

GENERAL NOTES			PLUMBING CRITERIA			ELECTRICAL CRITERIA			FOOD TENANT CRITERIA		
Tenant's drawings are to clearly show ALL modifications to existing installation that are required to accommodate Tenant Improvements.			<b>PIPING SYSTEM</b> Tenant may or may not be a customer of the Utility Company, however the design should be executed as if Tenant was acquiring water and sewer directly from the Utility Company.			Diagram is to include the Landlord's distribution equipment, metering (where utility metered), means to disconnect the service and overcurrent protection.			<b>GREASE HOODS</b> Compensating and short circuit hoods, those hoods that introduce outdoor air directly into the hood, are not permitted.		
Tenant's MEP drawings shall be prepared and stamped by a Professional Engineer. Indicate column line designations on all plans.			Only one connection to the Landlord's plumbing system is permitted.			<b>HVAC WIRING</b> Tenant shall provide a main disconnecting means at each HVAC unit.			Water wash down type kitchen hoods are required.		
Unless already existing and in compliance with Landlord's requirements, Tenant is required to install, upgrade and/or furnish any and all equipment, ductwork, piping, etc. for Tenant's MEP service installation.			Domestic water is supplied at the pressure available from the utility minus piping pressure losses to the point of connection.			Coordinate metering requirements, location of service, access to service, location of service disconnect and type of overcurrent protection (fused is preferred) including fault current data with existing conditions, local code authorities and the local utility company.			Hoods shall bear a current (2002 or later) UL 710 Label for Type I hoods. Labels and listings prior to 2002 are not acceptable.		
The design, materials and installation shall conform to the best current practice in the respective trades and shall be consistent with good engineering practice, manufacturer's recommendations, industry technical references and standards.			Tenants requiring specific pressures should test the available pressure and install regulators or booster pump systems to meet their needs.			Tenant's engineer shall specify appropriate AIC rating for Tenant equipment.			Where feasible, partial or full end panels shall be installed on the open ends of the hood.		
Any modification or upgrade of existing base building services or construction must receive the prior written approval from the Landlord, prior to drawing submission. Upgrades shall be subject to building capacity and access availability.			Tenants shall connect to vent header if existing, or extend vents thru roof.			Tenant shall provide a main disconnect means within the leased space in addition to any required by code or the utility company at service entry point.			All island type hoods shall have a minimum overhang of 12" on any open sides rather than the 6" code minimum.		
All supply air ductwork shall be externally insulated with 1-1/2" thick foil face insulation.			All roofing work must be by Landlord's roofer at Tenant's expense.			Circuit breakers shall be bolt-on, not plug-in type. Switching duty breakers on all devices used for turning loads on/off. Tenant shall have breaker locks on control and timeclock circuits.			Hood systems shall include grease extraction filters similar to Grease-X-Tractor filters as manufactured by the Greenheck Fan Corporation, (715) 359-6171 or KSA multi-cyclone filters by Halton Mfg. (270) 237-5600.		
Internally lined ductwork may be used for acoustic purposes only, NOT as a substitute for external insulation.			Tenant shall provide sanitary/vent riser diagrams and a water piping riser diagram on design drawings.			Arrange load to maintain a balance between phases of 10% or less.			<b>Standard, baffle type filters are not acceptable.</b>		
Externally insulated flexible duct, not to exceed 5'-0" in length, may only be used for connection to supply diffusers. Flex duct shall be properly supported and fastened to metal duct and diffuser with mechanically tightened draw bands.			Any unused plumbing equipment, piping, etc within or serving the demised premises must be removed.			24-Hour/7-Day Time Clock is required to control storefront entry lights, show window lights, show window receptacles, and storefront signage.			<b>COOKING OIL MANAGEMENT AND FILTRATION</b> Cooking oil shall be captured in a waste oil containment tank, similar to Shortening Management Systems by FrontLine International, Inc.		
Install volume/control dampers on each duct to a diffuser.			<b>PIPING MATERIALS</b> Below ground waste and vent shall be service-weight cast iron or schedule 40 PVC.			Electrical devices, time-clocks, panels, cabinets, etc. shall be mounted on a plywood backer-board.			Containment tank to be located next to waste oil producing equipment. Tenants have two options:		
The heat gain from enclosed display windows must be ventilated.			All no-hub connections shall be with cast iron couplings, similar to "MG" couplings including tie in to Landlord main.			<b>GROUNDING</b> Grounding must be to building steel with exothermic weld or split bolt connection. Do not ground to cold water pipe.			1. Provide properly sized Containment Tank and separate wall mounted pump station, where shortening is suctioned from the fry vat and pumped to the containment tank.		
<b>RETURN AIR</b> An open ceiling plenum return air system shall be used. Ducted return system is not permitted except at food Tenants and other odor producing Tenants or as determined by the Landlord.			Stainless steel band no-hub connections are not permitted below ground.			<b>TRANSFORMERS</b> All transformers shall be 3 phase. Single phase transformers are not permitted. 30 KVA and smaller transformer may be suspended from Landlord's roof structure. Mount transformer on vibration isolators.			Or		
Provide return / relief grilles. Size at one square foot of grille for 300 square feet of gross leasable area.			Above ground waste shall be service weight cast iron. Above ground vent shall be cast iron or Schedule 40 galvanized steel.			All wiring must be in conduit. All conduits shall be concealed where possible.			2. Provide properly sized Containment Tank and direct plumbed manifold system, where the shortening is pumped directly from the fryer to the containment tank, similar to Frontline's Magic-Line concept. The manifold system utilizes the filter of the fryer to pump waste shortening to the tank. The filter's pump powers the system.		
Locate RTU where designated by Landlord or provide written documentation by a Registered Structural Engineer where alternate location is proposed or a location is unavailable.			PVC piping is not permitted above ground.			Flexible conduit shall be MC only. Flexible conduit is not permitted within demising walls.			Suggested manufacturers: Highland Tank, Inc. (856)985-1214. and FrontLine International, Inc. (330)665-4239.		
When required, Tenant shall provide supplemental structural support framing designed by a licensed structural engineer employed by Tenant to adequately support the Tenant's equipment.			Below ground water shall be type "K" (soft) copper with no joints below ground.			Exposed conduit shall be installed in straight lines, parallel with or at right angles to the building structure. Do not loop excess flexible conduit in ceiling space.			<b>DISHWASHER EXHAUST</b> Dishwasher vapors must be captured by a hood. An exhaust grill at the ceiling is not acceptable for this purpose.		
The Landlord may require that engineering analysis, review or design be performed by Landlord's engineer at Tenant's expense.			Above ground water shall be type "L" copper.			Wire shall be copper THHN or THWN with insulation.			Hood and ductwork shall be constructed of aluminum or stainless steel, and be watertight.		
No alterations, additions, reinforcements or modifications to Landlord's structure to accommodate Tenant's work shall be performed without obtaining Landlord's prior written approval.			<b>LOCATION of PIPING</b> All plumbing equipment shall be properly suspended from Landlord's structure.			Replacement air units shall be installed on full perimeter curbs, similar to packaged RTU's.			Pitch ductwork and install joints in such a manner to allow moisture to drain back to hood or drain.		
The Landlord may require that approved structural modifications be performed by the Landlord's contractor under contract to Tenant at Tenant's expense.			All floor pipe penetrations, cleanouts, and floor drains must be sealed watertight, with membrane and flashing extended into clamping collar, per manufacturer's specifications. Refer to Architectural Criteria.			Interior make-up air ductwork shall be wrapped with 1-1/2" thick, foil-faced, fiberglass insulation.			<b>GREASE INTERCEPTORS</b> Do not connect hand-wash sinks, toilet room fixtures, or garbage disposals to the grease interceptor unless otherwise required by the local authorities.		
Tenant shall not drill, screw, weld or shoot into Landlord's structure or structural members.			No sanitary, vent, water or gas piping will be permitted within the demising walls.			Sanitary waste systems			Grease interceptors shall be sized as required by Local Building Codes and as required by the Landlord.		
All attachments shall be with beam clamps, clips or bolts with washers. Do not attach any construction directly to Landlord's roof deck. Joists, beams, trusses and girders may be used for lateral bracing and spanning support.			Hinged access doors must be installed to provide access to all plumbing equipment including but not limited to: valves, cleanouts, meters, and indirectly connected piping or as designated by the Landlord.			Grease interceptors: lint traps, and solids interceptors shall be installed on any plumbing fixtures that have the potential of introducing grease, lint, hair, etc. into the building sanitary system.			Sizing calculations shall be submitted to the Landlord for approval prior to construction.		
Do not support any construction from Landlord's cross-bracing or bridging.			<b>PIPING COMPONENTS</b> Tenant's connection to Landlord's cold water main is to include a service isolation valve.			Tenants shall not dispose of any hazardous chemicals into the building sanitary system. Photo Processing Tenants, if necessary, shall install an approved system for silver recovery. Locate all interceptors to allow adequate access for cleaning and maintenance.			Grease Interceptors may be installed above the floor where they receive the discharge from only one sink.		
Roof openings greater than 12" on any side shall have a steel angle frame below the roof, clamped to the structure to support the deck opening.			Any and all piping not reused, within the demised premises must be removed.			Pollution control unit (e.g. scrubber system)			Where the grease Interceptor receives waste from more than one fixture, grease producing tenants shall install either a recessed interceptor when the Tenant is on a slab-on-grade and the interceptor is 150 lb capacity or less, or a remotely located interceptor when the larger than 150 lb. or required by the local authorities to be remotely located.		
<b>ROOFTOP UNIT</b> Tenant must incorporate computer generated HVAC load calculations into their submission to the Landlord. All calculations shall be performed per ASHRAE.			Insulate all hot water, cold water, and condensate drain piping.			Installation shall not proceed beyond this point until this test has been verified by the Landlord's representative.			All exterior grease interceptors will be installed by the Landlord at the Tenant's expense.		
Unit must be sized appropriately to maintain space comfort. As a guideline, the unit shall be sized for 90% to 110% of the calculated load.			<b>DOMESTIC WATER</b> Tenant is responsible for verifying available capacity, pressure, service connection, and meter installation with the Landlord and the local utility.			After pressure testing and inspection by the Landlord's representative and the local authority, the ductwork shall be wrapped with fireproof insulation UL listed as a 1-hour separation for kitchen exhaust applications.			<b>BEVERAGE LINES</b> PVC piping is NOT permitted in ceiling plenums above or below the Tenant's space, including beverage lines and sleeves.		
If existing rooftop unit is over 10 years old or unless otherwise approved by the Landlord in writing, Tenant shall provide a new rooftop unit(s).			Where tenant is not a customer of the utility company, all Food Tenants and other heavy water users shall provide a double check valve assembly and a Rockwell or equal, utility grade water meter with both directly read and remote reader.			Access panels shall be gasketed "grease-tight", and be of the same, black iron material as the ductwork.			Flame and smoke rated polyethylene or equal shall be used.		
Landlord will not consider permitting the reuse of existing rooftop unit(s) until a report on the capacity and condition of the existing equipment by a company employing full time certified hvac/refrigeration specialists has been submitted by the Tenant.			Metering assembly to be properly located and adequately supported to allow for easy reading, maintenance, repair and replacement.			Galvanized, double wall, or other comfort air-conditioning access doors shall not be used.			Beverage line floor penetrations in upper level installations shall be provided with sleeves that extend up through the floor a minimum of 1", and are sealed to prohibit spills from leaking to the Tenant below.		
Rooftop units must be located a minimum of 5'-0" from Landlord's demising walls when possible to maintain a 10'-0" min. clearance between adjacent tenants' rooftop equipment.			The meter and checks shall be accessible for maintenance and reading without removing the device from the line.			All grease ductwork must be tested to 1-1/2" positive pressure, and demonstrated to the Landlord's representative to have no loss in pressure after 10 minutes.			<b>REFRIGERATION EQUIPMENT</b> All refrigeration equipment shall be either located within the tenant's leased space or in a Landlord approved location on the roof.		
Curb adapters are not permitted. If existing RTU is supported on post & rail system it shall be replaced with a full perimeter curb.			Fire protection water is supplied at the pressure available from the utility minus piping pressure losses to the point of connection.			After pressure testing and inspection by the Landlord's representative and the local authority, the ductwork shall be wrapped with fireproof insulation UL listed as a 1-hour separation for kitchen exhaust applications.			Note: Landlord is not responsible for heating loads created by Tenants' equipment during off hours.		
Hail guard is required on condensing coil.			Tenants shall design their piping system to accommodate the existing available pressure.			Pollution control units shall comply with NFPA standards, applicable codes, and shall require the approval of the Landlord.			Kitchen equipment Loads shall be submitted for Landlord review and approval.		
Tenant's HVAC contractor must label all of the Tenant's rooftop equipment to ensure proper identification.			<b>ELECTRICAL CRITERIA</b>			<b>KITCHEN DESIGNER NOTICE: Kitchen designers and kitchen equipment suppliers should be made aware of the specific requirements of this document as it pertains to specifications and/or installation of services and equipment for Food Service Tenants.</b>			<b>ROOF PROTECTION</b> Roof protection boards shall be installed around any roof top HVAC equipment by the LANDLORD'S roofing contractor under contract to the Tenant Contractor at the Contractor's expense.		
All roof work shall be done by the Landlord's roofing contractor at Tenant's expense.			<b>ELECTRICAL SYSTEM</b> Tenant may or may not be a customer of the Utility Company, however the design should be executed as if Tenant was acquiring power directly from the Utility Company.			<b>GENERAL NOTE:</b> These criteria provide general design information and construction requirements. However, for specific information regarding the division of responsibilities of the Landlord and Tenant with respect to the Premises, see the Design Manual for this specific project.			All roof work including cutting of the roof shall be performed by the LANDLORD'S roofing contractor under contract to Tenant Contractor at Contractor's expense.		
CONTACT INFORMATION: For questions regarding site access, storefront & architectural criteria, engineering design, delivery dates, construction rules & regulations, the scope of Landlords and Tenants work and store opening requirements, please contact your Tenant Coordinator or call 317-636-1600 for assistance. For questions regarding MEP Criteria or other MEP related questions please contact TES Engineering at (440)614-0315 for Bob Scherry, or -0316 for Bob Catino.			<b>THE FALLS</b> MEP/FP CRITERIA - PACKAGED ROOFTOP UNITS (Lifestyle Centers)			<b>DRAWING INDEX:</b> Preconstruction Drawing A-1 / Architectural Criteria MEP-1 / Mechanical, Electrical, Plumbing & Fire Protection Criteria Design Manual / Project Specific Guidelines (in Tenant Information Package)			Sheet: <b>MEP-1</b> Date: 03/23/11		