

Section 2

Component Parts Division

Component Parts
for Industrial
Air Systems



A family of companies creating better working environments for you.

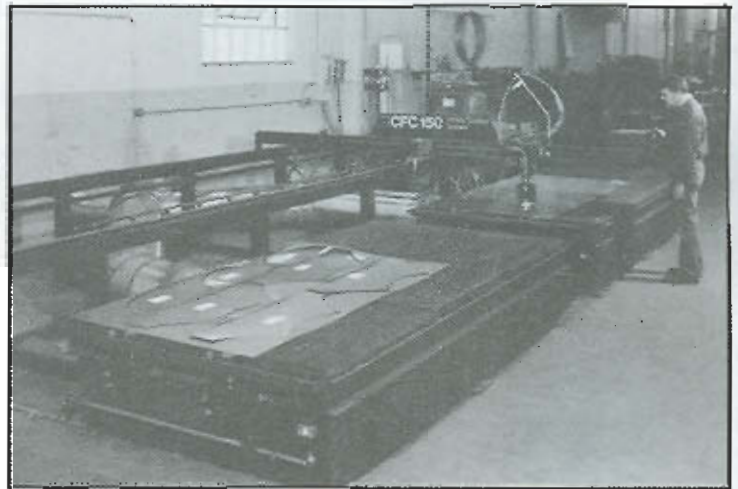
PARTS FOR INDUSTRIAL AIR SYSTEMS

Kirk & Blum now offers standardized, heavy-gauge duct-work components—factory direct. Our continued investment in production technology allows you to purchase precision fabrications at surprisingly low costs, and to have them delivered when you need them. Lastly, our efficient joining methods minimize assembly time and assure you the least total installed system cost.

This catalog describes the parts that are most often required in industrial ventilation systems. Sizes not shown and sub-assemblies are readily available on request. Parts fabricated from Stainless, AR225, Corten Steels and Aluminum, and/or gauges other than those shown, are also readily available on request.

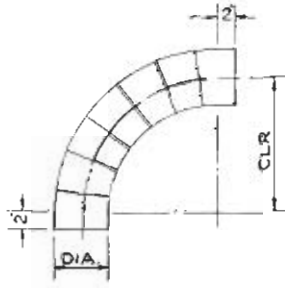
Kirk & Blum's rings, cut-offs and other Section 1 parts are available through our nationwide stocking distributor network.

All parts are fabricated to American Welding Society Specification D9.1.



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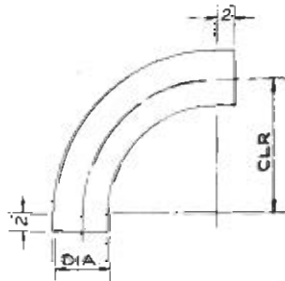
ELBOWS, Gore Sectioned



| CENTERLINE RADIUS (CLR) | | | | | |
|-------------------------|-------------|-----|-------------------|-------------|-----|
| LONG RADIUS (LR) | | | SHORT RADIUS (SR) | | |
| DIAMETER | CLR | PCS | DIAMETER | CLR | PCS |
| 3"-14" | 2 1/2 x DIA | 5 | 3"-16" | 1 1/2 x DIA | 5 |
| 15"-16" | 2 x DIA | 5 | | | |
| 17"-47" | 2 x DIA | 7 | 17"-47" | 1 1/2 x DIA | 7 |
| 48" & UP | 1 1/2 x DIA | 7 | 48" & UP | 1 1/2 x DIA | 7 |

For heavier service requirements, K&B manufactures elbows in 22 to 10 gauge depending upon requirements. Available in either galvanized or black sheet steel. All seams welded or brazed. Sizes range from 4" through 48" diameter. Built standard on 30°, 45°, 60° and 90°, but other angles, sizes, and gauges also available on order. Elbows can also be fabricated from 3/16" and heavier material. Larger diameters are also available.

ELBOWS, Smooth

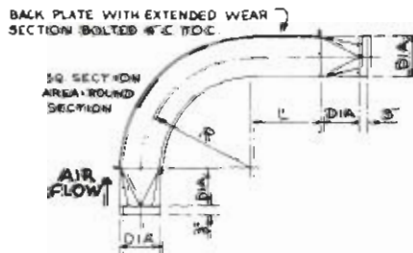


| CENTERLINE RADIUS (CLR) | | |
|-------------------------|-------|------|
| DIA. (O.D.) | GAUGE | CLR |
| 3 | 16 | 7.5 |
| 4 | 16 | 10 |
| 5 | 14 | 12.5 |
| 6 | 14 | 15 |
| 8 | 14 | 20 |

NOTE:
7 dia. elbows are available in Gore Type only.

These airtight elbows with totally smooth interior are superior to both machine made or conventional heavy gauge gore sectioned elbows. They are ideally suited for use in handling abrasive materials or in applications with a high dust loading, such as that encountered in foundry, grain, tobacco, glass, chemical, and paper industries. Also, they are more economical than gore sectioned elbows.

ELBOWS, Flat Back



| DIA. | R | L | BODY GAUGE | WEAR PLATE GAUGE |
|---------|--------------|--------------|------------|------------------|
| 4"-7" | 2 1/2 x Dia. | 2 x Dia. | 14 Ga. | 3/16" PRL |
| 8"-14" | 2 1/2 x Dia. | 2 x Dia. | 12 Ga. | 3/16" PRL |
| 15"-20" | 2 x Dia. | 1 1/2 x Dia. | 12 Ga. | 3/16" PRL |
| 21"-48" | 2 x Dia. | 1 1/2 x Dia. | 12 Ga. | 3/16" PRL |

For abrasive service, the K&B flat back elbow has a replaceable wear section. For special applications, the wear section is lined with 3/16" rubber. Built in black steel only, 4" through 48" diameter.

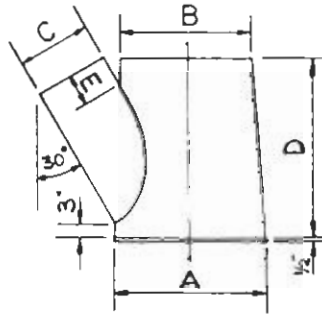
NOTE: Refer to Construction and Assembly Details on Page 7.

Fittings, Tee-on-Taper-30° & 45°

K & B tee-on-taper fittings are designed to join branches to the main at an angle of 30° or 45°. Made in all sizes from 4" through 48" diameter in black or galvanized steel. Gauges range from 22 through 10, depending upon requirements. Fittings from 3/16" and heavier material can also be fabricated. Larger diameters are also available.



Tee-on-Taper 30°



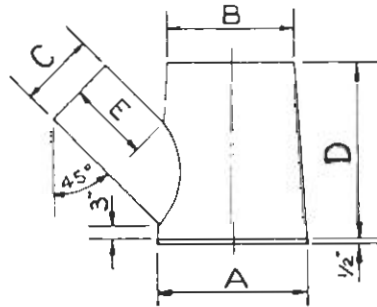
| C | E |
|--------------|-----|
| 4"-12" | 6" |
| 13"-18" | 9" |
| 19" and over | 12" |

1/2" Edge Turned on 20 Ga.-16 Ga.
No Length on 14 Ga. and Heavier.

Note: D = (2 x C) + 6" or A, whichever is larger



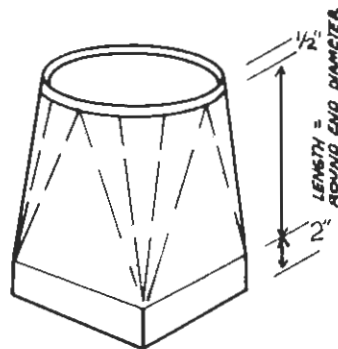
Tee-on-Taper 45°



| C | E |
|--------------|-----|
| 4"-12" | 6" |
| 13"-18" | 9" |
| 19" and over | 12" |

1/2" Edge Turned on 20 Ga.-16 Ga.
No Length on 14 Ga. and Heavier.

Transitions



1/2" Edge Turned on 20 Ga.-16 Ga.
No Length on 14 Ga. and Heavier.

Note:
Std. Length is 1 x Dia. of Round End.
Dimensions vary as required.

Transitions are used when changing from square or rectangular to round such as at centrifugal fan discharge, connections to equipment, etc. Available in all diameters, with or without flanges, in galvanized or black steel. Gauges range from 22 through 10, depending upon diameter requirements. 3/16" and heavier fabrications are also available.

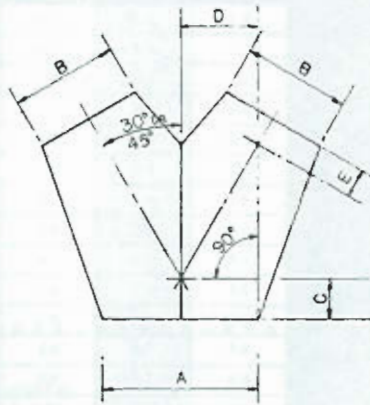
NOTE: Refer to Construction and Assembly Details on Page 7.

"Y" Fittings 30° & 45°

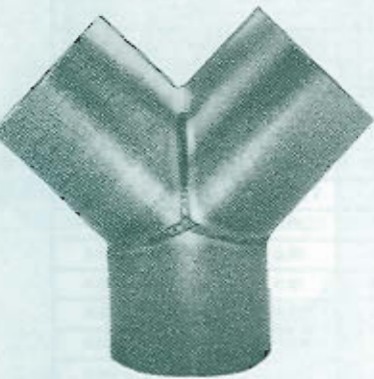
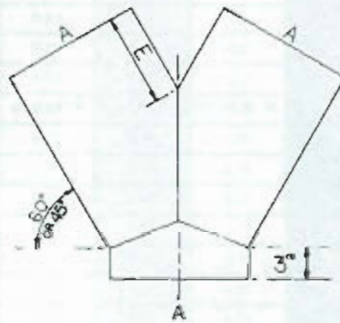
K & B "Y" fittings are designed to join branches to the main at an angle of 30° or 45°. Made in all sizes from 4" through 48" diameter in black or galvanized steel. Gauges range from 22 through 10, depending upon requirements. Fittings from 3/16" and heavier material can also be fabricated. Larger diameters are also available.



Reducing 30° or 45°



"Y" FITTINGS 30° & 45°



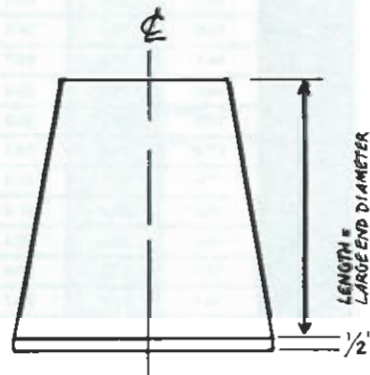
Non Reducing Type 30° or 45°

| A | B | C | D | E |
|-----------|--------|---------------------------|----------|----------|
| 8" and Up | Varies | 1/4 of A + Collar or Ring | 1/2 of A | 1/4 of B |

| A | E |
|--------------|-----|
| 4"-12" | 5" |
| 13"-18" | 9" |
| 19" and over | 12" |

Note: Reducers are available for branch diameter variations.

Reducers



1/2" Edge Turned on 20 Ga.-16 Ga.
No Length on 14 Ga. and Heavier.

Reducers are used when changing the diameter of round duct. Available in all diameters, with or without flanges, in galvanized or black steel. Gauges range from 22 through 10, depending upon diameter requirements.

NOTE: Refer to Construction and Assembly Details on Page 7.

Round Duct

For air-system use, K&B fabricates round duct, either galvanized or black steel, welded from 4" through 48" diameter, and gauges from 22 through 10 depending upon diameter requirements. Standard lengths are shown below and may be shop assembled in longer sections to order. Duct may be furnished with angle flanges for field bolting. 3/16" and heavier duct can also be fabricated. Larger diameters and other material, such as stainless and aluminum, are also available.



— STANDARD LENGTHS —

| Dia. of Duct | NUMBER OF GAUGES — USS | | | | | |
|--------------|------------------------|-----|-----|-----|-----|-----|
| | 20 | 18 | 16 | 14 | 12 | 10 |
| 4" | 48" | 36" | NA" | NA" | NA" | NA" |
| 5" | 48" | 36" | NA" | NA" | NA" | NA" |
| 6" | 60" | 60" | 60" | 60" | 48" | 24" |
| 7" | 60" | 60" | 60" | 60" | 48" | 24" |
| 8" | 60" | 60" | 60" | 60" | 48" | 48" |
| 9" | 60" | 60" | 60" | 60" | 48" | 48" |
| 10" | 60" | 60" | 60" | 60" | 60" | 48" |
| 11" | 60" | 60" | 60" | 60" | 60" | 48" |
| 12" | 60" | 60" | 60" | 60" | 60" | 48" |
| Over 12" | 60" | 60" | 60" | 60" | 60" | 60" |

WEIGHT OF GALVANIZED IRON DUCTS — POUNDS PER LINEAL FOOT

| Dia. of Duct | NUMBER OF GAUGES — USS | | | | | | |
|--------------|------------------------|------|------|------|------|------|------|
| | 22 | 20 | 18 | 16 | 14 | 12 | 10 |
| 4" | 1.7 | 2.0 | 2.6 | NA* | NA* | NA* | NA* |
| 5" | 2.1 | 2.4 | 3.2 | NA* | NA* | NA* | NA* |
| 6" | 2.5 | 2.9 | 3.8 | 4.5 | 5.8 | 7.7 | 9.8 |
| 7" | 2.9 | 3.3 | 4.4 | 5.3 | 6.7 | 9.0 | 11.4 |
| 8" | 3.3 | 3.8 | 5.0 | 6.0 | 7.8 | 10.3 | 13.1 |
| 9" | 3.7 | 4.3 | 5.6 | 6.7 | 8.7 | 11.6 | 14.7 |
| 10" | 4.1 | 4.7 | 6.2 | 7.4 | 9.7 | 12.9 | 16.3 |
| 11" | 4.4 | 5.2 | 6.8 | 8.1 | 10.6 | 14.1 | 17.6 |
| 12" | 4.8 | 5.6 | 7.4 | 8.9 | 11.3 | 15.4 | 19.4 |
| 13" | 5.2 | 6.1 | 8.0 | 9.6 | 12.5 | 16.6 | 20.9 |
| 14" | 5.6 | 6.5 | 8.6 | 10.3 | 13.4 | 17.8 | 22.5 |
| 15" | 6.0 | 7.0 | 9.2 | 10.9 | 14.4 | 19.2 | 24.0 |
| 16" | 6.4 | 7.5 | 9.8 | 11.7 | 15.3 | 20.4 | 25.7 |
| 17" | 6.8 | 7.9 | 10.4 | 12.5 | 16.2 | 21.6 | 27.3 |
| 18" | 7.3 | 8.5 | 11.2 | 13.4 | 17.4 | 23.2 | 29.2 |
| 19" | 7.7 | 9.0 | 11.8 | 14.1 | 18.4 | 24.6 | 31.0 |
| 20" | 8.1 | 9.5 | 12.4 | 14.9 | 19.4 | 25.9 | 32.6 |
| 21" | 8.4 | 9.8 | 12.9 | 15.4 | 20.2 | 26.6 | 33.6 |
| 22" | 8.9 | 10.4 | 13.6 | 16.3 | 21.3 | 28.3 | 35.7 |
| 23" | 9.3 | 10.8 | 14.4 | 17.0 | 22.4 | 29.7 | 37.9 |
| 24" | 9.7 | 11.3 | 14.8 | 17.7 | 23.1 | 30.8 | 38.9 |
| 25" | 10.1 | 11.7 | 15.4 | 18.4 | 24.1 | 32.1 | 40.5 |
| 26" | 10.5 | 12.2 | 16.0 | 19.2 | 25.0 | 33.3 | 42.0 |
| 27" | 10.9 | 12.7 | 16.6 | 19.9 | 26.0 | 34.5 | 43.8 |
| 28" | 11.3 | 13.1 | 17.3 | 20.6 | 26.9 | 35.9 | 45.3 |
| 29" | 11.6 | 13.6 | 17.8 | 21.3 | 27.8 | 37.1 | 46.8 |
| 30" | 12.2 | 14.2 | 18.6 | 22.3 | 29.1 | 38.8 | 48.9 |
| 31" | 12.5 | 14.6 | 19.2 | 23.0 | 29.9 | 40.0 | 50.5 |
| 32" | 12.9 | 15.1 | 19.8 | 23.7 | 30.8 | 41.2 | 52.0 |
| 33" | 13.3 | 15.6 | 20.4 | 24.4 | 31.8 | 42.5 | 53.5 |
| 34" | 13.7 | 16.0 | 21.1 | 25.2 | 32.5 | 43.8 | 55.2 |
| 35" | 14.1 | 16.5 | 21.7 | 25.9 | 33.7 | 45.0 | 56.7 |
| 36" | 14.5 | 16.9 | 22.2 | 26.6 | 34.6 | 46.3 | 58.4 |
| 37" | 14.9 | 17.4 | 22.8 | 27.3 | 35.8 | 47.5 | 60.0 |
| 38" | 15.3 | 17.8 | 23.4 | 28.0 | 36.4 | 48.7 | 61.5 |
| 39" | 15.6 | 18.3 | 24.0 | 28.7 | 37.4 | 50.0 | 63.0 |
| 40" | 16.1 | 18.8 | 24.7 | 29.5 | 38.4 | 51.3 | 64.6 |
| 41" | 16.5 | 19.2 | 25.6 | 30.2 | 39.3 | 52.5 | 66.2 |
| 42" | 16.9 | 19.6 | 25.9 | 30.9 | 40.2 | 53.7 | 67.3 |
| 43" | 17.4 | 20.3 | 26.6 | 31.6 | 41.4 | 55.4 | 69.6 |
| 44" | 17.8 | 20.7 | 27.3 | 32.6 | 42.4 | 56.6 | 71.5 |
| 45" | 18.2 | 21.2 | 27.9 | 33.3 | 43.3 | 58.0 | 73.0 |
| 46" | 18.6 | 21.6 | 28.4 | 34.0 | 44.2 | 59.2 | 74.6 |
| 47" | 19.0 | 22.1 | 29.6 | 34.7 | 45.1 | 60.5 | 76.1 |
| 48" | 19.4 | 22.6 | 29.7 | 35.5 | 46.1 | 61.8 | 77.9 |

NOTE: Refer to Construction and Assembly Details on Page 7.

Notes on Construction and Assembly

Three ways To Join Duct Components:

1) Lap Seam Construction (Big End (BE) & Small End (SE))

Kirk & Blum Standard Construction for all duct, elbows and fittings, is BE and SE for 14 ga. and lighter. The Big Ends will lap fit over the Small End approx. 1". This allows connection to be sheet-metal screwed or tack welded and caulked, or continuously welded. Also the Small End will be notched with a "V" for identification. On duct lengths Air-Flow should always be from Big End to Small End.



2) Butt-Weld Construction

Continuously welding two sections together.



3) Flanged Construction

Three-Ways to make flange connection:



a) **Continuous Weld** — Rings can be continuously welded around the circumference of one end of the component. For field adjustment, the other end is a loose flange. However, duct joints can be furnished with rings continuous welded on both ends if desired. We recommend welding rings on both ends of material 12 ga. and heavier.



b) **Skip Weld** — Skip welding is defined as approximately 1" weld every 6" around circumference. Final seal is accomplished by caulking in field.



c) **Van-Stone** — For 14 ga. and lighter a Van-Stone flange may be used. Van-Stone is to turn an edge which will retain rings and permit the ring to be rotated as necessary to match bolt holes.

Clean-Out Doors



Standard clean-out doors for suction side of ductwork system. Doors not gasketed. Order by duct diameter.

| DIA.* | HOLE SIZE | DOOR SIZE | GAUGE |
|---------|-----------|-----------|-------|
| 4"-6" | 4"x 6" | 6"x 8" | 16 |
| 7"-10" | 6"x 8" | 8"x 10" | 16 |
| 11"-18" | 8"x 10" | 10"x 12" | 16 |
| 19"-32" | 10"x 12" | 12"x 14" | 14 |
| 33"-48" | 12"x 14" | 14"x 16" | 14 |

*Give Exact Duct Diameter When Ordering.

Slip Joints



Telescoping joint permits vertical raising of duct for quick access — permitting easy inspection and adjustment of cutter heads under hoods, for example. Furnished with band iron clamps to lock in position.

| DIA. | LENGTH OF SLIP | OVERALL LENGTH | GAUGE |
|------|----------------|----------------|-------|
| 4" | 24" | 30" | 22 |
| 5" | 24" | 30" | 22 |
| 6" | 24" | 30" | 22 |
| 7" | 24" | 30" | 22 |
| 8" | 24" | 30" | 22 |
| 9" | 24" | 30" | 22 |
| 10" | 24" | 30" | 22 |
| 11" | 24" | 30" | 22 |
| 12" | 24" | 30" | 22 |

Drawbands



Drawbands are used to provide ready access for inspection, removal of foreign material, etc. May be straight or tapered, with formed or angle iron flanges, in galvanized or black steel. 6" through 48" diameters, 20 to 14 gauge depending upon requirements. Special drawbands can also be furnished.

| DIA. | LENGTH | GAUGE |
|----------|--------|-------|
| Up to 8" | 6" | 20 |
| 9"-16" | 9" | 18 |
| 17"-18" | 12" | 18 |
| 19"-22" | 12" | 16 |
| 23"-30" | 12" | 16 |
| 31"-48" | 18" | 14 |

Round Duct Caps



Removable caps provide visual inspection at terminus of submain duct lines. Can also be furnished with adjustable register opening for balancing future connections to system.

| DIA. | GAUGE |
|--------|-------|
| 4"-9" | 22 |
| 9"-18" | 22 |

Hose, Flexible Rubber



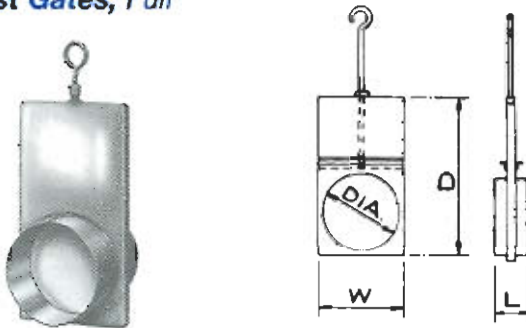
Where maximum flexibility is required, light weight hose is used. This hose is made of double-ply cotton, neoprene coated, with spiral steel wire reinforcement. Available in diameters from 2" through 10", in 25' coil only.

Tubing, Flexible Metal



Flexible metal tubing can easily be installed on machines with moving heads. This tubing is of electro-galvanized steel, .012 thick, in diameters from 2" through 10", in 25' coil only.

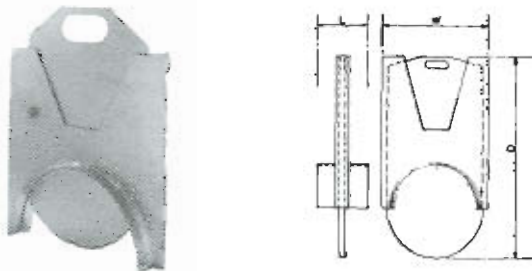
Blast Gates, Full



To provide a more positive seal than cut-offs the blast gate is used. There is a slight internal leakage with this blast gate, but no external leakage. May be used with positive or negative pressure. Not to be used if material is in the air stream. Built in sizes 3" to 24" of 18 and 14 gauge galvanized steel body, blade 16 to 12 gauge.

| SIZE | D | W | L | WT. (LBS) | SIZE | D | W | L | WT. (LBS) |
|------|---------|---------|----|-----------|------|---------|---------|----|-----------|
| 3" | 7 1/2" | 3 1/2" | 5" | 3 | 14" | 30 1/2" | 15 1/2" | 6" | 28.3 |
| 4" | 9 1/4" | 5" | 6" | 3 | 15" | 32 1/2" | 16 1/2" | 6" | 31.8 |
| 5" | 11 1/2" | 6" | 6" | 4.3 | 16" | 34 1/2" | 17 1/2" | 6" | 35.0 |
| 6" | 13 1/4" | 7" | 6" | 6.7 | 17" | 36 1/2" | 18 1/2" | 6" | 39.5 |
| 7" | 15 1/2" | 8" | 6" | 7.6 | 18" | 38 1/2" | 19 1/2" | 6" | 44.5 |
| 8" | 17 1/2" | 9 1/4" | 6" | 8.5 | 19" | 40 1/2" | 20 1/2" | 6" | 50.5 |
| 9" | 20" | 10 1/2" | 6" | 13.5 | 20" | 42 1/2" | 21 1/2" | 6" | 57.3 |
| 10" | 22" | 11 1/2" | 8" | 16.2 | 21" | 44 1/2" | 22 1/2" | 6" | 64.3 |
| 11" | 24" | 12 1/2" | 6" | 15.8 | 22" | 46 1/2" | 23 1/2" | 6" | 72.0 |
| 12" | 26 1/2" | 13 3/8" | 6" | 22.0 | 23" | 48 1/2" | 24 1/2" | 6" | 83.1 |
| 13" | 28 1/2" | 14 1/2" | 6" | 25.0 | 24" | 50 1/2" | 25 1/2" | 6" | 96.5 |

Cut-Off, Material Handling Half & Full

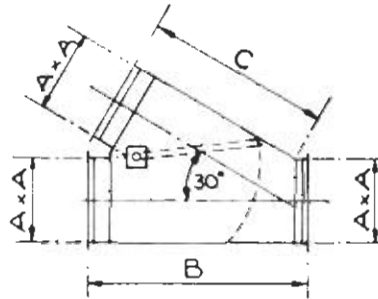


These fabricated steel cut-offs may be used when material is introduced into the air system. Material handling cut-offs are generally used to balance systems, and/or to save air, heat and power. They are available in black, galvanized and stainless steel. Half cut-off shown, full style is also available. If smaller sizes are required, contact Kirk & Blum for additional information.

| DIA | W | D | L |
|-----|-----|---------|--------|
| 16" | 19" | 20" | 3 1/2" |
| 18" | 21" | 22 1/2" | 3 1/2" |
| 20" | 23" | 25" | 3 1/2" |
| 22" | 25" | 27 1/2" | 3 1/2" |
| 24" | 27" | 30" | 3 1/2" |
| 26" | 30" | 32 1/2" | 4 1/2" |
| 30" | 34" | 37 1/2" | 4 1/2" |
| 34" | 38" | 42 1/2" | 4 1/2" |
| 36" | 40" | 45" | 4 1/2" |
| 40" | 44" | 50" | 4 1/2" |
| 44" | 48" | 55" | 4 1/2" |
| 48" | 52" | 60" | 4 1/2" |

NOTE: Even sizes shown — odd sizes also available

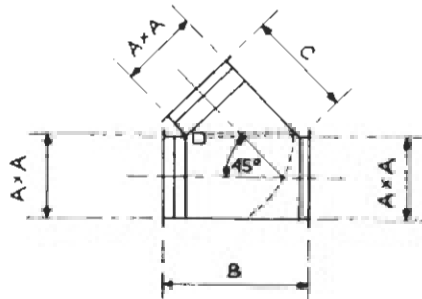
Switch Valves



| SIZE-A | B | C | GAUGE | | WEIGHT |
|--------|------------|------------|---------|-------|--------|
| | | | HOUSING | BLADE | |
| 8" | 2'-1 1/4" | 1'-8" | 14 | 10 | 110 |
| 10" | 2'-10" | 2'-4 1/4" | 14/12 | 14 | 140 |
| 12" | 3'-2 1/4" | 2'-7 3/4" | 14/12 | 14 | 170 |
| 14" | 3'-6 1/4" | 2'-11 7/8" | 14/10 | 14 | 200 |
| 16" | 3'-9 1/4" | 3'-2 1/4" | 14/10 | 14 | 230 |
| 18" | 4'-10 1/2" | 4'-0" | 12/10 | 14 | 350 |
| 20" | 5'-2" | 4'-3" | 12/10 | 14 | 420 |
| 22" | 5'-5 1/4" | 4'-6 1/4" | 10 | 14 | 470 |
| 24" | 5'-10 1/2" | 4'-9 1/4" | 10 | 14 | 520 |

Material Handling

Material Handling - valves are heavy-duty type for mildly abrasive dust control and material handling systems. May be furnished for air, electrical or manual operation. Not a percentage or splitter value. Standard sizes 8" through 24". Matching square-to-round transitions available if desired. Special larger valves also available. This valve is not explosion proof and is designed to be operated at a maximum total pressure of 12" water gauge.



| SIZE-A | B | C | GAUGE | | WEIGHT |
|--------|------------|-------|---------|-------|--------|
| | | | HOUSING | BLADE | |
| 10" | 1'-9 3/4" | 1'-4" | 14 | 14 | 105 |
| 12" | 2'-0 1/4" | 1'-6" | 14 | 14 | 125 |
| 14" | 2'-3 1/4" | 1'-8" | 14 | 14 | 145 |
| 18" | 2'-8 3/4" | 2'-0" | 14 | 14 | 175 |
| 20" | 2'-11 3/4" | 2'-2" | 14 | 14 | 205 |
| 24" | 3'-5 1/4" | 2'-6" | 14 | 14 | 235 |
| 30" | 4'-1 1/4" | 3'-0" | 14 | 14 | 345 |
| 34" | 4'-7 1/4" | 3'-4" | 14 | 14 | 400 |
| 42" | 5'-6 3/4" | 4'-0" | 14 | 14 | 585 |

Intermediate Sizes Also Available.

Air-Handling

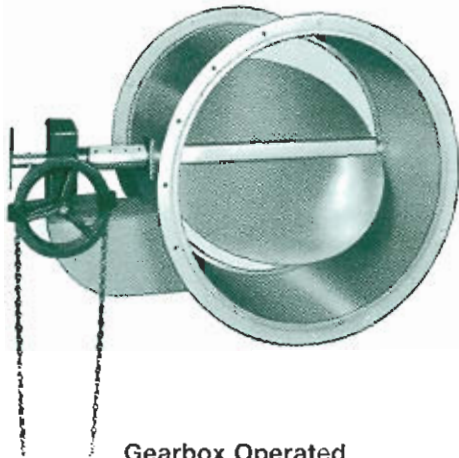
These valves are designed as an air diverter for clean air exhaust systems. Typically used on parts washer or baghouse exhaust systems to return the air back into the plant in winter or exhaust outdoors in summer. The all welded housing comes standard with a gearbox and chain operator. Although the blade is not gasketed, the angle iron blade stops keep leakage to a minimum. Matching square to round transitions are available if desired. These valves are not to be used in material handling systems and are designed for a maximum total pressure of 6" water gauge.

NOTE: All K & B Switch Valves are pre-tested and shipped assembled

Butterfly Dampers

Dampers are generally used on air or light dust handling systems.

Gearbox Operated



Gearbox Operated

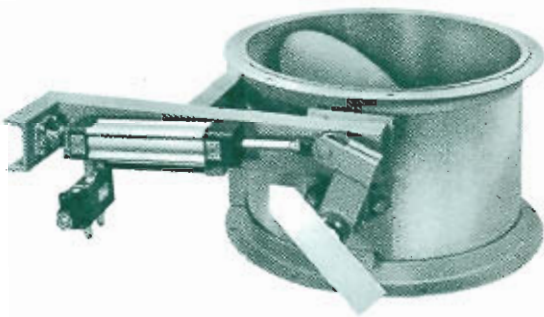
| DIA. | LENGTH | HOUSING GAUGE | BLADE GAUGE | WEIGHT |
|------|--------|---------------|-------------|--------|
| 8" | 12" | 16 | 1/4 | 20 |
| 10" | 12" | 16 | 1/4 | 24 |
| 12" | 12" | 16 | 1/4 | 30 |
| 14" | 12" | 16 | 1/4 | 38 |
| 16" | 12" | 16 | 1/4 | 46 |
| 18" | 12" | 16 | 1/4 | 50 |
| 20" | 12" | 16 | 1/4 | 75 |
| 24" | 12" | 16 | 1/2 | 100 |
| 30" | 18" | 16 | 1/4 | 175 |
| 36" | 18" | 14 | 1/4 | 350 |
| 42" | 30" | 14 | 1/4 | 410 |
| 48" | 30" | 14 | 1/4 | 465 |
| 60" | 30" | 12 | 1/4 | 750 |

Intermediate Sizes Also Available.

Standard K & B angle ring flanges are furnished on both ends.

When ordering, you must specify if the damper is to be mounted vertically or horizontally.

Air Cylinder or Motor Operated



Air Cylinder or Motor Operated

| DIA. | LENGTH | HOUSING GAUGE | BLADE GAUGE | WEIGHT |
|------|--------|---------------|-------------|--------|
| 8" | 12" | 16 | 1/4 | 20 |
| 10" | 12" | 16 | 1/4 | 24 |
| 12" | 12" | 16 | 1/4 | 30 |
| 14" | 12" | 16 | 1/2 | 38 |
| 16" | 12" | 16 | 1/2 | 46 |
| 18" | 12" | 16 | 1/4 | 50 |
| 20" | 12" | 16 | 1/4 | 75 |
| 24" | 12" | 16 | 1/2 | 100 |
| 30" | 18" | 16 | 1/4 | 175 |
| 36" | 18" | 14 | 1/4 | 350 |
| 42" | 30" | 14 | 1/4 | 410 |
| 48" | 30" | 14 | 1/4 | 465 |
| 60" | 30" | 12 | 1/4 | 750 |

Intermediate Sizes Also Available.

Standard K & B angle ring flanges are furnished on both ends.

Quadrant Operated



Quadrant Operated

| DIA. | LENGTH | HOUSING GAUGE | BLADE GAUGE | WEIGHT |
|------|--------|---------------|-------------|--------|
| 8" | 12" | 16 | 10 | 18 |
| 10" | 12" | 16 | 10 | 21 |
| 12" | 12" | 16 | 10 | 24 |
| 14" | 12" | 16 | 10 | 30 |
| 16" | 12" | 16 | 10 | 35 |
| 18" | 12" | 16 | 10 | 40 |
| 20" | 12" | 16 | 3/16" | 45 |
| 22" | 12" | 16 | 3/16" | 50 |
| 24" | 18" | 16 | 3/4" | 55 |

Intermediate Sizes Also Available.

Standard K & B angle ring flanges are furnished on both ends.

Centrifugal Collectors

Kirk & Blum manufactures a complete line of centrifugal, or "cyclone" type collectors. This line includes four design types, totaling 78 sizes, to provide a wide range of industrial applications. Where properly applied, efficient results at very low initial and operating cost are achieved. When used as precleaners, these collectors are an economical way of reducing the load on the final cleaning device. K & B centrifugal collectors are shown on these pages. Structural steel stands are available for all collectors.

Type C-7 Collector

The Type C-7 Collector is intended for shavings, sawdust, polishing, buffing and similar uses where the dust size will run above 325 mesh (44 microns), but may contain small percentages down to 20 microns. Air inlets and dust outlets are of generous size to handle the usual stray bulk objects

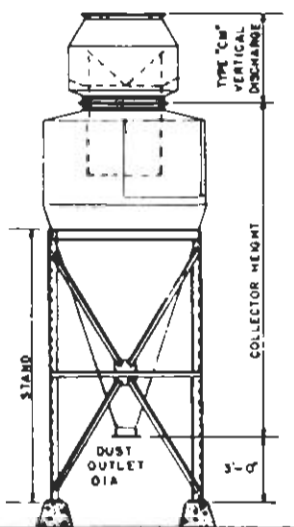


Type P-1 Collector

The Type P-1 Collector is used exclusively for paper trim and other related paper waste collection. It is equipped with screened interior tubular guard. The material outlet is oversized, and is square rather than round to prevent waste build up.



SCROLL, ELBOW OR CANOPY TYPE DISCHARGE ALSO AVAILABLE



Type C-7 and P-1 / Specifications

| SIZE | CAPACITY CFM @ 1400 (SCFM) | DIAMETER | GAUGE | C-7 | | P-1 | | WEIGHT-LBS | | | | | | | |
|------|----------------------------|----------|-------|------------------|--------------|------------------|--------------|------------------|----------------|----------|------------------|---------------|------|-----|----|
| | | | | HEIGHT COLLECTOR | HEIGHT STAND | HEIGHT COLLECTOR | HEIGHT STAND | INLET TRANSITION | TYPE OF OUTLET | RAIN CAP | CLEAN AIR OUTLET | FIRE DAMPENER | SIZE | | |
| 4 | 300 | 1'-4" | 18 | 2'-10 1/2" | 36 | 101 | --- | --- | 2 | 30 | 5 | 30 | 3 | 4 | |
| 6 | 670 | 2'-0" | 18 | 4'-4 1/2" | 73 | 112 | --- | --- | 4 | 38 | 10 | 45 | 4 | 6 | |
| 8 | 1200 | 2'-8" | 18 | 5'-4 1/2" | 126 | 159 | --- | --- | 6 | 43 | 19 | 60 | 6 | 8 | |
| 10 | 1930 | 3'-4" | 18 | 6'-8 1/4" | 174 | 338 | 5'-7 1/4" | 195 | 304 | 8 | 57 | 24 | 70 | 8 | 10 |
| 12 | 2700 | 4'-0" | 18 | 8'-1 1/4" | 238 | 423 | 7'-0 1/4" | 310 | 380 | 11 | 71 | 54 | 85 | 10 | 12 |
| 14 | 3640 | 4'-8" | 16 | 9'-5" | 406 | 510 | 8'-5 1/4" | 470 | 499 | 18 | 89 | 74 | 105 | 15 | 14 |
| 16 | 4800 | 5'-4" | 16 | 10'-9 1/4" | 598 | 667 | 9'-9 1/4" | 680 | 600 | 22 | 142 | 102 | 120 | 20 | 16 |
| 18 | 6000 | 6'-0" | 16 | 12'-0 1/4" | 687 | 909 | 11'-2" | 835 | 803 | 28 | 190 | 131 | 130 | 35 | 18 |
| 20 | 7400 | 6'-8" | 16 | 13'-3 1/4" | 656 | 983 | 11'-10 1/4" | 985 | 891 | 31 | 230 | 147 | 155 | 45 | 20 |
| 22 | 9000 | 7'-4" | 16 | 14'-6 1/2" | 1140 | 1149 | 13'-3 1/4" | 1070 | 974 | 50 | 266 | 179 | 230 | 60 | 22 |
| 24 | 10700 | 8'-0" | 16 | 15'-9 1/4" | 1478 | 1202 | 14'-8 1/4" | 1485 | 1097 | 60 | 372 | 202 | 309 | 70 | 24 |
| 26 | 12600 | 8'-8" | 16 | 17'-1 1/4" | 1890 | 1326 | 16'-1 1/4" | 1685 | 1186 | 65 | 425 | 230 | 325 | 85 | 26 |
| 28 | 14500 | 9'-4" | 16 | 18'-4" | 2360 | 1766 | 16'-11 1/4" | 2195 | 1476 | 75 | 456 | 255 | 375 | 95 | 28 |
| 30 | 16700 | 10'-0" | 14 | 19'-5 1/4" | 2720 | 1916 | 18'-2 1/4" | 2680 | 1584 | 85 | 490 | 285 | 425 | 110 | 30 |
| 32 | 19000 | 10'-8" | 14 | 20'-9 1/2" | 3120 | 2141 | 19'-8 1/4" | 3105 | 1775 | 118 | 560 | 302 | 475 | 125 | 32 |
| 34 | 21500 | 11'-4" | 14 | 22'-1 1/4" | 3642 | 2616 | 21'-1 1/4" | 3490 | 1970 | 132 | 632 | 379 | 525 | 135 | 34 |
| 36 | 24000 | 12'-0" | 14 | 23'-5 1/4" | 4190 | 2909 | 21'-9 1/4" | 3818 | 2160 | 144 | 700 | 419 | 575 | 150 | 36 |
| 38 | 27000 | 12'-8" | 14 | 24'-8 1/4" | 4590 | 3280 | 23'-1 1/4" | 4105 | 2291 | 157 | 740 | 459 | 625 | 160 | 38 |
| 40 | 30000 | 13'-4" | 14 | 25'-11 1/4" | 4910 | 4385 | 24'-6 1/4" | 4960 | 3770 | 170 | 950 | 504 | 900 | 200 | 40 |
| 42 | 32600 | 14'-0" | 14 | 27'-3" | 5370 | 4612 | 25'-10 1/4" | 5300 | 3977 | 185 | 1385 | 544 | 1050 | 220 | 42 |
| 44 | 36000 | 14'-8" | 12 | 28'-7 1/2" | 6150 | 5220 | 26'-6 1/4" | 6040 | 4400 | 274 | 1468 | 1030 | 1205 | 240 | 44 |
| 46 | 39300 | 15'-4" | 12 | 29'-9 1/4" | 8830 | 5463 | 27'-10 1/4" | 6525 | 4706 | 287 | 1530 | 1155 | 1365 | 260 | 46 |
| 48 | 43000 | 16'-0" | 12 | 31'-0 1/4" | 9250 | 5636 | 29'-3 1/4" | 6895 | 5139 | 309 | 1600 | 1375 | 1520 | 280 | 48 |
| 50 | 46400 | 16'-8" | 12 | 32'-3 1/4" | 9900 | 5902 | 30'-8 1/4" | 7700 | 5802 | 322 | 1710 | 1465 | 1700 | 300 | 50 |

*Add 2" PkH₂O when using CM outlet. (Pat. No. 3,342,023).
NOTE: Specifications for Design P-1 are the same as for the Design C-7 with the exception of HEIGHT and WEIGHT as shown above

Air Outlets

Blow Thru Outlets



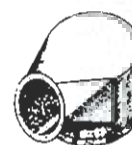
K & B Type CM Standard vertical type discharge outlet. Patent No. 3,342,023

Rain Cap



K & B "rain cap" with inner cone. (See page 14)

Clean Air Outlets



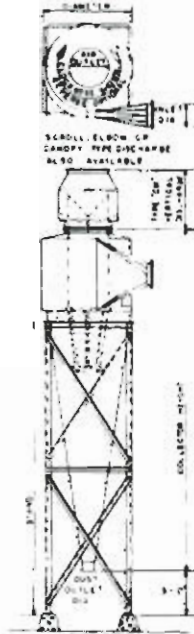
K & B casing type outlet. Use for draw thru applications.

Type C-5 Collector



Type C-5 Collector

With its relatively small diameter, long cone, the type C-5 collector is a high centrifugal force unit and will show extremely high efficiency down to 20 microns. From 10 to 20 microns, particle size, shape, and weight influence efficiency. Available in sizes from 260 to 6,500 CFM, for a single unit, or in multiple unit batteries.



Specifications

| SIZE | CAPACITY C.F.M. 4.0" P _{H₂O} * (SCFM) | COLLECTOR | | | WEIGHT-LBS | | | | | SIZE |
|------|---|-------------------------------------|--------------------------------------|-------|------------|--------|----------------|----------|------------------|------|
| | | DIAMETER | HEIGHT | GAUGE | COLLECTOR | STAND† | TYPE CM OUTLET | RAIN CAP | CLEAN AIR OUTLET | |
| 4 | 260 | 1'-0 ⁵ / ₈ " | 4'-10 ¹ / ₂ " | 10 | 125 | 135 | 18 | 3 | 20 | 4 |
| 5 | 400 | 1'-4 ¹ / ₂ " | 6'-1 ¹ / ₂ " | 10 | 160 | 141 | 22 | 4 | 30 | 5 |
| 6 | 600 | 1'-7 ¹ / ₈ " | 7'-2 ¹ / ₈ " | 10 | 210 | 211 | 30 | 7 | 35 | 6 |
| 7 | 800 | 1'-11 ¹ / ₄ " | 8'-4 ¹ / ₂ " | 10 | 290 | 287 | 33 | 11 | 40 | 7 |
| 8 | 1050 | 2'-2 ¹ / ₂ " | 9'-5 ¹ / ₂ " | 10 | 375 | 370 | 39 | 12 | 45 | 8 |
| 9 | 1350 | 2'-5 ¹ / ₈ " | 10'-6 ¹ / ₂ " | 10 | 425 | 453 | 41 | 15 | 50 | 9 |
| 10 | 1650 | 2'-9 ¹ / ₄ " | 11'-7 ¹ / ₂ " | 10 | 530 | 546 | 45 | 19 | 55 | 10 |
| 11 | 2000 | 3'-0 ¹ / ₂ " | 12'-8 ¹ / ₂ " | 10 | 715 | 629 | 49 | 23 | 60 | 11 |
| 12 | 2350 | 3'-3 ¹ / ₄ " | 13'-8 ¹ / ₂ " | 10 | 830 | 702 | 53 | 25 | 65 | 12 |
| 13 | 2750 | 3'-7" | 14'-10 ¹ / ₂ " | 10 | 1024 | 751 | 58 | 30 | 70 | 13 |
| 14 | 3200 | 3'-10 ¹ / ₂ " | 15'-11 ¹ / ₂ " | 10 | 1140 | 730 | 64 | 40 | 75 | 14 |
| 15 | 3700 | 4'-1 ¹ / ₄ " | 17'-0 ¹ / ₂ " | 10 | 1270 | 844 | 70 | 52 | 80 | 15 |
| 16 | 4200 | 4'-5" | 18'-1" | 10 | 1450 | 885 | 76 | 58 | 85 | 16 |
| 17 | 4700 | 4'-8 ¹ / ₄ " | 19'-2" | 10 | 1560 | 996 | 82 | 64 | 95 | 17 |
| 18 | 5300 | 4'-11 ¹ / ₂ " | 20'-2 ¹ / ₂ " | 10 | 1850 | 1106 | 103 | 74 | 105 | 18 |
| 19 | 5900 | 5'-3" | 21'-4 ¹ / ₂ " | 10 | 2020 | 1216 | 115 | 82 | 115 | 19 |
| 20 | 6500 | 5'-8 ¹ / ₄ " | 22'-6 ¹ / ₂ " | 10 | 2200 | 1330 | 134 | 92 | 120 | 20 |

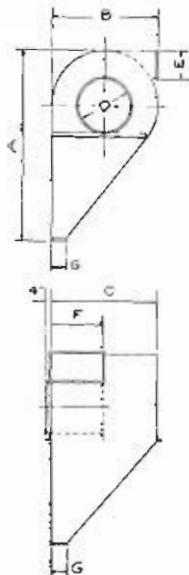
*Add .2" P_{H₂O} when using CM outlet, (Pat. No. 3,342,023)

Horizontal Classifier



Horizontal Classifier

A general purpose inertial separator used as primary collector ahead of final collection. Material, such as usable sand, unavoidably exhausted from cooler screen, can be returned to processing. Sizes 1,000 to 30,000 CFM.

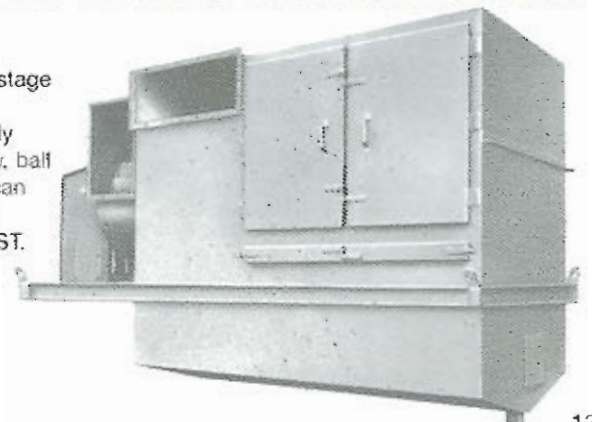


Specifications

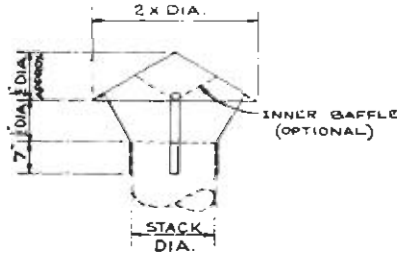
| SIZE | CFM | A | B | C | D | E | F | G | GAUGE | WEIGHT-LBS |
|------|-------|-----------------------------------|-----|-----|-----|-----|-----|-----|------------|------------|
| 1 | 1000 | 28 ¹ / ₂ " | 24" | 24" | 11" | 7" | 10" | 9" | 10 | 325 |
| 2 | 2000 | 61 ¹ / ₂ " | 36" | 36" | 16" | 9" | 16" | 9" | 10 | 450 |
| 3 | 3000 | 73 ¹ / ₄ " | 42" | 42" | 19" | 11" | 20" | 9" | 10 | 600 |
| 4 | 4000 | 84 ¹ / ₂ " | 48" | 48" | 22" | 13" | 22" | 9" | 10 | 850 |
| 6 | 6000 | 98 ¹ / ₄ " | 56" | 56" | 27" | 14" | 25" | 12" | 10 | 1100 |
| 8 | 8000 | 107 ¹ / ₂ " | 62" | 62" | 31" | 16" | 29" | 12" | 10 | 1400 |
| 10 | 10000 | 118 ¹ / ₂ " | 68" | 68" | 35" | 17" | 34" | 12" | 3/16" Ptl. | 3100 |
| 13 | 13000 | 125 ¹ / ₂ " | 72" | 72" | 39" | 18" | 35" | 12" | 3/16" Ptl. | 3300 |
| 15 | 15000 | 132 ¹ / ₂ " | 76" | 76" | 40" | 21" | 38" | 12" | 3/16" Ptl. | 3500 |
| 18 | 18000 | 138 ¹ / ₂ " | 80" | 80" | 43" | 21" | 40" | 15" | 3/16" Ptl. | 3850 |
| 20 | 20000 | 145" | 84" | 84" | 46" | 23" | 42" | 15" | 3/16" Ptl. | 3850 |
| 25 | 25000 | 156" | 90" | 90" | 51" | 24" | 43" | 15" | 1/4" Ptl. | 4500 |
| 30 | 30000 | 167" | 96" | 96" | 56" | 26" | 48" | 15" | 1/4" Ptl. | 4700 |

Oil Mist Collector

K & B offers six models of oil mist collectors ranging from 2,000 to 18,000 CFM. These 3-stage oil mist collectors achieve a high degree of demisting efficiency in laboratory tests with performances up to 99.98%. of heavy-gauge construction throughout, the unit has a sturdy perimeter frame for a variety of mounting arrangements. The exhaust unit, with heavy-duty, ball bearing motor and V-belt drive, has flexible isolators to minimize vibration. Filter element can be easily replaced and oil drain easily maintained. Variable speed drives are available. Fan and motor can be mounted on either right or left side. COMPLETE BULLETIN ON REQUEST.



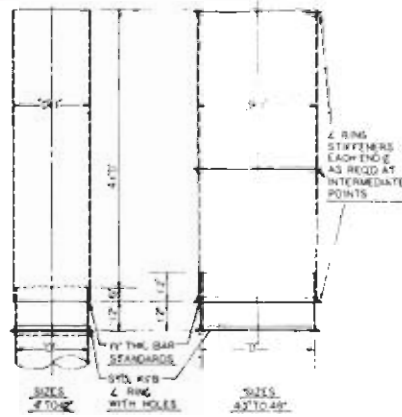
Rain Caps



| DIA. | NO. STANDARD | GAUGE |
|---------|--------------|-------|
| 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.

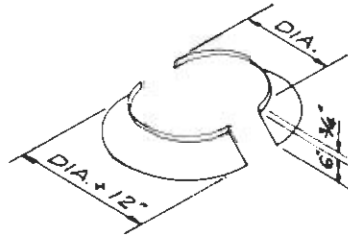
No Loss Vertical Discharge Stackhead



| DIA. | NO. STANDARD | GAUGE |
|---------|--------------|-------|
| 4"-14" | 3 | 22 |
| 15"-24" | 4 | 20 |
| 25"-30" | 4 | 18 |
| 31"-42" | 4 | 16 |
| 43"-48" | 6 | 16 |

This type of discharge stackhead is generally the accepted method to expel exhaust air up into the atmosphere, in lieu of other types of weather caps.

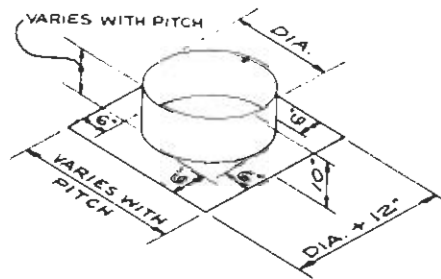
Stack Flanges



| DIA. | GAUGE |
|---------|-------|
| 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 size.

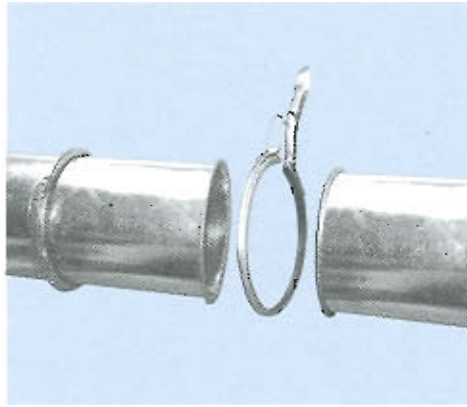
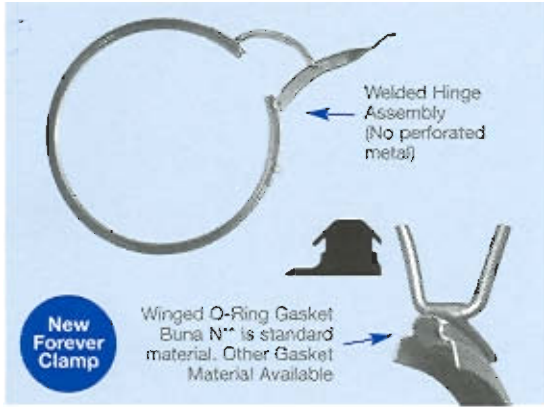
Roof Flanges



| DIA. | GAUGE |
|---------|-------|
| 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.

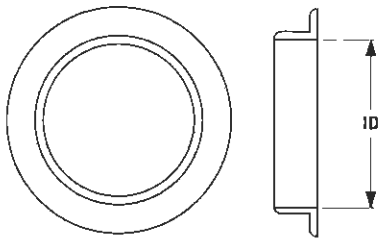
KB Duct, Clamp Together Ductwork System



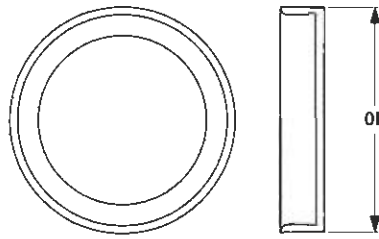
For fast and easy installation of ductwork components up to 22" diameter, Kirk & Blum offers KB Duct. Available in a variety of gauges and featuring the guaranteed "Forever Clamp," KB Duct is the high quality, low cost solution for most applications.

Special Rolled Rings And Segments

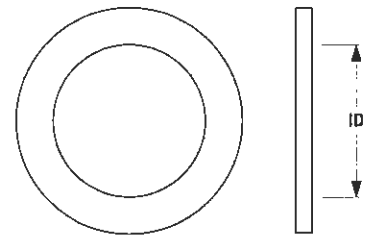
Leg Out - Specify Inside Diameter



Leg In - Specify Outside Diameter

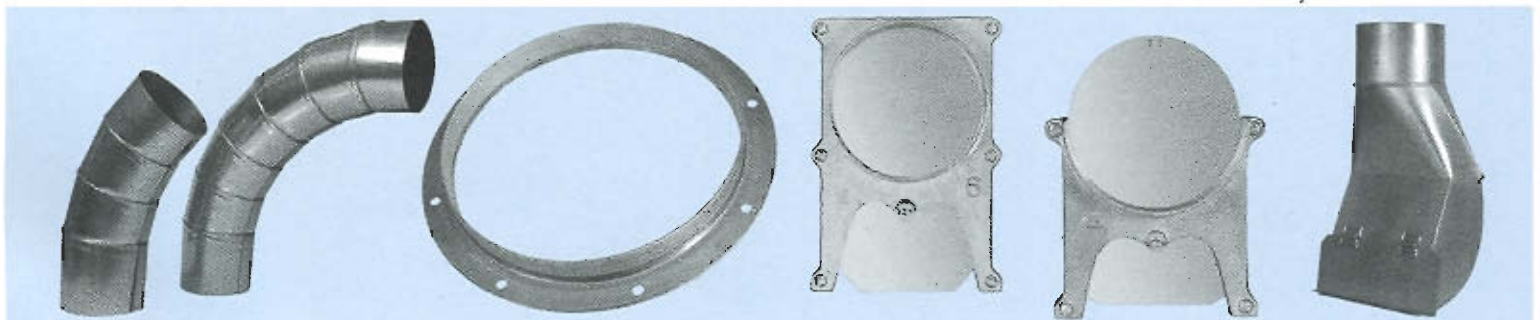


On Edge - Specify Inside Diameter

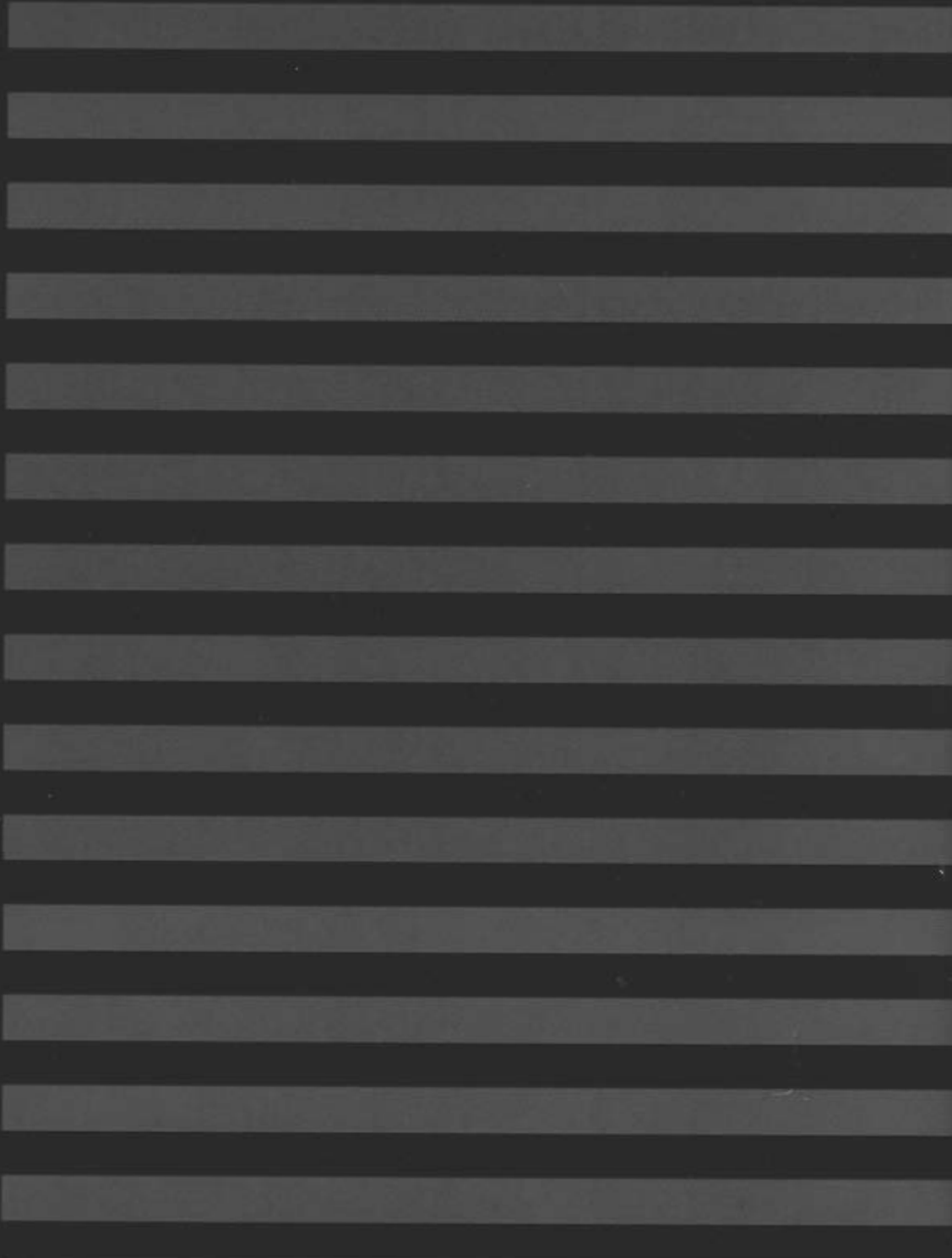


If the job requires special rings or segments fabricated from angle, bar, channel, or beam, Kirk & Blum can provide them. Kirk & Blum will roll and punch to your specifications. Special rings are quoted on a job-by-job basis and available in a short lead time.

Section 1 Products, Stock Parts For Air Systems



Contractors save time and money with K&B standard component parts. These products are available off the shelf for immediate shipment from our warehouse in Cincinnati or your local stocking distributor.



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

Kirk & Blum Components Parts Division

3120 Forrer Street
Cincinnati, OH 45209
Phone: 513.458.2600
Fax: 513.351.9935
Toll-Free: 800.333.5475
e-mail: kb-parts@kirkblum.com
www.kirkblum.com



K&B reserves the right to make changes to product line. All parts are finalized through quote.
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