

## INSTALLATION INSTRUCTIONS

#### **POSITIVE PRESSURE VENTING SYSTEM** LINER AND BREECHING SYSTEM

### **MODEL CT**

This installation manual will enable you to obtain a safe, efficient and dependable installation of this positive pressure chimney system. Please read and understand these instructions before beginning your installation.

Do not alter or modify the components of this chimney system under any circumstances. Any modification or alteration of the chimney system or approved accessories, including but not limited to the appliance it is connected to, may void the warranty, listings and approvals of this system and could result in an unsafe and potentially dangerous installation.

SUITABLE FOR POSITIVE PRESSURE VENTING APPLICATIONS WITH MAXIMUM 60" WATER COLUMN INTERNAL STATIC PRESSURE AT 1000 DEGREES F.

#### SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE

CT SUBMITTAL/INSTRUCTION					
PREPARED FOR:					
REFERENCE:					
LOCATION:					
CONTACT:					
TELEPHONE:	FAX:				
EMAIL:					
PREPARED BY:					



Listed to standards: ULC S-640, ULC S-635

and UL-1777

## **WARNINGS**

FAILURE TO FOLLOW THESE INSTALLATION INSTRUCTIONS COULD CAUSE FIRE, CARBON MONOXIDE POISONING, OR DEATH. IF YOU ARE UNSURE OF INSTALLATION REQUIREMENTS. CALL THE PHONE NUMBER LISTED ON THE BACK OF THESE INSTRUCTIONS.

A MAJOR CAUSE OF CHIMNEY RELATED FIRE IS FAILURE TO MAINTAIN REQUIRED CLEARANCES (AIR SPACES) TO COMBUSTIBLE MATERIALS. IT IS OF UTMOST IMPORTANCE THAT THIS CHIMNEY BE INSTALLED ONLY IN ACCORDANCE WITH THESE INSTRUCTIONS.

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#### INTRODUCTION

#### FIELD OF APPLICATION

Security<sup>™</sup> Model *CT* liner (5" @ 24") system is a positive pressure lining rated to 60" w.c. or breeching vent pipe to be used with residential, commercial or industrial heating appliances powered by solid (5" to 8" liner application only), liquid or gaseous fuels.

#### **TESTING / LISTING INFORMATION**

Security Chimney International, Ltd. model  $\it{CT}$  (5" to 24" dia.) venting system is listed with ITS (Intertek Testing Services) and the listing mark is ETL. Tested in accordance with the following standards for use with solid (5" to 8"), liquid or gaseous fuel burning appliances producing flue gas temperatures of less than 650° C (1200° F):

- ULC S-640 Standard For Lining Systems For New Masonry Chimneys
- ULC S-635 Standard For Lining Systems For Existing Masonry Or Factory-built Chimneys And Vents
- UL-1777 Chimney Liners

#### **GENERAL INFORMATION**

These instructions comprise both general guidelines and special requirements for all parts in the product line. Before specifying a design or beginning an installation please carefully review these instructions.

#### Maintenance Notes:

Chimney Cleaning: This applies to cleaning other than standard natural gas chimney applications where minimal maintenance is necessary. Keep your chimney clean. Access should be provided for the inspection and cleaning of all sections of the chimney. Have your chimney cleaned by qualified chimney sweep. It is recommended to use a nylon chimney brush of the correct size. Do not use a brush that will scratch the stainless steel interior of the chimney.

#### **FEATURES**

#### **Construction and Design**

The *CT* system is a rigid single wall, 316L or 304 stainless steel venting system. The seams are plasma or laser welded. It is designed with a 75 mm (3") overlap at the joint, coupled with two (2) ridges to prevent migration of condensation by capillary action to the outside. The joint is completed by sealing it with a high temperature silicone and applying a locking band (supplied) with a ceramic fiber gasket.

316L stainless steel for the *CT* system ensures maximum oxidation resistance to all types of flue gases and pH levels especially with oil.

The  $\it{CT}$  system showed an exceptional resistance to the pull test (ULC, UL). In small diameters, which use a lever type locking band, each joint resisted a 250 kg (551 lbs) load. In large diameters with a screw type locking band, each joint resisted a 450 kg (992 lbs) load. This exceptional load pull test allows for a secure and rigid installation.

The **CT** system is also designed to be connected to our **CI** or **CIX** chimney systems. Our **CIX** chimney system is a positive pressure vent system similar to the **CT** system.

#### LOAD BEARING CAPACITY

#### **SUPPORT**

Different types of supports are available to meet the requirements of various types of installations.

Top support

- Wall support
- Adjustable wall support
- · Roof support
- Suspension band
- · Supporting band

#### **CT CHIMNEY WEIGHT**

CHIMNEY WEIGHT IN LB/FT					
ln.	Lb/ft				
5	1.26				
6	1.52				
7	1.82				
8	2.02				
10	2.53				
12	4.05				
14	4.72				
16	5.40				
18	6.07				
20	8.43				
22	9.27				
24	10.12				
Table 2	•				

(see LOAD BEARING CHART table)

				MODEL "CT Maximum H									
Diameter - inches (mm	) →	5" (125mm)	6" (150mm)	7" (180mm)	8" (200mm)	10" (250mm)	12" (300mm)	14" (350mm)	16" (400mm)	18" (450mm)	20" (500mm)	22" (550mm)	24" (600mm)
SUPPORT - feet (met	ers)												
Support plate	(SPP)	200 (61)	200 (61)	200 (61)	200 (61)	200 (61)	185 (56)	170 (52)	155 (47)	145 (44)	130 (39.5)	115 (35)	100 (30.5)
Top support	(SS)	98 (30)	98 (30)	98 (30)	98 (30)	98 (30)	82 (25)	72 (22)	62 (19)	56 (17)	39 (12)	36 (11)	33 (10)
Roof support	(ST)	98 (30)	98 (30)	98 (30)	98 (30)	98 (30)	82 (25)	72 (22)	62 (19)	56 (17)	39 (12)	36 (11)	33 (10)
Adjustable wall support	(SMA)	NA	NA	98 (30)	98 (30)	98 (30)	82 (25)	72 (22)	62 (19)	56 (17)	39 (12)	36 (11)	33 (10)
Wall support	(SM)	98 (30)	98 (30)	98 (30)	95 (29)	75 (23)	46 (14)	41 (12.5)	36 (11)	31 (9.5)	23 (7)	21 (6.5)	20 (6)
Supporting band	(BD)	98 (30)	98 (30)	98 (30)	98 (30)	98 (30)	82 (25)	72 (22)	62 (19)	56 (17)	39 (12)	36 (11)	33 (10)
** Suspension band	(BDS)	10 (3)	10 (3)	10 (3)	10 (3)	10 (3)	10 (3)	10 (3)	8 (2.5)	8 (2.5)	7 (2)	7 (2)	7 (2)
** Horizontal run - feet (mete	ers)												
95° Tee	T95	98 (30)	98 (30)	98 (30)	98 (30)	98 (30)	82 (25)	72 (22)	62 (19)	56 (17)	39 (12)	36 (11)	33 (10)
140° Tee	T140	98 (30)	98 (30)	98 (30)	98 (30)	98 (30)	82 (25)	72 (22)	62 (19)	56 (17)	39 (12)	36 (11)	33 (10)
Suspended length (any support)		89 (27)	75 (23)	62 (19)	56 (17)	46 (14)	43 (13)	39 (12)	33 (10)	30 (9)	23 (7)	20 (6)	16 (5)
Table 1 - Model "CT" load	bearing cha	art				•							

#### INSTALLATION INFORMATION

All CT dimensions are actual lengths after assembly.

The *CT* venting system components will slip-fit together. Each component is delivered with a locking band (BS), which must be installed at all joints to ensure a correct mechanical connection between the components. For a positive pressure seal application up to 60" W.C. an 1/8th inch bead of high temperature (REDSIL) silicone must be applied at the joint of each component prior to applying a locking band. See drawing "Joint Assembly" on *page 6* for further information.

No component joint section is to be positioned in floors, ceilings or wall spaces.

The  $\it{CT}$  venting system is very flexible due to the large range of components available. All horizontal breechings are designed with a minimum  $5^{\circ}$  slope towards the appliance connector component CT Ø LD.

#### **STABILITY**

#### A) Liner, inside a chimney

Centering band (BA) should be used at every 10 feet (3m) to ensure proper centering of the liner and for stability. Supports are required at intervals specified in *Table 1*.

#### B) Liner, above a chimney or vent above a roof line.

Top support (SS) should be used on top of a chimney in order to support the liner. No extra support or braces are required for freestanding installations extending up to 5 feet (1.5m) above the roof line in regions with normal weather conditions.

In *coastal* regions or reagions subject to high winds and for installation extending up to *9 feet (3m) above the roof line* a Roof Brace (BT) must be used. Angle telescopic legs allow the brace to adapt to any roof pitch.

**Beyond 5 feet (1.5m)** and **up to 13 feet (4m)** above the roof line, the installation can be stabilized using a Guy-wire Band (BH).

#### C) Vent along a vertical surface

Wall band (BM) and the wall band extension (BE) ensure the stability of the vent. These are not load bearing components.

They should be installed at every 8 feet (2.5m) after any support on outside wall and 12 feet (3.5m) on interior wall.

The wall band extension (BE) used in combination with at wall band allows the clearance provided by the wall band to extend from 2 inches (50mm) up to 5 inches (85mm).

#### D) Breeching system

Suspension bands (BDS) should be used at every 10 feet (3m) (see *table 1* - load bearing chart) to support the breeching. It must also be used at every change of direction and change of diameters.

#### **ADJUSTMENT**

To facilitate the installation of a horizontal or diagonal venting section, an adjustable length is available. The adjustable length can be cut to fit shorter component but when installed must protrude into the component by a minimum of 3 in. (80 mm)

#### **ASSEMBLY**

The use of a  $95^{\circ}$  or a  $140^{\circ}$  tee makes it possible to laterally connect an appliance outlet to a vertical installation.

#### CONNECTION

An adaptor is available to connect the system to appliances.

The component CT  $\emptyset$  RCI allows the  $\it{CT}$  system to connect to Model  $\it{CI}$  that is an insulated chimney system.

The component CIXØRCTMB allows the CT system to connect to Model CIX that is an insulated positive pressure chimney system.

#### **ROOF PENETRATION**

When used as a liner and exiting a chimney or when used as a venting system and passing through the roof, a roof flashing (EP) for weather protection is required. Three types of roof flashings are available:

- Flat roof flashing
- 5° to 30° adjustable flashing
- · 30° to 45° adjustable flashing

Each flashing is made from stainless steel and comes complete with a storm collar. To ensure waterproofing, the joint between the storm collar and  $\it CT$  vent component must be sealed using a clear silicone.

#### **TERMINATION**

Two types of vent termination caps are available and must be used at the end of each installation.

#### **VENT MAINTENANCE**

Performed on a regular scheduled maintenance program. The vent surface can be cleaned by using a solution of water and vinegar. The vent interior should be washed with a hose during the non-heating season as regular maintenance. All drain connections are to be inspected and made free of debris.

#### OFFSET

Elbows angled at  $5^{\circ}$ ,  $15^{\circ}$ ,  $45^{\circ}$  and  $85^{\circ}$  are available to offset the *CT* system in either a horizontal or vertical application.

See deviation tables for offsets and rises dimensions for one elbow, two elbows (offset, return) and angled lengths. Add up the required components offsets and rises to get total dimensions.

Example: Two 45° elbows (D45) with one 12" length (L12) and one 36in length (L36) in between. 6" diameter.

Offset: (D45) 5-7/8 + (L12) 6" + (L36) 23" = 34-7/8" Rise: (D45) 14-3/16 + (L12) 6" + (L36) 23" = 43-3/16"

ONE ELBOW										
	5° e	lbow	15° e	lbow	45° (	elbow	85° e	lbow	90° e	lbow
diameter	offset	rise	offset	rise	offset	rise	offset	rise	offset	rise
5	7/16	7-5/16	1-3/8	7-1/8	4-1/16	6-5/8	8-1/4	5-3/32	8-9/32	5-1/8
6	7/16	7-5/16	1-3/8	7-1/8	4-1/16	6-5/8	8-1/4	5-3/32	8-9/32	5-1/8
7	7/16	7-5/16	1-3/8	7-1/8	4-7/16	7-5/8	9-11/32	6-3/16	9-3/8	6-7/32
8	7/16	7-5/16	1-3/8	7-1/8	4-7/16	7-5/8	9-11/32	6-3/16	9-3/8	6-7/32
10	7/16	7-5/16	1-3/8	7-1/8	4-15/16	8-13/16	12	8-27/32	12-1/32	8-7/8
12	7/16	7-5/16	1-3/8	7-1/8	4-15/16	8-13/16	12	8-27/32	12-1/16	8-29/3
14	7/16	7-5/16	1-3/8	7-1/8	4-15/16	8-13/16	12	8-27/32	12-1/16	8-29/3
16	7/16	7-5/16	1-13/16	10-5/8	6-1/4	11-15/16	13-29/32	10-3/4	13-31/32	10-13/1
18	7/16	7-5/16	1-13/16	10-5/8	6-1/4	11-15/16	15-9/16	12-13/32	15-21/32	12-1/2
20	7/16	7-5/16	1-13/16	10-5/8	6-7/16	12-5/16	16-5/16	13-5/32	16-13/32	13-1/4
22	7/16	7-5/16	1-13/16	10-5/8	6-11/16	13	17-1/4	14-3/32	17-11/32	14-3/1
24	7/16	7-5/16	1-13/16	10-5/8	6-15/16	13-5/8	18-3/16	15-1/32	18-5/16	15-5/3

	TWO ELBOWS (OFFSET RETURN)										
	5° e	lbow	15° e	lbow	45° (	45° elbow		85° elbow		90° elbow	
diameter	offset	rise	offset	rise	offset	rise	offset	rise	offset	rise	
5	5/8	14-5/8	1-15/16	14-3/8	5-7/8	14-3/16	13-7/32	13-9/16	13-13/32	16	
6	5/8	14-5/8	1-15/16	14-3/8	5-7/8	14-3/16	13-7/32	13-9/16	13-13/32	16	
7	5/8	14-5/8	1-15/16	14-3/8	6-11/16	16-3/16	15-3/8	15-25/32	15-19/32	18-19/32	
8	5/8	14-5/8	1-15/16	14-3/8	6-11/16	16-3/16	15-3/8	15-25/32	15-19/32	18-19/32	
10	5/8	14-5/8	1-15/16	14-3/8	7-11/16	18-9/16	20-19/32	21-3/16	20-29/32	24-29/32	
12	5/8	14-5/8	1-15/16	14-3/8	7-11/16	18-9/16	20-19/32	21-3/16	20-31/32	25	
14	5/8	14-5/8	1-15/16	14-3/8	7-11/16	18-9/16	20-19/32	21-3/16	20-31/32	25	
16	5/8	14-5/8	2-13/16	21-3/8	10-1/4	24-13/16	24-3/8	25-3/32	24-25/32	29-7/8	
18	5/8	14-5/8	2-13/16	21-3/8	10-1/4	24-13/16	27-5/8	28-7/16	28-5/32	33-31/32	
20	5/8	14-5/8	2-13/16	21-3/8	10-9/16	25-1/2	29-1/8	29-31/32	29-21/32	35-21/32	
22	5/8	14-5/8	2-13/16	21-3/8	11-1/8	26-7/8	30-31/32	31-7/8	31-17/32	37-29/32	
24	5/8	14-5/8	2-13/16	21-3/8	11-11/16	28-3/16	32-27/32	33-13/16	33-15/32	40-9/32	
Table 4											

	5° (from	vertical)	15° (from	15° (from vertical)		ı vertical)	85° (from	vertical)
length	offset	rise	offset	rise	offset	rise	offset	rise
L12	3/4	8-7/16	2-3/16	8-3/16	6	6	8-7/16	3/4
L18	1-1/4	14-7/16	3-3/4	14	10-1/4	10-1/4	14-7/16	1-1/4
L24	1-3/4	20-7/16	5-5/16	19-3/4	14-1/2	14-1/2	20-7/16	1-3/4
L36	2-13/16	32-3/8	8-7/16	31-3/8	23	23	32-3/8	2-13/16

#### **GENERAL INSTALLATION NOTES**

CAUTION: DURING JOB SITE CONSTRUCTION AND VENTING INSTALLATION PREVENT MATERIAL OR OBJECTS FROM FALLING INTO THE VENT PIPE. COVER OPENINGS. PROTECT THE VENT PIPE FROM WELDING SPARKS, MORTAR MIX AND CORROSIVE PRODUCTS. AVOID SCRATCHING THE INNER AND OUTER VENT SURFACE.

- For positive pressure application, all joints require the application
  of a high temperature (REDSIL) silicone. A small 1/8 inch bead is
  applied on the underside of the ridge of the male connector so when
  the components are slip-fit together it will create a gasket seal at the
  connection. Wipe smooth the excess silicone with a latex glove prior
  to applying the locking band (BS).
- For exterior installation, all outside locking bands must be sealed with silicone to limit water entering the vent.
- 3. The appliance adaptor (RD) is to have silicone applied at the connector and approximately three (3) inches inside at the expanded ridge area. The CT label shows an arrow pointing in the direction of the flue gas flow. The opposite end slides over the flue outlet. Apply a 1/4 inch bead of silicone inside the connector at the ridge area. Apply a 1/4 inch bead of silicone approximately 2-3/4 inches back from the front edge of the flue outlet. Make sure that the silicone is totally around the circumference and flue outlet. Slide the connector over the flue outlet and gently push back until it stops (approximately 3 inches). Wipe the excess smooth with a latex glove both inside and outside.
- 4. It may be necessary to conduct a "DRY" installation of the breeching in order to align all components properly to the main vertical venting. This is done by not applying any silicone or locking band. You may wish to mark the alignment with a permanent marking pen for the final installation.
- 5. Adjustable lengths (CT Ø LA) must protrude a minimum of three (3) inches (80 mm) into the component. The adjustable length may have the excess material cut on site for a better fit if necessary. Apply enough silicone to seal the joint where the adjustable length slides into the component, wipe smooth and apply a locking band.

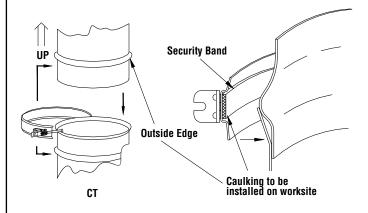
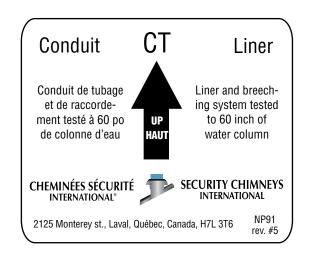


Figure 1 - Joint assembly

#### **CT LABELS**

The labels supplied for product identification are shown in *figure 2* and indicates the flow of the flue gases in the venting system.

Install the components with the arrow towards the exit cone of the **CT** venting system.



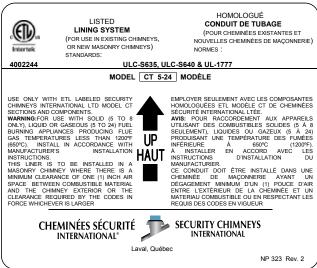


Figure 2 - CT labels

#### **INSTALLATION IN A MASONRY CHIMNEY**

## INSTALLING CT AS A LINER IN A MASONRY CHIMNEY OR AS A LINER IN AN EXISTING VENT

- \* Stainless Steel Wire Rope (by others) is to be used to hang the vent system from the top of the masonry chimney or from the top of the existing vent.
- The stainless wire rope is attached to the Guy Support Band and is secured with cable clamps (by others).
- The Stainless Steel Wire Rope is secured in a similar manner to the top platform of the masonry chimney or existing vent.
- Use the appropriate size of Stainless Steel Wire Rope (1/8" min.) to accommodate the required total loads of the vent system.

It may be necessary to fabricate a platform (at top of chimney / vent - by others).

#### DO NOT USE GALVANIZED WIRE ROPE.

Note: When installed as a liner in a masonry chimney or to reline an existing vent no other appliance can be vented into the same chimney or vent.

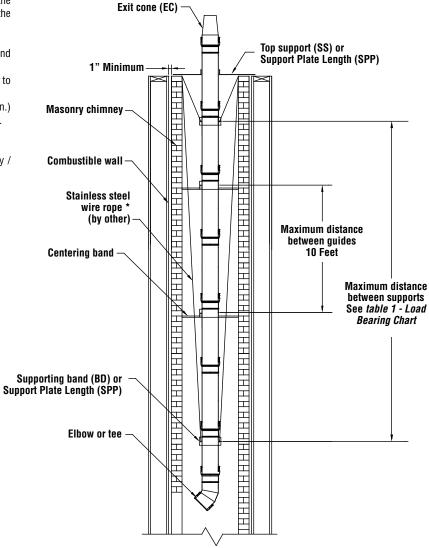


Figure A - Installing CT as a liner

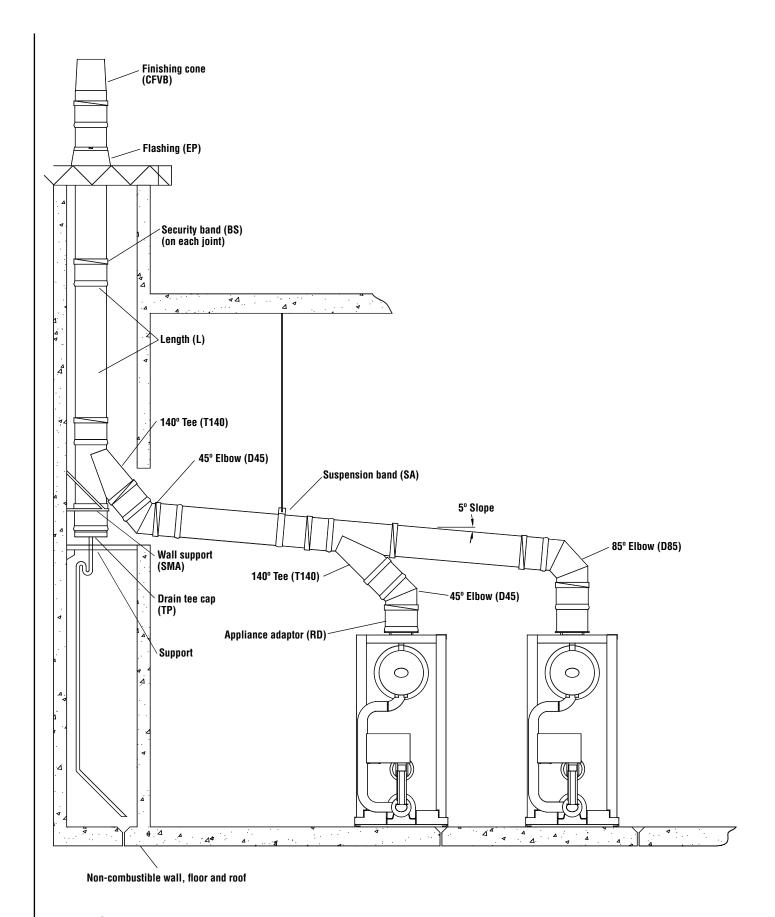
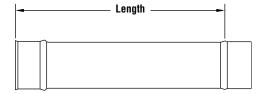


Figure 3 - Chimney Installation

#### **LENGTHS**

8-1/2in. (L12), 14-1/2in (L18), 20-1/2in (L24) and 32-1/2in. (L36) (see Figure 4)

Each length comes with a locking band. It must be locked on every joint between each section. If positive pressure is anticipated, silicone caulking (for up to  $300^{\circ}$ C /  $572^{\circ}$ F) or ceramic paste caulking (for up to  $760^{\circ}$ C /  $1400^{\circ}$ F) must be used.



I.D.		LONGUEUR - po. (mm)					
In. (mm)	Effective Length Available						
5 (125)	8-1/2 (216)	14-1/2 (368)	20-1/2 (521)	32-1/2 (826)			
6 (150)	8-1/2 (216)	14-1/2 (368)	20-1/2 (521)	32-1/2 (826)			
7 (180)	8-1/2 (216)	14-1/2 (368)	20-1/2 (521)	32-1/2 (826)			
8 (200)	8-1/2 (216)	14-1/2 (368)	20-1/2 (521)	32-1/2 (826)			
10 (250)	8-1/2 (216)	14-1/2 (368)	20-1/2 (521)	32-1/2 (826)			
12 (300)	8-1/2 (216)	14-1/2 (368)	20-1/2 (521)	32-1/2 (826)			
14 (350)	8-1/2 (216)	14-1/2 (368)	20-1/2 (521)	32-1/2 (826)			
16 (400)	8-1/2 (216)	14-1/2 (368)	20-1/2 (521)	32-1/2 (826)			
18 (450)	8-1/2 (216)	14-1/2 (368)	20-1/2 (521)	32-1/2 (826)			
20 (500)	8-1/2 (216)	14-1/2 (368)	20-1/2 (521)	32-1/2 (826)			
22 (550)	8-1/2 (216)	14-1/2 (368)	20-1/2 (521)	32-1/2 (826)			
24 (600)	8-1/2 (216)	14-1/2 (368)	20-1/2 (521)	32-1/2 (826)			

Figure 4 - Length (L)

ADJUSTABLE LENGTH (LA) (see Figure 5)

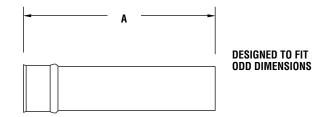
This length comes with a locking band that must properly cover each assembly joint.

Almost every straight run between two changes of direction will require an adjustable length.

This length is not designed as a load bearing component. Therefore, on vertical installations a support is required immediately above the section. In horizontal installations it should be installed as close as possible to a support and as close as possible to the direction / size change or as close as possible to the tee.

Used in conjunction with straight lengths, the adjustable length makes it possible to fit a *GT* length perfectly, in horizontal and diagonal installations. It also makes it possible to disassemble the installation.

The adjustable length can be cut to fit shorter component but when installed must protrude into the component by a minimum of 2-1/2 in. (64 mm).



IMPORTANT: The adjustable length is not designed as a load bearing component. Its vertical installation requires an appropriate support on the section above it to bear the weight of the remaining installation.

I.D.	A	Min. Length	Max. Length				
Inches (millim	Inches (millimeters)						
5 (125)	17-7/8 (454)	3-7/16 (88)	14 (356)				
6 (150)	17-7/8 (454)	3-7/16 (88)	14 (356)				
7 (180)	17-7/8 (454)	3-7/16 (88)	14 (356)				
8 (200)	17-7/8 (454)	3-7/16 (88)	14 (356)				
10 (250)	17-7/8 (454)	3-7/16 (88)	14 (356)				
12 (300)	17-7/8 (454)	3-7/16 (88)	14 (356)				
14 (350)	17-7/8 (454)	3-7/16 (88)	14 (356)				
16 (400)	17-7/8 (454)	3-3/4 (95)	14 (356)				
18 (450)	17-7/8 (454)	3-3/4 (95)	14 (356)				
20 (500)	17-7/8 (454)	3-3/4 (95)	14 (356)				
22 (550)	17-7/8 (454)	3-3/4 (95)	14 (356)				
24 (600)	17-7/8 (454)	3-3/4 (95)	14 (356)				

Figure 5 - Adjustable Length (LA)

LENGTH WITH DRAIN (LP) (see Figure 6)

This drain length allows condensation to be drained from horizontal runs, especially following an increaser.

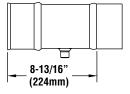


Figure 6 - Length with drain (LP)

#### TEES 90°

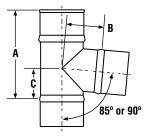
90° TEE (T90), 95° TEE (T95) AND 140° TEE (T140) (see figures 7 and 8)

Most often located at the base of a chimney, it makes it possible to connect the flue to the heating appliance. It can be installed at any horizontal or vertical point along the chimney to connect a length or ensure access for inspection or cleaning.

The  $140^{\circ}$  tee is normally used in conjunction with a  $45^{\circ}$  elbow to allow for a  $95^{\circ}$  change of direction with less flow restriction than with a  $95^{\circ}$  tee.

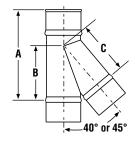
A support must be used with every tee. In horizontal installations the use of a suspension band (hangers) at each end is recommended. In vertical installations, a suspended tee can be installed as long as the total suspended length is not longer than the tee and one section. Tee support capacities are given in table on *page 2*.

Maintain a  $5^{\circ}$  slope toward the appliance. Can be used in conjunction with a  $5^{\circ}$  elbow to provide a  $90^{\circ}$  change of direction.



I.D.	Α	В	C				
Inches (millimeters)							
5 (125)	10-7/16 (265)	4-7/16 (113)	4-1/8 (105)				
6 (150)	11-7/16 (290)	5 (127)	4-5/8 (117.5)				
7 (180)	12-5/8 (320)	5-5/8 (143)	5-3/16 (132.5)				
8 (200)	13-3/8 (340)	6-1/16 (154)	5-5/8 (142.5)				
10 (250)	15-3/8 (390)	7-1/8 (181.5)	6-5/8 (167.5)				
12 (300)	17-5/16 (440)	8-1/4 (209)	7-9/16 (192.5)				
14 (350)	19-5/16 (490)	9-5/16 (236)	8-9/16 (217.5)				
16 (400)	22-13/16 (580)	10-3/8 (263)	10-5/16 (262.5)				
18 (450)	24-13/16 (630)	11-7/16 (290.5)	11-5/16 (287.5)				
20 (500)	26-3/4 (680)	12-1/2 (318)	12-5/16 (312.5)				
22 (550)	28-3/4 (730)	13-9/16 (345)	13-5/16 (337.5)				
24 (600)	30-11/16 (780)	14-11/16 (372.5)	14-1/4 (362.5)				

Figure 7 - 95° Tee (T95) and 90° Tee (T90)



I.D.	Α	В	С				
Inches (milli	Inches (millimeters)						
5 (125)	13-3/16 (335)	7-7/8 (200)	7-7/8 (200)				
6 (150)	14-3/4 (375)	9-7/16 (240)	9-7/16 (240)				
7 (180)	16-9/16 (420)	11 (280)	11 (280)				
8 (200)	17-11/16 (450)	12 (305)	12 (305)				
10 (250)	21-5/8 (550)	15-3/16 (385)	15-3/16 (385)				
12 (300)	24-5/8 (625)	17-11/16 (450)	17-11/16 (450)				
14 (350)	27-3/4 (705)	20-1/2 (520)	20-1/2 (520)				
16 (400)	32-5/16 (820)	24 (610)	24 (610)				
18 (450)	35-7/16 (900)	26-3/4 (680)	26-3/4 (680)				
20 (500)	39-3/16 (995)	29-1/8 (740)	29-1/8 (740)				
22 (550)	41-9/16 (1055)	32-1/2 (825)	32-1/2 (825)				
24 (600)	44-11/16 (1135)	34-13/16 (885)	34-13/16 (885)				

Figure 8 - 140° Tee (T140) and 135° Tee (T135)

INSPECTION TEE CAP (TV) & DRAIN TEE CAP (TP) (see **figures 9 and 10**)

Tee caps are used to seal the base or side opening of a tee. They provide access for inspection and cleaning of the chimney.

The drain tee cap must be used when an unprotected termination cap is used (finishing cone, finishing cap or short termination) to allow for drainage of rain water. It must be used when condensation in the chimney is expected.

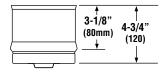


Figure 9 - Inspection tee cap (TV)

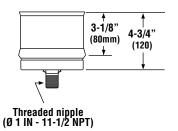


Figure 10 - Drain tee cap (TP)

#### LOCKING BAND (BS) (see figure 11)

Ensures tightness of the joint and sturdiness of the assembly. Comes with a ceramic fiber gasket.

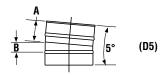


Figure 11 - Locking band (BS)

#### **ELBOWS**

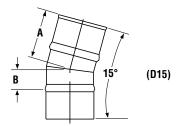
 $5^{\circ}$  (D5),  $15^{\circ}$  (D15),  $45^{\circ}$  (D45) OR  $85^{\circ}$  (D85) ELBOWS (see figures 14 through 18)

Elbows are used horizontally and vertically for a change of direction. They can be used alone or in combination to provide the required angle. When used horizontally, every change of direction must be supported by a suspension band.



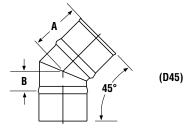
I.D.	Α	В					
Inches (millimeters)							
5 (125)	5-1/4 (133)	2-1/16 (53)					
6 (150)	5-1/4 (133)	2-1/16 (53)					
7 (180)	5-1/4 (133)	2-1/16 (53)					
8 (200)	5-1/4 (133)	2-1/16 (53)					
10 (250)	5-1/4 (133)	2-1/16 (53)					
12 (300)	5-1/4 (133)	2-1/16 (53)					
14 (350)	5-1/4 (133)	2-1/16 (53)					
16 (400)	5-1/4 (133)	2-1/16 (53)					
18 (450)	5-1/4 (133)	2-1/16 (53)					
20 (500)	5-1/4 (133)	2-1/16 (53)					
22 (550)	5-1/4 (133)	2-1/16 (53)					
24 (600)	5-1/4 (133)	2-1/16 (53)					

Figure 12 - Elbow (D5)



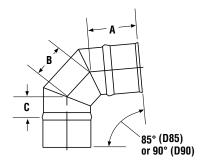
I.D.	Α	В		
Inches (millimete	Inches (millimeters)			
5 (125)	5-1/4 (133)	2-1/16 (53)		
6 (150)	5-1/4 (133)	2-1/16 (53)		
7 (180)	5-1/4 (133)	2-1/16 (53)		
8 (200)	5-1/4 (133)	2-1/16 (53)		
10 (250)	5-1/4 (133)	2-1/16 (53)		
12 (300)	5-1/4 (133)	2-1/16 (53)		
14 (350)	5-1/4 (133)	2-1/16 (53)		
16 (400)	7 (178)	3-7/8 (98)		
18 (450)	7 (178)	3-7/8 (98)		
20 (500)	7 (178)	3-7/8 (98)		
22 (550)	7 (178)	3-7/8 (98)		
24 (600)	7 (178)	3-7/8 (98)		

Figure 13 - Elbow (D15)



I.D.	A	В		
Inches (millimeter	Inches (millimeters)			
5 (125)	5-3/4 (145.5)	2-9/16 (65.5)		
6 (150)	5-3/4 (145.5)	2-9/16 (65.5)		
7 (180)	6-5/16 (160.5)	3-3/16 (80.5)		
8 (200)	6-5/16 (160.5)	3-3/16 (80.5)		
10 (250)	7 (178)	3-7/8 (98)		
12 (300)	7 (178)	3-7/8 (98)		
14 (350)	7 (178)	3-7/8 (98)		
16 (400)	8-7/8 (225)	5-11/16 (145)		
18 (450)	8-7/8 (225)	5-11/16 (145)		
20 (500)	9-1/16 (230)	5-7/8 (150)		
22 (550)	9-7/16 (240)	6-5/16 (160)		
24 (600)	9-13/16 (250)	6-11/16 (170)		

Figure 14 - Elbow (D45)



I.D.	Α	В	С
Inches (millim	eters)		
5 (125)	5-11/16 (145)	3-9/16 (90)	2-9/16 (65)
6 (150)	5-11/16 (145)	3-9/16 (90)	2-9/16 (65)
7 (180)	6-1/8 (155.5)	4-1/2 (115)	3 (75.5)
8 (200)	6-1/8 (155.5)	4-1/2 (115)	3 (75.5)
10 (250)	7-1/8 (180.5)	6-7/8 (175)	3-15/16 (100.5)
12 (300)	7-1/8 (180.5)	6-7/8 (175)	3-15/16 (100.5)
14 (350)	7-1/8 (180.5)	6-7/8 (175)	3-15/16 (100.5)
16 (400)	8-3/16 (207.5)	8-1/16 (205)	5 (127.5)
18 (450)	8-7/8 (225)	9-7/16 (240)	5-11/16 (145)
20 (500)	9-1/16 (230)	10-1/4 (260)	5-7/8 (150)
22 (550)	9-7/16 (240)	11 (280)	6-5/16 (160)
24 (600)	9-13/16 (250)	11-13/16 (300)	6-11/16 (170)

Figure 15 - Elbow (D85) or (D90)

#### OFFSET (see figure 16)

When used vertically, elbows will normally be used in pairs (offset/return). In such a case, a brace should be used at the base elbow, extra bracing should be used if more than two (2) sections are used between the two (2) elbows (not required if the angle run is shorter than two sections). A support must be used immediately above the top elbow to re-support the rest of the installation.

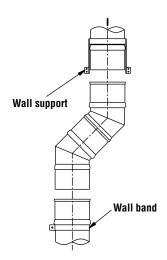
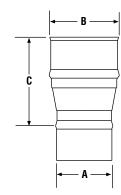


Figure 16 - Offset

#### **ADAPTORS**

INCREASER (RA) AND REDUCER (RR) (see figures 17 and 18)

Designed to allow an increase or a reduction of one (1) nominal size. When used horizontally, a suspension band must be used immediately beside the increaser. When used vertically a support must be used immediately above the increaser.



#### xx RA yy

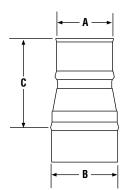
Tapered increaser can be used for one (1) standard diameter increase.

Two (2) diameters must be used for coding.

"xx" is the smaller inlet nominal diameter. "yy" is the bigger outlet nominal diameter.

I.D.	A	В	С
Inches (millim	eters)		•
5 (125)	4-15/16 (125)	5-7/8 (150)	8-1/8 (206)
6 (150)	5-7/8 (150)	7-1/16 (180)	8-1/2 (216)
7 (180)	7-1/16 (180)	7-7/8 (200)	7-11/16 (196)
8 (200)	7-7/8 (200)	9-13/16 (250)	8-1/8 (206)
10 (250)	9-13/16 (250)	11-13/16 (300)	8-1/8 (206)
12 (300)	11-13/16 (300)	13-3/4 (350)	8-1/8 (206)
14 (350)	13-3/4 (350)	15-3/4 (400)	8-1/8 (206)
16 (400)	15-3/4 (400)	7-11/16 (450)	8-1/8 (206)
18 (450)	7-11/16 (450)	19-11/16 (500)	8-1/8 (206)
20 (500)	19-11/16 (500)	21-5/8 (550)	8-1/8 (206)
22 (550)	21-5/8 (550)	23-5/8 (600)	8-1/8 (206)

Figure 17 - Increaser (RA)



#### xx RR yy

Tapered reducer can be used for one (1) standard diameter reuction.

Two (2) diameters must be used for coding.

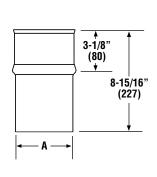
"xx" is the bigger inlet nominal diameter. "yy" is the smaller outlet nominal diameter.

I.D.	A B		С
Inches (milli	meters)		
6 (150)	4-15/16 (125)	5-7/8 (150)	8-3/16 (208)
7 (180)	5-7/8 (150)	7-1/16 (180)	8-1/2 (216)
8 (200)	7-1/16 (180)	7-7/8 (200)	7-11/16 (196)
10 (250)	7-7/8 (200)	9-13/16 (250)	8-1/8 (206)
12 (300)	9-13/16 (250)	11-13/16 (300)	8-1/8 (206)
14 (350)	11-13/16 (300)	13-3/4 (350)	8-1/8 (206)
16 (400)	13-3/4 (350)	15-3/4 (400)	8-1/8 (206)
18 (450)	15-3/4 (400)	7-11/16 (450)	8-1/8 (206)
20 (500)	7-11/16 (450)	19-11/16 (500)	8-1/8 (206)
22 (550)	19-11/16 (500)	21-5/8 (550)	8-1/8 (206)
24 (600)	21-5/8 (550)	21-5/8 (600)	8-1/8 (206)

Figure 18 - Reducer (RR)

#### STRAIGHT ADAPTOR (RD) (see figure 19)

Designed to provide connection to the appliance.

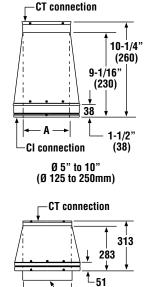


I.D.	Α
Inches (millimeters)	
5 (125)	4-15/16 (125)
6 (150)	5-7/8 (150)
7 (180)	7-1/16 (180)
8 (200)	7-7/8 (200)
10 (250)	9-13/16 (250)
12 (300)	11-13/16 (300)
14 (350)	13-3/4 (350)
16 (400)	15-3/4 (400)
18 (450)	17-11/16 (450)
20 (500)	19-11/16 (500)
22 (550)	21-5/8 (550)
24 (600)	23-5/8 (600)

Figure 19 - Straight Adaptor (RD)

#### CI TO CT ADAPTOR (RCI) (see figure 20)

Allows the use of the CT product with the CI. This adaptor will allow the connection of a CI breeching with a CT used as a masonry chimney liner.



I.D.	A
Inches (millime	ters)
5 (125)	4-15/16 (125)
6 (150)	5-7/8 (150)
7 (180)	7-1/16 (180)
8 (200)	7-7/8 (200)
10 (250)	9-13/16 (250)
12 (300)	11-13/16 (300)
14 (350)	13-3/4 (350)
16 (400)	15-3/4 (400)
18 (450)	17-11/16 (450)
20 (500)	19-11/16 (500)
22 (550)	21-5/8 (550)
24 (600)	23-5/8 (600)

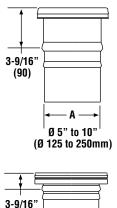
Ø 12" to 24" Ø 300 to 600mm

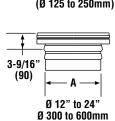
Figure 20 - CI to CT adaptor (RCI)

#### CT TO CI ADAPTOR (RCT) (see figure 21)

CI connection

Allows the use of the CT product with the CI. This adaptor will allow the connection of a CT breeching or a masonry chimney liner with a CI chimney.



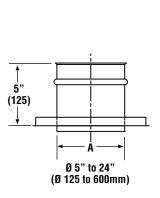


I.D. A			
Inches (millime	Inches (millimeters)		
5 (125)	4-15/16 (125)		
6 (150)	5-7/8 (150)		
7 (180)	7-1/16 (180)		
8 (200)	7-7/8 (200)		
10 (250)	9-13/16 (250)		
12 (300)	11-13/16 (300)		
14 (350)	13-3/4 (350)		
16 (400)	15-3/4 (400)		
18 (450)	17-11/16 (450)		
20 (500)	19-11/16 (500)		
22 (550)	21-5/8 (550)		
24 (600)	23-5/8 (600)		

Figure 21 - CT to CI adaptor (RCT)

#### CIX TO CT ADAPTOR (CIXØRCTFB) (see figure 22)

Allows the use of the  $\it{CT}$  product with the  $\it{CIX}$ . This adaptor will allow the connection of a  $\it{CIX}$  breeching with a  $\it{CT}$  used as a masonry chimney liner.

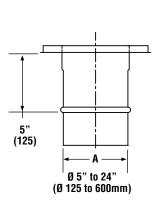


I.D.	Α
Inches (millime	ters)
5 (125)	4-15/16 (125)
6 (150)	5-7/8 (150)
7 (180)	7-1/16 (180)
8 (200)	7-7/8 (200)
10 (250)	9-13/16 (250)
12 (300)	11-13/16 (300)
14 (350)	13-3/4 (350)
16 (400)	15-3/4 (400)
18 (450)	17-11/16 (450)
20 (500)	19-11/16 (500)
22 (550)	21-5/8 (550)
24 (600)	23-5/8 (600)

Figure 22 - CIX to CT adaptor (CIXØRCTFB)

#### CT TO CIX ADAPTOR (CIXØRCTMB) (see figure 23)

Allows the use of the **CT** product with the **CIX**. This adaptor will allow the connection of a **CT** breeching or a masonry chimney liner with a **CIX** chimney.



A		
Inches (millimeters)		
4-15/16 (125)		
5-7/8 (150)		
7-1/16 (180)		
7-7/8 (200)		
9-13/16 (250)		
11-13/16 (300)		
13-3/4 (350)		
15-3/4 (400)		
17-11/16 (450)		
19-11/16 (500)		
21-5/8 (550)		
23-5/8 (600)		

Figure 23 - CT to CIX adaptor (CIXØRCTMB)

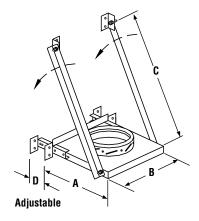
#### **SUPPORTS**

Supports are used to transfer the weight of an installation to the building structure. There are different types of supports and their capacity varies with each type and diameter. The load bearing chart on page 2 will provide details of their capacity.

#### ADJUSTABLE WALL SUPPORT (SMA) (see figure 24)

Designed to be used along a wall. Clearance to the wall is adjustable from 2 to 6in (50 to 152mm). Available for diameter of 7 to 24in (180 to 600 mm).

This support attaches to the wall structure. A collar secures the vent to the support. Made of stainless steel.



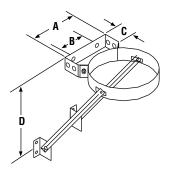
I.D.	Α	В	C
Inches (millim	eters)		
7 (180)	12 (305)	12 (305)	21 (534)
8 (200)	12 (305)	12 (305)	21 (534)
10 (250)	17-1/2 (445)	16 (407)	25-13/16 (655)
12 (300)	17-1/2 (445)	16 (407)	25-13/16 (655)
14 (350)	17-1/2 (445)	16 (407)	25-13/16 (655)
16 (400)	24 (610)	22 (559)	34 (864)
18 (450)	24 (610)	22 (559)	34 (864)
20 (500)	24 (610)	22 (559)	34 (864)
22 (550)	28-1/16 (712)	26 (661)	39 (991)
24 (600)	28-1/16 (712)	26 (661)	39 (991)

Figure 24 - Adjustable wall support (SMA)

#### WALL SUPPORT (SM) (see figure 25)

Designed to be used along a wall. Clearance to the wall is set at 50 mm. When used in conjunction with an extension band (BE) the clearance is adjustable from 2 to 5.25in (50 to 135 mm). Available in all diameters.

This support attaches to the wall structure. Made of stainless steel.



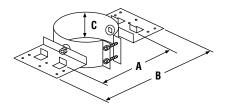
I.D.	Α	В	C	D		
Inches (mill	Inches (millimeters)					
5 (125)	4-7/8 (124)	3 (76)	2 (51)	7-7/8 (200)		
6 (150)	5-9/16 (142)	3-11/16 (94)	2 (51)	7-1/2 (190)		
7 (180)	6-3/8 (162)	4-1/2 (114)	2 (51)	11-13/16 (300)		
8 (200)	7-1/16 (180)	5-3/16 (132)	2 (51)	11-5/8 (295)		
10 (250)	8-11/16 (220)	6-3/4 (172)	2 (51)	11 (280)		
12 (300)	10-1/16 (256)	8-3/16 (208)	2 (51)	14-15/16 (380)		
14 (350)	11-1/8 (283)	9-1/4 (235)	2 (51)	14-1/2 (368)		
16 (400)	12-11/16 (323)	10-13/16 (275)	2 (51)	13-5/8 (346)		
18 (450)	14-1/8 (359)	12-1/4 (311)	2 (51)	13-1/16 (332)		
20 (500)	15-9/16 (395)	13-11/16 (347)	2 (51)	17-1/4 (439)		
22 (550)	16-15/16 (431)	15-1/16 (383)	2 (51)	16-5/8 (422)		
24 (600)	18-3/8 (467)	16-1/2 (419)	2 (51)	15-9/16 (395)		

Figure 25 - Wall support (SM)

#### ROOF SUPPORT (ST) (see figure 26)

Can be used on the top of a roof, on top of a floor or on a special mast structure. It does not provide fire stopping.

Two adjustable plates screwed to the structure will adapt to the pitch of the roof. A tightening collar attached to these plates locks around the vent. Made of galvalume steel.



I.D.	Α	В	С
Inches (millin	neters)		
5 (125)	8-7/8 (225)	13-9/16 (345)	4 (102)
6 (150)	9-13/16 (250)	14-9/16 (370)	4 (102)
7 (180)	11 (280)	15-3/4 (400)	4 (102)
8 (200)	11-13/16 (300)	16-9/16 (420)	4 (102)
10 (250)	13-3/4 (350)	18-1/2 (470)	4 (102)
12 (300)	15-3/4 (400)	20-1/2 (520)	4 (102)
14 (350)	17-11/16 (450)	22-7/16 (570)	4 (102)
16 (400)	19-11/16 (500)	24-7/16 (620)	4 (102)
18 (450)	21-5/8 (550)	26-3/8 (670)	4 (102)
20 (500)	23-5/8 (600)	28-3/8 (720)	4 (102)
22 (550)	25-9/16 (650)	30-5/16 (770)	4 (102)
24 (600)	27-9/16 (700)	32-5/16 (820)	4 (102)

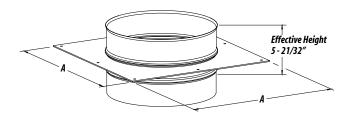
Figure 26 - Roof support (ST)

#### SUPPORT (SPP) (see figure 27)

Designed to be directly attached to the building structure or supported by non combustible structural element (not included). Part consists of a 5 21/32" length with an embedded support plate. It can be inserted at any height of the chimney. No tightening collar is required.

#### Can:

- be horizontally installed
- act as a firestop
- be used as a top support (SS) or supporting band (BD)



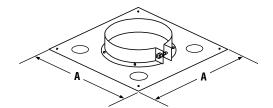
СТ		
Inside Diameter (in.)	A (in.)	
5	11	
6	12	
7	13	
8	14	
10	16	
12	18	
14	20	
16	22	
18	24	
20	26	
22	28	
24	30	

Figure 27 - Support (SPP)

#### TOP SUPPORT (SS) (see figure 28)

Designed to be installed at the top of the relined chimney or on top of a floor to support the liner. It also acts as a fire stop.

A tightening collar, locked around the vent, rests on a horizontal plate attached to the masonry chimney. (See load-bearing chart on page 2). Makes it possible to position the vent and seal the space around the opening. Made of stainless steel. It includes 4 holes in line with each corner to let wire rope go through in case of installation on top of a masonry chimney.

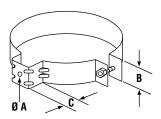


I.D.	A
Inches (millimeters	s)
5 (125)	12 (305)
6 (150)	12 (305)
7 (180)	15-5/16 (405)
8 (200)	15-5/16 (405)
10 (250)	17-15/16 (455)
12 (300)	17-15/16 (455)
14 (350)	20-1/16 (510)
16 (400)	22-1/16 (560)
18 (450)	24 (610)
20 (500)	26 (660)
22 (550)	27-15/16 (710)
24 (600)	29-15/16 (760)

Figure 28 - Top support (SS)

#### SUSPENSION BAND (HANGER) (BDS) (see figure 29)

Supports the *CT* system in a horizontal application. Makes it possible to suspend *CT* vent sections using a threaded rod attached to the ceiling of the boiler room or any point. This support is needed every 10ft (3m) or less (see table 1), at every change of direction (elbow), at every change of diameter (size) and it is also used to support the tee in a breeching application (see load bearing chart). Made of stainless steel.



I.D.	Α	В	С
Inches (millime	eters)		
5 (125)	3/8 (10)	1-1/2 (38)	3/4 (19)
6 (150)	3/8 (10)	1-1/2 (38)	3/4 (19)
7 (180)	3/8 (10)	1-1/2 (38)	3/4 (19)
8 (200)	3/8 (10)	1-1/2 (38)	3/4 (19)
10 (250)	3/8 (10)	1-1/2 (38)	3/4 (19)
12 (300)	1/2 (12)	2-1/16 (52)	3/4 (19)
14 (350)	1/2 (12)	2-1/16 (52)	3/4 (19)
16 (400)	1/2 (12)	2-1/16 (52)	3/4 (19)
18 (450)	1/2 (12)	2-1/16 (52)	3/4 (19)
20 (500)	1/2 (12)	2-1/16 (52)	3/4 (19)
22 (550)	1/2 (12)	2-1/16 (52)	3/4 (19)
24 (600)	1/2 (12)	2-1/16 (52)	3/4 (19)

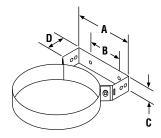
Figure 29 - Support band (hanger) (BDS)

#### **BRACING**

Braces are required to stabilize an installation. They are not to be used as support.

#### WALL BAND (BM)

Designed for interior or exterior use, this band stabilizes the vent along a vertical or diagonal surface: wall, mast, partition, joist. It is attached to the wall, mast structure. The band also ensures a minimum clearance of 2in (50 mm) between the vent and the surface to which it is attached. A greater clearance requires the use of a wall band extension (BE). Wall band should be installed every 8 ft (2.5m) from any support in exterior installations and 12 ft (3.5m) from supports in interior installations for a vertical installation. It should be installed at every two (2) sections when used on the diagonal run of an offset return. Made of stainless steel.

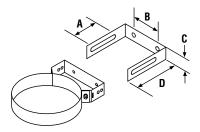


I.D.	A	В	С	D
Inches (mill	imeters)			
5 (125)	4-7/8 (124)	3 (76)	2 (51)	2 (51)
6 (150)	5-9/16 (142)	3-11/16 (94)	2 (51)	2 (51)
7 (180)	6-3/8 (162)	4-1/2 (114)	2 (51)	2 (51)
8 (200)	7-1/16 (180)	5-3/16 (132)	2 (51)	2 (51)
10 (250)	8-11/16 (220)	6-3/4 (172)	2 (51)	2 (51)
12 (300)	10-1/16 (256)	8-3/16 (208)	2 (51)	2 (51)
14 (350)	11-1/8 (283)	9-1/4 (235)	2 (51)	2 (51)
16 (400)	12-11/16 (323)	10-13/16 (275)	2 (51)	2 (51)
18 (450)	14-1/8 (359)	12-1/4 (311)	2 (51)	2 (51)
20 (500)	15-9/16 (395)	13-11/16 (347)	2 (51)	2 (51)
22 (550)	16-15/16 (431)	15-9/16 (383)	2 (51)	2 (51)
24 (600)	18-3/8 (467)	16-1/2 (419)	2 (51)	2 (51)

Figure 30 - Wall band (BM)

#### WALL BAND EXTENSION (BE) (see figure 31)

Attached to the wall band or (SM), it is designed to extend the clearance between the chimney and wall surface from 2 to 5.25 in (50 to 135 mm). A bolt and slot configuration allows the adjustment. Since it is used in conjunction with a wall band, its use follows the same rule. Made of stainless steel.



I.D.	Α	В	С	D
Inches (millin	neters)			
5 (125)	4-1/2 (115)	3 (76)	2 (51)	5-1/2 (140)
6 (150)	4-1/2 (115)	3-11/16 (94)	2 (51)	5-1/2 (140)
7 (180)	4-1/2 (115)	4-1/2 (114)	2 (51)	5-1/2 (140)
8 (200)	4-1/2 (115)	5-3/16 (132)	2 (51)	5-1/2 (140)
10 (250)	4-1/2 (115)	6-3/4 (172)	2 (51)	5-1/2 (140)
12 (300)	4-1/2 (115)	8-3/16 (208)	2 (51)	5-1/2 (140)
14 (350)	4-1/2 (115)	9-1/4 (235)	2 (51)	5-1/2 (140)
16 (400)	4-1/2 (115)	10-13-16 (275)	2 (51)	5-1/2 (140)
18 (450)	4-1/2 (115)	12-1/4 (311)	2 (51)	5-1/2 (140)
20 (500)	4-1/2 (115)	13-11/16 (347)	2 (51)	5-1/2 (140)
22 (550)	4-1/2 (115)	15-1/16 (383)	2 (51)	5-1/2 (140)
24 (600)	4-1/2 (115)	16-1/2 (419)	2 (51)	5-1/2 (140)

Figure 31 - Wall band extension (BE)

#### GUY WIRE BAND (BH) (see figure 32)

Attached to the outer casing of the chimney, it is designed to hold 3 guy wires at a  $120^{\circ}$  angle to stabilize a  $\it{CT}$  vent section extending from 5ft (1.5m) to 13ft (4m) beyond the last rooftop support (guy wires not included). Use three 3/16in (5mm) guy wires,  $120^{\circ}$  apart. Made of stainless steel.

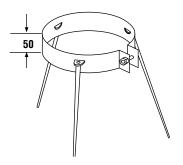


Figure 32 - Guy wire band (BH)

#### ROOF BRACE (BT) (see figure 33)

This component comes complete with tightening collar and adjustable legs.

Used to stabilize the *CT* vent section extending beyond the roof in areas subjected to high winds or lengths extending 5 to 10ft (1.5 to 3m) from the last support or attachment point. The legs are adjustable from 48 to 60in (1220 to 1500mm). Made of galvalume steel.

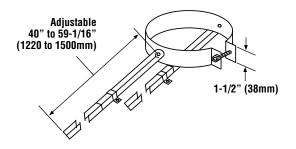
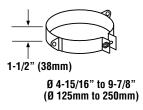
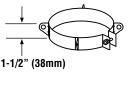


Figure 33 - Roof brace (BT)

#### SUPPORTING BAND (BD) (see figure 34)

Designed to support the  $\it{CT}$  liner when lowered in the relined chimney. It must be used with stainless steel cable (wire). NOT INCLUDED. Made of stainless steel.



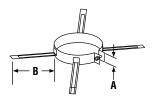


Ø 11-13/16" to 23-5/8" (Ø 300mm to 600mm)

Figure 34 - Supporting band (BD)

#### CENTERING BAND (see figure 35)

Designed to insure proper centering of the  $\emph{CT}$  inside the relined chimney; should be used every 10ft (3m).



		Г
I.D.	Α	В
Inches (millin	neters)	
5 (125)	1 (25)	16-3/4 (425)
6 (150)	1 (25)	17-11/16 (450)
7 (180)	1 (25)	18-7/8 (480)
8 (200)	1 (25)	19-11/16 (500)
10 (250)	1 (25)	24 (610)
12 (300)	1 (25)	26 (660)
14 (350)	1 (25)	27-15/16 (710)
16 (400)	1 (25)	33-7/8 (860)
18 (450)	1 (25)	35-13/16 (910)
20 (500)	1 (25)	37-13/16 (960)
22 (550)	1 (25)	39-3/4 (1010)
24 (600)	1 (25)	41-3/4 (1060)

Figure 35 - Centering band

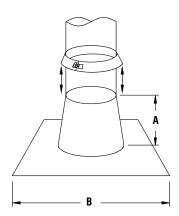
#### **FLASHINGS**

Some means must be provided for preventing water from entering the opening required for the vent. For that purpose the *CT* system uses the combination of a flashing and a storm collar. The flashing must be sealed to the roof and the storm collar sealed with silicone caulking to the vent. This combination will provide needed protection against rain and debris while allowing movement between the chimney and the roof.

Flashings are available for flat roofs and for pitched roofs. Made of stainless steel.

#### FLAT ROOF FLASHING (EP) (see figure 36)

For use on flat or slightly sloped (not more than 5°) roofs. The flashing must be properly sealed to the roof with roof caulking.

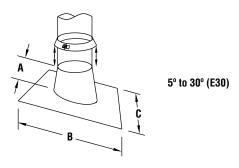


I.D.	Α	В
Inches (millime	eters)	
5 (125)	8 (203)	20 (508)
6 (150)	8 (203)	20 (508)
7 (180)	8-3/4 (222)	20 (508)
8 (200)	9-3/4 (248)	24 (610)
10 (250)	9-3/4 (248)	24 (610)
12 (300)	9-3/4 (248)	24 (610)
14 (350)	10 (254)	30 (762)
16 (400)	10 (254)	36 (914)
18 (450)	11-1/2 (292)	36 (914)
20 (500)	11-1/2 (292)	36 (914)
22 (550)	11-1/2 (292)	45 (1143)
24 (600)	12-1/2 (318)	45 (1143)

Figure 36 - Flat roof flashing (EP)

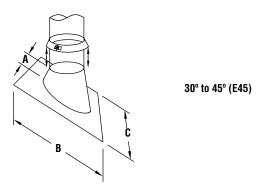
#### ADJUSTABLE ROOF FLASHING (see figures 37 and 38)

Is available in  $5^{\circ}$  to  $30^{\circ}$  roof pitch or in  $45^{\circ}$  roof pitch. Roof caulking is applied under the flat part of the flashing and the flat upper part of the flashing must be placed under the shingles. The base is made of aluminium for better flexibility. Storm collar included.



I.D.	A	В	C
Inches (millime	ters)		•
5 (125)	5 (127)	29-1/2 (749)	24 (610)
6 (150)	4-3/16 (107)	29-1/2 (749)	24 (610)
7 (180)	5-3/4 (146)	36 (914)	29-1/2 (749)
8 (200)	5 (127)	36 (914)	29-1/2 (749)
10 (250)	6-3/4 (171)	36 (914)	29-1/2 (749)
12 (300)	4-1/2 (114)	36 (914)	29-1/2 (749)
14 (350)	7 (178)	36 (914)	36 (914)
16 (400)	4-3/4 (121)	40 (1016)	40 (1016)
18 (450)	5-1/4 (133)	40 (1016)	40 (1016)
20 (500)	5-1/4 (133)	45 (1143)	45 (1143)
22 (550)	5-1/4 (133)	45 (1143)	45 (1143)
24 (600)	6-1/2 (165)	48 (1219)	48 (1219)

Figure 37 - Adjustable roof flashing (E30)



I.D.	А	В	С		
Inches (millin	Inches (millimeters)				
5 (125)	4 (102)	29-1/2 (749)	24 (610)		
6 (150)	4-1/2 (114)	29-1/2 (749)	24 (610)		
7 (180)	5 (127)	36 (914)	29-1/2 (749)		
8 (200)	6 (152)	36 (914)	29-1/2 (749)		
10 (250)	6 (152)	36 (914)	29-1/2 (749)		
12 (300)	4-1/4 (108)	36 (914)	29-1/2 (749)		
14 (350)	5-1/4 (133)	42 (1067)	36 (914)		
16 (400)	5 (127)	45 (1143)	39-3/4 (1010)		
18 (450)	5-1/4 (133)	48 (1219)	46 (1168)		
20 (500)	5-1/4 (133)	52 (1321)	48 (1219)		
22 (550)	5-1/2 (140)	52 (1321)	48 (1219)		
24 (600)	9-1/4 (235)	54 (1372)	48 (1219)		

Figure 38 - Adjustable roof flashing (E45)

#### STORM COLLAR (see figure 39)

A storm collar (included with flashing) must be adjusted immediately above the flashing and sealed with silicone caulking.

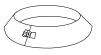


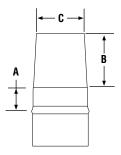
Figure 39 - Storm collar

#### **TERMINATION CAPS**

#### FINISHING CONE (CFVB) (see figure 40)

The finishing cone provides unrestricted exhaust. The flue exit area may be smaller in diameter than the section. It is secured to the vent the same way as a section. The exit cone aids in the acceleration of the flue gas products as they exit and aids in the prevention of ice formation at the point of termination. The exit cones are designed with the complete venting system.

When such a cone is used, rainwater will enter the vent; therefore, a drain component must be used to collect the rainwater. This will be designed into the venting system and will be located either at the base of the vertical vent or at the flue outlet of the appliance.

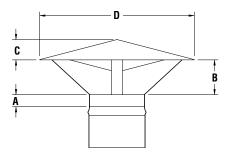


I.D.	A	В	С	
Inches (millim	Inches (millimeters)			
5 (125)	1-3/16 (30)	4-15/16 (125)	4-15/16 (125)	
6 (150)	1-3/16 (30)	5-7/8 (150)	5-7/8 (150)	
7 (180)	1-3/16 (30)	7-1/16 (180)	7-1/16 (180)	
8 (200)	1-3/16 (30)	7-7/8 (200)	7-7/8 (200)	
10 (250)	1-3/16 (30)	9-13/16 (250)	9-13/16 (250)	
12 (300)	1-3/16 (30)	11-13/16 (300)	11-13/16 (300)	
14 (350)	1-3/16 (30)	13-3/4 (350)	13-3/4 (350)	
16 (400)	1-3/16 (30)	15-3/4 (400)	15-3/4 (400)	
18 (450)	1-3/16 (30)	17-11/16 (450)	17-11/16 (450)	
20 (500)	1-3/16 (30)	19-11/16 (500)	19-11/16 (500)	
22 (550)	1-3/16 (30)	21-5/8 (550)	21-5/8 (550)	
24 (600)	1-3/16 (30)	23-5/8 (600)	23-5/8 (600)	

Figure 40 - Finishing cone (CFVB)

#### RAIN CAP (CPP) (see figure 41)

The rain cap is designed to prevent rain, snow or debris from entering the system. It is secured to the vent the same way as a section. The rain cap includes a deflector inside the cap to reduce flow restrictions.



I.D.	A	В	С	D
Inches (mil	limeters)			
5 (125)	1-3/16 (30)	3-9/16 (90)	1-3/4 (45)	14-1/16 (357)
6 (150)	1-3/16 (30)	3-7/8 (98)	1-3/4 (45)	14-1/16 (357)
7 (180)	1-3/16 (30)	3-9/16 (90)	2 (51)	16 (406)
8 (200)	1-3/16 (30)	3-7/8 (98)	2 (51)	16 (406)
10 (250)	1-3/16 (30)	3-7/8 (98)	2-5/8 (66)	20-7/8 (530)
12 (300)	1-3/16 (30)	4-3/4 (120)	2-5/8 (66)	20-7/8 (530)
14 (350)	1-3/16 (30)	4-1/2 (115)	4-3/8 (111)	24 (609)
16 (400)	1-3/16 (30)	5-1/8 (130)	4-3/8 (111)	24 (609)
18 (450)	1-3/16 (30)	4-1/2 (115)	5-1/16 (129)	27-11/16 (704)
20 (500)	1-3/16 (30)	5-1/8 (130)	5-1/16 (129)	27-11/16 (704)
22 (550)	1-3/16 (30)	4-1/2 (115)	5-11/16 (145)	31-1/8 (800)
24 (600)	1-3/16 (30)	5-1/8 (130)	5-11/16 (145)	31-1/8 (800)

Figure 41 - Rain cap (CPP)

#### WARRANTY

These products have a limited warranty. Please read the warranty to be familiar with its coverage.

Retain this document. File it with your other documents for future reference.

#### PRODUCT REFERENCE INFORMATION

Please contact Security Chimneys International for the phone number of your nearest Security Chimneys International dealer who will answer your questions or address your concerns.

Normally, all parts should be ordered through your Security Chimneys International distributor or dealer. Parts will be shipped at prevailing prices at time of order.

When ordering repair parts, always give the following information:

- 1. The model number of the chimney system.
- 2. The part number.
- **3.** The description of the part.
- 4. The quantity required.
- **5.** The installation date of the chimney system.

If you encounter any problems or have any questions concerning the installation or application of this system, please contact your dealer.

# SECURITY CHIMNEYS INTERNATIONAL LTD. CT POSITIVE PRESSURE VENTING SYSTEM 10-YEAR LIMITED WARRANTY

#### THE WARRANTY

Security Chimneys International guarantees its CT liner and breeching system for a period of 10 years from the date of purchase. This warranty is limited to the replacement only of the lengths deemed defective, provided it has been properly installed and used as intended. The complete system must have been designed and sized by, or the design and sizing must have been approved by Security Chimneys International's Engineering department on the basis of operating parameters provided by the customer. The entire chimney system to be installed must consist of Security Chimneys' components. This warranty will be void if the chimney is installed where chlorinated compounds or other halogenated compounds are present in the atmosphere or in the vented product. This warranty can not be extended by a Security Chimneys International representative.



Security Chimneys International Limited reserves the right to make changes at any time, without notice, in design, materials, specifications, prices. Consult your local distributor for chimney system code information.



800-667-3387; www.securitychimneys.com