

# TUBINOX

## FACTORY-BUILT LINING SYSTEM

### INSTALLATION AND OPERATING INSTRUCTIONS

**5", 6", 7" & 8" dia.**

FOR USE IN EXISTING OR  
NEW MASONRY CHIMNEYS

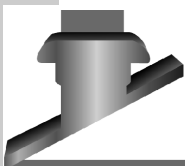
FOR USE WITH SOLID  
LIQUID OR GASEOUS  
FUEL BURNING  
APPLIANCES  
PRODUCING FLUE GAS  
TEMPERATURES OF  
LESS THAN 650°C

TESTED TO:

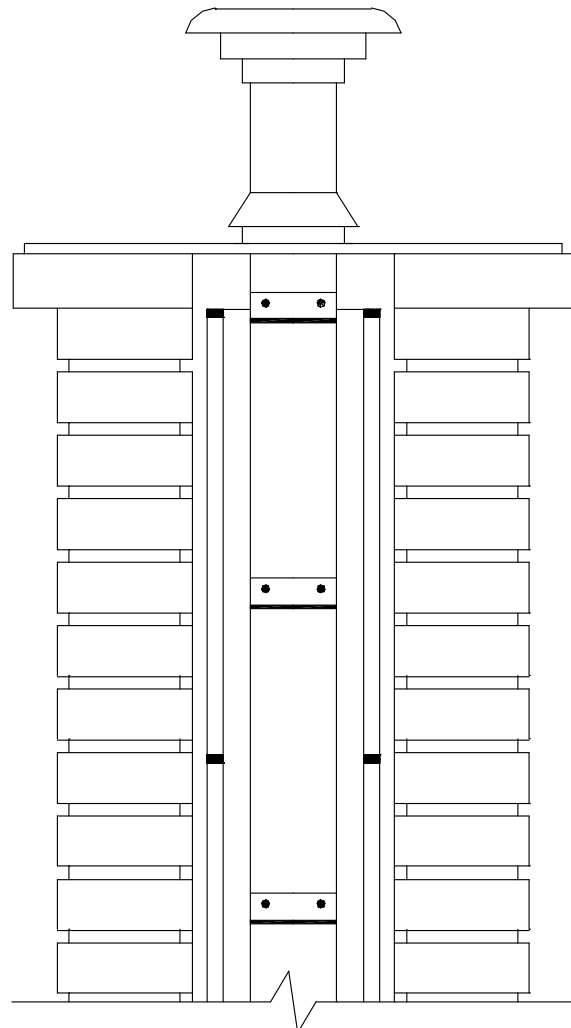
**1150° C**  
**2100° F**

STANDARD:

**ULC-S635M**  
**ULC-S640M**  
**UL-1777**



**SECURITY  
CHIMNEYS**



SECURITY CHIMNEYS INTERNATIONAL LTD  
2125 Monterey St.,  
Laval, Quebec, Canada  
H7L 3T6  
Tel.: (450) 973-9999

# Installation and Operating Instructions

Read these instructions and keep them for future reference.

Before installing this liner, consult your local building authority and obtain a building permit

Install the liner as described in these instructions. Only use parts supplied by Security Chimneys International Ltd. Failure to do so will void the certification and the guarantee of this chimney.

## GENERAL NOTES

1. TUBINOX lining system can be substituted to the traditional clay tile liner in new masonry chimney construction.
2. The liner is intended for use with solid, liquid and gaseous fuel burning appliances at these allowable flue gas temperatures :

|                     | U.S.                          | CANADA                        |
|---------------------|-------------------------------|-------------------------------|
| Maximum continuous  | 1000°F<br>540°C               | 1200°F<br>650°C               |
| Brief forced firing | 1400°F<br>760°C               | 1700°F<br>925°C               |
| Tested to           | 2100°F<br>1150°C<br>(10 min.) | 2100°F<br>1150°C<br>(30 min.) |

TABLE 1

3. Size the liner in accordance with the appliance manufacturer's instructions. The liner must not be smaller than the appliance flue outlet.
4. The chimney shall extend at least 3 ft (915 mm) above its point of contact with the roof and at least 2 ft (610 mm) higher than any wall, roof or adjacent building within 10 ft (3 m) of it (fig. 1).
5. The clearance between single wall stove pipe and unprotected combustible material must not be less than 18" (457 mm) (See National Building Code or NFPA).

## MASONRY CHIMNEY

Before installing the liner into an existing masonry chimney, the chimney must be thoroughly cleaned and examined. Check to ensure that the chimney is structurally sound.

Check for cracked, loose or missing bricks, moisture or other materials that could inhibit correct installation of the liner.

6. Do not fill the space between the liner and chimney with loose fill insulation or cement. These products may damage the liner.
7. A rain cap must be used on top of the liner to prevent the entrance of debris, rain, birds or small animals into the liner.
8. Homeowners must be reminded to check the rain cap for icing during conditions of low ambient temperatures due to the possibility of blockage through freezing moisture. The local authority having jurisdiction should be consulted if a rain cap is considered in areas of low ambient temperature.
9. Masonry chimney construction :
  - The masonry chimney must be built with bricks and mortar conformed to the Building Code. The flue opening dimension must always leave the liner free to expand.
10. The maximum height of liner that can be installed is 60 feet (18 m).
11. Special precaution should be taken in choosing the correct size of liner system in colder climate region. Poor draft, excessive condensation and creosote build-up could occur if the liner system is too big for the application.
12. Sharp bends that would crimp and restrict the cross-section of the liner are prohibited.

|                       | NFPA211    | National Building Code |
|-----------------------|------------|------------------------|
| Interior installation | 2" (50 mm) | 2" (50 mm)             |
| Exterior installation | 1" (25 mm) | 1" (25 mm)             |

TABLE 2

For a new masonry chimney liner installation make sure that the masonry chimney construction and clearances between the chimney exterior and combustible materials are as specified in NFPA 211 (USA) or the National Building Code (Canada) (See table 2).

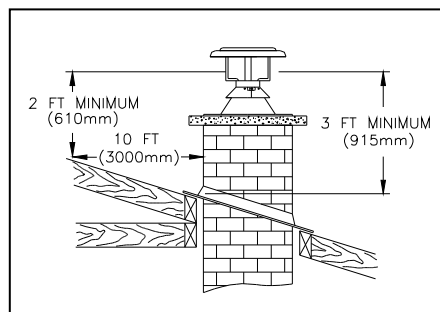


Figure 1

## YOU CAN DO IT ... STEP BY STEP !

Congratulations! You have made a wise choice in your selection of a TUBINOX lining system. You have purchased a fine quality system researched, developed and tested to precise standards of quality in manufacturing.

It's so easy to install...you can do it step by step. Each component is designed to fit together perfectly and easily. If you are handy with a few basic tools and have a general knowledge of carpentry, you can install your TUBINOX lining system over a weekend or have a professional install it for you in a few hours.

Before you install your TUBINOX lining system, read these instructions carefully and follow them exactly.

## TUBINOX

### RIGID STAINLESS STEEL LINER SYSTEM

List of components available :

| CODE | DESCRIPTION                   | CODE   | DESCRIPTION                                |
|------|-------------------------------|--------|--|
| LL6  | Length 6"                     | LSB    | Interior support                           |
| LL12 | Length 12"                    | LAAM   | Adaptor flexible pipe (male)               |
| LL24 | Length 24"                    | LAAF   | Adaptor flexible pipe (female)             |
| LL36 | Length 36"                    | LLFLEX | Stainless Steel Flex 5 ft long             |
| LL48 | Length 48"                    | LMA    | Masonry adaptor                            |
| L7A  | Adjustable length (7" to 11") | LRSMI  | Adjustable insulated wall radiation shield |
| LT   | Split base tee                | LLW6   | Increaser length                           |
| TCS  | Tee cap                       | LLW7   | Increaser length                           |
| LTC  | Twist lock tee cap            | LLW8   | Increaser length                           |
| LE30 | Elbow 30°                     | LLR5   | Reducer                                    |
| LE45 | Elbow 45°                     | LLR6   | Reducer                                    |
| LE90 | Elbow 90°                     | LLR7   | Reducer                                    |
| LST  | Top support                   | LCS    | Regular rain cap                           |
| LSA  | Support assembly              | LCC    | Deluxe rain cap                            |

## GENERAL INFORMATION

### CREOSOTE

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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.

Creosote formation in a chimney cannot be eliminated, but it can be minimized by :

1. Keeping the temperature of the gases in the chimney above 300°F.
2. Making small hot fires rather than slow burning, smoldering fires.

The chimney liner should be inspected periodically during the heating season to determine if a creosote build-up has occur. If a significant layer of creosote has accumulated ((1/8" (3 mm) or more)) it should be removed to reduce the risk of a chimney fire.

### CHIMNEY OPERATION AND MAINTENANCE

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**Keep your chimney and liner clean.**

Do not allow more than 1/8" build-up of creosote in your liner. Wood stoves can quickly create large deposits of creosote in the liner. 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 liner system weekly. From this you will learn how often it will be necessary to clean your liner.
2. The liner should be inspected at least once every 2 months during the heating season to determine if a creosote or soot build-up has occur. If creosote or soot has accumulated, it should be removed to reduce the risk of a chimney fire.
3. Have your liner cleaned by a qualified chimney sweep. If you want to clean your liner yourself, then use plastic, wood or stainless steel brushes. Do not use a brush that will scratch the stainless steel interior of the liner.
4. Do not expect chemical chimney cleaners to keep your liner clean. Their use does not negate the necessity of periodically inspecting and cleaning your liner.

### COAL

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Some coals contain large quantities of sulphur (up to 7%). When coal is burned, sulphur and coal ashes are deposited in the liner. This deposit combines with moisture to form a highly corrosive acid (Sulphuric Acid). In order to protect your liner, we recommend that you burn only low sulphur coals (less than 1% sulphur). Have your liner cleaned within 48 hours of shutting down your stove at the end of the heating season. Be certain that all the soot is removed. Wipe the liner flue using a strong solution of baking soda and water. This can be done by wrapping a rag around a chimney cleaning brush, dipping it in the baking soda-water solution, then passing it through the liner three or four times.

### CHIMNEY FIRES

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

1. Close all heater doors and combustion air controls. For fireplaces, block the fireplace opening with a non-combustible material (such as an asbestos or 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. Watch for smouldering or fire on combustibles next to the stove, stove pipe and chimney. Check outside to ensure that sparks and hot embers coming out of the chimney are not igniting the roof.
6. Do not use the stove again until your chimney and stove pipe have been inspected by a qualified chimney sweep or Fire Department inspector. The TUBINOX lining system has been designed to withstand the intense heat of a chimney fire. Nevertheless, chimney fires are dangerous and should be avoided.

# INSTALLATION GUIDELINES

## INSTALLATION INSTRUCTIONS

- The chimney lining system can be installed in a masonry or concrete chimney that complies with the building code.
- In Canada, a new masonry or concrete chimney construction must comply with CAN/CSA A405: Design and Construction of Masonry Chimneys and Fireplaces.

## INSTALLATION

### NEW CHIMNEY LINING (fig.4) :

1. To install a liner into a new masonry chimney, we suggest that you install the liner as the chimney is being constructed.
2. Start the masonry chimney construction, making sure that the dimension and manufacture of the bricks and mortar conform to the Building Code.
3. To start the liner installation, attach the tee (LT) to the first length (LL). Insert the liner with the male (smaller connection) end down. Twist lock the part together (fig.2). Attach the cap (TCS or LTC) to the base of the tee.

**NOTE :** Each joint takes 1 1/2" (38 mm) overlap.

4. Place the tee (LT) and length assembly on the support base (LSB), then add lengths (LL) along the chimney construction until the liner protrudes about 10 in. (254 mm) above the masonry chimney (fig.3).

**CAUTION :** *Never fill the space between the liner and the bricks. Always leave the liner free to expand.*

5. Install the top support (LST) on top of the masonry chimney using lag bolts and/or cement (fig.5).
6. Slip the support collar over the liner until it rests on the support (LST). Tighten the bolt to fasten it to the liner. (fig. 5)

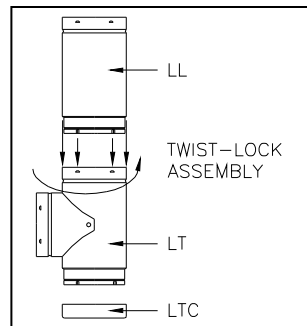


Fig. 2

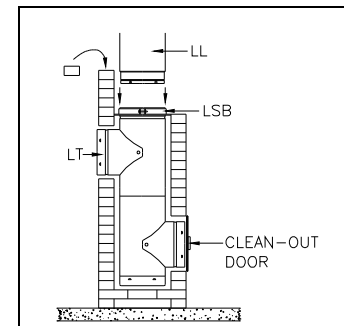


Fig. 3

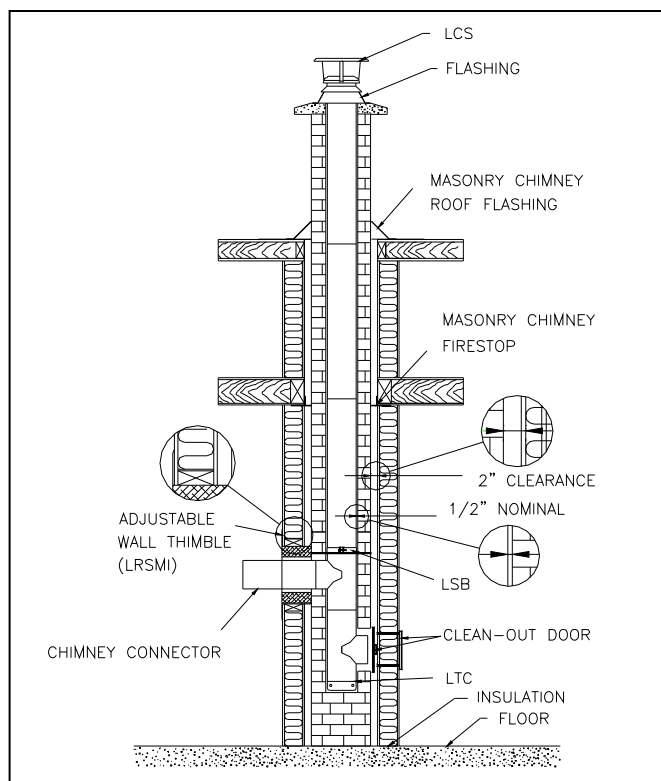


Fig. 4 – New masonry liner installation for interior chimney

7. Twist lock the rain cap (LCS or LCC) to the top of the liner.

8. **Installation of wall radiation shield (LRSMI) through a combustible wall.**

- From inside, frame a hole 14 1/2" x 14 1/2" (368 mm x 368 mm) in the wall where the vent will pass through.
- Adjust the insulated wall radiation shield length to fit the wall thickness and lock the two parts together with three (3) screws supplied.

**CAUTION:** Make sure the wall radiation shield (LRSMI) is always in contact with the masonry chimney.

- Slide the wall radiation shield (LRSMI) over the length and fix it to the wall using four (4) screws supplied (fig. 6).

**Note:** The void in the four corners between the wall radiation shield (LRSMI) and the wall frame can be filled with fiberglass insulation.

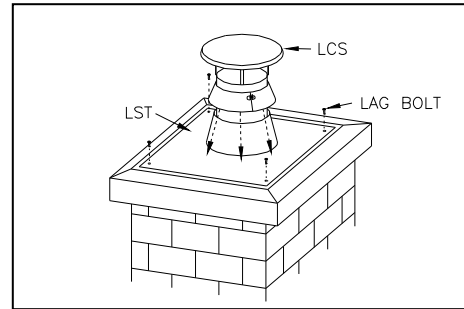


Fig. 5

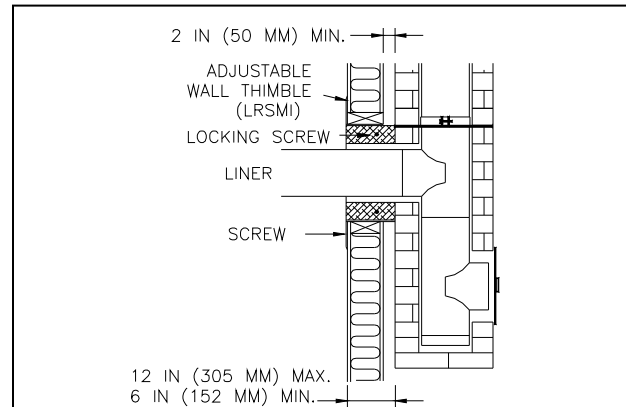


Fig. 6

▪ **EXISTING CHIMNEY LINING (fig. 7) :**

1. At the bottom of the masonry chimney, set up a brick or other non-combustible support on which the liner will rest.

**Note:** On an installation lower than 30 feet, you may support the liner from the top support (LST).

2. Attach the tee (LT) to the first liner length. Insert the liner with the male (smaller connection) end down. Twist lock the parts together (fig. 2 page 4).
3. You may remove the horizontal branch to facilitate lowering the liner into the chimney, then attach it when in place. If you keep it, make sure it is solidly attached.
4. To lower the liner into the chimney, we suggest that you tie a small hook to a long rope and grip the hook on the tee (LT). Make sure the rope is on the outside of the liner, so you will be able to add lengths and lower the assembly down the chimney (fig. 10). Add lengths (LL) until the liner protrudes about 10" above the masonry chimney top.
5. Install the support plate (of the LST or LSA) on top of the masonry chimney using lag bolts and /or cement.

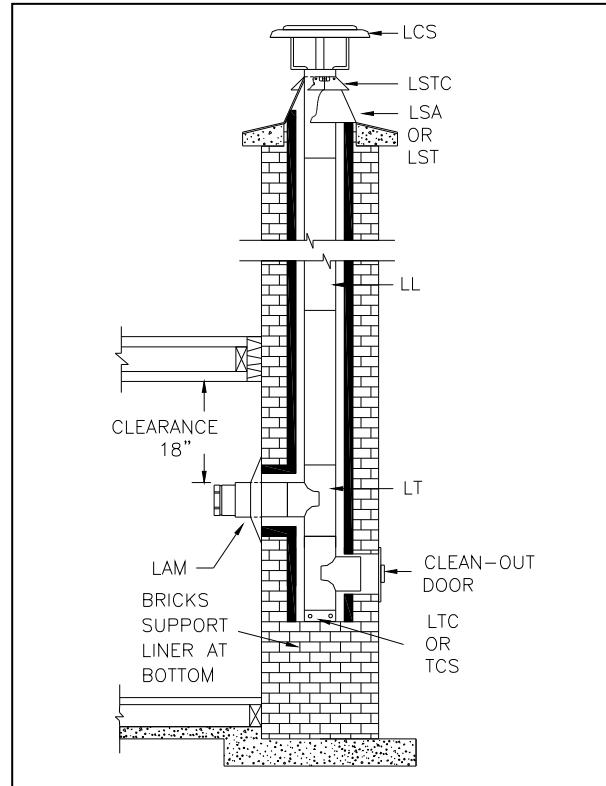


Fig. 7 – Existing masonry relining installation

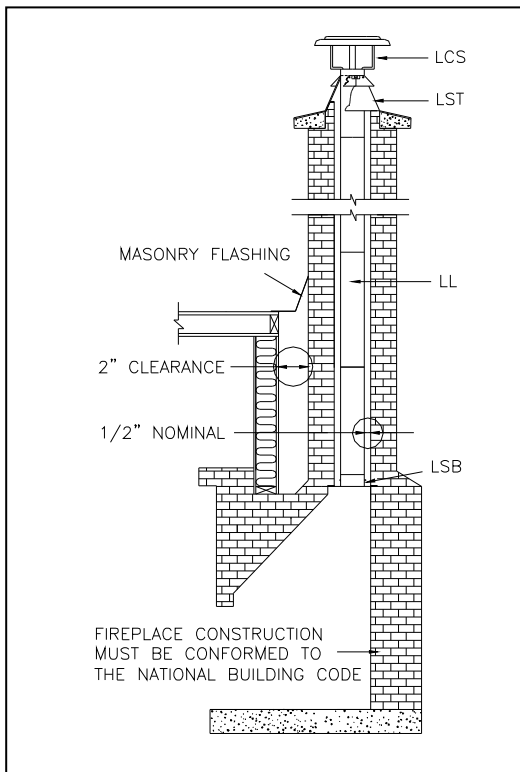


Fig. 8 – Lining system for new fireplace installation

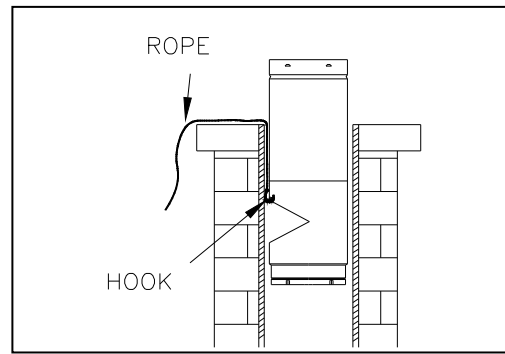


Fig. 10

6. Slip the support collar over the liner until it rests on the support plate. Tighten the bolt to fasten it to the liner.
7. Twist lock the rain cap (LCS or LCC) to the top of the liner.
8. From inside the house, twist lock the masonry adaptor (LMA) to the tee (LT). Now fasten the adaptor's collar to the masonry wall.

Be sure there is at least 18 inch clearance between the single wall pipe and any combustible material.

## INTERIOR SUPPORT

A liner installed in a fireplace chimney will require an interior support at the top of the fireplace (LSB).

- **NEW CHIMNEY LINING (fig.8)**
  - Install the support plate on top of the fireplace.
  - Proceed with the erection of the liner along the chimney construction as described before.
- **EXISTING FIREPLACE (fig.9)**
  - Install the liner as described previously (see "existing chimney lining"). With the liner hanging in the fireplace, place the interior support (LSB) in position and mark its location on the liner.
  - Remove the support and attach the support collar around the liner slightly above your mark.
  - Attach the support to the fireplace wall using four bolts and lags.
  - Continue connection to your stove.

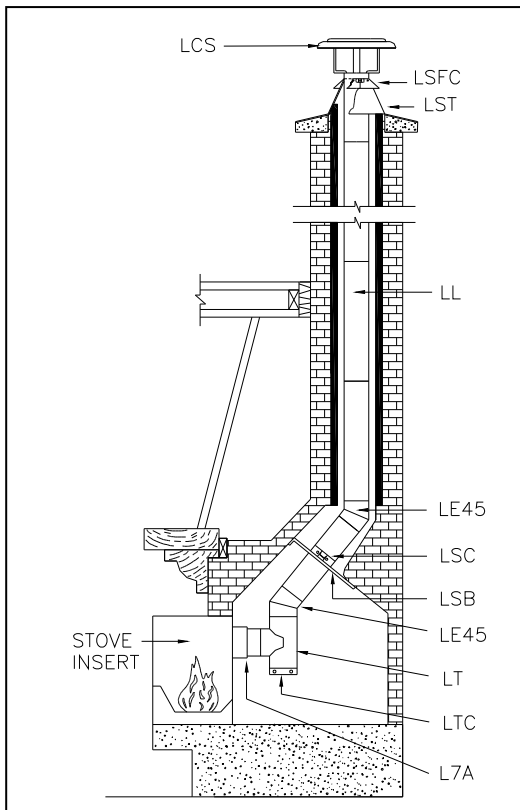


Fig.9 – Existing fireplace relining installation

# 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. 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 SCIL's 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. Labor to replace SCIL components is not included. THERE ARE EXCLUSIONS AND LIMITATIONS to this Limited Lifetime Warranty as 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 non-transferable and extends to the original owner only. 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** – Replacement at no charge for 5 years from the date of installation, excluding labor

**Components and fittings (excludes termination caps and labor)** –

Year 1-10 – Replacement of all components and fittings.

Year 11-15 – Replacement at 75% off of the prevailing list price in effect at the time of replacement (25% of the retail list price paid by the consumer).

Year 16 + – Replacement at 50% off of the prevailing list price in effect at the time of replacement (50% of the retail list price paid by the consumer).

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. SCIL's 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 Street, Laval, QC H7L 3T6.