

# Dublin Corporate Center

## Construction Rules and Regulations



2017

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\*Indicates Signatures/Initials Required

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## Building Information and Rates

**Project:** Dublin Corporate Center  
**Owner:** Dublin Corporate Center Acquisition, LLC

**Building Management Office:** Hines Interests Limited Partnership  
4160 Dublin Blvd Suite 140, Dublin CA, 94568  
(925) 556-6630  
Katy D'Albora, Property Manager  
Jeff Tucker, Chief Engineer

**Regular Business Hours:**

**ENGINEERING** 7:30am-4:30pm

**OFFICE** 8:00am-4:30pm

*Emergency calls will be picked up by the answering service after-hours and routed to the appropriate person.*

**Regular HVAC and Lighting hours:**

**Monday - Friday** 7:00am – 6:00pm

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**AFTER-HOURS BUILDING ACCESS and SERVICE RATES:**

Building entry is available 24 hours per day, seven days per week, for scheduled and approved contractor access.

**Overtime labor rates billable to Contractors and Tenants:**

*Note: Total overtime charges will include Engineering labor **plus** costs to run necessary building equipment/systems.*

**Engineering Labor:**

Regular Hours	\$ 110.00/hr
Overtime Hours	\$ 165.00/hr
Double-time Hours	\$ 220.00/hr
Holiday Hours	\$ 330.00/hr

**Call Backs:**

4-hour minimum per Local 39 contract

**Overtime HVAC rates charged to Tenants and Contractors:**

Heating/Cooling system(s) \$ 75.00/hr

1. After hours equipment/labor requests must be made during normal business hours and at least 24 hours in advance.
2. Modifications to the request must be made during normal business hours and prior to equipment/labor start time.
3. Contractor/Tenant will be billed following the above fee schedule and expected to pay invoice within 15 days.

**Requests must be made during Regular Business OFFICE Hours to the Building Management Office. For after-hours work, Building Management Office approval is REQUIRED. Any work not properly scheduled may be stopped and rescheduled. Contractor/Tenant must issue a written 24-hour notice when an engineer is required to be on duty outside of Regular Business ENGINEERING Hours and will be billed for labor that occurs outside of those hours.**

**Dublin Corporate Center  
Contractor/Tenant  
WORK INFORMATION & REQUEST FORM**

**DATE OF WORK:** \_\_\_\_\_

**LOCATION / FLOOR:** \_\_\_\_\_

**ENGINEER ON DUTY:** \_\_\_\_\_

**TIME:** \_\_\_\_\_

**PERSONNEL ON-SITE:**

1. \_\_\_\_\_

3. \_\_\_\_\_

2. \_\_\_\_\_

4. \_\_\_\_\_

**NOTE:** Dublin Corporate Center does not permit:

1. Use of gasoline powered equipment.
2. Non-fire treated wood products.
3. Lacquer spraying.
4. Disposal of construction debris or hazardous materials into building trash receptacles.
5. Unscheduled work on the Life Safety or Sprinkler Systems.
6. Temporary disabling of Life Safety Devices without 24 hour notice.
7. Work on an operational building system without an engineer onsite.
8. Work onsite without proper notification to the Building Management Office, and completed contractor Work Information Form.
9. Contractor or Tenant access onto roof or in electrical spaces without prior approval by Chief Engineer or Building Management Office.
10. The use of sprinkler head caps.
11. The painting of ceiling tiles.
12. Drilling fasteners into the exterior aluminum window system or to the ceiling T-BAR grids.
13. Broadcasting of music or other sounds through radios, tape decks, ipods, etc.
14. Microwaves for workers use, or any type of indoor cooking equipment or appliance.
15. Outdoor BBQs, open flame or any other means of cooking food inside or outside of premises or on the property.
16. Blocking open motor-controlled lobby doors.
17. No animals or children under the age of 18 permitted on the job site.

**BRIEF DESCRIPTION OF WORK:**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**ASSISTANCE REQUIRED:**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**LIFE SAFETY SYSTEM TESTING OR ELECTRICAL SYSTEM TEST**

Date & time of scheduled inspectors test: \_\_\_\_\_

**BUILDING SYSTEM WORK REQUIRED:**

- Condenser Water System
- Heating Water System
- Domestic Water System HVAC
- Electrical System
- Life Safety System

**Other:**

**CONTRACTOR ACTIVITY:**

- Painting Drywall
- Soldering
- Electrical
- Tile
- Demolition
- Glass
- Sanding
- Drywall
- Welding
- Plumbing
- Doors/Locks
- Debris Removal
- Refrigeration
- Sprinkler
- HVAC
- Carpet
- Ceiling Tile
- Cabinets
- Framing

**Other:**

**TOOLS & EQUIPMENT TO BE USED:**

- Paint Sprayer
- Coring Equipment
- Carpet Seaming Equipment
- Oxygen & Acetylene
- Duct Cleaning Equipment
- Floor Cleaning Equipment
- Gasoline Powered Equipment
- Grinder
- Powder Activated Tool
- Welding Equipment
- Propane Powered Equipment
- Power Saw

**Other:**

**LIST MATERIALS & ISSUE MSDS AS REQUIRED:**

Paint Types: \_\_\_\_\_

Solvents: \_\_\_\_\_

Gases: \_\_\_\_\_

Adhesives: \_\_\_\_\_

Fire Retardants: \_\_\_\_\_

Other: \_\_\_\_\_

**CONTRACTOR INFORMATION:**

Company Contact Person & Title: \_\_\_\_\_

Phone Number: (\_\_\_\_) \_\_\_\_\_ Cellular Number: (\_\_\_\_) \_\_\_\_\_

Scheduled hours of work at the Property: \_\_\_\_\_

Contractor License number: \_\_\_\_\_

- *Please attach a list of references for past 2yrs projects with project locations and client contact information.*

**SIGNATURE:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

## **CONSTRUCTION RULES AND REGULATIONS**

- 1.** General contractor, contractors, subcontractors, suppliers, material men, etc., shall be advised of the following building rules and regulations concerning their proper conduct within the building. All referenced material, labor, services, taxes, after hours costs, shipping, permits, fees or construction and/or other reference processes performed by Contractor shall be referred to hereinafter as "work."
- 2.** If you have any questions relating to these rules and regulations, please contact the Building Management Office at (925) 556-6630.
- 3.** The following rules and regulations contained herein are to not to be construed as relieving the Contractor from liability for any damage caused by the contractor, its agents or employees thereof. All work in the building must be supervised by the Contractor at all times.
- 4.** The General Contractor is responsible to ensure all subcontractors and suppliers read and understands these rules and regulations. Ignorance of same is not a waiver of liability or responsibility. Failure to comply with any of these rules may result in your contract being canceled and/or your people being asked to leave the job site. The General Contractor is responsible for the conduct of his subcontractors. The signature block on the last page of this document acts as the written record that a representative of the building management office and the Tenant have executed acceptance of all requirements listed herein.
- 5.** It is the intent of these Rules and Regulations to cover all applicable labor material and equipment necessary to completely finish the work described by the building management office in a workmanlike manner.
- 6.** Any Tenant Improvement project that adds removes or relocates building structural elements, walls, doors, plumbing, HVAC or electrical circuits and fixtures shall begin by Tenant or Contractor making digital copies of the latest plans available for the entire floor where the work shall occur. Tenant or Contractor must consult with Landlord's representative on naming and numbering on project drawings. Permit drawings shall be based on the actual building drawings and shall be shaded or otherwise 'grayed out' in all areas unaffected by the work. It shall be the responsibility of the Tenant or their Contractors to review actual site conditions and revise the drawings, if necessary, to reflect current wall layouts, dimensions, pipe and duct runs and electrical, controls and fire/life-safety system locations and circuiting, within the area(s) of the proposed work. These plan revisions may occur before permitting or during the work.
- 7.** At completion of any project requiring permit drawings; it shall be the responsibility of the Tenant or their Contractor to deliver to Landlord two (2) rolled sets of 'As-Built' black-line drawings of any new work, which may include Structural, Architectural, Mechanical & Controls, Electrical, Plumbing, Fire Sprinkler and Fire Alarm. Printed Mechanical, Electrical and Plumbing drawings shall not include ceiling grid. The intent is that these new drawings shall replace the current building drawings. New drawings shall show the entire floor: new work and existing conditions in the areas unaffected by the work, with no exclusionary shadings or highlight, for each floor where the work occurred. Final, As-Built drawings shall include a small inset view showing the area of the latest work. Drawings shall be no larger than 30 inches by 42 inches wide, and no smaller than 26 inches by 36 inches

wide. Two (2) digital copies of all As-Built drawings shall also be delivered on compact disc, in both the original CAD file format and in Adobe PDF.

- 8.** Where the Contractor wishes to make substitutions for items specifically called out on drawings, specifications, etc., Contractor shall submit in writing to the architect and building management: samples, technical data, performance data, etc., as required. Such material shall be submitted far in advance to allow time for review and written approval without causing any work delay. Any substitutions used without written approval shall be subject to rejection and replacement at Contractor's expense. Contractor shall pay for cost of any change in work due to improper checking and coordination by Contractor. Contractor shall also be responsible for all additional costs in the re-coordination of trades and replacement of material. Building Management Office will have a current and complete set of working plans and specifications at all times and will be notified of any modifications during construction.
- 9.** Prior to starting any work in the building, Contractor, at its sole expense, must have a current certificate of insurance on file with the building management office naming Dublin Corporate Center Owner LLC and Hines Interests Limited Partnership as additional insured. Insurance requirements are listed in detail in Exhibit A. The building management office may increase the required insurance limits based on the scope of work being performed. Contractor must also keep current certificates of insurance for all subcontractors. Any contractor or subcontractor found not having a current insurance certificate on file will be asked to leave the premises immediately.
- 10.** Contractors working in or about the property must have prior written approval from the Building Management Office before any type of work may commence. A list of subcontractors must be given to the building office. Any persons not on the approved Contractor list will be denied access to the property. This list will include phone numbers and contacts for each subcontractor.
- 11.** An initial walk through of the job will be conducted prior to construction. The contractor, building engineer and construction manager will review rules and regulations, as well as check for existing conditions on the premises.
- 12.** Prior to the commencement of work, Contractor will provide the building manager with a projected schedule showing the major items of work with the dates of their start and finish with significant milestones for management to inspect. A projected date of final completion shall also be included. This date shall be the time when all trades have completed their work, the suite has been certified by the City as ready for occupancy, and the job is ready to be turned over to the building manager and/or tenant.
- 13.** Contractor and subcontractors shall provide the Building Management Office with Safety Rules and Regulations for the project. All contractors and subcontractors are responsible for monitoring their safety programs and for conducting safety meetings.
- 14.** With regard to Hazardous Communication, Contractor shall provide MSDS to Building Management Office prior to or during beginning phase of construction, i.e. demolition.
- 15.** Contractor acknowledges that they have been informed of the location of the MSDS sheets for chemicals to which they and their subcontractors may be exposed to and emergency response procedures in the event of an accident. Contractor further



agrees to be responsible for communicating this information to their subcontractors and employees.

- 16.** Contractor and subcontractors shall maintain an Injury and Illness Prevention Program (IIP). Proof of compliance with Cal OSHA rule SB198 shall be maintained and followed. All employees on the job, regardless of whose payroll they are on, shall be required to respond to safety instructions from the contractor. Persons who do not respond will be removed from the job and not allowed to return.
- 17.** All contractors must be licensed in the State of California and have work experience in commercial properties. Written documentation/certification and previous job references can be required by the Building Management Office prior to the commencement of any type of work.
- 18.** Permits must be obtained from the City Building Department prior to commencement of Work. Permits must be posted on the job site in accordance to the governing body. Approval of drawings, details, schedules, etc., by the Building Management Office shall not relieve the contractor from the responsibility for compliance with local, county, state or federal laws, rules, ordinances, or any other authority having jurisdiction.
- 19.** All contractors will keep the premises and improvements free of all liens arising out of or claimed by reason of any Work performed, materials furnished or obligations incurred. Contractor is responsible for the payment of all bills or labor and materials furnished by, or to the subcontractors and him on this project. Contractor will deliver to the Owner a Waiver of Liens from himself and each of his subcontractors, if any, and at such time he will certify that he is submitting such lien waivers for all subcontractors involved.
- 20.** No one shall be allowed to endanger the buildings, its premises, or its occupants in any manner whatsoever. If such a situation occurs, the contractor, subcontractor, supplier, etc., shall immediately take steps to correct and eliminate the hazardous condition. In the event contractor's personnel fail to perform in a satisfactory manner, the building management reserves the right to immediately take the necessary steps to remedy the situation at the contractor's expense.
- 21.** Good business/professional conduct will be maintained by all contractor and subcontractors' personnel while they are on the property. Personnel are to be properly dressed for the environment they are working in as well as the job being done. Only fit and skilled personnel are to be employed. Respect must be shown to the building tenants at all times. Rude and obscene behavior, including foul or abusive language, will not be tolerated. Offenders will be asked to vacate the premises immediately and will not be allowed to return at any time.
- 22.** Contractor and subcontractors are not permitted to post any sign on the job site advertising their company names.
- 23.** Contractor and subcontractors personnel will enter and exit through a designated entrance. Use of the building main floor, lobbies or elevator lobbies is prohibited for storing materials (even on a temporary basis). Specific building moving and freight policies are established and must be reviewed with Building Management Office.
- 24.** Prior to the commencement of the project, the Building Management Office must approve hours in which the Work will begin and end each day. No variation to the

agreed hours will be allowed unless authorization is obtained by the Building Management Office. The Contractor's Rules and Regulations as stated herein will further limit hours. Building Management Office must be notified of "after hours" work in advance. All contractors working over the weekend and after the normal hours shall provide the management office with a list of workers prior to the worker being on site or they will be denied access. This list should also include an estimated time the contractors will be working, the location of the work and a 24-hour emergency contact for the Supervisor of the Work.

- 25.** Masonite must be laid to protect floor finishes for deliveries. It is the contractor's responsibility to keep public areas clean at all times. Extension cords, pipe conduit and other rolling materials must be secured immediately to prevent walking/tripping hazards to other trades.
- 26.** Elevator must be protected against Contractor use prior to demolition and through completion of project.
- 27.** No construction waste and debris will be placed in the building dumpster. The contractor will provide for the removal of all waste and debris at his own expense. If a dumpster is required, the location shall be placed in the parking lot authorized by the building manager and will meet the management's standards relating to safety and aesthetics. Contractor will keep the area around the dumpster neat and orderly.
- 28.** Construction personnel shall at all times maintain the highest level of project cleanliness. All construction debris shall be removed on a daily basis and shall never be allowed to produce a fire hazard. In the event contractor fails or refuses to keep the premise free of accumulated waste, the management office reserves the right to enter said premises and remove the debris at the contractor's expense. In addition, all public areas, i.e., corridors, restrooms, janitorial closets, etc., shall be maintained and kept free of construction debris, dust, etc.
- 29.** All light fixtures remaining in the space during construction shall be covered with clear plastic, affixed using 'painters' tape or another means to provide for easy, non-marring release. This is to minimize construction dust from collecting inside the fixtures and reflectors.
- 30.** All return air registers shall be covered with disposable polyester or fiberglass filter media material, affixed with 'painters' tape or other non-damaging means, to minimize construction dust entry into transfer ducts and the entire return air system.
- 31.** To the extent possible and allowable by code and the local authority, stairwell openings shall be temporarily covered with plastic sheeting, similar to an abatement containment 'flap', or curtains, to minimize dust travelling to other areas of the building. Such curtains shall be installed to allow free egress for emergency purposes and shall remain 'closed' when persons or equipment and materials are not passing through.
- 32.** Negative pressure shall be established in the areas of the work, if possible, by overriding HVAC controls and power exhaust, and/or by the Contractor installing a dedicated exhaust fan from the interior work areas to the exterior of the building or by utilizing a temporary connection to restroom exhaust ductwork.
- 33.** All carpeted corridors will be protected by carpet mask, flush with the base, from the point of entry to the job site to the restroom. Walk-off mats will be placed at all

locations where workers enter public areas of the building. These walk-off mats will be maintained and cleaned daily or more frequently if required so that construction material is not transferred to any other area of the building. Walk-off mats to be wetted and or provided with chemical discussed at Owners meeting, or shall be of the multi-layer 'sticky' type dirt trapping pads.

- 34.** Any flammable or hazardous materials (i.e., paint) may be stored on premises with permission of the management office who shall designate an area for storage.
- 35.** All electrical wiring shall be done per the National Electric Code (NEC). Any wiring installed by Tenant or Tenant's Contractor that does NOT conform to NEC standards shall be corrected at Tenant/Contractor's expense.
- 36.** All new, relocated or modified wall switch boxes for lighting shall have a neutral wire run from the fixture(s) served by the switchbox.
- 37.** All electrical panel labeling is to be performed in accordance with acceptable industry standards and all applicable building codes. The contractor must submit a typed electrical panel schedule to the building manager. All light switches, power receptacles and data/telecom wall plates shall be labeled with the proper panel and circuit. Data and telecom jacks shall be labeled per architectural plan room number and circuit number, at both the users' wall jacks and at the data closet patch panels or punch-down blocks (see the Building Engineer for acceptable labeling schemes).
- 38.** Electrical panels must be closed at the end of each working day. (Interior panels can be covered or barricaded). Doors to all electrical rooms must remain locked when not occupied or protected by barrier. No storage is allowed in an electrical room. Do not tape over locks to leave the door open or use any mechanical device to prop the door open.
- 39.** Prior approval is required from the Building Management Office for the following items:
  - a. Access to adjacent tenant areas, including tenants below the work areas, if applicable.
  - b. Drilling holes through concrete floors.
  - c. Setting anchors to any concrete wall or steel member.
  - d. Changing doors, hardware or key cylinder.
  - e. Installation of permanently affixed security devices.
  - f. Drilling fasteners into the exterior aluminum window system or to the ceiling T-BAR grids. Any holes in the exterior window system must be filled, patched, caulked and/or painted to meet building management satisfaction.
  - g. Alteration to any electrical circuit or water/sewer line.
- 40.** All safety equipment such as barricades, rigging, fire extinguishers, first aid supplies, etc., as may be necessary or required by any agency having jurisdiction shall be the sole responsibility and expense of contractor. All liability shall be the responsibility of the contractor.
- 41.** All contractors are to take precautions to prevent the accidental tripping of the fire alarm system. The smoke detectors must be covered during working hours and uncovered at the end of the day. The building engineer can offer instructions. False alarms will be fined as follows:
  - a. First Offense: \$200

- b. Second Offense: \$300
- c. Subsequent Offenses: \$500

Initial: \_\_\_\_\_

- 42.**No gasoline operated devices will be permitted within the building. All work requiring such devices will be by means of electrically operated substitutes.
- 43.**All approved gas and oxygen canisters shall be properly chained and supported to eliminate all potential hazards. At the completion of use, these canisters will be removed from the building.
- 44.**The Building Management Office will need 24-hour advance notice for the following work:
  - a. Domestic water
  - b. Sprinkler system work
  - c. Fire alarm or speaker
  - d. Electrical tie-ins to base building, sub panels located within the tenant premises, or the addition of equipment to any area other than the tenant's suite.
  - e. Any work that will take place outside the demised tenant space.
  - f. Any tie-ins that may affect other tenant spaces.

Note: If a building or utility alarm is turned off for contractor's work, the contractor must notify the Building Management Office upon completion so the system can be turned back on as soon as possible.

- 45.**Construction personnel are not permitted to block open stairway doors. These doors provide the fire protection required by code. Janitorial doors will be kept closed at all times on occupied tenant floors.
- 46.**No graffiti or vandalism will be tolerated. Any individual caught in the act shall be immediately removed from the premises and will not be allowed to return. All repairs will be at Contractor's expense.
- 47.**No tobacco smoking or chewing will be permitted in the building.
- 48.**Restroom usage for Contractors to be discussed with Building Management Office in advance of project commencement.
- 49.**Radios and other sound producing equipment will not disturb any tenants or be heard in the common areas of the building.
- 50.**Since work will occur while other businesses in the building are operating, noise is a major consideration. Excessive noise, which may disturb tenants, will force us to halt work temporarily. No hammer drilling, core drilling or any tenant disturbances will be allowed between the hours of 8:00 am and 5:00 pm, Monday through Friday, unless otherwise discussed and approved by Building Management Office. It is the responsibility of the Contractor to instruct all construction personnel that noise will be minimized at all times. The Building Management Office will determine acceptable noise level.

- 51.** Paint and Painting Precautions: Wet paint signs must be posted in all public areas when appropriate. All Contractors are to ensure that staff, tenants, and visitors are protected from harmful fumes and other potential negative reactions to populated areas while painting is in progress in the proximity. All paint containers will be clearly labeled, the MSDS must be provided. All warning information will be reviewed and adhered to by the painter/contractor. Precautions will be planned and implemented to assure ample ventilation and isolation is in place if selected paint is oil, latex, or petroleum based. Areas to be painted will be posted and the posting will include type of paint - oil, latex, or petroleum. Oil, latex, and/or petroleum-based paint will not be used in proximity to open flames or in areas where combustion may occur. When disposing of paint products, proper disposal and waste manifesting procedures will be followed.
- 52.** The odors which arise when various construction procedures are done can cause discomfort to the tenants of the building. The Building Management Office should be alerted to arrange for additional ventilation.
- 53.** Contractor will ensure the construction area is secured at the end of each work day.
- 54.** The contractor shall use reasonable measures to minimize energy consumption in the construction area when possible. The building will pay for normal electrical consumption during the construction process. All lights and equipment must be extinguished at the end of the Contractor's business day. In the event the contractor continues to leave lights and equipment on during off hours, the Building Management Office reserves the right to receive just compensation for excessive electrical consumption as it deems appropriate.
- 55.** No work is to be performed, nor materials stored in any area other than the suite under construction without prior written authorization from the Building Management Office.
- 56.** Rubber wheels are required on all vehicles transporting materials in the building.
- 57.** All equipment and material will be designed and attached for seismic loading in accordance with governmental agencies having jurisdiction over the work.
- 58.** General Contractor shall provide third-party (a company other than the mechanical contractor for the project) HVAC Air balancing for all zones affected by the work and hydronic balancing for any changes made to heating water systems. Test and Balance Agency shall be a certified member of the Associated Air Balance Council (AABC) with at least 5 years of experience in the testing and balancing of HVAC systems. Test and Balance Agency shall be regularly engaged and specialize in the testing and balancing of HVAC systems. Lead balancing technician shall be certified by AABC or NEBB. Testing and balancing shall be performed in complete accordance with the "National Standards for Total System Balance," as published by the AABC. The Test and Balance Agency shall assign personnel that have experience in projects of similar type and scope.
- 59.** Access to the Building Automation System, necessary for balancing work, shall be via a portable computer running the appropriate software for the building EMS.
- 60.** Contractor shall copy and post fire sprinkler shutoff instructions in main riser stairwells prior to starting demolition on building floors. Contractor shall instruct construction personnel in the emergency use of the building sprinkler valves.

61. Soldering, welding, brazing, and carpet seaming is not permitted without an Engineer on duty. The contractor must have a fire extinguisher within reach when welding, brazing or soldering. Flammable gas bottles shall be properly secured with chain. Hot work permit must be in place.
62. Where partitions are removed, all electrical devices and wiring must be removed back to the nearest junction box. Unused wiring, boxes, conduit, and mountings must be removed completely. Piping (waste, water, vent, condenser, sprinkler, heating) shall be removed to the riser or, if shared with another fixture, to the connecting branch. Valves with no downstream piping shall be plugged.
63. Any and all existing mechanical, electrical, plumbing system component not intended for reuse are to be removed completely to the source. Unused piping, conduit, etc is to be removed completely.
64. If non building standard light fixtures are to be used on a construction project, Contractor shall supply a multipack box or case lot of lamps to the Dublin Corporate Center Engineering Department for lamp replacement prior to Tenant move-in.
65. Portable AC units are only permitted to be used in an emergency situation. The Building Management Office or Engineering Department must be contacted for the temporary use of portable AC units.
66. All HVAC equipment in the remodeled area shall be installed, fully operational, and calibrated prior to tenant occupancy. The HVAC system must be balanced, and copies of the air balance report, water balance report, and copies of the manufacturers HVAC equipment manuals must be issued to the Engineering department.
67. Contractor shall bring any conflicts between the requirements in this Remodeling Guide and project construction documents to the attention of Building Management prior to proceeding with construction.
68. The general contractor shall staff the construction site with a supervisor while any construction work is being performed.
69. Close out documents shall include the rolled drawings and discs mentioned in item #3 above, as well as two (2) binders with the following information:
  - a) Copies of all permits.
  - b) All finish, fixture and installed equipment specifications and warranties.
  - c) Complete list of all finish submittals, including product data, quantity, color, and manufacturer.
  - d) The air balance report.
  - e) As built mechanical drawings showing all new construction and installations.
  - f) A list of all the sub-contractors responsible for installing or applying structural, mechanical, electrical, plumbing, equipment, fixtures and finishes.

Architect, Contractor or Tenant shall also provide one set of 24" x 30" 'Finish boards' of the finishes used for the project, with samples and names of floor coverings, wall base, paint, wall vinyl, cabinet and door veneers and/or laminates on front of boards, and manufacturer specification information on back of boards. Please see Landlord for standard building options and sample boards.

### **Required Materials prior to construction:**

- Project specifications
- Project Schedule
- MSDS Sheets
- Contract Agreement between Tenant and General Contractor
- Project Directory
- Certificates of Insurance from General Contractor and all Sub-contractors and Tenant Vendors
- Contractor License number and W9
- List of all sub-contractors
- Emergency contact number from GC and all sub-contractors
- Initial life safety submittal
- Architectural blue prints
- HVAC blueprints
- Mechanical blueprints
- Plumbing blueprints
- Sprinkler drawings
- Electrical blueprints
- Life safety blueprints
- Latch set and key cylinder count and layout (required six weeks prior to occupancy)

**Required materials at tenant occupancy:**

- Architectural "as built"
- Mechanical "as built"
- HVAC "as built"
- Plumbing "as built"
- Sprinkler "as built"
- Electrical "as built"
- Approved life safety submittal
- Life safety "as built" approved set
- Air balance report
- Water balance report
- DDC graphic completion and sign off from Chief Engineer

**STRUCTURAL REQUIREMENT**

The floor load design is listed below. Please keep in mind that high-density file cabinets create a substantial load and location must be verified by tenant's structural engineer prior to installation. If a tenant has an additional load requirement, the building management office must review the proposed upgrade with the tenant's structural engineer prior to approval. These limits should be considered prior to the use of heavy contractor equipment on the property.

- 1<sup>st</sup>-4th Floor 80 psf  
**psf = pounds / square foot live load**

**LIFE SAFETY**

All Life Safety/Fire Alarm work shall be by the Life Safety system provider for the building and shall comply with all applicable city and state codes.

Pyro-Comm, Kim Tamayo  
10966 Bigge St. San Leandro CA 94577  
(510) 277-2646



## **HAZARDOUS COMMUNICATIONS**

The Engineering staff at Dublin Corporate Center is responsible for hazardous materials safety management and general safety practices. Our Injury Prevention Program (CAL/OSHA) is designed to assure that all staff members as well as outside vendors/contractors working on our site, have a safe working environment. Your company must also have its' own Injury Prevention Program to comply with CAL/OSHA requirements.

## **INDOOR AIR QUALITY**

First and foremost the goal is to provide a healthy and comfortable environment for our tenants. We require quality design standards from engineers, architects and contractors building space for our tenants.

The mechanical system design for all building areas should be to provide sufficient outdoor air ventilation rates to meet the guidelines set forth in ASHRAE Standard 62-1989, Ventilation for Acceptable Air Quality and ASHRAE 55-1992, thermal Environmental Conditions For Human Occupancy.

## **WATER RESPONSE AND MOLD PREVENTION**

The first priority when mold is discovered is to promptly notify the building management and engineering office. Since the discovery of mold is a serious concern, the matter must be dealt with discreetly as a high degree of misinformation regarding the subject can cause undo responses if not communicated and dealt with properly.

## **HEATING VENTILATION & AIR CONDITIONING**

### **Base Building Systems:**

1. Air Systems: The base building air system consists of four Trane 105 ton DX boxcar air conditioning units M# SXHGD11 located on the roof. Each unit has the capacity of delivering 43,203 CFM with a minimum of 4,515 OSA and 4 stages of cooling. This calculates to 43,203 available CFM to each floor and any additional equipment added to system should be sized correctly not to exceed the max available CFM. The supply air reset can vary from 55deg to 65 deg air depending on the average building temperature. Each building has incorporated logic control for morning warm up, supply air reset, and after hours phone override for tenants. The typical building duct static can reset based on building demand from .75in wc. to 1.5 inches of w.c.
2. Boilers: Each base building heating perimeter heating systems consist of one 3 million BTU low Nox condensing boiler and 2 hydronic pumps to distribute the water to each floor. A total of 35 GPM is the max for each floor and any additional equipment added should be calculated with the current demand and not exceed the total of 35 gpm available per floor.
3. Condenser Water System: Currently the only building with available condenser water is 4160. The base building condenser water system consists of an open loop circuit cooling tower and pump located on the roof. Condenser water is supplied down a vertical riser in the west shaft of the building. Condenser water supply and return risers are available with valved connections for tenant provided heat pumps. New copper vertical piping for condenser water will be required for any addition equipment and all associated cost will be part of construction cost. The current tower is a 90 ton tower with 45 tons of cooling

currently connected. If any water source equipment is going to be speced for 4160 please be advised there is only limited capacity of existing tower. There are no chilled water systems in the building. Base building condenser water pumps operate 24/7. Tenants will be billed back for condenser water. In the event of a shutdown for emergency repair or MTC it is the tenants' responsibility to provide alternative means to cool their reflective space. Landlord will provide a 72 hour notification of any planned shutdown.

### **Scope of Work:**

1. General: The scope of HVAC work shall be based on the new layout, alterations and improvements of the tenant space. However, a minimum HVAC scope of work shall include all the functions outlined below.
2. Design and Drawings: Calculate cooling and heating loads and prepare design drawings based on the new layout of the tenant space.
3. Demolish and remove from premises all items that are not to be reused in the new design. Provide separate demolition plans.
4. Reroute existing branch ducts and/or provide new duct distribution network based on the new space layout. Main base building outside-air duct loop shall not be altered or rerouted unless approved by the Building Management in writing.
5. Exhaust from the tenant space requiring termination to the outside of the building shall be approved by the Building Management. Plans showing the complete exhaust duct routing and termination point shall be submitted to the Building Management office for approval
6. All vertical exhaust ducts shall be in spiral duct.
7. If total amount of exhaust CFM per floor for kitchen or above base areas should reach or exceed 500 CFM shut down control during non business hours should be provided.

All termination points on roof for exhaust should be reviewed and approved by Chief Engineer.

### **CFC MANAGEMENT**

We are committed to reducing the emissions of refrigerants while servicing, maintaining, repairing or disposing of air conditioning or refrigeration equipment. Contractor must comply with Section 608 of the Clean Air Act.

## **Ductwork:**

### **Air Outlets**

1. Supply Air Outlets:  
Air outlets shall be 2 ft. x 2 ft. 4 way adjustable perforated face ceiling diffusers, Titus model PMC or similar.  
Linear slot diffusers may also be used if required by architectural design.
2. Return Air Outlets:  
All new return air outlets shall be 2 ft. x 2 ft. perforated face ceiling grilles with 22" x 22" neck. All new grilles shall be equal to Titus model PAR. All new and reused perforated face grilles shall be provided with "mushroom cap". Ducted lined boots, colored black, may be used where the tenant requires sound attenuation.

### **Duct Specialties**

1. Flexible duct connections shall be similar to Ventfabrics or equal. Install at Heat Pumps and exhaust fans to maintain not less than 2" metal-to-metal separation.
2. Turning vanes shall be double thickness and airfoil type.
3. Duct access doors shall have hinges and latches and shall be adequately leakage rated based on the pressure in the duct.
4. Concealed Damper Regulators shall be similar to Ventlock model 677 or equal with mitergears and rod attachment.

### **Dampers**

1. Balancing Dampers shall be as follows:
  - A. Single or multi-blade balancing dampers constructed per SMACNA/ASHRAE Recommendations. Install on all branch ducts to facilitate proper air balancing.
  - B. Provide hand locking quadrant. On insulated ducts hand quadrant shall be elevated with help of brackets. Provide ribbon at each damper for easy identification.
2. Fire Dampers shall be as follows:
  - A. California Fire Marshal approved, UL Listed.
  - B. 20 gauge frame construction.
  - C. Ruskin model DIBD2 Style B or equal.
3. Combination Fire/Smoke Dampers (FSD) shall be as follows:
  - A. California Fire Marshal approved, UL listed per UL 555 (1-1/2 hour fire damper) and UL 555S leakage Class I and 350°F elevated temperature rating.
  - B. Heavy 13 gauge equivalent frame construction.
  - C. Low pressure drop airfoil or single blade.
  - D. Ruskin model FSD60 or equal.
  - E. Electric actuator, power open - fail close type, heavy duty, low noise and non-stall type. FSD shall incorporate a Firestat.
  - F. All FSD's shall be installed with remote position indicator light plate. Plate shall be mounted above the ceiling adjacent to the FSD. In IT rooms and/or utility rooms mount the plate affixed to the ceiling tile.

### **Heat Pumps (Water Source)**

1. Approved Manufacturers are Mammoth, Trane, and Climate Master. (Air-cooled, domestic water or non-recirculating type condensers are not allowed.)
2. Factory-assembled packages are to be completely wired and charged with refrigerant requiring only power, control and piping connections. Include 1" throwaway filters and extended drain pan.
3. Ratings shall be as follows: UL Listed, ARI certified, to meet Title 24 energy regulations.
4. Sound power levels shall be selected to conform with ASHRAE guidelines for office occupancy.
5. Programmable thermostat shall be provided by AC unit manufacturer integral with the unit.
6. For condensate drain use Little Giant, WW Grainger No. 2PO96 condensate lift pump, high-head, self-contained removal pump with safety switch.

### **Condenser Water Circulating Pumps**

1. Use Bell & Gossett or Grundfos in-line pumps. Pumps shall be closed-coupled, 1750 RPM, bronze fitted or all bronze construction. The pump internals shall be capable of being serviced without disturbing piping connection. Use for condenser water piping.

### **Exhaust Fans**

1. Use Penn-Zephyr model TDA (ducted at both ends) or similar ceiling exhaust fans with local on-off switch or electronic volume regulator.

### **Pipe and Pipe Fittings**

1. All piping shall conform with ASA safety code and be free of all defects. All pipe must be manufactured domestically in the USA.
2. For Condenser Water use:
  - A. Type "L" hand drawn pressure pipe copper with 95/5 or other lead free solder and wrought copper fittings.
3. For Condensate Drain Pipe use:
  - A. Copper type M, ASTM B88, wrought copper fittings, soldered joints.

### **Valve and Piping Specialties**

1. All valves and piping shall be domestically manufactured and shall bear a "made in USA" stamp.
2. Minimum pressure rating on all valves and piping specialties shall be 150 psi.
3. Dielectric Unions shall be as follows:
  - A. Dielectric fitting shall be Victaulic Dielectric Waterway, style 47.

4. Valves shall be Crane, Stockham and Jenkins.
  - A. Hand valves ½" through 2" are to be ball valves, threaded, 2-1/2" and above are to be butterfly, lug type with infinite throttling and memory stop handle.
  - B. Balance valves ½" through 2" are to be Ball valves, 2-1/2" and above are to be plug valves.
  - C. Flow Balancing Device is to be Bell & Gossett circuit setter with additional ball type shut off valve ahead of circuit setter and y strainer for isolation during service.
  - D. Pump Discharge Check Valve is to be Mueller or approved equal.
  - E. Thermometers and Wells are to be Weksler Type AF with 30 to 150 degrees scale.
  - F. Pressure gauges are to be Weksler Model BABP or equal, 3-1/2" diameter.
  - G. For Temperature and Pressure Test Station use Peterson Engineering Company, 1/4" or ½" MPT "Pete's Plug" with solid brass fitting cap.
  - H. Air Vents are to be Lunkenheimer #1778 - 3/8" manual.
  - I. Strainers are to be Muessco, Armstrong "Y" pattern with blow-off hose valve and hose adapter.
  - J. Flexible pipe connectors at pumps (required only for pumps with motors larger than 2 HP) are to be Mason MFTNC.

### **Design Guidelines**

1. All perimeter corner offices shall have their own dedicated thermostatically controlled independent zone.
2. No more than 5 private offices with the same solar exposure (or interior office) shall be combined into one zone.
3. Perimeter offices with different solar exposures shall not be combined into one zone.
4. All large (seating 8 or more occupants) conference rooms shall have their own dedicated thermostatically controlled independent zone.
5. Large or heavy-use copy rooms shall have their own dedicated thermostatically controlled independent zone. In addition, ceiling plenum mounted exhaust fan shall also be provided.
6. Perimeter VAV zones should all have discharge air sensors installed no closer than 5' away from discharge of air flow across heating coil.
7. All perimeter private offices air distribution designs should be layed out as close to possible with supply air registers no more than 4' away from perimeter window line and return grill located near door and thermostat. Not causing short cycling of air.

8. In multiple tenant floors do not cross-zone between tenants. Tenants shall have their own dedicated zones.
9. Kitchen/break rooms shall be provided with ceiling mounted exhaust fans.
10. Provide adequate number of return air grilles throughout. Allow for free passage of return air above ceiling to the mechanical shaft. If any area is enclosed by full height (slab-to-slab) partitions provide acoustically lined sheetmetal transfer air ducts. Transfer air duct shall be sized at no more than 350 feet per minute (FPM).
11. Provide adequate number of supply air diffusers for uniform air distribution. Single supply diffuser shall supply no more than 450 CFM of airflow.
12. Install air/water system to conform with ASHRAE recommended noise criteria for private offices. The noise criteria shall be based upon the finishes of the actual furnishings in the tenant space (partition, floor, furniture type).
13. Provide 24-hour cooling for the computer/IT rooms. Small IT rooms with moderate cooling load, if not independently cooled by Heat Pump, shall incorporate a thermostatically controlled ceiling mounted exhaust fan.
14. Do not run water lines above computer or other critical areas/rooms.
15. All perimeter VAV zones (existing) with single row heating coils must be evaluated and considered for replacement with 2 row heating coils. This finding must be reported to property management and chief engineer prior to completion of the project.
16. All mechanical design will be required to meet current California title 24 commercial HVAC requirements.

### **Heat Pump Installation**

1. Heat Pumps shall be installed above non-critical areas and above readily accessible ceilings. Provide adequate access for filter removal, inspection of moving parts, checking of belt tension and general servicing. Units shall be supported with vibration isolation hangers and shall be seismically braced. Use Mason Model 30N vibration isolators. Refer to installation detail at the end of this section. Pipe condensate drain line to condensate drain risers.
2. Heat pumps if mounted over areas where water leakage can cause expansive damage, a secondary drain pan should be provided under the unit to prevent damage due to condensate overflow. Secondary pan shall be adequately oversized to cover not only the entire area under the unit but also the area under the unit pipe connections as well. Also, drainpipe from this pan shall terminate at a location that can be readily observed.

### **Access Requirements**

1. Provide and coordinate installation of access panels required for maintenance and inspection of all valves, damper and equipment (including base building). Provide access panels for all items of equipment. Coordinate exact location and type of access door/panel with chief building engineer. Color code with building standard color pins all HVAC access locations.

2. All access points shall be provided to the satisfaction of the chief building engineer. Equipment shall be relocated (for easy maintenance access) and extra access points (panels, doors, etc.) shall be provided as required by the chief building engineer.
3. If equipment is installed without review approval by Chief Engineer it will be the right of the Chief Engineer to have the equipment removed or relocated at the cost of the contractor.

### **Controls**

1. Tenant owned Air conditioning/Heat pumps units shall be controlled by programmable thermostats provided by unit manufacturer. Thermostats shall comply with T24 requirements.
2. Duct smoke detectors shall be provided as required per code.
3. Dublin Corporate Center currently uses a Johnson Controls Metasys web based platform. The communication network that is currently in use is as follows:
  4. 4120- 1st and 2nd floor N2/ 3rd and 4th floor Bacnet.
  5. 4140- 3rd floor Bacnet/ Floors 1,2,4 N2.
  6. 4160- 4<sup>th</sup> floor Bacnet, floors 1,2, and 3 all N2.

Any newly designed VAV zones must be installed using Bacnet communication devices inclusive of supervisory controller.

- All graphics and floor plan/zoning design work should be approved by Chief Engineer prior to obtaining pricing for mechanical work.
- ALL terminal CFM parameters must meet the following criteria:
  1. Heating CFM must be set at 40% of max cooling air flow.
  2. Minimum CFM must be set at 15% of max cooling air flow.

## Commissioning

- Testing and balancing shall be performed by an AABC certified balancing contractor. Air Balance vendor must be approved by the chief building engineer.
- Verify all new and existing VAV terminal CFM Pitot Tube Traverse devices are calibrated correctly per respective commission tool prior to reading CFM values at VAV zones for commissioning.
- General Conditions- Prior to air/water balance, mechanical contractor should inspect all mechanical conditions of existing equipment inclusive of but not limited to inspection of main and branch duct work to verify no restrictions or leaks in air flow that may impact the performance of the VAV or reduce its ability to achieve desired air or water distribution requirements per design. Check operations of hot water valves and operators, verify correct water flow direction of heating coil, check that all required devices are adequately fastened to terminal box, all dampers and heating coils are free of dirt and or debris that may impact air flow or temperature differential across heating coil.
- Set all manual balancing dampers, valves, and balancing valves at 100%, open position. Verify all fire/smoke dampers to be open.
- Install all dampers and other balancing devices.
- General Contractor will be required to provide deficiency report based on these findings to Chief Engineer prior to closing the ceiling back up for inspection to allow time for approval of any repairs before occupancy date.
- Any changes or alterations to any zone ( walls moved or new walls) that uses existing VAV zoning should be re-calculated to verify existing VAV has enough capacity to provide adequate cfm/gpm to new design.
- All new CFM/GPM requirements for VAV zone as related to new or altered space plan must be available and provided to 3<sup>rd</sup> party balancing contractor at time of air and water balance.
- All DDC thermostats new and existing should be calibrated to +/- 1 degree at time of commissioning.
- Adjust all supply registers so they are not blowing straight down on the occupants and offer adequate air distribution.
- All DDC device addressing must match correct naming convention on final graphics.
- After all systems are complete and operating, the contractor shall submit to the chief building engineer complete preliminary air and water balancing report with correct addressing as related to final graphics per the criteria above and according to AABC National Standards, a copy of the handwritten test data to be used for final report submittal shall be forwarded to the chief building engineer 10 business day prior to tenant occupancy.



## **ELECTRICAL SYSTEMS**

These construction standards outline the design and construction guidelines applicable to all tenant modifications of Electrical systems of the building. All designs and construction must be based upon the criteria and constraints included herein and shall be performed in strict accordance with these standards.

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### **Electrical Base Building Systems**

1. Each floor houses 3 electrical rooms. The bus duct riser 480V service is stacked in the core of the building off the elevator lobby. The 208/120V transformers and panels are on each end of the building. One on the west end and one on the east end. Electrical room incorporates the following:
2. Building does not incorporate an Emergency Generator. Emergency lighting, including exit signs, are powered via Battery Packs.

### **Scope of Work**

1. General: The scope of electrical work for a tenant shall depend upon the actual alterations and improvements that have to be performed. However, a minimum scope of work for a typical tenant shall include all the functions outlined below.
2. Design and Drawings: Calculate electrical requirements and prepare new design drawings and Title 24 energy efficiency calculations based upon the proposed tenant layout. Use available power from base building system. Provide a key map on each drawing. Include electrical load schedule(s) and load summary. Obtain building permit for construction using the design drawings.

### **Design Criteria**

1. Do not distribute power from one floor to feed loads on another Building Management approval is required if under special circumstances loads are fed from different floors. In such case, equipment and panel schedules shall be clearly marked.
2. Do not connect more than 6 general purpose outlets on any 120 volt branch circuit.
3. Provide dedicated neutral for all 120 volt branch circuits feeding electronic equipment (computers, copiers, fax machines, printers, etc.).
4. Provide a dedicated neutral for each 120 volt dedicated branch circuit.
5. For excessive loads, such as in IT rooms, etc. tenant shall provide their own metered sub-panel and feed from floor panels and/or bus riser.
6. Perform any required core drilling/anchoring (and other noise, vibration producing activities) during non-business hours. X-ray and/or floor scan (chief engineer's option) is required prior to core drilling. Coordinate work with chief building engineer.
7. Provide emergency lighting to maintain a minimum of 0.5 footcandles.
8. Obtain approval from chief building engineer for the location of new transformer(s) prior to installation.

9. For 120/208 volt, 3 phase, 4 wire feeders serving branch circuit panelboards and computer distribution equipment, the neutral conductor shall have a calculated ampacity of not less than 150% of the phase conductor ampacity. The neutral conductor shall be considered a current carrying conductor for purposes of determining NEC derating factors.
10. When required by Lease to provide Energy consumption metering E-mon D-mon meters shall be provided. Installation and compatibility of the proposed system shall be coordinated with Building Management and Chief Building Engineer.
11. Maximum design load for new 120/208 volt panelboards: 80% Ampacity of overcurrent device feeding the panel.
12. Provide automatic shut off as required by CEC Title 24 requirements utilizing Building standard motion sensors.
13. All work shall conform to NEC and local codes.
14. Demolish and remove from premises all equipment, wire and raceway that are not to be reused in the new design.
15. Typical Standard (ring and string) data, voice, and electrical distribution to work areas when necessary are wall feeds, floor monuments, trenching. If alternatives are requested for on carpet or in carpet feeds a product called Connectrac is only acceptable.

Connectrac- [www.connectrac.com](http://www.connectrac.com)  
1350 Manufacturing Rd. Suite 103  
Dallas Texas  
1-877-480-5637

### **Submittals**

1. Prior to commencing any work, the electrical contractor shall assist the general contractor in submitting to the construction project manager's office all required documentation: Approved construction documents, construction permit, Fire Department review check, certificates of insurance indicating amounts of liability, property damage, worker's compensation coverage.
2. Electrical contractor shall submit a request and schedule for disruptions to buildings services.
3. Contractor shall review all equipment and material submittals prepared by his suppliers, mark copies as acceptable to him, and submit to the Architect. After Architect's approval submit two copies to the Owner's Representative.
4. Obtain all required city permits using the design drawings.
5. Submit 2 hard copies of the design drawings for Building Management's review and approval. Building management will provide their comments within 5 working days. Submission and acceptance of design documents shall take place prior to the start of construction. Final construction documents shall incorporate comments made by the Building Management. Design and Construction drawings shall be coordinated,

dimensioned, and indicate equipment, wiring, conduits, panel locations, transformers, etc. The drawing shall contain a key map of the floor with the tenant location and a load summary of electrical power used from the base building systems.

## **Telecommunications Management and Services**

1. All work relating to the telecommunications infrastructure shall be coordinated with the telecommunications management and services entity through the Building Management.

## **Bus Tap**

1. Whenever a bus tap is to be made, bus has to be de-energized. Coordinate with building chief building engineer for shut-down window allotment. All such activity has to be scheduled for afterhours or weekends.

## **PRODUCTS**

### **Conduit**

1. Electrical Metallic Tubing (EMT)

A. Description: ANSI C80.3; zinc-coated tubing with protective enamel coating on inside.

B. Fittings and Conduit Bodies:

- 1) ANSI/NEMA FB 1.
- 2) Concrete-tight steel or malleable iron, or pressurecast body with steel or malleable iron nuts.
- 3) Use compression type for 2 inch trade size and smaller, use compression or set-screw type for 2-1/2 inch trade size and larger.

2. Metal Conduit: Use in exposed dry and damp locations below switch height where conduit may be exposed to physical damage.

A. Rigid Steel Conduit: ANSI C80.1; threaded, hot-dipped galvanized, including threads, with protective coating on inside and outside.

B. Fittings and Conduit Bodies:

- 1) ANSI/NEMA FB 1.
- 2) Rigid Steel Conduit: Use threaded steel or malleable iron fittings.

3. Flexible Metal Conduit: Use for connections to lighting fixtures in accessible ceiling spaces, connections to equipment in dry systems and dry locations. Do not use under raised computer floors.

A. Description: Zinc-coated, interlocked steel construction.

B. Fittings: ANSI/NEMA FB 1; steel or malleable iron clamp or squeeze type, or pressure cast screw-in type. Do not use die-cast, set-screw, or sheet metal screw-in type.

4. Liquid Tight Flexible Metal Conduit: Use for connections to equipment in damp and wet locations.
  - A. Description: Galvanized interlocked steel construction with PVC jacket.
  - B. Fittings: ANSI/NEMA FB 1; steel or malleable iron, watertight type.

### **Fireproofing**

1. Material Manufacturer:
  - A. Nelson.
  - B. GE Silicones.
  - C. 3M.
2. Description: U.L. Approved Firestop material for cable and conduit penetrations. 3M's Fire Barrier Quick Pass Device may only be used for floor deck penetrations only.
3. Fire Rating: Re-establish rating of penetrated barrier.

### **Building Wire and Cable**

1. Description: Single conductor, insulated wire.
2. Conductor: Copper.
3. Insulation Voltage Rating: 600 volts.
4. Insulations ANSI/NFPA 70, Type THHN/THWN for sizes 2 and smaller, Type XHHW for sizes #1 and larger.
5. MC cabling is acceptable when used in concealed accessible areas and tenant sheetrock walls. Provide anti-short bushing at all connectors. Do not use MC cabling in core walls and for exposed work in unfinished areas. Also, MC cabling is not allowed in any core areas such, as Elevator Lobby, Restrooms, etc., for Life Safety devices and for homeruns/feeders.

### **Wiring Connectors**

1. Spring Wire Connectors: Corrosion-resistant, live-action spring in insulated shell, rated 105-degrees C.
2. Compression Connectors and Lugs: Circumferential (nonindenter) type.

### **Electrical Identification**

1. Nameplates: Engraved three-layer laminated plastic, white letters on a black background.
2. Wire and Cable Markers:
  - A. Use color coded conductors for branch circuit wiring.
  - B. Use plastic impregnated cloth or epoxy film markers, split sleeve or tubing type for feeders.
3. Use colored tape to identify conduit systems.

### **Dry Type Transformers**

1. Manufacturers: ITC type "R" or equivalent (if available) by General Electric, ITE, or Square D.
2. Dry Type Transformers: ANSI/NEMA ST 20; factory-assembled, air cooled dry type transformers; ratings as shown on the Drawings or as required for load served; designed for nonsinusoidal loads K-factor not less than thirteen (13). Derated standard transformers are not acceptable.
3. Insulation: UL class 220o C. with 80o C. temperature rise at rated KVA.
4. Winding Taps, Transformers Less than 15 KVA: Two 5 percent below rated voltage, full capacity taps on primary winding.
5. Winding Taps, Transformers 15 KVA and Larger: ANSI/NEMA ST 20.
6. Sound Levels: ANSI/NEMA ST 20.
  1. Ground core and coil assembly to enclosure by means of a visible flexible copper grounding strap.
  2. Mounting: Transformers 75 KVA and less shall be suitable for wall, floor, or trapeze mounting; transformers larger than 75 KVA shall be suitable for floor or trapeze mounting.
9. Coil Conductors: Continuous windings with terminations brazed or welded.
10. Enclosure: ANSI/NEMA ST 20; Type 1. Provide lifting eyes or brackets.
11. Isolate core and coil from enclosure using vibration-absorbing mounts.
12. Nameplate: Include transformer connection data, overload capacity based on rated allowable temperature rise, and inscription: "Suitable for non-sinusoidal current load with K-factor not to exceed 13".

### **Panelboards**

1. Manufacturers: A. GE
2. Enclosure: NEMA PB-1; Type 1.
3. Cabinet Size: 6 inches deep; 20 inches wide.
4. Provide flush or surface cabinet front with concealed trim clamps, concealed hinge and flush lock all keyed alike. Finish in manufacturer's standard gray enamel.
5. Provide panelboards with copper or tin plated aluminum bus, extending full height of panel. Minimum bus rating shall be 225 amps. Provide copper ground bus in all panelboards. Provide neutral bus with terminals for each circuit in the panel, including future circuits.
6. Minimum Short Circuit Rating: Meet or exceed fault current ratings. Field verify.
7. Molded Case Circuit Breakers: Bolt-on type ambient compensated thermal magnetic trip circuit breakers, with factory assembled common trip handle for multiple pole units.

Provide circuit breakers UL listed as Type SWD for lighting circuits. Provide UL Class A ground fault interrupter circuit breakers where required.

8. Provide lugs with approved connectors for size of conductors feeding panel. Provide double lugs and extra gutter space for parallel feeder conductors.

### **Enclosed Circuit Breakers**

1. Molded Case Circuit Breakers: NEMA AB 1.
2. Enclosure: NEMA AB 1, Type 1. Fabricate enclosure from steel, finish with manufacturer's standard enamel finish, gray color. Include provisions for padlocking.

### **LIGHTING FIXTURES**

1. **Standard 9ft ceilings-** Use (Manufacturer: Lithonia) 2x4 AL Series LED light Fixtures with lenses and lamps in standard pattern. Fixture and light switch quantity and placement to comply with Title 24 spacing requirements.
2. **Ceiling above standard 9ft-** Use direct/indirect standard output 4 ft LED HP-4 series, (Manufacturer: Finelite)
2. Use of non-building standard fixtures shall be pre-approved by the Building Management.

### **PLUMBING SPECIFICATIONS**

#### **GENERAL**

##### **Scope of Work**

1. General: The scope of plumbing work is to depend upon the actual alterations and improvements that have to be performed. However, a minimum scope of work for a typical tenant is to include all the functions listed below:
2. Contractor is to prepare design drawings based upon the proposed tenant layout. Contractor is to obtain building permit for construction using the design drawings.
3. Contractor is to reroute existing and/or provide new piping as required. Provide all seismic restraints required by Code, or this Specification, for all equipment, pipe and materials furnished under this Section. This Contractor is responsible for the design of the restraints and for proof of adequacy of the restraints.
4. Contractor is to add, relocate or remove existing plumbing fixtures. Install plumbing fixtures per California Code of Regulations, Title 24, Part 2, handicapped requirements.
5. Contractor is to review drawings with Building Chief Engineer prior to construction.
6. Contractor is to arrange for all necessary inspections, pay all fees for those inspections and turn over copies of all inspection reports and certificates to Building Management.

7. Contractor is to submit a request and schedule for disruptions to Building Management with a minimum of 48 hours advance notice.
8. Design Criteria:
  - A. Soil, Waste and Vent System shall be per California Plumbing Code (CPC) Latest Edition and applicable local regulations.
  - B. Water Piping: Size piping per CPC Latest Edition. Limit velocities 5 feet per second and friction loss to no more than 8 feet per 100 feet.
- A. The plumbing design drawings and calculations shall be signed by a State of California registered Mechanical Engineer.



## **Submittals**

1. Prior to commencing any work, the plumbing contractor shall assist the general contractor in submitting to the tenant's representative all required documentation: approved construction documents, construction permit, plan review check, certificates of insurance indicating amounts of liability, property damage, worker's compensation coverage.
2. Plumbing contractor shall submit a request and schedule for disruptions to buildings services.
3. Contractor shall review all equipment and material submittals prepared by his suppliers, mark copies as acceptable to him, and submit to the tenant's Architect. After Architect's approval, submit one set of approved documents to the tenant's representative.

## **PRODUCTS**

### **Piping**

1. Sanitary, waste/soil and vent piping aboveground, is to be of cast iron, standard weight, no-hub joint, with neoprene sleeve and stainless steel band.
2. Domestic water piping is to be Type "L" hard copper throughout.
3. Entire domestic water system shall be lead-free.
4. All pipes must be manufactured domestically in the USA.

### **Piping Accessories**

1. Clean-outs:
  - A. No-hub cast iron pipe cleanouts are to be permitted in horizontal drainage piping.
  - B. Contractor is to provide wall or floor covers for cleanouts in concealed piping.
  - C. Contractor is to provide polished chrome-plated escutcheons in finished rooms, and polished brass in other areas.
2. Fittings:
  - A. Fittings for use with sanitary waste/soil and vent piping are to be coated, cast iron, no-hub type with mechanical joints of stainless steel band with neoprene sleeve.
  - B. Fittings for use with domestic water piping are to be wrought copper solder joint ANSI B16.22.
  - C. Brass screwed fittings are to be Schedule 40, flat band, IPS with no

plain couplings permitted. Make joints in brass pipes without the use of lamp wick or filler except "utility compound" or Permacel Teflon tape may be applied to male threads only. All are to be reamed.

- D. Dielectric fittings shall be Victaulic Dielectric Waterway, style 47 or 6" long brass nipple, Schedule 40.

### **Valves**

1. Valves and valve construction shall be suitable for the pressure, temperature, and fluid quality of the service in which they are to be used. Approved manufacturers are Stockham, Apollo, Nibco and Jenkins.
  - A. ½" to 2" – Full Port Ball Valves; two-piece threaded.
  - B. 2-1/2" and Above - Gate Valves.
2. Vacuum breakers are to be Watts No. 800 or approved equal.

### **Water Heaters**

1. Hot water heaters are to be UL approved, rated at 150 psi, tankless, instantaneous type, flow switch activation, built-in temperature fail safe. Chromomite, InSinkEerator or approved equal.
2. Storage type water heaters, if used should floor mounted inside the cabinet incorporating 2" deep stainless Pan and an Expansion Tank. A.O. Smith or approved equal.

### **Garbage Disposal**

1. 3/4HP motor, shock absorbing bearing. InSinkEerator or approved equal.

### **Dishwasher**

1. Dishwasher should incorporate an in-built water heater. Asko or approved equal.

### **Insulation**

1. Materials shall be flame spread/smoke developed rating of 25/50 or less in accordance with ASTM E84, NFPA 255 and UL 723. Thickness shall be in accordance with Title 24 energy regulations.
  - A. Domestic hot water and refrigerated water mains and branches are to be fiberglass, rigid molded, non-combustible.
2. Insulation Jackets:
  - A. Domestic hot and refrigerated water pipes are to be all service 24 ASJ/SSL, fire retarding vapor barrier, factory applied, stapled.
3. Pipe Protection Saddles are to be Insul-coustic Div., Insul-Shield Model 704

or Pipe Shields, Inc., Model A1000 or A2000, or approved equal.

### **LOCKS AND HARDWARE**

1. Electrical and telephone closets are not keyed to the tenant space. These spaces contain sensitive and critical Building equipment and require authorization from the Building Office for entry.
2. Double doors equipped with an anti tamper metal strip or latch guard at the door edge must be equipped with a door coordinator to ensure that the doors close completely on Fire Alarm activation.
3. All magnetic latches, card access doors and magnetic door holders must be connected to the Building Life Safety System for release on floor fire alarm activation.
4. Door Hardware must be fire rated on fire rated doors. Door hardware must comply with current handicap regulations.
5. Construction plans including doors requiring card or key to exit a space require installation of electric locksets. Locksets will fail safe to the unlocked condition on power failure, and will be connected to the Life Safety System for automatic lock release on fire alarm activation.
6. New hardware must match existing building standard hardware in function and finish. Schlage ND series hardware.
7. All door hardware shall comply with all California Title 24 and Americans with Disabilities Act regulations.
8. Adjust or replace door closures as required to meet all ADA and California Title 24 requirements.
9. Sweep period of closures shall be adjusted so that from an open position of 70 degrees, the door will take at least 3 seconds to move to a point 3 inches from the latch, measured to the leading edge of the door
10. Maximum operating force for pushing or pulling open an interior door shall not exceed 5 lb. Maximum force for operating a stairwell fire door shall not exceed 15 lb. or as directed by a fire inspector.

### **WINDOW COVERINGS**

1. Vertical cloth blinds must match building existing material in size and color.

## **Project Closeout**

1. Prior to Building Management Office's final inspection and acceptance of the construction job, the contractor will be required to provide the following documentation to the Building Management.
  - a. Three (3) complete sets of operating and maintenance instruction bound in a hardbound binder and indexed.
  - b. Two (2) set of complete, reproducible as-built drawings. The drawing is to contain a key map of the floor with tenant location.
  - c. Water/Piping sterilization test reports and certificates.
  - d. All closeout documents listed above shall be submitted in Hard and Electronic (ACAD) format.

## **Inspection by Chief Building Engineer/Building Management**

1. The contractor shall notify the Building Management Office at least 48 hours in advance of completion of construction. A walkthrough and punch list shall be scheduled for the chief building engineer to review the installation for conformance with approved construction documents and Tenant Construction Standards.
2. A separate punch list shall be developed by the Tenant's design engineer/engineer-of-record prior to ceiling installation. Copy of the punch list shall be submitted to the Building Management. Prior to final completion and acceptance of the project the design engineer shall re-inspect and sign off the punch list.
3. Building Management shall have the right to inspect and test all tenant improvement work and require changes and corrections, which in its reasonable judgment are necessary or appropriate to bring such work (i) into compliance with the approved plans and specifications and related documents and (ii) into a first-class condition compatible with these standards and in order for building engineers to properly perform its required maintenance.

**EXECUTION PAGE**

By executing this Agreement, the Contractor represents that he has or will, prior to commencement of work, determine and verify all field measurements, field construction criteria, materials, catalog numbers and similar data. Contractor also agrees he has checked and coordinated all drawings, specifications, etc.

Contractor accepts and is willing to perform all work in a workmanlike manner and in accordance with industry standard practices. Any change orders, extra costs, time lines, or substantial completion dates based on drawings or changes will be brought to the attention of the Property Manager, Katy D'Albora ( [katy.dalbora@hines.com](mailto:katy.dalbora@hines.com)) and Chief Engineer Jeff Tucker ( [jeff.tucker@hines.com](mailto:jeff.tucker@hines.com)) and if not mentioned, it will be assumed that no extra cost is involved for making a change, deviation or omission from the original drawings, details or specifications.

The undersigned acknowledges receipt and acceptance of these Contractor's Rules and Regulations as stated. The undersigned Contractor takes full responsibility for:

1. Communicating these Rules and Regulations to all contractors' personnel and all subcontractors and their personnel.
2. Enforcing these Rules and Regulations to all contractors' personnel and all subcontractors and their personnel.

Signed by: \_\_\_\_\_ Date: \_\_\_\_\_  
**Contractor/Tenants representative- when applicable**

Title: \_\_\_\_\_ Company: \_\_\_\_\_

*Signed by:* \_\_\_\_\_ *Title:* \_\_\_\_\_ *Date:* \_\_\_\_\_  
**Property Manager – when applicable**

Accepted by: \_\_\_\_\_ Date: \_\_\_\_\_  
**Building Engineer**

**DUBLIN CORPORATE CENTER**

**SAFETY & TRAINING PROGRAM ACKNOWLEDGEMENT  
CONTRACTOR/SUBCONTRACTOR/VENDOR**

**TO BE ATTACHED TO EVERY CONTRACT, SUBCONTRACT AND VENDOR CONTRACT IN WHICH Hines Interests Limited Partnership IS ACTING AS THE MANAGING AGENT AND/OR IN WHICH Dublin Corporate Center Owner LLC IS THE CONTRACTING PARTY.**

Every Contractor, Subcontractor and Vendor who contractually agrees to provide services or supplies to Dublin Corporate Center of California must be in full compliance with the existing OSHA and CAL/OSHA requirements. This includes but is not limited to the following: (1) To maintain an effective Injury & Illness Prevention Program as set forth in Senate Bill 198; (2) To provide adequate safety and training programs to their employees including routine inspections of the equipment used in carrying out their contractual duties.

By signing below, the Contractor/ Subcontractor/ Vendor represents and warrants that they are in full compliance with OSHA and CAL/OSHA and maintain an effective Injury & Illness Prevention Program pursuant to Senate Bill 198. As such, the Contractor/ Subcontractor/Vendor agrees to indemnify and hold Dublin Corporate Center Owner LLC and Hines Interests Limited Partnership harmless from any and all penalties, violations, assessments or damages, monetary or non-monetary which result in the failure to comply with the above set forth regulations and representations.

Dublin Corporate Center reserves the right to cancel the underlying contract if any Contractor/Subcontract/Vendor breaches the above terms and conditions. The foregoing is agreed to and accepted.

**CONTRACTOR/SUBCONTRACTOR/VENDOR**

By: \_\_\_\_\_ Date: \_\_\_\_\_

Its: \_\_\_\_\_

Dublin Corporate Center

By: \_\_\_\_\_ Date: \_\_\_\_\_

Its: \_\_\_\_\_