



# BOSS Poly-tite Specification

## SCOPE

This specification covers the requirements of 100 mm to 900 mm nominal inside diameter Classic profile and 300 mm to 900 mm nominal inside diameter Modern profile corrugated high density polyethylene dual-wall pipe with a smooth interior wall and annular exterior corrugations for gravity-flow drainage applications.

## MATERIALS

Pipe shall be manufactured from high density polyethylene resin, which shall meet or exceed the requirements of CSA B182.6.

## PIPE DIMENSIONS

The nominal pipe size (NPS) is based on the nominal inside diameter of the pipe. The outside diameters should be specified for manhole/catch basins to accommodate the pipe. Perforated pipe and filter cloth are available on special order and may vary by region.

## PIPE STIFFNESS

The Classic and Modern profile pipe shall have a minimum pipe stiffness of 320 kPa, meeting CSA B182.6.

### Classic Profile

| Nominal Pipe Size (mm) | 100 | 150 | 200 | 250 | 300 | 375 | 450 | 525 | 600 | 750 | 900  |
|------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| Outside Diameters (mm) | 120 | 177 | 234 | 292 | 361 | 444 | 540 | 627 | 726 | 895 | 1087 |
| Pipe Stiffness (kPa)   | 320 | 320 | 320 | 320 | 320 | 320 | 320 | 320 | 320 | 320 | 320  |
|                        |     |     |     |     | 210 | 210 | 210 | 210 | 210 | 210 | 210  |

### Modern Profile

| Nominal Pipe Size (mm) | 300 | 375 | 450 | 525 | 600 | 750 | 900  |
|------------------------|-----|-----|-----|-----|-----|-----|------|
| Outside Diameters (mm) | 353 | 439 | 535 | 622 | 700 | 878 | 1064 |
| Pipe Stiffness (kPa)   | 320 | 320 | 320 | 320 | 320 | 320 | 320  |
|                        | 210 | 210 | 210 | 210 | 210 | 210 | 210  |

## STOCKED LENGTHS

Standard pipe lengths shall be 6 m or as requested by the Engineer.

## JOINTS

Joint options are outlined in the following table. Ultra Stab 100 is lab tested to 100 kPa in accordance with ASTM D3212, meeting the requirements of CSA B182.6. Styrene-Butadiene Rubber (SBR) or Thermoplastic Elastomer (TPE) gaskets shall be incorporated into the system with lubricant supplied by the manufacturer.

## Nominal Pipe Size and Connection Type Options

| Connection Type                                                                                                                                                                                             | CSA Standard | BNQ Standard | Joint Type | Nominal Pipe Size (mm) |     |     |     |     |     |     |     |     |     |     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|--------------|------------|------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|                                                                                                                                                                                                             |              |              |            | 100                    | 150 | 200 | 250 | 300 | 375 | 450 | 525 | 600 | 750 | 900 |
| Ultra-Stab 100<br>(standard bell & gasketed plain end)                                                                                                                                                      | B182.6       | –            | Watertight | ●                      | ●   | ●   | ●   | ●   | ●   | ●   | ●*  | ●   | ●*  |     |
| <b>Note:</b> For Classic profile and all standard bell fittings with a gasket. A different gasket is required for 525 mm and 750 mm pipe sizes for Classic and Modern profiles.                             |              |              |            |                        |     |     |     |     |     |     |     |     |     |     |
| Ultra-Stab 100<br>(in-line bell & in-line gasketed spigot)                                                                                                                                                  | B182.6       | –            | Watertight |                        |     |     |     | ●   | ●   | ●   | ●   | ●   | ●   | ●   |
| <b>Note:</b> For Modern profile only. BOSSLock in-line double-wall (DW) bell and super extended spigot from 300 – 525 mm pipe sizes, and in-line DW bell with standard spigot from 600 – 900 mm pipe sizes. |              |              |            |                        |     |     |     |     |     |     |     |     |     |     |

### HYDRAULICS

The pipe shall have a Manning's 'n' value of 0.012 at a flow velocity of 0.75 m/s.

### RETEST AND REJECTION

If any failure to conform to these specifications occurs, the pipe or fittings may be retested to establish conformity in accordance with the agreement between the purchaser and the seller.

### APPLICABLE STANDARDS

CSA B182.6, OPSS 410, OPSS 421, OPSS 1840, OPSD 806.02, BC MoT SS-31.



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