

Installing a Woodstove in a Masonry Fireplace

Both woodstoves and fireplace inserts can be installed in a masonry fireplace. Good performance depends on how close conditions are to being ideal. There are two factors that come into play -- 1) the tightness of the seal between the chimney connector and the masonry liner and 2) the warmth of the flue gases as they flow up the chimney.

If either of these two factors is missing, your installation will have poor “draft”. (Draft is defined as the suction provided by the chimney.) Strong draft is one of the most important components of woodstove performance. Poor draft makes the appliance hard to start, smoky and limits its heating power.

1) Tight Seals - The best way to create a tight seal is to use a block-off plate at the fireplace’s damper. Blocking off the damper opening keeps warm air in your house instead of letting it escape up the chimney. More importantly however, it makes a good draft possible. Leakage into the chimney from the house steals draft.

Without a block-off plate, the chimney cannot provide full draft to the stove. Instead, some of the draft pressure’s power (suction) is diverted or stolen by the leaks.

2) Warm Flue Gases - The best way to ensure that flue gases stay warm enough is to install as direct a connection as possible between the appliance and the first section of the chimney’s flue liner. The throat of the fireplace (located above the damper), is much larger than the liner. The flue gas enters this cavity and often lingers there sluggishly. This allows the flue gases to cool off. A cool chimney contributes to a sluggish draft and encourages creosote formation.

Installing a direct connection to the tile chimney liner enables the flue gases to completely by-pass the throat area. This keeps flue gases warmer and promotes strong draft in the system. Furthermore, a direct connection eliminates the most difficult to clean part of the installation. (In installations without a direct connection, creosote accumulation is often the worst in the fireplace throat. This irregularly shaped cavity is almost impossible to clean thoroughly because conventional chimney brushes don’t work.)

In most fireplace installations, a direct connect is all that is necessary to provide an adequate draft. However, some fireplace flue liners, although fine for typical fireplaces, are far too large for modern woodstoves.

Oversized flue liners contribute to rapid cooling of the flue gases. (Any chimney that is over 20% larger than the appliance flue collar is moderately “oversized.” However, full relines are not usually required unless the flue liner is more than three times larger than the appliance flue collar.) The problem is exacerbated if the chimney is outside the exterior walls of the house.

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Exterior chimneys are cooled by the surrounding outside air and often have insufficient draft as a result. If the chimney is very large or on an outside wall, a complete reline of the chimney may be necessary. A complete chimney reline reduces the size of the liner and adds an insulating air pocket. As a result, the flue gases stay warmer and make it easier for the chimney to provide a strong draft.

A full reline is always the best way to install a woodstove into a fireplace. However, the cost --- usually in excess of \$15 per foot --- is often difficult to justify. For detailed estimates, call our store and discuss your installation with one of our wood heating professionals. Measure the inside dimensions of your chimney and its overall length before calling.

Possible problems with this type of installation: Proper cleaning is an important part of your long-term maintenance. Without proper cleaning any installation, no matter how safely designed, can result in a life-threatening fire. Creosote deposits are a primary cause of chimney fires. Make sure your installation is properly cleaned on a regular schedule or whenever creosote deposits exceed a eighth of an inch in thickness.

In any chimney cleaned the conventional way using chimney brushes from the top, the creosote falls down into the bottom. With a Clay Liner Plate, this creosote falls down into the bottom of the liner where it is easily emptied. If there is no Clay Liner Plate on the direct connect kit, the creosote piles up on the smoke shelf. (The smoke shelf is right beside the damper block-off plate.) Creosote that collects there must be removed. You can install a cleanout door on the back of the fireplace throat to enable this. A cheaper but less convenient method is to remove the block-off plate and sweep off the shelf. You must either use an optional Clay Liner Plate, install a cleanout door on the back of the chimney throat or periodically remove the block off plate for cleaning.

Direct Connection Kits

Lehman's carries direct connect kits for all common installations. Our kits include a tight sealing block-off plate and flexible stainless steel pipe that can be bent to accommodate almost any fireplace. The flexible pipe is supported by metal legs that help hold it in position.

Best of all, the direct connect kits can be extended to run the entire length of the chimney *at any time*. This allows you to install the stove with a direct connect kit then add a full chimney reline later only if it is needed. In fact, a full-line of accessories give you easy adaptation to any installation.

To order your Direct Connect Kit, see "Direct Connect Kit Parts Sheet" attached. If you need advice, call for a personal consultation with one of Lehman's wood heating professionals.

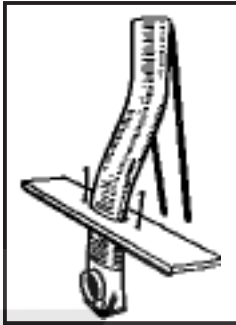
Direct Connect Kit Parts Sheet

Updated October 2007

Prices do not include shipping.

FlexLine™ Fireplace Connectors

Each connector kit contains 4' of oval flexpipe, a 48" block-off plate, hi-temp gasket, stove fitting*, support poles and hardware.



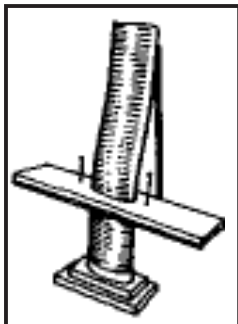
Model 4876, 4877
and 4888



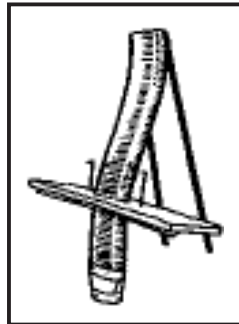
Model 4866A and
4886A

Part #	Inlet Size	Flexpipe Size
4876	6" round	4 1/4" x 9 1/2" x 4' (7" oval)
4877**	7" round	4 1/2" x 11" x 4' (8" oval)
4888	8" round	4 1/2" x 14 1/4" x 4' (10" oval)
4866A**	6" oval	4 1/4" x 7 3/4" x 4' (6" oval)
4886A	8" oval	4 1/2" x 11" x 4' (8" oval)
4706	8" x 16"	4 1/4" x 9 1/2" x 4' (7" oval)
4880A	8" x 16"	4 1/2" x 11" x 4' (8" oval)
4808	10 1/2" x 18"	4 1/2" x 14 1/4" x 4' (10" oval)
4875	6" round	4 1/4" x 9 1/2" x 4' (7" oval)
4885A	8" round	4 1/2" x 14 1/4" x 4' (10" oval)
4887	8" oval	4 1/2" x 11" x 4' (8" oval)
4889	10" oval	4 1/2" x 14 1/4" x 4' (10" oval)

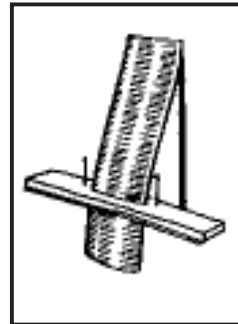
Model 4889 is ideal for use with the Vermont Castings WinterWarm Fireplace Insert.*



Model 4706, 4880
and 4808



Model 4875
and 4885A



Model 4887
and 4889

*Stove fitting not included in kits 4887 and 4889. Starter Piece must be purchased separately to complete kits 4887 and 4889.

**Special order only.



Model 4142, 4143,
4144 and 4145A


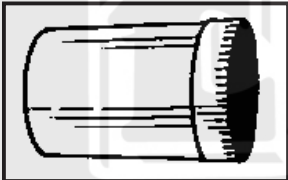



Starter Pieces

A Starter Piece must be purchased separately to complete kits 4887 and 4889.

Part #	Size	Description
4142	0° angle	Fitting for kit 4889
4143	20° angle	Fitting for kit 4889
4144	30° angle	Fitting for kit 4889
4145A	45° angle	Fitting for kit 4889

*The above can be used with Vermont Castings WinterWarm Fireplace Insert.**

Accessory Parts for the FlexLine™ System

	Part #	Size	Description
Clay Liner Plate 	4855	7" oval	Fits 8"x12" liner
	4856	7" oval	Fits 12"x12" liner
	4857	8" oval	Fits 8"x12" liner
	4858	8" oval	Fits 12"x12" liner
Oval Stove-to-Tee Fitting 	6611	6" oval	12" length
	6811	8" oval	12" length
Oval Rigid Extension 	6712	7" oval	12" length
	6724A	7" oval	24" length
	6812A	8" oval	12" length
	6824	8" oval	24" length
Jack Supports 	4840A		Use in place of hangers when damper not present
Hanger Extensions 	4841A		Adds 10" of length to hangers

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