



# REVERSO-MANUFACTURING INC.

MANUFACTURERS OF  
FIREPLACE EQUIPMENT AND ACCESSORIES

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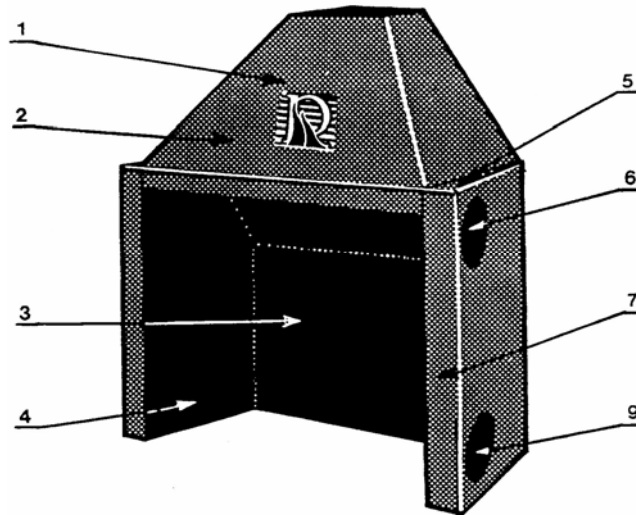
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## REVERSO™ HEAT-CIRCULATOR

### INSTALLATION INSTRUCTION MANUAL

#### SAVE THESE INSTRUCTIONS

NOTE: READ CAREFULLY BEFORE ATTEMPTING INSTALLATION



1. HI SMOKE DOME
2. CLOSE FITTING  
MANUAL DAMPER
3. HEAVY GAUGE  
FIREBOX
4. AIR CHAMBER

5. SMOKE SHELF
6. WARM AIR OUTLET
7. PROVISION FOR  
FIREPLACE DOOR
9. COLD AIR INTAKE

*Ask About* REVERSO FIREPLACE DOORS  
MADE IN CANADA

Rev. September 2005

## Step by Step ... **INSTALLATION**

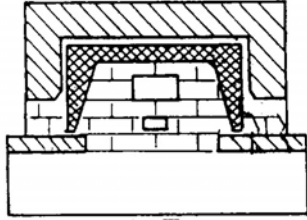


Fig. 1 Hearth plan at floor level

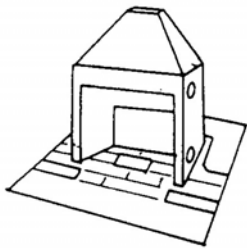


Fig. 2 Unit in position

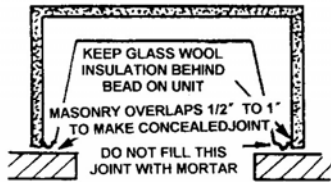


Fig. 3 Insulation and concealed joint

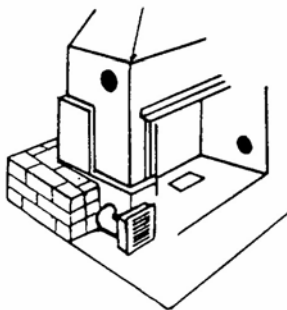


Fig. 4 Starting brick work and locating grilles

**Step 1** Finish the foundation with a layer of firebrick upon which to set the Heat-Circulator Unit. The firebrick should extend beyond the Heat-Circulator at the sides and back and be at least flush with the front of the Heat-Circulator. If the fireplace is to have an ashpit, the ash dump should be put in at the time the firebrick base is laid. Do not lay firebrick up into the metal firebox of the Heat-Circulator. (See Figure 1) Note: Fresh Air Kit is being utilized, the control box should be put in at the time the firebrick base is laid. See Reverse Fresh Air Inlet Kit instruction.

**Step 2** Position the Heat-Circulator on the firebrick hearth. Unpack the glass wool insulation and apply around the bottom of the unit. Cover the unit with a single thickness of insulation, taking particular care at corners. A thin watery mixture of mortar brushed on the steel Heat-Circulator will aid in holding the insulation in place. At this point particular care should be given to the glass wool insulation, location of the cold air intake grille, and gauging of the masonry work, so that the rest of the installation will be made much easier. (See Figure 2)

**Step 3** Lay the first course of masonry dry around the unit to check dimensions, thickness of mortar joints and grill locations. Take care to prevent the masonry from touching the unit at any point. The finished width of the fireplace opening should be 1" to 2" less than the width of the Heat-Circulator opening. Lay the masonry beyond the Heat-Circulator on each side of the Heat-Circulator opening, making a concealed joint between the Heat-Circulator and the masonry. Due to heat expansion, mortar will not stay in this concealed unit. (See Figure 3)

**Step 4** Plan the location of the cold air intake grilles. Air must not pass direct from the cold air inlet to the hot air outlet. The air must be circulated through the unit. Air passages should be finished smoothly to speed air flow and prevent heat loss. Sometimes it is desirable to locate grilles beyond the chimney masonry; if such is the case, use metal duct for the inlet and insulated metal duct for the warm air outlet. If Reverso H.F. fan grilles are to be used in the Heat-Circulator, and the power line to the fan is concealed, it may be desirable to locate the conduit and junction box in the masonry. When Reverso H.F. fans are used, two fans - one located in each cold air intake - are needed. Never locate the fans in the warm air outlet. Set the cold air intake grilles in place. Do not remove top grill face until the boxes are installed in the masonry. This assures a neat and level fit and protects the grilles. After dimensions are checked, the location of the grille and thickness of the mortar joints determined, the dry course of brick can be taken up and laid permanent with mortar. (See Figure 4)

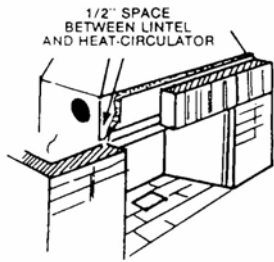


FIG. 5 Setting the lintel

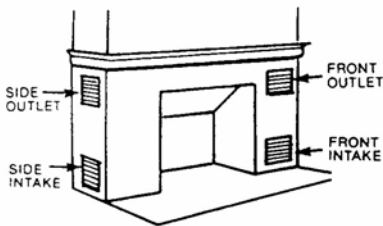


FIG. 6 Air outlets may be above mantel

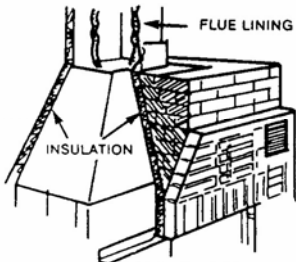


FIG. 7 Brick should be corbelled to support chimney

**Step 5** With this start, proceed with the masonry in the regular way. Keep mind:

- a) Glass wool insulation around the Heat-Circulator Unit.
- b) The concealed joint at fireplace opening.
- c) The cold air intake and warm air outlets must be planned for and located in the masonry and must be separated by masonry or ducts.
- d) All weight of the chimney must be supported by the masonry and not on the Heat-Circulator Unit.
- e) When the top of the fireplace opening is reached, use a metal lintel of adequate strength to support the masonry work above. Set the lintel low enough to conceal the metal apron of the Heat-Circulator Unit. Pack loosely generous quantities of insulation behind and at the end of the lintel. (See Figure 5)

**Step 6** Plan the location of the warm air outlet grille in the same manner cold air intake. If the warm air outlets are extended any distance beyond the masonry the duct work should be insulated. Air inlets and outlets may be located in so many different positions that it is beyond the scope of these instructions to cover specific details. (See Figure 6)

**Step 7** When the face of the fireplace has been built up to desired height, start corbelling the masonry back to meet the dome of the smoke chamber and the flue lining. Be sure the smoke chamber is covered with insulation. See that tight connection is made to the flue lining and that plenty of insulation is packed loosely around the place where the flue lining meets the smoke chamber. Do not allow the flue lining to rest on the Heat-Circulator, the Flue lining must be supported by the chimney masonry. (See Figure 7). Metal Adaptors are available to convert the Heat-Circulator flue opening for use with 8" or 10" round clay flue.

**Step 8** Finish the chimney in the normal way. NOTE: Before leaving the job, try the damper to make sure it opens wide and closes tight. It may be necessary to clean out fallen mortar. Leave the valve plate wide open to circulate air up the chimney. This helps to cure the masonry. Do not build a fire in the fireplace for several days, allowing time for the masonry to cure thoroughly.

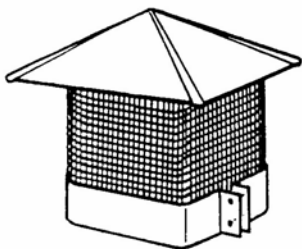


FIG. 9 Chimney should have a metal rain cap

### Reverso Metal Rain Cap

#### Paint Finish or Black

A complete line of rain caps designed to prevent animals, birds and leaves from entering your chimney flue.

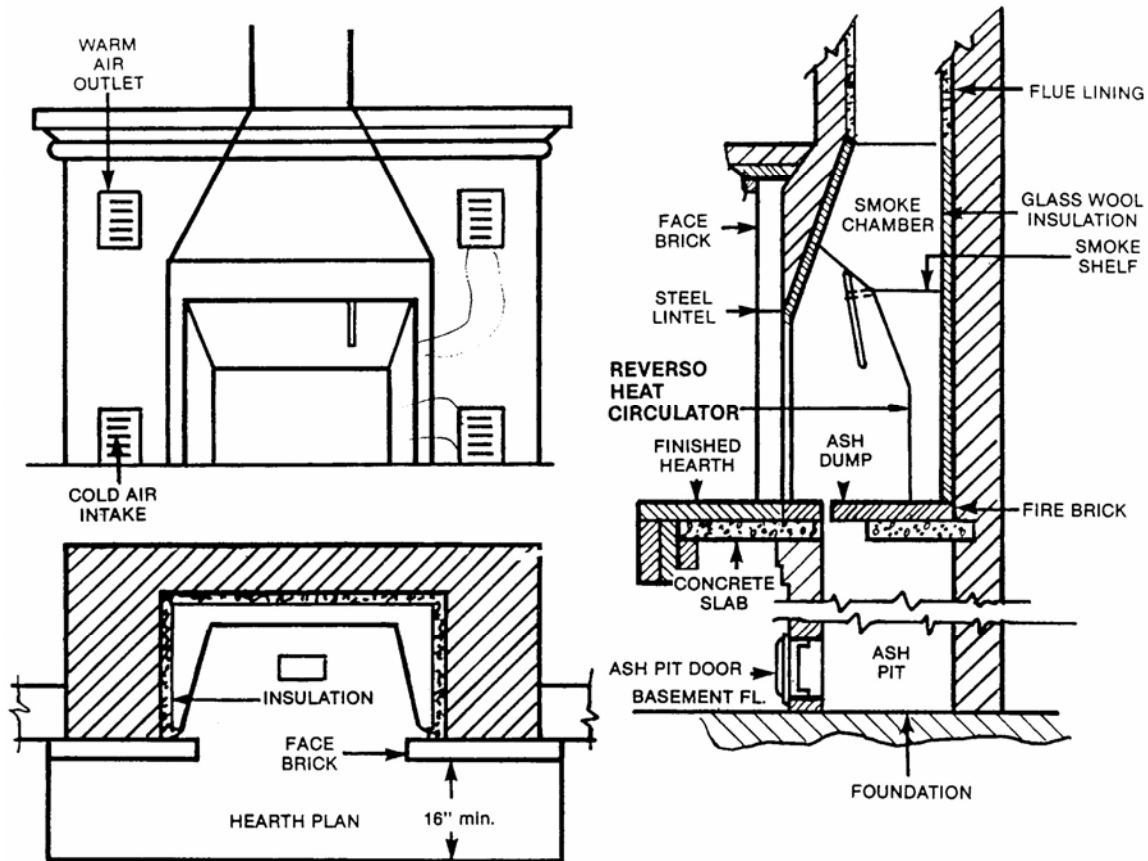
- will also help to prevent down-draughts
- trap large flying sparks
- deflect rain from flue opening

- easy to install

Stock sizes to fit outside flue dimensions of 8"x8" 8"x12" 12"x12" Custom size caps for 9" x 13", 13" x 13", 12" x 16" and 16" x 16" are available on request.

**ROUND RAIN CAPS** available for 8" and 10" round clay flues.

## TYPICAL CONSTRUCTION DETAIL

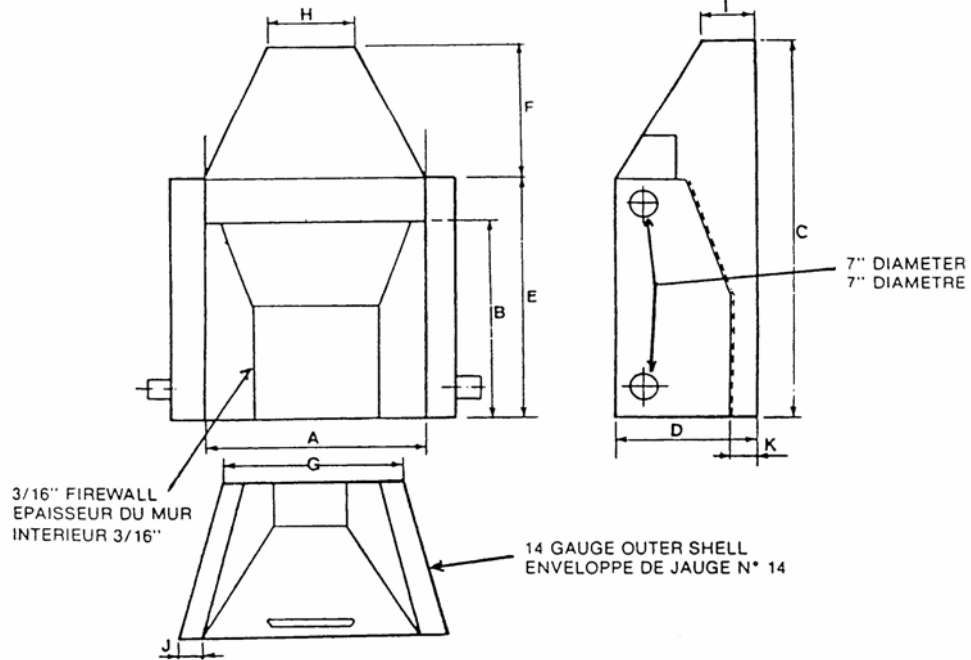


## Installation Instructions for Reverso Heat-Circulator

**GENERAL:** The mason is urged to read these instructions carefully. Frequent reference to these instructions and drawings will help the mason to do a perfect job of installing the Heat-Circulator Unit. Particular attention should be given to the application of the glass wool insulation. The Heat-Circulator Unit must not be used as a support for the masonry. The masonry at all points must be self supporting. Keep masonry 1/2" to 1" away from the steel at all points to allow for normal heat expansion. See that any mortar squeezed from the mortar joints does not touch the unit at any point.

**FOUNDATION:** Foundation dimensions will vary with the size of the Heat-Circulator used - type of masonry (brick or stone) - number and size of any other flues in the same chimney - and width of fireplace on each side of the fireplace opening. Therefore, due to the unlimited variety of applications for the Reverso Heat-Circulator, it is impossible to give specific details that cover all installations and dimensions of the foundation.

# "REVERSO" HEAT CIRCULATOR



Model	A	B	C	D	E	F	G	H	I	J	K	Weight
30	30	24	43-1/4	21	27	16-1/4	32-1/4	12	8	3	3	189
32	32	24	43-1/4	21	27	16-1/4	34-1/2	12	8	3	3	205
34	34	24	43-1/4	21	27	16-1/4	35	12	8	3	3	230
36	36	24	43-1/4	21	27	16-1/4	36-1/4	12	8	3	3	250
38	38	24	45	21	27	18	40-1/4	12	12	3	3	271
42	42	24	45	21	27	18	44-1/4	12	12	3	3	330
48	48	24	45	21	27	18	50-1/4	12	12	3	3	420

## Options:

FK120 – Fresh Air Intake Kit  
 HF-W9 – 4 Piece Fan Kit with Grills  
 Bi Fold Door Assemblies