

# SPECIFICATIONS

## WATERTIGHT SOLFLO MAX

### SCOPE

These specifications apply to all 100 mm (4 in) to 1500 mm (60 in) diameter Solflo Max pipes used for drainage, water course piping and gravity flow storm water sewers.

### PIPE REQUIREMENTS

Pipes shall be Solflo Max, manufactured with smooth interior and corrugated exterior walls.

- 100 mm (4 in) to 1200 mm (48 in) diameter pipes shall be certified as per standards BNQ 3624-120 and CSA B182.8 (Class A). They shall have minimum stiffness of 320 kPa and be 4 m (13.1 ft) long minimum.
- 1050 mm (42 in) pipes will be 3.3 m (10.8 ft) long minimum.
- 1500 mm (60 in) diameter pipes shall be certified as per standard AASHTO M294 (105 kPa), will comply with BNQ 3624-120 and CSA B182.8 (Class A, R95) standards and be 6 m (19.7 ft) long.

### RAW MATERIALS

Pipes shall be made from a polyethylene resin that complies with properties classification as defined by ASTM D3350 standard:

- Class A : PE 435400
- Class B : PE 424420

### JOINT PERFORMANCE

- 100 mm (4 in) to 250 mm (10 in): double bell with integrated gasket (DBIG). Double bells shall be certified as per standard CSA B182.8, Type 1 (watertight at 10.8 psi). The gasket shall be co-injected into the bell and shall overlap two corrugations.
- 300 mm (12 in) to 900 mm (36 in) and 1200 mm (48 in): bell with integrated gasket with clips (BIGC) welded to the pipe to ensure proper pipe insertion. The gasket shall be co-injected into the bell and shall overlap two corrugations. The assembly will comply with BNQ 3624-120 watertight requirements.
- 1050 mm (42 in) and 1500 mm (60 in): bell with O-Ring gasket (BG) installed by the manufacturer onto the male end, covered by a protective film for shipping. The assembly shall be certified as per standard AASHTO M294.
- O-ring gaskets shall comply with standards ASTM F477 and BNQ 3624-120. Fused and/or glued gaskets will not be permitted.

### ACCESSORIES

- 100 mm (4 in) to 1200 mm (48 in): accessories will be manufactured according to specified requirements in the standards BNQ 3624-120 and CSA B182.8.
- 1500 mm (60 in): accessories will be manufactured according to specified requirements in the standards AASHTO M294.
- **Service connections for PVC pipes:**  
Service connections for 100 mm (4 in) to 200 mm (8 in) diameter PVC pipes shall be monolithic (factory welded), as required by standard BNQ 1809-300, and equipped with an integrated O-ring gasket.
- **Solflo Max connections to a concrete structure:**  
Every connection to a concrete structure shall be made with a monolithic HDPE adapter whose end to be connected to the structure will be provided with a smooth exterior wall and at the other end with an o-ring bell gasket (BG) for 100 mm (4 in) to 250 mm (10 in) connections, a bell with integrated gasket (BIGC) for 300 mm (12 in) to 1500 mm (60 in) connections and 1200 mm (48 in) connections, or with an o-ring bell gasket (BG) for 1050 mm (42 in) and 250 mm (10 in) connections, as required by standard BNQ 1809-300. PVC and urethane adapters will not be permitted.
- Accessories shall be factory welded, both outside and inside, when this side is accessible.

### DIMENSIONS AND QUANTITIES

Dimensions and quantities shall comply with tender documents and drawings.

### INSTALLATION

Installation shall be carried out in compliance with standard BNQ 1809-300, and following Soleno's recommendations. Contact the Soleno representative in your region or visit our website at [www.soleno.com](http://www.soleno.com) for installation recommendations.