BOSS 2000 Specification

SCOPE

This specification covers the requirements of 100 mm to 900 mm nominal inside diameter Classic profile and 300 mm to 1500 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 B182.8 and/or BNQ 3624-120.

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 210 kPa and/or 320 kPa, meeting CSA B182.8/BNQ 3624-120. The Modern profile pipe for pipe sizes greater than 900 mm NPS shall have a minimum varying pipe stiffness meeting CSA B182.8/BNQ 3624-120.

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	1050	1200	1500
Outside Diameters (mm)	353	439	535	622	700	878	1064	1200	1377	1726
Pipe Stiffness (kPa)	320	320	320	320	320	320	320	145	125	95
	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 for Classic and Modern profile pipe are outlined in the following table. Ultra Stab 75 is lab tested to 75 kPa in accordance with ASTM D3212, meeting the requirements of CSA B182.8 Joint Type 1/BNQ 3624-120 WT. 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	1050	1200	1500
External snap coupler	B182.8 Joint Type 3	3624-120	Soil-tight	●	●	●											
Note: External snap couplers for Classic profile only.																	
External split coupler	B182.8 Joint Type 3	3624-120	Soil-tight				●	●	●	●	●	●	●	●	●	●	
Note: External split couplers for Classic profile from 250 - 900 mm pipe sizes and Modern profile from 300 - 900 mm pipe sizes.																	
Ultra-Stab 75 (standard bell & gasketed plain end)	B182.8 Joint Type 1	3624-120 WT	Watertight	●	●	●	●	●	●	●	●	●	●	●			
Note: 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 75 (in-line bell & in-line gasketed spigot)	B182.8 Joint Type 1	3624-120 WT	Watertight					●	●	●	●	●	●	●			
Note: 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 B182.8, BNQ 3624-120, OPSS 410, OPSS 421, OPSS 1840, OPSD 806.02, BC MoT SS-31.

armtec

Armtec is a leading national manufacturer of a comprehensive range of infrastructure products and engineered construction solutions for customers in a diverse cross-section of industries. With operations coast to coast, we are a trusted partner for transportation, public works, forestry, oil and gas, and mining operations throughout the country and abroad. Since 1908 our commitment to quality, customer service and innovation has set the benchmark in the Canadian drainage and bridge landscape.

Call 1-800-565-1152 or visit armtec.com