175)	1.1 (29)	29.7

### PUSH-FIT 150# MALE FLANGE ADAPTER



SERIES NUMBER	PIPE SIZE NOM.	D1 PIPE O.D.	D2	D3	D4	L	L1	WT LBS
JF-9016	1-1/2"	1.7 (42)	3.9 (98)	.63 (16)	5.0 (127)	2.5 (65)	.69 (18)	4.2
JF-9018	2"	2.1 (53)	4.7 (121)	.75 (19)	6.0 (152)	3.0 (76)	.75 (19)	5.1
JF-9020	3"	2.9 (73)	5.5 (140)	.75 (19)	7.0 (178)	3.9 (99)	.87 (22)	7.9
JF-9022	4"	4.0 (102)	7.5 (191)	.75 (19)	9.0 (229)	5.2 (131)	.94 (24)	13.2
JF-9026	6"	6.3 (159)	9.5 (241)	.87 (22)	11.0 (279)	6.8 (173)	1.0 (25)	19.8
JF-9028	8"	8.6 (219)	11.8 (299)	.87 (22)	13.5 (343)	8.1 (206)	1.1 (29)	29.7

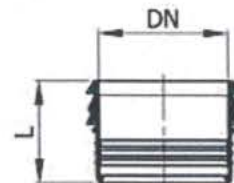
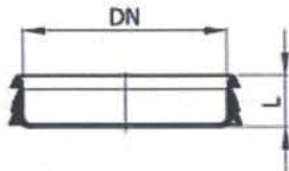


## PUSH-FIT EPDM GASKETS

### GRAVITY APPLICATIONS

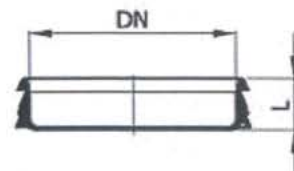
### VACUUM APPLICATIONS

SERIES NUMBER	PIPE SIZE NOM.	L	SERIES NUMBER	PIPE SIZE NOM.	L
JP-EPDM-0100	1½	.59 (15)	JP-EPDM-0100V	1½	1.4 (35)
JP-EPDM-0200	2	.71 (18)	JP-EPDM-0200V	2	1.7 (43)
JP-EPDM-0300	3	.83 (21)	JP-EPDM-0300V	3	2.4 (60)
JP-EPDM-0400	4	1.1 (27)			
JP-EPDM-0600	6	1.4 (35)			
JP-EPDM-0800	8	2.0 (50)			



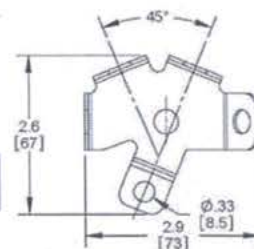
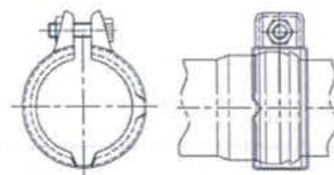
## PUSH-FIT FPM GASKETS

SERIES NUMBER	PIPE SIZE NOM.	L
JP-FPM-0100	1½	.59 (15)
JP-FPM-0200	2	.71 (18)
JP-FPM-0300	3	.83 (21)
JP-FPM-0400	4	1.1 (27)
JP-FPM-0600	6	1.4 (35)
JP-FPM-0800	8	2.0 (50)



## PUSH-FIT JOINT CLAMP

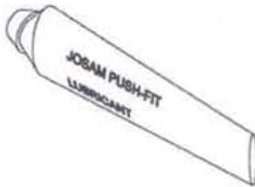
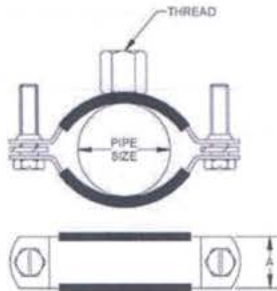
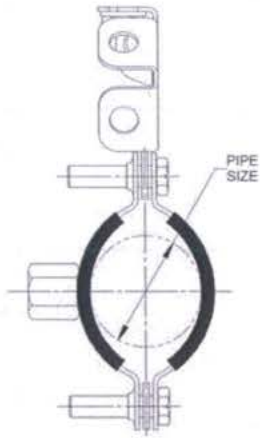
SERIES NUMBER	PIPE SIZE NOM.
JA-3002	1½
JA-3004	2
JA-3006	3
JA-3008	4
JA-3012	6
JA-3014	8



## SWAY BRACE

SERIES NUMBER
JA-3000





### ADJUSTABLE PIPE HANGER

SERIES NUMBER PIPE SIZE NOM.

JA-3020	1½
JA-3022	2
JA-3024	3
JA-3026	4
JA-3030	6
JA-3032	8

### NON-ADJUSTABLE PIPE HANGER

SERIES NUMBER PIPE SIZE NOM.

JA-3040	1½
JA-3042	2
JA-3044	3
JA-3046	4
JA-3050	6
JA-3052	8

### PIPE LUBRICANT

SERIES NUMBER

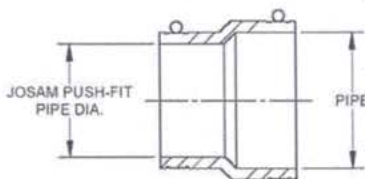
JA-3100
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### TRANSITION COUPLING

SERIES NUMBER PUSH-FIT ø PIPE SHIELD

JA-4100	1-1/2"	1-1/2" Copper	
JA-4101	1-1/2"	1-1/2" NH/Sch40/Glass	
JA-4200	2"	2" NH/SV/Copper	
JA-4201	2"	2" NH/SV/XH/Sch40/Glass	X
JA-4300	3"	3" NH/SV/XH/Sch40/Glass	X
JA-4301	3"	3" Copper	X
JA-4400	4"	4" NH/SV/XH/Sch40/Glass	X
JA-4401	4"	4" Copper	
JA-4600	6"	6" NH/SV/XH/Sch40/Glass	X
JA-4601	6"	6" Copper	X
JA-4602	6"	6" Glass	X
JA-4800	8"	8" NH/SV/Sch40	X
JA-4801	8"	8" Copper	X

\*Each coupling is provided with an elastomeric PVC coupling and 300 Series SS shield where noted



# JOSAM

www.josam.com

**Material Type**

Josam Push-Fit pipe and fittings are available in type 316L austenitic stainless steel. All seam welded pipes are acid pickled to provide the best consistent corrosion resistant surface and uniform aesthetic appearance.

Type 304SS is used for some accessories and can be offered for special applications. Properties for both 304 and 316L stainless steel are shown below.

CHEMICAL COMPOSITION	316L		304	
CARBON (C%)	0.030	MAX	0.080	MAX
MANGANESE (MN%)	2.00	MAX	2.00	MAX
PHOSPHOR (P%)	0.045	MAX	0.045	MAX
SULFUR (S%)	0.030	MAX	0.030	MAX
SILICON (SI%)	0.75	MAX	0.75	MAX
CHROMIUM (CR%)	16.0 - 18.0		18.0 - 20.0	
NICKEL (NI%)	10.0 - 14.0		8.0 - 10.5	
MOLYBDENUM (MO%)	2.0 - 3.0		-	
NITROGEN (N%)	0.1	MAX	0.1	MAX

PHYSICAL PROPERTIES - UNANNEALED	316L	304	UNITS
SPECIFIC GRAVITY	0.288	0.285	LB/IN <sup>3</sup>
MELTING POINT	2552	2552	°F
EXPANSION COEFFICIENT	8.9X10 <sup>6</sup>	9.6X10 <sup>6</sup>	32 - 212 °F
THERMAL CONDUCTIVITY	9.4	9.4	BTU/FT/ °F TO 212 °F
ELECTRICAL RESISTIVITY	740	780	MICROHM-MM AT 68 °F
SPECIFIC HEAT	0.12	0.12	BTU/LB 32 - 212 °F



MECHANICAL PROPERTIES	316L	304	UNITS
TENSILE STRENGTH	70,000	70,000	PSI MIN.
YIELD STRENGTH	25,000	25,000	PSI MIN.
MODULES OF ELASTICITY	28	28	MPSI
ELONGATION	30	30	% MIN.
HARDNESS BRINELL	217	217	HB MAX.

### Thermal Expansion

The expansion coefficient of stainless steel is very low. A 39.4" (1 meter) pipe expands approximately 0.063 inches (1.6 mm) with a change in temperature of 212 degrees F (100 degrees C).

The design of a Josam Push-Fit drainage system can be accomplished with no special consideration or compensating material for expansion. The pipes are also suitable for installation in concrete due to the similar expansion factor (0.0165 mm/m/degree C).

### Sealing Rings

Standard Josam Push-Fit gaskets are made of Ethylene Propylene Diene Monomer rubber, commonly known as EPDM. Fluorine rubber gaskets, commonly known as FPM, are also available as an option. The shape of the gasket is specifically designed to fit the socket and designed for an engineered water tight joint. When a pipe is inserted into the socket, the gasket is compressed between the socket and outer pipe surface to create a positive seal. As the internal pressure increases, the pressure of the seal against the joint also increases and the joint remains tight. The gasket is designed with a visible lip around the entire perimeter of the socket. This lip holds the seal in proper position and is an indicator of a properly made joint after assembly.

Longer shaped gaskets are required and available from Josam Company for vacuum drainage application. Please advise Josam when pipe systems will be used for vacuum drainage to ensure proper gaskets are furnished.

## Tightness

Push-Fit pipes and fittings create a joint that is suitable for use in typical gravity or vacuum drainage systems. The maximum pressure capacities listed below are based on testing in a lab environment with pipes rigidly fixed. Test pressures illustrate the quality of the gasket material and system design. Pipe and fittings are not intended for installation in pressure applications. Pipe installations must be fixed according to Josam's recommendations in order to meet test pressure requirements. Additional fixing requirements may be necessary for handling elevated pressures. Contact Josam Company with any questions or regarding specific pressure requirements.

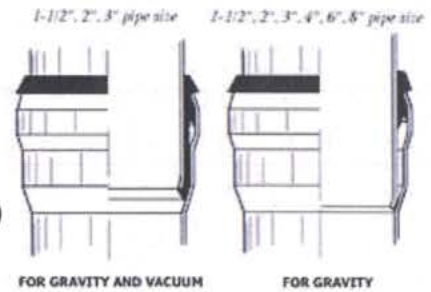
## Gravity

Pipe sizes 1- 1/2" to 5" nominal 10 bar (145 psi)  
 Pipe sizes 6" to 8" nominal 5 bar (72.5 psi)

## Vacuum

1-1/2" to 3" nominal -0.96 bar (28 in. Hg)

Vacuum systems typically use only 1-1/2" to 3" nominal pipe sizes.



## RUBBER TYPES

INTERNATIONAL DESIGNATION	EPDM	FPM
RUBBER TYPE	ETHYLENE PROPENE	FLUORINE (VITON)
NOMINAL HARDNESS IRHD	60	70
COLOR	BLACK	GREEN
TENSILE STRENGTH MPA	9.5	13
ELONGATION AFTER FRACTURE %	450	225
MAX. TEMPERATURE RANGE	120°C/248°F	300°C/572°F



## RESISTANCE

WEARABILITY	EPDM	FPM
RESISTANCE TO MINERAL OIL	D	A
RESISTANCE TO VEGETABLE OIL	B	A
RESISTANCE TO BENZENE/PETROL	D	A
RESISTANCE TO AROMATIC COMPOUNDS AND HYDROCARBONS	D	A
RESISTANCE TO KETONES	A	D
RESISTANCE TO ORDINARY DILUTED ACIDS AND ALKALINES	A	A
RESISTANCE TO OZONE AND WEATHER STRESSES	A	A
RESISTANCE TO AIR DIFFUSION	A	A

A = VERY GOOD SERVICE    B = MODERATE SERVICE  
 C = LIMITED OR VARIABLE SERVICE    D = UNSATISFACTORY

### CAUTION!

The information on this chart is intended for use as reference information only. Specific application factors including temperature and concentration may affect suitability and it is recommended that the user test for compatibility.



## Cutting the Pipes

Josam Push-Fit pipes can be cut to desired length by various means using manual and electric cutters. The pipes should be cut square and the exterior surface must be free of burrs and slightly rounded or beveled. Fittings may not be cut.

1. Select appropriate pipe lengths. Josam offers 8 different pipe lengths to minimize cuts and waste. Project take-offs should reflect a variety of pipe lengths to suit the pipe layout of the project application.
2. Cut pipe lengths as necessary using the closest pipe length available. In some instances multiple pipe sections may reduce the amount of pipe to be cut.
3. Cut pipes square using either a Josam recommended pipe cutter, a circular saw or a tube style pipe cutter with an appropriate blade or cutting wheel.
4. If using a cutter that does not debur the pipe, remove any burrs from the exterior surface of the pipe prior to making a joint. A slight bevel on the outside edge of the pipe end will facilitate easy insertion into the socket.
5. Contact Josam Company for recommended pipe cutters.

## Assembling a Josam Push-Fit Joint

The Josam Push-Fit socket and spigot joint is designed to be easily assembled and adjusted without the need of any special tools. Using lubricant available from Josam will allow the pipe material to be inserted into the socket and seal. Steps for making a joint are illustrated below.



1. Insert the seal into the socket if it is not already installed. The seal and pipe should be clean. If necessary remove the seal and rinse with water to remove any dirt.



- a. To insert the seal, squeeze and fold the ring into a heart shape. Press the top lip firmly into the socket with the lip hooking on the top edge.



- b. Allow the seal to unfold and press the lip tightly against the entire perimeter of the socket

## Assembling a Josam Push-Fit Joint (Cont'd)



2. Apply a small amount of lubricant (item 40930) to the inside of the sealing ring.



3. Before inserting a spigot end into the socket, it is recommended to mark the insertion depth on the spigot. See insertion Depth 'A' from chart on page 6.

4. Insert the spigot into the socket with a slight turning motion. Push the pipe completely into the socket and then back out approximately 1/4". The lip of the gasket should be visible around the perimeter of the joint.

**Note:** Make adjustments as soon as possible. After the lubricant dries the parts may be difficult to disassemble. If necessary heat the joint with a gas torch to help loosen the joint for disassembly. If heated in this manner, the seal should be replaced prior to reassembling.

## Hanging and Bracing the Pipe System

The Josam Push-Fit pipe systems should be supported to prevent the pipe joint from pushing apart. Use the following guidelines for fixing pipes.

- Josam Company recommends the use of their hangers for properly supporting the system. See page 20.
- Josam hangers or similar split ring hangers should be used to limit or prevent axial movement.
- Alternative hangers must be stainless steel or lined with rubber or non metallic material to protect against galvanic corrosion.
- Secure pipe penetrations to prevent vertical movement.
- Brace end of pipe runs and changes in direction to prevent the pipes from pushing apart. Utilize joint locking clamps and sway braces as necessary.

The rods and hanger spacing must be sufficient to support the weight of the pipes filled with water.

### WEIGHTS OF 39.4" (1 METER) PIPE FILLED WITH WATER.

PIPE SIZE	WEIGHT LBS. (KG)
1 1/2"	5.1 (2.3)
2"	7.3 (3.3)
3"	13.4 (6.1)
4"	24.0 (10.9)
6"	55.0 (25.0)
8"	103.4 (47.0)



### **Additional Bracing**

Sway braces should be used for limiting movement of the fixed pipes at intervals of 30-50 ft (10-15 meters) and changes in direction and end of lines as necessary to prevent pipes from pushing apart.

The Josam Push-Fit system must be properly supported by the hanger system to prevent the pipes from pushing apart. Ends of runs and changes in directions must be braced! If properly supported the Josam Push-Fit joint will handle considerable pressure when properly supported (see maximum tested pressures on page 23).

### **Underground installations**

316L pipe systems are suitable for direct burial underground in most areas. Soil conditions in some locations may require additional corrosion protection for the pipes prior to burial.

The following guidelines are recommended for underground installations:

1. Use proper trench safety procedures as required by local codes
2. Leveling course should be free from frozen material, large or sharp stones. A minimum 2-4" thick leveling course is recommended.
3. Ensure that pipes are properly pitched and evenly supported along the length of the pipe. Remove material from under the joint so sockets do not bear the weight of the pipes.
4. Brace changes in direction and end of pipe runs to prevent pipes from pushing apart prior to testing and backfilling.
5. 4" of fill surrounding pipes should be sand or crushed stone with maximum 15% passing through 0.075" screen.
6. Apply fill material carefully and compress evenly to 93% standard proctor.

### **Installation in concrete**

Some concrete additives such as accelerators or retardants, antifreeze, fluidifiers etc. may be corrosive to stainless steel. If additives are used, wrapping or lacquer coating may be required to protect the pipe system.

### **Changes in Direction**

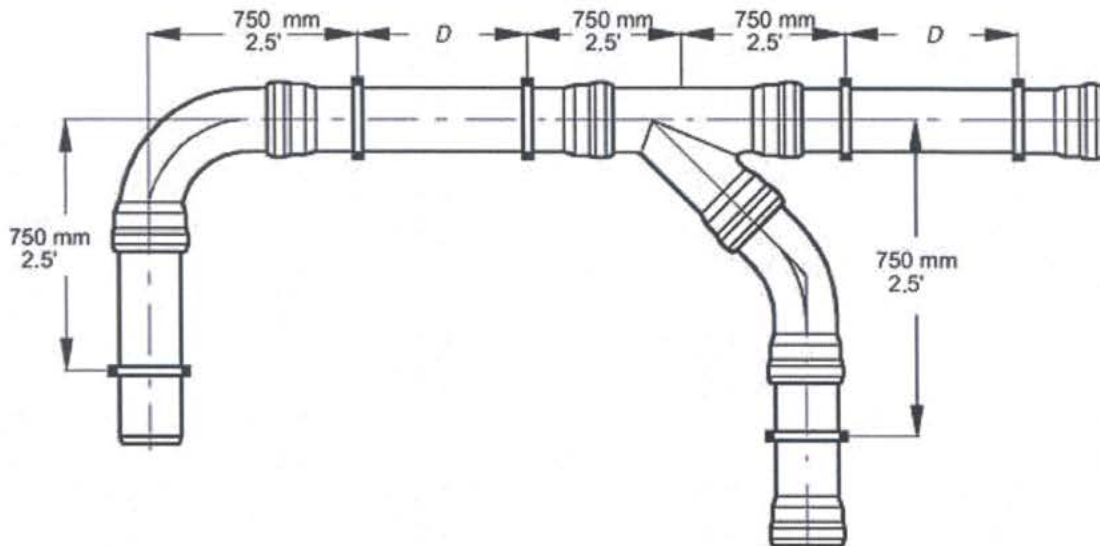
All vertical and horizontal pipes must be fastened at all changes of direction and all branches with hangers spaced no more than 2'6" (750mm).

## Vertical Runs

Vertical pipes should be supported at intervals no more than 9.8' (3 meters). Straight horizontal pipe runs should be supported at maximum spacing indicated in the chart below.

### HORIZONTAL HANGER SPACING

PIPE SIZE	D (max)
1-1/2"	6.6' (2.0)
2"	6.6' (2.0)
3"	8.2' (2.5)
4"	9.2' (2.8)
6"	10.8' (3.3)
8"	10.8' (3.3)



## Transition Fittings

The Josam Push-Fit system can be easily adapted to most pipe systems. For information on adapting the Josam Push-Fit system to other pipe systems please contact your local Josam representative or Josam Company directly.



# CHEMICAL RESISTANCE CHART

## RATINGS

A	Excellent.
B	Good -- Minor Effect, slight corrosion or discoloration.
C	Fair -- Moderate Effect, not recommended for continuous use. Softening, loss of strength or swelling may occur.
D	Severe Effect, not recommended for ANY use.
N/A	Information Not Available.

## CAUTION!

The information in this chart has been compiled from several reputable sources, including "Corrosion Data Survey", 6th Ed., NACE, and is intended for use as reference information only.

Specific application factors including temperature and concentration may affect suitability and it is recommended that the user test for compatibility.

CHEMICAL	316 SS	304 SS	EPDM	FPM
Acetic Acid 20%	A	A	A	B
Acetic Acid 80%	A	B	A	B
Acetic Anhydride	A	B	B	D
Acetone	A	A	A	D
Alcohols:Amyl	A	A	A	A
Alcohols:Benzyl	A	A	B	A
Alcohols:Butyl (Butanol)	A	A	A	A
Alcohols:Isopropyl	B	B	A	A
Alcohols:Methyl	A	A	A	C
Aluminum Chloride	C	D	A	A
Aluminum Chloride 20%	D	D	A	A
Aluminum Sulfate (<200° F)	A	A	A	A
Ammonium Carbonate	A	A	A	A
Ammonium Chloride	B	C	A	A
Ammonium Hydroxide	A	A	A	B
Amyl Chloride	A	A	D	B
Aniline	A	A	B	C
Aniline Hydrochloride	D	D	B	B
Antifreeze	A	N/A	A	A
Asphalt	A	B	D	A
Barium Chloride	B	B	A	A
Barium Hydroxide	A	B	A	A
Beer	A	A	A	A
Beet Sugar Liquids	A	A	A	A
Benzaldehyde	A	A	A	D
Benzene	A	A	D	A
Benzoic Acid	B	B	D	A
Borax (Sodium Borate)	A	A	A	A
Boric Acid	A	A	A	A
Bromine	D	D	D	A
Butter	A	C	A	A
Buttermilk	A	A	A	A
Butylacetate	A	A	B	D
Butyric Acid	B	B	B	B
Calcium Bisulfate	A	N/A	A	A
Calcium Bisulfide	B	B	C	A
Calcium Bisulfite	A	B	D	A
Calcium Chloride	B	B	A	A
Calcium Hydroxide	B	B	A	A
Calcium Hypochlorite	B	C	B	A
Carbon Dioxide (dry)	A	A	B	B
Carbon Dioxide (wet)	A	A	B	B
Carbon Disulfide	A	A	D	A
Carbon Monoxide	A	A	A	A
Carbon Tetrachloride	A	A	D	N/A
Carbonic Acid	A	A	B	A
Catsup	A	A	A	A
Chlorine (dry)	A	A	A	A
Chlorine Water	C	C	C	A
Chloroacetic Acid	C	C	B	D
Chlorobenzene (Mono)	B	A	D	A
Chloroform	B	B	D	A
Chlorosulfonic Acid	B	D	D	C
Chocolate Syrup	A	A	A	A
Chromic Acid 5%	C	B	A	A
Cider	A	A	A	A
Citric Acid	A	B	A	A
Citric Oils	A	A	B	A
Coffee	A	A	A	A
Copper Chloride	C	C	A	A
Copper Cyanide	B	B	A	A
Copper Nitrate	A	A	N/A	A
Copper Sulfate >5%	B	B	A	A
Detergents	A	A	A	A
Diesel Fuel	A	A	D	A
Dyes	A	A	N/A	A
Epsom Salt (Magnesium Sulfate)	B	A	A	A
Ethanol	A	A	A	A
Ethanolamine	A	A	B	D
Ether	A	A	C	C
Ethyl Chloride	A	A	A	A
Ethyl Ether	B	B	D	D
Fatty Acids	A	B	D	A
Fluorine	A	A	A	C
Formaldehyde 100%	A	A	A	D
Formic Acid (<100° F)	A	A	A	C
Fruit Juice	A	A	N/A	A
Fuel Oils	A	A	D	A
Furfural	B	A	C	D
Gallic Acid	B	A	B	A
Gelatin	A	A	A	A
Glucose	A	A	A	A
Glycerin	A	A	A	A
Glycolic Acid	A	A	A	A
Grape Juice	A	A	A	A
Hydrochloric Acid	D	D	A	A

CHEMICAL	316 SS	304 SS	EPDM	FPM
Hydrogen Peroxide 10%	A	A	A	B
Iodine	D	D	B	A
Lead Acetate	B	B	A	D
Magnesium Chloride	D	D	A	A
Magnesium Sulfate (Epsom Salts)	B	A	A	A
Mercury	A	A	A	A
Methanol (Methyl Alcohol)	A	A	A	C
Methyl Chloride	A	A	D	A
Methylene Chloride	B	B	C	B
Milk	A	A	A	A
Mineral Spirits	A	A	D	A
Molasses	A	A	A	A
Naphthalene	A	A	D	A
Natural Gas	A	A	D	A
Nickel Chloride (<10%)	B	B	A	A
Nickel Sulfate	B	B	A	A
Nitric Acid (20%)	A	A	A	A
Nitrous Acid	B	B	A	B
Oxalic Acid	C	C	A	A
Ozone	A	B	A	A
Perchloric Acid	D	D	B	A
Phosphoric Acid (crude)	B	D	B	A
Picric Acid (<10%)	A	A	B	A
Potash (Potassium Carbonate)	A	A	A	A
Potassium Bicarbonate	B	B	A	A
Potassium Bromide	B	B	A	A
Potassium Chlorate	A	A	A	A
Potassium Chloride	A	B	A	A
Potassium Hydroxide (Caust ICPotash)	A	B	A	B
Potassium Nitrate	B	B	A	A
Potassium Permanganate	A	A	A	A
Potassium Sulfate	A	A	A	A
Potassium Sulfide	B	B	A	A
Propylene Glycol	B	B	A	A
Pyridine	A	A	B	D
Rum	A	A	A	A
Salicylic Acid	B	B	A	A
Salt Brine (NaCl saturated)	A	B	A	A
Sea Water	C	C	A	A
Silver Nitrate	A	B	A	A
Soap Solutions	A	A	A	A
Soda Ash (see Sodium Carbonate)	A	A	A	A
Sodium Acetate	A	A	A	D
Sodium Bicarbonate	A	A	A	A
Sodium Bisulfate	B	D	A	A
Sodium Bisulfite (<100° F)	A	B	A	A
Sodium Bromide	B	C	A	A
Sodium Carbonate	A	A	A	A
Sodium Chlorate	B	A	A	A
Sodium Chloride	B	B	A	A
Sodium Cyanide (<200° F)	A	A	A	A
Sodium Fluoride (<10%)	A	C	A	A
Sodium Hydroxide (20%)	A	A	B	C
Sodium Hypochlorite (<20%)	C	C	B	A
Sodium Hypochlorite (100%)	D	D	B	A
Sodium Nitrate	A	A	A	A
Sodium Peroxide	A	A	A	A
Sodium Polyphosphate	B	B	A	A
Sodium Silicate	B	A	A	A
Sodium Sulfate	A	A	A	A
Sodium Sulfide (<10%)	A	B	A	A
Sodium Sulfite	A	B	A	A
Stannic Chloride (<10%)	B	B	A	A
Stannous Chloride	B	C	C	A
Starch	A	A	A	A
Stearic Acid	A	B	B	A
Sugar (Liquids)	A	A	A	A
Sulfate (Liquors)	B	B	A	A
Sulfur Chloride (100%)	A	A	D	A
Sulfur Dioxide (<10%)	A	D	A	A
Sulfuric Acid (<10%)	B	D	A	A
Sulfuric Acid (10-75%)	D	D	B	A
Sulfurous Acid (Solution)	B	B	B	A
Toluene (Toluol)	A	A	D	B
Tomato Juice	A	A	A	A
Trichloroethylene	A	A	D	A
Trisodium Phosphate	B	B	A	A
Turpentine	A	A	D	A
Urea	B	B	A	A
Urine	A	A	A	A
Vegetable Juice	A	A	A	A
Vinegar	A	A	A	A
Water, Deionized	A	A	A	A
Whiskey & Wines	A	A	A	A
Xylene	A	A	D	B
Zinc Sulfate	A	A	A	A