

# *Stainless Steel Rigid Liner*

## Stainless Steel Chimney Lining System



Intertek  
LISTED

**Tested to Standards**  
CAN/ULC-S635  
CAN/ULC-S640  
UL 1777

*Installer: It is of the utmost importance that these instructions are left with the homeowner.*

*Homeowner: Keep these instructions and maintenance guide in a safe place for future reference.*

**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 MANUFACTURER'S WARRANTY.**

***Stainless Steel Rigid Liner***

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**THE STAINLESS STEEL RIGID LINER SYSTEMS IS DESIGNED AND LISTED TO BE INSTALLED WITHIN MASONRY CHIMNEYS USED TO VENT THE PRODUCTS OF COMBUSTION PRODUCED BY HEATING APPLIANCES THAT BURN OIL, GAS, OR SOLID FUELS.**

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

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

### **IMPORTANT**

**THE STAINLESS STEEL RIGID LINER HAS BEEN TESTED AND LISTED USING ALL COMPONENTS 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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# CERTIFICATION LABELS

## 1.) PRODUCT INFORMATION

The Stainless Steel Rigid Liner is an all-fuel (wood-oil-gas) liner intended for residential type appliances (including fireplace insert) and building heating appliances in which the maximum continuous flue gas outlet temperatures does not normally exceed 1200° F (650° C) in Canada and 1000° F (540° C) in the United States.

The Stainless Steel Rigid 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.

The Stainless Steel Rigid 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 Flashing and the Rain Cap are also 300 series stainless steel.

## GENERAL INFORMATION

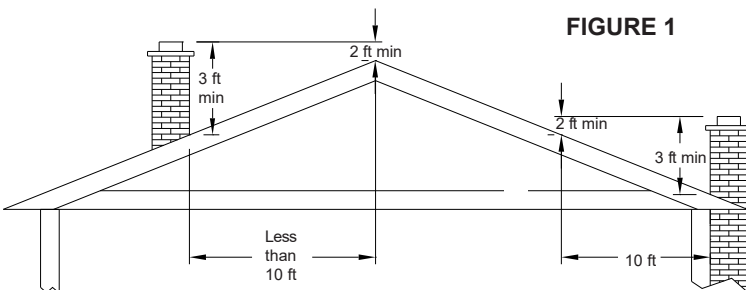
### 2.) SIZE, LOCATION AND CLEARANCES

- 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.

- The Stainless Steel Rigid 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.

- Obtain any necessary building permits. This liner should be installed by professionals who are certified in Canada by WETT (Wood Energy Technology Transfer Inc.) or l'Association des professionnels du chauffage (APC) or in the U.S. by NFI (National Fireplace Institute).

- 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).



- 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.

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

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

- The Stainless Steel Rigid Liner is intended for installation in existing or new tile lined or unlined masonry chimneys or factory built chimneys.

- 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.

- 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:

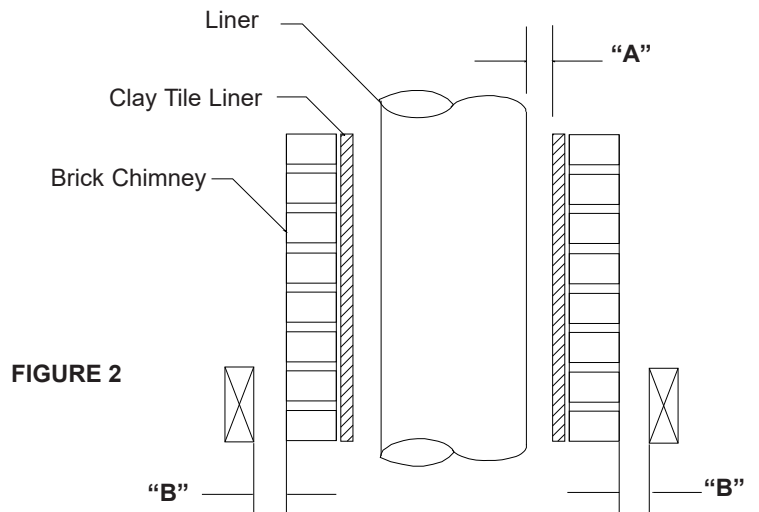
- The installation needs to meet the requirements of UL1777 at zero clearance to combustibles;
- The chimney being relined is located outside;
- Low flue gas temperatures are anticipated.

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

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

\*Insulated Rigid 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.**



- 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.

- 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.) LINER COMPONENTS

All Stainless Steel Rigid Liner installations will require a Starter Kit. The Starter Kit contains most parts required for the installation (Table 2 below).

TABLE 2 STARTER KIT CONTENTS:
FLASHING 20x20
FLASHING ADAPTER
ROUND TOP
TEE W/ CAP
18" ADJUSTABLE LENGTH
SUPPORT STRAPS
INSTALLATION INSTRUCTIONS

Other components available for your installation:

- Fixed Lengths
- 45° elbow
- 90° elbow
- Increaser
- Reducer
- Pull Down
- Anti Downdraft Cap - Dikap
- Insulation Wrap Kit (10' section per kit)

### 4.) 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.) CHIMNEY INSPECTION AND CLEANING

- 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.

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

- 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.

- 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).

- 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.

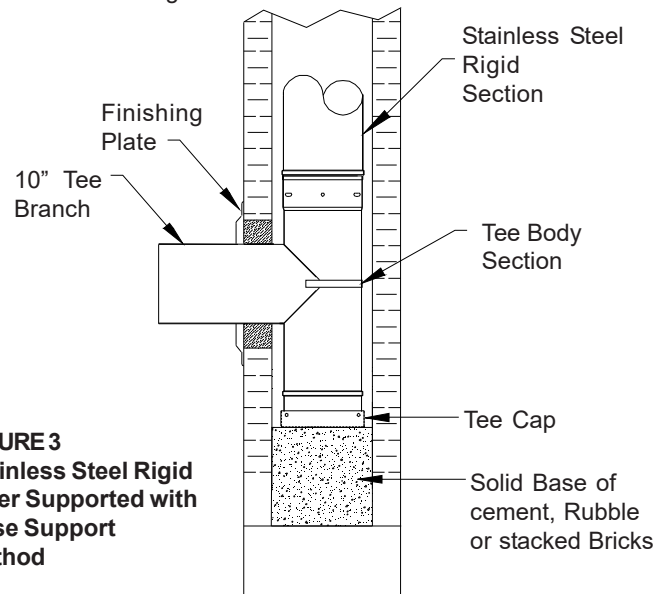
**NOTE: Always wear gloves, eye protection and dust respirator.**

- 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.

- Before installing the Stainless Steel Rigid 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.) SUPPORT OF LINER

There are basically three different liner support systems available for the Stainless Steel Rigid Liner. You have to determine which one



**FIGURE 3  
Stainless Steel Rigid Liner Supported with Base Support Method**

applies to you.

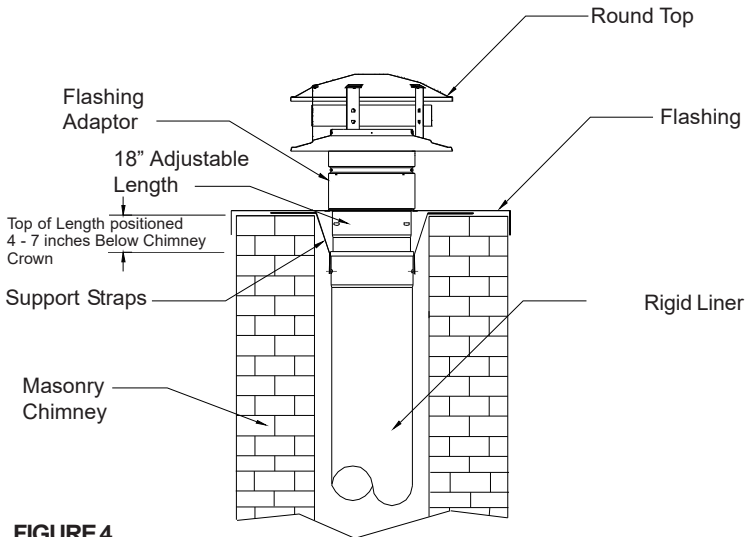
### 1. Base Support

- Cement /Stacked Bricks Support (see Figure 3). 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 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: You will still be required to re-support at the top of the masonry chimney to accommodate the termination of the Liner. See Figure 4.

### 2. Support Straps -

The Tee and Rigid Sections are supported with the 2 Support Straps, installed on the last Rigid Length which is positioned 4 to 7 inches below the chimney crown with 1/8" pop rivets (see Figures 4, 18 and 18).

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

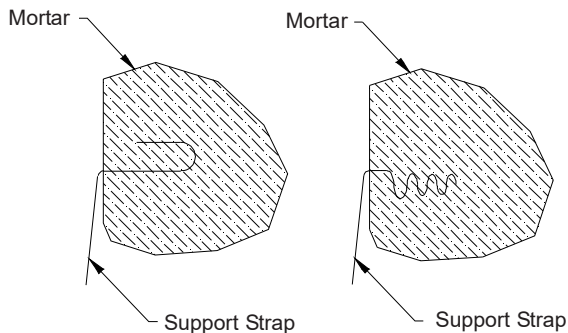


**FIGURE 4**  
Stainless Steel Rigid Liner with Support Straps at Top

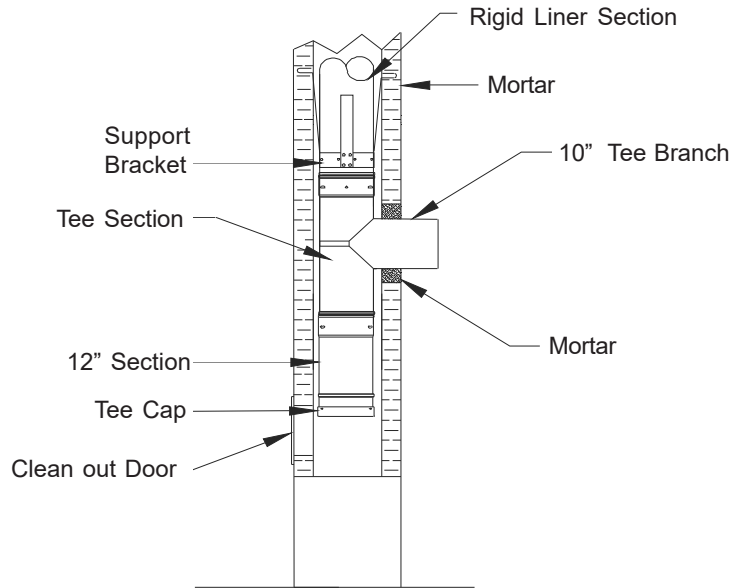
### 3. Support Bracket -

In a new construction installation (Figure 6), 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.

Bend the 4 straps of the support bracket, feed them through the prepared holes in the chimney walls and mortar them securely in place. Wait for the mortar to set strong enough to bear the weight of the system. You still need to add the Support Straps at the top of the chimney. See Figures 4, 18 and 19).



**FIGURE 5**  
Support Bracket Straps Mortared Into Chimney Walls

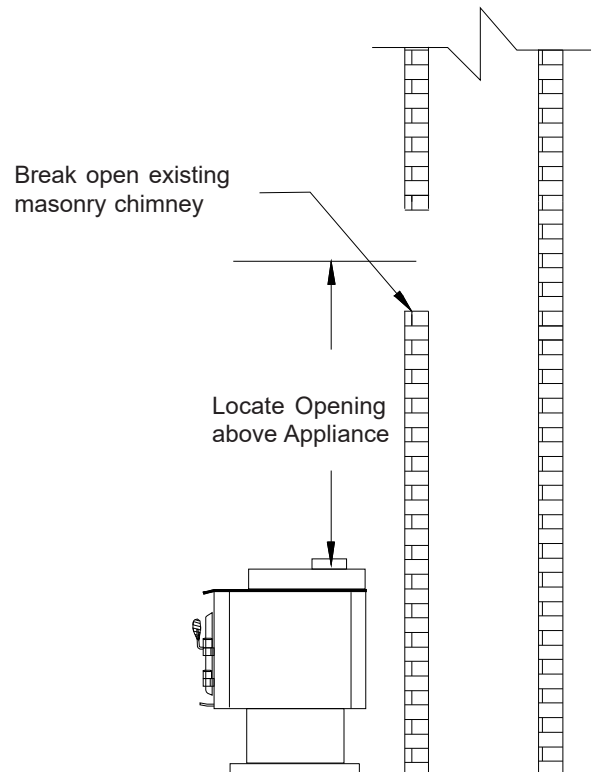


**FIGURE 6**  
Stainless Steel Rigid Liner - Support Bracket - New Construction

## 7.) PREPARATION OF THE MASONRY CHIMNEY FOR THE LINER

All Stainless Steel Liner systems will be supported/re-supported from the top of the masonry chimney. The Stainless Steel Rigid Liner is 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 with rivets, screws, bolts or mortar.

- 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 Figure 7).

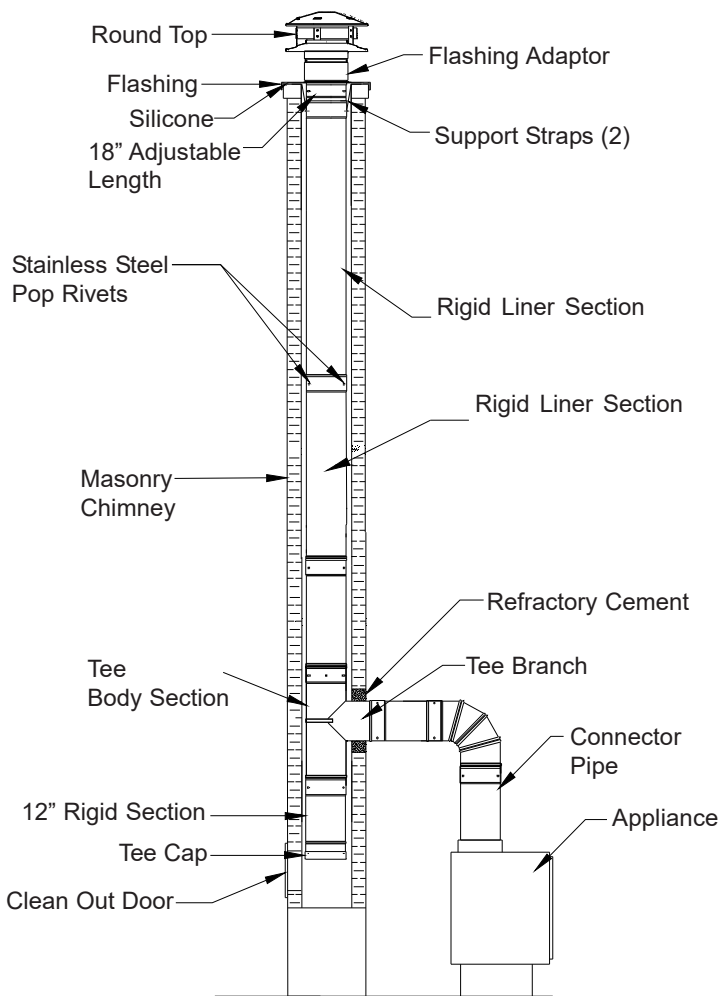


**FIGURE 7** - Preparing Opening Into Masonry Chimney

- 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.

- 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.

- The liner assembly will be supported from the top of the masonry chimney with Support Straps (see FIGURES 4, 8, 17 AND 18). 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 6).



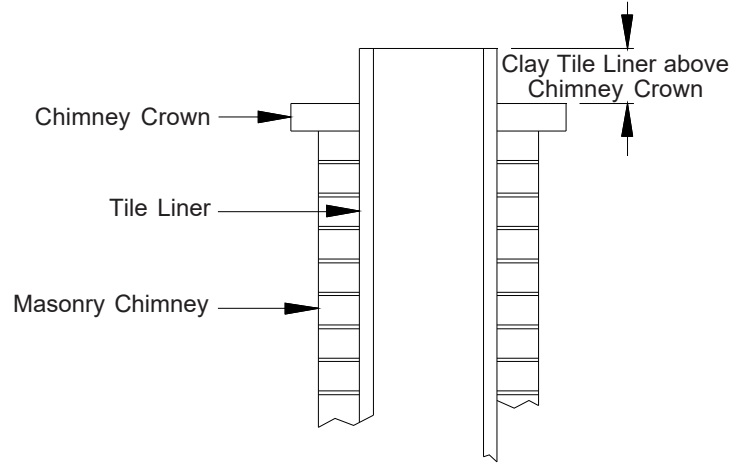
**FIGURE 8 - Typical Stainless Steel Rigid Liner Installation**

**8.) PREPARATION OF TOP OF CHIMNEY**

- 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.

- 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 9). 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 9 Remove Clay Tile Liner Above Chimney Crown If Damage is Evident**

**9.) 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.

The Insulation Wrap Kit has all the required components you will need to insulate 10' sections of the Stainless Steel Rigid Liner (20' would require 2 kits):

- 10 Feet - Foiled Insulation blanket
- 10 Feet - SS Wire Mesh
- 10 Feet -Aluminum Foil Tape
- 35 feet - SS Wire

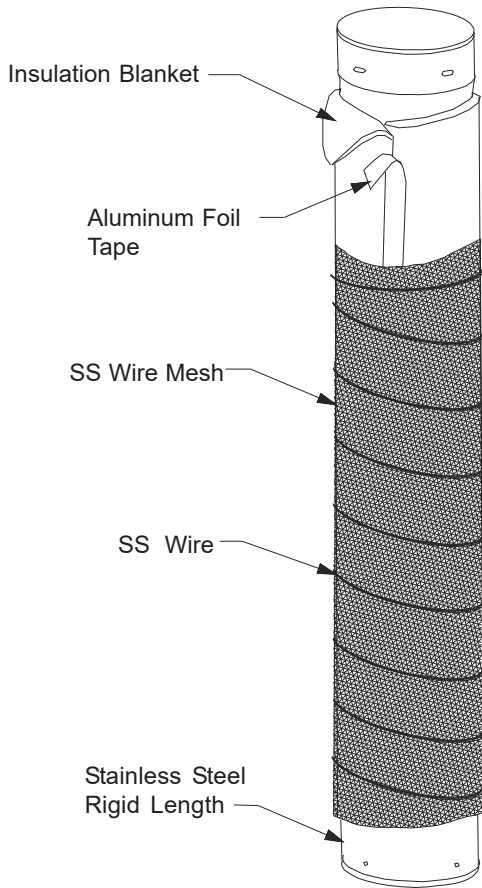
- Lay down the Insulation blanket (foil face side down) on a flat surface and place pre-assembled Rigid Lengths on the blanket providing a minimum overlap of 2 inches at the female end of the pre-assembled Lengths. Keep this end exposed to render the securing of the mating Lengths easier.

- Ensure that the foil side of the blanket is facing outward before rolling the insulation around the length. Tape the vertical seam with the aluminum foil tape. Aluminum foil tape, SS wire mesh and SS wire are required for a proper installation. The aluminum foil tape should be 3 to 4 inches wide (see Figure 10).

- If the insulated liner is being installed in an existing masonry chimney, the SS wire mesh must be placed around the insulated length (rigid or flex) of the liner. The SS wire mesh is held in place by the SS wire on the liner length.

- If the insulated liner is installed during the construction of a new masonry chimney the SS wire mesh does not have to be placed around the insulated length of rigid pipe.





**FIGURE 10**

- For liner expansion allowance, insulation wrap should not be used on 4" to 7" of the Rigid Liner where the Support Straps and the Adjustable Length are located.

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

- Wrap the SS wire mesh around the Insulation Sleeve. Place small pieces of aluminum foil tape to hold it in place until the SS wire is installed in a helical manner.

## 10.) INSTALLATION OF LINER GUIDELINES

- The installation of the Stainless Steel Rigid Liner is done from the top down. In some application, the installation may be done from the bottom up.

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

- The expanded (large) end of a Rigid Length always points upward as per the "UP" arrow on the listing label (see Figure12).

- It is best to assemble your base section first (Base Tee, Tee Cap).

- 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 (Section 9) for more information.

## 11.) - Assembly of Component

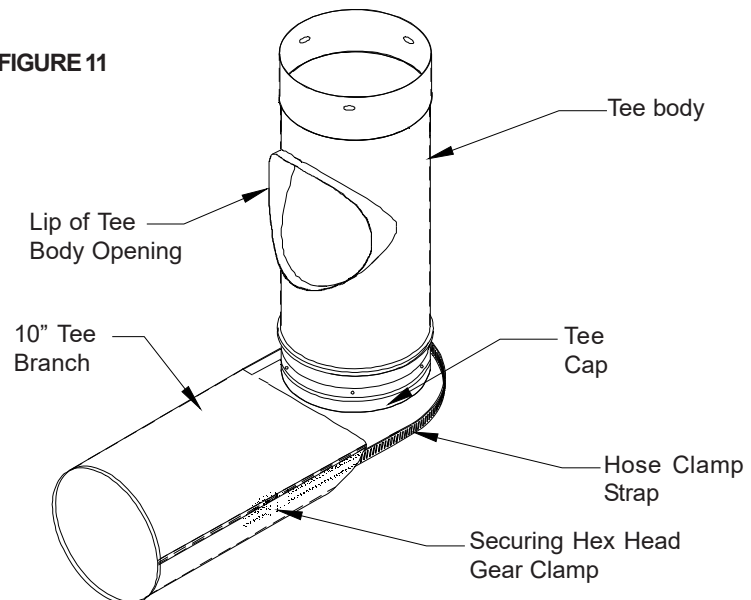
### 1 Base Tee - Stainless Steel Rigid Liner

- The Stainless Steel Rigid 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 11). This band is wrapped around the outside of the Tee body with a 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) so it can protrude into the room at least 50mm (2") for a connector pipe to be connected.

- 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 Figures 14a & 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 11**

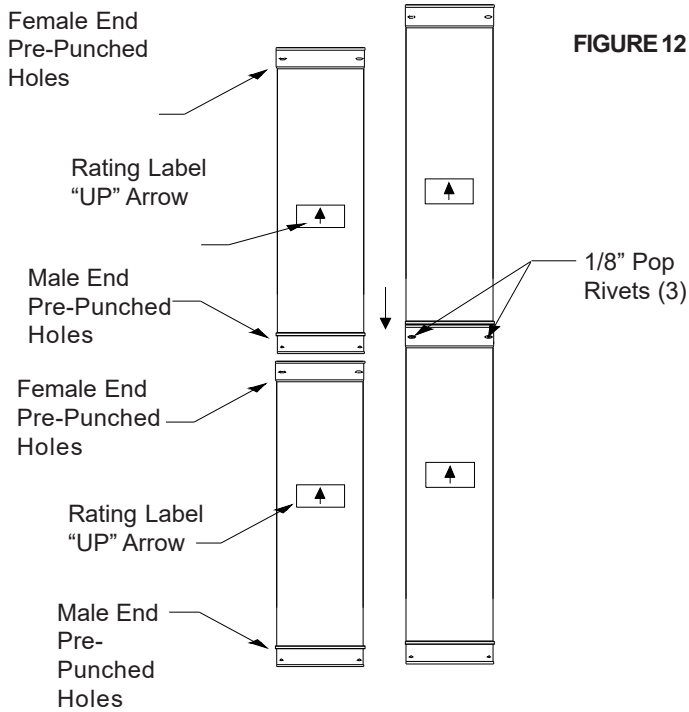


### 2 Sections - Stainless Steel Rigid Liner

- 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 12).

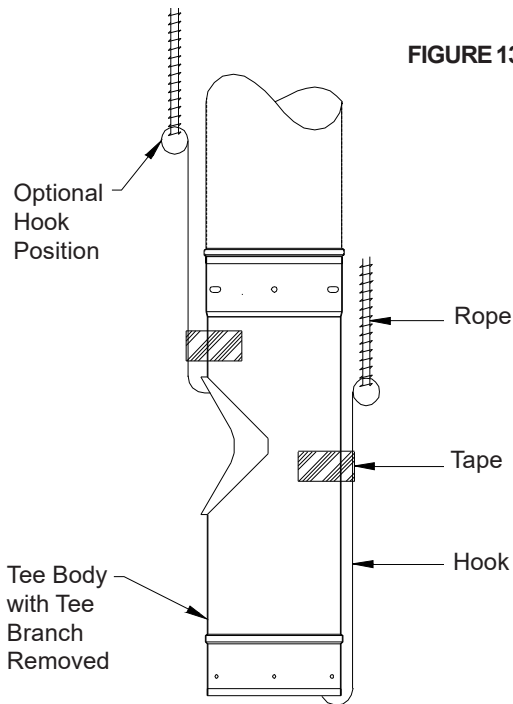
- Do not assemble more than can be safely transported up on the roof and installed into the chimney.

- 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 13).

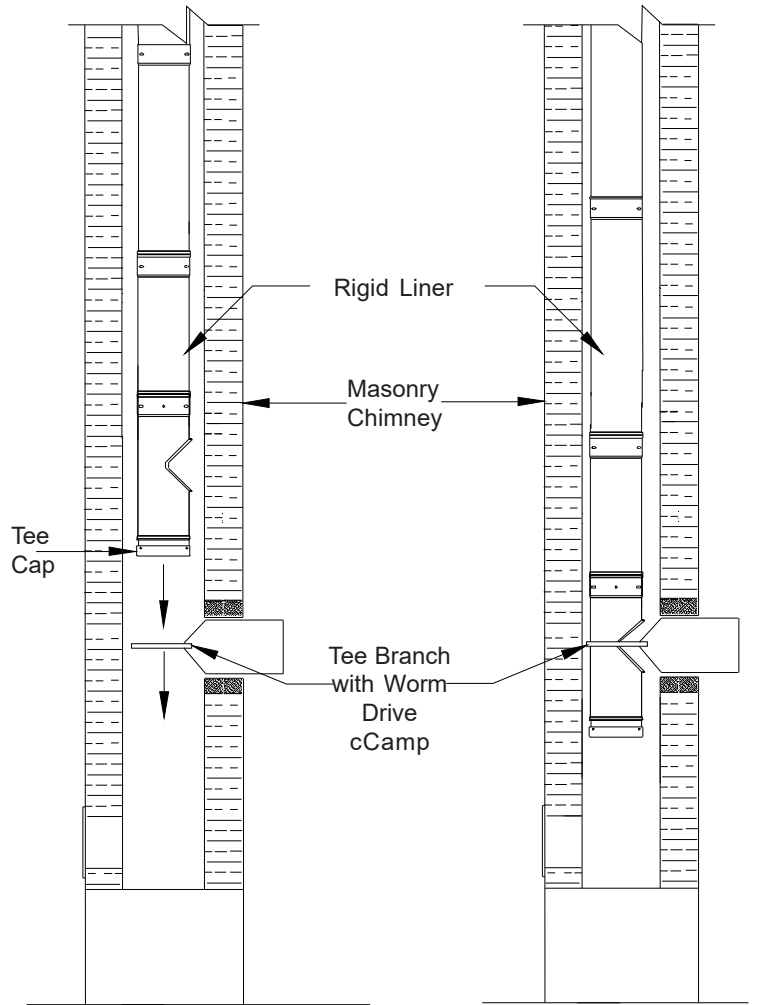


**FIGURE 12**

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 13**



**FIGURE 14a  
Lower Liner  
Through Band**

**FIGURE 14b  
Secure Tee Branch  
to Tee Body**

- 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.

- 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.

- 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.

- 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 14a & 14b).

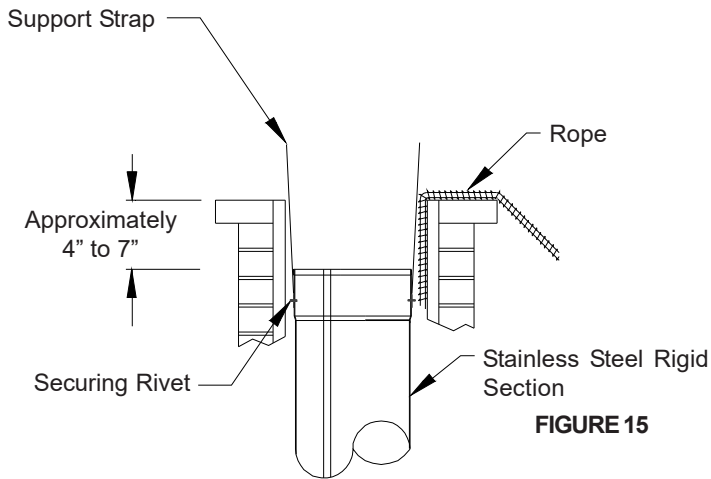


FIGURE 15

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

**.3 Elbows - Stainless Steel Rigid Liner**

- Elbows can be used to accomplish offsets in a Stainless Steel Rigid Liner installation or in making connection to the appliance (Figure 16).

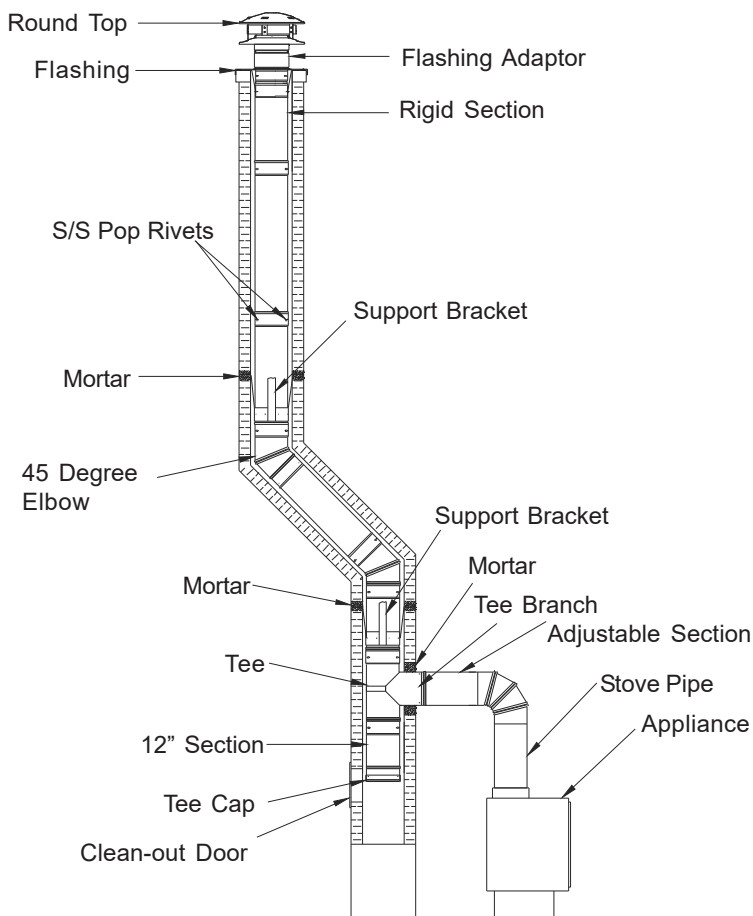


FIGURE 16

- If there is an offset in the chimney, use elbows as required and a liner Support Bracket as shown in Figure 16. Install the Support Straps at the top of the masonry chimney to hold the liner suspended while completing the base section.

- Remove enough bricks to gain access into the chimney for the elbows, the liner support straps, and to secure all liner joints with 3 supplied pop rivets. After the installation, re-mortar all openings. Leave the Support Strap in place at the top of the masonry chimney to assist in bearing the weight of the liner system.

- 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 pointing 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 Figures 18 & 19).

**12.) INSTALLING THE LINER**

- If the Stainless Steel Rigid Liner is to be insulated do so now. See Section 9.) for the installation of the Insulation Sleeve.

- Gather all necessary component parts and locate them near the termination of the chimney. This should consist of the Flashing, Flashing Adaptor, Round Top, and the prepared Rigid Lengths and Tee (with branch removed) and rope.

**13.) TERMINATION INSTALLATION - RIGID**

- 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 17). Trim as necessary or fold edges over the outside of the chimney.

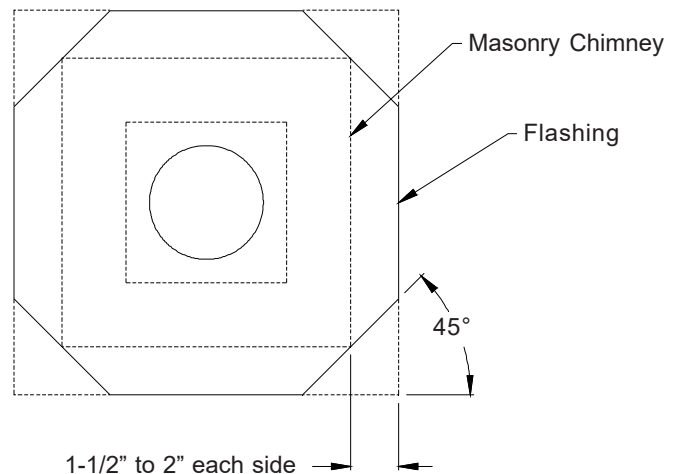


FIGURE 17 - FLASHING - STAINLESS STEEL RIGID LINER

- 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 18).

- 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 19).

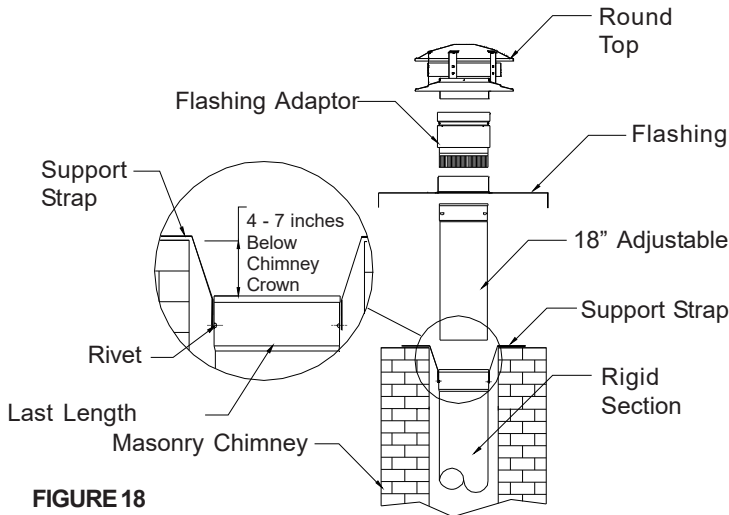


FIGURE 18

- 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 Figures 18 & 19).

- Ensuring that the Tee previously installed on the end the rigid liner is in the correct position. Insert the Flashing Adapter into the Flashing making sure the sleeve collar of the Flashing goes all the way in between the Flashing Adapter outer and inner casing.

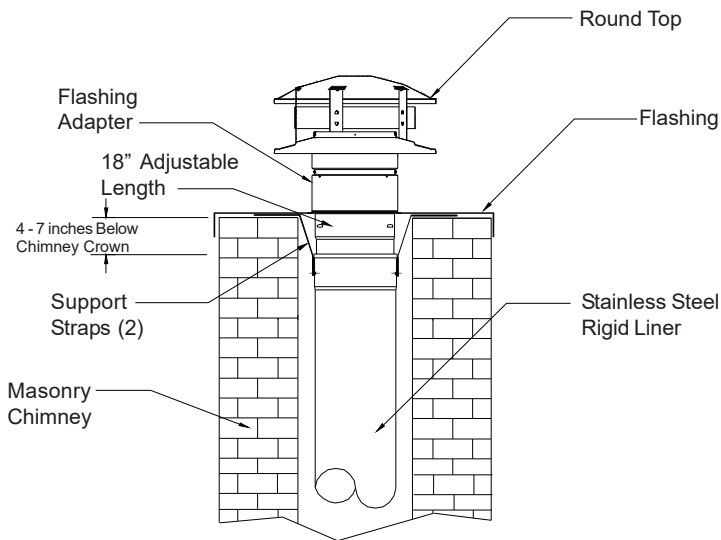


FIGURE 19 - Stainless Steel Rigid Chimney Termination

**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.**

- 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 Figures 18 & 19). Install Round Top (see Figure 20).

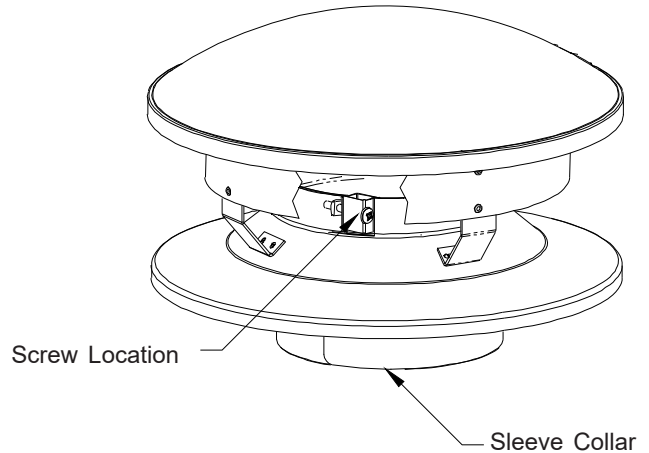


FIGURE 20 - ROUND TOP CUT-OUT SECURING SCREW

- Once the liner is installed, attach the Round Top securely by loosening the screw on top of the sleeve collar (see Figures 18, 19 & 20) 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.

#### 14.) COMPLETION OF LINER BOTTOM

- Make sure the Tee Branch is long enough to protrude into the room by at least 50mm (2") so that a connector pipe can be attached to it (see Figure 21). If a longer length is required install an 18" Adjustable Length and cut to the required length.

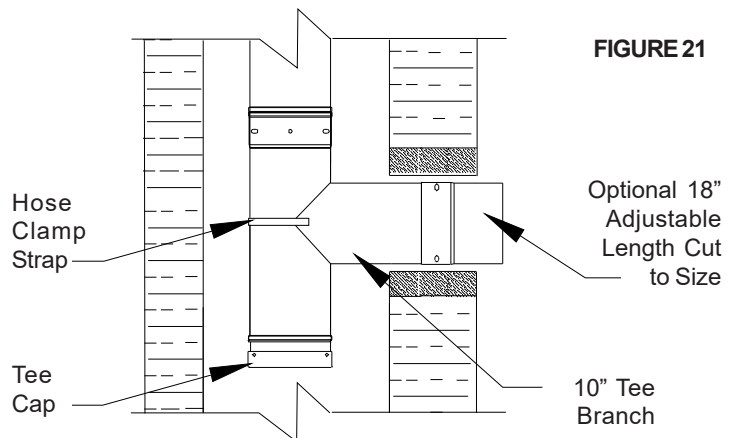


FIGURE 21

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

- 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.

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

### 15.) INSTALLATION OF APPLIANCE

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

- 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 22. Check your local codes for any restrictions and requirements. Selkirk's DSP or DCC Double Wall Stove Pipe can be installed at reduced clearance of 6" with the installation of the DSP or DCC Masonry Adapter. Follow the installation instructions supplied with the DSP or DCC. 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 16. for the Insulated Wall Thimble (DSP-IWT) by Selkirk and Figure 23.

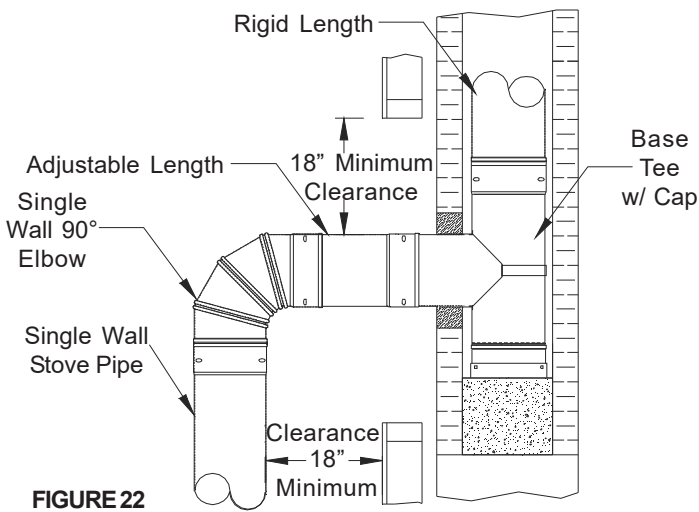


FIGURE 22

### 16.) INSTALLATION OF INSULATED WALL THIMBLE (IWT)

- If the 18-inch clearance to combustible materials – as mentioned in Section 15. is not acceptable, an Insulated Wall Thimble (IWT) can be installed to reduce this clearance to two inches (see Figure 23). Follow the installation instructions supplied with the Insulated Wall Thimble DSP-IWT.

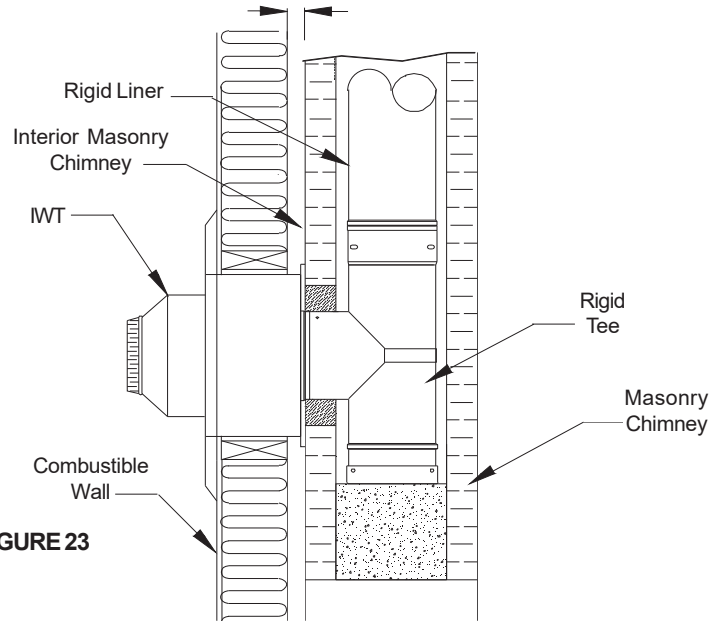


FIGURE 23

### 17.) INSTALLATION COMPLETION

- 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.

- Upon completion of the installation fill in the applicable information below. If markings are not visible, fill in the supplied label and display adjacent to the liner inlet.

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

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

Technician's Address: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

## 18.) INSPECTION AND MAINTENANCE

### INSTRUCTIONS

Should you have any questions concerning inspection and maintenance of the Stainless Steel Rigid Liner please contact:

Selkirk Canada  
375 Green Road  
Stoney Creek, Ontario L8E 4A5  
1.888.SELKIRK (735.5475)

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

Your Stainless Steel Rigid Liner must be installed and serviced by a qualified chimney or venting professional. 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 maintenance. Refer also to the appliance manufacturer’s maintenance instructions for recommendations relative to required maintenance of the appliance.

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 to form creosote. The creosote vapours condense in the relatively cool liner 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 liner characteristics, the liner should be inspected at least once every two months during the heating season to determine if a creosote or soot build-up has occurred. Check spark arrester screens at least every 2 to 4 weeks. If the spark arrester becomes clogged with creosote, it should be cleaned or replaced.

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 liner and connector pipe shall be inspected annually and cleaned as often as may be necessary to keep the liner and connector pipe free from dangerous accumulation of combustible deposits.

Contact a professional certified chimney sweep for chimney cleaning services and advice if you have any doubts about your ability to clean your liner system or if the task is too large. To visually inspect the chimney, remove the Liner Cap 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. Select the proper sized nylon/poly chimney brush to clean the liner. Make sure the brush passes throughout the complete length of the liner, including connectors and tee. It may be required to disassemble the connector assembly from the appliance for complete inspection and cleaning.

If chemical cleaners are used to assist in the cleaning of the Stainless Steel Rigid Liner, make sure it is a product which is non corrosive. We will assume no liability for damage resulting from the use of chemical cleaners. Chemical cleaners (including sweeping logs products) do not replace the optimal method of cleaning a liner 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.

It is important that the Liner system be checked and cleaned annually. This is for the safety of the homeowner and necessary to meet the warranty requirement.

Avoid burning “green”, “unseasoned” “wet” wood. Heat is wasted as it must first dry and evaporate the moisture content in the firewood. As the water evaporates it will form into creosote which will then condense in a relatively cool firebox and liner. This will not permit a clean hot burn. Do not burn saltwater driftwood, treated wood, wax logs, pressure treated lumber, rail road ties, or plastics. Fuel other than firewood may burn excessively hot leading to damages to the liner system and become a serious fire hazard. Burning such materials may also lead to severe corrosion of your appliance and of the liner.

### AVAILABLE COMPONENTS

DESCRIPTION	PART NUMBER
48” LENGTH	*RF48
36” LENGTH	*RF36
24” LENGTH	*RF24
12” LENGTH	*RF12
6” LENGTH	*RF6
18” ADJUSTABLE LENGTH	*RFAL
INCREASER 5” TO 6”	*RF6I
INCREASER 6” TO 7”	*RF7I
INCREASER 7” TO 8”	*RF8I
REDUCER 6” TO 5”	*RF5R
REDUCER 7” TO 6”	*RF6R
REDUCER 8” TO 7”	*RF7R
45 DEGREE ELBOW	*RF45
90 DEGREE ELBOW	*RF90
SUPPORT BRACKETS	*RFSB
TEE W/CAP	*RFTE
FLASHING ASSEMBLY	*RFFA
STARTER KIT	*RFSK
ROUND TOP	*RFRT
ANTI DOWNDRAFT CAP - DIKAPT	*RFDK
TRIM PLATE	*RFTP
FLEX CONNECTOR	*RFFC
INSULATION SLEEVE KIT	*RF10I

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

# INSTALLATION INFORMATION

Leave with homeowner. Homeowner: Keep in a safe place for future reference.

## PRODUCT INFO

LINER MODEL : **Stainless Steel Rigid Liner**

FLUE SIZE \_\_\_\_\_

TOTAL HEIGHT \_\_\_\_\_

INSIDE INSTALLATION

OUTSIDE INSTALLATION

CONNECTED TO (type of appliance):

WOOD STOVE

BOILER

INSERT

FURNACE

OTHER (specify) \_\_\_\_\_

FUEL:

WOOD

GAS

OIL

OTHER (specify) \_\_\_\_\_

LOCATION OF APPLIANCE:

BASEMENT

MAIN FLOOR

OTHER (specify) \_\_\_\_\_

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

## DEALER INFO

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

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

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

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

## TECHNICIAN INFO

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

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

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

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