



Ci50

Factory-built CHIMNEY
12 to 24 inch diameter

INSTALLATION AND OPERATING INSTRUCTIONS FOR MASONRY FIREPLACE

Read these instructions and keep them for future reference



Listed to the following standards:

ULC-S604
ULC/ORD-C959
UL-103
UL-103HT
UL-103 Industrial

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KEEP YOUR CHIMNEY CLEAN

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.

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.

BURNING SMART

How you burn wood in your fireplace directly affects the formation of creosote. Smaller, hotter fires are better than large, smoldering ones. Fast, effective start-ups are important, as is the moisture content of the wood. Ideally, you should use seasoned wood with a moisture content of 20-25%. If your wood is not completely seasoned, use more dry kindling and paper first to warm the chimney.

CHIMNEY OPERATION AND MAINTENANCE

Wood burning can quickly create large deposits of creosote in the chimney. We recommend the following:

1. The chimney should be inspected at least once every 3 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.
2. Have your chimney cleaned by a qualified chimney sweep. If you want to clean your chimney yourself, use plastic or stainless steel brushes.
3. 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.

CHIMNEY FIRES

If you are having a chimney fire, follow these steps:

1. Block the fireplace opening with a non-combustible material (such as a steel sheet).
2. Alert your family to the possible danger.
3. If you require assistance, alert your fire department.
4. If possible, use a dry chemical fire extinguisher, baking soda or sand to control the fire. Do not use water as it may cause a dangerous steam explosion.
5. Check outside to ensure that sparks and hot embers that are coming out of the chimney are not igniting the roof.
6. Do not use the fireplace again until a qualified chimney sweep or Fire Department Inspector has inspected your chimney.

The ci-50 chimney has been designed to withstand the intense heat of a chimney fire. Nevertheless chimney fires are dangerous and should be prevented.

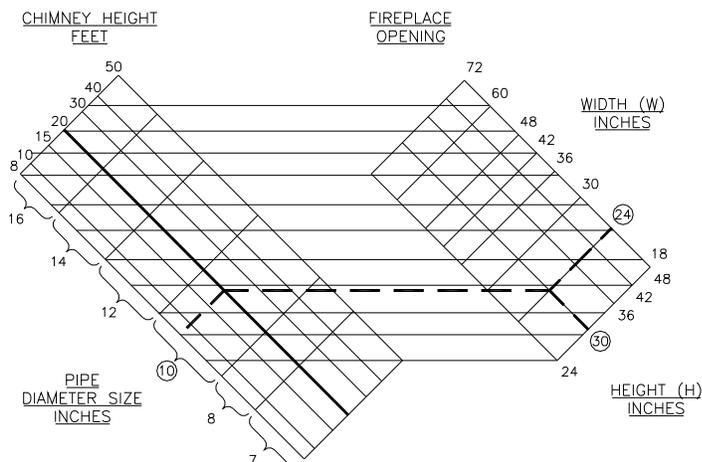
BEFORE HIRING A CHIMNEY SWEEP

1. Does the company or individual have adequate liability insurance in case of damage?
2. How long has the company been in business?
3. Does the company offer current references?
4. Is the company involved in any unresolved disputes?

LOAD BEARING CHART

Diameter (mm)	Maximum Height						
	305	355	406	457	508	559	610
(in.)	12	14	16	18	20	22	24
SUPPORT							
Anchor plate (m)	19	16.5	14.5	13	12	11	10
(ft.)	62	54	48	43	39	36	33
Floor support (m)	15	13	11.5	10.5	9.5	8.5	8
(ft.)	49	43	38	34	31	28	26
Roof support (m)	10.5	9.5	8.5	7.5	6.5	6.0	5.5
(ft.)	34.4	31.2	27.9	24.6	21.4	19.7	18
Suspension band (m)	1.8	1.8	1.8	1.8	1.8	1.8	1.8
(ft.)	6	6	6	6	6	6	6

CHIMNEY SIZING CHART



Example:

Dotted line represents a sample of a fireplace opening of 24" wide by 30" high. The correct flue size for the sample is a 10" diameter chimney for a chimney height of 20 feet.

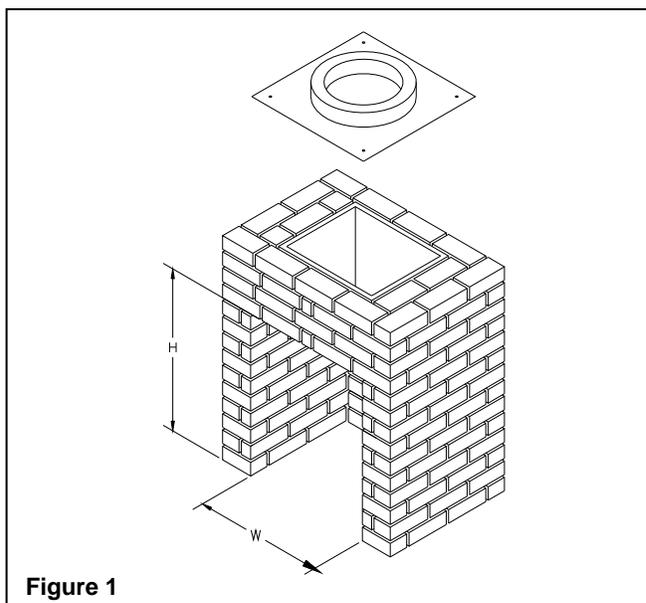


Figure 1

GENERAL INSTALLATION NOTES

INSTALLATION NOTES

1. The chimney is intended for use with solid, liquid and gaseous fuel burning appliances.
Allowable flue gas temperature:
Maximum continuous 540°C (1000°F)
Brief forced firing 760°C (1400°F)
Tested to 1150°C (2100°F)
2. For installations where the requirement is to provide chimney certified UL-103 HT, the minimum required clearance to combustible is 2 inches for a diameter of 12 to 24 inches.
3. The maximum heights of a chimney supported by the various security supports are outlined on page 2.
4. Size the chimney in accordance with the chimney sizing chart, also on page 2.
5. Use a maximum of two (2) offsets per chimney system. A support is required above each offset.
6. A chimney servicing a fireplace must not serve any other appliance.
7. The chimney must 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 unguyed chimney above the roof is 5 ft.
9. Portions of the chimney that may extend through accessible spaces must 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.
10. Do not fill the air space around the chimney with insulation or any other material. Insulation placed in this area could cause adjacent combustibles to overheat.
11. Shroud installation is allowed only in accordance with your local department of Building and Safety. Two openings having a minimum of 1½ times the total area of the chimney diameter opening must be provided.
12. Chimney covered by a chase must extend at least 8" above a metal chase cover. NOTE: In California, this chase cover should be ventilated to allow dispersal of chase heat build-up

WARNING

The clearance between the chimney and combustible material must not be less than 2". Do not fill this area with insulation.

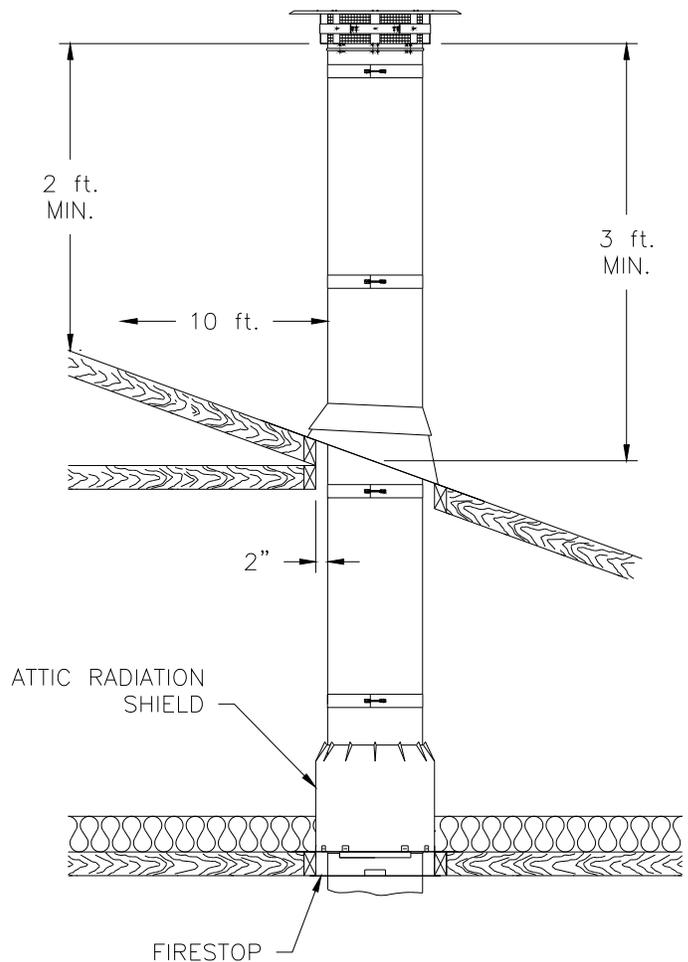


Figure 2

STEP BY STEP INSTALLATIONS

- 1 Make sure a smooth and level masonry platform is provided to accept the anchor plate.

If necessary, pour a minimum of $\frac{3}{4}$ in. refractory cement under the area of the anchor plate to provide the flat surface.

Secure the anchor plate using (4) $\frac{3}{8}$ in. dia. X 2 in. anchor bolt on the platform.

- 2 Put the first chimney length on the anchor plate. Push it down firmly in place. Secure it to the anchor plate using (4) $\frac{1}{2}$ in. #8 stainless steel metal screw. (Figure 3)

Note: the male coupling must be on top.

- 3 Stack the next chimney length on the first length. Position the locking band around the joint and tighten it.

- 4 Continue until the required chimney height is reached.

- 5 At the attic level, install a firestop plate (FEA), from below and an attic radiation shield (FP) from above. (Figure 4)

6 ROOF FLASHING INSTALLATION

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

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.

- 7 Place the storm collar over the chimney and the flashing. Tighten it with the bolt supplied making sure the joint is properly caulked (Figure 5).

- 8 Fit the rain cap to the top of the chimney. Screw two #8 x $\frac{1}{2}$ in. stainless steel screws in the joint, then cover the joint with the locking band provided with the last chimney length.

- 9 The flashing may be painted to match the house colour using metal paint.

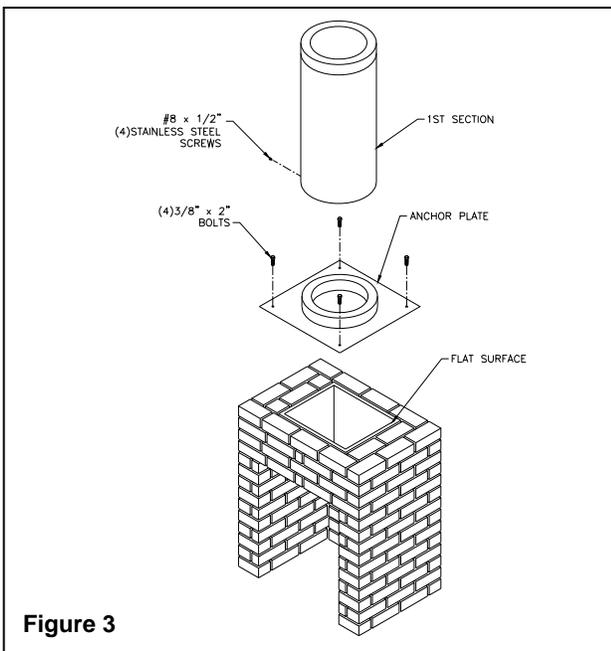


Figure 3

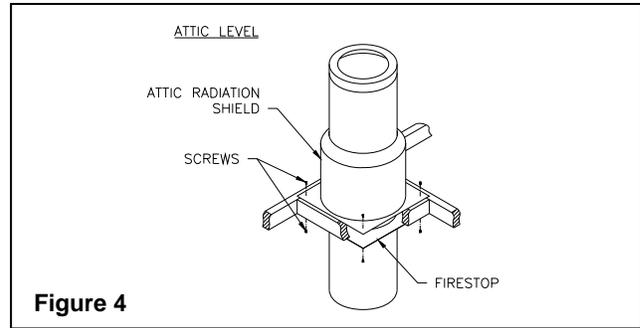


Figure 4

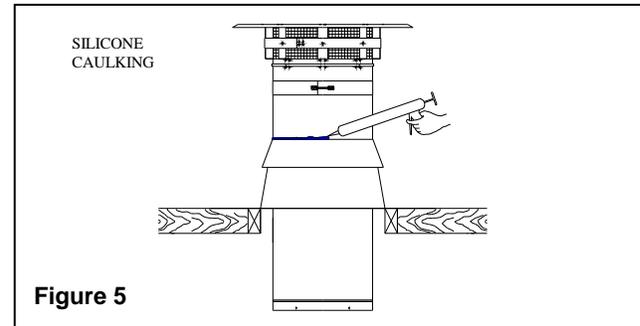


Figure 5

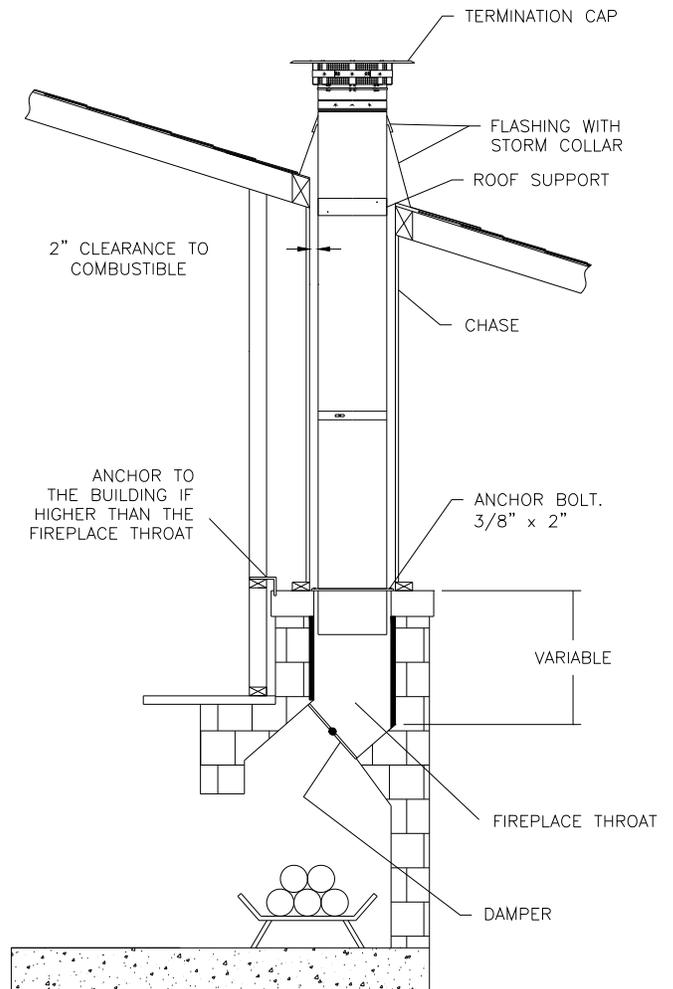


Figure 6

OFFSET CHIMNEY

If it is necessary to offset the chimney in order for it to pass through an upstairs cupboard 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 system. 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 3'. If the offset chimney is longer than 3', then it must be supported at 3' intervals using a roof support (ST+).

INSTALLATION INSTRUCTIONS

When you reach the height at which the elbow will be installed, proceed as follows:

- 1** Install the insulated offset elbow on the vertical chimney length. Turn it in the required direction and fasten it to the chimney by tightening the collar on the joint.
- 2** Place the required offset chimney length on the elbow.
- 3** Use another elbow to turn the chimney vertically. Again secure the elbow to the chimney length by tightening the collar on the joint.

To prevent the elbow from turning, you may add a #8 x 1/2 in. Stainless screw in the joint below the collar.

Install the remaining chimney as described in the preceding page.

WARNING

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

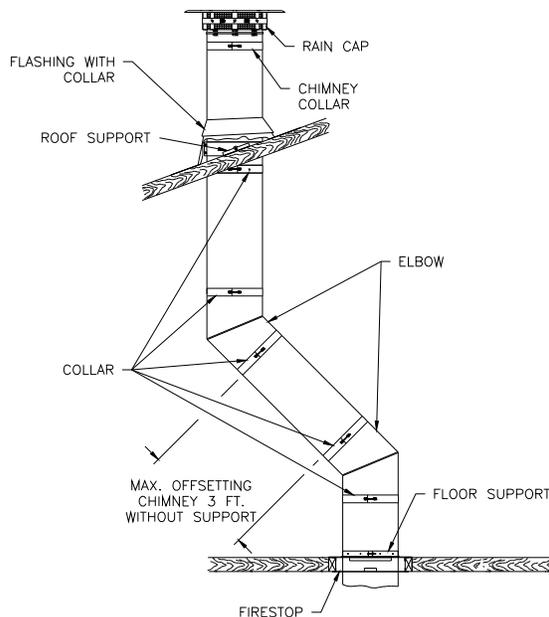


Figure 7

ROOF SUPPORT

The roof support has four (4) possible uses:

It may be used to support a chimney at the roof level. 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)

It may be used to support offset lengths when span exceeds 3".

INSTALLATION INSTRUCTIONS

With the chimney extending through the hole in the roof, ceiling or floor and the radiation shield in place, proceed as follows:

- 1** Slip the support down over the stainless steel chimney until its brackets rest on the roof or floor. Tighten the collar around the chimney, then secure it by screwing (4) 1/2" metal screws (supplied) through the holes located on each side of the collar bolts and into the chimney.

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. (Fig. 13a)

- 2** Install the remaining chimney lengths, until the required chimney height is reached.

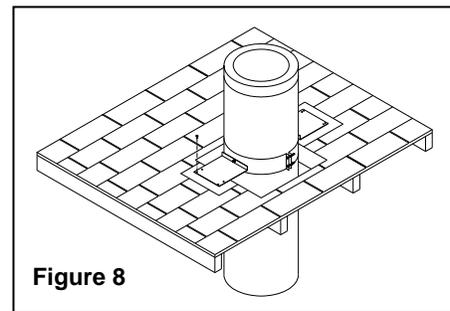


Figure 8

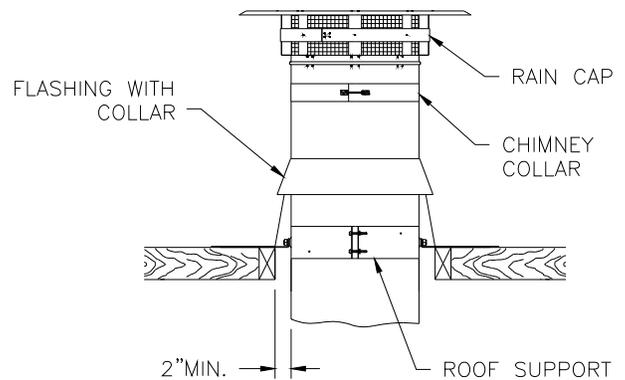


Figure 9

Ci50 10 YEAR LIMITED WARRANTY

This limited warranty is granted by Security Chimneys International Ltd., 2125 Monterey, Laval, Quebec, Canada H7L 3T6. (Hereinafter referred as "Warrantor")

Limited Warranty:

The Warrantor grants a warranty to the initial consumer that the Ci50 stainless steel chimney will be free from defects in material and workmanship under normal use of such chimneys for a period of 10 years from the date of purchase. This warranty is not valid if the Ci50 chimney is not installed in accordance with the recommendations provided in the installation manual and with all the components provided by the manufacturer. This product must be used for the application for which it was designed and intended.

The Warrantor shall not be liable for damages due to normal wear of the Ci50 chimney lengths, accidents, misuse, lack of reasonable and necessary maintenance, improper installation or unauthorized repairs, alterations or modifications of the product.

The Warrantor's liability with respect to defects shall be limited to the replacement of the Ci50 chimney lengths considered defective by the Warrantor for the following periods:

During the first 10 years, the Warrantor will provide Ci50 chimneys lengths and the initial consumer shall bear all other costs.

The Warrantor reserves the right to replace Ci50 chimney lengths with an equivalent product and the replacement must be carried out in accordance with the Warrantor's recommendations.

The warranty is limited to the replacement of defective chimney lengths and does not include any damages resulting from any defect in the product nor does it include expenses sustained in connection with the product, including damages to property.

IN NO EVENT WILL WARRANTOR BE LIABLE TO YOU OR ANY OTHER PERSON FOR ANY DAMAGES, INCLUDING ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES. SOME STATES DO NOT ALLOW THE ABOVE LIMITATION OR EXCLUSION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO YOU.

The warranty is only valid for an initial consumer who buys Ci50 chimney lengths and may not be assigned.

EXCEPT AS EXPRESSLY SET FORTH ABOVE, NO OTHER WARRANTIES, EITHER EXPRESS OR IMPLIED, WRITTEN OR ORAL, ARE MADE INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, AND THE WARRANTOR EXPRESSLY DISCLAIMS ALL WARRANTIES NOT STATED HEREIN. SOME STATES DO NOT ALLOW THE EXCLUSION OF IMPLIED WARRANTIES, SO THE ABOVE EXCLUSION MAY NOT APPLY TO YOU. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS AND YOU MAY ALSO HAVE OTHER RIGHTS THAT VARY FROM STATE TO STATE.

This warranty is governed by the laws of the province of Quebec, Canada.

OBTAINING REPLACEMENT:

To obtain a replacement, contact the Warrantor or the dealer. Proof of purchase is required. If defective chimney lengths have to be returned, it will be at the consumer's expense. The Warrantor will replace any chimney lengths that upon examination by Warrantor or its designated representative prove to be defective.