

as necessary. The polyethylene pipe shall be installed in a uPVC protection pipe (duct) class 10 for protection and ease of maintenance. The uPVC pipe shall be 110mm in diameter for 15, 20 and 25mm polyethylene pipes, and 160mm in diameter for 40 and 50mm polyethylene pipes, or as required by the Distribution Company.

- 5.12 uPVC protection pipe shall be provided in all green and unpaved areas. In sidewalk and paved areas, the uPVC protection pipe shall be encased in reinforced concrete. Warning tape shall be provided over the polyethylene pipe/uPVC protection pipe in green and unpaved areas.

Service connection fittings

- 5.13 Gate Valves shall be provided for all types of service connection to allow for the isolation of the customer connection. The valve shall be installed at a point as near as possible to the tapping point. For 15, 20 and 25mm service connections, the gate valve shall be installed in a concrete chamber or in a GRP cabinet. For connections equal to or greater than 40 mm (1½"), the gate valve shall be installed in the concrete meter chamber, or as specified by the Distribution Company.
- 5.14 For 15, 20 and 25mm service connections, GRP Water Meter cabinets fixed as described in Clause 4.21 shall be provided. The cabinet shall contain Water Meter, valves and fittings as described in Clause 4.29. The portion of the polyethylene service connection pipe between the finished surface level and the GRP Water Meter cabinet shall be protected with 110mm polyethylene protection tube fixed to the wall inside a recess, if practical, using 2 No. brass clamps.
- 5.15 For connections 40mm (1½") and above the following arrangement shall apply:
- (a) For 40 and 50mm service connections either GRP Water Meter cabinet (for threaded type Water Meters) or concrete chamber shall be provided containing Water Meter, valves and fittings as described in Clause 4.29.
 - (b) For service connections larger than 50mm concrete chamber shall be provided containing Water Meter, valves and fittings as described in Clause 4.29.
 - (c) Externally-installed meters shall be housed as described in Clause 4.18 and 4.19. If concrete chamber is used a meter reading display unit shall be provided which shall be fixed to /recessed in the boundary wall of the consumer plot/Premises.
 - (d) The internal plan dimensions of chamber for different sizes of service connections shall be as follows or as agreed by the Distribution Company:
 - (i) 600 x 600 x 400 mm for 15, 20 and 25mm service connections.
 - (ii) 1200 x 800 x 400 mm for 40 and 50mm service connection