



## **INSTALLATION INSTRUCTIONS**

## MODEL GA CHIMNEY LINING SYSTEM

**ULC Listed S635** 

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#### GAS CHIMNEY LINER INSTALLATION

Model GA chimney liner kits are intended for use with listed gas or propane fired appliances. Install in accordance with local building codes. Permits may be required, consult authority having jurisdiction before installation.

### NOTE: THE FOLLOWING RULES MUST BE OBSERVED DURING INSTALLATION.

Liner must be installed in a continuous length with a maximum height of 65 feet (20 meters). The minimum clearance from liner to the inside of chimney is zero. The installer must post the completed date of installation notice at the point where the connection is made to the appliance. This notice must include the date of installaiton, the manufacturer's name, the model number, and class of lining system. The correct sizing for the venting of low temperature flue products in geographical areas experiencing sustained low ambient temperatures must be strictly adhered to. The liner must not be sized less than specified in the appliance manufacturer's instructions. Any heating appliance connected to the lining system must not have a flue outlet size larger than the liner area at its smallest point, unless a qualified person has sized the liner to suit the appliance. Do not place insulation or other materials in required spaces surrounding the liner unless specified. The safe operation of the **Z-FLEX** lining system is based on the use of parts supplied by **Z-FLEX**. Its performance may be affected if these parts are not properly used in liner installation. Acceptance of the lining system is void if the installation instructions are not followed. Rain caps must be used to prevent moisture from entering he liner. Listed rain caps incorporating bird screens are necessary and/or required in some areas but may be susceptible to blockage through freezing moisture in areas of low ambient temperature. Consult authority having jurisdiction. Sharp bends that crimp and restrict the cross section of the liner are prohibited.

# INSTALLATION PROCEDURE IN MASONRY CHIMNEY KIT INCLUDES:

GAS LINER, MORTAR GUARD, RAIN CAP, FLASHING, SELF-TAPPING SCREWS & 6" to 5.5 reducer in 5.5" KITS

## TOOLS REQUIRED: DUCT TAPE, SCREWDRIVER, 5/8" ROPE LENGTH AND KNIFE.

**NOTE:** Sharp bends that crimp and restrict the cross-section of the liner are prohibited. Prior to liner installation, the chimney must be thoroughly cleaned and checked for cracked, loose, or missing bricks, mortar, or other materials that could inhibit the correct installation of 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.

## Read all instructions prior to installing and using appliance.

- The opening at the chimney base must be large enough to accept the mortar guard plus allow room for mortar.
- 2. The liner must be extended to its maximum length before installation.
- 3. Feed liner down from top of chimney, allowing approximately 12" to extend through basement wall. (NOTE: An installation guide cone may be purchased from Z-FLEX to help guide liner down chimney. Feed rope through guide cone and tie a knot in the end of rope. Attach cone to liner using duct tape or screws and pull liner down chimney using rope. DO NOT USE EXCESSIVE FORCE.)
- **4.** Allow 6" to 12" of the liner to extend above the top of the chimney to attach the rain cap. Centre the liner at the top of the chimney using a non-combustible material, such as fiberglass insulation. Leave a 4" space above the insulation for cement mixture to secure liner. Pour cement around liner as illustrated in drawing. The cement must be bevelled to allow for proper water run off.

**NOTE:** A chimney flashing, purchased separately from **Z-FLEX**, may be used instead of cement. The flashing should be lagged to the top of chimney, trimmed and sealed with caulking.

- **5.** Trim the liner to the required height and secure rain cap with three evenly spaced screws.
- **6.** At the chimney inlet, remove guide cone (if used) and place the mortar guard around liner. Mortar the guard in place per illustration (see back page). This step is not necessary when installing a fireplace insert.

### INSTALLATION PROCEDURE IN FACTORY-BUILT CHIMNEY

Prior to installation of the **Z-FLEX** lining system in a factory-built chimney or vent, the chimney must be cleaned and checked for any structural defect. It must be determined that all parts specified by the chimney or vent manufacturer, (e.g., support, radiation shield, fire stop, etc.) are installed and that the correct air space clearance between the chimney or vent exterior casing and combustible material is in accordance with the installation instructions. Read all instructions prior to installing and using appliance.

**NOTE:** The flashing needed for a factory-built chimney installation is available from **Z-FLEX** as an optional part.

- 1. Prior to installation, extend liner to its maximum length.
- **2.** Feed the liner down the chimney (use guide cone if necessary) leaving 6" to 12" extending above the chimney top to attach the rain cap.
- **3.** The flashing can now be slipped over the liner and fastened to the top of chimney using appropriate screws. Next, trim the flashing to fit and seal to the chimney so as to prevent moisture entering the liner, the space between the liner and the factory built chimney, and the chimney insulation. (See illustration)
- 4. Trim the liner to the required height and secure rain cap with three evenly spaced screws. (See illustration)
- 5. The liner should now be trimmed at chimney base and connected to the appliance in accordance with local codes.

#### MAINTENANCE INSTRUCTIONS

- a. The Z-FLEX lining system must be checked at least once annually by a company representative or a certified chimney sweep after the initial installation of the lining system.
- **b.** Periodically, check for condensation at the bottom fittings or down-drafting at the appliance. If either of these conditions are evident, have the entire system checked by a qualified technician.
- **c.** The rain cap may be removed for inspection by the removal of the three fastening screws.

#### NOTES

- Chimney liner components manufactured by ECCO Manufacturing may be used with Z-FLEX Chimney Liners if installed using ECCO installation instructions.
- **ii.** Chimney liner components manufactured by **Z-FLEX** may be used with ECCO Chimney Liners if installed using **Z-FLEX** installation instructions.

