



Press Formed Elbows, Angle Flanged, Sizes 3" - 7"

3211

TECHNICAL DATA

ID In.	Bend Degrees Available	CLR (Center Line Radius)	Tangents	Std Weight	Std Weight	Std Weight	Std Weight	Galvanized Steel	304SS (or 316SS)	
				30° Lbs	45° Lbs	60° Lbs	90° Lbs		24ga	14ga
3	30° 45° 60° 90°	Galvanized: 1.0 Optional : 1.5 Stainless Steel: 1.5	2.00	1.60	1.75	1.60	1.75	Std	Tubed	
4				2.00	2.25	2.00	2.25			
5				2.75	2.80	2.75	2.80			
6				3.65	3.85	3.65	3.85			
7				4.80	4.90	4.80	4.90			Std

Construction:

Standard galvanized steel 3" to 7" elbows are press formed. Press formed halves are stitch welded together with rolled ends. Stainless steel 3" to 6" elbows are tubed.

Ends: Angle Flange (ANGFL) - Nordfab Angle Flange is industry standard angle flange with pre-drilled holes. See 3261 QF Angle Flange Technical Data sheet for flange dimensions and hole patterns.

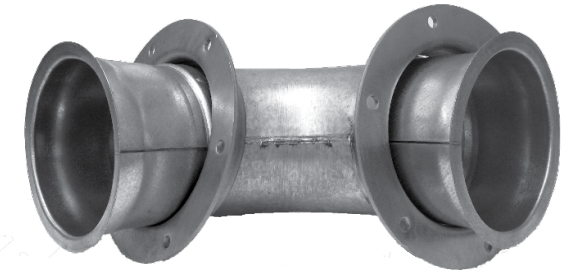
Collars: Collar is located on the exterior side of each port and considered as air flow non-directional. Collars have a laser welded longitudinal seam. If air flow directional product is required, it must be stated on the PO and additional cost may be incurred. A raised lap seam and spot weld are used for attaching the collar to the body and no caulking is used. If caulking is required, additional cost is incurred.

Notes:

Long Radius Elbows available with 1.5 CLR.

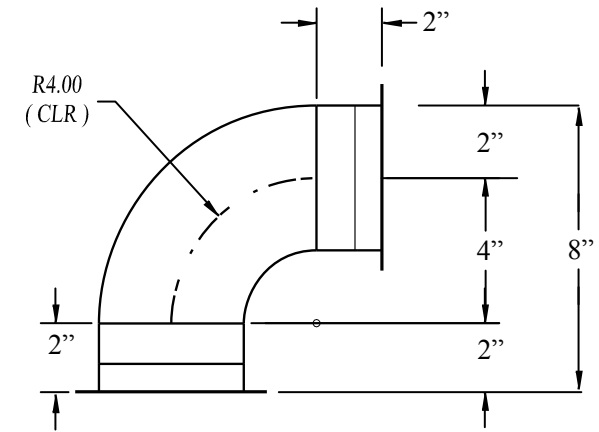
Size 8" to 40" elbows are gored - see 3211 Gored Elbows, Angle Flanged Technical Data Sheet

Reference Nordfab's QF Machine Adapter Technical Data sheet for actual ID and OD dimensions.



Height of 90° elbows can be calculated:

(Elbow diameter X CLR) + length of one tangent + 1/2 diameter
Example: (4" X 1.0) + 2 + 2 = 8



Example shown: 4" 90° Elbow 1.0 CLR = 4"

Temperature Rating of Product Components						
° F	QF Press Formed Elbows		Sealants			
1100°	Galvanized Steel	Optional - 304SS	3M Scotch Seal Metal Sealant 2084	Optional - Rock River Silicone Sealant	Optional - Red Devil HVAC/R High Temperature Silicone Sealant	Optional - Epoxy - 3M DP 125 Gray Sealant
500°						
390°						
250°						
194°						
0°						
-40°						
-60°						

Additional Notes
At temperatures ranging between 390° F and 480° F, the zinc-iron alloy layers in galvanized steel will continue to provide a high level of protection from corrosion. However, there may be some peeling, changes in mechanical properties, and reduction in the corrosion protection. Recommended max. service temperature is 390° F.
Rock River Silicone Sealant and Red Devil HVAC/R High Temperature Silicone Sealant are not paintable
304SS: <ul style="list-style-type: none"> • 3" - caulking on collared seam only • bluing may occur at 800° F and above

Compliance / Rating of Product Components		
Product	Material	Compliance / Rating
QF Press Formed Elbows	Galvanized	ASTM A653 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
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