



**INSTALLATION  
INSTRUCTIONS  
&  
MAINTENANCE  
GUIDE**

**VERSA-LINER™  
FACTORY-BUILT LINING SYSTEM**



**CAN/ULC - S635, CAN/ULC - S640, UL1777**



**IT IS OF THE UTMOST  
IMPORTANCE THAT  
THIS CHIMNEY LINER  
BE INSTALLED ONLY IN  
ACCORDANCE WITH  
THESE INSTRUCTIONS**

**PLEASE READ ALL INSTRUCTIONS BEFORE BEGINNING YOUR  
INSTALLATION. FAILURE TO INSTALL THIS SYSTEM IN  
ACCORDANCE WITH THESE INSTRUCTIONS WILL VOID THE  
CONDITIONS OF CERTIFICATION AND THE MANUFACTURERS  
WARRANTY. KEEP THESE INSTRUCTIONS IN A SAFE PLACE FOR  
FUTURE REFERENCE.**

Selkirk Corporation  
5030 Corporate Exchange Blvd.  
Grand Rapids, MI 49512  
Toll Free: 1.800.433.6341



[www.selkirkcorp.com](http://www.selkirkcorp.com)

Selkirk Canada Corporation  
P.O. Box 526, Depot 1  
Hamilton, ON L8L 7X6  
Toll Free: 1.888.SELKIRK (735.5475)

**VERSA-LINER™ SYSTEMS ARE AVAILABLE IN 5", 6", 7" AND 8" DIAMETERS.**

**FOR EASE OF INSTALLATION, VERSA-LINER™ SYSTEMS ARE AVAILABLE WITH RIGID OR FLEXIBLE LENGTHS.**

**ALL COMPONENTS ARE INTERCHANGEABLE WHEN CHOOSING EITHER A RIGID, FLEXIBLE OR BOTH FOR A LINING SYSTEM.**

### **For Installation into Masonry Chimneys**

**READ ALL INSTRUCTIONS CAREFULLY BEFORE STARTING THE PROJECT. REMEMBER THAT SAFETY COMES FIRST. VERSA-LINER™ IS DESIGNED FOR AN INSTALLATION BY A QUALIFIED PERSON IN ACCORDANCE WITH LOCAL BUILDING CODES.**

### **IMPORTANT**

**VERSA-LINER™ HAS BEEN TESTED AND LISTED USING ALL THE SUPPORTS, SECTIONS, ETC., DESCRIBED HEREIN. DELETION OR MODIFICATION OF ANY OF THE REQUIRED PARTS OR MATERIALS MAY SERIOUSLY IMPAIR THE SAFETY OF YOUR INSTALLATION, AND VOID THE CONDITIONS OF CERTIFICATION AND OR WARRANTY OF YOUR LINER.**

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## 1.0 PRODUCT INFORMATION

VERSA-LINER™ is an all-fuel (wood-oil-gas) liner intended for residential type appliances and building heating appliances in which the maximum continuous flue gas outlet temperatures do not normally exceed 1200° F (650° C) in Canada and 1000° F (540° C) in the United States.

VERSA-LINER™ is not intended for use with Category II, III or IV gas burning appliances or other appliances that cause condensation of corrosive acids on the liner of the chimney or create positive pressures in the chimney system.

VERSA-LINER™ is constructed of 300 series stainless steel. Every Rigid Liner section and component have pre-punched holes and are secured in place using three 3mm (1/8") diameter stainless steel rivets. The Flexible Liner is secured with stainless steel sheet metal screws. The Flashing and the Rain Cap are also 300 series stainless steel.

## GENERAL INFORMATION

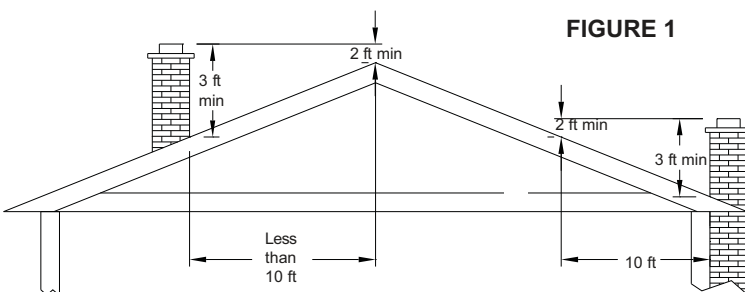
### 2.0 SIZE, LOCATION AND CLEARANCES

**.1** Ensure your installation will conform with all federal and municipal building code requirements. Before commencing your installation, CONTACT YOUR LOCAL BUILDING OR FIRE OFFICIALS ABOUT RESTRICTIONS AND INSTALLATION IN YOUR AREA.

**.2** VERSA-LINER™ is intended for use in accordance with the National Building Code, the installation Code for Oil Burning Equipment CAN/CSA-B139; Gas Burning Equipment CAN/CSA-B149; Solid-Fuel Burning Appliances and Equipment CAN/CSA-B365. In the United States in accordance with The National Fire Protection Association (NFPA) 211, National Fuel Gas Code #54, Oil Burning Equipment #31. All Installation codes mentioned above address chimney requirements. Under no circumstances should the installer circumvent existing codes.

**.3** Obtain any necessary building permits. If you choose to have your liner professionally installed, we recommend to have it installed by professionals who are certified in the U.S. by NFI (National Fireplace Institute) or in Canada by WETT (Wood Energy Technology Transfer Inc.) or l'Association des professionnels du chauffage (APC).

**.4** Authorities require that the masonry chimney extend not less than 3 feet above the highest point where it passes through the roof of a building and not less than 2 feet above any portion of the building within ten feet (see FIGURE 1).



**.5** The size of the liner selected should be the same size of the appliance flue outlet opening or as specified in the appliance manufacturer's instructions. Correct sizing is critical for venting of low temperature flue products in geographical areas experiencing sustained low ambient temperatures. Improper sizing may lead to excessive condensation of moisture, creosote build up and poor draft. A certified technician may alter the size of the liner to suit the appliance within codes perimeter. Consult the appliance manufacturer for guidance.

**.6** The maximum allowable liner height is 60 feet (18 m).

**.7** **Do not fill** the air space between the liner and chimney with loose fill insulation or cement.

**.8** VERSA-LINER™ is intended for installation in existing or new tile lined or unlined masonry chimneys or factory built chimneys.

**.9** This system is approved in Canada and the United States with an approved Ceramic Insulation Wrap to reduce the clearance to combustible construction outside of a masonry chimney only. The clearance between the masonry chimney and combustible materials is dependent on the installation configuration as shown in Table 1 and Figure 2.

**.10** An approved insulation wrap with 8 lb. density, 1/2" foil faced ceramic fibre blanket or Selkirk's Insulation Wrap will enhance the performance and life of the chimney when:

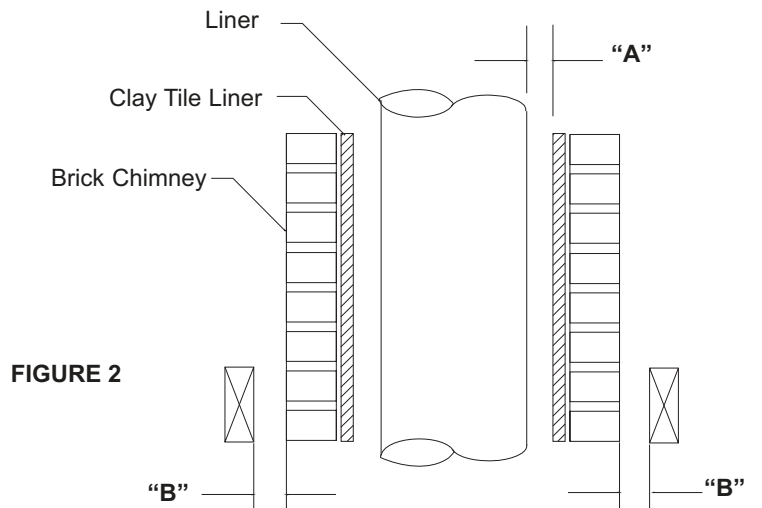
- The installation needs to meet the requirements of UL1777 at zero clearance to combustibles;
- The chimney being relined is located outside;
- Low flue gas temperatures are anticipated.

NOTE: Ensure there is adequate room for both Liner and Wrap.

Type of Installation	VERSA-LINER™ and interior of Chimney	Clearance Between Chimney Exterior and Combustibles		
	Clearance 'A'	Interior Installation 'B'	Exterior Installation 'B'	Country
VERSA-LINER™	0"	2"	1/2"	Canada
	0"	2"	1"	U.S.
Insulated* VERSA-LINER™	0"	0"	0"	Canada
	0"	0"	0"	U.S.

\*Insulated VERSA-LINER™ with an approved Insulation Wrap of 8 lbs. density, 1/2" foil faced ceramic fibre blanket or Selkirk's Insulation Wrap.

**\*Please note: While insulation is not required for every application, it is highly recommended. The performance of the heating system is greatly enhanced when adding an Insulation Wrap. An insulated system helps to improve draft, minimize condensation and flue surfaces warm up quickly. This added feature is important for exterior chimneys.**



.11 A new masonry or concrete chimney must comply with the following codes; National Building Code, CAN/CSA A405 Standard for "Design and Construction of Masonry Chimneys and Fireplaces" and NFPA 211.

NOTE: The safe operation of a venting system depends on the proper installation and use of all materials and components supplied by the manufacturer and proper use and operation of the connected heating equipment. Liner and component arrangements depend on the size and configuration of the chimney structure and the type, number and location of the appliances that are to be vented into the chimney.

.12 Do not connect more than one solid fuel burning appliance to a single chimney flue and do not connect gas or liquid fired appliances to chimney flues serving a solid fuel burning appliance.

### 3.0 LINER COMPONENTS

All VERSA-LINER™ installations will require a Starter Kit. Regardless of the type (Flexible or Rigid), the Starter Kit was designed so that all parts required for the installation is included in one kit (Table 2 below).

TABLE 2 STARTER KIT CONTENTS:	TYPE OF VERSA-LINER™ INSTALLATION
FLASHING 24x24	RIGID OR FLEXIBLE
FLASHING ADAPTER	RIGID OR FLEXIBLE
ROUND TOP	RIGID OR FLEXIBLE
TEE W/ CAP	RIGID OR FLEXIBLE
18" ADJUSTABLE LENGTH	RIGID ONLY
SUPPORT STRAPS	RIGID ONLY
FLEX CONNECTOR	FLEXIBLE ONLY
INSTALLATION INSTRUCTIONS	RIGID OR FLEXIBLE

Other components available for your installation:

Fixed VERSA-LINER™ Lengths (either Rigid or Flexible)

45° elbow

90° elbow

Increaser

Reducer

Pull Down

Anti Downdraft Cap - Dikap

Insulation Wrap Kit (10' section per kit)

### 4.0 TOOLS AND MATERIALS

The following tools and materials may be required as well as some others depending on the location and structure of the chimney:

Safety Work Gloves	Dust Respirator (3M 9900 or equiv.)
Eye Protection	Drop Cloth
Ladder(s)/Scaffolding	Chimney Brushes/Rods
Shop Vac	Extension Cords / Work Light
Masonry Drill Bits 1/2" or 3/8"	High Speed Drill Bit 1/8"
Measuring Tape	Reversible Electric or Cordless Drill
Utility Knife	Hacksaw/Reciprocating Saw & Blades
Screwdriver w/ Hex head	Small Adjustable Wrench/Ratchet Set
Hammer	Awl/Chalk/Felt Tipped Markers
Pliers	Tin Snips/Side Cutter/Shears
Cold Chisel	Metal Folder
Caulking Gun	Silicone Caulk, high temperature
Bag of Mortar Mix	Rope (10 feet longer than the chimney including the wire hook at one end)
Trowel	Pop rivet gun for 1/8" rivets
Mortar Pan	Extra Pop Rivets
Metal Foil Duct Tape	

### 5.0 CHIMNEY INSPECTION AND CLEANING

.1 Caution must be used when working on a roof. The pitch of the roof and type of shingles must be considered before you set up for your installation. Insure the safety of all workers at all times. Proper and safe scaffolding should be used for a safe installation. Check with local safety codes if safety equipment is required.

.2 Always inspect work site. Check overhead for power lines, antennas, brick chimney or other obstacles. Secure ladders to the building.

.3 Before the installation of the liner, it is recommended that the chimney be cleaned by a certified chimney sweep. All tar glazed creosote and soot deposited on the internal chimney walls and smoke chamber of the fireplace must be removed. Failure to thoroughly clean the chimney before installing a new liner system may lead to fire and or smoke damage to the home.

.4 The air space clearances between the masonry chimney exterior and combustible materials must be checked to verify that the chimney is in accordance with applicable building code requirements (see Table 1 and Figure 2).

.5 Since chimneys are usually very sooty and dusty, it is advisable to remove or cover your furniture, rugs etc. for the duration of the cleaning and installation of the liner.

**NOTE: Always wear gloves, eye protection and dust respirator.**

.6 These instructions are written on the assumption that the existing chimney is structurally sound. Make sure the masonry chimney is sound in construction, clean and free from all loose and potentially flammable debris. If you find any cracked, loose or missing bricks or tiles, have them repaired or replaced. Any obstructions restricting the installation of the liner must be removed - provided it does not affect the structural soundness of the chimney.

.7 Before installing a VERSA-LINER™ system into a factory-built chimney, check with your local codes. The chimney must be thoroughly cleaned and checked for structural defects. Re-lining an existing certified factory-built chimney will not change its listing. All parts of the chimney system, such as supports, radiation shields, and fire stops specified by the chimney manufacturer must be installed correctly and, in addition, there must be proper clearances between the chimney and surrounding combustible materials, as specified by the chimneys installation instructions.

### 6.0 SUPPORT OF LINER

Three different support systems are available for VERSA-LINER™, dependant of the type of liner to be utilized.

#### **VERSA-LINER™ RIGID**

- Cement /Stacked Bricks Support (also requires Support Straps at the top of the chimney to provide centering of the liner. See section 6.1 Method "A";

- Support Straps, see section 6.2 Method "B";

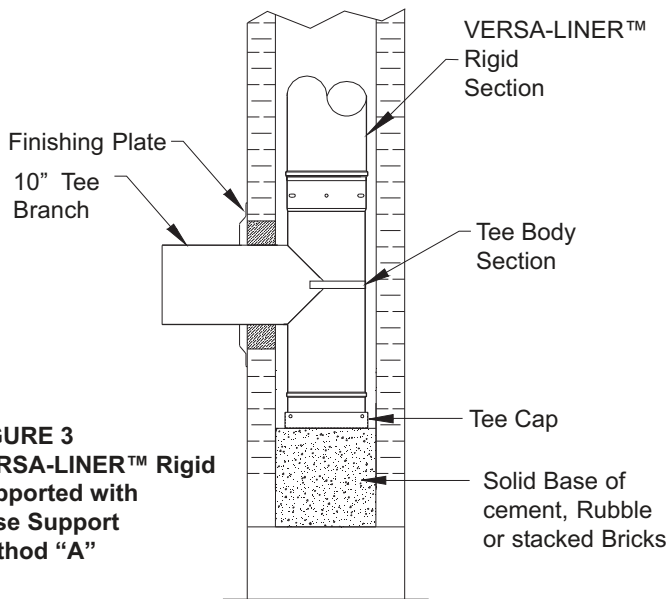
#### **VERSA-LINER™ FLEXIBLE**

- Flashing Support, see section 6.3 Method "C";

You have to determine which one applies to your installation.

#### **.1 Cement /Stacked Bricks - VERSA-LINER™ Rigid Type - Method "A"**

The Rigid Tee and Tee Cap is resting on a solid base support (cement base or stacked brick/rubble). The Tee branch is connected to the



**FIGURE 3**  
**VERSA-LINER™ Rigid**  
**Supported with**  
**Base Support**  
**Method “A”**

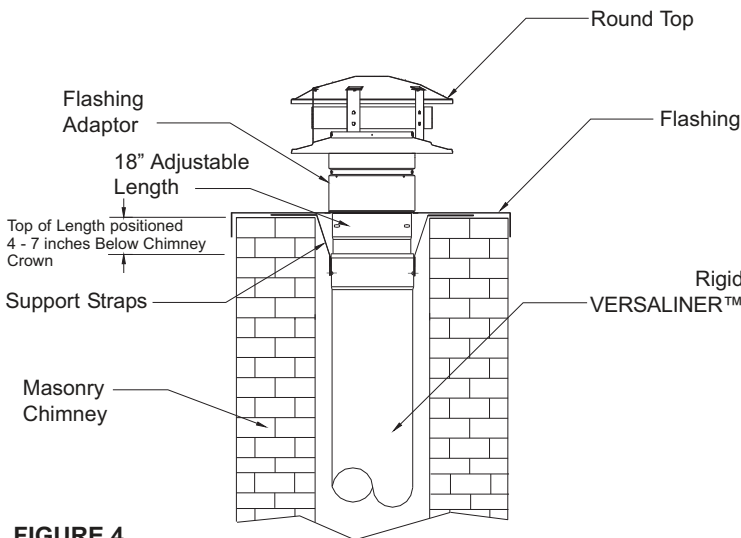
heating appliance with appropriate connector pipe. Removal of soot during cleaning is done through the tee branch assembly after the heating appliance has been disconnected (see FIGURE 3).

NOTE: When installing the VERSA-LINER™ Rigid type, you will still require to re-support at the top of the masonry chimney to accommodate the termination of the Liner. See Method B below.

**.2 Support Straps - VERSA-LINER™ Rigid Type - Method “B”**

The Tee and Rigid Sections are supported with the 2 Support Straps, installed on the last rigid section which is positioned 4 to 7 inches below the chimney crown (see Figure 4) with 1/8” pop rivets.

The Liner System is then finished off with an 18” Adjustable Length, Flashing Adaptor, Flashing and Round Top.

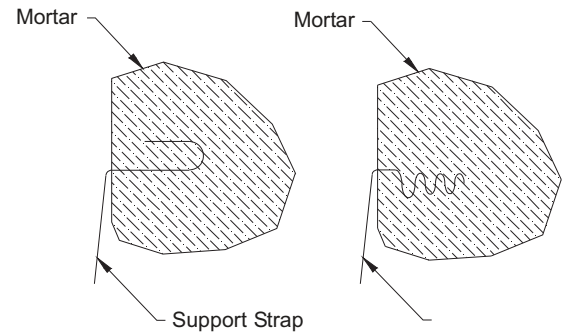


**FIGURE 4**  
**Rigid VERSA-LINER™ with Support Straps**  
**Method “B”**

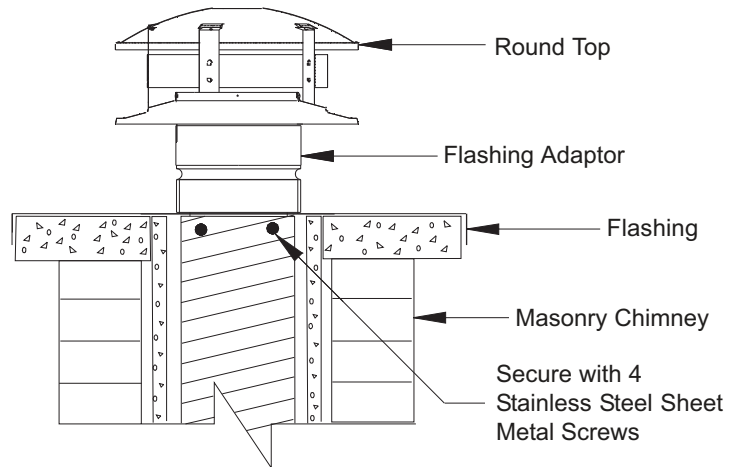
In a new construction installation, an additional Support Bracket can be installed as the liner system is installed. The 4 straps of the Support Bracket are mortared into the chimney walls as per Figure 5.

**.3 Flashing Support - VERSA-LINER™ - Flexible Type Method “C”**

When a Flexible Chimney Liner is used for the reline, a Flashing Adaptor



**FIGURE 5**  
**Support Bracket Straps mortared into chimney walls**



**FIGURE 6 - Flexible VERSA-LINER™ with Flashing Support**

**7.0 PREPARATION OF THE MASONRY CHIMNEY FOR THE LINER**

Determine which of the three liner support systems described in section 6.0 will best suit your application; Method “A”, “B” or “C”.

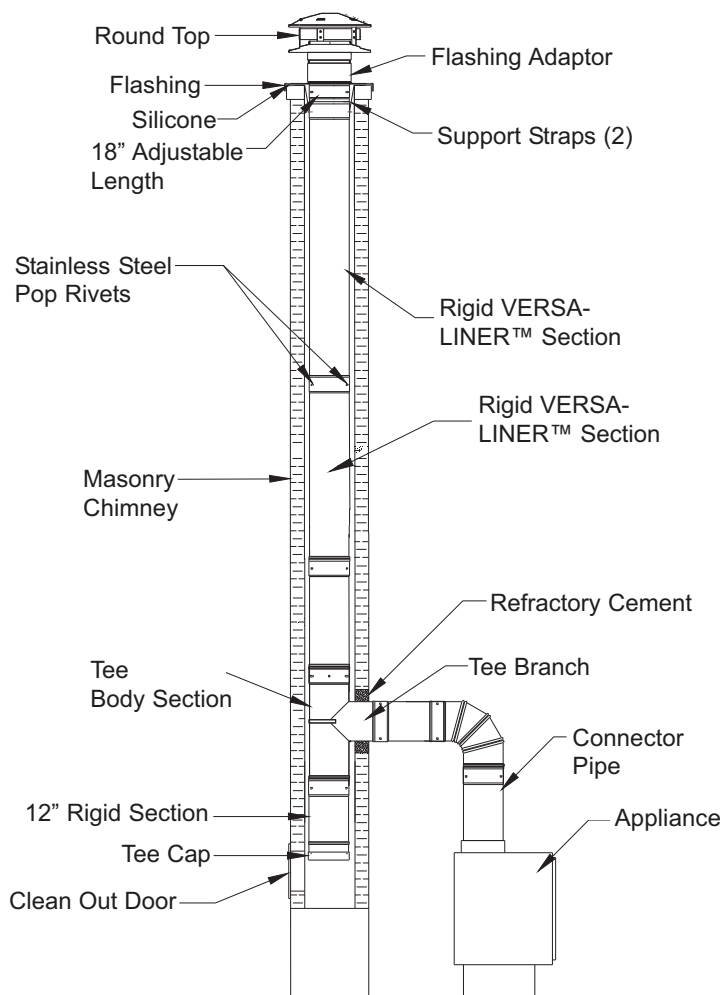
Regardless of the type of VERSA-LINER™, all are supported/re-supported from the top of the masonry chimney. VERSA-LINER™ is also designed to allow the liner to expand and contract vertically due to heating and cooling. Do not secure the liner to the chimney in any way such as rivets, screws, bolts or mortar.

**.1 VERSA-LINER™ - Rigid Type**

**a)** Establish the exact location where the Tee Branch will pass through the masonry chimney to be connected to the Tee body on the Liner system. Make the opening as high as possible to maximize connector rise yet maintain the proper clearances (see FIGURES 7 and 8).

**b)** If no opening currently exists, remove enough bricks (with an electric drill and a long masonry drill bit slightly smaller in diameter than the width of the mortar joint). Knock out the rest of the mortar around the brick with a cold chisel and remove the remaining bricks for the required opening.

**c)** If an opening already exists, it may need to be expanded in order to make the required connections. With a drill and a masonry drill bit (smaller in width than the mortar joint), remove mortar around whole bricks for easy removal. Knock out the rest of the mortar around the brick with a cold chisel and remove the remaining bricks for the required opening.

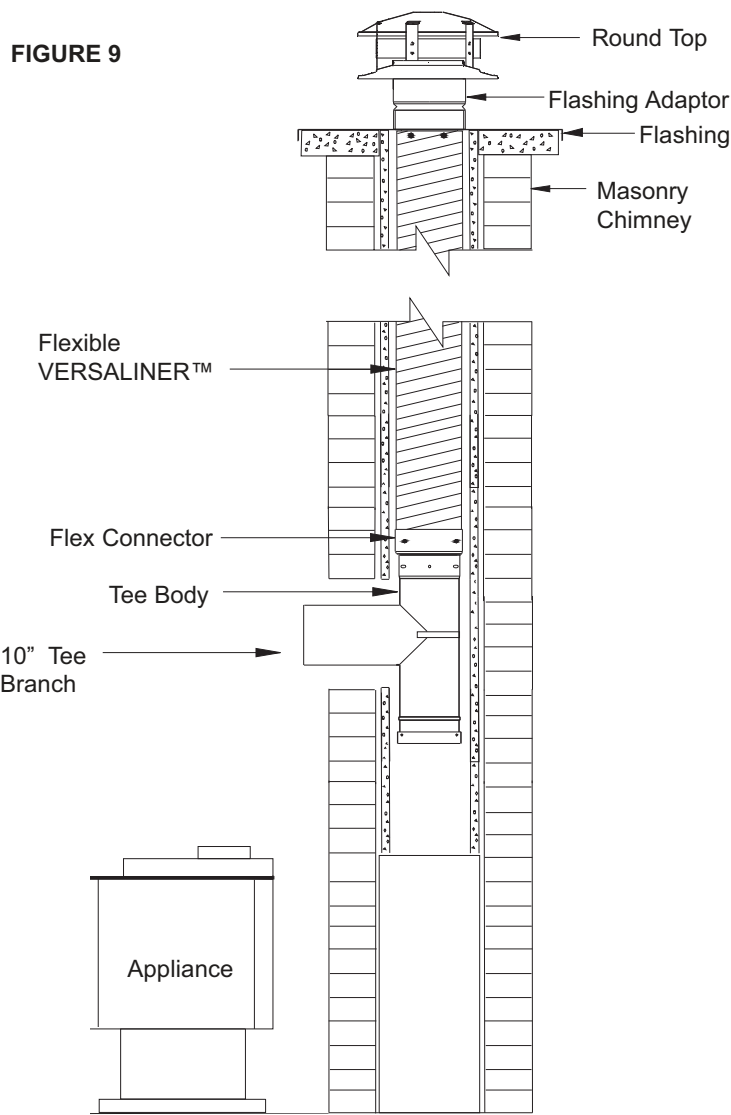


**FIGURE 7 - Typical VERSA-LINER™ Rigid Type Installation**

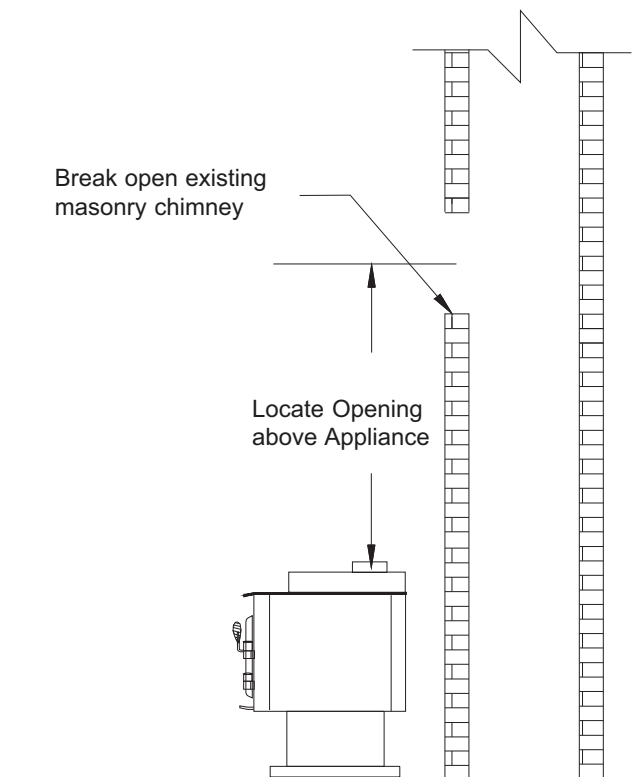
**d)** The liner assembly will be supported from the top of the masonry chimney with Support Straps (see FIGURES 4 & 7). For a new construction application a Support Bracket can also be installed lower by preparing at least two holes, about 12 to 18" above the tee branch for the straps of the Support Bracket to be anchored into the bricks (see FIGURE 5).

**.2 VERSA-LINER™ - Flexible Type**

**a)** Prepare an opening for the tee branch in the same way Section 7.1 a; b; c and FIGURES 8 and 9. The liner assembly will be supported from the top of the masonry chimney with the Flashing Adaptor (see FIGURES 6 & 9). For new construction it is best to install the Flexible Liner once the construction of the masonry chimney is completed.



**Typical VERSA-LINER™ - Flexible Type Installation**

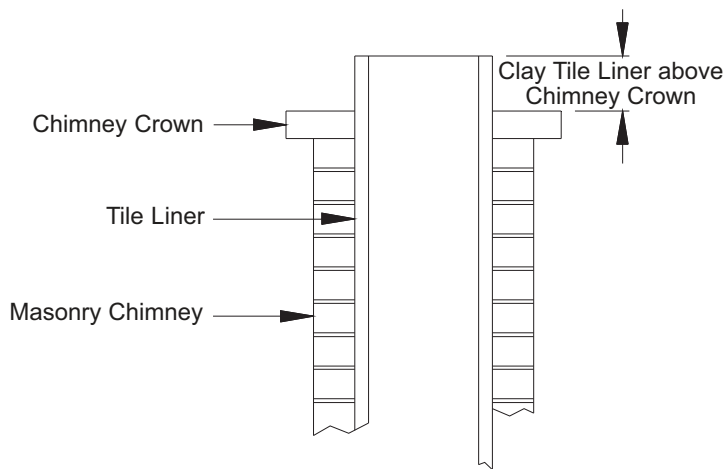


**FIGURE 8 - Preparing Opening Into Masonry Chimney**

**.3 TOP OF CHIMNEY**

**a)** Your chimney may have a clay-tile liner which protrudes above the brick chimney. There is no need to remove the top portion of the clay tile liner if it is in good condition. Complete any repairs needed to the chimney crown if any cracks or deterioration is visible.

**b)** If on the other hand the clay tile liner is not in good condition, you will need to make it flush by chipping away at the excess with a hammer and cold chisel (see FIGURE 10). Make sure that pieces of the clay tile liner don't fall into the flue; remove them if they do. When you have finished making the top of the chimney flush, fill in any cracks and uneven surfaces with mortar.



**FIGURE 10 Remove Clay Tile Liner Above Chimney Crown If Damage is Evident**

## 8.0 INSTALLATION OF INSULATION SLEEVE IN NEW OR EXISTING CHIMNEYS

When installing an insulated liner in a new or existing masonry chimney, the distance from the liner to the inside wall of the masonry chimney may be zero inches or greater and the clearance space between combustible materials and chimney exterior is zero inches.

A special Kit has been prepared with all required components you will need to insulate 10' sections of the VERSA-LINER™ (20' would require 2 kits):

- 10 Feet - Insulation Wrap
- 10 Feet - Wire Mesh
- 14 Feet - Foil Tape
- 5 - Hose Clamps

**.1** Lay down the Insulation Sleeve (foil face side down) on a flat surface and place pre-assembled VERSA-LINER™ Lengths on the blanket providing a minimum overlap of 2 inches at the female end of the pre-assembled Lengths. Keep this end exposed to render the securing of the mating Lengths easier.

**.2** Ensure that the foil back of the Insulation Sleeve is facing outward before rolling the insulation around the length. Tape the vertical seam with the aluminum tape. Aluminum tape, wire mesh and clamps are required for proper installation. The aluminum foil tape should be 3 to 4 inches wide (see FIGURE 11).

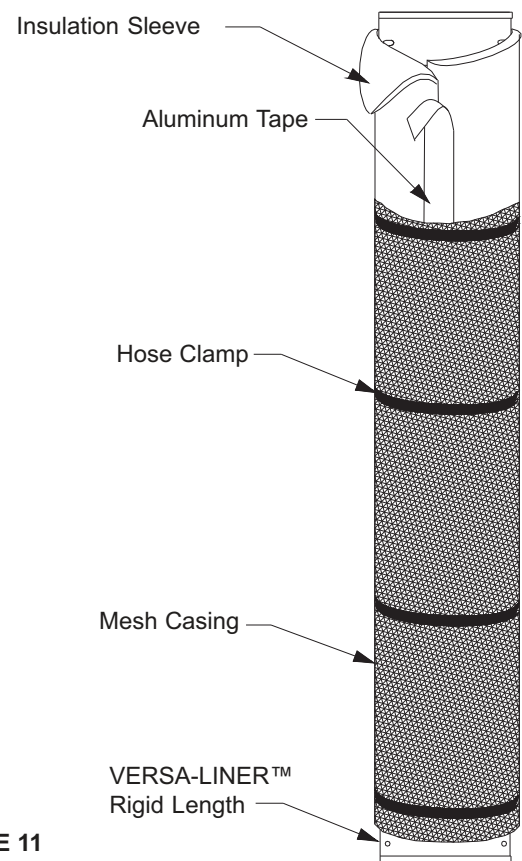
**.3** If the insulated liner is being installed in an existing masonry chimney, a wire mesh casing must be placed around the insulated length of the liner. The wire mesh casing can be held in place by all stainless steel hose clamps at 2 foot intervals on the liner length.

**.4** If the insulated liner is installed during the construction of a new masonry chimney the wire mesh casing does not have to be placed around the insulated length of pipe. **Exception:** When insulating the VERSA-LINER™ Flexible Liner after the new construction masonry chimney is built, the wire mesh is required.

**.5** For liner expansion allowance, no insulation wrap should be used on the upper 3" of the Flexible liner and 4" to 7" on the Rigid liner (where the Support Straps and the Adjustable Length are located).

**.6** Wrap carefully the Tee and the Branch with a 1" overlap and tape all seams.

**.7** Wrap the mesh casing around the Insulation Sleeve. Place small pieces of aluminum tape to hold it in place until the hose clamps are positioned at every 2 foot intervals.



**FIGURE 11**

## 9.0 INSTALLATION OF LINER GUIDELINES

**.1** The installation of the VERSA-LINER™ is done from the top down regardless of type; Rigid or Flexible. In some application, the Flexible Liner may be done from the bottom up.

**.2** Measure the distance from the center of the wall opening to the top of the chimney. Ensure for allowances for the chimney crown thickness, offsets if so required.

**.3** The expanded (large) end of a Rigid Length always points upward as per the "UP" arrow on the listing label (see FIGURE 13). The Flexible Length has no specific up or down orientation.

**.4** It is best to assemble your base section first (Base Tee, Tee Cap and a Flex Adaptor if a Flexible Liner is installed).

**.5** If you are to insulate the Liner system, it is best to do so in 10' sections on a firm surface. See Insulation Sleeve Section for more information.

## 10.0 VERSA-LINER™ - Assembly of Components

### .1 Base Tee - VERSA-LINER™ Rigid and Flexible

The VERSA-LINER™ Tee is shipped pre-assembled. The horizontal Tee Branch is removable to facilitate lowering of the liner into the chimney. The horizontal Tee Branch is 10 inches in length with a perforated band (hose clamp) connection (see FIGURE 12). This band is wrapped around the outside of the Tee body with an hex head screw gear clamp found inside of the Tee branch allowing loosening and tightening of the band.

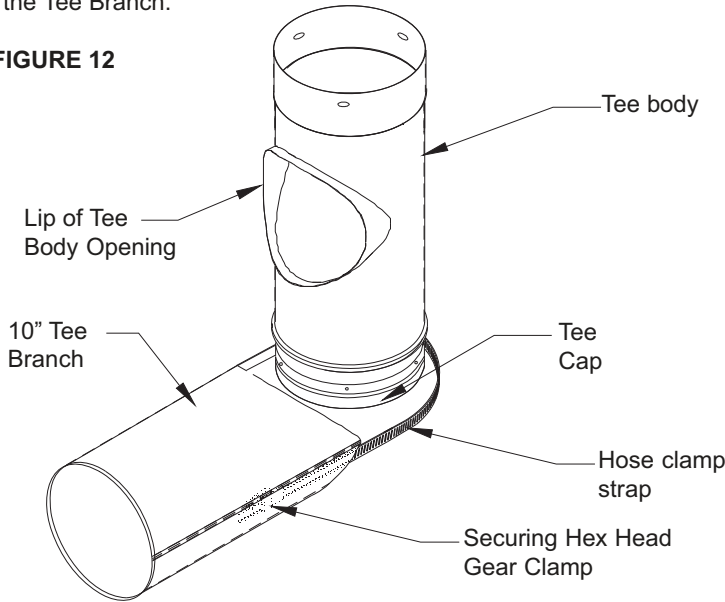
If the opening in the masonry wall is not large enough to accommodate



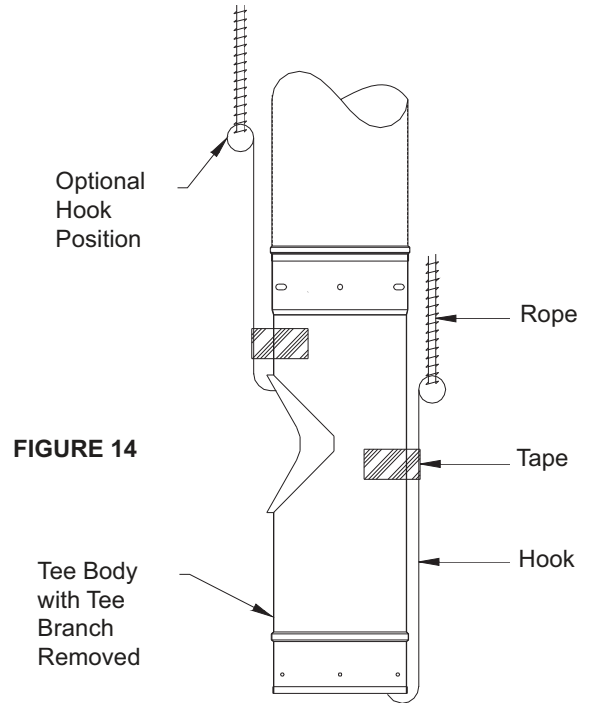
the Tee Branch, remove it by loosening the band with the hex head screw. You may need to add to the Tee Branch such as an Adjustable 18" Length as it should be long enough to protrude into the room at least 50mm (2") so that a connector pipe can be attached to it.

Pre-assemble the Tee Body to the liner. This includes any required Length or second Tee below the Tee. When you drop the liner down the chimney, the Tee Body will fit through the hose clamp of the Tee Branch (see FIGURE 15a & b). You may need the assistance of a second person to guide the Tee body through the hose clamp attached to the Tee Branch.

**FIGURE 12**



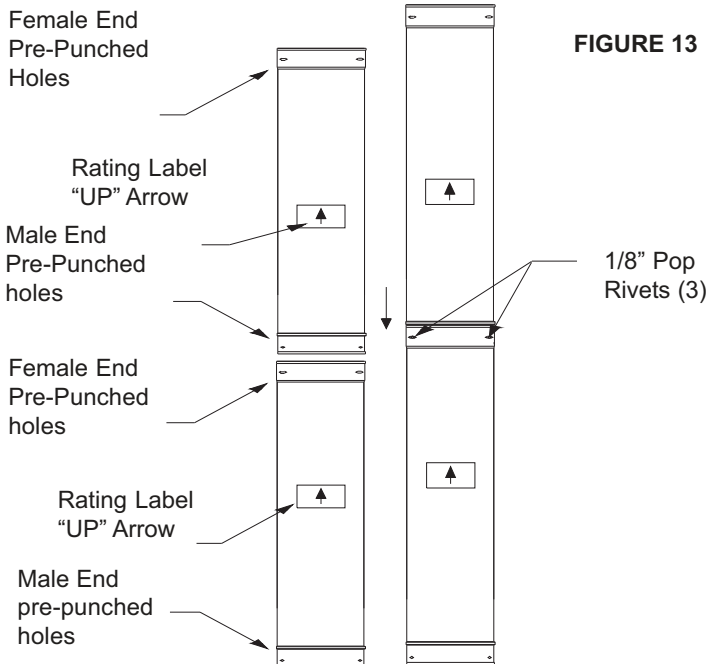
**NOTE:** Remember to secure the liner at the top of the chimney prior to the removal of hooks and rope and attaching the Tee Cap to the bottom of the Tee or Extension Length.



**FIGURE 14**

**.2 Sections - VERSA-LINER™ - Rigid**

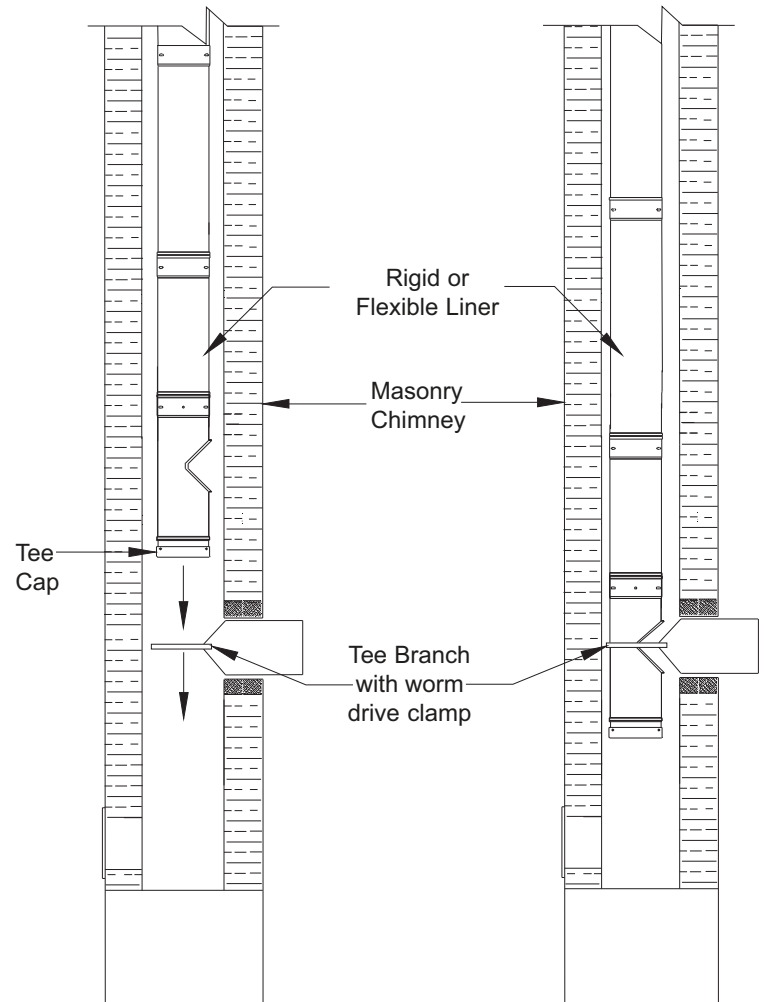
**a)** Insert the small end (male end) of a Length into the expanded end (female end) of another Length. Secure Lengths together with 1/8" Pop Rivets (3 per). Assemble and rivet sections together into convenient lengths of six to eight feet (see FIGURE 13).



**FIGURE 13**

**b)** Do not assemble no more than you know can be safely transported up on the roof and installed into the chimney.

**c)** Start with the base section. Attach a rope with a hook to the bottom end of the pipe or the opening in the tee and secure with duct tape. Make sure the rope is on the outside of the liner to be able to add lengths and lower the assembly down the chimney (see FIGURE 14).



**FIGURE 15a  
Lower Liner  
Through Band**

**FIGURE 15b  
Secure Tee Branch  
to Tee Body**

**d)** With the aid of the rope lower this first base section into the chimney until the top is about six inches above the chimney top and secure (tie) the rope off in any convenient secured way. This is so that securing of the next Length can be done easily.

**e)** Take the next liner section, place the small end into the top end of the liner section protruding above the chimney, and secure with pop rivets as before. Lower this section the same way.

**f)** Continue adding sections until the base section is resting on the base support (cement or stacked brick) or Tee Body opening is in line with the center of the wall opening. Keep in mind the final position of the last Length must be approximately 4" to 7" below the chimney crown. Ensure to install the Tee Cap to the bottom of the Tee or the extension Length.

**g)** As previously mentioned, you may need the assistance of a second person to guide the Tee Body Assembly through the hose clamp attached to the Tee Branch which is already in place in the opening (see FIGURE 12).

ing upward. Tighten the band with the supplied nut and bolt. Drill eight (8) 1/8" dia. holes through the pilot holes in the band and secure with pop rivets (not supplied).

If supported from above the masonry chimney with the Support Straps, make sure the top of of the last Rigid Length is positioned a minimum of 4" to 7" below the top of the masonry chimney. If the liner is resting on bricks (Base Support/Section "A") the rope can be removed.

Bend the support straps on top of the masonry chimney and secure in place with appropriate fasteners (see FIGURE 16, 22 and 23).

**.4 FLEXIBLE VERSA-LINER™ SECTIONS**

**a) LINER PREPARATION**

If installation permits, the Flex Connector and the Tee body may be installed on the Flex prior to feeding liner into the chimney as per FIGURE 19.

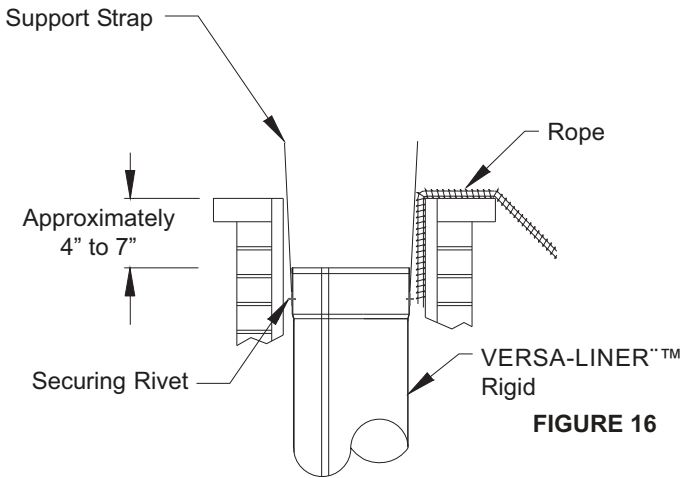
**NOTE: For an Insert into a masonry fireplace application a Tee is not required.**

**b) DETERMINING LINER LENGTH**

Determine the required length of the Flexible Liner by dropping a weighted line down the chimney and taking the measurement, ensure that allowances for offsets and the use of a Tee (if required) are made.

**c) TRIMMING THE LINER**

Select the length(s) necessary to accommodate the required distance determined above. If any Flexible Liner requires cutting, use a hacksaw, snips or a disc cutter. If necessary, multiple lengths may be joined using the Flex Connector (see Figure 17).



**FIGURE 16**

**CAUTION: DO NOT FILL THE SPACE BETWEEN THE LINER AND THE MASONRY CHIMNEY WITH LOOSE INSULATION**

**.3 OFFSET**

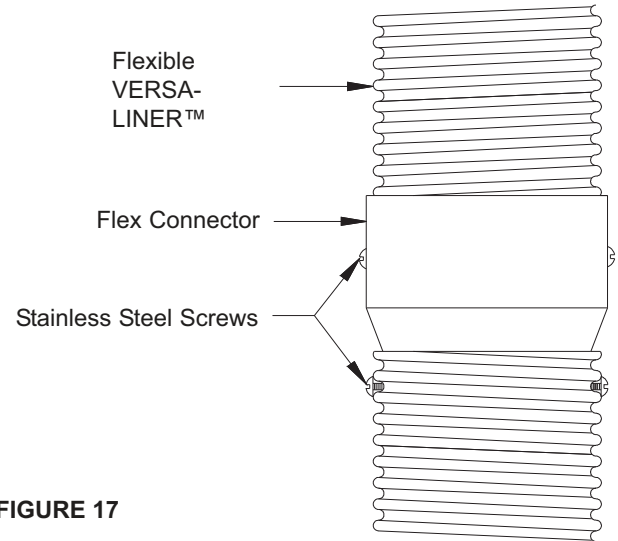
Adjustable Elbows can be used to accomplish offsets in a VERSA-LINER™ Rigid installation or in making connection to the appliance.

If the chimney is offset, lining the masonry chimney with the VERSA-LINER™ Flexible is recommended. A Length of Flexible VERSA-LINER™ may be used instead of elbows. To connect the Flex to the Rigid Liner use a Flex Connector.

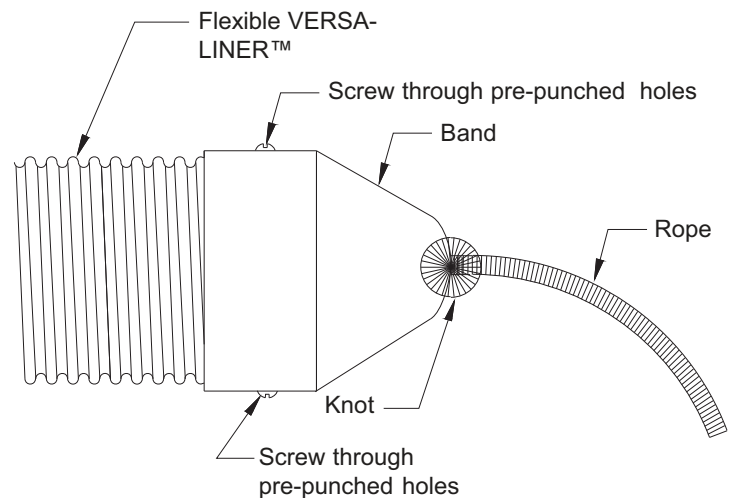
It is easier to install Elbows when the masonry chimney is being built in the new construction stage.

Elbows are not designed to support any weight. A Support Bracket will be required above the offset mortared into the brick or installed at the top of the masonry chimney with the Support Straps.

Slip the Support Bracket over the last Rigid Liner section on the expanded end of the length. Make sure the supporting straps are point



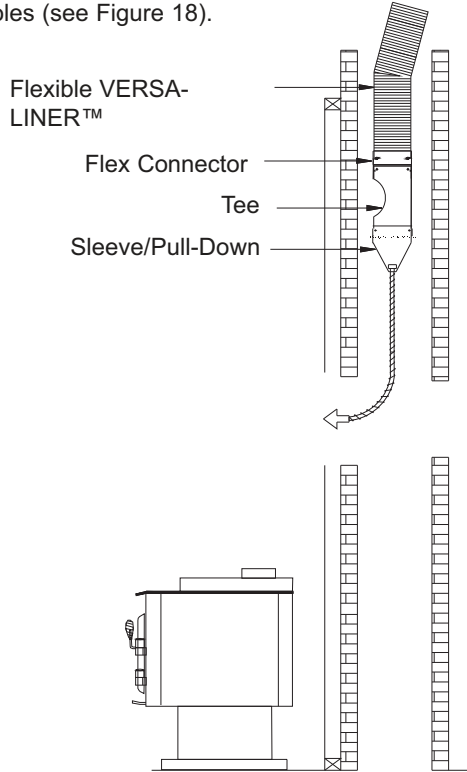
**FIGURE 17**



**FIGURE 18**  
**VERSA-LINER™ - Flexible Liner with Sleeve/Pull-Down**

#### d) INSTALLATION SLEEVE/PULL-DOWN ASSEMBLY

An Installation Sleeve/Pull-Down is available as an optional installation aide. When attached to a rope, it is used to pull and guide the end of the Flexible VERSA-LINER™ through the chimney. With one end of the rope, simply tie a knot around the band of the Installation Sleeve/Pull-Down. You can assemble the Installation Sleeve directly to the Flex by sliding it over the Flexible Liner, and inserting screws through the pre-drilled holes (see Figure 18).



**FIGURE 19**

You can also assemble the Sleeve/Pull-Down directly below the Tee (Tee Cap must be removed) once the Flex Adaptor is secured to the Tee. Secure with three (3) stainless steel screws equally spaced at 120° (see Figure 19).

**NOTE:** After removing the Sleeve/Pull-Down, the Tee Branch needs to be inserted into the chimney opening so that the Tee body can be guided through the hose clamp attached to the Tee Branch.

### 11.0 INSTALLING THE LINER

If the Flexible VERSA-LINER™ is to be insulated do so now. See Section 8.0 for the installation of the Insulation Sleeve.

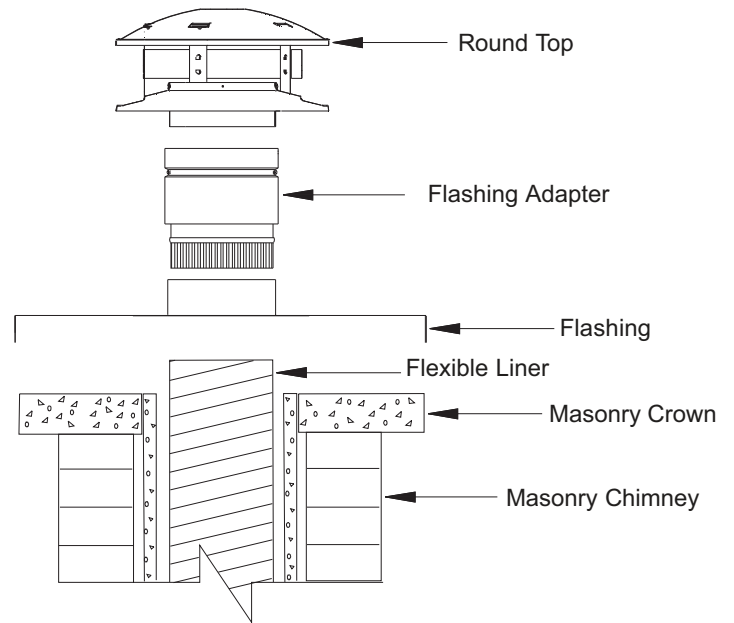
**.1** Gather all necessary component parts and locate them near the termination of the chimney. This should consist of the Flashing, Flashing Adapter, Round Top, and the prepared length of Flexible Liner complete with Flex Adaptor, Tee (with branch removed), the Installation Sleeve/Pull-Down and rope. Feed the Installation Sleeve/Pull-Down rope down the chimney flue (see FIGURE 19). While an assistant gently pulls on the rope from below, start lowering the Flexible Liner down into the chimney flue. If additional lengths of Flex are required, join the sections together with a Flex Connector (FIGURE 17).

**Note:** Due to possible snagging which may result in some surface damage, caution must be observed when lowering Liner Lengths into the masonry flue.

**.2** Ensuring that the Tee previously installed on the end the Flexible Liner is in the correct position, trim the flex so that it is flush with the top of the chimney (or clay tile). Insert the Flashing Adapter onto the Flashing making sure the sleeve collar of the Flashing goes all the way in between the Flashing Adapter outer and inner casing.

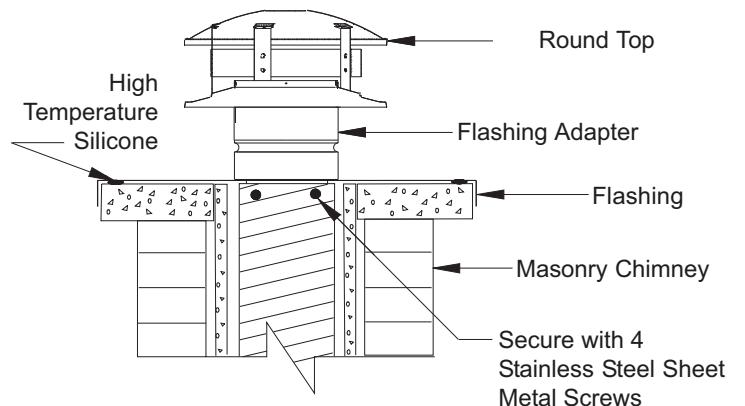
### CAUTION: DO NOT FILL THE SPACE BETWEEN THE LINER AND THE MASONRY CHIMNEY WITH LOOSE INSULATION

**.3** Position the Flashing and center the flat plate on top of the clay tile (or masonry chimney). Mark the outline of the clay tile on the underside of the flashing plate. The ideal size should be at least four inches larger than the outside of the masonry chimney (or clay tile). There should be a minimum of two inches overhang on each side of the chimney (or clay tile). Cut off each corner at 45° (see FIGURE 22). Trim as necessary or fold edges over the outside of the chimney.



**FIGURE 20 - Finishing of Masonry Chimney Top**

**.4** Pull enough of the Flexible Liner out of the chimney to enable you to attach the Flexible Liner to the crimped end of the Flashing Adapter. Install four (4) stainless steel screws (evenly spaced) through the Flex into the Flashing Adapter. Apply a generous bead of high temperature silicone on top of the masonry chimney. Slide the Flex and Flashing assembly back into the chimney opening until the Flashing plate comes to rest on the clay tile. Press the Flashing firmly into the silicone to create a good seal (see FIGURE 20 & 21). Install the Round Top (see FIGURE 23).

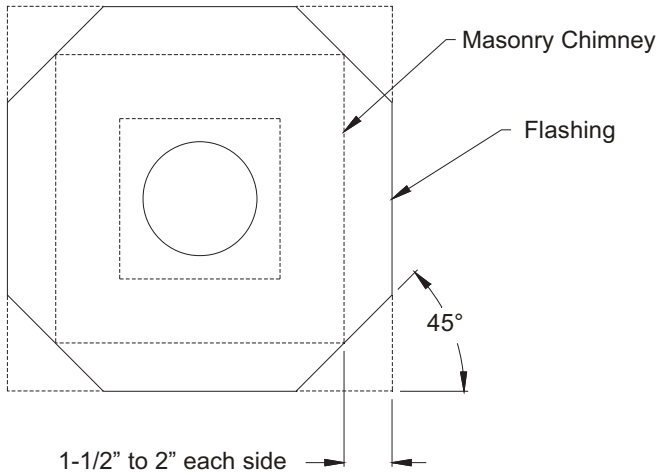


**FIGURE 21 - Flexible VERSA-LINER™ Chimney Termination**

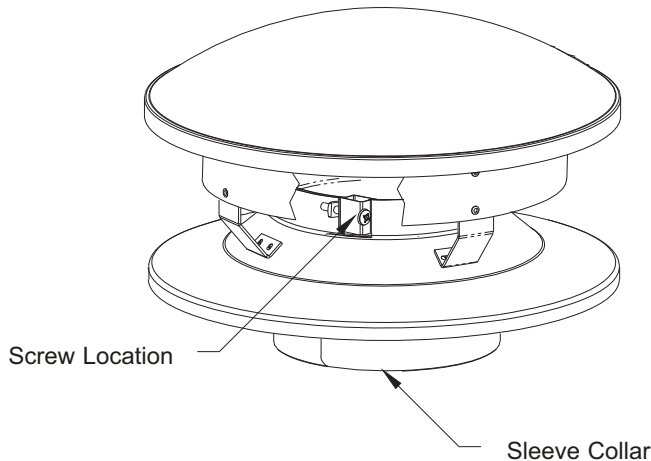
## 12.0 TERMINATION INSTALLATION - RIGID

.1 Follow steps found in section 11.3. Position the Flashing and center the flat plate on top of the clay tile (or masonry chimney). Mark the outline of the clay tile on the underside of the flashing plate. The ideal size should be at least four inches larger than the outside of the masonry chimney (or clay tile). There should be a minimum of two inches overhang on each side of the chimney (or clay tile). Cut off each corner at 45°. Trim as necessary or fold edges over the outside of the chimney.

**CAUTION: DO NOT MORTAR, SCREW OR RIVET THE LINER DIRECTLY TO THE FLASHING OR ANY OTHER PART OF THE CHIMNEY. THERE MUST BE ROOM FOR VERTICAL EXPANSION DUE TO HEATING AND COOLING OF THE LINER.**



**FIGURE 22 - FLASHING - VERSA-LINER™ - RIGID OR FLEXIBLE**

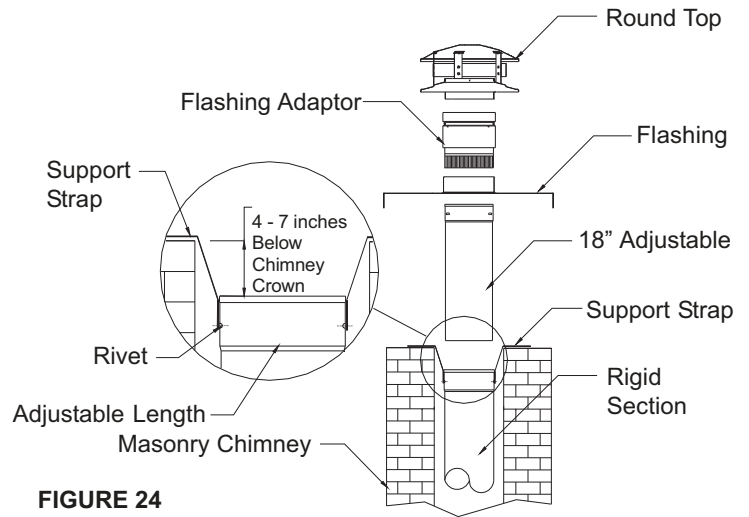


**FIGURE 23 - ROUND TOP CUT-OUT SECURING SCREW**

.2 Once the liner is installed, attach the Round Top securely by loosening the screw on top of the sleeve collar (see FIGURE 23) and by squeezing the bottom sleeve collar to allow it to enter into the Flashing Adapter. Press down evenly on the lower skirt until it contacts the upper end of the Flashing Adapter. Tighten the screw on the collar to expand the lower end of the sleeve collar until expanded and fully tight to the inside of the Flashing Adapter.

.3 Secure the Supporting Straps to the last Rigid Length with two (2) pop rivets 1/8" in diameter.

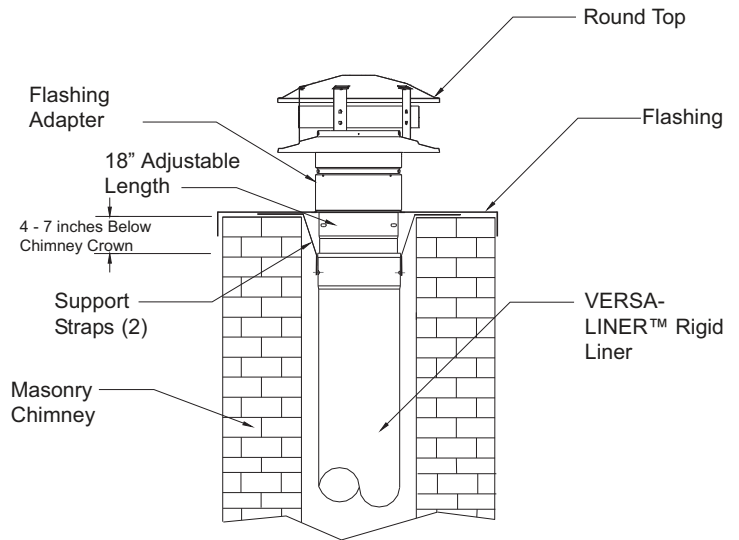
NOTE: The pop rivets must be installed from the inside out of the Rigid Length and the Supporting Straps positioned on the outside of the Length. Both Support Straps are to be used (see FIGURE 24).



**FIGURE 24**

The top of the last Rigid section must be between 4" to 7" below the top of the masonry chimney. Bend the Support Straps on top of the masonry chimney and secure in place with appropriate fasteners such as tap-cons, shield and lag screws (see FIGURE 24 & 25).

.4 Insert the Flashing Adapter onto the Flashing making sure the sleeve collar of the Flashing goes all the way in between the Flashing Adapter outer and inner casing. Attach the 18" Adjustable Length to the crimped end of the Flashing Adapter. Attach the 18" Adjustable Length to the crimped end of the Flashing Adapter with 3 pop rivets. Use the pre-drilled holes as a template and drill 1/8" holes (see FIGURE 24).

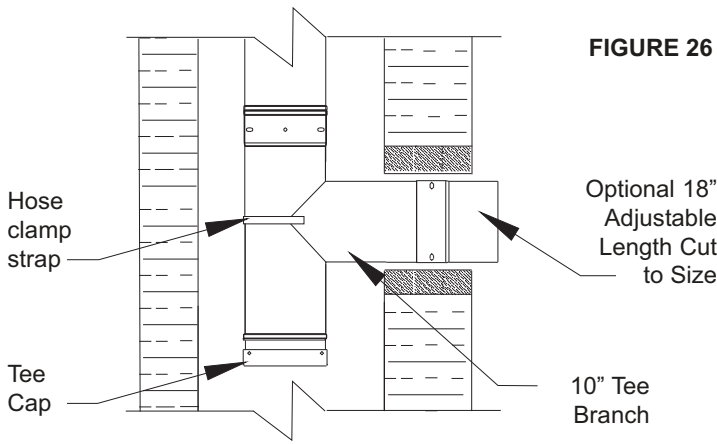


**FIGURE 25 - Rigid VERSA-LINER™ Chimney Termination**

.5 Apply a generous bead of high temperature silicone on top of the masonry chimney. Slide the Flashing assembly (Flashing, Flashing Adapter and the 18" Adjustable Length) into the chimney until the Flashing plate comes to rest on the clay tile or masonry chimney. NOTE: Make sure the 18" Adjustable Length enters into the top Rigid Length). Press the Flashing firmly into the silicone to create a good seal (see FIGURE 24 & 25). Install Round Top (see FIGURE 23).

## 13.0 COMPLETION OF LINER BOTTOM

.1 Make sure the Tee Branch is long enough to protrude into the room at least 50mm (2") so that a connector pipe can be attached to it (see FIGURE 26). If a longer length is required install an 18" Adjustable Length and cut to the required length.



.2 Make sure the Tee Branch is located in the centre of the chimney opening. Ensure also the Tee Cap has been installed.

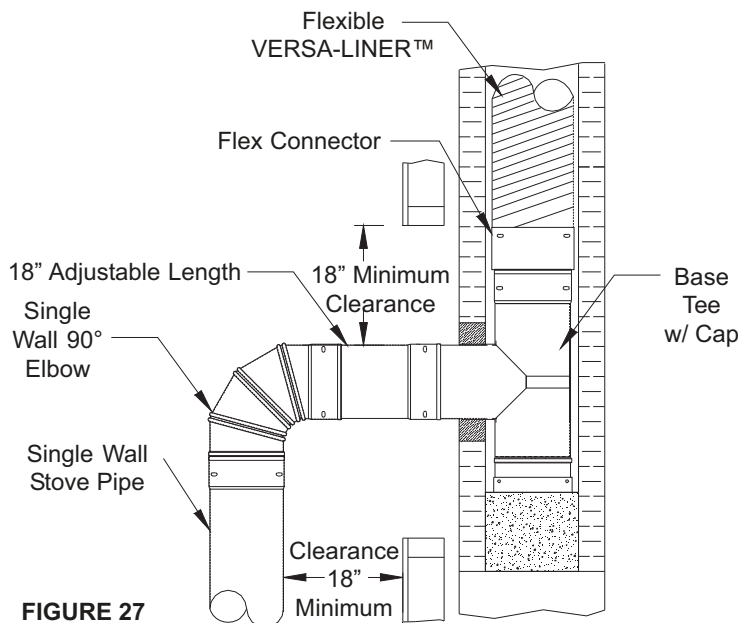
.3 Rotate the liner until the Tee Branch and the opening of the Tee Body are aligned. Ensure the Branch overlaps the lip on the Tee Body opening. Tighten the worm drive clamp securely with the hex head screw located inside of the Tee Branch.

.4 Now close the hole tightly around the tee branch with leftover bricks and mortar. Follow the manufacturer's instructions for mortaring.

#### 14.0 INSTALLATION OF APPLIANCE

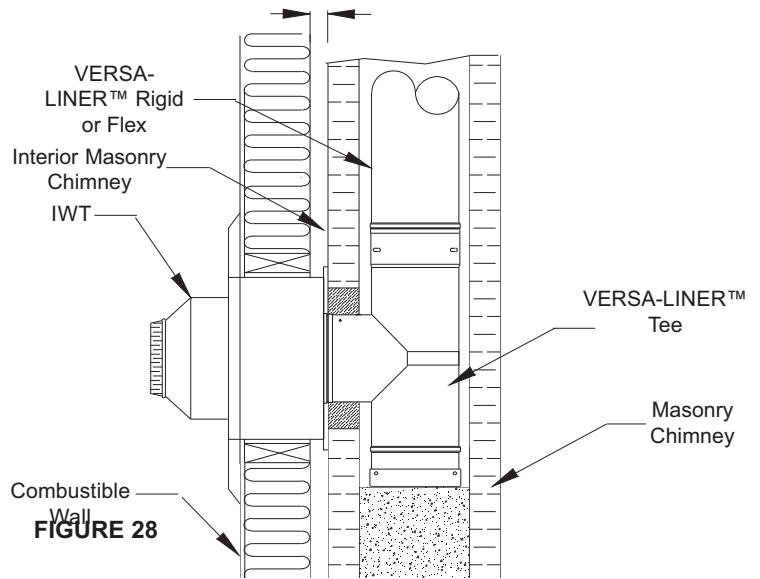
.1 Start adding sections from the Tee Branch attached to the tee to the appliance. Follow all local building codes and manufacturers instructions.

.2 Unless certified for lesser clearances, Code requirements for single wall uninsulated stove pipe and unprotected combustible material must not be less than 18" (457mm), see also FIGURE 27. Check your local codes for any restrictions and requirements. Selkirk's DSP Double Wall Stove Pipe can be installed at reduced clearance of 6". Follow the installation instructions supplied with the DSP. If a combustible wall is in front of the brick chimney through which your stove pipe passes, in order to install the appliance, a listed wall pass-through system or other approved methods (see NFPA 211 or CAN/CSA-B365) must be installed. See Section 15.0 for the Insulated Wall Thimble (DSP-IWT) by Selkirk and FIGURE 28.



#### 15.0 INSTALLATION OF INSULATED WALL THIMBLE (IWT)

.1 If the 18-inch clearance to combustible materials – as mentioned in Section 14.0 is not acceptable, an Insulated Wall Thimble (IWT) can be installed to reduce this clearance to two inches (see FIGURE 28). Follow the installation instructions supplied with the Insulated Wall Thimble DSP-IWT.



#### 16.0 INSTALLATION COMPLETION

.1 After the appliance is correctly positioned, all the venting connections are completed and checked for proper installation (clearances to combustibles, proper support and component parts), fill the void area around the penetration hole with mortar. High temperature ceramic sealant, or other non combustible filler material may be used as a substitute instead of mortar.

.2 Upon completion of the installation fill in the applicable information below as well as on the label provided (#1890450135). Affix the label at a location close to where the connection is made to the appliance.

Installation Date: \_\_\_\_\_

Technician's Name: \_\_\_\_\_

Technician's Certification Number: \_\_\_\_\_

## 17.0 MAINTENANCE AND CLEANING OF CHIMNEY AND RIGID LINER

### “Creosote and Soot – formation and need for removal”

The need for chimney maintenance depends on the kind of appliance and how it is operated. Gas and oil-burning appliances need very little, but wood burning appliances may need a great deal of chimney maintenance.

Good operating and firing techniques of your wood burner will have a positive impact in reducing creosote build-up. Burn hot, bright fires and fire each load hot. It is important to load your appliance properly and to avoid smoldering fires. By doing so, it reduces the risk of chimney fires and creosote formation. If your wood is not thoroughly seasoned, split it in smaller pieces instead of larger ones. Ideally, the moisture content of your firewood should be between 18 and 22 percent.

When wood is burned slowly, it produces tar and other organic vapours, which combine with expelled moisture which forms creosote. The creosote vapours condense in a relatively cool chimney flue of a slow-burning fire. As a result, creosote accumulates on the flue lining. When ignited, this creosote creates a chimney fire with extremely high temperatures.

With a new installation, the chimney should be inspected frequently (every two weeks) to determine the rate of creosote formation. When familiar with the appliance and chimney characteristics, the chimney should be inspected at least once every two months during the heating season to determine if a creosote or soot build-up has occurred. If creosote or soot build-up has occurred (1/16” or more), it should be removed to reduce the risk of a chimney fire. Every chimney flue and flue pipe shall be inspected annually and cleaned as often as maybe necessary to keep the chimney and flue pipe free from dangerous accumulation of combustible deposits.

Contact a professional chimney sweep for chimney cleaning services and advice. To visually inspect the chimney, loosen the set screw on the Rain Cap and lift it off the liner. Remove the Tee Cap (if so equipped) to clean from the bottom. This will permit the insertion of a flashlight for inspection and a plastic chimney cleaning brush. A metal brush may scratch the liner and lead to premature corrosion.

If chemical cleaners are used to assist in the cleaning of the VERSA-LINER™, make sure it is a product which is non corrosive. Chemical cleaners (including sweeping logs products) do not replace the optimal method of cleaning a chimney by a mechanical brushing for removal of creosote and other potentially hazardous material. This is in conjunction with a complete evaluation and visual inspection of the system by a professional chimney sweep.

The following materials should not be burned in you wood heat appliance: pressure treated lumber, rail road ties, salt water driftwood, or plastics. Burning such materials may lead to severe corrosion of your appliance and of the chimney liner. To reduce corrosion in a liner where coal is burnt, the system must be thoroughly cleaned within 48 hours of shutting down the appliance for the season and all soot be removed from the liner system. Ensure that only low sulphur content coal (1% or less) is burn.

## 18.0 REPLACEMENT PARTS LIST

DESCRIPTION	PART NUMBER
48” LENGTH	*RF48
36” LENGTH	*RF36
24” LENGTH	*RF24
12” LENGTH	*RF12
6” LENGTH	*RF6
18” ADJUSTABLE LENGTH	*RFAL
45 DEGREE ELBOW	*RF45
90 DEGREE ELBOW	*RF90
TEE W/CAP	*RFTE
FLASHING	*RFSF
ROUND TOP	*RFRT
TRIM PLACE	*RFTP
FLEX CONNECTOR	*RFFC
INCREASERS	5RFI6; 6RFI7; 7RFI8
REDUCERS	6RF5R; 7RF6R; 8RF7R
ANTI DOWNDRAFT TOP	*RFDK
INSULATED SLEEVE	*RF10I
STARTER KIT	*RF-SK
25’ FLEX LENGTH	*RF25FL
35’ FLEX LENGTH	*RF35FL
25’ COMPLETE KIT	*RF25KT
35’ COMPLETE KIT	*RF35KT
25’ INSERT KIT	*RF25IK
35’ INSERT KIT	*RF35IK

\* Denotes diameters of 5, 6, 7 or 8 inches

## INSTALLATION INFORMATION

*Keep in a safe place for future reference*

CHIMNEY MODEL: \_\_\_\_\_

TYPE OF APPLIANCE: \_\_\_\_\_

INSTALLATION DATE: \_\_\_\_\_

DESCRIPTION OF INSTALLATION (Chimney and Flue Pipe Configuration) \_\_\_\_\_

### **PURCHASED FROM:**

DEALER NAME: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_

Province/State: \_\_\_\_\_

### **INSTALLED BY:**

TECHNICIAN NAME: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_

Province/State: \_\_\_\_\_



## PRODUCT REGISTRATION

Register Online @: [www.selkirkcorp.com](http://www.selkirkcorp.com)

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_

Province/State: \_\_\_\_\_ Postal/Zip Code: \_\_\_\_\_ Telephone #: \_\_\_\_\_

Chimney Model: \_\_\_\_\_ Installation Date: \_\_\_\_\_

Technician Name: \_\_\_\_\_ Address: \_\_\_\_\_

City: \_\_\_\_\_ Province/State: \_\_\_\_\_ Zip Code: \_\_\_\_\_ Telephone #: \_\_\_\_\_