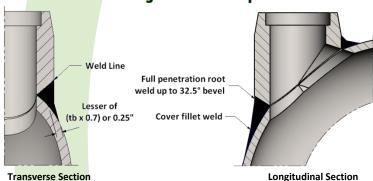


ISO 9001:2008 & PED Certified

Canadian Registered in all provinces

Welding onto Header Pipe



Longitudinal Section

Elbow Outlet

Specification: MSS-SP97 & ASME B31.1

Also in ASME B31.3, ASME B31.8, and ASME BPVC Sec I & Sec VIII Div 2 Threaded ends per ASME B1.20.1 • Beveled ends per ASME B16.25 Socket Weld ends per B16.11

Material: Available in a complete range of Carbon Steels, Stainless Steels, Alloy Steels and Non-ferrous metals certified to ASTM, ASME, and Military standards.

Sizes: 1/4" - 36" in all Schedules • 1/4" - 4" in Class 3000 & Class 6000 Also available in other requirements such as pressure and temperature specifics and special header, branch wall thickness.

Elbow Outlets suited for short elbow radii & 3D elbows are available upon request.





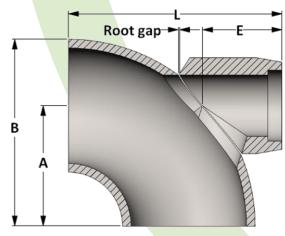




Socket Weld

Threaded

Butt Weld







Equation for overall length $L = E + \sqrt{B^2 - A^2} + Root gap$

All dimensions are in inches • Weights are based on Carbon Steel

| PIPE | STD / S40 | | XH / S80 | | Class 3000 | | Class 6000 | |
|-------|-----------|--------|----------|--------|------------|-------|------------|-------|
| SIZE | Е | LBS | E | LBS | E | LBS | E | LBS |
| 1/4 | 1.625 | 0.21 | 1.625 | 0.25 | 1.593 | 0.23 | 1.813 | 0.54 |
| 3/8 | 1.625 | 0.29 | 1.625 | 0.31 | 1.625 | 0.37 | 1.813 | 0.82 |
| 1/2 | 1.625 | 0.40 | 1.625 | 0.45 | 1.625 | 0.45 | 2.125 | 1.00 |
| 3/4 | 1.875 | 0.75 | 1.875 | 0.90 | 1.875 | 0.70 | 2.438 | 1.40 |
| 1 | 2.250 | 1.25 | 2.250 | 1.40 | 2.250 | 1.35 | 2.781 | 2.55 |
| 1-1/4 | 2.500 | 1.84 | 2.500 | 1.99 | 2.500 | 2.00 | 3.000 | 3.40 |
| 1-1/2 | 2.688 | 2.05 | 2.688 | 2.25 | 2.688 | 2.60 | 3.313 | 5.55 |
| 2 | 3.125 | 3.60 | 3.125 | 3.95 | 3.125 | 4.85 | 4.063 | 9.38 |
| 2-1/2 | 3.438 | 4.36 | 3.438 | 4.92 | 3.438 | 5.50 | 5.125 | 17.99 |
| 3 | 3.906 | 6.50 | 3.906 | 7.46 | 4.375 | 10.60 | | |
| 4 | 4.750 | 13.50 | 4.750 | 13.91 | 5.125 | 16.34 | | |
| 6 | 6.375 | 32.52 | 7.063 | 40.60 | | | | |
| 8 | 7.750 | 53.38 | 9.125 | 88.04 | | | | |
| 10 | 9.188 | 99.00 | 10.500 | 157.41 | | | | |
| 12 | 10.875 | 167.37 | 12.063 | 261.47 | | | | |