SECURE-TEMP® ASHT

Factory-built CHIMNEY 5", 6", 7", 8" & 10" dia. TYPE HT

CONTENTS

USA CANADA **GENERAL INFORMATION, GENERAL INFORMATION.** USA & CANADIAN APPLICATIONS...2 **USA & CANADIAN APPLICATIONS...2 KEEP YOUR CHIMNEY CLEAN. KEEP YOUR CHIMNEY CLEAN.** SIZING CHART......3 SIZING CHART......3 **GENERAL INSTALLATION NOTES....4-5 GENERAL INSTALLATION NOTES...19-20** INTERIOR STRAIGHT INSTALLATION INTERIOR STRAIGHT INSTALLATION -SINGLE FLOOR......6-7 INTERIOR STRAIGHT INSTALLATION INTERIOR STRAIGHT INSTALLATION -MULTIPLE FLOOR......8-9 -MULTIPLE FLOOR......23-24 INTERIOR INSTALLATION WITH INTERIOR INSTALLATION WITH CATHEDRAL CEILING......10-12 CATHEDRAL CEILING......25-27 OFFSET DEVIATION......13-14 OFFSET DEVIATION......28-31 EXTERIOR INSTALLATION......15-18 EXTERIOR INSTALLATION......32-34 INTERIOR INSTALLATION ON A INTERIOR INSTALLATION ON A FURNACE & WATER HEATER....35-36 FURNACE & WATER HEATER....35-36 SPECIALIZED COMPONENTS......37 SPECIALIZED COMPONENTS......37

INSTALLATION

AND

OPERATION

INSTRUCTIONS

WARNING A MAJOR CAUSE OF CHIMNEY-RELATED FIRES IS FAILURE TO MAINTAIN REQUIRED **CLEARANCES (AIR SPACES) TO COM-BUSTIBLE MATERIALS. IT IS OF UTMOST IMPORTANCE THAT THIS CHIMNEY BE** INSTALLED ONLY IN ACCORDANCE WITH THESE INSTRUCTIONS.

Read these instructions and keep them for future reference

Listed: Warnock Hersey 9651 Standard: CAN / ULC-S604 **UL-103HT CAN / ULC-S629** (6", 7", 8" only)



We recommend that our woodburning hearth products be installed and serviced by professionals who are certified in the U.S. by the National Fireplace Institute® (NFI) as NFI Woodburning Specialists or who are certified in Canada by Wood Energy Technical Lorg Training (WETT).



PIASHT LS301 REV. 18 11/2017



2125 Monterey, Laval, Quebec Canada, H7L 3T6 800-667-3387

RECOMMENDATIONS

Clearance

The clearances stated in this guide are minimum requirements: if more space is available, use it. Minimum clearances mean leaving unobstructed air space. Do not fill these spaces with any material whatsoever, especially not insulating material. If you insulate your attic later, be sure to maintain the necessary clearance.

Inspection

Contact local building or fire officials about restrictions, installation inspections and permits that may be required in your area.

Replacement Parts

If a component of your chimney system is damaged it must be replaced by an identical one from Security Chimney**s**.

APPLICATIONS

WOOD AND COAL STOVES

The ASHT chimney has been designed for use with wood, gas, oil, and coal in residential, commercial and industrial applications, specially developed for use with controlled-combustion stoves and wood burning fireplace.

In the USA, ASHT is listed to UL-103HT, 2100°F in diameters of 5, 6, 7, 8 and 10 inches.

In Canada, ASHT is listed to ULC-S629, 2100° F in diameters 6, 7, and 8 inches for wood/coal application. **NOTE:** For interior enclosed installation, premium shields are required around the chimney. Refer to specific Canadian installation section for proper installation.

In Canada, ASHT is also designed for use with gas or oil fired heating appliances such as furnace, hot water heaters, and other appliances, as per ULC-S604 in diameter 5 to 10 inches. In these types of installations, <u>no</u> premium shields are required even where the chimney is enclosed.

If you are planning to install a wood stove, we recommend that you:

- 1. Choose the right size stove. Do not buy one larger than you need.
- 2. Connect only one appliance to a chimney.
- 3. Never overfire your stove. If any part of the stove or

stove pipe is glowing red, then you are overfiring. Immediately close the stove's dampers until the system cools. The high temperature caused by overfiring can permanently damage the stove and stove pipe and may overheat nearby combustible walls and furniture.

- 4. Install the stove and stove pipe as described in the installation instructions accompanying the stove. Be certain to maintain the required clearances to combustible construction.
- 5. Keep your flue gases between 300°F and 500°F. This will maximize efficiency while minimizing condensation and creosote formation. Do not fill your stove with wood and allow it to smolder for 8 to 10 hours. This condition produces large amounts of creosote in the chimney.
- 6. Do not burn sea driftwood or treated w ood. These combustibles are highly corrosive to all types of stainless steel.

FACTORY BUILT FIREPLACES

In Canada, ASHT is suitable for use with closed or opened fireplaces certified for use with the ASHT.

When doing so please refer to the fireplace installation instruction to install the chimney.

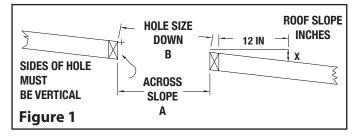
NOTE: Premium shields are not required for factory-built fireplaces unless the appliance manufacturer states otherwise.

KEEP YOUR CHIMNEY CLEAN

CHIMNEY OPERATION AND MAINTENANCE

Wood stoves can quickly create large deposits of creosote in the chimney. Some wood stoves can create enough creosote in two weeks to cause a chimney fire. When using a wood stove, we recommend that you:

- 1. Initially, inspect the chimney system weekly. You will learn how often it will be necessary to clean your chimney.
- 2. The chimney should be inspected at least once every 2 months during the heating season to determine if a creosote or soot build-up has occurred: if creosote or soot has accumulated, it should be removed to reduce the risk of chimney fire.
- 3. Have your chimney cleaned by a qualified chimney sweep. If you want to clean your chimney yourself: clean your chimney using plastic, wood, or stainless steel brushes. Do not use a brush that will scratch the stainless steel interior of your chimney.
- 4. Do not expect chemical chimney cleaners to keep your chimney clean. Their use does not negate the necessity of periodically inspecting and cleaning your chimney.



ROOF OPENING CHART

SIZING CHART

CHIMNEY-SIZE	5"	6"	7"	8"	10"				
OUTSIDE-DIAMETER	7"	8"	9"	10"	12"				
FRAMING DIMENSION REQUIRED									
Base-Support (S2)	12-1/8"								
Reduced Clear. Support (RCS)		10 1/8"	11 1/8"	12 1/8"					
Cathedral support (SCC)		12-1/8"	14-3/8"	14-3/8"					
Square support (SSC)		12-1/8"	14-3/8"	14-3/8"	14-3/8"				
Wall Thimble (RSM)	11-3/8"	12-3/8"	13-3/8"	14-3/8"	16-3/8"				
Finish support (SFC)		12-1/8"	14-3/8"	14-3/8"					
Firestop (BF)	11-3/8"	12-3/8"	13-3/8"	14-3/8"	16-3/8"				
Attic Radiation Shield (RSA2)	11-3/8"	12-3/8"	13-3/8"	14-3/8"	16-3/8"				
MA	X. LENGTH H	EIGHT SUPI	PORTED **						
Base Support (S2)	32'								
Tee Support (SM)	63'	63'	55'	48'	39'				
Roof Support (ST)	42'	34'	27'	24'	20'				
Radiation Shield Con- nector Support (RSSR)		30'	24'	21'					
Cathedral Support (SCC)		75'	65'	59'					
Square Support (SSC)		60'	50'	45'	35'				
Reduced Clearance Support (RCS)		60'	50'	45'					
Adj. Square Support (SSA)	27'	22'							
Finish Support (SFC)		75'	65'	59'					
Offset/Wall Support (SO) (SO-1)		28'	24'	20'	14'				
Insulated Tee (TI) *	63'	63'	55'	50'	50'				
Clearance To Combustibles	2"	2"	2"	2"	2"				

Table 1

* When installed on a concrete footing.

** **NOTE:** If greater height is required, use additional roof supports at intervals not exceeding 30'

CHIMNEY SIZE		5"	6	6"	7"		8"		10"		
ROOF SLOPE		ROOF HOLE SIZE									
x/12	A	В	A	В	A	В	Α	В	A	В	
0	11-3/8	11-3/8	12-3/8	12-3/8	13-3/8	13-3/8	14-3/8	14-3/8	16-3/8	16-3/8	
2/12	11-3/8	11-1/2	12-3/8	12-1/2	13-3/8	13-1/2	14-3/8	14-9/16	16-3/8	16-19/32	
4/12	11-3/8	12	12-3/8	13	13-3/8	14-3/32	14-3/8	15-5/32	16-3/8	17-1/4	
6/12	11-3/8	12-11/16	12-3/8	13-13/16	13-3/8	14-15/16	14-3/8	16-3/32	16-3/8	18-5/16	
8/12	11-3/8	13-11/16	12-3/8	14-7/8	13-3/8	16-1/16	14-3/8	17-1/4	16-3/8	19-11/16	
10/12	11-3/8	14-13/16	12-3/8	16-1/8	13-3/8	17-7/16	14-3/8	18-23/32	16-3/8	21-5/16	
12/12	11-3/8	16-1/16	12-3/8	17-1/2	13-3/8	18-29/32	14-3/8	20-11/32	16-3/8	23-5/32	
		Ta	able 2	- Refei	' to Fi	gure 1					

NOTE: ALL DIMENSIONS ARE IN INCHES

NOTE: DIAGRAMS & ILLUSTRATIONS ARE NOT TO SCALE.

GENERAL INSTALLATION NOTES (USA)

INSTALLATION NOTES (USA)

1

 The chimney is intended for use with solid, liquid, and gaseous fuel burning appliances. Allowable flue gas temperature:

Maximum continuous 1000° F (540°C) Brief forced firing 1400°F (760°C) Tested to 2100°F (1150°C) - 10 minutes

- The maximum height of chimney supported by the various Security Chimneys' supports are outlined on page 3.
- The supports described in this manual should only be used with Security Chimneys' model ASHT, 5", 6", 7", 8" and 10" factory built chimneys.
- 4. Size the chimney in accordance with the appliance manufacturer's instructions.
- When a firestop (BF or RSA2) is required, it is important to follow the framing dimensions for floor openings as prescribed in this manual. see Table 2).
- 6. A chimney servicing a fireplace or an incinerator shall not serve any other appliance.
- 7. The chimney shall extend at least 3 ft above its point of contact with the roof and at least 2 ft higher than any wall, roof or adjacent building within 10 ft of it.
- 8. The maximum height of an unguided chimney above the roof is 5 ft. If the chimney extends more than 5 ft. above the roof, a Universal Roof Brace (BS2) must be used.
- The clearance between single wall pipe and unprotected combustible material must not be less than 18" (see National Building Code and NFPA 211) except: The distance between the vertical stove pipe and the ceiling may be less than 18" and will be established by the finish support.
- 10. Portions of the chimney which may extend through accessible spaces shall be enclosed in all cases to avoid personal contact with the chimney and damage to the chimney. Except for installation in single and two-story family dwellings, the enclosure must have a fire resistance rating equal to or greater than that of the floor or roof assemblies through which they pass.
- 11. Do not fill the 2" space around the chimney with insulation or any other material. Insulation placed in this area could cause adjacent combustibles

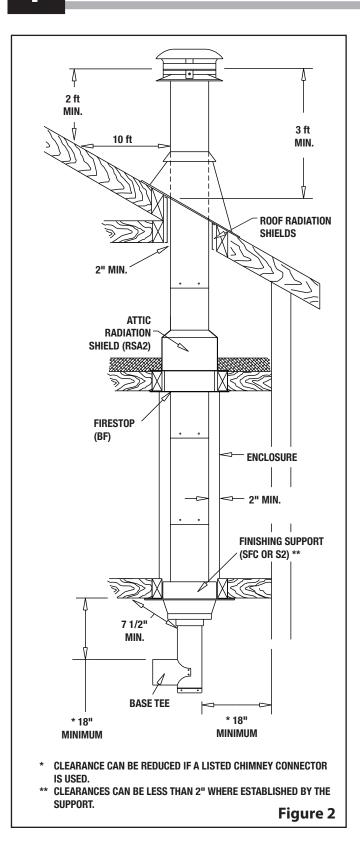
to overheat.

- 12. Self tapping screws are not required, but may be used to reinforce the connection and avoid accidental unlocking of chimney lengths. Use only 1/2" self-tapping screws. Do not penetrate the inner wall of the chimney.
- *13. If needed, when penetrating the building envelope the gap between the outer layer of chimney and any firestop or wall thimble can be sealed using high temperature rated (600°F) silicone caulking. Doing so will preserve the building envelop integrity.

WARNING

The clearance between the chimney and combustible material must not be less than 2", except where established by the support. Do not fill this area with insulation.

GENERAL INSTALLATION NOTES (CONT'D) (USA)



2 INTERIOR STRAIGHT INSTALLATION - SINGLE FLOOR (USA)

NOTE: If using the Reduced Clearance Support (RCS) at the attic level, the use of the attic radiation shield is not required. The Reduced Clearance Support (RCS) acts as an attic radiation shield when installed with insulation and a collar (provided) (see figure 3).

Step 1: Locate the chimney in a convenient place as near as possible to the appliance outlet.

Step 2: Cut and frame the opening in the ceiling and roof where the chimney will pass.

NOTE: It is important to follow the cutting dimensions for floor openings as prescribed in this manual.

	FRAMING DIMENSION					
CHIMNEY Size	Reduce Clearance Support	ROOF				
6"	10-1/8″ x 10-1/8″	12-3/8″ x 12-3/8″				
7"	11-1/8″ x 11-1/8″	13-3/8″ x 13-3/8″				
8″	12-1/8″ x 12-1/8″	14-3/8″ x 14-3/8″				

Table 3

- Step 3: From below, push the Reduced Clearance Support into the framed opening in the ceiling. Ensuring the support is level, attach the support to the framed opening using (12) - 3" spiral nails or #8 x 1 1/2" wood screws (see Figure 3). At least 3 1/2" of the support must extend into the room. Screw the Finish Trim (included) to the ceiling.
- Step 4: Place first chimney length into the support. Twist to lock into place. Wrap the insulation pad around the chimney section removing any excess. Slide insulation pad into the space between the chimney section and support making sure the insulation makes contact with the bottom of the support.

You may use approved insulation listed / compliant with ASTM E136/ULC S114 as Non-Combustible, have a melting temperature above 2000°F/1100°C, be water resistant with low moisture absorbtion. Material such as Rockwool or mineral wool qualify.

NOTE: If needed a Support Extension (SE) can be

attached to the support to increase its height. See page 12.

NOTE: Make sure arrow on pipe label is pointing upward.

- Step 5: Place the collar around the chimney on top of the square support. Make sure it completely covers the top of the square support.
- Step 6: Stack the next chimney length on the first length. Be sure that the male and female threads are not in line when putting the lengths together. Turn the chimney clockwise to lock it in place. Continue until the required chimney height is reached. Install the Roof Radiation Shield in the roof joists. This shield consists of (4) metal plates supplied with the Roof Flashing. Nail one plate to each side of the joists using (2) - 2 1/2" nails.

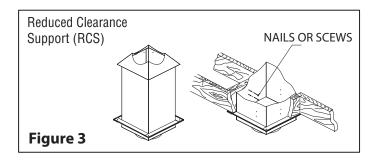
Step 7: ROOF FLASHING INSTALLATION

Put the roof flashing in place. Seal the joint between the roof and the flashing with roofing compound.

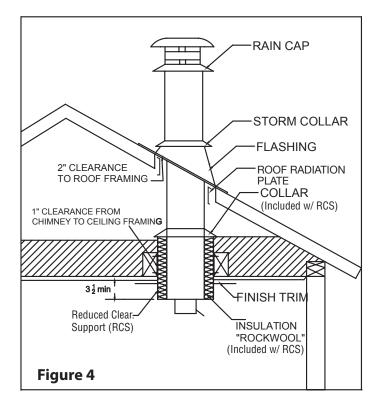
For sloping roofs, place the flashing under the upper shingles and on top of the lower shingles. Nail the flashing to the roof using nails. Place the storm collar around the chimney and slide down on top of the flashing.

Step 8: Tighten it with the bolt supplied and make sure the joint is properly caulked (see Figure 5).

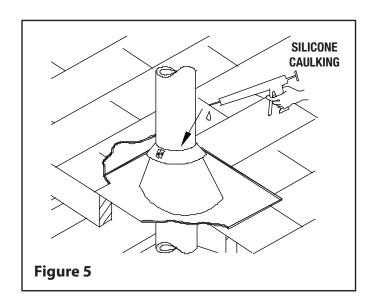
Step 9: Attach the rain cap to the top of the chimney.



INTERIOR STRAIGHT INSTALLATION - SINGLE FLOOR (CONT'D) (USA)



2



3 INTERIOR STRAIGHT INSTALLATION - MULTIPLE FLOOR (USA)

Step 1. Locate the chimney in a convenient place as near as possible to the appliance outlet.

Step 2. Cut and frame the openings in the floor, ceiling and roof where the chimney will pass.

NOTE: It is important to follow the framing dimensions for the floor openings prescribed in this manual.

	HOLE SIZE					
CHIMNEY SIZE	FINISH SUPPORT (SFC) or (S2)	RADIATION SHIELD* & ROOF				
5"	12-1/8" x 12-1/8"	11-3/8" x 11-3/8"				
6"	12-1/8" x 12-1/8"	12-3/8" x 12-3/8"				
7"	14-3/8" x 14-3/8"	13-3/8" x 13-3/8"				
8"	14-3/8" x 14-3/8"	14-3/8" x 14-3/8"				
10"		16-3/8" x 16-3/8"				
	Table 4					
* For sloping roofs see size Table 2 on page 3						

- Step 3. From below push the finish support into the framed opening. Nail or screw the support to the framed box using (12) 3" spiral nails or #8 x 1 1/2" wood screws (see Figure 6).
- Step 4. Put this first chimney length in the support. Turn it clockwise to lock it in place (see Figure 7).
- **NOTE:** Arrow on pipe label must be pointing up.
- Step 5. From below, install a Firestop (BF) in each floor through which the chimney passes.
- Step 6. Stack the next chimney length on the first length. Be sure that the male and female threads are not in line when putting the lengths together. Turn the chimney clockwise to lock it in place. You may add a 1/2" stainless steel self tapping screw to prevent accidental unlocking. Continue until the required chimney height is reached.
- Step 7. At the attic level, install a Firestop (BF), from below and an Attic Radiation Shield (RSA2) and Storm Collar from above (see Figure 8).

Install the Roof Radiation Shield in the roof joists. This shield consists of four metal plates supplied with the roof flashing. Nail one plate to each side of the joist using (2) - 2 1/2" nails.

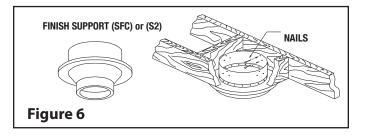
Step 8. ROOF FLASHING INSTALLATION

Put the roof flashing in place. Seal the joint between the roof and the flashing with roof-ing compound.

For sloping roofs, place the flashing under the upper shingles and on top of the lower shingles. Nail the flashing to the roof using roofing nails.

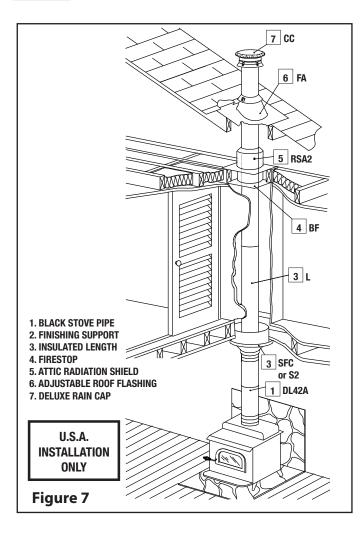
Place the storm collar over the chimney and the flashing. Tighten it with the bolt supplied making sure the joint is properly caulked (see Figure 9).

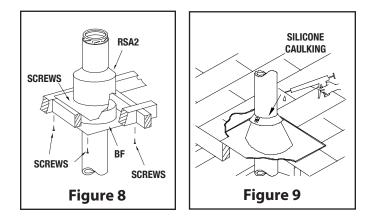
Step 9. Attach the rain cap to the top of the chimney.



3

INTERIOR STRAIGHT INSTALLATION - MULTIPLE FLOOR (CONT'D) (USA)



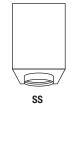


INTERIOR INSTALLATION WITH CATHEDRAL CEILING (USA)

SQUARE SUPPORT (SSC) AND ADJUSTABLE SQUARE SUPPORT (SSA)

4

This support is similar in application and installation as the Reduced Clearance Support. Install it using the instructions on page 11(refer to Figure 11 for visual references). There is no insulation. The adjustable square support requires an opening of 12" x 12" up to 12" x 22-1/2" in the ceiling (see Figure 12).

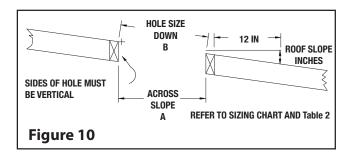


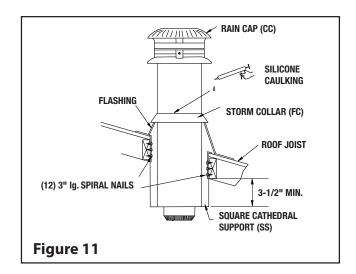
SUPPORT EXTENSION (PS24) (For Square Support only)

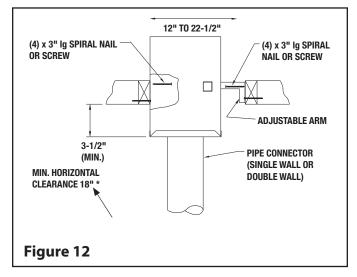
PS

Steep pitched cathedral ceilings may require the use of a Square Support extension (PS24). This piece fits down inside the square support and can be adjusted to increase the support's length by up to 16"

The extension is attached to the support using the eight metal screws provided. Be sure there is at least a 2" overlap where the extension joins the support.







4. INTERIOR INSTALLATION CATHEDRAL CEILING (CONT'D) (USA)

REDUCED CLEARANCE SUPPORT (RCS)

NOTE: The Reduced Clearance Support (RCS) comes with a collar. It can be discarded for a Cathedral Ceiling application, it is not required.

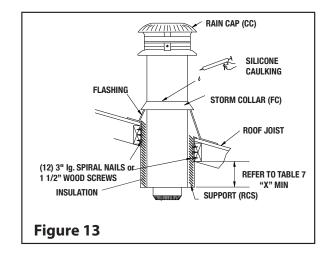


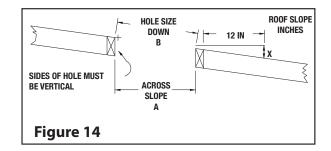
- Step 1: Locate the chimney in a convenient location as near as possible to the appliance outlet. Cut and frame an opening in the roof for the support (see Table 5). The sides of this hole must be vertical (see Figure 14).
- Step 2: From above, place the support in the opening.

NOTE: The bottom portion of the support must extend below the ceiling. (see Table 6). The minimum horizontal distance between the single wall stove pipe and the vertical surface is 18".

- Step 3: Use a level to ensure the support is vertical. If the support extends above the roof, cut it flush with the top of the roof. Attach the support to the framed opening using (12)-3" spiral nails or #8 x 1 1/2" wood screws (see Figure 13).
- Step 4: Place first chimney length into the support. Twist to lock into place. Wrap the insulation pad around the chimney section removing any excess. Slide insulation pad into the space between the chimney section and support making sure the insulation makes contact with the bottom of the support.

You may use approved insulation listed / compliant with ASTM E136/ULC S114 as Non-Combustible, have a melting temperature above 2000°F/1100°C, be water resistant with low moisture absorbtion. Material such as Rockwool or mineral wool gualify.





	6″			7″		,"			
Chimney Size		Hole Size (Reduce Clearance Support)							
Roof Slope	A	В	A	В	A	В			
x/12									
0	10-1/8	10-1/8	11-1/8	11-1/8	12-1/8	12-1/8			
2/12	10-1/8	10-1/4	11-1/8	11-1/4	12-1/8	12-1/4			
4/12	10-1/8	10-5/8	11-1/8	11-3/4	12-1/8	12-3/4			
6/12	10-1/8	11-1/4	11-1/8	12-1/2	12-1/8	13-1/2			
8/12	10-1/8	12-1/8	11-1/8	13-1/4	12-1/8	14-1/2			
10/12	10-1/8	13-1/4	11-1/8	14-1/2	12-1/8	15-7/8			
12/12	10-1/8	14-1/4	11-1/8	15-3/4	12-1/8	17-1/8			
			Table	5					

NOTE: ALL DIMENSIONS ARE IN INCHES.

TO CONTINUE INSTALLATION REFER TO STEP 6 ON PAGE 15.

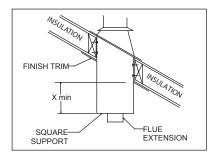
1 INTERIOR INSTALLATION CATHEDRAL CEILING (CONT'D) (USA)

Reduce Clearance Support Extension (SE)

Steep pitched cathedral ceilings may require the use of a Support Extension (SE). This piece fits down inside the reduced clearance support and can be adjusted to increase the support's length by up to 22".

SE

The extension is attached to the support using the eight metal screws provided. Be sure there is at least a 2" overlap where the extension joins the support.



Slope	X min
0/12 - 2/12	3 1⁄2″
2/12 - 7/12	5 1⁄2″
7/12 - 12/12	6 ¾″
12/12 - 24/12	7 1⁄2″
24/12	12 1⁄12″

Table 6

5 OFFSET DEVIATION (USA)

OFFSET CHIMNEY

If it is necessary to offset the chimney in order for it to pass through an obstruction or to clear a joist, do this by using 15° or 30° insulated elbows. A maximum of two offsets (4 elbows in all) is allowed in a chimney. The chimney must not be inclined more than 30° from vertical.

The minimum chimney height when using 15° offsets is 10'.

The minimum chimney height when using 30° offsets is 15'.

The maximum length of unsupported offset chimney is 6'. If the offset chimney is longer than 6', then it must be supported at 6' intervals using an Offset Support (SO) or Wall Band (BM).

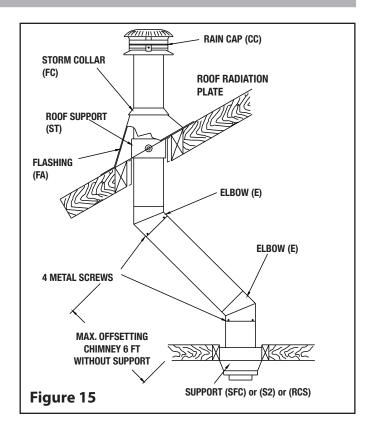
INSTALLATION INSTRUCTIONS

Install the required support and the chimney as described in the support's installation instructions. When you reach the height at which the elbow will be installed, proceed as follows:

- Step 1. Install the insulated offset elbow on the vertical chimney length. Turn it in the required direction and fasten it to the chimney with the (4)-1/2" metal screws provided.
- Step 2. Place the required offset chimney length (see Table 7 below) on the elbow. Turn it clockwise to lock it in place.
- Step 3. Use another elbow to turn the chimney vertically. Again secure the elbow to the chimney length using the (4)-1/2" metal screws.
- Step 4. Install the remaining chimney as described in the instructions for the Roof Support (See page 15).

INSTALLATION CALCULATIONS

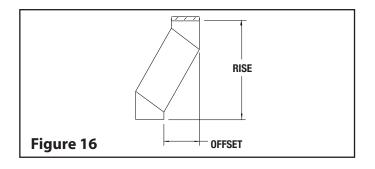
Determine the offset required in view of the obstacles that must be avoided (see Figure 15). Refer to Table 7 to determine the elbows required as well as the insulated length needed.



WARNING

A support must always be installed right above each offset (two elbows) to support the chimney above the offset.

5 OFFSET DEVIATION (CONT'D) (USA)



OFFSET & RISE CHART MODEL ASHT (5" - 10")

ANGLE	DIA	INCLIES	ONE LENGTH BETWEEN ELBOWS					TWO LENGTHS BETWEEN ELBOWS						
ANGLE	DIA.	INCHES	8	12	18	24	36	48	8 & 48	12 & 48	18 & 48	24 &48	36 & 48	48 & 48
15°	5" - 10"	Offset	3-5/16	4-5/16	5-7/8	7-7/16	10-1/2	13-5/8	15-3/8	16-7/16	18	19-1/2	22-5/8	25-3/4
		Rise	15-11/16	19-9/16	25-3/8	31-3/16	42-3/4	54-3/8	60-15/16	64-13/16	70-9/16	76-3/8	87	99-9/16
30°	5" - 10"	Offset	7-7/16	9-7/16	12-7/16	15-7/16	21-7/16	27-7/16	30-13/16	32-13/16	35-13/16	38-13/16	44-13/16	50-13/16
		Rise	20	23-1/2	28-11/16	33-7/8	44-1/4	54-11/16	60-9/16	64	69-1/4	74-7/16	84-13/16	95-1/4

Note: All dimensions are in inches.

Table 7

6 EXTERIOR INSTALLATION (USA)

ROOF SUPPORT (ST)

The Roof Support has three possible uses:

-It may be used to support a chimney from the roof. It adjusts to any roof pitch.

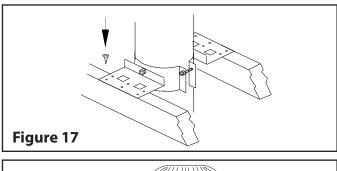
-It may be used on a floor, ceiling or roof above an offset to support the chimney above the offset.

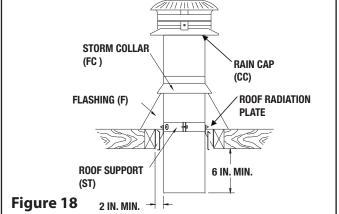
-It may be used on a floor, ceiling or roof as a supplementary support when the chimney height exceeds that of the primary support. (See maximum length height supported, page 3).

INSTALLATION INSTRUCTIONS

With the chimney extending through the opening in the roof, ceiling or floor proceed as follows (Refer to Figure 18 for visual references):

- Step 1. Install the roof radiation shields in the roof joists. These shields consist of four metal plates. Nail one plate to each side of the joist using (2) 2-1/2" nails.
- Step 2. Assemble the collar to fit your chimney diameter. Continue to assemble the support as described in the instructions supplied with the support.
- Step 3. Slip the support down over the stainless steel chimney until its brackets rest on the roof or floor. Tighten the collar around the chimney, (see Figure 17).
- Step 4. Center the chimney and nail or screw the support to the roof or floor using (8) - 2-1/2" nails or (8) N°. 8 - 1-1/4" wood screws. (Figure 17).
- Step 5. Install the remaining chimney lengths, until the required chimney height is reached.
- Step 6. Put the roof flashing in place. Seal the joint between the roof and the flashing with roofing compound. For sloping roofs, place the flashing under the upper shingles and on top of the lower shingles. Nail the flashing to the roof using roofing nails. Place the storm collar over the chimney and push down. Caulk the joint between the chimney and collar with high temp silicone caulking.
- Step 7. Fit the rain cap to the top of the chimney. Turn it clockwise to lock it in place.





6 EXTERIOR INSTALLATION (CONT'D) (USA)

OFFSET/WALL SUPPORT (S0) (S0-1)

When a chimney is used along a wall, this support may be used to support the chimney. The height of chimney supported is shown in supported height See Table 1.

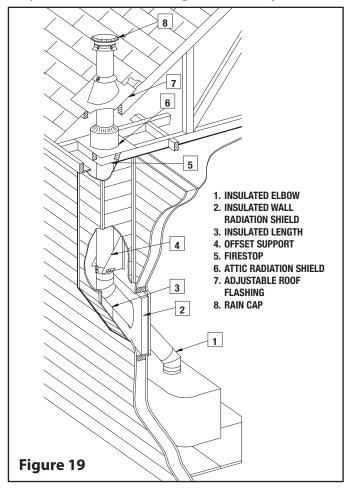


INSTALLATION INSTRUCTIONS

Install the support as follows (see Figure 19):

- Step 1. Assemble the collar to fit your chimney diameter. Continue to assemble the support as described in the instructions supplied with the support.
- Step 2. Slip the support down over the chimney to the proper location.
- Step 3. Tighten the collar around the chimney.
- Step 4. Attach the support brackets to the wall using (8) 3" nails or (8) N°. 10 x 1-1/4" wood screws.

NOTE: Be sure that the support attaches to a framing and not merely to dry wall or aluminum siding. Step 5. Continue installing the chimney.



TEE & WALL SUPPORT

Four supports are available, an adjustable with collar (SME), an adjustable with coupling (SMA), (SO-1) and a non-adjustable with coupling (SM). See Figure 20

INSTALLATION NOTES

If possible, install an interior chimney as it will provide better performance than an exterior chimney. In areas with continuous temperatures below 0°F (-18°C), the use of an exterior chimney may result in operating problems such as poor draft, excessive condensation of combustion products and rapid accumulation of creosote when connected to a wood burning appliance. If you do install an exterior chimney, we recommend that you enclose it using an insulated enclosure.

- 1. The chimney may be enclosed or unenclosed. Maintain 2" clearance to combustible materials. Do not fill the 2" space around the chimney with insulation or any other material.
- 2. A Wall Band (BM) must be used to secure the chimney to the wall. Maximum distance between wall bands is 8'.
- 3. The minimum length of chimney extending past the inside wall is 5".
- 4. The maximum length of chimney extending past the inside wall is 24".
- 5. The distance between the stove pipe and a parallel combustible wall or ceiling must not be less than 18". The distance between the horizontal stove pipe and the unshielded vertical wall through which it passes must not be less than 7".
- 6. If an exterior installation is to be enclosed, allow for access to base of tee to facilitate required cleaning.
- 7. The minimum distance between the bottom of the support and any horizontal combustible (including the ground) is 6". This distance can be reduced to 2" by using an insulated tee cap (TCI) in conjunction with a (SME) or (SO-1) wall support.
- 8. The adjustable support (SME) and (SO-1) may only be installed with an insulated tee cap (TCI) or a drain tee cap (TCP).
- 9. The adjustable support (SME) and (SO-1) can be installed either below or above the insulated tee.

6 EXTERIOR INSTALLATION (CONT'D) (USA)

INSTALLATION INSTRUCTIONS

- Step 1. Determine where the chimney will pass through the wall.
- For concrete walls cut an opening slightly larger than the chimney.
- For combustible walls cut and frame a hole 4" larger than the chimney, midway between the wall studs (see Table 8 below for sizing).

Normally wall studs are placed at 16" on center. With the hole midway between them, the support will fasten to these studs and thus ensure a strong attachment to the wall (see Figure 21).

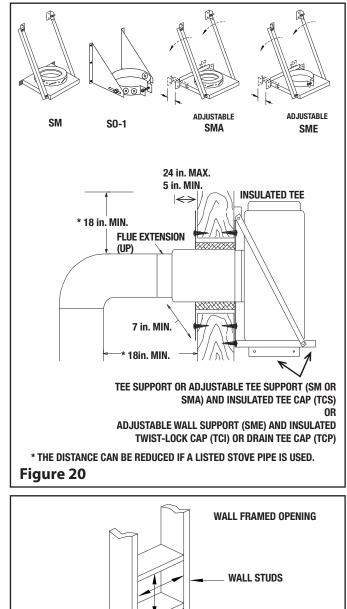
Step 2. Wood walls: Place the exterior half of the Wall Thimble (RSM) in the opening from the outside. Nail in place using (4) 2" nails or 1" screws. This Wall Thimble is adjustable from 7" to 12". Make sure the insulation pad is cut to the desired length according to the wall thickness. Wrap the insulation pad around the tube of the interior half of the Wall Thimble. Place the metal sheet around the insulation pad and join the locking tabs together. Place the interior half of the Wall Thimble inside the exterior half of the Wall Thimble.

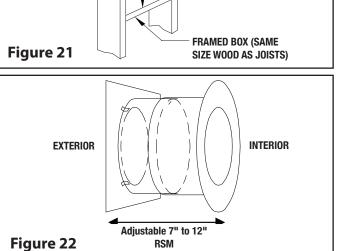
Using a level make sure that the hole for the chimney to pass through is horizontal. Screw the outer thimble in place with the provided screws (see Figure 23).

NOTE: The cavity surrounding the wall thimble can be filled with insulation (see Figure 23).

	HOLE SIZE					
CHIMNEY SIZE	COMBUSTIBLE CONCRETE					
5"	11-3/8" x 11-3/8"	7-3/4"				
6"	12-3/8" x 12-3/8"	8-3/4"				
7"	13-3/8" x 13-3/8"	9-3/4"				
8"	14-3/8" x 14-3/8"	10-3/4"				
10"	16-3/8" x 16-3/8"	12-3/4"				

Table 8

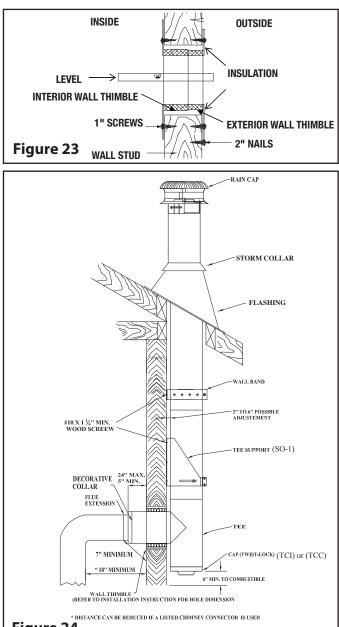




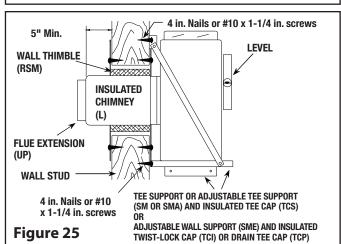
6 EXTERIOR INSTALLATION (CONT'D) (USA)

- Step 3. The minimum length of insulated chimney required to pass through the wall will be thickness plus 7". The insulated chimney must extend at least 5" into the room beyond the finished wall. Insert this chimney length in the side branch of the insulated tee. Turn it clockwise to lock it in place. Seal this joint by wrapping it with the aluminum tape supplied with the tee. Mount the insulated tee on the support so that the chimney length which will go through the wall is perpendicular to the side of the support that will fasten to the wall.
- Step 4. This step will require 2 people: (see Figure 25). Insert the chimney length of this tee-support assembly into the hole in the wall. Using a level, ensure the tee is vertical, then attach the support to the wall using (8) N°. 10 x 1 1/4" wood screws or 4" spiral nails.
- Step 5. Attach the clean-out cap to the support's flue extension using the three metal screws provided. Make sure that the screws have pierced through the flue extension. The cap is in the box with the insulated tee. If an insulated tee cap is used, twist lock the tee cap to the tee (adjustable support SME only).
- **NOTE:** To provide sufficient strength, the nails must be driven into the wall studs. For concrete walls, the support should be attached using (8) 1/4" x 2" lag bolts.
- Step 6. Attach the flue extension to the horizontal chimney length using the three metal screws provided (see Figure 25).
- Step 7. Stack a chimney length on top of the tee. Turn it clockwise to lock it in place. Continue until the required chimney height is reached.
- **NOTE:** At 8' intervals, attach the chimney to the wall using a Wall Band (BM).
- Step 8. If the chimney passes through the roof, cut a hole large enough to provide 2" clearance between the chimney and the roof. For pitch roof, see chart on page 3. Install the Roof Radiation Shield in the roof joist.

To continue, SEE STEP 6, on page 15.







NOTE: DIAGRAMS & ILLUSTRATIONS ARE NOT TO SCALE.

GENERAL INSTALLATION NOTES (CANADA)

INSTALLATION NOTES

1. The chimney is intended for use with solid (6",7", and 8" dia. only) or liquid and gaseous fuel burning appliances (all diameters).

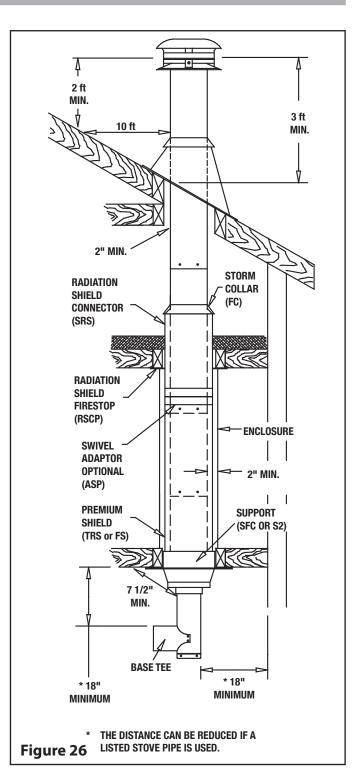
Allowable flue gas temperature: Maximum continuous 540°C (1000° F) Brief forced firing 760°C (1400°F) Tested to 1150°C (2100°F) - 30 minutes

2. On wood or coal stove applications and in areas where the chimney is completely enclosed, it is required to install Premium shields (telescopic or flexible) around the chimney and a Radiation Shield Connector (SRS) at the ceiling level. (See Figure 26).

For venting of gas or oil burning appliances Premium Shields are <u>not</u> required, even where the chimney is enclosed.

For factory-built wood burning fireplaces, Premium Shields are <u>usually not</u> required, please follow fireplace installation instructions.

- 3. The maximum height of chimney supported by the various security supports are outlined on Table 1.
- 4. The supports described in this booklet should only be used with Security Chimneys' model ASHT, 5", 6", 7", 8" and 10" factory built chimneys.
- 5. Size the chimney in accordance with the appliance manufacturer's instructions.
- 6. When a firestop (BF, RSA2, or SRS) needs to be installed, it is important to follow the framing dimensions for the floor openings prescribed in this manual. See Table 1.
- 7. A chimney servicing a fireplace or an incinerator shall not serve any other appliance.
- 8. The chimney shall extend at least 3 ft above its point of contact with the roof and at least 2 ft higher than any wall, roof or adjacent building within 10 ft of it.
- 9. The maximum height of unguided chimney above the roof is 5 ft.
- The clearance between single wall pipe and unprotected combustible material must not be less than 18" (see National Building Code and NFPA 211) except: The distance between the vertical stove pipe and the ceiling may be less than 18"



GENERAL INSTALLATION NOTES (CONT'D) (CANADA)

and will be established by the finish support.

- 11. Portions of the chimney which may extend through accessible spaces shall be enclosed in all cases to avoid personal contact with the chimney and damage to the chimney. When doing so on woodstove or coal application, a telescopic rigid or flexible shield is required around the chimney. Except for installation in single and two-story family dwellings, the enclosure must have a fire resistance rating equal to or greater than that of the floor or roof assemblies through which they pass.
- 12. Do not fill the 2" space around the chimney with insulation or any other material. Insulation placed in this area could cause adjacent combustibles to overheat.
- 13. Self tapping screws are not required, but may be used to reinforce the connection and avoid accidental unlocking of chimney lengths. Use only 1/2" self-tapping screws. Do not penetrate the inner wall of the chimney.
- *14. If needed, when penetrating the building envelope, the gap between the outer layer of chimney and any firestop or wall thimble can be sealed with high temperature rated (315°C) (600° F) silicone caulking. Doing so will help preserve the building envelop integrity.

WARNING

The clearance between the chimney and combustible material must not be less than 2", except where established by the support. Do not fill this area with insulation.

8 INTERIOR STRAIGHT INSTALLATION - SINGLE FLOOR (CANADA)

NOTE: If using the Reduced Clearance Support (RCS) at the attic level, the use of the attic radiation shield is not required. The Reduced Clearance Support (RCS) acts as an attic radiation shield when installed with insulation and a collar (provided).

- Step 1: Locate the chimney in a convenient place as near as possible to the appliance outlet.
- Step 2: Cut and frame the opening in the ceiling and roof where the chimney will pass.

NOTE: It is important to follow the framing dimensions for ceiling and roof openings as prescribed in this manual.

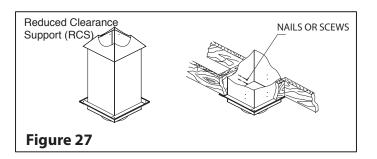
	FRAMING DIMENSION					
CHIMNEY Size	REDUCED Clearance Support	ROOF OPENING				
6"	10-1/8" x 10-1/8"	12-3/8" x 12-3/8"				
7"	11-1/8″x 11-1/8″	13-3/8″ x 13-3/8″				
8″	12-1/8″ x 12-1/8″	14-3/8″ x 14-3/8″				

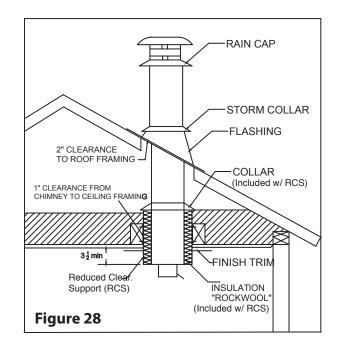
Та	bl	e	9
----	----	---	---

- Step 3: From below, push the Reduced Clearance Support (RCS) into the framed opening in the ceiling. Ensuring the support is level, nail the support to the framed opening using (12) - 3" spiral nails or #8 x 1 1/2" wood screws (see Figure 27). At least 3 1/2" of the support must extend into the room. Screw the Finish Trim (included) to the ceiling.
- Step 4: Place first chimney length into the support. Twist to lock into place. Wrap the insulation pad around the chimney section removing any excess. Slide insulation pad into the space between the chimney section and support making sure the insulation makes contact with the bottom of the support.

You may use approved insulation listed / compliant with ASTM E136/ULC S114 as Non-Combustible, have a melting temperature above 2000°F/1100°C, be water resistant with low moisture absorbtion. Material such as Rockwool or mineral wool qualify.

NOTE: If needed, a Support Extension (SE) can be attached to the support to increase its height. (See page 27).





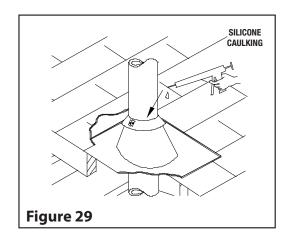
8 INTERIOR STRAIGHT INSTALLATION - SINGLE FLOOR (CONT'D) (CANADA)

NOTE: Make sure arrow on pipe label is pointing upward.

- Step 5: Place the collar around the chimney on top of the square support. Make sure it completely covers the top of the square support.
- Step 6: Stack the next chimney length on the first length. Be sure that the male and female threads are not in line when putting the lengths together. Turn the chimney clockwise to lock it in place. Continue until the required chimney height is reached.
- Step 7: ROOF FLASHING INSTALLATION

Put the roof flashing in place. Seal the joint between the roof and the flashing with roofing compound. For sloping roofs, place the flashing under the upper shingles and on top of the lower shingles. Nail the flashing to the roofing nails. Place the storm collar over the chimney and the flashing.

- Step 8: Tighten it with the bolt supplied and make sure the joint is properly caulked (see Figure 29).
- Step 9: Attach the rain cap to the top of the chimney.



9 INTERIOR STRAIGHT INSTALLATION - MULTIPLE FLOOR (CANADA)

Step 1: Locate the chimney in a convenient place as near as possible to the appliance outlet.

Step 2: Cut and frame the opening in the floor, ceiling and roof where the chimney will pass.

NOTE: It is important to follow the framing dimensions for the floor openings prescribed in this manual. This way, the holes left by the folded positioning tab of the firestop (BF or RSA2) will be blocked by the ceiling (see Table 10).

	FRAMING DIMENSIONS					
CHIMNEY Size	FINISH SUPPORT (SFC) or (S2)	RADIATION SHIELD* & ROOF				
5"	12-1/8" x 12-1/8"	11-3/8" x 11-3/8"				
6"	12-1/8" x 12-1/8"	12-3/8" x 12-3/8"				
7"	14-3/8" x 14-3/8"	13-3/8" x 13-3/8"				
8"	14-3/8" x 14-3/8"	14-3/8" x 14-3/8"				
10"		16-3/8" x 16-3/8"				
Table 10						
* For sloping roofs see size Table 2 on page 3						

- Step 3: From below push the Finish Support (SFC) into the framed hole. Nail the support to the framed box using (12) 3" spiral nails (see Figure 30).
- Step 4: If you are venting a Factory built fireplace or an oil or gas burning appliance please refer to installation notes #2 (on page 19) for guidelines on the use of the shields.
- Step 5: FOR UNENCLOSED INSTALLATION OR VENTING OF OIL OR GAS APPLIANCES:
- Refer to interior installation on a furnace and water heater guideline (page 35).
- Step 6: FOR ENCLOSED INSTALLATION (6",7",8" dia. only) (woodstove or coal burning appliance):

- Lock the first chimney length into the support with the arrow on label pointing up.

- Slide a Telescopic Rigid shield (TRS) on top of that length all the way to the bottom.

Stack the next chimney length on the first length. Be sure that the male and female threads are not in line when putting the lengths together. Turn the chimney clockwise to lock it in place. You may add a 1/2" stainless steel self tapping screw to prevent accidental unlocking. Continue installing until the chimney reached the ceiling.

- At the ceiling level, install a Radiation Shield Connector (SRS) and a Radiation Shield Firestop (RSCP) on the chimney (see Figure 32). Slide the Radiation Shield Connector down until the bottom of the insulated tube passes just through the Radiation Shield Firestop as shown in (see Figure 31). Adjust the height until a minimum of (1") of the Radiation Shield Connector passes through the firestop below. Fix it to the chimney from the attic side using (3) - 1/2" self-tapping screws. The Telescopic Shield is then slid upwards to the ceiling and attached to the bottom of the Radiation Shield Connector using (3) - 1/2" self-tapping screws.

In the attic:

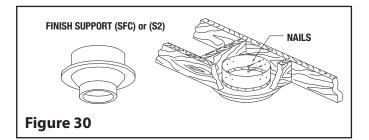
A Storm Collar (FC) must be installed on top of Radiation Shield to prevent any loose insulation from falling in the area between the chimney and the support.

Step 7: ROOF FLASHING INSTALLATION

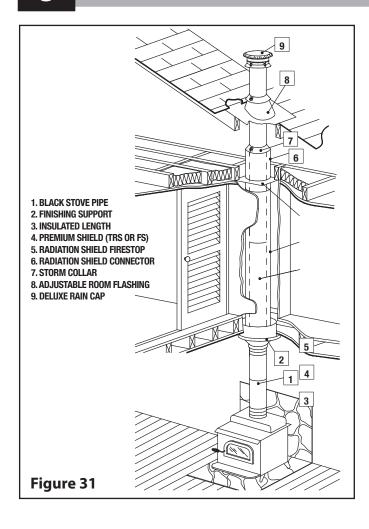
Put the roof flashing in place. Seal the joint between the roof and the flashing with roofing compound.

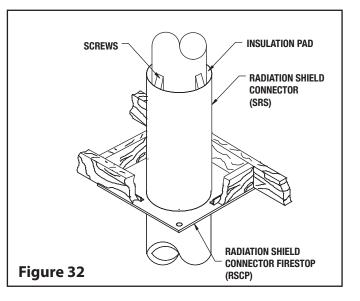
For sloping roofs, place the flashing under the upper shingles and on top of the lower shingles. Nail the flashing to the roof using roofing nails. Place the storm collar over the chimney and the flashing. Tighten it with the bolt supplied making sure the joint is properly caulked (see Figure 33).

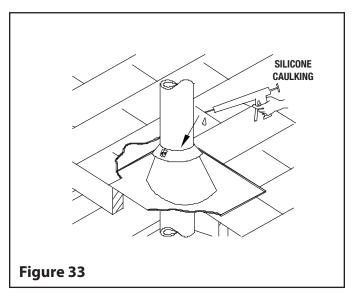
Step 8: Attach the rain cap to the top of the chimney.



9 INTERIOR STRAIGHT INSTALLATION - MULTIPLE FLOOR (CONT'D) (CANADA)







10

INTERIOR INSTALLATION WITH CATHEDRAL CEILING (CANADA)

A - CATHEDRAL SUPPORT (SCC)

This support is designed to be used in rooms with cathedral ceilings (no attic space between the ceiling and the roof). If the support is used as a regular floor support, follow the instructions for the Finish Support (SFC) on page 23.



- Step 1. Situate the chimney in a convenient location as near as possible to the appliance outlet. Cut and frame an opening in the roof for the support. The sides of this hole must be vertical (Figure 34) (see Table 2 on page 3).
- Step 2. From above, place the support in the opening. Refer to table 11 on page 27 for clearence from finished ceiling.

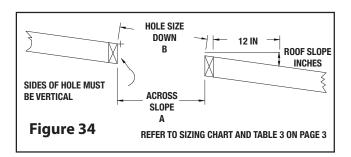
NOTE: The cone portion of the support must extend below the nearest wall. The minimum horizontal distance between the single wall stove pipe and the ceiling is 18". *

THE DISTANCE CAN BE REDUCED IF A LISTED STOVE PIPE IS USED.

Using a level, make sure the support is vertical. If the support extends above the roof, cut it flush with the top of the roof. Nail the support to the framed opening using (12) 3" spiral nails (Figure 35).

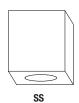
Place first chimney length into the support. Twist to lock in place.

TO CONTINUE INSTALLATION, REFER TO FLASHING INSTALLATION ON PAGE 23.



B - SQUARE SUPPORT (SSC) AND ADJUSTABLE SQUARE SUPPORT (SSA)

This support is similar in application and installation as the Cathedral Support (SCC). Install it using the instructions previously mentioned (refer to Figure 37 for visual references).



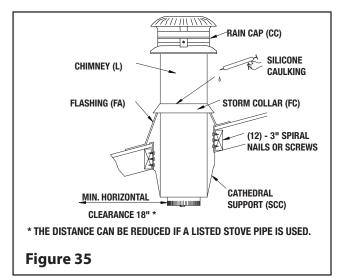
The Adjustable Square Support (SSA) requires an opening of 12" x 12" up to 12" x 22-1/2" in the ceiling (see Figure 37).

SUPPORT EXTENSION (PS24) (For Square Support only)

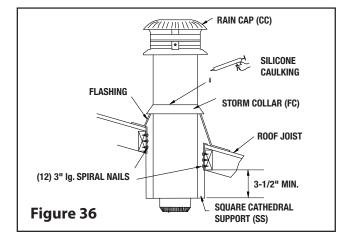
Steep pitched cathedral ceilings may require the use of a Square Support Extension (PS24). This piece fits down inside the square support and can be adjusted to increase the support's length by up to 16".

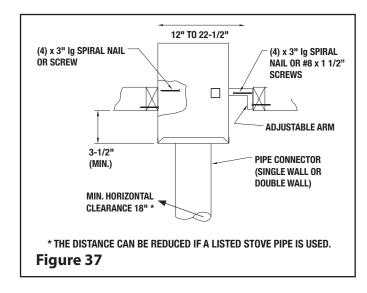


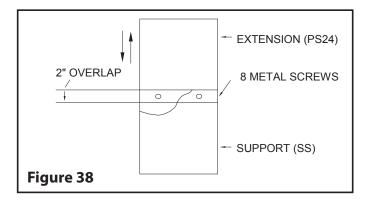
The extension is attached to the support using the eight metal screws provided. Be sure there is at least a 2" overlap where the extension joins the support.



INTERIOR INSTALLATION CATHEDRAL CEILING (CONT'D) (CANADA)







REDUCED CLEARANCE SUPPORT (RCS)

NOTE: The Reduced Clearance Support (RCS) comes with a collar. It can be discarded for a Cathedral Ceiling application it is not required.



- Step 1: Locate the chimney in a convenient location as near as possible to the appliance outlet. Cut and frame an opening in the roof for the support. The sides of this hole must be vertical (see Figure 40).
- Step 2: From above, place the support in the opening. Lower it to proper height (see Figure 36).
- **NOTE:** The bottom portion of the support must extend below the ceiling (see Table 11). The minimum horizontal distance between the single wall stove pipe and the ceiling is 18".

THE DISTANCE CAN BE REDUCED IF A LISTED STOVE PIPE IS USED.

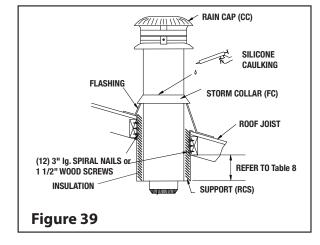
- Step 3: Using a level, make sure the support is vertical. If the support extends above the roof, cut it flush with the top of the roof. Nail the support to the framed opening using (12)-3" spiral nails or #8 x 1 1/2" wood screws (see Figure 39).
- Step 4: Place first chimney length into the support. Twist to lock into place. Wrap the insulation pad around the chimney section removing any excess. Slide insulation pad into the space between the chimney section and support making sure the insulation makes contact with the bottom of the support.

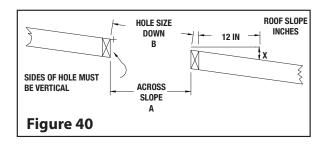
You may use approved insulation listed / compliant with ASTM E136/ULC S114 as Non-Combustible, have a melting temperature above 2000°F/1100°C, be water resistant with low moisture absorbtion. Material such as Rockwool or mineral wool qualify.

TO CONTINUE INSTALLATION REFER TO FLASHING INSTALLATION ON PAGE 23.

10

INTERIOR INSTALLATION CATHEDRAL CEILING (CONT'D) (CANADA)



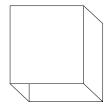


	(5″		7″	8″				
Chimney Size		Hole Size (Reduce Clearance Support)							
Roof Slope	A B		A	В	A	В			
x/12									
0	10-1/8	10-1/8	11-1/8	11-1/8	12-1/8	12-1/8			
2/12	10-1/8	10-1/4	11-1/8	11-1/4	12-1/8	12-1/4			
4/12	10-1/8	10-5/8	11-1/8	11-3/4	12-1/8	12-3/4			
6/12	10-1/8	11-1/4	11-1/8	12-1/2	12-1/8	13-1/2			
8/12	10-1/8	12-1/8	11-1/8	13-1/4	12-1/8	14-1/2			
10/12	10-1/8	13-1/4	11-1/8	14-1/2	12-1/8	15-7/8			
12/12	10-1/8	14-1/4	11-1/8	15-3/4	12-1/8	17-1/8			

Table 11

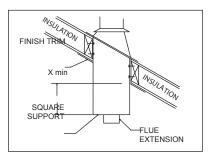
Reduce Clearance Support Extension (SE)

Steep pitched cathedral ceilings may require the use of a Support Extension (SE). This piece fits down inside the reduced clearance support and can be adjusted to increase the support's length by up to 22".



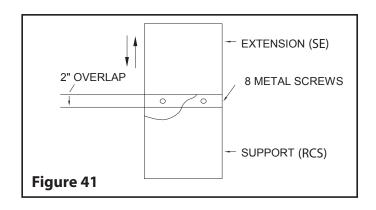
SE

The extension is attached to the support using the eight metal screws provided. Be sure there is at least a 2" overlap where the extension joins the support.



Slope	X min		
0/12 - 2/12	3 1⁄2″		
2/12 - 7/12	5 ½"		
7/12 - 12/12	6 ¾″		
12/12 - 24/12	7 ½″		
24/12	12 ½2″		

Table 12



OFFSET DEVIATION (CANADA)

OFFSET CHIMNEY (CANADA) FLASHING COLLAR (FC) RADIATION SHIELD RADIATION SHIELD CONNECTOR CONNECTOR SUPPORT (SRS) (RSSR) RADIATION SHIFI D 1" MIN CONNECTOR FIRESTOP (RCSP) SPRING SWIVEL SPACERS ADAPTORS OPTIONAL (ASP) FLEXIBLE SHIELD (FS) RE Figure 42

If it is necessary to offset the chimney in order for it to pass through an obstruction, do this by using 15°, 30° or 45° insulated elbows. A maximum of two offsets (4 elbows in all) is allowed in a chimney.

The minimum chimney height when using 15° offsets is 10'.

The minimum chimney height when using 30° offsets is 15'.

The maximum length of unsupported offset chimney is 6'. If the offset chimney is longer than 6', then it must be supported at 6' intervals using an Offset Support (SO) or Wall Band (BM).

INSTALLATION INSTRUCTIONS

If you are venting a Factory built fireplace or an oil or gas burning appliance please refer to installation notes #2 (on page 14) for guidelines on the use of the Premium Shields.

For Enclosed installation (6", 7", and 8" dia. only) (woodstove or coal burning appliance):

- Place the first chimney length on a flat surface with the male coupling on top.
- Slide a Flexible Shield (FS) on top of that length all the way to the bottom.
- Attach the flexible shield to the section using 3 x 1/2" stainless steel self tapping screws.
- Slide this assembly in the support and turn clockwise to lock it in place.
- At the ceiling level from the top, install a Radiation Shield Connector (SRS) and a Radiation Shield Support (RSSR) attached but not tightened together (see Figure 42).
- Slide the Radiation Shield Connector down until the bottom of the

insulated tube exceed the bottom of ceiling.

Adjust the height until a minimum of (1") of the Radiation Shield Connector project below the ceiling (see Figure 44).

Stack the next chimney length on the first length. Be sure that the male and female threads are not in line when putting the lengths together. Turn the chimney clockwise to lock it in place. You may add a 1/2 in stainless steel self tapping screw to prevent accidental unlocking.

When you reach the height at which the elbow will be installed:

- Step 1. Install the insulated offset elbow on the vertical chimney length. Turn it in the required direction and fasten it to the chimney with the (4)-1/2" metal screws provided.
- Step 2. Place the required offset chimney length (see Table 13) on the elbow. Turn it clockwise to lock it in place.
- Step 3.Use another elbow to turn the chimney vertically. Again secure the elbow to the chimney length using the (4) 1/2" metal screws.

Attach a spacer spring around the chimney at each elbow to help keep the Flexible Shield centered. (See Figure 42) Slide the Flexible Shield up the chimney and attach it below the ceiling to the Radiation Shield Connector using (3) - 1/2" self tapping metal screws. If you are limited in space to screw, install a Swivel Adaptor (ASP) (see Figure 42) below the Shield Connector (SRS) and one on the top end of the Flexible Shield. In the attic:

- Fix the Radiation Shield (RSSR) to the chimney and tighten the collar support.
- A Storm Collar (FC) must be install on top of Radiation Shield (SRS) to prevent any loose insulation from falling in the area between the chimney and the support.

For Unenclosed installation or venting of oil or gas appliances:

Put the first chimney length in the support. Turn it clockwise to lock it in place.

Stack the next chimney length on the first length. Be sure that the male and female threads are not in line when putting the lengths together. Turn the chimney clockwise to lock it in place. You may add a 1/2" stainless steel self tapping screw to prevent accidental unlocking. When you reach the height at which the elbow will be install:

- Step 1. Install the insulated offset elbow on the vertical chimney length. Turn it in the required direction and fasten it to the chimney with the (4)-1/2" metal screws provided.
- Step 2. Place the required offset chimney length (see Table 13) on the elbow. Turn it clockwise to lock it in place.
- Step 3.Use another elbow to turn the chimney vertically. Secure the elbow to the chimney length using the (4)-1/2" metal screws provided.

Install the remaining chimney as described in the instructions for the Interior Straight installation (see pages 20-21).

OFFSET & RISE CHART MODEL ASHT (5" - 10")

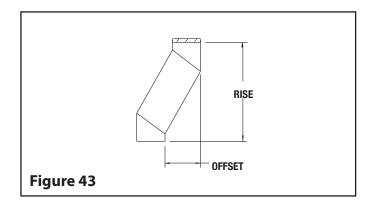
Determine the offset required in view of the obstacles

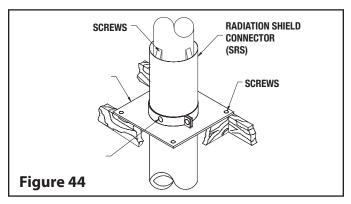
INSTALLATION CALCULATIONS

that must be avoided (see Figure 43). Refer to Table 13 below to determine the elbows required as well as the insulated length needed.

WARNING

A support must always be installed right above each offset (two elbows) to support the chimney above the offset.





ANGLE D	DIA	INOUES	ONE LENGTH BETWEEN ELBOWS					TWO LENGTHS BETWEEN ELBOWS						
	DIA.	INCHES	8	12	18	24	36	48	8 & 48	12 & 48	18 & 48	24 &48	36 & 48	48 & 48
15°	5" - 10"	Offset	3-5/16	4-5/16	5-7/8	7-7/16	10-1/2	13-5/8	15-3/8	16-7/16	18	19-1/2	22-5/8	25-3/4
		Rise	15-11/16	19-9/16	25-3/8	31-3/16	42-3/4	54-3/8	60-15/16	64-13/16	70-9/16	76-3/8	87	99-9/16
30°	5" - 10"	Offset	7-7/16	9-7/16	12-7/16	15-7/16	21-7/16	27-7/16	30-13/16	32-13/16	35-13/16	38-13/16	44-13/16	50-13/16
		Rise	20	23-1/2	28-11/16	33-7/8	44-1/4	54-11/16	60-9/16	64	69-1/4	74-7/16	84-13/16	95-1/4
45°	5" - 10"	Offset	10-5/16	13-3/16	17-3/8	21-5/8	30-1/8	38-5/8	43-7/16	46-1/4	50-1/2	54-3/4	63-1/4	71-11/16
	0 10	Rise	17-13/16	20-5/8	24-7/8	29-1/8	37-5/8	46-1/8	50-15/16	53-3/4	58	62-1/4	70-3/4	79-3/16

Note: All dimensions are in inches.

Table 13

NOTE: DIAGRAMS & ILLUSTRATIONS ARE NOT TO SCALE.

OFFSET DEVIATION (CONT'D) (CANADA)

ROOF SUPPORT (ST)

The roof support has three possible uses:

-It may be used to support a chimney from the roof. It adjusts to any roof pitch.

-It may be used on a floor, ceiling, or roof above an offset to support the chimney above the offset.

-It may be used on a floor, ceiling or roof as a supplementary support when the chimney height exceeds that of the primary support. (See maximum length height supported, page 3).

INSTALLATION INSTRUCTIONS

With the chimney extending through the hole in the roof, ceiling or floor proceed as follows (Refer to Figure 45 for visual references):

- Step 1. Assemble the support collar to fit your chimney diameter, as described on the instruction sheet supplied with the support.
- Step 2. Slip the support down over the chimney length until its brackets rest on the roof or floor. Tighten the collar around the chimney length, then secure it by screwing the (4) 1/2" metal screws (supplied) through the holes located on each side of the collar bolts and into the chimney (Figure 45).
- Step 3. Center the chimney and nail or screw the support to the roof or floor using (8) 2-1/2" nails or (8) N°. 8 1-1/4" wood screws.

OFFSET/WALL SUPPORT (SO) (SO-1)

When a chimney is used along a wall, this support may be used on the wall to support the chimney. The height of chimney supported is shown in supported height page 3.



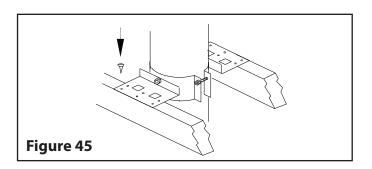
INSTALLATION INSTRUCTIONS

Install the support as follows (Figure 47):

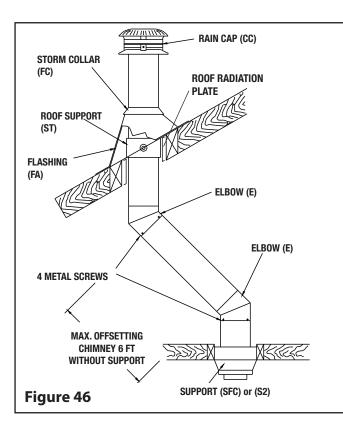
- Step 1. Assemble the support collar to fit your chimney diameter as described on the installation sheet supplied with the support.
- Step 2. Slip the support down over the chimney to a convenient location. Be sure that the support attaches to a solid wall and not merely to dry wall or aluminum siding.
- Step 3. Tighten the collar around the chimney. Then, secure it by screwing four 1/2" metal screws (supplied) through the holes located on each side of the collar bolts and into the chimney.
- Step 4. Attach the support brackets to the wall using (8) 3" nails or (8) N°. 10 x 1-1/4" wood screws.

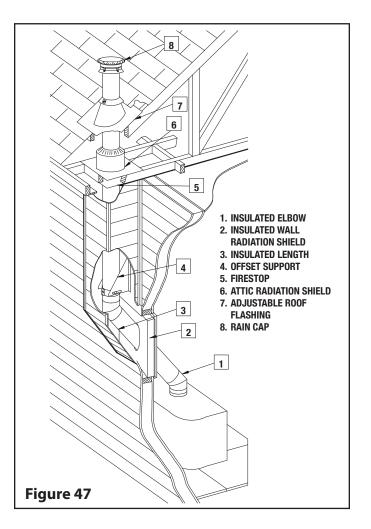
Step 5. Continue installing the chimney.

NOTE: Be sure that the support attaches to framing and not merely to dry wall or aluminum siding.

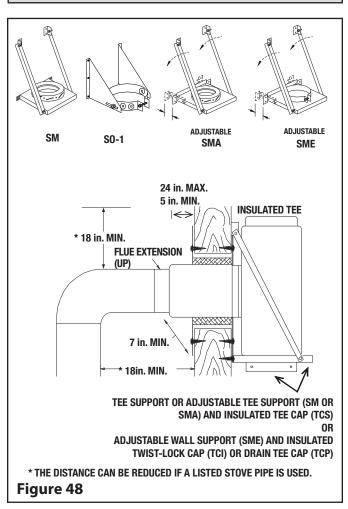


1 OFFSET DEVIATION (CONT'D) (CANADA)





EXTERIOR INSTALLATION (CANADA)



TEE & WALL SUPPORT

2

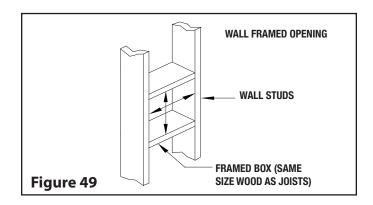
Four supports are available, an Adjustable with Collar (SME), an Adjustable with Coupling (SMA), (SO-1) and a Non-Adjustable with Coupling (SM).

INSTALLATION NOTES

If possible, install an interior chimney as it will provide better performance than an exterior chimney. In areas with continuous temperatures below -18°C (0°F), the use of an exterior chimney may result in operating problems such as poor draft, excessive condensation of combustion products and rapid accumulation of creosote when connected to a wood burning appliance. If you do install an exterior chimney, we recommend that you enclose it using an insulated enclosure. 1. The chimney may be enclosed or unenclosed.

NOTE: If enclosed at 3" or more clearance all around the chimney on a wood stove application, no Premium shields are required (see Figure 51).

- 2. Do not fill the clearance space around the chimney with insulation or any other material.
- 3. On installations where there is no enclosure around the chimney a wall band must be used to secure the chimney to the wall. Maximum distance between wall bands is 8'.
- 4. The minimum length of chimney extending past the inside wall is 5".
- 5. The maximum length of chimney extending past the inside wall is 24".
- 6. The distance between the stove pipe and a parallel combustible wall or ceiling must not be less than 18". The distance between the horizontal stove pipe and the unshielded vertical wall.
- 7. If an exterior installation is to be enclosed, allow for access to base of tee to facilitate required cleaning.
- 8. The minimum distance between the bottom of the support and any horizontal combustible (including the ground) is 6". This distance can be reduced to 2" by using an insulated tee cap (TCI) in conjunction with an Adjustable Wall Support (SME) or (SO-1).
- 9. The Adjustable Support (SME) and (SO-1) may only be installed with an insulated Tee Cap (TCI) or a Drain Tee Cap (TCP).

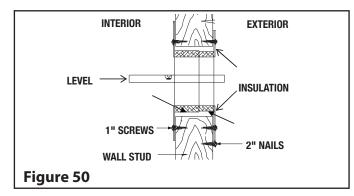


	HOLE SIZE					
CHIMNEY SIZE	COMBUSTIBLE	CONCRETE				
5"	11-3/8" x 11-3/8"	7-3/4"				
6"	12-3/8" x 12-3/8"	8-3/4"				
7"	13-3/8" x 13-3/8"	9-3/4"				
8"	14-3/8" x 14-3/8"	10-3/4"				
10"	16-3/8" x 16-3/8"	12-3/4"				

Table 14

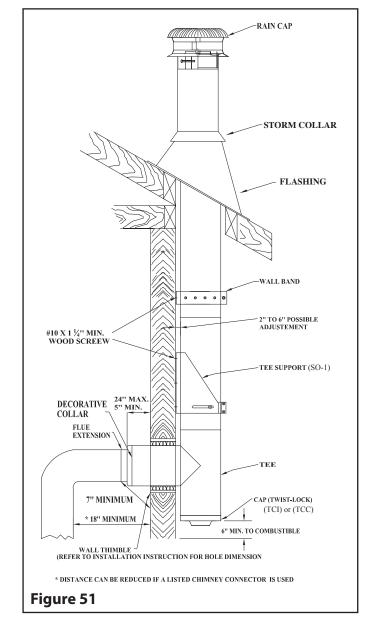
INSTALLATION INSTRUCTIONS

- Step 1: Determine where the chimney will pass through the wall.
- For concrete walls cut an opening slightly larger than the chimney.
- For combustible walls cut and frame a hole 4" larger than the chimney, midway between the wall studs (see Table 14 above for sizing).
- Step 2: Normally wall studs are placed at 16" centers. With the hole midway between them, the support will fasten to these studs and thus ensure a strong attachment to the wall. (see Figure 49).
- Step 3: Wood walls: Place the exterior half of the Insulated Wall Thimble (RSM) in the opening from the outside. Nail in place using (4) 2" nails or 1" screws. Make sure the insulation pad is cut to the desired length according to the wall thickness. Wrap the insulation pad around the tube of the interior half of the Insulated Wall Thimble. Place the metal sheet around the insulation pad and join the locking tabs together. Place the interior half of the Insulated Wall Thimble inside the exterior half of the Insulated Wall Thimble.



Step 4: Using a level make sure that the hole for the chimney to pass through is horizontal. Screw the outer thimble in place with the provided screws (see Figure 45).

NOTE: The cavity surrounding the wall thimble can be filled with house insulation (see Figure 50).



2 EXTERIOR INSTALLATION (CONT'D) (CANADA)

- Step 5: The minimum length of insulated chimney required to pass through the wall will be thickness plus 7". The insulated chimney must extend at least 5" into the room beyond the finished wall. Insert this chimney length in the side entry of the insulated tee. Turn it clockwise to lock it in place. Seal this joint by wrapping it with the aluminum tape supplied with the tee. Mount the insulated tee on the support so that the chimney length which will go through the wall is perpendicular to the side of the support that will fasten to the wall.
- Step 6: This step will require 2 people: Insert the chimney length of this tee-support assembly into the hole in the wall. Using a level, ensure the tee is vertical, then attach the support to the wall using (8) N°. 10 x 1 1/4" wood screws or 4" spiral nails.
- Step 7: Attach the clean-out cap to the support's flue extension using the three metal screws provided. Make sure that the screws have pierced through the flue extension. The cap is in the box with the insulated tee. If an insulated tee cap is used, twist lock the tee cap to the tee (Adjustable Support (SME) only).

NOTE: To provide sufficient strength, the nails must be driven into the wall studs. For concrete walls, the support should be attached using (8) 1/4" x 2" lag bolts.

- Step 8: Attach the flue extension to the horizontal chimney length using the three metal screws provided.
- Step 9 Stack a chimney length on top of the tee. Turn it clockwise to lock it in place.

NOTE: The arrow on label should be pointing up.

Depending on your installation, continue to Step 10 or to Step 11

FOR UNENCLOSED OR ENCLOSED INSTALLA-TION (3" OR MORE CLEARANCE):

- Step 10: Continue until the required chimney height is reached.
- **NOTE:** At 8' intervals, attach the chimney to the wall using a Wall Band (BM). If the chimney passes through the roof, cut a hole large enough to provide 2" clearance between the chimney and the roof. For pitch roof, see Table 2 on page 3.

TO CONTINUE, SEE ROOF FLASHING INSTALLA-TION, ON PAGE 23.

FOR ENCLOSED INSTALLATION AT LESS THAN 3" OR LESS FROM COMBUSTIBLES (Woodstove or coal burning appliance only):

Step 11: Place the first chimney length on a flat surface with the male coupling on top. Slide a Flexible Shield (FS) on top of that length all the way to the bottom. Attach the flexible shield to the section using $3 \times 1/2$ " stainless steel self tapping screws. Put this assembly on the tee and turn clockwise to lock in place. At the eave level from the top, install a Radiation Shield Connector (SRS) and a Radiation Shield Support (RSSR) attached but not tightened together (Figure 44). Slide the Radiation Shield Connector down until the bottom of the insulated tube exceeds the bottom of the ceiling. Adjust the height until a minimum of 1" of the Radiation Shield Connector projects below the eave. (see figure 42) and tighten the collar support. Stack the next chimney length on the first length. Be sure that the male and female threads are not in line when putting the lengths together. Turn the chimney clockwise to lock it in place. You may add a 1/2" stainless steel self tapping screw to prevent accidental unlocking.

TO CONTINUE, SEE ROOF FLASHING INSTALLA-TION, ON PAGE 23.

13 INTERIOR INSTALLATION ON A FURNACE AND WATER HEATER (USA & CANADA)

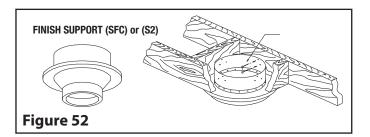
Step 1. Locate the chimney in a convenient place as near as possible to the appliance outlet. Cut and frame the opening in the ceiling where the chimney will pass.

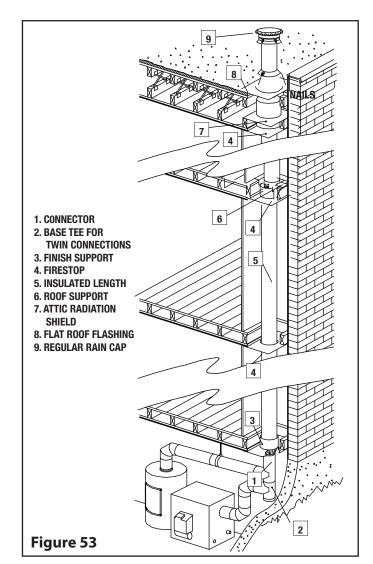
NOTE: It is important to follow the framing dimensions for the floor openings prescribed in this manual.

Refer to Table 1 for proper framing dimensions.

- Step 2. From below push the support into the framed hole. Nail the support to the framed box using (12) 3" spiral nails or #8 x 1 1/2" wood screws (see Figure 52).
- Step 3. Put this first chimney length in the support. Turn it clockwise to lock it in place.
- **NOTE:** Arrow on pipe label must be pointing up.
- Step 4. From below, install a Firestop (BF) in each floor through which the chimney passes (see Figure 53).
- Step 5. Stack the next chimney length on the first length. Be sure that the male and female threads are not in line when putting the lengths together. Turn the chimney clockwise to lock it in place. Continue until the required chimney height is reached.
- Step 6. At the attic level, install a Firestop (BF), from below and an Attic Radiation Shield (RSA2) from above (see Figure 54).
- Step 7. USA ONLY: Install the roof radiation shields in the roof joists. These shields consist of four metal plates. Nail one plate to each side of the joist using (2) 2-1/2" nails.
- Step 8. Put the roof flashing in place. Seal the joint between the roof and the flashing with roofing compound.

For sloping roofs, place the flashing under the upper shingles and on top of the lower shingles. Nail the flashing to the roof using roofing nails.

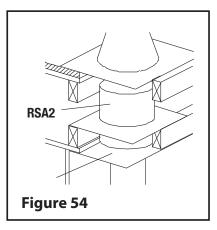


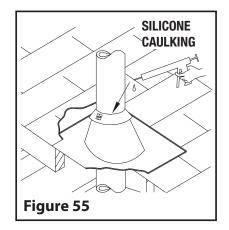


13 INTERIOR INSTALLATION ON A FURNACE AND WATER HEATER (USA & CANADA)

Step 9. Place the storm collar over the chimney and the flashing. Tighten it with the bolt supplied making sure the joint is properly caulked (see Figure 55).

Step 10: Attach the rain cap to the top of the chimney.

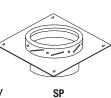




1 SPECIALIZED COMPONENTS (USA & CANADA)

ANCHOR PLATE (SP)

This support is used on a factory built fireplace or masonry on top of a furnace to provide a positive connection to the chimney. It is not to be used in contact with any combustible material, such as on a wood floor.



INSTALLATION INSTRUCTIONS

Once the appliance is installed, bolt the Anchor Plate (SP) to it. Install the chimney according to the installation instructions for the finish support (SFC) (see Figure 56).

FACTORY-BUILT FIREPLACES

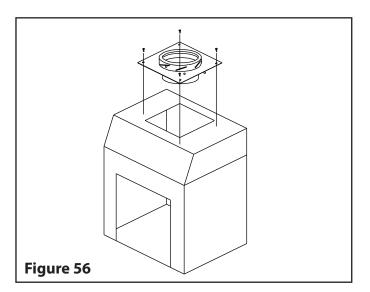
For chimneys installed on factory-built fireplaces, follow the installation instructions accompanying the fireplace.

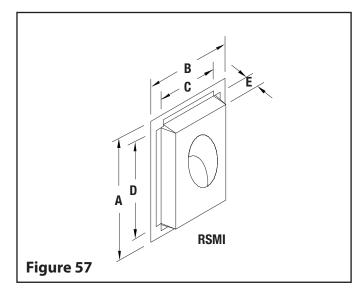
INSULATED WALL RADIATION SHIELDS

These are used only with wood-burning fireplaces which have been certified for use with ASHT.

ANGLED INSULATED RADIATION SHIELD (RSMI30°/RSMI45°)

It has been designed for use when a chimney passes through a wall at an angle (see Figure 55). Ref Table 15.





Ø INT.	FRAMING SIZE									
		RSMI30)	RSMI45 (CANADA ONLY)						
	7"	8"	10"	7"	8"	10"				
Α	37-3/4	39-3/4	45-5/16	26-5/8	28	30-1/2				
В	16-5/8	17-5/8	19-3/8	16-5/8	17-5/8	19-3/8				
C	12-5/8	13-5/8	15-3/8	12-1/8	13-1/2	14-7/8				
D	33-3/4	35-3/4	39-1/4	22-1/8	23-1/2	26				
E	3	3	3	3	3	3				

Table 15

SECURITY CHIMNEYS INTERNATIONAL, LTD. RESIDENTIAL CHIMNEY & VENTING PRODUCT LIMITED LIFETIME WARRANTY

THE WARRANTY

This Security Chimneys International, Ltd. (SCIL) Limited Lifetime Warranty warrants your residential vent and/or chimney system to be free from defects in material and workmanship at the time of manufacture. This Limited Lifetime Warranty includes all components and fittings, except termination caps and Secure Black^{™M} SW single wall black stove pipe. After installation, if covered components manufactured by SCIL are found to be defective in materials or workmanship during the Limited Lifetime Warranty period and while the Product remains at the site of the original installation, SCIL will, at its option, replace the covered components. SCIL reserves the right to replace covered components with an equivalent product and the replacement must be carried out in accordance with SCILs recommendations. If replacement is not commercially practical, SCIL will, at its option, refund the purchase price or wholesale price of the SCIL product, whichever is applicable. THERE ARE EXCLUSIONS AND LIMITATIONS to this Limited Lifetime Warranty a described herein.

COVERAGE COMMENCEMENT DATE

Warranty coverage begins on the date of installation. In the case of new home construction, warranty coverage begins on the date of first occupancy of the dwelling or six months after the sale of the Product by an independent SCIL dealer/distributor, whichever occurs earlier. The warranty shall commence no later than 24 months following the date of product shipment from SCIL, regardless of the installation or occupancy date.

EXCLUSIONS AND LIMITATIONS

This Limited Lifetime Warranty applies only if the Product is installed in the United States or Canada and only if used for the application for which it was designed and intended. The Product must be maintained in accordance with the printed instructions accompanying the Product and in compliance with all applicable installation and building codes and good trade practices.

This warranty is transferable. The Product must be purchased through a listed supplier of SCIL and proof of purchase must be provided. SCIL will be responsible for the replacement of the residential vent and/or chimney system considered to be defective for the following periods:

Termination Caps & Secure Black SW Stove Pipe - Replacement at no charge for 5 years from the date of installation, excluding labor

Components and fittings (excludes termination caps and Secure Black SW) -

- Year 1-15 Replacement of all components and fittings (a labor allowance may apply to a maximum of 300 \$ * certain conditions apply). Year 16 – Replacement at 50% off of the prevailing list price in effect at the time of replacement (No labor allowance applies).
- *Labor Allowance Conditions: Any Warranty replacement work must be performed by a Professional Installer.

SCIL will not be responsible for: (a) damages caused by normal wear and tear, corrosion from salt air, accident, riot, fire, flood or acts of God; (b) damages caused by abuse, negligence, misuse, or unauthorized alteration or repair of the Product affecting its stability or performance. (The Product must be subject to normal use with approved fuels listed in the Operation Manual provided with the product. Where applicable, fuel products with abnormal burning characteristics, including but not limited to fuel such as driftwood, plywood and wood products using a binder may burn at excessive temperatures and may cause damage to the Product or may cause it to function improperly; (c) damages caused by failing to provide proper maintenance and service in accordance with the instructions provided with the Product; (d) damages, repairs or inefficiency resulting from faulty installation or application of the Product.

This Limited Lifetime Warranty covers only parts as provided herein. SCILs entire liability is limited to the purchase price of this product. In no case shall SCIL be responsible for materials, components or construction which are not manufactured or supplied by SCIL or for the labor necessary to install, repair or remove such materials, components or construction. Additional utility bills incurred due to any malfunction or defect in equipment are not covered by this Limited Lifetime Warranty. All replacement or repair components will be shipped F.O.B. from the nearest stocking SCIL factory.

LIMITATION ON LIABILITY

It is expressly agreed and understood that SCIL's sole obligation and the purchaser's exclusive remedy under this warranty, under any other warranty, expressed or implied, or in contract, tort or otherwise, shall be limited to replacement, repair, or refund, as specified herein.

In no event shall SCIL be liable for any incidental or consequential damages caused by defects in the Product, whether such damage occurs or is discovered before or after replacement or repair, and whether such damage is caused by SCIL's negligence. SCIL has not made and does not make any representation or warranty of fitness for a particular use or purpose, and there is no implied condition of fitness for a particular use or purpose.

SCIL makes no expressed warranties except as stated in this Limited Lifetime Warranty. The duration of any implied warranty is limited to the duration of this expressed warranty.

No one is authorized to change this Limited Lifetime Warranty or to create for SCIL any other obligation or liability in connection with the Product. Some states and provinces do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. The provisions of this Limited Lifetime Warranty are in addition to and not a modification of or subtraction from any statutory warranties and other rights and remedies provided by law.

INVESTIGATION OF CLAIMS AGAINST WARRANTY

SCIL reserves the right to investigate any and all claims against this Limited Lifetime Warranty and to decide, in its sole discretion, upon the method of settlement.

To receive the benefits and advantages described in this Limited Lifetime Warranty, the appliance must be installed and repaired by a licensed contractor approved by SCIL. Contact SCIL at the address provided herein to obtain a listing of approved dealers/distributors. SCIL shall in no event be responsible for any warranty work done by a contractor that is not approved without first obtaining SCIL's prior written consent.

HOW TO REGISTER A CLAIM AGAINST WARRANTY

In order for any claim under this warranty to be valid, you must contact the SCIL dealer/distributor from which you purchased the product. If you cannot locate the dealer/distributor, then you must notify SCIL in writing. SCIL must be notified of the claimed defect in writing within 90 days of the date of failure. Notices should be directed to the SCIL Warranty Department at 2125 Monterey, Laval, QC H7L 376.

WARRANTY

This product has a limited lifetime warranty. Please read the warranty to be familiar with its coverage.

Retain this manual. 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 vent 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 LIMITED 2125 Monterey, Laval, Quebec, Canada, H7L 3T6 800-667-3387 Visit us at www.securitychimneys.com



2125 Monterey, Laval, Quebec, Canada, H7L 3T6 800-667-3387; www.securitychimneys.com

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.

> Printed in Canada © 2010, 2017 SECURITY CHIMNEYS INTERNATIONAL PIASHT LS301 REV. 18 11/2017