

DuraTech® Canada DTC

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

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INSTALLATION

AND

OPERATION

INSTRUCTIONS

WARNING

A MAJOR CAUSE OF CHIMNEY-RELATED FIRES 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.

Read these instructions and keep them for future reference

These instructions must be followed in all details. Failure to do so may result in a hazardous installation.

Listed: Warnock Hersey 9651

Standard: CAN / ULC-S604

UL-103HT
CAN / ULC-S629
(6", 7", 8" only)



DuraVent®

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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 home insulating material except specified otherwise. 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 DuraVent.

APPLICATIONS

WOOD AND COAL STOVES

The DTC 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, DTC is listed to UL-103HT, 2100°F in diameters of 5, 6, 7, 8 and 10 inches.

In Canada, DTC is listed to ULC-S629, 2100° F in diameters 6, 7, and 8 inches for wood/coal application.

In Canada, DTC is also designed for use with gas or oil fired heating appliances such as furnaces, water heaters, and other appliances, as per ULC-S604 in diameter 5 to 10 inches.

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 wood. These combustibles are highly corrosive to all types of stainless steel.

FACTORY BUILT FIREPLACES

DTC is suitable for use with closed or opened fireplaces certified for use with the DTC.

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

CREOSOTE - FORMATION AND NEED FOR REMOVAL

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 wood is burned slowly, it produces tar and other organic vapours, which combine with expelled moisture to form creosote. The creosote vapours condense in the relatively cool chimney flue of a slow-burning fire. As a result, creosote residue accumulates on the flue lining. When ignited this creosote makes an extremely hot 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 a significant layer of creosote has accumulated (3 mm or 1/8”), 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 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.

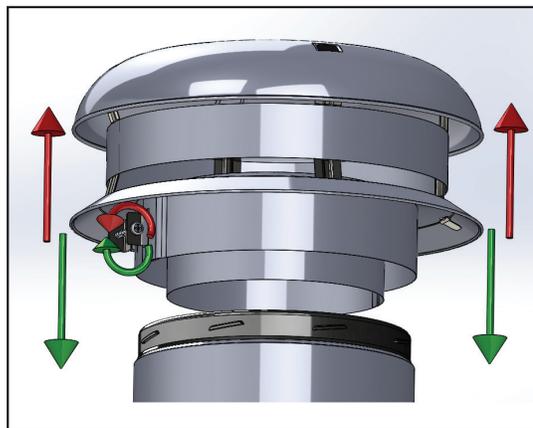
WARNING

In Case of Fire: If a flue fire occurs, close all appliance dampers and source of combustion air, and call your Fire Department. Do not use the chimney again, until it has been inspected for possible damage.

NOTE: ALL DIMENSIONS ARE IN INCHES.

CAP REMOVAL FOR MAINTENANCE

To remove cap, unscrew the collar screw to un-tighten the collar.
Pull on the cap to remove it from the chimney.
To put the cap back in place, slide it over the chimney and then tighten the collar using the collar screw.



SIZING CHART

CHIMNEY-SIZE	5"	6"	7"	8"	10"
OUTSIDE-DIAMETER	7"	8"	9"	10"	12"
FRAMING DIMENSION REQUIRED					
Reduced Clear. Support (RCS)	--	10 1/8"	11 1/8"	12 1/8"	--
Square support (CS24)	--	12-1/8"	14-3/8"	14-3/8"	14-3/8"
Wall Thimble (WTI)	11"	12"	13-3/8"	14-3/8"	16-3/8"
Finish support (FSC)	--	12-1/8"	14-3/8"	14-3/8"	--
Firestop (FS)	11-3/8"	12-3/8"	13-3/8"	14-3/8"	16-3/8"
Attic Radiation Shield (ISIA)	11-3/8"	12-3/8"	13-3/8"	14-3/8"	16-3/8"
MAX. LENGTH HEIGHT SUPPORTED **					
Tee Support (TS)	63'	63'	55'	48'	39'
Roof Support (RS)	42'	34'	27'	24'	20'
Square Support (CS24)	--	60'	50'	45'	35'
Reduced Clearance Support (RCS)	--	60'	50'	45'	--
Finish Support (FSC)	--	75'	65'	59'	--
Offset/Wall Support (RESU)	--	28'	24'	20'	14'
Insulated Tee (TSS) *	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'

NOTE: DIAGRAMS & ILLUSTRATIONS ARE NOT TO SCALE.

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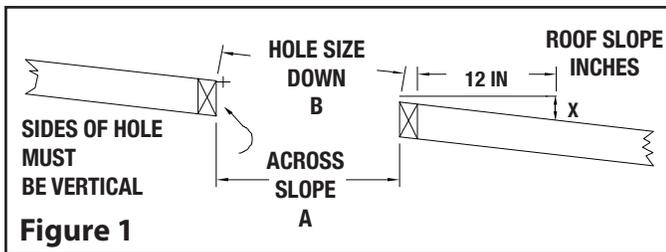
GENERAL INSTALLATION NOTES

ROOF OPENING CHART

CHIMNEY SIZE	5"		6"		7"	
ROOF SLOPE	ROOF HOLE SIZE					
x/12	A	B	A	B	A	B
0	11-3/8	11-3/8	12-3/8	12-3/8	13-3/8	13-3/8
2/12	11-3/8	11-1/2	12-3/8	12-1/2	13-3/8	13-1/2
4/12	11-3/8	12	12-3/8	13	13-3/8	14-3/32
6/12	11-3/8	12-11/16	12-3/8	13-13/16	13-3/8	14-15/16
8/12	11-3/8	13-11/16	12-3/8	14-7/8	13-3/8	16-1/16
10/12	11-3/8	14-13/16	12-3/8	16-1/8	13-3/8	17-7/16
12/12	11-3/8	16-1/16	12-3/8	17-1/2	13-3/8	18-29/32

CHIMNEY SIZE	8"		10"	
ROOF SLOPE	ROOF HOLE SIZE			
x/12	A	B	A	B
0	14-3/8	14-3/8	16-3/8	16-3/8
2/12	14-3/8	14-9/16	16-3/8	16-19/32
4/12	14-3/8	15-5/32	16-3/8	17-1/4
6/12	14-3/8	16-3/32	16-3/8	18-5/16
8/12	14-3/8	17-1/4	16-3/8	19-11/16
10/12	14-3/8	18-23/32	16-3/8	21-5/16
12/12	14-3/8	20-11/32	16-3/8	23-5/32

Table 2 - Refer to Figure 1



INSTALLATION NOTES

- The chimney is intended for use with solid, liquid, and gaseous fuel burning appliances. In Canada, only 6", 7" and 8" dia. for solid fuel.
Allowable flue gas temperature:
Maximum continuous 1200° F (650°C)
Brief forced firing 1400°F (760°C)
Tested to 2100°F (1150°C) - 30 minutes
- The maximum height of chimney supported by the various DuraVent supports are outlined on Table 1.
- The supports described in this manual should only be used with DuraVent's model DTC, 5", 6", 7", 8" and 10" factory built chimneys.
- Size the chimney in accordance with the appliance manufacturer's instructions.
- When a firestop is required, it is important to follow the framing dimensions for floor openings as prescribed in this manual. (see Table 2).
- A chimney servicing a fireplace or an incinerator shall not serve any other appliance.
- The chimney shall extend at least 3 ft above its point of contact with the roof and at least 2ft higher than any wall, roof or adjacent building within 10 ft of it.
- 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 (XRB) 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.
- Multi-Story: Consult local building codes for requirements in your area. In the U.S., the National Fire Protection Association Standard #211 states: "Factory-built chimneys that pass through floors of buildings requiring the protection of vertical openings shall be enclosed with approved walls having a fire resistance rating of not less than one hour when such chimneys are located in a building less than 4 stories in height, and not less than 2 hours when such chimneys are located in a building more than 4 stories in height." In Canada, except in single-family

1

GENERAL INSTALLATION NOTES (CONT'D)

and two-family dwellings, chimneys which extend through another story must have an enclosure with a fire resistance rating equal to or greater than that of the floor or roof assembly through which they pass.

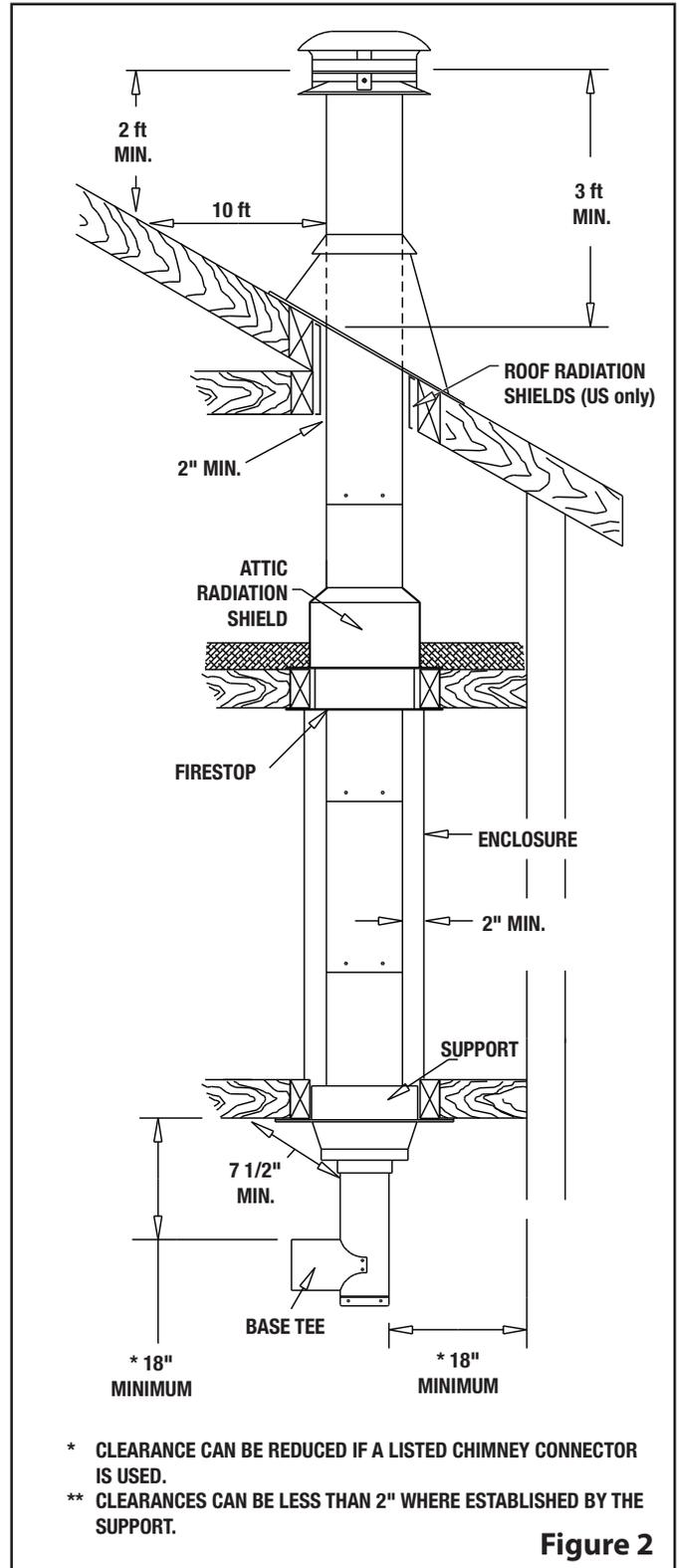
11. Do not fill the 2" space around the chimney with household insulation or any other material unless specified otherwise. Insulation placed in this area could cause adjacent combustibles to overheat.
12. Self-tapping stainless screws are not required, but may be used to reinforce the connection and avoid accidental unlocking of chimney lengths. Use only 1/2" self-tapping screws. Do not penetrate the inner wall of the chimney.
13. When penetrating an exterior wall or ceiling/roof assembly, the vapor barrier must be repaired. This is easily accomplished by attaching the vapor barrier to the outer perimeter of any wall thimble, Firestop, or ceiling support component using approved sealant or tape, while also maintaining the minimum clearances-to-combustibles to the chimney's outer wall. 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 (316°C / 600°F) silicone caulking. Should you require further clarification, consult your local authority having jurisdiction.
13. The safe operation of a factory-built chimney assembly is based on the use of parts supplied by the manufacturer and the performance of the assembly may be affected if the combination of these parts is not used in actual building construction.

Acceptance of the assembly is void if the installation instructions are not followed.

15. Provisions must be made to ensure that all interior portions of the chimney be accessible for inspection and cleaning.

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 unless directed otherwise in these instructions.



2

INTERIOR STRAIGHT INSTALLATION - SINGLE FLOOR

When 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).

NOTE: A Finishing Support (FSC) combined with an Attic Radiation Shield (ISIA) can also be used for this application. Refer to page 8 for installation guide.

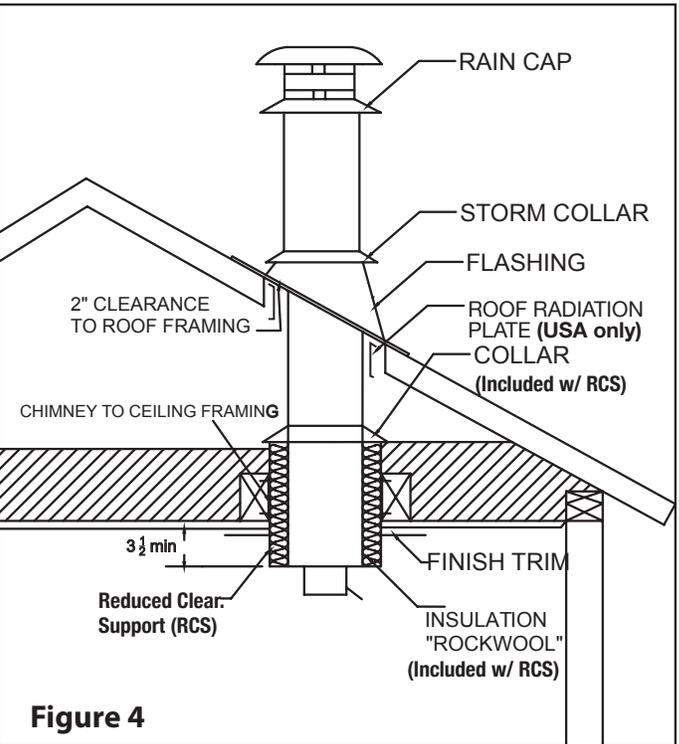
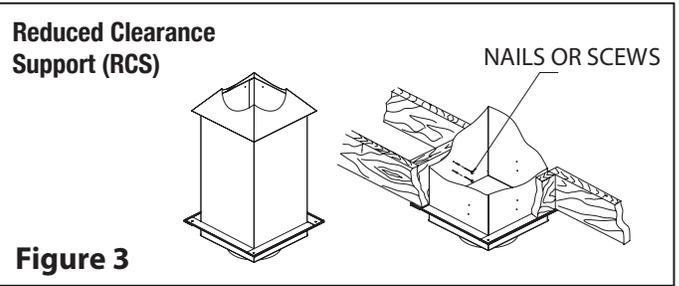
Step 1: Locate the chimney in a convenient place as near as possible to the appliance outlet.

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.

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).

NOTE: At least 3 1/2" of the support must extend down below the finished ceiling. This ensures minimum clearances are maintained to stovepipe. Fix the Finish Trim around the support using supplied screws.



CHIMNEY SIZE	FRAMING DIMENSION	
	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

2

INTERIOR STRAIGHT INSTALLATION - SINGLE FLOOR (CONT'D)

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. Additional pieces of insulation can be loosely tucked down within corners. Do not compress insulation. This reduces effectiveness.

NOTE: If needed a Support Extension (SE) can be attached to the support to increase its height. See page 11.

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

Step 5: Place the Square-to-Round Collar, included with the ceiling support, 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: (USA ONLY) - ROOF RADIATION SHIELD

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 8: 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.

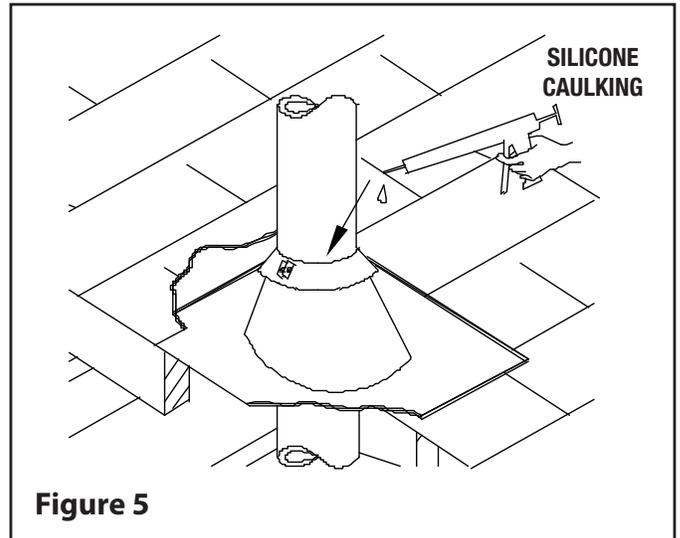


Figure 5

Step 9: Tighten the collar using the supplied bolt. Make sure the joint is properly caulked (see Figure 5).

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

3

INTERIOR STRAIGHT INSTALLATION - MULTIPLE FLOOR

IF USING THE REDUCED CLEARANCE SUPPORT (RCS), REFER TO PAGE 6 FOR DIMENSION AND COLLAR CAN BE DISCARDED.

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.

CHIMNEY SIZE	HOLE SIZE	
	FINISH SUPPORT (FSC)	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).

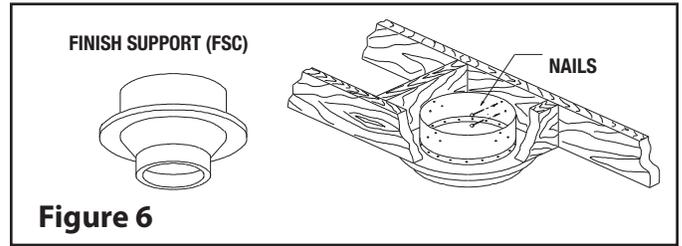


Figure 6

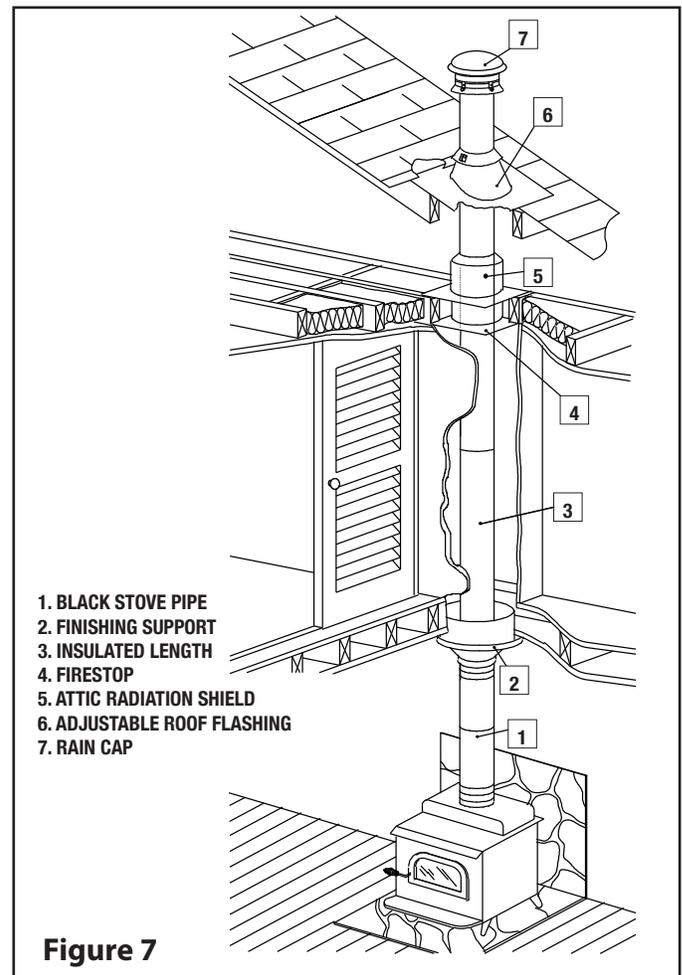


Figure 7

3

INTERIOR STRAIGHT INSTALLATION - MULTIPLE FLOOR (CONT'D)

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 (FS) 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 (FS), from below and an Attic Radiation Shield (ISIA) and Storm Collar from above (see Figure 8).

(USA ONLY) 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.

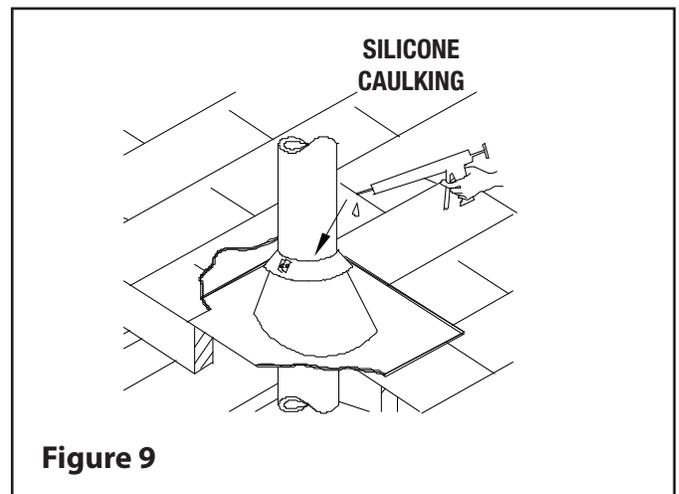
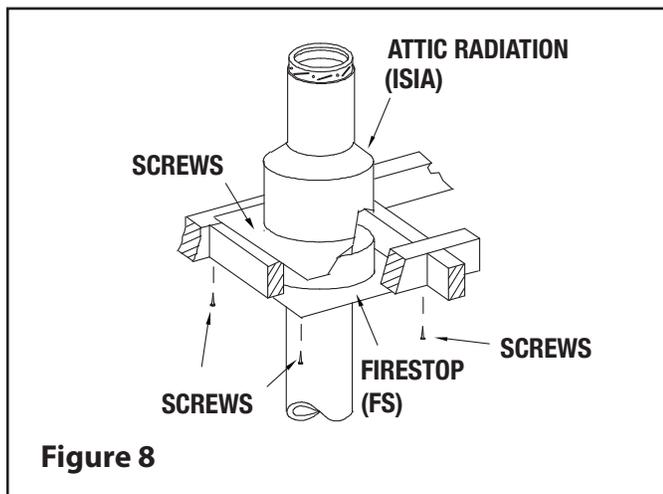
Step 8. **ROOF FLASHING INSTALLATION**

Put the roof flashing in place. Seal the joint between the roof and the flashing with 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 9).

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



NOTE: DIAGRAMS & ILLUSTRATIONS ARE NOT TO SCALE.

4

INTERIOR INSTALLATION CATHEDRAL CEILING

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 11).



Step 2: From above, place the support in the opening.

NOTE: The bottom portion of the support must extend below the ceiling. Distance will vary according to pitch (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 10).

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. Additional pieces of insulation can be loosely tucked down within corners. Do not compress insulation. This reduces effectiveness. Where desired, an extension (SE) is available for the support. This may be needed in steeper cathedral applications. Approved insulation can be used within the extension. It must be listed/compliant with ASTM E136/ULC S114 as non-combustible, have a melting temperature above 2000°F/1100°C, and be water resistant with low moisture

absorption. Materials such as rockwool or mineral wool qualify.

IMPORTANT: Approval to include additional insulation around the chimney applies only within the (RCS) and (SE) support extension. DO NOT attempt to field-insulate around the pipe at any other location or within any other uninsulated component offered by DuraVent.

**TO CONTINUE INSTALLATION
REFER TO STEP 6 ON PAGE 15.**

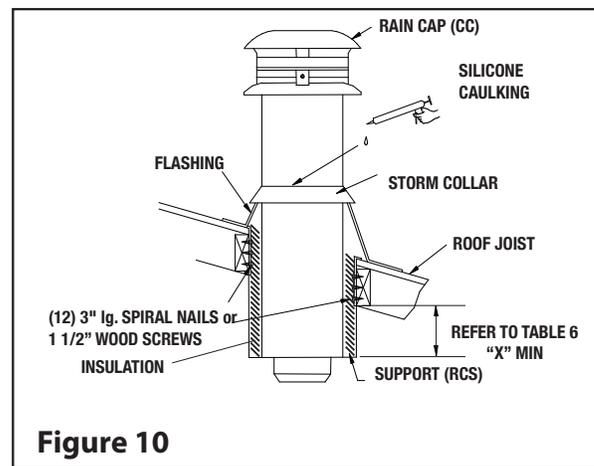


Figure 10

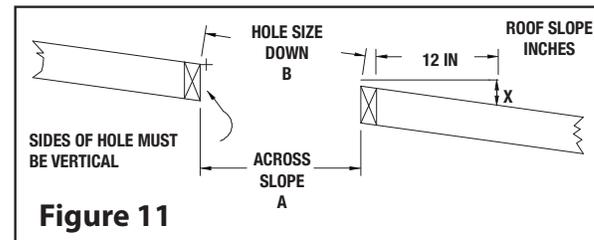


Figure 11

Chimney Size	Hole Size (Reduce Clearance Support)					
	6"		7"		8"	
Roof Slope	A	B	A	B	A	B
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

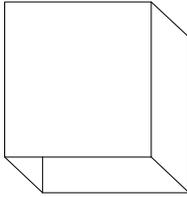
NOTE: ALL DIMENSIONS ARE IN INCHES. Table 5

4

INTERIOR INSTALLATION CATHEDRAL CEILING (CONT'D)

Reduce Clearance Support Extension (SE)

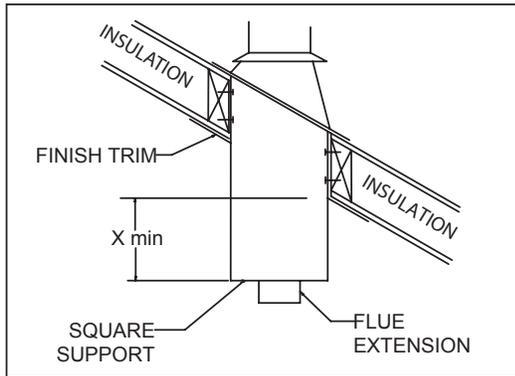
Steep pitched cathedral ceilings may require the use of a Support Extension (SE). This piece fits down inside the reduced clearance support and can be adjusted to increase the support's length by up to 22".



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.

NOTE: Refer to Step 4 (page 10) regarding additional insulation required with this extension.



Slope	X min
0/12 - 2/12	3 1/2"
2/12 - 7/12	5 1/2"
7/12 - 12/12	6 3/4"
12/12 - 24/12	7 1/2"
24/12	12 1/2"

Table 6

4

INTERIOR INSTALLATION WITH CATHEDRAL CEILING (CONT'D)

SQUARE SUPPORT (CS24)

This support is similar in application and installation as the Reduced Clearance Support. Install it using the instructions on page 11 (refer to Figure 13 for visual references). Approved insulation can be used within the extension and support surrounding the chimney. It must be listed/compliant with ASTM E136/ULC S114 as non-combustible, have a melting temperature above 2000°F/1100°C, and be water resistant with low moisture absorption. Materials such as rockwool qualify.

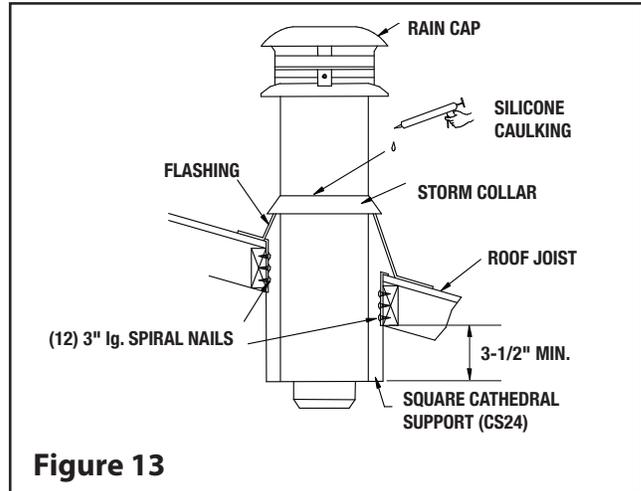
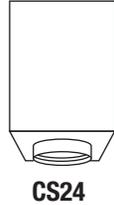
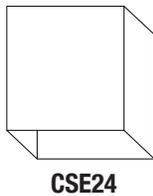


Figure 13

SUPPORT EXTENSION (CSE24) (For Square Support only)

Steep pitched cathedral ceilings may require the use of a Square Support extension (CSE24). This piece fits down inside the square support and can be adjusted to increase the support's length by up to 22"



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.

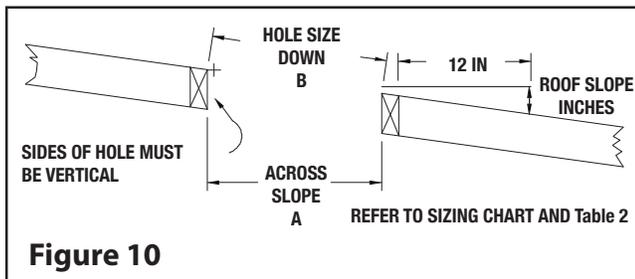


Figure 10

5

OFFSET DEVIATION

OFFSET CHIMNEY

It may be necessary to offset the chimney to clear an obstruction such as a joist or truss, or to position the chimney close to the ridge cap. 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 or 45° **(Canada Only)**.

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

The minimum chimney height when using 30° or 45° 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 (RESU) or Wall Band (WSU).



WARNING

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

INSTALLATION INSTRUCTIONS

Install the required support and the chimney as described in the previous pages of 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.

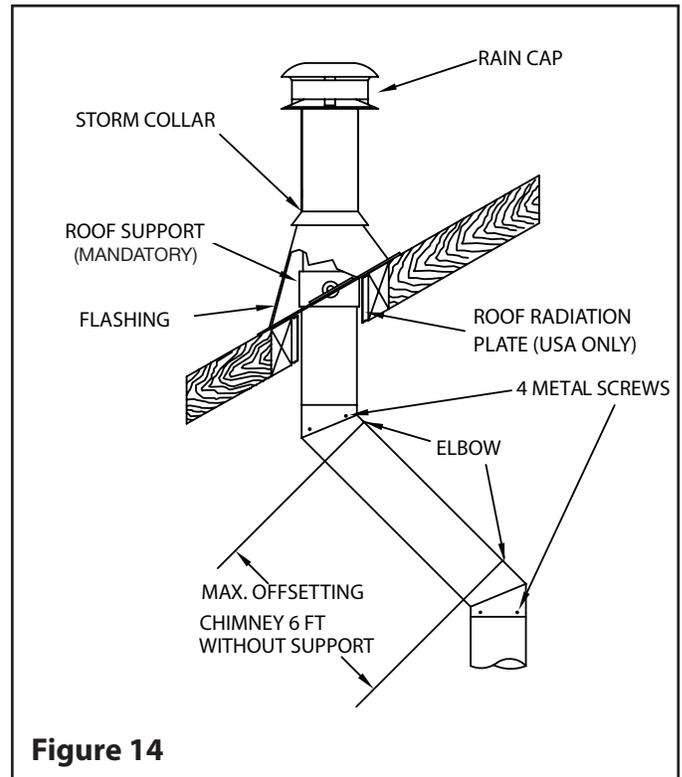


Figure 14

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 14). Refer to Table 7 to determine the elbows required as well as the insulated length needed. If required, an adjustable length can be used to offset exact distance required.

5

OFFSET DEVIATION (CONT'D)

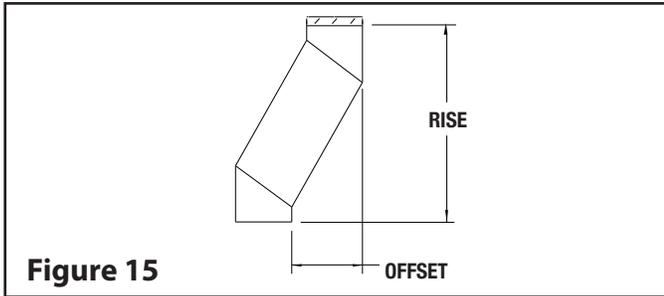


Figure 15

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

ANGLE	DIA.	INCHES	ONE LENGTH BETWEEN ELBOWS						TWO LENGTHS BETWEEN ELBOWS					
			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° (Canada Only)	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
		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 7

6

EXTERIOR INSTALLATION

ROOF SUPPORT (RS)

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 17 for visual references):

Step 1. **(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 2. Assemble the Roof Support's Collar to fit your chimney diameter. Continue to assemble the support as described in the instructions supplied with the support.

Step 3. Slip the assembled Roof Support down over the stainless steel chimney until its brackets rest on the roof or floor. Tighten the collar around the chimney, (see Figure 16).

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 16).

Step 5. Install the remaining chimney lengths, until the required chimney height is reached.

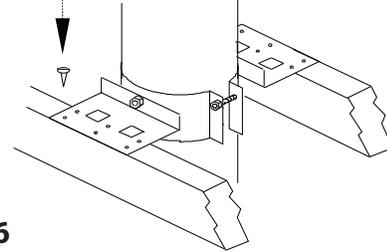


Figure 16

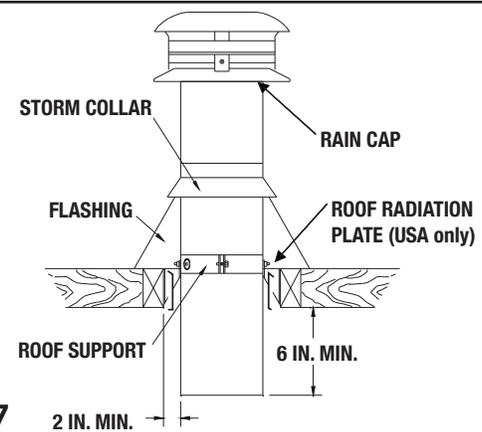


Figure 17

Step 6. **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. Tighten it with the bolt supplied making sure the joint is properly caulked (see Figure 9).

Step 7. Refer to page 3 for Cap installation.

6

EXTERIOR INSTALLATION

This chimney will provide optimum performance when installed within the heated space of a building. The consequences of installing the chimney outdoors, up the exterior wall of a building could result in:

- Back-drafting during cold weather when the connected appliance is not operating
- Weak, unstable draft
- Increased creosote accumulation
- Increased potential for condensation of water vapor in the chimney flue
- Decreased efficiency of the connected appliance

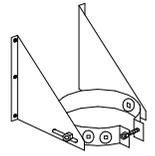
If you do install an exterior chimney, we recommend that you enclose it using an insulated enclosure.

INSTALLATION NOTES

1. The chimney may be enclosed or unenclosed.
2. Maintain 2" clearance to combustible materials. Do not fill the 2" space around the chimney with insulation or any other material.
3. A Wall Strap or Re-Support must be used to secure the chimney to the wall when used on an exterior wall. Maximum distance between wall bands is 8'.
4. The horizontal chimney length passing through the wall must project a minimum of 5" and no more than 24" beyond the inside wall. Minimum projection is required to ensure appropriate clearances are maintained once stovepipe is installed.
5. If an exterior installation is to be enclosed, allow for access to base of tee to facilitate required cleaning.
6. The minimum distance between the bottom of the Tee or Support and any horizontal combustible is 2" by using an insulated tee cap (TCI).

RE-SUPPORT

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 18):

- 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^o. 10 x 1-1/4" wood screws.

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

Step 5. Continue installing the chimney.

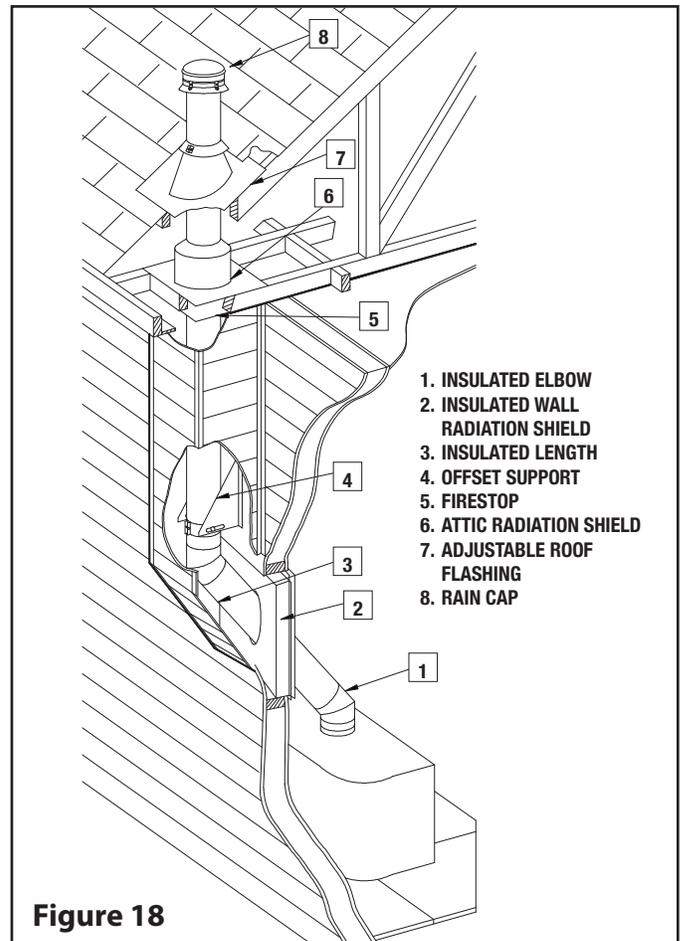


Figure 18

6

EXTERIOR INSTALLATION (CONT'D)

WALL SUPPORT

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 20).

Step 2. Wood walls: Place the exterior half of the Wall Thimble (WTI) 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" (see Figure 21). Make sure the insulation pad is cut to the desired length according to the wall thickness. Place the interior half of the Wall Thimble inside the exterior half of the Wall Thimble. For a wall requiring more than 12", a shield extension can be field fabricated using galvanized sheet metal 26 gauge minimum.

Ensure the opening for the chimney to pass through is straight and level. Screw the outer thimble in place with the provided screws (see Figure 22).

NOTE: The cavity surrounding the wall thimble metal shield can be filled with insulation (see Figure 22).

CHIMNEY SIZE	OPENING SIZE	
	COMBUSTIBLE	CONCRETE
5"	11" x 11"	7-3/4"
6"	12" x 12"	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

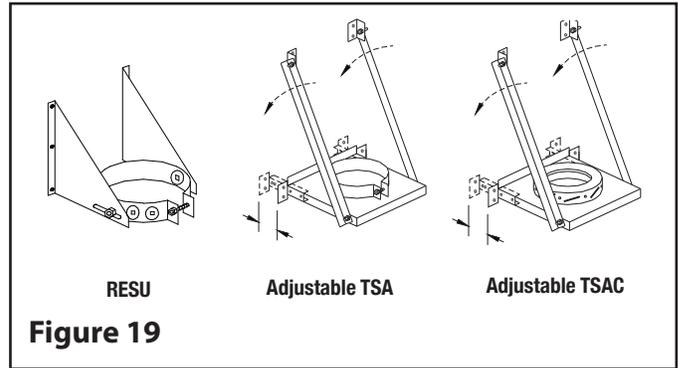


Figure 19

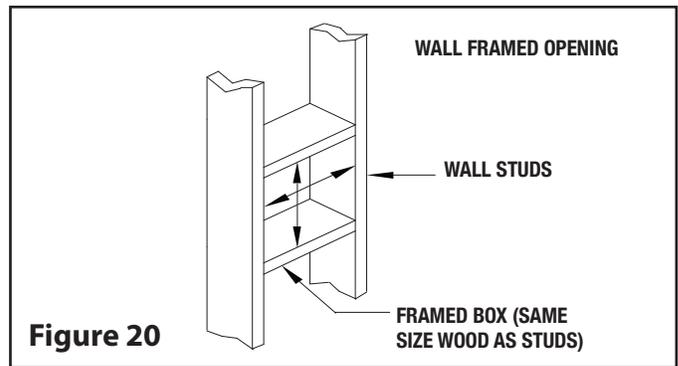


Figure 20

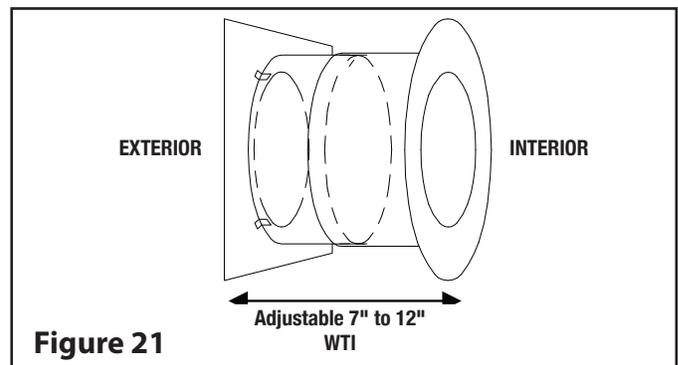


Figure 21

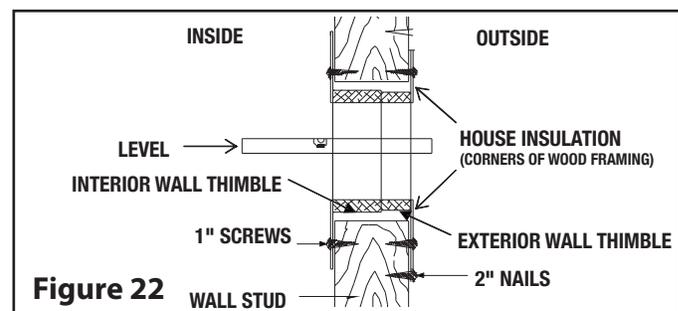


Figure 22

6

EXTERIOR INSTALLATION (CONT'D)

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.

NOTE: The supports (RESU or TSA) can be installed above the Tee. (See Figure 24A).

Step 4. This step will require 2 people: (see Figure 23). 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.

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 5. Attach the clean-out cap to the Tee Support or Tee.

Step 6. Attach the flue extension to the horizontal chimney length.

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.

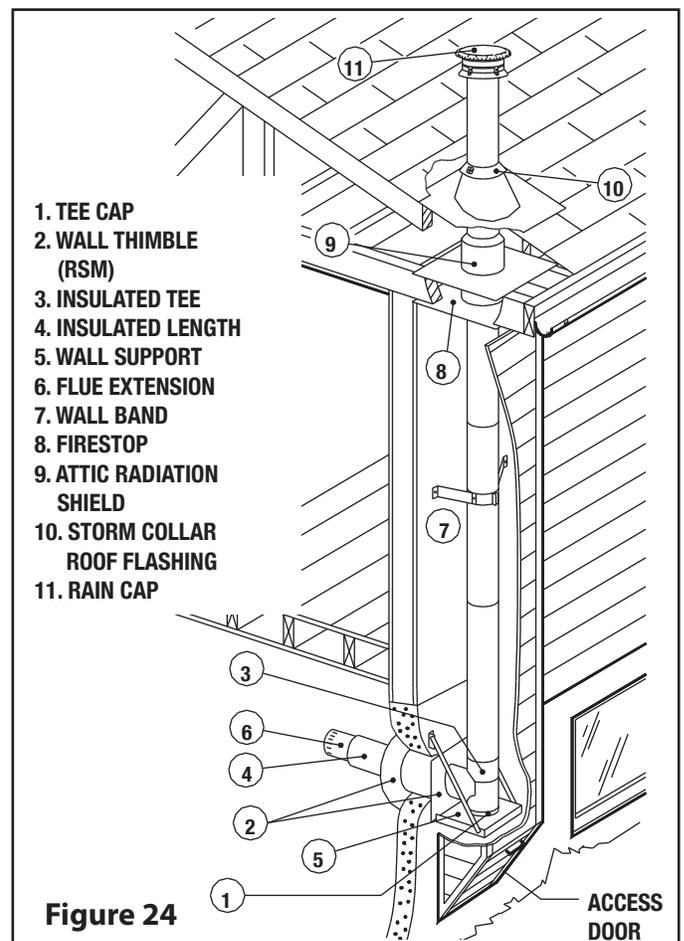
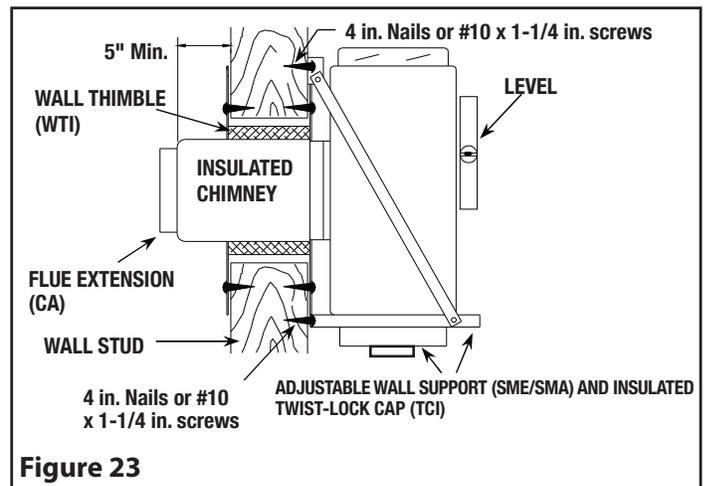
NOTE: At 8' intervals, attach the chimney to the wall using a Wall Strap or Re-Support.

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 pitched roof, see chart on page 4.

(FOR US Installs ONLY)

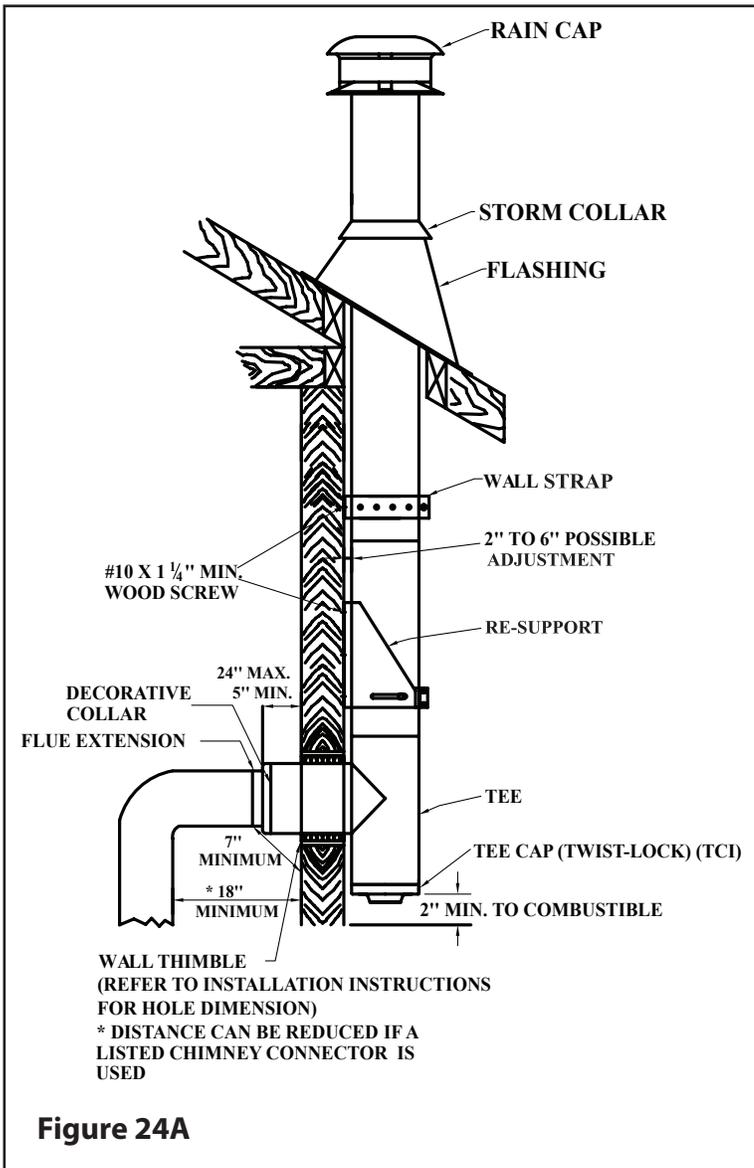
Install the Roof Radiation Shield in the roof joist.

To continue, SEE STEP 8, on page 8.



6

EXTERIOR INSTALLATION (CONT'D)



7

INTERIOR INSTALLATION ON A FURNACE, BOILER, OR WATER HEATER

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 25).

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 (FS) in each floor through which the chimney passes (see Figure 26).

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 (FS), from below and an Attic Radiation Shield (ISIA) from above (see Figure 27).

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.

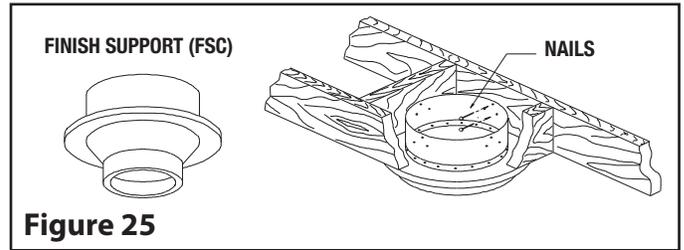


Figure 25

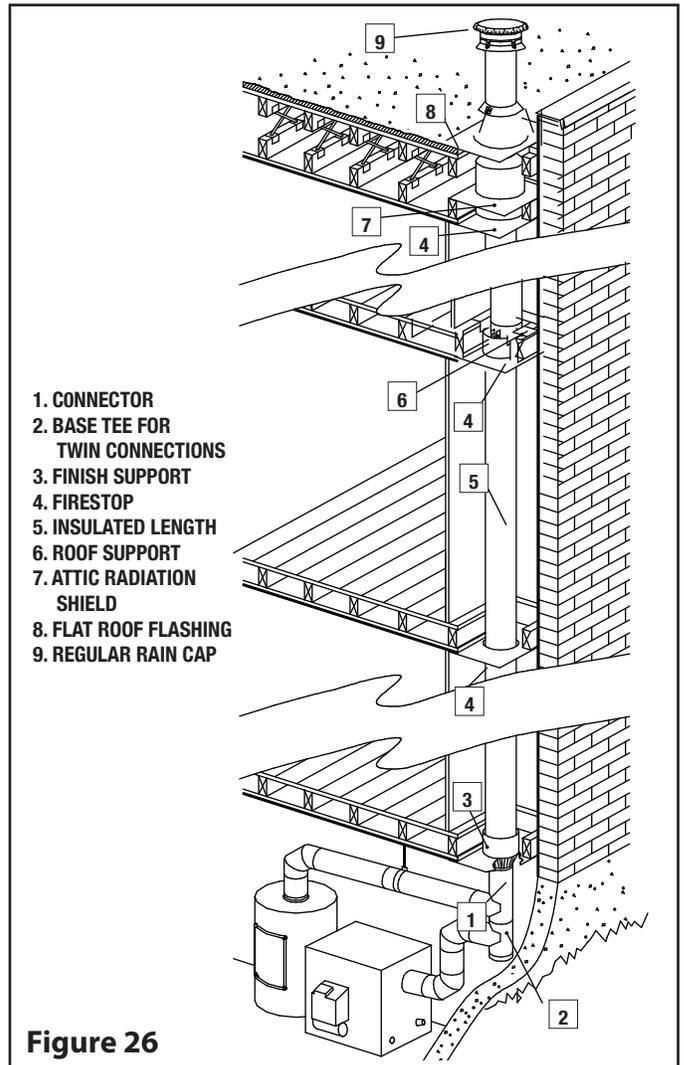


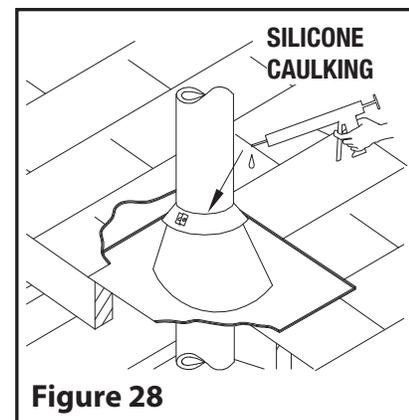
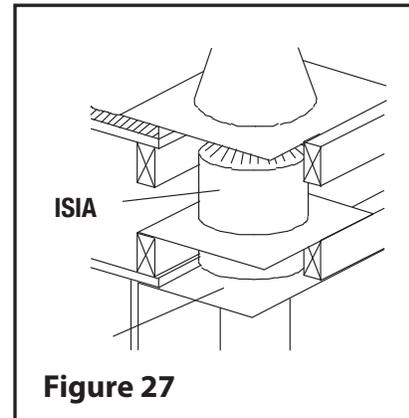
Figure 26

7

INTERIOR INSTALLATION ON A FURNACE, BOILER, OR WATER HEATER (CONT'D)

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 28).

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

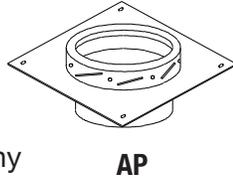


8

SPECIALIZED COMPONENTS

ANCHOR PLATE (AP)

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 (AP) to it (see Figure 29).

FACTORY-BUILT FIREPLACES

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

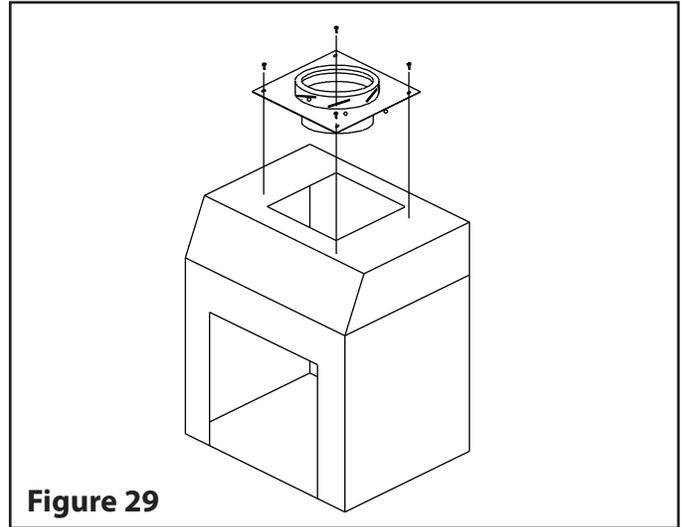


Figure 29

INSULATED WALL RADIATION SHIELDS

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

ANGLED INSULATED RADIATION SHIELD It has been designed for use when a chimney passes through a wall at an angle (see Figure 30).

Ref Table 9.

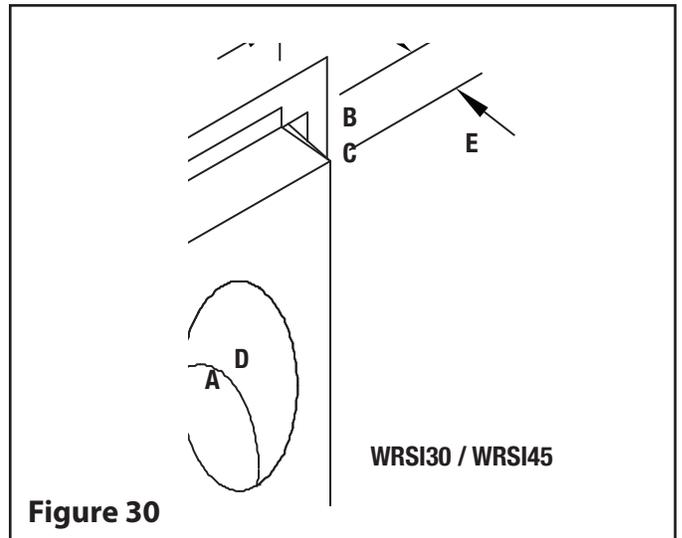


Figure 30

	SIZE					
	WRSI30			WRSI45 (CANADA ONLY)		
	7"	8"	10"	7"	8"	10"
A	37-3/4	39-3/4	45-5/16	26-5/8	28	30-1/2
B	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 9

9

REPLACEMENT PARTS



LENGTHS & FITTINGS	
DTC-08SS-2	LENGTH Ø" X 8"
DTC-12SS-2	LENGTH Ø" X 12"
DTC-18SS-2	LENGTH Ø" X 18"
DTC-24SS-2	LENGTH Ø" X 24"
DTC-36SS-2	LENGTH Ø" X 36"
DTC-48SS-2	LENGTH Ø" X 48"
DTC-12TASS-2	ADJUSTABLE LENGTH, 12"
DTC-TSS-2	TEE WITH TEE CAP (TWIST LOCK)
DTC-TCI	INSULATED TEE CAP (TWIST LOCK)
DTC-TBGA	BASE TEE GALVANIZED (TC INCLUDED)
DTC-TBSS	BASE TEE STAINLESS (TC INCLUDED)
DTC-TCBGA	BASE TEE CAP GALVANIZED
DTC-E15SS-2	INSULATED ELBOW 15 DEGREE
DTC-E30SS-2	INSULATED ELBOW 30 DEGREE
DTC-E45SS-2	INSULATED ELBOW 45 DEGREE
SUPPORTS	
DTC-CS24	SQUARE CATHEDRAL SUPPORT 24"
DTC-CSE24	SQUARE SUPPORT EXTENSION 24"
DTC-FSC	FINISHING SUPPORT W/COUPLER
DTC-FSCR	FINISHING SUPPORT W/COUPLER WITH REMOVABLE COLLAR
DTC-RCS	REDUCE CLEAR. SUPPORT INS. 24"
DTC-SE	SQUARE SUPPORT EXTENSION 24"

9

REPLACEMENT PARTS



DTC-TSA	ADJUSTABLE TEE SUPPORT
DTC-RESU-2	OFFSET / WALL SUPPORT
DTC-RS	ROOF SUPPORT
DTC-FSP	FLOOR SUPPORT
DTC-AP	ANCHOR PLATE



BRACES & FIRESTOPS

DTC-FS	FIRESTOP
DTC-FS30	ANGLED FIRESTOP - 30 DEGREE
DTC-FS45	ANGLED FIRESTOP - 45 DEGREE
DTC-FRS	RADIATION SHIELD
DTC-SRSE	PASS-THROUGH RAD. SHIELD (INSULATED CHIMNEY)
DTC-ISIA	ADJUSTABLE INSULATED ATTIC RADIATION SHIELD
DTC-FSI	INSULATED RADIATION SHIELD
DTC-WTI-2	INSULATED WALL THIMBLE
DTC-CA	FLUE EXTENSION
DTC-WRSI30	INSULATED WALL RADIATION SHIELD - 30 DEGREE
DTC-WRSI45	INSULATED WALL THIMBLE - 45 DEGREE
DTC-XRB	UNIVERSAL ROOF BRACE
DTC-WSU-2	UNIVERSAL WALL BAND
DTC-GWB	GUY WIRE BAND (WIRE NOT INCLUDED)



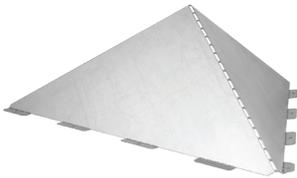
VENTED FLASHING (STORM COLLAR INCLUDED)

DTC-FF	FLAT ROOF FLASHING
DTC-F7	ADJUSTABLE ROOF FLASHING 1/12 - 7/12



9

REPLACEMENT PARTS



DTC-F12	ADJUSTABLE ROOF FLASHING 8/12 -12/12
DTC-F21	ADJUSTABLE ROOF FLASHING 12/12 -21/12
DTC-FP7	PEAK ROOF FLASHING 1/12 -7/12
DTC-FP12	PEAK ROOF FLASHING 8/12 -12/12
DTC-F7DSA	ADJUSTABLE ROOF FLASHING 1/12 TO 7/12, ALUMINUM MALLEABLE
DTC-F12DSA	ADJUSTABLE ROOF FLASHING 8/12 TO 12/12, ALUMINUM MALLEABLE
DTC-SC	STORM COLLAR
SP	FLASHING SNOW DIVERTER
OTHERS	
DTC-VC	RAIN CAP
SA	UNIVERSAL SPARK ARRESTER BAND
DTC-DC	DTC DECORATIVE COLLAR, SINGLE-WALL STOVE PIPE
DTC-DVL	DTC DECORATIVE COLLAR, DOUBLE-WALL STOVE PIPE
DTC-TC	DECORATIVE TRIM
INSTALLATION KITS	
DTC-WSK-2	WALL SUPPORT KIT (INCLUDES: 1 OF EACH TCI, WTI-2 , TSS-2, CA, DVL, WSU-2, RESU-2, VC)
DTC-KINC-2	INTERIOR KIT NEW CONSTRUCTION (INCLUDES: 1 OF EACH FSC, ISIA, VC)

To order a replacement part, please reach out to your nearest dealer, distributor, or to customerservice@duravent.com

DuraVent Limited Lifetime Warranty

DuraVent, Inc. provides this limited lifetime warranty for all of its products with the exception of Ventinox® (lifetime), and PolyPro® (ten years). Subject to the limitations set forth below, DuraVent warrants that its products will be free from defects in material or manufacturing, if properly installed, maintained and used. DuraVent products are fully warranted if installed only by a professional installer. This Warranty is transferable from the original homeowner to the buyer of the home. This warranty does not cover normal wear and tear, smoke damage or damage caused by chimney fires, acts of God, or any product that was: (1) purchased other than from an authorized DuraVent dealer, retailer or distributor; (2) modified or altered; (3) improperly serviced, inspected or cleaned; or (4) subject to negligence or any use not in accordance with the installation instructions included with the product as determined by DuraVent. Installation instructions are available online at www.duravent.com under Support/Literature and through our Customer Service Department 800-835-4429 or customerservice@duravent.com. This limited lifetime warranty applies only to parts manufactured by DuraVent.

DuraVent provides the following warranties for its products: One Hundred Percent (100%) MSRP 15 years from the date of purchase, and Fifty Percent (50%) thereafter, except for the following limitations on: all Termination Caps and DuraBlack® are warranted at One Hundred Percent (100%) for five years.

All warranty obligations of DuraVent shall be limited to repair or replacement of the defective product pursuant to the terms and conditions applicable to each product line. These remedies shall constitute DuraVent's sole obligation and sole remedy under this warranty. This warranty provides no cash surrender value. The terms and conditions of this warranty may not be modified, altered or waived by any action, inaction or representation, whether oral or in writing, except upon the express, written authority of an executive officer of DuraVent.

Corn, bio-fuels, driftwood or other wood containing salt, preservative-treated lumber, plastic and household trash or garbage, or wood pellets containing such materials must not be burned in the appliance or fireplace. In case of a chimney fire, the chimney must be inspected and approved by a certified Chimney Sweep before reuse. After each annual inspection, maintenance, and cleaning, the certified Chimney Sweep must fill out and date the appropriate section of the warranty card provided with the chimney liner.

LIMITATIONS ON INTERNET SALES: Notwithstanding any other terms or conditions of this Limited Lifetime Warranty, DuraVent provides no warranty for the following specific products if such products are not installed by a qualified professional installer: DuraTech®, DuraTech® HTC, DuraTech® Premium, DuraChimney® II, PelletVent Pro®, DirectVent Pro®, FasNSeal®, FasNSeal® W2, FasNSeal® Flex,

and PolyPro®, and DuraVent's relining products including DuraLiner®, DuraFlex® (SW, Pro, 316, 304), and Ventinox®. For purposes of this warranty, a trained professional installer is defined as one of the following: licensed contractors with prior chimney installation experience, CSIA Certified Chimney Sweeps, NFI Certified Specialists, or WETT Certified Professionals.

DuraVent must be notified and given the opportunity to inspect defective product prior to replacement under the terms of this limited lifetime warranty. All warranty claims must be submitted with proof of purchase. Labor and installation costs are not covered under this warranty. To obtain warranty service contact: DuraVent Warranty Service, 877 Cotting Ct., Vacaville CA 95688, or call 800-835-4429.

WHERE LAWFUL, DURAVENT DISCLAIMS ALL OTHER WARRANTIES, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT WILL DURAVENT BE LIABLE FOR INCIDENTAL, CONSEQUENTIAL, PUNITIVE OR SPECIAL DAMAGES OR DIRECT OR INDIRECT LOSS OF ANY KIND, INCLUDING BUT NOT LIMITED TO PROPERTY DAMAGE AND PERSONAL INJURY. DURAVENT'S ENTIRE LIABILITY IS LIMITED TO THE PURCHASE PRICE OF THIS PRODUCT. SOME STATES DO NOT ALLOW LIMITATIONS ON IMPLIED WARRANTIES, OR THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS AND EXCLUSIONS MAY NOT APPLY TO YOU. THIS LIMITED WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS THAT VARY FROM STATE TO STATE.

For the most up-to-date installation instructions, see www.duravent.com

REV 11.28.17

Manufactured in Vacaville CA

DuraVent®

www.duravent.com | 800-835-4429

L209_810007492_DV Limited Lifetime Warranty_11-28-2017

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 DuraVent for the phone number of your nearest DuraVent dealer who will answer your questions or address your concerns.

Normally, all parts should be ordered through your DuraVent 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.

DuraVent
877 Cotting Court, Vacaville, CA 95688
800-835-4429; www.DuraVent.com

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DuraVent 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.