

# **Table of Contents**

About	2	RFS	Firestop Spacer				
Construction	1 Features3	SFC	Single-Wall Flexible Gas Vent Connector 19				
		DFC	Double-Wall Flexible Gas Vent Segment .19				
Type B Round Gas Vent Pipe & Fittings							
		Type B Ova	al Gas Vent Pipe & Fittings				
RP	Round Pipe 3" through 12"4						
R	Round Pipe 14" through 30"5	OP	Oval Pipe				
RPA/R18A	Adjustable Length Pipe6	OPA	Adjustable Oval Pipe				
REA90	0-90° Adjustable Elbow 6	OES45	Standard Elbow				
REA60	60/45° Adjustable Elbow	OEF45	Flat Elbow				
R45	45° Elbow	OT	Standard Oval Tee				
REA45	45° Adjustable Elbow7	OBC	Tee Support22				
RT	Tee8	OTC	Oval Tee Cap				
RTC	Tee Cap8	OAR	Oval-to-Round Adapter				
RYF	Wye9	OARA	Oval-to-Round Adapter				
RDH	Draft Hood Connector	RAO	Round-to-Oval Adapter				
RHW	High Wind Cap 3" through 6"10	OCP	Plate Spacers				
RM	Cap 7" through 12"10	OBPWS	Hold-Down Plate				
С	Metal Cap 14" through 30"10	OFS	Firestop Spacers				
CU	Universal Cap 14" through 30"11	OC	Oval Cap 4"24				
RN	Increaser11	ECW	Cap 4"25				
RIX	Universal Increaser/Adapter	OF	Oval Flashing				
RIX	Increaser12	OSC	Oval Storm Collar				
RRA	Female Adapter						
RAA	Male Adapter	Type B Ga	s Vent Installations				
RA	Male Adapter						
RF	Adjustable Roof Flashing Flat to 6/12 14	Gas Applia	ance Chimney Liner Systems				
RFA	Adjustable Roof Flashing 6/12 to 12/12 .14						
RTF	Tall Cone Roof Flashing	ALK	Basic Kit				
RS	Storm Collar 3" through 6"	ALKE	Extension Kit				
RS	Adjustable Storm Collar 7" through 12"15	ALK-FS	Insulated Sleeve				
SC	Adjustable Storm Collar 14" through 30".16	ALK-FC	Flex Coupler28				
RGS	Gripper Support 3" through 6"	FX-PD	Pull Down				
RSA	Support Assembly 3" through 12" 17		Adapters29				
SP	Support Plate	RLA	Female B-Vent Adapter				
RPC	Pipe Collar 3" through 8"						
RWT	Wall Thimble18						
RWB	Wall Bracket						

#### **About**

#### **Experience**

For over a century, Hart & Cooley has been a leader in the HVAC industry, offering an extensive product portfolio of grilles, registers and diffusers, flexible air duct, type-B gas vent, all-fuel chimney and chimney liners.

#### Quality

All of our products are precision engineered, manufactured with premium material and tested thoroughly in our state-of-the-art facility to guarantee optimal performance.

#### Warranty

With respect to type-B gas vent, Hart & Cooley, Inc. warrants for a period of twelve (12) months after shipment that such goods are free from defects in material and workmanship under normal service and use for which they were designed.

#### Selection

At Hart & Cooley, we proudly offer you a wide selection of over 500 SKUs of type-B gas vent products and accessories to ensure a fit for every job.

#### **Facilities**

Hart & Cooley's corporate headquarters are proudly located in Grand Rapids, MI with 9 manufacturing facilities and 5 distribution centers located across North America.

#### **Customer Service & Tech Support**

We employ a full-time support staff of nearly 30 Customer Service Representatives and 5 Technical Support Specialists. Have a question about a product or installation? Our staff is readily available to take your call and make your job easier.

#### New Website! hartandcooley.com

Checkout our brand new website, which offers a convenient search tool and contains our entire line of products in a user-friendly format.







#### Hart & Cooley

5030 Corporate Exchange Blvd. SE Grand Rapids, MI 49512

P (800) 433-6341 F (800) 223-8461

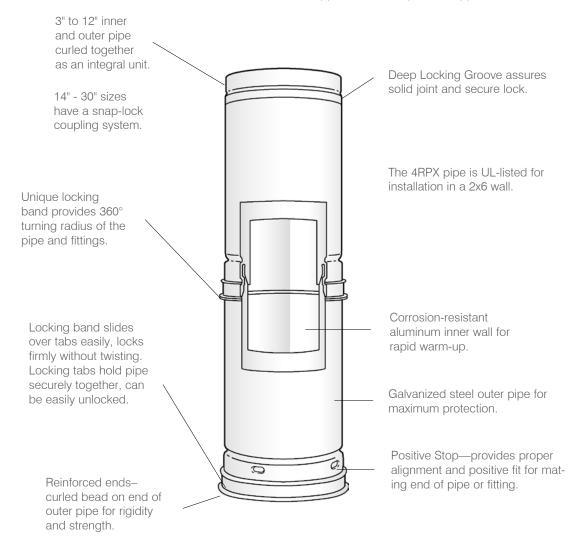
hartandcooley.com

#### **Construction Features**

Safety of the Hart & Cooley® system is assured by the double-wall, air-insulated design and locking joints. Properly installed, the vent cannot come apart through vibration, and offers protection against vent failure or fire hazard. Type B Gas Vent is designed for negative pressure applications and flue gas temperatures not exceeding 400° F above ambient for Category I appliances.

**Durability** is the result of high-quality materials and workmanship, with galvanized outer pipe and aluminum inner pipe providing protection against corrosion and external damage.

Simple installation is achieved with a complete line of adjustable fittings and various lengths of pipe. Curled ends lock together for stability and easy assembly. A full set of installation instructions are supplied with all caps and supports.





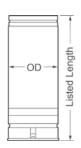
**HART & COOLEY® B-VENT** complies with the latest Underwriters Laboratories Standard No. 441

# **Type B Round Gas Vent Pipe & Fittings**

#### Round Pipe - RP\*

3" through 12"





Lock-Ring Style

- 3" to 12" pipe and fitting couplers overlap 13/8" when joined together; therefore, assembled length is 13/8" less than listed length.
- 14" to 30" sizes overlap 1" when joined together; therefore assembled length is 1" less than listed length.
- The allowable minimum clearance to combustibles is 1", except for 4RPX on which clearance is provided by locking band on pipe only when installed in a 2 x 6 stud wall.
- Outside Diameter (OD) Sizes 3" through 6" is size plus 1/2" Sizes 7" through 30" is size plus 1"

Size	Model Number	Listed Length
	3RP5	5'
	3RP4	4'
	3RP3	3'
3"	3RP24	24"
	3RP18	18"
	3RP12	12"
	3RP6	6"
	4RPX5	5'
	4RPX4	4'
- 11	4RPX3	3'
4"	4RPX24	24"
	4RPX18	18"
	4RPX12	12"
	4RPX6	6"
	5RP5	5'
	5RP4	4'
	5RP3	3'
5"	5RP24	24"
	5RP18	18"
	5RP12	12"
	5RP6	6"
	6RP5	5'
	6RP4	4'
	6RP3	3'
6"	6RP24	24"
	6RP18	18"
	6RP12	12"
	6RP6	6"

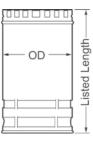
Size	Model Number	Listed Length
	7RP5	5'
	7RP4	4'
7"	7RP3	3'
1	7RP24	24"
	7RP18	18"
	7RP12	12"
	8RP5	5'
	8RP4	4'
8"	8RP3	3'
	8RP24	24"
	8RP18	18"
	8RP12	12"
	10RP3	3'
10"	10RP24	24"
	10RP18	18"
	12RP3	3'
12"	12RP24	24"
	12RP18	18"
	14R3	3'
4.411	14R24	24"
14"	14R18	18"
	14R12	12"
	16R3	3'
16"	16R24	24"
10	16R18	18"
	16R12	12"
	18R3	3'
18"	18R24	24"
10	18R18	18"
	18R12	12"

A full set of installation instructions are supplied with caps and supports.

\*Denotes UL listing

# Round Pipe - R\* 14" through 30"



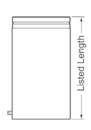


Snap-Lock Style

Size	Model Number	Listed Length
	20R3	3'
20"	20R24	24"
20	20R18	18"
	20R12	12"
	22R3	3'
22"	22R24	24"
	22R18	18"
	22R12	12"
	0.400	01
	24R3	3'
24"	24R24	24"
	24R18	18"
	24R12	12"
	26R3	3'
	26R24	24"
26"	26R18	18"
	26R12	12"
	20012	12
	28R3	3'
0011	28R24	24"
28"	28R18	18"
	28R12	12"
	30R3	3'
30"	30R24	24"
30	28R18	18"
	30R12	12"

# Adjustable Length Pipe - RPA\*/R18A





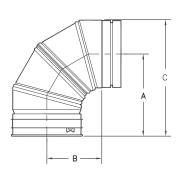
- †Overlap: Minimum 1"
- Maximum overlap on a 12" length is 10"
- Maximum overlap on an 18" length is 16"

Model Number	Size	Listed Length†
3RPA	3"	12"
4RPA	4"	12"
5RPA	5"	12"
6RPA	6"	12"
7RPA	7"	18"
8RPA	8"	18"
10RPA	10"	18"
12RPA	12"	18"
14R18A	14"	18"
16R18A	16"	18"
18R18A	18"	18"
20R18A	20"	18"
22R18A	22"	18"
24R18A	24"	18"
26R18A	26"	18"
28R18A	28"	18"
30R18A	30"	18"

# **Adjustable Elbow** - REA90\*

0-90°



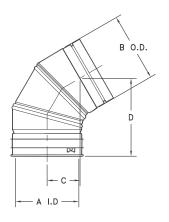


Model Number	Size	А	В	С
3REA90	3"	51/2"	33/4"	71/4"
4REA90	4"	6"	41/4"	81/4"
5REA90	5"	61/2"	43/4"	91/4"
6REA90	6"	7"	51/4"	101/4"
7REA90	7"	73/4"	6"	113/4"
8REA90	8"	81/4"	61/2"	123/4"

# Adjustable Elbow - REA60\*

60/45°



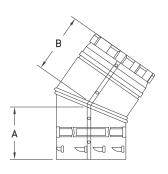


Model Number	Size	A I.D.	B O.D.	С	D
3REA60	3"	3"	31/2"	17/8"	51/4"
4REA60	4"	4"	41/2"	21/8"	51/2"
5REA60	5"	5"	51/2"	21/4"	6"
6REA60	6"	6"	61/2"	25/8"	63/8"

### **Elbow** - R45\*

45°





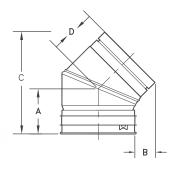
- 14" elbow is adjustable
- 16" through 30" elbows are fixed

Model Number	Size	А	В
14R45	14"	65/8"	61/2"
16R45	16"	7"	7"
18R45	18"	79/16"	71/2"
20R45	20"	81/2"	85/8"
22R45	22"	8"	75/8"
24R45	24"	85/8"	85/16"
26R45	26"	9"	9"
28R45	28"	91/2"	91/2"
30R45	30"	10"	10"

# Adjustable Elbow - REA45\*

45°

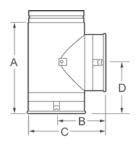




Model Number	Size	А	В	С	D
7REA45	7"	43/8"	25/8"	103/8"	43/4"
8REA45	8"	45/8"	27/8"	11 <sup>1</sup> /8"	43/4"
10REA45	10"	5"	31/4"	123/4"	43/4"
12REA45	12"	51/2"	33/4"	133/4"	43/4"

Tee - RT\*

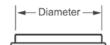




Model Number	Size	А	В	С	D
3RT3	3" x 3" x 3"	71/2"	41/2"	61/4"	41/2"
4RT4	4" x 4" x 4"	81/2"	5"	71/4"	5"
5RT5	5" x 5" x 5"	91/2"	51/2"	81/4"	51/2"
5RT4	5" x 5" x 4"	91/2"	51/2"	81/4"	51/2"
5RT3	5" x 5" x 3"	91/2"	51/2"	81/4"	51/2"
6RT6	6" x 6" x 6"	101/2"	6"	91/4"	6"
6RT4	6" x 6" x 4"	101/2"	6"	91/4"	6"
6RT3	6" x 6" x 3"	101/2"	6"	91/4"	6"
7RT7	7" x 7" x 7"	111/2"	61/211	103/4"	63/4"
8RT8	8" x 8" x 8"	121/2"	7"	113/4"	71/4"
10RT10	10" x 10" x 10"	141/2"	8"	133/4"	81/4"
12RT12	12" x 12" x 12"	161/2"	9"	153/4"	91/4"
14RT	14" x 14" x 14"	24"	113/4"	191/4"	12
16RT	16" x 16" x 16"	26"	13"	211/2"	131/4"
18RT	18" x 18" x 18"	281/2"	141/4"	233/4"	141/2"
20RT	20" x 20" x 20"	30"	151/2"	26	153/4"
22RT	22" x 22" x 22"	33"	163/4"	281/4"	17"
24RT	24" x 24" x 24"	36"	18"	301/2"	181/4"
26RT	26" x 26" x 26"	38"	19"	321/211	191/4"
28RT	28" x 28" x 28"	40"	20"	341/2"	201/4"
30RT	30" x 30" x 30"	42"	21"	361/2"	211/4"

# Tee Cap - RTC

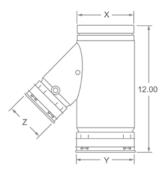




Model Number	Diameter Size
3RTC	3"
4RTC	4"
5RTC	5"
6RTC	6"
7RTC	7"
8RTC	8"
10RTC	10"
12RTC	12"
14RTCP	14"
16RTCP	16"
18RTCP	18"
20RTCP	20"
22RTCP	22"
24RTCP	24"
26RTCP	26"
28RTCP	28"
30RTCP	30"

# Wye - RYF\*

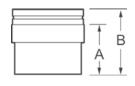




Model Number	Size X / Y / Z
4RYF33	4" / 3" / 3"
4RYF44	4" / 4" / 4"
4RYF43	4" / 4" / 3"
5RYF53	5" / 5" / 3"
5RYF54	5" / 5" / 4"
5RYF43	5" / 4" / 3"
5RYF44	5" / 4" / 4"
6RYF54	6" / 5" / 4"
6RYF53	6" / 5" / 3"
6RYF43	6" / 4" / 3"
6RYF44	6" / 4" / 4"
6RYF63	6" / 6" / 3"
6RYF64	6" / 6" / 4"

# **Draft Hood Connector** - RDH\*



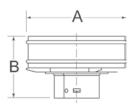


Model Number	Size	А	В
3RDH	3"	41/2"	6"
4RDH	4"	41/2"	6"
5RDH	5"	41/2"	6"
6RDH	6"	41/2"	6"
7RDH	7"	7"	81/2"
8RDH	8"	7"	81/2"
10RDH	10"	7"	81/2"
12RDH	12"	7"	81/2"

# High Wind Cap - RHW\*

3" through 6"





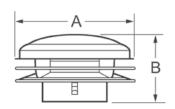
Model Number	Size	Α	В
3RHW	3"	81/4"	41/2"
4RHW	4"	91/4"	47/8"
5RHW	5"	101/2"	51/4"
6RHW	6"	111/4"	55/8"

- Exceptional performance in windy conditions
- Designed to resist nesting birds

Cap - RM\*

7" through 12"





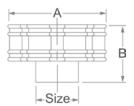
Model Number	Size	Α	В
7RM	7"	141/8"	67/8"
8RM	8"	151/8"	7"
10RM	10"	191/8"	9"
12RM	12"	211/8"	101/2"

Barriers provided in cap opening spaced less than 1" are designed to resist entry of birds

# Metal Cap - C\*

14" through 30"





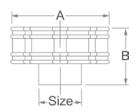
- Barriers provided in cap opening spaced less than 1" are designed to resist entry of birds
- Snap-locks onto pipe.

Size	А	В
14"	22"	11"
16"	25"	12"
18"	281/411	131/2"
20"	311/211	15"
22"	341/211	161/2"
24"	373/4"	18"
26"	42"	191/2"
28"	44"	21"
30"	48"	221/2"
	14" 16" 18" 20" 22" 24" 26"	14" 22" 16" 25" 18" 281/4" 20" 311/2" 22" 341/2" 24" 373/4" 26" 42" 28" 44"

# Universal Cap - CU\*

14" through 30"



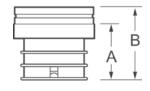


- Barriers provided in cap opening spaced less than 1" are designed to resist entry of birds
- Slips into most B Vent

Model Number	Size	А	В
14CU	14"	22"	11"
16CU	16"	25"	12"
18CU	18"	281/4"	131/2"
20CU	20"	311/2"	15"
22CU	22"	341/2"	161/2"
24CU	24"	373/4"	18"
26CU	26"	42"	191/2"
28CU	28"	44"	21"
30CU	30"	48"	221/2"

#### Increaser - RN\*





I	Model Number	Size	Α	В
	3RN4	3" to 4"	33/4"	51/4"
	3RN5	3" to 5"	33/4"	51/4"
	3RN6	3" to 6"	33/4"	51/4"
	3RN7	3" to 7"	33/4"	51/4"
	4RN5	4" to 5"	33/4"	51/4"
	4RN6	4" to 6"	33/4"	51/4"
	4RN7	4" to 7"	33/4"	51/4"
	5RN6	5" to 6"	33/4"	51/4"
	6RN7	6" to 7"	33/4"	51/4"
	6RN8	6" to 8"	33/4"	51/4"
	7RN8	7" to 8"	37/8"	53/8"
	8RN10	8" to 10"	37/8"	53/8"
	8RN12	8" to 12"	37/8"	53/8"
	10RN12	10" to 12"	37/8"	53/8"

# Universal Increaser/Adapter - RIX\*



Adapts and increases from locking ring style, small-diameter vent pipe to new snap-lock large-diameter vent pipe

Model Number	Diameter Size
8RIX14U	8" to 14"
10RIX14U	10" to 14"
10RIX16U	10" to 16"
10RIX18U	10" to 18"
12RIX14U	12" to 14"
12RIX16U	12" to 16"
12RIX18U	12" to 18"
12RIX20U	12" to 20"

### Increaser - RIX\*

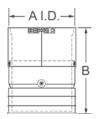


Model Number	Diameter Size
14RIX16	14" to 16"
14RIX18	14" to 18"
16RIX18	16" to 18"
14RIX20	14" to 20"
16RIX20	16" to 20"
18RIX20	18" to 20"
14RIX22	14" to 22"
16RIX22	16" to 22"
18RIX22	18" to 22"
20RIX22	20" to 22"
16RIX24	16" to 24"
18RIX24	18" to 24"
20RIX24	20" to 24"

Model Number	Diameter Size
22RIX24	22" to 24"
18RIX26	18" to 26"
20RIX26	20" to 26"
22RIX26	22" to 26"
24RIX26	24" to 26"
20RIX28	20" to 28"
22RIX28	22" to 28"
24RIX28	24" to 28"
26RIX28	26" to 28"
22RIX30	22" to 30"
24RIX30	24" to 30"
26RIX30	26" to 30"
28RIX30	28" to 30"

# Female Adapter - RRA\*



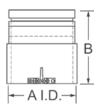


Model Number	Size	I.D. A	В
3RRA	3"	33/4"	6"
4RRA	4"	43/4"	6"
5RRA	5"	53/4"	6"
6RRA	6"	63/4"	6"

Adapts Hart & Cooley vent to other brands of B vent (ours to theirs)

# Male Adapter - RAA\*





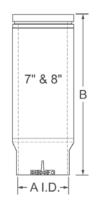
Model Number	Size	I.D. A	В
3RAA	3"	311/16"	6"
4RAA	4"	411/16"	6"
5RAA	5"	511/16"	6"
6RAA	6"	611/16"	6"
7RAA	7"	711/16"	81/2"
8RAA	8"	811/16"	81/2"

Adapts thicker wall brands of B vent to Hart & Cooley vent (theirs to ours)

# Male Adapter - RA\*







Model Number	Size	I.D. A	Dim. B
3RA	3"	39/16"	6"
4RA	4"	49/16"	6"
5RA	5"	59/16"	6"
6RA	6"	69/16"	6"
7RA	7"	79/16"	173/4"
8RA	8"	89/16"	173/4"

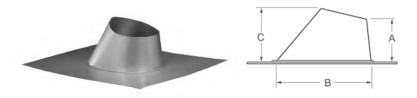
Adapts other brands of B vent to Hart & Cooley vent (theirs to ours)

Competitive	Pipe	Airspace	Adapter	Model
Manufacturer	Diameter		Male	Female
Metalbestos	3" - 6"	1/4"	RA or RPA†	RRA
	7" - 8"	1/4"	RA	-
Metal Fab	3" - 6"	1/4"	RA or RPA†	RRA
	7" - 8"	1/2"	RPA	-
AmeriVent	3" - 6"	1/ <sub>4</sub> "	RA or RPA†	RRA
	7" - 8"	1/ <sub>2</sub> "	RPA	-
Air-Jet	3" - 6" 7" - 8"	3/8" 3/8"	RAA RAA	-
DuraVent	3" - 6"	5/ <sub>16</sub> "	RAA	RRA
	7" - 8"	5/ <sub>16</sub> "	RAA	-

†RPA, the Adjustable Length, can be found on page 4

# Adjustable Roof Flashing - RF

Flat to 6/12



Model Number	Size	А	В	C.
3RF	3"	3"	61/8"	41/8"
4RF	4"	31/4"	73/8"	41/8"
5RF	5"	31/2"	85/8"	43/4"
6RF	6"	33/4"	10"	51/4"
7RF	7"	4"	11 <sup>1</sup> /8"	63/8"
8RF	8"	41/4"	131/8"	63/4"
10RF	10"	43/4"	155/8"	71/2"
12RF	12"	43/4"	18"	8"
14RF	14"	51/4"	21"	91/4"
16RF	16"	51/4"	231/4"	91/2"
18RF	18"	53/4"	25 <sup>7</sup> /8"	101/2"
20RF	20"	53/4"	281/8"	11"
22RF	22"	61/4"	305/8"	12"
24RF	24"	61/4"	327/8"	121/2"
26RF	26"	NA	NA	12"
28RF	28"	NA	NA	12"
30RF	30"	NA	NA	13"

# Adjustable Roof Flashing - RFA

6/12 to 12/12



Available in 3" through 8"

Model Number	Size	А	В	С
3RFA	3"	51/2"	6"	71/4"
4RFA	4"	53/8"	73/8"	79/16"
5RFA	5"	55/8"	85/8"	85/8"
6RFA	6"	53/8"	10"	813/16"
7RFA	7"	53/8"	11 <sup>7</sup> /8"	93/4"
8RFA	8"	51/4"	13"	101/16"

# Tall Cone Roof Flashing - RTF

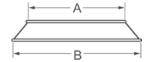


Model Number	Size	А	В
3RTF	3"	11"	71/2"
4RTF	4"	11"	71/2"
5RTF	5"	11"	71/2"
6RTF	6"	11"	71/2"
7RTF	7"	11"	11"
8RTF	8"	11"	11"
10RTF	10"	11"	16'
12RTF	12"	11"	16"
14RTF	14"	11"	191/4"
16RTF	16"	11"	191/4"
18RTF	18"	11"	235/8"
20RTF	20"	11"	235/8"
22RTF	22"	11"	275/8"
24RTF	24"	11"	275/8"
26RTF	26"	11"	319/16"
28RTF	28"	11"	319/16"
30RTF	30"	11"	319/16"

### Storm Collar - RS

3" through 6"



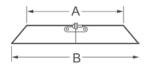


Size	А	В
3"	31/2"	65/8"
4"	41/2"	75/8"
5"	51/2"	85/8"
6"	61/2"	95/8"
	3" 4" 5"	3" 31/2" 4" 41/2" 5" 51/2"

# **Adjustable Storm Collar** - RS

7" through 12"



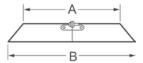


Model Number	Size	А	В
7RS	7"	8"	10 <sup>7</sup> /8"
8RS	8"	9"	11 <sup>7</sup> /8"
10RS	10"	11"	141/2"
12RS	12"	13"	161/2"

### Adjustable Storm Collar - SC

14" through 30"





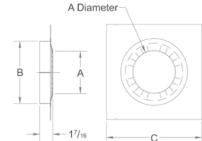
- Designed to be snug around vent pipe for a weather-tight fit
- For use with roof flashing and caulk

Model Number	Size	А	В
14SC	14"	15"	187/8"
16SC	16"	17"	211/4"
18SC	18"	19"	231/4"
20SC	20"	21"	2515/16"
22SC	22"	23"	285/16"
24SC	24"	25"	3011/16"
26SC	26"	27"	331/16"
28SC	28"	29"	351/16"
30SC	30"	31"	371/16"

# **Gripper Support** - RGS\*

3" through 6"





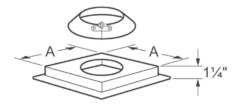
Model Number 3RGS 3" 31/2" 51/2" 9" 4RGS 41/2" 61/2" 10" 5RGS 5" 51/2" 71/2" 11" 6RGS  $6^{1/2}$   $8^{1/2}$ 12" 7RGS 71/2" 13" 8RGS 81/211 14" 10RGS 10" 101/2" 16"

- Supports 30 feet of pipe
- Acts as a firestop
- 7", 8" and 10" not UL-listed

# Support Assembly - RSA\*

3" through 12"



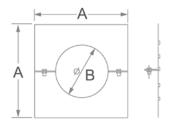


- Supports 30 feet of pipe
- · Acts as a firestop

Model Number	Size	А
3RSA	3"	55/8"
4RSA	4"	65/8"
5RSA	5"	75/8"
6RSA	6"	85/8"
7RSA	7"	101/8"
8RSA	8"	111/8"
10RSA	10"	131/8"
12RSA	12"	151/8"

# Support Plate - SP\*





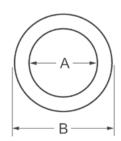
Supports 30 feet of pipe

Model Number	Size	А	В
14SP	14"	145/8"	14"
16SP	16"	165/8"	16"
18SP	18"	185/8"	18"
20SP	20"	205/8"	20"
22SP	22"	225/8"	22"
24SP	24"	245/8"	24"
26SP	26"	265/8"	26"
28SP	28"	285/8"	28"
30SP	30"	305/8"	30"

# Pipe Collar - RPC

3" through 8"



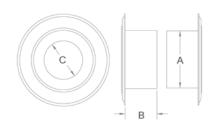


To cover a rough opening

Model Number	Size	А	В
3RPC	3"	35/8"	83/4"
4RPC	4"	45/8"	83/4"
5RPC	5"	55/8"	107/8"
6RPC	6"	65/8"	12 <sup>7</sup> /8"
7RPC	7"	81/8"	147/8"
8RPC	8"	91/8"	16 <sup>7</sup> /8"

#### Wall Thimble - RWT





Number	Size	Α	В	С
3RWT	3"	51/2"	31/16"	39/16"
4RWT	4"	61/2"	31/16"	49/16"
5RWT	5"	71/2"	31/16"	59/16"
6RWT	6"	81/211	31/4"	69/16"
7RWT	7"	10"	31/4"	81/16"
8RWT	8"	11"	31/4"	91/16"

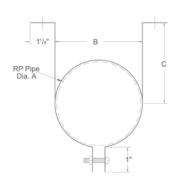
- Provides necessary clearance to combustibles
- Sleeve is adjustable from 3" to 6"

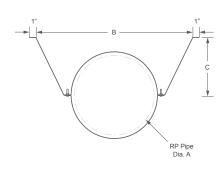
#### Wall Bracket - RWB



Model Number	Size	А	В	С
3RWB	3"	3"	31/2"	31/4"
4RWB	4"	4"	41/2"	33/4"
5RWB	5"	5"	51/2"	41/4"
6RWB	6"	6"	61/2"	43/4"
7RWB	7"	7"	8"	51/2"
8RWB	8"	8"	19 <sup>5</sup> /8"	65/8"
10RWB	10"	10"	2111/16"	713/16"
12RWB	12"	12"	233/4"	9"







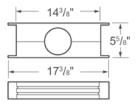
3" through 7"

8" through 12"

- Available in 3" through 12"
- 8" through 12" bracket used with perforated pipe strap supplied by others

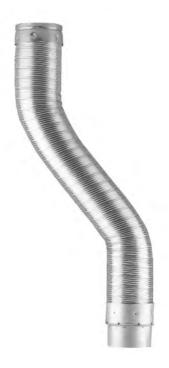
# Firestop Spacer - RFS\*





- Fits 2" x 6" wall
- Available in 4" only
- For other firestops, see installation instructions

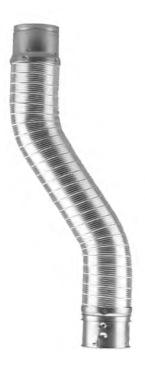
#### Single-Wall Flexible Gas Vent Connector - SFC



- Single-wall flexible construction
- · Includes an integral appliance draft hood connector for fast installation
- Locks onto Hart & Cooley Type B gas vent
- Requires only 1" clearance to combustibles per installation instructions
- UL-listed for use as a connection from an appliance to Type B gas vent in conditioned spaces only. Do not enclose
- Available in 3" through 5" diameters and 1' through 5' lengths

Diameter	Model Number	Length
	3SFC12	12"
	3SFC24	24"
3"	3SFC3	36"
	3SFC4	48"
	3SFC5	60"
	4SFC12	12"
	4SFC24	24"
4"	4SFC3	36"
	4SFC4	48"
	4SFC5	60"
	5SFC12	12"
5"	5SFC24	24"
	5SFC3	36"
	5SFC4	48"
	5SFC5	60"

### **Double-Wall Flexible Gas Vent Segment** - DFC



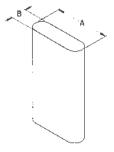
- Features double-wall, air-insulated construction
- Has Type B male/female ends for easy connection with Hart & Cooley vent
- Requires only 1" clearance to combustibles
- UL-listed for use as a connection from an appliance to Type B gas vent and as a segment of Type B gas vent
- Can be used in unconditioned spaces, such as attics and crawl spaces. Do not enclose
- Available in 3" through 5" diameters and 2' through 5' lengths

Diameter	Model Number	Length
	3DFC24	24"
3"	3DFC3	36"
3	3DFC4	48"
	3DFC5	60"
	4DFC24	24"
<b>4</b> 11	4DFC3	36"
4"	4DFC4	48"
	4DFC5	60"
	5DFC24	24"
	5DFC3	36"
5"	5DFC4	48"
	5DFC5	60"

# **Type B Oval Gas Vent Pipe & Fittings**

#### Oval Pipe - OP





Type B

Sizes 4" and 5" may be installed with 1" minimum clearance to combustibles.

#### Type BW (recessed heater)

Four-inch oval vent (when installed in 2 x 4 stud wall with recessed heater) requires clearances as determined by use of 4OBPWS hold-down plate, 40CP ceiling plate spacers, and 40FS firestop spacers.

#### Type B 2x4

Four- and five-inch oval vent (when installed in 2 x 4 stud wall, not using a recessed heater) requires clearance as determined by use of 4OFS or 5OFS firestop spacers at each ceiling level.

#### Lengths for 4" Sizes:

6", 12", 18", 24", 3', 4', 5'

#### Lengths for 5" Sizes:

18", 24", 3', 4', 5'

Model Number	Size	А	В
40P *	4"	71/16"	27/8"
50P *	5"	103/4"	27/8"

\*Add length to complete Model Number.

- Oval Pipe overlaps 13/8" when joined together; therefore, assembled length is 13/8" less than listed length.
- Offers all the advantages of round pipe, and may be used for the following types of installation.

4" Oval:

Conventional Type B

Type B-2x4 when used with firestop Type BW-2x4 with recessed heater

5" Oval:

Type B

Type B-2x4

# Adjustable Oval Pipe - OPA



#### Sizes for 12" Lengths:

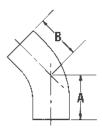
4", 5" (adjustable from 3" to 10")

Model Number	Size
4OPA	4"
5OPA	5"

The adjustable length telescopes onto standard pipe sections to permit adjustments from 3" to 10"

#### Standard Elbow - OES45



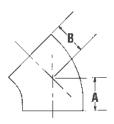


Model Number	Size	Α	В
40ES45	4"	3"	3"
50ES45	5"	31/2"	31/2"

The standard  $45^{\circ}$  elbow is used in pairs where offsets are desired in 1" minimum clearance enclosures or open spaces, such as attics or basements. Add pipe sections between pairs to produce additional offset.

#### Flat Elbow - OEF45



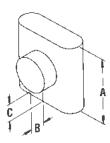


Model Number	Size	А	В
40EF45	4"	33/4"	33/4"
50EF45	5"	43/4"	43/4"

The flat  $45^{\circ}$  elbow is used in pairs where offsets are desired in 1" minimum clearance enclosures or open spaces, such as attics or basements. Add pipe sections between pairs to produce additional offset.

#### Standard Oval Tee - OT



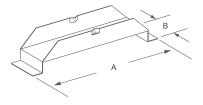


Model Number	Size	Α	В	С
4OT	4"	12"	29/16"	23/8"
5OT	5"	12"	29/16"	23/8"

The branch size and trunk size have the same diameter. The tee branch accepts either double- or single-wall pipe.

# Tee Support - OBC





Model Number	Size	Α	В
4OBC	4"	3"	111/2"
5OBC	5"	3"	12 <sup>7</sup> /8"

The tee support is used to support and center the tee. Use with the tee cap shown below.

# Oval Tee Cap - OTC

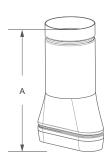


Model Number	Size
4OTC	4"
5OTC	5"

The tee cap is used for closing off the bottom of the tee

# Oval-to-Round Adapter - OAR\*



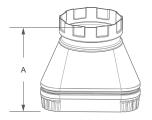


Model Number	Size	Dim. A
40AR	4"	113/8"

Adapts from oval to lock-ring style round

### Oval-to-Round Adapter - OARA



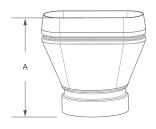


Model Number	Size	А
40ARA	4"	67/8"
5OA5RA	5"	93/8"

- The oval-to-round adapter is used for conversion of vent from
- Requires use of RAA male adapter to continue with round

# Round-to-Oval Adapter - RAO



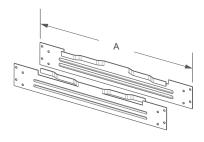


Model Number	Size	А
4RAO	4"	6 <sup>7</sup> /8"
5RA50	5"	93/8"

- The round-to-oval adapter is used for conversion of vent from round to oval
- Requires use of RRA female adapter to come from round

# Plate Spacers - OCP

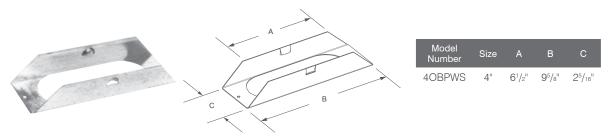




Model Number	Size	А
4OCP	4"	171/2"

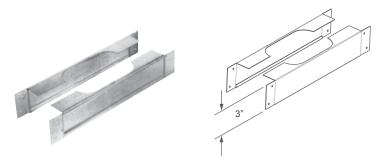
Type BW plate spacers are required at the first ceiling level above a wall furnace to center and space vent properly and to provide the required opening between floors. Firestop spacers must be used at subsequent levels.

#### Hold-Down Plate - OBPWS



The Type BW hold-down plate is required for connecting Type BW vent to a wall furnace outlet

# Firestop Spacers - OFS



Model Number	Size	Wall
4OFS	4"	2" x 4"
5OFS	5"	2" x 4"
4OFS6	4"	2" x 6"

The firestop spacers center vent in 16" O.C. stud space and serve as a firestop at the ceiling level. This is a required component for Type B 2 x 4 and multi-story Type BW installations.

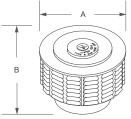
# Oval Cap - OC



Model Number	Size	А	В
OC	4"	5 <sup>3</sup> / <sub>8</sub> " x 8 <sup>1</sup> / <sub>2</sub> "	31/2"

### Cap - ECW

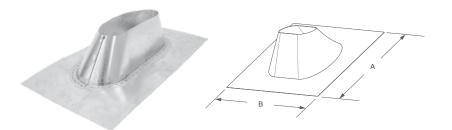




1	Model Number	Size	А	В
	5ECW	5"	97/8"	55/16"

5" Oval to Round Adapter, 50A5RA

# Oval Flashing - OF



Model Number	Size	А	В
4OF	4"	177/8"	131/2"
5OF	5"	23"	14"

The all-pitch flashing is installed either parallel or perpendicular to the roof ridge, and fits roof pitches flat to 5/12

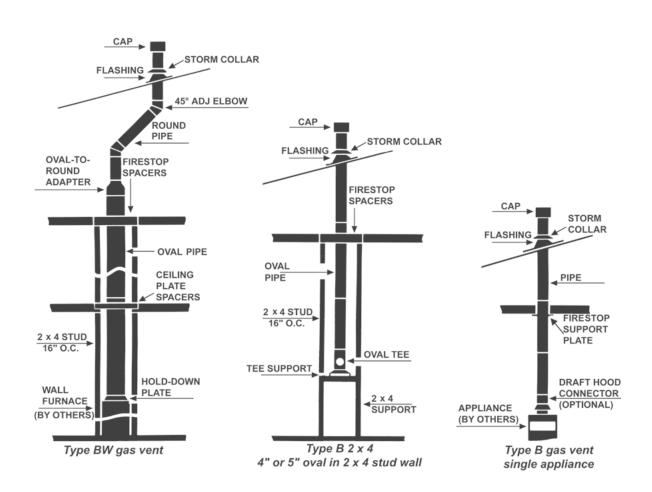
### Oval Storm Collar - OSC

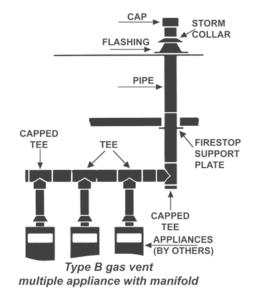


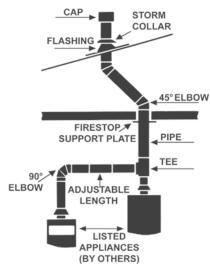
Model Number	Size
4OSC	4"
5OSC	5"

The storm collar serves as a counter flashing and requires mastic to seal to the vent pipe

# **Type B Gas Vent Installations**







Type B gas vent multiple appliance

# **Gas Appliance Chimney Liner Systems**

#### Basic Kit - ALK



- Available in 3", 4", 5", 5.5", 6", 7" and 8" diameters
- Available in 15', 25' and 35' lengths
- Listed to: UL1777 and ULC-S635
- Compatible with Type B gas vent systems
- Kit includes length, round top, flashing with 3" collar, mortar guard, fasteners and instructions

Model Number	Size	Length
3ALK15	3"	15'
3ALK25	3"	25'
3ALK35	3"	35'
4ALK15	4"	15'
4ALK25	4"	25'
4ALK35	4"	35'
5ALK15	5"	15'
5ALK25	5"	25'
5ALK35	5"	35'
55ALK25	5.5"	25'
55ALK35	5.5"	35'
6ALK25	6"	25'
6ALK35	6"	35'
7ALK25	7"	25'
7ALK35	7"	35'
8ALK25	8"	25'
8ALK35	8"	35'

#### **Extension Kit** - ALKE



- 10' flexible liner length
- Includes coupler and fastener package
- UL-listed

Model Number	Size	Length
3ALKE10	3"	10'
4ALKE10	4"	10'
5ALKE10	5"	10'
55ALKE10	5.5"	10'
6ALKE10	6"	10'
7ALKE10	7"	10'
8ALKE10	8"	10'

#### **Insulated Sleeve - ALK-FS**

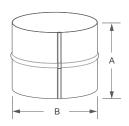


Model Number	Size
4ALK-FS	3"-4"
5ALK-FS	5"
6ALK-FS	51/2"-6"
7ALK-FS	7"
8ALK-FS	8"

- Insulation sleeve with tough poly exterior
- · Cable ties included

# Flex Coupler - ALK-FC





For fitting or joining ALK liner lengths

Model Number	Size	А	В
3ALK-FC	3"	4"	2.97"
4ALK-FC	4"	4"	3.97"
5ALK-FC	5"	4"	4.97"
55ALK-FC	51/2"	4"	5.47"
6ALK-FC	6"	4"	5.97"
7ALK-FC	7"	4"	6.97"
8ALK-FC	8"	4"	7.97"

### Pull Down - FX-PD

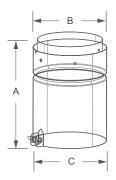


Model Number	Size
3FX-PD	3"
4FX-PD	4"
5FX-PD	5"
55FX-PD	51/2"
6FX-PD	6"
7FX-PD	7"
8FX-PD	8"

Used to stretch and lead ALK liner down chimney

# Adapters





Adapter to transition from all brands of listed Type B Gas Vent to ALK Liner

Model Number	Size	А	В	С
3ALK-VA	3"	5.88"	2.95"	3.57"
4ALK-VA	4"	5.88"	3.95"	4.57"
5ALK-VA	5"	5.88"	4.95"	5.57"
6ALK-VA	6"	5.88"	5.95"	6.57"
7ALK-VA	7"	5.88"	6.95"	8.57"
8ALK-VA	8"	5.88"	7.95"	9.57"

# Female B-Vent Adapter - RLA



Sold separately; not part of kit

Size	Α	В
3"	3"	55/8"
4"	4"	55/8"
5"	5"	55/8"
6"	6"	55/8"
7"	7"	55/8"
8"	8"	55/8"
	3" 4" 5" 6" 7"	3" 3" 4" 4" 5" 5" 6" 6" 7" 7"

Notes	

#### Hart & Cooley is proud to be an HCl brand

5030 Corporate Exchange Blvd. SE Grand Rapids, MI 49512

P (800) 433-6341 F (800) 223-8461

hartandcooleyinc.com