



**MACERICH**<sup>®</sup>



**FASHION OUTLETS**  
CHICAGO  
5220 Rose Street, Rosemont, IL 60018



## Tenant Design Criteria

Section t Technical Criteria

Updated: April 2017



## ADDENDUM LOG

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*Updated General Criteria info (pg. t5, sect. N)*

*March, 2013*

*Updated Logo per VP request*

*March, 2014*

*Distribution of utilities through exit corridors is prohibited with exception (t14)*

*July, 2014*

*Tenant must install a local annunciator (t12 - R)*

*March, 2015*

*Updated Plumbing content to list specific location for main water shut off valve to be at eye level. (t8)*

*March, 2016*

*Added Electric / Water Sub-meter Requirements (t4)*

*April, 2016*

*Added Water Efficiency language (t9)*

*April, 2017*

*Removed language regarding Telephone Service (t13) [P]  
Replaced with language regarding Communications Services (t13)*



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## ELECTRIC / WATER SUB-METER REQUIREMENTS

As applicable for property, if there is an existing electric or water sub-meter in the Tenant's space, then the Tenant must have the meter recommissioned to ensure proper installation and functionality. Alternatively, the Tenant can choose to install a new meter that meets Macerich's meter specifications. Either option must be performed by a Landlord-approved electrician and verified by Macerich, and will be at the Tenant's sole cost.

### METER SPECS

Tenant may install the meter specified by Macerich or the like. Meter must meet the following criteria:

#### Electric:

- Meters must be revenue grade.
- There must be at least a 6-digit display.
- Meter must be able to read demand (kW) and usage (kWh).
- The meter must capture the electric usage of the entire Tenant space, including HVAC units. If this is not possible, then it must be noted.
- If using a meter with CTs, note if a multiplier is required and what the multiplier is on the face of the meter.

#### Water:

- Meter must be properly sized for the water flow in the space. Generally this means the size of the meter should match the size of the water line, or the meter can be 1/4" smaller than the line. This means that if there is a 1" water line servicing the space, a properly sized meter would be 3/4" or 1".

#### Installation Requirements:

- Meters must be installed by a Landlord approved electrician.
- Installation must be verified and approved by the Operations Manager, or a member of the Operations staff, at the property.
- Proof of inspection must be sent to the Energy Management Department (Alaine Marx, [alaine.marx@macerich.com](mailto:alaine.marx@macerich.com)) and should include the following:
  - Date of installation or recommissioning
  - Picture of the meter at time of installation or recommissioning. Picture should be clear and should display kWh and kW legibly.
  - Confirmation that the meter covers whole tenant space.
  - Meter make and model
  - Units that the meter reads in
  - Multiplier, if applicable

## GENERAL CRITERIA

- A. All plans, specifications and calculations shall be prepared under the supervision of a Registered Professional Engineer holding a valid registration in the State of Illinois in the applicable fields of engineering. 1/4" scale floor plans shall be provided showing each of the following disciplines: HVAC systems, electrical and plumbing. Include as a minimum electric panel board schedules, one line diagram and fully circuited electric floor plans, HVAC , air distribution ductwork equipment and controls, reflected ceiling plan and roof plan (if applicable), plumbing floor plan and riser diagram, and kitchen exhaust hood elevation, where applicable. Further requirements for plans to be submitted are found within the individual sections which follow. Include fire protection sprinkler layout with reference to compliance with Code and I.S.O. requirements.
- B. Provide barricade, if needed, in accordance with Tenant Contractors' Construction Guidelines and other requirements of the Landlord and submit barricade location in plan submittals. Provide negative air pressure differentials in the construction area or other means to control the spread of construction related contaminants to adjacent occupied areas. Barricades and contaminant control must remain in place until the Tenant space is completed and ready to be occupied by Tenant.
- C. The Tenant's engineer shall refer to and abide by this Fashion Outlets of Chicago MEP Design Criteria For Tenant Improvements, Tenant Handbook, Design Criteria, and the Lease for submission requirements and other guidelines set forth for the design and construction of all items in the Tenant's Premises.
- D. All work shall be done in accordance with the requirements of the Illinois State Fire and Building Code, NFPA Standards, the Americans with Disabilities Act (ADA) and all-applicable codes and regulations. Additionally, food service facilities must adhere to the pertinent Department of Health regulations, Sanitary Codes, and all other applicable codes. Certain code-required items are mentioned in these criteria for emphasis or example only. Identification and compliance with all applicable codes and regulations are the Tenant's responsibility.
- E. The design and appearance of all light fixtures and exposed ductwork and piping which are visible from the public areas are critical to the overall visual effect, and are subject to detailed review and approval by the Landlord.
- F. All piping and ductwork is to be installed as high as reasonably possible and run parallel to the structure. Landlord's structural engineer, at Tenant's expense, prior to the start of any work must approve all holes through structural members or slabs.
- G. All openings through structurally supported slabs must be core-bored, sleeved, grouted, sealed and made water and fireproof. Sleeves, except for water closets, janitor sinks and floor drains, must extend at least two inches (2") above the finished floor. Landlord must approve the location of all floor openings in writing. Waterproofing must be inspected and approved by the Landlord before any flooring material is installed. The Tenant is responsible for taking whatever measures are necessary (including but not limited to those measures prescribed by the Landlord in the exercise of its reasonable judgment) to assure that core-boring will not damage Landlord's structure, conduits, etc. The costs of such tests or repair of any damage will be borne by the Tenant.
- H. Noise and Vibration Control. All equipment installed by Tenant shall be provided with vibration isolators, sound traps, duct lining, acoustic housings, acoustical louvers and other noise and vibration control apparatus required to limit intrusion into adjacent spaces accordingly:
- Intrusive noise levels transmitted to adjacent spaces shall not exceed NC-25 when measured in the adjacent tenants' spaces.

## GENERAL CRITERIA (cont'd.)

- Tenant equipment noise emitted to the exterior shall not exceed 45 dBA. At any time within the first six months of occupancy or within the first six months after installation of any new equipment which produces noise and vibration, the Landlord may request a test by an acoustical consultant of its choice to verify compliance with the above minimum acoustical requirements. Should the Tenant be in compliance, the Landlord will pay the costs of the testing. Should the Tenant not be in compliance, Tenant will pay the costs of the initial testing, shall make whatever changes are required to bring the installation into compliance, and shall pay the costs of all subsequent testing by an acoustical consultant approved by the Landlord to verify compliance.
- I. Landlord building field conditions may vary from those shown on the Lease Outline Drawings. The Tenant design team must verify field conditions, which may affect the design, and are encouraged to personally visit the site early in the design process.
- J. The Tenant shall be responsible for coordinating all Tenant work with Landlord's work and building. In the event that Tenant's work causes any modifications to Landlord's work or building, the Tenant must notify the Landlord before any work is done and shall reimburse the Landlord for its direct expenses.
- K. In the event the Tenant is notified of any violations of codes, or ordinances, or regulations, or of its obligations hereunder, either by the jurisdictional authorities or by the Landlord, the Tenant shall correct such violations within seven (7) calendar days from the date of such notification. Should the Tenant fail to correct such violations within this period, the Landlord shall have the right to correct such violations at the Landlord's cost plus an administrative fee and bill Tenant for same. Tenant is also responsible for any incidental expenses or damages to Landlord or to third parties resulting from its violation(s) or failure to comply with the requirements set forth herein.
- L. No openings for fans, vents, louvers, grilles, or other devices shall be installed in any demising partition, exterior wall, or roof without Landlord's prior written approval. All roof openings, blocks and flashing must be done by the Landlord's roofing contractor at the Tenant's expense.
- M. In the event of any conflict between local codes or regulations and these criteria, local codes or regulations shall govern, and the matter shall be brought to the Landlord's attention via written notice from Tenant.
- N. Tenant's design must accommodate air transfer of 100% of the make-up air supplied to the space. This transfer is to be accomplished through openings between glass panels and under and around glass doors. No louvers or grilles are to be installed in the storefronts for these purposes. Please show engineering calculations to verify the transfer is at 500 fpm velocity.

## HVAC DESIGN CRITERIA

- A. Landlord shall provide and install one or more package rooftop units or split systems connected to the Tenant electrical panel. Electrical work to be done by Tenant. Reuse of existing HVAC equipment is permitted provided Tenant puts any equipment it reuses in good working order and complies with all applicable design, code, and legal requirements. ASHRAE design weather conditions Chicago, IL:
- Summer : 91 degrees F d.b., 74 degrees F w.b. outside  
75 degrees F d.b. and 50% humidity indoor.
- Winter : -6 degrees F d.b., -7.2 degrees F w.b. outside  
68 degrees F d.b. indoor.
- B. Tenant is responsible for the design of the Tenant's HVAC system. All calculations shall be in accordance with the latest edition of the ASHRAE Handbooks, all applicable codes and regulations, and good engineering practice. All calculations shall be certified by an Illinois Registered Professional Mechanical Engineer and the results submitted to Landlord for approval.
1. Design must comply with criteria.
  2. Field verification of existing HVAC name plate information is the responsibility of the Tenant.
  3. If Tenant decides and Landlord approves that additional package rooftop units or split systems are needed to meet the Tenant's tonnage requirements or if existing equipment is of a condition that it may not be reused, new equipment is to be supplied and installed by the Tenant at the Tenant's expense. Removal and disposal of old equipment is by the Tenant at the Tenant's expense.
- C. Rooftop HVAC equipment shall be located directly above the Tenant Premises or as approved by the Landlord. Tenant shall install all other HVAC equipment within the Tenant's premises

- including controls, ductwork, fire dampers where required, electric connections, electric duct heaters, exhaust fans, etc. and balancing. Tenant shall provide code approved access panels at all equipment for service access.
- D. Outside air ventilation when needed shall be provided through the roof at a point above the Tenant's space per items 1 & 2 below. All design of the ventilation system and installation shall be by the Tenant at the Tenant's sole expense.
1. Upper level tenants shall provide code required outside air through their own respective package rooftop units.
  2. Lower level tenants shall provide code required outside air via ducted connections to landlord provided central outside air duct mains.
- E. To meet exhaust requirements: Upper level tenants shall provide rooftop equipment above its space and penetrate the roof to its ceiling space. The exhaust fan and associated ductwork is provided by the Tenant.
1. Lower level tenants shall provide their own exhaust fans with ducted connections to landlord provided central toilet exhaust system.
  2. Relief of any excess outside air shall be vented to a Tenant exhaust system.
  3. All odorous or otherwise unacceptable air as determined by Landlord shall be removed by means of a ducted exhaust system with a centrifugal exhaust fan ducted to the outside of the building at the roof.
  4. Air should not flow from the food preparation areas to dining and waiting areas or to other portions of the Landlord's building. (for food court tenants).

## HVAC DESIGN CRITERIA (cont'd.)

- F. Tenant's supplemental package rooftop units or split systems shall be selected based on the cooling and heating load requirements of the space served.
- G. Tenant's HVAC system shall be a stand alone system.
- H. Ductwork
  - 1. The Tenant ductwork shall be fabricated from galvanized sheet metal and be in compliance with all SMACNA Standards. All duct branches off of the main trunk line shall be installed with volume dampers to allow for proper balancing. If the dampers are located above an inaccessible ceiling, a remote operator or ceiling access panel shall be installed.
  - 2. Flexible ductwork shall be factory insulated and shall only be used for tie-ins from the trunk line or branch duct to the air distribution devices. Flexible ductwork shall be limited to a maximum length of 6 feet.
  - 3. Air distribution devices shall be located per the engineered drawings and to ensure proper air flow. Air distribution devices shall be of steel or aluminum construction.
  - 4. All supply, return, and outside air ductwork shall be externally insulated, except where ductwork is internally lined, with minimum R-4.2 insulation. All joints and seams of the insulation shall be stapled and sealed.
  - 5. Fiberglass duct is not permitted.
- I. Ceiling mounted fan units, piping, heaters, fans and ductwork may be attached to the Landlord's structure, subject to the following:
  - 1. Installation must be designed by or approved by Landlord's structural engineer, at Tenant's expense. Tenant shall submit equipment weights for approval.
- 2. Reinforcing building structure or components shall be performed by Landlord's approved contractor at Tenant's expense.
- 3. Ductwork and all other Tenant construction must be designed to clear any interior roof leaders, downspouts, sprinkler or gas lines in the space
- J. Tenant shall engage the services of a third party certified air balance contractor to (independent of the MC) adjust and completely balance Tenant's HVAC system. Tenant shall provide to Landlord a copy of the certified balance report, showing static pressures, fan motor RPM, motor current, supply air, outside air and exhaust quantities as part of the closeout package.



## PLUMBING DESIGN CRITERIA

The Landlord has provided public toilet rooms located off of the common area for use by customers and employees. Therefore, please note that plumbing stubs have not been provided to the Premises for some Tenant spaces. (Not required per code)

### Water Efficiency

1. The Tenant is required to install waterless urinals in tenant restrooms when urinals are used.
  2. Low-Flow water closets using 1.6 GPF or less gallons per flush will be installed in all tenant spaces.
  3. Operation sensors and low-flow heads using 0.5 GPM or less in lavatories.
- A. Connect to the Landlord provided stub.
- B. Domestic cold water piping shall be provided by the Landlord from the meter box to a location within the ceiling of the Tenant space. Retail service size is typically 3/4". Refer to Landlord Construction Documents for more information.
- C. Gas is available to restaurant Tenants for cooking only. The Tenant is responsible for the set up of the service account including all fees and deposits and setting of the gas meter. Landlord's approval of all routing and details is required during the Tenant plan review process. Gas piping shall be extended from the meter to the appliance(s) and/or equipment requiring connection by the Tenant.
- D. Tenant working drawings must include a plumbing riser diagram for sewer and water lines, complete with all cleanouts, pipe sizes, connection to existing Landlord lines, materials and specifications, etc.
- E. Each Tenant desiring hot water shall furnish and install its own water heater, fully insulated and steel jacketed with overflow pans, as required to meet Tenant's hot water needs. Instantaneous type water heaters are permitted.
- F. All piping systems must be compatible with the type of materials used by the utility and Landlord, and shall comply with the following requirements:
1. Drainage, vent pipe and fittings for above grade use shall be hub-less cast iron with rubber sealing sleeve and stainless steel coupling joints with stainless steel clamps and bolts. Below-grade PVC piping is acceptable.
  2. Water piping shall be Type L copper tubing, seamless drawn, hard copper with plain ends ASTM B88. Fittings shall be wrought or cast copper with socket ends for lead-free solder.
  3. Gas Piping shall be black steel pipe schedule 40 seamless with threaded connections.
  4. No plumbing is to be run through building chases or cut into the exterior walls.
  5. No plastic or PVC piping shall be run in plenum spaces.
- G. Valves:
1. All valves for domestic water to be 125 psi test all bronze wedge gate valves or line size quarter-turn ball valves installed in the proper orientation.
  2. Valves for gas piping system shall be all bronze plug valves or gate valves with bronze body and stainless steel disk.
  3. All valves shall be accessible for ease of operations.
  4. Tenant shall provide a main water shut off valve located at eye level in a wall behind a labelled access door. Locate in or near employee restroom as designated by Landlord.

## PLUMBING DESIGN CRITERIA (cont'd.)

### H. Pipe is to be supported securely from hangers as follows:

1. Pipes supported from steel structure shall be supported from steel beams and joists with approved clamps and other structural attachments.
2. In areas with concrete flat slabs and concrete on metal deck, inserts, self-drilling anchors, or powder driven anchors will be allowed.
3. No pipe hangers will be supported from the metal roof deck or base building utilities.
4. Hangers shall not pierce piping insulation vapor barrier.
5. All steel hangers, rods, beam clamps, etc. exposed to public view shall be painted to match adjacent finishes. Appearance and spacing of hangers exposed to public view, are important aspects of the final visual environment. Specific details of support methods and location of hangers must be indicated on drawings submitted to Landlord for review, and are subject to Landlord's approval. All hangers must be evenly spaced and grouped as much as possible with supports for other trades to minimize visual clutter in the upper portions of all spaces exposed to public view. Support systems must be neat and workmanlike, and free of extra length of support rods below the supported member. Hardware and accessories must be selected with a smooth finished appearance for the completed support assembly. Hangers exposed to public view shall be of the clevis or trapeze type, complete with bolts, rods and nuts. Minimum hanger rod diameter shall not be less than, and maximum spacing of supports for steel and copper horizontal piping must not be greater than, the values in the latest issue of the ASHRAE Handbooks. Cast iron pipe must be supported at least every five feet, and at every joint and fitting. Cast iron pipe branches must have hangers four-foot on center maximum. Where required to meet minimum spacing of hangers, Tenant's plumbing contractor is responsible for installing additional intermediate structural supports.

6. Provide cast brass or chrome escutcheons with setscrew, deep type, to cover sleeves or of a size to cover fitting projections. Provide escutcheons for all exposed piping through walls, floors and exposed ceiling.

- I. Condensate drains for roof top units shall be PVC pipe thermally insulated. Piping shall be restrained to appropriate sized Miro Industries pipe supports. Supports shall allow for movement due to thermal expansion. Piping shall discharge at area drains. The routing of the piping shall be such to avoid trip hazards on the roof.
- J. Flush valve toilets are permitted providing the Tenant has verified that the water line serving the Premises is sized to handle the requirements. Increasing the size of water service to the Premises must be approved by the Landlord. The cost of new water piping, meter, and increased utility deposit are Tenant costs.
- K. Grease interceptors are provided by the landlord at one (1) central location. Tenant shall connect to existing landlord provided grease lines where indicated on shell documents.
  1. Interceptor shall be furnished and installed by the Tenant within the premises. Tenant shall be responsible for the proper care, cleaning and maintenance thereof.
  2. The grease trap shall be designed and vented in accordance with the Plumbing Code. Tenant shall provide routine maintenance including cleaning and emptying of the grease trap and grease waste plumbing piping and any other regular maintenance on at least a quarterly basis.
- L. Garbage disposals are not permitted.
- M. Floor drains must be provided where required by code. All floor drains installed in toilet rooms must have acceptable means to maintain a water seal in the trap.



## FIRE PROTECTION DESIGN CRITERIA

- A. All other Tenant spaces are served by an existing shell fire sprinkler system in as-is condition with respect to modifications made by previous Tenants. Field verification of the existing piping configuration is the responsibility of the Tenant. Any modifications done after the date of possession, to the fire sprinkler system, are the Tenant's responsibility and must be performed by the Landlord's preferred/required fire sprinkler contractor.
  - 1. Work shall comply with the national fire codes as published by the National Fire Protection Association, state, and local codes.
  - 2. All materials shall be UL listed and approved for use in fire protection installation by authorities, agencies, codes, and standards of the governing agencies.
  - 3. Sprinkler heads in all finished areas shall be semi-recessed or recessed quick response type.
  - 4. Sprinkler piping in finished areas shall be concealed above the ceilings.
  - 5. Pipe hangers and spacing shall conform to NFPA #13.
  - 6. Heads must be placed under any obstructions exceeding four feet in length or width.
  - 7. No obstruction or storage is permitted less than 18 inches from any head.
  - 8. All modification to fire sprinkler must be performed by Landlord approved fire sprinkler contractor.

## ELECTRIC DESIGN CRITERIA

- A. The Tenant's designers are responsible for verifying the system size and configuration from plans and in the field. All costs to increase wire, service or distribution equipment sizes, whether within the Premises or not shall be paid by the Tenant.
- B. Materials, products, equipment, including components thereof, systems and methods shall be new and be identified by Underwriter's Laboratories, Inc. as suitable for the purpose, and shall meet the requirements of the National Electrical Code, IEEE Gray Book and of local authorities having jurisdiction. Materials, products and equipment, including components thereof, shall be sized and installed in conformity with the requirements of other recognized standards, such as ASTM, IEEE, IPCEA, NFPA and NEMA, where the requirements of such standards are more stringent than those cited above.
- C. Electrical service provided for the majority of tenants Tenant is 120/208V, 3 phase, 4 wire, Larger tenants and full service restaurants may be provide with 277/480V service.
- D. The Tenant shall verify the existing service size and all service equipment and locations. Modifications or replacement of any equipment is by the Tenant at the Tenant's expense. Increased service size shall be reviewed by the Landlord. Tenant will provide its own feeder, distribution panels, dry-type transformer (if needed) for other voltages and all other equipment as required. Transformer installations shall be located in the Tenant premises and shall conform to NEC and local code requirements with respect to location, mounting, grounding and over current protection.
- E. All service equipment (including but not limited to distribution centers, circuit breakers, switches, transformers, etc.) must be sized per N.E.C. requirements. All step down transformers must be covered with an angled hood/cap.
- F. All conductors shall be soft-drawn annealed copper. Minimum size shall be #12 for power wiring and #14 for control wiring. Wire shall be 600 volt insulated, NEC type THW, or THHN/THWN. All power wiring shall be run generally in rigid conduit or EMT. MC cable is permitted for lighting and convenience receptacles when located in concealed ceilings or walls where permitted. Flexible conduit is permitted only for final connection to motors. Control wiring can be plenum rated, where permitted, or shall be installed in conduit.
- G. Tenant distribution and lighting panel boards shall be of the three phase, four wire distributed phasing type. Tenant's circuiting shall be arranged to present, as nearly as possible, an evenly balanced load on all phases. Panel-boards shall be circuit breaker type. All circuit breakers shall have Amperage Interrupting Capacity (AIC) at least 10% greater than the available fault current at the breaker location, as calculated by the Tenant's engineer. AIC shall be stated on the Tenant's panel board schedule.
- H. All electrical work shall be installed so as to be readily accessible for operating, servicing, maintaining and repairing. All conduit shall be concealed where possible. Exposed conduit shall be in straight lines parallel with or at right angles to, column lines or beams and separated by at least 3 inches from water lines whenever they run alongside or across such lines. Hangers shall be fastened to steel, concrete or masonry, but not to piping. Hangers and support systems are an integral part of the visual environment. All hangers and supports exposed to public view must be shown in detail on plans submitted to Landlord for approval of appearance. All hangers must be uniformly spaced and neatly installed with no excess material beyond what is required for the support function. Select accessories and hardware with a smooth, neat finished appearance. Paint all exposed conduit hangers to match the adjacent finishes.

## ELECTRIC DESIGN CRITERIA (cont'd.)

- I. Grounding shall consist of copper conductors in conduit with bolted connections. Grounding and bonding shall comply with NEC and IEEE Green Book. All metallic raceways shall be grounded.
- J. All interior and exterior (exterior only where permitted) Tenant signs are to be powered by the Tenant panel. Routing of electrical conduit from the panel to a junction box at the Tenant sign shall be concealed and approved by the Landlord in advance.
- K. Manual motor starters with overload protection may be used for fractional horsepower motors. Three-phase starters shall be provided with overload and under voltage protection in each phase. Combination starters, when used, shall contain fusible switches.
- L. Tenant's engineer shall refer to Tenant Design Criteria, for specific light fixture and signage lighting requirements. Fluorescent fixtures, where permitted, shall be either rapid start or slimline T8, T5 or compact lamps. All ballasts for fluorescent lamps shall be the electronic high efficiency type with maximum 20% total harmonic distortion fed back into line. Preheat and/or trigger start fixtures shall be used only in special applications requiring lamps less than four feet in length. Provide minimum lighting levels required by Health Department and other agencies.
- M. Motors shall be designed to latest NEMA Standards.
- N. The Tenant's estimated maximum demand load shall be based on the summation of:
  - 1. 125% of the largest HVAC load, plus 100% of the remaining air conditioning and ventilation load (the greater load of cooling or heating); plus
  - 2. The percentage of the connected load for kitchen equipment, including refrigerators, freezers, etc.; in accordance with the NEC, plus
  - 3. 100% of the connected load for instantaneous electric water heaters and 125% for tank type electric water heaters, plus
  - 4. 100% of connected lighting load (based on fixture wattage for incandescent lamps and watts input to the ballast for fluorescent lamps), plus
  - 5. 65% of the connected load of all kitchen appliances in food preparation spaces.
  - 6. 100 % of illuminated signs, base equipment connected load on nameplate.
  - 7. Receptacles per NEC.
  - 8. 100% of all other loads not listed above.
- O. Load data indicated above shall be listed on the Tenant electrical plans or elsewhere in submissions to Landlord.
- P. Tenant shall provide fire alarm notification and initiating devices and associated cabling, power supplies, amplifiers, etc., as required per state and local codes and connect to the Mall's emergency voice/alarm system. Food Service and other Tenants shall hire the Landlord's required fire alarm contractor to design and install the Tenant's system and tie-in to the Landlord's main panel.
- Q. Tenant must install a local annunciator at the NAC panel located in their space.

### Communications Services

- 1. Landlord has installed a high-speed fiber infrastructure at the Center for purposes of providing voice and data access throughout the Center. All access for Tenant's voice and data services must be sourced through Landlord's designated provider which is currently Granite Telecommunications or such alternative provider as designated by Landlord. The vendor contact for voice and data services can be found in the Tenant Criteria Package under General Information.
- 2. For all wiring needs in common electrical rooms, a required vendor must be used to maintain the integrity of the electrical room. The vendor contact for low voltage wiring needs can be found in the Tenant Criteria Package under General Information.

## TENANT KITCHEN EXHAUST SYSTEMS (where applicable)

- A. Tenants furnish, install and maintain their own individual kitchen exhaust and make-up air systems, constructed and installed in accordance with all other applicable codes and regulations. Kitchen exhaust fans shall be located on the roof in locations designated and approved by the Landlord. All exhaust systems must be electric motor drive, connected and controlled from the Tenant's space. Tenant shall provide conduit from Tenant space to the roof for this purpose. The routing path of the conduit must be approved by the Landlord.
- B. Kitchen hoods shall bear evidence of UL and NSF listing. Kitchen hoods must incorporate UL listed fire damper for supply air penetrations in accordance with NFPA 96.
- C. Hoods must be capable of removing at least 90% of the grease contained in the exhaust air. Grease removal filters shall be provided with access panels. The Tenant shall be responsible for cleaning filtration equipment on a timely basis. The hood must be designed for proper capture taking into account the type of cooking, in a manner accepted by a nationally recognized standard.
- D. The Tenant shall furnish, install, and maintain in proper working order, a UL listed wet chemical fire-extinguishing system to protect all kitchen hoods above cooking areas and, if required, extending into ductwork. Fire extinguishing system must be approved by the Landlord, and meet the requirements of NFPA 96 and local codes.
- E. Kitchen exhaust ductwork shall be installed in a fire rated shaft provided by the Tenant. Location of the shaft and roof penetrations must be approved by the Landlord at the time of the drawing review. Duct work shall be constructed of 16-gage minimum thickness carbon steel. Continuously weld all longitudinal and transverse joints. Where applicable, ducts shall be enclosed as required by NFPA 96 and local codes. Ducts need not be insulated when they are the only duct within the fire rated shaft and there is 6" clear to the shaft. When ducts serving other types of equipment are located within the same shaft, steps may be required by code to assure the fire separation between the systems. Exhaust ducts located outside the Tenant space must be enclosed in a two hour rated assembly up to the shaft.
- F. Horizontal ducts shall be sloped and reservoirs with cleanout doors shall be provided by Tenant in accordance with the latest edition of the International Mechanical Code (IMC) at 20' - 0" on centers, or as otherwise required by code. The bottom edge of the cleanout door shall be not less than 2 inches above the bottom of the duct. Every run shall have at least one cleanout door. Provide a cleanout door and grease drain at the base of each vertical section of the kitchen exhaust duct. Cleanout doors and frames shall be fabricated of the same gage metal as the duct. Provide 1/8inch thick high temperature gasket, approved for use on kitchen exhaust ducts, between frame and duct and between door and frame.
- G. Tenant hoods will operate with direct connected outside air supply from the Tenant make-up air system and the conditioned space, in conformance with all applicable codes. The direction of air flow shall always be from the common area into the Tenant space. For spaces permitting smoking, air must flow into the Tenant space across the entire area of any openings leading outside the demised premises.
- H. Make-up air ductwork shall be fabricated from galvanized sheet metal in accordance with the standards of the Sheet Metal and Air Conditioning Contractors National Association of America, latest edition and shall be insulated with 1-1/2" fiberglass or equal. (as required by the latest edition of the applicable energy code).
- I. Ductwork for dishwasher steam appliance and oven exhaust shall be fabricated rectangular low-pressure stainless steel or aluminum ductwork of at least 20 gage minimum thickness. Ductwork shall be properly pitched to drain to the hood connection and joints shall be fully sealed to prevent leaking.



## TENANT KITCHEN EXHAUST SYSTEMS (where applicable) (cont'd.)

- J. Tenant ductwork shall be shown on the plans, coordinated with base building construction, and any code required fire dampers shall be installed at the Tenant's expense.
- K. Air balance of any exhaust and makeup systems shall be the responsibility of the Tenant, and Tenant shall furnish Landlord with a copy of a certified air balance report.
- L. Tenant shall operate the exhaust and make-up system during all hours of cooking operation.

## EXIT CORRIDORS

Distribution of utilities through a newly constructed or an altered exit passageway is prohibited except for equipment and ductwork specifically serving the exit passageway, sprinkler piping, standpipes, electrical raceway for fire department communication and electrical raceway serving the exit passageway.