

**3" @ 36" dia.**

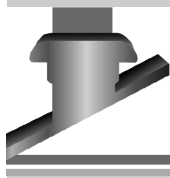
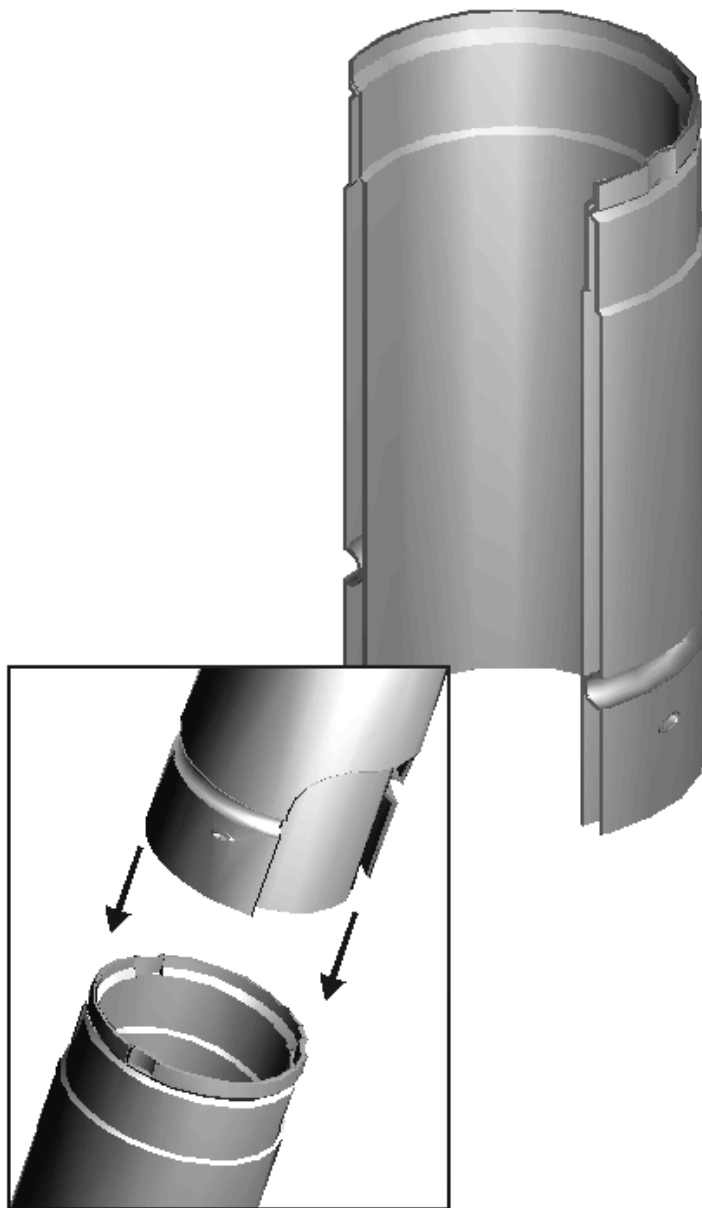
# CG TYPE B, GAS VENT

## INSTALLATION AND OPERATING INSTRUCTIONS

LISTED FOR VENTING  
GAS FIRED APPLIANCES  
CERTIFIED WITH  
DRAFT HOOD.  
THE MAXIMUM FLUE  
GAS TEMPERATURE  
MUST NOT EXCEED  
245° C (470° F)

LISTED  
ACCORDING TO:

ULC-S605  
UL-441



**SECURITY  
CHIMNEYS**

Printed in Canada

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PICG

## FOR YOUR SAFETY

- ❑ Before installation, consult your local building authority and obtain a building permit.
- ❑ Install the gas vent as described in these instructions.
- ❑ Keep these instructions for further reference.
- ❑ Only use parts supplied by Security Chimneys International Ltd. Failure to do so will void the vent listing and the manufacturer warranty.
- ❑ This vent is not intended for venting liquid or solid fuel appliances.

## SPECIAL CARE

- ❑ The gas vent is to be installed with a clearance of not less than 1" between the outer casing and any combustible.
- ❑ This vent is intended for interior use or exterior use above the roofline.

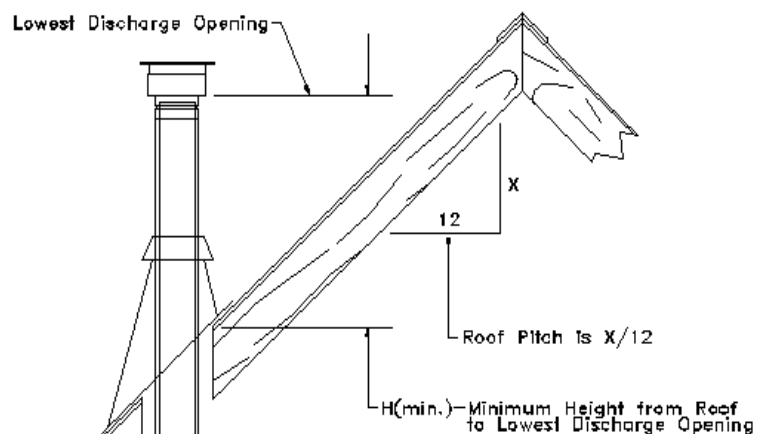
Note: For U.S. only, you may install the vent along an exterior wall.

- ❑ Maximum height of unguided vent above the roofline is 5 ft. (dia. 3" to 12") and 4 ft. (dia. 14" to 36").
- ❑ U.S.: Vent terminations should be installed in accordance with the opposite chart, providing they are at least 8 feet from a vertical wall or similar obstruction.

Canada: Vent terminations should be installed in accordance with the opposite chart, and not less than 2 ft. above any obstruction within a horizontal distance of 10 ft.

- ❑ For size 14" and up, (U.S. and Canada) vent termination shall extend 2 ft above the highest point where they pass through a building roof and at least 2 ft higher than any portion of the building within 10 ft.

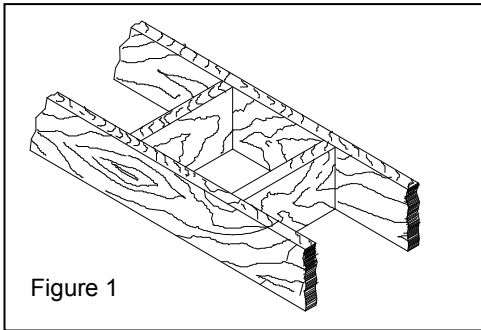
- ❑ Do not fill the 1" air space around the vent with insulation or any other material. For U.S. only: When installed outside, we recommend to enclose it in a chase. In cold climate, R12 insulation can be used to insulate the enclosure.
- ❑ Except for installation in single and two-family dwellings, gas vents which extend through any storey above that on which the connected appliance is located are to be provided with enclosures having a fire resistance rating equal to or greater than that of the floor or roof assemblies through which they pass.



Roof Pitch	U.S.		CANADA	
	H (min.)	Ft.	H (min.)	Ft.
Flat to 6/12	1.0		2.0	
6/12 to 7/12	1.25		2.0	
over 7/12 to 8/12	1.5		2.0	
over 8/12 to 9/12	2.0		2.0	
over 9/12 to 10/12	2.5		2.5	
over 10/12 to 11/12	3.25		3.25	
over 11/12 to 12/12	4.0		4.0	
over 12/12 to 14/12	5.0		5.0	
over 14/12 to 16/12	6.0		6.0	
over 16/12 to 18/12	7.0		7.0	
over 18/12 to 20/12	7.5		7.5	
over 20/12 to 21/12	8.0		8.0	

## INSTALLATION INSTRUCTIONS

1. Locate the vent as close as possible to the appliance ensuring that the installation is as direct and as straight as possible.
2. Cut and frame a hole in the floors, ceiling and roof for the vent as shown on fig.1.



VENT SIZE (in.)	HOLE SIZE (in.)
3	5 ½ x 5 ½
4	6 ½ x 6 ½
5	7 ½ x 7 ½
6	8 ½ x 8 ½
7	9 ½ x 9 ½
8	11 x 11
10	13 x 13
12	15 x 15
14	17 x 17
16	19 x 19
18	21 x 21
20	23 x 23
22	25 x 25
24	27 x 27
26	29 x 29
28	31 x 31
30	33 x 33
32	35 x 35
34	37 x 37
36	39 x 39

3. From above, place the support (KS) centered with the hole on the floor (Fig. 2 & 3).

Floor support capacity (KS)	
Vent size (in.)	Support capacity (ft)
3	100
4	100
5	100
6	100
7	100
8	60
10	60
12	60
14	60
16	60
18	60
20	50
22	50
24	50
26	40
28	40
30	40
32	30
34	30
36	30

If additional height is required, use additional support at intervals respecting the maximum height associated with each diameter.

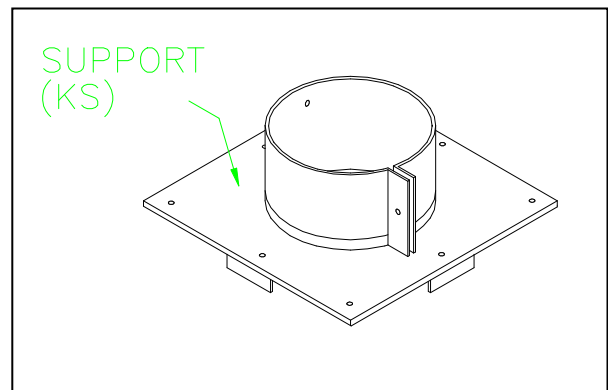


Figure 2

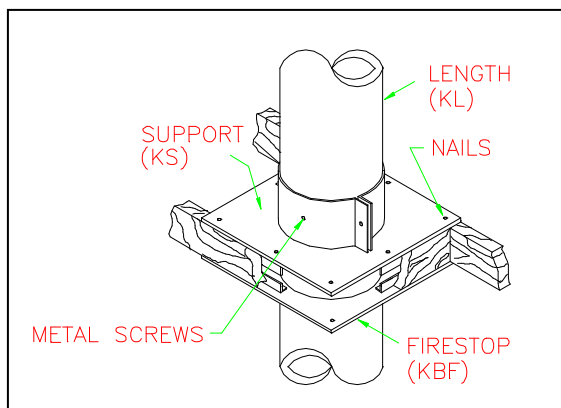


Figure 3

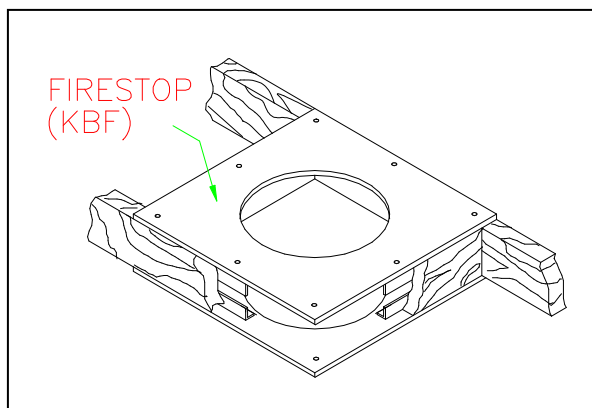


Figure 4

4. Install the KBF firestop from below (Fig.3).
5. Lower the first section from above until it reaches the appropriate location for venting the appliance. Tighten the floor support collar around the vent. Then secure the vent using 3 metal screws through the collar into the vent casing making sure that the screws do not puncture the vent flue pipe (Fig.3).
6. Install the next length on top of the first one. Push the length down until it can rotate and lock in place.
7. Continue to install sections as in # 6 until the required height is reached. Tees and elbows are installed the same way.
8. At each floor or ceiling through which the vent passes, install a firestop above the floor (Fig.4 & 6). **Note:** The joint between the outer casing and any firestop installed in a ceiling must be sealed with high temperature silicone caulking.
9. Install the roof flashing. On sloping roof, place the high side of the flashing under the shingles. Seal the joint between the roof and the flashing with roofing pitch. Nail the flashing to the roof with roofing nails.
10. Place the storm collar over the vent and the flashing. Seal the joint between the storm collar and the vent with silicone caulking.
11. Install the rain cap (KC) on the end of the vent. **CAUTION:** Rain caps incorporating bird screens are necessary and/or required in some areas but may be susceptible to blockage through freezing moisture. It is important to check the rain cap for icing during low ambient temperatures. Consult authority having jurisdiction.

### WALL BAND (KBM)

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Wall bands are required to stabilize the vent and to maintain clearance to combustibles. They must be used every 8 ft. Fasten the band legs to the wall using two ½ " spiral nails or # 8 – 1 ½ " screws.

### ROOF BRACE (KBS)

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Must be used when the vent extends more than 5 ft (dia. 3" to 12") and 4 ft (dia. 14" to 36") above the roofline.

Fit the band around the vent. Position and attach the legs to the roof at a convenient location. Tighten the band around the vent.

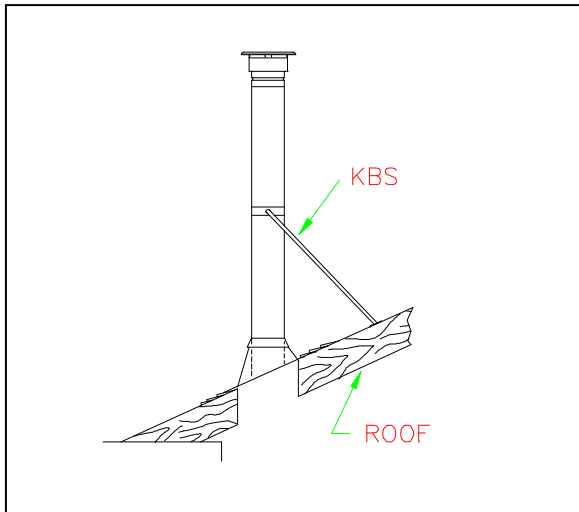


Figure 5

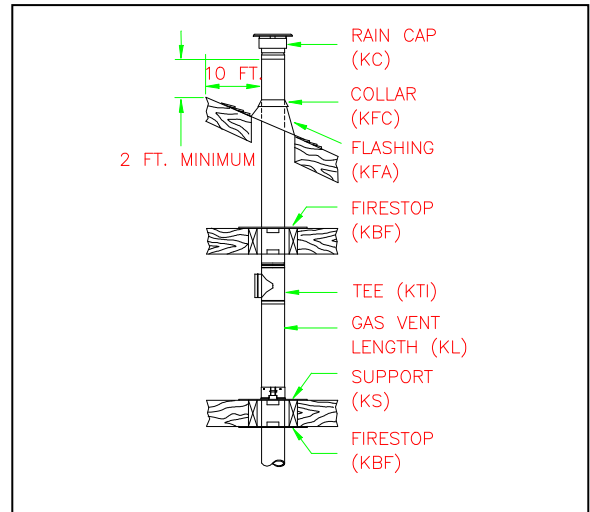


Figure 6

**OFFSET**

- Refer to the appliance instruction manual to know your offset limitation.
- A support (KS) must always be installed right above each offset (two elbows) to support the remaining chimney.
- Refer to the installation instructions on page 2 and to figure 7 for installation steps.

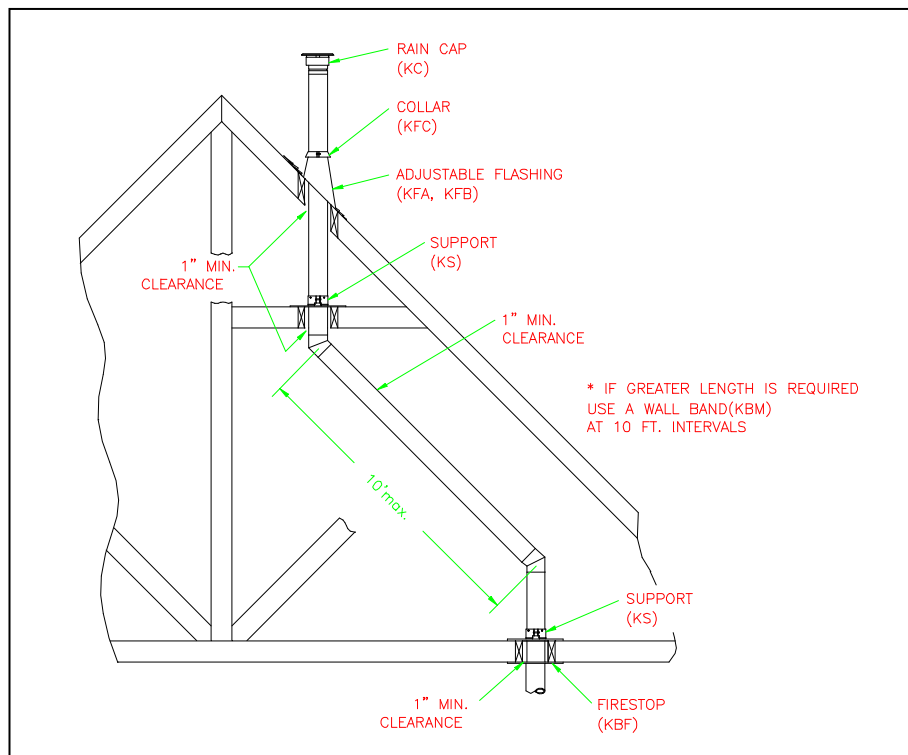
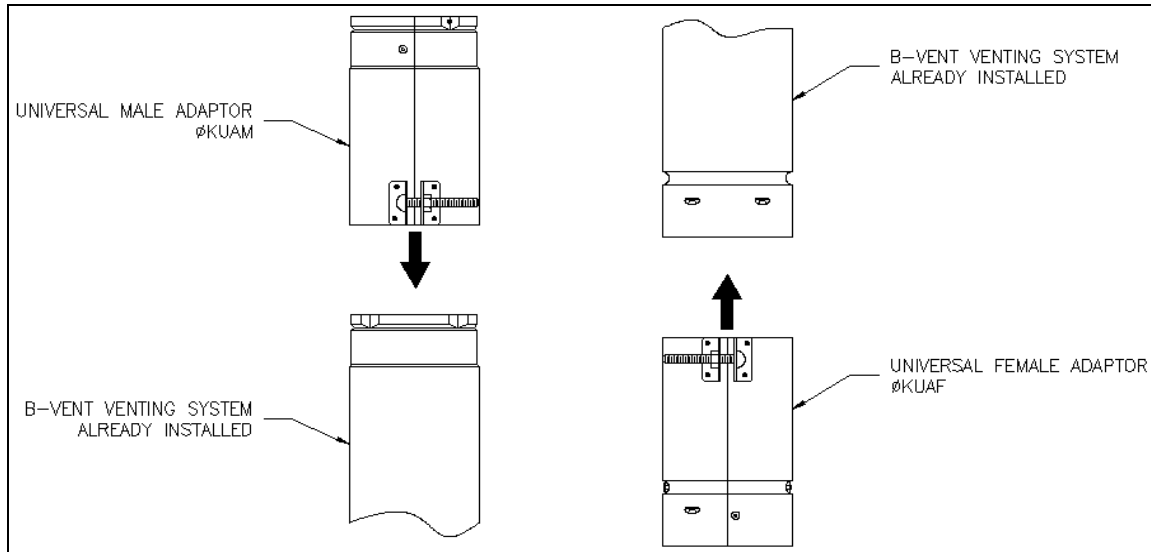


Figure 7

## UNIVERSAL ADAPTERS

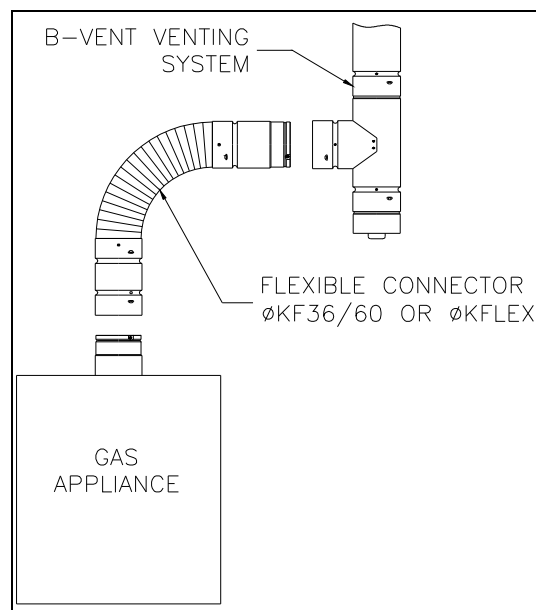
The universal adapters are intended to make the bond between Security Chimney B-vent and other brands of B-vent pipes. Usually used when adding new part to an existing venting system. Slide the fitting over the pipe and fasten it using the bolt and nut. A minimum of 3" overlap is required.



## SINGLE WALL AND DOUBLE WALL FLEXIBLE ADAPTER

The single and double wall flexible connector are used to connect the gas appliance to the B-Vent venting system. The ends of the flexible connector are equipped with male and female B-Vent locking system. The flexible connectors are not intended to support any loads. Both ends must be adequately supported. Clearances to combustibles are one inch.

**NOTE: THE FLEXIBLE CONNECTOR MUST NOT PASS THROUGH A WALL OR CEILING.**

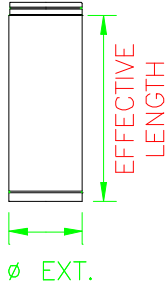


## GENERAL PARTS

### LENGTHS

#### STRAIGHT LENGTHS

Available in 7 diameters and 5 standard lengths, 1ft, 2ft, 3ft, 4ft, and 5 ft. They are easy to assemble and can be combined to obtain the required installation height. Each length is 1 ½" longer than its effective length.



#### Ref. KL

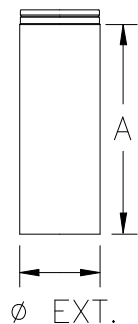
Ø int. (inch)	3	4	5	6	7	8	10
Ø ext. (inch)	3.5	4.5	5.5	6.5	7.5	9	11

#### Effective lengths (inch)

10.5	Yes	Yes	Yes	Yes	Yes	Yes	Yes
22.5	Yes	Yes	Yes	Yes	Yes	Yes	Yes
34.5	Yes	Yes	Yes	Yes	Yes	Yes	Yes
46.5	Yes	Yes	Yes	Yes	Yes	Yes	--
58.5	Yes	Yes	Yes	Yes	Yes	Yes	--

#### ADJUSTABLE LENGTHS

Used in combination with a straight length, this component makes it possible to fit a CG length perfectly either horizontally or diagonally. It allows for easy disassembly and can absorb the linear expansion of longer pipe lengths. The adjustable length is not a loadbearing component. As an expansion compensator installed vertically, it requires a support just above it.



#### Ref. KAL

Ø int. (inch)	3	4	5	6	7	8	10
Ø ext. (inch)	3.6	4.6	5.6	6.6	7.6	9.1	11.1
A (inch)	13.5	13.5	13.5	13.5	13.5	13.5	13.5

#### Adjustment

←----- 3" to 10" ----->

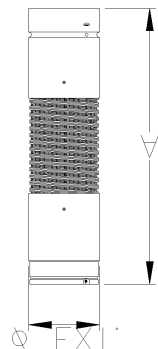
## FLEXIBLE LENGTHS

Available either in single or double wall, the flexible lengths are an easy way to connect your gas appliance to the CG B-vent system. Flexible lengths must not support any loads. The single wall length is adjustable from 36" to 60".

Single wall lengths are not certified. When used with the following equipment, clearances to combustible materials are:

Listed equipment with draft hoods and equipment listed for use with Type B gas vent: 6"

Residential boilers and furnaces with listed gas conversion burner and with draft hood: 9"

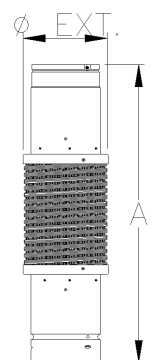


### Réf. KF36/60

Ø int. (inch)	3	4	5
Ø ext. (inch)	3.5	4.5	5.5
A (inch)	36	36	36

### Adjustment

<----- 36" to 60" ----->



### Réf. KFLEX

Ø int. (inch)	3	4	5
Ø ext. (inch)	4.4	5.4	6.4

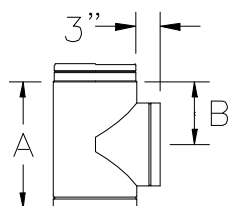
### Lengths

A (inch)	24	24	24
A (inch)	36	36	36
A (inch)	48	48	48
A (inch)	60	60	60

## TEES

### 90° TEE

Most often located at the base of a vertical vent to connect the flue to the heating appliance. It can be installed at any horizontal or vertical point for connecting other appliances or ensure access for inspection or cleaning the vent. A tee cap (TC) is available. (See table on next page for dimensions).



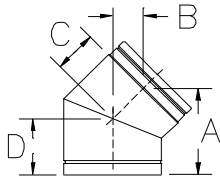
### Ref. KTI

Ø int. (inch)	3	4	5	6	7	8	10
A (inch)	8.5	8.5	10.5	10.5	12.5	14.5	16.5
B (inch)	3.5	3.5	4.5	4.5	5.5	6	7.5

## ELBOWS

### 45° ELBOW

Adjustable elbow is available from Ø 3 in. to Ø 10 in.; allows the offset of a flue or a section at specific angle between 0° and 45°. Can be combined with other elbows to deviate the chimney or for a complementary offset.



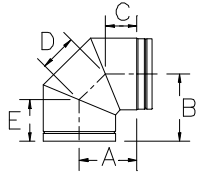
#### Ref. KE45

Ø int. (inch)	3	4	5	6	7	8	10
A (inch)	6.1	6.3	5.4	5.5	6	7.1	7.8
B (inch)	2.3	2.5	1.1	1.2	1.5	1.6	1.8
C (inch)	-	-	1.5	1.7	2.1	2.3	2.5
D (inch)	-	-	4.3	4.3	4.5	5.5	6

### 90° ELBOW

Adjustable elbow is available from Ø 3 in. to Ø 10 in.; allows the offset of a flue or a section at specific angle between 0° and 90°. Can be combined with other elbows to deviate the chimney or for a complementary offset.

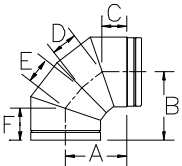
FOR Ø5" TO Ø10"



#### Ref. KE90

Ø int. (inch)	3	4	5	6	7	8	10
A (inch)	3.5	3.5	4.0	4.8	5.1	6.6	6.2
B (inch)	5.7	5.7	6.8	7.0	7.0	8.5	9.0
C (inch)	1.1	1.1	1.8	2.6	2.4	3.3	2.6
D (inch)	1.9	1.9	3.1	3.1	3.8	4.6	5.1
E (inch)	1.5	1.5	4.6	4.7	4.3	5.3	5.4
F (inch)	3.4	3.4					

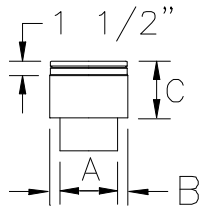
FOR Ø3" & Ø4"



## ADAPTORS

### DRAFT HOOD CONNECTOR

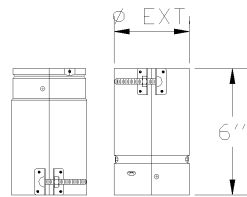
This component is designed to connect the **CG Vent** to an appliance having identical diameter.



Ref. KDH							
Ø int. (inch)	3	4	5	6	7	8	10
A (inch)	3	4	5	6	7	8	10
B (inch)	3.5	4.5	5.5	6.5	7.5	9	11
C (inch)	4	4	4	4	4	4	6

### UNIVERSAL ADAPTERS

Used to make the bond between Security Chimney B-vent and other brands of B-vent.

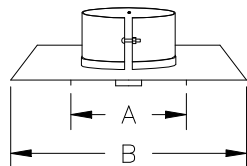


Réf. KUAF, KUAM						
Ø int. (inch)	3	4	5	6	7	8
Ø ext. (inch)	3.5	4.5	5.5	6.5	7.5	8.5

## SUPPORTS

### FLOOR SUPPORT

Supports the flue on a slab, floor or joist. A tightening collar, locked around the flue and secured to the vent by self-taping screws (supplied), rests on a horizontal plate screwed or nailed to the floor. Can be used with a firestop spacer attached beneath the ceiling, making it possible to position the vent and seal the space around the opening. Made of galvalume steel.

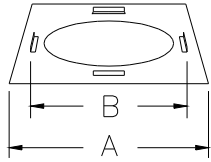


Ref. KS							
Ø int. (inch)	3	4	5	6	7	8	10
A (inch)	5 ½ x 5 ½	6 ½ x 6 ½	7 ½ x 7 ½	8 ½ x 8 ½	9 ½ x 9 ½	11x11	13X13
B (inch)	16X16	16X16	16X16	16X16	16X16	16X16	16X16
Max.H. (ft.)	100	100	100	100	100	60	60

## FIRESTOPS

### FIRESTOP PLATE

Attached on and/or under a floor or on both sides of a partition, it serves to position the vent whenever it passes through a floor, slab or joist, maintaining a minimum 1-inch clearance between the external casing of the flue and surrounding combustible materials. Made of galvalume steel.

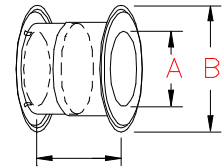


#### Ref. KBF

Ø int. (inch)	3	4	5	6	7	8	10
A (inch)	16	16	16	16	16	16	16
B (inch)	5.5 x 5.5	6.5 x 6.5	7.5 x 7.5	8.5 x 8.5	9.5 x 9.5	11x11	13x13

### WALL THIMBLE

It protects wood or other combustible materials from a possible abnormal rise in temperature where a vent pipe or connector passes through a wall. A 1" safety clearance separates the thimble from the vent length. No insulation is to be inserted in this space. This component slides out to adjust to the thickness of the wall, from 8 in./min. to 12 in./ max. Made of galvalume steel.



ADJUSTABLE

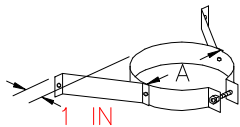
#### Ref. KNT

Ø int. (inch)	3	4	5	6	7	8
A (inch)	3.6	4.6	5.6	6.6	7.6	9.1
B (inch)	11	11	12	12	14	14

## STABILIZING BANDS

### WALL BAND

Designed for use on an interior or exterior wall, it serves to stabilise the vent while providing the required clearance to combustibles. The use of wall bands at maximum intervals of 8 ft. is recommended.

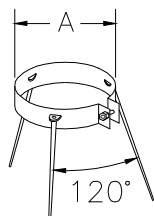


#### Ref. KBM

Ø int. (inch)	3	4	5	6	7	8	10
A (inch)	3.5	4.5	5.5	6.5	7.5	9	11

## GUY WIRE BAND

Attached to the outer casing of the vent (secured by bolts), it is designed to hold 3 guy wires at a 120° angle to stabilise a vent section extending from 5 ft. to 13 ft. beyond the last rooftop support. Recommended distance between guy wire bands is 5 ft. Made of galvalume steel.

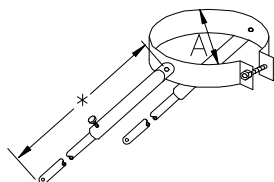


### Ref. KBH

Ø int. (inch)	3	4	5	6	7	8	10
A (inch)	3.5	4.5	5.5	6.5	7.5	9	11

## ROOF BRACE

This component comes complete with tightening collar and adjustable legs extending from 48 in. to 84 in. Used to stabilise the CG vent section extending beyond the roof in areas subjected to high winds or lengths extending more than 5 ft, beyond the last support or attachment point. Made of galvalume steel.



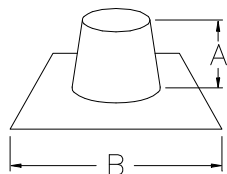
### Ref. KBS

Ø int. (inch)	3	4	5	6	7	8	10
A (inch)	3.5	4.5	5.5	6.5	7.5	9	11

## ROOF FLASHINGS

### FLAT ROOF FLASHING WITH COLLAR

This component seals a vent length extending from a flat or very slightly sloped (no more than 5° pitch) roof. Made of galvalume steel.

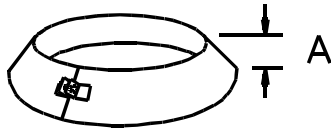


### Ref. KF

Ø int. (inch)	3	4	5	6	7	8	10
A (inch)	7	7	7	7	7	7	7
B (inch)	20	20	20	20	20	24	24

## STORM COLLAR

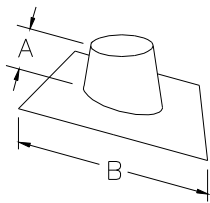
Designed to ensure a watertight seal over flashings of any kind: prefabricated or traditional flashing. Made of galvalume steel.



Ref. KFC							
Ø int. (inch)	3	4	5	6	7	8	10
A (inch)	2.5	2.5	2.5	2.5	2.5	2.5	2.5

## ADJUSTABLE ROOF FLASHING 5° TO 30°

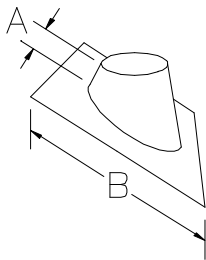
This component seals a vent length extending from a roof with a 5° to 30° pitch. Made of galvalume steel.



Ref. KFA							
Ø int. (inch)	3	4	5	6	7	8	10
A (inch)	4	4.5	4.5	5	5	3	3
B (inch)	20	20	20	20	24	24	24

## ADJUSTABLE ROOF FLASHING 30° TO 45°

This component seals a chimney length extending from a roof with a 30° to 45° pitch. Made of galvalume steel.

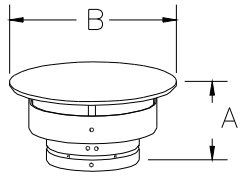


Ref. PKFB						
Ø int. (inch)	3	4	5	6	7	8
A (inch)	4.5	4.5	4.5	4.5	4.5	4.5
B (inch)	20	20	20	20	24	24

## TERMINATION CAP

### RAIN CAP

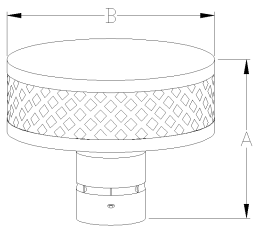
Attached to the top of the last straight length, it effectively prevents rain, snow, leaves or birds from entering the opening. Made of aluminium.



<b>Ref. KC</b>							
Ø int. (inch)	3	4	5	6	7	8	10
A (inch)	8	8	8	8	8	8	8
B (inch)	8	9	10.5	11.5	13.5	16.7	16.7

### HIGH WIND CAP

Specially designed for high winds or constant wind area.



<b>Ref. KCGD</b>							
Ø int. (inch)	3	4	5	6	7	8	10
A (inch)	8.5	8.5	8.5	9.5	9.5	11	11
B (inch)	10.5	10.5	10.5	14	14	20	20