

PLUMBING SPECIFICATIONS

COMMON RENOVATION REQUIREMENTS - PLUMBING

- REFER TO ARCHITECTURAL SPECIFICATIONS FOR PLUMBING FIXTURE SPECIFICATIONS.
- THIS PROJECT COMPRISES OF ALTERATIONS AND RENOVATIONS TO THE EXISTING BUILDING. THE EXISTING BUILDING IS CURRENTLY OCCUPIED AND THE PROJECT WILL PROCEED IN A MANNER WHICH WILL MINIMIZE ANY INCONVENIENCE TO THE BUILDING OCCUPANTS. COORDINATE THE TIME SCHEDULE WITH THE ARCHITECT AND GENERAL CONTRACTOR.
- PROVIDE ALL MATERIALS, EQUIPMENT AND LABOR NECESSARY TO COMPLETE THE WORK OUTLINED ON THESE CONTRACT DOCUMENTS. THE CONTRACTOR IS TO NOTE THAT THESE DOCUMENTS ARE DIAGRAMMATIC ONLY AND THAT FINAL PLACEMENT OF EQUIPMENT OR DEVICES IN THE FIELD MAY NOT DIRECTLY CORRESPOND TO THAT WHICH IS SHOWN ON THE DRAWINGS. IF A CONFLICT IN POSITIONING OCCURS THE CONTRACTOR IS TO NOTIFY THE ENGINEER IMMEDIATELY TO ASCERTAIN WHAT THE INTENT WAS BY THE DESIGN PROFESSIONAL. IT IS THE INTENT OF THE SPECIFICATIONS AND DRAWINGS TO CALL FOR FINISHED WORK, TESTED AND READY FOR OPERATION. ANY APPARATUS, APPLIANCE, MATERIAL OR WORK NOT SHOWN ON DRAWINGS BUT MENTIONED IN THE SPECIFICATIONS, OR VICE VERSA, OR ANY INCIDENTAL ACCESSORIES NECESSARY TO MAKE THE WORK COMPLETE AND PERFECT IN ALL RESPECTS AND READY FOR OPERATION AS DETERMINED BY GOOD TRADE PRACTICE EVEN IF NOT PARTICULARLY SPECIFIED, SHALL BE FURNISHED, DELIVERED AND INSTALLED UNDER THEIR RESPECTIVE DIVISIONS WITHOUT ANY ADDITIONAL EXPENSE TO THE OWNER.
- ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE LATEST EDITION OF ALL APPLICABLE STATE AND LOCAL BUILDING CODES INCLUDING THE NEW YORK CITY BUILDING, MECHANICAL, PLUMBING, FUEL GAS, ELECTRICAL AND ENERGY CONSERVATION CODE.
- THE FOLLOWING DEFINITIONS APPLY TO THIS CONTRACT:
 - FURNISH THE TERM "FURNISH" MEANS TO SUPPLY AND DELIVER TO THE PROJECT SITE, READY FOR UNLOADING, UNPACKING, ASSEMBLY, INSTALLATION, AND SIMILAR OPERATIONS.
 - INSTALL THE TERM "INSTALL" IS USED TO DESCRIBE OPERATIONS AT PROJECT SITE INCLUDING THE ACTUAL UNLOADING, UNPACKING, ASSEMBLY, ERECTION, PLACING, POSITIONING, ANCHORING, APPLYING, WORKING TO DIMENSION, FINISHING, CURING, PROTECTING, CLEANING, AND SIMILAR OPERATIONS.
 - PROVIDE THE TERM "PROVIDE" MEANS TO FURNISH AND INSTALL, COMPLETE AND READY FOR THE INTENDED USE.
 - REMOVE THE TERM "REMOVE" MEANS TO DISCONNECT FROM ITS PRESENT POSITION, REMOVE FROM THE PREMISES AND TO DISPOSE OF IN A LEGAL MANNER.
 - SUBSTITUTIONS: ALTERNATE EQUIPMENT OR MANUFACTURERS ARE REQUESTS FOR CHANGES IN PRODUCTS, MATERIALS AND METHODS OF CONSTRUCTION AS PROPOSED BY THE CONTRACTOR AFTER AWARD OF THE CONTRACT.
 - FINISHED: ALL ROOMS AND AREAS TO BE SPECIFIED TO RECEIVE ARCHITECTURAL TREATMENT AS INDICATED ON THE DRAWINGS. ALL ROOMS AND AREAS NOT COVERED, INCLUDING UNDERGROUND TUNNELS AND AREAS ABOVE CEILINGS SHALL BE CONSIDERED NOT FINISHED, UNLESS OTHERWISE NOTED.
 - SUBCONTRACTOR: THE TERM "SUBCONTRACTOR" MEANS SPECIFICALLY THE SUBCONTRACTOR WORKING UNDER THIS DIVISION. OTHER CONTRACTORS ARE SPECIFICALLY DESIGNATED "PLUMBING SUBCONTRACTOR," "GENERAL CONTRACTOR" OR SO ON. NOTE: TAKE CARE TO ASCERTAIN LIMITS OF RESPONSIBILITY FOR CONNECTING EQUIPMENT WHICH REQUIRES CONNECTIONS BY TWO OR MORE TRADES.
 - BUILDING: THE TERM "BUILDING" MEANS THE BUILDING STAFF AND THE MANAGING AGENT.
- INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS REQUIRED BY THE AUTHORITIES HAVING JURISDICTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ARRANGING FOR INSPECTIONS AND BEING AVAILABLE FOR INSPECTIONS BY THE AUTHORITY HAVING JURISDICTION.
- SUBMIT TO THE OWNER AN OFFICIAL CERTIFICATE OF INSURANCE FOR THEIR RECORDS.
- DO NOT BURN WASTE MATERIALS. DO NOT BURY DEBRIS OR EXCESS MATERIALS ON THE OWNER'S PROPERTY. DO NOT DISCHARGE VOLATILE, HARMFUL OR DANGEROUS MATERIALS INTO DRAINAGE SYSTEMS. REMOVE AND DISPOSE OF ALL WASTE MATERIALS, PACKAGING MATERIAL, SKIDS ETC. FROM THE SITE AND DISPOSE OF IN A LAWFUL MANNER IN ACCORDANCE WITH MUNICIPAL, STATE AND FEDERAL REGULATIONS.
- PROVIDE TEMPORARY HEAT, COOLING, HUMIDIFICATION, AND DEHUMIDIFICATION DURING CONSTRUCTION PERIOD AS REQUIRED TO MAINTAIN THE BUILDING TEMPERATURE ABOVE 50 DEGREES F, 30 PERCENT RH AND BELOW 90 DEGREES AND 50 PERCENT RH. PROVIDE TEMPORARY VENTILATION AS REQUIRED TO MAINTAIN TOLERABLE WORKING CONDITIONS IN RESPECT TO FRESH AIR, TEMPERATURE AND FILTRATION.
- PROVIDE FIRE STOPPING AROUND ALL MECHANICAL PENETRATIONS THROUGH FIRE RATED PARTITIONS. PROVIDE ASBESTOS FREE FIRE STOPPING SYSTEM CAPABLE OF MAINTAINING AN EFFECTIVE BARRIER AGAINST FLAME AND GASES. SYSTEM SHALL BE UL LISTED AND COMPLY WITH ASTM E 814.
- THE CONTRACTOR SHALL BE REQUIRED TO PROPERLY STORE MATERIALS AND EQUIPMENT SO AS TO AVOID THEFT OR VANDALISM. IF THEFT OR VANDALISM OCCURS, THE CONTRACTOR SHALL REPAIR OR REPLACE SUCH ITEMS AT THE DIRECTION OF THE ENGINEER.
- ACCESS DOORS SHALL BE PROVIDED IN CEILINGS, WALLS AND FLOORS AT ALL VALVES, CONTROL DEVICES, AND OTHER APPARATUS AND EQUIPMENT REQUIRING PERIODIC SERVICE AND INSPECTION. PROVIDE SHOP DRAWING SHOWING TYPE AND LOCATION WITH ARCHITECT AND ENGINEER FOR FINAL APPROVAL.
- SPECIFIC DIMENSION DETAILS OF ALL PENETRATION WORK MUST BE SUBMITTED AND INCLUDE FLASHING (UNTEL AND WATERPROOFING) PROCEDURES. NO ONE MAY PENETRATE THE EXTERIOR BRICK OR FACADE OF THE BUILDING WITHOUT SUBMITTING ALL THE PROPOSED PENETRATIONS AND OBTAINING APPROVAL FOR EVERY PROCEDURE.
- DEMOLITION WORK SHALL COMPLY WITH ALL BUILDING NOISE ABATEMENT REGULATIONS.
- NO ELECTRICAL JACK-HAMMERS AND OTHER SIMILAR IMPACT, PERCUSSION DEVICES MAY BE USED. SLICE HAMMERS ARE LIMITED TO THE SIZE THAT CAN BE USED WITH ONE HAND. ELECTRIC SAWS OR OTHER POWER TOOLS WHICH MAY CAUSE INDESTRUCTIBLE DAMAGE TO THE TENANTS MAY NOT BE USED WITHOUT THE PRIOR WRITTEN APPROVAL BY THE CORPORATION.
- THE BUILDING MAY AT ANY TIME RESTRICT OR PROHIBIT THE USE OF EQUIPMENT, MATERIALS OR PROCEDURES THAT ARE, IN THE CORPORATION'S SOLE OPINION, A NUISANCE, CAUSE EXCESSIVE NOISE OR MAY BE POTENTIALLY HARMFUL TO THE BUILDING OR ITS OCCUPANTS.
- FLOORS MUST BE KEPT PADDED DURING THE CONSTRUCTION PERIOD.
- NO CUTTING OR CHANNELING OF CONCRETE CEILING OR FLOOR SLABS IS PERMITTED UNLESS SPECIFICALLY NOTED ON THE PLANS.
- CONTRACTORS ARE RESPONSIBLE FOR THE PROTECTION OF THE INTERIOR WALLS OF THE ELEVATORS WELLS, E.G.: MASONRY, DROP CLOTHES, PLASTIC, ETC.
- THE WORK MUST BE CONFINED TO THE APARTMENT AND MUST NOT CREATE DUST, DIRT, OR ANY OTHER TYPE OF NUISANCE TO OTHER APARTMENTS OR COMMON AREAS.
- PRIOR TO ORDERING ANY MATERIALS AND EQUIPMENT, THOROUGHLY REVIEW THE SITE CONDITIONS TO DETERMINE IF ADEQUATE CLEARANCES AND ACCESS IS ALLOWED TO INSTALL THE COMPONENTS. ORDER EQUIPMENT BROKEN DOWN AS NECESSARY TO ALLOW FOR PROPER HANDLING THROUGH THE PROJECT AREA. PROVIDE ALL NECESSARY ALTERATIONS TO THE STRUCTURE OF THE BUILDING AS NECESSARY TO RIG THE EQUIPMENT IN PLACE. CAREFULLY INSPECT ALL BUILDING ELEMENTS PRIOR TO CUTTING OR DRILLING INTO WALL, FLOORS OR CEILINGS. PATCH AND PAINT SURFACES DISTURBED BY WORK UNDER THIS CONTRACT AS REQUIRED TO RESTORE THEM TO THEIR ORIGINAL CONDITION.

SPECIFIC INSTALLATION REQUIREMENTS - PLUMBING

- ELECTRICAL CONNECTIONS (UNLESS OTHERWISE SPECIFIED): ALL POWER WIRING SHALL BE FURNISHED AND INSTALLED BY ELECTRICAL SUB CONTRACTOR ALL POWER WIRING SHALL BE FURNISHED AND INSTALLED COMPLETE FROM POWER SOURCE TO MOTOR OR EQUIPMENT JUNCTION BOX INCLUDING POWER WIRING THROUGH THE STARTERS.
- WHEN SPECIFIED, ALL PLUMBING CONTROL WIRING, INTERLOCK WIRING AND EQUIPMENT CONTROL WIRING FOR THE EQUIPMENT FURNISHED UNDER THIS DIVISION SHALL BE PROVIDED IN ACCORDANCE WITH THE REQUIREMENTS OF DIVISION 16.
- PIPING AND FITTINGS: DOMESTIC WATER AND CONDENSATE PIPING SHALL BE COPPER TUBING TYPE L WITH COPPER OR BRASS FITTINGS. SOLDER FILLER METALS SHALL BE LEAD FREE. WASTE AND VENT PIPING SHALL BE HUBLESS, SERVICE WEIGHT, CAST IRON SOIL. SLOPE WASTE LINES BY A MINIMUM OF 1/8" TO 1/4" PER FOOT. NATURAL GAS PIPING SHALL BE SCHEDULE 40, CARBON STEEL PIPE, WITH THREADED JOINTS AND FITTINGS. REFER TO PLUMBING RISER DIAGRAMS FOR ADDITIONAL REQUIREMENTS. OFFSET VENT PIPING AT LAVATORIES TO ACCOMMODATE THE INSTALLATION OF MEDICINE CABINETS.
- THE CLOTHES WASHER SHALL HAVE A DEDICATED 2" VENTED STANDING WASTE LINE AND BRANCH LINE TO THE RISER. THE CLOTHES WASHER SHALL HAVE A PRESSURE TYPE VACUUM BREAKER AND A CHECK VALVE FOR BOTH HOT AND COLD WATER SUPPLY READY ACCESSIBLY TO THE BUILDING'S MAINTENANCE STAFF. SEPARATE SHUT-OFF VALVES TO THE CLOTHES WASHER SHALL BE TURNED OFF AFTER EVERY USE TO PREVENT HOSE RUPTURE (FLOODS).
- PIPING INSTALLATIONS: INSTALL UNIONS OR FLANGES IN PIPES ADJACENT TO EACH VALVE. CONTROL DEVICE AND AT FINAL CONNECTIONS EACH PIECE OF EQUIPMENT. INSTALL DIELECTRIC UNIONS TO JOIN DISSIMILAR METALS. INSTALL AND ANCHOR PIPING TO ENSURE PROPER EXPANSION AND CONTRACTION.
- PIPE HANGERS AND SUPPORTS SHALL MEET THE REQUIREMENTS OF MSS SP-96 AND SP-99 DEVELOPED BY THE MANUFACTURERS STANDARDIZATION SOCIETY OF THE VALVES AND FITTINGS INDUSTRY, INC. SUPPORT HORIZONTAL PIPING AT INTERVALS NOT EXCEEDING 12FT O.C. FOR COPPER, 8FT O.C. FOR COPPER TUBING SMALLER THAN 1 1/2", AND 10 FT O.C. FOR COPPER TUBING LARGER THAN 1 1/2". SUPPORT VERTICAL PIPING AT EVERY FLOOR OR CEILING PENETRATION.

CONTRACTOR SCHEDULING TESTING OWNER TRAINING

- THE CONTRACTOR'S CONSTRUCTION SCHEDULE MUST PROVIDE FOR NOTIFYING ENGINEER FOR WALK THROUGH FIELD OBSERVATIONS ONE WEEK PRIOR TO COMPLETING EACH OF THE FOLLOWING SEPARATE MILESTONES: FIELD OBSERVATIONS OF ALL PIPING, PRESSURIZING ALL PIPING SYSTEMS FOR LEAK CHECKS, SHOP DRAWING SUBMITTALS, COORDINATION DRAWING SUBMITTAL, AND AS-BUILT DRAWINGS DOCUMENTATION COMPLETED BY CONTRACTOR AND REVIEWED BY ENGINEER.
- PRE-FUNCTIONAL TESTING (MANUFACTURER START UP PROCEDURES): BOILERS, WATER HEATERS, STEAM SHOWERS, AND MEASURED TIME FOR EACH HOT WATER TAP TO DELIVER 110 DEG F. WATER.
- FUNCTIONAL TESTING: ALL APPLICABLE WATER TEST AND BALANCING, COMMON ALARMS, INCLUDING OPERATE PLUMBING FIXTURES AND REVIEW PRESSURE, FLOW, DRAINAGE, CONTROL, SYSTEM, AND HOT WATER TEMPERATURE MAINTENANCE SYSTEM.
- OWNER TRAINING: REVIEW GENERAL OPERATION OF THE FOLLOWING WITH THE OWNER. EQUIPMENT AND CONTROL OPERATION INCLUDING COMMON ALARMS, WATER MAIN AND GAS SHUT OFF VALVES, AND LOCATION OF O&M MANUALS.

