

Duct And Components For Industrial Air Systems



- Flanged Duct and angle rings in stock and ready to ship.
- Clamp Together Duct featuring the new industry standard FOREVER Clamp with the "FOREVER" Guarantee.
- Raw End Duct, Elbows and Components. Add your own lips and flanges.







A family of companies creating better working environments for you.



ION'S SOU

Duct And Component Parts For Industrial Air Systems Flanged, Raw End And Clamp-Together Ducting

Kirk & Blum is the nation's largest manufacturer of industrial sheet metal components. We're one of the nation's oldest manufacturers of industrial sheet metal, with over 100 years of customer service and customer satisfaction. We have strategically and conveniently located customer sales, service and production facilities across North America – in the east, southeast, midwest and far west. Kirk & Blum wants to be your national sheet metal supplier. No one else can offer you what Kirk & Blum can:

- A complete offering of ducting flanged and clamp-together.
- Individual components or complete systems, including all accessories.
- Custom and special fabrications.
- Complete fabrication services.
- Custom development of special products. You draw it and we can make it.
- Free design. We can turn the roughest drawings into full 3-D systems designs.
- Highest quality guaranteed. From the latest technology and production techniques.
- Full service and support at all levels. SOMETHING WE'RE KNOWN FOR.
- FASTEST DELIVERY IN THE INDUSTRY.



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### How are you connected?





#### **Three Fabrication Options**

Today, there are three conventional fabrication options for the components which make up most industrial ducting systems:

#### **Clamp-Together Ducting**

Kirk & Blum is an innovator in clamp-together duct, and designer and developer of many advances in this lighter weight, flexible, easy-to-install system.

#### Flanged Ducting

Kirk & Blum is also a long time national leader, and currently the nation's foremost supplier, of systems and components in flanged end ducting.

#### **Raw End Ducting**

Kirk & Blum duct components are also available in straight or raw end to meet your specifications or application requirements. You may add your own lip or flanges as needed.

### **Two Connection Options**



The Forever Clamp



# unique Forever Clamp -- the easiest-to-install and most

The Forever Clamp.

efficient joining method ever developed for lighter weight systems. Guaranteed never to tear, twist or fail to perform -- FOREVER.

The heart of our clamp-together ducting system is our

#### **Angle Ring Flanges**

K&B pressed and rolled steel angle rings are widely used in industries around the world in connecting ductwork in harshest dust and fume control work.

### **Our Part # Says It All**



The prefix 1 with our Part # indicates component is Clamp-Together.



The prefix 2 with our Part # indicates component is Flanged end.



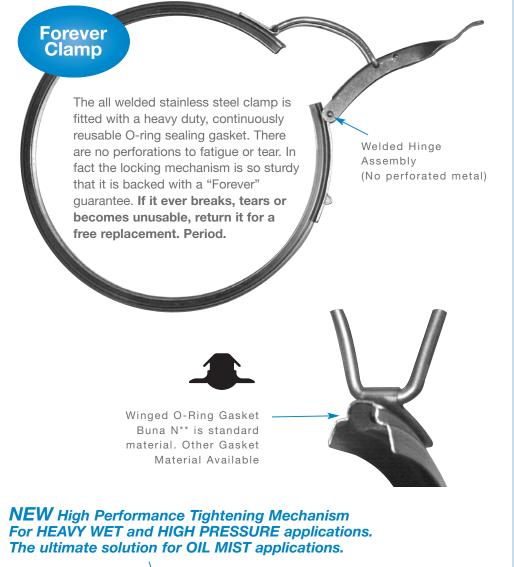
Parts may also be ordered Raw End to meet this specification.

### **Ordering Made Easy**

# **Connectors - Clamp Together Duct**

#### **The Forever Clamp**

Our exclusive Forever Clamp has fast become industry famous. It has revolutionized the industry with our one-of-a-kind "Forever" guarantee.





### **NEW** Adjustable Forever Clamp

K&B Duct now offers the popular Forever Clamp with an adjustable band to provide extra assurance in wet or high pressure (positive or negative) applications. See our video online at kbduct.com. **Our new adjustable clamp also features our famous "Forever" Guarantee.** 

#### NOTES:

OTHER GASKET MATERIALS As needed or requested, other gasket and O-ring materials can be supplied. They are:

RED SILICONE - Used primarily on high heat and FDA Food Grade applications.

VITON - Oil Mist

GORE-TEX- Used in some oil mist applications

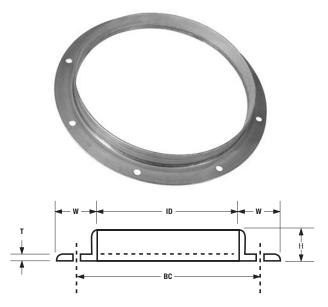
All of the above can be supplied as clamp gasket or for the adjustable sleeve/fittings, HOWEVER, when needed for the latter, they do not come as a complete O-ring but as a piece of cord. They can still be used as the O-ring but they must be fitted under the clamp.



# **Connectors - Flanged Duct**

#### Stainless Steel Rings, Type 304

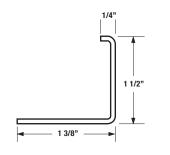
Kirk & Blum stocks standard 304 Stainless Steel rings. Through 5" are pressed formed, and above 5", roll formed and welded. They are available with or without holes. Type 304L, 316, 316L, and larger or specially sized stainless steel rings are also available.



SIZE	Part #	Dia.	HWT	HOLES	B.C.	WEIGHT LBS.
3	A3032	3 1/16	7/8x1x10 ga.	6@9/32	4 5/16	0.70
4	A3042	4 1/16	15/16x1x10 Ga	6@9/32	5 1/16	.085
5	A3052	5 1/16	1x1x10 Ga	6@9/32	6 5/16	1.18
6	A3062	6 3/32	1x1x10 Ga	6@9/32	7 5/16	1.38
7	A3072	7 1/8	1x1-1/8x10 Ga	6@3/8	8 1/2	1.73
8	A3082	8 1/8	1-1/4x1-1/4x1/8	6@3/8	9 9/16	1.90
9	A3092	9 1/8	1-1/4x1-1/4x1/8	6@3/8	10 5/8	2.55
10	A3102	10 1/8	1-1/4x1-1/4x1/8	6@7/16	11 9/16	3.05
11	A3112	11 1/8	1-1/4x1-1/4x1/8	6@7/16	12 9/16	3.25
12	A3122	12 1/8	1-1/2x1-1/2x1/8	8@7/16	14	3.88
13	A3132	13 1/8	1-1/2x1-1/2x1/8	8@7/16	15	4.25
14	A3142	14 1/8	1-1/2x1-1/2x1/8	8@7/16	16	4.75
15	A3152	15 1/8	1-1/2x1-1/2x3/16	8@7/16	17	7.25
16	A3162	16 1/8	1-1/2x1-1/2x3/16	8@7/16	18	8.00
17	A3172	17 1/8	1-1/2x1-1/2x3/16	8@7/16	19	8.25
18	A3182	18 1/8	1-1/2x1-1/2x3/16	12@7/16	20	8.50
19	A3192	19 1/8	1-1/2x1-1/2x3/16	12@7/16	20 3/4	8.75
20	A3202	20 1/8	1-1/2x1-1/2x3/16	12@7/16	21 3/4	9.50
21	A3212	21 1/8	1-1/2x1-1/2x3/16	12@7/16	22 3/4	10.25
22	A3222	22 1/8	1-1/2x1-1/2x3/16	12@7/16	23 3/4	10.75
24	A3242	24 1/8	1-1/2x1-1/2x3/16	12@7/16	25 7/8	11.50
26	A3262	26 1/8	2x2x3/16	16@7/16	28 3/8	16.75
28	A3282	28 1/8	2x2x3/16	16@7/16	30 3/8	18.00
30	A3302	30 1/8	2x2x3/16	16@7/16	32 3/8	19.50
32	A3322	32 1/8	2x2x3/16	16@7/16	34 3/8	20.75
34	A3342	34 1/8	2x2x3/16	16@7/16	36 3/8	22.00
36	A3362	36 1/8	2x2x3/16	16@7/16	38 3/8	23.00

#### ECONOflange - Fast. Easy. Economical Duct Connection.





8"-72" sizes available. 2" increments. Many specialty metals available.

- Add your own flanges on site.
- Simple installation process.
- Fast screw connections.
- No special tools required.
- Very cost effective.

Flange construction: Hot dipped galvanized steel. 18 gauge 8"-48". 16 gauge 50" and up. Gasket: Neoprene.

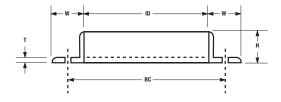
# **Ordering Made Easy**

#### Stock Angle Rings -Pressed and Rolled Steel

Kirk & Blum stock angle rings through 14" diameter are press formed. Angle rings above 14" diameter are roll formed and welded. K&B pressed and rolled steel angle rings are available with or without holes. All angle rings and flanges are punched on state-of-the-industry automatic equipment.

Stock angle rings are black steel, unpainted. Larger angles, channels, bars and other sizes rolled to order in carbon, galvanized and stainless steel, plus aluminum and other alloys. Square and rectangular flanges are also available.





Note: Gaskets are in stock for Kirk & Blum rings in sizes 3" through 50". They are 1/8" thick black neoprene and punched to K&B specifications. Other gasket materials are available as a special order.

Oval, square and rectangular flanges are also available.

Special angle rings and gaskets available.

	SIZE	H W T	ID	NO HOLES	SIZE HOLES	B.C.	WEIGHT LBS	1
	3	7/8x1x10 Ga	3-1/16	6	9/32	4-5/16	70	
	4	15/16x1x10 Ga	4-1/16	6	9/32	5-5/16	.85	48
	5	1x1x10 Ga	5-1/16	6	9/32	6-5/16	1.18	-
	6	1x1x10 Ga	6-3/32	6	9/32	7-5/16	1.38	24
	7	1x1-1/8x10 Ga	7-1/8	6	3/8	8-1/2	1.73	$\square$
sed	8	1x1-1/8x10 Ga	8-1/8	6	3/8	9-9/16	1.90	xoq
Pressed	9	1-1/8x1-1/4x10 Ga	9-1/8	6	7/16	10-5/8	2.55	perl
	10	1-1/4x1-3/8x10 Ga	10-1/8	6	7/16	11-13/16	3.05	12
	11	1-1/4x1-3/8x10 Ga	11-1/8	6	7/16	12-3/4	3.25	
	12	1-1/4x1-1/2x10 Ga	12-1/8	8	7/16	14	3.88	30
	13	1-1/2x1-1/2x10 Ga	13-1/8	8	7/16	15	4.25	
	14	1-1/2x1-1/2x10 Ga	14-1/8	8	7/16	16	4.75	
	15	1-1/2x1-1/2x3/16	15-1/8	8	7/16	17	7.25	
	16	1-1/2x1-1/2x3/16	16-1/8	8	7/16	18	8.00	
	17	1-1/2x1-1/2x3/16	17-1/8	8	7/16	19	8.25	bundle
	18	1-1/2x1-1/2x3/16	18-1/8	8	7/16	20	8.50	er bu
	19	1-1/2x1-1/2x3/16	19-1/8	12	7/16	20-3/4	8.75	s per
	20	1-1/2x1-1/2x3/16	20-1/8	12	7/16	21-3/4	9.50	pieces
	21	1-1/2x1-1/2x3/16	21-1/8	12	7/16	22-3/4	10.25	24 pi
	22	1-1/2x1-1/2x3/16	22-1/8	12	7/16	23-3/4	10.75	
	23	1-1/2x1-1/2x3/16	23-1/8	12	7/16	24-7/8	11.25	
	24	1-1/2x1-1/2x3/16	24-1/8	12	7/16	25-7/8	11.50	
	25	1-1/2x1-1/2x3/16	25-1/8	16	7/16	26-7/8	12.00	
	26	2x2x3/16	26-1/8	16	7/16	28-3/8	16.75	
	27	2x2x3/16	27-1/8	16	7/16	29-3/8	17.38	
	28	2x2x3/16	28-1/8	16	7/16	30-3/8	18.00	
	29	2x2x3/16	29-1/8	16	7/16	31-3/8	18.75	0
	30	2x2x3/16	30-1/8	16	7/16	32-3/8	19.50	lpur
	31	2x2x3/16	31-1/8	16	7/16	33-3/8	20.38	pieces per bundle
	32	2x2x3/16	32-1/8	16	7/16	34-3/8	20.75	ss pe
	33	2x2x3/16	33-1/8	16	7/16	35-3/8	21.25	iece
	34	2x2x3/16	34-1/8	16	7/16	36-3/8	22.00	12 p
	35	2x2x3/16	35-1/8	16	7/16	37-3/8	22.50	
0	36	2x2x3/16	36-1/8	16	7/16	38-3/8	23.00	
Angle	37	2x2x3/16	37-1/8	24	7/16	39-3/8	23.75	
Rolled Angl	38	2x2x3/16	38-1/8	24	7/16	40-3/8	24.50	Ц
Bol	39	2x2x3/16	39-1/8	24	7/16	41-3/8	25.00	
	40	2x2x3/16	40-1/8	24	7/16	42-3/8	25.75	
	41	2x2x3/16	41-1/8	24	7/16	43-3/8	26.13	
	42	2x2x3/16	42-1/8	24	7/16	44-3/8	26.50	
	43	2x2x3/16	43-1/8	24	7/16	45-3/8	27.38	
	44	2x2x3/16	44-1/8	24	7/16	46-3/8	28.00	
	45	2x2x3/16	45-1/8	24	7/16	47-3/8	28.63	
	46	2x2x3/16	46-1/8	24	7/16	48-3/8	29.00	
	47	2x2x3/16	47-1/8	24	7/16	49-3/8	29.88	<u>e</u>
	48	2x2x3/16	48-1/8	24	7/16	50-3/8	30.75	pund
	49	2x2x3/16	49-1/8	24	7/16	51-3/8	31.50	per bu
	50	2x2x3/16	50-1/8	24	7/16	52-3/8	32.00	
	52	2x2x3/16	52-1/8	24	7/16	54-3/8	33.75	pieces
	54	2x2x3/16	54-1/8	24	7/16	56-3/8	35.00	6 p
	56	2x2x3/16	56-1/8	24	7/16	58-3/8	36.25	
	58	2x2x3/16	58-1/8	32	7/16	60-3/8	37.50	
	60	2x2x3/16	60-1/8	32	7/16	62-3/8	38.75	
	62	2x2x3/16	62-1/8	32	7/16	64-3/8	40.00	
	64	2x2x3/16	64-1/8	32	7/16	66-3/8	41.50	
	66	2x2x3/16	66-1/8	36	7/16	68-3/8	42.75	
	68	2x2x3/16	58-1/8	36	7/16	70-3/8	44.00	
	70	2x2x3/16	70-1/8	36	7/16	72-3/8	45.25	
	72	2x2x3/16	72-1/8	36	7/16	74-3/8	46.50	

#### Infinite Adjustment Means Fast And Easy Installation

K&B Duct comes in nominal 5' lengths with rolled lips on both ends. Adjustable sleeves are 11" long, also with rolled lips on both ends. The rubber O-Ring is included with the sleeve.

#### Just Follow These 6 Easy Steps

**Step 1.** *Measure the length needed for adjustment.* 

**Step 2.** Take a standard 5' section of appropriate diameter duct. Mark the duct slightly shorter (3"-4") than the length needed.

**Step 3.** Use the O-ring which comes with the adjustable sleeve to mark a cut line and cut the duct.

**Step 4.** Debur the edge of the cut duct and slide the 11" adjustable sleeve over the cut end of duct.

**Step 5.** Adjust the length of the duct/sleeve assembly to the exact length needed by sliding the pipe in and out of the sleeve.

**Step 6.** When the desired length is achieved, clamp the assemby in place. Simply clamp the O-ring to the rolled lip of the adjustable sleeve with the K&B Forever Clamp and install. Length can be re-adjusted by un-clamping, then re-clamping. Presto: INFINITE ADJUSTMENT.

#### Infinite Adjustment Using Our Exclusive Adjustable Fitting

Infinite fitting adjustability is also unique to K&B Duct. Simply cut pipe itself long enough to stick into fitting. Then join pipe to fitting as detailed above. Especially useful when the distance needed is less than the 11" sleeve. As the sleeve itself would be longer than the length required.



# Infinite Adjustment. A K&B Exclusive.



#### Infinite Adjustment Means Fast And Easy Adjustment To Any Length In The Field

Infinite adjustment is an exclusive with K&B Duct. And it means you can make infinite adjustments in the field to fit any length requirement.

#### The Secret Is In Our Adjustable Sleeve And Adjustable Fittings

All K&B Duct fittings (branches, elbows, hoods, etc.) will accept a cut piece of pipe.

Our adjustable sleeve is recommended for longer lengths. With the adjustable collar on ALL fittings for those short (under 11"), critical and often nagging adjustments between fittings.

Step 1. Measure length needed.



Step 3. Use O-ring to mark cut line and cut.

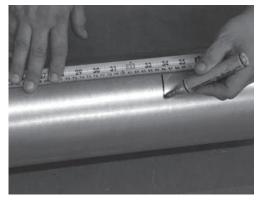


Step 5. Adjust to length.

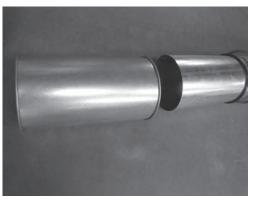


For lengths under 11", mark the duct approximately 2" shorter than the needed length.

Step 2. Mark duct 3"- 4" shorter than length needed.



Step 4. Debur and slide sleeve over cut end of pipe.



Step 6. Clamp ends of assembly. Clamp O-ring to sleeve.



# K-wick GRIP AND HANG 70% faster with K&B Duct's Cable System



SPECIAI

- K&B's hanging system is a "K-wick" and simple way to securely suspend ducting from ceilings, beams or other supports. The 'gripper' allows you to form a loop around the duct and then to adjust it to the right length.
- Each package contains 15 feet of cable with a ferruled loop (A) for attaching to the support structure, a "clutcher" (B) to loop the free end around the duct and a release tool (C) that works (as shown in the cutaway view) to release the cable.
- Select from three sizes to fit your application.

# Heavy Gauge Clamp-Together Duct

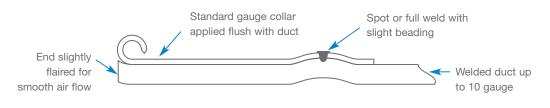
A special product offering for abrasive applications

# K&B Duct can now be supplied in heavy gauges up to 10 gauge for these and other applications

Where as standard straight duct of sizes 4-18" can be made 1 gauge heavier than our charts show, there is often a call for even heavier duct.

Now K&B Duct is available in heavy gauges from 10 ga and up. In these heavier gauges, the standard collar is applied to seam welded duct or tubing and the end of the duct is flared slightly so that the two ends of heavy gauge material butt up when clamped together.

In the field, adjustment is accomplished by using the standard adjustable sleeve. However, it is always recommended that cuts be made to a closer fit than required with the standard duct so as to limit the exposure of the thinner material to the air stream. Collars can also be supplied for field application in cut to fit scenarios.



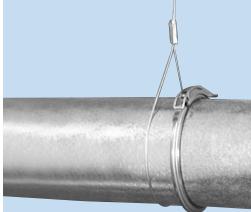
# **Robust and Tight Fittings**

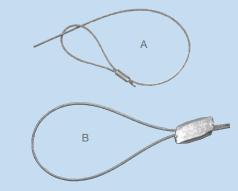
Unless otherwise specified, fittings such as branches (t on tapers), Y's, transitions, reducers and hoods are supplied in 18 gauge. Hard to form areas of the product are fully welded to insure a tight seal. Full welding of the entire part is available upon request however, the standard product is made to tight and stringent specifications. Collars are spot welded AND THEN beaded to make a very tight and secure connection and to create smooth air flow.





The collar is applied to the fitting with spot weld AND THEN beaded to make a tight and secure connection.





Time is money.

K&B Duct's unique hanging system, featuring our advanced Cable System components, is fast and easy, and saves you time and money.

That's why we call it "K-wick".



#### NOTES:

OTHER GASKET MATERIALS As needed or requested, other gasket and O-ring materials can be supplied. They are:

RED SILICONE - Used primarily on high heat applications

FDA (white rubber) - Food Grade

VITON - Oil Mist

GORE-TEX- Used in some oil mist applications

All of the above can be supplied as clamp gasket or for the adjustable sleeve/fittings, HOWEVER, when needed for the latter, they do not come as a complete O-ring but as a piece of cord. They can still be used as the O-ring but they must be fitted under the clamp.

#### **NOTES:**

The 11" adjustable sleeve is the most common method of creating variable lengths of duct in the field. To utilize, cut a standard piece of duct slightly shorter than the needed length. Place O-ring over the cut end and then slide into the 11" sleeve. Once the assembly is adjusted to size, clamp the O-ring to the rolled lip of the sleeve. O-RING IS SUPPLIED WITH 11" SLEEVE.



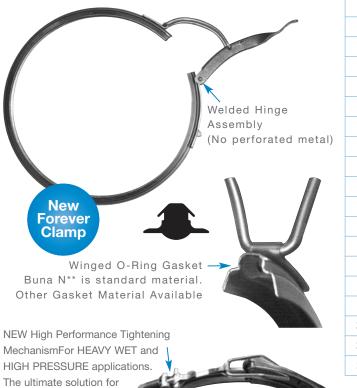
The sleeve is 11" long and therefore the shortest length of adjustment is 11". Additional 'adjustability' for lengths shorter than 11" is provided for in the collars on all fittings. To utilize, simply cut a standard piece of duct slightly longer than the needed length. Place an O-ring over the cut end and slide into the fitting. Once the desired length is obtained, clamp the O-ring to the rolled lip on the fitting. ORDER EXTRA O-RING.

For short (under 11'') adjustments



#### The Forever Clamp And New Adjustable Forever Clamp

Both our all welded stainless steel Forever Clamp, and new adjustable band Forever Clamp for heavy wet and high pressure applications, feature our famous "Forever" Guarantee. When ordering the new adjustable clamp, use the prefix "A" before our Part #.



Dia.	Part #		Dia.	Part #			
3"	13003		3"	A13003			
4"	13004		4"	A13004			
5"	13005		5"	A13005			
6"	13006		6"	A13006			
7"	13007		7"	A13007			
8"	13008		8"	A13008			
9"	" 13009		9"	A13009			
10"	13010		10"	A13010			
11"	13011		11"	A13011			
12"	13010 13011 13012 13013 13014		13012 12"		12"	A13012	
13"	13013		13"	A13013			
14"	13014		14"	A13014			
15"	13015		15"	A13015			
16"	13016		16"	A13016			
17"	13010   13011   13012   13013   13014   13015		17"	A13017			
18"	13018		18"	A13018			
19"	13019		19"	A13019			
20"	13020		20"	A13020			
22"	13022		22"	A13022			
24"	13024		24"	A13024			

NEW

Adjustable

Forever

Clamp

# K&B Duct Galvanized and Stainless Steel Ducting

OIL MIST applications.

Dia.	Part #	Std. Ga.	Hvy. Ga.
3"	10003	26	tubing
4"	10004	24+	tubing
5"	10005	24+	tubing
6"	10006	24+	tubing
7"	10007	22	To 10 ga.
8"	10008	22	To 10 ga.
9"	10009	22	To 10 ga.
10"	10010	22	To 10 ga.
11"	10011	22	To 10 ga.
12"	10012	22	To 10 ga.
13"	10013	20	To 10 ga.
14"	10014	20	To 10 ga.
15"	10015	20	To 10 ga.
16"	10016	20	To 10 ga.
17"	10017	20	To 10 ga.
18"	10018	20	To 10 ga.
19"	10019	20	To 10 ga.
20"	10020	20	To 10 ga.
22"	10022	20	To 10 ga.
24"	10024	20	To 10 ga.



\* If using Stainless Steel, add an "SS" to the end of the part #.

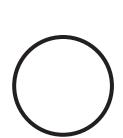
# Standard Adjustable Sleeve And Additional O-Rings



Adjustable Sleeve						
Dia.	Part #					
3"	11003					
4"	11004					
5"	11005					
6"	11006					
7"	11007					
8"	11008					
9"	11009					
10"	11010					
11"	11011					
12"	11012					
13"	11013					
14"	11014					
15"	11015					
16"	11016					
17"	11017					
18"	11018					
19"	11019					
20"	11020					
22"	11022					
24"	11024					

\* If using Stainless Steel, add an "SS" to the end of the part #.

#### Additional O-Rings



Additional O-Ring							
Part #	Hi-Temp						
11103	11103HT						
11104	11104HT						
11105	11105HT						
11106	11106HT						
11107	11107HT						
11108	11108HT						
11109	11109HT						
11110	11110HT						
11111	11111HT						
11112	11112HT						
11113	11113HT						
11114	11114HT						
11115	11115HT						
11116	11116HT						
11117	11117HT						
11118	11118HT						
11119	11119HT						
11120	11120HT						
11122	11122HT						
11124	11124HT						

#### NOTES:

Standard O-ring is made of Buna-N-40 durameter rubber. Highly resistant to most chemicals and oils. Temp rating to 250 degs. Other materials such as Red Silicone, Gore-tex, Viton and FDA rubber are also available in cut to length cord.

- \*\* 1- O-Ring is supplied with each adjustable sleeve. Additional o-rings may be needed for adjustable fittings such as elbows and branches.
- \*\*\* Add "HT" to clamp part number to order High Temp-Other materials are available.

#### NOTES:

Sleeve is 30" long, The assembly includes sleeve, O-ring, Clamp and a piece of pipe, cut and trimmed to form the pre-fitted assembly. Up to 26" adjustment-56" total length.

#### NOTES:

All duct is a nominal 5 feet in length. Sizes 4-18" can be made 1 gauge heavier. 3" duct consist of a 3" collar applied to a 3" piece of rolled duct as opposed to standard duct where the rolled lip is formed on the pipe. The 3" sleeve slides over the pipe as in other sizes.

HEAVY Gauge Duct is constructed with a welded seam and then a standard gauge rolled lip "collar" is welded over the end. The pipe and the collars positioned so that the end of the pipe is flush with the collar. Field adjustment is accomplished by cutting the pipe to exact length and using either a standard adjustable sleeve or welding a new collar to the cut end.

+SS gauge=22



CONSTRUCTION: Available in galvanized only. They are constructed of stamped halves that are then welded with a continuous "stitch" weld that is accomplished by using an inner and outer welding wheel to complete continuous spot welds. The K&B rolled lip collar is spot welded to the elbow and a beader forms the metal so that the ends of the metal are out of the air stream.

APPLICATION: Sizes 3" up to 6" are good for all dust applications. The larger sizes are recommended for light dust or air only as their gauge is not as heavy as those of the other elbows offered.

#### NOTES:

CONSTRUCTION: Available in Galvanized SS and sizes 3" through 14" (only 3-8" shown in catalog), these are VERY heavy gauge tubing with the standard K&B collar applied in a slip over or into fashion. They are unidirectional.

APPLICATION: While the obvious is that these elbow are used in abrasive application, they are the only offering of SS in the smaller diameters. They also are an additional means of supplying long radius in the smaller diameters and they are the best avenue for a "completely" smooth (no gap) elbow. Interior buffing available for paper trim or fiber applications.

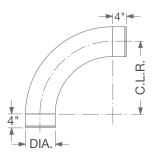
#### Adjustment Capability



IMPORTANT: When using the adjustable feature of the fitting, order an additional O-ring.

Standard	d Radius (1.5)	
90 deg	45 deg	GA
Part #	Part #	GA
12303.90	12303.45	22
12304.90	12304.45	22
12305.90	12305.45	22
12306.90	12306.45	22
12307.90	12307.45	22
12308.90	12308.45	22
12309.90	12309.45	22
12310.90	12310.45	22
12312.90	12312.45	22
	90 deg Part # 12303.90 12304.90 12305.90 12306.90 12307.90 12308.90 12309.90 12310.90	Part #   Part #     12303.90   12303.45     12304.90   12304.45     12305.90   12305.45     12306.90   12306.45     12307.90   12307.45     12308.90   12308.45     12309.90   12309.45     12309.90   12309.45     12310.90   12310.45

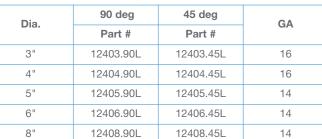




All fittings have slip fit capability in the collar. See page 2.

#### **Tubed Elbows**

	Standard F	Radius (1.5)	
Dia.	90 deg	45 deg	GA
Dia.	Part #	Part #	GA
3"	12403.90	12403.45	16
4"	12404.90	12404.45	16
5"	12405.90	12405.45	14
6"	12406.90	12406.45	14
8"	12408.90	12408.45	14
	Long Rad	dius (2.5)	





Galvanized and Stainless Steel

\* If using Stainless Steel, add an "SS" to the end of the part #.

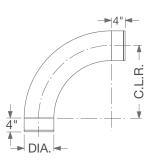
#### K&B Extensive Elbow Offering

Elbow	Galv	SS	Sizes	Ga.	Radius	Degrees	Air Tight	Particulant	Directional	Γ
Stitched 3-6"	•		3-6"	22	1.5	90-45	٠	All		
Stitched 7-12"	•		7-12"	22	1.5	90-45	•	Fume-Light Dust		
Tubed	•	•	3-6 & 8"	14	1.5-2.5	90-45	•	All		
Gored	•	•	7" up	20-up	All/Any (1.5-2.5 std)	All (90-60-45- 30) std	٠	All		
Pleated non-welded	•		3-15"	22-20	1.5-2.5	90-60-45-30	٠	Lrg Part.	٠	
Pleated welded	•		3-15"	22-20	1.5-2.5	90-60-45-30	•	All	•	Γ

# Elbows - Gored (Segmented)



Galvanized and Stainless Steel



All fittings have slip fit capability in the collar. See page 2.

Standard Radius (1.5) <sup>*</sup>					
	90 deg	60 deg	45 deg	30 deg	
Dia.	Part #	Part #	Part #	Part #	GA
7"	12007.90	12007.60	12007.45	12007.30	20
8"	12008.90	12008.60	12008.45	12008.30	20
9"	12009.90	12009.60	12009.45	12009.30	20
10"	12010.90	12010.60	12010.45	12010.30	20
11"	12011.90	12011.60	12011.45	12011.30	18
12"	12012.90	12012.60	12012.45	12012.30	18
13"	12013.90	12013.60	12013.45	12013.30	18
14"	12014.90	12014.60	12014.45	12014.30	18
15"	12015.90	12015.60	12015.45	12015.30	18
16"	12016.90	12016.60	12016.45	12016.30	18
17"	12017.90	12017.60	12017.45	12017.30	18
18"	12018.90	12018.60	12018.45	12018.30	18
19"	12019.90	12019.60	12019.45	12019.30	18
20"	12020.90	12020.60	12020.45	12020.30	18
22"	12022.90	12022.60	12022.45	12022.30	18
24"	12024.90	12024.60	12024.45	12024.30	18
		Long Rad	lius (2.5)*	I	
	90 deg	60 deg	45 deg	30 deg	
Dia.	Part #	Part #	Part #	Part #	GA
7"	12007.90L	12007.60L	12007.45L	12007.30L	20
8"	12008.90L	12008.60L	12008.45L	12008.30L	20
9"	12009.90L	12009.60L	12009.45L	12009.30L	20
10"	12010.90L	12010.60L	12010.45L	12010.30L	20
11"	12011.90L	12011.60L	12011.45L	12011.30L	18
12"	12012.90L	12012.60L	12012.45L	12012.30L	18
13"	12013.90L	12013.60L	12013.45L	12013.30L	18
14"	12014.90L	12014.60L	12014.45L	12014.30L	18
15"	12015.90L	12015.60L	12015.45L	12015.30L	18
16"	12016.90L	12016.60L	12016.45L	12016.30L	18
17"	12017.90L	12017.60L	12017.45L	12017.30L	18
18"	12018.90L	12018.60L	12018.45L	12018.30L	18
19"	12019.90L	12019.60L	12019.45L	12019.30L	18
20"	12020.90L	12020.60L	12020.45L	12020.30L	18
22"	12022.90L	12022.60L	12022.45L	12022.30L	18

Standard Radius (1.5)\*

\* If using Stainless Steel, add an "SS" to the end of the part #.

Price Point 1-3 (1=io)	Notes
1	Good all around elbow. Stitch weld halves.
1	Good for fume/light dust/air. Gauge is a little light for heavy dust.
3	Heavy tubed elbow. Only SS elbow in 4-6". These are the only LR 4-6" offered.
2	Good all around elbow. All sizes, all dimensions, all radius over 7". Gores are mechanically locked and caulked. Gauges over 18 will be butt welded.
1	Not air tight - suitable for heavy dust like wood. Made from rolled duct that is pleated/bent into elbow. Pleats close the non-welded end of the rolled duct.
1.5	Good all around elbow. Made from rolled duct that is seam welded and then pleated/bent into elbow.

12024.90L

12024.60L

12024.45L

12024.30L

18

24"

#### NOTES:

CONSTRUCTION: Available in Galvanized or SS. Starting at size 7", the gores (segments) are cut and then formed so that the ends of the gores are locked together. The number of gores varies with the size and angle of the elbow. While radii of 1.5 and 2.5 are shown, they can be made in ANY angle desired. The K&B rolled lip collar is applied as normal.

APPLICATION: Good as all around elbow, providing smooth interior and heavy duty construction. In the event that heavy gauges are needed (greater than 18 ga) the gores are butt welded. The interior can be buffed for paper trim and fiber applications.

The rolled lip collar adds about 2.5" tangent to the length of the elbow. However, please remember that the collar is sized to receive a cut piece of pipe. This provides infinite adjustability.

Adjustment Capability



IMPORTANT: When using the adjustment feature of the fitting, order an additional O-ring.



CONSTRUCTION: These elbows are made by bending and pleating a piece of duct. The NON-Welded style starts with an un-joined piece of duct and as the pleating takes place, the overlapping edges are pressed together on the inside of the elbow. The welded elbow starts with a piece of duct that has been continuously welded down the seam. The duct is formed the same way. The weld is on the outside radius. Both are available in galvanized only.

APPLICATION: The non-welded elbow is a very cost effective elbow used in systems where a small amount of leakage is acceptable. It is unidirectional.

The rolled lip collar adds about 2.5" tangent to the length of the elbow. However, please remember that the collar is sized to receive a cut piece of pipe. This provides infinite adjustability.

Adjustment Capability



IMPORTANT: When using the adjustment feature of the fitting, order an additional O-ring.

# Ordering Made Easy

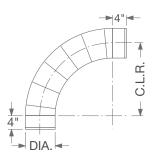
Contact the K&B Duct dealer representative nearest you for free design assistance, easiest ordering and fastest delivery in the industry.

# K&B Elbows - Pleated/Non-Welded

	Standard Radius (1.5)*				
	90 deg	60 deg	45 deg		
Dia.	Part #	Part #	Part #	GA	
3"	12103.90	12103.60	12103.45	22	
4"	12104.90	12104.60	12104.45	22	
5"	12105.90	12105.60	12105.45	22	
6"	12106.90	12106.60	12106.45	22	
7"	12107.90	12107.60	12107.45	22	
8"	12108.90	12108.60	12108.45	22	
9"	12109.90	12109.60	12109.45	20	
10"	12110.90	12110.60	12110.45	20	
11"	12111.90	12111.60	12111.45	20	
12"	12112.90	12112.60	12112.45	20	
13"	12113.90	12113.60	12113.45	20	
14"	12114.90	12114.60	12114.45	20	
15"	12115.90	12115.60	12115.45	20	
	Lo	ng Radius (	2.5)*		
	90 deg	60 deg	45 deg		
Dia.	Part #	Part #	Part #	GA	
3"	12103.90L	12103.60L	12103.45L	22	
4"	12104.90L	12104.60L	12104.45L	22	
5"	12105.90L	12105.60L	12105.45L	22	
6"	12106.90L	12106.60L	12106.45L	22	
7"	12107.90L	12107.60L	12107.45L	22	
8"	12108.90L	12108.60L	12108.45L	22	
9"	12109.90L	12109.60L	12109.45L	20	
10"	12110.90L	12110.60L	12110.45L	20	
11"	12111.90L	12111.60L	12111.45L	20	
12"	12112.90L	12112.60L	12112.45L	20	
13"	12113.90L	12113.60L	12113.45L	20	
14"	12114.90L	12114.60L	12114.45L	20	
15"	12115.90L	12115.60L	12115.45L	20	



Galvanized Only



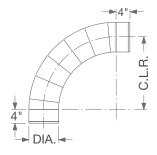
All fittings have slip fit capability in the collar. See page 2.

# K&B Elbows - Pleated/Welded

Standard Radius (1.5)					
Dia.	90 deg	60 deg	45 deg	GA	
Dia.	Part #	Part #	Part #	GA	
3"	12203.90	12203.60	12203.45	22	
4"	12204.90	12204.60	12204.45	22	
5"	12205.90	12205.60	12205.45	22	
6"	12206.90	12206.60	12206.45	22	
7"	12207.90	12207.60	12207.45	22	
8"	12208.90	12208.60	12208.45	22	
9"	12209.90	12209.60	12209.45	20	
10"	12210.90	12210.60	12210.45	20	
11"	12211.90	12211.60	12211.45	20	
12"	12212.90	12212.60	12212.45	20	
13"	12213.90	12213.60	12213.45	20	
14"	12214.90	12214.60	12214.45	20	
15"	12215.90	12215.60	12215.45	20	
	Lor	ng Radius (2	.5)		
Dia.	90 deg	60 deg	g 45 deg		
Diu.	Part #	Part #	Part #	GA	
3"	12203.90L	12203.60L	12203.45L	22	
4"	12204.90L	12204.60L	12204.45L	22	
5"	12205.90L	12205.60L	12205.45L	22	
6"	12206.90L	12206.60L	12206.45L	22	
7"	12207.90L	12207.60L	12207.45L	22	
8"	12208.90L	12208.60L	12208.45L	22	
9"	12209.90L	12209.60L	12209.45L	20	
10"	12210.90L	12210.60L	12210.45L	20	
11"	12211.90L	12211.60L	12211.45L	20	
12"	12212.90L	12212.60L	12212.45L	20	
13"	12213.90L	12213.60L	12213.45L	20	
14"	12214.90L	12214.60L	12214.45L	20	
15"	12215.90L	12215.60L	12215.45L	20	



Galvanized Only



All fittings have slip fit capability in the collar. See page 2.

#### NOTES:

CONSTRUCTION: These elbows are made by bending and pleating a piece of duct. The NON-Welded style starts with an un-joined piece of duct and as the pleating takes place, the overlapping edges are pressed together on the inside of the elbow. The welded elbow starts with a piece of duct that has been continuously welded down the seam. The duct is formed the same way but the weld is on the outside radius.

APPLICATION: The welded elbow provides good all around usage. It is uni-directional.

The rolled lip collar adds about 2.5" tangent to the length of the elbow. However, please remember that the collar is sized to receive a cut piece of pipe. This provides infinite adjustability.

Adjustment Capability



IMPORTANT: When using the adjustment feature of the fitting, order an additional O-ring.



STANDARD CONSTRUCTION is 18 ga with the branch fully welded to the taper. The back of the taper is lapped spot welded and caulked. The 2.5" collar is applied as shown on page 3. Length of branch varies based upon the various dimensions. However, REMEMBER, that length is not important in designing because of the adjustability of the system. IE the cut pipe can slide into the collar to adjust the length.

Heavier gauges and full welded are available.

IMPORTANT: When using the adjustable feature of the fitting, order an additional O-ring.

#### Adjustment Capability



IMPORTANT: When using the adjustment feature of the fitting, order an additional O-ring.

# **Ordering Made Easy**

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# Branches (Tee on Taper)

	Part #	Part #	Part #	
Dia.	30 deg	45 deg	Tee'	C
3"	14003.30	14003.45	14303	
4"	14004.30	14004.45	14304	
5"	14005.30	14005.45	14305	
6"	14006.30	14006.45	14306	
7"	14007.30	14007.45	14307	
8"	14008.30	14008.45	14308	
9"	14009.30	14009.45	14309	
10"	14010.30	14010.45	14310	
11"	14011.30	14011.45	14311	
12"	14012.30	14012.45	14312	
13"	14013.30	14013.45	14313	
14"	14014.30	14014.45	14314	
15"	14015.30	14015.45	14315	
16"	14016.30	14016.45	14316	
17"	14017.30	14017.45	14317	
18"	14018.30	14018.45	14318	
19"	14019.30	14019.45	14319	
20"	14020.30	14020.45	14320	
22"	14022.30	14022.45	14322	
24"	14024.30	14024.45	14324	-





Galvanized and Stainless Steel

С

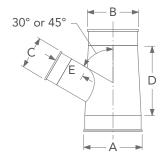
# **Double Branches**

Dia.	Part #	Part #	GA	
Dia.	30 deg	45 deg	GA	
3"	14103.30	14103.45	18	
4"	14104.30	14104.45	18	
5"	14105.30	14105.45	18	
6"	14106.30	14106.45	18	
7"	14107.30	14107.45	18	
8"	14108.30	14108.45	18	
9"	14109.30	14109.45	18	
10"	14110.30	14110.45	18	
11"	14111.30	14111.45	18	
12"	14112.30	14112.45	18	
13"	14113.30	14113.45	18	
14"	14114.30	14114.45	18	
15"	14115.30	14115.45	18	
16"	14116.30	14116.45	18	
17"	14117.30	14117.45	18	
18"	14118.30	14118.45	18	
19"	14119.30	14119.45	18	
20"	14120.30	14120.45	18	
22"	14122.30	14122.45	18	
24"	14124.30	14124.45	18	

\* If using Stainless Steel, add an "SS" to the end of the part #.

B С D А

Galvanized and Stainless Steel



 $D = (2 \times C) + 6$ " or A which ever is larger. Add 2.5" for each collar.

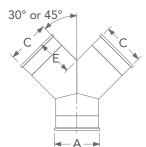
С	E
4"-12"	8.5"
13"-18"	11.5"
19" up	14.5"

13

#### **Y-Branches**



A Galvanized and Stainless Steel



All fittings have slip fit capability in the collar. See page 3.

С	E
4"-12"	8.5"
13"-18"	11.5"
19" up	14.5"

Dia.	Part #	Part #	GA
Dia.	30 deg	45 deg	GA
4"	14204.30	14204.45	18
5"	14205.30	14205.45	18
6"	14206.30	14206.45	18
7"	14207.30	14207.45	18
8"	14208.30	14208.45	18
9"	14209.30	14209.45	18
10"	14210.30	14210.45	18
11"	14211.30	14211.45	18
12"	14212.30	14212.45	18
13"	14213.30	14213.45	18
14"	14214.30	14214.45	18
15"	14215.30	14215.45	18
16"	14216.30	14216.45	18
17"	14217.30	14217.45	18
18"	14218.30	14218.45	18
19"	14219.30	14219.45	18
20"	14220.30	14220.45	18
22"	14222.30	14222.45	18
24"	14224.30	14224.45	18

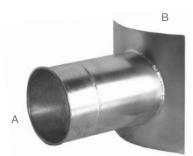
#### NOTES:

STANDARD CONSTRUCTION is 18 ga. (The taper is lapped spot welded and caulked. The halves are then full welded together.) The 2.5" collar is applied as standard. Length of Y branch varies based upon the various dimensions. However, REMEMBER, that length is not important in designing because of the adjustability of the system. IE the cut pipe can slide into the collar to adjust the length. Angle rings or flanges can be applied to the transitions and adapters to mate with existing duct, or they can be made with raw ends sized to specific dimensions.

Heavier gauges are available.

\* If using Stainless Steel, add an "SS" to the end of the part #.

#### In-Cuts



Galvanized and Stainless Steel

Dia.	Part #	Part #	Part #	GA
Dia.	30 deg	45 deg	T's	GA
3"	14403.30	14403.45	14503	18
4"	14404.30	14404.45	14504	18
5"	14405.30	14405.45	14505	18
6"	14406.30	14406.45	14506	18
7"	14407.30	14407.45	14507	18
8"	14408.30	14408.45	14508	18
9"	14409.30	14409.45	14509	18
10"	14410.30	14410.45	14510	18
11"	14411.30	14411.45	14511	18
12"	14412.30	14412.45	14512	18
13"	14413.30	14413.45	14513	18
14"	14414.30	14414.45	14514	18
15"	14415.30	14415.45	14515	18
16"	14416.30	14416.45	14516	18
17"	14417.30	14417.45	14517	18
18"	14418.30	14418.45	14518	18
19"	14419.30	14419.45	14519	18
20"	14420.30	14420.45	14520	18
22"	14422.30	14422.45	14522	18
24"	14424.30	14424.45	14524	18

\* If using Stainless Steel, add an "SS" to the end of the part #.

#### NOTES:

In cuts are designed for quick introduction of a lateral line to an existing trunk line. They are sized by the lateral. Construction and dimensions of the lateral is the same as a branch.

Adjustment Capability



IMPORTANT: When using the adjustment feature of the fitting, order an additional O-ring.



**Blast Gates - Air Tight** 

#### NOTES:

Construction: The standard FULL cut off is an aluminum cast housing to which collars have been "screwed". The screw is then ground off on the inside to keep it out of the air stream. The HALF GATE is simply the housing and gate with no collars. It is attached to existing duct by cutting a slit and sliding the gate over the duct. It can be attached to existing duct with screws. It is shown installed.

Application: cut offs are used primarily to cut off air supply to areas when dust collection/ venting is not needed. This can improve performance in other areas or simply limit the size of the needed collector. It is difficult to design a "balanced" system incorporating cut offs as the dynamics of the system are changing.

Blast Gates are used primarily where air is bled into the system or where heavier application of air diverting is required. They are air tight and fully welded.

SS Cut-offs are cast aluminum bodies and SS blades and collars.

IMPORTANT: When using the adjustable feature of the fitting, order an additional O-ring.

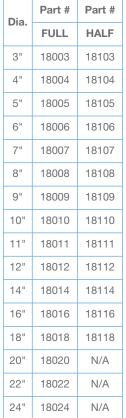
#### NOTES:

K&B Air Tight Gates are available for your specific application as manual gates in a self-cleaning "skeleton" gate style or in our increasingly popular pneumatically operated AutoAire fully automatic gates.

# Ordering Made Easy

Contact the K&B Duct dealer representative nearest you for free design assistance, easiest ordering and fastest delivery in the industry.

# Cut-Offs









Galvanized and Stainless Steel

NEW

\* If using Stainless Steel, add an "SS" to the end of the part #.





As Self-Cleaning Manual As Half With Seal



As Automatic Gate

New from K&B Duct is our exclusive design for an air tight cast aluminum blast gate. An exclusive recess in the gate halves allows for insertion of a high density (UHMW) plastic ring which presses against the blade when closed or against the opposing ring when open. Foam seals behind both rings further secure the seal, providing the pressure to keep the rings tight against the blade or each other. The seal is Air Tight.

AVAILABLE IN POPULAR SIZES 4", 6" AND 8"

\* The term "Air Tight" relates to a high degree of seal. It is not meant to imply 100% seal in all situations or any pressure.

# Hose Adapters

Dia.	Part#	GA
3"	15203	24+
4"	15204	24+
5"	15205	24+
6"	15206	24+
7"	15207	22
8"	15208	22
9"	15209	22
10"	15210	22
11"	15211	22
12"	15212	22
13"	15213	20
14"	15214	20
15"	15215	20
16"	15216	20
17"	15217	20
18"	15218	20
19"	15219	20
20"	15220	20
22"	15222	20
24"	15224	20



Galvanized and Stainless Steel

3"	16003	20
4"	16004	20
5"	16005	20
6"	16006	20
7"	16007	20
8"	16008	20
9"	16009	20
10"	16010	20
11"	16011	20
12"	16012	20
13"	16013	20
14"	16014	20
15"	16015	20
16"	16016	20
17"	16017	20
18"	16018	20
19"	16019	20
20"	16020	20
22"	16022	20
24"	16024	20

Reducers

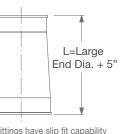
Part #

GA

Dia.



Galvanized and Stainless Steel



# All fittings have slip fit capability in the collar. See page 3.

\* If using Stainless Steel, add an "SS" to the end of the part #.

### Adapters (To K&B Rolled Lip)

Dia.	STRAIGHT (non flanged)	FLANGED	GA
	Part #	Part #	
3"	15003	15103	24+
4"	15004	15104	24+
5"	15005	15105	24+
6"	15006	15106	24+
7"	15007	15107	22
8"	15008	15108	22
9"	15009	15109	22
10"	15010	15110	22
11"	15011	15111	22
12"	15012	15112	22
13"	15013	15113	20
14"	15014	15114	20
15"	15015	15115	20
16"	15016	15116	20
17"	15017	15117	20
18"	15018	15118	20
19"	15019	15119	20
20"	15020	15120	20
22"	15022	15122	20
24"	15024	15124	20

\* If using Stainless Steel, add an "SS" to the end of the part #.





Galvanized and Stainless Steel

#### NOTES:

STANDARD CONSTRUCTION for reducer is 18 ga. The taper is lapped spot welded and caulked. The 2.5" collar is applied as standard. Length of reducer varies based upon the various dimensions. However, REMEMBER, that length is not important in designing because of the adjustability of the system. IE the cut pipe can slide into the collar to adjust the length.

Sized and price by large end. Specify dimension, A (large end) to B (small end).

Heavier gauges and full welded are available.

Reducers are priced by large end.

IMPORTANT: When using the adjustable feature of the fitting, order an additional O-ring.

+SS gauge=22

Adjustment Capability



IMPORTANT: When using the adjustment feature of the fitting, order an additional O-ring. Page 5

#### NOTES:

Adapters can be made to fit ANY AND ALL existing duct, hood connections, valves, gates, etc, etc, etc. The nonrolled end can be fitted with a flange, expanded out, or pulled in to fit specified dimension. Adaptations requiring greater than 1/8" increase or decrease from given size will be priced as a reducer.

+SS Gauge = 22



STANDARD CONSTRUCTION is 18 ga. The taper is lapped spot welded and caulked. The 2.5" collar is applied as standard. Length varies based upon the various dimensions. However, REMEMBER, that length is not important in designing because of the adjustability of the system. IE the cut pipe can slide into the collar to adjust the length. Angle rings or flanges can be applied to the transitions and adapters to mate with existing duct, or they can be made with raw ends sized to specific dimensions.

Heavier gauges and full welded are available.

IMPORTANT: When using the adjustable feature of the fitting, order an additional O-ring.

#### **Rect Flange End** Hemmed Dia. GA Part # Part # 3" 16103 16203 20 4" 16104 16204 20 5" 16105 16205 20 6" 16106 16206 20 7" 16107 16207 20 8" 16108 16208 20 9" 16109 16209 20 10" 16110 16210 20 11" 16111 16211 20 16112 12" 16212 20

16113

16114

16115

16116

16117

16118

16119

16120

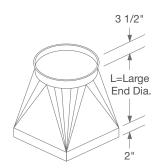
16122

16124

**Rectangular to Round Transitions** 



Galvanized and Stainless Steel



\*If using Stainless Steel, add an "SS" to the end of the part #.

All fittings have slip fit capability in the collar. See page 3.

16213

16214

16215

16216

16217

16218

16219

16220

16222

16224

20

20

18

18

18

18

18

18

18

18

#### **Endcaps**

13"

14"

15"

16"

17"

18"

19"

20"

22"

24"

Dia.	CLOSED END	BIRD SCREEN
D10.	Part #	Part #
3"	19503	19604
4"	19504	19604
5"	19505	19605
6"	19506	19606
7"	19507	19607
8"	19508	19608
9"	19509	19609
10"	19510	19610
11"	19511	19611
12"	19512	19612
13"	19513	19613
14"	19514	19614
15"	19515	19615
16"	19516	19616
17"	19517	19617
18"	19518	19618
19"	19519	19619
20"	19520	19620
22"	19522	19622
24"	19524	19624





Galvanized and Stainless Steel

# **Ordering Made Easy**

# K&B Duct Clamp Together Duct - Hanging System

# Hanging Duct

Hanging duct can be accomplished with a variety of methods ranging from cable hangers to duct saddles and treaded rod/conduit. The important thing to consider is the spacing of the hangers. Spacing is NOT dictated by the duct but rather by the weight of the material to be collected and the collective weight of the dust and duct should the duct become "plugged". To calculate this, simply multiply the area (A) of the duct by the length of the duct.  $A=\pi r^2$  times the length. Then using the weight

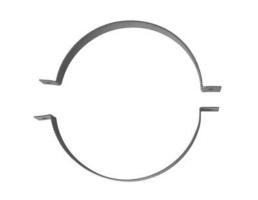
capacity of the hanger, space according to the worst case scenario. For example: A 1 section of  $18^{"}$  duct would have a volume of  $(3.14*(9*9)*12^{"}/(1728^{"})$  to give you the cubic feet answer of 1.76. If your collected dust = 15 lbs per cubic foot, then your potential break load would have to be 26 lbs/foot of duct. Using the chart at the bottom, a #3 hanger would be more than adequate as it is recommended that duct be suspended at least every 15 for rigidity.

#### Saddles

Dia.	Part #	GA
4"	17004	16
5"	17005	16
6"	17006	16
7"	17007	16
8"	17008	16
9"	17009	16
10"	17010	16
11"	17011	14
12"	17012	14
13"	17013	14
14"	17014	14
15"	17015	14
16"	17016	14
17"	17017	14
18"	17018	14
19"	17019	14
20"	17020	14
22"	17022	14

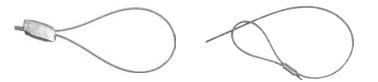
ADDITIONAL HANGING ACCESSORIES

- Threaded Rod
- Ceiling Clips
- Pig Tail Anchor Bolts
- Conduit



# "K-wik" Hangers

Size	#3		#4		#5				
deg to vertical	0*	30*	45*	0*	30*	45*	0*	30*	45*
Working Loads (lbs)	176	151	123	495	425	346	715	614	500
Break Loads (lbs)	1276		3300		4752				
Part No.	1	7100.	3	17100.4		17100.5			



Each package contains cable, and clutcher Cables available in 15'-30'



#### NOTES:

K&B Duct offers saddle hangers, threaded rod and conduit for the hanging of duct. The saddle hangers encompass the duct and are bolted together. Threaded rod or electrical conduit can then be used. Threaded rod is simply used as the bolt for the saddle. With conduit, the ends must be hammered flat and drilled so that the bolt used on the saddle will also secure the conduit.

#### NOTES:

Cable hangers are a quick and secure way to suspend duct. It is an especially good system to use during installation. They can be used exclusively or if a more rigid system is required, they can be interspersed with more rigid hangers.

Hangers must be selected and spaced based upon the weight of the DUCT AND MATERIAL being conveyed assuming worst case (plugged) scenario. K&B Duct is not liable for consequential or incidental damages related to this product. There are no warranties expressed or implied.



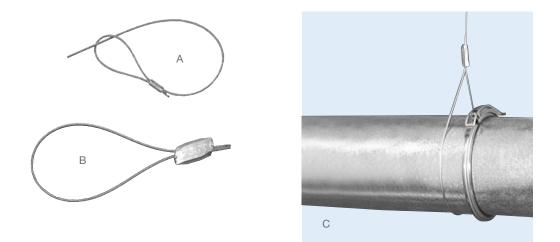
# K&B Duct Clamp Together Duct - Installation Tips

**ESTABLISH A STAGING AREA** where all parts can be laid out in the order of assembly. Each shipment has the part # and the box that the part is in to assist you in locating the parts. It is recommended that you stage the drops separately and as close to the drop locations as possible.

**ESTABLISH THE 'LINE' OF TRAVEL.** You need to establish a straight line by which to install your various lines. You may use an existing beam or you may want to 'pull' a string as your straight line to insure that you are staying straight throughout your installation. Installations can begin at the fan end or the at the 'pick-ups'. However final adjustments are easier on the pick-ups and larger jobs are easier if installation starts from the fan forward. Either way, you need a pre-established 'line' to follow.

LOCATE AND INSTALL TEMPORARY HANGERS that will support the duct during the installation process. Hangers can be added and moved as duct is installed, but hangers will be needed during the installation to support the duct. If using the cable hangers—see the instructions in the catalog/price list. If using a rod attached to saddles, you will want to have the saddles attached to the rod, ready to receive the duct.

**IF USING 'K-WICK' CABLE HANGERS** – then refer to illustration below. Figure A represents the forming of a loop around a beam or other object from which the duct will be suspended. Figure B and C illustrate the way the cable goes through the clucher around the duct and back through the clucher. A "thumb tab" allows for release of the cable.



**CLAMP TOGETHER STRAIGHT RUNS ON THE FLOOR** – but limit the lengths to a manageable number of pieces. Remember that the longer the duct the harder it is to maneuver and the more hangers you will need.

ALWAYS INSTALL CLEVIS PIN IN CLAMP as soon as it is latched. This is especially important during installation so as to avoid accidental unclamping.

### **Ordering Made Easy**



866-KNB-Duct • (1-866-562-3828) • www.kbduct.com • info@kbduct.com

#### K&B Clamp together Duct

**Bid Specs** 

**Product Description:** The system is a full line of duct and components. All parts are of standard sheet metal construction with a rolled lip applied to each end of the component. An all stainless over-center locking clamp is used to encompass the rolled lips, pull them together and then securely join them. Adapters enable connection to virtually and machine or existing duct.

**Clamp:** The lifetime guaranteed clamp is fitted with a "winged O-ring" gasket made of N-butyl rubber. The gasket is designed to fully encompass the entirety of the rolled lips including the area formed by the "v" between the rolled lips. Other gasket material is available.\*

**Duct and Adjustability:** The duct is a nominal 5' length. Adjustable sleeves and adjustable components enable the installer to quickly make odd lengths and to adjust for a proper fit. To utilize this feature, a cut piece of pipe is slid into the sleeve or fitting and secured with an O-ring and standard clamp.

#### STANDARD PRODUCT

Materials: Material Duct and Components are available in galvanized, stainless (304-316) as a standard.

**Gauges:** Duct Standard Gauges for the duct are 26 ga for 3", 24 ga for 4-6", 22 ga for 7-12" and 20 ga for sizes 13-22". Elbows are typically one gauge heavier than standard duct gauge. All components (branches, reducers etc) are of 18 ga material.

#### **PRODUCT OPTIONS**

Material: Carbon steel, galvanized and stainless steel are available as options.

**Gasket Materials:** Viton, Gore-tex, Red Silicone Rubber, Asbestos gaskets and O-ring material are also available.

**Gauges:** All duct can be provided in standard configuration in one ga heavier (24 in 22, 22 in 20and 20 in 18). Rolled lips can be applied to Gauges up to 10 ga by applying a rolled lip collar to fully welded duct and components. Heavy tubed elbows are available.

#### **PRESSURE RATING**

The rolled lip on the duct and fittings act as a stiffening ring and therefore allow the product to withstand much higher pressures than normally associated with spiral or other rolled duct. The duct is typically installed with the confidence in pressure applications up to 40" negative water column pressure. Higher pressures guarantees are available. To obtain this simply call K&B.

CALL 1-866-562-3828 if you have other questions or need additional assistance. Call this number immediately if there is a shortage on the order. Delayed reporting will result in further billing for missing parts.



Flanged duct is available in 5 or 10 lengths. It is also available fully seam welded or in lock seamed joints. Lock seamed is only available in 5.

Standard flanges are galvanized. Available also in stainless steel or black iron.

+SS gauge=22

Available in heavier gauges and larger sizes. Call for pricing.

# Flanged Duct

Flange Duct (with flanges)				
Dia.	Part #	GA		
4"	20004	24+		
5"	20005	24+		
6"	20006	24+		
7"	20007	22		
8"	20008	22		
9"	20009	22		
10"	20010	22		
11"	20011	22		
12"	20012	22		
13"	20013	20		
14"	20014	20		
15"	20015	20		
16"	20016	20		
17"	20017	20		
18"	20018	20		
19"	20019	20		
20"	20020	20		
22"	20022	20		
24"	20024	18		
26"	20026	18		
28"	20028	18		
30"	20030	18		
32"	20032	18		
34"	20034	18		
36"	20036	18		
38"	20038	18		
40"	20040	18		
42"	20042	16		
44"	20044	16		
46"	20046	16		
48"	20048	16		

\*If using Stainless Steel, add an "SS" to the end of the part #.



Galvanized and Stainless Steel

# **Ordering Made Easy**

# K&B Duct Flanged Duct

# Elbows - Flanged

Standard Radius (1.5)					
	90 deg	60 deg	45 deg	30 deg	
Dia.	Part #	Part #	Part #	Part #	GA
	Se	e note for s	izes under 2	24″.	
24"	22024.90	22024.60	22024.45	22024.30	18
26"	22026.90	22026.60	22026.45	22026.30	18
32"	22032.90	22032.60	22032.45	22032.30	16
34"	22034.90	22034.60	22034.45	22034.30	16
36"	22036.90	22036.60	22036.45	22036.30	16
38"	22038.90	22038.60	22038.45	22038.30	16
40"	22040.90	22040.60	22040.45	22040.30	16
42"	22042.90	22042.60	22042.45	22042.30	16
44"	22044.90	22044.60	22044.45	22044.30	16
46"	22046.90	22046.60	22046.45	22046.30	16
48"	22048.90	22048.60	22048.45	22048.30	16
Long Radius (2.5)					
		-	( )		
	90 deg	60 deg	45 deg	30 deg	
Dia.	90 deg Part #	60 deg Part #	45 deg Part #	30 deg Part #	GA
Dia.	Part #	Part #		Part #	GA
<b>Dia.</b>	Part #	Part #	Part #	<b>Part #</b>	<b>GA</b> 18
	Part #	Part # e note for s	Part #	<b>Part #</b>	
24"	Part # Se 22024.0L	Part # e note for s 22024.0L	Part # izes under 2 22024.45L	<b>Part #</b> 24″. 22024.0L	18
24" 26"	Part # Se 22024.0L 22026.0L	Part # e note for s 22024.0L 22026.0L	Part # izes under 2 22024.45L 22026.45L	<b>Part #</b> 24″. 22024.0L 22026.0L	18 18
24" 26" 28"	Part # Se 22024.0L 22026.0L 22028.0L	Part # e note for s 22024.0L 22026.0L 22028.0L	Part # izes under 2 22024.45L 22026.45L 22028.45L	Part # 24″. 22024.0L 22026.0L 22028.0L	18 18 18
24" 26" 28" 30"	Part # Se 22024.0L 22026.0L 22028.0L 22030.0L	Part # e note for s 22024.0L 22026.0L 22028.0L 22030.0L	Part # izes under 2 22024.45L 22026.45L 22028.45L 22030.45L	Part # 22024.0L 22026.0L 22028.0L 22030.0L	18 18 18 16
24" 26" 28" 30" 32"	Part # Se 22024.0L 22026.0L 22028.0L 22030.0L 22032.0L	Part # e note for s 22024.0L 22026.0L 22028.0L 22030.0L 22032.0L	Part # izes under 2 22024.45L 22026.45L 22028.45L 22030.45L 22032.45L	Part # 22024.0L 22026.0L 22028.0L 22030.0L 22032.0L	18 18 18 16 16
24" 26" 28" 30" 32" 34"	Part # Se 22024.0L 22026.0L 22030.0L 22032.0L 22034.0L	Part # e note for s 22024.0L 22026.0L 22028.0L 22030.0L 22032.0L 22034.0L	Part # izes under 2 22024.45L 22026.45L 22028.45L 22030.45L 22032.45L 22034.45L	Part # 22024.0L 22026.0L 22028.0L 22030.0L 22032.0L 22034.0L	18 18 18 16 16 16
24" 26" 28" 30" 32" 34" 36"	Part # Se 22024.0L 22026.0L 22028.0L 22030.0L 22032.0L 22034.0L 22034.0L	Part # e note for s 22024.0L 22026.0L 22028.0L 22030.0L 22032.0L 22034.0L 22036.0L	Part # izes under 2 22024.45L 22026.45L 22028.45L 22030.45L 22032.45L 22034.45L 22036.45L	Part # 22024.0L 22026.0L 22028.0L 22030.0L 22032.0L 22034.0L 22034.0L	18 18 18 16 16 16 16 16
24" 26" 28" 30" 32" 34" 36" 38"	Part # Se 22024.0L 22026.0L 22030.0L 22032.0L 22034.0L 22036.0L 22038.0L	Part # e note for s 22024.0L 22026.0L 22030.0L 22032.0L 22034.0L 22036.0L 22038.0L	Part # izes under 2 22024.45L 22026.45L 22028.45L 22030.45L 22032.45L 22034.45L 22036.45L 22038.45L	Part # 22024.0L 22026.0L 22028.0L 22030.0L 22032.0L 22034.0L 22036.0L	18 18 18 16 16 16 16 16 16
24" 26" 28" 30" 32" 34" 36" 38" 40"	Part # Se 22024.0L 22026.0L 22030.0L 22032.0L 22032.0L 22034.0L 22038.0L 22038.0L	Part # e note for s 22024.0L 22026.0L 22028.0L 22030.0L 22032.0L 22034.0L 22036.0L 22038.0L 22040.0L	Part # izes under 2 22024.45L 22026.45L 22028.45L 22030.45L 22032.45L 22034.45L 22036.45L 22038.45L 22040.45L	Part # 22024.0L 22026.0L 22028.0L 22030.0L 22032.0L 22034.0L 22038.0L 22038.0L	18 18 18 16 16 16 16 16 16 16
24" 26" 28" 30" 32" 34" 36" 38" 40" 42"	Part # Se 22024.0L 22026.0L 22030.0L 22030.0L 22034.0L 22036.0L 22038.0L 22040.0L	Part # e note for s 22024.0L 22026.0L 22030.0L 22032.0L 22034.0L 22036.0L 22038.0L 22040.0L 22042.0L	Part # izes under 2 22024.45L 22026.45L 22028.45L 22030.45L 22032.45L 22034.45L 22038.45L 22038.45L 22040.45L	Part # 22024.0L 22026.0L 22028.0L 22030.0L 22032.0L 22034.0L 22036.0L 22038.0L 22040.0L	18 18 18 16 16 16 16 16 16 16 16

\*If using Stainless Steel, add an "SS" to the end of the part #.



Galvanized and Stainless Steel



#### NOTES:

For parts under 24" use the price of the corresponding part in the K&B Duct line and add the price of two flanges. To create the part # simply change the first number in the K&B Duct part # from a "1" to a "2". This will signify that the part is to be flanged.

Available in heavier gauges and larger sizes. Call for pricing.



CONSTRUCTION: These elbows are made by bending and pleating a piece of duct. The NON-Welded style starts with an un-joined piece of duct and as the pleating takes place, the overlapping edges are pressed together on the inside of the elbow. The welded elbow starts with a piece of duct that has been continuously welded down the seam. The duct is formed the same way. The weld is on the outside radius. Both are available in galvanized only.

APPLICATION: The non-welded elbow is a very cost effective elbow used in systems where a small amount of leakage is acceptable ie the wood industry. The welded elbow provides good all around usage. Both are unidirectional.

# K&B Elbows - Flanged Pleated/Non-Welded

	Standard Radius (1.5)						
	90 deg	60 deg	45 deg				
Dia.	Part #	Part #	Part #	GA			
4"	22104.90	22104.60	22104.45	22			
5"	22105.90	22105.60	22105.45	22			
6"	22106.90	22106.60	22106.45	22			
7"	22107.90	22107.60	22107.45	22			
8"	22108.90	22108.60	22108.45	22			
9"	22109.90	22109.60	22109.45	20			
10"	22110.90	22110.60	22110.45	20			
11"	22111.90	22111.60	22111.45	20			
12"	22112.90	22112.60	22112.45	20			
13"	22113.90	22113.60	22113.45	20			
14"	22114.90	22114.60	22114.45	20			
15"	22115.90	22115.60	22115.45	20			
	Long Dodius (0.5)						



Galvanized Only



#### Long Radius (2.5)

	90 deg	60 deg	45 deg	
Dia.	Part #	Part #	Part #	GA
4"	22104.90L	22104.60L	22104.45L	22
5"	22105.90L	22105.60L	22105.45L	22
6"	22106.90L	22106.60L	22106.45L	22
7"	22107.90L	22107.60L	2107.45L	22
8"	22108.90L	22108.60L	22108.45L	22
9"	22109.90L	22109.60L	22109.45L	20
10"	22110.90L	22110.60L	22110.45L	20
11"	22111.90L	22111.60L	22111.45L	20
12"	22112.90L	22112.60L	22112.45L	20
13"	22113.90L	22113.60L	22113.45L	20
14"	22114.90L	22114.60L	22114.45L	20
15"	22115.90L	22115.60L	22115.45L	20

# **Ordering Made Easy**

# K&B Elbows - Flanged Pleated/Welded

Standard Radius (1.5)				
	90 deg	60 deg	45 deg	
Dia.	Part #	Part #	Part #	GA
4"	22204.90	22204.60	22204.45	22
5"	22205.90	22205.60	22205.45	22
6"	22206.90	22206.60	22206.45	22
7"	22207.90	22207.60	22207.45	22
8"	22208.90	22208.60	22208.45	22
9"	22209.90	22209.60	22209.45	22
10"	22210.90	22210.60	22210.45	20
11"	22211.90	22211.60	22211.45	20
12"	22212.90	22212.60	22212.45	20
13"	22213.90	22213.60	22213.45	20
14"	22214.90	22214.60	22214.45	20
15"	22215.90	22215.60	22215.45	20
	Lor	ng Radius (	2.5)	
	90 deg	60 deg	45 deg	
Dia.	Part #	Part #	Part #	GA
4"	22204.9L	22204.6L	22204.45L	22
5"	22205.9L	22205.6L	22205.45L	22
6"	22206.9L	22206.6L	22206.45L	22
7"	22207.9L	22207.6L	22207.45L	22
8"	22208.9L	22208.6L	22208.45L	22
9"	22209.9L	22209.6L	22209.45L	20
11"	22211.9L	22211.6L	22211.45L	20
12"	22212.9L	22212.6L	22212.45L	20
13"	22213.9L	22213.6L	22213.45L	20
14"	22214.9L	22214.6L	22214.45L	20
15"	22215.9L	22215.6L	22215.45L	20



Galvanized Only



#### NOTES:

CONSTRUCTION: These elbows are made by bending and pleating a piece of duct. The NON-Welded style starts with an un-joined piece of duct and as the pleating takes place, the overlapping edges are pressed together on the inside of the elbow. The welded elbow starts with a piece of duct that has been continuously welded down the seam. The duct is formed the same way. The weld is on the outside radius. Both are available in galvanized only.

APPLICATION: The non-welded elbow is a very cost effective elbow used in systems where a small amount of leakage is acceptable ie the wood industry. The welded elbow provides good all around usage. Both are unidirectional.



For parts under 24" use the price of the corresponding part in the K&B Duct line and add the price of two flanges. To create the part # simply change the first number in the K&B Duct part # from a '1' to a '2'. This will signify that the part is to be flanged.

Available in heavier gauges and larger sizes. Call for pricing.

# Branches (Tee on Taper)

		Part #			
Dia.	30 deg	45 deg	Tee'	GA	
	See note for sizes under 24".				
24"	24024.3	24024.45	24324	18	
26"	24026.3	24026.45	24326	18	
28"	24028.3	24028.45	24328	18	
30"	24030.3	24030.45	24330	16	
32"	24032.3	24032.45	24332	16	
34"	24034.3	24034.45	24334	16	
36"	24036.3	24036.45	24336	16	
38"	24038.3	24038.45	24338	16	
40"	24040.3	24040.45	24340	16	
42"	24042.3	24042.45	24342	16	
44"	24044.3	24044.45	24344	16	
46"	24046.3	24046.45	24346	16	
48"	24048.3	24048.45	24348	16	





Galvanized and Stainless Steel

\* If using Stainless Steel, add an "SS" to the end of the part #.

# Double Branches (Tee on Taper)

	Par				
Dia.	30 deg	45 deg	GA		
See note for sizes under 24".					
24"	24124.3	24124.45	18		
26"	24126.3	24126.45	18		
28"	24128.3	24128.45	18		
30"	24130.3	24130.45	16		
32"	24132.3	24132.45	16		
34"	24134.3	24134.45	16		
36"	24136.3	24136.45	16		
38"	24138.3	24138.45	16		
40"	24140.3	24140.45	16		
42"	24142.3	24142.45	16		
44"	24144.3	24144.45	16		
46"	24146.3	24146.45	16		
48"	24148.3	24148.45	16		



Galvanized and Stainless Steel



\* If using Stainless Steel, add an "SS" to the end of the part #.

#### For parts under 24" use the price of the

NOTES:

corresponding part in the K&B Duct line and add the price of two flanges. To create the part # simply change the first number in the K&B Duct part # from a '1' to a '2'. This will signify that the part is to be flanged.

Available in heavier gauges and larger sizes. Call for pricing.

# **Ordering Made Easy**

# K&B Duct Flanged Duct

Y-Branches - Flanged





	Part #	Part #			
Dia	30 deg	45 deg	GA		
See note for sizes under 24".					
24"	24224.3	24224.45	18		
26"	24226.3	24226.45	18		
28"	24228.3	24228.45	18		
30"	24230.3	24230.45	16		
32"	24232.3	24232.45	16		
34"	24234.3	24234.45	16		
36"	24236.3	24236.45	16		
38"	24238.3	24238.45	16		
40"	24240.3	24240.45	16		
42"	24242.3	24242.45	16		
44"	24244.3	24244.45	16		
46"	24246.3	24246.45	16		
48"	24248.3	24248.45	16		

\* If using Stainless Steel, add an "SS" to the end of the part #.

Galvanized and Stainless Steel

# In-Cuts - Flanged



Galvanized and Stainless Steel



	Part #	Part #	Part #	
Dia	30 deg	45 deg	T's	GA
	See not	e for sizes un	der 24".	
24"	24424.3	24424.45	24524	18
26"	24426.3	24426.45	24526	18
28"	24428.3	24428.45	24528	18
30"	24430.3	24430.45	24530	16
32"	24432.3	24432.45	24532	16
34"	24434.3	24434.45	24534	16
36"	24436.3	24436.45	24536	16
38"	24438.3	24438.45	24538	16
40"	24440.3	24440.45	24540	16
42"	24442.3	24442.45	24542	16
44"	24444.3	24444.45	24544	16
46"	24446.3	24446.45	24546	16
48"	24448.3	24448.45	24548	16

\* If using Stainless Steel, add an "SS" to the end of the part #.

#### NOTES:

For parts under 24" use the price of the corresponding part in the K&B Duct line and add the price of two flanges. To create the part # simply change the first number in the K&B Duct part # from a '1' to a '2'. This will signify that the part is to be flanged.

Available in heavier gauges and larger sizes. Call for pricing.

#### **NOTES:**

For parts under 24" use the price of the corresponding part in the K&B Duct line and add the price of two flanges. To create the part # simply change the first number in the K&B Duct part # from a '1' to a '2'. This will signify that the part is to be flanged.

Available in heavier gauges and larger sizes. Call for pricing.



NOTES:

Reducers are priced by large end.

sizes. Call for pricing.

Available in heavier gauges and larger

For parts under 24" use the price of the corresponding part in the K&B Duct line and add the price of two flanges. To create the part # simply change the first number in the K&B Duct part # from a '1' to a '2'. This will signify that the part is to be flanged.

# Cut-Offs - Flanged

	Part #
Dia	Full
4"	28004
5"	28005
6"	28006
7"	28007
8"	28008
9"	28009
10"	28010
11"	28011
12"	28012
14"	28014
16"	28016
18"	28018
20"	28020
22"	28022



. . . . .

Galvanized and Stainless Steel

15"	28215	14
16"	28216	14
17"	28217	14
18"	28218	14
19"	28219	14
20"	28220	14
22"	28222	14

**Blast Gates - Flanged** 

GA

14

14

14

14

14

14

14

14

14

14

14

**Rectangular to Round Transitions -**

Part #

28204

28205

28206

28207

28208

28209

28210

28211

28212

28213

28214

Dia.

4"

5"

6"

7"

8"

9"

10"

11'

12"

13"

14"

Flanged

48"



Galvanized and Stainless Steel

\* If using Stainless Steel, add an "SS" to the end of the part #.

#### **Reducers - Flanged**

Dia	Part #	GA		
See note for sizes under 24".				
24"	26024	18		
26"	26026	18		
28"	26028	18		
30"	26030	16		
32"	26032	16		
34"	26034	16		
36"	26036	16		
38"	26038	16		
40"	26040	16		
42"	26042	16		
44"	26044	16		
46"	26046	16		
48"	26048	16		



Galvanized and Stainless Steel

	Hemmed	
Dia	Part #	GA
See	e note for si	zes
	under 24".	
24"	26124	18
26"	26126	18
28"	26128	18
30"	26130	16
32"	26132	16
34"	26134	16
36"	26136	16
38"	26138	16
40"	26140	16
42"	26142	16
44"	26144	16
46"	26146	16

26148

16



Galvanized and Stainless Steel

#### **NOTES:**

\* If using Stainless Steel, add an "SS" to the end of the part #.

### **Ordering Made Easy**

Contact the K&B Duct dealer representative nearest you for free design assistance, easiest ordering and fastest delivery in the industry.

# All Other Components

All K&B Duct components can be fitted with a flange in lieu of a rolled lip. The part numbers are basically the same with the exception that all flanged parts start with a '2' rather than the '1' used for clamp together.

While Clamp together duct is available from 3 to 24" sizes, flange ducting and components can be fabricated in ALL sizes. And while the price list shows up to 48", much larger capabilities exist.



#### 27

# **K&B Duct - Accessories**

# Steel Flex Hoses

	RIGID	FLEXIBLE
Dia.	Part #	Part #
2"	18502	
2.5"	18502.5	
3"	18503	18603
4"	18504	18604
5"	18505	18605
6"	18506	18606
7"	18507	18607
8"	18508	18608
9"	18509	
10"	18510	
12"	18512	

# Hose Clamps

Dia.	Part #
2"	17202
3"	17203
4"	17204
5"	17205
6"	17206
8"	17208
10"	17210
12"	17212



K&B Duct offers Flex Hose in steel or rubber, with a wide variety of material variations and accessories, to meet virtually any application requirement: wood dust, plastics and polymers, chemicals, pharmaceuticals, chemicals, oil mist, food and abrasives. Including high temperature and high pressure hoses. Custom lengths available.

Dia.	Black	Clear
Dia.	Part #	Part #
2"	18302	18402
2.5"	18302.5	18402.5
3"	18303	18403
4"	18304	18404
5"	18305	18405
6"	18306	18406
7"	18307	18407
8"	18308	18408
9"	18309	
10"	18310	18410
12"	18312	18412
14"	18314	18414
16"	18316	18416
18"	18318	18418
20"	18320	

**Rubber Flex Hoses** 

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#### NOTES:

Other types of hoses are available.

Steelflex comes in two types: Rigid flex which holds the contour to which it is moved; flexible which moves freely like rubber hose.

#### **Router Hoods**





**Suction Hoods** 

### Custom Hood Designs

18324

24"



K&B Duct manufactures variety of suction hoods and router hoods for a wide variety of applications, including radial arm saws, table saws, routers and other cutting and forming equipment. Our hoods are available in a number of standard configurations and materials or can be custom manufactured to meet your exact needs. Simply contact K&B Duct or your nearest K&B Duct dealer representative with your specific requirements.

#### NOTES:

Special Components. Virtually any standard component and any special component can be fabricated to meet the customer's specification. Send your drawing or contact K&B for additional information.



No Loss Stack Heads are designed for roof top exhaust while eliminating the pressure drops associated with other "caps" and vent tops.

Bell mouths make great hoods because of the graduated curve of the metal.

Vibration Dampeners with their rubber insert, effectively separate fans from the duct and eliminate vibration from the fan being transmitted to the duct.

Radial Arm hoods come with flared sides to better capture the dust typically "thrown" by a radial arm saw.

### **Bell Mouths**

Dia.	Part #	GA
4"	16304	18
5"	16305	18
6"	16306	18
7"	16307	18
8"	16308	18
9"	16309	18
10"	16310	18
11"	16311	18
12"	16312	18
13"	16313	18
14"	16314	18
15"	16315	18
16"	16316	18
17"	16317	18
18"	16318	18
19"	16319	18
20"	16320	18
22"	16322	18
24"	16324	18
26"	16326	18
28"	16328	18
30"	16330	18
32"	16332	18



# Vibration Dampeners

Dia.	Part #	GA
4	15404	20
5	15405	20
6	15406	20
7	15407	20
8	15408	20
9	15409	20
10	15410	20
12	15412	20
14	15414	20
16	15416	20
18	15418	20
20	15420	20
22	15422	20
24	15424	20
26	15426	20
28	15428	20
30	15430	20

**Radial Arm Hoods** 

Dia.

4"

5"

6"

Part #

19104

19105

19106

GA

18

18

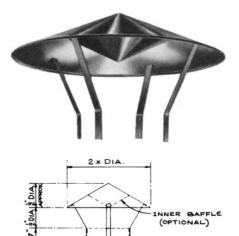
18



**Ordering Made Easy** 

### **K&B Duct - Accessories**

Rain Caps



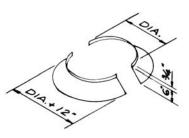
Dia.	No. Standard	Ga.
4"-14"	3	22
15"-24"	4	20
25"-30"	4	18
31"-42"	4	16
43"-48"	6	16

Weather caps for stacks are furnished complete with supports standards. In sizes 4" through 48" diameter. Caps should be ordered by stack diameter.

**Stack Flanges** 



DIA

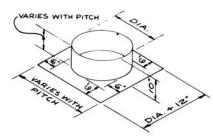


Dia.	Ga.
8"-19"	22
20"-31"	20
32"-48"	18

Flange is umbrella type made in halves. Standard sizes from 8" through 48". Larger sizes quoted on request. Stack Flanges should be ordered by duct sizes.

#### **Roof Flanges**





Dia.	Ga.
8"-19"	22
20"-31"	20
32"-48"	18

Flanges are one-piece construction; opening minimum is 4" larger than diameter or duct; made to fit pitch of roof. Standard sizes from 8" through 48". Larger sizes quoted on request. Roof Flanges should be ordered by duct size and roof pitch.

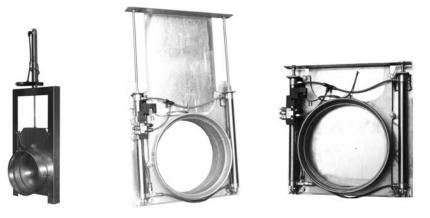


# AutoAire<sup>TM</sup> Automatic Air Controls

# Air when you need it. Where you need it.

Industrial Grade Air-Operated Stand-Alone Automatic Gates and Controlled Gate Systems

3" and UP



Dust collection systems with standard blast gates often have poor air flow and low suction as the result of operators not closing (or opening) the gates. K&B Duct's AutoAire gates provide total control of air, when and where you need it. An AutoAire system can 'stretch' the available CFM of a smaller system and 'optimize' the efficiency of even the largest.

#### AutoAire Means Big Energy Savings.



AutoAire offers you big energy savings automatically. Control of the fan's power level is automatic, adjusting it for the exact amount of air needed. Then, as gates are opened and closed automatically, the system continually adjusts, lowering power consumption, and saving you energy continuously.

**A Wide Variety of Applications** K&B Duct's industrial grade gates can be utilized in a variety of ways:

**1.** Gates only/no controller – Open and close an infinite number of individual gates by simply turning on and off a machine, switch, or sensor.

2. Controller for Collector Motor – Open and close multiple gates by turning on and off a machine, switch, or sensor, AND use a system controller to simultaneously cut on and off the collector fan.

3. VFD (Variable Frequency Drive) Control – An in line pressure regulator coupled with a controller and VFD functions to continuously regulate and control fan speed (and load) where multiple gates with multiple combinations continuously change the air requirements resulting in lower power consumption.

# Ordering Made Easy

# Special Solutions For Special Problems By KB Duct

K&B Duct has extensive experience in dealing with issues involving dust capture and removal. Our work with contractors and reps across the country has put us at the forefront in developing solutions for both common as well as the most unique problems. Here are some of the many solutions we have developed for our customers.

#### **Automatic Gates**





**PROBLEM:** Many companies have operations which struggle with collection systems that were (and still are) sized for operations that existed years ago when installed. Now these needs have changed drastically. So how do you get air (suction) WHERE YOU NEED IT -- WHEN YOU NEED IT?

**SOLUTION:** Gates that operate automatically as machines (or control systems) turn on and off. Our automatic gates are air operated with electric solenoids activated by virtually any electrical signal. Automatic gates can also be combined with in-duct pressure sensors and Variable Frequency Drive (VFD) fans to control and optimize fan power consumption. See AutoAire on the preceding page for more information.

Dia.	Part #	# of Cyl
3"	A18003	1
4"	A18004	1
5"	A18005	1
6"	A18006	1
7"	A18007	1
8"	A18008	1
9"	A18009	2
10"	A18010	2
11"	A18011	2
12"	A18012	2
13"	A18013	2
14"	A18014	2
15"	A18015	2
16"	A18016	2
17"	A18017	2
18"	A18018	2
19"	A18019	2
20"	A18020	2
22"	A18022	2
24"	A18024	2

#### **No-Loss Stackheads**



**PROBLEM:** When exhausting air into the atmosphere, rain caps, elbows and other components designed to prevent rain water from entering the duct and fan, cause back pressure that robs the fan's performance.

**SOLUTION:** No-Loss Stackheads, as the name implies, eliminate back pressure. The central exhaust duct is surrounded by larger duct which both sticks up higher than the central duct and is open at the bottom. Rain water that that falls into the larger duct washes down the side of the larger duct and discharges at the bottom. Available in galvanized and stainless steel. All sizes and transition needs available.

Dia.	Part #	GA
4"	19204	24
5"	19205	24
6"	19206	24
7"	19207	22
8"	19208	22
9"	19209	22
10"	19210	22
12"	19212	22
14"	19214	20
16"	19216	20
18"	19218	20
20"	19220	20
22"	19222	20
24"	19224	18
26"	19226	18
28"	19228	18
30"	19230	18
32"	19232	18



### **Diverter Valves**



**PROBLEM:** Both dust collection and material transfer require that material be diverted to (or from) several different locations (machines, bins, hoppers, trucks, vats, etc.)

**SOLUTION:** K&B Duct's heavy duty (3/16" construction) Diverter Valves provide either manual or automatic material/air diverting. The heavy duty door (flap), with (replaceable) heavy rubber seal, controls the direction of flow. Transitions are fabricated to your specifications.

	Man.	Auto
Dia.	Part #	Part #
4"	19704	19804
5"	19705	19805
6"	19706	19806
7"	19707	19807
8"	19708	19808
9"	19709	19809
10"	19710	19810
11"	19711	19811
12"	19712	19812
13"	19713	19813
14"	19714	19814
15"	19715	19815
16"	19716	19816
17"	19717	19817
18"	19718	19818
19"	19719	19819
20"	19720	19820
22"	19722	19822

#### **Backdrafts**



**PROBLEM:** Pulsation, from the cleaning of filter media or other pressure increases, can cause pulsation back into the plant or building through the duct system. Stopping this pulsation at the source is critical.

**SOLUTION:** K&B Back Draft Dampers are designed with a counter balanced flap that easily opens with the flow of air, but quickly and tightly closes when the air flow is reversed. Thus, closing off the building. Units are constructed of heavy duty 3/16" steel to withstand high pressures.

**PROBLEM:** As more and more systems are installed with air from fans/collectors evacuated into the atmosphere (so as to avoid NFPA regulations on return air), attention is turning to noise reduction for plant personnel and neighbors.

**SOLUTION:** K&B Duct Silencers dampen that noise. Our Silencers are built so that air passes through a chamber of expanded metal, surrounded by more than 4" of insulation. Noise, generally created by turbulence and vibration of air molecules, is literally absorbed by the insulation. Normally, one unit is sufficient. Though, Silencers can be placed in sequence for more severe applications.

Dia.	Part #
6"	17606
7"	17607
8"	17608
9"	17609
10"	17610
11"	17611
12"	17612
13"	17613
14"	17614
15"	17615
16"	17616
17"	17617
18"	17618
19"	17619
20"	17620
22"	17622
24"	17624

Dia.	Part #
4"	17804
5"	17805
6"	17806
7"	17807
8"	17808
9"	17809
10"	17810
11"	17811
12"	17812
13"	17813
14"	17814
15"	17815
16"	17816
17"	17817
18"	17818
19"	17819
20"	17820
22"	17822
24"	17824

#### **Silencers**



### **Ordering Made Easy**

#### **Zipper Duct**



**PROBLEM:** Some machines/ systems require extremely wide ranges of motion, over long lengths. Even the use of very long lengths of flex may not be feasible. The duct system is simply required to "travel" with the machine head.

**SOLUTION:** K&B Duct Zipper Duct provides for extra long movement. A heavy rubber seal collapses and seals around the traveling head as it moves the length of the duct.

Dia.	Part #
4"	17904
5"	17905
6"	17906
7"	17907
8"	17908
9"	17909
10"	17910
11"	17911
12"	17912
13"	17913
14"	17914
15"	17915
16"	17916

#### **Oil Mist Accumulator**



**PROBLEM:** New cutting/grinding machines offer unique new challenges. The combination of the speed of the cutter, volume of effluent, closure of machines, location of pick-up hoods and high static fans all end up sucking effluent into the system. Large amounts of effluent collect in the duct and "drown" the filters.

**SOLUTION:** K&B's unique (yet simple) accumulators provide both an area AND a surface for the effluent to accumulate, then drop out of the air stream before entering the duct itself. A series of simple, expanded metal cones allow the droplets to condense on the surface, then drain to the outside of the accumulator (out of the air stream) where they drop into the sump. A drain hose returns the collected effluent to the machine.

Dia.	Part #	GA
4"	19904	24
5"	19905	24
6"	19906	24
7"	19907	22
8"	19908	22
9"	19909	22
10"	19910	22
11"	19911	22
12"	19912	22

#### **Oil Mist Curb**



**PROBLEM:** Rubber flex (a preferred method for for final connection of duct) cannot seal tightly around pick-ups. Oil/effluent that condenses on the side of the hose leaks out between the hose and the connection. Result: oil collects on top of the machine and, with time, runs down the machine, causing slick spots on the floor.

**SOLUTION:** K&B's Oil Mist Curb addresses the leaking oil NOT BY STOPPING IT (a virtual impossibility) but by collecting it in a sealed curb, allowing it to "leak" back into the machine through "weep" holes.

Dia.	Part #	GA
4"	18904	24
5"	18905	24
6"	18906	24
7"	18907	22
8"	18908	22
9"	18909	22
10"	18910	22
11"	18911	22
12"	18912	22



#### **Viewing Spools**



**PROBLEM:** How do operations that convey paper trim and other long, stringy material monitor the constant flow of material so that "breaks" and clogs are detected before the system plugs up completely?

**SOLUTION:** K&B Duct's Viewing Spool, constructed using a heavy acrylic "spool" tightly coupled to duct adapters with a threaded rod, is a clear solution. (Rolled lip shown. Also available with flanges.)

Dia.	Part #	GA
4"	17404	24
5"	17405	24
6"	17406	24
7"	17407	22
8"	17408	22
9"	17409	22
10"	17410	22
12"	17412	22
14"	17414	20

#### **Ball Joints**



**PROBLEM:** CNC machines have wide ranges of movement. So even the use of flex hose does not address these wide ranges or the "whip" inflicted on the duct.

**SOLUTION:** Ball joints swivel with the flex hose, to both improve the movement and reduce the impact of the motion.

Dia.	Part #
3"	19303
4"	19304
5"	19305
6"	19306
7"	19307
8"	19308
9"	19309
10"	19310
11"	19311
12"	19312

#### **Floor Sweeps**



Galvanized and Stainless Steel **PROBLEM:** Dust and residue clutter shop floors and create hazards.

**SOLUTION:** Fully welded, and sealed when closed, K&B floor sweeps are ideal for machining and cutting operations where dust is hard to collect and capture.

Dia.	Part #	GA
4"	19004	18
5"	19005	18
6"	19006	18
7"	19007	18
8"	19008	18

### **Ordering Made Easy**

control drafts.

#### **Butterfly Valves**

**PROBLEM:** Uneven and undesirable air flow and drafts through the line.

**SOLUTION:** Butterfly valves both control and balance air flows, and



Galvanized and Stainless Steel

Dia.	Part #	GA	
3"	19403	24+	
4"	19404	24+	
5"	19405	24+	
6"	19406	24+	
7"	19407	22	
8"	19408	22	
9"	19409	22	
10"	19410	22	
11"	19411	22	
12"	19412	22	
13"	19413	20	
14"	19414	20	
15"	19415	20	
16"	19416	20	
17"	19417	20	
18"	19418	20	
19"	19419	20	
20"	19420	20	
22"	19422	20	
24"	19424	20	



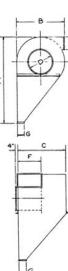
Have a special problem? Need a special solution? That's what we're here for.

### **Pre-Separator (TRAP)**

**PROBLEM:** Many materials (objects, sparks, bulking material) must first be removed from the system before reaching the collector.

**SOLUTION:** K&B's Pre-Separator is a simple, compact inertial separator that, when correctly adjusted and sized, will remove bulky, stringy or any unwanted material/matter prior to entering the filter/collector. Thereby, protecting and increasing media life.





Size	CFM	А	В	С	D	Е	F	G	Ga.	Wt. Ibs
1	1000	39½"	24"	24"	11"	7"	10"	9"	10	325
2	2000	611/2"	36"	36"	16"	9"	16"	9"	10	450
3	3000	731/4"	42"	42"	19"	11"	20"	9"	10	600
4	4000	845/8"	48"	48"	22"	13"	22"	9"	10	850
6	6000	983/4"	56"	56"	27"	14"	25"	12"	10	1100
8	8000	1071/2"	62"	62"	31"	16"	29"	12"	10	1400
10	10000	1181/2"	68"	68"	35"	17"	34"	12"	3/16"Pit.	3100
13	13000	1253/4"	72"	72"	39"	18"	35"	12"	¾6"Pit.	3300
15	15000	1321/2"	76"	76"	40"	21"	38"	12"	3/16"Pit.	3500
18	18000	1381/2"	80"	80"	43"	21"	40"	15"	¾6"Pit.	3650
20	20000	145"	84"	84"	46"	23"	42"	15"	3/16"Pit.	3850
25	25000	156"	90"	90"	51"	24"	43"	15"	¼"Pit.	4500
30	30000	167"	96"	96"	56"	26"	48"	15"	¼"Pit.	4700

#### High-Efficiency Centrifugal "Cyclone" Collectors

#### **Our Design Or Yours**

K&B Duct offers a full line of small to mid-range cyclones in our standard "Hi-Efficiency" design. The sizes offered below can be specified with or without fans, structures, vortex breakers or rotary air locks. We can combine any of these options or WE WILL BUILD TO YOUR EXACT SPECIFICATIONS.

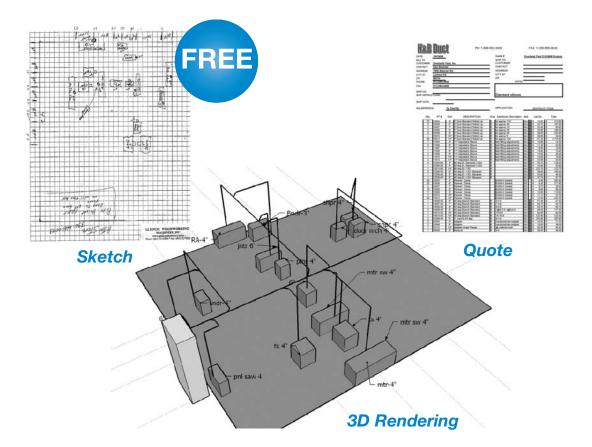
Our standard structure provides 24" clearance under the cyclone or STRUCTURES CAN BE BUILT TO YOUR EXACT SPECIFICATIONS.

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Size	CFM at Pressure Drop		Height*	Footprint	Inlet	Outlet	Discharge
	2"	6"	breaker)	rootprint	(H x W)	Dia.	Discharge
15	1500	2500	84"	25"x25"	15" X 7.5"	14"	4"
19	2400	4000	105"	32"x 32"	19"X9.5"	18"	4"
24	3800	6500	132"	38"x38"	24"X12"	23"	6"
30	600	10000	164"	48"x48"	30"x15"	29"	6"
38	9600	16200	207"	59"x59"	38"x19"	37"	8"
48	15300	25900	260"	72"x72"	48"x24"	47"	12"
60	24000	40500	324"	88"x88"	60"x30"	60"	14"

**K&B Duct - Special Services** 

### System Design Service



#### See your system in 3D before you buy.

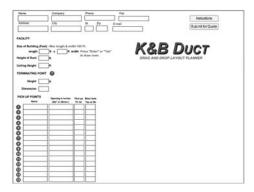
#### "Test Drive" Your New Duct System Before You Buy.

K&B Duct offers you comprehensive system design service. You can evaluate the look, the placement, the effectiveness, the viability and particularly the cost of your new system before you buy IN FULL 3 DIMENSION.

We take your layout (even the roughest sketch) and "lay it into" our exclusive 3D program. We draw in your machinery, size the ducting to fit your collector and specific requirements, add the ducting to your layout and show you your system in 3D. WE CAN EVEN SHOW IT TO YOU ON YOUR COMPUTER.

Once you have approved the layout, we will provide you with a quote which we guarantee will not disappoint you.

Send us your layout today. Or go to our web site, kbduct.com, and click on our "Free 3D Design Service" tab. Then use our exclusive "DRAG-AND-DROP LAYOUT PLANNER" to plan, sketch and submit your system layout. It's fast and easy. Takes only a few minutes. But the benefits are huge.



# **Component Design Service**





Here is Jason, one of our certified welders. But what are those components at his feet? We don't know either. "But if you can draw it, we can make it."

At K&B Duct, we like to say: "If you can draw it, we can make it." But, in fact, even if you can't daw it, we can help you draw it --- and then make it for you.

Our sales people are all graduates of the industry's well known Ventilation Conference. Each has been trained on proper air flow and systems design. And, more importantly, we have worked with thousands of systems, countless engineers and product representatives, learning what works and what doesn't work. Chances are, we can help you design that special hood or other special component to meet your requirements and fit that special application exactly.

#### **Component Fabrication Service**







Attention Mr. Fabricator And Mr. Contractor: Can you Afford To Continue Making Duct?

Especially when K&B Duct can offer you:

- A guaranteed low, fixed price.
- Guaranteed on-time delivery.
- Guaranteed highest quality.
- And protect your profit.

Think about it. You profit from:

- LOWER overhead.
- FEWER personnel issues.
- NO cost over-runs.
- LOWER Insurance costs.

Does it really make sense to take on all the burdens of manufacturing when it puts your profit at risk? K&B Duct wants to be your low cost duct manufacturer.



N'S SOM

Your ducting is only as good as the service behind it. In the long run...





THAT'S WHAT MAKES K&B DUCT SUCH A GREAT SUPPLIER. K&B Duct's great products are supported by great people who are always available and always accessible by phone. THERE ARE NEVER ANY AUTOMATED ATTENDANTS. But our great service only begins there. And all of our great services are available to you at NO CHARGE. They are simply VALUE ADDED services that have helped to make us a great supplier.

- 3D SYSTEMS DESIGN from professionals who really know duct and collection systems. With our on-line assistance and 3D programs, you can actually view and evaluate your system before you order. It's like taking a test drive through your facility.
- TAKE-OFF SERVICE from your drawings or ours. This not only saves you valuable time, but insures that you get ALL the parts you need and ONLY the parts you need.
- SPECIAL PART DESIGN from specialists and engineers who actually teach at national conferences.
- SPECIAL PART FABRICATION from certified sheet metal mechanics and welders. Our specialty: highest quality at lowest cost.
- QUICK QUOTES that keep you from having to wait and wait and wait. You provide the schedule. We provide the speed.
- FAST AND ACCURATE SHIPPING from our trained, experienced and financially motivated shipping department. Our shipping personnel are more than just "packers." They are specially trained in comparing products to orders and drawings. They're experienced in evaluating construction for quality. And they take pride in packing so that your product is completely protected.

This is just a sampling of the great service offered by K&B Duct. Just tell us what you need. WE'RE AT YOUR SERVICE.





Kirk & Blum is a member of the CECO Environmental family of companies.

#### **CECO Environmental Corp.**

3120 Forrer Street Cincinnati, Ohio 45209 Phone: 513.458.2600 Fax: 513.458.2647 Toll Free: 800.333.5475 e-mail: cecoenviro@cecoenviro.com www.cecoenviro.com NASDAQ: CECE

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