



MODEL PA

CHIMNEY AND EXHAUST SYSTEMS



Underwriters
Laboratories Inc.®
LISTED

LISTINGS

The Schebler Model PA chimney and exhaust system is listed by Underwriters Laboratories Inc. (UL) under file number MH17739 in the United States and Canada for the following uses. It also has the Underwriters Laboratories mark for Canada (cUL).

UL 103 – A 1400°F chimney, a 1000° F Building Heating Appliance Chimney for positive pressures to 60"WC for high temperature applications.

UL 2561 – A 1400°F Building Heating Appliance Chimney for positive pressures to 60"WC intended for venting flue gases at a temperature not exceeding 1400°F under continuous operating conditions, from building-heating appliances and other low-heat appliances.

UL 1978 – Use for grease exhaust duct serving commercial cooking appliance hoods.

The system is also approved by the New York City Department of Buildings for use in New York City. MEA # 227-94-M.

SYSTEM CONCEPT

The Model PA is a modular double wall prefabricated exhaust system with 1" air gap for use in venting appliances that require a positive, neutral or negative draft exhaust system. Sections are provided in lightweight, easy-to-handle lengths and connected with the RapidLock™ Connection System with high temperature sealant. Straight sections, expansion joints, tees, elbows and support devices are offered, allowing a complete exhaust system to be assembled from standard components.



SURROUNDINGS

The Model PA chimneys are suitable for use with Building Heating Appliances and other low heat appliances as described in the Chimney Selection chart of the National Fire Protection Association Standard Number 211 which produce flue exhaust gases not exceeding 1400°F under continuous operation or 1800°F intermittent operation. These chimneys are to be installed as required for metal chimneys. They are not to be enclosed within combustible construction. An unenclosed chimney may be placed adjacent to walls of combustible construction at the clearances specified.

COMPLETE LINE OF FITTINGS AND SIZES AVAILABLE

The Model PA chimney system is available in even and odd diameters ranging from 5" to 48". A complete line of straight sections, expansion joints, tees, elbows, rain caps, roof penetration components and support members are offered. In addition to the standard components virtually any conceivable fitting is available as a special order item.

MATERIAL THICKNESS

The standard 304 stainless steel inner shell thickness is .036" for 5" to 36" diameter systems and .048" for 38" to 48" diameter systems. Standard 430 stainless steel outer shell thickness is .028" for 5" to 36" diameter systems and .048" for 38" to 48" diameter systems.

MATERIAL AVAILABLE

The Model PA is available in a variety of materials allowing the proper material selection for your specific application. The standard product features a 304 stainless steel liner and 430 stainless steel outer shell. For greater corrosion resistance 316 stainless steel is available for the liner and 304 or 316 stainless steel for the outer shell.

For most applications the standard 304 stainless steel inner, 430 stainless steel outer material selection is sufficient. For Boilers firing oils heavier than #2 use 316 stainless steel for the inner shell.

SUPPORT LIMITS

Support plates and wall supports are utilized to support the weight of the chimney and to provide a fixed point to allow proper operation of expansion joints. In horizontal runs supports should be placed adjacent to fittings that are not otherwise supported. See the individual part description for allowable support charts.

TESTS PERFORMED

The Model PA has endured rigorous tests by Underwriters Laboratories. Just a few of the tests performed are:

- **Structural Tests** The support plates and wall supports have been physically tested to carry a load 4 times that allowed by our listing.
- **Wind Load Tests** Loads equivalent to 110 mph wind have been applied to the chimney with acceptable results.
- **Skin Temperature Rise Tests** The chimney has been subjected to a series of burn tests at temperatures up to 1800°F. The purpose of these tests is to determine safe clearances from the chimney wall to combustible materials.
- **Rain Tests** The rain caps have been tested to ensure that an unsatisfactory amount of water does not enter the rain cap.

SCHEBLER VALUE

- **Fast Project Completion**
 - 2-week lead time (vs. industry standard 3-6 weeks)
 - Trouble-free installation / detailed instructions
 - No on-site welding
- **Maximum Strength / Long Life**
 - Unmatched dimensional accuracy for secure joint connections
 - Fully welded liners and shells
 - Unequaled support limits
- **Complete System Design**
 - CAD drawings
 - 3D design solutions
 - Complete BOM
 - System sizing
- **Special Fittings**

OPERATING TEMPERATURES AND CLEARANCES CHART

The Model PA has been tested and listed for continuous use at both 1000°F and 1400°F as well as for use as grease duct at the following clearances to combustible materials. The clearances shown are from the shell to combustibles.

PA Clearance to Combustibles

Section Inside Diameter	1000°F (560°C) Chimney*	1400°F (760°C) Chimney
5"-6"	6" (152mm)	7" (178mm)
7"-12"	7" (178mm)	8" (203mm)
13"-16"	8" (203mm)	9" (229mm)
17"-20"	9" (229mm)	10" (254mm)
21"-24"	10" (254mm)	11" (279mm)
25"-28"	11" (279mm)	12" (305mm)
29"-32"	12" (305mm)	13" (330mm)
33"-36"	13" (330mm)	14" (356mm)
37"-40"	14" (356mm)	15" (381mm)
41"-44"	15" (381mm)	16" (406mm)
45"-48"	18" (457mm)	20" (518mm)

*Building Heating Appliance Chimney

Section Inside Diameter	Grease Duct
5"-6"	6" (152mm)
7"-12"	8" (203mm)
13"-16"	10" (254mm)
17"-20"	11" (279mm)
21"-24"	12" (305mm)
25"-28"	14" (356mm)
29"-32"	16" (406mm)
33"-48"	18" (457mm)

Clearance to non-combustible materials for all diameters and applications is 1" (25mm).

PART NUMBERS

All standard parts manufactured by Schebler are identified by a part number which describes their make up and function.

The part numbers are made up as follows:

1. The first series is the model designation, PA, P1, P2, P2A, P4 or SW.
2. This is followed by the part name. For example 47S, 90T and CC.
3. Next is the part's internal diameter in inches, such as 06, 12, 24.
4. Last is the liner/shell material designation.

For example the part number for an 8" ID, Model PA, 47" long straight section with a 304 stainless steel liner and aluminized steel shell is: PA47S08A.

Code	Liner / Shell Material
A	304 / Aluminized
B	316 / Aluminized
C	304 / 304 or all 304
D	304 / 316
E	316 / 316 or all 316
F	Galvanized
G	Aluminized
H	Painted Carbon Steel
N	304 / 430
P	316 / 430
Q	430
S	316 / 304

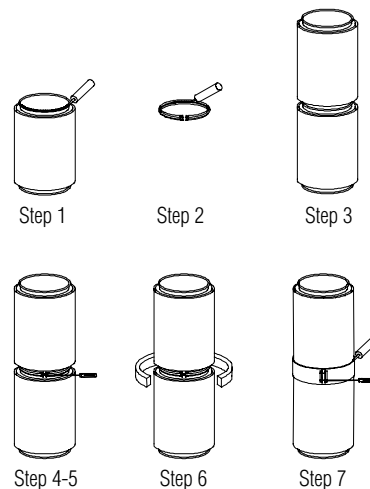
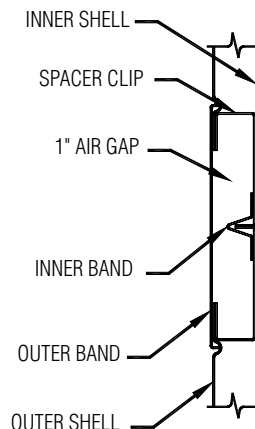
JOINT ASSEMBLY

Note: Wipe inner bands and flanges clean prior to assembly.

1. Apply continuous bead of proper sealant covering one of the ½" flange of the two parts being joined.
2. Fully fill the vee groove of the inner band with proper sealant.
3. Join the flanged ends of the two sections together.
4. Install the inner band around the flanges and rotate the flange bolt into the corresponding notch of the clip and tighten both bolts.
5. Tap around the inner band with a rawhide mallet and retighten the flange bolts until they bottom-out to ensure a tight joint.
6. Place the outer band over the space between the outer shells of the adjoining sections. The flanges on the outer band fit into the grooves on the shells.
7. Rotate the flange bolt into the corresponding notch of the clip and tighten both bolts evenly until secure. For outdoor installations, apply a bead of S600 sealant in the groove at the upper end of the outer band.

SEALANT

Schebler offers three types of sealant, S600, S2000, and S2001. The S600 is used for applications with flue gas temperatures up to 600°F (315°C). This includes most boilers and water heaters. The S2000 is used for grease duct systems. S2001 is used for installations operating under positive pressure, such as generator exhaust.



SYSTEM COMPONENTS

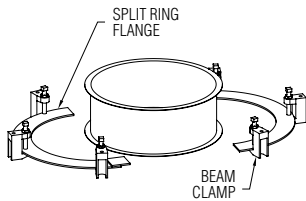
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ADAPTER KIT (FLANGED)

Part No. BKF

The Adapter Kit (Flanged) is used for securing pipe to a flanged appliance outlet. Beam clamps are provided for connection of the flanges, or the flange can be drilled in the field to match the appliance.

Includes 1 inner band.

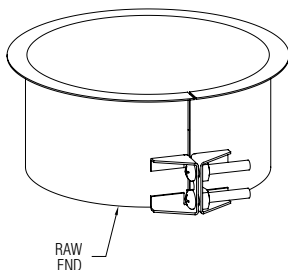


ADAPTER KIT (RAW)

Part No. BKR

The Adapter Kit (Raw) is used for securing pipe to an unflanged appliance outlet.

Includes 1 inner band.

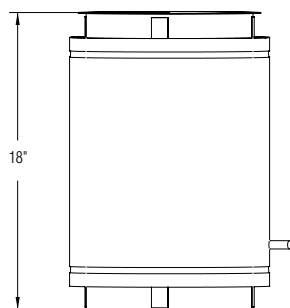


NOZZLE SECTION

Part No. NS

The Nozzle Section includes a 1" NPT connection to be used as a test port.

Includes 1 inner and 1 outer band.



STRAIGHT SECTION

Part No. 18S, 29S, 47S and 59S

Standard lengths are as follows:

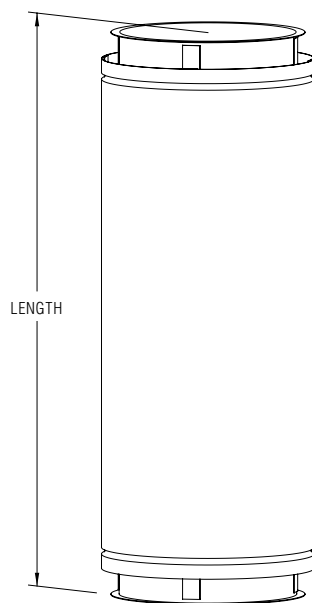
Diameter 5" - 7" is 18", 29" and 47"

Diameter 8" - 24" is 18", 29", 47" and 59"

Diameter 25" - 48" is 18", 29" and 47"

Custom parts can be manufactured to any length over 8".

Includes 1 inner and 1 outer band.



ADJUSTABLE LENGTH

Part No. 18AL, 22AL, 30AL and 45AL

The Adjustable Length is used to provide adjustment during installation as well as compensate for thermal expansion between fixed points.

The adjustment in length available for each part is as follows:

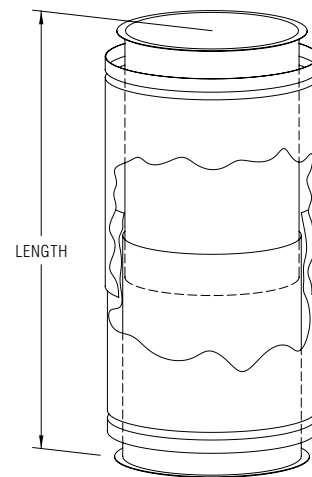
18AL = 14" to 17"

22AL = 16" to 21"

30AL = 20" to 29"

45AL = 27 1/2" to 44"

Includes 1 inner and 1 outer band.

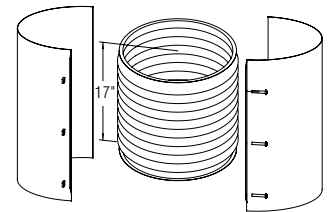


BELLOWS SECTION

Part No. BS

The Bellows Section is designed to compensate for thermal expansion, up to 3". This part is recommended for diesel engine and turbine exhaust systems.

Includes liner, shell, and 1 inner band.

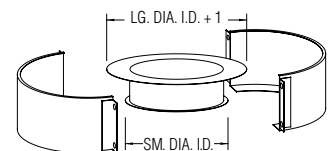


ABRUPT INCREASER

Part No. AI

The Abrupt Increaser is used to connect two sections of different diameters in a shorter space than a tapered increaser.

Includes 1 inner band of larger and smaller sizes and 1 seal ring.

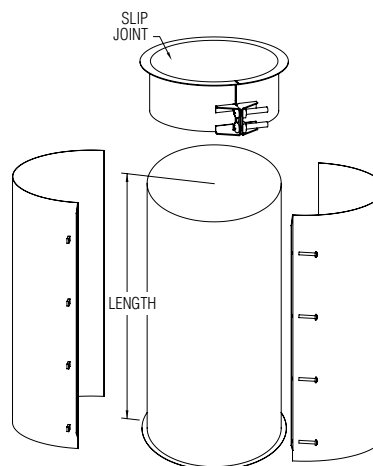


VARIABLE LENGTH SECTION

Part No. 18VS, 29VS and VS

The Variable Section adjusts to provide a fixed odd length between two sections. The minimum length is 5", the maximum is 18", 29" or 40". This part does not provide for thermal expansion.

Includes liner, shell, slip joint, and 1 inner band.

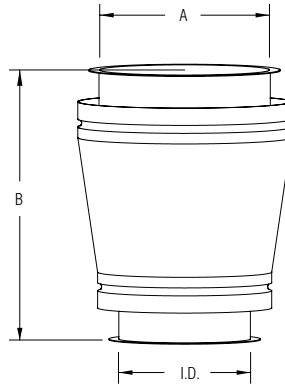


TAPERED INCREASER

Part No. TI

The Tapered Increaser is used when a change in pipe diameter is required.

Includes 1 inner and 1 outer band of both smaller and larger size.



Part No. TI

I.D.	A	B	A	B	A	B	A	B
6"	8"	15"	10"	18"	12"	21"	14"	24"
8"	10"	15"	12"	18"	14"	21"	16"	24"
10"	12"	15"	14"	18"	16"	21"	18"	24"
12"	14"	15"	16"	18"	18"	21"	20"	24"
14"	16"	15"	18"	18"	20"	21"	22"	24"
16"	18"	15"	20"	18"	22"	21"	24"	24"
18"	20"	15"	22"	18"	24"	21"	26"	24"
20"	22"	15"	24"	18"	26"	21"	28"	24"
22"	24"	15"	26"	18"	28"	21"	30"	24"
24"	26"	15"	28"	18"	30"	21"	32"	24"
26"	28"	15"	30"	18"	32"	21"	34"	24"
28"	30"	15"	32"	18"	34"	21"	36"	24"
30"	32"	15"	34"	18"	36"	21"	38"	24"
32"	34"	15"	36"	18"	38"	21"	40"	24"
34"	36"	15"	38"	18"	40"	21"	42"	24"
36"	38"	15"	40"	18"	42"	21"	44"	24"
38"	40"	15"	42"	18"	44"	21"	46"	24"
40"	42"	15"	44"	18"	46"	21"	48"	24"
42"	44"	15"	46"	18"	48"	21"	~	~
44"	46"	15"	48"	18"	~	~	~	~
46"	48"	15"	~	~	~	~	~	~
48"	~	~	~	~	~	~	~	~

Available in odd sizes.

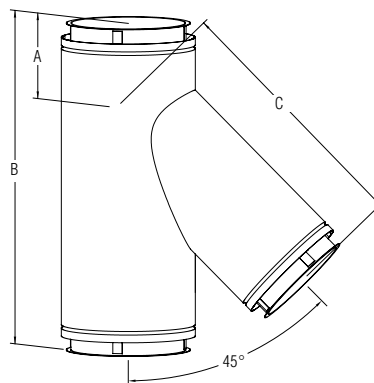
Call for odd diameter taper increaser information.

REDUCING 45° LATERAL TEE

Part No. R45LT

The Reducing 45° Lateral Tee is used for low flow resistance entry into a stack or breeching when the stack or breeching is a larger size. Specify size of branch required.

Includes 1 each inner band and outer band for larger and smaller opening.



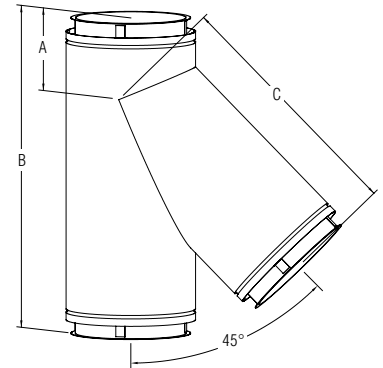
45° LATERAL TEE

Part No. 45LT

The 45° Lateral Tee is used for low flow resistance entry into a stack or breeching.

Includes 2 inner bands and 2 outer bands.

Note: Grease tees available
1 1/2" containment dam located
at one opening.



Part No. 45LT / R45LT

I.D.	A	B	C
5-6"	7"	26"	19"
7-8"	7 3/8"	28 3/4"	21 5/8"
9-10"	7 3/4"	31 1/2"	23 3/4"
11-12"	8 1/4"	34 1/2"	26 1/4"
13-14"	8 5/8"	37 1/4"	28 5/8"
15-16"	9 1/16"	40 1/8"	31 1/16"
17-18"	9 1/2"	43"	33 1/2"
19-20"	9 7/8"	45 3/4"	35 7/8"
21-22"	10 5/16"	48 5/8"	38 5/16"
23-24"	10 3/4"	51 1/2"	40 3/4"
25-26"	11 1/8"	54 1/4"	43 1/8"
27-28"	11 9/16"	57 1/8"	45 9/16"
29-30"	12"	60"	48"
31-32"	12 3/8"	62 3/4"	50 3/8"
33-34"	12 3/4"	65 1/2"	52 3/4"
35-36"	13 3/16"	68 3/8"	55 3/16"
37-38"	13 5/8"	71 1/4"	57 5/8"
39-40"	14"	74"	60"
41-42"	14 7/16"	76 7/8"	62 7/16"
43-44"	14 7/8"	79 3/4"	64 7/8"
45-46"	15 1/4"	82 1/2"	67 1/4"
47-48"	15 11/16"	85 3/8"	69 11/16"

SYSTEM COMPONENTS

CUSTOM DIMENSIONS ARE AVAILABLE TO SUIT YOUR NEEDS IN EVEN AND ODD SIZES

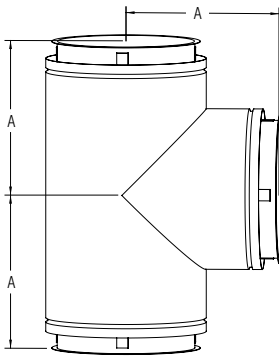
90° TEE

Part No. 90T

The 90° Tee is used to join horizontal and vertical sections, as well as to provide for connection of drain or inspection fittings. Use either the drain tee cap or the end cap for closure of the unused opening.

Includes 2 inner bands and 2 outer bands.

Note: Grease tees available 1 1/2" containment dam located at one opening.



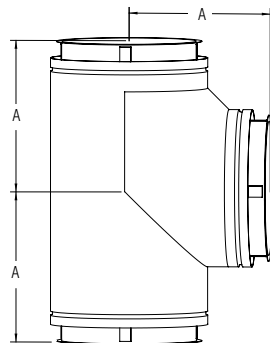
Part No. 90T/ R90T	
I.D.	A
5-6"	10 1/2"
7-8"	11 1/2"
9-10"	12 1/2"
11-12"	13 1/2"
13-14"	14 1/2"
15-16"	15 1/2"
17-18"	16 1/2"
19-20"	17 1/2"
21-22"	18 1/2"
23-24"	19 1/2"
25-26"	20 1/2"
27-28"	21 1/2"
29-30"	22 1/2"
31-32"	23 1/2"
33-34"	24 1/2"
35-36"	25 1/2"
37-38"	26 1/2"
39-40"	27 1/2"
41-42"	28 1/2"
43-44"	29 1/2"
45-46"	30 1/2"
47-48"	31 1/2"

90° BOOT TEE

Part No. BT

The 90° Boot Tee is used to join horizontal and vertical sections with lower resistance as well as to provide for connection of drain or inspection fittings. Use either the drain tee cap or the end cap for closure of the unused opening.

Includes 2 inner bands and 2 outer bands.

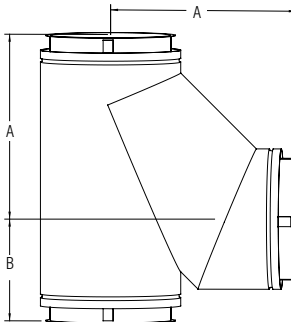


Part No. BT	
I.D.	A
23-24"	19 1/2"
25-26"	20 1/2"
27-28"	21 1/2"
29-30"	22 1/2"
31-32"	23 1/2"
33-34"	24 1/2"
35-36"	25 1/2"
37-38"	26 1/2"
39-40"	27 1/2"
41-42"	28 1/2"
43-44"	29 1/2"
45-46"	30 1/2"
47-48"	31 1/2"

REDUCING 90° TEE

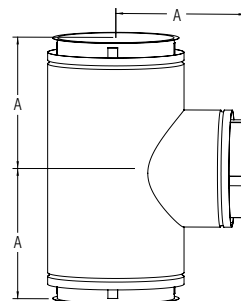
Part No. R90T

The Reducing 90° Tee is used to join horizontal and vertical sections of different sizes, as well as provide for connection to drain or inspection fittings. Use either the drain tee cap or the end cap for closure of the unused opening. Specify size of branch required.



Part No. BT		
I.D.	A	B
5"	10 5/16"	6 3/4"
6"	11 3/16"	7"
7-8"	13 1/16"	8"
9-10"	14 7/8"	9"
11-12"	16 11/16"	10"
13-14"	18 1/2"	11"
15-16"	20 3/8"	12"
17-18"	22 3/16"	13"
19-20"	24"	14"
21-22"	25 13/16"	15"
23-24"	27 11/16"	16"

Includes 1 each inner band and outer band for larger and smaller opening.



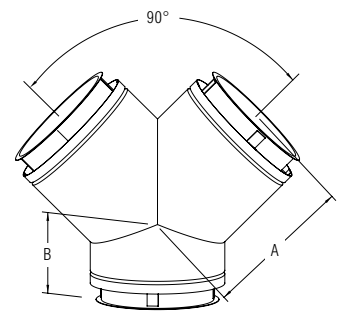
90° WYE

Part No. 90Y

The 90° Wye is used for joining runs where low flow resistance is desired. All openings must be the same size. For connection to smaller diameter sections use the tapered or abrupt increasers.

Includes 2 inner bands and 2 outer bands.

Note: Grease wye available 1 1/2" containment dam located at one opening.



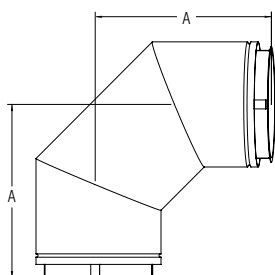
Part No. 90Y		
I.D.	A	B
5-6"	10 1/2"	7"
7-8"	11 1/2"	7 13/32"
9-10"	12 1/2"	7 13/16"
11-12"	13 1/2"	8 7/32"
13-14"	14 1/2"	8 5/8"
15-16"	15 1/2"	9 1/16"
17-18"	16 1/2"	9 7/16"
19-20"	17 1/2"	9 7/8"
21-22"	18 1/2"	10 9/32"
23-24"	19 1/2"	10 23/32"
25-26"	20 1/2"	11 1/8"
27-28"	21 1/2"	11 17/32"
29-30"	22 1/2"	11 31/32"
31-32"	23 1/2"	12 3/8"
33-34"	24 1/2"	12 25/32"
35-36"	25 1/2"	13 3/16"
37-38"	26 1/2"	13 11/16"
39-40"	27 1/2"	14 1/32"
41-42"	28 1/2"	14 15/32"
43-44"	29 1/2"	14 27/32"
45-46"	30 1/2"	15 1/4"
47-48"	31 1/2"	15 11/16"

90° ELBOW

Part No. 90L

The 90° Elbow is used when making a 90° directional change. The 90° elbow is available in sizes 5" through 24". For a 90° directional change in diameters from 25" through 48" use two 45° elbows.

Includes 1 inner and 1 outer band.



Part No. 90L

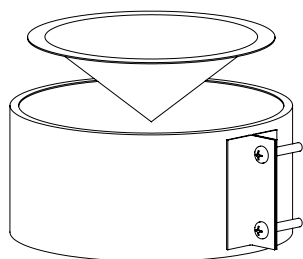
I.D.	A
5-6"	13 1/2"
7-8"	15 1/2"
9-10"	17 1/2"
11-12"	19 1/2"
13-14"	21 1/2"
15-16"	23 1/2"
17-18"	25 1/2"
19-20"	27 1/2"
21-22"	29 1/2"
23-24"	31 1/2"

END CAP

Part No. EC

The End Cap is used to close an unused tee opening and to provide a means of accessing the interior of the system for inspection and cleaning.

Includes 1 inner band.

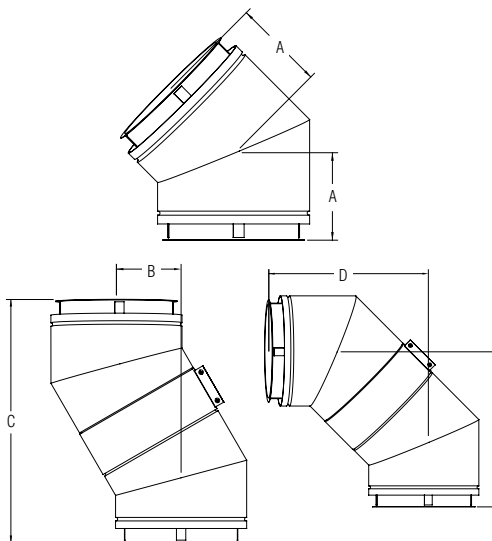


45° ELBOW

Part No. 45L

The 45° Elbow is used when a vertical or horizontal direction change of 45° is desired.

Includes 1 inner and 1 outer band.



Part No. 45L

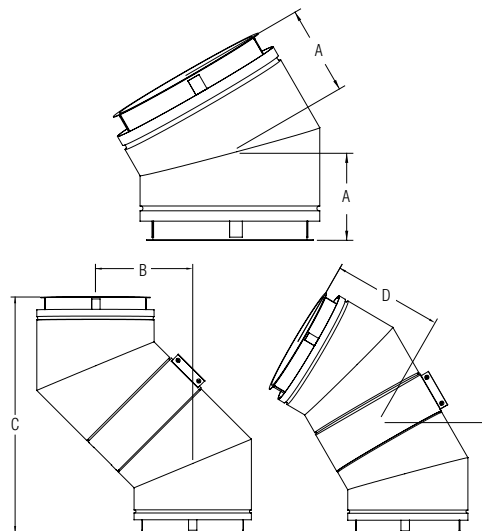
I.D.	A	B	C	D
5-6"	7"	9 29/32"	23 29/32"	16 29/32"
7-8"	7 3/8"	10 7/16"	25 3/16"	17 13/16"
9-10"	7 13/16"	11 3/64"	26 43/64"	18 55/64"
11-12"	8 1/4"	11 43/64"	28 11/64"	19 59/64"
13-14"	8 5/8"	12 13/64"	29 29/64"	20 53/64"
15-16"	9 1/16"	12 13/16"	30 15/16"	21 7/8"
17-18"	9 1/2"	13 7/16"	32 7/16"	22 15/16"
19-20"	9 7/8"	13 31/32"	33 23/32"	23 27/32"
21-22"	10 5/16"	14 37/64"	35 13/64"	24 57/64"
23-24"	10 3/4"	15 13/64"	36 45/64"	25 61/64"
25-26"	11 1/8"	15 47/64"	37 63/64"	26 55/64"
27-28"	11 9/16"	16 23/64"	39 31/64"	27 59/64"
29-30"	11 15/16"	16 7/8"	40 3/4"	28 13/16"
31-32"	12 3/8"	17 1/2"	42 1/4"	29 7/8"
33-34"	12 3/4"	18 1/32"	43 17/32"	30 25/32"
35-36"	13 3/16"	18 21/32"	45 1/32"	31 27/32"
37-38"	13 5/8"	19 17/64"	46 33/64"	32 57/64"
39-40"	14"	19 51/64"	47 51/64"	33 51/64"
41-42"	14 7/16"	20 27/64"	49 19/64"	34 55/64"
43-44"	14 7/8"	21 1/32"	50 25/32"	35 29/64"
45-46"	15 1/4"	21 9/16"	52 1/16"	36 13/16"
47-48"	15 11/16"	22 3/16"	53 9/16"	37 7/8"

30° ELBOW

Part No. 30L

The 30° Elbow is used when a vertical or horizontal direction change of 30° is desired.

Includes 1 inner and 1 outer band.



Part No. 30L

I.D.	A	B	C	D
5-6"	6 1/8"	6 1/8"	22 55/64"	13 13/64"
7-8"	6 3/8"	6 3/8"	23 51/64"	13 47/64"
9-10"	6 5/8"	6 5/8"	24 23/32"	14 9/32"
11-12"	6 15/16"	6 15/16"	25 57/64"	14 61/64"
13-14"	7 3/16"	7 3/16"	26 53/64"	15 31/64"
15-16"	7 7/16"	7 7/16"	27 3/4"	16 1/32"
17-18"	7 3/4"	7 3/4"	28 59/64"	16 45/64"
19-20"	8"	8"	29 55/64"	17 15/64"
21-22"	8 1/4"	8 1/4"	30 51/64"	17 23/32"
23-24"	8 1/2"	8 1/2"	31 23/32"	18 5/16"
25-26"	8 3/4"	8 3/4"	32 21/32"	18 55/64"
27-28"	9 1/16"	9 1/16"	33 53/64"	19 17/32"
29-30"	9 5/16"	9 5/16"	34 3/4"	20 1/16"
31-32"	9 9/16"	9 9/16"	35 11/16"	20 39/64"
33-34"	9 7/8"	9 7/8"	36 55/64"	21 9/32"
35-36"	10 1/8"	10 1/8"	37 25/32"	21 13/16"
37-38"	10 3/8"	10 3/8"	38 23/32"	22 23/64"
39-40"	10 5/8"	10 5/8"	39 21/32"	22 57/64"
41-42"	10 15/16"	10 15/16"	40 13/16"	23 9/16"
43-44"	11 3/16"	11 3/16"	41 3/4"	24 7/64"
45-46"	11 1/2"	11 1/2"	42 59/64"	24 25/32"
47-48"	11 3/4"	11 3/4"	43 55/64"	25 5/16"

SYSTEM COMPONENTS

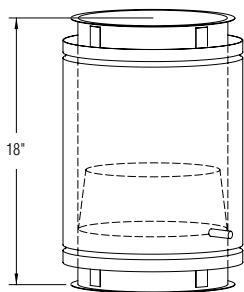
CUSTOM DIMENSIONS ARE AVAILABLE TO SUIT YOUR NEEDS IN EVEN AND ODD SIZES

DRAIN SECTION

Part No. DS

The Drain Section is used to drain rain water and condensation from within the stack. The NPT nipple should be connected to a suitable drain.

Includes 1 inner and 1 outer band.

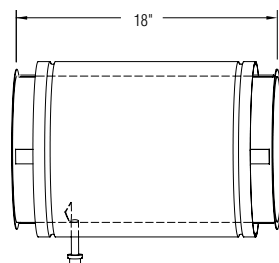


HORIZONTAL DRAIN

Part No. HD

The Horizontal Drain is used to drain rain water and condensation from within the stack. The NPT nipple should be connected to a suitable drain.

Includes 1 inner and 1 outer band.

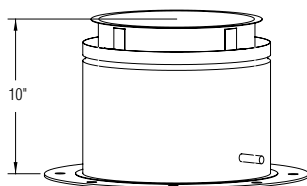


BASE DRAIN SECTION

Part No. BD

The Base Drain Section provides a bottom closure and drain attachment for base supported chimneys.

Includes 1 inner and 1 outer band.

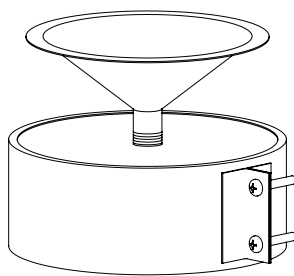


DRAIN TEE CAP

Part No. DTC

The Drain Tee Cap is used to close an unused tee opening and to provide a drain at the base of a vertical chimney.

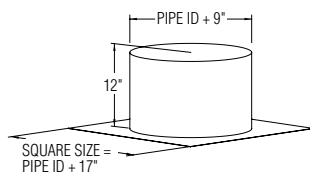
Includes 1 inner band.



FLASHING

Part No. FL

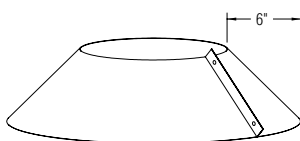
The Flashing is used in conjunction with the rain collar to seal roof penetrations. This part is designed for flat roofs. Custom pitched flashings are available upon request.



RAIN COLLAR

Part No. RC

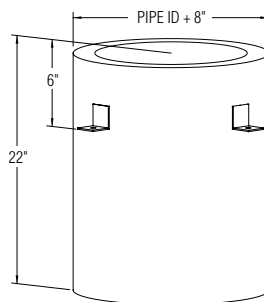
The Rain Collar is used in conjunction with the flashing to seal roof penetrations.



INSULATED THIMBLE

Part No. IT

The Insulated Thimble is used when penetrating a combustible wall or roof. This part is designed for flat roofs. Custom pitched thimbles are available upon request.

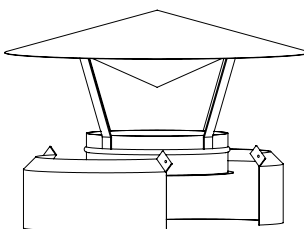


RAIN CAP

Part No. CC

The Rain Cap is used at stack terminations to prevent water from entering the flue. A drain should be used at the base of stacks to drain off water that may be blown into the flue.

Includes 1 inner band and 1 closure ring to seal outer shell joint.

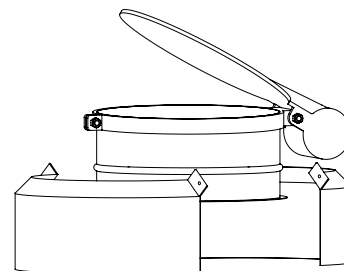


FLIP TOP CAP

Part No. FTC

The Flip Top Cap is used in generator systems when the cap remains closed until pressure opens the cap.

Includes 1 inner band and 1 closure ring to seal outer shell joint.

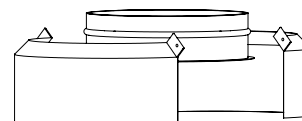


TOP SECTION

Part No. TS

The Top Section is used to protect the insulating space between the inner and outer shells when an open termination is required. A drain should be used at the base of stacks to drain off water that enters the system.

Includes 1 inner band and 1 closure ring to seal outer shell joint.



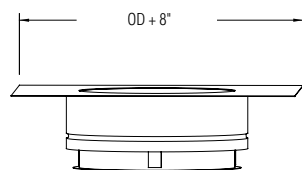
FAN ADAPTER

Part No. FA

The Fan Adapter is used to attach grease duct to an exhaust fan or kitchen hood.

Includes 1 inner and 1 outer band.

Note: Plenum boxes available for multiple fan systems.

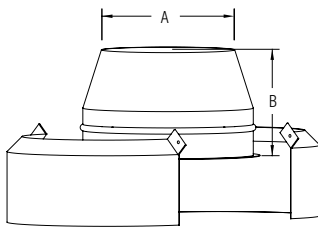


EXIT CONE

Part No. EXC

The Exit Cone is used to increase the flue gas velocity exiting the stack. A drain should be used at the base of stacks to remove any water that enters the stack.

Includes 1 inner band and 1 closure ring to seal outer shell joint.



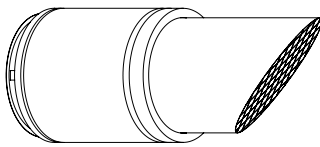
Part No. EXC		
I.D.	A	B
6"	4 7/8"	5 3/8"
8"	6 1/2"	6 1/8"
10"	8 1/8"	6 3/4"
12"	9 3/4"	7 1/2"
14"	11 3/8"	8 1/8"
16"	13 1/8"	8 7/8"
18"	14 3/4"	9 1/2"
20"	16 3/8"	10 1/4"
22"	18"	10 7/8"
24"	19 5/8"	11 5/8"
26"	21 1/4"	12 1/4"
28"	22 7/8"	13"
30"	24 1/2"	13 5/8"
32"	26 1/8"	14 3/8"
34"	27 3/4"	15"
36"	29 3/8"	15 3/4"
38"	31"	16 3/8"
40"	32 5/8"	17 1/8"
42"	34 1/4"	17 3/4"
44"	35 7/8"	18 1/2"
46"	37 1/2"	19 1/8"
48"	39 1/4"	19 3/4"

HORIZONTAL TERMINATION

Part No. HT

The Horizontal Termination is used when the stack terminates in a horizontal position. Birdscreen covers the opening to prevent any birds or rodents from entering.

Includes 1 inner and 1 outer band.

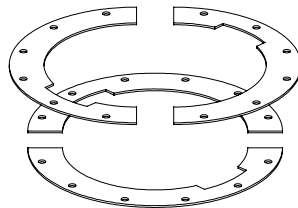


GUY SECTION

Part No. GS

The Guy Section is to be used when the chimney extends beyond the vertical limits above the roof line. The guy section should be connected to guy wires or a rigid guying structure.

Note: This part must be placed at the connection of two flue sections.

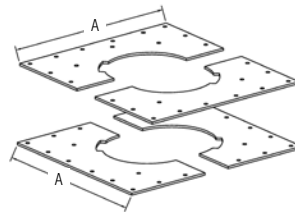


SUPPORT PLATE

Part No. SP

The Support Plate is the primary load carrying member of the chimney assembly. This part is designed to support (B) (See Chart below) feet of vertical chimney section as well as provide fixed points in breaching runs.

Note: This part must be placed at the connection of two flue sections.



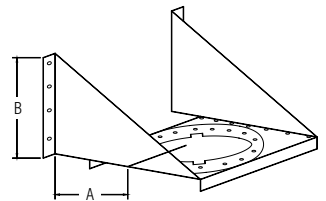
Part No. SP		
I.D.	A	B(FT)
6"	12"	403'
8"	14"	389'
10"	16"	375'
12"	18"	361'
14"	20"	347'
16"	22"	334'
18"	24"	320'
20"	26"	306'
22"	28"	292'
24"	30"	278'
26"	32"	264'
28"	34"	250'
30"	36"	236'
32"	38"	222'
34"	40"	208'
36"	42"	195'
38"	44"	181'
40"	46"	167'
42"	48"	153'
44"	50"	139'
46"	52"	125'
48"	54"	111'

WALL SUPPORT

Part No. WS

The Wall Support is used to provide chimney support along a wall. The wall support will maintain the required clearance to combustible structures when properly installed and can support (C) (See Chart Below) feet of vertical chimney.

Note: This part must be placed at the connection of two flue sections.



Part No. WS			
I.D.	A	B	C(FT)
5-6"	11"	12 3/8"	193'
7-8"	13"	14 3/8"	171'
9-10"	14"	15 3/4"	164'
11-12"	15"	17 1/16"	153'
13-14"	17"	19 1/8"	148'
15-16"	18"	20 7/16"	140'
17-18"	20"	22 1/2"	134'
19-20"	21"	24 1/8"	129'
21-22"	23"	26 3/16"	123'
23-24"	24"	27 1/2"	119'
25-26"	26"	29 1/2"	113'
27-28"	27"	30 7/8"	108'
29-30"	29"	32 7/8"	103'
31-32"	30"	34 1/4"	120'
33-34"	32"	36 1/4"	114'
35-36"	33"	37 5/8"	88'
37-38"	35"	39 9/16"	81'
39-40"	36"	40 15/16"	77'
41-42"	38"	42 15/16"	73'
43-44"	39"	44 5/16"	68'
45-46"	44"	47"	64'
47-48"	45"	49 11/16"	60'

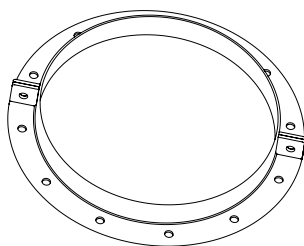
SYSTEM COMPONENTS

CUSTOM DIMENSIONS ARE AVAILABLE TO SUIT YOUR NEEDS IN EVEN AND ODD SIZES

FULL RING

Part No. FR

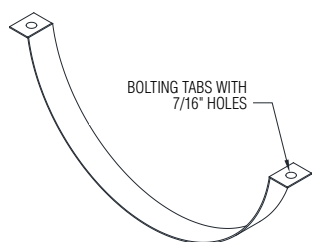
The Full Ring is used to guide horizontal and vertical runs. The part is simply bolted around the outer shell then rigidly connected to the building structure.



HANGER

Part No. HG

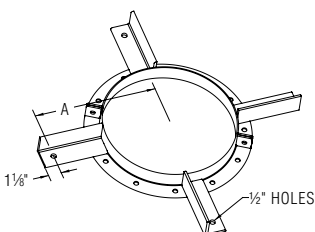
The Hanger is used to support long horizontal runs, placed under the flue and then supported by rods connecting to the building structure.



FLOOR/ROOF GUIDE

Part No. FRG

The Floor/Roof Guide is used at the penetration of floors and roofs to guide the chimney. This part is designed to absorb lateral loads only. It will not support vertical chimney sections.

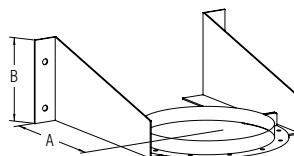


Part No. FRG	
I.D.	A
5-6"	8 ⁷ / ₈ "
7-8"	10 ³ / ₈ "
9-10"	11 ³ / ₈ "
11-12"	12 ³ / ₈ "
13-14"	13 ³ / ₈ "
15-16"	14 ³ / ₈ "
17-18"	15 ³ / ₈ "
19-20"	16 ³ / ₈ "
21-22"	17 ³ / ₈ "
23-24"	18 ³ / ₈ "
25-26"	19 ³ / ₈ "
27-28"	20 ³ / ₈ "
29-30"	21 ³ / ₈ "
31-32"	22 ³ / ₈ "
33-34"	23 ³ / ₈ "
35-36"	24 ³ / ₈ "
37-38"	25 ³ / ₈ "
39-40"	26 ³ / ₈ "
41-42"	27 ³ / ₈ "
43-44"	28 ³ / ₈ "
45-46"	29 ³ / ₈ "
47-48"	30 ³ / ₈ "

WALL GUIDE

Part No. WG

The Wall Guide is used to guide long vertical runs that are placed adjacent to walls. This part will maintain proper clearance to combustibles when properly installed.



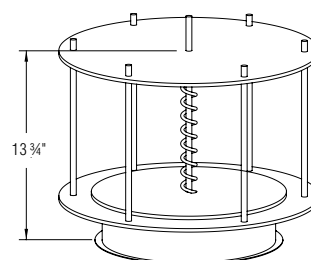
Part No. WG		
I.D.	A	B
5-6"	11"	7 ¹³ / ₁₆ "
7-8"	13"	8 ¹ / ₂ "
9-10"	14"	8 ⁵ / ₈ "
11-12"	15"	9"
13-14"	17"	9 ⁷ / ₁₆ "
15-16"	18"	9 ³ / ₄ "
17-18"	20"	10 ¹ / ₄ "
19-20"	21"	10 ⁹ / ₁₆ "
21-22"	23"	11 ¹ / ₈ "
23-24"	24"	11 ⁵ / ₁₆ "
25-26"	26"	11 ⁷ / ₈ "
27-28"	27"	12 ¹ / ₈ "
29-30"	29"	12 ¹¹ / ₁₆ "
31-32"	30"	12 ¹⁵ / ₁₆ "
33-34"	32"	13 ¹ / ₂ "
35-36"	33"	13 ¹¹ / ₁₆ "
37-38"	35"	14 ⁵ / ₁₆ "
39-40"	36"	14 ¹ / ₂ "
41-42"	38"	15 ¹ / ₁₆ "
43-44"	39"	15 ⁵ / ₁₆ "
45-46"	44"	16 ¹¹ / ₁₆ "
47-48"	45"	16 ⁷ / ₈ "

PRESSURE RELIEF VALVE

Part No. PRV

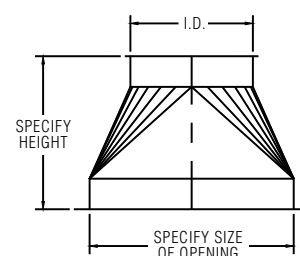
The Pressure Relief Valve is used in generator exhaust systems to prevent damage resulting in the ignition of unburned fuel. This component complies with NFPA 37.

Valves are set to 1 PSI.

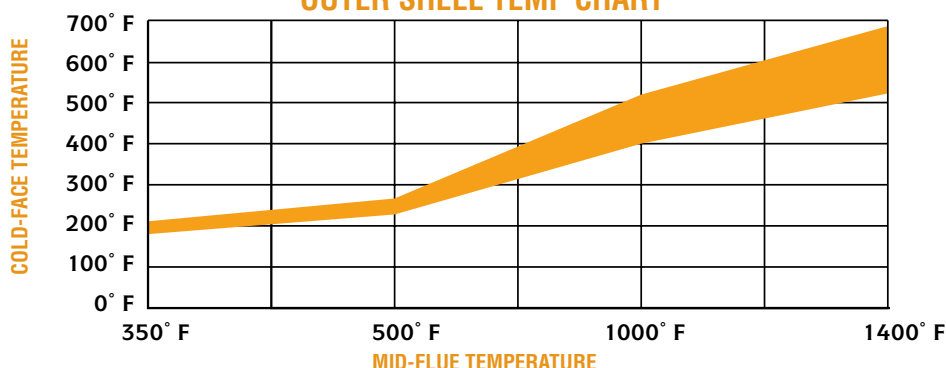


SQUARE-TO-ROUND TRANSITIONS

The Square-to-Round Transitions are used when connecting to appliances with square or rectangular outlets. The base can be raw for field welding or flanged for field drilling and bolting.



OUTER SHELL TEMP CHART



PA WEIGHT CHART

Part Description	Part No.	Inside Diameter (Inches)																					
		6"	8"	10"	12"	14"	16"	18"	20"	22"	24"	26"	28"	30"	32"	34"	36"	38"	40"	42"	44"	46"	48"
14" to 17" Adjustable	18AL	12 lbs.	15	18	21	24	27	30	33	36	39	42	45	48	51	54	69	86	90	95	99	104	108
16" to 21" Adjustable	22AL	13 lbs.	17	20	24	28	31	35	38	42	45	49	52	56	59	63	81	100	105	110	115	120	126
20" to 29" Adjustable	30AL	17 lbs.	21	26	30	35	40	44	49	53	58	62	67	71	76	80	104	128	135	141	148	154	161
27½" to 44" Adjustable	45AL	23 lbs.	30	36	43	49	56	62	68	75	81	88	94	101	107	113	148	181	190	199	209	218	227
29" Straight Section	29S	16 lbs.	20	24	28	32	36	41	45	49	53	57	61	66	70	74	95	118	124	130	136	142	148
30 Degree Elbow	30L	8 lbs.	10	12	15	18	20	23	26	30	33	36	40	44	47	51	67	85	91	98	105	112	119
45 Degree Elbow	45L	9 lbs.	11	14	17	20	24	27	31	35	40	44	49	54	59	64	85	108	116	125	135	144	154
45 Degree Tee	45LT	18 lbs.	26	34	43	53	64	76	88	102	117	133	150	168	186	205	283	356	388	422	457	493	531
47" Straight Section	47S	23 lbs.	30	36	43	49	56	62	68	75	81	88	94	101	107	113	148	181	190	199	209	218	227
59" Straight Section	59S	-	38	47	54	61	70	77	85	94	101	-	-	-	-	-	-	-	-	-	-	-	-
90 Degree Elbow	90L	12 lbs.	17	23	30	38	46	55	65	76	88	-	-	-	-	-	-	-	-	-	-	-	-
90 Degree Grease Tee	90GT	16 lbs.	20	26	32	38	45	53	62	70	79	89	100	110	121	133	181	226	246	266	287	309	330
90 Degree Tee	90T	15 lbs.	19	25	31	37	44	52	60	68	77	87	97	107	118	130	176	221	240	259	280	301	322
Abrupt Increaser	AI	7 lbs.	8	10	11	13	15	16	18	20	21	23	24	26	28	29	31	39	41	43	45	47	49
Base Drain	BD	12 lbs.	15	17	20	23	26	28	31	34	37	39	42	45	48	51	59	72	76	79	83	87	90
Bellows Section	BS	13 lbs.	16	19	22	26	29	32	35	39	42	45	49	52	55	59	75	93	98	103	107	112	117
Boiler Kit Flanged	BKF	7 lbs.	8	10	11	13	15	16	18	20	21	23	24	26	28	29	31	39	41	43	45	47	49
Boiler Kit Raw	BKR	4 lbs.	5	6	7	8	8	9	10	11	12	13	14	15	16	17	25	26	27	29	30	31	
Drain Section	DS	11 lbs.	14	17	20	23	26	29	32	35	37	40	43	46	49	52	66	83	87	91	95	99	103
Drain Tee Cap	DTC	5 lbs.	6	7	8	9	11	12	14	16	18	20	22	25	27	30	39	51	55	59	64	69	74
End Cap	EC	4 lbs.	5	6	7	8	10	11	13	15	17	19	21	24	26	29	38	50	54	58	63	68	73
Fan Adapter	FA	7 lbs.	8	10	11	13	15	16	18	20	21	23	24	26	28	29	31	39	41	43	45	47	49
Flashing	FL	11 lbs.	12	13	15	16	18	19	21	22	24	25	27	29	30	32	34	35	37	39	40	42	44
Floor/Roof Guide	FRG	10 lbs.	10	11	12	15	16	17	18	19	24	25	27	27	30	30	32	33	34	35	36	38	39
Full Ring	FR	3 lbs.	4	5	6	9	10	11	12	13	18	19	21	21	24	24	26	27	28	29	30	32	33
Guy Section	GS	9 lbs.	11	13	14	16	18	20	22	23	25	27	29	31	32	34	36	42	44	46	48	50	52
Half Ring	HR	2 lbs.	2	3	3	5	5	6	6	7	9	10	11	11	12	12	13	14	14	15	15	16	17
Horizontal Drain	HD	11 lbs.	14	17	20	23	26	29	32	35	37	40	43	46	49	52	66	83	87	91	95	99	103
Insulated Thimble	IT	20 lbs.	22	25	28	31	33	36	39	42	44	47	50	52	55	58	61	63	66	69	72	74	77
Nozzle Section	NS	11 lbs.	14	17	20	23	26	29	32	35	37	40	43	46	49	52	66	83	87	91	95	99	103
Rain Cap	CC	9 lbs.	11	13	16	18	21	24	27	31	34	37	41	45	52	57	65	73	79	86	92	99	105
Rain Collar	RC	4 lbs.	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13	14	14	15
Support Plate	SP	31 lbs.	36	42	47	53	58	64	70	76	99	107	114	122	130	138	146	186	196	206	217	227	238
Tapered Increaser	TI	13 lbs.	16	20	23	27	30	33	37	40	44	47	50	54	57	61	78	97	102	106	111	116	121
Top Section	TS	3 lbs.	4	5	5	6	7	8	9	9	10	11	12	12	13	14	17	21	22	23	24	25	26
Variable Section	VS	23 lbs.	30	36	43	49	56	62	68	75	81	88	94	101	107	113	148	181	190	199	209	218	227
Wall Guide	WG	14 lbs.	17	19	21	26	28	31	34	37	44	48	50	53	57	60	62	66	69	73	75	85	87
Wall Support	WS	51 lbs.	61	73	84	97	108	124	138	156	186	206	222	244	262	285	304	360	381	416	439	477	501

All weights shown above are actual weights, for shipping weights multiply by 1.25

SAMPLE SPECIFICATION - MODEL PA

The factory-built modular chimney shall be laboratory tested and listed in accordance with Underwriters Laboratories Standard UL 103, Standard for factory-built chimneys for building heating appliances, UL 2561, Standard for 1400°F factory-built chimneys for use with building heating equipment burning gas, solid or liquid fuels with flue gases not exceeding 1400°F continuous operations and 1800°F intermittent operation for a 10 minute duration. It shall also be tested and listed for use as a Grease Duct in accordance with UL 1978. Sections shall bear the UL listing mark and cUL listing mark for Canada. Sections shall be sealed with banded flanges and joint sealant specific to the application.

Inner shell material shall be type 304 stainless steel for natural gas and number 2 oil fired appliances, type 316 stainless steel for coal, number 4 and number 6 oil fired appliances. Inner shell thickness shall be .036" for 5" to 36" diameter systems and .048" for 37" to 48" diameter systems. All inner shell seams shall be full penetration welded the entire length of the pipe section. Riveted, tack or spot welded seams are not permitted.

Outer shell material shall be 430 stainless steel with a thickness of .028" for 5" to 36" diameter systems and .048" for 37" to 48" diameter systems. All outer shell seams shall be full penetration welded the entire length of the pipe section. Riveted, tack or spot welded seams are not permitted.

Between the inner and outer shells there shall be a minimum 1" air gap. Stainless steel centering clips shall be welded to the outer shell to maintain the 1" spacing and ensure concentricity of the shells.

Breeching and chimney sections, when installed according to manufacturer's instructions, shall comply with national safety standards and building codes. Stacks terminating above a roof must terminate as required by code or NFPA 211.

MODEL PA STANDARD 5-YEAR WARRANTY

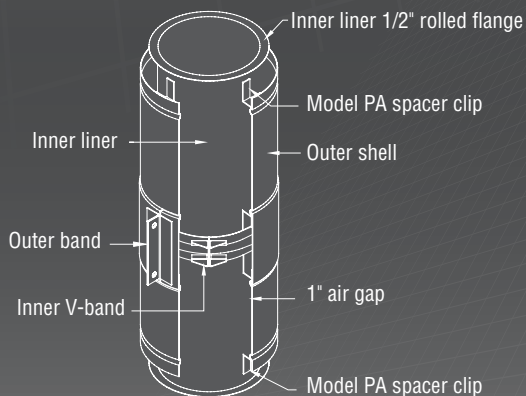
The Schebler Model PA Chimney, where installed according to manufacturer's installation instructions, is warranted by the Schebler Company for a period of five (5) years from date of system start-up, against defects in material and workmanship of the product for parts only. Any defective part in the product will, at Schebler's option, either be repaired or replaced. Should the part be returned, the owner must pay all transportation charges. The repaired or replacement part will, in turn, be shipped by Schebler to the owner, freight prepaid. The warranty on any repaired or replacement part shall be for a duration of time no longer than the remaining or unexpired term of the original warranty.

This warranty does not cover labor or other service charges incurred by the owner, nor any parts not manufactured by The Schebler Company, or any other components that are not part of the Model PA Chimney Systems.

This limited warranty is extended to the purchaser subject to the satisfaction of the following conditions:

1. Generally accepted engineering practices have been followed to determine that sizing and material specifications are suitable for the application and environment involved.
2. The undamaged components have been correctly installed in accordance with the installation instructions published by The Schebler Company at the time of shipment.

The Schebler Company assumes no liability for incidental or consequential damages of any kind or for any damages resulting in whole or part from misuse, improper installation, or inadequate maintenance of the system or component part thereof. This warranty is in lieu of all other express warranties or guarantees of any kind. All implied warranties, including merchantability and fitness, are limited to the duration of the express warranty contained herein. The Schebler Company neither assumes nor does it authorize any other person to assume on its behalf any other liability in connection with the sale of its products.



MODEL PA EXTENDED 10-YEAR WARRANTY

The Schebler Company warrants owners of its Model PA Chimney against defects in material and workmanship in normal use for ten (10) years from the date of delivery to the construction site when installed, maintained and used as part of a Schebler Model PA Chimney System and in accordance with The Schebler Company specifications. The Schebler Company further warrants any portion of the chimney system repaired or replaced under this warranty for the remainder of the original warranty period.

This warranty is limited to repair or replacement of the product plus shipping cost to the failure location. This warranty does not cover any labor costs for removal or replacement of the defective product nor does this warranty cover any system components not furnished by The Schebler Company and installed as part of the system.

This limited warranty is extended to the purchaser subject to the satisfaction of the following conditions:

1. System sizing and design has been performed by Schebler personnel and design parameters provided to The Schebler Company by the responsible engineer were and are accurately representative of the operating conditions.
2. The undamaged components have been correctly installed in accordance with system design and sizing as performed by Schebler and installation instructions published by The Schebler Company at the time of shipment.
3. Proper precautions have been taken to ensure that appliance air is free of solvent or refrigerant vapors or any halogenated compound which may cause acid condensate to form within the chimney.
4. The Schebler Company has supplied the entire chimney or exhaust system from the appliance outlet to the termination of the stack.
5. Prior to start-up and thereafter, exposed aluminized steel surfaces are protected with a minimum of one base coat of primer and one finish coat of heat resistant paint at all times.

The Schebler Company assumes no liability for incidental or consequential damages of any kind or for any damages resulting in whole or part from misuse, improper installation, or inadequate maintenance of the system or component part thereof. This warranty is in lieu of all other express warranties or guarantees of any kind. All implied warranties, including merchantability and fitness, are limited to the duration of the express warranty contained herein. The Schebler Company neither assumes nor does it authorize any other person to assume on its behalf any other liability in connection with the sale of its products.



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