

PLUMBING GENERAL NOTES

1. ALL WORK SHALL CONFORM WITH ALL LOCAL, STATE, FEDERAL ORDINANCES AND BUILDING CODES GOVERNING THE INSTALLATION OF THE MECHANICAL SYSTEM. IF WORK IS LAID OUT, INDICATED SPECIFIED IS CONTRARY TO OR CONFLICTS WITH FIELD CONDITIONS, LOCAL ORDINANCES, BUILDING CODES OR REGULATIONS, THE CONTRACTOR SHALL REPORT IN WRITING TO THE ARCHITECT/ENGINEER BEFORE SUBMITTING A BID OR PROCEEDING WITH WORK. THE ARCHITECT/ENGINEER WILL THEN ISSUE INSTRUCTIONS AS HOW TO PROCEED.
2. THE DRAWINGS ARE TO BE CONSIDERED DIAGRAMMATIC, NOT NECESSARILY SHOWING IN DETAIL OR TO SCALE ALL OF THE MINOR ITEMS, UNLESS SPECIFIC DIMENSIONS ARE SHOWN, THE STRUCTURAL, ARCHITECTURAL AND SITE CONDITIONS SHALL GOVERN THE EXACT LOCATIONS. CONTRACTOR SHALL FOLLOW DRAWINGS IN LAYING OUT WORK, CHECK DRAWINGS OF ALL TRADES TO VERIFY SPACES IN WHICH WORK WILL BE INSTALLED AND MAINTAIN MAXIMUM HEAD ROOM, AND SPACE CONDITIONS AT ALL POINTS. COORDINATE LOCATION OF PIPEWORK WITH OTHER TRADES, PARTICULARLY WHERE PIPES RUN THROUGH STRUCTURAL ELEMENTS. PROVIDE ALL NECESSARY SLEEVES BEFORE CONCRETE IS POURED. WHERE HEAD ROOM, OR SPACE CONDITIONS APPEAR INADEQUATE, ARCHITECT/ENGINEER SHALL BE NOTIFIED BEFORE PROCEEDING WITH INSTALLATION. THIS CONTRACTOR SHALL, WITHOUT EXTRA CHARGE, MAKE FIELD MODIFICATION IN LAYOUT AS NEEDED TO PREVENT CONFLICT WITH WORK OF VARIOUS TRADES OR FOR PROPER EXECUTION OF THE WORK.
3. EXAMINE ALL DRAWINGS CAREFULLY PRIOR TO SUBMITTING A BID. CONTRACTOR WILL BE REQUIRED TO FURNISH, INSTALL AND/OR CONNECT WITH APPROPRIATE SERVICES ALL PLUMBING ITEMS SHOWN ON ANY OF THE ARCHITECTURAL, AIR CONDITIONING, ELECTRICAL AND SPRINKLER DRAWINGS WITHOUT ADDITIONAL EXPENSE TO THE OWNER. IF DISCREPANCIES, CONFLICTS, INTERFERENCE OR OMISSIONS OCCUR BETWEEN DRAWINGS, NOTIFY IN WRITING THE ARCHITECT/ENGINEER IN AMPLE TIME TO PERMIT REVISIONS BEFORE THE BIDS ARE SUBMITTED.
4. INSTALL MATERIALS AND EQUIPMENT IN A NEAT AND FIRST CLASS WORKMANLIKE MANNER. THE OWNER RESERVES THE RIGHT TO DIRECT REMOVAL AND REPLACEMENT OF ITEMS WHICH, IN HIS OPINION, DO NOT PRESENT A NEAT AND WORKMANLIKE APPEARANCE. REMOVAL AND REPLACEMENT IS TO BE DONE IMMEDIATELY WHEN DIRECTED BY THE OWNER IN WRITING, AT THE SOLE EXPENSE OF CONTRACTOR.
5. START OF WORK BY CONTRACTOR SHALL BE CONSIDERED AS ACCEPTANCE BY HIM OF ALL CLAIMS OR QUESTIONS AS TO SUITABILITY OF THE WORK OF OTHER TRADES OR OTHER CONTRACTORS TO RECEIVE HIS WORK. THIS CONTRACTOR SHALL REMOVE AND REPLACE, AT HIS EXPENSE, ALL MECHANICAL WORK WHICH MAY HAVE TO BE REMOVED BECAUSE OF INTERFERENCE WITH OTHER TRADES.
6. THIS CONTRACTOR SHALL OBTAIN AND PAY ALL INSURANCE, FEES, PERMITS, ASSOCIATION DUES, ROYALTIES AND TAXES OF WHATEVER NATURE SHALL APPLY TO HIS WORK. HE SHALL ALSO PAID ALL THE INSPECTION FEES AS MAY BE REQUIRED BY LAW OR ORDINANCE AND SHALL KEEP THE OWNER HARMLESS FROM ANY DAMAGE AND EXPENSE ARISING FROM ANY VIOLATION OF LAWS, RULES OR ORDINANCES.
7. DO A COMPLETE JOB, EVERYTHING CONNECTED, READY FOR USE.
10. AT COMPLETION OF JOB THE MECHANICAL CONTRACTOR SHALL GIVE THE OWNER AN AS-BUILT SET OF REPRODUCIBLE DRAWINGS SHOWING THE EXACT LOCATION OF ALL INSTALLATIONS.
8. PROVIDE MEANS "FURNISH AND INSTALL".
9. AS USED HEREIN, ALL STATEMENTS RELATED TO EXISTING FIELD CONDITIONS SHALL MEAN AN EXPRESSION OF THE CONSULTANT'S PROFESSIONAL OPINION TO THE BEST OF ITS INFORMATION, KNOWLEDGE AND BELIEF, AND DOES NOT CONSTITUTE A WARRANTY OR GUARANTEE BY THE CONSULTANT. THE CONTRACTOR SHALL VISUALLY INSPECT AND VERIFY ALL EXISTING FIELD CONDITIONS AS PART OF HIS/HER DUTIES AND NOTIFY THE DESIGN PROFESSIONAL, IN WRITING, OF ANY DISCREPANCIES.
10. CONTRACTOR SHALL VISIT THE SITE AND REVIEW ALL PERTINENT UTILITY DRAWINGS TO FAMILIARIZE HIMSELF WITH THE LOCATION OF ALL EXISTING AND/OR PROPOSED UTILITY STUB OUTS, PIPING, EQUIPMENT, ETC., AND MAKE DUE ALLOWANCES FOR ANY CONDITION AFFECTING HIS WORK.
11. ALL UNDERGROUND SANITARY & STORM DRAINAGE PIPING AND FITTINGS SHALL BE PVC-DWV (ASTM D-2665/D-2949).
12. ALL ABOVE GROUND SANITARY & STORM DRAINAGE BRANCH & VENT PIPES AND FITTINGS SHALL BE PVC-DWV (ASTM D-2665/D-2949), EXCEPT WHEN INSTALLED IN RETURN PLENUM, WHERE CAST IRON OR EQUIVALENT NON-COMBUSTIBLE PIPING MUST BE USED.
13. ALL UNDERGROUND WATER PIPING SHALL BE COPPER TYPE "L" (ASTM B-75). ALL ABOVE GROUND PIPING SHALL BE COPPER TYPE "TM" (ASTM B-75).
14. ALL HOT WATER PRESSURE AND TEMPERATURE RELIEF PIPING SHALL BE COPPER TYPE "L" (ASTM B-75).
15. ALL AIR CONDITIONING CONDENSATE DRAINAGE PIPING SHALL BE SCH. 40 PVC (ASTM D-2665), EXCEPT WHEN INSTALLED IN RETURN AIR PLENUM WHERE COPPER TYPE "DWV" OR EQUIVALENT MUST BE USED.
16. ALL PLUMBING FIXTURES SHALL BE PROVIDED WITH ALL NECESSARY ACCESSORIES SUCH AS STOP VALVES, "P" TRAPS, SPOUTS, P & T VALVES, ETC., AS REQUIRED. ALL EXPOSED PIPING AT FIXTURES AND EQUIPMENT SHALL BE CHROME PLATED BRASS PIPE OR TUBE. PROVIDE SHUT OFF VALVES AND UNIONS TO ALL FIXTURES, ETC., REQUIRING WATER SUPPLY. PROVIDE DIELECTRIC COUPLINGS AS REQUIRED. FOR ALL COPPER PIPING CONTRACTOR MUST USE 95/5 SOLDER. PROVIDE WATER HAMMER ARRESTORS TO EACH FIXTURE AS REQUIRED.
17. PROVIDE CLEANOUTS (WITH CHROME PLATED WALL OR FLOOR ACCESS FRAMES AND COVERS AS REQUIRED) AT THE BASE OF ALL WASTE AND/OR VENT STACKS. PROVIDE PITCH PANS & LEADS FLASHING FOR ALL SANITARY SYSTEM VENTS.
18. ALL HORIZONTAL WASTE PIPING SHALL BE SLOPPED AT 1/8 PER FOOT, UNLESS OTHERWISE NOTED.
19. FOR INSTALLATION OF ANY ROOF MOUNTED OR WALL MOUNTED EQUIPMENT REFER TO STRUCTURAL ENGINEERING DRAWINGS.
20. CONTRACTOR TO FIELD VERIFY ALL FIXTURES AND EQUIPMENT MATCHED ON PLANS AS EXISTING.

PLUMBING NOTES

1. RUN 1-1/2" PIPE @ 1/4" FT FIXTURE ARM.
2. RUN 2" PIPE @ 1/4" FT.
3. RUN 3" & 4" PIPES @ 1/8" FT.
4. PROVIDE CLEANOUT AT BASE OF EACH SOIL AND WASTE STACK.
5. SHOWERS & TUBS VALVES TO BE ANTI-SCALD TYPE.
6. INSTALL 1/2" CW AT RIGHT SIDE OF FIXTURES. INSTALL 1/2" HW AT LEFT SIDE OF FIXTURES PROVIDE WATER HAMMER ARRESTOR.
7. DOMESTIC HOT WATER AND RECIRCULATING PIPING SHALL BE INSULATED WITH INSULATING MATERIAL HAVING A CONDUCTIVITY BETWEEN 0.24 AND 0.28 [BTU-IN/(H-FT²-°F)] INSULATION THICKNESS SHALL BE AS FOLLOWS:
 - FOR PIPES 3/4" AND SMALLER - 1/2" THICK
 - FOR 1" PIPE - 3/4" THICK
 - FOR PIPES 1-1/4" AND LARGE - 1" THICK
8. FLOOR DRAINS MUST BE PLACED WHERE THEY WILL NOT INTERFERE WITH WHEEL CHAIR TRAFFIC.

PLUMBING SYMBOL LEGEND

SYMBOL	DESCRIPTION
	EXITING SANITARY LINE
	SANITARY LINE
	EXISTING WATER LINE
	WATER LINE
	WATERGATE VALVE
	HOSE BIBB
	EXISTING GAS PIPE
	GAS PIPE
	WATER METER
	NEW CONNECTION

SYMBOL	DESCRIPTION
FU	FIXTURE UNIT
CW	COLD WATER
MIN.	MINIMUM
TYP.	TYPICAL

