# Stainless Steel Flexible Liner

## Stainless Steel Chimney Lining System



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.



Tested to Standards
UL 1777
CAN/ULC-S635
Class 3

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.

Stainless Steel Flexible Liner

5030 Corporate Exchange Blvd. SE Grand Rapids, MI 49512 Telephone: 800.433.6341 950 South Service Road, Second Floor Stoney Creek, ON L8E 6A2 Telephone: 888.735.5475 THE STAINLESS STEEL FLEXIBLE LINER SYSTEMS IS DESIGNED AND LISTED TO BE INSTALLED WITHIN MASONRY CHIMNEYS USED TO VENT THE PRODUCTS OF COMBUSTIONS 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 FLEXIBLE LINER IS DESIGNED FOR AN INSTALLATION BY A QUALIFIED PERSON IN ACCORDANCE WITH LOCAL BUILDING CODES.

#### **IMPORTANT**

STAINLESS STEEL FLEXIBLE 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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#### PRODUCT INFORMATION

Stainless Steel Flexible Liner 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. This liner should be 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.). Stainless Steel Flexible Liner is intended for residential type appliances (including fireplace insert) 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.

Stainless Steel Flexible 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.

Do not connect any appliance that burns a liquid fuel to a chimney liner used to vent a solid fuel burning appliance.

Stainless Steel Flexible Liner, Top Plate and Rain Cap are constructed of 300 series stainless steel. These components have a built-in worm screw fastening hose clamp as a securing system.

Each installation must be planned for the best performance of the appliance being installed. Refer to appliance manufacturer's instructions to determine any special venting requirements for specific appliance. Building permits may be required before installation. Do not use any materials or components other than specified in these installation instructions.

The installer must contact the local building and fire code officials to determine any installation and inspection requirements. Building permits may be required before installation. Liner must be installed within the local building codes. Please remember, regardless of national codes, the local building inspectors have ultimate jurisdiction.

#### **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
Eye Protection
Ladder(s)/Scaffolding
Shop Vac
Masonry Drill Bits 1/2" or 3/8"
Measuring Tape
Utility Knife
Screwdriver w/ 5/16 Hex head
Hammer
Pliers
Cold Chisel
Caulking Gun
Bag of Mortar Mix
Trowel

Mortar Pan

Metal Foil Duct Tape

Dust Respirator (3M 9900 or equiv.) Drop Cloth Chimney Brushes/Rods Extension Cords / Work Light High Speed Drill Bit 1/8" Reversible Electric or Cordless Drill Hacksaw/Reciprocating Saw & Blades Small Adjustable Wrench/Ratchet Set Awl/Chalk/Felt Tipped Markers Tin Snips/Side Cutter/Shears Metal Folder Silicone Caulk, high temperature Rope (10 feet longer than the chimney including the wire hook at one end) Pop rivet gun for 1/8" rivets Extra Pop Rivets

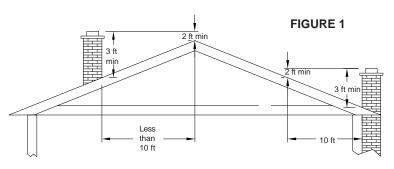
#### 1.) INSPECTION AND PREPARATION OF CHIMNEY

The existing chimney must meet the following codes for proper construction and compliance requirements before the liner can be installed:

- The chimney must have the proper wall thickness, ie: minimum of 4 inches (nominal) solid masonry units or as required by local building codes.
- Before the installation of the liner, the chimney and the smoke chamber of the fireplace must be cleaned thoroughly by a certified

chimney sweep to remove all deposits of soot, creosote, or glazed creosote. Failure to thoroughly clean the chimney before installing a new liner system may lead to fire and or smoke damage to the home.

- A proper inspection must be done to determine that the chimney is structurally sound. If the structural integrity of the chimney is found to be in question, ie: missing, loose, or craked masonry or mortar joints, repairs must be made before installation of the chimney liner.



- The chimney must be a minimum of 10 feet high, and a maximum of a 100 feet in height.
- 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).

#### 2.) SIZING THE PROPER LINER DIAMETER

- 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 any appliance that burns a liquid fuel to a chimney liner used to vent a solid fuel burning appliance.
- For solid fuel burning appliances, the cross sectional area of the liner shall not be less than the cross sectional area of the appliance outlet collar. The cross sectional area of the flue shall not be more than three times the cross sectional area of the appliance outlet collar. For solid fuel burning fireplaces, the liner should be at least one-tenth the square inches of the square inches of the fireplace opening. Refer also to N.F.P.A. 211 for solid fuel in the US and CAN/CSA-B365 in Canada. Please note that this formula can vary based on height of the chimney and other determining factors.
- The connector pipe used to connect the appliance to the chimney liner must meet proper clearances to combustibles as determined by the appliance manufacturer's installation instructions, the national building code, or the local building code, whichever is in force.
- For liner sizing of gas and oil burning appliances please refer to N.F.P.A.54 for gas and N.F.P.A.31 for oil in the US. In Canada refer to the following Installation Codes: CAN/CSA-B139 for oil and CAN/CSA-B149 for gas. Also refer to appliance manufacturer's instructions. Incorrectly sized liners for these appliances can lead to performance problems and condensation with the lining system.
- 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.
- If the chimney is constructed inside the structure, a minimum of two inches of unobstructed air space must surround the chimney to any combustible material. If the chimney is constructed on the outside of the structure, in the US, one inch (1/2" in Canada) of unobstructed air space must be maintained between the chimney and all other combustible materials. See Table 1 and Figure 2.

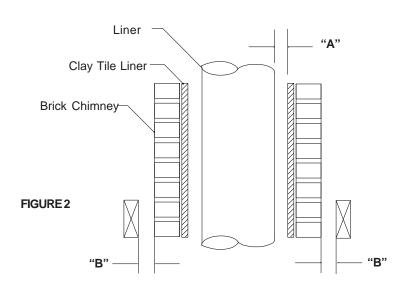
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- When the chimney passes through a floor, ceiling, or other horizontal or vertical structure, firestops of a non-combustible material must be used.
- IF THE PROPER CLEARANCES LISTED ABOVE CANNOT BE DETERMINED THE LINER MUST BE INSTALLED WITHAN APPROVED INSULATION WRAP.
- 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 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.

TABLE 1 - AIR SPACE CLEARANCES TO LINER (see Fig. 2)					
	Stainless Steel Flexible Liner and interior of Chimney	Clearance Between Chimney Exterior and Combustibles			
Type of Installation	Clearance 'A'	Interior Installation 'B'	Exterior Installation 'B'	Country	
Stainless Steel Flexible	0"	2"	1/2"	Canadá	
Liner	0"	2"	1"	U.S.	
Insulated* Stainless Steel Flexible Liner	0"	0"	0"	Canadá	
	0"	0"	0"	U.S.	

\*Insulated Stainless Steel Flexible Liner with an approved Insulation Wrap of 8 lbs. density, 1/2" foil faced ceramic fibre blanket such as our Insulation Wrap Kit - \*RF101 (\*denotes diameter from 5" to 8").

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

## 3.) DETERMINE IF THE CORRECT SIZE LINER WILL FIT INTO THE CHIMNEY

- Since chimneys are usually very sooty and dusty, it is advisable to remove or cover your furniture, rug, etc. for the duration of the cleaning and installation of the liner. The Stainless Steel Flexible Liner can be installed within the existing flue tile or the flue tile can be removed. It is extremely important that the correct size liner will fit into the chimney. Certain factors, such as chimney construction and offsets in the chimney, may change the size of the interior of the chimney. It is best to prove the interior of the chimney before trying to install the chimney liner. This can be done by lowering a short piece of the intended size liner down the chimney to see if it will pass all the way to the bottom. You can also use a liner guide cone to accomplish this. If the chimney liner will need to be insulated this will affect the required dimensions needed to install the liner. If the round configurations needed to vent the appliance will not fit the liner may be formed to an oval configuration to fit, however ovalizing the liner will change the cross sectional area.

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.

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

#### 4.) INSTALLING STAINLESS STEEL FLEXIBLE LINER

- Make sure the thimbles to be used in the installation are in the proper chimney to maintain the required clearance to combustibles for the connector pipe from the appliance. If the clearances are not correct reconstruct the thimble to the proper position.
- Determine the length of the liner by measuring from the bottom of the opening to the top of the chimney. To this measurement add approx. six inches to accommodate the crown and top hardware. Cut liner to length by using a hacksaw, snips or a disc cutter.

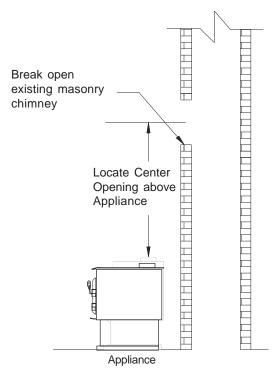


FIGURE 3 - Preparing Opening Into Masonry Chimney

- If necessary, 2 lengths may be joined together by using the flex connector. You can also use the pulling cone to allow an easier installation of leading the liner down from the top of the chimney.
- Remove the snout from the two part tee.
- Attach the tee body to the liner by inserting the liner into the female end tee body as far as possible.
- Using a 5/16" (8mm) nut driver, tighten the worm drive clamp firmly around the liner. If the liner is going to be insulated with a ceramic insulation blanket, install the blanket now. If a tee cap is going to be used, attach it to the body now.
- Take the tee snout that was removed from the tee body and extend the draw band completely, slide the tee snout into the thimble with the draw band centered in the flue. Lower the liner down from the top of the chimney, and feed the tee body through the draw band on the tee snout. You may have to rotate the liner to align the hole in the tee body with the snout. Once you have aligned the tee, tighten the draw band to secure the snout to the tee body.
- Seal the area around the tee snout with mortar for an airtight seal.
- The Top Kit (Top Plate and Liner Cap) is used to bear the total weight of the liner system at the top of the masonry chimney (see Figure 4).

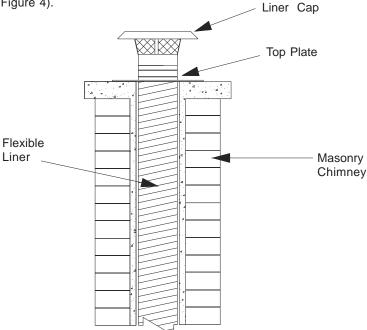
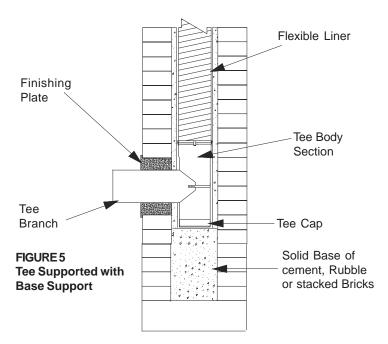


FIGURE 4 - Stainless Steel Flexible Liner with Top Plate

- Your chimney may have a clay-tile liner which protrudes above the 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 the excess with a hammer and cold chisel. Make sure 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. Proceed to install the Top Kit.
- The installation of the Top Kit is accomplished by first removing the Liner Cap portion of the kit by loosening the top worm drive clamp a few turns. Next, install the Top Plate assembly over the liner, tighten the worm drive screw until snug, then attach the Top Plate to the masonry with silicone or tapcons. Cut the liner flush with the top of the assembly and reinstall the Liner Cap portion of the Top Kit.
- To facilitate inspection and cleaning, wall penetrations shall not be placed directly behind the heating appliance.
- A Top Extension is available to extend the height of your flex liner system. The extension attaches to the top plate and the liner cap attaches to the top extension with the securing worm drive clamp.
- Make sure the tee branch is long enough to protrude into the room by at least 2" so a connector pipe can be attached to it.



You can also have the Tee and Tee Cap resting on a solid base support (cement base or stacked brick/rubble). The tee snout 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 5). NOTE: You will still be required to re-support the flexible liner assembly at the top of the chimney with the above mentioned

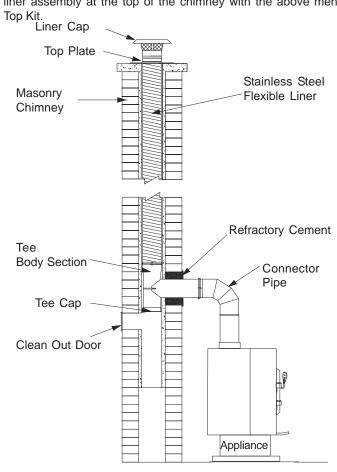
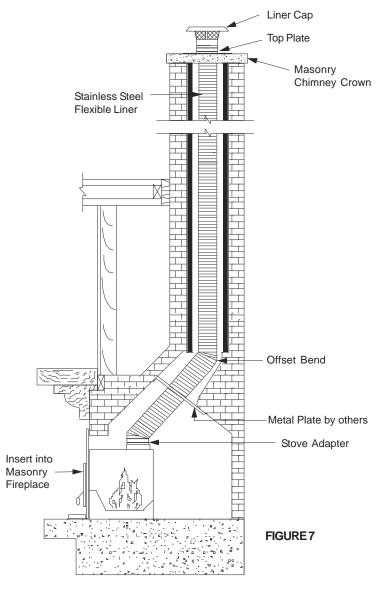


FIGURE 6 - Typical Stainless Steel Flexible Liner Installation

#### 5.) INSERT INTO A MASONRY FIREPLACE

- For an insert application into a masonry fireplace, a Insert Liner Kit is available. For this application a tee and tee cap are not required. This kit comes with a Stove Adapter made to accept our liner into the top female end with our worm drive clamp to tighten it in place. The Stove Adapter slips into the top of the insert collar for an easy transition. See Figure 7 for a basic installation.
- In certain applications, an elbow would facilitate the connection at the insert. These are available in 30°, 45° or 90°.
- Follow the manufacturer instructions supplied with the insert for more details on how to connect to the appliance.



#### 6.) INSULATING THE LINER (IF REQUIRED)

A note about insulating stainless steel flexible liner: Not all situations require insulation of the chimney liner. The UL1777 Standard for installing stainless steel chimney liners requires insulation because the non-code conforming chimney has zero clearance to combustibles or some other defect. The definition of a code conforming chimney is one that meets or exceeds NFPA 211 for construction of chimneys in the US and CAN/CSA-A405 for Design and Construction of Masonry Chimneys and Fireplaces in Canada.

For the installed liner systems to meet UL standards, all UL listed components used must be installed with proper clearances.

The Insulation Wrap Kit - \*RF101 (\*denotes diameter from 5" to 8") comes complete with the following:

10' - 1/2" Foiled Insulation Blanket

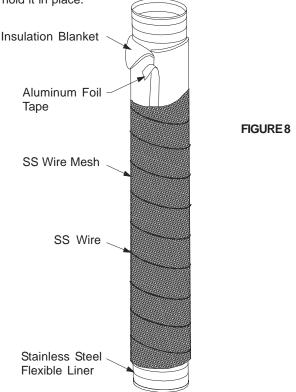
10' - Stainless Steel Wire Mesh

10' - Aluminum Foil Tape

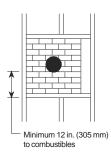
35' - Stainless Steel Wire

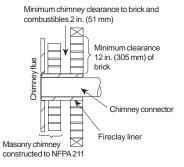
Insulating with Insulation Wrap Kit:

- The liner must be insulated from the bottom of the tee including the tee cap (in the case of an insert application from the stove adapter from where it would stop on insertion into it). The Insulation Wrap must be 3" below the crown of the chimney to allow for vertical thermal expansion.
- After determining this length, prepare sections of the insulation blanket with a minimum of 2" overlap, taped with foil tape.
- Lay down the prepared sections of insulation blanket (foil face down) on a flat surface.
- Lay the liner and the bottom connector (tee branch with tee cap or stove adapter) in the center of the insulation blanket.
- Wrap blanket around the liner. Hold in place every foot with pieces of 8" length of foil tape.
- Once the insulation is in place apply a continuous vertical length of foil tape from top to bottom of the overlapped insulation seam. The insulating wrap must overlap along its length by a minimum of 1". A wider overlap is allowed but may cause installation difficulties in tight clearance situations.
- Next place insulated liner into the mesh sock.
- Starting at the bottom secure with the stainless steel wire in an helical manner (spiral) all the way to the top and twisted on itself at each end to hold it in place.



The following Figure 8 shows NFPA 211 diagrams for chimney connector systems and clearances to combustible walls (US only). In Canada, refer to CSA-B635 the Installation Code for Solid Fuel Burning Appliances and Equipment.

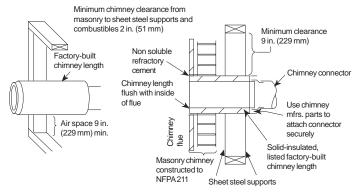




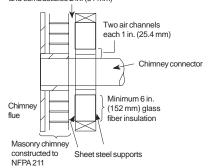
#### System

Minimum 3.5 in. (90 mm) thick brick masonry wall framed into combustible wall with a minimum of 12 in. (305 mm) brick separation from clay liner to combustibles. Fireclay liner (ASTM C 315. Standard Specification for Clay Fire Linings, or equivalent), minimum 5/8 (16 mm) wall thickness, shall run from outer surface of brick wall to, but not beyond the inner surface of chimney flue liner and shall be firmly cemented in place.

Clearance: 12 in. (305 mm)



Minimum chimney clearance to sheet steel supports and combustibles 2 in. (51 mm)



#### System

B Solid-insulated, listed factory-built chimney length of the same inside diameter as the chimney connector and having 1 in. (25.4 mm) or more of insulation with a minimum 9 in. (229 mm) air space between the outer wall of the chimney length and combustibles.

The inner end of the chimney length shall be flush with the inside of the masonry chimney flue and shall be sealed to the flue and to the brick masonry penetration with non-water-soluble refractory cement. Supports shall be securely fastened to wall surfaces on all sides.

Fasteners between supports and the chimney length shall not penetrate the chimney liner.

Clearance: 9 in. (229 mm)

#### System

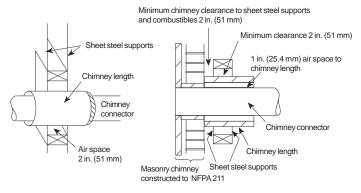
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Sheet steel chimney connector, minimum 24 gauge (0.024 in. (0.61 mm)) in thickness, with a ventilated thimble, minimum 24 gauge (0.024 in. (0.61 mm)) in thickness, having two 1 in. (25.4 mm) air channels, separated from combustibles by a minimum of 6 in. (152 mm) of glass fiber insulation. Opening shall be covered, and thimble supported with a sheet steel support, minimum 24 gauge (0.024 in (0.61 mm)) in thickness.

Supports shall be securely fastened to wall surfaces on all sides and shall be sized to fit and hold chimney section.

Fasteners used to secure chimney section shall not penetrate chimney flue liner.

Clearance: 6 in. (152 mm)



### FIGURE 8

Two ventilated air

channels, each 1

in. (152 mm).

sheet steel.

Construction of

#### System

D Solid-insulated, listed factory-built chimney length with an inside diameter 2 in. (51 mm) larger than the chimney connector and having 1 in. (25.4 mm) or more of insulation, serving as a pass-through for a single wall sheet steel chimney connector of minimum 24 gauge (0.024 in (0.61 mm)) thickness, with a minimum 2 in. (51 mm) air space between the outer wall of chimney section and combustibles).

Minimum length of chimney section shall be 12 in. (305 mm). Chimney section concentric with and spaced 1 in. (25.4 mm) away from connector by means of sheet steel support plates on both ends of chimney section. Opening shall be covered, and chimney section supported on both sides with sheet steel supports of minimum 24 gauge (0.024 in. (0.61 mm)) thickness.

Supports shall be securely fastened to wall surfaces on all sides and shall be sized to fit and hold chimney section.

Fasteners used to secure chimney section shall not penetrated chimney flue liner.

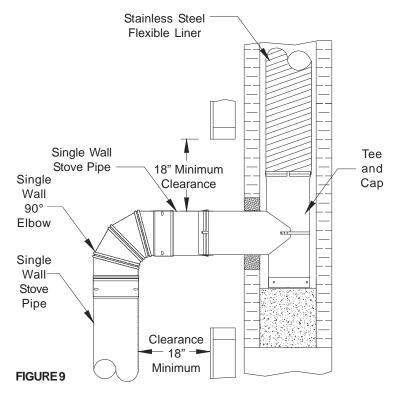
Clearance: 2 in. (51 mm)

#### Additional requirements:

- 1. Insulation material used as part of wall pass-through system shall be of noncombustible material and shall have a thermal conductivity of 1.0 Btu-in./hr-ft²-jF (4.88 kg-cal/hr-m²-jC) or less.
- 2. All clearances and thicknesses are minimums; larger clearances and thicknesses shall be permitted.
- 3. Any material used to close up an opening for the connector shall be of noncombustible material.
- 4. A connector to a masonry chimney, except for System B, shall extend in one continuous piece through the wall pass-through system and the chimney wall to the inner face of the flue liner, but not beyond.

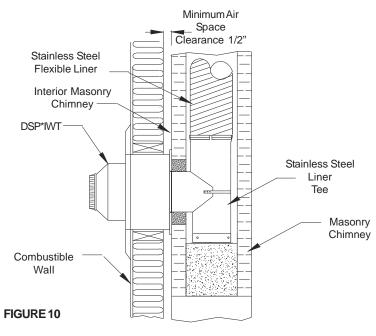
#### 7.) INSTALLATION OF APPLIANCE

- Start adding sections of connector pipes 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 connector pipe and unprotected combustible material must not be less than 18" (457mm), see also FIGURE 9. Check your local codes for any restrictions and requirements. Model DCC or DSP Double Wall Stove Pipe can be installed at reduced clearance of 6" with the installation of the Masonry Adapter. Follow the installation instructions supplied with DCC and DSP Double Wall Stove Pipe.
- If a combustible wall is in front of the brick chimney through which your connector pipe connects to the liner, 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 8 for the Insulated Wall Thimble (DSP-IWT) and FIGURE 10.



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

- If the 18-inch clearance to combustible materials – as mentioned in Section 7 is not achievable, an Insulated Wall Thimble (IWT) can be installed to reduce this clearance to two inches (see FIGURE 10). Follow the installation instructions supplied with the Insulated Wall Thimble DSP-IWT or any other certified Insulated Wall Thimble.



#### 9.) 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 a high temperature ceramic sealant, or other non combustible filler material instead of mortar.
- **2** 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:		 	
-		 	

## 10.) INSPECTION AND MAINTENANCE INSTRUCTIONS

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

United States 5030 Corporate Exchange Blvd., SE Grand Rapids, MI 49512 1.800.433.6441

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 Flexible 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 replaces.

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, incuding 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 Flexible 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 excessibely 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 - (\* denotes diameter)**

DESCRIPTION	PART NUMBER
COMPLETE STANDARD KIT 25' (4" TO 8")	*MF25KT
COMPLETE STANDARD KIT 35' (4" TO 8")	*MF35KT
COMPLETE SMOOTHWALL KIT 25' (4" TO 8")	*MF25KTS
COMPLETE SMOOTHWALL KIT 35' (4" TO 8")	*MF35KTS
INSERT BASIC KIT 25' (5", 5.5", 6")	*MF25IK
INSERT BASIC KIT 35' (5", 5.5", 6")	*MF35IK
SMOOTHWALL BASIC KIT 25' (5", 5.5", 6")	*MF25IKS
SMOOTHWALL BASIC KIT 35' (5", 5.5", 6")	*MF35IKS
PELLET KIT 25' (3" & 4")	*MF25PK
PELLET KIT 35' (3" & 4")	*MF35PK
INSULATION WRAP KIT (5" - 8")	*RF101
FLEX LENGTH 25' (4" TO 8")	*MF25SFL
FLEX LENGTH 35' (4" TO 8")	*MF35SFL
SMOOTHWALL FLEX LENGTH 25' (4" TO 8")	*MF25SFLS
SMOOTHWALL FLEX LENGTH 35' (4" TO 8")	*MF35SFLS
30° ELBOW (4" TO 8")	*MFFE30
45° ELBOW (4" TO 8")	*MFFE45
90° ELBOW (4" TO 8")	*MFFE90
FLEX TEE (4" TO 8")	*MFFT
PELLET TEE (3" & 4")	*MFPT
TEE CAP (4" TO 8")	*MFTC
SMALL FLASHING - 13" X 13" (4" TO 8")	*MFFS
LARGE FLASHING - 18" X 18" (4" TO 8")	*MFFL
RAIN CAP (4" TO 8")	*MFRC
TOP KIT EXTENSION (4" TO 8")	*MFTKE
FLEX CONNECTOR (4" TO 8")	*MFFC
STOVE ADAPTER (5", 5.5", 6")	*MFSA
PULLING CONE (4" TO 8")	*MFPC

### **INSTALLATION INFORMATION**

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

### **PRODUCT INFO:**

Liner Model: Stainless Steel Flexible 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: