

CLAY-60 PHASE II
AIR-TIGHT
ZERO CLEARANCE FIREPLACE
Installation / Operator's Manual #30160

FOR YOUR SAFETY - Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

IMPORTANT:

Installation must be made in accordance with State and local ordinances which may differ from this installation manual.

CAUTION:

Read rules for Safe Operation and Instructions **CAREFULLY!**

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INTRODUCTION

Thank you for your purchase of the Clayton Zero-Clearance Fireplace. By following the instructions in this manual you can be assured of an installation that will add both beauty and value to your home, as well as provide safe, efficient supplemental heat.

Your Clayton dealer can be a valuable source of information in helping select the proper components for your installation as well as recommending professionals who can assist in installation and maintenance.

IMPORTANT INFORMATION

Read these instructions carefully and keep for future reference.

- ✓ Obtain a building permit and check local codes. This installation must comply with their rulings.
- ✓ Always have operational smoke or ionization detectors in your home.
- ✓ To prevent injury or damage, do not allow anyone unfamiliar with solid fuel to operate this unit.
- ✓ Do not store fuel or other combustible materials within marked clearances.
- ✓ Do not burn garbage, plastics, "green" wood, composite wood products or coal. These materials can produce gases and byproducts that may harm the fire chamber and chimney or produce excessive amounts of creosote.
- ✓ Never start a fire with gasoline, kerosene, charcoal lighter fluid or other flammable liquids.
- ✓ Use only with approved chimney.
- ✓ Black metal on front of unit is HOT - keep children away.

FIREPLACE SPECIFICATIONS

Emissions 2.7 grams/hr.

Maximum BTU Output/Hr. 54,300

Estimated Heating Capacity 1800 sq. ft.

Height	48"
Width	38-1/4"
Depth	27 3/8"
Flue Size.....	8" I.D.
Hot Air Ducts (Optional).....	8"
Maximum Log Length	24"
Paint.....	"Forest" Black Metallic

DISCLAIMER NOTICE

The BTU ranges and heating capacity specifications are provided as guidelines only and in no way guarantee the output or capacity of the unit. In warmer climates, on average, the fireplace can be expected to heat a greater area than indicated.

Other factors which affect the actual area that the unit will heat include: the conditions of the building, heat loss, type of construction, amount of insulation, type of air movements and location of the unit. The actual BTU output depends on the type and condition of the wood being burned, draft setting and the chimney that the fireplace is hooked up to.

NOTE: Your Clayton warranty is at the end of this manual. Be sure to complete and return the warranty registration to the manufacturer. If you have any problem your local dealer cannot help you with, please contact the manufacturer direct.

PLANNING YOUR FIREPLACE INSTALLATION

Before beginning actual installation, it is important to thoroughly plan out the location of the fireplace and how it will be used to provide heat to your home. Read the entire manual to ensure that your installation meets all requirements and that you have the necessary materials and equipment to complete installation.

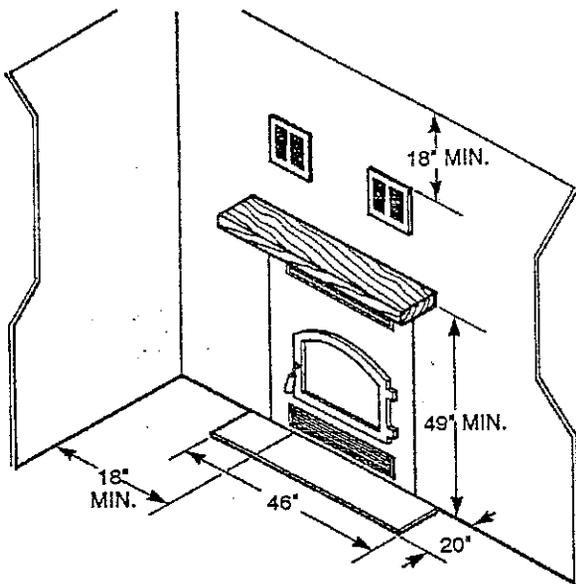
GENERAL GUIDELINES FOR LOCATING THE FIREPLACE

1. Consider how it will be framed and its relation to doors, windows, adjacent walls and traffic patterns.
2. If possible, locate the fireplace so the chimney can be installed without cutting through floor joists or roof rafters.
3. Determine where a duct can be run to provide outside air to the fireplace for combustion (optional).

CLEARANCES FROM COMBUSTIBLES

Front to Adjacent Wall	18"
Non-combustible Hearth	20" x 46"
Base of Unit to Overhead Combustible	49"
Heat Vents to Ceiling	18"
Heat Ducts, Approved Chimney Pipe to Combustibles	2"
Back, Sides and Top of Unit	Flush to Materials (Built-in Spacers)

CLEARANCES TO COMBUSTIBLES



HOT AIR DISTRIBUTION

The high BTU output of the Clayton fireplace makes it an excellent heat source. The diagrams on pg. 6 and 7 show different duct systems that can be used to heat one or more rooms in your home.

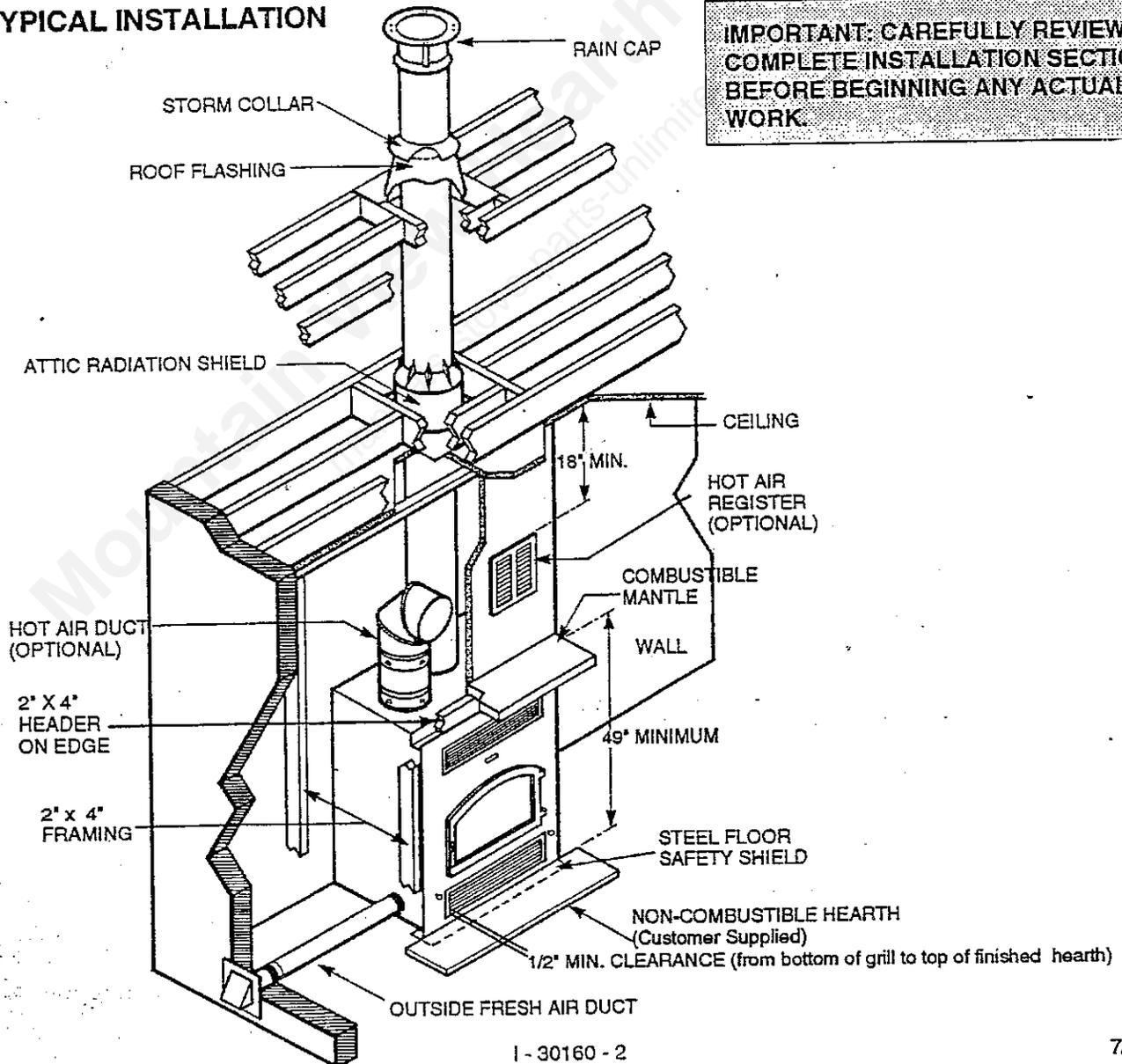
CHIMNEY CONSIDERATIONS

1. Any UL-103 (HT-2100 degree) type HT, or ULC-S629 (in Canada) factory built chimney system may be used.

You may connect to a Masonry chimney as long as the conditions in section 8-4.5 of the national code book are met.

2. Do not vent any other appliance through the fireplace chimney.

TYPICAL INSTALLATION



IMPORTANT: CAREFULLY REVIEW COMPLETE INSTALLATION SECTION BEFORE BEGINNING ANY ACTUAL WORK.

INSTALLATION

PARTS CHECKLIST:

1. Clayton Fireplace
2. Approved Chimney Including:
 - Anchor Plate
 - Appropriate number of lengths for proper height.
 - 15° or 30° elbows (if necessary). See Chimney Installation instructions.
 - Firestop radiation shield, Attic radiation shield
 - Roof flashing
 - Rain Cap.
 - Supports (if necessary)

OPTIONAL PARTS

1. Additional hot air ductwork
2. Air duct booster fans and snap switches
3. Grill box extension kit
4. Masonry Adapter box
5. Temperature probe port extension
6. Non-Combustable Face and Hearth
7. Condar temperature probe model 9-85
8. Hot Air Duct Kit
9. 10" x 10" Grill Kit

STRUCTURAL AND FINISHING MATERIALS OPTIONS

1. Framing and sheathing.
2. Facing materials: stone, bricks, tile, etc.
3. Premanufactured fireplace surround and hearth
4. Mantle

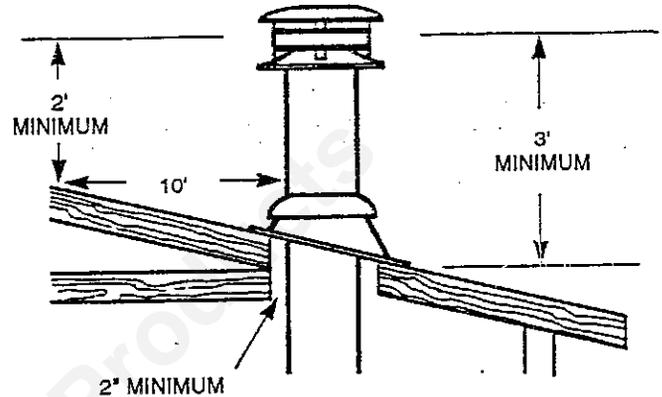
PLACING THE FIREPLACE

1. Move fireplace into selected location.
2. Hearth Preparation:

On combustible flooring, raise the front of the fireplace enough to slide the 6" wide steel floor safety shield halfway under the unit. Nail the exposed portion of the strip to the floor. The safety shield provides added protection against hot embers which could fall in between the fireplace and the finished hearth. In all installations consideration must be given to the thickness of the final hearth material. A clearance of 1/2" minimum must be maintained between the top of the finished hearth and the bottom of the lower grill to insure that the grill can be fully opened for removal of the ash pan. Elevate the fireplace as required.

CHIMNEY GENERAL INFORMATION

1. A minimum of three feet is required from the top of the chimney to the point where it passes through the roof. In addition, the top of the chimney must be at least 2' higher than any wall, roof ridge or building that is within 10'.

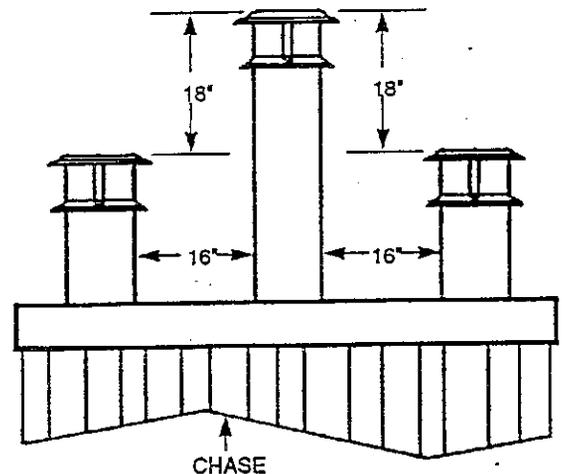


2. Where more than one chimney uses the same chase, or exits the roof in the same location, maintain the clearances shown to prevent smoke being drawn from a warm flue to a cold one. These are suggested clearances only.
3. Whenever possible the entire run of the chimney should be within the structure. The use of an exterior chimney may cause poor draft, excessive condensation and a faster build-up of creosote.

If it is necessary to use an exterior chimney, it should be framed in with an insulated enclosure.

Do not fill the enclosure with loose fill. A 2" clearance must be maintained around the chimney pipe.

4. The fireplace will support a maximum chimney height of 15'. Additional length should be supported at 10' intervals using components specified by the chimney manufacturer.



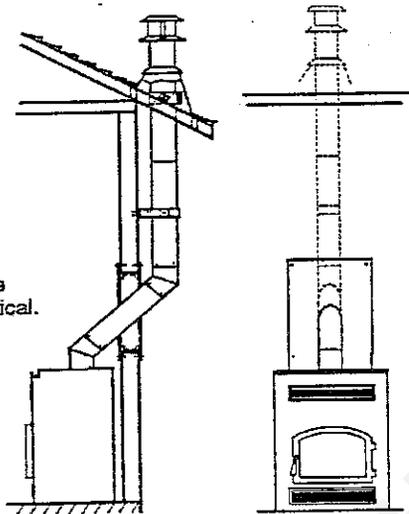
INSTALLING THE CHIMNEY

Follow chimney manufacturer's instructions for proper installation. Be sure the chimney is equipped with the corresponding anchor plate for attachment to the fireplace.

Whenever possible, the chimney should take a straight vertical path to the roof. If a bend is required, use only one angled section with a maximum of two elbows. Only 15° or 30° elbows are approved for this unit. Consult your dealer for selection of components and observe required clearances.

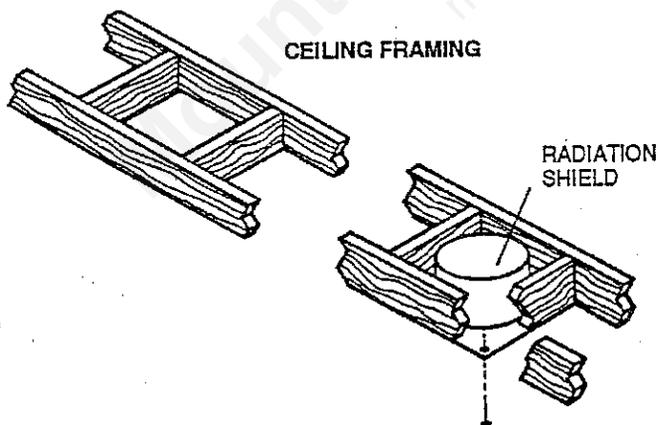
OFFSET CHIMNEY INSTALLATIONS

Chimney must not angle more than 30° from vertical.

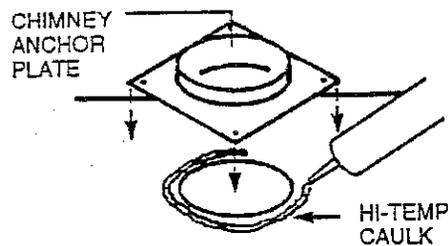


1. Cut and frame in holes in ceiling and roof where chimney will pass with 2 x 4's. Finished opening should be 13" x 13". Use a plumb bob to line up centers of holes with flue opening on fireplace.

2. Attach a firestop radiation shield on the underside of the framing for each floor that the chimney goes through. At the attic level install an attic radiation shield.



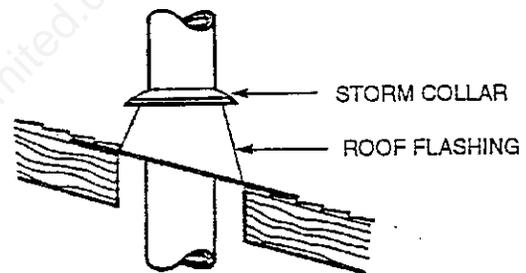
3. Place bead of hi-temp silicone caulk under appropriate chimney anchor plate and push plate collar into fireplace flue. Secure with metal screws. Connect first chimney section per manufacturer's instructions. Continue adding sections until required height is achieved.



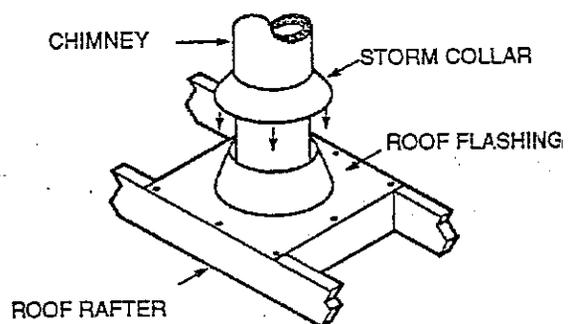
4. If the chimney is not enclosed and passes through a vented attic space or roof, proceed as follows:

- Slide roof flashing over chimney and seal flashing to roof with roofing compound. If roof is sloped, place top edge of flashing under shingles and bottom edge on top of shingles. Secure with roofing nails.
- Place storm collar over chimney and flashing. Tighten collar and seal joint with good quality caulking compound.
- Install raincap on chimney and secure.
- Clean flashing with vinegar or solvent and apply a coat of rustproof paint.

5. If the chimney is enclosed in the attic it must be fitted with a good radiation shield and vented flashing.



- Install radiation shield in roof and attach with four 3/4" screws or 1" nails.
- Seal roof flashing to roof with roofing compound. On sloped roofs, place top edge of flashing under shingles and bottom edge on top of shingles. Secure with roof ing nails.



- Place storm collar over chimney and push down so collar makes contact with flashing. Seal the collar joint with silicone or high quality caulking.
- Install and secure raincap.

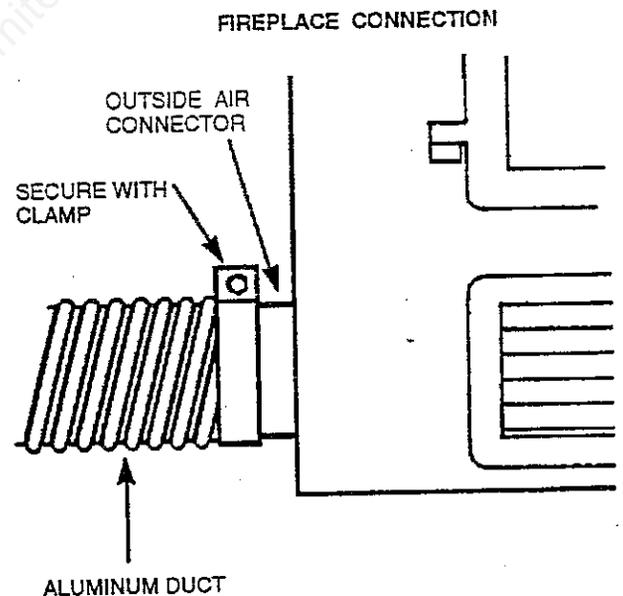
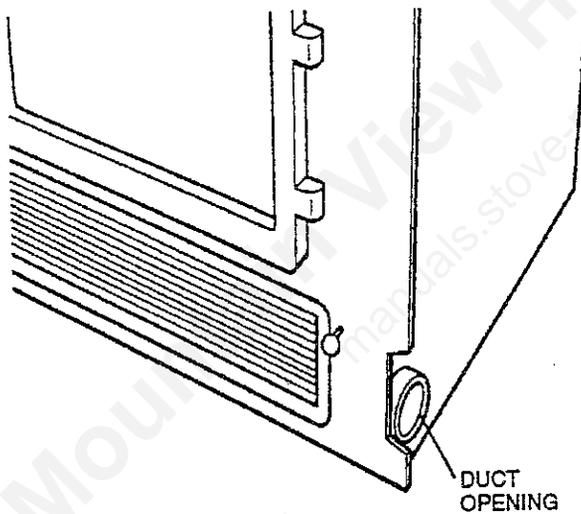
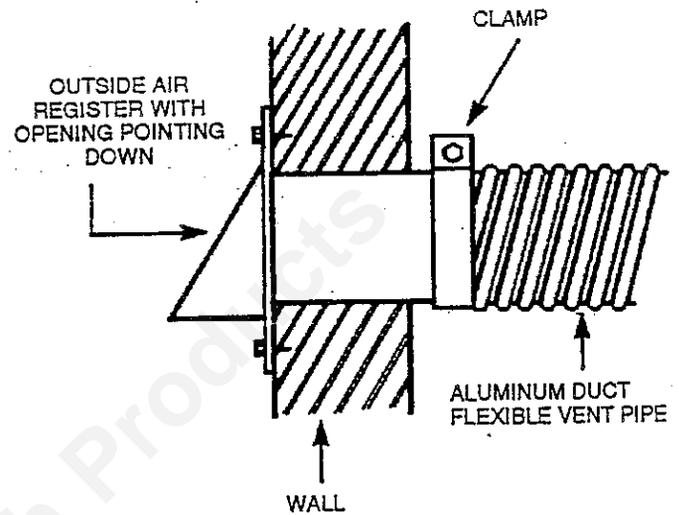
COMBUSTION AIR DUCT

It is required that a separate source of outside combustion air be provided for all installations. This is particularly important in well insulated houses. The Clayton Outside Air Kit assures proper combustion of the wood. The kit consists of an exterior vent, flexible vent pipe, and mounting hardware.

The Clayton Fireplace is equipped with an opening on both sides of the unit for connection of the outside air duct. The actual duct may be run above or below the floor level.

1. Cut a 4-1/4" hole in the outside wall of the house. From the outside, install the vent with the vent openings pointing down.
2. Push one end of the aluminum air duct over the neck of the outside vent and the other end over the fireplace connector.
3. Secure duct at each end with clamps supplied (2).

NOTE: Combustion air must be connected to both sides of the unit



8" WARM AIR OUTLETS

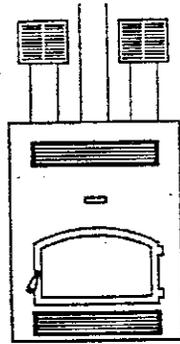
The two 8" heat duct outlets at the unit top are blocked off during manufacturing so the heat exits the fixed-open permanent grill at the unit front. If the 8" heat ducts are installed, however, they cannot be blocked or have closeable dampers at the heat register outlet.

An exception to this would be the self-closing dampers which are installed when using the booster fans for extended duct runs over head. Their closure would only occur in isolated instances, if at all.

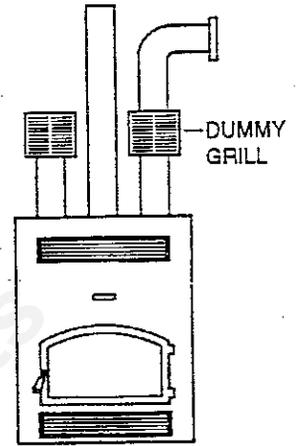
HOT AIR DUCT INSTALLATION

The Clayton Phase II Fireplace can be used to heat a single room or an entire house. The diagrams on this and the following three pages show approved duct configurations.

(1) SAME ROOM WITH DUCT OPTION
United States and Canada
(WIRING OPTION A)

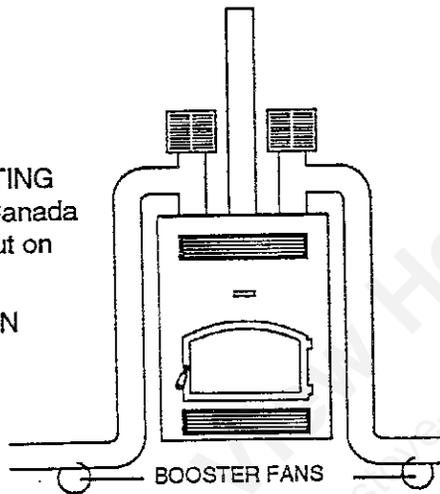


(2) SAME ROOM AND SECOND ROOM
United States and Canada
(WIRING OPTION A)

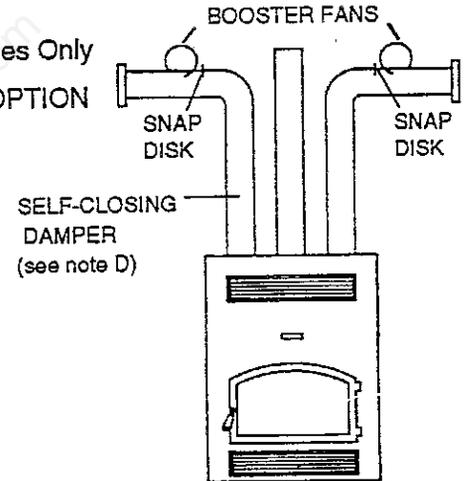


(3) CENTRAL HEATING
United States and Canada
(See complete layout on following page.)

(WIRING OPTION B, C or D)



(4) TWO ADJACENT ROOMS
United States Only
(WIRING OPTION B or D)



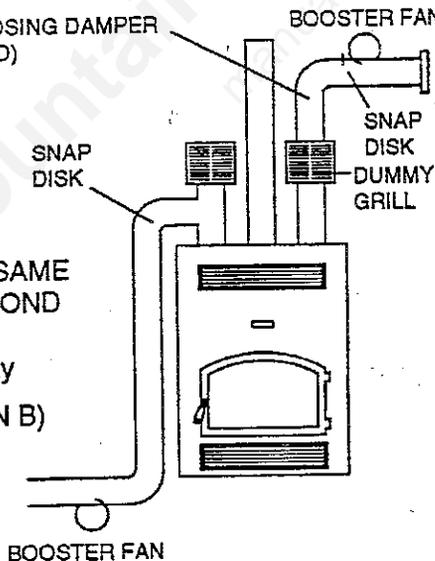
SELF-CLOSING DAMPER
(see note D)

BOOSTER FAN

SNAP DISK

SNAP DISK
DUMMY GRILL

(5) BASEMENT, SAME ROOM AND SECOND ROOM
United States Only
(WIRING OPTION B)



NOTES:

A. In installations where ductwork is run downward, one standard hot air vent must also open into the fireplace room.

B. Booster fans must not be enclosed within a chase.

C. Booster fans on *upward* ductwork must be equipped with snap disk, heat sensitive switches. Booster fans on *downward* ductwork may be equipped with snap disk, heat sensitive switches or an on/off switch.

D. All hot air ductwork must be 8" diameter B-Vent through the initial wall or ceiling penetration. Single wall pipe may then be used providing booster fans and self-closing dampers are installed on *upward* ducting.

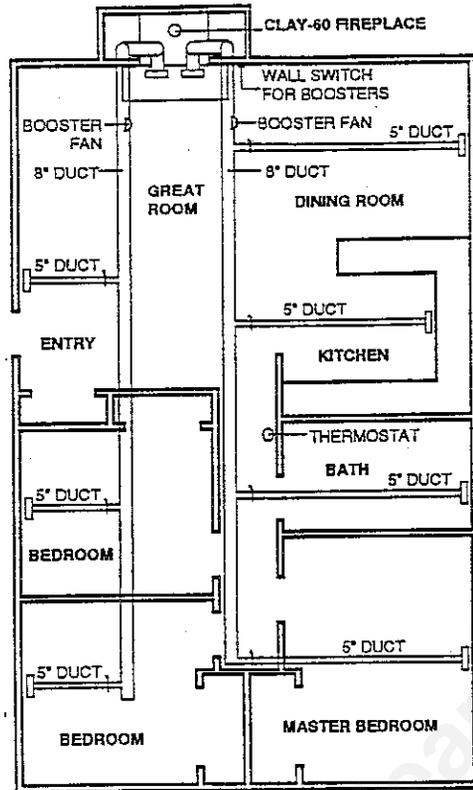
E. See Wiring Section for detailed electrical requirements.

F. B-Vent will retain heat much better than single wall pipe for longer runs.

G. Cut hole in outer skin of B-Vent to install snap disk.

TYPICAL DUCTWORK LAYOUT FOR CENTRAL HEATING

Approved for United States and Canada.



NOTE:

DUCTWORK MAY BE RUN OVERHEAD OR BELOW FLOOR FOR UNITED STATES - BELOW FLOOR ONLY FOR CANADA.

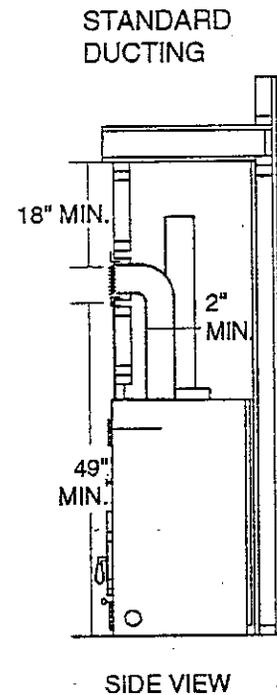
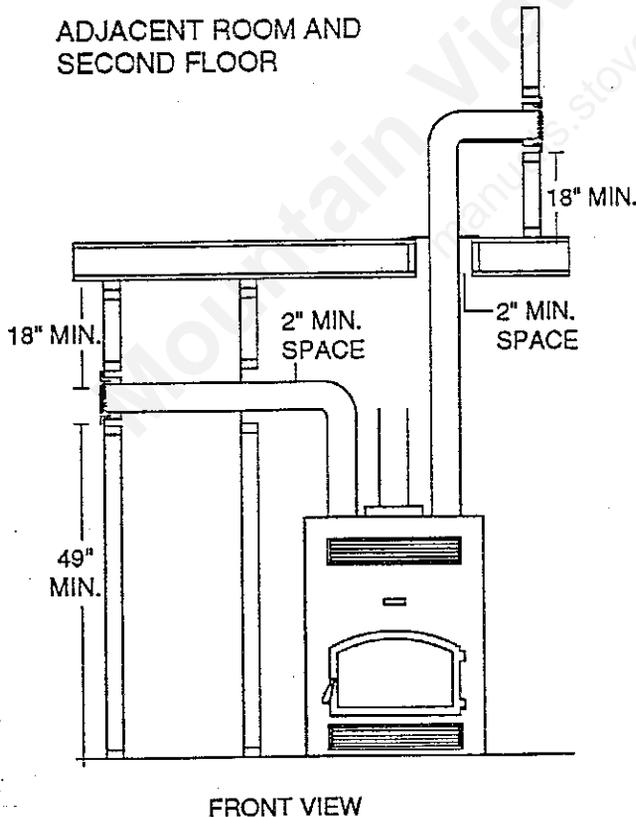
When running ductwork down, standard hot air registers must also open into room with fireplace.



EXAMPLE:

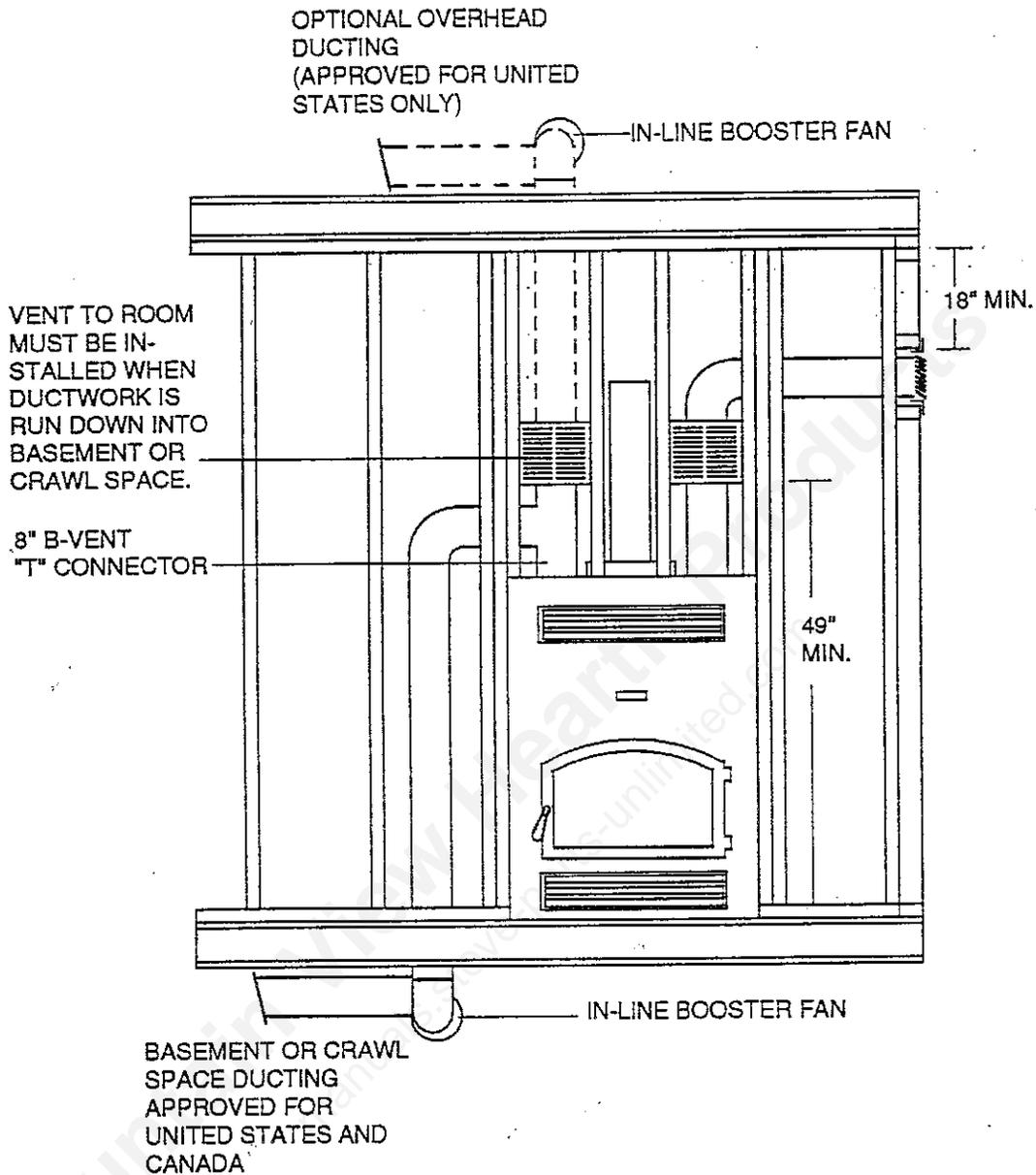
1200 SQ. FT. HOME

CLEARANCE CONSIDERATIONS WHEN INSTALLING HOT AIR DUCTWORK



NOTE: All hot air ductwork must be 8" diameter B-Vent through the initial wall or ceiling penetration. Single-wall pipe may then be used providing **booster fans** and self-closing **dampers** are installed on **upward** ducting.

CENTRAL HEATING DUCT SYSTEM CLEARANCES



All hot air ductwork must be 8" diameter B-Vent through the initial wall or ceiling penetration. Single wall pipe may then be used providing **booster fans** and **backdraft dampers** are installed on **upward** ducting.

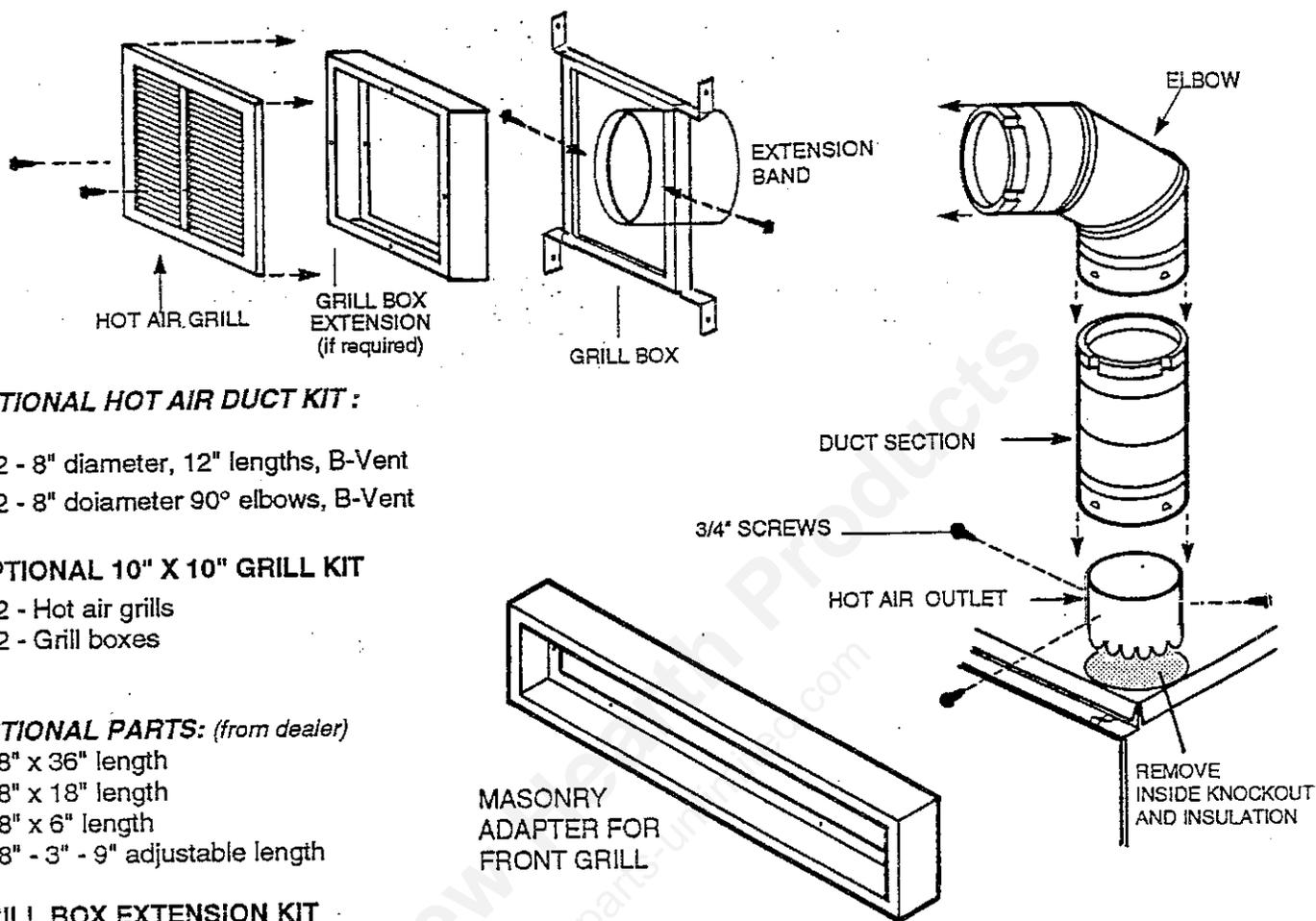
2" clearance to combustibles must be maintained around the hot air ductwork.

NOTE: When ducting down, attach a 90° elbow to the top of "T" connector for installation of room hot air register.

This is essential to disipate heat in the event of fan failure.

Attach 90° elbow to side of "T" to run ducting to basement or crawl space.

OPTIONAL HOT AIR DUCT KIT AND 10" X 10" GRILL KIT



OPTIONAL HOT AIR DUCT KIT :

- 2 - 8" diameter, 12" lengths, B-Vent
- 2 - 8" doiameter 90° elbows, B-Vent

OPTIONAL 10" X 10" GRILL KIT

- 2 - Hot air grills
- 2 - Grill boxes

OPTIONAL PARTS: (from dealer)

- 8" x 36" length
- 8" x 18" length
- 8" x 6" length
- 8" - 3" - 9" adjustable length

MASONRY
ADAPTER FOR
FRONT GRILL

GRILL BOX EXTENSION KIT

- 2 - Grill Box Extensions

Cut out in drywall for grill box is 11 1/8" square.

HOT AIR DUCT INSTALLATION

The hot air outlets may be vented into the same room as the fireplace or to an adjacent room or second floor. When going through a combustible wall or floor, a radiation shield must be installed in the wall. The required hole size is 13" x 13" for studs and flooring.

CAUTIONS:

1. Do not install heat registers below the level of the two hot air outlets on the top of the fireplace.
2. Do not tie the ducts into a central heating system.
3. All hot air ductwork must be 8" diameter B-Vent through the initial wall or ceiling penetration. Single wall pipe may then be used providing **booster fans** and **backdraft dampers** are installed on upward ducting.

4. Use only outlet registers approved for this unit. Other registers may restrict air flow causing overheating.

5. Do not run hot air ducts for a distance greater than 10' unless system is equipped with booster fans. (See page 6.)

6. Maintain a 2" minimum clearance from ducts to combustibles.

NOTE: The grills must exit at least 18" away from the ceiling and 16" from the side walls.

2" from sidewall if duct booster fans are installed with snap disks.

FLUSH FIREPLACE INSTRUCTIONS WHEN INSTALLED WITH 8" DUCT KIT

When the finished wall will be flush with the front of the fireplace, proceed as follows:

1. Fit a 90° elbow to the top of each duct section. Push down firmly to snap lock them together.
2. Attach the duct sections to the hot air outlets on top of the fireplace. Fasten them in place by screwing three metal screws through the pipe and into the fireplace hot air outlets. Be sure face of each elbow is parallel to the front of the fireplace.
3. The hot air outlet registers are in two parts (grill and grill box). Put the grills aside for now. Slide grill boxes over end of 90° elbows. Using a straightedge, check that front of grill boxes are even with front of fireplace. Secure each grill box to elbows with two sheet metal screws.

RECESSED FIREPLACE INSTALLATIONS WHEN INSTALLED WITH 8" DUCT KIT

When the hot air ducts will pass through a masonry surround built around the fireplace, a grill box extension kit must be used to make the face of the hot air registers flush with the brick or stone. Proceed as follows:

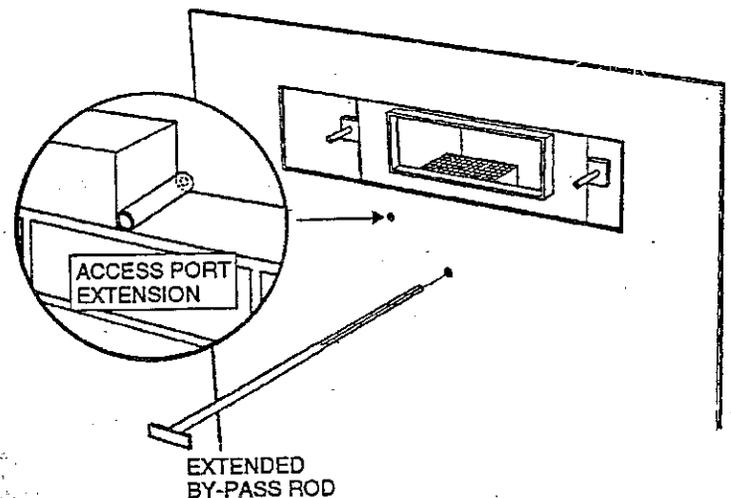
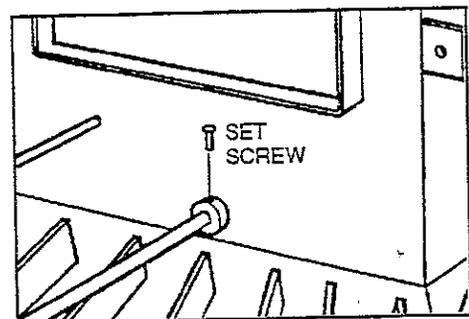
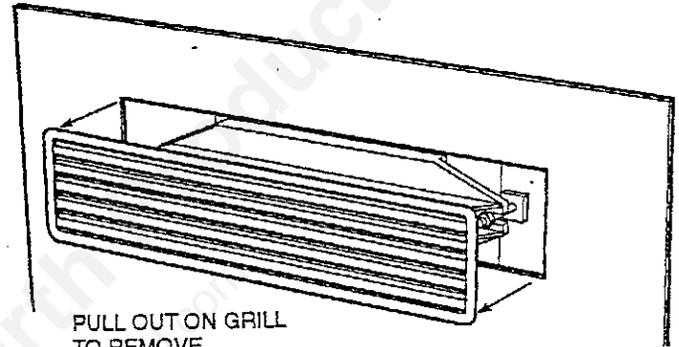
1. Fit a 90° elbow to the top of each duct section. Push down firmly to snap-lock them together.
2. Attach the duct sections to the hot air outlets on top of the fireplace. Fasten them in place by screwing three metal screws through the pipe and into the fireplace hot air outlets. Be sure the face of each elbow is parallel to the front of the fireplace.
3. Screw grill box extensions onto standard grill boxes using four metal screws. Slide grill box assemblies over end of 90° elbows and adjust so face of grill boxes will be flush with finished brick or stone wall. Use two sheet metal screws to secure each grill box assembly to the 90° elbows.
4. Slide 5-1/4" round duct extensions over inner grill box duct collar.

If you have designed your masonry surround to extend down over the face of the fireplace, you must also add a masonry adapter for the front grill. An optional way to deal with the front grill is to entirely remove it and construct a soldier course of bricks over the opening. (see finishing details on page 11). Depending on the amount of overlap it may also be necessary to add an extension tube for the temperature probe access port and replace the standard by-pass handle with an extended version. (Consult your dealer).

INSTALLING EXTENDED BY-PASS ROD AND ACCESS PORT EXTENSION

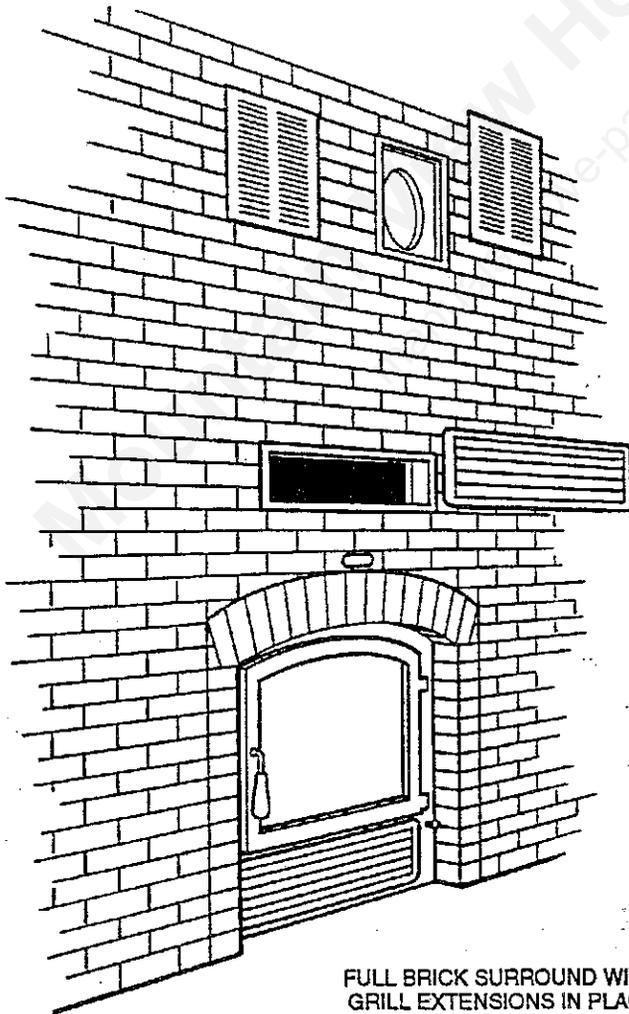
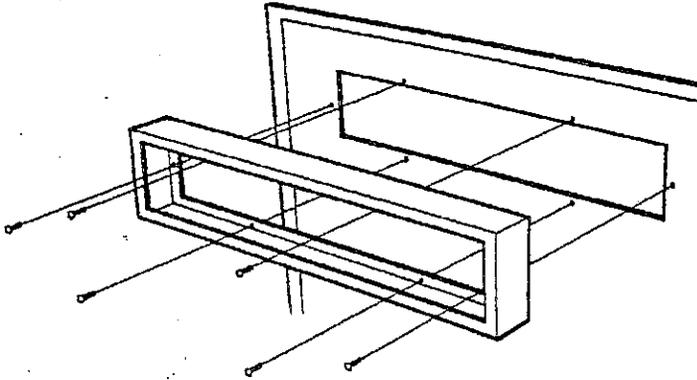
1. Pull off top grill and remove set screw from by-pass rod retaining collar.
2. Pull out existing rod, insert extended rod and replace set screw. If necessary, access door on by-pass chamber may be removed to facilitate alignment of rod.

NOTE: When bricking in the access port extension sleeve (smaller one) and the extended by-pass rod sleeve make sure they are aligned properly.



INSTALLING MASONRY ADAPTER

1. With the top grill removed, position the masonry adapter over the opening and mark the position of the six holes in the adapter's rear flange.
2. Drill holes into the face of the fireplace and attach the adapter.
3. When finishing details are complete push grill into adapter.



FULL BRICK SURROUND WITH GRILL EXTENSIONS IN PLACE

FRAMING-IN AND FINISHING INSTALLATION

The Clayton fireplace has been designed so it can be framed-in using standard combustible building materials without providing additional fireproofing or air spaces.

PRECAUTIONS:

Do not place unit directly against an exposed vapor barrier. A vapor barrier should be covered with sheet rock or similar material.

Refer to minimum clearance chart for placement of combustible finishing details.

When installing unit, be sure it is completely wired during the rough framing stage. (see pages 17-18).

FRAMING:

1. Frame the fireplace using 2" x 4" or heavier lumber. Use double studs on either side of the fireplace. The header above the front black facing must be a 2" x 4" set on edge.
2. Frame-in vertical sides of grill boxes with 2 x 4's (when applicable) and secure boxes with corner nailing strips. See illustrations for general framing layout.
3. Combustible wall material must be installed flush with the fireplace facing. It may not project out in front of the fireplace.
4. When facing the fireplace with brick, etc., the material must not overlap the front of the unit more than 2" on the sides to allow proper operation of the doors.
5. When the front finish is complete, install the hot air outlet grills with screws provided. The grills should point downwards to direct the hot air towards the floor.

WARNING:

Do not build in the area directly above the fireplace, this area must remain empty.

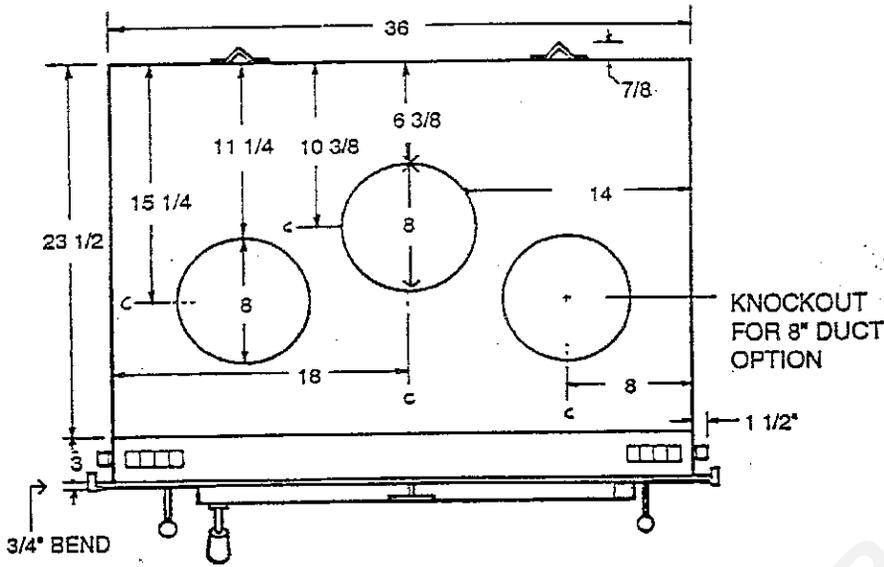
The header should rest on top of the metal spacer. Do not alter the spacers or notch the header to fit around them.

Do not put wood or combustibles directly on fireplace.

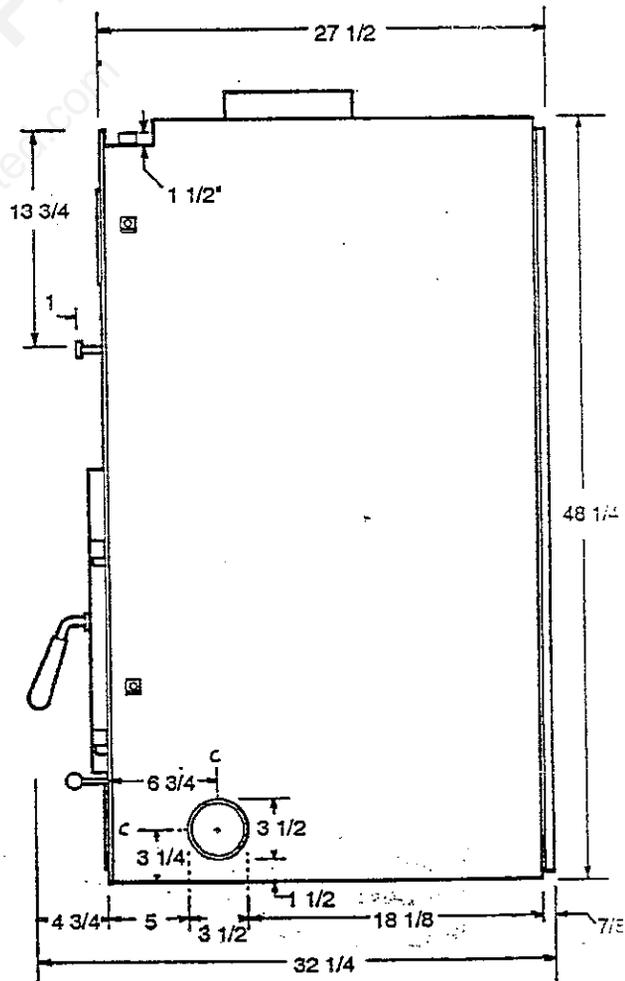
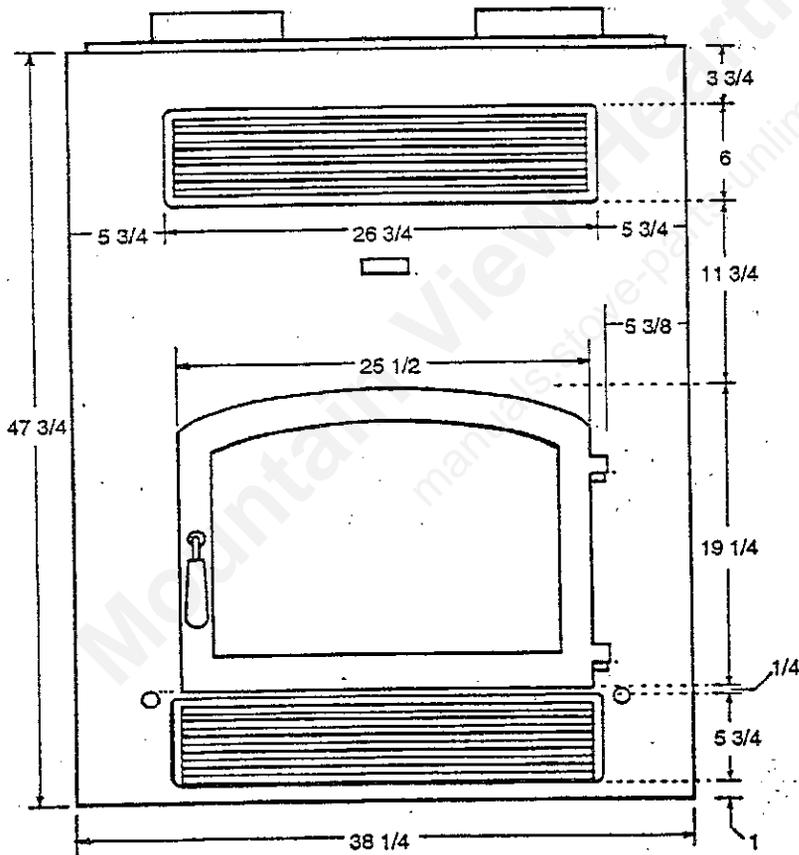
Do not block the rectangular air inlet or outlet, as this will cause the fireplace to overheat. If installing a brick soldier course as shown, the top metal grill must first be removed.

A wood mantle, if installed, must be at least 49" above the base of the fireplace.

FIREPLACE DIMENSIONS (In Inches)

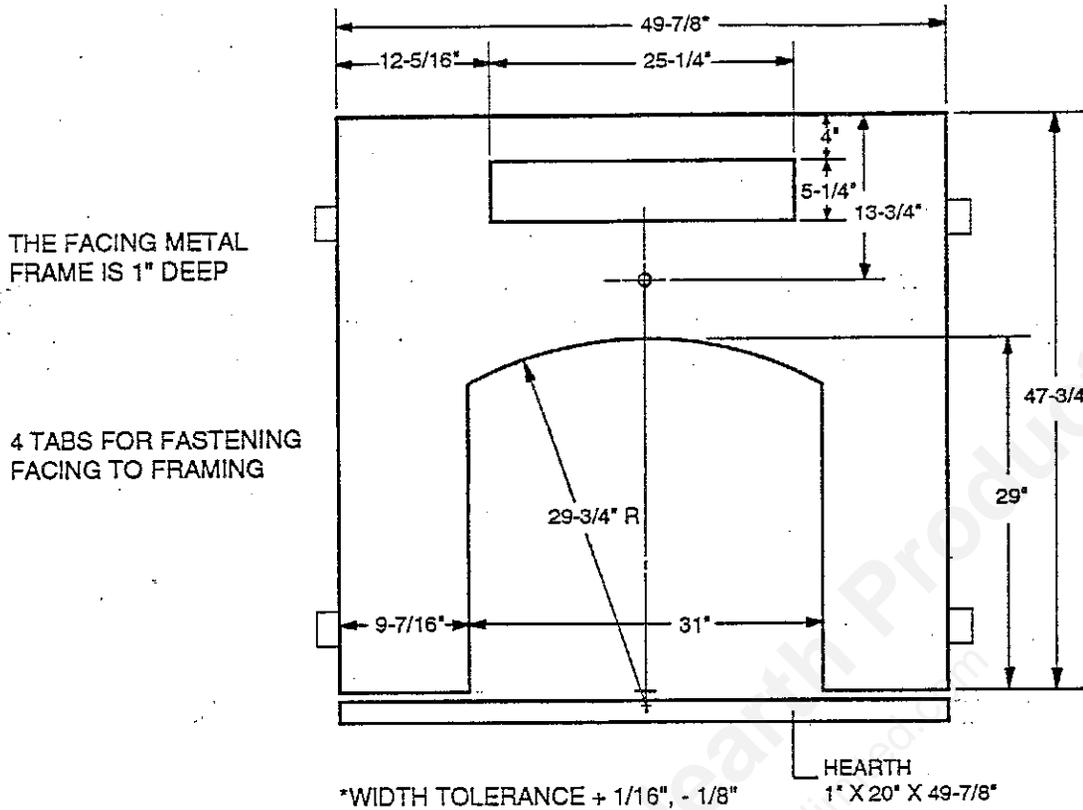


NOTE: Rough Opening Size:
38-1/2" WIDE x 52" HIGH



NON-COMBUSTIBLE FACING CUT-OUT DIMENSIONS

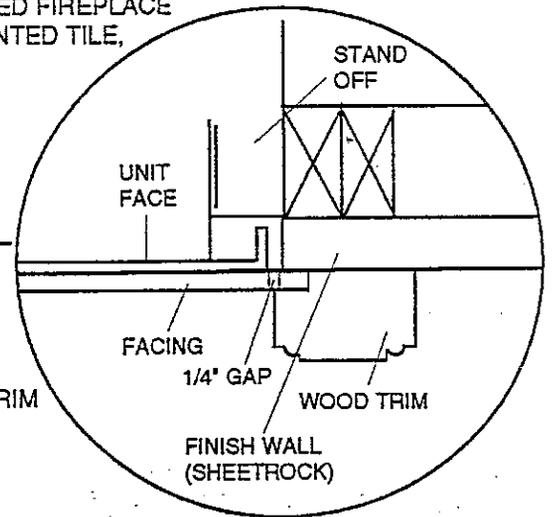
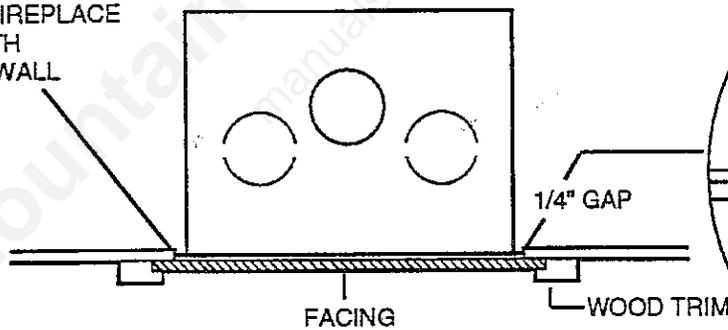
Required for tile or marble facing



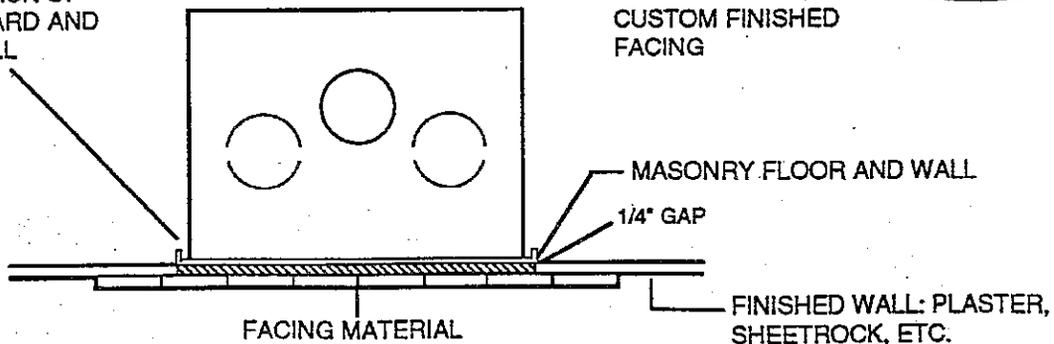
-SET-BACK FOR FACING OPTIONS

PREMANUFACTURED FIREPLACE SURROUND: MOUNTED TILE, STONE, ETC.

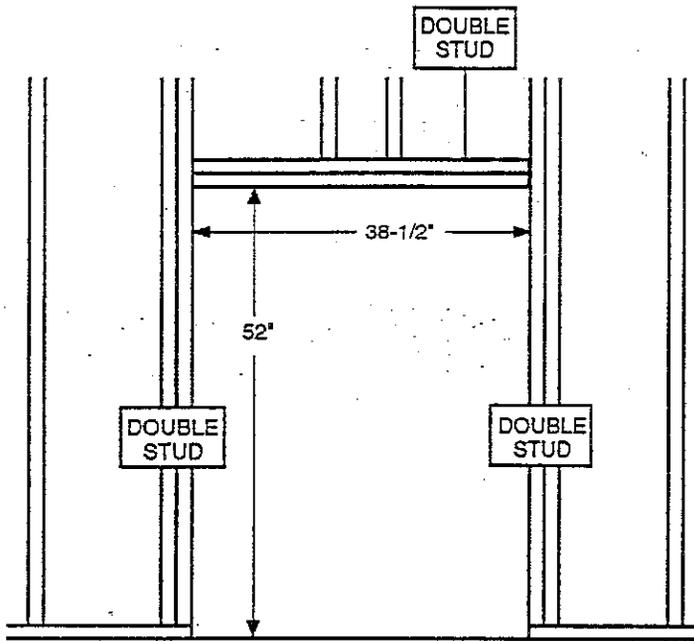
FACE OF FIREPLACE FLUSH WITH FINISHED WALL



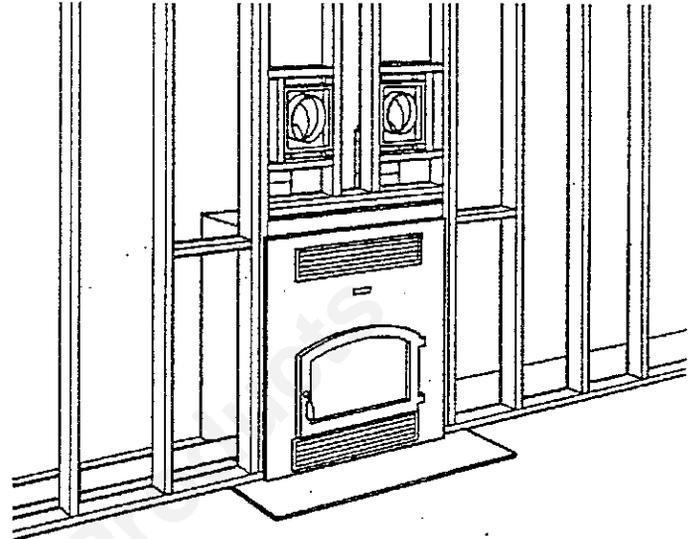
FACE OF FIREPLACE EVEN WITH BACK OF MASONRY BOARD AND FINISHED WALL



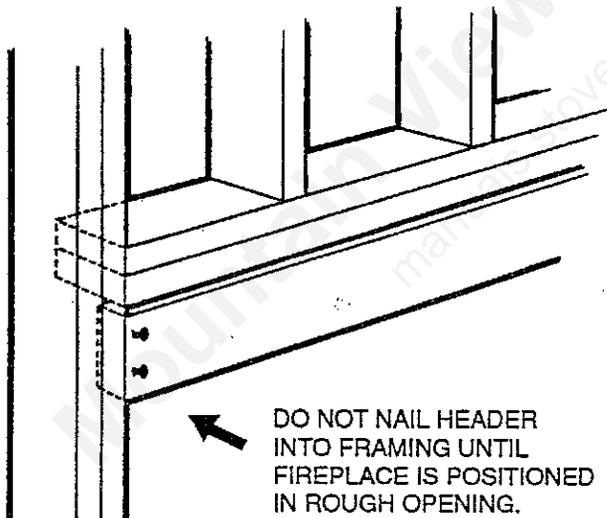
ROUGH OPENING DIMENSIONS



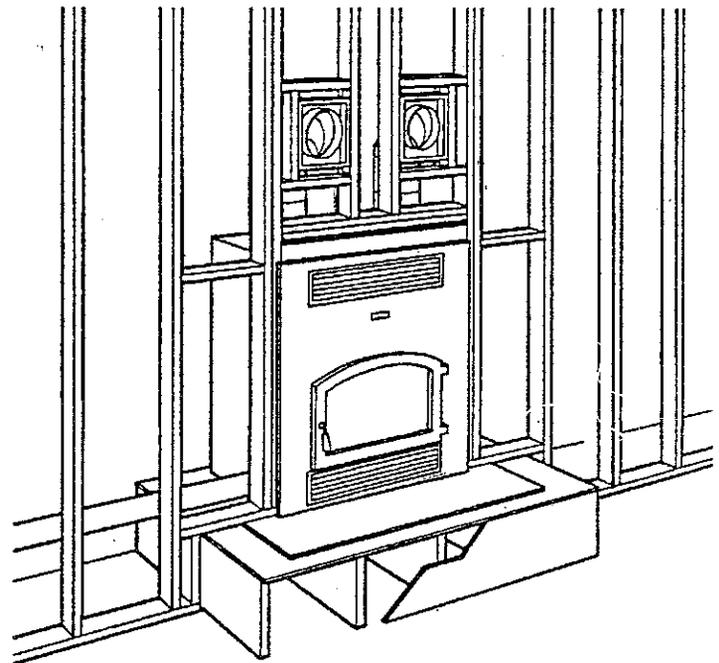
ROUGH FRAMED FLOOR LEVEL INSTALLATION SHOWN WITH OPTIONAL 10" X 10" GRILL KIT



HEADER DETAIL

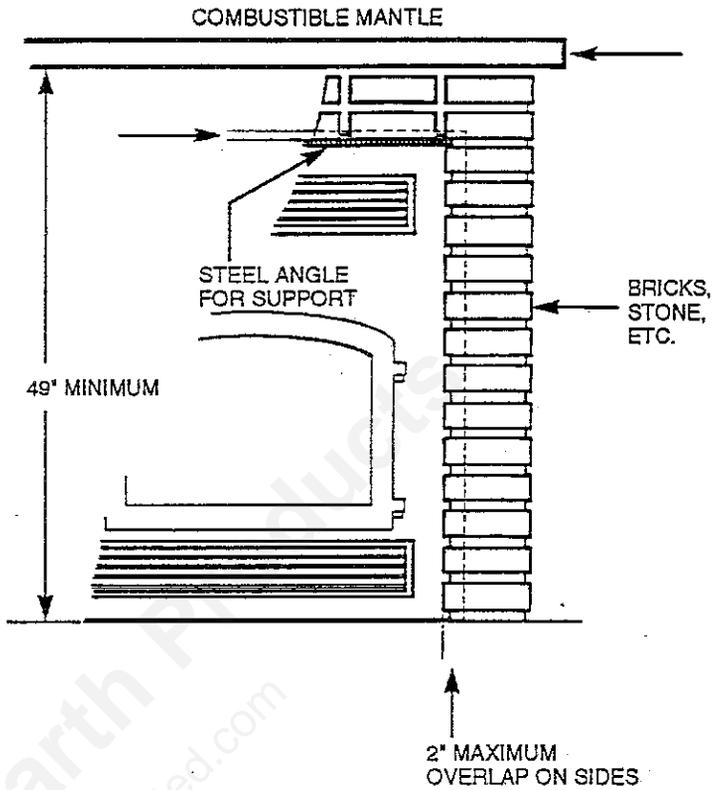
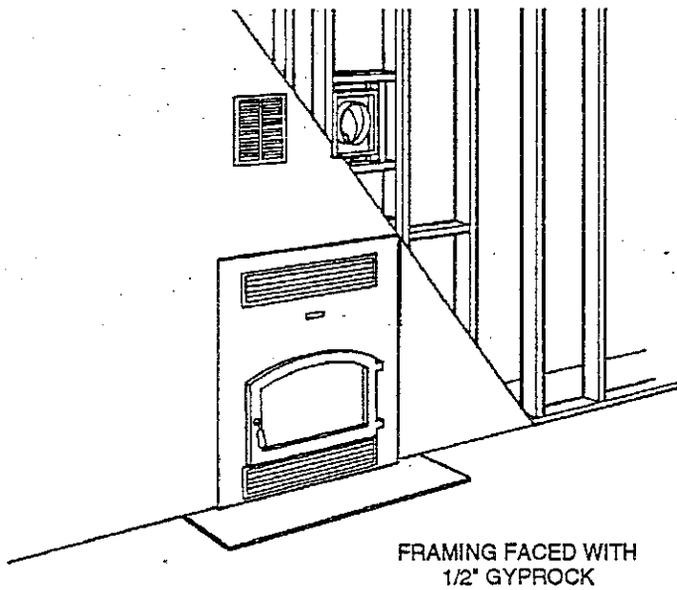


ROUGH FRAMED RAISED INSTALLATION SHOWN WITH OPTIONAL 10" X 10" GRILL KIT



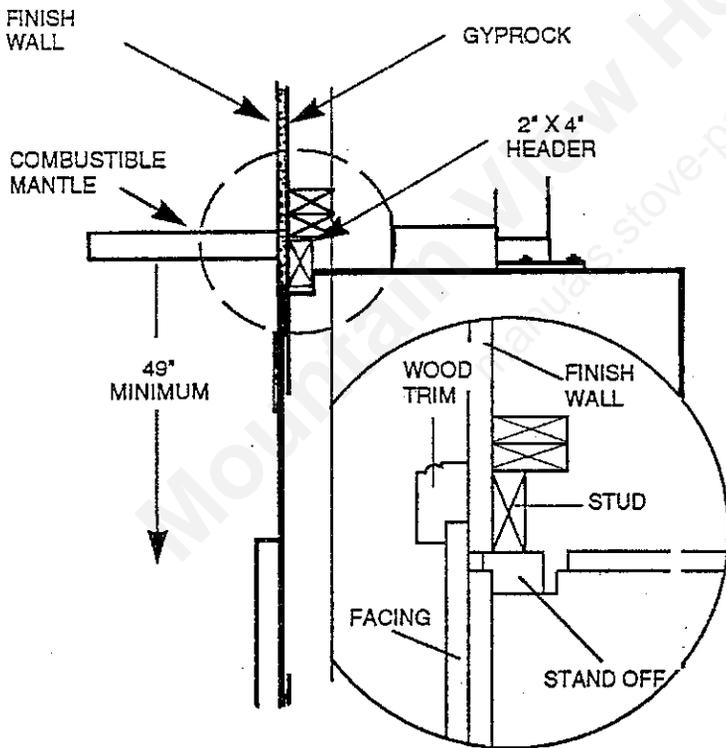
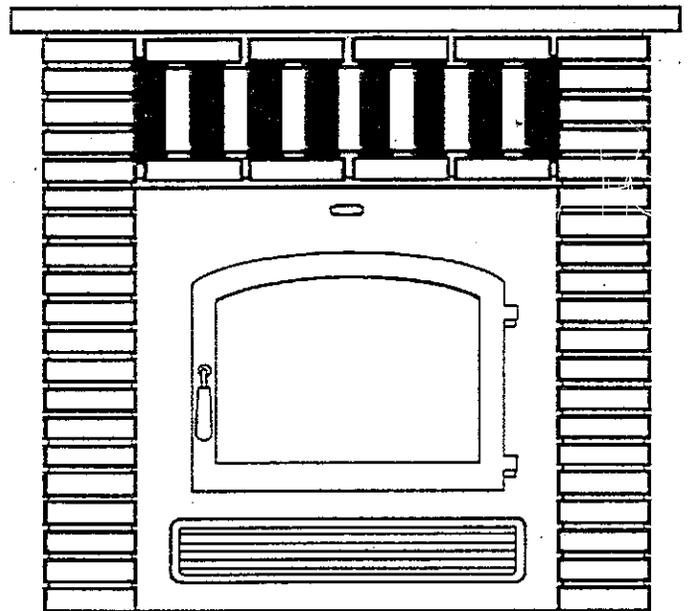
FINISHING DETAILS AND OPTIONS

PARTIALLY OVERLAPPED NON-COMBUSTIBLE FACING



SOLDIER COURSE BRICK

Remove top grill. Leave 2" minimum open space between vertical bricks. Total open area in front of grill opening must be at least 90 square inches.



FINISHING HEARTH:

A non-combustible hearth (e.g. ceramic tiles, stone, bricks, etc.) no smaller than 20" deep by 46" wide must be centered against the front of the unit. Be sure the joint between the fireplace and the hearth is sealed to prevent sparks or embers from falling into the floor area below the hearth.

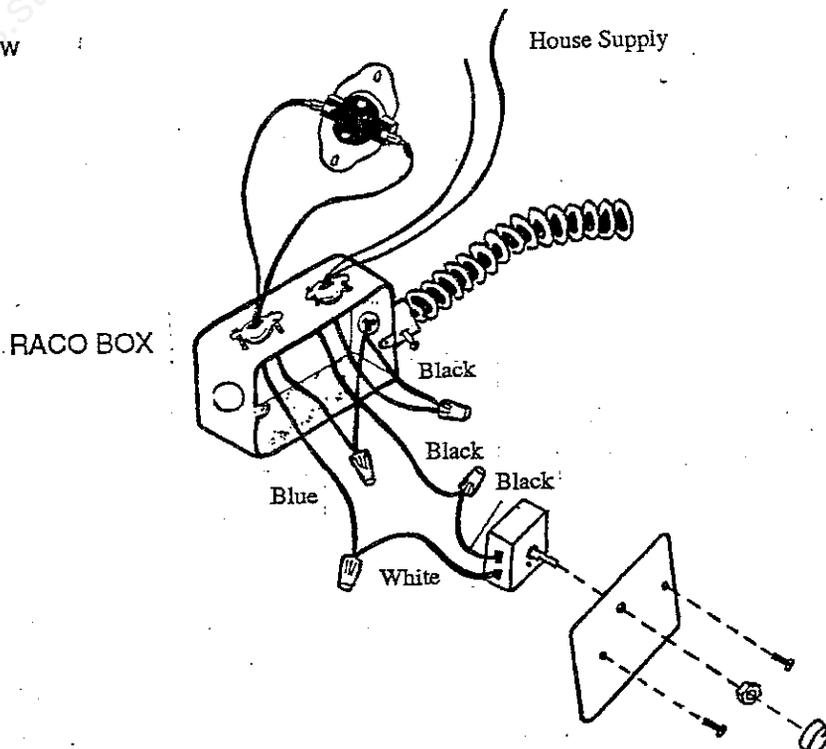
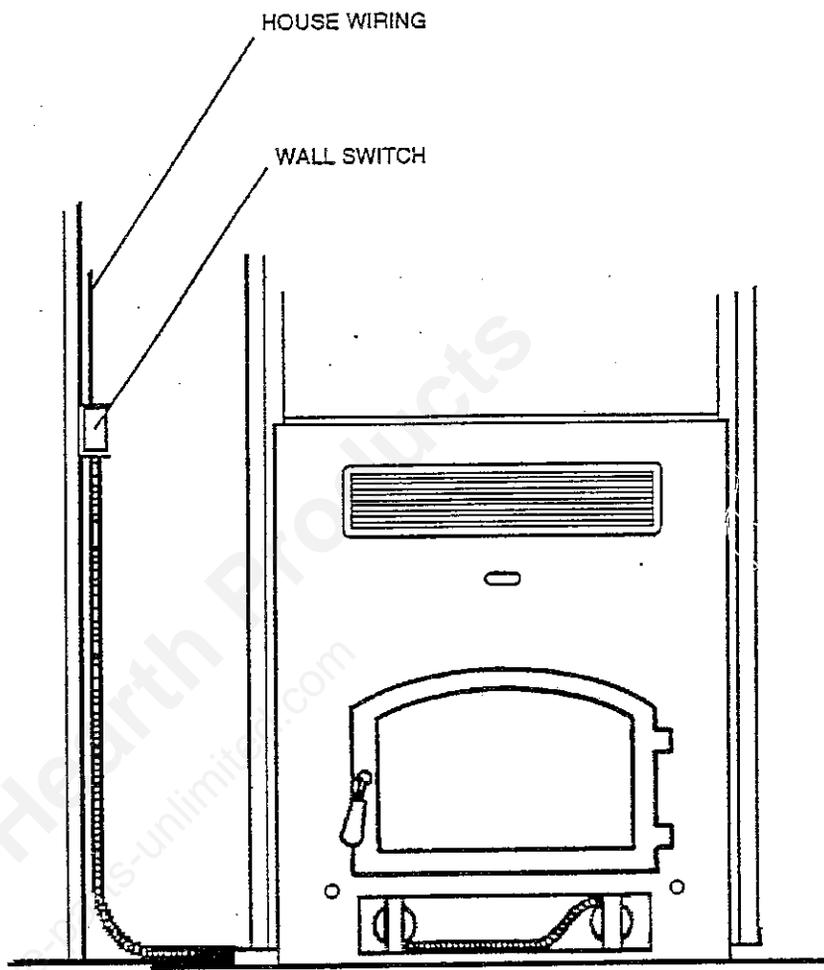
STANDARD FORCED AIR FANS

WIRING OF FANS SHOULD BE PERFORMED BY A QUALIFIED ELECTRICIAN

The forced air fans come factory installed and include two prewired motors with fan blades and mounting hardware.

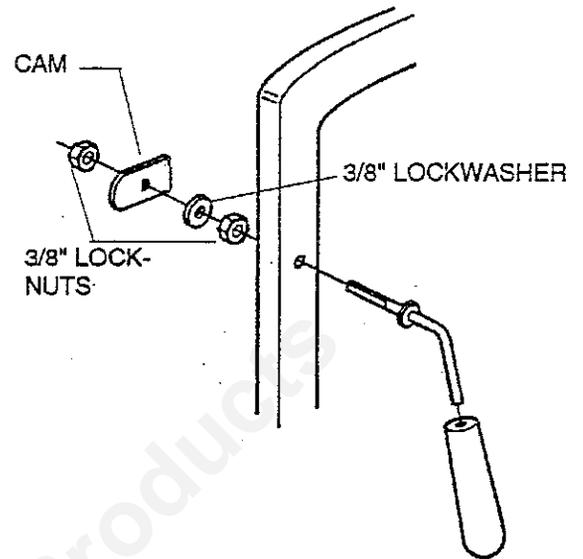
The directions below describe how to wire the fan for a standard duct system. If you have installed an optional duct system equipped with booster fans and/or snap disks, refer to the Wiring Diagrams on pages 17, 18 for further instructions.

1. Mount a 2" x 4" electrical box on the framing near the fireplace for installing a switch to control the fan kit.
2. On the left side of the fireplace closest to the switch location, feed a length of flexible conduit through the 7/8" hole in the sidewall of the fireplace.
3. The conduit must have three conductors: hot, neutral and ground.
4. Open the electrical box on the fan motor that is on the left side as the power conduit.
5. Run power conduit to switch box. Secure with BMX connector (not supplied).
6. Run grounded electrical cable from a new or existing 15 amp circuit to the switch box and connect wires and switch as shown in wiring schematic.



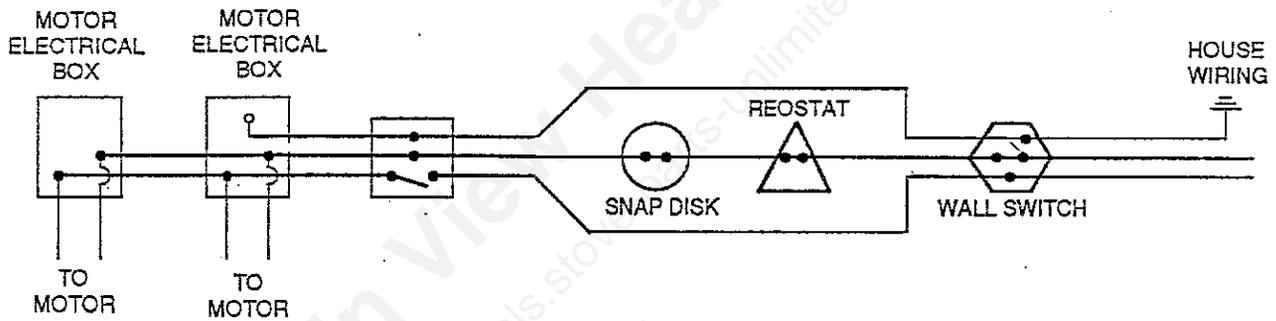
DOOR HANDLE INSTALLATION

1. Screw wooden handle onto shank and insert into door.
2. Secure with locking nut.
3. Slide on washer and latch cam, and secure with locking nut.



STANDARD WIRING DIAGRAM WITH WALL SWITCH

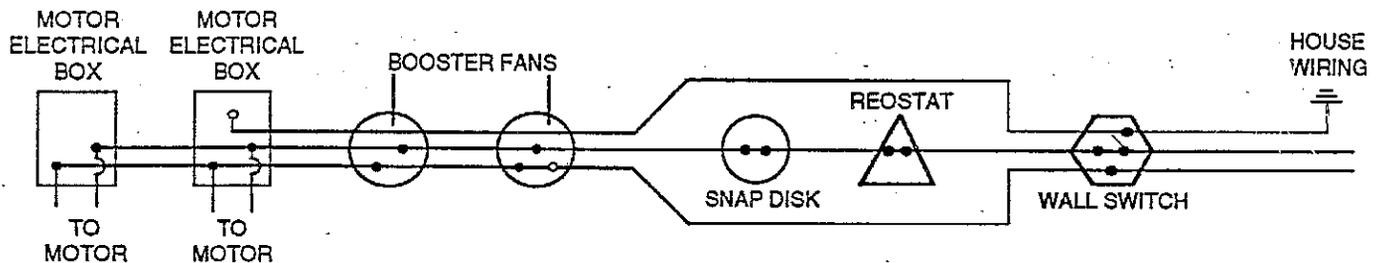
(A)



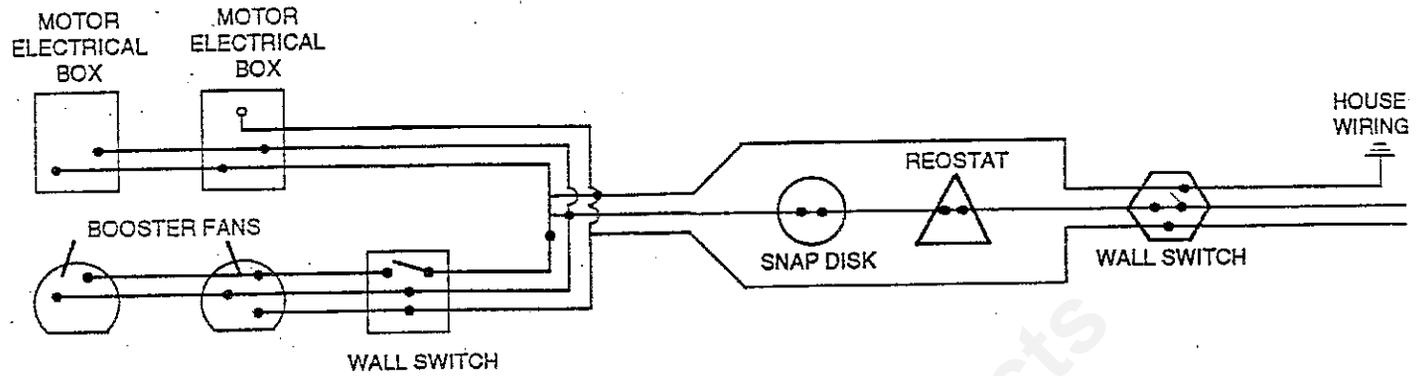
OPTIONAL WIRING

Refer to configurations shown on page 6.

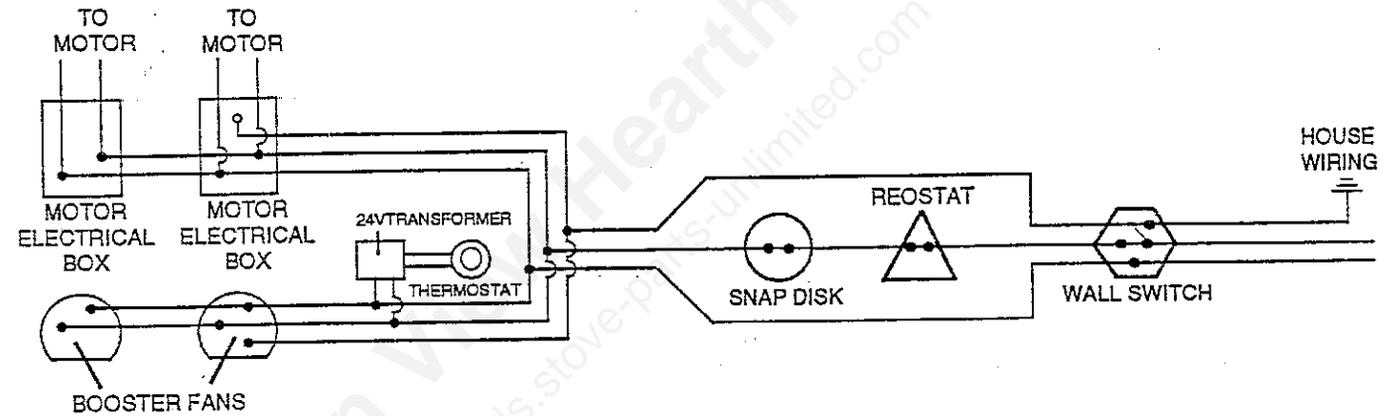
(B) STANDARD FANS WITH BOOSTERS



C STANDARD FANS WITH BOOSTERS ON SEPARATE WALL SWITCH



D STANDARD FANS WITH BOOSTERS ON THERMOSTAT



OPERATION

The Clayton fireplace is designed for burning clean, clear wood only. Well dried hardwoods are recommended for more even combustion, heating and reduced creosote formation.

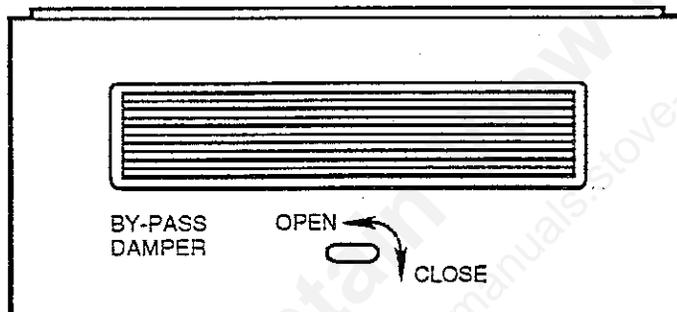
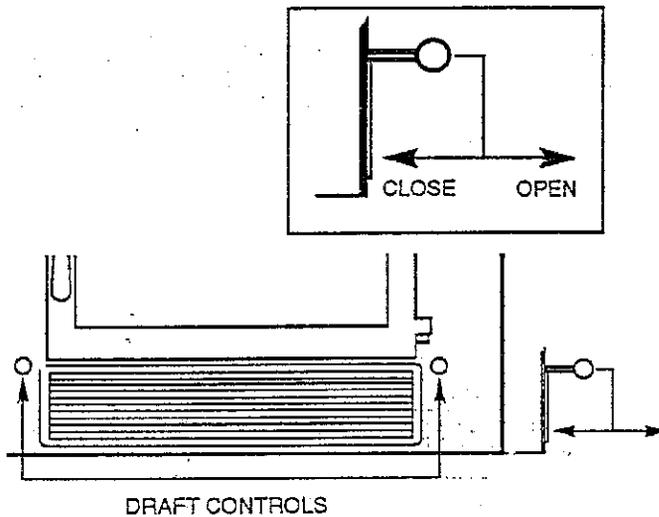
NEVER BURN COLORED PAPER, PAINTED WOOD, WOOD WITH NAILS, ETC. THESE MATERIALS CONTAIN COMPOUNDS THAT WILL DAMAGE THE UNIT'S CATALYTIC COMBUSTOR.

Small to medium, brisk fires are recommended. Extremely hot fires may cause discoloration of gold doors and are not required to achieve maximum efficiency.

Do not overload the fireplace to increase burning times. If you wish to hold a fire overnight, first close draft controls tight, then pull out approximately 1/4". This will slow the fire, and leave a bed of hot embers that will facilitate relighting in the morning. Slow combustion fires produce more creosote which will condense on the glass doors and chimney, requiring more frequent cleaning.

STARTING A FIRE:

1. Pull out the two slide draft controls so they are fully open.
2. Open the by-pass damper by giving the handle at the top center of the unit a 1/4 turn to the left.



3. Place a few sheets of crumpled newspaper and some small pieces of kindling wood directly on the firebrick. Do not use additional grates or irons. Ignite the paper. Do not use flammable fluids to start the fire.
4. Once fire is established, add larger pieces of wood and close fireplace doors. **KEEP WOOD BEHIND PERMANENT LOG STOP AND DO NOT LOAD WOOD ABOVE HEIGHT OF FIREBRICK.**
5. Allow 15 to 20 minutes to ensure fire is burning briskly, then close by-pass damper by turning damper handle to the right.
6. If necessary, the draft controls can be adjusted inward to slow the fire and reduce the heat output.

ADDING WOOD TO EXISTING FIRE

Before adding wood, always open by-pass damper first and close after loading is completed. **NEVER OPERATE THE FIREPLACE WITH THE BY-PASS DAMPER IN THE OPEN POSITION EXCEPT DURING INITIAL FIRING AND REFUELING.**

For maximum heat production and safety, the fireplace should **ALWAYS** be operated with the door completely closed.

ASH PAN AND ASH REMOVAL

To remove ashes from the firebox, pull the grate slide plate to the front with a poker, etc.

Push the ashes through the opening, into the ash pan. When the ash pan is approximately two thirds full, remove and empty.

IMPORTANT: Be sure to close slide plate after cleaning.

CAUTION: *Ash pan may be hot, use care in handling.*

Ashes should be placed in a metal container with a tight fitting lid. Keep the container on a non-combustible floor in a garage or outdoors, since ashes may remain hot for days and give off toxic fumes. Ensure that ashes are completely cool before final disposal.

Leaving a small amount of ash in the pan and on the fireplace grate will help protect the metal from excessive heat the enhance combustion efficiency.

DO NOT operate the fireplace without the ash pan in place. Also, the ash pan must be completely closed during operation to prevent excessive draft which can cause overheating.

CARE AND MAINTENANCE

1. Check the fiber rope gasket around the door periodically to ensure a tight fit. Replace gaskets if they are not providing a tight seal.
2. Clean the glass doors - The Clayton incorporates an air wash system that helps keep the glass free of creosote.

If the glass becomes dirty as a result of frequent slow burning fires, build and maintain a brisk fire. This will burn off creosote deposits. The glass may also be cleaned with a hot water/soap solution. Do not use abrasive cleansers or pads on the glass.

If the glass is ever broken it must be replaced with original equipment glass only. Consult your fireplace dealer or the manufacturer. Do not replace with tempered or standard glass.

3. Door frame - The gold plated frame should be cleaned with appropriate metal cleaner. Do not use steel wool or other abrasives.

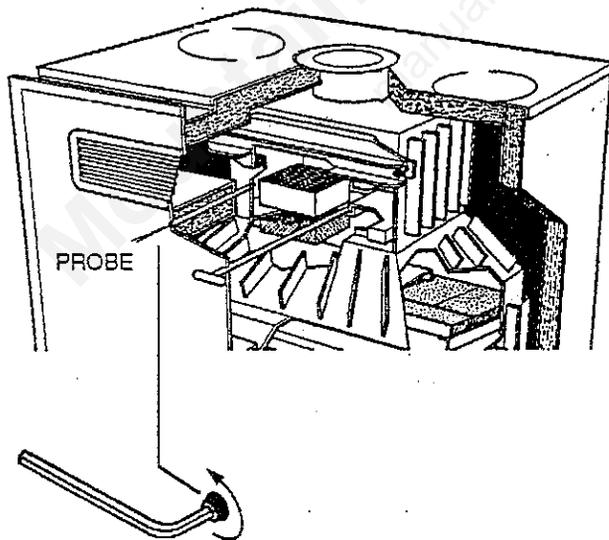
4. Creosote - Formation and Need for Removal:
When wood is burned slowly, it produces tar and other organic vapors which combine with expelled moisture to form creosote. The creosote vapor condenses in the relatively cool chimney flue of a slow burning fire. As a result, creosote residue accumulates on the flue lining. When ignited, the creosote makes an extremely hot fire.

The chimney connector and chimney should be inspected at least once every month during the heating season to determine if a creosote build-up has occurred. If creosote has accumulated, it should be removed to reduce risk of a chimney fire. Your dealer can recommend a qualified chimney sweep or provide you with the proper tools to do-it-yourself. Use only brushes that are designed for your type of chimney.

After each cleaning, check catalytic combustor to be sure it is free of creosote or other particles which may have fallen on it. A plugged combustor will cause the fireplace to smoke.

USE OF TEMPERATURE PROBE

The condition of the unit's catalytic combustor should be checked periodically (at least once per heating season) using a Condar model 9-86 temperature probe. (Available from your Clayton dealer or consult the manufacturer.)



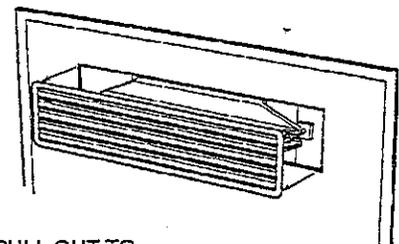
UNSCREW 1/4" ALLEN SET SCREW ON FACE OF FIREPLACE AND INSERT PROBE. IF ACCESS PORT EXTENSION TUBE WAS USED FOR BRICK FACED INSTALLATION, INSERT LONG END OF ALLEN WRENCH INTO TUBE TO REMOVE SET SCREW.

TESTING PROCEDURE

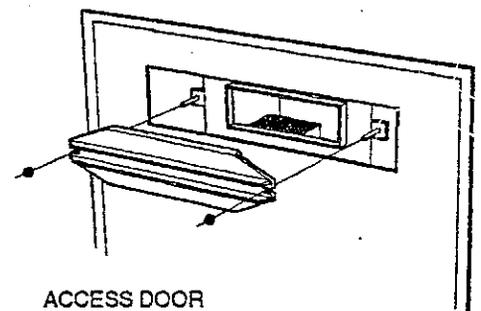
1. Build an intense fire.
2. Remove access port on front of the unit with allen wrench. *Use caution, cover may be hot.*
3. Insert the temperature probe 15-1/4" into the fireplace to position the end of the sensing element directly over the combustor.
4. Check temperature reading after 30 minutes.
5. If temperature registers 800° F or more, catalytic combustor is operating properly. Remove temperature probe and replace allen screw.
6. If temperature registers below 800° F, catalytic combustor requires replacement. Replace allen screw and see combustor replacement instructions.

CATALYTIC COMBUSTOR REPLACEMENT

1. Ensure that fireplace is cool.
2. Remove front grill.
3. Remove cast iron access door on front of secondary heat chamber.
4. Lift out old catalytic combustor and replace with a new 3" x 6" VERSAGRID catalytic combustor with 16 cells per sq. in. (Consult your dealer).
5. Replace access door and front grill.



PULL OUT TO REMOVE GRILL

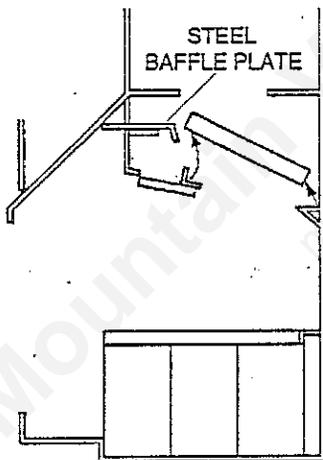
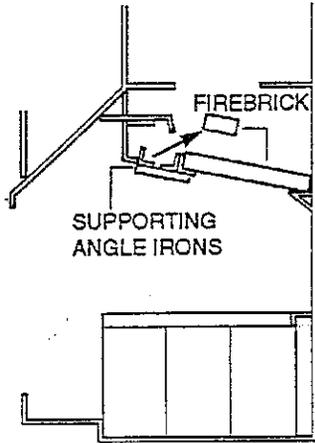
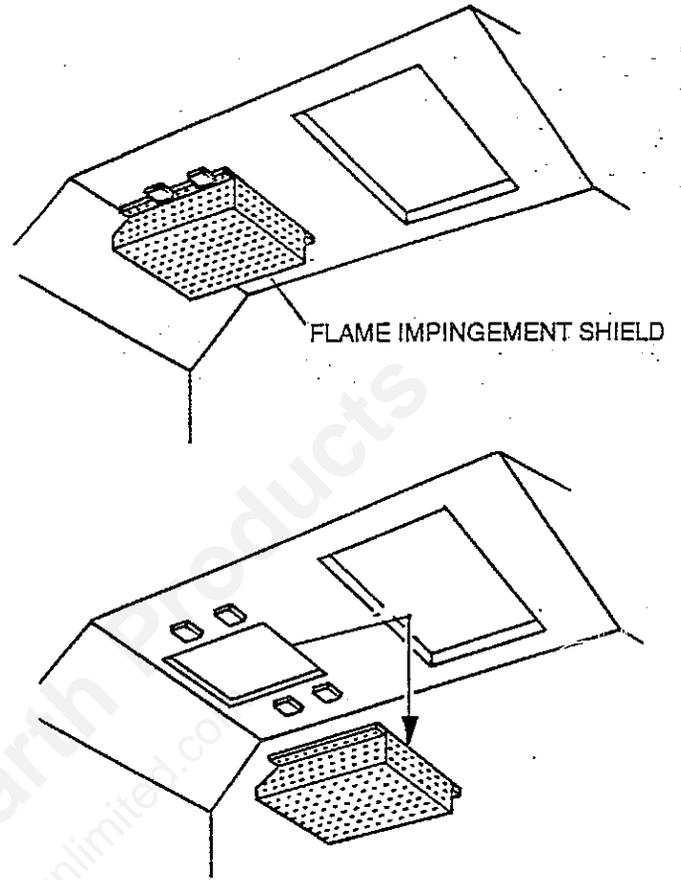


ACCESS DOOR

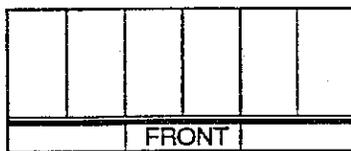
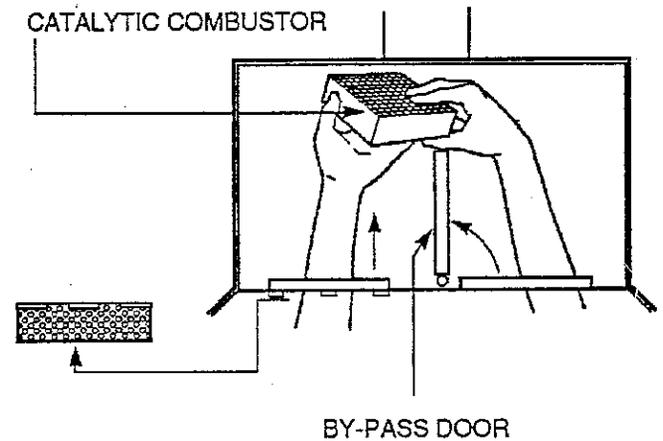
NOTE: If you have installed a brick soldier course over the top grill, the catalytic combustor must be removed through the firebox.

1. Remove firebrick baffle and supporting angle irons.
 2. Slide flame impingement shield to the right and remove.
 3. Open by-pass door.
 4. Reach into firebox and raise catalytic combustor to top of secondary heat chamber.
 5. Remove combustor through open by-pass door.
- To install new combustor, follow steps in reverse order.

INSIDE VIEW OF FIREBOX TOP



SIDE VIEW OF FIREBOX

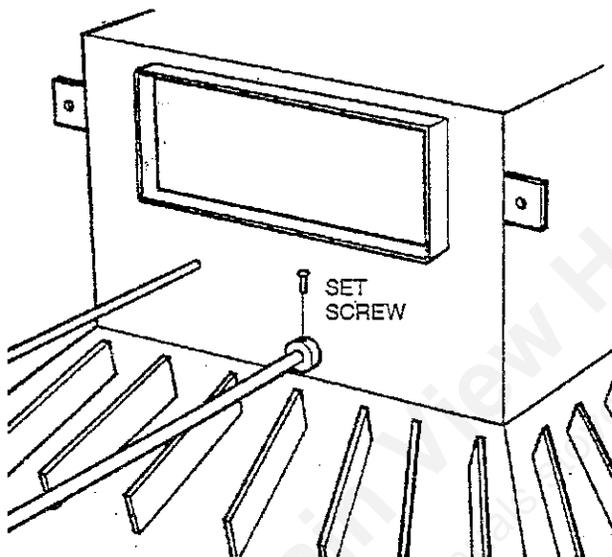


TOP VIEW OF FIREBRICK ARRANGEMENT

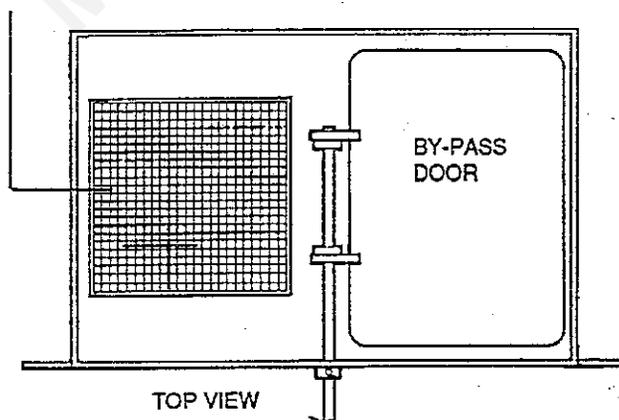
BY-PASS DOOR REPLACEMENT

All materials subjected to high temperatures will eventually breakdown. If during regular inspection of the firebox you discover a hole developing in the cast iron by-pass door it should be replaced.

1. Remove top grill and access door as explained in catalytic combustor replacement.
2. Remove set screw from by-pass rod collar and jerk on rod to free it from the by-pass door.
3. Lift out old door and replace with new one. Reinsert by-pass rod and secure with collar set screw.
4. Replace access door and top grill.



CATALYTIC
COMBUSTOR



TROUBLE SHOOTING

1. Smoke Coming From Fireplace

A. Inadequate Combustion Air - Check that exterior air duct is not closed or blocked and that draft controls are properly set.

B. Exhaust Fan - An exhaust fan, particularly in a tightly built house, may pull smoke back down the chimney and into the house. Try opening a window a small amount or avoid operating such fans when fireplace is in use.

C. Wet Wood - Use only properly cured woods.

D. Dirty or Blocked Chimney - Check and clean as necessary.

E. Chimney Too Short - Review chimney specifications in this manual and see that your installation conforms to them.

2. Excessive Creosote

Creosote is a dark brown or black combustion by-product. While deposits in the chimney cannot be totally eliminated, smaller, hot fires will minimize formation.

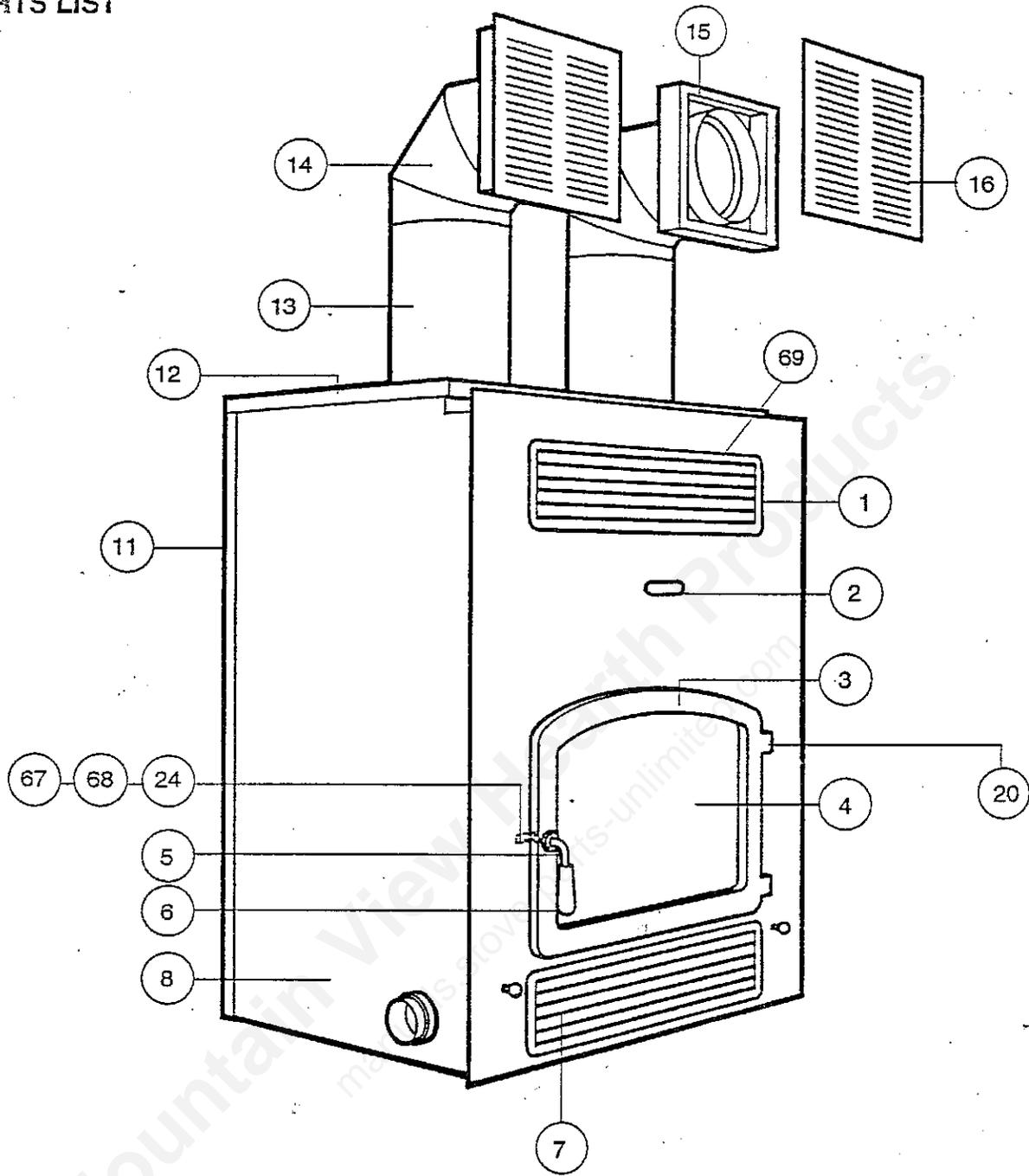
CHIMNEY FIRES

A chimney that is not regularly cleaned presents a greater risk of chimney fire. When creosote deposits are ignited, an extremely hot fire will result.

If you experience a chimney fire:

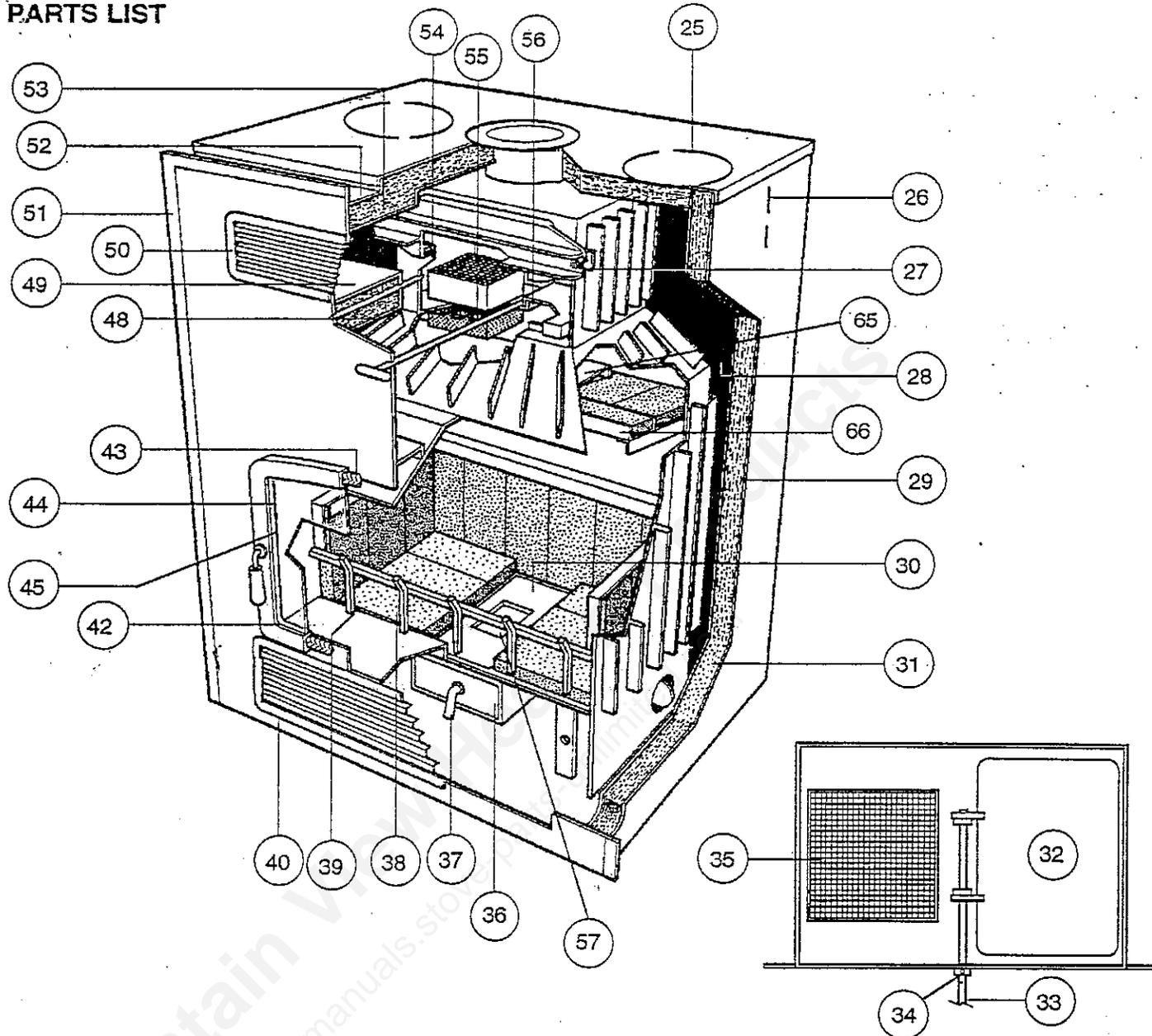
1. Close the fireplace door and close draft controls.
2. Evacuate all people from the house and notify the fire department.
3. If possible, discharge a dry chemical fire extinguisher or throw baking soda or sand on the fire inside the fireplace to control the fire. **Do not use water.**
4. Check for smoldering or burning combustibles next to the fireplace and chimney. Also check that there are no sparks or hot embers on the roof.
5. Once fire is out, have the complete system thoroughly checked over before using again.

PARTS LIST



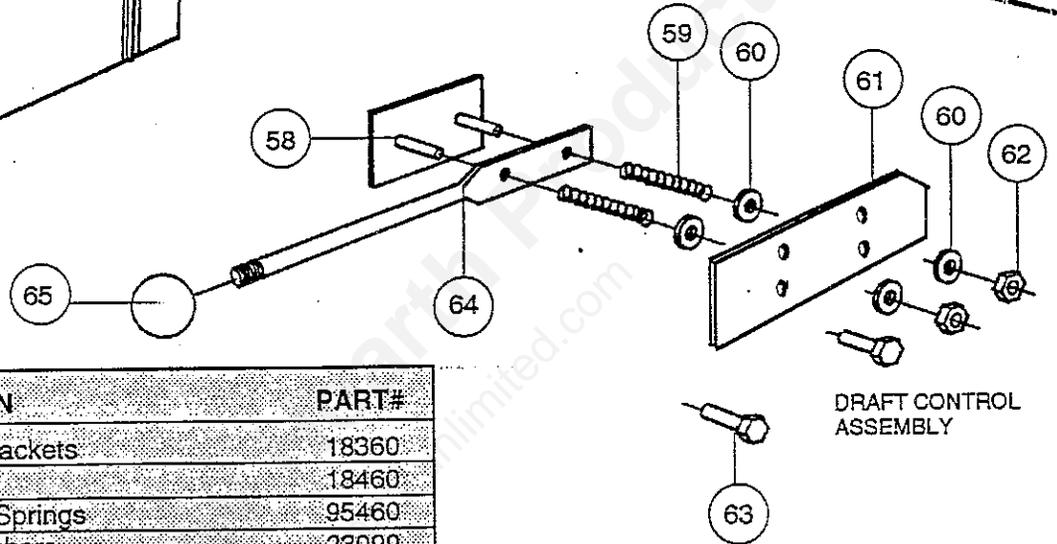
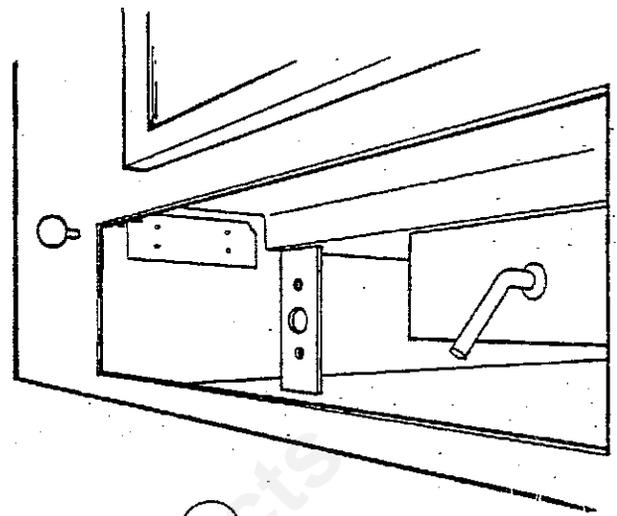
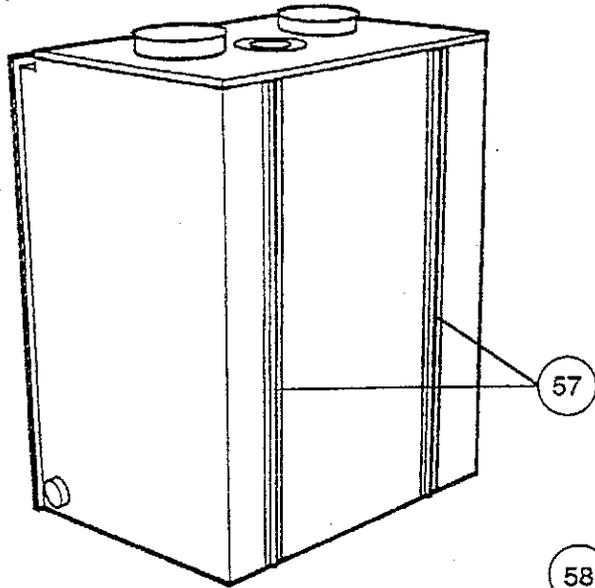
ITEM	DESCRIPTION	PART #	ITEM	DESCRIPTION	PART #
1	Top Grill	68260	13	Optional 8" Hot Air Duct x 12"	94260
2	By-pass Handle	95560	14	Optional 8" 90° Elbow	94360
3	Door (Gold)	50665	15	Optional Grill Box	19460
4	Glass	93965	16	Optional 10" x 10" Grill	94460
5	Door Handle	19360	20	7/32 X 1" Hinge Pin	23165
6	Door Handle (Wood)	95660	24	Door Latch	19260
7	Ash Grill	68060	67	3/8" Locknut	22560
8	Outer Side	18860	68	3/8" Lockwasher	2207M
11	Outer Back	18960	69	Grill Clips	19365
12	Outer Top	19060			

PARTS LIST



ITEM	DESCRIPTION	PART#	ITEM	DESCRIPTION	PART#
25	Inner Top	17260	42	Glass Rope	99460
26	Back Insulation	94960	43	Door Rope	95060
27	Cast Iron Access Door	51060	44	Glass Holders	18060
28	Inner Back	17360	45	1/4" - 20 x 3/8" Screws	22760
29	Inner Side	17460	48	Front Insulation	95160
30	Cast Iron Grate 51165	51265	49	Front Air Duct	18160
31	Side Insulation	94860	50	Top Grill (Gold)	68260
32	Cast Iron By-pass Door	51265	51	Brass Trim	65060
33	By-Pass Door Rod	17560	52	Outer Front	18260
34	3/8" x 3/8" Set Screw	22660	53	Top Insulation	95260
35	Catalytic Combustor	94565	54	Access Door Gasket	95360
36	Ash Pan	17660	55	Flame Impingement Shield	10237
37	Ash Pan Handle	17760	56	By-pass Rope	95360
38	Firebrick	90499	57	Grate Slide Plate	10238
39	Log-Retainer	17860	65	Steel Baffle Plate	16068
40	Bottom Grill (Black)	68060	66	Angle Iron Supports	16050

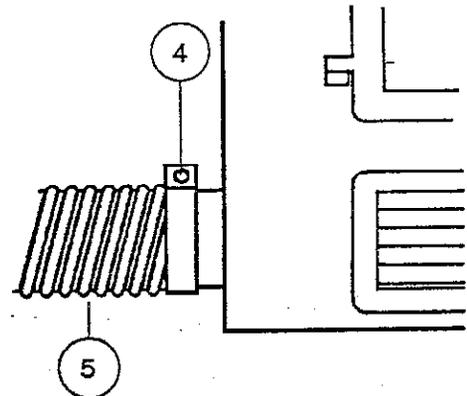
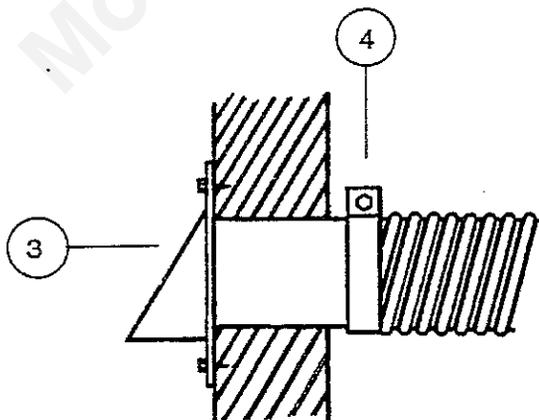
PARTS LIST



ITEM	DESCRIPTION	PART#
57	Rear Offset Brackets	18360
58	Slide Plate	18460
59	Compression Springs	95460
60	3/16" Flat Washers	23099
61	Slide Plate Bracket	18560
62	10 - 24 Lock Nuts	25260
63	#10 x 1/2" Tek-Screws	23699
64	Slide Rod	18660
65	Phenolic Knob	94660

DRAFT CONTROL ASSEMBLY

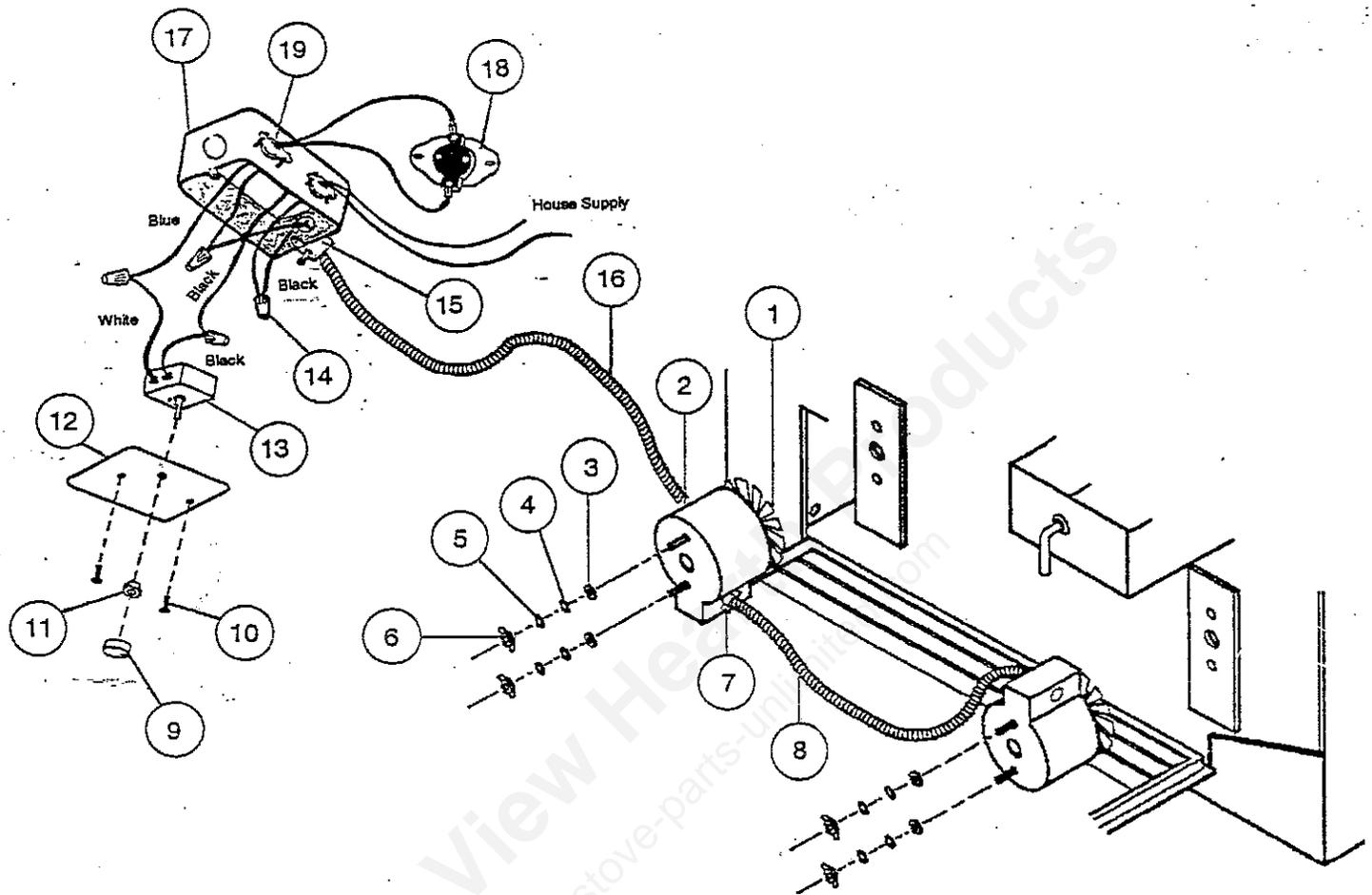
OUTSIDE AIR KIT PARTS LIST (Optional)



ITEM	DESCRIPTION	PART#
1	1/2" x 2-1/2" Carriage Bolt	20599
2	3" Spin Air Duct Cap	50600
3	Vent	93560
4	Clamp	93660
5	7" x 4" Flexible Aluminum Vent Pipe	93760

FAN KIT PARTS LIST

HARDWIRED MODEL



ITEM	DESCRIPTION	PART#
1	Fan Blades (2)	93860
2	Motors (2)	46960
3	3/16" Rubber Washers (4)	22360
4	3/16" Flat Washers (4)	23099
5	3/16" Lock Washers (4)	20899
6	#8 - 32 Wing Nuts (4)	22460
7	BMX Fittings (2)	42599
8	3/8" Flexible Conduit (1)	42699
9	Rheostat Knob	41255
10	6-32 X 1/2 P.H.M.S.	23999
11	Rheostat Nut	42381
12	2" X 4" Raco Box Cover	17665
13	Rheostat	42376
14	30-073 Orange Wire Nut	41299
15	3/8" BX Connector #653	42599
16	3/8" Flex Conduit	92001
17	2 x 4 Raco Box	40700
18	Snap Disc	45575
19	3/8" Regal #6623	41599

CLAYTON MANUFACTURING 25-YEAR LIMITED WARRANTY for CLAYTON ZERO-CLEARANCE FIREPLACE SYSTEM

This limited warranty will not become effective unless and until you have completed and mailed to Clayton Manufacturing, 112 Lind Street West, Mankato, MN 56001, the enclosed owner's registration card within sixty (60) days after the date of installation of the fireplace described thereon.

Clayton Manufacturing, Inc. extends the warranties specified in paragraph A through D below with respect to its CLAYTON Zero-Clearance fireplace (the Fireplace) including the Clayton Manufacturing-supplied accessories and components referred to in those paragraphs, subject to the following conditions and limitations.

(1) These warranties shall not be effective unless Clayton Manufacturing receives the enclosed warranty registration card, completed as specified therein, within 60 days after installation of the Fireplace.

(2) These warranties are extended only to a Fireplace installed in the continental United States, including Alaska, and Canada; only if and so long as the Fireplace is installed and operated at all times in accordance with the installation and operating instructions furnished therewith; and only if and so long as the Fireplace is not removed from its original installation.

(3) These warranties are limited to repair, replacement or furnishing a replacement for sale, as specified in paragraph A through D, for a part found to Clayton Manufacturing's satisfaction, after examination, to be defective in materials or workmanship under normal conditions, use and service.

(4) All obligations with respect to these warranties may be fully discharged by Clayton Manufacturing.

(5) Except as otherwise expressly specified in paragraphs A through D, NONE OF THESE WARRANTIES COVER AND SHALL NOT BE RESPONSIBLE FOR ANY CONSTRUCTION, INSTALLATION, LABOR, TRANSPORTATION OR OTHER COSTS OR EXPENSES ARISING FROM A DEFECTIVE PART, ITS REPAIR OR REPLACEMENT OR OTHERWISE, NOR SHALL CLAYTON MANUFACTURING IN ANY EVENT BE RESPONSIBLE FOR ANY INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES, EXCEPT TO THE EXTENT PROVIDED BY LAW. THERE ARE NO IMPLIED WARRANTIES WITH RESPECT TO THE FIREPLACE, ITS COMPONENTS AND ACCESSORIES (INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE), ALL OF WHICH ARE HEREBY EXPRESSLY EXCLUDED. IN NO EVENT SHALL ANY IMPLIED WARRANTY PRESCRIBED BY LAW (NOTWITHSTANDING THE FOREGOING EXPRESS EXCLUSION) REMAIN IN EFFECT AFTER EXPIRATIONS OF THE WARRANTIES SET FORTH IN PARAGRAPHS A THROUGH D.

(6) Clayton Manufacturing cannot be responsible for any smoking of the fireplace system which is caused by environmental conditions (such as nearby buildings or roof peaks, trees, hills, or mountains), inadequate ventilation or negative air pressure in the house caused by mechanical systems (such as furnaces, fans, clothes dryers, etc.)

A. FIREPLACE COMPONENTS (exclusive of Clayton Manufacturing-supplied firegrate, fan motor, glass door, outside air system, and catalytic combustor, all of which are covered by separate warranties under paragraphs B through D below).

1. Through the fifth year following installation of the Fireplace, Clayton Manufacturing will repair, or if available, replace (at its option) a defective part without charge.

2. Thereafter through the 10th year following installation, Clayton Manufacturing will deliver without charge (for installation by others) a replacement (if available) for the defective part.

3. Thereafter through the 25th year following installation, Clayton Manufacturing will sell a replacement (if then available) for the defective part, FOB its factory, at Clayton Manufacturing's then current list price.

B. FIREGRATE, AND CAST IRON DOORS (excluding glass), **OUTSIDE AIR SYSTEM:** Within 90 days after installation of the Fireplace, Clayton Manufacturing will make available without charge, FOB its factory, a replacement for the defective part.

C. FAN MOTOR:

1. Through the 1st year following installation of the Fireplace, Clayton Manufacturing will repair or replace (at its option) a defective part without charge.

2. Thereafter through the 25th year following installation, Clayton Manufacturing will sell a replacement (if then available) for the defective part, FOB its factory, at Clayton Manufacturing's then current price.

D. CATALYTIC COMBUSTOR:

APPLIED CERAMICS warrants to the consumer who purchases a VERSAGRID CATALYTIC CONVERTER as a component in an E.P.A. certified solid fuel appliance, to replace at no charge to the consumer the VERSAGRID CATALYTIC CONVERTER that ceases to function within two (2) years from the date of purchase by the original consumer, provided that the following conditions are met:

(1) A copy of the original bill of sale that includes place and date of purchase must be submitted with the warranty claim.

(2) The original VERSAGRID CATALYTIC CONVERTER must be returned to APPLIED CERAMICS.

(3) The VERSAGRID CATALYTIC CONVERTER must not have been mechanically abused, nor must the wrong fuels have been used in the appliance.

If after two years the VERSAGRID CATALYTIC CONVERTER fails to function, the prorated warranty will allow replacement at the following special price schedule:

Year 3 - \$65.00 Year 4 - \$70.00 Year 5 - \$75.00 Year 6 - \$80.00

Year 7 and after at a current wholesale price.

Conditions 1, 2, and 3 also apply to the Prorated portion of the warranty.

Any E.P.A. certified solid fuel appliance will receive one replacement catalyst for each defective catalyst returned during the two year period. The consumer will be responsible for removal, any servicing, and return of any items required for filing the warranty claim. This warranty is APPLIED CERAMICS exclusive warranty and APPLIED CERAMICS disclaims any other express or implied warranty for the VERSAGRID CATALYTIC CONVERTER, including any warranty or merchantability of fitness for a particular use.

Mail Address:
Applied Ceramics
Customer Service Department
P.O. Box 29664
Atlanta, GA 30359

UPS Address:
Applied Ceramics
Customer Service Department
5555 Pleasantdale Road
Doraville, GA 30340

Since local building requirements may vary greatly throughout the country, users of Clayton Manufacturing products should determine in advance whether there are any building code restrictions on the use of the specific product. **CLAYTON MANUFACTURING MAKES NO REPRESENTATION OR WARRANTY REGARDING AND SHALL NOT BE RESPONSIBLE FOR ANY BUILDING CODE COMPLIANCE.**

OWNERSHIP RECORD

DEALER'S NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

DATE OF PURCHASE _____

FIREPLACE MODEL NO. _____

SERIAL NO. _____

WARNOCK HERSEY / SERIAL NO. _____

NOTES _____

The Claytons have been safety tested by Warnock Hersey Inc. to the following standards: UL 127 and ULC S610 and UL 391

Registration Card must be completed and mailed within 60 days of installation to validate warranty.

CLAYTON MANUFACTURING, INC. WARRANTY REGISTRATION CARD

PLEASE PRINT CLEARLY

1) Name _____

Address _____ City _____

State _____ Zip _____ Phone (_____) _____

2) Dealer's Name _____

Address _____ City _____

State _____ Zip _____ Date of Purchase _____

3) Fireplace Model No. _____ Serial No. _____

4) First learned of Clayton through: _____

5) Purchased this fireplace because: _____

6) Additional Comments: _____

Please complete and mail within 60 days of installation to validate warranty.