

Irrigation System Materials Specification

All equipment, materials and accessories shall conform to the appropriate current Australian Standards.

1) PVC pipe

- a) All underground piping shall be uPVC piping manufactured to *AS1477:2006*
- b) mPVC pipes conforming to *AS4765:2007* will be accepted in 100mm and 150mm sizes of class 12 and above.
- c) Mainlines and Sub-mains Piping supplied and installed by the Contractor shall be in accordance with the following:
 - i) Installed in accordance with the manufacturer's recommendations.
 - ii) A minimum of PN12 pressure rating.
 - iii) Joined using rubber ring socketed pipe for 80mm or larger.
 - iv) Solvent welded for pipe work up to and including 50mm.
- d) Lateral pipe work installed on the down-stream side of the solenoid control valves, supplied and installed by the Contractor shall be in accordance with the following:
 - i) Installed in accordance with the manufacturer's recommendations.
 - ii) A minimum of PN12 pressure rating.
 - iii) Joined using solvent welded joint.

2) PVC Pipe Fittings

- a) Fittings supplied and installed in underground pipe work for mainlines and sub-main pipes up to 50mm diameter shall be in accordance with the following:
 - i) PVC solvent weld manufactured & installed in accordance with *AS1477:2006*.
 - ii) Compatible with PVC pipe produced in accordance with the Standard.
 - iii) Manufactured to a minimum of PN18.
- b) Fittings supplied and installed in underground pipe work for mainlines and sub-main pipes, 80mm diameter or larger shall be in accordance with the following:
 - i) Bends: PVC rubber ring jointed long radius (not essential), Cat. No. P12 or rubber ring ductile iron.
 - ii) Tees: Rubber ring joint, ductile iron cement lined and bitumen coated or approved equivalent.
 - iii) Tapping Bands: Single branch & cross tapping bands shall be screwed bronze.
 - iv) Reducers: Rubber ring jointed ductile iron.
 - v) Flanged Connectors: All flanged connectors shall be table "E" rubber ring joint ductile iron.
 - vi) Lateral Line Fittings: Lateral pipe work fittings located downstream of solenoid control valves shall be PN18 moulded PVC fittings with solvent cement joints.

3) Solvent Cements

Solvent cements supplied shall be in accordance with the manufacturer's recommendations for the climatic conditions that prevail during the installation of the system.

4) Priming Fluid

Priming or cleaning fluids shall be as recommended by the pipe manufacturer.