

1 General

1.1 CONTRACT CONDITIONS

- .1 The General Conditions of the Contract and Division 01 shall be read in conjunction with this Division, all of which shall be considered an integral part of this Contract.

1.2 WORK INCLUDED

- .1 Domestic Cold and Domestic Hot Water supply piping within building;

1.3 STANDARDS

- .1 National Plumbing Code 2010.
- .2 ASTM

2.0 Products

2.1 PIPING

- .1 Pipe
 - .1 Copper tube, hard drawn, Type L (ASTM B88M).
 - .2 Polyethylene Tube (alternate)
 - .1 Cross-linked polyethylene (ASTM F-876, F-877), rated at 689 kPa @ 82° C.
 - .2 Standard of Acceptance: Uponor AquaPEX.

2.2 FITTINGS

- .1 Brass or bronze threaded fitting to ANSI B16.15.
- .2 Solder fittings, wrought copper to ANSI B16.22, 95/5 lead-free solder.
- .3 Polyethylene tube:
 - .1 Uponor Propex.

2.3 VALVES

- .1 Brass construction ball valve, Teflon seat, 2-piece body, screwed ends, blowout-proof stem, memory stop: Red-White Fig. 5044A

3.0 Execution

3.1 INSTALLATION

- .1 General
 - .1 Cut tube ends square and de-burr, clean tube ends and sockets thoroughly before soldering.
 - .2 Group exposed piping and run parallel to building lines.
 - .3 Install piping close to building structure to conserve space and minimize furring.
 - .4 Grade down to low points in direction of flow, at a minimum grade of 0.2%.
 - .5 Provide hose-end faucets to drain all low points.
 - .6 Isolate all branches and equipment with gate valves.
 - .7 Use unions to facilitate removal of equipment.

- .8 Use dielectric fittings for connection of dissimilar metal.
- .9 Provide one-piece escutcheons on exposed pipe passing through floors and walls.
- .10 Where passing through floor or ceiling joists, follow specific recommendations on permissible size and positioning of cutouts.
- .11 All penetrations of structural members subject to Consultant's approval.
 - .1 Polyethylene Tubing
- .12 Pipe ends to be cut square using approved shearing tool.
- .13 Use only manufacturer's approved fittings and joining tool.
- .14 Use manufacturer's bend supports for all bends of less than eight (8) times pipe diameter.

3.2 TESTING

- .1 Hydrostatically test domestic water piping systems on pure water at a pressure of 860 kPa sustained over a 4-hour period without measurable loss.

3.3 CLEANING

- .1 On completion of tests, flush entire system with clean water.

END OF SECTION