Retail and Restaurant Construction Criteria

Introduction

Information contained in this section has been assembled to assist the architect and the architect's consultants in preparation of Construction Documents and Specifications. The architect is responsible for adhering to the requirements outlined in the Lease Criteria as well as the following criteria.

City Creek Center will provide an opportunity for Tenant's to express their individual identity & branding through the use of high end, sophisticated and sustainable materials.

The following Construction Document Criteria and the Design Criteria, which are available on our website at http://tenantcoordination.taubman.com, were created to help define the Design Philosophy.

City Creek Center is a participant in the LEED™ (Leadership in Energy and Environmental Design) for Neighborhood Development rating system from the U.S. Green Building Council. From the inception of design, building owners, architects, engineers and contractors have invested in an integrated design process to make City Creek Center a model for sustainable, mixed-use urban design.

We encourage the use of sustainable design and construction practices for all aspects of Tenant Improvements. Please reference the City Creek Center Tenant Green Building Handbook located at http://tenantcoordination.taubman.com, (City Creek Center Heading) or the U.S. Green Building Council's website at usgbc.org for more information.

Architecture and Finishes

Tenant must provide material samples with their plan submittal. In addition, tenant must provide either photos of comparable finishes of an existing store or renderings of the finishes for the proposed stores with their plan submittal.

Floors

Block 75 and 76- Levels 1 and 2- Floor Cross Sections (Conditions vary by location. Refer to Base Building Structural drawings for more information and Field verify all structural conditions):

1. Approximately 3-1/2” concrete over 3” composite steel deck.
2. Approximately 4” concrete over polystyrene foam fill of variable thickness
3. Approximately 6” concrete over 3” composite steel deck
Floor Finishes

1. Transitions: All floor finishes at the storefront lease line shall be the same finish floor elevation as the Landlord's mall floor. See Entry Vestibule Details on website for entry conditions.
   a. All bathrooms are to have an ADA complaint marble threshold (or equivalent) to contain water in the event of a leak
   b. Spaces 223, 223A and 225 will require floor finish thickness of ¼” or less at the leaseline due to floor level conditions in spaces. See Entry Vestibule Details on website for entry conditions.

2. Walk Off Mats: Walk Off mats are optional. Walk Off mats must be high quality-recessed type and flush with adjacent surfaces.

3. Expansion Joints: Expansion joints in sales areas must be detailed and illustrated in the Construction Documents. Expansion joint material must be compatible with the floor finish materials.

4. Anti-Fracture Membrane - Floor Isolation: it is recommended to install an Anti-Fracture Membrane at the column lines, transitions between the structural slab/geo-foam supported slabs and any shrinkage cracks that are evident. Depending on the condition and exposure of the area it may be beneficial to treat an entire area.

Storefront Work

1. Materials: All materials employed in Tenant's storefront shall be hard surface, durable, weather-resistant materials that require minimum maintenance. Consideration for heat, humidity, precipitation, etc. shall be given. Wood employed decoratively within or at the storefront, or anywhere within the leased premises, must comply with code requirements.

2. Structural Support: All storefront work requiring structural support shall be floor supported and braced at their head sections by a structural steel framework secured to the existing building structure.

3. Security: Identify and specify any security system to be used. Door frame mounted or floor systems acceptable depending on site conditions. No free standing-exposed pedestal systems are permitted.

4. Mechanical Devices: Any mechanical device (time clocks, grille locks, grille controls, etc.) shall be concealed within Tenant's storefront construction.

5. Transitions-U Channel: Tenant to provide 1” u-channel transition at end of demising walls. There are no Landlord provided neutral piers, only U-Channel Transitions to the adjacent tenant.

6. Egress Path: A clear egress path of 10 ft. is required in front of the storefronts. Tables/Chairs, signage and other obstructions must not be located in this space.

7. Door Swing: All entry doors that swing outward must be setback into recessed openings and not impede the egress path.

8. Glazing: Where glazing is utilized, it shall be engineered for seismic and wind load site conditions. Refer to local building codes for guidelines.
9. **Glazing-U-Factor and SHGC:** Tenant storefront glazing facing the retail street shall have a maximum allowed assembly U-Factor of 0.45. This is a total assembly U-Factor, not a center of glass U-Factor. Tenant storefront glazing shading coefficient shall be 0.44.

10. **Insulation:** Walls facing street shall have continuous R-12 insulation in cavity between veneer and framing. The overall U-factor of the walls shall be 0.044. Roof construction over retail spaces will be a 6 inch deck with R-38 insulation. The overall U-Factor of the roof will be approximately 0.022. For tenants above an unconditioned parking garage, landlord has provided R-20 insulation on the underside of the deck.

### Walls, Partitions and Separations

#### Landlord Work

**Demising Walls:** Landlord will erect 2” x 6” metal stud partitions dividing the Tenant's premises from the adjacent tenant spaces or common areas at the Tenant's expense. Tenant shall verify Landlord's placement of wall studs **prior to space acceptance** and advise Landlord in writing of any discrepancies immediately. Failure to notify Landlord of discrepancies shall be regarded as acceptance by the Tenant.

#### Tenant Work

1. **Wall Construction:** Tenant's interior partitions shall be constructed of metal stud framing with gypsum board finish on all sides with taped and spackled joints.
   
   a. Tenant Demising walls and steel columns shall receive a minimum of one layer of 5/8” fire Type ‘X’ code gypsum wallboard with taped and spackled joints from floor to underside of structure above.
   
   b. Tenant shall provide and install non-combustible fire stops as may be required at separations from the adjacent leased premises and ceiling above mall areas.

2. **Transitions-U Channel:** Tenant to install a 1” U channel transition at the storefront Leaseline. There are no Landlord provided neutral piers.

#### Exit / Access / Doors and Corridors

1. **Exit/access doors:** shall be minimum 3'-0" x 7'-0" x 1-3/4" - 1 hour fire door or code permitted equivalent and frame with hardware in accordance with governing codes. Hardware must match existing building standards and keyways. Note- some exit passageways are 2-hour fire rated when serving as exit stair discharges at Level 1. If tenants exit into this space, 1.5 hour fire doors are required.

2. **Finishes:** After installation of exit/access door, Tenant shall restore service corridor to original condition.
   
   a. **Corridor Vestibules:** Where vestibules are constructed, extend adjacent corridor finishes into the vestibule and provide corner guards as per the Landlord's specifications.
   
   b. **Projections:** Tenant door may project a maximum of 7 inches when fully open into the exit passageway per Code.
   
   c. **Exit/access door:** Exit/access door shall be painted per color specified by Landlord and labeled with store name and number as specified by center management.
3. Wall Construction: Exit/access corridor walls shall receive one layer of 5/8” fire code Type ‘X’ gypsum wallboard on both sides from floor to underside of structure above. All joints must be taped and spackled.

4. Key Entry System: SLC Building Department will require each tenant to install a Key Entry System at the rear exit door of their space within the exit passageway system.
   a. Tenants will have their key located in a common key box in the Retail Fire Command Center. Label on plans accordingly as this is often a city comment.

Ceiling Work

1. Ceiling Heights: Ceiling heights are shown on the Space Layout Drawing (See Sheet 1 of 2) included with the Tenant Design Package. Tenant is responsible for field verification of the existing conditions. Ceiling heights above the height shown on the Space Layout Drawing may be possible but Landlord does not guarantee clearances for such ceilings. In some cases, existing utilities may be relocated by Tenant at Tenant's expense. Written approval from Landlord is required before proceeding with such work.

2. Metal suspension systems: Metal suspension systems shall be used for all ceilings and shall be secured to Landlord's structural framing where possible. Minimal connections to Landlord's structural deck will be permitted. Only lay-in acoustical ceilings may be secured to floor deck, refer to Landlord's Standard Project Details.

3. Gypsum Ceilings: Drywall ceilings and soffits are required in the sales display area at the storefront (typically +/- 5'-0" from the lease line back into the store).
   a. When using an acoustical lay-in tile ceiling in the sales area, tiles must be 2' x 2'. All ceiling tiles in the sales are must have an exposed regular edge.
   b. Provide a change in ceiling height for interest, so the entire ceiling is not completely flat.
   c. Combustible materials of any sort may not be used or stored above the Tenant's ceilings.
   d. All diffusers, grilles, tracks, etc., must be painted to match finish ceiling.

4. Access Panels: Provide access panels to permit servicing of all equipment located above the ceiling. Access panels in hard surface ceilings must be a flush panel door with a tape-in drywall bead flange. Access panels should be installed on vertical ceiling soffits or located as inconspicuously as possible.
Interiors-General

1. Rubbish Storage Rooms: Provide a storage area for rubbish in all food or beverage service operations. All storage area floors above grade level shall have a Landlord approved waterproof membrane between Landlord's structural sub-floor and Tenant's finish floor.

2. Food Preparation and Service Areas: All food preparation and service area floors above grade level shall have a Landlord approved waterproof membrane between the structural sub-floor and Tenant's finish floor. They also must have an adequate number of floor drains. Please refer to the Standard Floor Penetration details on the website.

3. Health Code: All finishes shall be in compliance with Health Code Requirements (or approved by local health authority).

4. Stock Rooms: Tenants may exit through Stock Rooms if:
   a. Exit accommodates no more than 50% of the tenant occupant load
   b. Stock Room is not subject to locking from egress side
   c. 44 inch clear aisle defined by full or partial height fixed walls and leads directly to the exit without obstructions.

5. Elevator/Open Stair: Tenants spanning levels 2 & 3 on Block 75 will require an elevator and an open-stair between the two levels. The open stair must be designed as an exit stair. A fire rated enclosure is not required around the open stair. A draft-stop and water curtain is not required around the open stair.

Storefront Signage

Landlord has provided storefront sign design and installation guidelines. For additional information please refer to our website at http://tenantcoordination.taubman.com, and review the following:

1. Design Criteria
2. Sign Criteria
3. Storefront Supplemental Criteria

Structural

Modifications and Alterations

Modifications and alterations: to Landlord's framing structure will not be permitted without Landlord's prior written approval. In the event that Landlord approves Tenant's request, Tenant shall leave Landlord's structure as strong as or stronger than original design with finishes unimpaired.
Penetration of Landlord's Floor Structure

1. Concrete floor penetrations: required by Tenant shall be coordinated with Landlord's Field Representative structural consultant and shall be engineered to fit existing conditions and installed according to the Standard Floor Penetrations on the website.
   
   a. All floor penetrations in food service/preparation areas and toilet rooms shall have Water tight sleeves extending a minimum of 4" above finish floor. Please refer to the Standard Floor Penetration details on the website.

2. Concrete Floors with Geofoam: Utilities can be trenched just below the slab and backfilled with pea gravel. Please refer to the Standard Floor Penetration Details on the website.

3. Structural Design Loads- subject to landlord review and approval
   
   a. First Level: 100 psf (Live Load)
   b. Second Level: 100 psf (Live Load)
   c. Roof: 30 psf + snow drift

4. Mezzanines: Subject to Landlord review and approval as needed.

5. Seismic Joints: Tenant shall procure and install the seismic joint finish cover within the lease areas as needed. Refer to detail A2 on A4.93.

6. Seismic Restraint and Sound Attenuation: vibration isolation and seismic restraint requirements must be provided for all equipment (floor mounted and suspended).
   
   a. For tenants with roof equipment, exhaust fans and RTU's often create excessive noise both in the kitchen and outside and may require additional sound attenuation.
   b. Speaker systems must provide sound attenuation materials and installation methods so as not to infringe on adjacent tenants quiet enjoyment

7. Core Brace Attachment (i.e. X Brace): the following are guidelines regarding attachments to the Core Braces. It is acceptable to attach light, non-rigid finishes such as stud tracks or drywall. Typically such items could be attached via tack welds and self-taping screws and must be approved by Tenant Coordination.

   The following attachments are prohibited:

   a. The protected zones should be off limits as shown on CoreBrace sheet 101 and described in section 7.4 of AISC 341-05
   b. Anything regarding life safety issues should not be attached to the braces, i.e. stairs, elevator guard rails, etc.
   c. Anything that would cause the braces to carry additional loads, i.e. beams that would transfer gravity, or girts at the perimeter of the structure that would transfer lateral loads.
   d. Mechanical, electrical and plumbing, fire sprinkler, etc.
   e. In general, anything so rigid that it would prohibit the brace from properly functioning during a seismic event.
   f. Small powder actuated fasteners
Mechanical, Electrical, Plumbing and Fire Protection Criteria

Mechanical - Connecting to the Central Condenser Water Supply Systems

It is suggested that each Tenant's HVAC design be submitted to Landlord on a preliminary basis prior to preparation of Construction Documents. Please refer to the Mechanical and Plumbing Design Narrative on our website at http://tenantcoordination.taubman.com.

Landlord Work

Landlord will provide the following:

1. System: The leased premises are served from a centrally conditioned condenser water system installed by Landlord, which will deliver, during regular Shopping Center business hours, filtered outside air at a variable temperature and volume and condenser water at variable volumes through a closed loop, with return pipe(s).

2. Condenser Loop: Tenant condenser water loop will provide condenser water at a temperature range of 80-90° in the summer time and 60-70° in the wintertime for connection to tenant water source heat pump unit. Tenants are allowed 1.2 gpm / 100 ft^2.

3. Outside Air: Outside air provided to the space will be heated to 50-55° during the winter months.

4. Toilet Exhaust: The Landlord will provide toilet exhaust air stubs into or in close proximity to the Tenant space. The Tenant will be allowed 0.1 cfm per square foot of leased premises for general exhaust. No Toilet Exhaust fans are needed.

5. Temperature: The Retail Street air conditioning system is designed to maintain temperatures between 60-80° year round.

Tenant Work

1. General Scope: Tenant, at its sole cost and expense shall prepare Design, Construction Drawings and Specifications for, and shall initially construct or provide all heating, ventilation, exhaust equipment and controls, ducts, insulation, and all structural, plumbing, and electrical work related thereto. Each tenant shall provide an individual system(s) as outlined below. All equipment shall bear UL labels. Please refer to the Tenant Interface Diagrams on the website for system design.

2. Water Source Heat Pumps: Furnish and install self-contained water source heat pump unit(s) for air conditioning and heating within the leased premises.

   a. WSHP Controls: Water source heat pumps will operate with DDC controls and tie into the Landlord’s building automation system, which is a Delta system. Furnish and install all code complying temperature controls as required by the manufacturer’s recommendations. See Recommended Tenant Controls on the website.

   b. Manufacturer: Water source heat pumps shall be Climate Master series TT or Florida Heat Pump series ES (2 stage) or equivalent 13.1 SEER rated equipment

   c. Drain Pans: provide drain pans below all WSHP/piping and properly drain to comply with all local and state codes.
3. Variable Air Volume (VAV’s): Tenants will be required to provide a local VAV box between the Landlord’s outside air duct and the tenant’s water source heat pump.

   a. VAV Controls: The VAV boxes will be controlled by Carbon Dioxide sensors provided by Tenant in the Tenant space. The VAV box will also have an automatic override when the outdoor temperatures are appropriate to provide 50% outside air during economizer cycle for the water source heat pumps. Please refer to the Tenant Interface Diagrams on the website.

4. Condenser Piping: Condenser water piping systems are to include a suitable strainer on the supply side of the Tenant's water source heat pump and a flow control balancing valve on the return and flexible piping connections. A 2-way shutoff valve interlocked with the water source heat pump compressor shall also be provided by the tenant. Piping materials are to comply and be compatible with Landlord's piping systems.

5. Ductwork: Ductwork in Tenant's public areas shall be concealed. Standards of construction shall be in accordance with Latest ASHRAE and SMACNA Guides.

6. Ventilation: Tenants are required to keep their doors open to the retail street at all times.

7. Code/Design Standards: Design, fabricate and construct all ductwork from galvanized sheet metal in accordance with the latest ASHRAE and SMACNA standards. All work must be inspected and approved by the local authorities.

8. Vibration: Unit is to be installed with properly designed vibration isolation to eliminate all transmission of vibration to building structure.

9. Insulation: Tenant's supply and make-up air ductwork shall be insulated and shall be installed in concealed spaces above ceilings. Equipment must be installed allowing clear access for servicing.

10. Food Service: For Lease Spaces designated for Food and Beverage Services, Tenant shall provide all process requirements, hood exhausts, make-up air supplies, equipment vents and other contaminated exhausts as needed. Landlord has provided kitchen grease exhaust ductwork capable of up to 10,000 cfm exhaust, kitchen vapor exhaust ductwork capable of 1,800 cfm exhaust, and kitchen make-up air ductwork capable of 11,800 cfm and two (2) six inch (6”) diameter water heater flue vents from the kitchen spaces to the roof via shafts.

   a. Make up Air: The Tenant is responsible for providing exhaust fans and make up air equipment to serve these ducts on the roof.

   b. Pollution Control Devices: Kitchen equipment on both blocks will be required to use pollution control devices in the kitchen exhaust systems.

      • UV Lights: Tenants will be required to use UV lights in kitchen hoods. UV lights for grease mitigation are required in the kitchen hoods by Halton or Gaylord.

      • Scrubbers: Odor and smoke removal devices (scrubbers) are required on the rooftop exhaust fans by Halton or Gaylord. Charcoal or wood burning cooking equipment may require a 4 stage system.

      • Access: Provide approved access doors for such dampers. All grease laden ducts that pass through fire-rated partitions are to be encased in calcium silicate blocks or other suitable material approved for use by the
code authorities.

c. Roof Equipment: Tenant roof equipment shall be located in areas designated by Landlord to specified heights and in accordance with Landlord’s standard details for equipment on the roof.

d. Structure: Should weight or location of equipment by Tenant require supports, screens, cat walks or roof hatch and ladder, they shall be provided by Tenant in accordance with standard details. Landlord shall determine when and where the above shall be required.

e. Finish: All above equipment shall be finish painted in accordance with Landlord’s paint schedule and specifications.

f. Labeling: Tenant’s roof equipment shall be clearly identified with Tenant’s name.

Tenants designated to install

**Individual Heating, Ventilating and Air Conditioning Systems**
*(Areas defined on leasing plans and Exhibit “A” of the Lease):*

**Tenant Work**

1. **System:** Each Tenant shall provide its own individual system (i.e. heating, ventilation and air-conditioning equipment and controls, ducts, insulation, water supply, venting and drainage, fresh air supply and return, exhaust and make-up air, dehumidification and humidification equipment, water saving equipment and all structural, plumbing and electrical work related thereto). All equipment shall bear UL label.

2. **Insulation:** All supply and fresh-air ductwork shall be insulated and all ductwork on all levels shall be installed in concealed space above ceilings.

3. **Code/Design Standards:** Standards of design and construction shall be in accordance with latest ASHRAE and SMACNA Guides. All work must be inspected and approved by the local authorities.

4. **Food Service:** For Lease Spaces designated for Food and Beverage Services, Tenant shall provide all process requirements, hood exhausts, make-up air supplies, equipment vents and other contaminated exhausts. Landlord has provided kitchen grease exhaust ductwork capable of up to 10,000 cfm exhaust, kitchen vapor exhaust ductwork capable of 1,800 cfm exhaust, and kitchen make-up air ductwork capable of 11,800 cfm and two (2) six inch (6”) diameter water heater flue vents from the kitchen spaces to the roof via shafts (verify actual CFM’s for leased space).

   a. **Make up Air:** The Tenant is responsible for providing exhaust fans and make up air equipment to serve these ducts on the roof.

   b. **Pollution Control Devices:** Kitchen equipment on both blocks will be required to use pollution control devices in the kitchen exhaust systems.

      - **UV Lights:** Tenants will be required to use UV lights in kitchen hoods. UV lights for grease mitigation are required in the kitchen hoods by Halton or Gaylord.

      - **Scrubbers:** Odor and smoke removal devices (scrubbers) are required on the rooftop exhaust fans by Halton or Gaylord. Charcoal or wood burning cooking equipment may require a 4-stage system.
Access: Provide approved access doors for such dampers. All grease laden ducts that pass through fire-rated partitions are to be encased in calcium silicate blocks or other suitable material approved for use by the code authorities.

c. Roof Equipment: Tenant roof equipment shall be located in areas designated by Landlord to specified heights and in accordance with Landlord’s standard details for equipment on the roof.

d. Structure: Should weight or location of equipment by Tenant require supports, screens, cat walks or roof hatch and ladder, they shall be provided by Tenant in accordance with standard details. Landlord shall determine when and where the above shall be required.

e. Finish: All above equipment shall be finish painted in accordance with Landlord’s paint schedule and specifications.

f. Labeling: Tenant's roof equipment shall be clearly identified with Tenant's name.

Heating, Ventilation and Air-Conditioning- General Information

1. As Builts: Provide As Built points of connection to existing ducts, waste, vent and water stubs upon completion of installment (See Rules and Regulations).

2. Odors: Tenant shall not permit odors from within the leased premises to enter other areas of the center. If any tenant or occupant of the center objects to odors from the leased premises the Landlord may, at Landlord's discretion, instruct the Tenant to control such odors.

   a. Failure to correct the situation would be a material breach of the Lease. If Tenant's mechanical system is unable to function in a manner to prevent odors from leaving the premises, Tenant shall make the necessary adjustments or additions to its present system to the satisfaction of the Landlord's Field Representative.

3. Air Balance: Tenant shall engage a separate temperature control contractor for final set-up of system(s) operations and air balancing and submit Air Balance Report to facility.

Plumbing

Landlord Work

1. Stubs: On-site water supply mains for domestic and fire protection, shut-off valves, and fire hydrants.

   a. Water: Interior domestic water branch line stubbed into Tenant's premises.

   b. Sanitary: Sanitary Waste Line and plumbing vent branch lines stubbed below and above Tenant’s premises.

   c. Gas: Gas service for designated food and beverage spaces, including meter and branch line extension from the project manifold designated by Landlord to leased premises. Supply piping and gas relief vent piping up through the roof has been provided by the landlord in the shell design. Manifolds are existing.
d. Grease: Grease Waste Line and plumbing vent branch lines stubbed below and above Tenant’s premises for designated food and beverage service tenant spaces.

e. Grease Interceptor: A grease interceptor has been provided for each designated food and beverage tenant space by the landlord in the shell design.

**Tenant Work**

1. System: Plumbing fixtures and piping system including all rough-in and final connections for same. Installation of all hot and insulated cold water lines, drains, and vents, electrical water heaters, water meter, and final connections to Tenant’s specialty equipment. All installed per governing codes.

2. Plumbing fixtures

   a. Water closets shall be limited to a maximum flow rate of 1.28 GPF.
   b. Urinals shall be limited to a maximum flow rate of 0.125 GPF.
   c. Lavatories shall be limited to a maximum flow rate of 0.5 GPM

3. Water heaters: shall be electric, except for food and beverage service tenants where gas units may be permitted if gas is available. The food and beverage tenants must install a condensing water heater(s) to utilize the AL29-4C flue vents provided by the landlord in the kitchen utility shaft as part of the shell design.

4. Drains and Waterproofing: Floor drains (4") and elastomeric waterproof membranes shall be provided in toilet rooms and kitchens, and/or other rooms with water supply or drainage.

5. Heat Trace: Provide heat tracing on all pipe subject to freezing. These pipes include but are not limited to sanitary sewer traps, trap primer piping, grease waste piping and cold water piping installed in unconditioned spaces.

6. Provide water hammer arrestor behind access panel in Tenant restrooms.

7. Grease Waste: Food and Beverage Service Tenants shall connect all grease laden waste to the Common grease waste system designated for their space. Tenant is responsible for coordinating regularly scheduled servicing of the grease interceptor system with the Landlord.

   a. In addition to connecting to the common grease waste system, each Food and Beverage Service Tenants will be required to connect their 3 compartment sinks to a floor mounted grease trap within their space. Cleaning/maintenance of the Grease Trap is the tenant’s responsibility.

8. Floor Penetrations: Pipe sleeves shall be installed in penetrations through floor slabs. See the Standard Floor Penetration Details on the website.

9. Water Meter: water meter within the leased premises is provided by landlord contractor at tenant expense. **Install meter near floor (preferably in Toilet Room and +/- 5ft AFF) in an easily accessible location.** Meter shall read in gallons.

10. Gas Regulator: Food and beverage service tenants to provide gas pressure regulator valve (PRV) at tie in to gas line and connect PRV vent to gas relief vent pipe provided.
11. Drain Pans: Tenants located above any base building or tenant mechanical/electrical rooms and the parking level generator room (tenants in Building D-Space 130A) shall install drain pans below all piping installed by tenant (running through the rooms), properly drain and comply with all local and state codes.

Fire Protection – Fire Alarm System

Landlord Work
The Base Building Contractor shall provide a Fire Alarm System as follows:

1. Manufacturer: A Siemens’s central fire alarm system serving the common shopping center.

2. Interface: A fire alarm junction box and addressable modules (as required) to interface to the Tenant provided fire alarm systems and system devices.

3. Connection: Base Building Contractor shall make the final Tenant interface wiring connections to the Base Building Contractor’s fire alarm system at the Tenant’s sole cost and expense. This will ensure the integrity of the Base Building Contractor’s fire alarm system warranty.

4. Programming: The Base Building Contractor’s fire alarm system will include all system programming and sequence of operation.

Tenant Work
General Scope of Work:

1. System: The Tenant shall provide a complete and operational fire alarm system as described herein for the in-line Tenant area, in-line restaurant area, and anchor store area.

2. Tie In: Tenant fire alarm contractor’s work shall begin at the Tenant interface location provided by the Base Building Contractor (V.I.F.).

3. Standards: The design and installation of the fire alarm system shall be in accordance with NFPA 72, state and local codes and ordinances.

In-Line Tenant Scope of Work:

1. System: Tenant shall provide a complete and code compliant fire alarm system, as required by all applicable codes.

2. Conduit: Tenant shall provide all required conduit and cabling to the Mall interface junction box.

3. APS: Tenant shall provide auxiliary power supplies (APS) as required for Tenant visual notification appliances. Tenant shall coordinate connection to a dedicated 120 VAC circuit, and shall provide 24 hour battery backup in each APS.

4. Speaker/visual notification appliances: Tenant shall provide all required speaker/visual notification appliances for a complete and code compliant fire alarm system. Tenant shall provide proper supervision of all wiring and appliances. Notification appliance mounting methods shall match the Mall. In the Tenant spaces use ceiling mounted visual and speaker notification appliances.
5. Connections: Tenant shall coordinate synchronization connections with the Siemen’s Base Building Contractor. All visual notification appliances in mall and Tenant spaces shall be synchronized. Tenant shall provide all required synchronization modules.

6. Smoke Detector: Tenant shall provide addressable smoke detector at APS. Mount smoke detector on ceiling/deck as per NFPA 72.

7. Shut Down of Equipment: Tenant shall provide shutdown of associated air handling unit (AHU). Tenant shall confirm proper shutdown function.

8. Duct Detectors: Tenant shall provide addressable duct detectors in the return side of all air handling units (AHU) with a design capacity greater than 2,000 cfm.
   a. Tenant shall provide addressable duct detectors in the return side for all AHUs and fan powered terminal units (VAVs) where multiple air handling systems share common supply or return air ducts or plenums with a designed capacity greater than 15,000 cfm.

9. Concealed Detectors: Tenant shall provide remote test stations/annunciators as required for all concealed detectors. Tenant shall provide all required power cabling connections to duct detectors and remote test stations/annunciators.

In-Line Restaurant Tenant Scope of Work:
1. Meet all criteria as outlined above in the In-Line Tenant section 3.
2. Kitchen Hood Suppression Monitoring: Tenant shall provide addressable input modules and monitoring connections to Tenant kitchen hood suppression systems. Tenant shall confirm proper shutdown function.

Equipment Requirements
1. UL Listing and Manufacturer: All Tenant provided auxiliary power supplies, speaker/visual notification appliances, modules and devices shall be UL listed for the intended application (i.e. UL listed for commercial fire alarm use), and shall be the same manufacturer as the Mall. In addition, the Tenant speaker/visual notification appliances must be compatible and listed for use with the associated Tenant APS.
   a. In Tenant spaces requiring additional Tenant provided modules and devices (e.g. Tenants with Tenant installed AHUs); all modules and devices must be addressable, must be of the same manufacturer as the Base Building Contractor’s fire alarm system, and must be compatible with the specific Base Building Contractor’s FACP. These modules and devices will be required to connect directly to the Base Building Contractor's addressable loop. The Base Building Contractor will be responsible for final wiring connections to the Tenant addressable loop at each Tenant interface junction box.

Acceptance Testing
1. All tests and inspections shall be reported in writing and submitted to the Base Building Contractor and landlord in accordance with this section.
2. The system shall meet all the requirements of the listed applicable codes and the requirements of the AHJ. The system tests and test documents shall meet the requirements of the AHJ.
3. The smoke detectors shall be tested to ensure smoke entry into the sensing chamber as required by NFPA 72.

4. Provide testing of the voice evacuation system dBA levels to ensure compliance with all applicable codes.

5. All testing, inspection and retesting required for certification and required for all warranty work or replacements shall meet the requirements of the AHJ. This certification, inspection, or testing shall be completed at no additional cost to the Base Building Contractor.

6. Provide the testing date in writing to the Base Building Contractor a minimum of two weeks before the date. The Base Building Contractor may elect to have a representative present for testing.

7. The fire alarm system will not be acceptable until final testing and receipt of the testing certificates have been obtained.

Fire Protection Design Criteria

Fire Protection – Sprinkler System

Landlord Work

1. Tenant Fire Service Main: Interior Tenant Fire Service Main (TFSM) routed to each tenant space at a point to be determined by Landlord. TFSMs have been hydraulically calculated to provide a minimum of 650 gpm to the most remote tenant on each level.

2. Monitoring: The TFSMs are monitored by the Landlord’s fire alarm system.

Tenant Work

1. Design and Approval: Hydraulically calculated fire protection sprinkler system, fire extinguishers, and other equipment within Tenant's premises shall be in accordance with the Landlord’s Insurance Underwriters’ Fire Rating Inspection Bureau (FM) and state/local code requirements. Since the entire fire protection system for the project is required to be an inter-related, centrally controlled installation, Tenant shall cause to be designed and installed, by a qualified sprinkler contractor acceptable to Landlord, said system within Tenant's premises according to the Landlord's requirements; and shall submit for Landlord's review, shop drawings, specifications and hydraulic calculations for the sprinkler system that have been approved by the Fire Rating Inspection Bureau (FM). Landlord's approval of this shall not constitute the assumption of any responsibilities by Landlord for the accuracy or sufficiency of the sprinkler system. Tenant shall be solely responsible for the system within the leased premises.

2. Tap: Tenant fire sprinkler contractor's work shall begin at the 6 in. Tenant Fire Service Main (TFSM) provided by the landlord within the tenant space. Tap into the TFSM shall be by the Landlord’s sprinkler contractor at the tenant’s expense. The TFSM serving the tenant space is not to be used as a cross main for the tenant provided system. **Only one tap into the TFSM is allowed.**
   a. Individual tenant control valves are not allowed in the sprinkler system. Valving and alarm system is accomplished at source to building by Landlord.
3. For Block 75 Level 3 glass storefronts along Social Hall: the Tenant shall provide closely spaced sprinklers (water curtain) at a maximum spacing of 6'-0" apart, and within 6"-12" of the glass. Sprinklers shall be the concealed type, and they shall be installed so that the spray pattern of the sprinkler is not obstructed prior to wetting the glass.

**Fire Protection Design Criteria**

1. **Sales Area:** Density 0.20 GPM/SF over 2,500 feet.

2. **Stock Rooms:** Where stock exceeds twelve feet in height (six feet for plastics), coordinate design with local AHJ and FM Global.

3. **Standard Pressure Piping System Component:** Listed for 175 psig minimum working pressure. All piping shall have a C.R.R. of 1.0 or greater.

4. **Fire Sprinkler system design criteria as follows.**
   
   a. **Tenant Lease Spaces:** Density – 0.20 gpm / sq. ft.
   
   b. **Operating Area – Hydraulically most remote 2,500 sq. ft.** (locations of partitions shall be ignored when choosing remote area).
   
   c. **Temperature Rating / Response Type – Concealed Ordinary / Quick Response.**
   
   d. **K-Factor – 5.6 or 8.0**
   
   e. **Sprinkler Spacing – 130 sq. ft. maximum**
   
   f. **Hose Stream Allowance – hose stream allowances are not required within the tenant calculations. A 250 gpm hose stream allowance has already been included in the calculations for the TFSM.**
   
   g. **NOTE:** Where storage/merchandise exceeds 12 ft (6 feet for plastics) in height and/or where storage is on racks with solid shelves, coordinate design criteria with the local AHJ and FM Global.
   
   h. **NOTE:** TFSM’s have been sized based on hydraulic calculations, to provide the above described water supply. Tenant sprinkler calculations need only to be taken back to the connection on the TFSM.

5. **Lease Space level 100 – available water supply**
   
   a. 100 psi static, 90 psi residual, while flowing 650 gpm to the hydraulically most remote point of the Tenant Fire Service Main.

6. **Lease space level 118**
   
   a. 90 psi static, 80 psi residual, while flowing 650 gpm to the most remote point of the Tenant Fire Service Main.

7. **Lease space level 136**
   
   a. 80 psi static, 70 psi residual, while flowing 650 gpm to the most remote point of the Tenant Fire Service Main.
Sprinkler Heads
1. Type: Sprinkler heads in gypsum board and other hard surface ceilings must be concealed type while sprinkler heads in lay-in ceilings to be semi-recessed heads. Fully Pendent type sprinkler heads are permitted only in stock/storage areas. All sprinklers shall be Quick Response.

Electrical

General Requirements
1. Access: Equipment must be installed allowing clear access for servicing.

2. Electrical Data Tabulation Sheets: must be filled out completely, certified by engineer of record, and submitted with Construction Document for Landlord Review Process.

3. Tenant Electric Design Loads:
   a. Retail (dry goods): 14 watts/sqft
   b. Restaurant (sit down style): 24 watts/sqft

4. Lighting Control: Utilize daylight sensors and dimmable ballasts to control light levels in day lit zones of your space where appropriate, and occupancy sensors for lighting in auxiliary spaces (non-sales areas) and to control plug loads such as task lights and computer monitors.
   a. Select high quality, energy efficient fixtures considering aesthetics and the visual comfort of occupants.

Landlord Work
1. Electric Conduits: Landlord has provided 2.5” and/or 4” empty electrical service conduits from Tenant’s leased premise to Center’s central metering switchboard. Refer to Base Building Tenant Conduit Provision Plans.

2. Telephone Conduits: Landlord has provided 1 to 1.5” empty conduit for Telephone service stubbed into Tenant’s premises.

3. Power: Power available for the leased premises is 480/277 volt, 3 phase, 4 wire, 60 hertz.

4. Telephone incoming feeders to project central distribution closets.

5. Circuit Breaker: Landlord has provided a 200 amp circuit breaker and meter compartment in Facility switchboard and a 2.5 to 4” empty conduit stubbed into Tenant’s premises. All circuit breakers are to be furnished by tenant (see circuit breaker specs on website) and installed by Landlord contractor at tenant expense. Meter provided by Utility Company.
Tenant Work

1. Electrical Feeders and Other Equipment: Electrical feeders in existing conduit from Landlord's distribution equipment to Tenant's premises. Tenant shall coordinate metering and power requirements with Landlord. All conductors shall be insulated copper wire type THHN or THWN.
   a. Tap box, panel board(s), transformer(s), distribution center, conduits, and branch wiring, outlet boxes, and final connections to all electrical devices including mechanical equipment, controls, and signs.
   b. All lighting fixtures, lamps, convenience outlets, time clocks, signs, etc., and all related conduits and wiring.

2. Panel Design: Panel board(s) shall be designed for 20% minimum spare ampacity (based on connected load) and 20% spare breaker space.

3. Light Fixtures: All lighting fixtures in Tenant's sales areas, other than decorative fixtures shall be recessed. Fluorescent fixtures shall have deep cell parabolic lenses. Track Lighting at the storefront display area shall be recessed. Track lighting outside the storefront display area may be surface mounted.
   a. Lighting shall not spill outside premises and no direct glare shall be visible to public view.
   b. Bare lamp fluorescent or incandescent fixtures may not be used except: (1) in stockrooms or areas inaccessible to customers.

4. Telephone: Telephone equipment and wire from central distribution point outside the leased premises to, and within the leased premises and related items for same.

5. Television and burglar alarm equipment: Television and burglar alarm equipment, and all conduits, wiring, and related items for same. The installation of any roof mounted antenna must be approved, in writing, by Landlord.

6. Exit/emergency lighting system: Exit/emergency lighting system functioning on a normal source or battery operated source for loss of power conditions (as required by governing codes).
   a. Emergency lighting shall be provided by Tenant to illuminate stock, food preparation area or sales area and rear exit way during power outages. Said lighting shall be battery operated, recessed lights or twin-head light pack(s).
   b. In areas visible to customers, battery assembly for emergency and exit lights shall be concealed and remote type light fixtures used.

7. Signage: Transformers, ballast, conduit, wiring, and related items for signs. Circuits serving sign(s) shall be connected by a time switch.

8. Transformers: Transformers are to be supported at the floor/wall, not from the building structure or demising wall.
   a. Three phase transformers (dry-type), for all tenants, shall have six standard full capacity tap arrangements. Entire installation within Tenant's premises shall be balanced equally across all three phases.
9. Service call system: Tenant shall provide and install a buzzer call system and all related conduit and wire located at back service corridor and must not be audible in sales area.

10. Codes and UL: Entire installation shall meet all requirements of national or local electrical codes. All equipment shall bear UL labels.

11. Conduit: All electrical wiring systems shall be in conduit. The use of "Bx" or "Romex" is not permitted except the last +/- 10 ft. of wiring to the fixture. Speaker or low voltage wiring must be plenum rated or in conduit.

12. Neutral Conductor: The neutral conductor shall not be bonded to ground ahead of Tenant’s step-down Transformer. The ground fault protection in Landlord’s distribution system will not function properly if the neutral is bonded to ground anywhere. Correct this situation if found existing.

13. Roof Access: Unless approved otherwise in the Tenant's lease, a roof access agreement is required prior to the installation of any roof mounted antenna or satellite dish.

**Additional Supporting Documentation**

For additional supporting documentation and reference information to assist you in preparing your drawings, please refer to the following Base Building Construction Documents and Landlord Standard Project Details.

1. Refer to the City Creek Center-Base Building Construction Documents listed on our website at [http://tenantcoordination.taubman.com](http://tenantcoordination.taubman.com)

2. Refer to City Creek Center Retail/Restaurant Design and Sign Criteria’s and Storefront Conditions Supplement for more information on Sign Requirements. Available on our website at [http://tenantcoordination.taubman.com](http://tenantcoordination.taubman.com).

3. In order to expedite the plan review by the Building Services & Business Licensing Department, please reference the following:
   
   a. Provide a keyplan on the drawing showing the location of the tenant space on the overall building keyplan.
   
   b. Provide MEP page number(s) that corresponds to the Tie-In information on each of your MEP sheets (IE: M-XXX for HVAC Tie-In information, etc.).
   
   c. Place a box around the utility connection points saying “location of electrical tenant metering switchboard” or “location of cold water piping connection.”

4. Each TI must include an overall floor plan identifying where their space is located in relation to the restroom to confirm compliance with the 300 foot travel distance measurement.