

# INSTALLATION AND OPERATION INSTRUCTIONS FOR THE



## Model: **AK-225 OUTSIDE AIR KIT**

The Hearth Technologies AK-225 Air Kit is used to bring in outside make-up and combustion air to Heat-N-Glo solid wood fuel fireplaces and some gas fireplaces. Check the fireplace instructions.

The air that is drawn into the fire chamber from outside the home or unheated area helps relieve the demand for combustion air being drawn into the fireplace from inside the home.

### CONTENTS OF SHIPPING CARTON

Compare contents of the shipping of the carton in Figure 1 with actual parts received. If any parts are missing or damaged, contact your dealer before starting installation.

**NOTE:** 4-inch Class 1 ducting material or metal duct may be used with AK-225.

**WARNING:** Six inch duct must be used with Model HST-38MH for installation in a mobile home. (For installation in the state of New York, only aluminum non-combustible flexible or type "0" metal ducting is permissible).

### INSTALLATION PRECAUTIONS

The duct termination should be located so it is exposed to an out-of-doors opening at least 100 square inches. If the duct termination must be located in a crawl space or basement, be sure the termination area has 100 square inches of ventilation opening to outside air.

The duct termination must be located so it does not compete for air flow with exhaust fans, gas vent hoods or other air consuming devices or appliances. It must not be obstructed by rafters, insulating materials, or other obstructions. The less restrictive the air supply, the better the AK-225 will perform.

It is good practice to protect your hands and eyes during installation by wearing work gloves and safety glasses.

**CAUTION: DO NOT INSTALL THE DUCT TERMINATION INTO A GARAGE OR OTHER AREA THAT COULD CONTAIN FLAMMABLE LIQUIDS OR FUMES, OR INTO AN ATTIC SPACE.**

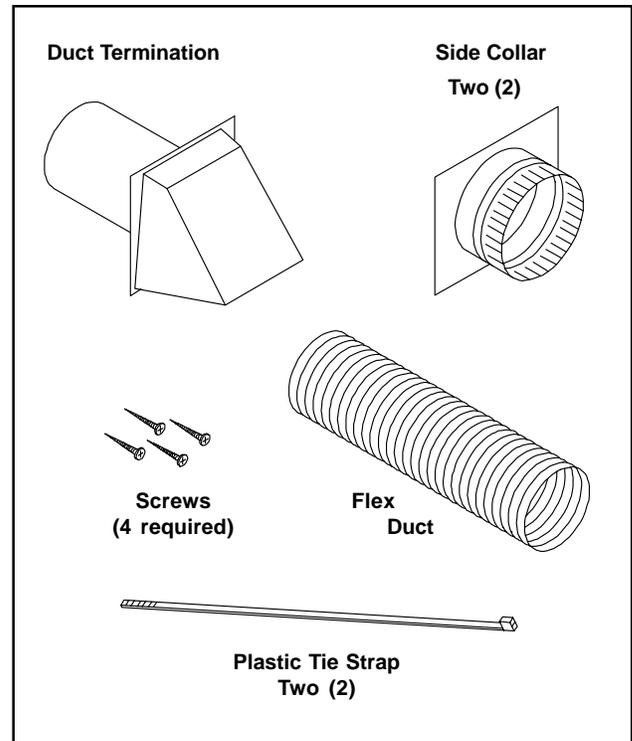
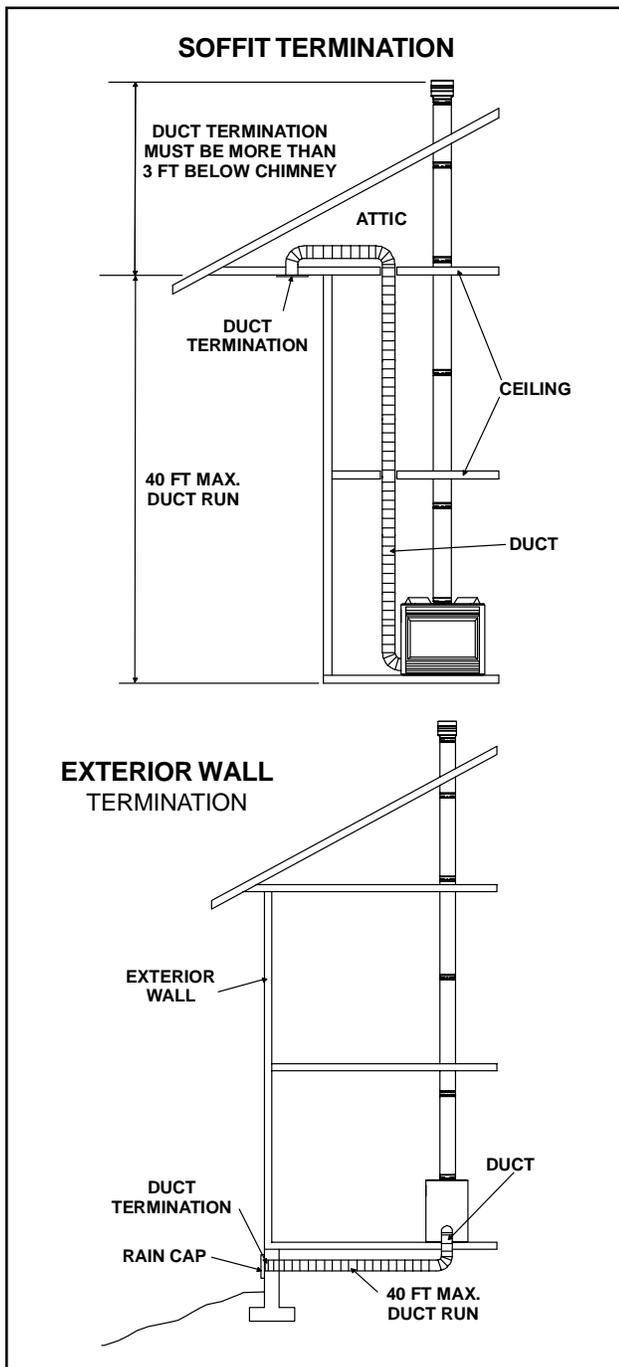


FIGURE 1. CARTON CONTENTS

### INSTALLATION INSTRUCTIONS

Determine the location of the fireplace as described in the fireplace installation manual. Then plan the location of the duct termination and the route of the duct run between the fireplace and the duct termination.

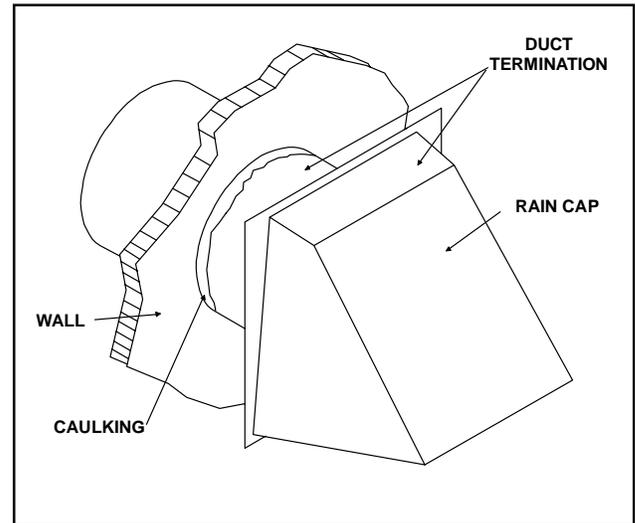
The duct run must be limited to a maximum distance of 40 feet from the fireplace pipe collar to duct termination. This will provide the least restriction to air flow. No more than four 90 degree elbows can be used. The duct run may be horizontal, vertical inclined or any combination of these for all models. Vertical duct runs must be at least three (3) feet below the fireplace chimney flue exit. See Figure 2.



**FIGURE 2**

1. Remove and discard the outside air knockout (or cover plate) located at the side or bottom of the fireplace. Use care not to rub against the sharp edges of this opening to avoid cuts. Some appliances may not have a cover plate.
2. Attach the side collar with four (4) screws to the side or bottom of the fireplace. Slide the duct over the collar and attach the duct to the collar using the plastic tie straps or three (3) screws (screws not provided). Continue attaching the ducting together using three (3) screws at each joint until you have installed sufficient duct to arrive at the duct termination location.

3. Install the duct termination from the outside of the home and cover it with the rain cap. Cut a hole in the desired location approximately 4 1/2 inches in diameter, caulk around the hole, and slide the termination through the opening from outside the home. The termination/rain cap should be caulked around its perimeter to assure a tight seal. The rain cap opening should be positioned downward. See Figure 3.



**FIGURE 3**

4. **FOR MODELS EM-41 AND EM-48:** Remove the 4 screws holding the cover plate over the outside air hole in the side of the fireplace's outer skin. Attach the 2 foot section of flex duct to one of the side collars with a plastic tie strap. Insert the flex duct through the outer skin all the way to the collar. Place the second side collar, (flat side towards the unit) against the other collar and using the screws previously removed, secure both collars to the fireplace outer skin.

Follow previous instructions to run air duct to termination.

Open lower grille and attach the flex duct to the duct collar on the underside of the fire chamber base. Secure by using a plastic tie strap. See Figure 4.

**NOTE:** The outside air damper control for models EM-41 and EM-48 is located behind the lower grill in the middle of the unit. To open the damper, pull the control rod forward and left until the damper locks into open position. The damper **MUST** be open for the unit to operate properly.

5. The AK-225 Outside Air Kit is now installed and ready for use.

## OPERATION PRECAUTIONS AND INSTRUCTIONS

### For all solid wood fuel fireplaces:

When operating with glass doors, open the doors and close the fireplace outside air damper so your fire will be started using room air. After the fire is well started, you may open the outside air control and close the doors to provide air to the fire.

### For gas fireplaces:

When lighting your gas fireplace, you **MUST** always first open the combustion air damper for the unit to operate and the glass doors **MUST** be in place.

Periodically inspect the duct termination for any blockage. Correct if necessary.

For maximum benefit and efficient usage, refer to operating instructions in owner's manual.

Replacements parts and service may be obtained through your dealer.

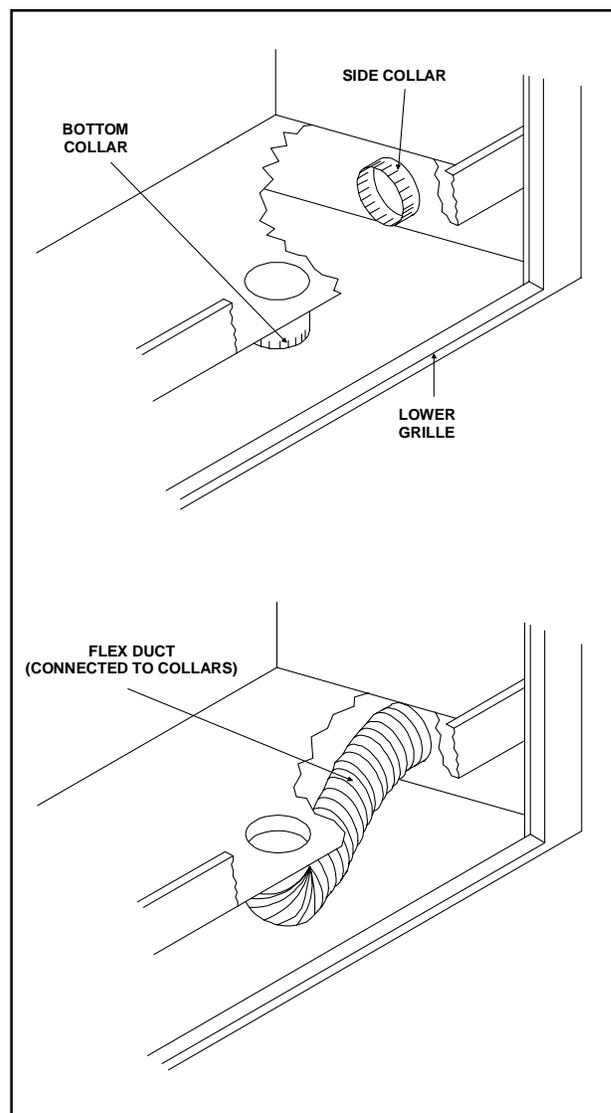


FIGURE 4