



**THROUGH-PENETRATION ESTIMATION TABLE:**

To determine sealant requirement, look up the pipe size (left-hand column) and follow across to appropriate opening size (top row). The value indicated is for round openings sealed with a 1/4" depth of sealant. A multiplier has been provided for calculating different sealant depth requirements (Sealant Depth Factor). Values have also been provided for the openings and pipe areas. If more than one pipe is running through an opening, simply add the total area of the pipes and subtract from the opening area. Then multiply by the sealant depth to calculate sealant requirements.

| SEALANT REQUIREMENTS IN CUBIC INCHES PER 1/4 INCH OF INSTALLED DEPTH* |                    |                                |           |            |            |            |             |             |              |              |              |              |              |
|---|--------------------|--------------------------------|-----------|------------|------------|------------|-------------|-------------|--------------|--------------|--------------|--------------|--------------|
|   |                    | Diameter of Opening - in. (mm) |           |            |            |            |             |             |              |              |              |              |              |
| PIPE SIZE   |                    | 1.5 (38)                       | 2.0 (51)  | 3.0 (76)   | 4.0 (102)  | 5.0 (127)  | 6.0 (152)   | 7.0 (178)   | 8.0 (203)    | 10 (254)     | 12 (305)     | 14 (356)     | 26 (660)     |
| Trade Size in. (mm)   | Pipe O.D. in. (mm) |                                |           |            |            |            |             |             |              |              |              |              |              |
| 0.5 (13)  | 0.840 (21)         | 0.3 (4.9)                      | 0.6 (9.8) | 1.6 (26.2) | 3.0 (49.2) | 4.8 (78.7) | 6.9 (113.0) | 9.5 (155.7) | 12.4 (203.2) | 19.5 (319.5) | 28.1 (460.5) | 38.3 (627.6) | 132.6 (2173) |
| 1.0 (25)  | 1.315 (33)         | 0.1 (1.6)                      | 0.4 (6.6) | 1.4 (22.9) | 2.8 (45.9) | 4.6 (75.4) | 6.7 (109.8) | 9.3 (152.4) | 12.2 (200.0) | 19.3 (316.3) | 27.9 (457.2) | 38.1 (624.3) | 132.4 (2170) |
| 1.5 (38)  | 1.900 (48)         |                                |           | 1.1 (18.0) | 2.4 (39.3) | 4.2 (68.8) | 6.4 (104.9) | 8.9 (145.8) | 11.9 (195.0) | 18.9 (309.0) | 27.6 (452.3) | 37.8 (619.4) | 132.0 (2163) |
| 2.0 (51)  | 2.375 (60)         |                                |           | 0.7 (11.5) | 2.0 (32.8) | 3.8 (62.3) | 6.0 (98.3)  | 8.5 (139.2) | 11.5 (188.4) | 18.5 (309.7) | 27.2 (445.7) | 37.4 (568.6) | 131.6 (2157) |
| 2.5 (64)  | 2.875 (73)         |                                |           | 0.1 (1.6)  | 1.5 (24.6) | 3.3 (54.1) | 5.4 (88.4)  | 8.0 (131.1) | 10.9 (178.6) | 18.0 (295.0) | 26.7 (437.5) | 36.9 (604.7) | 131.1 (2148) |
| 3.0 (76)  | 3.500 (79)         |                                |           |            | 0.7 (11.5) | 2.5 (41.0) | 4.7 (77.0)  | 7.2 (118.0) | 10.2 (167.1) | 17.2 (281.9) | 25.9 (424.4) | 36.1 (591.6) | 130.3 (2135) |
| 3.5 (89)  | 4.000 (102)        |                                |           |            |            | 1.8 (29.5) | 3.9 (63.9)  | 6.5 (106.5) | 9.4 (154.0)  | 16.5 (270.4) | 25.1 (411.3) | 35.3 (578.5) | 129.6 (2124) |
| 4.0 (102)   | 4.500 (114)        |                                |           |            |            | 0.8 (13.1) | 3.0 (49.2)  | 5.6 (91.8)  | 8.5 (139.3)  | 15.6 (255.6) | 24.2 (396.6) | 34.4 (563.7) | 128.7 (2109) |
| 6.0 (152)   | 6.625 (168)        |                                |           |            |            |            |             | 1.1 (18.0)  | 4.0 (65.5)   | 11.1 (181.9) | 19.7 (322.8) | 29.9 (490.0) | 124.2 (2035) |
| 8.0 (203)   | 8.625 (219)        |                                |           |            |            |            |             |             |              | 4.9 (80.3)   | 13.6 (222.9) | 23.8 (390.0) | 118.0 (1934) |
| 10.0 (254)  | 10.750 (273)       |                                |           |            |            |            |             |             |              |              | 5.6 (91.8)   | 15.8 (259.0) | 110.0 (1803) |
| 12.0 (305)  | 12.750 (324)       |                                |           |            |            |            |             |             |              |              |              | 6.6 (108.1)  | 100.8 (1652) |
| 24.0 (610)  | 24.000 (610)       |                                |           |            |            |            |             |             |              |              |              |              | 19.6 (321.2) |

\*Different Sealant Depth?

|               |                 |
|---------------|-----------------|
| 1/2" (12.7)   | Multiply by 2   |
| 5/8" (15.9)   | Multiply by 2.5 |
| 1" (25.4)     | Multiply by 4   |
| 1-1/4" (31.8) | Multiply by 5   |

**IMPORTANT NOTE:**

This information is provided for estimational purposes only. Allowances should be made for waste. Values for through-penetrations are based upon Schedule 40 pipes. All values are nominal.

