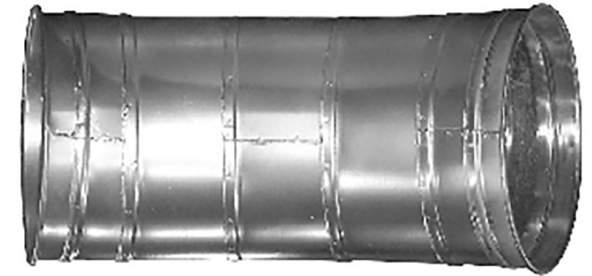


QF Heavy Wall Elbows, Sizes 7" - 24"

3212

Size In.	ID In.	Bend Degrees Available	CLR (Center Line Radius)	Tangents	Std Weight Lbs 90°	Galvanized Steel	304SS (or 316SS)
						16ga	16ga
7	6.89	30° 45° 60° 90°	1.5 *Long Radius Elbows are 2.5	2.25	9.42	Std	Std
8	7.88				13.64		
9	8.88				16.64		
10	9.89				21.54		
11	10.86				27.65		
12	11.97				33.76		
13	12.97				40.07		
14	13.96				46.38		
15	14.97				52.61		
16	15.94				58.83		
17	16.97				66.14		
18	17.96				73.44		
20	19.96				85.40		
22	21.97				107.98		
24	23.94				132.63		



Construction:

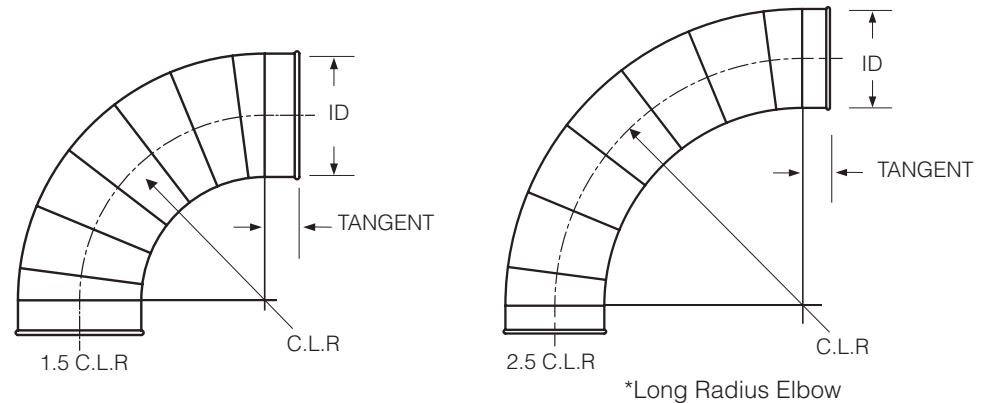
7" and larger elbows shown here are gored (segmented) construction with gores lapped over one another and spot welded. Galvanized is 16ga with 16ga collars while SS is 16ga with 20ga collars. This is a directional elbow and supplied with an arrow to indicate the direction of flow.

Degree of angle	Number of gores
15°	(2) 7.5° + (2) tangents
30°	(1) 15° + (2) 7.5° + (2) tangents
45°	(2) 15° + (2) 7.5° + (2) tangents
60°	(3) 15° + (2) 7.5° + (2) tangents
90°	(5) 15° + (2) 7.5° + (2) tangents

Seam: All heavy wall elbows have spot welded and caulked gores.

Ends: Standard QF end can be changed to Raw ID (RAWID), Raw OD (RAWOD), No Fitting (NF), Hose Adapter (RAWFLEX), Flat Flange (FFL), Angle Flange (ANGFL), or Van Stone (VANSTONE).

The customer must specify direction of flow for the desired elbow if order calls for ends other than QF.



QF Heavy Wall Elbows, Sizes 7" - 24" 3212

Temperature Rating of Product Components						
° F	QF Gored Elbows		Sealants			
-60°	Galvanized Steel	Optional - 304SS	3M Scotch Seal Metal Sealant 2084	Optional - 3M Polyurethane Adhesive Sealant 540	Optional - Rock River Silicone Sealant	Optional - Red Devil HVAC/R High Temperature Silicone Sealant
-40°				Optional - Epoxy - 3M DP 125 Gray Sealant		
0°						
194°						
250°						
400°						
500°						
1100°						

Additional Notes
Rock River Silicone Sealant and Red Devil HVAC/R High Temperature Silicone Sealant are not paintable
Galvanized steel provides little or no breakdown of zinc (zinc melting point 740°F)
304SS: <ul style="list-style-type: none"> bluing may occur at 800° F and above

Compliance / Rating of Product Components		
Product	Material	Compliance / Rating
QF Gored Elbows	Galvanized	ASTM A527 with a G-90 rating
	304SS	Finish meets ASTM A240
	316SS	Finish meets ASTM A240
3M Scotch Seal Metal Sealant 2084	Acetone blend	AAMA Specification 801.1
3M Polyurethane Sealant 540	Polyurethane	ASTM E 162, ASTM E 662, Bombardier SP 800-C
Rock River Sealant	100% Silicone	ASTM C920 Class 25, TT-S-00230C Class A and TT-S-001543A, FDA No 421 CFR 117.2600, conforms to FDA requirements
Red Devil HVAC/R High Temperature Sealant	Silicone	ASTM C920 Class 25, TT-S-00230C Class A and TT-S-001543A, CEBTP 432.6 140-2, Mil Spec 46106A, CGSB 19C9-9B, DIN 18540 Part 2, OREX 150031-2