

## INSTALLATION INSTRUCTIONS

**WARNING: Masonry thickness should be at least 8" at all points surrounding the Heatilator Fireplace form and circulating air passages. Remember, this is only a form around which an all masonry fireplace is being constructed. Consult local building codes for other requirements.**

- 1 Air circulation through the unit **MUST BE PROVIDED**. Use of fireplace without this circulation may create a fire hazard and will result in deterioration of the fireplace.
- 2 The Heatilator Brand fireplace serves as a form for the masonry—but must not be used as a support for the masonry. **All masonry must be self-supporting and MUST NOT touch the metal at any point.**
- 3 Glass wool insulating material must be used between the masonry and the unit at all points - with special care at the corners.
- 4 Make the finished width of the fireplace opening 1" to 2" less than the width of the unit opening to conceal the joint between metal and masonry. NOTE: Not all models have beads illustrated in Figure A, Page 2.
- 5 Be sure the flue lining and chimney height is the correct size required for the fireplace unit size to be used. See table below.
- 6 Use care to prevent mortar and debris from falling down inside chimney. If any debris falls down into unit, it will be necessary to remove damper and clean hinge and smoke shelf.
- 7 A separate chimney flue, with no other connections must be provided for each fireplace. Flue must not slant more than 30 degrees from the vertical at any point and flue can be offset only once 30 degrees off the vertical and once 30 degrees back to the vertical. See table below for correct flue sizes.
- 8 Chimney should extend at least 3 feet above the high point where chimney penetrates the roof or 4 feet above a flat roof. Chimney must always extend 2 feet above any portion of the building or surrounding structure within 10 feet.
- 9 Do Not build a fire in a new fireplace until masonry has thoroughly dried. This will require two or three weeks.
- 10 Be sure all air passages (inlet and outlet) are separate and independent from one another. **Be sure all air passages (inlet and outlet) have a smooth finish to assure proper air circulation and increase the heat-circulating efficiency.**
- 11 A RAINCAP is a must to reduce downdraft and to prevent rain from reaching the metal fireplace.
- 12 **IMPORTANT: Combustible material should never come in contact with the metal form. This is an all masonry fireplace and should be constructed accordingly by a qualified mason.**  
**NOTE: The use of outside air for combustion purposes is highly recommended.**  
**See Page 6.**

### Proper Chimney Flue Size Guide

FOR CHIMNEYS OVER 20' HIGH

Unit No.	Standard Flue	Modular Flue	Round Flue
34	8½" x 13"	12" x 12"	10"
38	13" x 13"	12" x 16"	12"
42	13" x 13"	12" x 16"	12"
50	13" x 18"	16" x 16"	15"
62	13" x 18"	16" x 18"	15"

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34	13" x 13"	12" x 16"	12"
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50	13" x 18"	16" x 20"	15"
62	18" x 18"	20" x 20"	18"

Outside dimensions shown for standard and modular flues — inside dimensions for round flues. Chimney height is measured from hearth.

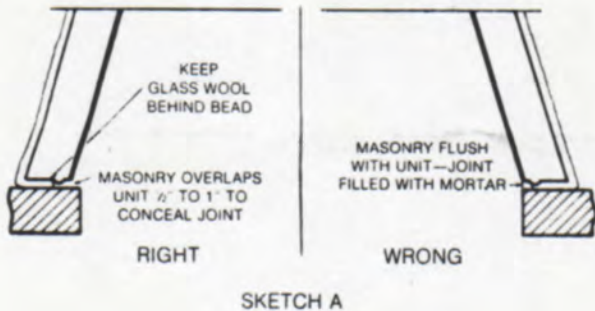
# HEATILATOR FIREPLACE INSTALLATION DETAILS

**Planning the Fireplace**—Plan the fireplace as a part of the room in which it is located—not as a separate unit. The size and shape of the room—location and space available for the fireplace—position of doors and windows—and the general architectural treatment will affect the size and proportions of the fireplace itself. Any Heatilator Fireplace that is in good proportion to the room will usually be adequate to warm the room comfortably.

Take special care to locate the Heatilator intake and outlet openings so that the grilles will blend in with the decorative treatment of the mantel (see sketches on page 5). For the best appearance place the intake grilles close to the floor and the outlet grilles above eye level. Rectangular grilles set either vertically or horizontally, are usually most satisfactory.

**Foundation**—Provide an adequate foundation that will carry the weight of the fireplace and chimney masonry. The dimensions of the foundation will vary with the size of Heatilator unit used—type of masonry (brick, stone, etc.)—number and size of other flues in same chimney—size and location of grilles—and width of the masonry posts on either side of the opening (see pages 3 and 4).

**Floor of Fireplace**—Finish off the foundation with a layer of firebrick. Set the Heatilator unit directly on the firebrick without mortar or insulating material. Firebrick should extend beyond the unit at sides, back and front. **Do not build firebrick up into the metal firebox or line firebox with masonry.**



**Width of Masonry opening**—Be sure that the finished width of the fireplace opening is 1" to 2" less than the width of the unit opening. This brings the masonry beyond the unit on either side of the opening to conceal the joint between masonry and metal (see sketch A).

**Insulating Material**—Use the blanket of glass wool furnished with the Heatilator unit to provide an expansion cushion between the metal and the masonry. **Cover the metal with a single thickness of wool with particular care at the corners - to prevent masonry from touching unit at any point.** A thin watery mixture of mortar brushed on the steel will hold the wool in place while the masonry is being laid up to it.

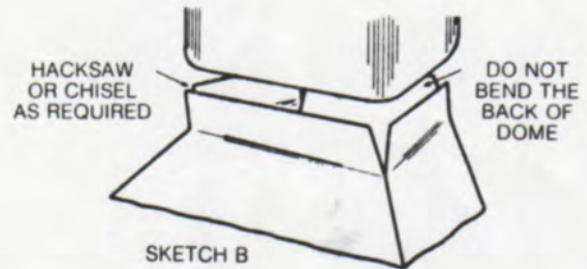
**Air Intakes and Outlets**—Provide a separate air passage in the masonry between each intake or outlet opening of the Heatilator unit and its respective grille. Care must be taken to prevent air from passing directly from the intake passages to the outlet passages before circulating through the unit. **Finish passages smoothly to speed air flow and prevent heat loss.** Avoid long horizontal runs. Where grilles are located beyond the chimney masonry, use insulated metal ducts for the warm air outlets—wood, plasterboard, metal, etc., for the intake ducts.

**Installing Grilles**—Assemble grilles before setting housings in masonry so that grille faces will be properly leveled. Do not draw screws up tight enough to bend grille face. After masonry has set, grille faces can be removed to finish off air passages.

Fan grilles will increase the heating efficiency of the fireplace or assist in forcing air through long outlet ducts. These should be installed at both intake openings—**never at outlets**. Shutter grilles may be used to control flow of heat where more than two outlets are provided but never to shut off circulation of air through unit.

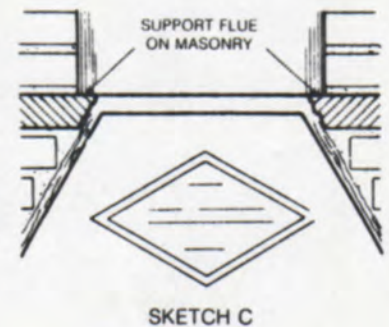
**Setting the Lintel**—If the top of the fireplace opening is straight, use an angle iron lintel to support the masonry. If opening is arched, use a curved metal lintel. Set lintel low enough to conceal the metal apron of the Heatilator unit. Pack glass wool between lintel and unit.

**Enclosing Dome**—Corbel masonry to follow slope of dome. Be sure insulating blanket is placed between unit and masonry at all points. **All masonry must be self-supporting and not rest on unit.**



**Fireplace Flue**—Provide a separate flue of the proper size for each fireplace—see table on page 1. If flue lining specified is larger than top of unit, cut down corners of dome with hacksaw or chisel. Flare out sides and form to the same size as inside of flue lining. Do not bend back of dome (see sketch B).

In setting the flue, carry masonry at least 1/2" above top of dome and support flue on masonry (see sketch C). Set flue lining in mortar and **pack space between top of dome and flue with glass wool.**



**Chimney**—Run the flue as straight up as possible with no bends or angles more than 30 degrees from the vertical. If flue is offset, cut liner to obtain tight joints between sections. Where two or more flues are built in the same chimney without masonry between them stagger the joints at least 7" apart.

If chimney is close to high trees, hills, etc., **a chimney cap is required to prevent downdrafts.** Openings under cap on each side should equal total area of all flues covered.

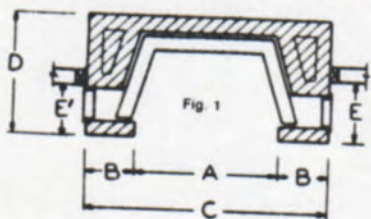
# HEATILATOR FIREPLACE FOUNDATION SIZES

The following plans are furnished as a guide in determining foundation size. All dimensions are given in inches and represent the **minimum dimension possible**—when using standard 2¼" x 3¾" x 8" brick.

Dimensions C and D give the **minimum overall foundation size** and can be increased as desired. Those dimensions that vary with the size of grilles used are shown for each grille size. Footings should extend 6 inches beyond the foundation on all sides, and should be 8 to 12 inches thick.

## Plan 1

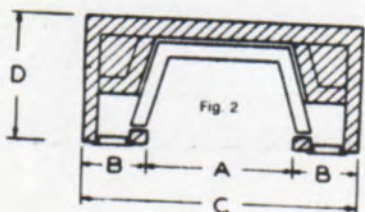
Fig. 1—Projecting fireplace with intake grilles in sides. No extra flues.



Heatilator Unit No.	A	B	C	D	E (See Note)				E' (See Note)			
					#1	#2	#3	#4	#1	#2	#3	#4
No. 34	32	8	48	29	12¼	15½			9¾	13		
No. 38	36	12½	61	31	12¼	15½			9¾	13		
No. 42	40	12½	65	32	12¼	15½			9¾	13		
No. 50	48	12½	73	34			15½	12¾			13	9¾
No. 62	60	16½	93	36			15½	12¾			13	9¾

Note—Dimension E shows the space needed for each type grille, with grilles centered between fireplace face and the wall. Dimension E' indicates minimum space required for each type grille between fireplace face and wall.

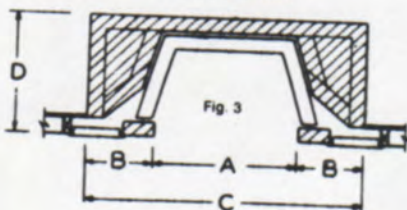
Fig. 2—Flush or projecting fireplace with intake grilles in face. No extra flues.



## Plan 2

Heatilator Unit No.	A	B				C				D
		#1	#2	#3	#4	#1	#2	#3	#4	
No. 34	32	12½	16½			57	65			29
No. 38	36	16½	16½			69	69			31
No. 42	40	16½	21			73	82			32
No. 50	48			21	16½			90	81	34
No. 62	60			21	21			102	102	36

Fig. 3—Flush fireplace with intake grilles placed horizontally in baseboard. No extra flues.



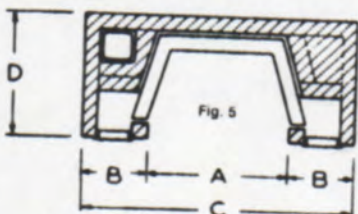
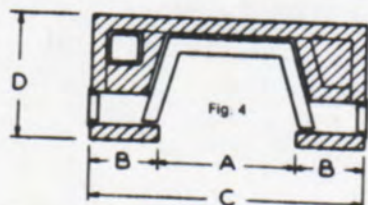
## Plan 3

Heatilator Unit No.	A	B		C		D
		#1	#4	#1	#4	
No. 34	32	16½		65		29
No. 38	36	16½		69		31
No. 42	40	16½		73		32
No. 50	48		16½		81	34
No. 62	60		16½		93	36

## Plans 4 and 5

Fig. 4—Projecting fireplace with intake grilles in sides. Additional 8½" x 8½" flue.

Fig. 5—Flush or projecting fireplace with intake grilles in face. Additional 8½" x 8½" flue.



Heatilator Unit No.	A	B				C				D
		#1	#2	#3	#4	#1	#2	#3	#4	
No. 34	32	16½	16½			65	65			29
No. 38	36	16½	16½			69	69			31
No. 42	40	16½	21			73	82			32
No. 50	48			21	16½			90	81	34
No. 62	60			21	*16½			102	193	36

\*21" for Plan 5

†102" for Plan 5

# HEATILATOR FIREPLACE FOUNDATION SIZES

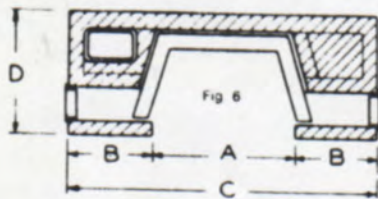
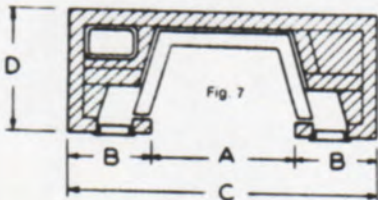


Fig. 6—Projecting fireplace with intake grilles in sides. Additional 8½" x 13" flue.  
 Fig. 7—Flush or projecting fireplace with intake grilles in face. Additional 8½" x 13" flue.



Heatilator Unit No.	A	B				C				D
		#1	#2	#3	#4	#1	#2	#3	#4	
No. 34	32	21	21			74	74			29
No. 38	36	21	21			78	78			31
No. 42	40	16½	21			73	82			32
No. 50	48			21	16½			90	81	34
No. 62	60			21	*16½			102	†93	36

\*21" for Plan 7

†102" for Plan 7

Note—Figs. 6 and 7 apply to units No. 34 and 38. Minimum foundation size shown for larger units requires the additional flue to be set with 8½" dimension in line with back of unit.

## Plans 8 and 9

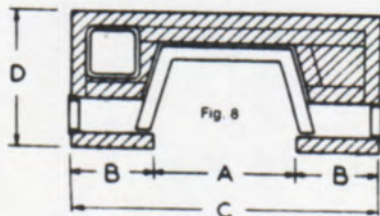
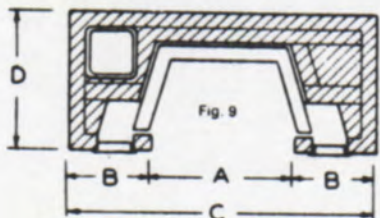


Fig. 8—Projecting fireplace with intake grilles in sides. Additional 13" x 13" flue.  
 Fig. 9—Flush or projecting fireplace with intake grilles in face. Additional 13" x 13" flue.



Heatilator Unit No.	A	B				C				D
		#1	#2	#3	#4	#1	#2	#3	#4	
No. 34	32	21	21			74	74			33
No. 38	36	21	21			78	78			33
No. 42	40	21	21			82	82			33
No. 50	48			21	21			90	90	34
No. 62	60			21	21			102	102	36

Note—Figs. 8 and 9 apply to units No. 34 and 38. For larger units, the additional flue can be lined up with rear of unit to eliminate double course of masonry at back of unit.

## Plans for Corner, Back-to-Back and Adjoining Fireplaces



Fig. 10—Cross-section of a corner fireplace illustrating flue construction.

Fig 10

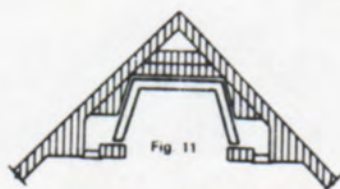


Fig. 11—Foundation plan for corner fireplace showing location of intake grilles.

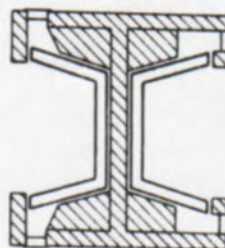


Fig. 12

Fig. 12—Foundation plan for two fireplaces installed back to back with intake grilles in sides or face.



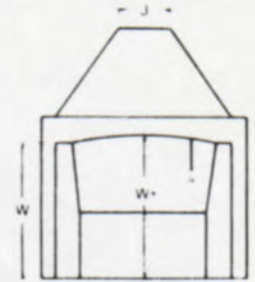
Fig 13

Fig. 13—Foundation plan for two fireplaces installed side by side, with intake grilles in face.

# HEATILATOR FIREPLACE UNIT DIMENSIONS

## Unit Dimensions in Inches

Unit	A	B	C	D	E	F	G	H	J	K	L	W	W+
34	33 $\frac{1}{2}$	39 $\frac{1}{2}$	23 $\frac{1}{2}$	19 $\frac{1}{2}$	27 $\frac{1}{2}$	32 $\frac{1}{2}$	49 $\frac{1}{2}$	16 $\frac{1}{2}$	12	8	11 $\frac{1}{2}$	27	28 $\frac{1}{2}$
38	38	45 $\frac{1}{2}$	27 $\frac{1}{2}$	21 $\frac{1}{2}$	32 $\frac{1}{2}$	35 $\frac{1}{2}$	52 $\frac{1}{2}$	17 $\frac{1}{2}$	12	12	9 $\frac{1}{2}$	29 $\frac{1}{2}$	31
42	42	51	30 $\frac{1}{2}$	23 $\frac{1}{2}$	37	38 $\frac{1}{2}$	56	19	12	12	11 $\frac{1}{2}$	32	34
50	50	61 $\frac{1}{2}$	38	25 $\frac{1}{2}$	46	42	62 $\frac{1}{2}$	20	17	12	13 $\frac{1}{2}$	34	37
62	62	74 $\frac{1}{2}$	49 $\frac{1}{2}$	27 $\frac{1}{2}$	58 $\frac{1}{2}$	46	69 $\frac{1}{2}$	21 $\frac{1}{2}$	17	12	15 $\frac{1}{2}$	37 $\frac{1}{2}$	41



## HEATILATOR Grille Locations

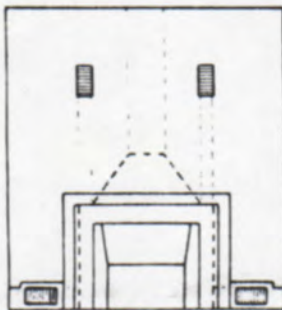
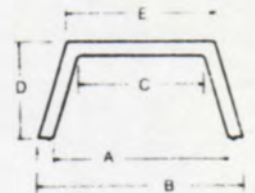
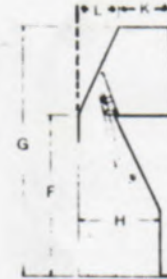
The sketches shown below illustrate various methods of locating intake and outlet grilles. These plans are intended to serve only as a general guide to grille locations, since exact positions will depend on design of fireplace and overall decorative treatment.

Grilles for Heatilator units 34 to 42

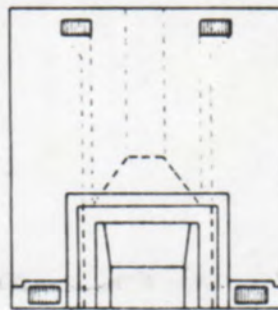
- No. 1...Face 5 $\frac{1}{8}$ " x 10 $\frac{1}{8}$ "...Housing 5 $\frac{1}{4}$ " x 10 $\frac{1}{4}$ "
- No. 2...Face 8 $\frac{3}{4}$ " x 8 $\frac{3}{4}$ "...Housing 8" x 8"

Grilles for Heatilator units 50 and 62

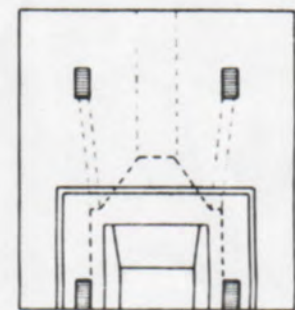
- No. 3...Face 8 $\frac{3}{4}$ " x 10 $\frac{3}{4}$ "...Housing 8" x 10"
- No. 4...Face 5 $\frac{1}{8}$ " x 13 $\frac{1}{8}$ "...Housing 5 $\frac{1}{4}$ " x 12 $\frac{1}{4}$ "



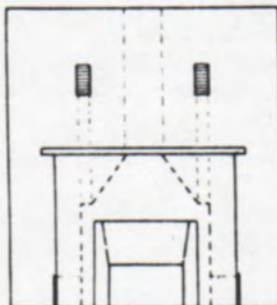
1. Flush fireplace with intake grilles in baseboard-outlets installed vertically.



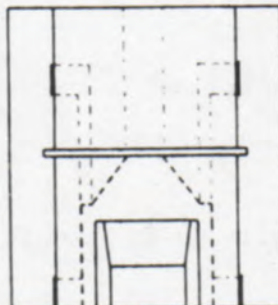
2. Flush fireplace with intakes in baseboard-outlets above eye level.



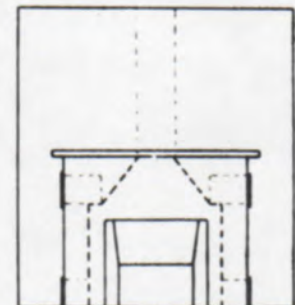
3. Flush fireplace with all grilles in face-outlets above eye level.



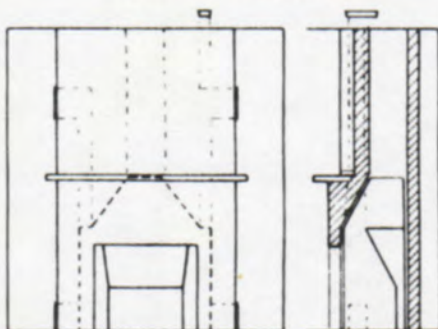
4. Projecting fireplace with intake grilles at sides-outlets in face over mantel.



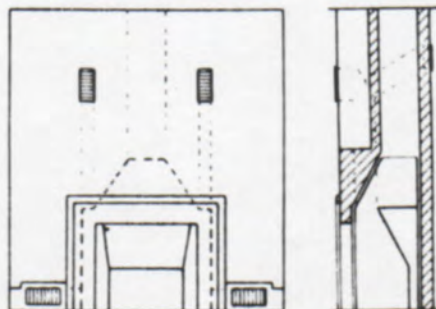
5. Projecting fireplace with all grilles at sides-outlets above mantel shelf.



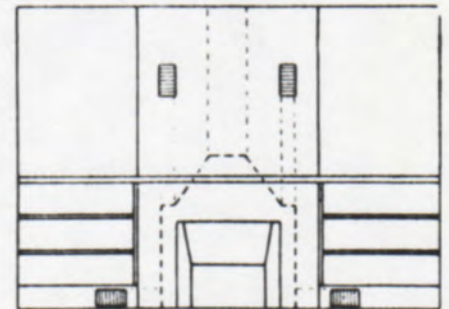
6. Projecting fireplace with all grilles at sides-outlets below mantel shelf.



7. Projecting fireplace with all grilles at sides. Additional outlet extended to shutter grille in upper room.



8. Flush fireplace with all grilles in face. Duplicate outlet with shutter grille located in adjoining room.



9. Projecting fireplace flanked by bookshelves. Intake grilles located in baseboard-outlet grilles in face over mantel.