THE LIFETIME LINING SYSTEM™
Installation and maintenance instructions for smooth and single wall chimney lining kits.

We recommend you use an experienced and qualified chimney professional to install your Lifetime Lining System.

The Lifetime Lining System from Lifetime Chimney Supply is intended for use as a masonry chimney liner only. The Lifetime Lining System has been tested and approved to UL1777 and ULC-S635 zero-clearance standards* for masonry chimneys serving gas, oil or wood-burning appliances.

All warranties, stated or implied, are void if this product is not properly installed in accordance with the instructions contained in this brochure and in accordance with local requirements. The listing for the Lifetime Lining System is void if components other than those supplied as listed components by this manufacturer are used.

*Zero-clearance tested and approved for gas and oil only by UL - Approval Code 3HXH. Applies only for 3” to 12” diameter sections.

It is important that this chimney liner be installed 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.

Liner systems designated LCS316, LCS304, LCS430, LCS446, LCS316-SW, LCS304-SW and LCS430-SW.

Lifetime Chimney Supply, LLC.
132 Dupont Street, Plainview NY 11803
THE LIFETIME LINING SYSTEM™
Smooth wall and single wall chimney lining kit
Available in 3" to 24" diameter sections from 10' to 100'

The Lifetime Lining System is intended for use with heating appliances vented through a masonry chimney that burn home heating oil, natural or LP gas and solid fuels (pellet, wood and coal). Use of experimental fuels voids the warranty. This lining system is not for use with Category II, III, or IV gas burning appliances as defined by the National Fuel Gas Code, NFPA 54, or other appliances that create positive pressures in the chimney system or that cause condensation of corrosive acids on the liner of the chimney.

The Lifetime Lining System is intended for use in an unlined chimney with at least a nominal 4" of masonry all around, a properly built masonry chimney with cracked clay tile liners, or to provide a properly sized flue for a heating appliance installed in a masonry chimney that otherwise meets existing codes. The Lifetime Lining System may be used to reline a fireplace chimney. The liner must be connected to the top of the smoke chamber by a bottom plate or other means that provides an air-tight and drip-free termination.

**PARTS LIST – The Lifetime Lining System Includes:**

- 1 Stainless Steel Liner
- 1 Stainless Steel Tee
- 1 Mortar Sleeve (optional)
- 1 Stainless Steel Single Wall Liner
- 1 304 Series Stainless Steel Rain Cap
- 1 Stainless Steel Tee Cap
- 1 Stainless Steel Top Plate

**INSTALLATION INSTRUCTIONS**

- If chimney requires field drilling, use a 1/4" stainless steel drill bit to drill through the inner section of the chimney liner section.
- Wall penetration assemblies are not to be located directly behind a heating appliance.
- The following criteria shall apply to a connector to a masonry chimney:
  - It shall extend through the wall to the inner face or liner but not beyond.
  - It shall be firmly cemented to masonry.
  - If a thimble is used to facilitate removal of the chimney connector for cleaning, the thimble shall be permanently cemented in place with high-temperature cement.
  - The effective area of a connector for a single appliance shall not be less than the area of the appliance flue collar, unless it is part of an engineered venting system.
- **Sizing:**
  - Size the liner according to equipment manufacturer's instructions and/or local building codes. The chimney liner must be sized no less than that specified in the appliance manufacturer's instructions.
- **Local approval:**
  - Contact local fire or building officials about restrictions and installation inspection in your area.
- **Cleaning existing chimney:**
  - The chimney must be clean and free of debris.
  - All soot, dirt and creosote including tar and glaze creosote must be removed prior to installation.
  - Proper clearing of the chimney is a warranty prerequisite.
  - The internal and external condition of the chimney must be checked for safety and repaired as necessary.
  - The chimney must terminate above the roof line as per NFPA-211.
  - Run a guide cone up and down the chimney to clear any obstructions and to ascertain that the liner diameter will pass through the chimney's flue opening.
- **Choosing the correct type of stainless steel:**
  - Type 304/316 (or 304L/316L), 430 and 446 stainless can be used for wood, oil and low efficiency gas appliances. Type 304/316 can also be used as a fireplace liner. The high efficiency gas furnaces require another type of venting system. Refer to the manufacturer's installation instructions before connecting a liner to a gas appliance.
- **Connection to UL listed direct connect system:**
  - The liner system may be connected with a UL listed direct connect system which is installed in accordance with the manufacturer's instructions. You must use a stainless steel pipe connector or stainless steel transition or slip connector to make the connection. The liner must also be sized (cross sectional area) the same as the direct connect system.
- **Pull through wall direct connect:**
  - To connect liner directly to the unit pull liner through the wall while passing the liner inside mortar sleeve at the base of the wall so that the liner does not touch the coment while passing through the wall. Connect the UL approved liner to appliance using either a direct connection or a UL listed connector. Then seal the hole in the wall with high-heat furnace cement.

- **Liner installation:**
  - Inspect the chimney for cracked, loose or missing bricks or stones. Check for missing mortar joints. The chimney must be a minimum of 4" thick throughout. No chimney should be relined that is not structurally sound. Also inspect the space clearances between the exterior of the masonry chimney and any combustibles. These clearances must be in accordance with current NFPA 211 standards or the local building codes. Check the height of the chimney to be certain it conforms to the recognized regulations.
  - This installation must include the rain cap, a protective covering or housing for the top of the chimney intended to prevent the entry of rain, snow, animals and birds, and to prevent down drafts.
  - Initial installation of chimneys, fireplaces and vents shall allow inspection of the surroundings to determine that the required clearances have been maintained and that correct provisions for support, stabilization, future inspection and maintenance are in place.
- **Minimum air space clearance:**
  - Solid Fuel: 1" (25mm)
  - Gas/Oil: 0" (0mm)
- All wood beams, joists, studs and other combustible material shall have a clearance to masonry fireplaces as follows:
  - No less than 2" (51mm) from the front faces and sides
  - Not less than 4" (102mm) from the back faces of masonry fireplaces
- The chimney liner in sizes 1/4" ID through 24" ID will be intended to vent Category I gas-fired appliances and

* Incorrect sizing for low temperature flue products in regions that experience sustained low ambient temperatures can result in excess condensation, creosote formation, and inadequate draft.
INSTALLATION INSTRUCTIONS CONTINUED

- Install oil-fired appliances while maintaining a 1" clearance within the annular space between the liner and inside masonry chimney and 1" clearance from outside masonry chimney and combustible construction.

- Remove a sufficient amount of brick and mortar to allow access for the installation of the tee's snout at the base of the chimney where the heating appliance vent connector attaches to the tee of the lining system.

- Separate the tee from its snout.

- Attach the tee to the liner with the fasteners provided. Drop or pull the liner with the attached tee, without the snout, through the chimney until the tee rests in the base of the chimney where the brick and mortar were previously removed.

- Attach the snout and place the end-cap on the bottom of the tee with the fasteners provided.

- Attach the pipe connecting the heating appliance to the tee's snout.

- Seal the area around the tee where the brick and mortar were removed with a furnace cement product.

- Using a high-temperature silicone product, seal the joints where the snout of the tee connects to the pipes from the heating appliance.

- Connect the heating appliance vent connector to the Lifetime Lining Tee System as per local code and appliance manufacturer's written instructions.

- Slide the top plate over the liner and place on the clay tile and center.

- Mark the outline of the clay tile on the underside of the top plate.

- Remove and trim the top plate to the size marked. Trim the liner so that 4" of liner extends above the top of the clay tile.

- Apply a wide bead of high-temperature silicone around the top surface of the clay tile.

- Place the top plate over the liner and slide down onto the silicone.

- Hold in place firmly to create a good seal.

- Screw the four fasteners provided through the 2" collar of the top plate and into the liner.

- Do not overtighten the fasteners.

- Apply a bead of high-temperature silicone to the inside of the top section of liner and to the lower section of the rain cap.

- Place the rain cap into the top section of the liner and push down until the stop bead of the rain cap meets the liner.

- Remove excess silicone.

- Two pieces of Lifetime smooth wall chimney liner may be joined together with the proper connector and fasteners from Lifetime Chimney Supply.

- The joints must be sealed with high-temperature silicone.

- If additional oil or gas appliances need to be connected to the Lifetime smooth wall or single wall chimney liner the following methods are acceptable and will not void the warranty:
  - Use a second tee with the correct size takeoff. Install the tee onto the Lifetime smooth wall or single wall chimney liner then connect the appliance tee to it using tex screws or rivets.
  - Install the snouts of both tees as stated in the instructions above.
  - Remove the cut-out portion of the liner.
  - Attach the liner to the appliance using the tee snout.
  - Feed the draw band around the liner and into the turn buckle and tighten.
  - Apply a bead of high-temperature RTV silicone between the tee and the liner.
  - Seal the area around the liner and the snout as instructed above.

**Initial firing:**

- Before the initial firing of the appliance, check the appliance's operating instructions for initial firing precautions.

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* Listed caps with screening are necessary and/or required in some areas but may be susceptible to frozen moisture blockage in low ambient regions. Consult authority having jurisdiction.

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**TYPICAL FACTORY-BUILT FIREPLACE RELINING INSTALLATION**

**TYPICAL BURNER RELINING INSTALLATION**
THE LIFETIME LINING SYSTEM™ WARRANTY

Lifetime Chimney Supply, LLC. guarantees the Lifetime Lining System stainless steel chimney liner and components are free from manufacturer's material and workmanship defects, corrosion or perforation caused by chimney fires. Lifetime warranty for wood, wood pellets, gas and oil installations when used to vent residential UL listed heating appliances that are Category I residential gas or oil burning heating and hot water systems including gas fireplaces, gas logs, oil stoves, wood-burning stoves and fireplaces. Lifetime Chimney Supply, LLC. guarantees the original purchaser for the lifetime of the product as long as said purchaser owns the home in which the Lifetime Lining System stainless steel chimney liner was originally installed. This warranty is subject to the following conditions:

- Lifetime Lining System stainless steel chimney liner and components must be installed by a certified solid fuel professional and in accordance with these written instructions.
- Lifetime Lining System stainless steel chimney liner and components are intended for use in lining and relining masonry chimneys that vent a tested and approved or listed residential appliance for which Lifetime Lining System stainless steel chimney liner and components are intended.
- Annual inspections, maintenance and cleaning must begin one year after the date of the installation and continue once every twelve months thereafter by a certified chimney sweep or a qualified solid fuel professional.
- The chimney must have a Lifetime Chimney Supply chimney cap.
- Corrosive chemical chimney cleaners must not be used and their use will void the warranty.
- Driftwood or wood pellets containing salt, treated lumber, plastics, the chimney sweeping log or trash must not be burned and doing so will void the warranty.
- The maintenance record must be up-to-date.
- Never use a metal chimney cleaning brush. We strongly recommend the use of a plastic bristle chimney cleaning brush as metal brushes can damage the liner and will void the warranty.

In case of a chimney fire the liner must be inspected and cleaned by a certified chimney sweep or a qualified solid fuel professional before reuse. If you should need to make a claim under the conditions of this warranty, you must contact the original installer who will provide Lifetime Chimney Supply, LLC. with information about your claim. Should a factory inspection of the defective parts in question be required by Lifetime Chimney Supply, Lifetime Chimney Supply will pay the shipping cost for the return of the defective parts in question. If Lifetime Chimney Supply deems the parts to be defective, Lifetime Chimney Supply will replace the parts at no cost to the original purchaser and said replacement will be Lifetime Chimney Supply’s exclusive and final remedy under this warranty. Lifetime Chimney Supply shall not be liable for any costs for the removal or re-installation of the liner or any liability for special consequential or incidental damages in any way related to or arising out of defects in or damage to the liner. Lifetime Lining System stainless steel chimney liner has been tested and approved to UL1777 zero-clearance standards* and all component parts have been tested and listed by UL*. A copy of the test report is available upon request by your installer. Lifetime Chimney Supply makes no warranty, express or implied, of merchantability or fitness for a particular purpose or otherwise. This warranty gives you specific legal rights. You may have other rights which vary from state-to-state concerning exclusion or limitation of incidental or consequential damages.

*Tested and approved by UL - Approval Code 3F9K1 - All Lifetime Lining System™ components are UL listed. © Lifetime Chimney Supply, LLC.

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Lifetime Chimney Supply, LLC.
132 Dupont Street
Plainview NY 11803
INSULATING THE LINER PIPE INSTRUCTIONS (REQUIRED FOR ALL SOLID FUELS)

Heat-Feb 6600 Saf-T Wrap Insulating Blanket Wraps
(Caution: Foil edges of insulating wrap are very sharp. Handle with care.)

- Make sure that the bottom connector, either a tee connector or a universal connector, has been installed.
- The liner must be insulated from the bottom of the connector to the crown. In the case of a tee connector, the liner must be insulated from where the tee cap is installed up to the crown; with a universal connector, from where the connector would stop on insertion into the heating appliance up to the crown. After determining the distance, roll out the insulating wrap and cut it to the proper length.
- The insulating wrap must overlap along its length by a minimum of 1 inch. To ensure that you will have the proper width of insulating wrap multiply the liner diameter by 3.14 plus 1 inch for overlap. Although it is not necessary, you may trim the insulating wrap to this amount if you wish. A wider overlap than 1 inch is allowed but may cause difficulty installing in tight clearance situations.
- Place the insulating wrap foil face down on a level surface. Lay the liner and its bottom termination connector (previously attached) in the center on the insulating wrap. Line up the bottom connector as outlined in the second paragraph. Remember that at the top the insulating wrap will be even with the chimney crown.
- Start wrapping the insulating wrap around the liner pipe. Hold the wrap in place with foil tape at approximately 1 foot intervals making sure to overlap the insulating wrap by a minimum of 1 inch. You may use spray adhesive to assist you in holding the insulating wrap against the liner pipe.
- When the insulating wrap is in place around the liner pipe, apply a continuous length of foil tape from the top to the bottom of the overlapped insulating wrap seam.
- Encapsulate the insulated liner using retractor wire mesh. Unroll the correct size wire mesh and pull it over the entire length of the insulated liner pipe. At the bottom of the insulating wrap secure the mesh and insulating wrap in place with a stainless steel hose clamp. At the top of the liner pipe stretch the wire mesh tight and while holding the mesh tight, clamp the insulating wrap and the wire mesh in place with a stainless steel hose clamp. Trim away any excess wire mesh. With long liner lengths you may also wrap the entire insulated liner pipe with stainless steel wire wrapped spirally and twisted on itself at each end to hold it in place. The insulated liner pipe is now ready to be installed.

MAINTENANCE INSTRUCTIONS

- Cleaning of chimney, if necessary, shall be done by methods that do not impair structural or thermal performance.
- To maintain this warranty the liner assembly must be cleaned and inspected by a certified solid fuel technician yearly before each heating season to ensure that it is free of debris, creosote and condensation and that all parts are in good condition.
- A written maintenance record must be kept by the homeowner on the warranty card provided.

Creosote and Soot-Formation and the Need for Removal

- When wood is burned slowly, it produces tar and other organic vapors, which combine with expelled moisture to form creosote. The creosote vapors may condense on the inside of the chimney liner during slow-burning firing periods. As a result, creosote residue accumulates on the chimney liner. When ignited, this creosote makes an extremely hot fire. The chimney liner system should be inspected at least once every two months during the heating season to determine if a creosote or soot buildup has occurred. If creosote or soot has accumulated, it should be removed to reduce the risk of a chimney fire.

Fill out completely, cut out and mail.

Customer Name:

Address:

City: State: Zip:

Phone: Email:

Installer Name:

Company:

Company Address:

City: State: Zip:

Phone: Email:

Installer Signature: Date:

Number of Chimneys Lined: Height of Each Chimney:

Type of appliance vented: □ Stove: ☐ Fireplace: □ Pellet Stove
□ Oil ☐ Gas ☐ Wood ☐ Gas ☐ Wood ☐ Insert ☐ Gas Log ☐ Wrap ☐ None
□ Heating System: ☐ Water Heater:
☐ Oil ☐ Gas

www.northlineexpress.com

CALL: 1-877-734-2458
# MAINTENANCE RECORD

After each annual inspection, cleaning and maintenance please have the installer fill out and date the appropriate section of this card. After the first year please keep separate records of inspection, cleaning and maintenance for each year as required by this warranty.

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