

## SECTION 15052

### POLYVINYL CHLORIDE (PVC) PRESSURE PIPE

#### PART 1 - GENERAL

##### 1.1 DESCRIPTION

- A. Work Included: Furnish and install polyvinyl chloride (PVC) pipe of the size (s) and type (s) and in the location (s) shown on the Drawings and as specified herein.
- B. Related Work Specified Elsewhere: "Pipe & Pipe Fittings - General" is specified in this Division

##### 1.2 QUALITY ASSURANCE

- A. Standards:
  - 1. Schedule 40 and 80 Pipe: ASTM D-1785 and PS 21-70.
  - 2. Pressure Rated (SDR) Pipe: ASTM D-2241 and PS-21-70.
  - 3. Materials: ASTM 1784
    - a. PVC Normal Impact: Type I, Grade I, PVC 1120.
    - b. PVC Normal Impact: Type I, Grade II, PVC 1220.
    - c. PVC High Impact: Type II, Grade I, PVC 2110.
    - d. CPVC (high temperature): Type IV, Grade I, PVC 4120.
  - 4. Pipe for use with domestic potable water shall have NSF seal of approval.
- B. Manufacturers:
  - 1. Certain-Teed.
  - 2. J-M Manufacturing.
  - 3. Harvel.
  - 4. Cabot.
  - 5. Or approved equal.

#### PART 2 - PRODUCTS

##### 2.1 MATERIALS

- A. Piping Outside Buildings:
  - 1. Pipe and Fittings:
    - a. Pipe and fittings shall be gasketed style utilizing twin gasket coupling or single gasket bell and spigot.
    - b. Class as shown on the Drawings.
    - c. PVC Class Water Pipe: Made to cast iron O.D.'s instead of IPS, or as shown on the Drawings and/or as approved by the Engineer.
    - d. Pipe Lengths: Laying lengths of 20 feet or as shown on the Drawings.
  - 2. Joints:
    - a. Provide rubber gaskets in sufficient quantity to allow for loss.
    - b. Provide couplings of the same quality as the pipe that will maintain tight joints when subjected to the same hydrostatic tests designated for the pipe.

3. Adaptors: When applicable, provide adaptors for connecting polyvinyl chloride pipe to pipes constructed from other material.
- B. Piping Inside Buildings:
1. Pipe and fittings:
    - a. Solvent weld type unless otherwise shown on the Drawings or specified in other Sections in the Division.
    - b. Piping, fittings and components: Schedule 40 PVC, normal impact unless otherwise shown on the Drawings or specified in other Sections in this Division.
  2. Joints:
    - a. Joints: Solvent weld PVC connections shall be made with industrial grade PVC or CPVC cleaners and cement. IPS Corporation's "WELD-ON 724" industrial grade cement shall be used exclusively on sodium hypochlorite solvent weld piping systems. Solvent weld PVC connections shall be in strict accordance with manufacturers recommended installation procedures.
    - b. Threaded and Screwed Joints: Permitted only on Schedule 80 and heavier pipe.
    - c. Couplings and Fittings: Minimum schedule and pressure rating as the pipe.
  3. Provide suitable adaptors for connections to equipment and other piping systems.

## PART 3 - EXECUTION

### 3.1 INSTALLATION

- A. Jointing:
1. Clear each pipe length, coupling and fitting of all debris and dirt before installing.
  2. Provide and use coupling pullers for jointing the pipe when required.
  3. Shove home each length of pipe against the pipe previously laid and hold securely in position.
  4. Do not pull or cramp joints.
- B. Fabrication:
1. Cutting:
    - a. Use a hand saw or pipe cutter with blades (not rollers).
    - b. Examine all cut ends for possible cracks caused by cutting.
  2. Connecting:
    - a. Solvent weld connections as recommended by the manufacturer.
    - b. Connect pipe and fittings only when temperature is above the minimum recommended by the manufacturer.
    - c. Threaded adaptors shall be connected only with plastic male into metal female.

END OF SECTION