



MACERICH®

Inland Center

500 Inland Center Dr San Bernardino, CA
92408



Tenant Design Criteria

Section **t** Technical Criteria
Updated: April 2016

ADDENDUM LOG

July, 2009

Full update

July, 2009

TC update

June, 2011

*Plumbing content updated to include Seismic Gas
Shutoff Valve (t15)*

September, 2011

Waterproof membrane requirement updated

December, 2012

Updated Gas Shutoff Valve language (t15)

March, 2014

*Distribution of utilities through exit corridors is prohibited
with exception (t16)*

October, 2014

Added Solar Panel language (t8)

October, 2014

*At grade level electrical conduit is not allowed to be installed
in the slab (t5)*

December, 2014

Wiring language updated (t6, #9)

January, 2015

*Language regarding the waterproofing membrane on page t14
revised. (t14)*

March, 2015

*Updated Plumbing content to list specific location for main water
shut off valve to be at eye level. (t14)*

September, 2015

Updated Fire Line Safety Criteria (t7)

April, 2016

Added Water Efficiency language. (t14)

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PLAN SUBMITTAL & APPROVAL PROCEDURES and
CONTRACTOR'S RULES & REGULATIONS**

ELECTRICAL CRITERIA

General Design/Construction Coordination

The electrical criteria is provided for the purpose of designing the Tenant's electrical system. This criteria is provided as a guideline for Tenant's Engineer. It is the Tenant's responsibility to verify existing conditions and comply with all applicable codes and standards.

1. Conduit and raceway hangers, clamps, light fixtures, junction boxes, supports, etc. must be fastened to joists and/or beams. Do not attach directly to the slab, roof deck, ductwork, piping or conduit above.
2. Tenant's equipment in the mall electric room must be clearly identified with Tenant's name and space number.
3. Provide access panels at all junction boxes locations and at smoke detectors above the ceiling.
4. All outlet boxes, floor boxes, wire raceways, power/telephone poles, plug-in molding, wiring devices, hanger supports and other items required for a complete distribution must be furnished and installed by Tenant.
5. Furnish and install power to roof top units, water heater, store fixtures, signage, music systems and any other fixtures or equipment provided by Tenant. Any roof cutting and patching by mall's required roofer at Tenant's expense.
6. All wiring must be copper and in conduit. Low voltage wiring must be in conduit.
7. System ground is to be building steel. Structure is designed with a "UFER" grounding system.
8. Transformers shall be installed below finished ceilings. They may not be anchored to or suspended from the existing Mall structure, exterior or demising walls.
9. Conduit is existing or may be provided by the Landlord from a point of distribution to the Tenant's demised premises.
10. The electrical circuit breaker (main breaker) for the Tenant will be furnished and installed by the Landlord at the Tenant's expense.
11. The Tenant is responsible for all electrical work within the Tenant's

space.

12. The Tenant provides wiring through the conduit from the Landlord's point of distribution to the Tenant's space.
13. The electrical service size requested by Tenant is subject to approval by Landlord.
14. The Tenant will confirm the size of the existing electrical service and ensure that it is satisfactory for the Tenant's conditions before work commences.
15. If the Tenant's electrical requirements exceed the standard size provided by the Landlord, the Tenant will submit total Load Calculations to confirm their requirement.

Complete Engineered drawings must be submitted to the Landlord's Tenant Coordinator for review and approval. Landlord will review the plans for conformance to basic mall requirements. The Landlord does not review for electrical design, nor does the Landlord accept responsibility for the Tenant's adherence to governing codes.

The documents to be submitted for Landlord approval must include the following:

1. Complete plans and specifications for all electrical work, including lighting, power and one line riser Diagram. Documents must be signed and sealed by a Licensed Engineer in the state where the Shopping Center is located.
2. Floor plan, including branch circuiting and all equipment locations.
3. Reflected ceiling plan, including light fixture layout and lighting fixture schedule.
4. System one line diagram.
5. Electrical load summary and Panel board schedules, showing the connected load on each circuit and the total connected load.
6. Drawings must include panel schedules, load calculations and meter information.
7. Structural drawings must be submitted for all equipment that will be

ELECTRICAL CRITERIA (cont'd.)

suspended from the steel structure.

Power Source

All work required to connect Tenant to the main power source must be performed by Landlord's designated electrician, at Tenant's expense. Exceptions to this requirement may be granted by the Tenant Coordinator.

Tenant is responsible for feeders to the tenant space, installation of a dry type transformer, panels and complete distribution throughout the tenant space. A General Electric demand check meter must be installed in the mall electric room. Tenant is responsible to arrange for electrical service and meter with utility company at Tenant's expense.

Landlord will provide the main power source for Tenant's connection. Power source will be 120/280v, 3 phase, 4 wire and 120/280v, single phase, 3 wire and will be available in the nearest mall electric room. Tenants are responsible for installation of the fused bus duct disconnect switch and must pull the feeder wires to the Tenant's demised premises. Landlord will provide an empty conduit with pull-wire from the mall electric room to the Tenant space. If a larger conduit is required, Tenant is responsible for installation of same from the power source to the demised premises.

Telephone Service

Tenants are required to contact the local Telephone Company for service and shall comply with their requirements. Tenant is responsible for installing a complete telephone system within their premises.

Lighting

Provide a lighting schedule for review in conjunction with a reflected ceiling plan. Lighting must conform to the following guidelines:

1. Display window lighting must be controlled by a time clock and be on during the hours the Shopping Center is open. Display window lighting at the ceiling must be glare-free and at approved levels at the storefront glass line.
2. The Tenant is responsible for all lighting within the Tenant's space.

The Tenant will not install any lighting outside the Tenant's space with the exception of Mall required standard lighting at back doors. These fixtures shall be photo cell controlled.

3. Decorative fixtures for storefront illumination, such as luminous ceilings, chandeliers, pendant or wall units or clear type glitter strips are permitted if approved by Landlord. No strobe, spinner or chase type lighting shall be used.
4. Fluorescent or incandescent light fixtures in Tenant's public areas, other than decorative fixtures, shall be recessed. Fluorescent fixtures shall have deep cell parabolic louvers. Bare lamp fluorescent or incandescent fixtures may be used only in concealed areas and/or stockrooms.
5. Tenant shall provide emergency lighting per code to illuminate stock and/or sales areas and rear exit way during power outage. Emergency lighting shall be battery-operated, twin-head light pack(s) and/or fluorescent fixtures. In public areas, emergency lights shall be concealed.
6. Recessed incandescent down lights may be used.
7. Exit, emergency and night lights must be provided throughout, as determined by governing codes.
8. Fluorescent lighting in the sales area must be recessed and must use metal parabolic louver type lenses with a minimum of 18 cell configuration for a standard 2 x 2 fixture. Bare lamp fluorescent or fluorescent fixtures with acrylic prismatic lenses may be used only in concealed areas or stock rooms.
9. Track lighting may be used if the track is painted to match the ceiling color.

Temporary Power

1. The Landlord may provide temporary electrical service to the Tenant at a monthly charge. This charge will be paid as additional monthly rent no later than the date of commencement.
2. Temporary wiring needed to work in the space should be connected to the Tenant's electrical service and not common area outlets.

ELECTRICAL CRITERIA (cont'd.)

Reuse of Existing Electrical Systems

1. The Tenant will submit a letter to the Landlord from the Tenant's electrical engineer stating that the existing electrical system is not being altered.
2. The Tenant's electrical engineer will be licensed in the state in which the work is being preformed.

Tenant is responsible for lighting system control, including connection to the Building Management system and connection to the Fire Alarm system. All emergency lighting, exit signs, horns and strobes must be provided by Tenant as required by code.

Material/Equipment Specifications

1. Drawings must include complete material specifications, including manufacturer's name and product number and complete schedules of all equipment and fixtures to be installed.
2. All material and equipment must be new and of a commercial grade and must bear Underwriter's labels where such labeling applies.
3. At grade level electrical conduit may be installed at least 4" under the slab and must be in Schedule 40 PVC conduit. But never allowed to be installed in the slab or less than 4" below slab.
4. Floor boxes must be watertight.
5. Pull boxes or junction boxes must be a minimum of 12 gauge galvanized steel outlets. Boxes in walls must be galvanized pressed steel or case metal. Caulk around boxes to eliminate noise transmission.
6. All main and branch feeders and circuitry wiring must be copper. All conductors to have 600 volt insulation type THW, THWN or THHN.
7. Convenience receptacles must be specification grade, 120 volt, 20 amps and be grounding type per NEC.
8. Manual or magnetic starters, switches, contactors, relays, time switches, safety devices, dimmers and other controls must be commercial type with heavy duty ratings and must be installed in strict conformance with the manufacturer's recommendation and applicable codes.

9. Any exposed low voltage wiring must be plenum graded.
10. All wiring of any type must be installed in conduit must be armored cable (BX). Armored cable will only be allowed for concealed branch circuit wiring within the demised premises. Exposed and/or open wiring of any kind will not be allowed. Flexible conduits must be used for connections to vibrating equipment.
11. Ground to building steel.
12. Install transformers below finish ceilings.

FIRE LINE SAFETY CRITERIA

Fire Alarm System - Life Safety

1. Food Court Tenants must provide a complete fire alarm detection system within the Tenant's space that ties into Landlord's system.
2. If applicable, Tenant is required to use Landlord's designated contractor for installation of the necessary smoke detectors and connection to the main fire alarm system. System must comply with the requirements of the governing authority.
3. Tyco Fire Alarm equipment is used on the property (ADT does residential/Tyco commercial). ISA (International Systems of America) monitors the Fire Alarm panels. There is no Fire Alarm equipment installed in the Tenant inline spaces. Only the Food Court Tenants have Fire Alarm equipment inside their spaces.

Fire Protection/Sprinkler System Information

1. All sprinkler modification work will be performed by the Landlord's required contractor for the Tenant at the Tenant's expense.
2. Equipment:
 - A. Standard sprinkler heads in areas without ceilings will be quick response upright bronze heads.
 - B. Standard sprinkler heads in areas with finished ceilings will be quick response semi-recessed chrome heads.
 - C. Flush mounted heads are required throughout the DCA.
 - D. The Tenant should contact the local or state fire marshal for specific requirements relating to quantity and location of fire extinguishers. At minimum, Tenant is to install at least one wall hung, 2A 10BC dry type U.L.-listed fire extinguisher.
 - E. Keep all piping as close to walls and as high to underside of roof framing as possible.
 - F. Required Duct Detector: Any HVAC unit 2000 CFM or larger, is required to have a smoke duct detector in the air supply & return of each unit. The duct detector must have remote test and alarm indicator station per city code.

- G. Contractor must also submit plans to the Fire Prevention Bureau for approval. The Tenant/Tenant's Contractor is responsible for all city testing and inspection fees.
- H. If required, Tenants will furnish and install their own complete fire alarm system that is compatible with the Landlord's system. Tenant is responsible for any devices and connection costs as may be required to interface with the Landlord's system with all work performed at the Tenant's expense for any portion of the monitoring system, whether inside or outside the Tenant premises.
- I. Contractor shall notify the Landlord in writing at least 24 hours in advance of making any modifications to the sprinkler systems. Contractor must notify the fire department and any alarm monitoring company for verification that the system is fully drained. The contractor must notify the Landlord when the system is back online.
- J. In order to clear alarms, contractor shall contact security or Mall maintenance supervisor at least 60 minutes prior to any drain down. Contractor shall remain for one (1) hour after the system has been refilled to check for leaks or other problems.
- K. No system will be left to drain over night. All systems have to be charged and operational when worker leave for the night.
- L. Keep all piping as close to walls and as high to underside of roof framing as possible.

Drawings

1. Fire Protection/Sprinkler Drawings shall include a reflected ceiling plan, with revised sprinkler head locations.
2. A copy of the Tenant's store plans will be sent to the Landlord's sprinkler contractor for review to insure that the system is adequate for the space as designed.

Procedures

All work on the Sprinkler Fire System must be done between the hours of 7:00 AM and 4:00 PM Monday through Friday, so the fire system can be filled and tested by 5:00 PM. A cost of \$250.00 for each shut down of the system is required to be paid before the system is drained. The Mall staff or approved contractor will drain and fill the system.

MECHANICAL CRITERIA

General Design/Construction Coordination

The mechanical criteria is provided for the purpose of designing the Tenant's heating, ventilating and air conditioning system. This criteria is provided for Tenant's Engineer. It is the Tenant's responsibility to verify existing conditions and comply with all applicable codes and standards.

Complete Engineered drawings must be submitted to Landlord's Tenant Coordinator for review and approval. Landlord will review the plans for conformance to basic mall requirements. The Landlord does not review for mechanical design, nor does the Landlord accept responsibility for the Tenant's adherence to governing codes.

Equipment or other obstacles placed in the vicinity of existing solar panels shall follow the guidelines outlined below:

- No equipment shall be placed within 10 feet of any solar inverter or AC junction box
- To avoid interfering with solar panel production, objects shall be placed no closer than the distance defined as 2 times their height. For example, if a 4 foot HVAC unit is installed, it must be located at least 8 feet away from a solar panel.
- In no cases, regardless of the height shall an obstacle be placed within 3 feet of solar equipment
- No conduits, pipes or other devices shall be added to existing conduit carrying devices
- No wires, pipes or other devices will be routed across or over existing solar equipment
- All modifications within 20' of solar equipment shall require review and approval from Macerich personnel

The documents to be submitted for Landlord approval must include the following:

1. Complete plans and specifications covering the heating, ventilating and air conditioning system work. Show make, type and performance of all equipment. Documents must be signed and sealed by a Licensed Engineer in the state where the shopping Center is located.

2. Calculations showing the heating and cooling required, including transmission and ventilation losses in the space and heat and cooling provided for the ventilation supply and exhaust required for the space. Calculations shall be as described in "Load Calculations" included below.
3. Temperature control system data showing make, control and energy management systems.
4. Exhaust system layout, including CFM and equipment specifications.
5. Structural details for support of all roof top equipment and equipment suspended from the steel structure.

Load Calculations

The Tenant must perform all calculations in accordance with methods set forth in the latest American Society of Heating, Refrigeration and Air Conditioning Engineers' Guide and Data Book and in accordance with good engineering practice. All calculations must be tabulated in a concise, orderly manner.

Heating load calculation: All spaces must be calculated to maintain the minimum space temperatures in sales and public spaces of 68 degrees F and 50 degrees F in non-public spaces.

Cooling load calculation: All spaces must be calculated to maintain the minimum space temperature of 73 degrees F and a maximum relative humidity of 55 degrees F and shall take into account all interior heat producing items such as people, equipment, roof and exterior walls.

The Tenant is required to submit calculations indicating the heating and cooling loads for the space and calculations for exhaust and make up air.

Tenants must design for a maximum noise criteria of NC40 for all spaces except kitchens and other similar work areas.

MECHANICAL CRITERIA (cont'd.)**Exhaust Requirements**

Tenants whose operation produces objectionable odors such as restaurants, pet shops, hair salons, nail salons and the like must maintain 10% negative air pressure with respect to the Mall by providing make up air equal to 90% exhaust air volume. Tenant may be required to provide, at Landlord's discretion, a separate make up outside air supply system to balance Tenant's exhaust system. Spaces that require exhaust must be designed to provide negative air pressure relative to adjoining conditioned spaces to prevent odor transfer.

Roof mounted exhaust fans must be ducted to ceiling grilles located approximately in the center and rear of the demised premises and specifically near the area where the odors are generated. The system shall be designed to cause the exhaust air to gravitate from the Mall Common Area to the odor producing area and then exhausted out.

- Landlord may require nail shops to install scrubbers. This will be determined on a case by case basis.
- Air filtration systems and bathroom exhaust fans are not acceptable solutions.
- The exhaust fan must be interlocked with the light switches for the store customer service area.
- The combined HVAC and exhaust system must be in operation during all hours that the Tenant is open for business.

Kitchen Exhaust Systems

Kitchen exhaust systems are subject to Landlord's review to ensure the exhaust does not compromise the ventilation air of adjacent mall roof top units. Kitchen exhaust systems are subject to the following criteria:

1. The exhaust fan must be a SWSI centrifugal fan which must be fitted with a minimum 10'-0" stainless steel upblast. Guide wires must be attached to the roof in order to secure the stack. Use the mall roofer for connection of the guide wires.
2. A "Grease Guard" grease containment system (or approved equal) must be installed to protect the Landlord's roof. A quarterly maintenance program must be in-place for the grease containment units. Proof of the maintenance contract must be presented to Landlord prior to the store opening.

Roof Penetrations

If use of roof top units, roof-type supplemental supply, condensing units or exhaust air units by the Tenant is permitted by the Landlord, units must be located on that part of the roof of the building directly above the demised premises as designated by Landlord. Tenant must provide and install all necessary piping and other necessary appurtenances for the operation of the roof top equipment. To the extent any of Tenant's equipment is to be located on the roof, the Tenant agrees to erect roof units in accordance with the requirements of the Landlord and the Tenant further agrees to repair any and all damage to the roof and structure caused by hoisting installation and the maintenance and/or servicing of such equipment, all of which must be at the sole cost and expense of the Tenant.

The Tenant must furnish and install all curbs, supports, lintels, pipes, ducts, vent caps, air inlets, exhaust hoods, louvers, flashings, counterflashing, etc. as required for any equipment requiring openings through the roof and/or exterior walls. The use of curb adapters is not allowed.

The Landlord has the right to inspect the quality of the work and approve locations and, if found unsatisfactory, reject same.

All cutting, patching and restoring of roofing is to be done by the Landlord's roofing contractor at the Tenant's expense. All repairs, maintenance and damage to the roof and/or building due to Tenant's installation must be at the Tenant's cost and expense.

Closeout Requirements

1. Tenant must submit as-built drawings and certified air balance reports prior to construction close out showing the exact location of all equipment and duct work.
2. Tenant is required to properly abandon old and unused roof top equipment (HVAC units, exhaust fans, etc.) by full removal, including curb with an appropriate metal deck and roof material patch. All roofing work must be performed by the Mall approved Roofing Contractor.
3. Pavers must be placed around the roof top equipment and from the main pathway to the equipment in order to protect the roof from traffic.

MECHANICAL CRITERIA (cont'd.)**HVAC Information****General Requirements**

1. Any new VAV box or replacement of an existing VAV box or the modification of any structure or substructure supporting the unit(s) shall be designed, engineered and installed at Tenants' sole cost and expense. Tenant shall provide structural engineering calculations and drawings from a licensed structural engineer (Registered in the State of the Center where the work is located) to Landlord for review and approve prior to installation of any unit. All equipment is to be installed from structural members that can support the weight of the equipment in areas designated by Landlord. All recommendations of design and verification of completion shall have the structural engineer's embossed seal from the state.
2. The Tenant's contractor shall coordinate with the Landlord's approved roofing contractor all cutting and drilling necessary for the proper installation of equipment. The Landlord's approved roofing contractor shall do all repairs damage to work under other heading caused by the work under the heading, at the direct and sole cost of Tenant.
3. Vibration isolators are required to be installed on all HVAC equipment, whether on the roof or within the Tenants space.
4. All condensate lines shall be copper and installed as follows:
 - A. Lines shall be run at right angles and drain into Tenant's space.
5. At areas where electrical conduits or other roof penetrations are removed, the roof deck must be repaired by the Landlord's roofing contractor, to an "as-new" condition.
6. The improvements shall in no way diminish or interfere with the structural integrity of the building, roof structure or with roof drainage.
7. Workmen prior to their leaving the premises should remove all debris, materials, unused parts, etc.
8. Ladders will not be permitted on the side of the building for roof access. Roof access may be obtained by checking in at the Management Office, at which time Security will escort workers to the access point. All workers are required to check out at the Management Office when finished.
9. All return air is to be ducted from the finished ceiling back to the VAV box. Ceiling return air plenum is not acceptable.
10. Fire damper assemblies, (including sleeves and installation procedures) must be U.L.. listed and approved by the building inspector preceding installation. Install duct and ceiling access to fire dampers. Smoke detectors may be required in all return air or exhaust duct work. The detectors will over ride and shutdown the air handling equipment when smoke is discovered.
11. Fiberglass ducts are not permitted for HVAC trunk lines. Flex duct is permitted for run outs within the Tenant premises and is limited to a maximum distance of 4'-0".
12. Exposed duct work is not allowed on the roof.
13. Balancing of the air conditioning system will be performed by an independent test and balancing agency at the sole cost and expense of the Tenant.
14. Tenant must provide welding blankets to protect Landlords roof during any welding on the roof level. Tenant may be required to use a Deputy Inspector to inspect all welds at the sole cost and expense of the Tenant. All materials, welds, connections, etc. installed by Tenant for the HVAC system must be coated to withstand corrosion.
15. No improvements will be installed during inclement weather. Tie-in of flashing materials to moist or dusty surfaces should not be attempted. Existing materials, as well as all metal or concrete surfaces, should be cleaned prior to application of new materials.
16. All electrical conduit, metal pipe or plastic piping should be restrained to appropriate sized wood blocking set into roofing cement. Attachment to blocking should allow for movement due to thermal expansion and contraction.
17. Platforms, curbs and sleepers are to be tied into the existing roof membrane by the Landlord's approved roofing contractor, at the sole cost of the Tenant, in a manner acceptable to the roofing manufacturer and the Landlord.
18. Provide new prefabricated lead or metal pipe sleeve flashing to seal any new pipe penetrations through the roof. Flashing flanges should be installed in a manner acceptable to the roofing manufacturer and the Landlord.

MECHANICAL CRITERIA (cont'd.)**Conditions for HVAC Systems**

1. Smoke detectors may be required in all return air or exhaust duct work. The detectors will over ride and shutdown the air handling equipment when smoke is discovered.
2. The Tenant must contract with an outside HVAC contractor for regular repair and maintenance of the system and provide proof of such contract to the Landlord prior to the store opening.
3. Balancing of the air conditioning system will be performed by an independent test and balance agency at the sole cost and expense of the Tenant. The air balance report is to be provided to the Center office prior to the store opening. The mechanical contractor shall cooperate with the selected balance agency in the following manner:
 - A. Provided sufficient time before final completion date so that testing and balancing can be accomplished.
 - B. Provide immediate labor and tools to make corrections when required without undue delay. Install balancing dampers as required by test and balance agency.
 - C. The contractor shall put all heating, ventilating and air conditioning systems and equipment into full operation and shall continue the operation during each working day of testing and balancing.
 - D. Testing and balancing agency shall be kept informed on any major changes made to system during construction and shall be provided with a complete set of as-built drawings.

Structural Considerations

1. The Tenant must retain a Structural Engineer, registered in the state in which the work is being performed.
2. The Tenant's structural engineer must examine the existing structure and determine the location for equipment placement.
3. The Tenant's engineer will provide the Landlord with a recommendation for the support of equipment.
4. Reinforce the roof system to adequately support the weight of any equipment added.
5. No structural or miscellaneous bridging, blocking, etc., may be removed.
6. The Landlord must approve any modifications required before work begins.

7. Upon completion, the Tenant's structural engineer shall submit a letter stating that the equipment has been installed in accordance with the engineer's recommended design.
8. Existing rooftop equipment that is not being used by the Tenant shall be removed and disposed of at the Tenant's expense.

Location & Installation of Roof Top Equipment

1. Locate all roof top equipment as far from side walls as possible. Roof top equipment will not be visible from the parking lot or adjacent streets.
 - A. Distance between Fresh Air Intake and Exhaust units shall be a minimum of 15'-0".
 - B. It is the sole responsibility to design and locate the distance such that Tenant's exhaust cannot be drawn into the Fresh Air Intake of any existing roof top equipment.
2. Factory curbs are required for the installation of all roof top equipment. Curbs must be a minimum of eight inches high.
3. Roof penetrations may not be located so close to one another that they interfere with proper flashing, or be installed in any roof waterway or area of the roof which ponds water. If placement of any curb or platform causes restriction of water flow and/or creates a ponding situation, a cricket will be constructed at the upslope side of the curb. Crickets can be formed from Perlite roof insulation to provide a minimum slope of 1/4" per foot.
4. Roof penetration for control and electrical wiring shall be made through the equipment curb or a square pitch-pan located within 24" of the curb.
5. The distance between the new improvements and parapet walls, existing equipment curbs, or any rooftop projection, should be no less than 24" to allow for proper flashing and sealing of the roof membrane.
6. The Tenant's name and suite number will be stenciled on the roof top as designated by Mall Management Office.

GENERAL NOTES:

- A. Tenant may not reuse an VAV box 5 years old or over. If the existing unit is in excess of 5 years old, a new unit shall be installed in accordance with the Landlord's criteria, at the sole cost of the Tenant.
- B. When reusing an existing HVAC system the Tenant is in no way

MECHANICAL CRITERIA (cont'd.)

relieved of the responsibility to conform to the Landlords criteria governing the HVAC.

- C. The Tenant may not alter the existing HVAC system in any way without first submitting plans for approval.
- D. Prior to opening, the Tenant will submit the following documentation; (i) a letter from the HVAC Contractor asserting that the VAV box is operating in "like-new" condition, (ii) a copy of the maintenance agreement for unit(s) to the Landlord, (iii) the Tenant's HVAC maintenance contractor must provide photographs of the existing unit(s).

VAV Box Specifications:

On the first floor, Tenant will furnish the variable air volume ("VAV") box(es) at Tenant's expense. Tenant will balance their Leased Premises according to Landlord approved Tenant construction documents (at Tenant's expense). If existing VAV box is to be reused it must be repaired and refurbished to "like new" condition. Provide on-site Landlord representative with written documentation that unit has been restored to "like new" condition.

Tenant Responsibility:

Tenant shall provide a complete mechanical system from Landlord's distribution point (supply stub-out) within the Leased Premises, including but not limited to: connection to supply duct work, installation of VAV mixing box, low pressure rigid metal duct work, grilles, registers, controls and circuitry necessary for the satisfactory operation of an air conditioning system.

- All supply, return and exhaust systems must be balanced and tested by Tenant's air balance mechanical contractor. Submit a copy of the balance report to Mall management.
- Duct work shall be free from vibration. If duct work has excessive vibration, Tenant shall provide additional braces and supports. Additional supports must be hung from the top of joist cord and/or beam.
- No fiberglass flex duct or duct board is permitted.
- Flex duct must not be used between Landlord's supply tap and VAV box.
- Any odor producing Tenants (i.e. hair salon, nail & specialty food Tenants, etc.) must provide an additional exhausting system approved by Landlord to eliminate odors. Coordinate shaft routing with Landlord's representative prior to plan submission.

- Tenants are to use the following digital thermostats only with VAV boxes. If not existing, thermostats must be replaced with these:

1. Honeywell TB6980A1007
2. Damper Zone Actuator: Honeywell ML616B2024

Odor Producing Tenants/Exhaust Systems

1. The following special requirements apply to odor producing Tenants (including but not limited to hairstyle shops, pet-shops, restaurants or fast food use shops, and any other at Landlords discretion).
 - A. Odor producing area - Tenant is required to furnish and install the necessary equipment to remove any odors. This work will be approved in writing by the Landlord and at the sole expense of the Tenant. Examples of such Tenants include; hair or nail shops, pet shops and food preparation shops.
 - B. Use motor driven and factory curb Supreme up blast roof ventilator model installed at a minimum of 40" from roof membrane to discharge. Use a gauge welded exhaust duct. Provide makeup air as noted below, but not less than 85% of amount of exhaust.
 - C. The Tenant, as required by special conditions such as grills, restaurant exhaust systems, etc., will provide special makeup air. Along with the HVAC unit, the Tenant may use an evaporative cooler.
 - D. Smoke detectors may be required in all return air or exhaust duct work to override the air handling equipment and provide shutdown when smoke reaches the equipment.
 - E. A grease containment system is required for food service installations. The Tenant will provide the Landlord with a copy of the maintenance agreement for the grease containment system.
 - F. Absolutely no exposed duct work shall be allowed on the roof running on a horizontal plane.
 - G. All exhaust duct work must be installed in conformance with N.F.P.A bulletin 96 and the uniform mechanical code. Location of exhaust duct work and roof exhaust fans must have the approval of the Landlord.
 - H. Along with the HVAC unit, the Tenant may use an evaporative cooler (Essick or Landlord approved equal).
 - I. The evaporative cooler (or other make-up air unit). The unit shall be used for the make-up air only.
 - A. Tenant shall operate HVAC System between 5 and 10% negative

MECHANICAL CRITERIA (cont'd.)

pressure and shall provide air balance report prior to opening and on a yearly basis as requested by Mall Management.

- B. All installations shall comply with governing codes and be approved by the fire marshal.

Additional Requirements for Restaurants:

1. Sizes and locations for all duct and piping through roof must be shown on plans. Show all required fireproofing.
2. All garbage and refuse areas wash down "grey" water must be contained and properly drained off into city approved system (i.e.. sewer or storm).
3. If the Tenant engages in the preparation of food or baked goods, Tenant agrees, at Tenant's expense to do the following:
 - A. Install dry chemical extinguishing devices (such as ansul) approved by the fire insurance rating organization carriers.
 - B. Maintain all exhaust ducts and filters in a clean condition.
 - C. Place and store Tenant's garbage and refuse in containers which shall be kept, until collected, in a self-contained area within the demised premises set aside for the storage of garbage and/or storing of inflammable or combustible materials, Tenant agrees to install and maintain appropriate chemical extinguishing devices.
 - D. In the event gas is used in the demised premises, Tenant agrees to install an appropriate gas cutoff valve.
 - E. Should the Tenant fail to install any such devices referred to in this section and/or to subscribe to the servicing thereof, Landlord shall have the right to enter the demised premises and to make any necessary installations and charge the cost of such installations and/or the servicing thereof to Tenant which Tenant agrees to pay to Landlord, as additional rent, within ten (10) days after demand.

Note: See HVAC System Plan on the following sheet for the type of HVAC system required in each section of the mall.

PLUMBING CRITERIA

General Design/Construction Coordination

The following criteria is provided for the purpose of designing the Tenant's plumbing system. This criteria is provided for Tenant's Engineer. It is the Tenant's responsibility to verify existing conditions and comply with all applicable codes and standards.

Complete Engineered drawings must be submitted to Landlord's Tenant Coordinator for review and approval. Landlord will review the plans for conformance to basic mall requirements. The Landlord does not review for plumbing design, nor does the Landlord accept responsibility for the Tenant's adherence to governing codes.

The documents to be submitted for Landlord approval must include the following:

- Complete plans and specifications covering the complete plumbing system. Documents must be signed and sealed by a Licensed Engineer in the state where the Shopping Center is located.

The Tenant shall provide a complete plumbing system for the Tenant space. The Landlord has provided connections in each Tenant space for sanitary waste and potable cold water.

Tenant is responsible for all plumbing including toilets, sinks, urinals, drains, hot water heaters, water coolers and connections into existing water and sewer lines.

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.

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.

All domestic supply lines shall be copper. Sanitary and vent lines traversing the ceiling area to be cast iron or copper (no PVC). Tenant will utilize electric water heaters for domestic hot water.

Every Tenant must install a handicapped restroom facility with a minimum of one water closet and one lavatory and in accordance with local code officials. An exception to this requirement is only permitted for Food Court Tenants who are within close proximity to the public restrooms upon approval of the Landlord and local code official.

Restrooms must install a 3" floor drain. Anti- cockroach screens over floor drains in storage rooms, closets or any areas where drains do not get much use. Mop sinks and water fountains must be installed per local code requirements.

Tenant must install clean outs as required by code and Landlord's requirements and these shall terminate flush with the finish floor or wall. No clean outs are permitted above the ceiling.

Garbage disposals are not allowed.

Hair salons and pet shops shall provide hair and solids interceptors on all sinks and basins which may receive human or animal hair. After installation, these hair interceptors shall be properly maintained so as to keep the sanitary system free from any adverse conditions.

Except with Landlord's prior written permission for non-compliance, all pot sinks, scullery sinks, pre-wash sinks and other kitchen units must be connected to a grease trap. Dishwashers may not be connected to grease trap.

Waterproofing must be installed in all "wet areas" such as kitchens, restrooms, mop sinks, drinking fountains, etc. The waterproof membrane must extend 4" vertically on all demising walls. This membrane will be water tested by the General Contractor and inspected and signed off by Mall Personnel. If the membrane fails the water test, it must be replaced.

PLUMBING CRITERIA (cont'd.)

Food service, hair salons and photographic processing or other Tenants with equipment or operations that have the possibility of backflow will be required to install an approved backflow preventer. These must be certified and acceptable to the water district and checked yearly or as required by the local authority having jurisdiction.

Tenants must submit calculations to the Landlord which show the size selection or basis of capacity of all equipment and piping.

All waste piping designed and installed for the discharge of material from kitchen equipment, except dishwashers, shall discharge through a grease interceptor provided and installed by tenant prior to connection to mall's sanitary system. Grease interceptors shall be contained completely within the demised premises and above the floor slab or in other Landlord approved location

1. Water service for Tenants is provided from at least a 1" diameter line. Each Tenant is responsible for ordering and paying for their own water meter to their space.
2. The plumbing system shall be installed in accordance with governing building codes and shopping requirements.
3. Low flow plumbing fixtures are required for water conservation.
4. A floor drain is required to be installed in all toilet rooms.
5. Water piping shall be copper with sweat type fittings. Sanitary pipe shall be cast iron.
6. Use lead jackets, 8" or higher, for roof vents only.
7. All waste piping designed and installed for the discharge of material from kitchen equipment, except dishwashers, shall discharge through a grease interceptor provided and installed by Tenant prior to connection to Landlord's sanitary system. Grease interceptors shall be contained completely within the demised premises and above the floor slab or in other Landlord approved location.
8. All photographic film processing equipment must have an approved reduced pressure principal backflow prevention assembly installed at the water service connection (inside store, after meter).

Gas Service

All new development and newly Tenanted restaurants need to have seismic gas shut-off valves installed on Landlord side of the meter, at each individual space. Seismic valves must be:

1. UL-approved;
2. FM-approved; or,
3. ACSE 25-compliant.

All devices must be installed consistent with manufacturer's instructions and following jurisdictional code.

Gas may be available at the center. Tenant, at its sole cost and expense and in compliance with local code must procure gas service to and within the demised premises and will make all necessary arrangements with the local Gas Company for such service. Tenant is responsible for installation of a gas meter at the gas meter header.

Pressure regulators and piping required for connection to Tenant's equipment is the responsibility of the Tenant. Coordinate with Landlord for regulator vent routing.

Gas piping on the roof must be placed on pillow blocks or similar arrangement.

Seismic Gas Shutoff Valve

All Tenants who use or have a gas line installed for their premises, or equipment that serves their premises, are required to install a code and Landlord-compliant seismic gas shut off valve on the main gas line serving the space.

Ventilation

Tenants will provide vertical exhaust ducts at a location designated by Landlord. All hood exhaust must be connected to vertical duct in accordance with code. Tenants are required to provide for the upkeep and maintenance for such vertical exhaust duct and related devices and materials.

All sanitary sewer and plumbing vent piping shall comply with all local codes.

Vents through the roof shall be a minimum of 4" and extend a minimum of 8" above finish roof.

STRUCTURAL CRITERIA

The following criteria is provided for the purpose of designing the Tenant's structural drawings. This criteria is provided as a guideline for Tenant's Engineer. It is the Tenant's responsibility to verify existing conditions and comply with all applicable codes and standards.

Complete Engineered drawings must be submitted to the Landlord's Tenant Coordinator for review and approval. Landlord will review the plans for conformance to basic mall requirements. The Landlord does not review for design, nor does the Landlord accept responsibility for the Tenant's adherence to governing codes.

The documents to be submitted for Landlord approval must include the following:

- Complete plans and specifications for all structural work. Documents must be signed and sealed by a Licensed Engineer in the state where the Shopping Center is located.

General Requirements

1. The Tenant's storefront must be structurally self-supported. Tenant may not support the storefront from the bulkhead or fascia. Structural support for Tenant storefronts must be from the roof joists for lateral bracing.
2. Fixtures and equipment may not be attached to or supported from the floor or roof deck.
3. Structural drawings are required for all items that require support from the steel structure or for all roof top equipment weighing 300 lbs or more.
4. Joist reinforcing is required for roof top equipment as well as steel support for all roof openings.
5. Upper level Tenant's must review base building structural drawings prior to installing a security safe, ovens or any equipment weighing 300 lbs. or more.

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.