QUICK-FIT

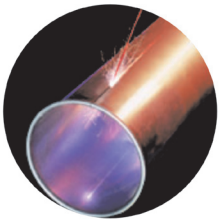
THE WORLD'S FASTEST DUCTING

Q-F puts the squeeze on costly conventional duct Installation.

Q-F is a snap! No complicated cutting, no riveting, no braising or welding are required. One Q-F clamp connects sections together in seconds. Branches, diverters, elbows - all adapt easily to your existing duct and may be taken apart and re-used or cleaned without special tools.

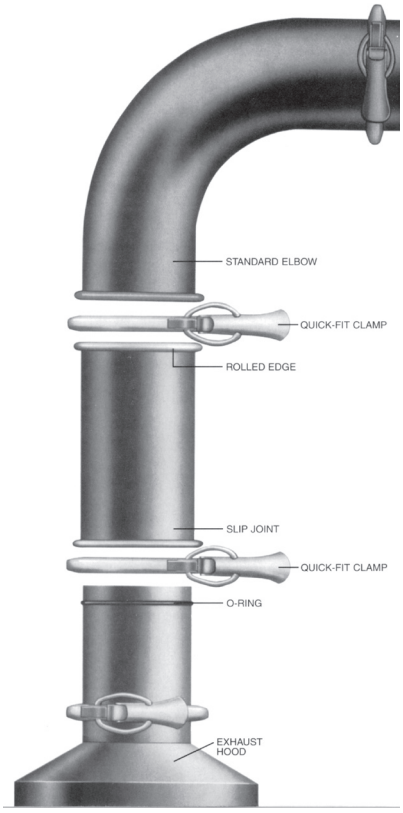
Q-F is easy to install, easy to align, and it's strong!

Q-F clamps are so easy to install, they almost install themselves. Simply place the clamp over the Q-F rolled lip ends and snap! The extraordinary strength of Q-F's specially machined double rolled lips provides a solid, straight run. The patented Q-F clamp connects the rolled ends. Snap the Q-F clamp and you have the strongest, safest, most re-usable dust-extraction piping available today. No special instructions or skills are needed to assemble a Q-F system. Install new lines, clean out lines or make changes to existing duct runs anytime you need to with Q-F.



LASER WELDED SEAM

Q-F adapts to your every need; connect to the old or bring in the new.



Q-F has everything you need in galvanized or stainless steel parts:

* *LASER WELDED* pipe in diameters from 3" to 24"
* Branch fittings in all sizes and shapes
* Elbows 30°, 45°, 60°, 90°
* Larger custom sizes and special adapters
* Blast Gates, Diverter Valves, Hoods, Manifolds.

Q-F adjusts to fit - without complicated measurements.

Planning to add, remove, or replace dust-extraction piping? Q-F's adjustable fittings slide together to create the precise length. No need for time wasted on exact measuring and precision cuts. Simply slide on and fit to your desired length, a few inches or a few feet. Need a different length for a new run? Just re-use your Q-F components and re-fit, again reducing your cutting and fabricating time.

Q-F saves you time and money.

Just how much money can you save using Q-F? Call us! You will be pleased with the savings and all the built-in advantages you get with Q-F.

Whether you need just a few parts, or help with a complete system, Q-F has 4 to 5 day lead time.

Call for a free sample.

Air Cleaning Specialists Inc.
826 Horan Drive
Fenton, MO 63026
Toll Free: 800-878-5030
Fax: 636-349-0556
www.ductingsystems.com

COLLAPSIBILITY & LEAKAGE DATA

COLLAPSIBILITY STRENGTH OF "Q-F" PIPING

Each size of piping has been tested for strength against collapsing. The piping was exposed to constant positive pressure and constant vacuum. Each pipe was exposed to a maximum capacity of the test equipment of 80" WG of vacuum and positive pressure. None of the pipe showed any form of deformation during the test. Please take into account that our pipe comes in 5' lengths with a rolled lip on each end, thus providing reinforcement every 5', which presents a sound structural design that should be stronger than any pipe in its class. Pipe and fittings must be installed in accordance with NORDFAB's standard specifications and standard accepted practices.

LEAKAGE RATE

All fit together ducting systems allow for some degree of leakage where they are joined. "Q-F" ducting is no exception and is not sold as an airtight system. However, versus the other ducting typically used in fit together systems, Nordfab's Quick-Fit (Q-F) ducting has fully welded, leak-tight laser welded seams. Spiral and other ducting with lock form seams are NOT fully welded at the seams and can be expected to have higher leakage rates than "Q-F".

In addition to our standard Nitrile gasket, NORDFAB also offers special clamp gasket material for high heat, food applications, etc. Further, the applying of sealants to the individual rolled ends can enhance the tightness of the system. However, the "Q-F" system is sold as a quick way of installing and modifying duct-work while at the same time retaining the usability of each component. In short, "Q-F" is meant to be able to be taken apart, re-assembled, stored, or moved. Completely eliminating the possibility for leakage jeopardizes the inherent benefits of the duct. Standard "Q-F" is designed to provide tight sealing and efficient airflow under negative pressures. To that end, we are providing the following information for piping situations where fan sizing is of extreme importance. The following data was obtained using standard components and was performed in accordance with the SMACNA, " HVAC AIR DUCT LEAKAGE TEST MANUAL". The information gives the leakage rate per joint of duct at various pressures. To utilize the chart, count the number of clamps, (this equals the number of pieces), per size and multiply by the number given beside the corresponding diameter and under the applicable pressure. These numbers assume that the product is correctly installed; free of dents in the joining ends and that the gasket is in place. Special gasket material and sealants will increase the sealing capabilities.

LEAKAGE RATE IN CFM PER QF JOINT

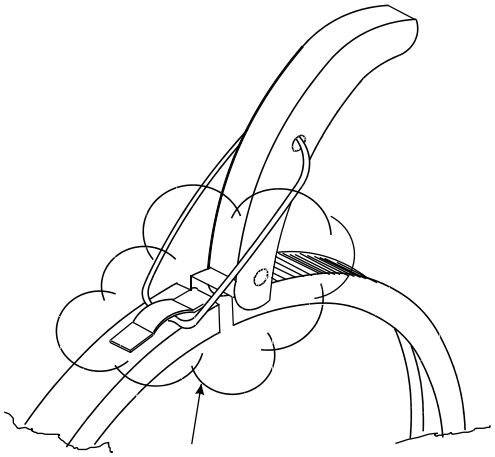
Dia Inches	3 WG	5 WG	7.5 WG	10 WG	15 WG	20 WG	25 WG	30 WG
4	0.20	0.25	0.30	0.30	0.35	0.50	0.60	0.80
5	0.20	0.25	0.30	0.30	0.35	0.50	0.60	0.80
6	0.20	0.25	0.30	0.30	0.35	0.50	0.60	0.80
7	0.20	0.25	0.30	0.30	0.35	0.50	0.60	0.80
8	0.20	0.25	0.30	0.30	0.35	0.50	0.60	0.80
9	0.20	0.25	0.30	0.30	0.35	0.50	0.60	0.80
10	0.20	0.25	0.30	0.30	0.35	0.50	0.60	0.80
12	0.30	0.30	0.40	0.40	0.40	0.60	0.70	0.90
14	0.30	0.30	0.50	0.70	0.80	0.80	0.90	1.10
16	0.30	0.40	0.60	0.70	1.00	1.10	1.20	1.40
18	0.40	0.40	0.70	0.80	1.10	1.30	1.50	1.70
20	0.40	0.60	0.80	0.90	1.20	1.50	1.70	2.00
22	0.40	0.60	0.80	1.10	1.40	1.50	2.00	2.20

NORDFAB Ducting QUICK-FIT

THE WORLD'S FASTEST DUCTING

Q-F CLAMP

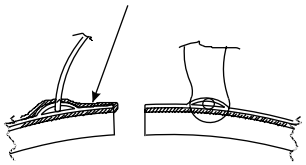
Stainless Style



See Detail on Right

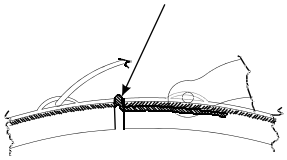
Position # 1

Seal Will Be Installed And Folded Over At the Factory. It Will Release Easily Due To The Pressure Sensitive Backing.



Position # 2

While Clamping Down, Slowly Tuck Extra Seal Underneath The Opposing Side Of Clamp.



Die Formed Rolled Edge

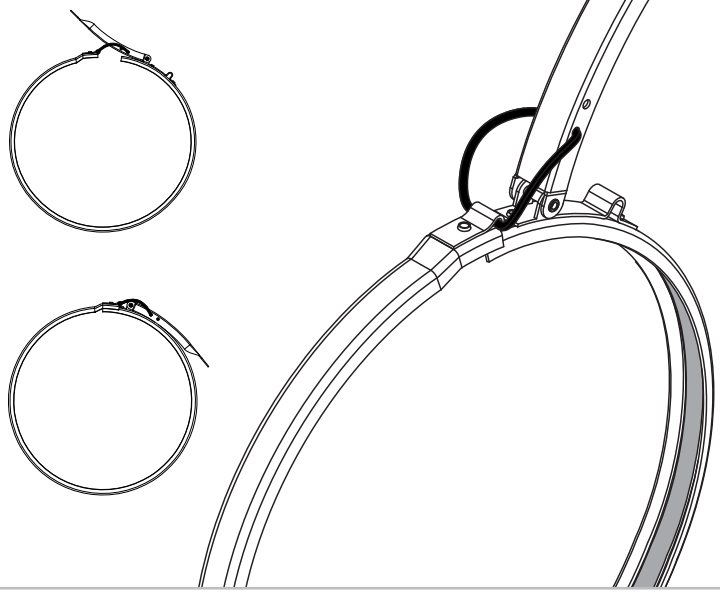
Galvanized Style

Quick-Seal Clamps

Since 1986, the Nordfab Quick-Fit clamp has been the world's best selling and best sealing duct clamp. It has set the standard for use in industrial dust, mist, smoke and fume collection. Many have tried to imitate it, but we've found none who have ever matched, or improved upon, its tight, leak-resistant seal.

Until now...
The New Nordfab Quick-Seal clamp uses our new revolutionary "overlap" design. This ensures the tightest seal possible.

Additionally, we have lengthened the handle for the Quick-Seal clamp and made it stronger, giving you more leverage to clamp down for super tight seals.



FITTINGS

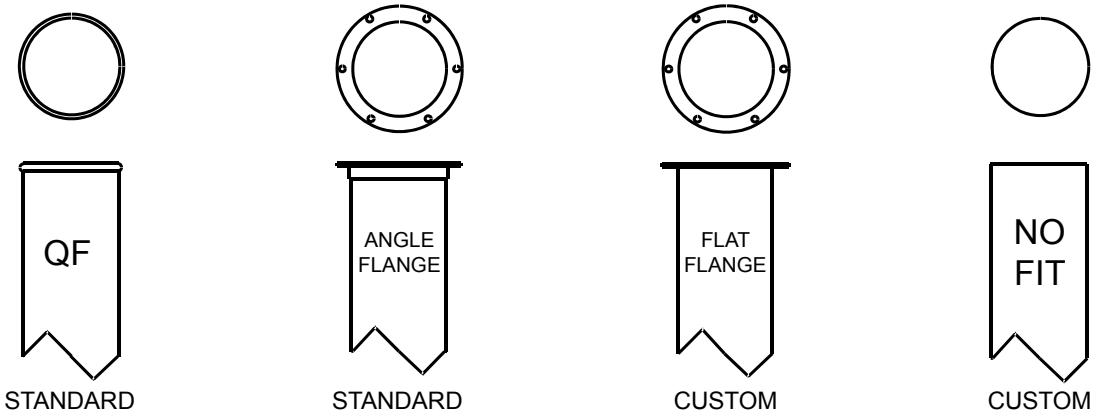
A) Branch fittings are produced to have a concentric design, as they taper to a specific dimension. Joints are lapped, spot welded, cleaned, and painted with KRYLON Industrial Tough Coat, Acrylic Enamel #1760 Aluminum. Seams are sealed with 3M Scotch-Seal (R) 2084 grey sealant.

B) Fitting gauges vary from 22 to 16 gauge depending on the configuration of the branch or fitting. Gauge can generally be determined by using the corresponding QF Pipe diameter gauge. If exact gauge is required, contact factory for more information.

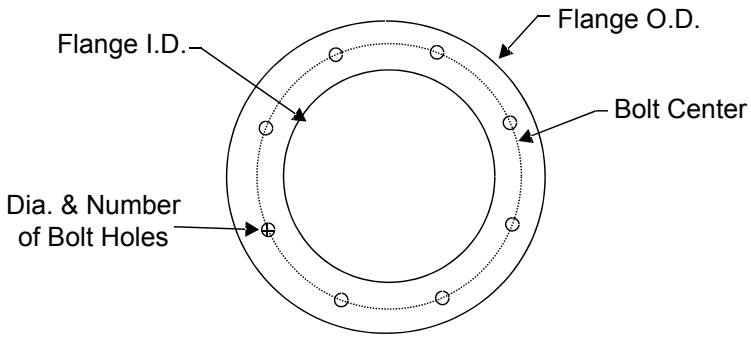
C) All standard branch fittings are produced on a 30 degree angle, however other angles (7.5˚ - 90˚) are available upon request.

D) As a normal practice, internal welds are not cleaned or painted. Cleaning or painting the inside is an option based on the customer's application and is done only at the customer's request with an **upcharge**.

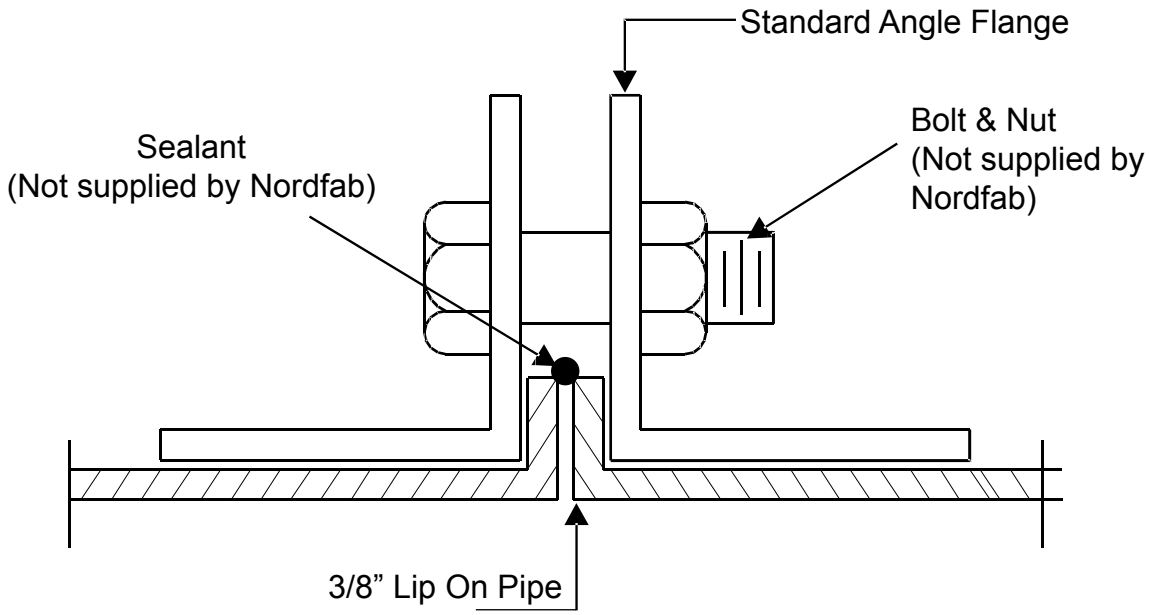
EXAMPLES OF VARIOUS FITTINGS AVAILABLE



INFORMATION NEEDED TO ORDER A CUSTOM FLANGE



FLANGE DUCT SPECIFICATION



A) "Flanged" = Material sheet blanks are 78.75" lg. and rolled with a longitudinal lock formed seam. An angle flange made from angle bar stock rolled on edge is placed on the end of the duct using a Van Stone Lip Connection as illustrated above. (See Nordfab Catalog for sizes)

B) Refer to your local guidelines and codes for how ducting should be supported

C) Duct diameters for FLANGE DUCT as follows:
3" through 40" available in 1" increments

NORDFAB Ducting QUICK-FIT

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ELBOWS

A) Standard elbows will have a centerline radii of 1 x dia & 1.5 x dia as specified in catalog .Longer radius elbows are available upon request.

B) Standard elbows 3" to 7" are pressed formed, 8" and larger are gored construction with a lock form standing seam every 15 degrees. Gore type elbows are produced as follows:

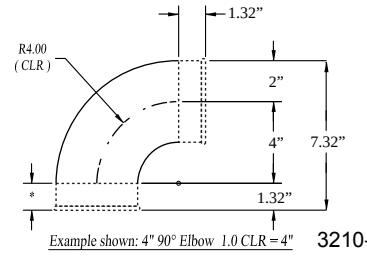
ANGLE IN DEGREES	NUMBER OF GORES
15º	(2) 7.5º + 2 tangents
30º	(1) 15º + (2) 7.5º + 2 tangents
45º	(2) 15º + (2) 7.5º + 2 tangents
60º	(3) 15º + (2) 7.5º + 2 tangents
90º	(5) 15º + (2) 7.5º + 2 tangents

ELBOW STANDARD AND UPGRADES FOR QF AND ANGLE FLANGE

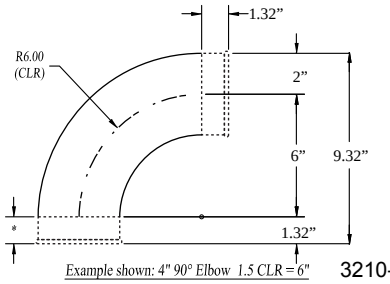
NOTE: TUBED ELBOWS ARE AVAILABLE @ 14 GA EXCEPT 3-4" GAL @ 16GA

ELBOW DIAMETER	GALV STD GAUGE	SS STD GAUGE	ONE GAUGE UPGRADE	MAX HEAVY WALL STYLE ELBOW
3"	24	14 TUBED	N/A	N/A
4"	24	14 TUBED	N/A	N/A
5"	24	14 TUBED	N/A	N/A
6"	24	14 TUBED	N/A	N/A
7"	24	22	18	16
8"	22	22	18	16
9"	22	22	18	16
10"	22	22	18	16
11"	22	22	18	16
12"	22	22	18	16
13"	20	20	18	16
14"	20	20	18	16
15"	20	20	18	16
16"	20	20	18	16
17"	20	20	18	16
18"	20	20	18	16
19"	20	20	18	16
20"	20	20	18	16
21"	20	20	18	16
22"	20	20	18	16
23"	20	20	18	16
24"	20	20	18	16
26"	18	18	16	16
28"	18	18	16	16
30"	18	18	16	16
32"	18	18	16	16
34"	16	16	16	16
36"	16	16	16	16
38"	16	16	16	16
40"	16	16	16	16

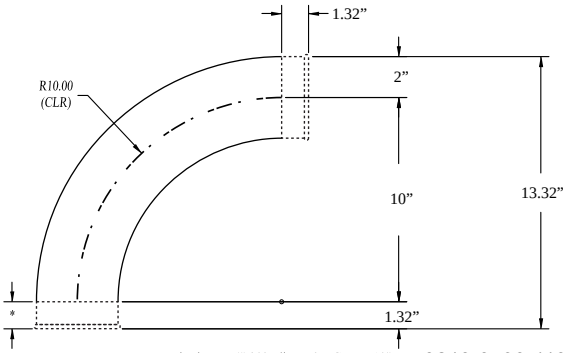
4" GALV. ELBOW CLR EXAMPLE



Example shown: 4" 90° Elbow 1.0 CLR = 4" 3210-0490-104000



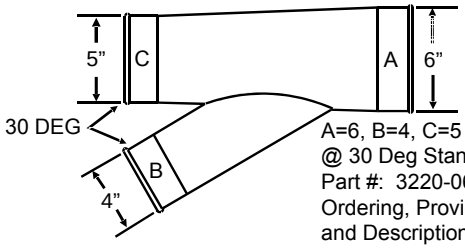
Example shown: 4" 90° Elbow 1.5 CLR = 6" 3210-0490-106000



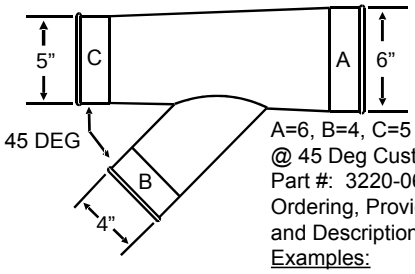
Example shown: 4" 90° Elbow 2.5 CLR = 10" 3210-0490-110000

NOTE: Overall height calculation only works with 90° elbows.

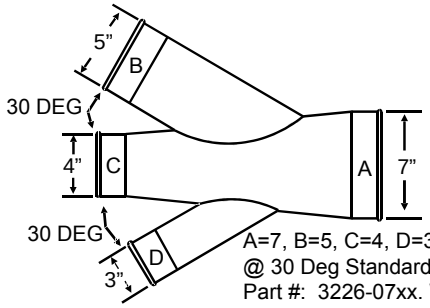
BRANCH STYLES



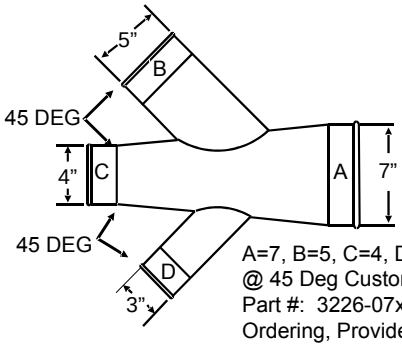
A=6, B=4, C=5
@ 30 Deg Standard
Part #: 3220-06xx. When Ordering, Provide Part # and Description.
Examples:
3220-06 6-4-5
or Branch 6-4-5



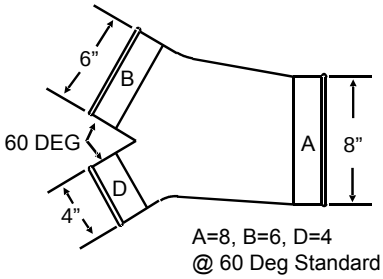
A=6, B=4, C=5
@ 45 Deg Custom
Part #: 3220-06xx. When Ordering, Provide Part # and Description.
Examples:
3220-06 6-4-5 @ 45 Deg
or Branch 6-4-5 @ 45 Deg



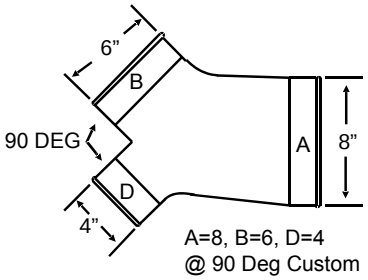
A=7, B=5, C=4, D=3
@ 30 Deg Standard
Part #: 3226-07xx. When Ordering, Provide Part # and Description.
Examples:
3226-07 7-5-4-3
or Double Branch 7-5-4-3



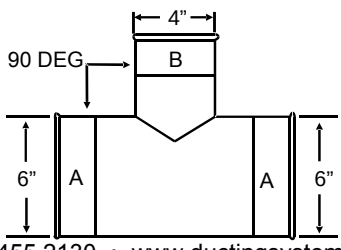
A=7, B=5, C=4, D=3
@ 45 Deg Custom
Part #: 3226-07xx. When Ordering, Provide Part # and Description.
Examples:
3226-07 7-5-4-3 @ 45 Deg or
Double Branch 7-5-4-3 @ 45 Deg



A=8, B=6, D=4
@ 60 Deg Standard
Part #: 3221-08xx. When Ordering, Provide Part # and Description.
Examples:
3221-08 8-6-4
or Y- Branch 8-6-4

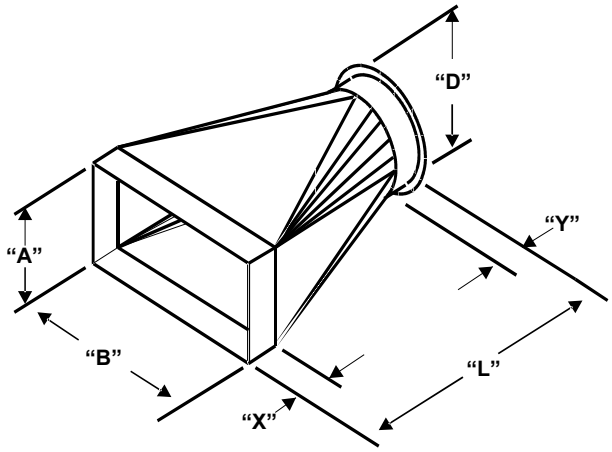


A=8, B=6, D=4
@ 90 Deg Custom
Part #: 3221-08xx. When Ordering, Provide Part # and Description.
Examples:
3221-08 8-6-4 @ 90 Deg
or Y- Branch 8-6-4 @ 90 Deg

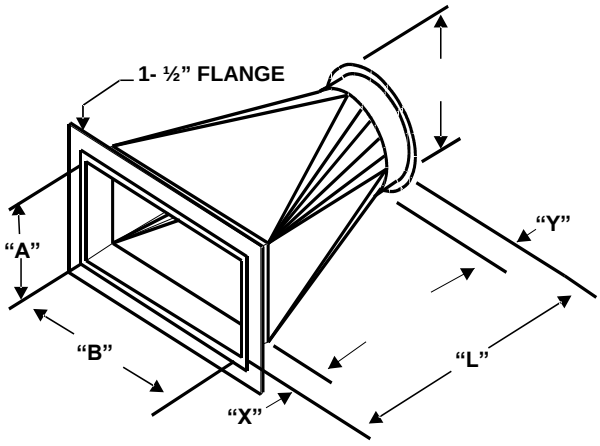


A=6, B=4
@ 90 Deg Standard
Part #: 3227-0604. When Ordering, Provide Part # and Description.
Examples:
3227-0604
or T- Branch 6-4

TRANSITION STYLES



STYLE #1



STYLE #2

Built to your specifications. Please list all required dimensions and details.

Specify Rectangle End: ☐ Angle Flange ☐ Flat Flange ☐ Raw End I.D. ☐ Raw End O.D.

Flange Type: ☐ Angle Flange ☐ Flat Flange ☐ Sheet Metal

Specify Round End: ☐ QF ☐ Angle Flange ☐ Flat Flange ☐ Hose Conn.

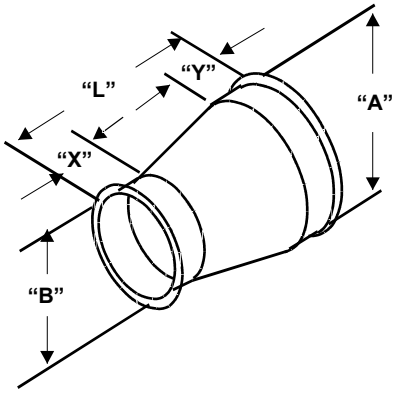
☐ Raw I.D. Or O.D.

NOTE: If no hole pattern is supplied for flanges, they will be supplied "Blank" to be field drilled.

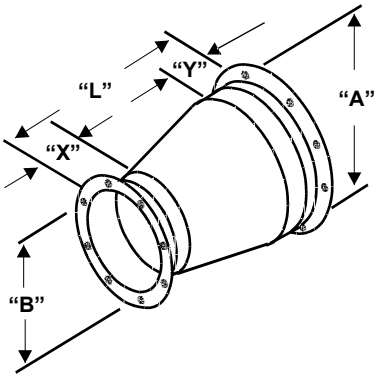
"L" = to the greater of B or D **NOTE: Minimum L for Sq to Rd is B x 0.75**

Item #	Qty.	"D"	"A"	"B"	"X" Std 2"	"Y" Std 2"	"L"	Gauge	Flange Material	Flg Dwg	Special Notes

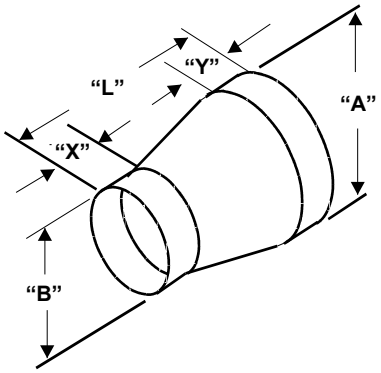
REDUCER STYLES



"Q-F STYLE"



"FLANGED STYLE"



"RAW END STYLE"

A) Reducers are produced by the following formula:

"QF" LENGTH = (A-B) + 6" [7" MIN]
"FL" LENGTH = (A-B) + 8" [9" MIN]

B) Standard material gauges as follows: (Heavier gauges available contact NORDFAB)

DIA.	GALV. GAUGE	SS GAUGE
4" - 12"	22	22
14" - 22"	20	20

NOTE: Any combination of the above style are available upon request. Please specify all the required dimensions and all reducer end configurations (Raw ID, Raw OD Style, QF Style, Flange Style, Etc.).

Item#	Qty	"A"	Style "Q-F" "Flange" "Raw"	"B"	Style "Q-F" "Flange" "Raw"	"L" (A-B+6)	"X" STD-2"	"Y" STD-2"	Part Gauge	Flange Material	Flg Dwg	Special Notes

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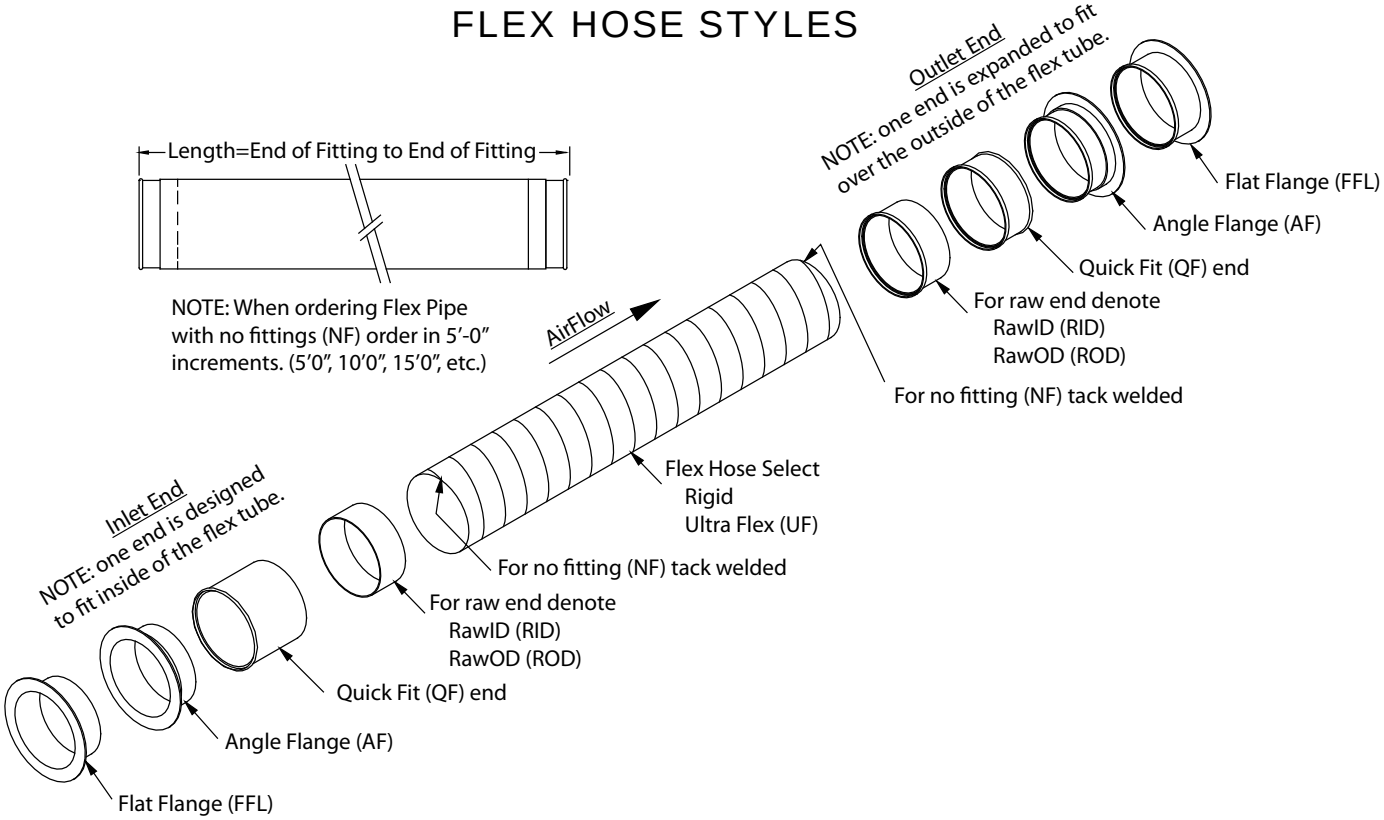
FLEX HOSE STYLES



NOTES:

1. If no hole pattern is supplied for flanges, you will receive blank flanges (flanges without holes).
2. Any combination of the above style are available upon request. Please specify the inlet diameter, flex hose diameter, and outlet diameter.
3. Note the length is based on the flex hose being stretched out before cutting (not compressed).
4. Special Notes: SP=Spot Weld (Std), ST=Stitch Weld, SO=Solid Weld, BY=Buff Yes, BN=Buff No (Std), note other requirements.
5. Rigid and Ultra Flex hose is produced in 5' lengths in diameters 7" and above.

Item #	Inlet Dia.	Inlet End Style (QF, NF, AF, FFL, RID, ROD)	Flex Dia.	Flex Hose (RF, UF)	Outlet Dia.	Outlet End Style	Length (in.)	Material (G, SS)	Drawing (Y/N)	Special Notes

RUBBER FLEXIBLE HOSE

- Wide Temperature Range
- Versatility
- Better UV, Moisture and Weathering Resistance
- Will Not Set to The Shape of the Box When Packed
- Superior Chemical Resistance
- Better Abrasion Resistance
- Outstanding Flex Resistance
- Better Looking Product
- No Cement
- Air Tight

T-7

Size Range (in).....stock 2" to 24"
Standard Length (ft).....25', 50'
Standard Colors.....black
Temp Range (˚F) .....-60˚ to 275˚

- Medium weight thermoplastic rubber hose reinforced with a spring steel wire helix
- Good abrasion resistance
- Designed for applications with wide temperature ranges
- Great moisture & UV resistance
- Excellent chemical resistance
- Smooth interior assures minimal friction loss & efficient air flow
- Wall Thickness = .030"
- Available in metric sizes, consult sales team on pricing & minimums

R-4

Size Range (in).....stock 2" to 24"
Standard Length (ft)..... 10', 25', 50'
Standard Colors.....clear
Temp Range (˚F) .....20˚ to 160˚

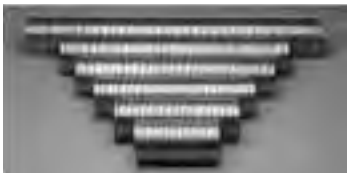
- Medium weight PVC hose reinforced with a spring steel wire helix
- Good for positive pressure applications
- Great compressibility
- Construction allows for value packaging by reducing the box size, reducing warehouse space & shipping costs
- Ideal for dust and woodworking applications
- Good chemical & moisture resistance
- Manufactured with FDA acceptable materials
- Wall Thickness = .028"

FLX-THANE® MD

Size Range (in).....stock 2" to 24"
Standard Length (ft).....25', 50'
Standard Colors..... black, clear
Temp Range (˚F) .....-60˚ to 225˚

- Medium weight polyurethane hose reinforced with a bronze coated spring steel wire helix
- Good compressibility
- Great abrasion resistance & high tear strength
- Superior chemical resistance
- Excellent flexibility
- Designed for applications with wide temperature ranges
- Very good low temperature flexibility
- Clear is manufactured with FDA acceptable materials
- Available in metric sizes, consult sales team on pricing & minimums
- Wall Thickness = .030"

RIGID METAL FLEX HOSE



Part # 3281-XX00

Inside Dia. (Inches)	Appox. Outside Dia. (Inches)	Min. CLR Bend Radius	Appox. Weight Per Foot (LBS)
1 1/2	1 3/4	12.0	1.00
2	2 1/4	16.0	1.30
2 1/2	2 3/4	18.0	1.60
3	3 1/4	22.0	2.00
3 1/2	3 3/4	25.0	2.30
4	4 1/4	29.0	2.60
5	5 1/4	34.0	3.00

Inside Dia. (Inches)	Appox. Outside Dia. (Inches)	Min. CLR Bend Radius	Appox. Weight Per Foot (LBS)
6	6 1/4	44.0	3.60
7	7 1/4	50.0	4.20
8	8 1/4	56.0	4.70
9	9 1/4	61.0	5.30
10	10 1/4	65.0	5.90
12	12 1/4	76.0	7.00
14	14 1/4	106.0	8.10

MEDIUM-HEAVY GALVANIZED OR STAINLESS

.017- .020 Strip Thickness

ULTRA FLEX METAL HOSE

Part # 3283-XX00

Inside Dia. (Inches)	Min. CLR Bend Radius	Appox. Weight Per Foot (LBS)
3	21	2.15
4	30	2.65
5	35	2.95

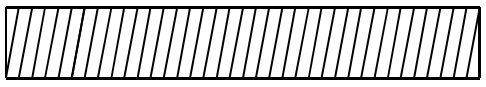
Inside Dia. (Inches)	Min. CLR Bend Radius	Appox. Weight Per Foot (LBS)
6	43	3.55
7	52	4.15
8	60	4.55

Manufactured in sizes ranging from 3" dia thru 8" dia of stainless steel or galvanized. Some Applications would include Air Handling, and Dust Collection.

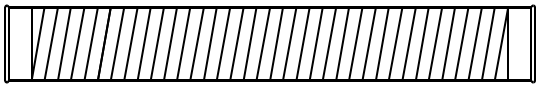
Square Lock: ID Tolerance: +1/4 " , - 0
Specification: 3"-6" manufactured out of .019 material
7"-8" manufactured out of .024 material

RIGID AND ULTRA FLEX STEEL HOSE CONFIGURATIONS

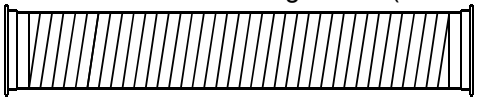
Steel Flex Hose With Raw Ends (Standard)



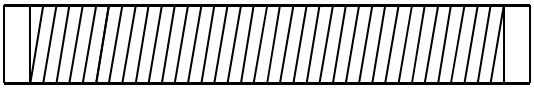
Steel Flex Hose With Q-F Ends (Custom)



Steel Flex Hose With Flange Ends (Custom)



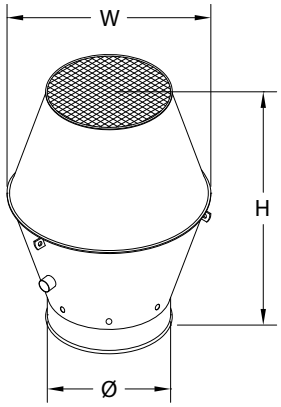
Steel Flex Hose With Raw Pipe Ends (Custom)



NOTE: When ordering steel hose, you have the option of having the hose fitted with several different style end fittings in any number of combinations. Raw hose is priced per foot, and sold only in 5 Ft. increments on 7" and above. 6" and below can be sold in any length. Contact your sales rep for pricing on specific lengths and end fittings.

JET CAP

Ø	PART NO.	ENDS	W (inches)	H (inches)
6”	3258-0600	QF	10.12	14.40
8”	3258-0800	QF	13.25	18.40
10”	3258-1000	QF	16.50	22.40
12”	3258-1200	QF	20.00	27.00
13”	3258-1300	QF	21.50	30.00
14”	3258-1400	QF	23.12	32.80
15”	3258-1500	QF	24.50	34.00
16”	3258-1600	QF	26.50	36.40
17”	3258-1700	QF	27.70	38.00
18”	3258-1800	QF	29.50	40.00
20”	3258-2000	QF	32.50	44.40
22”	3258-2200	QF	35.40	47.50
24”	3258-2400	QF	38.60	51.50
26”	3258-2600	FLANGE	42.20	55.00
28”	3258-2800	FLANGE	45.20	59.00
30”	3258-3000	FLANGE	48.20	63.00
32”	3258-3200	FLANGE	51.20	67.00
34”	3258-3400	FLANGE	54.60	71.00
36”	3258-3600	FLANGE	58.20	74.70
38”	3258-3800	FLANGE	61.20	79.00
40”	3258-4000	FLANGE	64.20	83.00

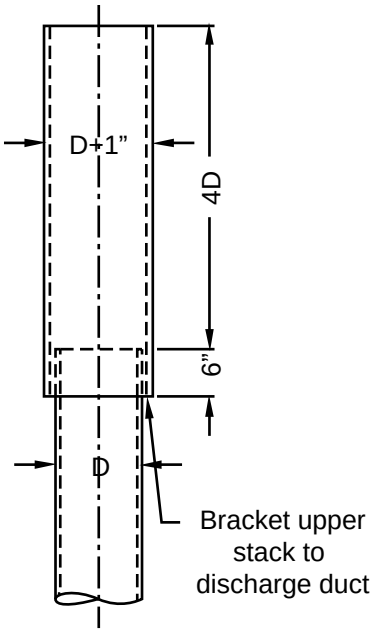


- Prevents rain from entering duct work
- Inner funnel piece allows rain to drain out of ductwork even when system is not running
- Has three angle brackets for guide wire attachment
- Installs In Seconds with Standard Q-F Clamp

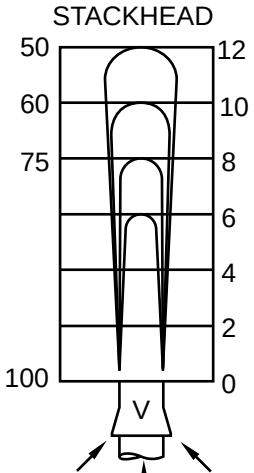
Angle Flange used for securing with guyed wires

QF Connection

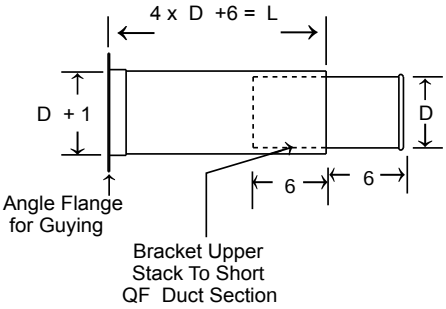
NO-LOSS STACKHEAD



VERTICAL DISCHARGE
NO LOSS



PREFERRED
Air proceeds upward



Recommended Industrial Ventilation Guidelines

INSTALLING TAP-IN OR CUT-IN

STEP 1:

Temporarily place the in-cut on the main trunk in the required position, and while holding in place, place hand inside of branch and trace the interior of the branch on trunk line where it needs to be cut out.

STEP 2:

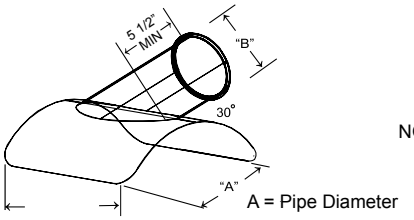
Take down in-cut and drill a starter hole in the main trunk along the line traced from the branch. Then using metal snips or a reciprocating saw, cut out metal piece that has been traced. File or grind any sharp edges to insure efficient flow.

STEP 3:

Now use an industrial strength silicone sealant to seal between in-cut base and main trunk.

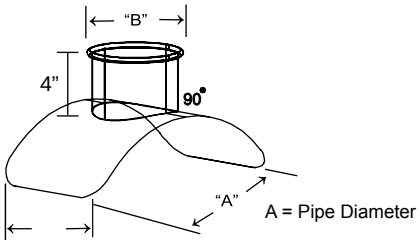
STEP 4:

Use small sheet metal screws or a banding type clamp material to secure in-cut to the main trunk line.



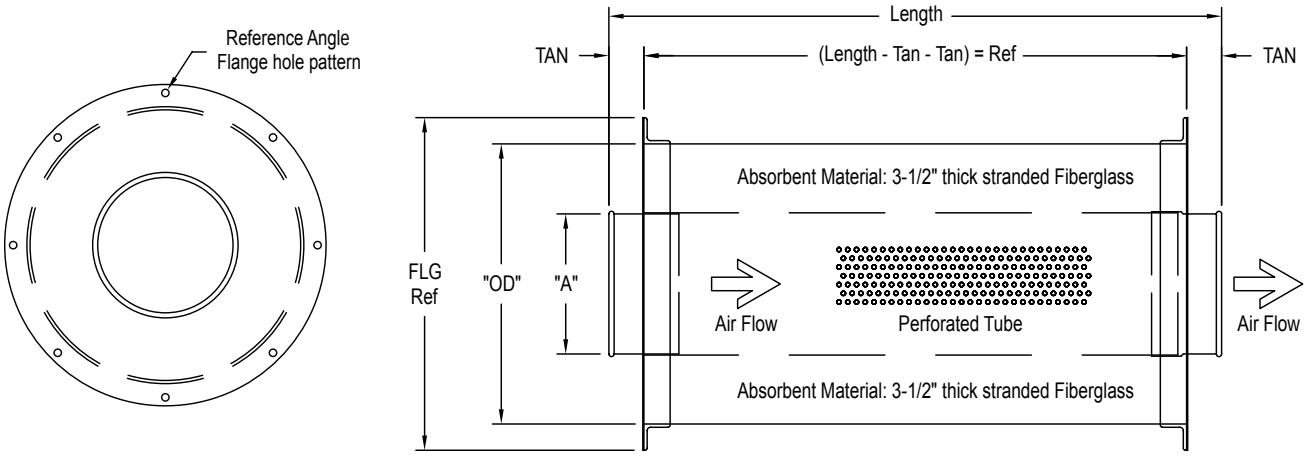
Saddle length + width = 3" all directions from Branch Tube (B).

NOTE: Gauge based on "A"



Saddle length + width = 2" all directions from Branch Tube (B).

INLINE SILENCER



1. Silencer to be placed in process line down stream of fan or cyclone collector.
2. Silencer housing constructed of 18-20 gauge galvanized metal.
3. Silencer should be properly supported in process line.
4. NORDFAB reserves the right to modify the design of the silencer without notice.
5. Efficiencies of Silencer have not been tested, nor are there any guarantees of sound level attenuation.

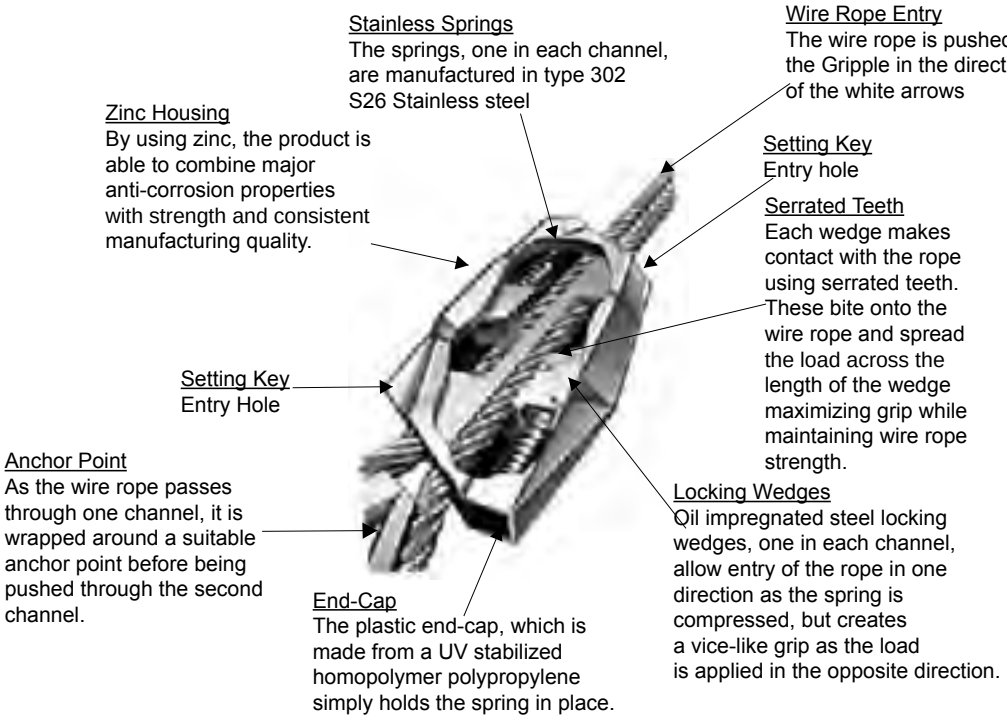
GRIPPLE HANG-FAST

Gripple Hang-Fast is a complete solution for hanging mechanical and electrical services. It comes as a ready-to-use suspension kit, with load ratings from 22lbs to 715lbs. The comprehensive range ensures that installation times are minimized and high productivity is achieved on site.

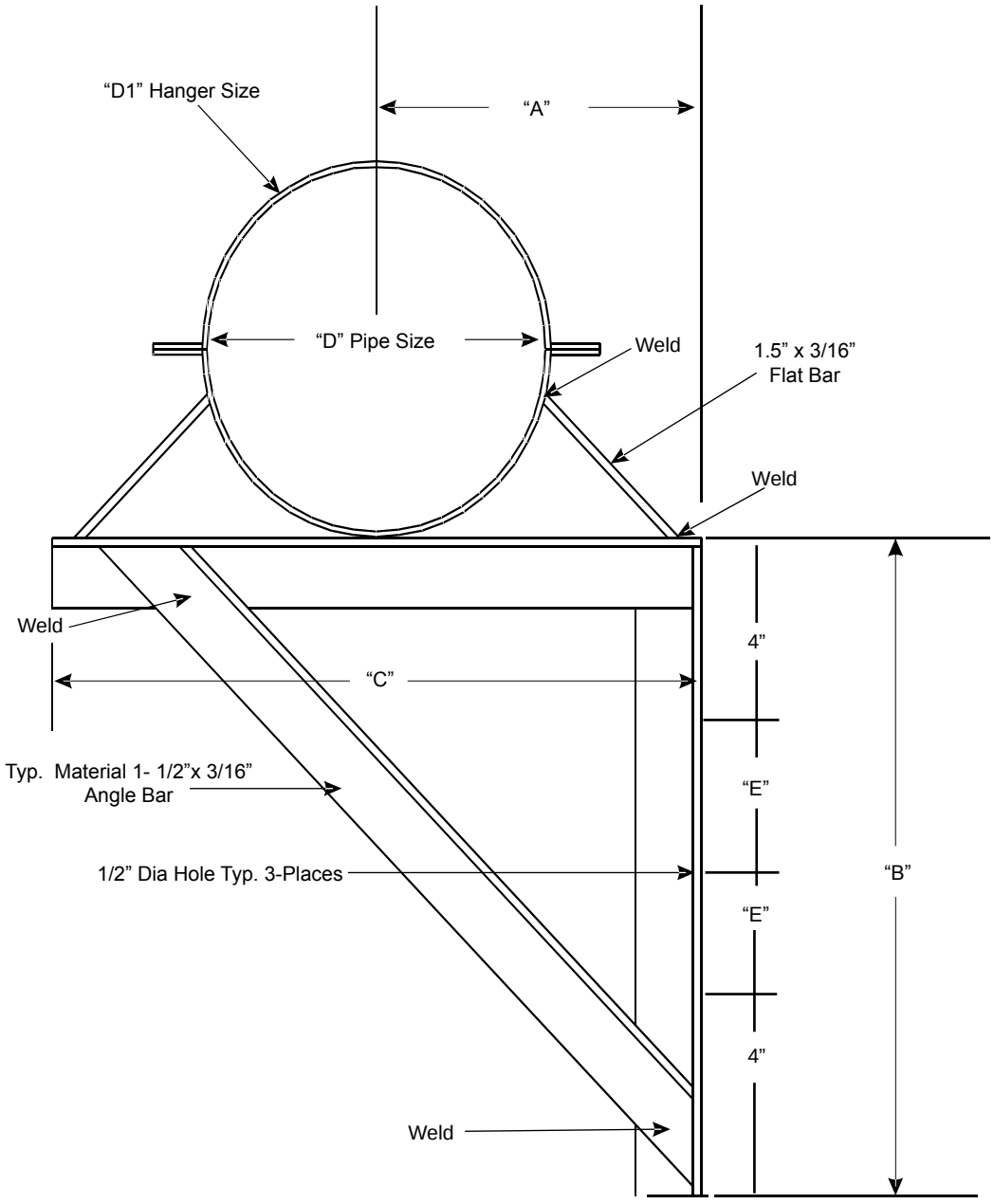
The principal element of all Gripple Hang-Fast assemblies is the Gripple Hang-Fast Grip, which is not only used to terminate the rope but is also the means by which object height can be adjusted.

Gripple Hang-Fast
Sizes & Working Load Limits ...

ITEM #	LENGTH	WEIGHT	AVAILABILITY
3266-1500-022LBS	15'	22 LBS	IN STOCK
3266-1500-100LBS	15'	100 LBS	IN STOCK
3266-1500-200LBS	15'	200 LBS	IN STOCK
3266-1500-495LBS	15'	495 LBS	IN STOCK
3266-1500-715LBS	15'	715 LBS	IN STOCK



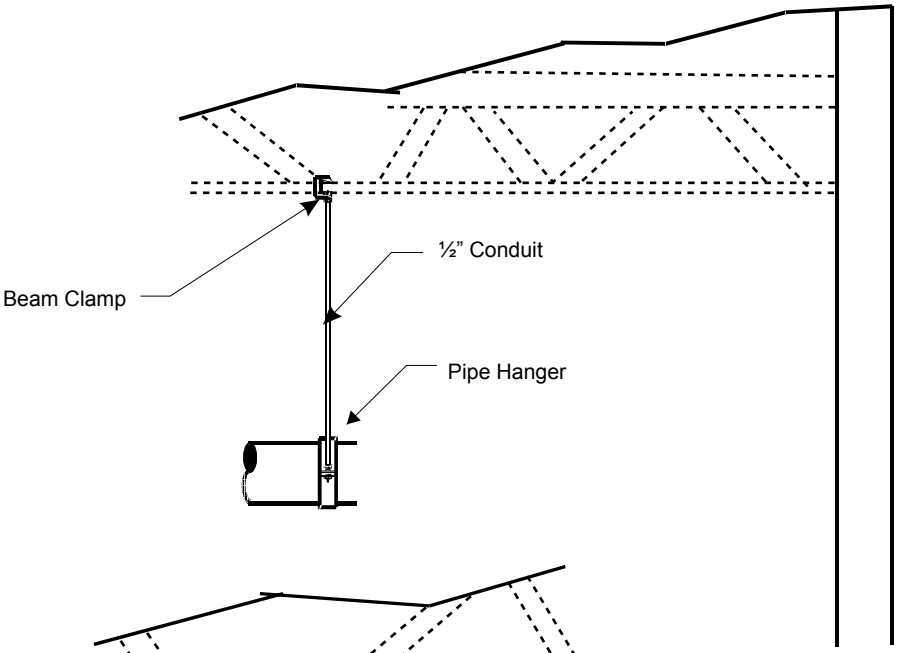
TYPICAL WALL MOUNTING BRACE

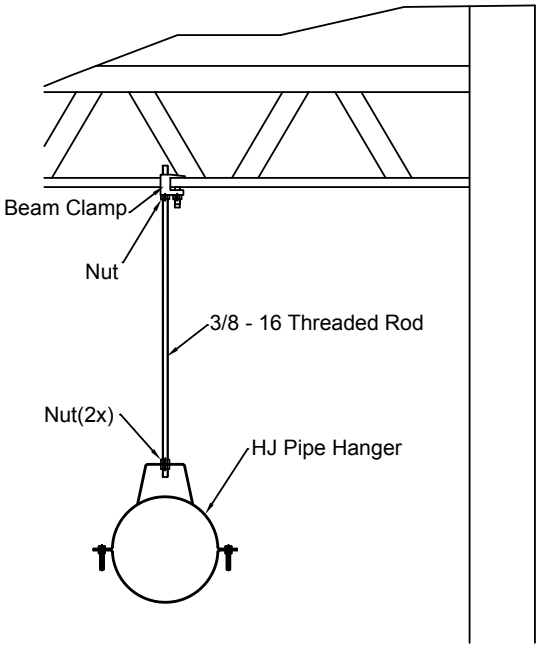


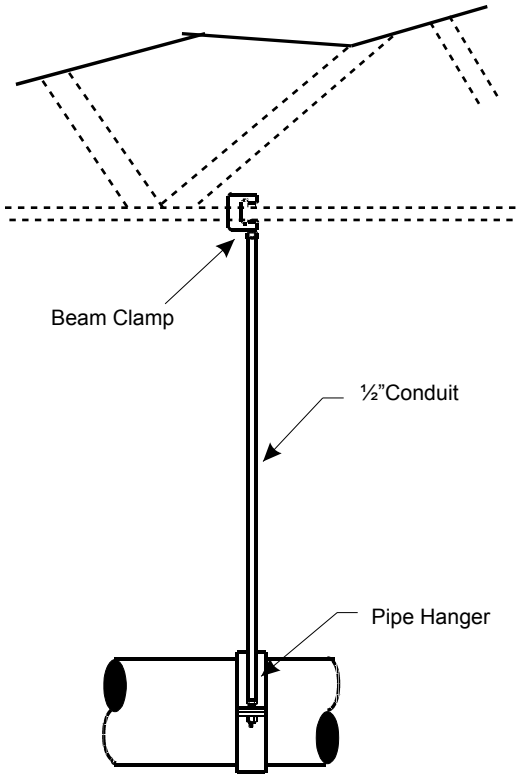
QTY	"A"	"B"	"C"	"D1"	"D"	"E"

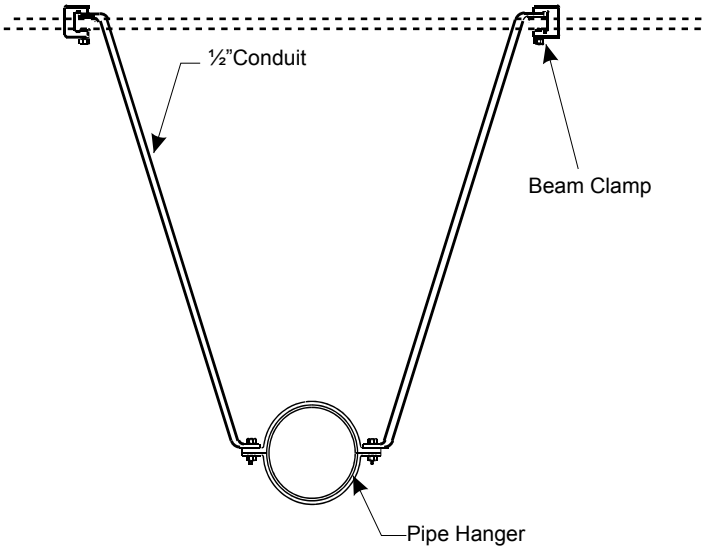
TYPICAL CEILING HANGING METHOD

(Check local building codes, Nordfab is not responsible for building code violations)
Gripple hangers are also a typical ceiling hanging method.









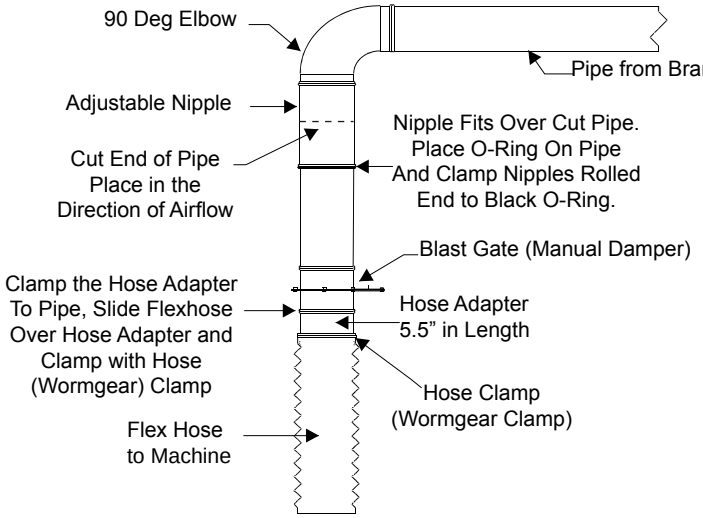
NOTE: Refer to your local codes when choosing how to support QF ducting.

NORDFAB Ducting QUICK-FIT

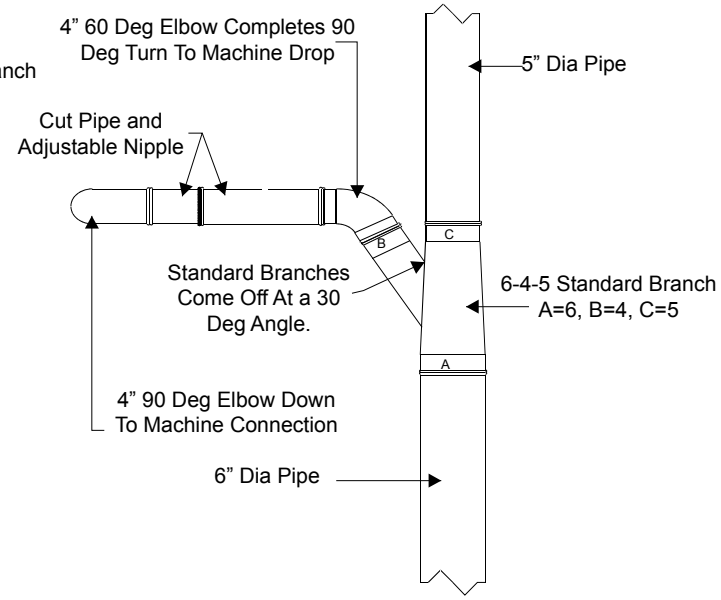
THE WORLD'S FASTEST DUCTING

TYPICAL DRY SYSTEM INSTALLATION

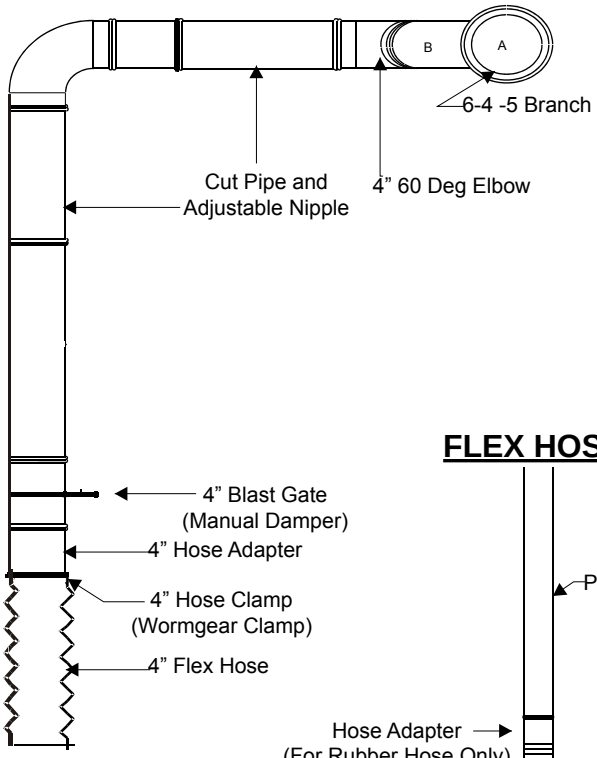
TYPICAL DROP FOR DRY SYSTEMS



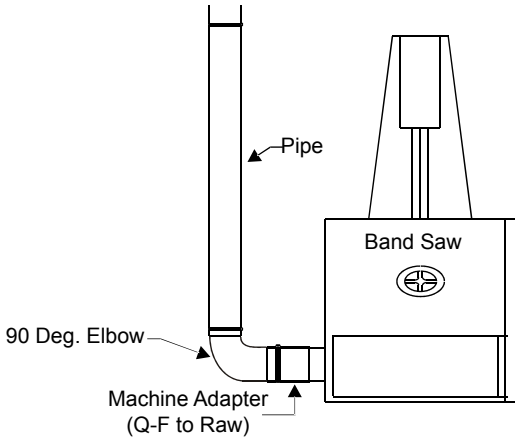
PLAN VIEW



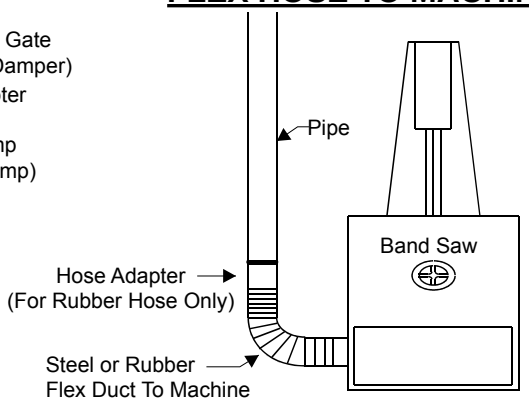
ELEVATION VIEW



HARD DUCT TO MACHINE

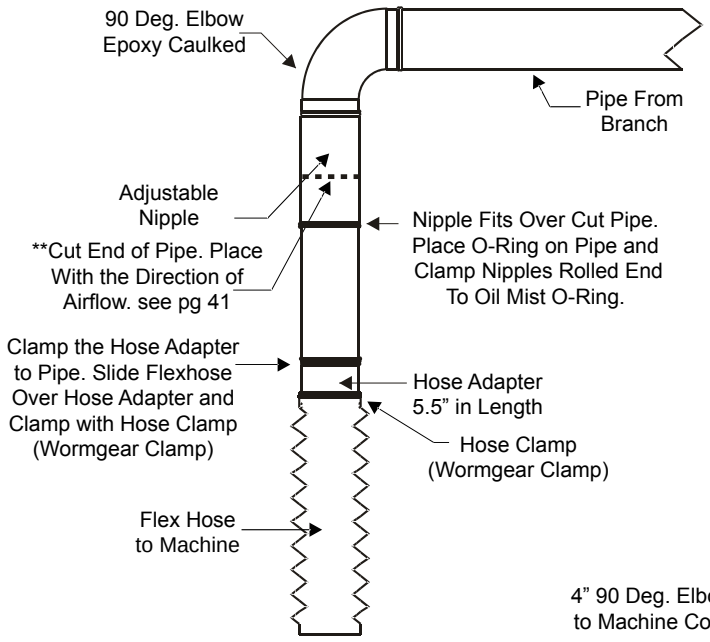


FLEX HOSE TO MACHINE

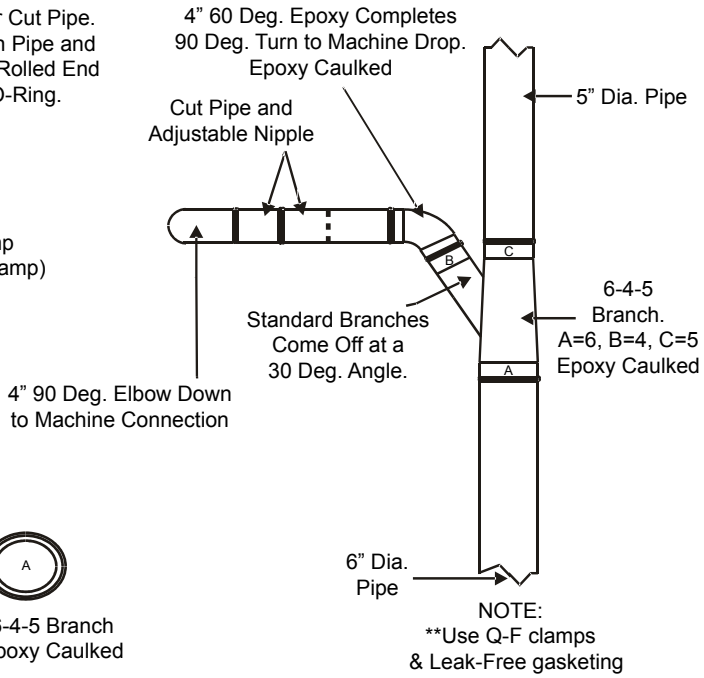


TYPICAL WET SYSTEM INSTALLATION

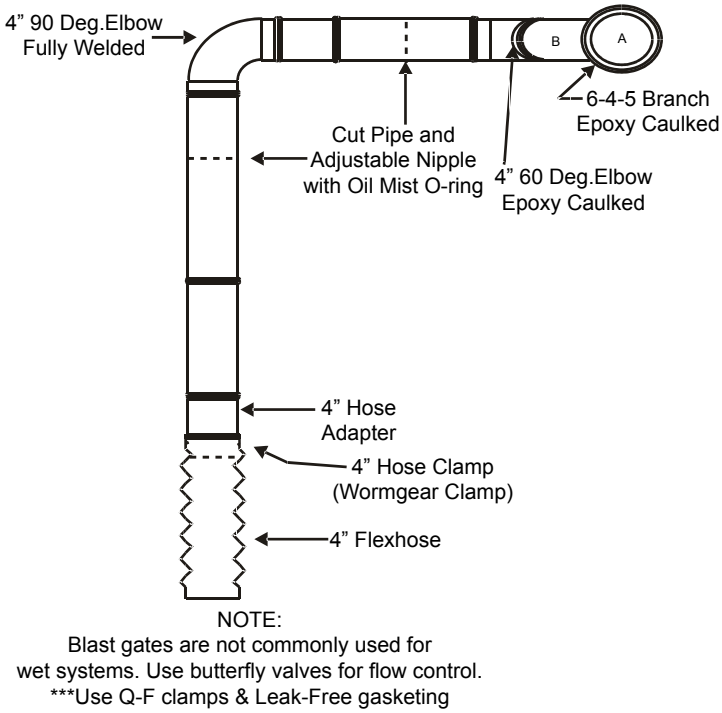
TYPICAL DROP FOR WET SYSTEMS



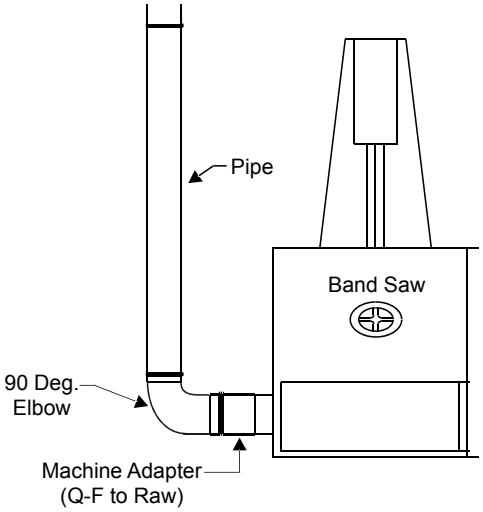
PLAN VIEW



ELEVATION VIEW



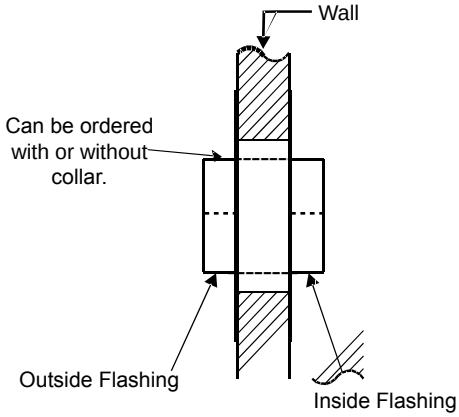
HARD DUCT TO MACHINE

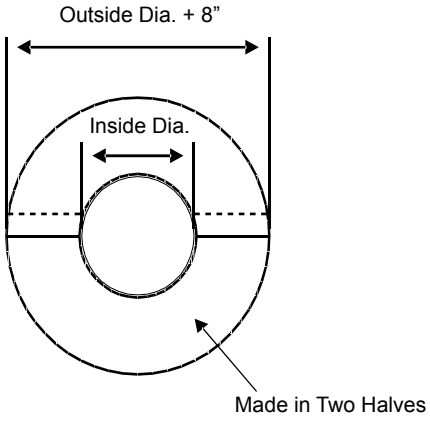


NORDFAB Ducting QUICK-FIT

THE WORLD'S FASTEST DUCTING

WALL FLASHING

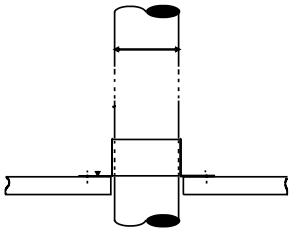




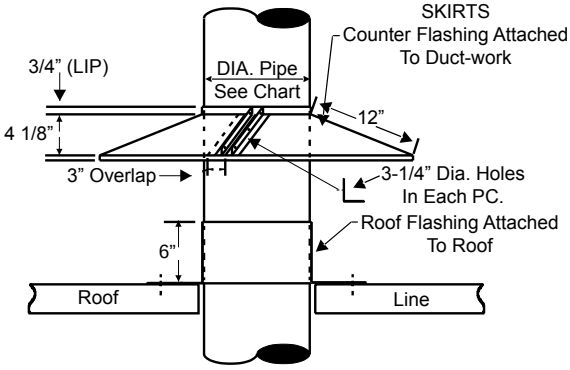
DESCRIPTION:
Provides weather protection for Wall penetration. Ordering one flashing provides you with both 1 inside and 1 outside flashing (4 halves).

AVAILABILITY:
Material: GALVANIZED or STAINLESS STEEL
Sizes in inch: 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40

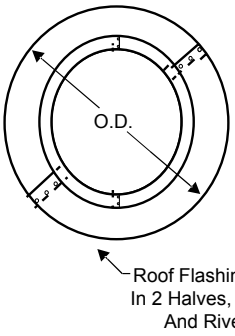
ROOF FLASHING & SKIRT (SOLD SEPARATELY)



Elevation View



Top View



DESCRIPTION:
Provides weather protection for roof penetration.

AVAILABILITY:
Material: GALVANIZED or STAINLESS STEEL
Sizes in inch: 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40

NOTE: Please specify Wall or Roof Flashing

Quantity	Dia. Of Pipe	# of Sets

SIZING A "Q-F" SYSTEM

NORDFAB offers assistance to those sales people and customers who have never designed a ducting system before. We can assist you in determining the correct duct size and configuration that will supply you with the correct flow.

We have the ability to assist customers in designing a blast-gated system; taking into account flow dynamics that will be affected by blast gates. While blast gates can be used to effectively utilize an undersized filtering system, they can also destroy the flow if not properly placed.

USING THE CFM / FPM CHART

Different materials need to be moved at different velocities to prevent the material from falling out of the air stream. For example: wood chips and saw dust flow well at 4500 feet per minute. Referring to the chart on the next page, you will see that a 4" duct will convey 395 CFM at 4500 FPM. This will mean that a 4" pick-up on a machine will take 395 CFM from your filtering system; or working in reverse, if you know that a machine will require approximately 400 CFM to remove the waste, then you should design a 4" duct for the purpose.

Description of Conveyed Material	Velocity FPM	Example
Gases	1,000 - 2,000	All Vapors, Gases and Smoke
Fumes	2,000 - 2,500	Welding
Oil Mist	2,000 - 2,500	Oily Vapor or Oily Smoke
Very Fine Light Dust	2,500 - 3,000	Cotton Lint, Litho Powder, Wood Flour
Dry Dusts and Powders	3,500 - 4,000	Light Shavings, Rubber Dust, Soap Dust
Typical Industrial Dust	3,000 - 4,000	Grinding or Buffing Dust, Granite/Brick/Clay Dust
Heavy Dusts	4,000 - 4,500	Heavy or Wet Sawdust, Metal Turnings, Sand Blast Dust, Wood Blocks
Heavy or Moist	4,500 +	Moist Cement Dust, Quick-Lime Dust, Sticky Buffing Lint

AIR VOLUME CHART (CFM)

AIR VOLUME IN DUCTS IN CUBIC FEET PER MINUTE (CFM)											
	VELOCITY IN FEET PER MINUTE (FPM)										
DUCT Ø	2000	2500	3000	3500	4000	4500	5000	5500	6000	6500	7000
3	100	125	150	170	195	220	245	270	295	320	345
4	175	220	260	305	350	395	440	485	525	570	615
5	275	340	410	475	545	615	680	750	820	885	955
6	395	490	590	685	785	885	980	1080	1180	1275	1375
7	535	670	800	935	1070	1205	1335	1470	1605	1735	1870
8	700	875	1050	1220	1395	1570	1745	1920	2095	2270	2445
9	885	1105	1325	1545	1765	1990	2210	2430	2650	2870	3090
10	1090	1365	1635	1910	2180	2455	2725	3000	3270	3545	3820
11	1320	1650	1980	2310	2640	2970	3300	3630	3960	4290	4620
12	1570	1965	2355	2750	3140	3535	3925	4320	4710	5105	5500
13	1850	2300	2770	3225	3685	4150	4610	5070	5530	5990	6450
14	2140	2675	3205	3740	4275	4810	5345	5880	6415	6950	7485
15	2450	3070	3680	4300	4900	5520	6130	6750	7360	7970	8590
16	2790	3490	4190	4885	5585	6285	6980	7680	8380	9075	9775
17	3150	3940	4730	5515	6300	7090	7880	8670	9450	10240	11030
18	3535	4420	5300	6185	7070	7950	8835	9720	10600	11485	12370
20	4365	5455	6545	7635	8725	9815	10910	12000	13090	14180	15270
22	5280	6600	7920	9240	10560	11880	13200	14520	15840	17160	18480
24	6285	7855	9425	10995	12656	14135	15710	17280	18850	20420	21995
26	7370	9210	11055	12900	14740	16580	18420	20270	22110	23950	25800
28	8550	10685	12820	14960	17100	19230	21310	23500	25650	27780	29920
30	9800	12260	14700	17170	19625	22080	24530	26990	29440	31890	34350
32	11160	13950	16750	19541	22330	25120	27910	30700	33490	26280	39070
34	12600	15755	18905	22055	25210	28360	31510	34660	37810	40965	44115
36	14130	17665	21195	24730	28260	31800	35325	38860	42390	45925	49455
38	15745	19680	23615	27550	31490	35425	39360	43295	47230	51170	55100
40	17445	21800	26170	30530	34890	39250	43610	47975	52330	56700	61055

"QF" PARTS LIST TAKE-OFF WORKSHEET

Your Name: _____ **Fax:** _____ **Page** ___ **of** ___

Company Name: _____ **Phone:** _____ **Project:** _____ **Date:** _____

QF DIA.	PIPE 5'0" LONG (3"Ø 39")	ADJ. NIPPLE INCL O-RING	ELBOWS				BLAST GATES	FLOOR SWEEP	MACHINE ADAPTOR STAND. IS QF TO ID	FLEX HOSE ADAPT.	QF CLAMP	PIPE HANGER	FLEX HOSE RUBBER OR STEEL	FLEX HOSE CLAMP	MISC. FITTINGS (REDUCERS, ADAPTORS, TRANSITIONS, ANY FITTINGS THAT CAN NOT BE SPECIFIED ELSEWHERE)	BRANCH, DOUBLE BRANCH & Y BRANCH				
			90°	60°	45°	30°										A	B	C	D	QTY
3"																				
4"																				
5"																				
6"																				
7"																				
8"																				
9"																				
10"																				
11"																				
12"																				
13"																				
14"																				
15"																				
16"																				
17"																				
18"																				
20"																				
22"																				
24"																				