

FURNISH ALL NECESSARY LABOR, MATERIAL, EQUIPMENT, AND SUPERVISION REQUIRED FOR THE PROPER COMPLETION OF THE PLUMBING AND RELATED WORK, INCLUDING CONFORMANCE WITH THE FOLLOWING CODES, REGULATIONS AND STANDARDS FOR HEALTH CARE FACILITIES:

2. INSULATION AND ADHESIVE USED ON THIS PROJECT SHALL HAVE A FLAME SPREAD CLASSIFICATION OF NO MORE THAN 25 AND A SMOKE DEVELOPED RATING OF NOT MORE THAN 50.

3. ALL DOMESTIC PIPING SHALL BE INSULATED INCLUDING PIPING IN WALLS.

4. CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS AND CONDITIONS AT THE BUILDING SITE BEFORE INSTALLATION OF HIS WORK.

5. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS OF ALL EQUIPMENT AND FIXTURES.

6. PROVIDE ACCESSIBLE CLEANOUTS AT THE BASE OF ALL SANITARY STACKS AND AT THE BASE OF ALL VERTICAL RAINWATER CONDUCTORS.

7. DRAINAGE PIPING CLEANOUTS SHALL BE LOCATED IN UNFINISHED ROOMS, STORAGE ROOMS, CLOSETS, AND JANITORS CLOSETS WHERE POSSIBLE. EXTEND FLOOR CLEANOUTS FROM MAIN DRAIN TO THESE ROOMS. CLEAN OUT LOCATIONS IN FINISHED ROOMS ARE TO BE SUBMITTED TO ARCHITECT FOR REVIEW PRIOR TO INSTALLATION.

8. THE CLEAN-OUT SHALL MATCH THE FLOOR TYPE WHERE INSTALLED.

9. CONNECT ALL VENT STACKS TO BASE OF SOIL STACKS.

10. PLUMBING CONTRACTOR SHALL VERIFY LOCATION AND INVERT ELEVATION OF EXISTING DRAINAGE PIPING BEFORE PROCEEDING WITH NEW DRAINAGE PIPING INSTALLATION.

11. ALL DIMENSIONS AND EXISTING CONDITIONS SHALL BE CHECKED AND VERIFIED BY THE CONTRACTOR AT THE SITE BEFORE PROCEEDING WITH ANY WORK.

12. INSTALLING CONTRACTOR TO PROVIDE 1/8" SCALE SHOP DRAWINGS. COORDINATE ALL PIPING LOCATIONS IN ACCORDANCE WITH ARCHITECTURAL PLANS.

13. PRIOR TO THE START OF WORK, CONTRACTOR SHALL SUBMIT TO ENGINEER THE FOLLOWING FOR REVIEW:

A) LOCATION AND CONSTRUCTION DETAILS OF SUPPORTS, INCLUDING METHODS OF ATTACHMENT TO STRUCTURAL COMPONENTS.

B) MAGNITUDES AND DIRECTIONS OF LOADS ANTICIPATED, STRUCTURAL ATTACHMENT POINTS UNDER ALL OPERATING CONDITIONS OF PIPING SYSTEM.

C) ALL WORK SHALL BE IN COMPLIANCE WITH APPLICABLE CODES LISTED ON ARCHITECTURAL COVER SHEET.

15. ALL EXCAVATION SHALL BE PERFORMED IN STRICT COMPLIANCE WITH THE REGULATIONS OF [OSHA] THE OCCUPATIONAL SAFETY AND HEALTH ASSOCIATION.

16. PIPING TO BE INSTALLED IN ACCESSIBLE AREAS. IN CASES WHERE THE PIPING WILL BE EXTENDED THROUGH A SUPPORTING WALL, PERMANENT CEILING OR FLOOR, SLEEVES MUST BE INSTALLED.

17. PLUMBING PIPING SHALL NOT BE RUN THROUGH ELECTRICAL ROOMS, TELECOMMUNICATION ROOMS, OR ELEVATOR MACHINE ROOMS. EXISTING BRANCH PIPING SERVING EQUIPMENT IN THESE ROOMS.

18. UNLESS NOTED OTHERWISE ALL DRAINAGE PIPING SHALL HAVE A 0.01 SLOPE EXCEPT PIPING 3" AND SMALLER WHICH SHALL HAVE A 0.02 SLOPE.

19. ALL UNDERGROUND WASTE PIPING SHALL BE 2" MINIMUM.

20. ALL FLOOR DRAINS SHALL BE PROVIDED WITH A TRAP PRIMER CONNECTION. PROVIDE A 1/2" COPPER LINE EXTENDED FROM TRAP PRIMER AS SPECIFIED TO THE PRIMER CONNECTION.

21. ALL PIPING SYSTEMS SHALL HAVE VALVES AT POINTS SHOWN ON THE DRAWINGS AND/OR AS REQUIRED FOR ISOLATION OF EQUIPMENT AND FIXTURES.

22. SHUT-OFF VALVES CAPABLE OF 100 PERCENT DEAD SHUT-OFF SHALL BE PROVIDED ON EACH BRANCH LINE FROM THE MAIN AND BE INSTALLED FOR ALL EQUIPMENT AND PLUMBING FIXTURES TO PERMIT ISOLATION FOR MAINTENANCE AND REPAIR.

23. PROVIDE ISOLATION VALVES AT ALL CONNECTIONS TO RISERS, BRANCH PIPING AND TO ISOLATE INDIVIDUAL FIXTURES.

24. INSTALL VALVES WITH NEAT APPEARANCE AND ACCESSIBILITY.

25. CONNECTIONS SHALL BE MADE TO INSURE UNRESTRICTED CIRCULATION WITH NO AIR POCKETS OF TRAPPED CONDENSATE.

26. DISCHARGE LINES FROM ALL RELIEF VALVES SHALL BE PIPED TO WITHIN FOUR INCHES (4") OF FLOOR DRAINS.

27. SAFETY VALVES SHALL BE PIPED TO ATMOSPHERE IN ACCORDANCE WITH GOVERNING CODES, INCLUDING ALL SAFETY MEASURES RELATED TO PROPER OPERATION.

28. BACK FLOW PREVENTORS TO BE INSTALLED AS REQUIRED PER CODE OR AS REQUIRED PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.

29. ALL DOMESTIC HOT WATER RETURN BRANCH CONNECTIONS SHALL BE EQUIPPED WITH A BALL VALVE, CHECK VALVE, AND BALANCING VALVE.

30. ALL PIPING SHALL BE SUPPORTED AT 4'-0" ON CENTER BOTH HORIZONTALLY AND VERTICALLY.

31. OWNER SHALL SUPPLY ALL PLUMBING FIXTURES AND ASSOCIATED TRIM. INSTALLING CONTRACTOR SHALL SUPPLY ALL CARRIERS, CONNECTIONS, VALVES, PIPING ETC FOR EQUIPMENT FUNCTION.

32. PROVIDE DIELECTRIC UNIONS AT ALL CONNECTIONS BETWEEN DISSIMILAR MATERIALS.

33. PROVIDE SHOP DRAWINGS PRIOR TO START OF WORK.

34. PLUMBING CONTRACTOR SHALL COORDINATE HIS WORK WITH THE WORK OF ALL OTHER CONTRACTORS PRIOR TO START OF PLUMBING SYSTEM INSTALLATION.

35. ALL LOCATIONS, CLEANOUT COVERS, AND OTHER FINISH-EXPOSED COMPONENTS SHALL BE PROTECTED FROM DAMAGE. DAMAGED COMPONENTS SHALL BE REPLACED BY CONTRACTOR AT NO ADDITIONAL COST TO CONTRACT.

36. SCHEDULE ALL SHUTDOWNS THAT AFFECT UTILITIES AND PORTIONS OF THE BUILDING THAT MUST REMAIN IN OPERATION WITH THE OWNER.

37. DEMOLITION WORK AT ALL TIMES SHALL BE SUBJECT TO THE DIRECTION AND APPROVAL OF THE OWNER AND BE CARRIED OUT IN SUCH A MANNER SO AS NOT TO INTERFERE WITH THE NORMAL OPERATION OF THE BUILDING.

38. DISPOSE OF ALL REMOVED MATERIAL IN APPROVED MANNER.

39. ISOLATE, DRAIN, AND REFILL EXISTING SYSTEMS AS REQUIRED TO ACCOMMODATE INSTALLATION OF NEW SYSTEMS.

40. PROVIDE ALL NECESSARY TEMPORARY OR PERMANENT CAPS OR PLUGS FOR PIPING. DO NOT LEAVE PIPING OPEN ENDED.

41. ALL EQUIPMENT DESIRED BY THE OWNER SHALL BE STORED AT THE SITE BY THE CONTRACTOR AT A LOCATION DIRECTED BY THE OWNER. EQUIPMENT AND MATERIALS NOT DESIRED BY THE OWNER SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR IMMEDIATELY.

42. REMOVE AND/OR RELOCATE EXISTING EQUIPMENT AS SPECIFIED OR SHOWN ON THE DRAWINGS IN A NEAT AND WORKMANLIKE MANNER. HANGERS, FOUNDATIONS AND/OR STRUCTURAL SUPPORTS FOR SAID EQUIPMENT AND MATERIALS SHALL BE REMOVED.

43. NO EXISTING EQUIPMENT OR MATERIAL SHALL BE REUSED WITHOUT SPECIFIC APPROVAL OF THE OWNERS REPRESENTATIVE.

44. ALL EQUIPMENT AND MATERIAL TO BE REMOVED THAT IS DESIRED BY THE OWNER SHALL BE RIGGED TO AN ONSITE STORAGE LOCATIONS AS DIRECTED BY THE OWNER.

45. ALL WATER HAMMER ARRESTORS SHALL BE LOCATED IN AN ACCESSIBLE LOCATION AS REQUIRED BY CODE. PROVIDE ACCESS PANELS AS NEEDED.

46. ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY OF PHILADELPHIA LATEST PLUMBING CODE INCLUDING THE SINGLE STACK WASTE AND VENT SYSTEM AS DESCRIBE IN SECTION 919 OF THE PHILADELPHIA PLUMBING CODE AS ADOPTED IN THE DESIGN, AND ALL OTHER APPLICABLE CODES HAVING JURISDICTION OVER THE CLASS OF WORK INCLUDING THE INTERNATIONAL BUILDING CODE LATEST EDITION.

47. CAP ALL UNUSED PIPING BEHIND FINISHED SURFACES AS REQUIRED TO ACCOMMODATE NEW WORK.

48. STERILIZE THE WATER DISTRIBUTION SYSTEM BY THE METHOD APPROVED BY THE AUTHORITY HAVING JURISDICTION.

49. TEST THE SANITARY PIPING THROUGHOUT UPON COMPLETION OF ROUGH-IN TESTING SHALL BE IN COMPLIANCE WITH THE CITY OF PHILADELPHIA PLUMBING CODE LATEST EDITION.

50. TEST THE DOMESTIC HOT & COLD WATER PIPING WITH A HYDROSTATIC PRESSURE. TESTING SHALL BE IN COMPLIANCE WITH PHILADELPHIA PLUMBING CODE LATEST EDITION.

51. ALL PIPING TO BE LABELED EVERY 15' MAX OR AT ALL CHANGES OF DIRECTION AND WHERE PIPING PASSES THROUGH A WALL.

52. CONTRACTOR TO PROVIDE A VALVE TAG CHART.

53. ALL DOMESTIC WATER VALVES TO BE LEAD FREE.

TYPICAL PENETRATION THRU FLOOR

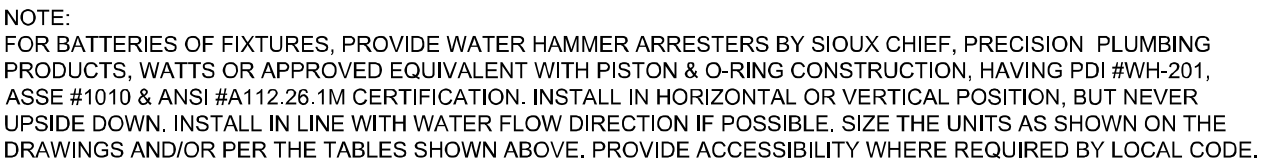
FIRE RETARDANT MATERIAL TO BE U.L. APPROVED. FIRE SEAL MATERIAL TO MAINTAIN ASSEMBLY RATING BETWEEN PIPE & SLEEVE.

TYPICAL PENETRATION THRU WALL

FIRE RETARDANT MATERIAL TO BE U.L. APPROVED. FIRE SEAL MATERIAL TO MAINTAIN ASSEMBLY RATING BETWEEN PIPE & SLEEVE.

U.L. NUMBER REQ'D			
MATERIAL	GYPSUM WALL	CMU WALL	FLOOR
STEEL PIPE STEEL PIPE	420	420	420
WINSULATION COPPER	444	444	444
PIPE COPPER PIPE	442	442	429
WINSULATION	445	335	335

REFER TO ARCHITECTURAL
PLANS FOR
WALL RATINGS.



SALE: NONE

PIPING LEGEND						
SYMBOL	SERVICE	SIZE	MATERIAL	JOINTS	INSULATION	REMARKS
— CW —	DOMESTIC COLD WATER	ALL	PEX	PUSH-FIT	-	JOINTS SHALL CONFORM TO ASSE 1061 AND INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS
— HW —	DOMESTIC HOT WATER	ALL	PEX	PUSH-FIT	-	JOINTS SHALL CONFORM TO ASSE 1061 AND INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS
— CW —	DOMESTIC COLD WATER	ALL	COPPER TYPE "L" HARD	SOLDERED	3/4" FIBERGLASS	-
— HW —	DOMESTIC HOT WATER	ALL	COPPER TYPE "L" HARD	SOLDERED	1" FIBERGLASS	-
— S —	SANITARY	LESS THAN OR EQUAL 2-1/2"	SCHEDULE 40 SOLID CORE PVC	SOLVENT-CEMENT	-	SOLVENT CEMENT NOT PURPLE IN COLOR SHALL CONFORMS TO ASTM D2564,CSA B137.3, CSA B181.2 OR CSA B182.1
— S —	SANITARY	GREATER THAN 2-1/2"	SCHEDULE 40 SOLID CORE PVC	SOLVENT-CEMENT	-	SOLVENT CEMENT NOT PURPLE IN COLOR SHALL CONFORMS TO ASTM D2564,CSA B137.3, CSA B181.2 OR CSA B182.1
— V —	VENT	LESS THAN OR EQUAL 2-1/2"	SCHEDULE 40 SOLID CORE PVC	SOLVENT-CEMENT	-	SOLVENT CEMENT NOT PURPLE IN COLOR SHALL CONFORMS TO ASTM D2564,CSA B137.3, CSA B181.2 OR CSA B182.1
— V —	VENT	GREATER THAN 2-1/2"	SCHEDULE 40 SOLID CORE PVC	SOLVENT-CEMENT	-	SOLVENT CEMENT NOT PURPLE IN COLOR SHALL CONFORMS TO ASTM D2564,CSA B137.3, CSA B181.2 OR CSA B182.1
— S —	SANITARY	LESS THAN OR EQUAL 2-1/2"	COPPER TYPE "L" HARD	SOLDERED	-	-
— S —	SANITARY	GREATER THAN 2-1/2"	CAST IRON	CAULKED JOINTS	-	INSTALL PER SECTION 705.3 OF THE CITY OF PHILADELPHIA PLUMBING CODE
— V —	VENT	LESS THAN OR EQUAL 2-1/2"	COPPER TYPE "L" HARD	SOLDERED	-	-
— V —	VENT	GREATER THAN 2-1/2"	CAST IRON	CAULKED JOINTS	-	INSTALL PER SECTION 705.3 OF THE CITY OF PHILADELPHIA PLUMBING CODE
— C —	CONDENSATE	ALL	SCHEDULE 40 SOLID CORE PVC	SOLVENT-CEMENT	1/2" FIBERGLASS	SOLVENT CEMENT NOT PURPLE IN COLOR SHALL CONFORMS TO ASTM D2564,CSA B137.3, CSA B181.2 OR CSA B182.1

IDSG

llc.

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