

# Taubman



## Construction Criteria



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## **I. INTRODUCTION**

Information contained in this Construction Criteria has been assembled to assist the Tenant's 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.

The following Construction Document Criteria and the Design Criteria, which are available on our website at <http://Tenantcoordination.taubman.com>, referred to as **TC website**, were created to help define the Design Philosophy.

We encourage the use of sustainable design and construction practices for all aspects of Tenant Improvements. Please reference the U.S. Green Building Council's website at [usgbc.org](http://usgbc.org) for more information.

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



## II. ARCHITECTURE AND FINISHES

### A. Storefront Work

1. Materials: All materials should be suitable for California climate (when exposed) and convey durability and permanence. Materials employed in Tenant's storefront shall be hard surface, durable, materials that require minimum maintenance. Wood employed decoratively within or at the storefront, or anywhere within the leased premises, must comply with code requirements. All materials should be non-reflective.
  - i. All materials at the storefront must be Flame Spread Class I. Areas opening onto the mall (sales area) must be Class I or Class II. Elsewhere, Class III rated materials is acceptable.
2. Material Samples: **Tenant must provide an 11" x 17" material sample board** with their plan submittal (labels must be consistent with the plan submittal legend). In addition, Tenant must provide either photos of finishes from a comparable existing store or renderings of the finishes for the proposed store with their plan submittal.
3. Structural Support: Tenant's storefront construction must be floor supported at the base and shall be laterally braced at their head section to Landlord's structural framing or tenant's supplemental steel secured to the structural framing. No attachments to the Landlord's mall finished bulkhead, ceiling system or steel roof deck shall be permitted.
4. Height(s):
  - a. Storefront Bulkhead Height:
    - i. Level 1: Varies: Refer to Restaurant Design Criteria for more information.
    - ii. Levels 6-8: Allowable Storefront Height: +/- **12'-3"**.

**Please Note:** In 2016, Renovation began at the Beverly Center which will raise the mall bulkheads on Levels 6-8 from 11'-6" to 12'-3". As a result of these changes, all tenants must utilize the taller storefront height. Both new tenants and existing tenants that are remodeling (including limited and full remodels) are required to expand their storefront finishes up to the newly established height. This storefront change does not affect the store interior 'clear' ceiling heights (see Ceiling Height section for further information).

- b. Clear Ceiling Heights:
  - i. Level 1: Varies: Refer to Restaurant Design Criteria for more information.
  - ii. Levels 6-8: Allowable Ceiling Height: +/- **11'-6"**.

5. Storefronts and Glazing (all storefronts): Glazing: Where glazing is utilized, it shall be engineered for seismic and wind load (where applicable) site conditions as well as energy code requirements. Refer to local building codes for minimum seismic design provisions. Provide design for wind loading (where applicable) in accordance with the local building
6. Storefront Door Enclosures: The Los Angeles Fire Department requires storefront door closures to be a non-combustible smoke barrier type, such as horizontal sliding (glass or solid) or roll-up doors. A smoke barrier door shall be provided with a gasket so installed as to provide a seal where the door meets the stop on both sides and across the top. The use of open grilles or sliding screens is prohibited.
  - i Where utilized and in compliance with requirements above, storefront grilles shall be concealed in an overhead or side storage pocket during shopping center hours.
7. Water Curtains: The Los Angeles Fire Department requires that the storefront's design employ a water curtain as part of the sprinkler system on the Tenant's side of the storefront enclosure. The water curtain sprinklers must be located a minimum of 18" above the Tenant's or mall ceiling, whichever is lower.
8. Demising Wall-U Channel Transition: Tenant to provide 1" U-Channel transition at the lease line of demising walls at the storefront. **There are no Landlord provided neutral piers, only U-Channel Transitions to the adjacent Tenant. Scribe Tenant storefront material to mall bulkhead where possible.**
9. Anti-Theft - Security System: Identify and specify any security system to be used. Fully concealed systems are *encouraged*. Door frame mounted or in floor systems are acceptable (see criteria below). **No free standing/ exposed pedestal systems are permitted.**
  - a. In Floor Security sensors may be located within depressed concrete slab area located just inside storefront lease line. Concrete topping in-fill will be placed by the tenant. **Trenching of elevated structural slabs is not permitted.** (see Structural Section for additional information)
10. Mechanical Devices: Any mechanical device (time clocks, grille locks, grille controls, etc.) shall be concealed within Tenant's storefront construction.
11. Mirrors: No mirrors shall be visible from the common area facing the storefront.
12. Egress Path: A clear egress path of 10 ft. is required in the mall concourse area in front of the storefronts. Tables/Chairs, signage and other obstructions must not be located in this space.
13. Door Swing: All entry doors that swing outward must be setback into recessed openings and not impede the egress path.

## B. Storefront Signage

**Level 1 Tenants:** Refer to Restaurant Design Criteria for specific sign criteria.

**All Other Tenants:** Storefront Signage must comply with Tenant's lease and requirements below.

### *Dimensional and Location Requirements (INTERIOR)*

1. Number of Signs: Tenant shall identify the premises by installing **one primary identification sign** on the storefront elevation.
2. Store Name/Trade Name: Store identification signs shall be limited to the store name (d.b.a.). Wording of signs shall not include the product sold except as part of Tenant's trade name. The use of a crest, shield, logo, or other established corporate insignia which has been customarily displayed or associated with the store name may be approved on an individual basis by the Landlord at Landlord's sole discretion.
3. Height: The average height of sign letters or components shall **not exceed twelve inches (12")**. **Letters are limited to sixteen (14") maximum height.**
4. Projection: Signs shall not project beyond the storefront more than two inches (2") if less than eight feet (8 ft.) above finished floor line, nor more than four inches (4") above eight feet (8 ft.).
5. Limits: The extreme outer limits of the sign letters and components shall fall within a rectangular area that can be defined as follows:
  - a. The sides shall not fall closer than twenty-four inches (24") to the side lease lines of the premises; and
  - b. The top side of which shall fall no closer than twelve inches (12") to the soffit of the mall fascia.
6. Review and Approval: All signage, identification, and graphics are subject to the approval of the landlord. The landlord maintains all authority to reject any sign or sign component, whether specifically addressed in this manual, or not.
  - a. All signage shall be submitted to landlord for approval with scaled shop drawings. All signage must meet approval of local code authority.
  - b. All signs and sign installation shall comply with all local building and electrical codes.
7. Decals: In addition to the primary identification sign, graphics on the storefront glass doors are permissible, Subject to landlord approval. These may not be illuminated, and must adhere to:
  - a. Install on second surface, 3-4" MAX letter height, 36-42" AAF MAX.

- b. Charge card decals shall not be affixed to any part of the storefront, nor shall any charge card identification be immediately visible from the public space.
8. Light Box Displays: Or equivalent illuminated displays, boxes, images are allowed however design subject to landlord approval.
- a. Maximum size 4'x8'
  - b. Only 1 per storefront
  - c. No moving images or changes in illumination

**Prohibited Sign Types**

1. Signs with **exposed fasteners**, vents, or weep holes
2. Signs with exposed neon or other lamps or signs using flashing lights.
3. Sign manufacturer's name, stamps or decals, or registered trademarks.
4. Signs with exposed raceways, ballast boxes or transformers.
5. Signs with painted letters.
6. Signs employing luminous, vacuum-formed plastic letters.
7. Signs of exposed box or cabinet-type design that employ transparent, translucent or luminous plastic background panels.
8. Shadow box type signs.
9. Signs employing un-edged or uncapped plastic letters with no returns.
10. Paper, plastic or cardboard signs. In addition, stickers or decals of any kind are not permitted on the storefront glass or in entry area, unless approved by Landlord.
11. No sign, advertisement, notice or other temporary lettering shall be exhibited, inscribed, painted or affixed on any part of the storefront(s) except store identification signs.
12. Signs with an orientation other than horizontal, that is, no vertical, perpendicular (blade signs) or diagonal signage, etc. unless approved by Landlord.

## C. Interiors

1. Restrooms: All Toilet Room floors above grade level shall have a Landlord approved **waterproof membrane** between the structural sub-floor and Tenant's finish floor across entire floor area and 4" up all walls. All Toilet Rooms shall have ceramic tile sanitary floors and base that extend a minimum of 4" above finish floor.
  - a. All Toilet Room floors on grade level shall have a LL approved water proofing membrane at perimeter walls to prevent migration to adjacent tenant spaces.
  - b. All bathrooms are to have an ADA complaint marble threshold (or equivalent) to help contain water in the event of a leak
2. Plumbing Fixture Travel Distance: One employee toilet room is required in each tenant space unless specified otherwise by all governing authorities.
3. Rubbish, Recycling and Composting
  - a. 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 across entire floor area and 4" up all walls.
  - b. Rubbish System: This jurisdiction has specific requirements for the recycling of materials as well as food waste. The mall has designated trash, recycling & composting collection areas. Tenants shall comply with all local requirements for the disposal of any rubbish/ food waste, etc.
4. Mop Sink: Food and beverage service tenants are to provide a mop sink in their space for general cleaning purposes.
5. Cooking Oil Disposal: Landlord has installed a **cooking oil disposal system extended to designated restaurant tenant spaces**. Tenant shall incorporate system into their kitchen design and extend piping from stub-in location to final location within tenant space. Tenant must use LL required contractor for all work directly related to cooking oil disposal system installation/ extension. Tenant is also required to purchase and utilize mobile Dar Pro pumping caddy for use with this system.
6. 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 across entire floor area and 4" up all walls. They also must have an adequate number of floor drains.
  - a. All food preparation and service area floors on grade level shall have a LL approved water proofing membrane at perimeter walls to prevent migration to adjacent tenant spaces.



7. Health Code: All finishes shall be in compliance with Health Code Requirements (or approved by local health authority).
8. Exiting: One exit is required for all tenant spaces less than 600 SF. All other tenant spaces require a min. of two exits.
9. Television, LCD's and Security Equipment: Television, LCD screens and security equipment, and all conduits, wiring, and related items in the sales area are subject to Landlord review and approval.
  - a. Television & LCD Screens: The installation of Televisions & LCD screens in Tenant sales area for marketing and advertising is subject to Landlord review and approval.
    - i. If approved, Television & LCD screens must be a minimum of five (5) feet from the storefront lease line. (or per the lease)
    - ii. No flashing or strobing images.
    - iii. Content must adhere to decency standards in Lease and is subject to Landlord review and approval.
  - b. Antennas & Satellite Dishes: The installation of any roof mounted antenna/satellite must be approved, in writing, by Landlord and coordinated with Mall Facilities prior to install.
10. Exit/Emergency Lighting System: Tenant shall provide 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, code required emergency egress pathways, and rear exit way during power outages. Said lighting shall be battery operated and shall be recessed lights, separate unitary battery pack lights, or integral with selected general lighting fixtures.
  - b. **In areas visible to customers, battery assembly for emergency and exit lights shall be concealed by utilizing remote type light fixtures or integral with selected general lighting fixtures.**
11. Fireproofing: Covering and finishing of columns. Columns and floor beams, and composite concrete and steel floor deck are provided with spray-applied fireproofing by Landlord to achieve a required fire resistance rating. Roof beams and steel roof deck have been provided with spray-applied fireproofing by Landlord to achieve a required fire resistance rating. Tenant shall repair the fireproofing with approved methods as necessary to meet the required rating, wherever Tenant Work has caused it to be scraped or removed.
12. Sales/ Stock Ratio: The Los Angeles Building Department requires that a 2:1 ratio of sales area to storage area be maintained for each tenant space.

## D. Flooring

### Floor Slab Conditions:

**Level 1:** Slab on Grade (4" concrete slab w/ methane barrier on 6" granular fill)

**Levels 6-8:** Trowel Finished Structural Concrete Slab.

1. Floor Material: All materials employed in Tenant's space shall be hard surface, durable, materials that require minimum maintenance. Wood employed anywhere within the leased premises, must comply with code requirements.

**a. Tenant's storefront – hard surface floor finish must extend to the leaseline**

- i. Floor material must withstand regular contact with mall cleaning equipment.
- ii. Vinyl floor products are not acceptable in the sales area. iii. No vinyl or rubber base permitted in the sales area. Provide a hard surface-durable base material.

**b. Polished Concrete:** Polished Concrete floors are allowed on a case by case basis, if consistent with tenant prototype design

- i. Prototype: Submit prototype design package as part of the approval process.
- ii. Pattern/Texture: Provide score, diamond grind and/or bead blast pattern.
- iii. Finish: Sealing the surface with clear acrylic, epoxy, or urethane sealer adds varied levels of sheen and depth, and protects the concrete from damage and staining.
- iv. Concrete floors must be sealed with a high quality, low-VOC clear acrylic, epoxy, or urethane sealer, level 2 (minimum) sheen finish.
- v. Color: Artistic designs using pigments, paints, epoxy are acceptable if wear resistant and consistent with prototype.
- vi. Repair: Repair of the cracks or spalls in the existing slab, where desired by the Tenant, shall be performed by the Tenant using concrete repair methods approved by the Landlord.

**c. Wood Flooring:** Solid wood or Engineered wood flooring with veneers of 2mm thickness or more and commercial grade (10 year warranty) finish are acceptable. No laminate or vinyl wood products are allowed in the sales area.

**d. Restrooms:** All tenant public restrooms (see Plumbing Criteria) must have hard surface, durable flooring with waterproof membrane. No vct flooring.

2. Transitions: **All floor finishes at the storefront lease line shall be the same finish floor elevation (flush- grout line) as the Landlord's mall floor.** Provide recessed/flush Schluter Type or equivalent transition strips in all other floor transition areas of Tenant space as needed based on floor material.

- a. All toilet rooms are to have an ADA compliant marble threshold (or equivalent) to contain water in the event of a leak.
- 3. Seismic or Expansion Joints: Expansion joints in storefront or sales areas must be detailed and illustrated in the Construction Documents. Seismic or Expansion joint materials must be compatible with the storefront and 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 and any shrinkage cracks that are evident.
- 5. Mezzanines: Where mezzanines are required or approved by the Landlord, Tenant is required to submit Structural Design Drawings and Calculations for Landlord's review and approval. Mezzanines shall be framed, supported, and constructed with materials suitable to the use intended and as required by governing codes.
  - a. Designated Level 1 Restaurant tenants are required to install a mezzanine structure within their space for support/ placement of kitchen/ mechanical equipment, etc.
- 6. Restrooms: All Toilet Room floors above grade level shall have a Landlord approved **waterproof membrane** between the structural sub-floor and Tenant's finish floor across entire floor area and 4" up all walls. All Toilet Rooms shall have ceramic tile sanitary floors and base that extend a minimum of 4" above finish floor.
  - a. All Toilet Room floors on grade level shall have a LL approved water proofing membrane at perimeter walls to prevent migration to adjacent tenant spaces.
  - b. All bathrooms are to have an ADA complaint marble threshold (or equivalent) to help contain water in the event of a leak

## E. Ceiling Work

1. Ceiling Heights: Tenant is responsible for field verification of the existing conditions. **Ceiling heights above the height shown on the Space Layout Drawing and listed below 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: (Tenant's suspended ceilings shall be secured to Landlord's structural steel framing or Tenant's supplemental support system (uni-strut or equivalent)). Design for seismic loading and vibration isolation. No attachments to the Landlord's mall finished bulkhead, ceiling system or steel roof or floor deck shall be permitted. No attachments to the last 3'-0" of existing steel moment frame beams shall be permitted. Refer to the base building drawings for locations of the existing moment frames.
3. Ceilings: all suspended ceilings including seismic bracing designed and installed where required and in accordance with the Building Code for seismic zone 4.
4. Sales Area Ceilings: Gypsum 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. Acoustical lay-in tile ceiling in the sales area may be approved on a limited basis, If used, tiles must be 2' x 2' with an exposed tegular 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, speakers, etc., must be painted to match finish ceiling.
  - e. Open ceilings are not permitted.
5. Hanging Marketing Displays: Tenant Storefront hanging marketing displays must provide a recessed track or equivalent discreet hanging method. Hanging grids or other surface mounted hanging methods are prohibited.
6. Access Panels: Provide access panels to permit servicing of all Tenant and Landlord 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 located as inconspicuously as possible. No exposed fasteners on access panels allowed.
7. Lighting Fixtures: See Electrical Section for Lighting Criteria

## F. Wall Partitions and Separations

1. **Demising Walls:** Landlord will erect metal stud partitions dividing the Tenant's premises from the adjacent Tenant spaces or common areas at the Tenant's expense. **Tenant shall verify location per Space Layout Drawing**
  - a. **Please Note: 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.
  - b. **Demising walls are not designed to accommodate loading. All fixtures must be supported by blocking, the floor or new wall construction.**
2. **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. 5/8" Firecode (UL listed) gypsum board shall be used on all partitions or exit passageways where a one hour or two hour fire resistant separation is required. All interior partitions shall have gypsum board finish on all sides.
  - 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.
  - c. Tenants will be allowed to install utilities (pipes, conduits, etc.) within demising wall cavity; however this space to be shared with adjacent Tenant on first come basis. Tenant is responsible for protection against accidental damage.
  - d. Tenant interior partitions shall be constructed with a vertical deflection joint at the underside of the floor or roof slab and framing above. Joint shall allow for up to 3/4" vertical movement of the floor or roof structure above.

## G. Service Doors and Vestibules

1. 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 be self-closing and match existing building standards. Keyways and lock cores are by Tenant.
2. Finishes: After installation of Tenant exit/access door, Tenant shall restore base building 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.
    - i. Vestibule Ceiling: Provide gypsum ceiling with a minimum height of 8'-0".
  - b. Projections: Tenant door may not project when fully open into the exit passageway.
  - c. 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 minimum one layer of 5/8" fire code Type 'X' gypsum wallboard on both sides from floor to underside of structure above or as required by code. All joints must be taped and spackled. Refer to Space Layout.

### III. Structural

1. Modifications and alterations: Modifications and alterations to Landlord's framing structure and floors 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 or stronger than original design with finishes unimpaired. Conditions vary by location. Refer to Base Building Structural drawings for more information and Field verify all structural conditions:
2. Removing Slab on grade, existing construction: Where the Tenant will demolish portions of the existing slab in order to facilitate mechanical installations, the Tenant shall obtain review and approval from Landlord structural consultant prior to any work commencing. Tenant shall perform and provide the sawcut slab demolition and slab replacement in accordance with Slab Repair Detail in project shell construction documents.
3. Structural Design Loads:
  - a. **On-grade slabs**: 125 lbs. per square foot.
  - b. **Levels other than on-grade**: 100 lbs. per square foot, reducible.
  - c. **Roof**: 20 lbs. per square foot.
  - d. **Mezzanines**: Subject to Landlord review & approval.
4. Mechanical equipment that may be suspended from or installed over roof framing shall have supports distributed to limit loading on beams to this loading allowance. Where the proposed loading allowance will be exceeded, the Tenant shall submit structural calculations verifying the capacity of the base building structure, prepared by a structural engineer registered in the State of California for Landlord's review and approval.
5. All structural design loads imposed on the roof structure by tenant mechanical equipment and other items weighing in excess of 400 pounds are subject to Landlord Review and Approval. Tenant shall submit loading, roof framing analysis and support details prepared by a structural engineer registered in the State of California for Landlord's review and approval.
6. All loads shall be supported directly by the structural steel framing; loads suspended from or bearing directly on the roof or floor deck are not permitted.
7. Mezzanines: Upper Level floor framing has not been designed to support mezzanines. In the event an upper level Tenant is approved for a mezzanine, all structural enhancements of the floor framing and associated structure are the sole responsibility of the Tenant. Tenant shall submit structural mezzanine framing drawings and structural calculations verifying capacity of the base building structure, prepared by a structural engineer registered in the State of California for Landlord's review and approval.
8. Concrete floor penetrations: Required by Tenant shall be coordinated with Landlord's Field Representative structural consultant and shall be engineered to fit existing conditions.

9. All floor penetrations (excluding floor drains) in food service/preparation areas and toilet rooms shall have Water tight sleeves extending a minimum of 4" above finish floor.
10. Upper Levels: Trenching depth for electric and security systems is **not permitted** in upper level slabs on metal deck.
11. Fireproofing: Fireproofing is covering and finishing columns, beams and the upper level floor and roof deck(s).
  1. Columns and floor beams are provided with spray-applied fireproofing by the Landlord to achieve a three-hour fire resistance rating
  2. Roof beams and steel roof deck have been provided with spray-applied fireproofing by the Landlord to achieve a two-hour fire resistance rating.
  3. The tenant shall repair the fireproofing with approved methods as necessary to meet the required rating wherever tenant work has caused it to be scraped or removed.
12. Seismic Restraint, Vibration Isolation and Sound Attenuation: Vibration isolation and seismic restraint requirements must be provided for all equipment (floor mounted and suspended).
  - Pollution Control Devices/Scubbers & exhaust fans often create excessive noise both in the kitchen and outside and may require additional sound attenuation.
  - Speaker systems must provide sound attenuation materials and installation methods so as not to infringe on adjacent Tenants quiet enjoyment. No speaker or sound emitting device shall be installed or employed within twenty feet (20') of Tenant's storefront lease line and shall be directed toward the interior of the space.
  - The design of all equipment supports and their connections to the shell structure shall be provided by the tenant. Submit details and calculations for design of these items, including loads imposed on the base building structure prepared by a structural engineer licensed in the State of Hawaii for Landlord review.
13. Safes: Provide structural information (safes load & path of travel) for Landlord review & approval.
14. Seismic or Expansion Joints: Expansion joints in storefront or sales areas must be detailed and illustrated in the Construction Documents. Seismic or Expansion joint materials must be compatible with the storefront and floor finish materials. The Seismic Joint must be detailed and illustrated in the Tenant Construction Documents for the storefront or floor areas. Joint materials must be compatible with the storefront and floor finish materials.



## IV. Heating Ventilation and Air Conditioning

### A. Tenants designated to connect to the Central Air Conditioning Supply System (All retail tenants unless otherwise specified)

#### *MALL INFRASTRUCTURE:*

1. Central System: Landlord will provide a variable volume, central air conditioning system completely installed including “air-side economizer” operation with the following:
  - a. Conditioned, filtered, fixed temperature, variable volume air to each Tenant space through a series of vertical duct shafts and horizontal supply ducts.
  - b. Conventional high velocity supply ducts stubbed into or in proximity to each Tenant space.
  - c. The air conditioning supply system as provided by the Landlord will be designed and installed to maintain the following conditions in the sales area only.
    - i. Inside temperature of 76° F +/- 2°F dry bulb and 60% +/- 5% relative humidity during summertime when outside condition are 93°F dry bulb and 77°F wet bulb and the following inside design conditions are not exceeded:
      1. Lighting: 5.0 watts/SF
      2. Occupancy: one person/75 SF
  - d. Landlord’s system will not operate during shopping center off-hours as determined by the Landlord.
2. Variable Air Volume Devices (VAV): **Landlord requires (cooling only) standard variable air volume control devices complete with electronic controls and wireless zone sensor thermostat(s).**
3. BAS System: Tenant VAV control communications loop and junction box will be provided by Landlord in close proximity to the Tenant's premises. One junction box is provided for each VAV Duct Tap and shall be located at rear of tenant space in back of house corridor.
4. Toilet Exhaust: Toilet exhaust ducts stubbed into or in close proximity to each Tenant space. **Exhaust fans by Tenant per code.**
5. Fire Dampers: Fire Dampers are required for demising walls with Open Ceilings for the passage of return-air.
6. Return Air Openings: Tenant’s with ceiling will require return air openings in adjacent demising walls for passage of return air sizes of R.A openings and approximate locations, shall be determined by the Landlord and provided to the Tenant for coordination with adjacent Tenants.

## **TENANT WORK (Also refer to section 'D' for General Criteria)**

Tenant, at its sole cost and expense, shall prepare Construction Drawings and Specifications for and shall initially construct or provide all heating, ventilation, exhaust Equipment, including controls, ducts, insulation and all structural, plumbing and electrical for the leased premises. Each Tenant shall provide an individual system proceeding from the high-velocity air conditioning ducts and the toilet exhaust duct provided. All equipment shall bear UL labels.

### **Heating**

1. Heating Equipment: Tenant HVAC equipment shall be designed to maintain the leased premises at an inside dry bulb temperature of 70°F when the outside temperature is 42°F dry bulb with average wind velocity of 15 MPH.
  - a. The majority of required Tenant heating will be generated by inherent internal loads, that is, the daytime contribution from people and lighting.
2. Supplemental Heating Systems: Those Tenants affected by external heat losses (exterior walls, doors, windows, floors, etc.) may install independent electric heat from Tenant's power source **upon Landlord approval** and consisting of the following:
  - a. Roof: By self-contained, thermostatically controlled electric unit heaters installed in the space between ceiling and roof. Unit heaters shall be designed to maintain a minimum inside dry bulb temperature of 55°F in this plenum. Thermostat shall be set and locked at 55°F.
  - b. Exterior Wall, Doors, Windows, Slab: By electric heaters in fan-powered VAV boxes. Heaters shall be designed to maintain a minimum inside dry bulb temperature of 70°F in affected spaces.

### **Ventilation**

1. Sales Area: Central air conditioning supply system will provide minimum outside air per occupant, as required by code.
2. Toilet Rooms: Tenant shall connect to landlord provided exhaust duct stub and exhaust per local code requirements. **Exhaust fans by Tenant per code**. Exhaust equipment shall be of ceiling or in-line type complete with backdraft damper and minimum 26 gauge sheet metal duct connection to Landlord's toilet exhaust system.

### **Air Conditioning**

Variable Air Volume Devices (VAV): Tenant shall install a minimum of one VAV control device set. VAV control device sets are of the cooling only (except as noted above) fan-powered variable volume type with **50% shut-off**, complete with electronic controls and zone sensor thermostat(s). Note that VAV control device will require a 110v, single phase dedicated electrical circuit. FP VAV box will require connection to the fire alarm service and BAS connection to the base building systems.

## **B. Tenants designated to install Individual Heating, Ventilating and Air Conditioning System**

### ***TENANT WORK*** (Also refer to section 'D' for General Criteria)

1. 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. All equipment shall be contained within Tenant's premises, or within Landlord designated areas on the roof/parking levels.
3. All supply and fresh-air ductwork shall be insulated and all ductwork on all levels shall be installed in concealed space above ceilings.
4. Standards of design and construction shall be in accordance with latest ASHRAE and SMACNA Guides. Ductwork and equipment shall be supported from the existing structural steel framing. Tenant shall provide supplemental steel or Unistrut framing as necessary to span between the existing steel framing. Support of the ductwork or equipment off of the existing floor or roof decks is not allowed.
5. All new roof mounted equipment shall be installed on minimum 18" roof curbs to ensure proper roofing. Seismically support all equipment to the base building standards.

## C. Tenants designated to connect to Centralized Condenser Water Plant (Level 1 Restaurant Spaces & Food Hall on Level 8)

### *MALL INFRASTRUCTURE*

1. Centralized Condenser Water Plant: The Leased Premises are served from a Centralized Condenser Water Plant installed by Landlord which will deliver, during regular Shopping Center business hours, filtered, Condenser Water at a fixed temperature and variable volume. The system is designed to maintain the Leased Premises at 76°F.  $\pm$  2°F. DB and 50% RH, when outdoor temperature is 85°F. DB and 69°F. WB, and latent heat gain does not exceed 23 BTU/hour per square foot of Leased Premises.
  - a. Condenser Water Loop: The Condenser Water Loop will provide Condenser Water Supply (CS) at a temperature of 88 degrees Fahrenheit, and Condenser Water Return (CS) at 103 degrees Fahrenheit (15 degree Fahrenheit delta t), for connection to Tenant's Water Source Heat Pump Unit(s). Tenants are allowed 2 GPM/Ton, based on the following Criteria: The above figures are averages only. Tenants are allowed a specific tonnage and GPM based on size of space, amount of storefront and orientation of the space. The specific Tenant Space allotments shall be as indicated on mechanical drawings.
  - b. Approximately the capacity per level is as follows:
    - i. Level 1 Fast Casual Tenant(s) 200 s.f./ton
    - ii. Level 1 Full Service Restaurant Tenant(s) 150 s.f./ton
    - iii. Level 8 Food Hall Tenant(s) 150 s.f./ton
2. BAS System: There is no BAS system on Level #1.
3. Toilet Exhaust: Restaurants are required to provide their own toilet exhaust system based on the size and quantity of waste fixtures.

### ***TENANT WORK*** (Also refer to section 'D' for General Criteria)

Tenant, at its sole cost and expense, shall prepare Construction Drawings and Specifications for and shall initially construct or provide all heating, ventilation, exhaust Equipment, including controls, ducts, insulation and all structural, plumbing and electrical for the leased premises. Each Tenant shall provide an individual system(s) as outlined below. All equipment shall bear UL labels.

1. Cooling Equipment: Tenant shall provide and install within its Leased Premises, Condenser Water Source Heat Pump Units. Tenant shall design and install the water and air distribution system for its Leased Premises.

- a. The Tenant's temperature sensor shall include an over-ride button for afterhours cooling operation. The programming features and requirements are to be coordinated with the Landlord.
2. Drain Pans: Provide secondary drain pans below all Heat Pump Units/piping and properly drain to comply with all local codes.
3. Condenser Water Piping Connection: Condenser water piping systems are to include a suitable strainer on the supply side of the Tenant's fan coil unit and a flow control balancing valve on the return, 2-way shut-off valve and flexible piping connections. A 2-way modulating control valve interlocked with the fan coil shall also be provided by the Tenant. Piping materials are to comply and be compatible with Landlord's piping systems and suitable for a plenum installation.
4. Insulation: All ductwork and condensate piping shall be insulated. All ductwork and Condenser Water Piping on all levels shall be installed in concealed space above ceilings.
  - a. Engineered design of unit support including design of seismic bracing of mechanical equipment where required by the Building Code per California Building Codes. Submit details prepared by a qualified California-licensed engineer including information illustrating proposed loads imposed on the base building for all mechanical equipment weighing more than 400 pounds.
5. Pollution Control units: Required for all restaurant tenants. Units shall be installed within tenant space bearing on the Tenant's floor, mezzanine structure or suspended from framing above. Locate suspended units within areas dedicated for mechanical equipment loading. See Structural Section, Structural Design Loads.
6. Outside Air: Tenants shall provide their own dedicated outside/make-up air system independent of the Landlord system. **Level 1 tenants: must incorporate outside air grilles into storefront design or at rear/service walls.**
7. Toilet Rooms-Exhaust: Tenant shall provide exhaust fans to satisfy exhaust requirements for toilet rooms and for removal of heat or odors generated within the Leased Premises. Exhaust fans shall be located within the Leased Premises. Toilet exhaust shall be completely the responsibility of such tenant. Exhaust equipment shall be of ceiling or in-line type complete with backdraft damper and minimum 26 gauge sheet metal ductwork exhausting to roof or parking level above. Tenant's exhaust fan shall be controlled by a local switch provided by Tenant.
8. Pressure Relief System: Tenant shall provide a pressure relief system for the HVAC if needed. The system shall consist of counter balanced backdraft damper, ductwork, relief grille/louver discharging to the exterior at a Landlord approved location. Discharge grille/louver shall be mounted in an inconspicuous location approved by leasing and the design architect.
9. Tenants are responsible for relief of their individual spaces. Relief shall be via entry doors, ductwork, dampers and louvers, grilles, etc. to a storefront location acceptable to the Landlord.

## D. General Requirements (Applies to Each Type of System)

1. Air Distribution System: Tenant shall furnish and install standard low-velocity air distribution system to sales or dining areas of the leased premises. Tenant may elect to supply air to other than sales or dining areas with the understanding that temperature, as stated above, may not be maintained.
2. Ductwork: Design, fabricate and construct all ductwork from minimum 26 gauge sheet metal in accordance with the latest ASHRAE and SMACNA standards. Caution, fiberboard ductwork is not permitted.
  - a. Tenant's supply-air ductwork shall be insulated and all ductwork shall be installed in concealed space above ceilings. Space between ceiling and structure shall be used as a return-air plenum.
  - b. Flexible ductwork to air devices, other than short runs (8'-0" or less), are not permitted.
3. Points of Connection: Verify points of connection to existing ducts, waste, vent and water stubs with Landlord's Field Representative.
4. 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. 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.
5. Access: Equipment must be installed allowing clear access for servicing. Access must also be provided to Landlord Equipment as well.
6. Fire Dampers: Fire dampers are required for demising walls with open ceilings for the passage of return-air. Applicable only to tenants on common return system.
7. Return Air Openings: Tenant's (on mall common return system) with ceilings will require return air openings in adjacent demising walls for passage of return air. Sizes of return air openings and approximate locations shall be determined by Landlord and provided to the Tenant for coordination with adjacent Tenants.
8. Pollution Control Devices & Exhaust Ductwork Path of Travel:
  - a. **For first level Tenants**, ductwork shall penetrate existing parking level 2 slab at locations designated by Landlord and exhaust outward over the street level. Tenant to patch waterproofing as required.
  - b. **For upper level Tenants**, ductwork shall be routed to roof. Verify path required w/ Landlord.

- c. Non-grease laden ductwork that passes through service corridor or adjacent tenant walls or Upper level floors shall have UL approved fire dampers located in ductwork at wall and floor. Provide approved access doors for service to fire dampers.
  - d. All grease laden ducts that pass through fire-rated partitions are to be encased suitable material and fire rating approved for use by the code authorities.
  - e. Pollution Control Devices: Kitchen equipment will be required to use pollution control devices **within the Tenant space** for the kitchen exhaust systems.
    - i. Exhaust Types: Exhaust hoods on roof shall be up-blast type. Provide exhaust to remove all hot food odors.
    - ii. Grease Mitigation: Tenants must accommodate grease mitigation (UV lights, grease grabber, or other acceptable alternatives).
    - iii. Scrubbers: Odor and smoke removal devices (scrubbers) are required on the exhaust fans and located **within the Tenant space**. Charcoal or wood burning cooking equipment may require a 4 stage system.
    - iv. Access: Provide approved access doors to ductwork and/or equipment in accordance with local codes. All grease laden ducts that pass through fire-rated partitions are to be encased in suitable material approved for use by the code authorities.
9. Roof Work/Equipment: Note: Roof Access is very limited due to site conditions. All rooftop equipment must be reviewed and approved by Landlord.
- a. Location: Tenant's roof equipment shall be located in areas designated by the Landlord to specified heights and according to Landlord's approval. Exception: should weight or location of equipment by Tenant require supports, screens, catwalks or roof hatch and ladder, they shall be provided by Tenant according to Standard Project Details. Landlord will determine when and where the above shall be required.
  - b. Structural Design Loads: Subject to Landlord review and approval. Tenant shall submit loading, roof/ parking level framing analysis and support details - prepared by a structural engineer registered in the State of California for Landlord's review and approval.
  - c. Finish: All such equipment shall be factory-finish painted according to the Landlord's paint schedule and specifications.
  - d. Identification: Tenant's roof equipment shall be clearly identified with Tenant's space number and name.
  - e. Support: All equipment rails and curbs shall be positively anchored to the supporting structure and all equipment secured to the rails/curbs to resist the effects of 90 mph winds (based on

ultimate loads using ASCE7-10) and 4G seismic force resistance. Anchorage requirements shall be included on the Tenant's Mechanical plans.

- f. Roof Walkway Pads and Grease Pads: Tenant shall provide walkway and grease pads per landlord roofing contractor's specs.
  - g. Cutting and Patching: Cutting and patching of roof openings, when approved by the Landlord, shall be done by the Landlord's roofing contractor at Tenant's expense.
10. Screening of Tenant's Equipment/ Exhaust Ductwork: **Equipment screening is required for any equipment/ ductwork visible to public on parking levels. Refer to design criteria for details on screening.**
  11. Parking Level Penetrations: All equipment located on public parking levels shall be installed on min. 18" high curbs. Tenant to patch/ repair waterproofing/traffic membrane to "like new" condition upon installation.
  12. Air Balancing: Tenant shall engage a separate temperature control contractor for final set-up of system(s) operations and air balancing. **Tenant will provide the Air Balance report to the facility upon completion of the Tenant HVAC system.**
  13. Registers: All Tenants shall provide ceiling return-air registers or grilles (maximum velocity 400 FPM net).
  14. Control Wiring: Tenant shall furnish and install all code complying temperature control wiring and conduit as required per manufacturer's recommendations or the Landlord's review comments. **All control wiring shall be in conduit.**
  14. Kitchen Exhaust and MUA Systems: For lease spaces designated for food and beverage services Tenant shall provide all process requirements, hood exhausts, equipment vents, and other contaminated exhausts. When permitted by the Landlord, they shall extend in ductwork through the roof or parking level slab(s).
    - a. Tenant shall furnish and install, if applicable, a complete kitchen exhaust and make-up air duct system. Ductwork shall be fabricated of metal in type and gauges specified by NFPA 96 for the use intended and shall be designed and constructed according to all codes and the latest ASHRAE and SMACNA standards.
    - b. All process exhausts, hood exhaust, equipment vents, and other contaminated exhaust, when permitted by Landlord, shall discharge vertically to the atmosphere 20ft minimum horizontally away from any fresh-air intakes (or horizontally if located on parking levels), properly dispersing odors or fumes away from same. All grease hood exhaust fans must be equipped with internal grease collection receptors. Additionally, all grease hood exhaust fans must be surrounded by a self-contained grease retention system to protect the adjacent roof/ parking level surfaces (grease guard). If at any time landlord determines that the exhaust is causing a nuisance to landlord or other tenant equipment or customers, Landlord shall direct tenant to modify the system at tenant's cost.



- i. Kitchen equipment will be required to use air pollution control devices (“APU”) in the kitchen exhaust systems.
- ii. Exhaust fans on roof shall be up-blast type. Provide exhaust to remove all hot food odors.
- iii. Kitchen ventilation systems are to be approved by local health authorities.
- iv. The Tenant is responsible for providing exhaust fans and make-up air equipment to serve these ducts on the roof.
- v. Provide access panels in grease ducts per code. All grease laden ducts that pass through fire-rated partitions are to be encased in suitable material approved for use by the code authorities.
- vi. 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.
- vii. 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.
- viii. All above equipment shall be finish painted in accordance with Landlord’s paint schedule and specifications.
- ix. Tenant’s roof equipment shall be clearly identified with Tenant’s space number and name. First level Tenants should consider using UL listed pre-fabricated modular grease duct system components.
- x. Non-grease laden ductwork that passes through service corridor or adjacent Tenant walls or upper level floors shall have UL approved fire dampers located in ductwork at wall and floor. Provide approved access doors for service to fire dampers.

## V. Plumbing

### *MALL INFRASTRUCTURE*

1. Points of Connection: On-site water supply mains for domestic and fire protection & shut-off valves.
  - a. Water: Interior domestic water branch line stubbed into Tenant's premises.
  - b. Sanitary: Sanitary waste line and plumbing vent branch lines stubbed to Tenant's premises.
  - c. Gas: Gas Utility Company meter manifolds will be located in an area designated by Landlord.
  - d. Grease Waste: Grease waste line and plumbing vent branch lines stubbed to Tenant's premises for **designated** food and beverage service Tenant spaces.
    - i. Grease Interceptor: A grease interceptor(s) has been provided to service **designated** food and beverage Tenant spaces.
  - e. Used Cooking Oil: Used cooking oil collection piping stubbed to select food use Tenant's spaces.

### *TENANT WORK*

1. System: Plumbing fixtures and piping system including all rough-in and final connections for same. Installation of all insulated 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 and accessories: Shall be of commercial quality and shall be of water conserving type. Tenant tank type water closets to be equipped with Sloan "flushmate," or equal, pressure assisted flushing device.
  - 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 .125 GPF.
  - c. Lavatories shall be limited to a maximum flow rate of 0.5 GPM.
3. 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 across entire floor area and **4" up all walls**. Food and beverage service Tenants on upper levels shall be required to provide a Waterproof membrane in all wet areas at Tenant's expense.
4. Hammer Arrestors: Provide water hammer arrestor behind access panel in Tenant restrooms.

5. Grease Waste: Food and Beverage Service Tenants shall connect all grease laden waste to the common grease waste system designated for their space (where applicable). Landlord is responsible for coordinating regularly scheduled servicing of the grease interceptor system at Tenants expense.
  - a. In addition to connecting to the common grease waste system (where applicable), each Food and Beverage Service Tenant will be required to connect their 3-compartment sinks to a **floor mounted grease trap** within their space. Cleaning/maintenance of the Grease Trap are the Tenant's responsibility.
6. Floor Penetrations: Pipe sleeves shall be installed in penetrations through floor slabs.
7. Mop Sink: Tenant is to provide a mop sink in their space for general cleaning purposes.
8. Domestic Water Meter: The Landlord shall provide at Tenant's expense the domestic water meter and recorder. The output from the domestic water meter shall be integrated to the closest available landlord designated controller by landlord.
  - a. Wiring: The wiring between the meter register and the unitary controller shall be furnished by the Landlord at tenant's expense for installation by the tenant.
  - b. Specs: The Tenant water meters shall be Neptune model T-10 and shall include a Tricon S register which is set up to provide a pulse output for each 10 gallons consumed.
  - c. Installation: **Install meter near floor (preferably in Toilet Room and +/- 5 ft. AFF) in an easily accessible location.**
9. Gas: Food and beverage service Tenants shall make gas service arrangements with the gas utility company. Routing of gas line shall be approved by Landlord prior to construction. See General Information for Utility Company contact information.
10. Drain Pans: Tenants located above any base building or Tenant mechanical/electrical rooms shall install drain pans below all piping installed by Tenant (running through the rooms), properly drain and comply with all local and AHJ codes.

## VI. Fire Protection

### A. Sprinkler System

#### *MALL INFRASTRUCTURE*

**Levels 1 and 6-8:** Ordinary Hazard Group II overhead shell fire sprinkler system capable of delivering a minimum density of 0.24 over 1,500 sq. ft. Fire sprinkler zones are provided with a supervised alarm system.

#### *Tenant Work & General Requirements:*

1. Design and Approval: Tenant fire sprinkler contractor shall modify the landlord provided overhead shell fire sprinkler system as needed, and provide fire extinguishers, and other equipment within Tenant's premises in accordance with the **Landlord's Insurance Underwriters' Fire Rating Inspection Bureau (FM Global), NFPA 13, all applicable 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, Specifications, Seismic Calculations, Materials Cut Sheets – Specifications (manufacture, model, size, etc.) for sprinkler heads, sprinkler pipe, and fittings and All Components (sprinklers, pipe, fittings, etc.) hydraulic calculations for the sprinkler system that have been approved by the Fire Rating Inspection Bureau (FM Global). 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.
  - a. ***FM Global approval is needed prior to Tenant's start of construction.***
  - b. Individual tenant control valves and flow switches are not allowed. Valving and alarm system is accomplished at source to building by Landlord.
  - c. Provide dry chemical fire protection for range hoods, etc.
  - d. Stock rooms: Where stock exceeds twelve feet in height, coordinate design with the Fire Rating Inspection bureau.

#### **Tenant Design Requirements:**

Modify Landlord provided overhead shell fire sprinkler system as needed and provide fire extinguishers, and other equipment within Tenant's premises according to Landlord's Insurance Underwriter's Fire Rating Inspection Bureau and code requirements. Since the 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 the 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. Landlord's approval of this shall not constitute the assumption of any responsibility by the Landlord for the accuracy or sufficiency of the sprinkler system. Tenant is solely responsible for modifications of the system within the leased premises.

Sales area: Density 0.24GPM/SF over 1,500 feet.

Pressure and flow requirements: Verify with the Fire Rating Inspection Bureau. (???????)

## **Sprinkler Heads**

Sprinklers in gypsum board and other hard surface ceilings must be concealed type while sprinklers in lay-in ceilings to be semi-recessed. Pendent type heads are permitted only in the stock/storage areas.

## **B. Fire Alarm System**

### ***LANDLORD WORK***

1. General Features: Landlord will provide the following:
  - a. Level 1: a fire alarm addressable Signaling Line Circuit (SLC), emergency voice evacuation system speaker circuit, and visual notification appliance synchronization circuit at the Tenant interface junction box located in the mall area behind the Tenant space. Base building Tenant interface junction boxes will be provided and installed by the Landlord.
  - b. Levels 6-8: a fire alarm addressable Signaling Line Circuit (SLC), emergency voice evacuation system speaker circuit, and visual notification appliance circuit(s) at the Tenant interface junction box located in the back of house corridor behind the Tenant space. Base building Tenant interface junction boxes will be provided and installed by the Landlord.
2. Modules: Landlord will provide and install the following addressable modules:
  - a. One (1) addressable relay module to shutdown tenant background music sound systems.
  - b. One (1) addressable relay module to activate smoke purge in tenant space.
  - c. One (1) addressable isolation module for isolation of signaling line circuit.
  - d. One (1) addressable input module to monitor tenant kitchen hood suppression system (as necessary).

### ***TENANT WORK***

1. General Features: Tenant will provide and install all initiating devices, notification appliances, and auxiliary power supplies (Level 1 only) as required by all applicable codes and standards and installed in accordance with NFPA 72 within the Tenant's premises. Tenant shall provide and install all necessary cabling and conduit within the Tenant's premises starting at the Landlord provided Tenant interface junction boxes.
2. Modules, Devices, Appliances, etc.: There shall be a minimum of one (1) speaker and one (1) visual notification appliance per Tenant premises. Tenant shall provide adequate audible and visual coverage within their premises in accordance with NFPA 72.
  - a. Occupant Notification Appliances: Tenant shall provide and install speaker and visual notification appliances within each sales floor area, stock room, toilet room, and central fitting room areas in accordance

with the applicable building and fire codes and NFPA 72. All visual notification appliances in Mall and Tenant shall be synchronized.

- b. Auxiliary Power: Level 1 tenants shall provide and install auxiliary power supplies as necessary for Tenant visual notification appliances. Tenant shall coordinate connection to a dedicated 120 VAC circuit and shall provide twenty four (24) hours, followed by fifteen(15) minutes of battery backup in each APS.
  - c. Smoke Detection: Tenant shall provide and install smoke detectors in the followings locations: above APS, at entrance to tenant space and exit from tenant space. Spot type smoke detection shall be addressable and connected to the Landlord's base building fire alarm system, at the Tenant's expense.
  - d. Duct Smoke Detection: Tenant shall provide and install duct type smoke detection within each individual air handling unit as required. Duct type smoke detection shall be addressable and connected to the Landlord's base building fire alarm system, at the Tenant's expense.
  - e. HVAC shutdown: Tenant shall provide and install addressable relay modules within three (3) feet of the associated HVAC controls to initiate HVAC shutdown as required. Addressable relay modules shall be connected to the Landlord's base building fire alarm system, at the Tenant's expense.
  - f. Hood Suppression Systems: Tenant shall provide and install addressable input modules to monitor tenant hood suppression systems as required. Restaurant Tenant kitchen hood suppression systems shall be provided and installed by the Tenant. Addressable input modules shall be connected to the Landlord's base building fire alarm system, at the Tenant's expense.
3. Connections: Final connection of the Tenant's fire alarm system to the Landlord provided base building fire alarm system shall be provided by the Landlord's base building contractor, at the Tenant's expense.
  4. Conduit: All tenant fire alarm wiring or cable shall be in rigid or EMT conduit. Flexible conduit is not acceptable. Tenant shall color code all conduits, backboxes, and fittings in accordance with the tenant coordination requirements.
  5. Acceptance: Final acceptance testing of the Tenant's premises fire alarm system shall be performed by the Landlord's base building contractor concurrent with the base building's fire alarm system final acceptance test, at the Tenant's expense.
    - a. Entire installation shall conform to the Standard Project Details.

## VII. Electrical

### GENERAL REQUIREMENTS

1. **Tenant Electric Design Loads:**
  - a. **Retail (dry goods): 14 watts/sq. ft. maximum demand load.**
  - b. **Restaurant (sit down style): 30 watts/sq. ft. maximum demand load.**
2. **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).
  - a. Select high quality, energy efficient fixtures considering aesthetics and the visual comfort of occupants.
3. **Access:** Equipment must be installed allowing clear access for servicing.

### *MALL INFRASTRUCTURE*

1. **Electric Service Characteristics:** Power for the leased premises is available at 480/277 volts, 3 phase, 4 wire, 60 hertz.
2. **Electric Service Provisions:** Landlord has provided a Tenant Distribution Switchboard located in a Tenant Electrical Closet in the general vicinity of the Tenant. **All Tenant circuit breakers in the Tenant Distribution Switchboards are to be furnished by Tenant and installed by Landlord contractor at Tenant expense.**
  - i **Electric Meter:** Landlord will provide a Shark 200S electronic submeter with WIFI Ethernet capability at tenant expense. **Tenant will install the meter in their space.** WIFI connectivity shall be inspected and approved by Landlord in the field.
3. **Telecommunications Service Backbone:** Landlord has provided the Telecommunications Service Backbone from the “Main Point of Entry (MPOE)” to the Telecommunications Closets distributed throughout the Center. Telecommunications service cabling from the Telecommunications Closet to the Tenant’s leased premise shall be the responsibility of the Tenant in conjunction with the Landlord and Telecommunications Service Provider.

## **TENANT WORK**

4. Electrical Service Feeders and Other Equipment: Tenant shall provide electrical service feeders/ conduit from Landlord's distribution switchboard to Tenant's premises (If not existing). Tenant shall coordinate metering and power requirements with Landlord. All conductors shall be insulated copper wire, type THHN/THWN.
5. Tenant Service Circuit Breakers: All Tenant service circuit breakers in the Landlord provided Tenant Distribution Switchboards are to be furnished by Tenant and installed by Landlord's contractor at Tenant expense.
6. Other Equipment: Tenant shall provide all panelboards, transformers, conduits, wiring, and final connections to all electrical devices, equipment, and appurtenances within the Tenant's leased premises.
7. Fixtures- Misc.: Tenant shall provide all lighting fixtures, lamps, signs, controls, and all associated conduits and wiring within the Tenant's leased premises.
8. Lighting Fixtures: All lighting fixtures in Tenant's sales areas, other than decorative fixtures, shall be high quality, energy efficient - commercial grade fixtures.
  - a. All Lighting in the Design Control Area (+/- 6'-0" from leaseline into tenant space) shall be **recessed or concealed behind a soffit** unless otherwise approved by Landlord. Lighting outside the storefront display area may be surface mounted.
  - b. Lighting shall not spill outside premises and no direct glare shall be visible to public view.
  - c. Tenant shall utilize energy efficient LED lighting where possible.
  - d. Fluorescent fixtures shall be 2' x 2' direct/indirect type with perforated - center basket diffusers. Bare lamp fluorescent or incandescent fixtures may not be used except in stockrooms or areas inaccessible to customers. Sample Specification: Lithonia Lighting, Avante, 2AV 2'x2', or sim.
9. Panelboard Design: Panelboards shall be designed for 20% minimum spare ampacity (based on connected load) and 20% spare breaker space.
10. Telecommunications Service Cabling: Tenant shall provide telecommunications service cabling/ conduit from the Telecommunications Closet to the Tenant's leased premise. **Telephone and Internet equipment, conduits and wire installations from Tenant Dmark to central distribution cabinet shall be coordinated through Granite Telecommunications only at 855-GRT-GRID (855-478-4743).**
11. Television, LCD's and Security Equipment: Television, LCD screens and security equipment, and all conduits, wiring, and related items in the sales area are subject to Landlord review and approval.



- e. Television & LCD Screens: The installation of Televisions & LCD screens in Tenant sales area for marketing and advertising is subject to Landlord review and approval.
  - f. If approved, Television & LCD screens must be a minimum of five (5) feet from the storefront leaseline.
  - g. No flashing or strobing images.
  - h. Content must adhere to decency standards in Lease and is subject to Landlord review and approval.
12. Antennas & Satellite Dishes: The installation of any roof mounted antenna/satellite must be approved, in writing, by Landlord and coordinated with Mall Facilities prior to install. 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.
13. Exit/Emergency Lighting System: Tenant shall provide exit/emergency lighting system functioning on a normal source or battery operated source for loss of power conditions (as required by governing codes).
- i. Emergency lighting shall be provided by Tenant to illuminate stock, food preparation area or sales area, code required emergency egress pathways, and rear exit way during power outages. Said lighting shall be battery operated and shall be recessed lights, separate unitary battery pack lights, or integral with selected general lighting fixtures.
  - j. **In areas visible to customers, battery assembly for emergency and exit lights shall be concealed by utilizing remote type light fixtures or integral with selected general lighting fixtures.**
14. Signage: Tenant shall provide transformers, ballasts, conduit, wiring, and related items for signs. Circuits serving sign(s) shall be connected by a time switch.
15. **Transformers: Transformers are to be mounted on the floor, structural wall or platform supported by the floor, not from the building structure or demising wall. Suspension of transformer not allowed. Provide details and structural drawing if floor mounted with raised platform.**
- k. 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 to within 10% across all three phases.
16. 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
17. Codes and UL: Entire installation shall meet all requirements of national or local electrical codes. All equipment shall bear UL labels or labels from other third party testing agencies recognized by the local code enforcement authority.

18. Conduit: All electrical wiring systems shall be in conduit. The use of "Bx" or "Romex" is not permitted. Speaker, security, or other low voltage wiring within the Tenant's leased premise must be plenum rated or in conduit.