

StrengThinTM 100 Piping System:

The Victaulic Company StrengThinTM 100 system may be used on chilled water, cooling water, potable water, and air systems with 1.6mm to 3.7mm wall Type [304/304L] pipe per BS EN 10217-7 in sizes 50mm through 200mm [2" through 8"].

Pipe Size	Wall Thickness	Max. Pressure
		Rating
DN50/2"	1.6mm - 2.7mm	16 bar 232 PSI
DN65/76,1mm	1.6mm - 2.7mm	16 bar 232 PSI
DN80/3"	1.6mm - 2.7mm	16 bar 232 PSI
DN100/4"	1.6mm - 2.7mm	16 bar 232 PSI
DN125/139,7	2.0mm – 3.0mm	16 bar 232 PSI
DN150/6"	2.0mm – 3.0mm	16 bar 232 PSI
DN200/8"	2.0mm – 2.9mm	10 bar 145 PSI
DN200/8"	3.0mm – 3.7mm	16 bar 232 PSI

Maximum Joint Working Pressure as shown in Victaulic Submittal 31.02

Fittings: StrengThinTM 100 roll grooved ends suitable for installation with Victaulic Style E497 rigid couplings. Fittings shall be cast stainless steel conforming to ASTM A351/A351M, Grade CF8 or CF8M; and wrought stainless steel per EN 10088-1 No.1.4307 (304L) or EN 10088-1 No.1.4404 (316L).

Fitting Type	Victaulic Number
90-degree Elbow	E490
45-degree Elbow	E491
Tee	E492
Reducing Tee	E493
Concentric Reducer	E495
Cap	E496
Adapter Nipple	E494 and E494G
Flange Adapter	E498

Fitting end-end dimensions as shown in Victaulic Submittal 31.04



Joints:

Sizes 50mm through 200mm [2" through 8"], as manufactured by Victaulic Company; consisting of two ductile iron housings conforming to ASTM A 536, Grade 65-45-12 cast with housing keys to adjoin Victaulic StrengThinTM-100 grooved components, galvanized or thermoplastic coating. Couplings shall be provided with zinc-electroplated steel bolts and nuts conforming to ASTM A449 and ASTM A563/A563M. Gasket shall be Grade ['EHP' EPDM for water systems with operating temperatures to 120°C (250°F)] ['EW' EPDM for operating temperatures to 110°C (230°F)] ['EF' EPDM for operating temperatures to 110°C (230°F)] ['T' Nitrile for operating temperatures to 82°C (180°F)] compound gasket. Installation-Ready, for direct push installation without field disassembly. Victaulic Style E497 Rigid Coupling

Butterfly Valves: 2" - 6" / 50 - 150 mm: 21 bar (300 psi / 2068 kPa CWP), suitable for bidirectional and dead-end service to full rated pressure. StrengThinTM 100 grooved end stainless steel body and disc, grade CF8M, conforming to ASTM A351, with blow-out proof 17-4PH stainless steel stems to ASTM A564. Disc shall be connected to the stem without the use of fasteners or pins, and be offset from the disc centerline to provide a full 360° continuous contact with the seating surface when closed. Seat shall be pressure responsive, EPDM or Nitrile. Stem seals shall be of the same material as the seats. Valve shall have standard ISO flange mounting for ease of actuation. Valve provided with lever or 10-position handle or gear operator as required. The handle shall be zinc-plated carbon steel or fully stainless steel, latch lock type with infinitely variable and memory stop features. Manufacturer – Victaulic Series E461 Vic-300 MasterSeal Valve.

Installation:

- 1) Install StrengThinTM 100 couplings and fittings in accordance with Victaulic Company's published instructions.
- 2) A modified Victaulic Series VE-270 or VE272 pipe-end forming tool with ST100 roll sets specifically designed for StrengThinTM 100 grooving shall be used.
- 3) Do not install StrengThinTM 100 couplings on pipe prepared with "original" grooving tools or with AGS or RX roll grooving sets. Do not use StrengThinTM 100 on cut-grooved pipe.
- 4) The gaskets shall be suitable for the intended service, and shall be molded and produced by the coupling manufacturer.
- 5) All hardware (bolts/nuts) used on StrengThinTM 100 couplings shall be provided with the couplings by Victaulic.
- 6) Victaulic's factory-trained representative shall provide on-site training for the contractor's field personnel in the proper use of tools and installation of StrengThinTM 100 products.



a. The representative shall periodically visit the job site to ensure best practices in grooved joint installations are being followed. (A distributor's representative is not considered qualified to conduct the training.)