

SUPER-Flow™



Installation Manual

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SUPER-Flow™ CHIMNEY LINER

Installation & Maintenance Instructions

Super-Flow™ stainless steel chimney liner, type 316-L alloy, is intended for the relining of unlined or tile-lined masonry chimneys venting residential type heating appliances burning wood, coal, gas, or oil as specified by NFPA 211.

Super-Flow™ satisfies code requirements as a replacement for 5/8 inch fireclay flue tiles. Super-Flow™ is **NOT INTENDED TO BE USED AS A SUBSTITUTE FOR A CHIMNEY.**

The installation of Super-Flow™ stainless steel flexible chimney liner is to be attempted only by a competent, experienced chimney sweep technician or heating appliance installer.

Pre-Planning Your Installation

As with any professional project, careful planning is the key to a smooth and efficient Super-Flow™ liner installation. Take care of the following steps ***before*** arriving at the job site:

For more information, technical support, and to order parts, contact:

Sleepy Hollow
ChimneySupply, Ltd.
85 Emjay Boulevard
Brentwood, NY 11717
800-553-5322
Fax 516-231-2364

Check with Local Authorities

The installation of a Super-Flow™ liner must conform with the requirements of the appliance manufacturer's instructions, applicable standards of the National Fire Protection Assn. (NFPA), and local codes. Check with local authorities to secure any licenses or permits required to install the lining system. Determine if any there are any restrictions or requirements for your area that supersede these instructions. If necessary arrange to have the installation inspected by the local code official.

Qualify the Chimney

If at all possible, arrange to inspect the chimney before scheduling the liner installation. By so doing you will have a chance to detect chimney problems or installation considerations before they interfere with your installation. Use your inspection to determine repairs needed to the chimney and any special parts or tools necessary. Follow the procedure described in "Prepare the Chimney" below.

Size the Liner

Determine the proper size liner based on the appliance manufacturer's instructions and local or national codes and standards. If the liner will be used to vent one or more Category I gas appliances, consult the appliance instructions and the sizing tables in Part 11 of the 2002 ***National Fuel Gas Code***. Unless specifically allowed by the appliance instructions or codes, the liner must not be sized smaller than the appliance flue collar.

Review the Installation Steps

The instructions in this manual describe the following major steps for installing the liner:

- 1. Prepare the Chimney**
- 2. Prepare and Assemble the Liner**
- 3. Insulate the Liner**
- 4. Install the Liner in the Chimney**
- 5. Finish the Chimney Top**

Please review the details of these steps, even if you have done many liner installations. Go over the installation procedure with any assistants or other technicians who will be in the job.

Determine the Liner Components Needed

After inspecting the chimney and reviewing the installation procedure you should be able to specify the Super-Flow™ liner components that will be needed to complete the installation. Make sure that you have the necessary parts on hand to avoid costly delays or improvisation. Use the form on the facing page to check your inventory.

Determine the Tools Needed

Once you have identified the components you will be using make sure you have the tools and other supplies necessary to assemble and install the liner. Use the form below to check the availability of tools.

Plan for Safety

Be sure that you have sufficient protective equipment such as respirators, goggles and gloves, etc. for all personnel on the job site. Make sure the equipment is used properly. Examine the installation site for hazards and obstructions such as electric wires, trees, or unstable building components, and make sure you can work safely around them. Make sure than any national or local jobsite safety requirements are complied with.

SUPER-FLOW LINER TOOL AND EQUIPMENT CHECKLIST

OK	Tools/Equipment	OK	Tools/Equipment
	Ladder and Scaffolding or platform		Drop light/extension cord/drop cloth
	Face protection: respirator and goggles		Screwdrivers
	Gloves		Hand crimper/metal file
	Hack saw or electric hack saw (preferred), metal cutting blades		Masonry drill bit: 1/2" for threaded rod base support
	Electric drill (battery type preferred)		Super Shears or other metal shears
	Super Flex Punch or 5/32" cobalt drill; other sizes as necessary		Masonry tools: mixing box, hoe, trowel, pointing tool, etc.
	Ruler/measuring tape		Supplies
	Pop rivet gun		Degreaser paper towels
	1/4", 5/16 " hex driver		Mortar mix or masonry cement, sand
	Hammer/rotary hammer		Misc. wood boards

SUPER-FLOW LINER \ COMPONENTS

Diameter/ Size	Description	Quantity	Diameter/ Size	Description	Quantity
Liner Components			Insulation Components		
	Coil or coils of Super-Flow (Super-Flow available in 5', 25', 50' lengths)			Cera-Foil F-14 blanket: 8 lb. density, foil faced; 1/4" thick for zero clearance installations, 1/4" thick for installations with clearance	
	Two Part Tee (removable snout)			Super Skin stainless steel mesh	
	Flared Tee (non-removable snout)			Spray glue and stainless steel wire	
	Hot-water Tail Piece			Super Skin clamps	
	Four Way Tee (accommodates barometric dampers)			3 mil aluminum foil adhesive tape	
	Tee Cap		Other Job Specific Items		
	Flex Adaptor (flex to rigid; flex to flex)				
	Slip Connector				
	30° Elbow				
	45° Elbow				
	90° Elbow				
	Rain Cap				
	Storm Collar				
	Support Clamp				
	Chimney Top Support Plate				
Miscellaneous			Special Reminder		
	Super Rivets: 5/32"x 1/4"				
	Threaded Rods w/nuts (base support)				
	650° red silicone				
	Super Thimble insulated wall pass-through (or onsite built)				

Installation Procedure

There are several types of installation for which Super-Flow™ stainless steel chimney liner is suitable. These include a simple relining with a base tee for stoves, furnaces, and other free standing appliances; and relining for direct connection of a fireplace insert. The steps below describe a simple relining; most apply to all types of installations. Where appropriate, separate sections describe special steps for different installation types. Supplemental instructions may also be packaged with certain components used for these installations.

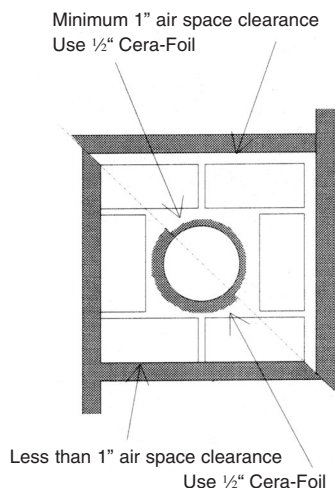
Prepare the Chimney

Before actually installing the liner you must verify that the chimney is suitable for the liner, make any repairs or adjustments necessary for proper installation, and prepare the chimney to accept the liner. Follow the steps below to ensure a properly prepared chimney.

Clean and Inspect the Chimney

Super-Flow™ is for installation only in chimneys which comply with the requirements of NFPA 211, *Chimneys, Fireplaces, Vents, and Solid Fuel Burning Appliances*. You must clean and inspect the chimney prior to installation of the liner.

First, thoroughly clean the chimney. Remove any combustible deposits such as creosote, leaves or bird nests. Use a heavy round- or flat wire brush, or mechanical or chemical cleaners as necessary. If tar glaze creosote cannot be completely removed you may need to break out the existing tile liners in order to ensure that the chimney is free of combustible material.



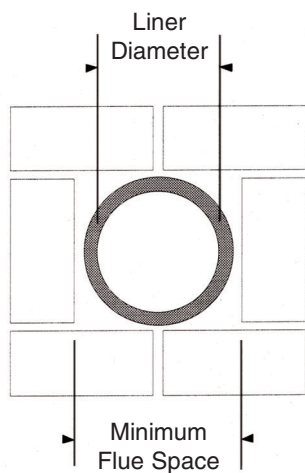
Next, thoroughly inspect the chimney. Verify that the chimney is constructed of solid masonry units such as bricks or concrete block, with minimum wall thickness of 4 inches (nominal). Inspect the interior of the chimney flue with an inspection mirror, and/or by lowering a bright drop light or video inspection equipment into the chimney. Look for loose or missing mortar, holes; cracked, loose, or missing bricks; and unused thimbles. Remove any mortar projections or other snags, repair any defects, and properly seal any unused thimbles.

Inspect the exterior of the chimney for cracks, loose or missing mortar or bricks and make any necessary repairs. Make sure that the chimney footing is sound and that the chimney is stable and not settling or moving from its proper position. Verify that there are no other appliances connected to the chimney flue to be relined.

Verify proper clearance to combustibles. For a standard installation there must be a minimum one inch air space clearance of all combustible material from the exterior surface of the chimney. The air space must not be filled with insulation or other material, but all floor/ceiling penetrations must be firestopped according to NFPA 211. If the chimney **DOES have proper clearance** then the liner must be insulated with 1/2 inch thick, 8 lb. density Cera-Foil. If the chimney **does NOT have proper clearance** then the liner must be insulated with 1/2 inch thick, 8 lb. density Cera-Foil.

Verify available space in the chimney. In order to properly insert the liner there must

be sufficient space within the current chimney flue. For a zero clearance installation using ½ inch Cera-Foil, the flue must be at least 1½ inches larger than the liner diameter in all directions. It may be necessary to remove an existing clay liner to provide this space. *Do not omit the Cera-Foil insulation in order to make the liner fit.*



Verify proper termination height. The top of the chimney must extend at least three feet above the highest point where it penetrates the roof, *and* at least two feet higher than any part of a structure within 10 feet laterally.

Measure the Chimney. Feed a 50 to 100 foot non-metal tape measure down from the top of the chimney. Have another person receive the end of the tape and pull it taut in close proximity to the point where the bottom of the lowest Tee will be located. Record this measurement. You will use it later to determine the total length of the Super-Flow™ liner.

Open the Chimney

Using a hammer and chisel, or a rotary hammer, make an opening in the chimney where the tee will be located. If more than one tee will be used (such as a separate cleanout tee, which is highly recommended), make corresponding openings for them. Make the hole large enough for you to comfortably insert the bull (snout) of the tee once the liner is lowered.

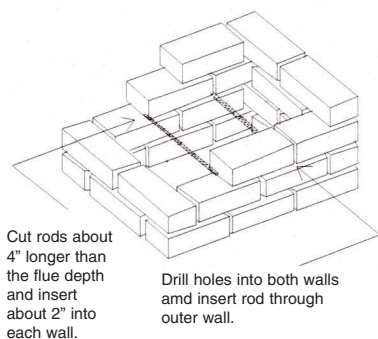
Minimum Flue Space		
Liner Diameter	Standard Installation	Zero Clearance Installation
4"	5"	5½"
5"	6"	6½"
6"	7"	7½"
7"	8"	8½"
8"	9"	9½"

When locating the hole for chimney connectors, be sure to plan for adequate clearance to combustibles at the top and sides. See table 5-5(a) and (b) in NFPA 211 for required clearances from different types of connectors, and acceptable methods of reducing clearance.

If the connector must pass through a combustible wall to get to the chimney, make an opening in the wall for the appropriate wall pass-through system. See page 8 in this manual or Table 5-7 in NFPA 211 for acceptable site-built wall pass-throughs, or use a SUPER THIMBLE wall pass-through. Follow the instructions packaged with the SUPER THIMBLE. The wall penetration must not be located immediately behind the appliance.

Prepare the Base Support

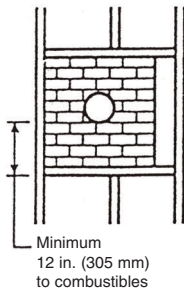
In order to allow for lengthwise thermal expansion, the Super-Flow™ liner must not be anchored at the chimney top. It must therefore be supported at the bottom of the liner. The weight of the liner must not bear on the bull (snout) of the tee. Instead, a firm support must be provided directly underneath the lowest tee. The simplest way to provide proper support for the liner is to fill the chimney with rubble or sand up to the level of the bottom of the tee. If you use loose rubble, pour a cap of mortar or concrete on top of the rubble to avoid settling problems. Then top off the fill with sand up to the level of the tee. If the length of the chimney below the tee or other condition makes filling the chimney impractical, make a support from threaded rods inserted across the interior of the chimney. Use threaded rods at least ⅜ inch in diameter. With a masonry bit slightly larger than the rods, drill two holes through the chimney wall, and corresponding holes at least two inches deep into the opposite wall. Locate the holes at the level of the bottom of the tee, close enough together so the tee will rest evenly on the rods.



Cut the rods to the width of the chimney flue plus about four inches. Insert each rod through the first chimney wall, and thread two nuts on to the end of the rod inside the

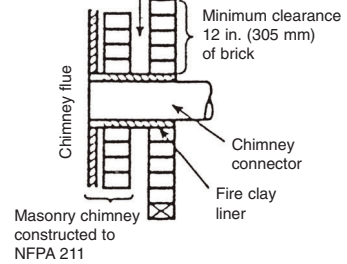
Chimney Connector Systems and Clearances from Combustible Walls for Residential Heating Appliances

A

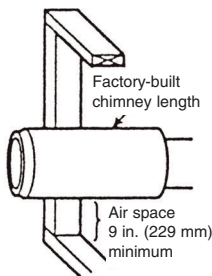


Minimum 3.5-in thick brick masonry all framed into combustible wall with a minimum of 12-in brick separation from clay liner to combustibles. The fireclay liner shall run from outer surface of brick wall to, but not beyond, the inner surface of chimney flue liner and shall be firmly cemented in place.

Minimum chimney clearance to brick and combustibles 2 in. (51 mm)

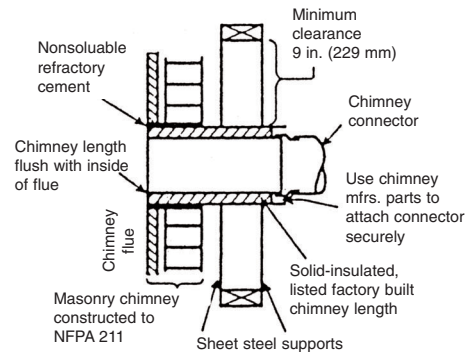


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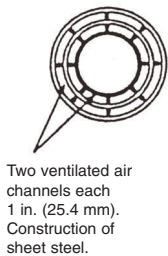


Solid-insulated, listed factory-built chimney length of the same inside diameter as the chimney connector and having 1-in. or more of insulation with a minimum 9-in. air space between the outer wall of the chimney length and combustibles.

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

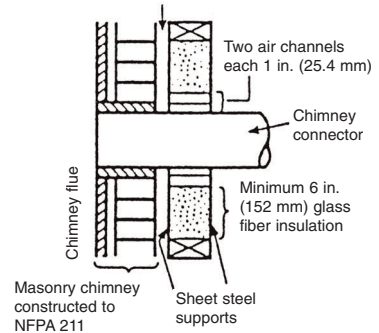


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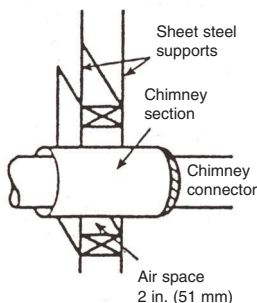


Sheet steel chimney connector, minimum 24 gauge in thickness, with a ventilated thimble, minimum 24 gauge in thickness, having two 1-in. air channels, separated from combustibles by a minimum of 6-in. of glass fiber insulation. Opening shall be covered, and thimble supported with a sheet steel support,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

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

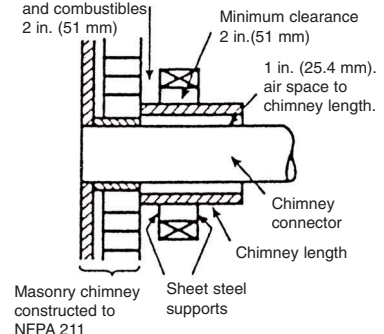


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Solid insulated, listed factory-built chimney length with an inside diameter 2-in. larger than the chimney connector and having 1-in. or more of insulation, serving as a pass-through for a single wall sheet steel chimney connector of minimum 24 gauge thickness, with a minimum 2-in. air space between the outer wall of chimney section and combustibles. Minimum length of chimney section shall be 12-in. chimney section spaced 1-in. away from connector using 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 securely fastened to wall surfaces of minimum 24 gauge thickness. Fasteners used to secure chimney section shall not penetrate chimney flue liner.

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



chimney. Turn the second nut until it is about two inches from the end of the rod. Continue inserting the rod through the hole and guide the end into the hole in the opposite wall, inserting it until the nut meets the wall. Turn the other nut until it is snug against the opposite wall of the chimney, holding the rod firmly in position. Close up the holes in the chimney wall with mortar.

Prepare and Assemble the Liner

Note: Do not substitute any other materials or components for those specified in these instructions. Doing so will void any warranty and may render the liner system unsafe.

You are now ready to assemble and prepare the Super-Flow™ liner. In this section you will select the liner components needed for the installation and assemble them.

Select the Necessary Components

Using the measurement obtained by measuring the chimney as described above, determine the total length of the Super-Flow™ liner and the components you will need. The liner will extend from the bottom of the lowest tee to at least 4 inches, but not more than 6 inches, above the top of the chimney crown or projecting flue liner. You may trim the top of the Super-Flow™ liner section to length.

With tape measure, measure and mark Super-Flow™ liner (Proceed to cut with hack saw, manual or electric. Lay cutting blade between ribs. Wearing eye protection and gloves rotate liner as blade follows interlock channel. At 350° cross over ribbed seam to complete cut. File any rough edges. Observe marked flow direction. Arrow indicates top, or this end up.

Assemble the Components

Super-Flow™ liner is available in 5', 25', and 50' lengths. Care should be taken in preparation for installation of insulated coils. When installing from rooftop a maximum wrapped section length of 25' is suggested. Maximum Super-Flow™ liner length is 150 feet.

Uncoil roll of Super-Flow™ flexible stainless steel chimney liner on flat level surface.

Begin by connecting the first Super-Flow™ roll to the lowest tee. If you are using a two part tee and the bull (snout) is still attached, turn the tightening screw with a long screwdriver until the band is loose enough to slide off the tee. Set the bull aside.

IMPORTANT: SUPER-FLOW™ LINER TEE INSTALLATION DIFFERS FROM OTHER LINER TO TEE CONNECTIONS. TEE IS ATTACHED INTO INSIDE OF TWO PLY LINER, NOT OVER THE OUTSIDE OF LINER.



Degrease and wipe clean the outside of the top (male) end of the tee and the lower (female) end of the liner section. Apply an approximately 1/8 inch bead of Red silicone to the liner section, about 1/2 inch from the end. Insert this female end all the way onto the male end of the tee, while rotating the pipe slightly. Be sure the tee extends into the inner wall the Super-Flow™ two (2) inches and drill into the liner for rivet placement ONLY



when the tee is in place. The tee holds the inner wall securely so it can be drilled without pushing the inner wall in and preventing a drill hole from being made through both walls of the two ply liner.

Drill four $\frac{5}{32}$ inch holes through the mated tee and Super-Flow™ liner section. Fasten the sections together with $\frac{5}{32}$ " x $\frac{1}{4}$ " SUPER RIVETS. *You must use a minimum of four SUPER RIVETS to fasten each joint in the liner system.*

Seal and connect the tee cap to the bottom of the tee following the same procedure, only being sure to place the male end of the bottom of the tee into the female tee cap.

Use a 20 gauge Slip Connector to join two pieces of Super-Flow™ liner.

Insulate the Liner



The next step is to wrap the assembled Super-Flow™ liner with Cera-Foil insulation and cover the insulation with protective SUPER SKIN stainless steel mesh. To do these steps you will want a clean, dry, relatively flat open area.

Wrap the Liner Sections

Remove the Cera-Foil blanket from the carton and unroll it with the foil side down.

Position the Super-Flow™ liner section (with the riveted tee) on the edge of the blanket, and align the end of the blanket with the raised bead near the bottom of the tee. Mark the blanket at the other (upper) end of the liner section and cut off the blanket to this length.



Take the liner off the blanket and spray the inside surface of the blanket with spray adhesive. **Do not spray the portion of the blanket that will be below the top of the hole in the tee :** this will need to be loose in order to attach the bull (snout) after the liner is lowered in the chimney. Also, if more than one length of Super-Flow™ liner is being used, do not spray the upper two or three inches of the blanket, which will cover the female end of the pipe; this will also need to be loose. For the topmost liner section, end the blanket so that there will be about six inches of uncovered pipe below the top of the chimney. This is necessary to allow for thermal expansion of the liner.

Now place the liner section on the edge of the blanket and carefully roll them together, making sure that the end of the blanket stays even with the end of the pipe. Continue rolling until the blanket overlaps the beginning edge. Trim the blanket lengthwise to create an overlap of between one and two inches.

Pull back the edge of the overlap and spray additional adhesive on the inner surface of the overlapping blanket, about three feet at a time. Press the overlap together and hold for a few seconds. Once the entire seam is sealed, turn the liner over so its weight rests on the seam. Move on to measuring and wrapping the next liner section while the adhesive sets.



Next, apply 3 mil aluminum foil adhesive tape over the glue seam. Apply a single piece of tape lengthwise up the entire seam. Then apply short lengths of tape across the seam, approximately every six inches.

Wrap each of the Super-Flow™ liner sections according to the above procedure. For the topmost liner section, end the blanket so that there will be about six inches of uncovered pipe below the top of the chimney. This is necessary to allow for thermal expansion of the



liner.

Finally, use a sharp knife to cut away the blanket covering the hole in the tee(s). Trim the blanket so it is even with the lip around the edge of the hole.

Apply Protective SUPER SKIN

First, roll up the SUPER SKIN like you would fold down a pair of nylon stockings or long socks. You should end up with a thick ring of SUPER SKIN. Place the ring around the end of the first liner section (with the tee) and unroll a few inches so that the skin is about an inch beyond the edge of the blanket. Place a SUPER SKIN clamp around the skin just below the raised bead in the tee. *Position the tightening screw so that it faces the same direction as the hole in the tee.* Tighten the screw so that the SUPER SKIN is clamped tightly to the tee.



Continue unrolling the ring of SUPER SKIN, pulling it tight as you move up the pipe length. Tuck and fold over any excess SUPER SKIN so that the skin is snug against the outside of the blanket.



When you reach the other end of the liner pipe, install a SUPER SKIN clamp around both *the blanket and the skin, over the bead in the pipe about two inches from the end.* Be sure to leave the portion of the blanket covering the female end (if applicable in a multi-length installation of Super-Flow™) of the pipe loose, as you will need to push it aside in order to fasten Super-Flow™ sections together. Cut off the SUPER SKIN about an inch beyond the clamp.

Wrap 18 gauge stainless wire several times around the pipe near the clamp and secure it to the clamp. Continue wrapping the wire in a candy-stripe pattern, with one revolution about every 8 to 10 inches, to the other end of the pipe. Again wrap the wire several times around the pipe and secure it to the clamp.

Install the Liner in the Chimney



Installation of Super-Flow™ liner can be done from the top or bottom of the chimney. Many installations will use only one length of Super-Flow™ liner, but should your installation require more than one insulated length of liner and having assembled and insulated manageable sections of the liner, you are now ready to assemble them together while lowering the liner into the chimney. Before starting this process, double check to be sure that you have a safe working area at the top of the chimney. Make sure that the footing on the roof is secure, assemble and secure any scaffolding or other platforms, and make sure that electric lines and antennas are a safe distance from your work area.

Installation from the Top: Prepare the Liner for Lowering

Attach POLY-PRO ROPE with clip, to one end of liner, or with liner re-coiled, attach rope around center of rolled coil. Position one person on roof ridge on first roof level. Position coiled SUPER FLEX™ against ladder with top person pulling. Push liner smoothly up ladder rungs. Repeat steps per each roof level. (A portion of the cardboard from the HOLLOW WOOL™ carton may be placed over chimney crown to reduce friction during thenext step.) With liner on roof, feed POLY ROPE down flue. Now feed liner hand over

hand into flue, until base of liner TEE rests on BASE SUPPORT of flue. **NOTE:** If liner stops, lift liner 6" and drop. Repeat this a few times until liner continues down or rotate liner 360°, if possible, as this will spin SUPER FLEX™ liner off of obstruction or ledge. Center and align TEE opening if necessary.



Installation from the Bottom:

NOTE: If possible, it is often easier and faster to install your insulated Super-Flow™ flexible liner from the base of the flue, both fireplace and non fireplace flues.

Lay out proper DROP CLOTHS. On a non-fireplace flue, enlarge THIMBLE opening, allowing enough room to arch the liner upward, and at least 2" wider on the sides than liner diameter. Drill or punch a 5/32" hole 180° apart on the top end of the insulated Super-Flow™ liner. Attach Super-Flow™ NOSE CONE to liner. From chimney top, lower POLY ROPE or hoist cable down flue. Attach POLY ROPE with clip to NOSE CONE, or if using SUPER WINCH, attach WINCH CABLE to NOSE CONE.

Attach the Tee Bull

Once you have the liner bottom of the tee opposite the lowest hole in the chimney, rotate the liner as necessary so the hole in the tee is facing forward. With a long screwdriver, loosen the SUPER SKIN clamp and slide it from the bottom of the tee. Push the SUPER SKIN up the tee until it is above the hole in the tee. Carefully cut or tear the insulation blanket from the bottom of the hole to the end of the blanket. Push the blanket up the tee until it is also above the hole.

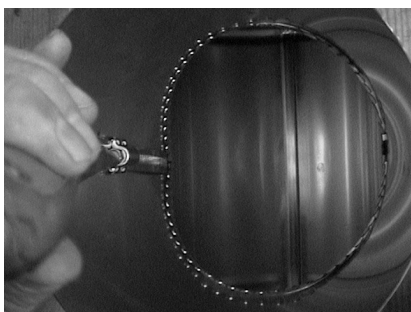


Determine the length of connector pipe necessary to extend completely through the chimney wall. Attach this section of connector to the end of the tee bull (snout), using the degreasing, cementing and riveting procedure described above.

Loosen the tightening screw on the bull so that the band will slide easily over the tee body. *Do not remove the band from the tightening screw.* Hold the bull in the hole in the chimney and position the looped band under the tee. Have an assistant lower the liner while you slide the bull up on to the tee. Position the bull so that the lip around the hole in the tee body is **inside** the bull. Lower the liner on to the base support.

Carefully apply red silicone all around the joint between the bull and the tee body, both inside and outside. With a wet finger push the cement into the joint and smooth it. With a long screwdriver, turn the tightening screw until the bull is clamped tightly to the tee body. Pull the insulation blanket back down and around the tee body, and rejoin the ends underneath the bull. Apply a strip of aluminum tape to hold these ends together. It is not necessary to replace the SUPER SKIN: it has done its job.

Complete installation of the tee by slipping a short section of insulation around the tee bull. It is not necessary to apply spray adhesive or SUPER SKIN, but do tape the seam with aluminum tape.



Finish the Chimney Base

If the connector must pass through a combustible wall, install a SUPER THIMBLE or equivalent wall pass-through assembly from Page 8 of this manual or Table 5-7 in NFPA 211. Close up the opening(s) in the chimney wall with brick and mortar, using a metal or clay tile thimble to protect the projecting tee bull and connector. Attach the appropriate

chimney connector, following the clearance and installation requirements in Chapter 5 of NFPA 211. Be sure to use at least three sheet metal screws or rivets to secure each connector joint and attach the connector to the appliance flue collar.

Finish the Chimney Top



To finish your Super-Flow™ liner installation return to the top of the chimney and install the termination components. Properly installed these will both secure and stabilize the liner, and provide a weathertight assembly that prevents the entry of moisture into the flue or space around the liner.

Apply the Top Plate and Clamp

Make sure that the top of the Super-Flow™ liner projects at least four inches, but not more than 6 inches above the top of the flue tile or chimney crown. Trim the top of the pipe with a metal cutting saw or shears as necessary. Make sure that the Cera-Foil insulation ends about 6 inches below the top of the tile or crown.



Clean the top of the projecting flue tile or the masonry crown, removing any foreign material, mortar droppings or loose granules. Make the surface relatively smooth and fill any significant cracks.

Apply a generous bead (at least ¼ inch) of silicone caulk around the top perimeter of the tile or crown. Clean and degrease the bottom of the top support plate, place it over the liner and press it firmly into the silicone, making sure that the caulk fills and seals all the way around.

Assemble the bolts on the top support clamps loosely enough so the clamp will slide easily over the liner. Position the clamp on the liner just over the top lip of the top plate and tighten the bolts with a ⅞ inch wrench.



Apply the Storm Collar and Rain Cap

Turn the tightening screw on the storm collar until it is loose enough to slide over the liner. Position it just above the support clamp and tighten the screw so that the collar is level and firmly clamped to the liner. Clean and degrease the collar and the liner and apply a sealing bead of silicone all around the circumference of the joint between the two. With a wet finger press the silicone into the joint and smooth.

Loosen the ⅞ inch bolt on the band of the rain cap so that it slides on to the liner. Position the band so that its top edge is even with the top of the liner. Tighten the bolt to clamp the rain cap tightly to the liner. Do not seal the rain cap to the liner with silicone, as the rain cap must be removed for future inspection and cleaning.



Installation of the Super-Flow™ liner is complete!

Maintenance Instructions

Like all chimney systems, the Super-Flow™ liner requires periodic inspection and maintenance, both to protect full warranty coverage and to provide continued safe and efficient operation.

The frequency and type of inspection and maintenance required depend on the type of appliance connected and the conditions of operation. The liner system should be inspected several times during the initial heating season to determine the frequency of future inspections. At minimum, the chimney and liner must be inspected at least once per year. This inspection must be performed by an authorized representative of Sleep Hollow Chimney Supply, Inc. or other CSIA Certified Chimney Sweep.

When wood is burned slowly it produces tar and other organic vapors which combine with moisture in the flue gases to form creosote. This creosote may collect on the inside surface of the chimney. Accumulation of creosote will be more rapid when the appliance is burned slowly, for extended periods with a large fuel load or limited air supply. If this creosote is ignited it burns intensely, with a very hot fire that can damage the chimney or spread to the house structure.

The inside of the liner must be inspected annually or more frequently as necessary to determine if a creosote build-up has occurred. If creosote has accumulated it must be removed to reduce the risk of fire.

To inspect the Super-Flow™ liner, loosen the $\frac{7}{16}$ inch bolt on the band of the rain cap and remove the cap. Use an inspection mirror, bright drop light or video inspection system to examine the entire length of the flue interior. If creosote is present clean the chimney with a sturdy round- or flat-wire brush, according to accepted chimney cleaning practices.

Also inspect the liner for loose, deteriorated or missing parts. If any parts require replacement, use only parts specified and supplied by Sleepy Hollow Chimney Supply. Substitution of unauthorized components may void any warranty and may create a fire hazard.

If a different appliance is to be connected to the Super-Flow™ liner in the future, that appliance must be listed and labeled for use with residential type chimneys. Do not connect a Category II, III or IV gas appliance, or any appliance which causes positive pressure in the venting system, to the Super-Flow™ liner. Any connected appliance must not have a flue outlet size larger than the chimney liner area at its smallest point, unless specifically allowed by appropriate codes or appliance manufacturer's instructions.

