

BOSS 2000 Specification

SCOPE

This specification covers the requirements of 100mm to 900mm nominal diameter corrugate high density polyethylene 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 Cell Class requirements of ASTM D3350.

PIPE DIMENSIONS

The nominal size of the pipe is based on the nominal inside diameter of the pipe. The tolerance on the specified inside diameter shall be +3 / -1.5%. Outside diameters should be specified for manhole / catch basins to accommodate the pipe. Perforated pipe and filter cloth is available on special order and may vary by region.

Nominal Inside Diameters (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	1,087

STOCKED LENGTHS

Standard pipe lengths shall be 6m or as requested by the Engineer. Lengths shall not be less than 99% stated length.

JOINTS

Pipes shall be joined with external double bell 'snap' couplers (100mm - 200mm) or external 'split' couplers (250mm - 900mm) for soil-tight applications meeting CSA Group standard B182.8 Type 3 / BNQ 3624-120. Pipes shall be joined with Ultra Stab 75 gasketed bell and spigot couplers (150mm - 900mm) lab tested to 75kPa in accordance with ASTM standard D3212 meeting CSA Group standard B182.8 Type 1 / BNQ 3624-120 for water-tight applications under normal gravity flow operating pressures. Styrene-Butadiene Rubber (SBR) gaskets shall be incorporated into the system with lubricant supplied by the manufacturer.

PIPE STIFFNESS

The pipe shall have a minimum pipe stiffness of 320kPa (100mm – 900mm) meeting CSA Group standard 182.8 or 210kPa (250mm – 900mm) at 5% deflection. Tests shall be conducted in accordance with ASTM D2412.

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 purchase and the seller.

APPLICABLE STANDARDS

CSA B182.8, BNQ 3624-120, OPSS 1840, OPSS 410, OPSD 806.02, BC MoT SS-317