



# TENANT CONSTRUCTION HANDBOOK

MARCH 2024 V10

## **Taubman**

America's Most Productive Retail Properties

# TENANT CONSTRUCTION RULES & REGULATIONS MANUAL

#### **CONSTRUCTION RULES AND REGULATIONS**

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#### **CONSTRUCTION RULES AND REGULATIONS**

#### **CONSTRUCTION PREREQUISITES**

It is requested that the general contractor (GC) obtain a copy of the Construction Rules and Regulations and the Tenant Construction Handbook, and thoroughly review them before the Pre-Construction Meeting.

#### INTRODUCTION

The following is a description of procedures for Tenant Construction. This guide addresses items frequently encountered during most Tenant store buildouts. Please read this information thoroughly to be familiar with all the requirements that will affect your work. Contractors must be aware and familiar with any changes, addendums, etc. which may occur that are not covered in this manual. If you should encounter any problems or have any questions not covered within this manual, contact the on-site Landlord Representative immediately.

#### **BEFORE COMMENCING WORK, TENANT'S GC MUST:**

- Schedule a pre-construction meeting and report to the Facilities Director with a copy of the construction permit.
   Facilities Director will provide at the pre-construction meeting a copy the approved plans. The Landlord approved drawings and permitted plans must be always kept on-site during construction. Any changes to the approved construction documents and/or tenant improvements require written approval from Landlord. Changes include any revised construction documents after the Landlord approved documents.
- 2. Submit a list of subcontractors that will be on site. Refer to Subcontractor's information form included herein.
- 3. Submit a copy of the "Registro de Comerciante" in Puerto Rico.
- 4. Provide the Facilities Director with a Certificate of Insurance. Certificate of Insurance must be on file prior to starting construction. Refer to certificate sample included here in.
- 5. Submit a construction schedule.
- 6. Coordinate with Facilities Director means of access.
- 7. Contractor Security Deposit submit a three thousand dollars (\$3,000.00) deposit check for Retail Tenants, and five thousand (\$5,000.00) deposit check for Restaurants. Checks made payable to: Plaza Internacional Puerto Rico LLC.
  - a. The sum shall be applied to any cost incurred by Landlord in fulfilling Tenant Contractor's responsibilities, which contractor fails to complete.
  - b. All remaining funds will be fully refundable, with no interest, to the contractor upon completion of all punch list items, closeout documentation and final acceptance of the store by Landlord.
- 8. Report any discrepancies in dimensions, lack of utilities, etc. Immediately to on-site representative.
- 9. Post the construction permit in tenant space where notices, contact information are required to be displayed.
- 10. Post upon possession of tenant space a sign including space number and tenant name at the rear entrance or barricade entrance door. This sign must be in place to ensure that supplies and materials are delivered to the appropriate location.

#### **INSURANCE**

An original certificate of the required insurance shall be furnished to Landlord before the start of the construction work. Insurance coverage shall meet the requirements as defined in the Tenant's Lease. Insurance carriers shall give an AM Best rating of A-VII or better and shall be registered or authorized to do business in Puerto Rico. Submit required insurance to the Landlord to include the following:

<u>Comprehensive General Liability</u>: a blanket policy for the amount not less than \$2,000,000.00 for any occurrence <u>Comprehensive Automotive Liability</u>: include ownership, maintenance & operation of any automotive equipment in the amounts indicated as follows:

Bodily Injury (Personal Injury or Death) in the amount of \$2,000,000.00 for each occurrence.

<u>Property Damage</u> in the amount of \$2,000,000.00 for each occurrence.

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Please include the following as additional insured: **The Taubman Company LLC and Plaza Internacional Puerto Rico LLC** Cancellation Clause: **30-day notice** 

#### **WORKERS COMPENSATION INSURANCE**

An original certificate of the required insurance shall be furnished to Landlord before the start of the construction works. Worker Compensation Insurance must cover up to \$2,000,000.00.

#### PREMISES ACCEPTANCE WALKTHROUGH

- 1. Utilities tie-in locations:
  - a. Electrical connection stub
  - b. Fire Sprinkler connection
  - c. Plumbing vent stub
  - d. Potable water connection
  - e. Sanitary stub or connecting pipe.
  - f. Outside air duct connection
  - g. Chilled water stubs
  - h. Data connection stub
  - i. BAS connection stub
  - j. Grease stub or point of connection.
  - k. Used oil stub or point of connection.
  - I. Gas line point of connection
- 2. Existing Conditions:
  - a. Lease line
  - b. Neutral piers (provided by Landlord) If not already installed, cost is included in the non-reimbursable fees.
  - c. Mall soffit, trellis, fixed canopies, speakers, exist signs, cameras, etc.
  - d. Service corridors
- 3. Designated Loading Areas and Routing of Materials and Deliveries including workers parking, staging locations, open tab location as directed by Facilities Director and/or Tenant Construction Handbook.
- 4. Water meter and electrical meters provided by Landlord, included in the non-reimbursable fees.
- 5. Mall Tile inspection form. Broken or damages tiles will be recorded. All other tiles that become damage or broken posteriorly will be charged to GC including installation costs.
- 6. Premises acceptance form.

#### **GENERAL INFORMATION**

#### AMERICAN WITH DISABILITIES ACT (ADA)

GC shall comply with the latest edition of ADA, any of its amendment, as well as applicable local laws, and ordinances. Compliance will include, but not limited to, design, construction, and alteration of the leased premises as well as access to employment of and service to individuals covered by the ADA.

#### INSPECTIONS

Coordinate all required inspections via Landlord's Independent Inspection Company.

#### CODE COMPLIANCE AND OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA)

GC must comply and conform to all the requirements of the OSHA and no exceptions will be recognized. Landlord requires all workers to wear hardhats, work boots, long pants, reflective safety vest, eye protection, and shirts with a sleeve length of four

inches (4") always. GC must comply with any existing or future city, state or federal statues, ordinances, regulations, codes, insurance ratings boards, or legislation regarding the control of pollution as it applies to construction.

#### **PERMITS**

If permit expeditor service is not provided by Landlord, Tenant is responsible for securing all applicable permits and certifications from local Agencies to submit for a Construction Permit. Construction Permit must be obtained prior commencement of works, and a copy shall be submitted to the Facilities Director. Food service tenants must obtain a Health Department Permit as required and Liquor License for dispensing alcoholic beverages.

#### **RULES**

The following rules and procedures shall be strictly adhered to during all phases of Tenant Construction.

- 1. Construction shall comply in all respects with applicable Federal, State, and/or Municipal Statues, Ordinances, Regulations, Laws, and Codes.
- 2. Tenants, Tenant's Contractors, and their employees are expected to act in accordance with all regulations established by Landlord's on-site representative.
- 3. All tenants' contractors will enter through designated access locations/gates.
- 4. Landlord's right to stop construction:
  - a. Landlord's representative may stop work and/or required the GC to make immediate corrections if they have observed any work or procedure that threatens life, safety, for aesthetic reasons or if GC or subcontractors violate any requirement or regulation contained in this Handbook.
  - b. GC will be fined, as per Violations and Fines Form included herein.
- 5. Protection of Property. GC will be responsible for maintaining common areas and existing finishes and protect against damages at the Tenant's lease line.
  - a. If the GC fails to repair any damage or unsatisfactory work after receiving a written notification from the Facilities Director within a reasonable amount of time, Landlord will have the damaged or unsatisfactory work remediated.
  - b. The cost for the repair will be deducted from Contractor's Construction Deposit. If the deposit does not adequately cover the damage or unsatisfactory work, any shortfall will be invoiced directly to Tenant or deducted from the **Tenant's Allowance.**

#### **SAFETY AND PERSONAL DEMEANOR**

- 1. GC, Construction workers, and Tenants are expected to act in accordance with all regulations established by Facilities Director. Conduct of all contractors involved with tenant construction is the responsibility of the GC. Rude disrespectful, insulting actions or loud behavior towards customers, tenants, fellow workers, or Landlord's Representative will not be tolerated. The GC shall ensure that all requests by Landlord's Representative shall be complied immediately.
- 2. Tenant Contractors in violation of any rules will be subject to forfeit all or a portion of the Contractor's Construction Deposit and complete construction shut down.
- 3. This is a smoke and tobacco free site NO smoking in tenants' spaces, common areas or within twenty-five feet (25') of any entrance.
- 4. Absolutely no alcohol, drugs or weapons of any kind are permitted in center at any time.
- 5. No radios, iPods, Boom Boxes, earphones, or ear buds of any type of area permitted on center property at any times.
- 6. All works shall be performed within the confines of the Tenant's barricaded space. Absolutely no work will take place in the common area of the Center.
- 7. Tenant shall comply all applicable safety regulations. GC shall take all necessary precautions to safeguard all workmen and patrons from any accident and preserve all private and public property. Landlord reserves the right to stop all works until such conditions or practices area resolved.
- 8. Routine inspections will be performed by Landlord's Representative with regards to accurate performance of contractor's work, safety requirements, and to ensure adherence to the Contractor's Rules and Regulations.

#### 9. Miscellaneous safety rules:

- a. Fire extinguisher, the number and type of fire extinguisher(s) provided by GC during construction shall be as required by applicable codes, and OSHA.
- b. Prior to any welding work, GC shall request a Hot Permit, and implement safety practices as required by governing codes.
- c. All workmen lunch breaks shall take place within the construction site. No workmen wearing construction clothing full of dust or debris will be allowed at the common area seating. **Mall Security will ask to leave the area**.
- d. **No workmen** shall use the common restrooms for showering or cleaning their construction boots or construction clothes.
- e. Post safety or hazard signage as needed.
- f. Do not plug any tools or electronics to common area outlets.
- g. Tools and electric extension cords shall NOT be frayed or damaged and should be equipped with ground. Do not use any tools without Ground Fault Circuit Indicator (GFCI).
- h. No pets of any kind are allowed.
- i. GC shall be responsible for renting a dumpster, our preferred vendor is **ARB Inc.**, Customer Service number is **787-788-1075.** Trash and construction debris shall be cleaned and serviced daily.
- j. GC shall always have an on-site Superintendent during construction. Failure to do so will be subject to fine.

#### PROHIBITED WORK OR PRACTICES

- 1. Imposing any excessive structural load, temporary or permanent, on any part of the building structure without prior written approval of Landlord.
- 2. Installing or displaying any signage or graphic without Landlord's prior approval.
- 3. Deviating from an approved set of plans without prior Landlord's written approval.
- 4. Accessing base building electrical components without prior Landlord's approval.
- 5. Accessing Landlord's water service, chilled water loop, raiser rooms without Landlord's approval.

#### **PROJECT REQUIREMENTS**

#### **AREAS ABOVE CEILING**

Combustibles of any kind and PVC are prohibited in areas above ceilings. Any wiring concealed above the ceiling must be installed in conduit. Transformers, water heaters and other such devices are not allowed above the finished ceiling construction. **MC cable and Romex is not allowed.** 

#### **ATTACHEMENT TO STRUCTURE**

All drilling, welding, or other attachment to any part of the base building structural system other than normal ceiling suspension and independently supported utilities must be specifically approved by the Landlord in writing. Before work is initiated. Specific drawings describing attachments must be submitted. All storefronts are to be self-supporting. All attachments to the Landlord's structure shall be done with mechanical fasteners only. Attachment to the roof deck is not permitted.

#### **BARRICADE**

All barricades are to be coordinated on an individual basis with Facilities Director before construction. Landlord's base building structure or finish shall never be used to secure the barricade.

#### **CEILINGS**

Ceiling construction cannot be attached to the center's finished soffit. These components are not designed to support additional loads. Ensure that ceilings area supported from the building's structural steel, bar joist, purlins, etc. and are nor attached to the soffit in any fashion. Do not remove or relocate any existing hangers.

- 1. Maintain access to all tenants and center equipment above ceiling per code and maintenance requirements. Coordinate access panels' locations with Facilities Director and/or Building Inspector. All panels shall be minimum 24' x 24' in size.
- 2. The maximum ceiling height clearance will be 13'-4" unless noted otherwise.
- 3. An expansion joint must be incorporated into the ceiling if present within the space. GC shall verify code requirements. Landlord approval is required for aesthetic treatment of the joint.

#### **CONCRETE CORE DRILL OF FLOOR SLAB**

Contractor must notify Landlord's Representative in writing **72 hours in advance** of coring floor slab. Vacuuming of all after/slops from coring or cutting must occur. Specific details and procedures area available in this Tenant Construction Handbook.

#### **CONCRETE PLACEMENT**

GC is required to be present during entire concrete pouring process to ensure that the concrete contractor is aware and complies with the following requirements:

- 1. Routes into the pouring area from concrete truck shall be coordinated with and designated by Facilities Director.
- 2. All concrete pours shall be scheduled with Facilities Director at a minimum of 72 hour in advance.
- 3. Pour "in fill" and waterproofing membrane MUST be in place and approved by on site Inspector prior to pour.
- 4. All concrete contractors shall put down floor protection and plywood along the route the concrete is carted/pumped throughout the Center to the Tenant's premises. This shall include the area around and directly below the truck. GC is responsible for the repair of, and cost of any damages caused during the pour.
- 5. When pumping concrete to the site, provide plywood below the coupling flanges. The flanges shall not rest on the deck or concrete sub.
- 6. No excess concrete shall be poured into the Loading Docks drains. Such practice will constitute an immediate fine.
- 7. Only propane concrete buggies area allowed within the project building.

#### **CONTRACTORS PARKING**

Coordinate with Facilities Director contractor's workmen parking area. Unloading of equipment, materials and supplies at loading docks shall also be coordinated with Facilities Director. Trucks will not be allowed to stay parked at Loading Docks after delivery has occurred. Absolutely no parking will be allowed on Fire Lanes. No obstruction to Anchor stores loading areas will be permitted.

#### **COORDINATION OF WORKS**

GC shall coordinate all works via email: Éric F. Guzmán-Colon, Facilities Director at <a href="mailto:eguzmancolon@taubman.com">eguzmancolon@taubman.com</a> and Nyvette Fernández, Superintendent at <a href="mailto:nfernandez@taubman.com">nfernandez@taubman.com</a>, as per instruction on this Handbook under SERVICES REQUESTS AND PORCEDURES.

#### **DELIVERIES**

All deliveries are to be made through and coordinated with Facilities Director. Contractor will be responsible for coordinating freight deliveries. Please provide any material suppliers with complete location information including, tenant name, space number, GC name, GC Superintendent Contact information. Landlord will not accept deliveries on behalf of the tenants or tenant's contractor. Tenant contractor must provide all equipment and labor necessary to unload all deliveries and move all materials immediately away from loading docks and to Tenants space.

#### **DEMISING WALLS**

- 1. The landlord will install metal studs, 16" o.c., floor to structure above. GC shall verify that the drywall contractor installs a minimum of one-layer 5/8" fire rated gypsum board, fire taped and spackled from floor to ceiling. The finished demising wall shall be installed in such a manner that the resulting partition will provide a fire-rated enclosure to the roof or floor structure above, including fire caulking of all penetrations.
- 2. The demising wall will be located per dimensions indicated in the Landlord's lease outline drawing (LOD). Any dimensional inconsistencies between the space layout drawing and the Landlord approved Construction Drawings should be brought to the immediate attention of Landlord Representative.
- 3. Demising walls do not possess any structural integrity. GC shall provide structural reinforcement if any construction is to be attached to or supported from the demising wall. Structural drawings shall be submitted to Landlord for approval.
- 4. Standards shall not be recessed into any fire-rated demising wall, second layer of drywall must be placed to conceal them.
- 5. Tenants are required to install Landlord's provided neutral piers reveals at lease line storefronts.

#### **EXPANSION JOINTS**

An expansion joint shall be incorporated into walls if an expansion joint exists within the space. Since demising walls are fire rated, the GC shall verify code requirements with the local building department. Landlord approval is required for aesthetic treatment of any expansion joint detail.

#### **DEMOLITION** (if applicable)

Demolition shall not interface adjacent Tenants, Residential, Office or Center common areas. Be aware of work that may cause excessive vibrations, which can cause damage to adjacent tenant spaces and/or surrounding areas.

#### **DETAILS**

Details you are required to adhere to in the construction process – e. i. pouring concrete slabs, coring details or super slab, entry construction, fire stop specifications, waterproofing at entry etc. are in this Handbook.

#### **EXIT SIGNAGE AND EMERGENCY LIGHTING**

Exit requirements and exit identifications within Tenant's premises shall be furnished and installed by GC following all requirements of the governing building codes and ADA. All exiting and identifications shall be completed before fire inspection and building certification.

#### **FIREPROOFING**

The GC will be responsible for protecting and maintaining the base building fireproofing. Any damage to the base building fireproofing shall be repaired by the GC at Tenant's sole cost and expense as soon as possible after damage occurs, but no later than 48hrs after damage occurred.

#### **FLOOR FINISHES**

Tenant is responsible to purchase and install common area flooring from the lease line within the setbacks. Tenant's GC shall provide a seamless transition between Landlord's stone finish (at common areas) and Tenant's flooring. Paving at exterior storefront/entry vestibules must be positively sloped to drain away from Tenant's entry.

#### **GANGBOXES AND DOLLIES**

All wheeled equipment/vehicles shall have non-marking rubber tires. Tools and construction materials must be always stored in the tenant's space and are not allowed to be stored at the Center Service areas at any time. Pallet Jacks are not allowed at any time.

#### **HAZARDOUS MATERIALS**

GC is responsible to comply with all existing city, state or federal regulations or legislation regarding the control of pollution. GC shall not use or install, not shall permit its sub-contractors to use or install any building materials containing asbestos or any other hazardous material.

- 1. Landlord Representative will require Manufacturer safety Data Sheets (MSDS) on certain materials, specifically floor tile adhesive (mastic). The GC shall ensure all materials used in the store construction are identifiable and have MSDS's.
- 2. The identification, handling, and disposal of hazardous materials, as determined by federal, state and/or city statues, ordinances, regulation, laws, and codes, are the responsibility of the GC.
- 3. Materials listed as "non- asbestos" are unacceptable and shall not be used for construction.

#### **LABOR DISPUTES**

GC shall use its best efforts to maintain labor peace for the duration of the project and shall conduct labor relations in such manner as to avoid strikes, picketing and boycotts of, on or about the leased premises and the Center. If, during the period of construction, any Contractor's employees, or subcontractors strike or picket lines or boycott or other visible activities objectionable to Landlord are established or conducted or carried out on or about the project or the Center, GC shall use its best efforts to resolve such activities without involving the landlord and without disruption of patrons and other activities.

#### LANDLORD INSPECTIONS

Tenant's works will be daily inspected by on-site Inspector or Landlord Representative. While it is not the Landlord's intention to hinder or stop construction if any Landlord or Center Criteria are in question; or if on-site inspector observes any code or law violation or patrons' welfare has been compromised, the Landlord reserves the right to stop work.

#### MODIFICATIONS TO THE BASE BUILDING

If the Tenant store design requires a modification to the base building architectural, structural, plumbing, electrical, HVAC, or other system, the tenant MUST first submit to the Landlord a Request For Information (RFI) in writing for consideration. Submittal must include drawings and specifications from a certified structural engineer.

The following conditions, but not limited to, are applicable:

- 1. Duct shaft penetrations
- 2. Extraordinary loads (i.e. safes, vaults, transformers, water heaters, mezzanine, etc.)

Structural modifications to center require written approval by Landlord structural engineer prior to execution. Structural beams, purlins, joist, etc. shall not be modified by the GC unless specifically noted in the Landlord approved drawings. Any structural work shall be coordinated in advance, as per instructions in this manual under service request.

#### **NOISE AND ODORS**

The on-site inspector or Landlord Representative will terminate any construction activity that is deemed to excessively noisy or dusty or which his disruptive to the normal operations of the adjacent tenants and /or the Center. If excessive noise or odors are identified by on-site inspector or Landlord Representative, the GC will cease such operations immediately. The use of propane gas is not permitted at any time.

**Noise Restriction – construction hours:** 

Monday – Thursday operation areas 10:00AM – 8:00PM Friday - Saturday Mall operation areas 10:00AM – 9:00PM Sunday – 11:00AM – 7:00PM

After hours work shall be coordinated between 10:00PM - 9:00AM - Monday to Saturday. If work will affect a restaurant, GC must be coordinate with Facilities Director for setting working hours.

#### **QUALITY STANDARDS**

All construction must be completed in accordance with industry standards and in a professional workmanlike manner. Tenant shall require the GC to be responsible to replace and/or repair all work done or furnished that does not meet Landlord's quality standards. All such work shall be in good and usable condition at the date of completion. Tenant's GC shall guarantee all work performed to be free of all defects in workmanship and materials for one (1) year from the date of completion. Tenant's GC shall be responsible for the replacement or repair without any additional charge for all work done or furnished which shall become defective within one (1) year after substantial completion of the work. The connection of such work shall include without additional charge all expenses and damages or disturbed thereby. All warranties or guarantees pertaining to materials or workmanship on or with respect to Tenant's work shall be in the contract or subcontract which shall be written so that such guarantee or warranties shall insure to the benefit of both Landlord and Tenant. All warranties shall be included in the close-out documents.

#### **ROOF PENETRATIONS**

No penetrations will be allowed without prior approval of the Landlord.

#### **SECURITY**

- 1. The general contractor is responsible for always securing their construction site. Contractors shall safeguard/secure all tools, materials, supplies, etc. The center will not be responsible for any items lost or stolen. The Tenant's space must be secured when unoccupied. Arrangements must be made with the on-site representative if the Contractor requires access to the center after hours. If the Contractor needs to work in an adjacent Tenant's space, it is the Contractor's responsibility to coordinate such work with the on-site representative. The Contractor must provide at his cost, professional security service if required by the adjacent Tenant.
- 2. Access to telephone rooms, electric closets, etc., shall be scheduled through Landlord's representative. Authorization for entry will be given ONLY by Landlord's representative. GC shall be required to follow all written procedures.

#### SERVICE EXIT DOORS & VESTIBULES (to interior service corridors only)

- 1. A recessed vestibule/ service/ exit door is required. This vestibule is part of the service corridor assembly and must be constructed in compliance with applicable codes. A sprinkler head is required in the vestibule. The tenant shall restore the service corridor to the original condition. Vestibule walls shall be restored to original fire-rated condition and finishes to match adjacent existing walls, floors, etc.
- 2. Rear service/exit doors and frames shall be commercial grade, "B" label construction with a minimum size of 3' x 7'. All doors shall be equipped with a door closer located on the tenant's (interior) side of the door. All exit doors shall have appropriate fire exiting hardware. Verify code requirements with the governing agency.
- 3. Service/ Exit door shall be finished painted a color specified by Landlord and labeled by the Landlord with store number.
- 4. A doorbell must be installed at service corridor doors to alert Store Personnel of deliveries.
- 5. Corner guards are required at both returns into the vestibule and will match existing at the site.

#### STORAGE OF MATERIALS

All building materials must be stored within the limits of the Tenant's lease area. Storing of materials of corridors, exterior common areas and hardscape, vacant lease space, etc. will not be permitted. Flammable materials are not to be stored in lease area except those which are to be used during that construction day. Storage containers (gang boxes) must be constructed of metal and lockable. Failure to comply with these regulations will result in removal of all such materials. The Tenant shall reimburse the Landlord for the cost incurred for such removal. Contact at onsite representative if special needs are required. Storing of unmarked or unidentifiable materials on site is not permitted. All storage of materials must be approved by Facilities Director and must be clearly marked with the store name, or it will be removed.

#### STORE FRONT ADDRESS

Provide store address per approved sign criteria. NO OTHER FORM OF ADDRESS NUMERALS WILL BE PERMITTED.

#### STOREFRONT CONSTRUCTION

Integrity of the bulkhead, waterproof material on stem walls, shall not be jeopardized by the configuration of the Storefront.

- 1. The soffit is not designed to support any additional loads. Storefront may not be attached to any part of the Center soffits.
- Damages caused by demolition or construction to Landlord's service corridor, soffits, or pavers tikes shall be repaired to a
  "like new" condition. The general contractor shall coordinate any repairs with Tenant Coordinator. If these items are not
  addressed before project completion, repair cost will be deducted from the general contractor's construction deposit.
- 3. Construction or design elements will not be allowed to project beyond Tenant's lease line unless approved by the Landlord in writing prior to construction.
- 4. Tenant's side of storefront bulkhead shall be insulated and sealed smoke tight to deck to ensure 1 hr. enclosure. All exterior storefronts must be composed of weather-tight components including all necessary curbs, flashings, sealants, insulation, etc. to provide a weather-tight installation.
- 5. Exterior canopy and awning shop drawing submittals must be submitted to the Landlord for approval prior to installation.

  Drawings shall contain attachment details and must be signed and sealed by a licensed structural engineer.
- 6. The GC shall ensure that the sign contractor is aware of all comments of the <u>Landlord's approved sign shop drawings</u>. <u>Landlord approval is required before sign fabrication</u>. Failure to submit shop drawings, will prohibit the storefront sign from <u>being installed</u>. Temporary signs will not be permitted for store opening.
- 7. Neutral pier reveals shall be furnished by Landlord and installed by the Tenant's General Contractor.
- 8. The GC shall insure access to all Landlord's equipment existing adjacent to the storefront or within the Tenant's space.
- 9. The GC is responsible for final cleaning of the storefront and floor pavers at his storefront prior to opening.

#### **TENANT SIGNAGE**

The Sign Manufacturer must submit sign shop drawings to the Landlord for approval prior to installation. All storefront signs must be installed per Landlord's approved sign drawings. NO manufacture's labels are permitted on the sign. All conduits, raceways and wires must be concealed.

#### WASTE REMOVAL / TRASH

- 1. General trash / construction debris creates safety and fire hazards. The general contractor shall ensure that the construction site is policed, and debris removed to provide a safe, sanitary construction site DAILY.
  - a. NOTE: THE ACCUMULATION OF TRASH WITHIN THE TENANT SPACE, SERVICE CORRIDORS, OR COMMOM AREAS WILL NOT BE TOLERATED. The Landlord or his designated contractor will control the corridors and common area and has full authority to remove all materials, debris, equipment, and vehicles that are placed in the corridors and common area and charge the Tenant Contractor for the cost of any clean up or removal of same.
  - b. The cost for removal of any debris will be deducted from the general contractor's construction deposit.
- 2. The GC shall coordinate the rental of trash dumpsters, our preferred vendor is ARB, Inc.- Customer Service: (787) 788-1075 GC shall be responsible for policing and cleaning the dumpster and surrounding area.

#### WELDING

It is the responsibility of the GC contact Mall Management for **authorization prior to any welding being performed**. The GC shall post an observer at the site for a minimum of thirty (30) minutes after completion of any welding.

#### **UTILITY & SERVICE INFORMATION**

#### **INTERRUPTION OF UTILITIES AND SERVICES:**

The on-site representative must be notified in writing at least 72 hours prior if any interruption of a utility is required.

#### **ELECTRICAL SYSTEM**

The GC shall ensure that the electrical contractor is aware of and complies with all Landlord comments on the Landlord approved construction drawings.

- 1. Tenant, at its expense, shall furnish and install an electrical feeder from metering distribution equipment to a point within the leased premises. This work shall include, but not be limited to furnishing a circuit breaker compatible with existing meter center and conductors of sufficient capacity for Tenant's requirements, with sufficient extra coiled length for termination on meter center circuit breaker.
- 2. Conductors will be one continues run from the circuit breaker to Tenants disconnect. The type and size of the electrical service will be as specified on the Landlord's approved construction drawings. Mall Management will designate location of the power source to the space and required labeling.
- 3. Conduit exists from meter room to Tenant's space. All work in the electrical room regarding terminating of feeder is by Landlord's Electrical Contractor, to be coordinated and paid through Mall Management.
- 4. All wiring shall be in conduit (rigid or EMT). Flexible conduit may not be used for extended runs or instead of conduit in partitions. Flexible conduit may be used in lengths not to exceed 6' for finish connections only. MC cable and Romex ARE NOT ALLOWED.
- 5. All circuit panels must be balanced. Balancing will be verified by Tenant's Electrical Contractor.
- 6. Access to electrical room will be provided by Mall Management. Arrangements must made 72 hours in advanced with the Mall Management.

#### **FIRE PROTECTION SYSTEM**

- 1. Landlord has provided a main in each tenant space. Tenant shall extend sprinkler system using approved branch piping and sprinklers as required to complete the system. Sprinkler Shop Drawings MUST be submitted to Landlord's Insurance Underwriter, Global Risk Consultants (GRC), for review and approval before installation.
- 2. Sprinkler Contractors must send electronic drawings (in PDF format). The fire protection review submittal should include drawings, calculations, and lists of equipment (valves, sprinkler heads including sprinkler identification number (SIN), etc.).
- 3. Any deficiencies found must be corrected in full compliance with Global Risk Consultants (GRC).

NOTE: Contractor must use schedule 40 pipe. Thin wall pipe is not permitted.

All tenant sprinkler plan reviews must be submitted to the following address: TaubmanProjects@tuvsud.com

#### **FIRE ALARM MUST BE SIEMENS**

#### **FIRE SPRINKLER SYSTEM**

The general contractor shall ensure the fire protection contractor is aware of and complies with all comments on the Landlord approved construction drawings. All plans must be approved before construction begins.

- 1. The sprinkler system is monitored 24/7. Contractors must not tamper with these systems.
- Existing temporary sprinkler system CANNOT be abandoned. GC MUST remove and dispose prior to installation of new permanent sprinkler system.
- 3. The GC shall contact Landlord's representative not less than 72 hours in advanced to schedule a sprinkler system to tie-in the Tenant system. (Refer to tie in procedure in handbook)

- 4. Before a shut down for final connection can occur, the system shall be hydrostatically tested and made ready for "tie-in". A copy of the approved hydrostatic test will be given to Landlord's representative prior to connection to the sprinkler main.
- 5. Fire extinguishers must be located on the job site during construction to meet all city, state, and OSHA requirements.

#### **FIRE ALARM SYSTEM**

All life safety requirements associated with the tenant's construction are based on the initial code review of the base building. Smoke detector, smoke exhaust, fire alarm system, etc. are unique to this Center. GC shall coordinate all works via email to: Facilities Director and Superintendent as per instruction on this Handbook under SERVICES REQUESTS AND PORCEDURES

#### TIE-INS MUST BE PERFORMED AFTER HOURS

#### **GAS**

A base building gas manifold has been provided by the Landlord.

- 1. Gas service including meter and branch line extension from the project manifold designated by Landlord to leased premises. Gas piping is provided to designated food and beverage tenants.
- 2. Locations of gas manifolds (See Base Building Drawings and verify in field).
- 3. Exposed pipes in service areas shall be painted to match adjacent surfaces.
- 4. Enclosure requirements should be verified with the local government agency. Vented shafts, chases, etc., may be required along the route.
- 5. Seismic gas value is required.

#### **HEATING, VENTILATION & AIR CONDITIONING (HVAC)**

The GC shall ensure that the HVAC / mechanical contractor is aware of and complies with all comments on the landlord approved construction drawings.

**IMPORTANT NOTE**: THE SYSTEM IS CURRENTLY "LOCKED OUT" VIA WIRE CABLE. IF YOU OR YOUR SUBCONTRACTOR CUTS, ALTERS, DAMAGES THIS CABLE YOU WILL RECEIVE AN AUTOMATIC \$1,000 FINE.

- 1. Standards of design and construction shall be in accordance with latest ASHRAE and SMACNA Guides.
- 2. Provide clear access to all equipment in ceiling space per governmental codes.
- 3. Contractor will provide access panels to all Landlord's equipment and shut off valves.
- 4. When the system is ready for start-up (see procedures), Landlords representative shall be notified at least **72 hours** in advance, allowing time to schedule an operational inspection. The system shall be 100% operational before store opening.
- An air-balance of the system must be performed by an independent temperature controls contractor as required by Landlord's representative, with a certified air-balance report submitted to Landlord's representative before the store opens.
- 6. The GC's deposit will not be processed for return until this report is received.

#### **PLUMBING**

The GC shall ensure that the Plumbing contractor is aware of and complies with all comments on the landlord approved construction drawings.

- 1. Landlord's representative will designate sanitary, domestic water and other utility lines to be used. These utility lines may exist outside the leased premises.
- Work requiring access into adjoining Tenant spaces shall be negotiated by the GC though Mall Management. Any damage cause by this work shall be corrected by the general contractor at his expense.
- 3. Ensure that all sanitary clean outs are exposed and remain accessible. Since many trades can affect this requirement, the general contractor shall ensure that all subcontractors are aware of any existing clean outs.

- 4. Water Meter: Provided by Landlord, cost reimbursed by Tenant Contractor or Tenant. The Tenant Plumbing Contractor shall install a Landlord provided domestic water meter in the Tenant space. Such meter shall be located no more than 5 ft. above the floor and include shut-off valves. Meter and valves are to be always accessible.
- 5. All supply water lines, exposed, or concealed, shall be insulated. Ensure that this insulation materials are plenum rated.
- 6. The GC shall ensure that the plumbing contractor does not leave any uncapped or open sanitary or vent lines, etc. Unnecessarily clean-up can be costly and offensive.
- 7. Floor drains must be installed in all restroom's floors.
- 8. Copper, steel, cast iron or any other code-complying metal shall be used for all piping.

When construction is completed, all sanitary lines shall be "routed out". Written notification, indicating date and time shall be provided to Landlord's representative before barricade is removed.

#### FLOOR / DECK INFORMATION

- 1. All toilet room floors are to be waterproofed with an elastomeric membrane. Waterproofing must extend a minimum of 4" up all wall surfaces. A 24 hour flood test will be required of the waterproofing membrane.
- 2. All kitchens, food preparation and serving areas must have a waterproof membrane.
- 3. Floor drains are required in all toilet rooms and kitchen areas. The floor shall be sloped to the drain to ensure proper drainage. Transitions between dissimilar floor materials shall be smooth and flush. The use of transition or reducer strips is not permitted.
- 4. The GC shall field verify the existence of expansion joints within the space. Some floor slabs are fire-rated. Verify that expansion joints meet all code requirements. Landlord approval is required for aesthetic treatment of this joint.
- 5. Tile flooring is available to match existing flooring at the storefront. Such flooring shall be available for purchase from Landlord's representative.
- 6. Anti-Fracture Membrane Floor Isolation per tenant design criteria: it is recommended to install an Anti-Fracture membrane at the column lines, transitions between the structural slab/geo-foam supported slabs and any evident shrinkage cracks. Depending on the condition and exposure of the area it may be beneficial to treat entire area.

#### **COMPLETION OF CONSTRUCTION**

Landlord will release the Tenant's Contractor's deposit and/or Tenant Allowance to the Tenant upon receipt of all the following items:

#### STORE OPENING INSPECTION

- 1. Notice of completion of Tenant Construction Tenant General Contractor must notify Landlord's representative when store construction is completed, and the space is ready for the punch list walk-thru. The notice must be provided a minimum of 72 hours in advance.
- 2. Final Construction Punch List A punch list walkthrough must be performed with the Tenants Contractor and the Landlord's representative before opening the premises. The punch list will identify outstanding work to the storefront, display area, rear entrance, and other areas of the space and/or roof that need to be completed, modified, or repaired. The tenant Contractor will review the punch list with the Landlord's representative when the work is completed. The Landlord's representative must physically sign off on each item of the punch list for the work to be considered completed. If the punch list work is not completed within 30 days, the Landlord, at his option, may perform the work and deducted from Tenant Contractor's deposit or Tenant Allowance.
- 3. Pre-Opening Construction Completion checklist will be reviewed at this time to ensure that all Landlord issues and deficiencies have been corrected before store opening.
- 4. Use Permit and Business License (Provisional Patent) Before the Tenant opens for business, a Use Permit and Business License must be obtained and posted in the premises. Tenant's Contractor must submit a copy to Landlord's representative.
- 5. Stocking and Merchandising
  - a. The Landlord cannot be responsible for Tenant's merchandise. Merchandise may not be stored outside the confines of the leased space.

- b. Debris associated with merchandising must be discharged in the waste dumpster rented by Tenant's General Contractor.
- 6. As-built Drawings Tenant's Contractor on Tenant behalf will submit to the onsite Landlord's representative one (1) set of as-built drawings and one (1) complete CD which accurately show lease lines, dimensions of space, locate all underground utilities and equipment and any modification to the base building structure.
- 7. Air Balancing Report One (1) hard copy and one PDF copy of written report by an AABC certified air balancing company which includes warranties and maintenance schedules.
- 8. Contractor's Letter Requesting Deposit Refund Deposit must be requested in writing on company letterhead. Federal Tax ID number must be included.

The General Contractor's construction deposit will **NOT** be processed for return until an air balance report, all Landlord issues are resolved, and a Lien Waiver is received. Allow at least sixty (60) days for processing return of construction deposit. Tenants will be notified on all returned construction deposits.

#### **IMPORTANT CONTACTS**

#### THE MALL OF SAN JUAN MANAGEMENT OFFICE

Éric F. Guzman-Colón, Facilities Director

eguzmancolon@taubman.com

Nyvette Fernández, Facilities Superintendent

nfernandez@taubman.com

#### MALL SECURITY

Axel Rivera, Security Director

Doris De Jesus, Assistant Director

Phone: 787.759.6294

#### **INSURANCE**

Please include the following in your certificate as additional insured:

Plaza Internacional Puerto Rico, LLC and The Taubman Company, LLC

#### **REQUIRED CONSTRACTORS**

#### LANDLORD'S ROOFING CONTRACTOR

LANDLORD'S LOW VOLTAGE CONTRACTOR

Atlas Roofing, Juan Carlos Cela Phone: 787.261.6133 office@atlasroofingpr.com Granite Telecommunications Phone: 1.855.478.4743

#### PERMIT EXPEDITOR/ON-SITE INSPECTOR

Miguel Bonilla ing.mbonilla@gmail.com

#### **BASE BUILDING TIE-INS**

All base building tie-ins are to be coordinated through the Mall Management, including electrical, plumbing, HVAC systems, fire sprinklers, fire alarm, and BAS system. Costs associated with all tie-ins are included in each tenant's non—refundable fee, and scheduling of each tie in must be completed a minimum of 72 hours prior to the date the service is required. Please send an email requesting the service to: eguzmancolon@taubman.com or nfernandez@taubman.com.

#### **CONTRACTORS AUTHORIZED TO PEFORM TIE-INS**

ACOTROL

Fire Safe

Bermudez, Longo, Diaz Masso (BLDM)

Energy Products

Fire Alarm

Fire Sprinkler System

Electrical

BAS

## PRE-CONSTRUCTION REQUIRED DOCUMENTS

1. PRE-CONSTRUCTION CHECKLIST	page 19
2. GENERAL CONTRACTOR INFORMATION	page 20
3. SUBCONTRACTOR INFORMATION	page 21
4. CERTIFICATE OF INSURANCE	page 22
5. REGISTRO DE COMERCIANTE	page 23
6. SCHEDULE	page 24
7. SAFETY PROGRAM	page 25
8. MATERIALS AGREEMENT	page 26
9. TILE ASSESMENT	page 27
10. PROJECT BOARD	page 28
11. VIOLATIONS AND FINES	page 29
12. STATEMENT OF RECEIPT	page 30
13. PREMISES ACCEPTANCE FORM	page 31
14. STORAGE USE FORM	page 32

#### PRE-CONSTRUCTION CHECKLIST

Tenant:	Date:
Space #:	
GC Company Name:	
GC Contact Name:	
GC Contact's Phones #:	
GC Contact's email:	
REQUIRED DOCUMENTS (Tenant/Contractor to	bring to Pre-Construction Meeting)
GC Information Form	Construction Schedule
Subcontractors Information Form	Reimbursable deposit check
Registro de Comerciante	Non-reimbursable fee check
Certificate of Insurance	Construction Permit
Copy of Safety Program	Barricade bump out form

#### **DOCUMENTS** (Provided by Landlord during Pre-Construction Meeting)

Landlord approved drawings	Violations and fines form
Tenant material use agreement	Pre-opening Checklist
Tile inspection form	Statement of receipt of Handbook
Inspection Board Sheet	Fan coils units information
Mall Rules and Regulations	Service Area drawing

#### **PROCEDURES** (Reviewed during Pre-Construction Meeting)

Tie-ins	Sprinkler drawings submittal
Shutdowns	Landlord provided materials
Meters	Safety/ Emergency procedures
Hot Permit Requests	Open Tab/trash
Deliveries	Parking

#### **GENERAL CONTRACTOR INFORMATION**

Tenant:	
Space #:	
GC Company Name:	
Company Address:	
Company Phone #:	-
Company Fax #:	_
Email:	

	Name	Phone	email
Primary Contact			
Project Manager			
Superintendent			
Safety Super			

#### **SUB-CONTRACTORS INFORMATION**

Tenant:	
Space #:	
GC Company Name:	 
GC primary contact name & phone #:	 

	Company Name	Phone	email
Millwork			
Glass			
Drywall			
Flooring			
Fire protection			
Plumbing			
HVAC			
Electrical			
Fire Alarm			
Other			

Client#:		
ACORD. CERTIFICATE OF LIAB	ILITY INCIDANCE	(mmaan
	4/18/2	
THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER. AND THE CERTIFICATE HOLDER.		
	licy(ies) must be endorsed. If SUBROGATION IS WAIVED, subj	
the terms and c y require an en certificate hold	ndorsement. A statement on this certificate does not confer righ	its to the
PRODUCER	RXNEACT Agent Constact's Name PHONE - 555-555-5555 PHONE - 555-555-55555	5-4444
Agent/Broker Name Agent/Broker Address	(AC, No, Ext; 505-505-5050 E-MAIL ADDRESS: Agent Contact's email	10-4444
	INSURER(8) AFFORDING COVERAGE	NAIC#
INSURED	INSURER A: Insurer Name Here	
Legal Name	INSURER B: Insurer Name Here INSURER C: Insurer Name Here	
Address	INSURER D: Insurer Name Here	
	INSURER E :	
CONTRACTO CENTROLATE NUMBER	INSURER F:	
COVERAGES CERTIFICATE NUMBER:  THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HA	REVISION NUMBER:  VE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICE	PERIOD
INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDE EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAY	OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHI ED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE	СА ТНІЗ 📖
NSR TYPE OF INSURANCE ADDITIONAL POLICY NUMBER	(MAYDOXXXX) LIMITS	
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X COMMERCIAL GENERAL LIABILITY		0,000
CLAIMS-MADE X OCCUR	MED EXP (Any one person) \$ PERSONAL & ADV INJURY \$1,000	0.000
	GENERAL AGGREGATE \$2,000	4 4
GEN'L AGGREGATE LIMIT APPLIES PER:	PRODUCTS - COMP OP AGG \$2,000	0,000
POLICY PRO- JECT LOC	COMBINED SINGLE LIMIT	
B AUTOMOBILE LIABILITY	(Ea accident) \$ BOOLY (NURY (Per person) \$	
ANY AUTO ALL OWNED SCHEDULED AUTOS AUTOS	BODILY INJURY (Per accident) \$	
HIRED AUTOS NON-OWNED AUTOS	PROPERTY DAMAGE (Per accident) §	
	1	
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(Mandatory in NH)  if yes, describe under DESCRIPTION OF OPERATIONS below	EL DIOCAGE EN ENPLOTEE 9	00,000 00.000
DESCRIPTION OF OPERATIONS below	EL DISEASE - POLICY LIMIT   \$ 1,0	00,000
211		
DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks	s Sohedule, if more space is required)	
Re: Location - Plaza Internacional Puerto Rico LLC d/b/a The Mall of San Juan, 1000 Mall of		
San Juan Blvd., San Juan, P.R. 00924		
Certificate Holder and The Taubman Company, LLC are designated additional insureds.		
CERTIFICATE HOLDER CANCELLATION		
	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIV	
PLAZA INTERNACIONAL PUERTO RICO, LLC	ACCORDANCE WITH THE POLICY PROVISIONS.	
1000 Mall of San Juan Blvd. San Juan. PR 00924	AUTHORIZED REPRESENTATIVE	

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GOBIERNO DE PUERTO RICO DEPARTAMENTO DE HACIENDA Modelo SC 2918 Rev. 23 ene 17



CERTIFICADO DE REGISTRO DE COMERCIANTE

Nombre Localidad:

THE MALL OF SAN JUAN 1
1000 MALL OF SAN JUANBLVD
MANAGEMENT OFFIC
SAN JUAN PR. 224

Nombre Legal:

PLAZA INTERNACIONAL PUERTO RICO LLC 1000 MALL OF SAN JUAN BLVD SAN JUAN PR 00924-4034

0534090-0024

AGENTE RETENEDOR

Fecha de Emisión:

29-oct-2016

Fecha de Expiración:

31-mar-2019

Tipo de Certificado: Comerciante

Código NAICS:

**Actividad Comercial:** 

81293

Estacionamientos y Garajes

Certifico que este comerciante está inscrito en el Registro de Comerciantes del Departamento de Hacienda.

Secretario Auxiliar de Rentas Internas

Este Certificado no es transferible y el mismo deberá exhibirse en todo momento en un lugar visible al público en la localidad indicada.

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L1825725440

#### **MOSJ MILESTONE SCHEDULE**

No.	MILESTONE:	COMPLETION	PHASE
1	Attend Pre-Construction Meeting		D
2	Premises Available		Pre-
3	Permit Ready		Construction
4	Accept Delivery of Space		(P)
5	Ordered All Materials		(1)
6	Start Construction		
7	Misc. Demolition		
8	Pour Concrete Slab (1st Floor)		
9	Connect Permanent Power		
10	Rough Ceiling Framing Complete		
11	Rough Framing Complete		
12	Rough Electric Complete		
13	Rough Fire Alarm Complete		
14	Rough Mechanical Complete		
15	Rough Plumbing Complete		
16	Rough Sprinkler Lines Complete		
17	Rough Storefront Complete		
18	Drywall Complete		Construction
25	Substantial completion		Construction
26	Walls Painted / Wallpapered		(C)
27	Floor Covering Installed		(0)
28	Finished Electrical Complete		
29	Millwork & Fixtures Installed		
30	Finished Plumbing Complete		
31	Finished HVAC Complete		
32	Finished Sprinklers Complete		
33	Finished Fire Alarm Complete		
34	Water Meter Installed & pinged		
35	Electric Meter Installed & pinged		
36	BAS connection made		
37	Storefront Glass Installed		
38	Storefront Rolling Grill Installed		
39	Storefront Complete		
40	Pre-Opening Inspection Scheduled		
41	Pre-Opening Inspection Passed		
42	Punch-List Established		01.005.01.17
43	Merchandised		CLOSEOUT
44	Punch-List Completed		(CL)
45	Outstanding Issues Closed		(3-)
46	Use Permits / Licenses Obtained		
47	Store Open for Business		

#### **PROOF OF SAFETY PROGRAM**

Tenant Contractors must send an email with a PDF copy or bring a USB with a digital copy of their company Safety Program in PDF format to the Pre-Construction meeting. As noted in the Mall's rules and Regulations, tenant's contractors must abide by the site safety requirements, and ensure that all subcontractors and vendors working beneath them always meet these requirements. Failure to meet the Mall's Safety requirements will result in fines, which will be deducted from the Tenant Contractor refundable deposit.

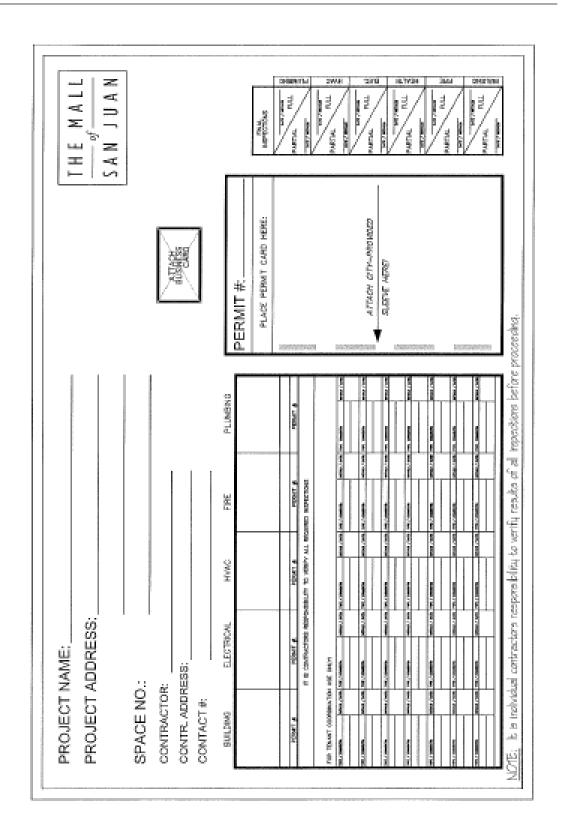
#### **TENANT MATERIALS USE AGREEMENT**

I hereby agree that only asbestos-free materials will be used or installed during construction. This determination of asbestos-free shall be made following all applicable state and federal regulations and may be based upon data provider either by a Manufacturer Safety Data Sheet (MSDS), a certification by the manufacturer, or else by laboratory results. I also agree to immediately notify Center Management if asbestos-containing materials are identified and agree to maintain/dispose of these materials in compliance with all applicable state and federal regulations.

Tenant name	Space number	
Contractor Representative	Date	
 Landlord's Representative	 Date	

#### **MALL TILE ASSESSMENT FORM**

Date:_				
Space	number:			
Tenan	t name:			
	I will protect the tiles that w	ill fall ir or any	amages to the tile on this date. nside the construction premises o of its subcontractors damages a ti	
			in front of my space have damage be replaced by the Mall at Mall's c	
	I will protect all undamaged barricade and under the barri		rom my side of the lease line, ti	ile contained by the
Contra	actor's name		Signature	
Mall N	Management's Rep. name		Signature	
Notes	:			



# Tenant: Space # Space # Subcontractor Name: Date of Violation:

Description	Fine	Penalty
Smoking (allowed in designated areas only)	\$ 250.00	
Working on Unprotected Mall Property	\$ 200.00	
Clogged Drain Lines	\$ 500.00	Plus cost of repair
No superintendent on Job Site	\$ 250.00	
Parking in Unauthorized Area		Towing cost
Damage to Mall (type:walls, tile, ceiling, lighting	\$ 100.00	
Damage to Mall Service Doors	\$ 250.00	
Blocking Loading Dock		Cost of repair
Blocking Back of the House Corridors	\$ 500.00	Plus towing cost
Using Non-approved Subcontractor		No deposit
Osing Non-approved Subcontractor		refund & cost of
		No deposit
Unauthorized Roof Access		refund & cost of
Unauthorized Dumping or Cleanout	\$ 500.00	Plus towing cost
Unauthorized Storage		Lost of Deposit
Using Delivery Carts with Steel Wheels	\$ 500.00	Cost of repair
Using Pallet Jacks	\$ 500.00	
Setting up Work on Common Mall Property	\$ 1,000.00	Cost of repair
No Radios or any kind of Boom Box or Headpho	\$ 200.00	
Verbal Abuse		No deposit
Verbal Abuse		refund &
Unauthorized Slab Coring -1st violation	\$ 350.00	
Unauthorized Slab Coring -2st violation	\$ 700.00	
Excessive noise coplaints from near tenants		
1st violation	\$ 250.00	
Excessive noise coplaints from near tenants		
2nd violation	\$ 500.00	
Excessive noise coplaints from near tenants		No deposit
3rd violation		refund &
Overloading Elevators	\$ 500.00	Plus cost of repair

Total Violation Cost	
Mall Management authorized representative	
Signature	Date

## STATEMENT OF RECEIPT OF TENANT HANDBOOK & LANDLORD APPROVED DRAWINGS

I have received and reviewed a copy of the Tenant Construction Handbook including the Rules and Regulations regarding general information and procedures of Tenant Construction.

- 1. I understand the contents of this manual and that the Landlord, or its representatives, reserves the right to change or modify any of these policies, and the right to stop construction at any time for safety or aesthetic reasons, or if the Contractor or any of its vendors violates the rules and policies contained in this manual.
- Tenant General Contractor is responsible for ensuring that all subcontractors involved in the construction are fully aware of all information contained in this manual, and they will be held responsible for all fines and violations caused by their vendors.

I have also received a copy of the landlord approved construction drawings and I have reviewed them in their entirety with the Facilities Director. I agree with all Landlord comments and I am responsible for ensuring that all work is installed and completed in accordance with these plans and specifications.

Tenant name	Space number
General Contractor's name	General Contractor's signature
Landlord Representative's name	Landlord Representative's signature
 Date	

#### PREMISES ACCEPTANCE FORM

Representative and or appointed representative at the lease line and found them to be in	t space in the presence of the Landlord's e. I have inspected the Center's flooring and soffit acceptable conditions except as noted below. andlord for any damages caused by tradesmen or
Noted Exceptions:	
Contractor's name	Date
Contractor's signature	
Landlord's representative's name	
Landlord's representative's signature	

#### STORAGE PREMISES ACCEPTANCE FORM

By signing this form, I hereby certify that I hereby certified	er and or appointed representative. I manner, and that I will return it to was received. I take full responsibili- low, and agree to the following terms safe (non-hazardous/ non-flammable	agree that the space The Mall of San Juan ty for the safe use of and conditions: ) material.
<ol><li>The space will not be used as a work room material storage.</li></ol>	om, break room or any purposed otr	ner than construction
3. The space will be maintained in an organiz	red and clean manner during its use.	
<ol> <li>I agree to vacate, clean, and remove all m notification by Mall Management.</li> </ol>	naterial from this space at my own co	ost within 24 hours of
5. I will supply and install a new lock and agleck if done by Mall Facilities team. A copy of will remain under Security Team. I agree to end of the term of use of the space.	of the key will be given to Mall Mana	gement; custody of it
<ol><li>I have provided The Mall of San Juan Mar will be returned to me upon verification that</li></ol>		
In addition to the above, I agree to repair or space during my use.	reimburse The Mall of San Juan any d	amage caused to this
Tenant Name	Space Number	_
Contractor's Name	Start Date	End Date
E-mail address		

Date

Contractor's Signature

## SERVICES REQUEST & PROCEDURES

1.	BASE BUILDING TIE INS & SERVICES REQUEST	page 34
2.	HOT PERMIT REQUEST	page 35
3.	DELIVERIES	pages 36-37
4.	EMERGENCY EVACUATION	page 38
5.	SPRINKLER DRAWING SUBMITTAL	page 39
6.	LOW VOLTAGE INFRAESTRUCTURE	page 40

## BASE BUILDING TIE INS AND SERVICES REQUEST

The following base building tie-ins, services and other works are to be coordinated and scheduled through Mall Management Representative:

#### Tie-Ins

- Fire Sprinkler drain down (removal of existing fire suppression system)
- Fire Sprinkler tap in drain down (permanent connection)
- Electrical tie –in (contractor shall provide breaker)
- Fire Alarm tie in
- Alarm testing
- BAS tie-in

#### **Other Works/Services**

- Barricade build out or take down.
- Sanitary explorations affecting adjacent tenants.
- Concrete slab pouring
- Concrete slab coring
- Welding Hot permit
- Oversize or special deliveries
- Dumpsters/open tabs delivery

Scheduling of each tie -in, required service or permit, must be done at a minimum of 72 hours, prior to the date the service is required. Tenants or the General Contractor requesting the service shall send an email to:

Facilities Director, Éric F. Guzmán-Colón <u>eguzmancolon@taubman.com</u> and/or Superintendent Nyvette Fernández <u>nfernandez@taubman.com</u>

Please include the following information:

- Store name
- Company name
- General Contractor representative's name and phone number
- Description of service
- Requested date.

**Note:** Tie-in costs are included in each tenant non-refundable mall fee. Before scheduling preconstruction meeting, and invoice detailing all tie-ins and equipment included with its associated cost will be sent.

# ATTENTION

Before issuance of a hot work permit, the fire safety supervisor or their appointee shall inspect the work area and confirm that precentions have been taken to prevent fire in accordance with NFPA No. 51B, OSHA (29CFR 1910.252) or appropriate Corporate Loss Control Procedures. All cutting and welding equipment should be in good repair.

NO CUTTING-WELDING WORK SHALL BE DONE IF AUTOMATIC SPRINKLER PROTECTION IS NOT IN SERVICE.

## PRECAUTIONS Within 35 feet of work

		_		ŧ
C Floors swept clean of combustibles.	Combustible floors wet down, covered with damp sand, metal or other non-combustible shields.	FLAMMABLE/COMBUSTIBLE LIQUIDS REMOVED. Other combustibles removed or protection with flameproof covers and shields.	All wall and floor openings covered.	<ul> <li>Finmeproof covers suspended beneath work to collect enable</li> </ul>
		0	O	

# WORK ON ENCLOSED EQUIPMENT (Tanks, containers, ducts, dust collectors, etc.) Caulpment cleaned of all combustibles Containers purged of figurmable vapors FIRE WATCH

Construction noncombustible and without combustible

WORK ON WALLS OR CELLINGS

Combustibles maved away from opposite side of wall

covering

O

peration	l openings		The starm
To be provided during and 30 minutes after operation	loors above/below vertica	Supplied with extinguisher and small hose	Trained in use of equipment and in sounding life alarm
To be provided dur	Provide watch on f	Supplied with extir	Trained in use of a
O	O		D

# HOT WORK PERMIT

where this work is to the undersigned. Pre have been taken to pre	ation where this work is to ally by the undersigned. Pre permit have hear taken to pre	he location where this work is to be done has been examined ersonally by the undersigned. Precautions checked on the back this permit have been taken to present societarial traces.
where this work is the undersigned. It have been taken to	ation where this work is ally by the undersigned. Permit have been taken to	The location where this work is to be done has been personally by the undersigned. Preceditions checked or of this bernit have been taken to prevent accidental the
where this work the undersigned have been taken	ation where this work ally by the undersigne- permit have been taken	location where this work sonally by the undersigner his permit have been taken
where this the unders have been	ally by the unders bermit have been	location where this sonally by the unders vis permit have been
where the un	ally by the un permit have to	location where sonally by the un- its permit have b
	ally by permit	location sonally by the permit

Floor/Department Work to be done

Building

PERMIT EXPIRES:	(date)	(time)
NO WORK SHALL BE DO	NE IF AUTOMATIC S	PRINKLER
PROTECTION IS OUT-OF-SE	SERVICE	

Completed	
Started	ork done by
47	773

Loss Prevention-Fire Safety Supervisor

Signed:

# FINAL CHECK-UP

Work area and all adjacent areas to which sparks and heat might have spread (including floors above and below and on opposite sides of walls) were inspected 30 minutes after the work was completed and were found firesafe.

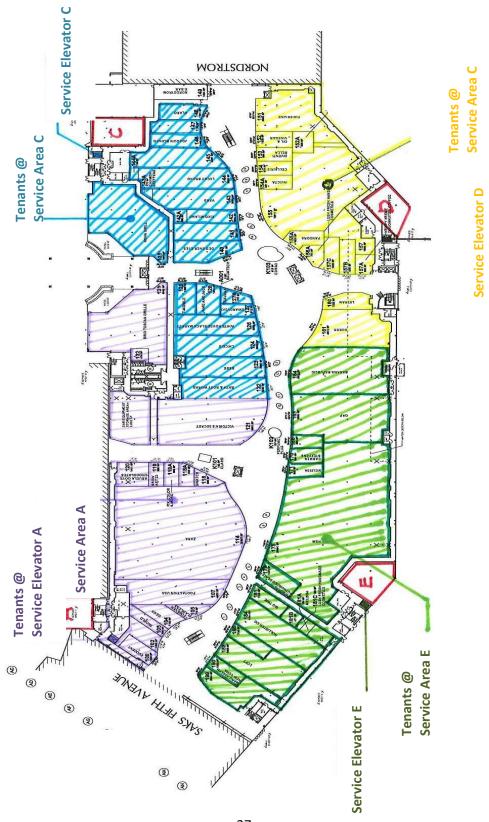
IN CASE OF FIRE - CALL:
The for review by insurance loss control consultants. Additional permit

#### **DELIVERIES**

All deliveries must be scheduled and coordinated as previously stated through an email sent to: eguzmancolon@taubman.com and nfernandez@taubman.com

Tenants are required to schedule all deliveries a minimum of **72 hours** prior to the actual delivery date and time. The following procedures must be observed during all deliveries:

- 1. All delivery routes to the construction site will be designated by Mall Management. The general contractor shall ensure that all project subcontractors are aware of these routes.
- 2. Loading docks shall be used for all deliveries unless approved by Mall Management. The tenant's general contractor shall verify door size openings from the service area to the construction site, to ensure that all types and sizes of materials can be delivered to the space. Mall Management will designate the appropriate service area for deliveries.
- 3. Service areas shall be used only for loading and unloading construction materials. Any vehicle parked more than 30 minutes with no activity will be bestowed at the general contractor's expense.
- 4. Deliveries to the Tenant space shall be made through the service corridors to the rear door (where possible). SPECIAL ARRANGEMENTS MUST BE COORDINATED WITH MALL MANAGEMENT FOR ALL DELIVERIES THAT WILL NEED TO USE THE MALL'S CENTER COMMON AREA. THESE SPECIAL DELIVERIES MUST BE SCHEDULED AT LEAST ONE (1) WEEK IN ADVANCE OF THE DELIVERY.
- 5. Delivery carts used in the center shall be equipped with soft rubber tires. Carts with steel wheels are not permitted. Cost of floor repairs for damage caused by deliveries will be deducted from the general contractor's construction deposit. If your course of travel through the center is over an expansion joint, a 1/2" sheet of 4' X 8' plywood is required to cover the expansion joint.
- 6. Customer entrances to the Center shall not be used for material deliveries. Special conditions may warrant exceptions but prior authorization from Mall Management is required before delivery.
- 7. The general contractor shall ensure that any dirt, litter, or tire tracks left from deliveries shall be cleaned by the responsible contractor. If clean-up is not performed within a reasonable time, center cleaning personnel will perform the work and, the cost will be deducted from the general contractor's construction deposit. Contractor will be penalized with a \$100 Fine.
- 8. See attached delivery group map on the following page for specific loading dock usage information.



### **EMERGENCY EVACUATION**

In the event of an emergency, the Mall of San Juan has been divided into four (4) zones for evacuation purposes. As shown below, all site personnel are to report to the evacuation area associated with the store on which they are working. Exit the building at the closest safe exit, and rendezvous with the rest of your group at the appropriate evacuation area. Mall Security will provide further information at each one of these locations.

### SPRINKLER DRAWING SUBMITTAL

The Landlord's fire protection underwriter, Global Risk Consultants, will review and approve all plans.

The following items must be submitted to conduct a prompt and thorough review of the sprinkler system:

PDF files transmitted by email are the preferred submittal method, however, 3 hard copies may be submitted:

- Sprinkler Shop Drawings with section view
- Hydraulic Calculations (required for all submittals)
- Seismic calculations for all Earthquake Zones
- Catalog Cut Sheets for materials being used (i.e. sprinklers, fittings, pipe, valves, etc.)
- Owner's Certificate (ref. NFPA-13, section 4.3) including the Occupancy Details needed to ensure adequate protection, the occupancy details should include, but not be limited to, stored materials, storage height, storage arrangement (shelves, racks, mobile storage units), processes present, etc.

### All plans must be emailed to the following addresses:

Global Risk Consultants

Attn: Michelle Czarnecki 6122 King's Way Saugatuck, MI 49453 (269) 857-8198 michelle.czarnecki@tuvsud.com

### Mall Management must be copied:

eguzmancolon@taubman.com

nfernandez@taubman.com

### NOTE:

- 1. All tenants must use schedule 40 pipe. Thin wall pipe will not be permitted.
- 2. Sprinkler systems must be designed for Hazard Category 2-0.2 gpm/sq.ft/ over an area of 2,500 sq. ft. using K8.0 instead of KS.6

### LOW VOLTAGE INFRASTRUCTURE

TAUBMAN HAS INSTALLED A NEW FIBER TELECOMMUNICATIONS BACKBONE IN THIS FACILITY. IN ORDER TO MAINTAIN THE INTEGRITY AND SECURITY OF THESE ASSETS, THE FOLLOWING POLICY AND PROCEDURES HAVE BEEN SET FORTH, EFFECTIVE IMMEDIATELY.

NO NEW CONDUIT, FIBER, OR CABLE FOR THE PURPOSE OF PHONE OR INTERNET SERVICES SHALL BE INSTALLED BY ANY SERVICE PROVIDER OR THEIR CONTRACTOR.

ALL APPROVED WORK WILL BE SCHEDULED THROUGH THE MALL'S NETWORK ADMINISTRATOR, GRANITE TELECOMMUNICATIONS.

- 1. Telephone closets must always remain LOCKED.
- 2. The Facilities Director and Security Office will receive an **APPROVED SCHEDULE** in advance via email.
- 3. All technicians scheduled by Granite Telecommunications will be asked to **CHECK IN** at the Mall Security Office.
- 4. **CONFIRM** company name with the approved schedule and ask for identification upon signingin.
- 5. **ONLY APPROVED** technicians may be granted access to telecommunication closets.

If access to mall telecommunications facilities is requested by a carrier's technician, and they do not appear on the approved schedule, **DENY ACCESS, AND PROCEED AS FOLLOWS:** 

- 1. Security to contact **Granite Telecommunications** for access authorization: **1-617-933-5545**
- 2. Granite Telecommunications will discuss the specifics of the access request.
  - Access requests to deliver new services, not approved by Taubman or Granite Telecommunications will be DENIED.
  - Access requests to support or troubleshoot existing services will be APPROVED.
  - Access requests for previously scheduled handoff of a service for eventual cross-connection by Granite Telecommunications will be APPROVED.
- 3. Granite Telecommunications will provide the technician with a ticket number where details of the interaction will be documented.
- 4. Security may add the ticket number to their check-in log for reference as necessary.

Granite Telecommunications: 1-617-933-5545

### **SPECIAL EQUIPMENT**

1. FAN COIL UNITS & VAV BOXES	page 42
2. OUTSIDE AIR VAV BOXES	page 43
3. TEMPERATURE SENSOR SPECS	pages 44-47
4. BAS FIT OUT & FAN COIL INSPECTION	page 48
5. EATON CIRCUIT BREAKER	pages 49-54
6. ELECTRICAL METER	pages 55-64
7. CORING OF SLAB & FCU SUPPORT	pages 65-68

### **FAN COIL UNITS AND VAV BOXES**

The Landlord has pre-purchased fan coil units (FCU) and variable air valves boxes (VAV) for tenant to use due to the long lead time associated with this equipment. Tenants or their contractors will be required to purchase this equipment from the Mall Management. This cost is in addition to the non-refundable fees noted in prior sections of this Tenant Construction Handbook. Please note that this may require some tenants to redesign their mechanical systems to accommodate the following equipment that has been purchased.

FCU model HCBB Daikin large capacity fan coil units available:

Model	HCBB08	HCBB16	HCBB20	HCBB30
Supply CFM	800	1,600	2,000	3,000
Total Capacity	27,536	55,591	72,040	113,215
Sensible Capacity	19,629	39,241	50,592	78,267
Flow GPM	4.6	9.3	12.0	18.9
Coil Pressure Drop	4.2 Ft	6.1 Ft	6.5 Ft	2.4 Ft
Fan HP	0.75	1.0	1.5	1.5
ESP	0.5"	0.50"	0.50"	0.35"
MCA	3.5A	3.9A	5.6A	5.6A
Cost per unit	\$3,360.00	\$4,465.00	\$4,940.00	\$5,415.00

All the above-listed units have the following attributes:

- 208 volt 3 phases
- Includes a manual circuit setter.
- Right-handed configuration
- Include a two-way modulating valve

### VAV box:

- Model #SDV5 Price single duct VAV boxes
- Units will be provided with factory-mounted 120-24V transformer with protective shroud.
- Cost: \$221.00 ea.
- Available sizes: 6", 7", and 8"

<sup>\*</sup>Cut sheets and specifications are available on request

# FAN COIL UNITS (FCUs) and OUTSIDE AIR VARIABLE AIR VOLUME BOXES (OA-VAV)

The following Tenant Equipment shall be provided by the Landlord and installed by the Tenant at the Tenant's expense (in **addition** to the Tenants non-refundable mall fees):

- a. Tenant's Chilled Water Fan Coil Units (FCUs) shall be furnished with the following:
  - i. Unit Mounted Motor Starter, Transformer & Disconnect.
  - Valve Package (Manual Circuit Setter with Shutoff Valve, Strainer & Two-way FCU Modulating Valve).
  - iii. 208v 3ph 60hz
  - iv. Right-Handed Configuration
- b. Tenant's Chilled Water Modulating Control Valves.
- c. Tenant's Outside Air VAV Boxes. OA VAV's shall be furnished with the following:
  - i. Removable Sensor Ring.
- d. Tenant's Domestic Water Meter
- e. Tenant's Electrical meter



### Network Sensors: eZNS-T100

#### Description

The eZNS-T100 network sensor offers building occupants an intuitive touch-interface to adjust individual comfort levels while tailoring to the needs of their specific market. Featuring a standard temperature sensor with humidity,  $\rm CO_2$  and motion options, the eZNS also offers a choice of backlit colors to provide additional user feedback and esthetic appeal.

The eZNS sensor's NFC technology allows installers to use NFC-enabled mobile devices to configure the eZNS and enable enteliWEB integration.



#### Application

The eZNS is suitable for a wide range of sensing applications, from basic temperature monitoring, to indoor air quality and occupancy sensing. A customizable interface allows for intuitive user interaction.

An available external input allows for additional zone monitoring such as window or door contact, temperature averaging or other dry contact sensor information.

When paired with an application controller, the eZNS supports advanced control strategies such as demand control ventilation, energy savings based on occupancy and optimal user comfort.

#### **Features**

- RGB backlight allows choice of colors to indicate conditions, alarms and night mode
- Large easy-to-read LCD screen.
   Onscreen visual feedback on button selection
- Capacitive touch zones allow custom button sizes
- Multiple button layout options. Simple one-touch buttons, or two-touch buttons for added functionality
- Slider to quickly adjust setpoint or tap for precise changes
- Fully programmable in GCL+
- USB Service port, software enabled or disabled. Service tool not required.
- Smartphone and tablet integration and setup using NFC technology
- Recessed mount for minimal profile or surface mount backplate options
- Fits most electrical boxes worldwide
- 2-piece design with tamper set screw lock

#### **Specifications**

#### LCD

2-line custom segmented display with icons

#### Buttons

2 rows of 4 capacitive touch zones, allowing up to 8 individual buttons or combined to form larger buttons

### Backlight (Optional)

Optional RGB LED backlight for multicolor LCD and button illumination

#### Temperature

Digital Temperature Sensor +/- 0.2° C (+/- 0.36°F)

### Humidity Sensor (Optional)

Accuracy +/- 3%

### CO<sub>2</sub> Sensor (Optional)

Dual Beam, Self Calibrating NDIR Detection

#### Range: 0-2000 ppm

Accuracy @ 77°F (25°C):

 $\pm$  (50ppm + 2% of value)

Temperature Dependence: 2ppm/°C [1 ppm/ °F] typical

Pressure Dependence: 0.13% of reading per mm Hg

Stability: 20 ppm/year (typical)

### Occupancy Sensor (Optional)

Passive infrared motion (PIR) sensor

Range: 5m [16.4 ft.]

Coverage: 100° Horizontal

#### Inputs

1 10kΩ input (16 bit A/D)

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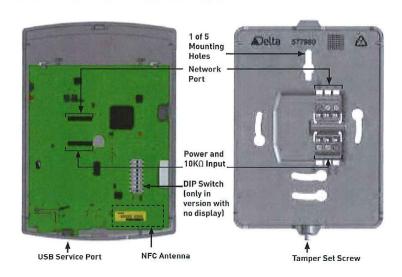
BACnet is a registered trademark of the American Society of Heating, Refridgerating and Air Conditioning Engineers Inc.

Published in April 2014

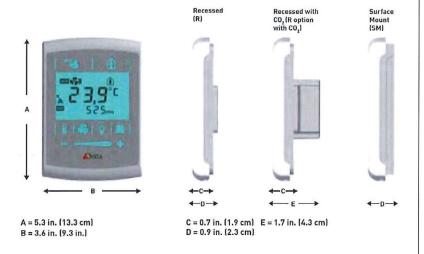


### enteliZONE™

### eZNS-T100: Board Layout Diagram



### eZNS-T100: Dimensions and Backplate Options



### Specifications (Continued)

### Technology

32-bit processor Internal A/D, Flash and RAM

#### Communications

RS-485 port

Delta LINKnet (up to 76800 bps)

### **USB Service Port**

Used as virtual Com port to connect the BACnet® network to a workstation

Near Field Communication (NFC) Passive 2-way short range

#### Connectors

Screw-type terminal connectors

### Wiring Class

Class 2 / SELV

#### Power

24 V AC/DC

2 VA no backlight

4 VA with backlight

6 VA with backlight and CO, sensor

#### **Ambient**

32° to 131°F (0° to 55°C)

10 - 90% RH (non-condensing)

### Dimensions

With R (non-CO $_2$ ) and SM backplate: 5.3 x 3.6 x 0.9 in. [13.3 x 9.3 x 2.3 cm] With R (CO $_2$ ) backplate:

5.3 x 3.6 x 1.7 in. (13.3 x 9.3 x 4.3 cm)

### Mounted Surface Profile

Recessed (both R backplates):

0.75 in. [1.9 cm]

Surface Mount (SM backplate):

0.9 in. (2.3 cm)

### Compliance

CE

FCC Class B

#### Listings

UL 916

Subject to change without notice.

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MoSJ Tenant Handbook - V**3**, **6.3**31**5**5 deltacontrols.com



### enteli<mark>ZONE</mark>™

### eZNS-T100: Standard Button Overlay Options









Overlay 03

Overlay 05

Overlay 09

Overlay 45









Overlay 46

Overlay 47

Overlay 53

### eZNS-T100: Color Options



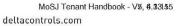
WWG: White Button Overlay, White Front, Grey Back



GWG: Grey Button Overlay, White Front, Grey Back



BBB: Black Button Overlay, Black Front, Black Back





### enteli<mark>ZONE</mark>™



### Ordering

The product number of the eZNS-T100 is eZNS-T100aaa-bb-cc-ddd-eee where the letters correspond to the different options listed below:

#### Sensor Options (aaa-)

С	CO2		
Н	Humidity		
М	Motion		
нм	Humidity and Motion		
СН	CO <sub>2</sub> and Humidity		
СМ	CO <sub>2</sub> and Motion		
СНМ	CO,, Humidity and Motion		

#### Display Options (-bb-)

В	RGB Backlit Display / Butto			
NB	No Backlighting			
ND	No Display			

### Backplate Options (-cc-)

R	Recessed / Recessed CO2
SM	Surface Mount

 $<sup>{}^{1}\</sup>mathrm{CO}_{2}\mathrm{sensor}$  options require recessed  $\mathrm{CO}_{2}$  backplate.

### Button Overlay Options (-ddd-)

###	Standard Button Overlay Number
###	Library Button Overlay Number <sup>2</sup>
999	Custom Button Overlay <sup>3</sup>

<sup>2</sup>See eZNS Button Overlay Design Guide. Expect up to 8 weeks for delivery. Additional charges apply.

#### Button Overlay and Plastic Color Options (-eee-)

WWG	White Button Overlay, White Front with Grey Backplate (default)	
GWG	Grey Button Overlay, White Front with Grey Backplate	
BBB Black Button Overlay, I Front with Black Back		
Custom Color Options <sup>3</sup>		

<sup>3</sup>Contact inside sales for pricing and more information.



### **BAS FIT OUT & FAN COIL INSPECTION**

- 1. The following <u>BAS Fit-Out Scope of Work</u> shall be performed by the Landlord's BAS Contractor at the Tenant's expense (paid for by the tenant within their non-refundable mall fees):
  - Furnish, install, and wire Tenant's Unitary Controller.
  - Furnish install and wire Tenant's Chilled Water Fan Coil Unit Supply Fan Proof of Current Switch.
  - Furnish, install, and wire Tenant's Discharge Air Temperature Sensor.
  - Furnish, install, and wire Tenant's FCU FilterStatus Switch.
  - Furnish, install, and wire Tenant's Combo Space Sensor (Temperature, Humidity &Co2).
  - Furnish, install, and wire Tenant's FCU Secondary Drain Pan Water Detector.
  - Interface Tenant's Domestic Water Meter with the Unitary Controller. The Tenant's (Domestic Water Meter shall be furnished by the Landlord and installed by the Tenant.)
  - Furnish and install Conduit & Wire associated with the BAS Fit-OutScope.
- 2. The following <u>Tenant Chilled Water Fan Coil Unit Inspection</u> shall be performed by the Landlord at the Tenant's expense (paid for by the Tenant within their non-refundable mall fees): Inspect the details of the installation to insure:
  - The installer understands which connection is supply and which is return.
  - Correct piping materials are being used.
  - Correct joints are being used.
  - Proper valve placement and arrangement of components are being followed.
  - Access will be maintained to equipment and system components.
  - Test ports are in place for temperature and pressure readings.
  - Verify the systems have been properly insulated.
  - Verify that the Condensate drain line(s) have been installed.
  - Verify that a secondary drain pan is being installed below each of the Tenant Fan Coil Units.
  - Upon completion of the installation verify that the Tenant's balancing contractor has established the proper set point on the FCU Circuit Setters which establishes the amount of Chilled Water at the approved values.

### 27.4-26 Molded-Case Circuit Breakers & Enclosures Circuit Breaker Selection Data

E-T-N

September 2011 Sheet 27 102

Series C Selection Data-F-Frame

### Series C, F-Frame Thermal-Magnetic 10–225A Electronic RMS 15–225A



F-Frame Breaker

### Table 27.4-55. Dimensions in Inches (mm)

Number of Poles	Width	Height	Depth	
1 2	1.38 (34.8) 2.75 (69.9)	6.00 (152.4) 6.00 (152.4)		
3 4	4.13 (104.8) 5.50 (139.7)	6.00 (152.4) 6.00 (152.4)		

### Table 27.4-56. Thermal-Magnetic Trip Ratings

Frame	Ratings		
ED, EDH, EDC	100, 125, 150, 175, 200, 225		
EHD, FDB, FD, HFD, FDC, HFDDC	10, 15, 20, 25, 30, 35, 40, 45, 50, 60, 70, 80, 90, 100, 110, 125, 150		
FD, HFD, FDC	175, 200, 225		

### Table 27.4-57. Digitrip 310+ Electronic Trip Units

Types	Frame	Ratings		
FDE, HFDE, FDCE	225	100, 110, 125, 150, 160, 175, 200, 225		
	160	60, 70, 80, 90, 100, 125, 150, 160		
	80	15, 20, 30, 40, 50, 60, 70, 80		

### Table 27.4-58. UL 489 Interrupting Capacity Ratings

Circuit Number Breaker of Poles Type	Trip Type ①	Interrupting Capacity (Symmetrical Amperes)						
		Volts AC (50/60 Hz)				Volts DC		
		240	277	480	600	125	250 ②③	
EDB EDS	2, 3 2, 3	N.I.T.	22,000 42,000	_	_	_	10,000 10,000	_
ED EDH EDC <sup>©</sup>	2, 3 2, 3 2, 3	N.I.T.	65,000 100,000 200,000	=	Ξ	=	10,000 10,000 10,000	
EHD	1 2, 3	N.I.T.	 18,000	14,000	14,000	_	10,000	10,000
FDB	2, 3, 4	N.I.T.	18,000	-	14,000	14,000	_	10,000
FD FD FDE®	1 2, 3, 4 2, 3, 4	N.I.T.	65,000 65,000	35,000 —	35,000 35,000	 18,000	10,000	10,000
HFD HFD HFDE ®	1 2, 3, 4 2, 3, 4	N.I.T.		65,000 —	 65,000 65,000	 	10,000	 22,000 
FDC ®	2, 3, 4	N.I.T.	200,000	-	100,000	35,000 25,000	-	22,000
HFDDC ®	3	N.I.T.	_	_	-	_	_	42,000 @

- ① N.I.T. is non-interchangeable trip unit.
- ② Two-pole circuit breaker, or two poles of three-pole circuit breaker.
- ① Time constant is 3 milliseconds minimum at 10 kA and 8 milliseconds minimum at 22 kA.
- ① Current limiting.
- ⑤ Electronics available on three-pole only.
- ® HFDDC is UL only and is not tested to other standards.
- 1 Interrupting rating is 35,000A at 600 Vdc with three poles in series, for ungrounded systems only.

#### Table 27.4-59. Line and Load Terminals

Maximum Terminal	Wire	AWG Wire	Metric Wire	Catalog Number Package of 3 Terminals	
Breaker Amperes	Body Material ®	Туре	Range Range (mm²)		
Standard Pres	sure Type Terminals				
20 (EHD) 100 150 225	Steel Steel Aluminum Aluminum	Cu/Al Cu/Al Cu/Al Cu/Al	(1) #14-#10 (1) #14-1/0 (1) #4-4/0 (1) #4-4/0	2.5-4 2.5-50 25-95 25-95	3T20FB ® 3T100FB 3TA150FB 3TA225FD
Optional Pres	sure Terminals			•	•
50 100 150 225	Aluminum Aluminum Stainless Steel Aluminum	Cu/Al Cu/Al Cu Cu/Al	(1) #14-#4 (1) #14-1/0 (1) #4-4/0 (1) #6-300 kcmil	2.5-16 2.5-50 25-95 16-150	3TA50FB ® 3TA100FD 3T150FB 3TA225FDK

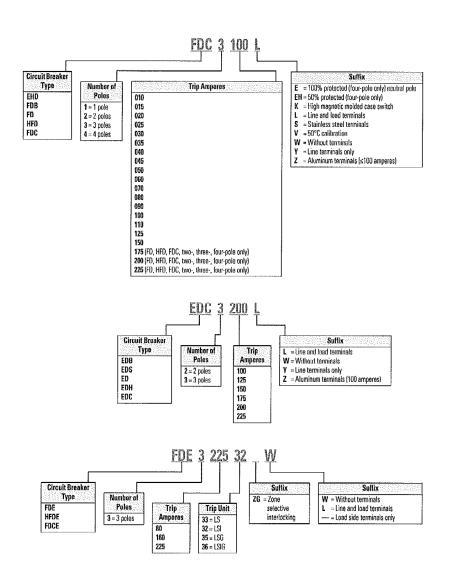
- ® UL listed for use with copper or aluminum conductors as noted.
- Not for use with ED, EDH, EDC breakers.

### 2.3 Molded Case Circuit Breakers Series C

### **Catalog Number Selection**

This information is presented only as an aid to understanding catalog numbers. It is not to be used to build catalog numbers for circuit breakers or trip units.





### 27.4-28 Molded-Case Circuit Breakers & Enclosures Circuit Breaker Selection Data

FACON

September 2011 Sheet 27 104

Catalog

4T402K ®®

Series C Selection Data—K-Frame

### Series C, K-Frame Electronic RMS, 70–400A Thermal-Magnetic, 100–400A



K-Frame Breaker

Table 27.4-64. Dimensions in Inches (mm)

Number of Poles	Width	Height	Depth	
2, 3	5.50	10.13	4.06	
	(139.7)	(257.2)	(103.2)	
4	7.22	10.13	4.06	
	(183.4)	(257.2)	(103.2)	

### Table 27.4-65. Thermal-Magnetic Trip Ratings

Frame	Ratings
DK, KDB, KD, HKD,	100, 125, 150, 175, 200,
KDC, HKDDC,	225, 250, 300, 350, 400

### Table 27.4-66. Digitrip 310 and OPTIM Electronic Trip Unit Rating Plugs

Frame	Rating Plugs ①
KD, HKD, KDC, CKD, CHKD	70, 90, 100, 110, 125 ②, 150, 160, 175, 200, 225, 250 ③, 300, 350, 400 ③

- 10 160A is only available on Digitrip 310.
- Adjustable rating plug available on Digitrip 310.

#### Table 27.4-67. NEMA/UL 489/CSA Interrupting Capacity Rating

Circuit Number	Number	Trip	Interrupti	Interrupting Capacity (Symmetrical Amperes)						
	Breaker of Poles Type	Type 3	Volts AC	(50/60 Hz)	Volts DC					
туре			240	480	600	250 👀	600®			
DK KDB KD	2, 3 2, 3, 4 2, 3, 4	N.I.T. N.I.T. I.T.	65,000 65,000 65,000	35,000 35,000	 25,000 25,000	10,000 10,000 10,000	=			
HKD KDC ® HKDDC	2, 3, 4 2, 3, 4 3	I.T. I.T. I.T.	100,000 200,000 —	65,000 100,000	35,000 65,000 —	22,000 22,000 42,000®	_ 35,000 ®			
CKD ® CHKD ®	3 3	I.T. I.T.	65,000 100,000	35,000 65,000	25,000 35,000	=	_			

- N.I.T. is non-interchangeable trip; I.T. is interchangeable trip.
- Two-pole circuit breaker or two outside poles of three-pole circuit breaker.
- ⑤ Time constant is 3 milliseconds minimum at 10 kA and 8 milliseconds minimum at 22 kA.
- ® 8 milliseconds time constant.
- ② Current limiting.
- ① 100% rated.
- Two poles in series.
- Three poles in series.

### Table 27.4-68. Line and Load Terminals

Breaker Amperes	Body Material	Type	Range/Number Conductors	Wire Range (mm <sup>2</sup> )	Number
Standard Cu//	Al Pressure Ter	minals		*	
225 350	Aluminum Aluminum	Cu/Al Cu/Al	3–350 (1) 250–500 (1)	35–185 120–240	TA300K ® TA350K ®
400	Aluminum	Cu/Al	3/0–250 (2)	95–120	2TA400K @@ 3TA400K @@ 4TA400K @@
Optional Copp	per and Cu/Al F	ressure 1	ype Terminals	*	
225 350	Copper Copper	Cu Cu	3–350 (1) 50–500 (1)	35–185 120–240	T300K ® T350K ®
400	Copper	Cu	3/0–250 (2)	95–120	2T400K <sup>®</sup> 3T400K <sup>®</sup> 4T400K <sup>®</sup>
400	Aluminum	Cu/Al	2/0–250 (2) or 2/0–500 (1)	70–120 70–240 70–240	2TA401K @@ 3TA401K @@ 4TA401K @@
400	Aluminum	Cu/AI	500-750 (1)	300–400	2TA402K @@ 3TA402K @@ 4TA402K @@
400	Copper	Cu/Al	500-750 (1)	-	2T402K @@ 3T402K @@

- Individually packed.
- @ Terminal kits contain one terminal for each pole and one terminal cover.
- Two-pole kit.
- <sup>®</sup> Three-pole kit.
- © Four-pole kit.
- Terminal kits contain one terminal for each pole and three interphase barriers.

### Molded Case Circuit Breakers

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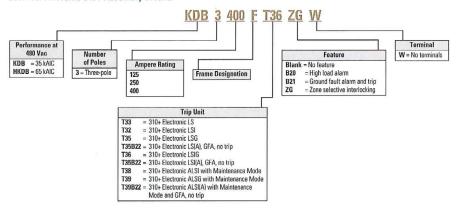
Series C

#### **Catalog Number Selection**

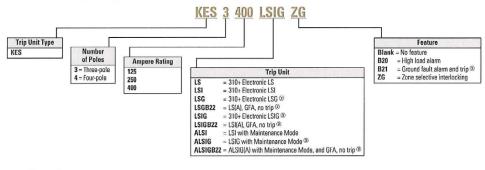
This information is presented only as an aid to understanding catalog numbers. It is not to be used to build catalog numbers for circuit breakers or trip units.

K-Frame with 310+ Electronic Trip Unit Technology®

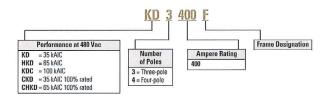
### 250/400A K-Frame 310+ Assembly Breaker ®



### 250/400A 310+ Electronic Trip Unit



### **400A Frame Only**



#### Note

- © Cannot combine 'B2X' suffixes with 'B2X' suffixes.
- ② Not available in four-pole configurations.

### **Molded-Case Circuit Breakers & Enclosures Circuit Breaker Selection Data**

FATON

September 2011 Sheet 27098

Series G Selection Data-LG-Frame

Series G, L-Frame Electronic RMS, 100-630A\* Thermal-Magnetic, 250-630A\* \*UL Maximum is 600A



L-Frame Breaker

Table 27.4-36. Dimensions in Inches (mm), Weight in Lbs (kg)

Number of Poles	Width	Height	Depth	Weight
3	5.48	10.13	4.09	16
	(140)	(258)	(104)	(7.3)
4	7.22	10.13	4.09	20
	(183)	(258)	(104)	(9.1)

### Table 27.4-37. Thermal-Magnetic Trip Rating

Frame	Ratings
LG ①	250, 300, 350, 400, 500, 600 320, 630

1 Not UL listed.

#### Table 27.4-38. Digitrip 310+ **Electronic Trip Units**

Frame	Ratings
LG_630 LG_600	250, 300, 315, 350, 400, 500, 600, 630 250, 300, 315, 350, 400, 450, 500, 600
	160, 200, 225, 250, 300, 315, 350, 400 100, 125, 150, 160, 175, 200, 225, 250

Note: 160, 315 and 630 are IEC ratings only. LG breaker is HACR rated.

### Table 27.4-39. UL 489/IEC 60947-2 Interrupting Capacity Ratings

Circuit Breaker of Poles Type	Interrupting Capacity (kA rms Symmetrical Amperes) (kA)									
	Volts AC (50/60 Hz)									DC @
	240-240		380-415		480	80 600	690		250 ③	
	lcu	lcs	lcu	lcs		lcu	Ics	lcu	Ics	
3, 4	65	65	35	35	35	18	12	6	22	22
3, 4 3, 4	85 100	85 100	50 70	50 70	50 65	25 35	20 25	10 13	22 42	22 42
3, 4 3, 4	200	200 200	100 150	100 150	100 150	50 65	30 35	15 18	42 50	42 50 50
	3, 4 3, 4 3, 4 3, 4	of Poles Volts A 240-24 lcu 3, 4 65 3, 4 85 3, 4 100 3, 4 200 3, 4 200	of Poles Voits AC (50) 240–240 1cu Ics 3,4 85 85 3,4 100 100 3,4 200 200 3,4 200 200	of Poles Volts AC (50/60 Hz) 240−240 380−4 1cu 1cs 1cu 3,4 85 85 50 3,4 100 100 70 3,4 200 200 150 150 150 150 150 150 150 150 150 1	of Poles    Volts AC (50/60 Hz)   240-240   380-415	of Poles    Volts AC (50/60 Hz)   240-240   380-415   480	of Poles    Volts AC (50/60 Hz)     240-240     380-415     480   600	of Poles           Voits AC (50/60 Hz)         240-240         380-415         480         600         690           Icu         Ics         Icu         Ics         Icu         Icu           3, 4         65         65         35         35         35         18         12           3, 4         85         85         50         50         50         25         20           3, 4         100         100         70         70         65         35         25           3, 4         200         200         100         100         50         30         30           3, 4         200         200         150         150         150         65         35	of Poles           Volts AC (50/60 Hz)           240-240         380-415         480         600         690           Icu         Ics         Icu         Ics         Icu         Icu         Ics           3, 4         65         65         35         35         35         18         12         6           3, 4         85         85         50         50         50         25         20         10           3, 4         100         100         70         70         65         35         25         13           3, 4         200         200         100         100         100         30         15           3, 4         200         200         150         150         150         35         35         18	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$

- ② DC rating applies to substantially non-inductive circuits.
- Two-pole circuit breaker, or two poles of three-pole circuits.
   IEC rating is 300 kA at 240 Vac.

#### Table 27 4-40 Line and Load Terminals

Maximum Breaker Amperes	Terminal Body Material	Wire Type	AWG Wire Range/Number of Conductors	Metric Wire Range mm <sup>2</sup>	Number of Terminals Included	Catalog Number
400	Aluminum	Cu/Al	500-750 (1)	240–380 (1)	3 4	3TA631LK ®
400	Aluminum	Cu/Al	500-750 (1)	240–380 (1)		4TA631LK ®
400	Copper	Cu	500-750 (1)	240–380 (1)	3 4	3T631LK <sup>⑤</sup>
400	Copper	Cu	500-750 (1)	240–380 (1)		4T631LK <sup>⑤</sup>
630	Aluminum	Cu/Al	2–500 (2)	35-240 (2)	3 4	3TA632LK ©©
630	Aluminum	Cu/Al	2–500 (2)	35-240 (2)		4TA632LK ©©
630	Copper	Cu	2–500 (2)	35-240 (2)	3 4	3T632LK ®
630	Copper	Cu	2–500 (2)	35-240 (2)		4T632LK ®
400	Aluminum	Cu/Al	2–500 (1)	35-240 (1)	1	TA350LK ®
400	Copper	Cu	2–500 (1)	35-240 (1)		T350LK

- ⑤ Includes LTS3K (three-pole) or LTS4K (four-pole) terminal covers.
- Standard terminal included with complete breaker.

### 2.2

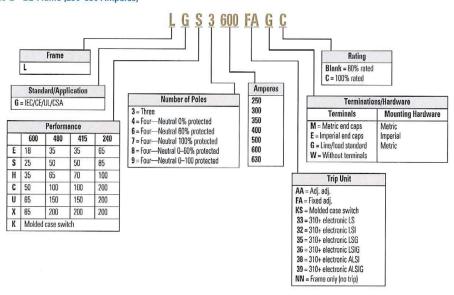
### Molded Case Circuit Breakers

Series G

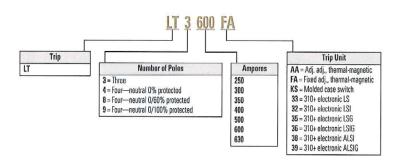
### **Catalog Number Selection**

This information is presented only as an aid to understanding catalog numbers. It is not to be used to build catalog numbers for circuit breakers or trip units.

Series G-LG-Frame (250-630 Amperes)

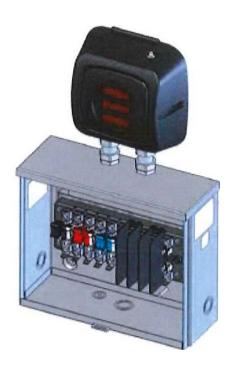


### Trip Unit

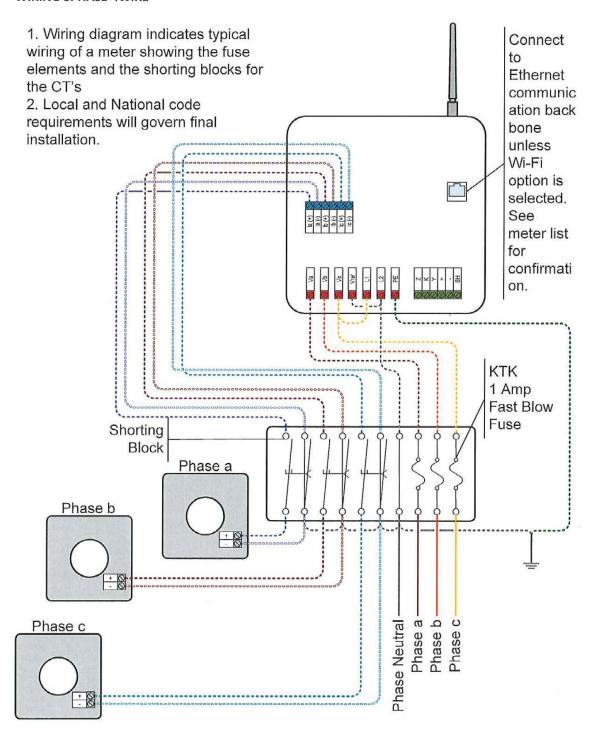


### **SHARK METER ASSEMBLY**

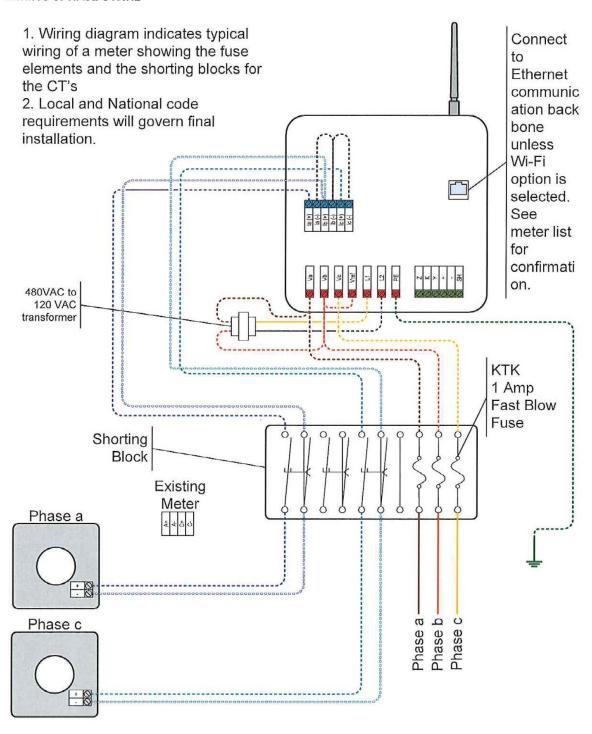
- 1. Dimensions shown are approximate to make it easier to measure for field installation.
- 2. All dimensions are slightly larger than actual size.
- 3. See engineered factory drawings indicating actual assembly size.
- 4. Provision of this accessory is at the discretion of the installing contractor.
- 5. Assembly includes:
  - Enclosure
  - Shorting blocks for CT
  - Fuse blocks for sensed power
  - Meter is attached as shown and prewired to a terminal block.
- 6. Electric Meter shall be located no more than 5 feet above the floor.



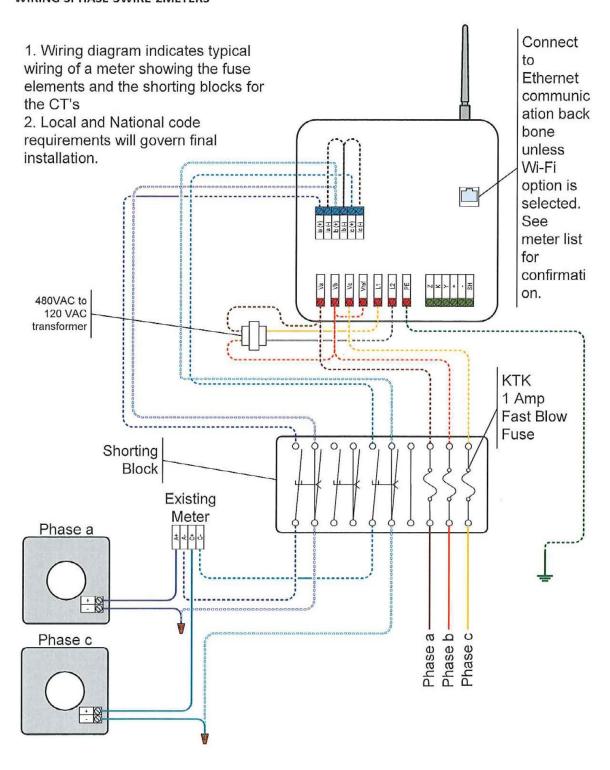
### WIRING 3PHASE-4WIRE



### WIRING 3PHASE-3WIRE



### WIRING 3PHASE-3WIRE-2METERS



### **DOCUMENT REFERENCES**

- 1. Shark 200S Installation Documentation: E149721\_Shark200S.pdf
- 2. Shark Quick Start Guide: E145723\_Shark100S200S\_QS.pdf
- 3. Shark 200S dimensions: shark200s\_dimension.pdf
- 4. TESCO Shark 200S field accessory enclosure: 907057 rev3 Meter Box Shark 200

### **COMMISSIONING STEPS**

### Pre-Installation prior to ship

• Confirm meter locations, CT sizing and determination of enclosures are required.

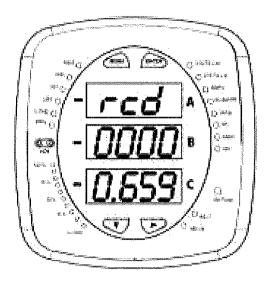
### Pre-installation with materials on site

• Confirm bill of materials is correct.

### **Post Installation**

- Confirm wiring of meter against wiring diagrams
- Confirm CTs are installed in the right direction.
- Power up the meter
- Contact National Meter Vendor to confirm communication to meter.
- Confirm meter is operating properly.
- Lock down meter.

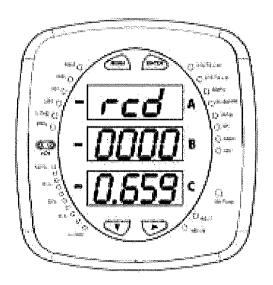
### **READ TOTAL KWH**



The meter auto scrolls through readings. When the Wh light is lit it will indicate total usage. Take and multiply this value by the meter multiplier listed on the label. For instance, the meter is measuring 600 amps and the ratio is 600:5 the multiplier would be 120.

You can also press the down arrow to highlight the Wh reading.

### **READ HIGH DEMAND**



To look at minimum and maximum demand, all you need to do is scroll down (down arrow button on bottom left) to W/VAR/PF parameter indicator on the meter. Watts, kW, and demand will be displayed on the top. To view a maximum KW demand, press the right arrow (right arrow button on bottom right) once and the maximum reading indicator will light up indicating maximum KW demand. Press the same arrow again and the minimum indicator will light up indicating lowest KW demand.

### **DEMAND RESET**

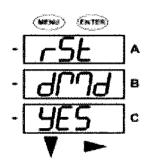
### Shark200S

Reset: Demand (rStd); resets the Max and Min values.

 Press the Enter button while either rStd or rStE is in the A window. The Reset Demand No or Reset Energy No screen appears.



 If you press the Enter button again, the Main Menu appears, with the next mode in the A window, (The Down button does not affect this screen.)



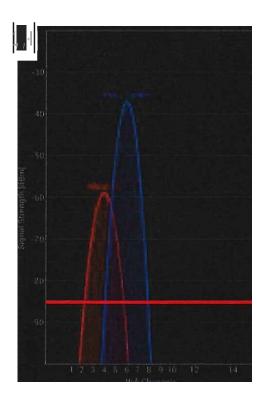
 If you press the Right button, the Reset Demand YES or Reset Energy YES screen appears. Press Enter to perform a roset.

NOTE: If Password protection is enabled for reset, you must enter the four digit password before you can reset the meter (see Chapter 5 for information on Password protection). To enter a password, follow the instructions in Section 7.2.4.

### CAUTIONI Reset Demand YES resets all Max and Min values

 Once you have performed a reset, the screen displays either "rSt dMd donE" or "rSt EnEr donE"and then resumes auto-scrolling parameters.

### **CHECK FOR WI-FI SIGNAL**



To determine if your current AP infrastructure can connect to the meter find a smart phone and download a free app called Wi-Fi Analyzer. Select the channel graph view. This will show all the Wi-Fi signals in the area. Find the strongest signal from a Taubman AP. The meters can work down to as low as -90 dB. If your signal is less than 85 dB please send an e- mail to meters@taubman.com for clarification if an additional AP will be required for your application.

### CORING OF THE FLOOR SLAB and FAN COIL UNITS SUPPORT

### **CORING OF FLOOR SLAB**

Floor slabs can have single cores not exceeding 6" diameter placed through the composite concrete slabs in any location except within the 5-foot-wide zones centered on the collector element and 3-foot-wide zone from slab edge at boundary element slab reinforcing denoted on the attached drawings. Cores cannot be placed closer than 4 feet from another core without engineer's approval. Field verifies the location of the slab reinforcing and structural steel framing below prior to coring.

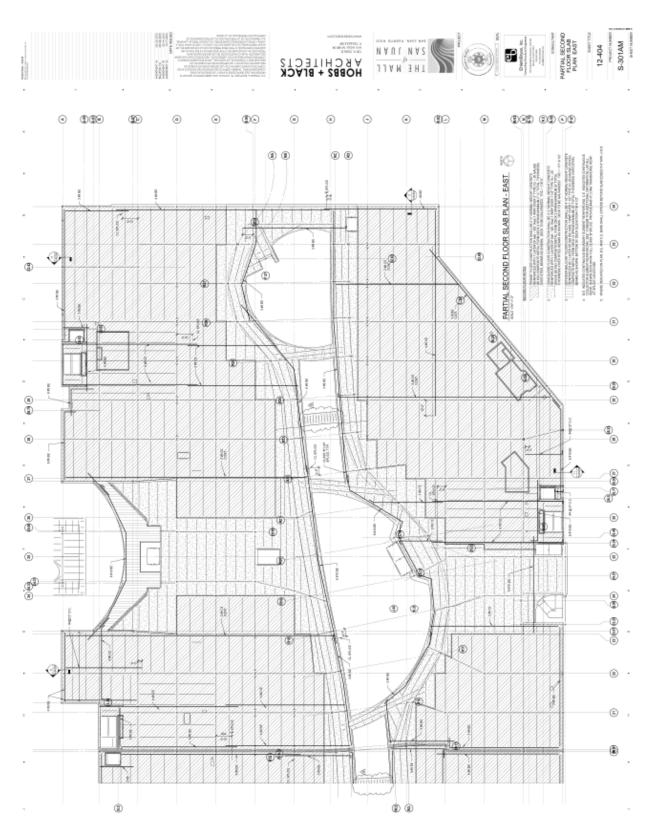
### **FAN COIL UNITS SUPPORT**

### Support of Fan Coil Units from the Floors:

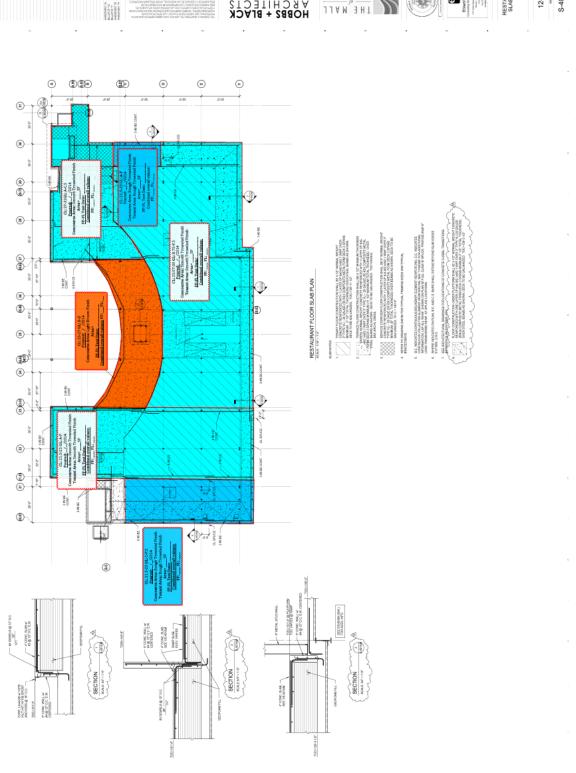
Fan coil units weighing less than 1,000 lbs. can be supported from the second floor and from the slab portion of the third floor. The units shall be supported only from the steel beams and must be attached to meet current building code seismic requirements. Repair all damaged fireproofing. Ensure that no connections are made to the "No Attachment Zones" denoted on the steel framing. Units shall be located at least 10 feet from any other supported units.

### Support of Fan Coil Units from the Roof:

Fan coil units weighing less than 600 lbs. can be supported from the roof structure. The units shall be supported only from the steel beams and must be attached to meet current Building Code seismic tie requirements. Under no circumstances shall the unit or associated piping or ductwork be supported from the metal roof decking. Repair all damaged fireproofing. Ensure that no connections are made to the "No Attachment Zones" denoted on the steel framing. Units shall be located at least 10 feet from any other supported units unless reviewed by the Mall of San Juan's Structural Engineer.







# DETAILS & EXISTING CONDITIONS

1. GAS INFORMATION	pages 70
2. SERVICE ELEVATORS	page 71
3. DECK FASTENING	page 72
4. FIREPROOFING	pages 73-74

### **GAS INFORMATION**

- 1. Empire/San Juan Gas Product
  - a. The Gas product is a Propane mixture of 60% LPG and 40% Air. It has the properties of NG but with more BTU Values.
- 2. Heating Value Characteristics
  - a. 1,506 BTU/Cu. Feet.
- 3. Gas Product Pressure
  - a. 30 psi delivered to the Landlord Manifold/Regulator.
  - b. 14" to 18" Water Column (0.5 to 0.65 psi) after the Landlord Manifold/Regulator.
- 4. Gas Line Sizing
  - a. Tenant Gas Line size from Landlord Manifold/Regulator to Tenant's space shall be 2".

# SERVICE ELEVATORS INFORMATION

The Mall of San Juan has five (5) service elevators with the following specifications:

- Capacity = 5,000 lbs.
- Approximate Interior dimensions==5'-4" wide x 9'-9" deep
- Entrance dimensions= 4'-6" wide x 8'-0" high
- Please make sure elevator is protected while transporting materials and equipment.



### **DECK FASTENING INFORMATION**

Ceiling Metal Suspension Systems: Tenant's suspended ceilings shall be secured to Landlord's structural framing or Tenant's supplemental support system (unit-strut or equivalent).

Design for seismic loading and vibration isolation. No attachments to the Landlord's mall finished bulkhead, ceiling system or steel roof deck shall be permitted.

Attachment to the concrete filled steel floor deck (between 1st & 2nd levels) may be permitted in unique and extenuating circumstances where tenant's supplemental support system may not work and must be approved by facility management. Ceiling loads must be 4 lbs./sq. ft. or less), connection shall be made into the side of the deck flute, and vertical load shall not exceed 75 pounds (provide written verification of the loads).

All other ductwork, pipes, conduits must be hung from the tenant's supplemental support system.

### **Grace Fireproofing Products**

### **MONOKOTE Z-106/HY**

## Portland cement based, medium density, cementitious fireproofing

### **Product Information**

Monokote Z-106 HY is Portland cement based cementitious fireproofing designed to meet specific commercial and industrial fire protection requirements on structural steel members, floor ceiling and root/ceiling assemblies.

Monokote Z-106 HY is hard, moisture resistant and suitable for interior areas where resistance to moisture and abrasion is needed. Formulated for use with Grace's patented Injection System, Monokote Z-106/HY offers high-yield and improved application characteristics while providing resistance to repeated physical contact and or high humidity.

### **Applications**

Monokote Z-106 HY can be used for interior, exposed applications where abrasion, high humidity and damage resistance are desired such as:

- · Special use areas in commercial buildings
- · Transportation terminals
- Convention centers
- · Stairwells
- Parking garages
- Elevator shafts
- Light manufacturing areas and facilities
- Mechanical rooms
- Gymnasiums and pool areas
- · Correctional facilities

#### Benefits

Monokote Z-106/HY offers the following advantages to the architect owner, applicator and building occupant.

• Durability—100% Portland cement binder provides

- Durability—100° portland cement binder provides increased durability in interior environments where high-traffic resistance to physical abuse is required.
- Moisture resistant—Provides excellent resistance to high humidity and condensation.

- Quick set—HY formulation allows use with Grace patented Injection System for high-yield and quick set.
- Applicator friendly—Low pumping pressures allow use of small diameter hoses for increased maneuverability and greater pumping distances.
- Non-toxic—The factory-mixed blend of common Portland cement and inert materials require only the addition of water for mixing and application.

### **Delivery and Storage**

- a. All material to be used for fireproofing shall be delivered in original unopened packages bearing the name of the manufacturer, the brand and proper Undetwriters Laboratories Inc labels for fire hazard and fire resistance classifications.
- b. The material shall be kept dry until ready for use. Packages of material shall be kept off the ground, under cover and away from sweating walls and other damp surfaces. All bags that have been exposed to water before use shall be discarded. Stock of material is to be rotated and used before its expiration date.

### Steel and Concrete Surfaces

- a. Prior to the application of Z-106/HY Fireproofing an inspection shall be made to determine that all steel and concrete surfaces are acceptable to receive fireproofing. The steel to be fireproofed shall be free of oil, grease, excess rolling compounds or lubricants loose mill scale excess rust, non-compatible primer, lock down agent or any other substance that will impair proper adhesion Where necessary, the cleaning of steel surfaces to receive fireproofing shall be the responsibility of the general contractor.
- b. Prior to application of Monokote Z-106/HY a bonding agent approved by the fireproofing manufacturer shall be applied to all substrates to receive

### Recommended Specifications—Medium Density Products

Physical Properties	Z-106/HY	Test Method	Laboratory Test* Value
Minimum density	22 pcf (350 kg/m³)	ASTM E605	See note below**
Minimum bond strength	2,000 psf (94.5 kN/m²)	ASTM E736	Greater than 2,000 psf (94.5 kN/m²)
Minimum compressive strength @ 10% deformation	100 psi (680 kPa)	ASTM E761	Greater than 100 psi (680 kPa)
Deflection and	No cracking	ASTM E759	Pass
bond impact	No delamination	ASTM E760	Pass
Air erosion	0.000 gr/ft² (0.000 gr/m²)	ASTM E859	0,000 gr/ft² (0,000 gr/m²)
Mold inhibitor	Yes	ASTIM G21	Pass/No growth
Standard color	Gray		N/A

Actual laboratory tested values meet or exceed Grace's recommended value. Test reports are available on request from your

# GRACE

<sup>\*\*</sup> ASTM test methods modified where required, for high density, high performance products.

- Z-106 HY. There are two exceptions to this requirement:
- no bonding agent is required when Monokote
   Z-106 HY is applied uninjected to bare steel and
- 2. no bonding agent is required when bond tests run in accordance to the "oatings Materials section of the Underwriters Laboratories Fire Resistance Directory Volume 1 indicate that a bonding agent is not required for Monokote Z-106 HY in conjunction with the specific primed or painted structural steel
- c The project architect shall determine if the painted primed structural steel to receive fireproofing has been tested in accordance with ASTM E119, to provide the required fire resistance rating
- d No fireproofing shal be applied prior to completion of concrete work on steel decking
- Fireproofing to the underside of roof deck as emblies shall be done only after roofing application is applete and roof traffic has ceased.

### Mixing

- a. Monokote Z-106 HY Fireproofing shall be mixed by machine in a conventional, plaster-type mixer or a continuous mixer specifically modified for cementitious fireproofing. The mixer shall be kep clean and free of all previously mixed majerial. The mixer speed in a conventional mixer shall be adjusted to the lowest speed which gives adequate blending of the material and a mixer density of 38–43 pcf (610–690 kg m³).
- b Using a suitable metering device and a conventional mixer, all water shall be first added to the mixer as the blades turn. Mixing shall continue until the mix is lump-free, with a creamy texture. All material is to be thoroughly vet Target density of 38—43 pcf (610–690 kg m. is most desirable. Overmixing Monokote 7-106 HY will reduce pumping rate and will negatively effect in-place density and mechanical properties.

### Application

- a. Application of Monokote Z-106 HY Fireproofing can be made in the following sequence
  - 1 Required fire rating thickness will determine if a multi-pass operation is required. If the first pais can be applied at a thickness sufficient to obtain the required rating a second pass will not be required.
  - Where the full required thickness can not be applied in a single pass, subsequent passes can be applied only after the first coat has set
- Monokote Z-106 HY Fireproofing material shall not be used if it contains partially set, frozen or caked material.
- Monokote Z-106 HY shall have a minimum average dry, in-place density of 22 pcf (350 kg m ).
- d Monokote Z-106 LY is f rimulated to be mixed with water at he job site

- e. Monokote Accelerator may be used with Monokote Z-106 1Y to enhance set characteristics and product yield. The Monokote Accelerator is injected into the Monokote Z-106 HY at the nozzle of the spray gun. Monokote Accelerator shall be mixed and used according to manufacturers recommendations.
- f Monokote Z-106 IfY is applied directly to the steel, at arious rates of application which will be job dependent, using standard plastering type equipment or continuous mixer pump units. A spray gun, with a properly sized orifice and spray shield and air pressure at the nozzle of approximately 20 psi (0.14 MPa will provide the correct hangability, density and appearance.

### Temperature and Ventilation

- a An air and substrate temperature of 40 F (4.4 C) minimum shall be maintained for 24 hours prior to application, during application and for a minimum of 24 hours after application of Monokote Z-106 HY.
- 24 hours after application of Monokote Z-106 HY.
  b. Provisions shall be made for ventilation to properly
  dry the fireproofing after application. In enclosed
  areas lacking natural ventilation, air circulation and
  ventilation must be provided to achieve a minimum
  total air exchange rate of 4 times per hour until material is substantially dry

#### Field Tests

- a The architect will select an independent testing laboratory for which the owner will pay) to sample and verify the thickness and density of the fireproofing in accordance with the provisions of ASTM E605 current edition), Standard Test Method for Thickness and Density of Sprayed Fire-Resistive Material Applied to Structural Members or Uniform Building ode Standard No -6 Thickness and Density Determination for Spray Applied Freprocting. Where samples are of irregular shape or sprayed texture), the displacement method (ASTM E605 published in AWCI Technical Manual 12-A) shall be used to determine in-place fireproofing density.
- b The architect will select an independent testing laboratory (for which the owner will pay) to randomly sample and verify the bond strength of the fireproofing in accordance with the provisions of ASTM E736.
- c Results of the above tests will be made available to all parties at the completion of pre-designated areas which shall have been determined at a pre-job conference.

#### Safety

- a Monokote Z-106/HY is shippery when wet. The general contractor and applicator shall be responsible for posting appropriate cautionary SLIPPERY WHEN WELSIGN. Signs should be posted in all areas in contact with wet fireproofing material. Anti-s up surfaces should be used on all working surfaces.
- b Material Safety Data Sheets for Monokote Z-106 HY is available upon request by writing:
  Grace Construction Products, Attn. Environmental Health & Safety Dept, 62 Whittemore Ave Cambridge, MA 02140

### www.graceconstruction.com

For technical assistance call toll free at 866-333-3SBM (3726)

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We hope the information ere will be helpful. It is based on data and knowledge considered to be true and accurate and is offered for the users' consideration investigation and verification, but we do not warrant like results to be obtained. Please read all statements, recommendations or suggestions in conjunction with our conditions of sale which apply to all goods supplied by us. No statement recommendation or suggestion is intended for any use which would infringe any patent or copyright. W. R. Grace & Co.,—Conn 62 Whittemore Avenue, Cambridge, MA 02140. In Canada Grace Canada Inc., 294 Clements Road, West Ajax Ontano Canada L1S 3C6.

This product may be covered by patents or patents pending Z106-17 Printed in U S A 4 10

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### **POST CONSTRUCTION**

PRE-OPENING CHECK LIST pages 76-78
 AS-BUILT REQUIREMENTS page 79

3. USE PERMIT page 80

### PRE-OPENING PUNCH LIST CHECKLIST

TENANT:	SPACE:
Clean Storefront	
Neutral pers at both sides are installed and cl	ean.
Glass clips at store front are not installed at e	ye view height.
Speakers set back 20' into store.	
Track lighting at storefront recessed or not vi	sible from storefront.
All electrical outlets in storefront area are co	ncealed or blend into wall same color.
Overhead grill key is in any inconspicuous pla	ce.
Exit signage not visible from concourse	
Signage installed follows Landlord's approved	I shop drawings.
No neon or blade sign in storefront	
No visible Sensormatic, security, or customer	devices
Minimum 2x2 regular tile in sales area	
Battery packs on exit and emergency lights m	ust be recessed or remote-located.
Access panels in the sales area are flush with	concealed hardware.
No vinyl base in the sales area	
Installed drain in the bathroom.	
Installed saddle at the bathroom door.	
BOH shelving is 18" below the ceiling.	
Any perforation on the existing wall is fixed a	nd caulked.

Fire-rated plywood is installed 4' up the r	
Corner guards are installed at BOH.	
Doorbell is installed at BOH door.	
All filters in air handling units were replac	ed just before the opening of the store.
Submit Air Balance Report	
Copy of client punch list	
As-built drawings submitted (digitally)	
The staging area is clean and free of lefto	ver materials or tools.
Tenant Certificate of Insurance (COI)	
Store manager's contact information.	
Use Permit and Business License obtained	d.
All required signage by local government	agencies is properly hung.
Inchested by	
Inspected by:	
Center Representative	General Contractor
Data	

\*Items not corrected by General Contractor will be corrected by Landlord and deducted from the Contractor's Security Deposit Notes:

### **AS-BUILT REQUIREMENTS**

- Cross out words like equal to, like and replace them with the specific information used during the construction process.
- Provide the exact details of changes or additional information, including but not limited to fabrication, erection, installation, location, sizing, material, dimension, etc.
- Provide all necessary information on the contractor's designed systems.
- Invert elevations, grade modifications, and related information on piping utilities, earthwork, etc.
- Record all unexpected obstructions found in the contract area.
- If an additional sheet is added to the drawings, try to use the same sheet size, scale, and legend as the one being replaced or referenced.
- Changes made from the final <u>inspection</u> process.
- If possible, As-Built drawings shall be recorded with three base colors, with a legend indicator; RED- deleted items; GREEN- added items, BLUEspecial information, or details.
- Refer to specific actions instead of referencing change order numbers or related documents.
- Use written explanation to describe changes.
- Use clear lettering.
- Be sure to add revision notes and corrections to the affected section view, general notes specific notes, profiles, and schedules.
- Add all related shop drawings to As-built drawings.
- Update the index sheet to show the latest drawing changes or additions.
- Be specific when making notes to <u>underground utilities</u>, showing the exact location, depth, and material used.
- When finished, stamp title sheet with 'RECORD DRAWING AS BUILT' including contractor's name, date, signature and other relevant information.
- If a sheet has not been changed at all or no mark has been added, label the sheet only 'As- Built'.
- If a sheet has been changed or modifications have been added, label it 'Revised AS- Built'.
- Prepare a final CD with the As-built drawings.
- All As Built require a signature.

### **USE PERMIT REQUIREMENT**

When opening a new business and completing construction in Puerto Rico (PR), Tenant's must obtain a Construction Permit before the start of construction. **Once construction is completed, each Tenant is required to obtain a <u>Use Permit</u> (Permiso Unico) before the start of business. This Use Permit is like a Certificate of Occupancy.** 

Every Tenant is required to hire an Architect / Engineer of Record who is registered and licensed by the College of Architects & Landscape Architects of PR, or the College of Engineers & Surveyors of PR. They also must be registered with the State Department of PR.

Taubman has retained a local Permit Specialist for use by all Tenants. This expediting firm will work directly with each tenant at no cost to the Tenant to facilitate submitting and obtaining the required Construction Permit and Use permit (Permiso Unico) from the local authorities having jurisdiction. Authorization needs to be given to the Permit Expeditor by each Tenant to manage this process.

### **Permit Expeditor**

Eng. Miguel A. Bonilla, P.S.C

Att. Mr. Miguel Bonilla

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