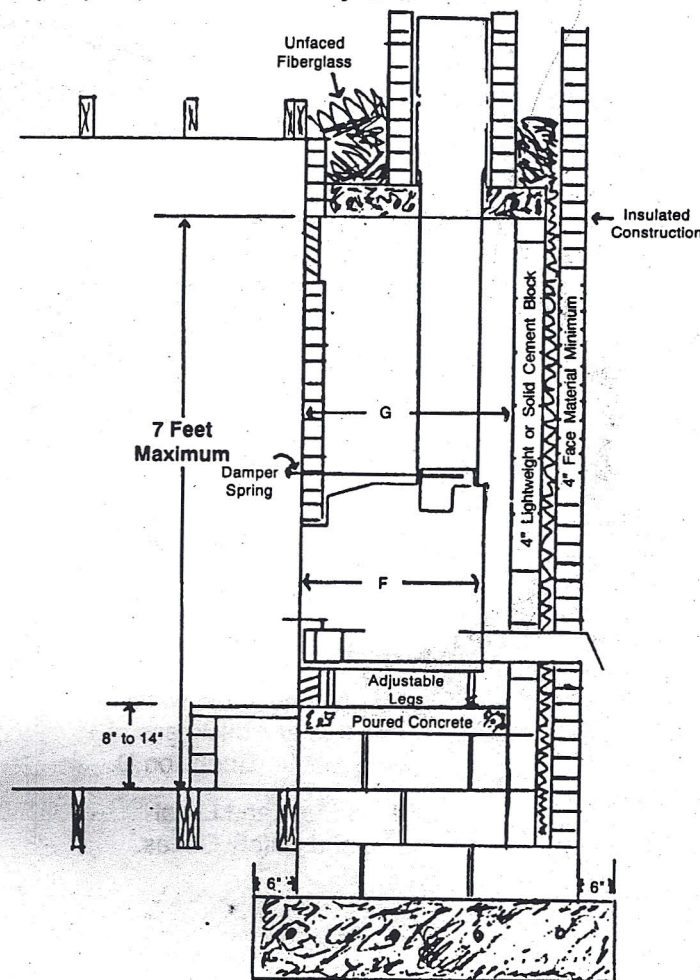
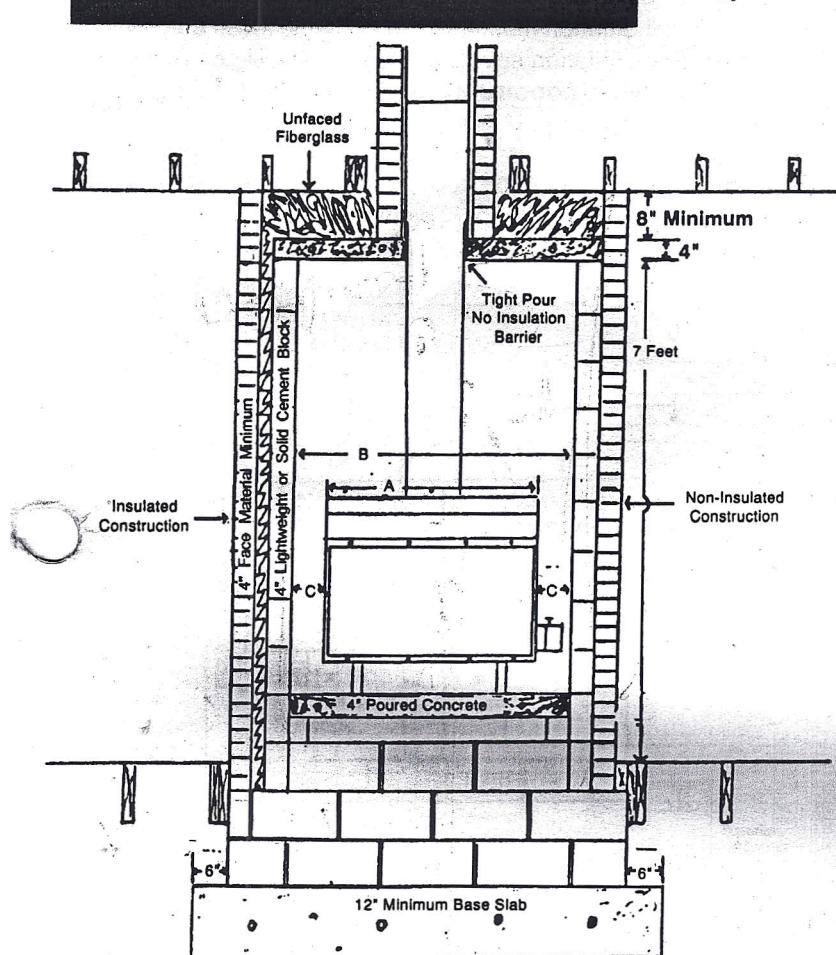


Wilkening Fireplace HOME HEATER

Completely read and understand these instructions prior to starting the installation. For SAFE, EFFICIENT operation follow these installation instructions. Prior to installation of any FIREPLACE HOME HEATER, check with state and local officials regarding: building permits or licenses and building codes that apply to your area. If state or local codes are more restrictive than these instructions they must be followed. **DO NOT alter dimensions B or G** stating the width and depth of the inner block heat chamber. If the owner wants a wider fireplace structure move the outer masonry veneer walls to the desired dimension. **Alteration of this product or failure to follow these instructions will result in Fire and Property Damage, which may result in Loss of Life.** The installer and owner is responsible for any alteration of the materials or specifications provided. If you or your contractor have any questions, call your dealer or (218) 547-3393 for factory direct assistance.



1. Pour a properly reinforced concrete base for the fireplace footing with a minimum foundation not less than (12) twelve inches in thickness extending at least (6) six inches on each side of the footing. This footing and base **MUST** extend below the frost line. Failure to pour a properly reinforced footing will result in structural failure and will create a fire hazard. Use no less than (8) eight pieces of #4 reinforcement rod laid at right angles to each other in the base. For footing size refer to dimensions D and E for the appropriate size unit. The concrete base must be no less than a 4000 psi mixture, poured on fill material in accordance with state and local codes. Construct the footings with 8x10x16 cement block up to ground level. At this point the foundation block should be reduced to allow for the (4) four inch masonry veneer wall and, if an outside construction, the (2) two inch insulation factor. See diagrams this page.

The minimum side distance from a combustible frame wall to the fireplace opening is (18) eighteen inches. The burning chamber must rest on a (4) four inch minimum reinforced concrete slab that is level with the finished hearth height. **CAUTION: DO NOT ALLOW THE LOWER SLAB TO CONTACT THE OUTER VENEER WALL ON AN INSULATED CONSTRUCTION.** If this is done cold transfer will occur. A raised hearth of non-combustible material must extend at least (16) sixteen inches in front of and at least (8) eight inches to the side of the fireplace opening. The hearth must be at least (8) eight inches and no more than (14) fourteen inches in height. When installing an ash clean out, position a (5) five inch form into the lower slab in the position of the clean out drop tube.

WHEN CONSTRUCTION IS IN SESMIC ZONES 2, 3 AND 4

Reinforcement rods in the sides and back walls must be end bent and tied to the reinforcement rods in the base and upper slabs. The number and placement of these rods must conform to chapter 37 of the Uniform Building Code.

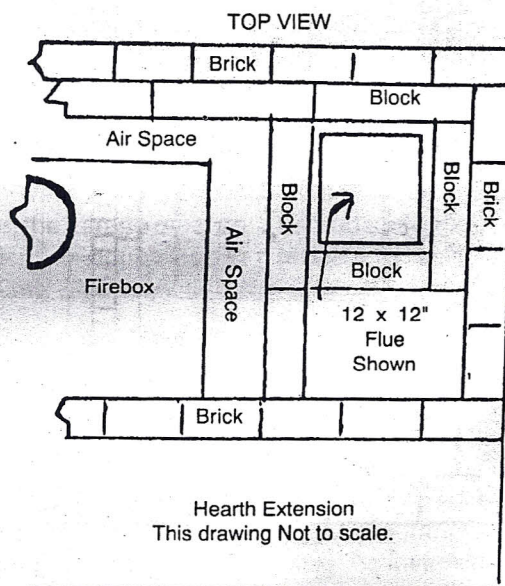
3. **Every installation requires (2) two (4) four inch minimum masonry walls.** The inner side and back walls are to be constructed from (4) four inch light weight or (4) four inch solid cement block. The outer veneer walls are to be constructed with a minimum of (4) four inches of brick, stone or block. As the inner walls are constructed, recess the side walls to allow for (4) four inches of material across the face of the fireplace. **IMPORTANT:** Maintain clearances to the side and back walls of masonry as shown by dimension C and G. **NOTE:** Each inlet and outlet louver is the correct width of the inner heat chamber, and each unit requires (4) four inches of clearance from the back of the unit to the back wall of the heat chamber. Install a (4) four inch 26 gauge galvanized pipe into the block wall at the predetermined exit point, this is for outside combustion air, and seal properly with mortar. Insert metal ties into each course on the side walls to insure proper bond to the face material. **NOTICE:** Insulation is required between the inner block wall and the outer veneer wall **WHENEVER** any portion of the fireplace extends to the outside of the frame wall of the home or into a garage. To insulate, use (3-1/2) three and one half inches of unfaced fiber glass compressed to (2) two inches between the inner block wall and outer veneer wall. This insulation must extend below the lower concrete slab to at least grade level. **WARNING** If no insulation is used on an outside installation severe cold transfer will occur. **DO NOT** use styrofoam or expanded polystyrene as this will melt and burn. **(FAILURE to construct this unit with 2-4" masonry walls voids the listing and creates a Fire Hazard.)**
4. Construct the inner heat chamber walls until they reach a height of (7) seven feet off the floor or the top course is (1) one foot from the finished ceiling height. The finished height of the upper slab must not be closer than (8) eight inches to the ceiling headers. Any combustible material closer than (8) eight inches to the top of the concrete slab is a fire hazard. In homes with a vaulted ceiling, the base of the upper slab must not exceed (7) seven feet in height.

NOTE: This drawing shows placement of Optional flue. This chimney must conform to NFPA 211 standards and all applicable building codes.

The Optional flue **CANNOT** be located in unit heat chamber.

INSTALLER must add width of Optional flue and thickness of 1 Masonry wall to dimension D.

Check all State and Local Building and Safety Codes.



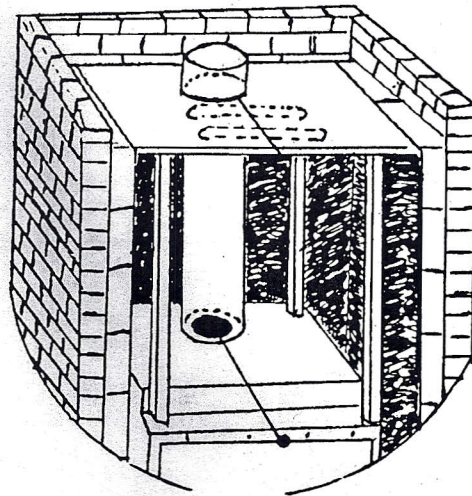
5. Remove the bolts from the base of the burning chamber and position it on the concrete slab. The rear legs of the burning chamber adjust for leveling. If an ash dump is used, slip a (4) four inch galvanized pipe (crimped end down) over the drop tube and seal with furnace cement. Fill any voids between the galvanized pipe and the lower slab with mortar. Position the lower louver under the burning chamber, making sure it is flush with the front. Bolt securely in place. Note on double see thru units only one side is bolted to the lower louver. Failure to properly seal the ash dump tube to either the lower concrete slab or metal unit will result in cold air infiltration and ash circulation into the home.
6. Attach the intake adaptor (furnished) securely with screws or rivets to the burning chamber intake. Use (4) four inch 26 gauge galvanized pipe to complete ducting. Attach all connections permanently and seal with furnace cement. Ducting must be to building exterior, screened and terminate above the snow line. **DO NOT** terminate the duct in an attic or garage. **NOTE:** ducting more than (6) six feet, increase the duct size to (6) six inch at (6) six foot. Maximum length is (20) twenty feet with no more than 3 elbows. At the termination point of the duct, care must be taken so no foreign material may obstruct air flow. Screen mesh size should be no larger than 1/4" square mesh.
7. Connect the air control rod and crimp the cotterpin. Check that the air control operates freely.

8. Install the marked end of the flue connection pipe by slipping it over the flue outlet on the burning chamber. Do not angle the flue connection pipe, as the seal at the base **MUST** contact the flue outlet of the burning chamber. Offset pipe are available from your dealer, to move the chimney structure. The maximum angle of the offset pipe or any approved chimney system is 30 degrees. If the 30 degree angle is exceeded, poor draft and back smoking will occur. Never run the single wall metal pipe out of the heat chamber in any other manner than shown in diagram #FC1 or #FC2 on opposite page, as a fire hazard may result.

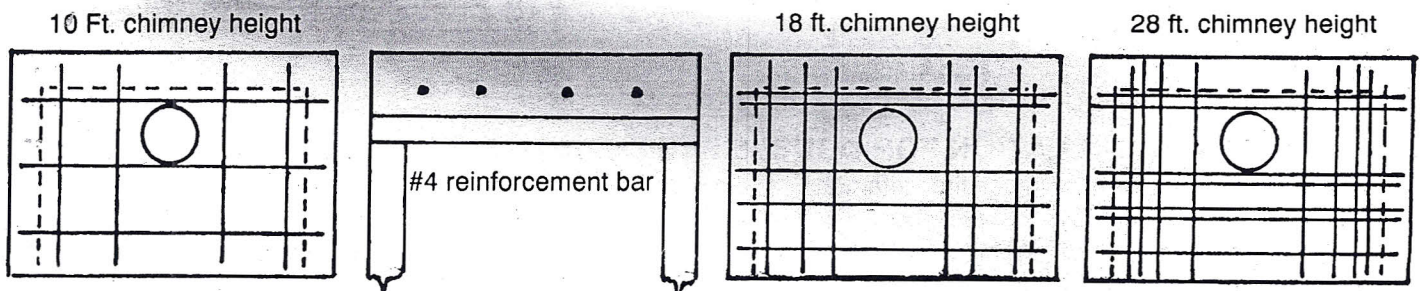
This drawing shows position of plywood form for pouring upper concrete slab on. REFER: to step 9.

NOTICE: All forms and temporary supports **MUST BE REMOVED** when concrete is cured.

Drawing NOT to scale.



9. A (4) four inch minimum reinforced 3000 P.S.I. mixture concrete slab with a minimum of (7) seven pieces of reinforcement rod must be cast (see reinforcement rod placement diagrams). As the slab is cast allow for an (8) eight inch minimum clearance from the top of the slab to the wooden frame materials. **Any combustible material closer than (8) eight inches to the upper concrete slab is a fire hazard.** This space is to be insulated with (8) eight inches of unfaced fiberglass after the chimney is constructed. An **UPPER SLAB POUR PLATE** is available for a permanent form to cast this slab onto. The pour plate, which comes with most of the reinforcement rod necessary, is designed for no recess for mantle construction. The sides and the back of the pour plate overlap the side and back of the inner chamber walls by (2) two inches and is pre-stressed to carry the load. The other alternative is to cut a temporary form from plywood to cast the slab onto. If this is done, cut a hole for the flue connection pipe to fit through, cut the form in half and cleat together (see diagram this page). Temporary props are used to stabilize the form. Position a board across the front of the form making sure it allows enough space for the face material to pass by it. When the slab is cast make sure that the upper slab does not enter into the insulation space, as cold transfer will occur. **NOTE:** All plywood and temporary supports must be removed after the slab has cured. Any combustible material within the heat chamber or resting upon the upper concrete slab will **BURN**. This fireplace or chimney structure shall not be used as structural support for any framing members.



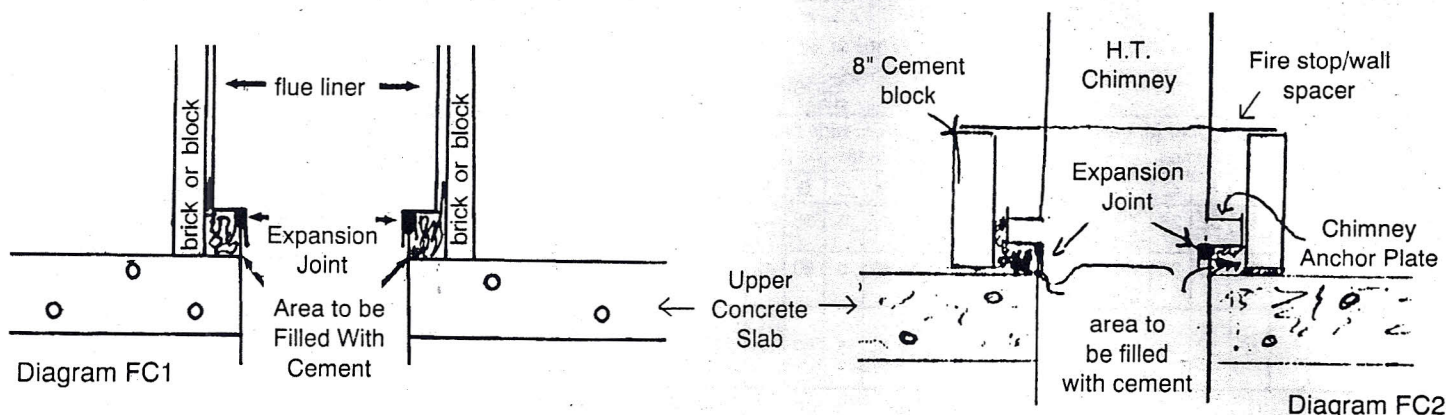
Reinforcement rod number and placement. Drawings not to scale.

NOTICE FOR INSTALLING IN SEISMIC ZONES 2, 3 and 4

10. When installing this product in seismic zones 2, 3 and 4 the upper reinforced concrete slab must be cast in place with no less than the minimum number of #4 reinforcement rods (see reinforcement rod placement diagrams). These rods must conform to chapters 24 and 26 of the Uniform Building Code. The upper slab must be no less than (4) four inches thick and of a 3000 psi mixture. All reinforcement rods must be end bent and tied to all vertical fireplace reinforcement rods and anchored to the wall where applicable. A minimum of (4) four #4 reinforcement rods must be end bent and tied to the horizontal reinforcement rods imbedded into the slab. These rods are to extend vertically and be spaced in accordance with the width of the masonry chimney. This fireplace and chimney structure must have reinforcement rods tied and spaced in accordance with chapter 37 of the Uniform Building Code.

11. When using a masonry chimney, install the clay flue tile adaptor (provided) into the outlet of the flue connection pipe above the concrete slab. Failure to use the clay tile chimney adaptor may result in a creosote leak and voids warranty. Fill the void between the slab and base of the adaptor with cement. Lay the first row of brick or block around the adaptor. This will contain the fill

material. Set the first flue liner into the adaptor and encase with brick or block. Continue with the rest of the chimney (see diagram). If a class A high temperature chimney is used, do so in accordance with the manufacturers directions. A (10) ten inch inside diameter flue is required. Place the HT chimney adaptor into the flue connection pipe. Fill the void below the adaptor with mortar and surround the metal section with a course of (8) eight inch cement block that extends at least (8) eight inches above the top of the adaptor. Position an anchor plate into our adaptor and lag screw securely into position. Fasten each section of metal pipe with the bands provided. Then one section at a time place the remaining liners in place supporting and maintaining clearances as recommended by the manufacturer. On the first section of chimney place a fire stop/wall spacer so it contacts the top of the (8) eight inch cement block. This will eliminate the possibility of any combustible contacting the anchor plate. Strict adherences to chimney manufacturers clearances must be maintained or a fire may result.



The expansion space provided will allow the metal pipe to expand during operation.
Drawing not to scale.

12. Construct the chimney to the proper height using the flue size listed for each unit. Failure to use the proper flue size will result in poor draft and smoking. All masonry chimneys must be installed in accordance with NFPA 211 requirements for fireplace chimney and vents and must have a (4) four inch minimum encasement of masonry, preferably insulated between the liner and the encasement. Maintain chimney clearances to combustibles as recommended by state and local codes. The chimney should terminate at least (3) three feet above any flat roof, or (2) two feet above any point that the chimney is within (10) ten feet of the closest peak (measured from the inside of the liner horizontally to the roof slope. If an existing chimney is to be used it must conform to these requirements and be of sound construction (with a flue liner) or it must be replaced.
13. Finish the outer veneer walls of the fireplace. **IMPORTANT:** Use unfaced fiberglass insulation for an expansion joint on the sides and top of the burning chamber (where masonry contacts the burning chamber). This fiberglass should be 1/2 inch thick and (4) four inches wide. **DO NOT** compress tight. Allow for at least 1/4 inch expansion room between the masonry face and the burning chamber. A lintel iron must be used across the face wall opening. **NO** masonry material may contact the burning chamber, as cracking of the face wall will occur due to thermoexpansion of the metal surface. Wrap fiberglass insulation around the lintel and verify that no mortar falls between the lintel iron and the burning chamber.
14. When the face material reaches the height of the damper install the damper shaft with the collar imbedded into the masonry seam. **NOTICE:** The spring must be placed between the masonry front and the knob. Do not adjust the tension of the spring until the front material has cured.
15. No combustible material may be used for a mantle construction. Check with state and local codes.
16. When positioning the upper louver the top of the upper louver must be flush with the bottom of the upper slab with the fins pointing upward (see attached tag). If either of these two requirements are not followed restrictive circulation of air will result. This will cause excessive temperatures which may result in unit failure and over heating of the fireplace structure. This will result in a fire. If a masonry opening is used for air venting, it must have a surface area equal to dimension B times 10-5/8" of net free flow area.
17. After the upper louver is in place, continue with the face veneer wall to ceiling height. Fill any void between the upper concrete slab and the face veneer with mortar. If the void is not filled, heat will flow through the void into the upper space and reduce heat output of the fireplace and may cause a fire. For additional circulation of heated air throughout the home, if required, it is recommended that a cold air return to a forced air system be placed directly above the heat outlet louver in the ceiling. This will allow the home owner to distribute heated air throughout the home. **DO NOT** directly connect the forced air system to the heat chamber without prior approval of the state or local building official.
18. Compress the damper spring to the desired tension and tighten the set screws.

19. Install the fireplace doors according to the instructions included in the box. Provided with this unit is a roll of fiberglass gasket that is to be used to seal the door to the burning chamber. Remove the paper backing and stick the gasket to the outer perimeter of the burning chamber. **NOTE:** It is recommended that final cleaning of the masonry be done before installing the door. This will eliminate the chance of cleaning solvents or acids discoloring the finish. **CAUTION:** Caustic cleaning solvents will discolor painted or brassed surfaces.
20. If you or your contractor have any questions call your dealer or (218) 547-3393 for factory direct assistance. Save these instructions for future reference. Do not allow the owner to operate this appliance for three weeks after completion as improper curing of the masonry will result. Improper curing will result in cracks and premature deterioration of the masonry and may cause fire. Refer the owner to the enclosed operation instructions and warranty.

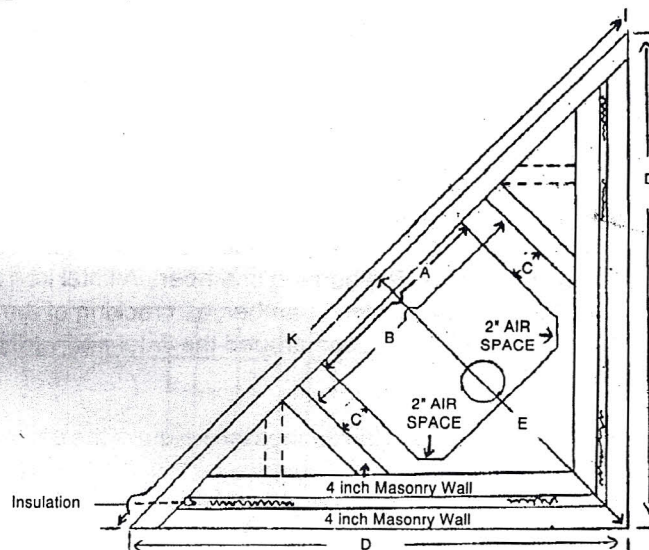
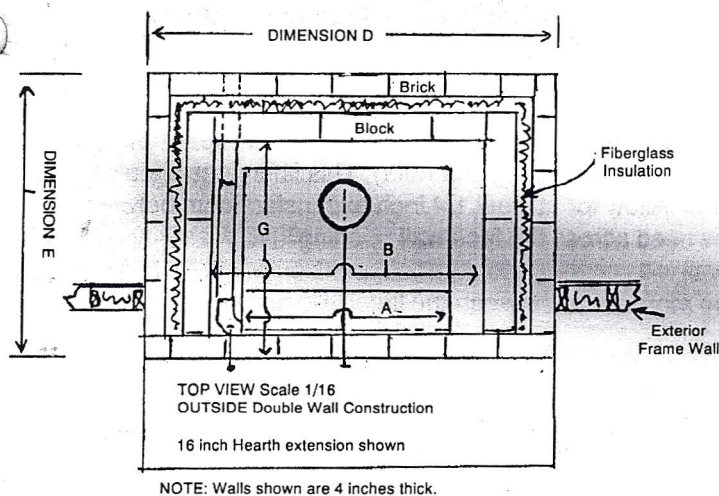
Single Front Models

36 INCH wide unit (All Door Models) All Dimensions are in Inches.								30 INCH wide unit (All Door Models) All Dimensions are in Inches.								24 INCH wide unit (All Door Models) All Dimensions are in Inches.							
A	B	C	D	E	F	G		A	B	C	D	E	F	G		A	B	C	D	E	F	G	
36	48	6	64	44	32	36	Non-Insulated Construction	30	40	5	56	40	28	32	Non-Insulated Construction	24	32	4	48	36	24	28	Non-Insulated Construction
36	48	6	68	46	32	36	Insulated Construction	30	40	5	60	42	28	32	Insulated Construction	24	32	4	52	38	24	28	Insulated Construction
36	48	6	60	42	32	36	Inner Masonry Wall with Insulation and Existing Block Wall	30	40	5	52	38	28	32	Inner Masonry Wall with Insulation and Existing Block Wall	24	32	4	44	34	24	26	Inner Masonry Wall with Insulation and Existing Block Wall

The Chimney must conform to NFPA 211 Standards

Flue sizes for Single, Double & Corner Model Fireplaces	
24 Inch wide units	8"x12" O.D.
30 Inch wide units	12"x12" O.D.
36 Inch wide units	12"x12" O.D.

NOTICE: If using a Class A High Temperature, do so in accordance with manufacturer's specifications. (10) ten inch minimum on the 36 and 30 inch wide units. Six (6) inch minimum on the 24 inch wide unit.



Corner Model Fireplaces

36 INCH wide corner unit All Dimensions are in Inches.							30 INCH wide corner unit All Dimensions are in Inches.							24 INCH wide corner unit All Dimensions are in Inches.						
A	B	C	D	E	K		A	B	C	D	E	K		A	B	C	D	E	K	
36	48	6	88	62	124	2 Masonry Walls Non-Insulated	30	40	5	74	52	104	2 Masonry Walls Non-Insulated	24	32	4	63	44	92	2 Masonry Walls Non-Insulated
36	48	6	92	65	130	2 Masonry Walls Insulated	30	40	5	78	55	110	2 Masonry Walls Insulated	24	32	4	67	47	96	2 Masonry Walls Insulated
36	48	6	84	59	118	Inner Masonry Wall with Insulation and Existing Block Wall	30	40	5	70	49	98	Inner Masonry Wall with Insulation and Existing Block Wall	24	32	4	59	42	88	Inner Masonry Wall with Insulation and Existing Block Wall

Consult and follow all State and Local Building Codes prior to installation.

No hearth extension shown.

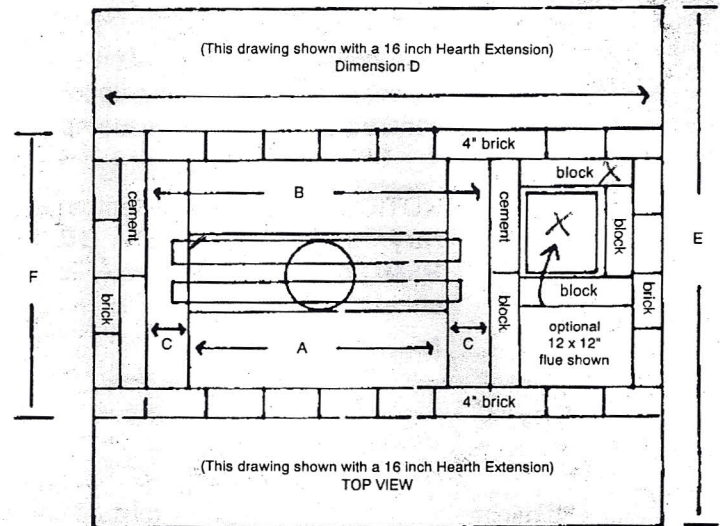
NOTE: That outer face veneer can be angled back to decrease face width.

SUPPLEMENT FOR INSTALLATION OF DOUBLE SEE THRU MODELS

When the burning chamber is positioned on the lower louvers, fasten one side of the burning chamber (through the pre-drilled holes) to the lower louver. The other side is to free float. Each face wall for double see thru size is (4) four inches thick. The two (4) four inch intake pipes may be combined and adapted to (6) six inch to complete the duct. **If the air source is to be ducted vertically, increase dimension D by 4" and run the galvanized pipe between the inner block wall and the outer masonry veneer wall.**

All Dimensions are in INCHES

A	B	C	D	E	F	
30	40	5	72	68	36	30 inch wide Double Front unit.
36	48	6	80	72	40	36 inch wide Double Front unit.



*Dimension D less 12" + 4"
for single flue outlets*

SUPPLEMENT FOR INSTALLATION OF REAR LOADING MODELS

On rear loading models only one set of inlet and outlet louvers is used. Verify that the drilled side of the burning chamber is positioned over the inlet louver. Use masonry material to support the loading side of the burning chamber. The face and side walls that exposed into the loading area must be (2) two (4) four inch thick masonry walls with (2) two inches of unfaced fiberglass insulation between them. If the loading side of the unit is to be installed into a garage, the garage must be insulated and heated or cold transfer through the burning chamber will occur. See damper installation instructions for double see thru models. **If the air source is to be ducted vertically, increase dimension D by 4" and run the galvanized pipe between the inner block wall and the outer masonry veneer wall.**

DAMPER INSTALLATION FOR DOUBLE SEE THRU AND REAR LOADING MODELS

METHOD 1: Insert the damper rod through the metal plate into the pre-drilled flue connection. Each masonry front has a metal sleeve that the damper shaft rides in. This sleeve is mortared into the brick course. The tension spring must be installed on the side that the damper plate fits snugly (see diagram). After the masonry cures, push the damper shaft in to compress the spring. Use the wrench furnished to tighten the set screw inside the unit. **Proper spring tension will hold the damper at any position.**

METHOD 2: Tighten only the center set screw in the damper plate. Leave 2-1/4" of the damper shaft protruding from the finished front. Install the sleeves onto the shaft (one for each front). After the masonry has cured, have an assistant hold the damper shaft on the opposite side. Install the spring and knob compressing 1/4" and tighten allen set screw.

NOTICE: The damper plate must be installed **BEFORE** the flue connection pipe is positioned.

Top View Double Unit

