

**Owner's Manual
For Models E & C**

**Residential
Factory Built
Fireplace**

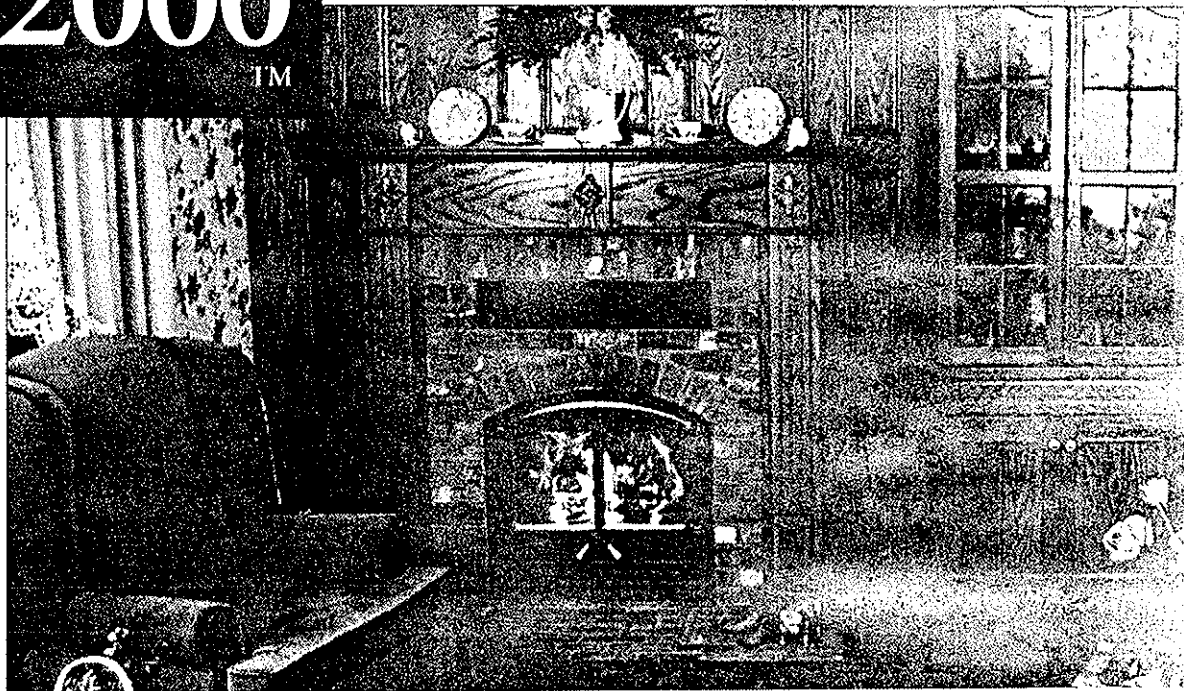
Operation

Maintenance


Installation

Manual

Opel 2000TM



looking inside, down and on the left.

Wameoch Hersey
 LISTED FACTORY BUILT FIREPLACE
MODEL: OPEL 2000C SER. NO. **WH-**
TESTED TO: UL-127 / ULC-S610 /
ULC S627 REPORT NO. 5315 (JULY 90)

DO NOT REMOVE THIS LABEL

INSTALL AND USE ONLY IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION AND OPERATING INSTRUCTIONS. DO NOT OBSTRUCT COMBUSTION AIR INLET.


MINIMUM CLEARANCES TO COMBUSTIBLE MATERIALS	
SIDEWALL	12 IN. / 305 MM FROM DOOR OPENING
MANTLE	25 IN. / 635 MM FROM DOOR OPENING
TOP FACING	23.5 IN. / 600 MM FROM DOOR OPENING
SIDE FACING	6.5 IN. / 165 MM FROM DOOR OPENING
UNIT TOP, BACK, SIDES AND BOTTOM	0 IN. / 0 MM TO SPACERS


COMBUSTIBLE MATERIALS ARE NOT PERMITTED ON FACE OF UNIT. COMBUSTIBLE FLOOR MUST BE PROTECTED BY A NON-COMBUSTIBLE MATERIAL EXTENDING 16 IN. / 405 MM TO THE FRONT AND 8 IN. / 205 MM TO THE SIDES OF THE FIREPLACE DOOR OPENING.

COMPONENTS REQUIRED FOR INSTALLATION:
USE 4 IN. / 100 MM DIAMETER FLEXIBLE DUCT AND COMBUSTION AIR INLET ASSEMBLY. USE ONE OF THE FOLLOWING 7" / 180 MM OR 8" / 205 MM DIAMETER LISTED CHIMNEY SYSTEMS, COMPLETE WITH COMPONENTS AS SPECIFIED IN R.S.F. INSTALLATION INSTRUCTIONS. ANY CHIMNEY SYSTEM THAT COMPLIES WITH ULC-S629 STANDARD. SECURITY CHIMNEYS MODEL ASHT. OLIVER MACLEOD MODEL 3103. GSW JAKES EVANS JFC. JSC PRODUCT LINE. JAMES A RYDER MODEL FP (CANADA ONLY). SELKIRK METALBESTOS MODEL SSII. SIMPSON DURAVENT MODEL DURA PLUS (SOP). AMERICAN METAL PRODUCTS CO.: AMERI-TEC MODEL HS. METAL-FAB INC. MODEL 2100 TEMP GUARD.

OPTIONAL COMPONENTS: B-VENT HEAT DUCT SYSTEM - PART NO. FOV.
CENTRAL HEATING: FAN PART NO. FFHB6, VALVE AND THERMOSTAT PART NO. FEHC6.
FAN ASSEMBLY PART NO. FFHB5 ELECTRICAL RATING 115V, 60 HZ, 1A - 2ALL THERMOSTAT, PART NO. FEHC4 - FIRE SCREEN PART NO. FDPS - CATALYTIC COMBUSTOR PART NO. R6903. BURNING OF METAL FOILS, COAL, PLASTIC AND GARBAGE, SULPHUR AND DIESEL OIL WILL MAKE THE CATALYST IN THE COMBUSTOR INACTIVE. THE COMBUSTOR IS FRAGILE - HANDLE CAREFULLY. THE PERFORMANCE OF THE CATALYTIC DEVICE OR ITS DURABILITY HAS NOT BEEN EVALUATED AS A PART OF CERTIFICATION. REPLACE GLASS ONLY WITH 5 MM TIN-OXIDE COATED CERAMIC GLASS OR OPTIONAL DOUBLE PANE CERAMIC KIT. OPERATE ONLY WITH FIREBRICK IN PLACE. FOR USE WITH SOLID WOOD FUEL ONLY.

WITH CATALYST IN PLACE:
U.S. ENVIRONMENTAL PROTECTION AGENCY CERTIFIED TO COMPLY WITH JULY 1990 PARTICULATE EMISSION STANDARDS.

DATE MANUFACTURED




MANUFACTURED BY:
2965 TATLOW ROAD, P.O. BOX 3637,
SMITHERS, B.C. V0J 2N0

MADE IN CANADA

The Opel 2000 Fireplace Certification and Serial# Label

SAFETY FIRST

DO'S AND DON'TS

If this fireplace is not properly installed, a house fire may result. For your safety, follow the installation directions. Contact local building or fire officials about restrictions and installation requirements in your area.

NOTE: We strongly recommend installers to be WETT or WHERF certified.

To ANYONE using this fireplace:

These DO's and DO NOT's are for your safety.

1. DO read this instruction manual before lighting your first fire.
2. DO burn seasoned wood fuel only.
3. To avoid glass breakage, DO NOT slam the fireplace door.
4. DO NOT use gasoline-type lantern fuel, kerosene, charcoal lighter fluid or similar liquids to start or freshen up a fire in this fireplace. Keep all such liquids well away from the fireplace while it is in use.
5. DO NOT overfill the fireplace.
6. DO keep all combustible materials (furniture, shoes etc.) at least 4 feet away from the front of the fireplace.
7. If the OPEL 2000 is equipped with a catalyst it needs periodic inspection for proper operation. If you have the catalyst installed, DO NOT burn chemical chimney cleaners as they contain contaminants that will render the catalyst inoperative.

CREOSOTE

When wood is burned slowly, it produces tar and other organic vapours which combine with expelled moisture to form creosote. The creosote vapours condense in the relatively cool chimney flue of a slow burning fire. As a result, creosote residue accumulates in the flue lining. When ignited, this creosote makes an extremely hot fire. The chimney should be inspected periodically during the heating season to see if a creosote

more), it should be removed to reduce the risk of chimney fire.

WARNING: *Burn dried wood only!*

Do not burn:

- driftwood
- treated wood
- coal
- garbage
- plastic

Do not use construction scraps (e.g., 2x4 or plywood scraps) as your only supply of fuel, as you may overheat and seriously damage the fireplace. Use no more than 3 densified fuel logs (e.g. Presto Logs), at a time.

GENERAL SPECIFICATIONS

THE COMBUSTION CONTROL SYSTEM

Since the doors are sealed, all combustion air must come from outside the house through a draft control. This control has a bimetal coil to allow more air when the unit is cold, and less air when the unit is hot, guarding against overheating. It can be controlled either manually through the lever below the door handles, or automatically through the optional electric wall thermostat.

For the first few days, it is best to operate the fireplace with the manual control fully on (moved to the right as far as possible). Just control the fire as you would any normal fireplace using two or three logs at a time for a smaller fire, or more logs for more heat. Once you become familiar with operating the fireplace with the control open, you can start experimenting with lower settings. Remember: when the fireplace is hot, the control will not need as much movement to reduce the fire as when it is cold. The bimetal coil will already have shut the damper part way.

The combustion air inlet outside your home can be fitted with a shut-off damper. If your fireplace is not in use during very cold weather and you find frost building up above your door, see your dealer about this option (Part #FD-O). The damper should be closed when the fireplace is not in use. An optional power shut-off is also available (Part #FD-HD) - see Figure 5.

THERMOSTAT OPERATION

If you want constant heat, day and night, you will be surprised at what the wall thermostat option can do for you. Once you have your fire burning, just set the manual control on low (push the draft control lever all the way to the left) and let the automatic thermostat take over. Your room temperature will keep as even as though you were heating with oil, gas, or electricity — except you will find wood heat more comfortable (See Options: Wall Thermostat FD-HC4)

NOTE: This thermostat controls the combustion air rate, not the internal circulating blower. Also, when you are using the automatic thermostat during cold weather, you will find that the fire burns cleaner if the manual setting is on medium or higher. This will keep the thermostat from shutting the fireplace right down during the automatic on - off cycle.

THE INTERNAL CIRCULATING BLOWER

If you have the optional internal blower installed, adjust the speed of the blower to the output you require. The blower speed control should have been installed at a convenient place on the wall. When a fire is burning, the thermal switch installed inside the fireplace will turn on at 110° F, allowing the blower to operate. When the OPEL 2000 cools to 90° F, the switch deactivates the blower. The maximum heat output of the fireplace is greater with the blower running (See Options: Circulating Blower FD-HB5-N).

THE GRAVITY VENT SYSTEM

If there are areas in your home that you would like to heat either in an upper level or an adjacent room, the gravity vent system can provide this heat without the use of a blower. It is controlled by a gravity vent damper. The handle is located between the top louvres of the fireplace. Simply turn the lever to adjust the air flow through the gravity vent ducting. As the hot air rises, it will be distributed through the insulated ducting to the outlet (See Options: The Gravity Vent System FD-V).

THE CENTRAL HEAT SYSTEM

You have the option to heat remote rooms in your home from the heat generated by your fireplace. If this option is installed, there will be a wall thermostat installed in the main room you want to heat, away from the room which contains the fireplace. This

ing them at the temperature you desire. When the blower is running, it takes air from the room the OPEL 2000 is in, draws it around the fireplace and distributes it (See Options: Central Heating System FD-HC6/FD-HB6).

NOTE: The blower (FD-HB6) can push warm air either up or down, and can also be zone controlled (See Options: Zone Heating).

HINT: If some evening you would like to enjoy the ambience of the wood flame, but you are a little too warm, turn up the central heating thermostat and open a window by the thermostat. This will keep your room in front of the fire from getting too warm.

OPERATION

LIGHTING

Slide the draft control under the doors all the way to the right. Light a fire in the fireplace, starting with paper and kindling only. Then add 2-3" diameter wood. After the fire is established, close the doors to prevent overheating of the fireplace face which is designed to accept combustion air through the outside air duct only (see the Combustion Control section). Never use any flammable liquids. Once a coal bed is established, add standard cord wood. Leave the draft control open until the fire is well lit, then adjust it to the level you desire.

WARNING: *Do not use a grate or elevate the fire.*

THE FIRST FIRE

Before the first fire, be absolutely sure to wipe off all fingerprints and debris from the gold plating. The plating undergoes a sealing process during this first fire, and the acid from your finger prints will permanently etch the gold plating. You will experience a slow start-up during the first fire. The refractory bricks still contain moisture and take a good hot fire to get rid of the moisture. While there is moisture in the bricks, the bricks will be black with smoke deposits. When the moisture is gone, the bricks will be white. You may also experience a slight odour during the first few fires. This odour results from the curing paint and the burn-off of oil.

THE CATALYTIC COMBUSTOR (Optional)

If the OPEL 2000 is equipped with a catalyst, it ignites creosote-forming gases in

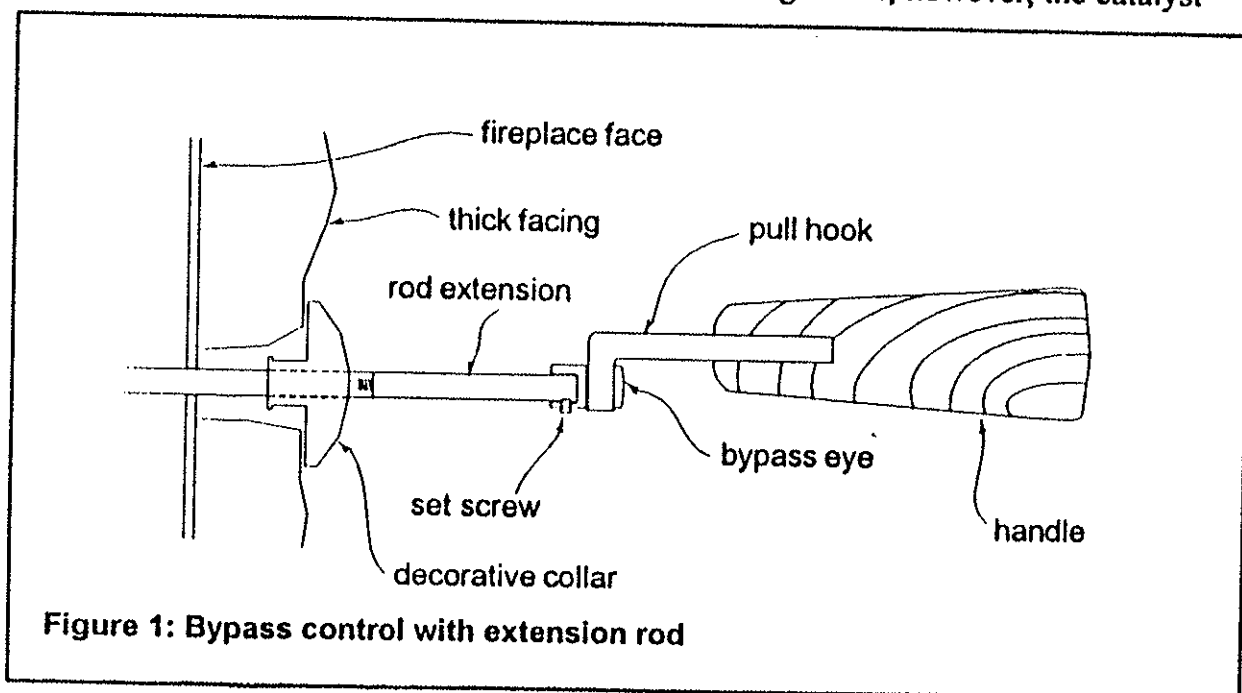
wood smoke at significantly lower temperatures. As a result, you get less creosote and more heat from your fire at low to medium burn rates. Less fuel goes up your chimney in the form of smoke. In addition to the list on page 4, DO NOT burn chemical chimney cleaners, as they can contain contaminants that will render the catalyst inoperative.

The catalytic option comes with a bypass damper which serves two functions:

- a) to eliminate smoking into the room when the doors are opened.
- b) to allow the fire to start quickly when the fireplace is cold.

Make sure the bypass damper above the right door is pulled all the way out before opening the doors. When starting a fire, the bypass damper should be left open long enough to establish sufficient draft (approximately 30 minutes).

The temperature in the firebox and the gases entering the catalyst must be raised to at least 500° F for catalytic activity to be initiated. When you start the fire, keep a medium to high fire for about 20 minutes to stabilize the catalyst at a sufficient operating temperature. If the fire is allowed to die down too soon after starting, the catalyst may stop working. After the 20 minutes of a medium to high burn, however, the catalyst



will operate with the heat generated by the burning smoke, even with a low fire.

REFUELLING

Fuel wood can be of any species. However, ensure that the wood is well seasoned and

NOTE: The central heat and internal blowers, if installed, should be shut off during refuelling.

The doors should be opened **slowly**, moving both doors together, to keep smoke from spilling into your room. If you do have smoke spillage, check to see that all kitchen and bathroom fans have been shut off. They can cause a vacuum in the house, which pulls smoke out of the fireplace.

If you have the OPEL 2000C with the catalyst: After refuelling a cool fire or a fire that has burnt down to a cool coal bed, operate the fire at a medium to high burn rate for at least 10 minutes to ensure that the catalyst reaches operating temperature.

MAINTENANCE

CLEANING

The high-heat paint and gold plating can be cleaned with a soft moist cloth. Use a mild detergent and water. **Do not use abrasive cleaners!**

ASHES

Clean the ashes before they become too deep, i.e., before you have a spillage problem when opening the doors.

Ashes should be placed in a metal container with a tight fitting lid. If the ashes are disposed of by burial, or otherwise locally dispersed, they should be retained in the closed container until all cinders have thoroughly cooled.

DOORS

Keep the door latch and hinges lubricated with an all-purpose grease at least annually. To adjust the door closer, tighten the Allen screw (as shown in Figure 2) to ensure that the door closes tightly. The hinges are adjustable by removing the cap on top, and loosening the nut underneath. The hinge pins are manufactured off-centre to facilitate easy adjustment. With a flat screwdriver, the pins can be turned so that the doors seal well and fit with each other. After adjustment, tighten the nuts, holding the hinge pins

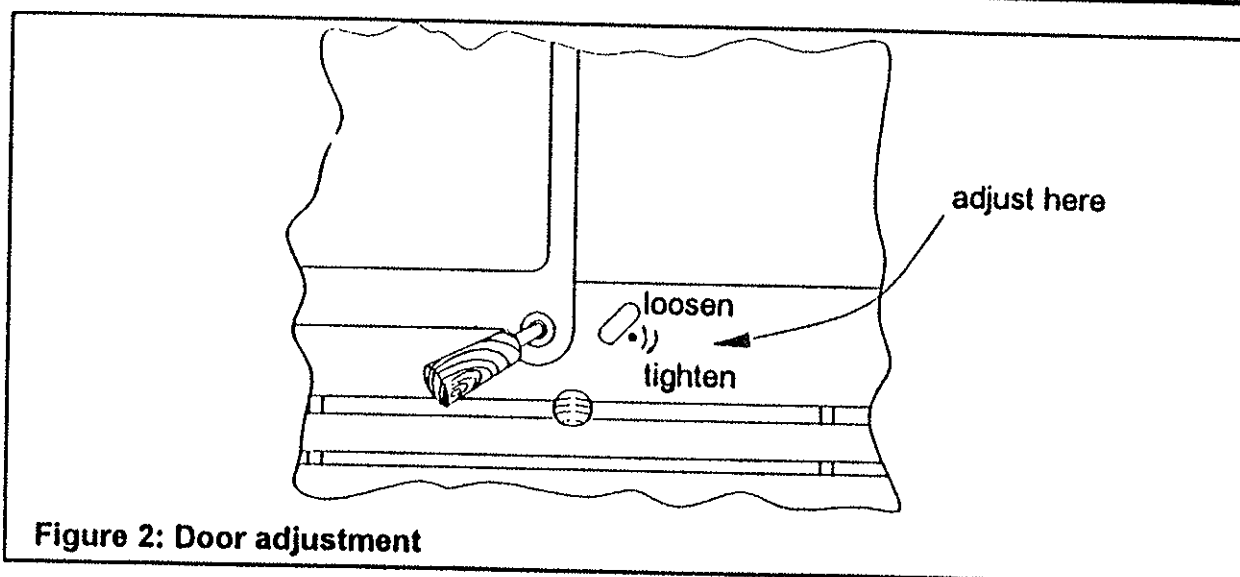


Figure 2: Door adjustment

in place with the screwdriver, and replace the hinge caps. If the door seal is damaged to the point where it does not seal tightly, replace the gasket. The gasket replacement kit (part #FD-GRK2) is available from your dealer.

GLASS

In a controlled combustion firebox, temperatures are not always high enough to keep the glass perfectly clean. We have supplied you with special reflective ceramic glass which will withstand the heat from the fireplace without cracking. The reflective properties keep the glass hotter to stay cleaner. A good hot fire in the morning usually cleans off most of the deposits that have accumulated during the night. Remember, the drier the wood, the cleaner the glass. A word of caution: although heat will not break the glass, a good blow can. Be careful not to hit the glass.

WARNING: Never clean this glass with an abrasive cleaner. Use only a cleaner recommended by your dealer. Never clean the glass while it is hot. You risk getting a serious burn.

IF YOUR GLASS BREAKS:

See your dealer for the exact replacement glass. If the gasket is damaged, it must be replaced with the identical kind (HEATSAFE T1838PW-BL). Place the gasket on the door frame between the door and the glass (it is self-sticking).

1. Remove the door from the fireplace by lifting it off the hinges.
2. Remove the clips holding the glass

4. Place the new glass into the opening and replace the clips being careful not to over-tighten the screws.

5. Check the glass by trying to move it back and forth. It should feel snug, but move slightly without too much effort.

GOLD PLATING

If you have gold doors or gold louvres, you will be happy to know that they will not tarnish. However, they are not scratch resistant and require a totally abrasive free cleaning. Use only mild soap and warm water to clean the gold when the surface is cool. The use of any household cleaner, such as Windex, abrasive cleaners, or any form of acid, may permanently etch or remove some of the gold plating. Before every fire, be absolutely sure to wipe off all fingerprints from the gold plating. Acid from debris or your fingerprints may permanently etch the gold plating.

CHIMNEY CLEANING

Check the chimney for creosote buildup every week until experience shows how often cleaning is necessary. A buildup of 1/4 inch or more should be cleaned mechanically before more creosote accumulates. Use a wire brush that fits correctly into the chimney. The two baffles in the firebox can be removed to gain access to the flue from below.

PAINT

You may touch up the face of the OPEL 2000 with STOVE BRIGHT Metallic Black high temperature paint. The correct paint is available from your dealer. When you paint the face of the fireplace, remove the gold items (i.e., doors and louvres), and cover the area surrounding the fireplace with newspaper. Follow the directions outlined on the spray can. DO NOT attempt to paint while the fireplace is still warm. Keep the spray can away from any source of heat or open flame. Ensure that there is adequate ventilation in the room, from the time you start painting until the paint is dry.

CATALYTIC COMBUSTOR (If Equipped)

Make sure that you keep the warranty card for the catalyst. If the catalyst fails, it should be replaced with Applied Ceramics Model 3621202-52-C. The dimensions of

the catalyst are 3.875" x 12.25" x 2".

It is important to periodically monitor the operation of the catalyst to ensure that it is functioning properly and to determine when it needs to be replaced. A non-functioning catalyst will result in a loss of heating efficiency, and an increase in creosote and emissions.

Catalysts should be visually inspected at least three times during the heating season to determine if physical degradation has occurred. Actual removal of the catalyst is not recommended unless a more detailed inspection is needed because of a noticeable decrease in performance.

You can get an indication of whether the catalyst is working, by comparing the amount of smoke leaving the chimney when the smoke is going through the chimney after light-off has been achieved, to the amount of smoke leaving the chimney when the bypass damper is open:

1. Light the fire in accordance with the instructions under lighting. After the fireplace is warm, set the manual control (and the thermostat, if this option is installed) to low.
2. With the bypass damper closed, the smoke is routed through the catalyst. Go outside and observe the emissions leaving the chimney.
3. Open the bypass damper and again observe the emissions leaving the chimney.

Significantly more smoke should be seen when the exhaust is not routed through the catalyst, i.e., with the bypass damper open. Be careful not to confuse smoke with steam from wet wood.

The catalytic combustor is self cleaning, and requires very little maintenance. Any loose ash should be removed with a paint brush. If the catalyst is plugged with creosote, you may try burning it off by leaving the bypass damper in a partially open position and pushing the draft control all the way to the right. You may also burn off the excess creosote with a propane torch

WARNING: *Do not use sharp or hard tools to clean the catalytic combustor as this will damage the combustor.*

CATALYST REMOVAL AND REPLACEMENT

2. Carefully ease out the catalyst, using a knife blade if it is tight.

3. Replace the catalyst the same way it was removed. If the gasket is loose, recement it to the outside using a silicone adhesive. A damaged gasket should be replaced with 3M "Interam" 1/16" x 2" x 36".

INSTALLATION

COMPONENT CHECKLIST

The following items should be included as part of your fireplace purchase:

- 2 - five inch elbows and 15" of five inch pipe
- A fresh air hood
- 3 ft. of flex duct
- A warranty card and owner's manual
- 3 ft. of insulation wrap

Contents of Plastic Bag:

- 90" of aluminium tape
- 14 - #10 x 1/2 Drill and Tap screws
- 4 - 2" x 18" ceramic strips

The OPEL 2000 with a catalyst also contains a wood handle with a hook and an eye piece with an extension.

Check local codes concerning restrictions and installation requirements in your area.

WARNING: *Remove the doors before installation and place them in a safe area to reduce the possibility of*

a) vandalism

b) sub - trade tool abrasion, chipping, or breaking of glass.

c) gold finish damage because of muriatic acid, plaster, cement, paint and harmful sprays or liquids, and sub - trade tool abrasion.

LOCATION

Your OPEL 2000 fireplace may be installed in many different ways (see Figure 4) without any special floor reinforcement.

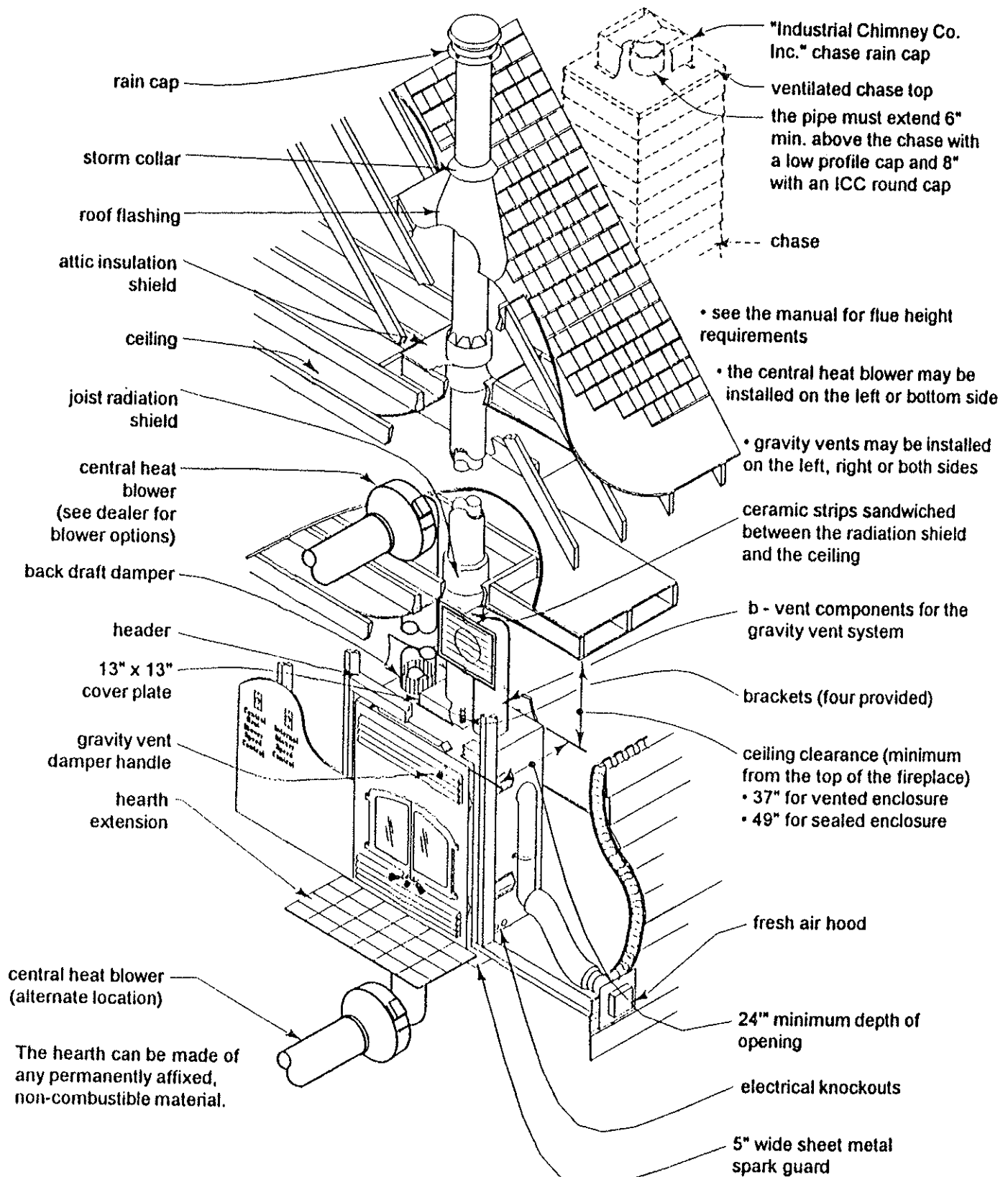


Figure 3: General assembly

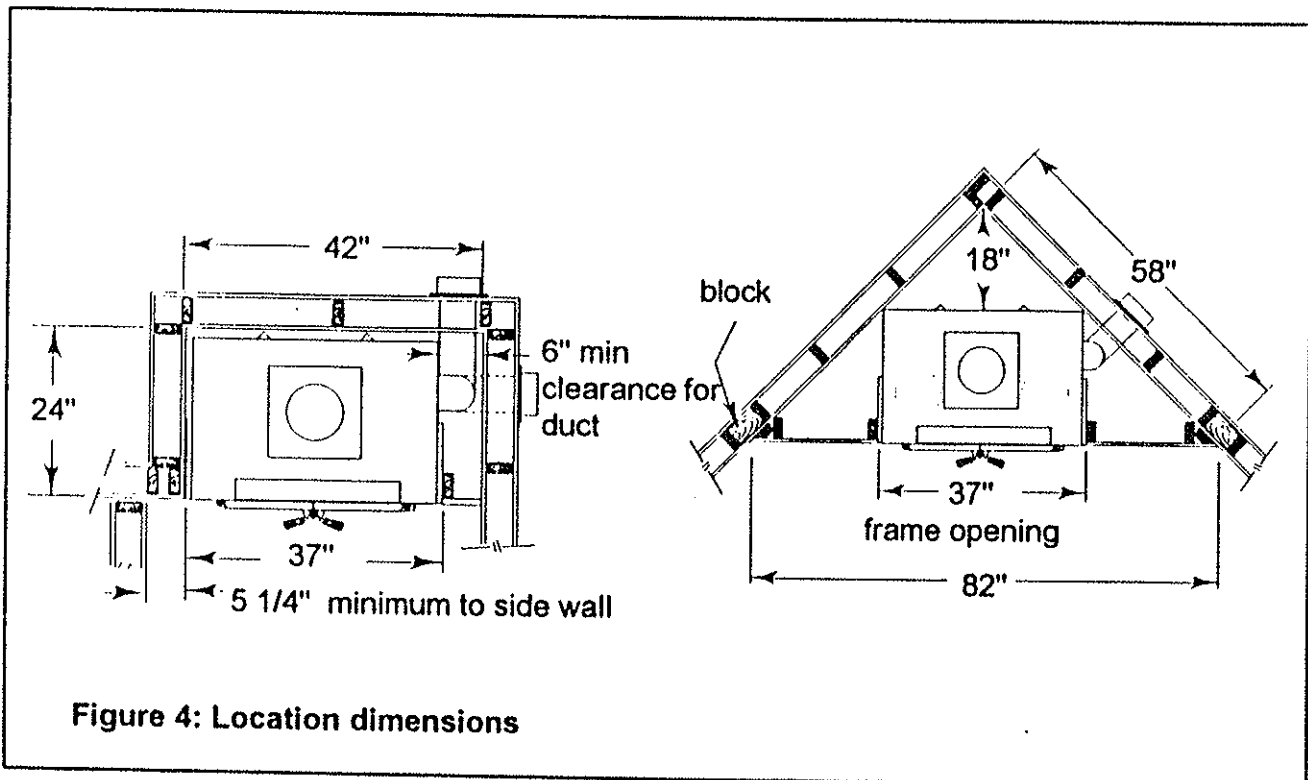
WARNING: *If this fireplace is not properly installed, a house fire may result. For your safety, follow the installation directions and clearances.*

1. Note the location of roof and floor joists. Choose a location that does not require cutting them.
2. Do not build shelves or cupboards in the area above the fireplace. This space must be kept empty.
3. If at all possible, run the chimney up the inside of the house. If it must be run up outside, it should be enclosed in an insulated enclosure (See Installation: Chase Enclosure). **Remember, a cold chimney causes poor draft!**

CEILING CLEARANCE

Ceiling Clearance is the distance from the top of the fireplace to the ceiling.

If the space between the top of the fireplace and the ceiling joists is less than 49 inches, the enclosure around the fireplace MUST be vented. Place a minimum 3" X 10" vent grille into holes cut within one foot of both the floor and ceiling levels, to allow room air to circulate through the fireplace enclosure and reduce heat build-up. These vent



grilles may be placed vertically or horizontally. Under no circumstances is the distance between the ceiling and the top of the unit to be less than 37 inches (See Figure 3).

OUTSIDE AIR DUCT

After the fireplace is correctly positioned, connect the combustion air inlet to the outside.

1. Find a convenient location for the combustion air duct and register. The location of the register may be above or below floor level (see Figure 3). Under no circumstances should the combustion air inlet be placed in the attic.
2. Attach the two supplied 5 1/4" dia. elbows to the 15" long pipe. Attach these pieces to the fireplace as shown in Figure 5. There is a metal strap attached to the 15" pipe. Screw both ends of the strap to the side of the firebox

NOTE: The 15" piece of pipe and the 2 elbows are used to bring the combustion air intake to a lower level. Otherwise the fireplace may smoke back through the combustion air inlet when the fireplace doors are opened.

3. Make a 5 1/4" hole in the outside wall of the house. Mount the register in the hole from the outside with the inlet facing down.

4. Place the insulated flexible duct over the register tube and the second elbow. At both ends, carefully pull back the insulation and plastic cover, exposing the flexible duct. Then at each end, attach the duct with metal screws to the inlet and tube. Carefully push the insulation and cover back over the duct. Tape the plastic cover in place with the 2" aluminium duct tape provided.

CAUTION: *When running duct around corners, be sure to prevent crimping that would restrict the combustion air flow.*

LONG DUCTS: If the duct supplied is not long enough, it must be replaced with a 5" diameter insulated duct rated at over 200° F. Our testing has shown that as long as the 5" diameter insulated duct is utilized properly, there is no restriction on the length of the run. It is recommended that the duct does not exceed 12 ft. vertical height rise above the base of the unit. The air inlet should never be less than 5 ft. below the top of the chimney flue.

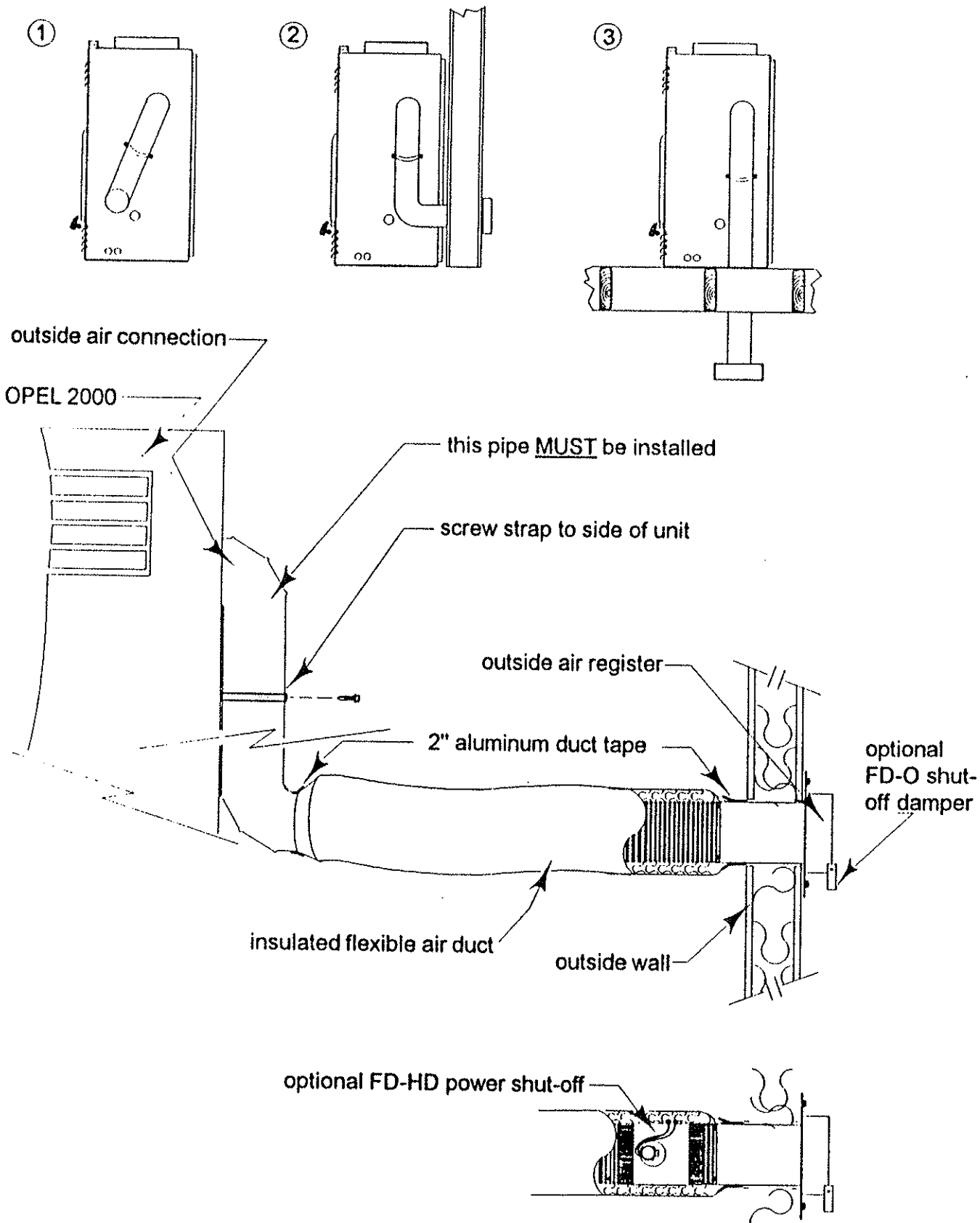


Figure 5: Outside air connection and installation options

CHIMNEY

This fireplace is certified for use with 7" or 8" prefabricated chimney. The chimney system height from the **top** of the fireplace must be a minimum of 12 ft. and a maximum of 28 ft.

The minimum system height of 12 ft. must be increased by approximately 1 ft. for every 2000 ft. elevation above sea level. Every 30° or 45° elbow also increases the minimum height by 1 ft. For example, if you are living 6000 ft. above sea level, your chimney must terminate at least 15 ft. from the top of the fireplace (12 ft. + 3 ft. for the 6000 ft.) See Table #3 on page 20 for more precise recommended flue heights.

Choose one of the following systems: **(Do not mix and match!)**

IN CANADA:

All makes of ULC S629M standard chimney or the following chimney systems covered by ULC S610:

Security Chimneys Ltd.	Model ASHT
Oliver - MacLeod Ltd.	Model Pro-Jet 3103
GSW Heating Products Co.	Model JSC
Energy Vent	Model Commander 5103
Selkirk Metalbestos	Model SS
ICC Inc.	Model 2100

IN THE UNITED STATES:

The following chimney systems covered by UL103HT / UL127

Security Chimneys Ltd.	Model ASHT
Oliver - MacLeod Ltd.	Model Pro-Jet 3103
GSW Heating Products Co.	Model JSC
Selkirk Metalbestos	Model SSII
Simpson Dura-Vent Co. Inc.	Model Dura Plus SDP

NOTE: The starter section is **not** required with the Dura Plus

American Metal Product Co.	Model Ameri-Tec HS
Energy Vent	Model Commander 5103
Metal Fab Inc.	Model Temp/Guard 2100
ICC Inc.	Model HT/Excel

AIR COOLED CHIMNEY OPTION

MANUFACTURER	Security Chimney Ltd.	Oliver-MacLeod Ltd.	GSW Heating Products	Energy Vent	Selkirk Metalbestos	ICC Inc	Simpson Dura-Vent Co.	American Metal Products	Metal Fab Inc.
Model	HT	Pro-Jet 3103	JFC	HT-5103	SSII	Excel 2100	Dura/Plus 2100	HS	Temp/Guard 2100
Chimney Lengths	L*	USHTO*SL%	JSC*P%	HT-%	20*0%	EL%	9*17	*HS-%	*TGG%
Chimney Elbows	E%	USHTO*IE%	JSC*DE%	HT-%		EE%	9*66	*HS-0%	*TGGA%
Offset Support	SO	IFO*OS-N	JSC*ES	HT*OS		OS	9*60	*HS-SBA	*TGSB
Joist Firestop/Radiation Shield	BF*RS	IFO*CFRS	JSC*FRS	HT*FRS	20*465	RS	9*44	*HS-FSA	*TGFA
Attic Insulation Shield	RSA	IFO*LAFRS	JSC*AIS	AIS	20*490	SC	9946	*HS-AIS	*TGIS
Roof Flashing/Storm Collar (unvented for open attic)	F%R	IFO*RF0	N/A	HT*ARF	20*825	F%	9959	*F%	*TGF%
Roof Flashing/Storm Collar (vented for enclosed chase)	FAMH	IFO*VRF%	JSC*AT%	HT*AFRV	20*815	V%	9*51	*SC	*TGF%
Rafter Radiation Shield (for enclosed chase only)	RSMH	IFO*RRS	JSC*RRS	HT*FLRS	N/A	N/A	N/A	N/A	N/A
Rain Cap	CPE	IFO*RC	JSC*FRC	HT*RC	20*800	RC	9*84	*HS-RCS	*TGC

NOTE: * = Chimney Diameter % = Length / Angle Pitch

MANUFACTURER	Security Chimney Ltd.	Oliver-MacLeod Ltd.	GSW Heating Products	Energy Vent	Selkirk Metalbestos	ICC Inc
Model	HT	Pro-Jet 3103	JFC	HT-5103	SS	Excel 2100
Chimney Lengths	L*	USHTO*SL%	JFC*P%	HT-%	07070*	CL%
Chimney Elbows	E%	USHTO*IE%	JFC*DE%	HT-%		CE%
Offset Support	SO	IFO*OS-N	JFC*ES	HT*OS		OS
Joist Fire stop/Radiation Shield	BF*RS	IFO*CFRS	JFC*FRS	HT*FRS	070900*	CRS
Attic Insulation Shield	RSA	IFO*LAFRS	JFC*AIS	AIS	070910*	CARST
Roof Flashing/Storm Collar (unvented for open attic)	F%R	IFO*RF0	N/A	HT*ARF	070350*	F%
Roof Flashing/Storm Collar (vented for enclosed chase)	FAMH	IFO*VRF%	JFC*AT%	HT*AFRV	070380*	V%
Rafter Radiation Shield (for enclosed chase only)	RSMH	IFO*RRS	JFC*RRS	HT*FLRS	4036999	N/A
Rain Cap	CPE	IFO*RC	JFC*FRC	HT*RC	053750*	RC

TABLE 1: CHIMNEY PARTS LIST FOR CANADA

TABLE 2: CHIMNEY PARTS LIST FOR USA

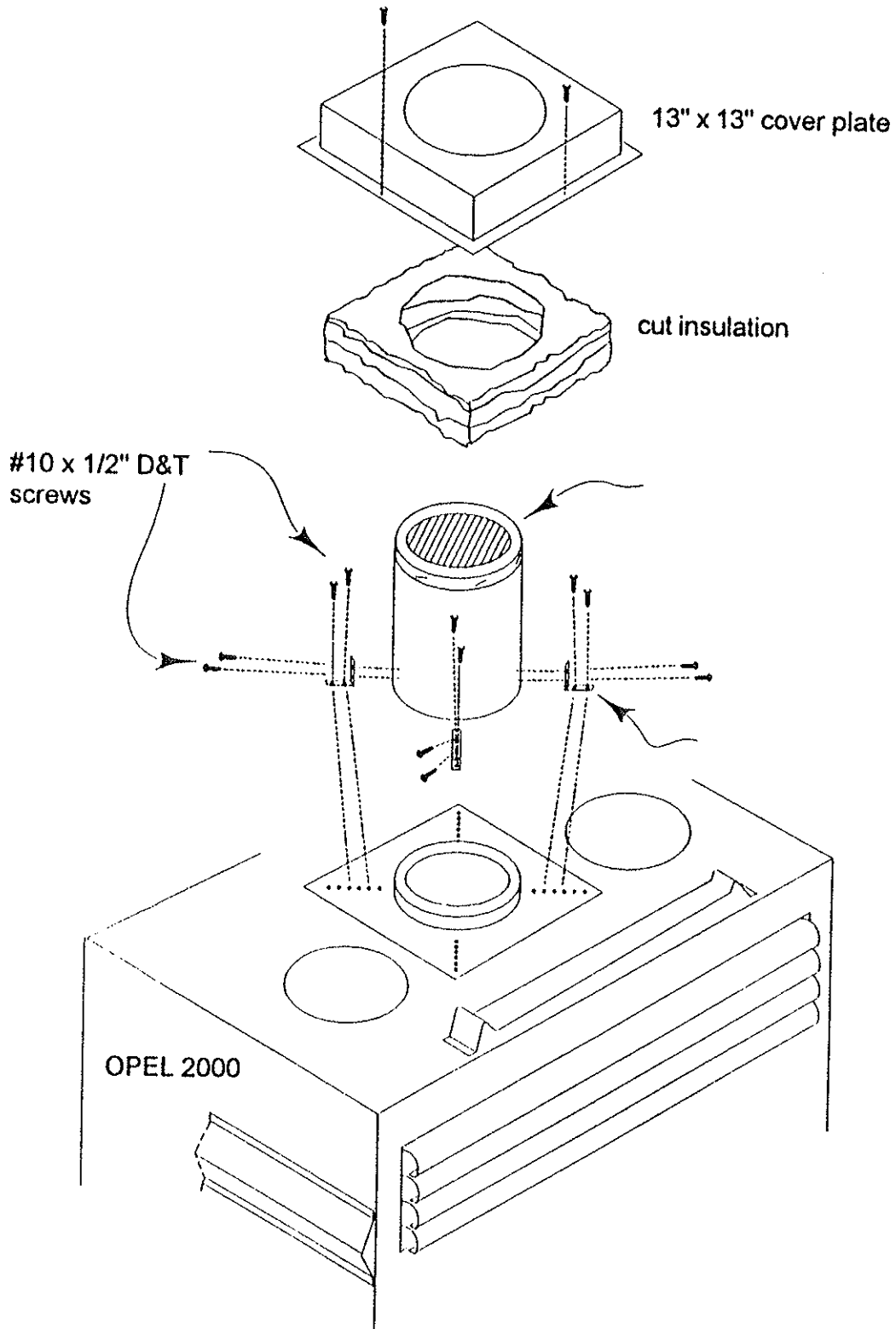


Figure 6: Flue installation

chimney system. Note that in Canada, the air cooled chimney must include the outside air connection, where in the United States, the chimney needs only to be vented to the chase. Refer to the installation manual supplied with the air cooled chimney for the complete instructions. (The Majestic Model SK chimney requires a chimney adapter RSF ENERGY #FD-MSK)

ICC CHASE RAIN CAP OPTION

The OPEL 2000 is certified with the "Industrial Chimney Co. Inc." chase top option (see Figure 8). This option can be used if you prefer its design over the conventional rain cap. Be aware that the chase top must be ventilated, and that the flue must extend at least 6" beyond the chase top with a low profile cap, and 8" with an ICC round cap. Please refer to the installation manual supplied by ICC for the complete installation instructions.

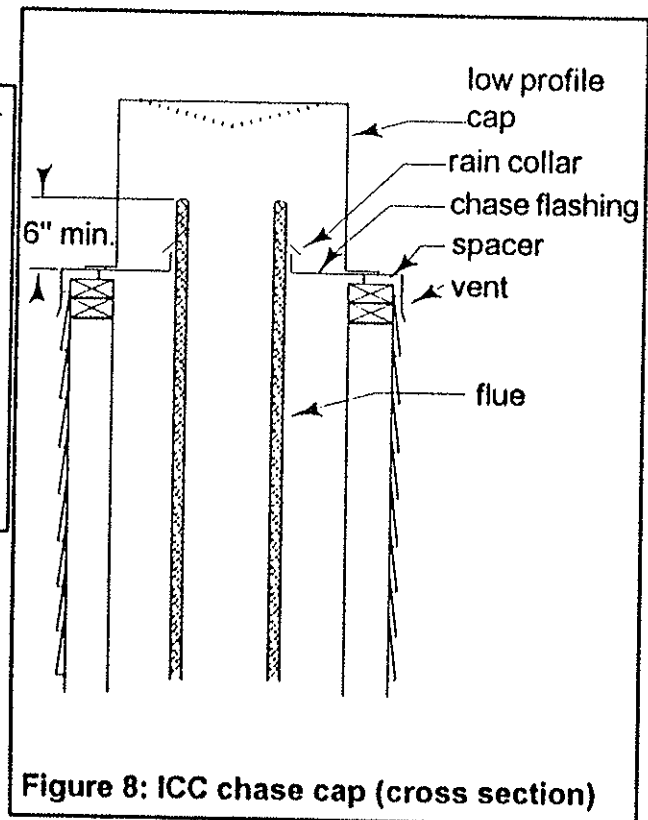
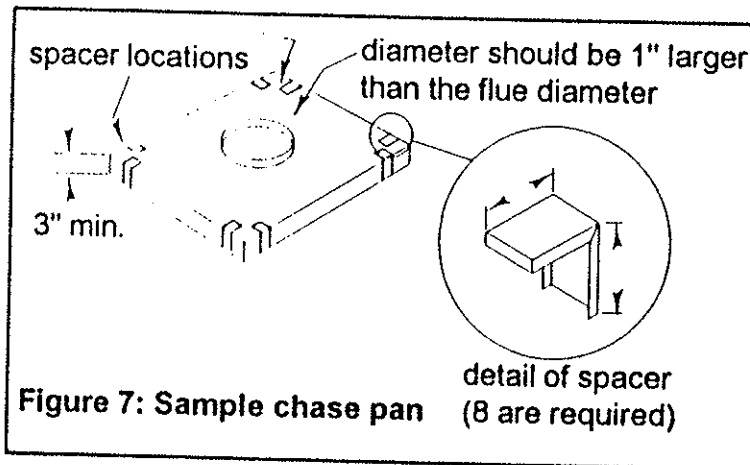


TABLE #3

MINIMUM RECOMMENDED FLUE HEIGHTS IN FEET
FROM THE TOP OF THE FIREPLACE

<u>Elevation(ft)</u>	<u>#OF ELBOWS</u>						
	<u>0</u>	<u>2x15</u>	<u>4x15</u>	<u>2x30</u>	<u>4x30</u>	<u>2x45</u>	<u>4x45</u>
0-2000	12	13	14	15	18	16	20
2000-4000	13	14	15	16	19	17	22
4000-6000	14	16	16	18	22	19	24
6000-8000	15	17	17	19	23	20	26
8000-10000	16	18	18	20	25	22	27

CHIMNEY INSTALLATION

NOTE: The clearance between the chimney and combustible material must be 2" or more. DO NOT fill this area with insulation.

1. Cut and frame the required holes in the floor, ceiling and roof where the chimney will pass through. Use a plumb bob. **Check the chimney manufacturer's instructions for the framing size.**
2. From below, install a radiation shield in each floor through which the chimney passes. At the attic level, install an attic insulation shield as shown in Figure 9. The first radiation shield above the fireplace must have strips of ceramic felt stapled between the shield and the ceiling, to eliminate excessive heat transfer. These strips are supplied with the fireplace.
3. Remove the 13" x 13" cover and insulation from the top of the fireplace. Cut the insulation to size by setting a section of pipe on it and cutting a hole out.

NOTE: The purpose of this cover box and insulation is to insulate the chimney connection. This prevents excessive heat transfer into the fireplace enclosure.

4. Place the first chimney length on the fireplace. Secure the chimney length to the fireplace with the four angle brackets provided. The larger drill and tap screws attach the brackets to the support plate around the flue outlet. Slide the cut insulation and the

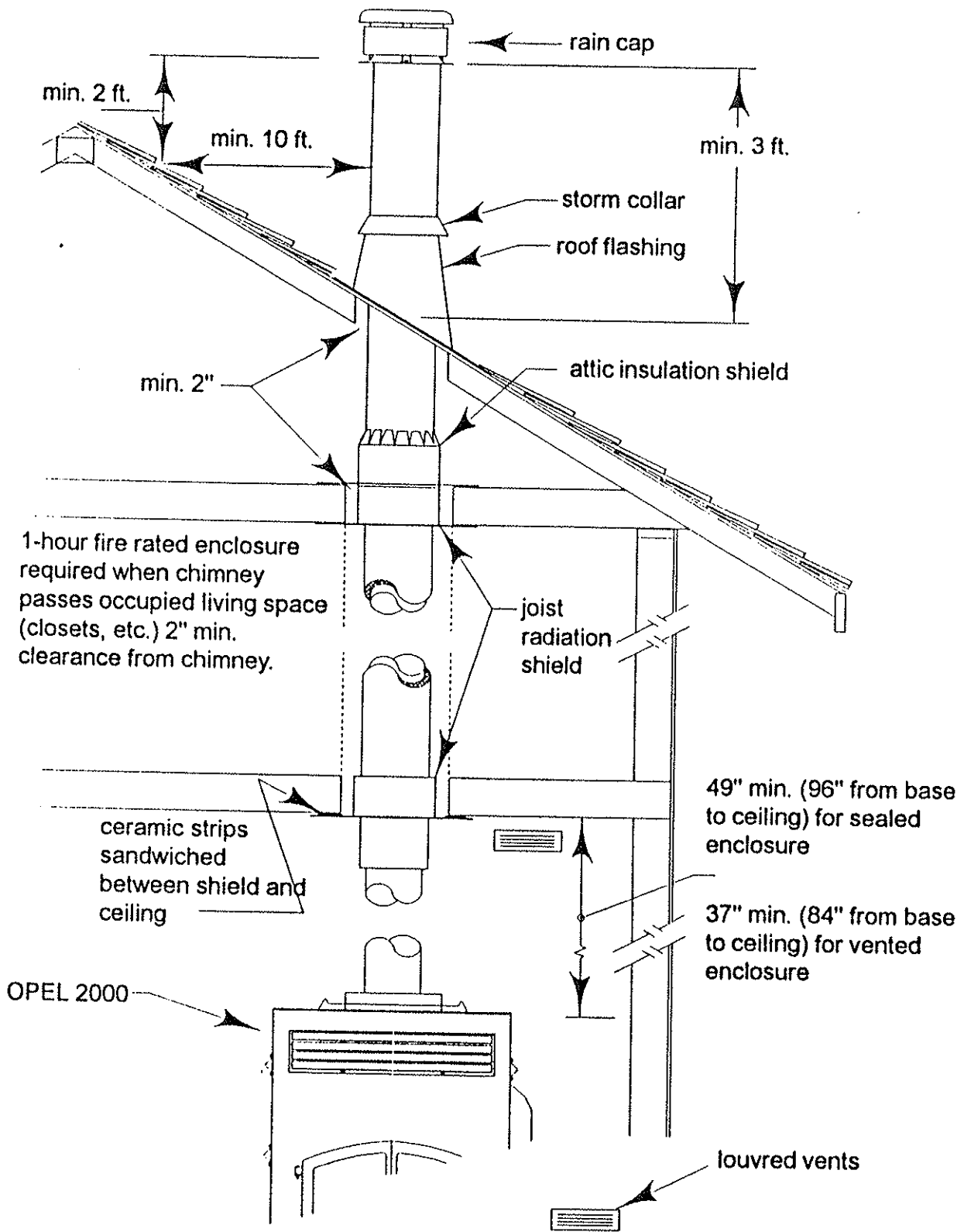


Figure 9: Chimney installation

13" x 13" cover over the first chimney length, then fasten the cover to the top of the fireplace with small drill and tap screws. Continue installing chimney lengths until you reach the desired height.

The chimney must extend at least 3 ft. above its point of contact with the roof and at least 2 ft. higher than any wall, roof, or building within 10 ft. of it. Refer to the chimney manufacturer's flue height requirements for penetration above a chase.

If the chimney is higher than 5 ft. above the roof, it must be secured using a roof brace or guy wires.

5. Put the roof flashing into place. Seal the joint between the roof and the flashing with roofing tar. For sloping roofs, place the flashing under the upper shingles and on top of the lower shingles. Nail the flashing to the roof using roofing nails.

6. Place the storm collar over the chimney and flashing. Seal it around the chimney with silicone sealer (DO NOT use roofing tar).

7. Fit the rain cap on the chimney. Secure it tightly in place.

8. Wash the roof flashing with solvent (or vinegar if the flashing is galvanized), then paint it with exterior paint.

9. Read the chimney manufacturer's installation manual concerning requirements for supports, bracings, anchors, etc.

MASONRY CHIMNEY

Warning: When contemplating using an existing chimney, it must first be thoroughly inspected by an authority having jurisdiction to determine the following:

1. It is a well constructed, lined masonry chimney, fully in accordance with Local Building Codes and the National Building Code of Canada (NBCC) 9.21

2. It has been thoroughly cleaned of any soot or creosote residue and inspected to determine that it is in good condition.

3. There is no attic insulation of any type in contact with the chimney and no insulation stuffed in around the chimney at any point, for any reason.

4. There is, as per NBCC 21.9.5, the necessary air space clearance at all points around the chimney from floor to roof flashing. If the chimney is enclosed in drywall, openings will be required to verify clearances at all points.
5. Chimney will be used only for the fireplace and may not be used to vent a furnace, water heater or any other appliance.
6. If major repairs are required to meet the above conditions, a new chimney should be constructed

NEW CHIMNEY INSTALLATION:

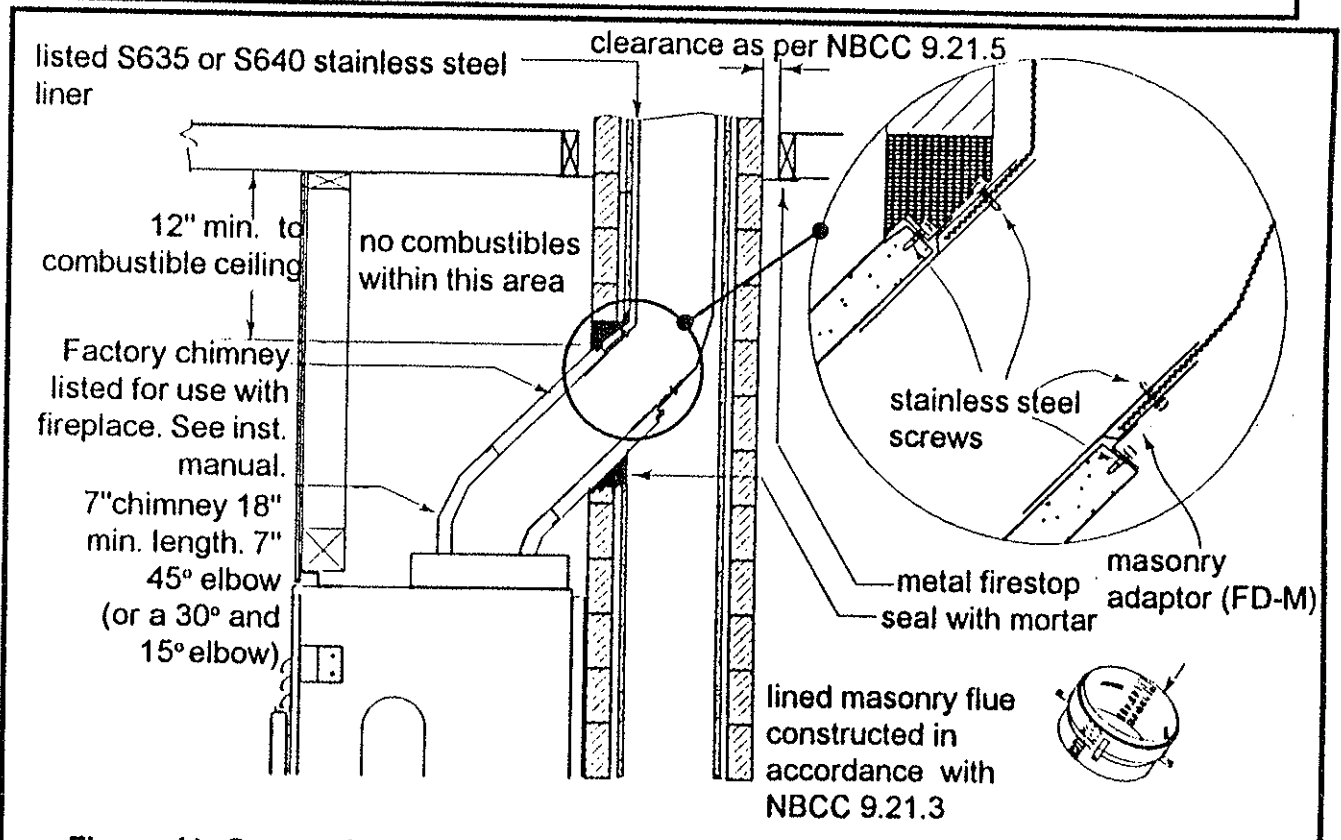
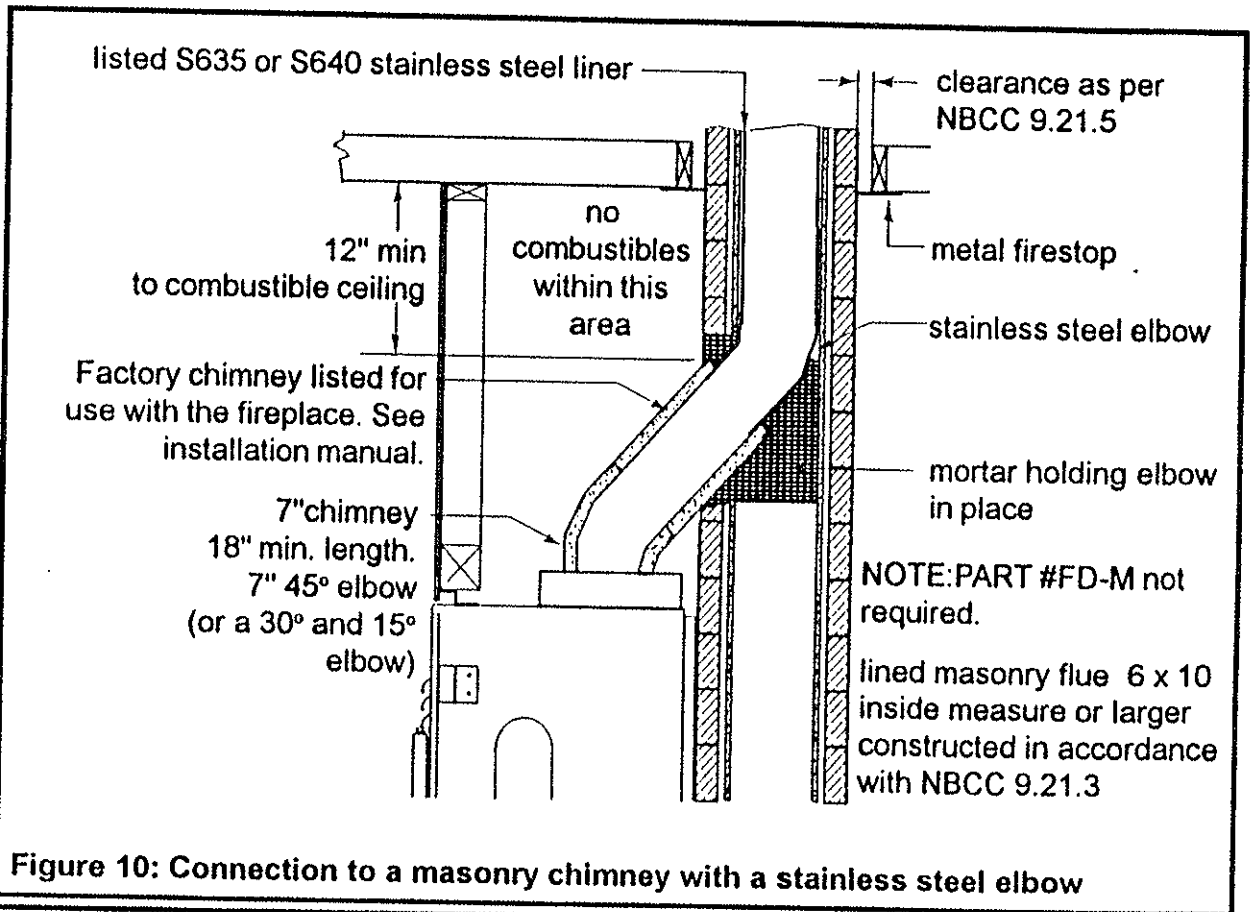
To ensure adequate draft and to facilitate cleaning, the fireplace must be connected to the chimney using 7" diameter listed HT metal chimney with an elbow. As shown in Figure 11, a listed 7" rigid stainless steel liner and a 45° stainless steel elbow are attached to the chimney and secured in place using mortar. If you use an 6 x 10 clay liner you will need to ovalize the stainless steel liner to fit into the clay liner. It is recommended that you position your fireplace before building the chimney. The factory built chimney sections can easily be installed as the layers of brick are being placed.

Note: If the ceiling is high enough some vertical chimney can be installed before the 45° or 30° elbow is installed.

EXISTING CHIMNEY INSTALLATION:

If it is difficult to install rigid stainless on an existing chimney, a listed stainless steel flex liner can be used (See Figure 11). Special care is to be taken when installing the flexible liner. A positive connection is assured with the masonry adaptor (part #FDM) available from your dealer. The stainless steel flex liner connects into the masonry adaptor and is secured with the 4 stainless steel screws provided. The masonry adaptor is then secured to the metal HT chimney with the 4 screws provided. The stainless steel liner fits inside the clay liner all the way to the top of the masonry chimney. It is not meant to replace the clay liner. After mortaring in place, the connection should not be visible. It is important that the heat from the flue is isolated from the fire place enclosure. Figure 11 illustrates a typical flex liner installation. Care must be taken when cleaning to ensure that the stainless steel flex liner is not dislodged.

As depicted in Figure 11, the metal chimney is to be a minimum of 18" from the con-

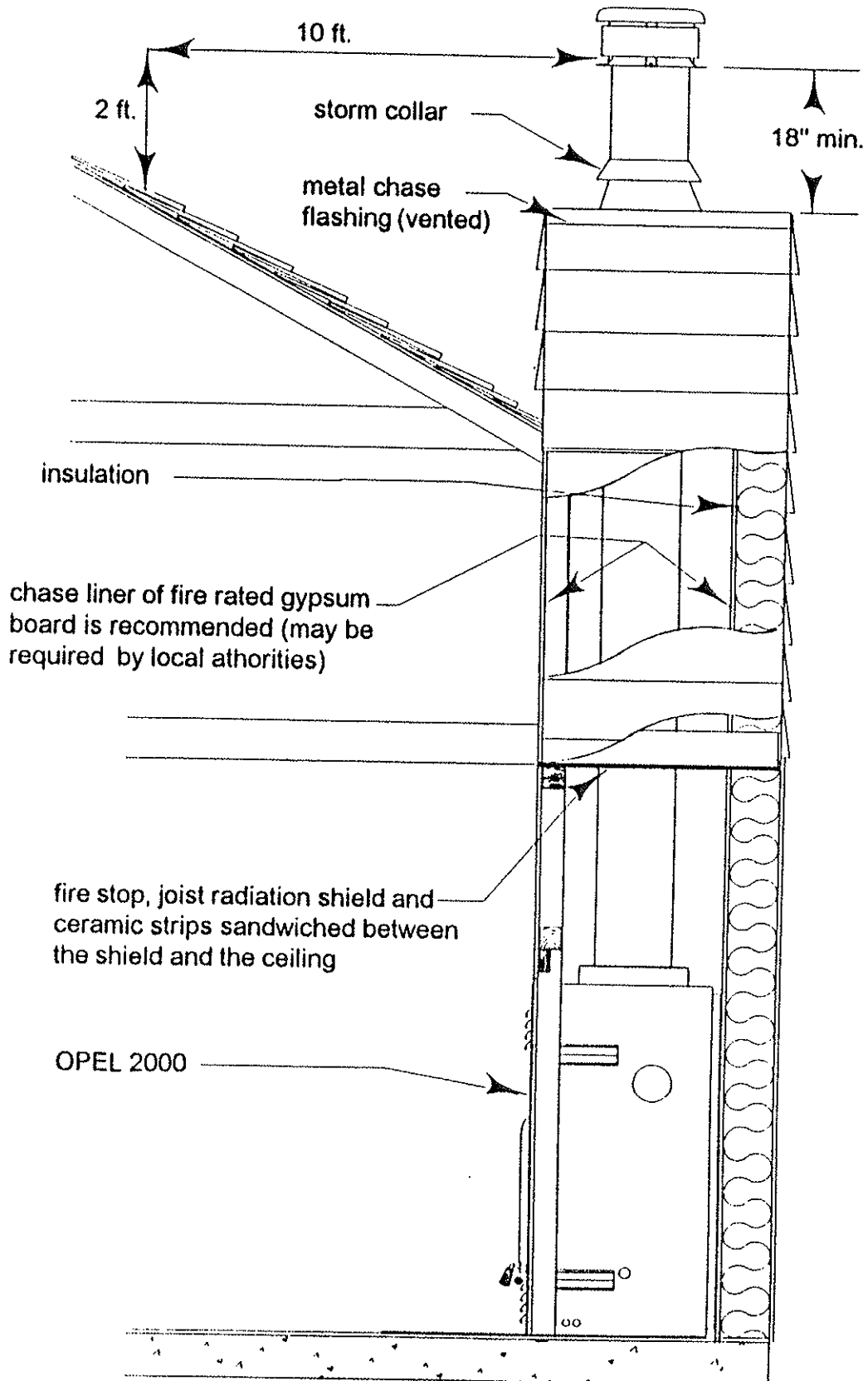


nection point at the elbow to the masonry adaptor. The uppermost part of the metal chimney where it enters the masonry chimney must be a minimum of 12 inches from the ceiling.

1. After temporarily removing the 13" X 13" cover, move the fire place into its proposed position and install the 45° factory built chimney elbow on top of the fireplace flue opening.
2. Sight-in and mark the outline of where the factory-built chimney will penetrate the masonry chimney.
3. Using a large (3/4" - 2") masonry drill bit, drill a hole exactly in the centre of the oval outline. With a masonry hammer and drill, slowly enlarge the hole to the size required. Remember to work from the centre out. Be especially careful with the clay liner behind the brick because three sides of it must stay in place.
4. Bring the stainless steel liner down from the top of the chimney. If you are using a rigid liner you will need enough room to secure an elbow to it with at least two screws. For chimneys with less than 10" X 10" inside you may find it easier to install a flex liner and secure the end with a special masonry adapter (part #FD-M) available from your dealer.
5. Move the fireplace forward enough to install the length of factory built chimney and put the 13" x 13" cover over the top (with insulation cut out around to fit snugly over the chimney). Move the fireplace back into position as you connect the elbow or the masonry adaptor to the factory built chimney.
6. If you mortar the stainless steel elbow into place, you will not need to fasten it to the factory built chimney. The crimped end should go into the factory built chimney at least 1 1/2". If you use the masonry adaptor, it must be screwed to the factory-built chimney with the screws provided.

CHASE ENCLOSURE

If the chimney runs up the outside of the house, it must be enclosed in a chase structure. It is best to locate the chase away from any overhead obstructions and meet all clearances from such objects. The chase should be constructed in such a way that it is an extension of the home. It should be well insulated between the footings and the floor of the home to prevent heat loss. If the climate in your area is mild, insulate the chase at least to the first firestop. If the climate in your area is very cold, insulate the chase



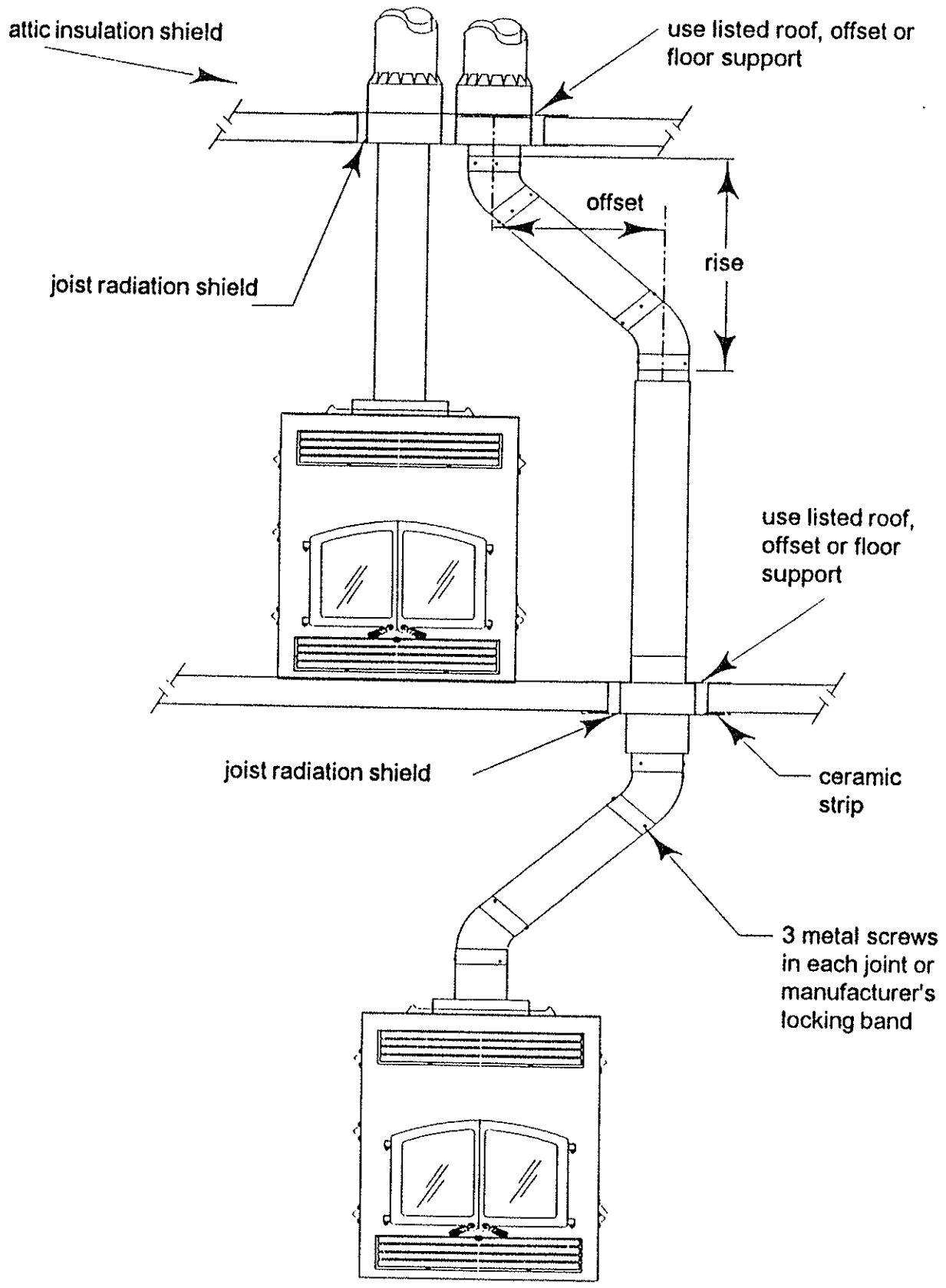


Figure 13: Offset chimney installation

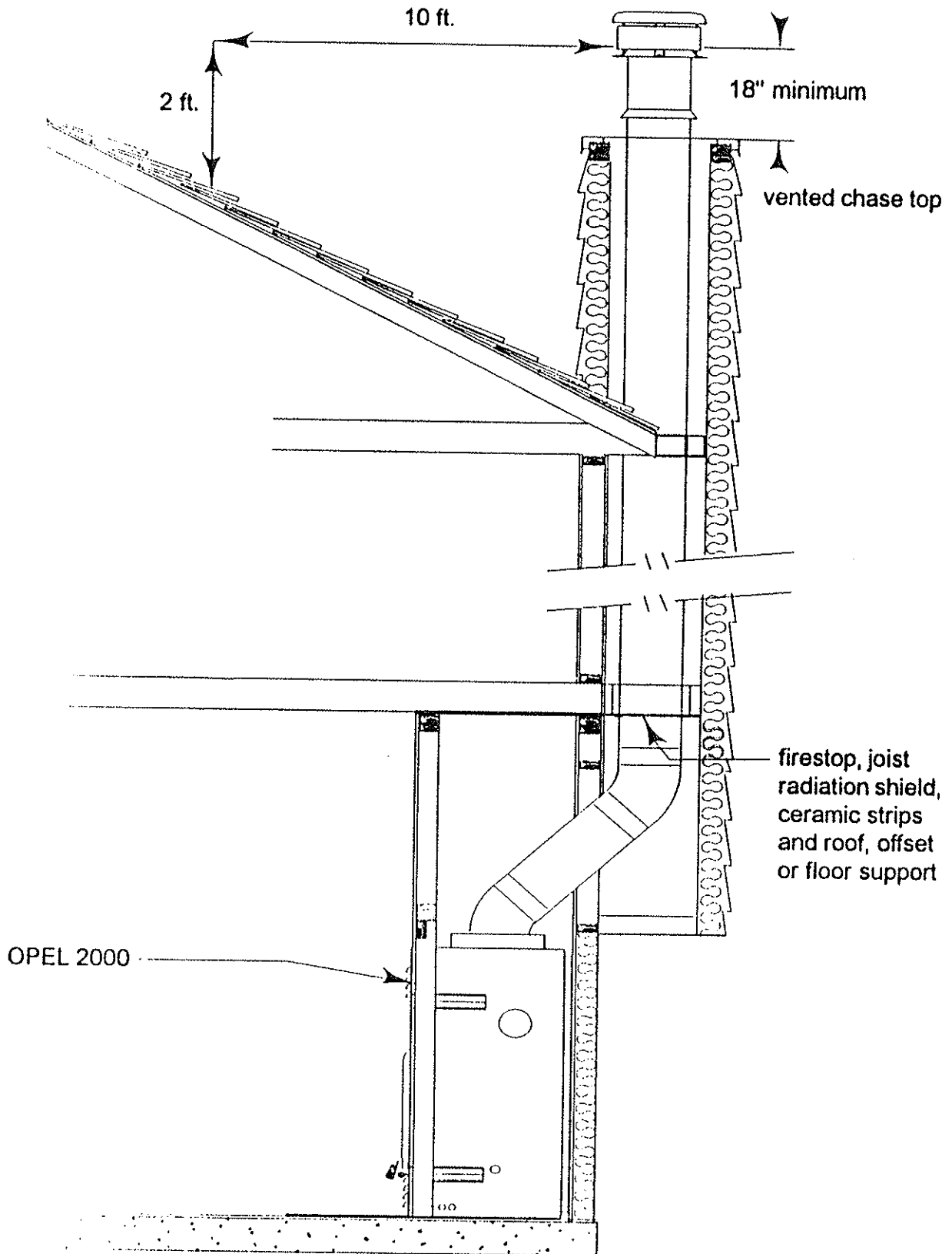


Figure 14: Offset chimney through a wall

NOTE: If the chase is enclosed or flashed to the roof as shown in figure 12, then the flashing must be vented.

If required by local codes, make certain that the walls have been properly insulated, vapour sealed and sheathed with a fire rated gypsum board (see Figure 12).

REMEMBER: Check local codes concerning installation requirements and restrictions in your area.

FIRE STOP

A fire stop must be placed where the chimney passes through each floor level overhead. This will assist in retarding any spread of fire and act to contain the fire within the area below the firestop.

OFFSET CHIMNEY

Maximum offset angle: 45°

Maximum number of elbows: four (4), resulting in two (2) offsets.

If a 45° elbow is not available, a combination of a 15° and 30° elbow may be used.

An elbow may be installed directly on top of the fireplace if required.

Use the offset option if you need to clear a joist or pass around a cupboard.

Install the fireplace and chimney as described earlier. When you require an elbow, proceed as follows:

1. Install the required elbow. Turn it in the desired direction, and fasten it to the other section with 3 metal screws at the joint (if the chimney manufacturer allows this in its instruction manual). If required, locking bands could be used in place of the metal screws depending upon the manufacturers' brands and instructions.
2. Install enough lengths to obtain the desired offset. Secure each joint with 3 metal screws.
3. Use another elbow to return the chimney to the vertical direction.
4. Install a roof support, an offset support, or a floor support at each offset to support the weight of the flue (Class A elbows are not designed to support a flue above an

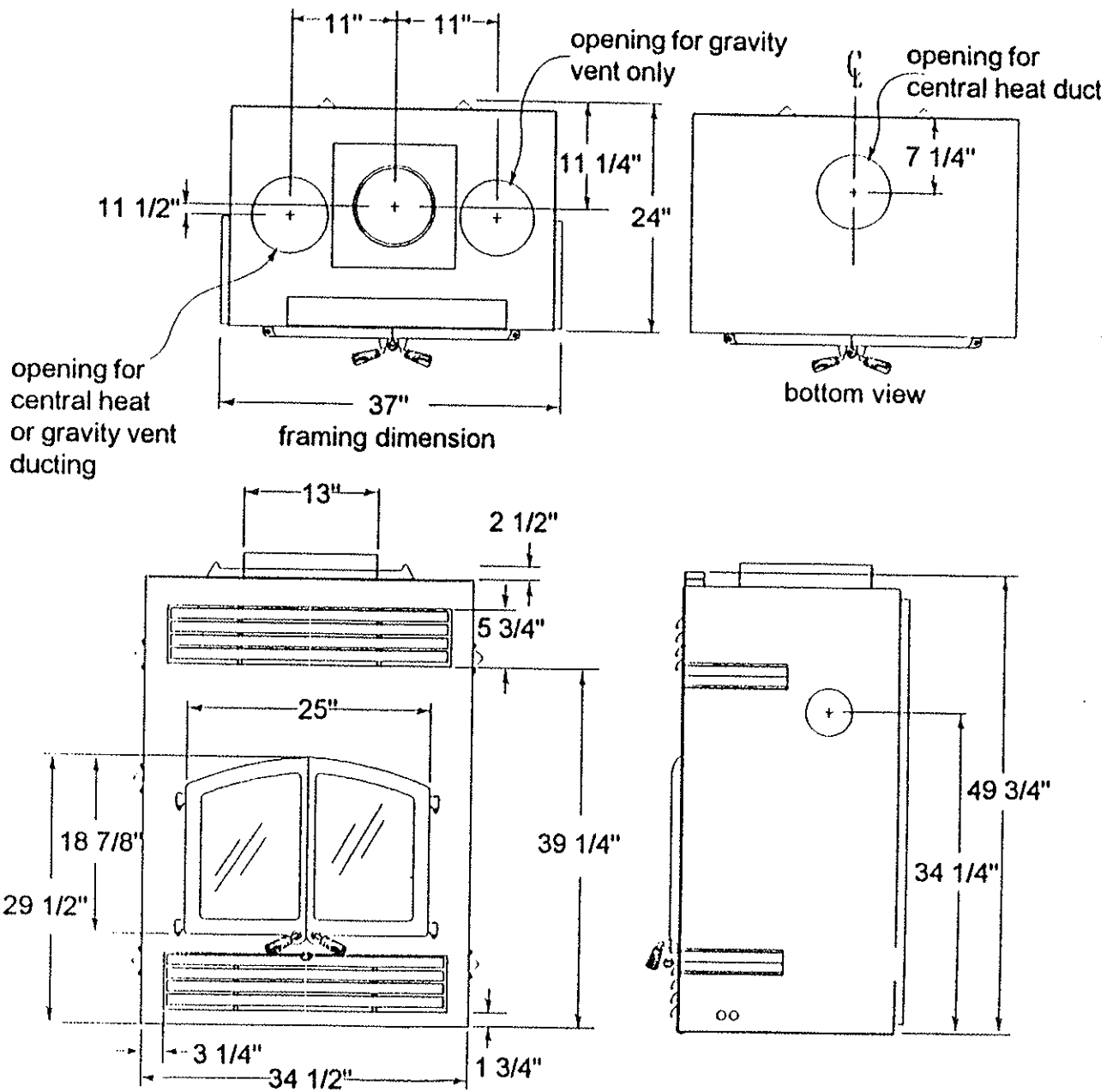
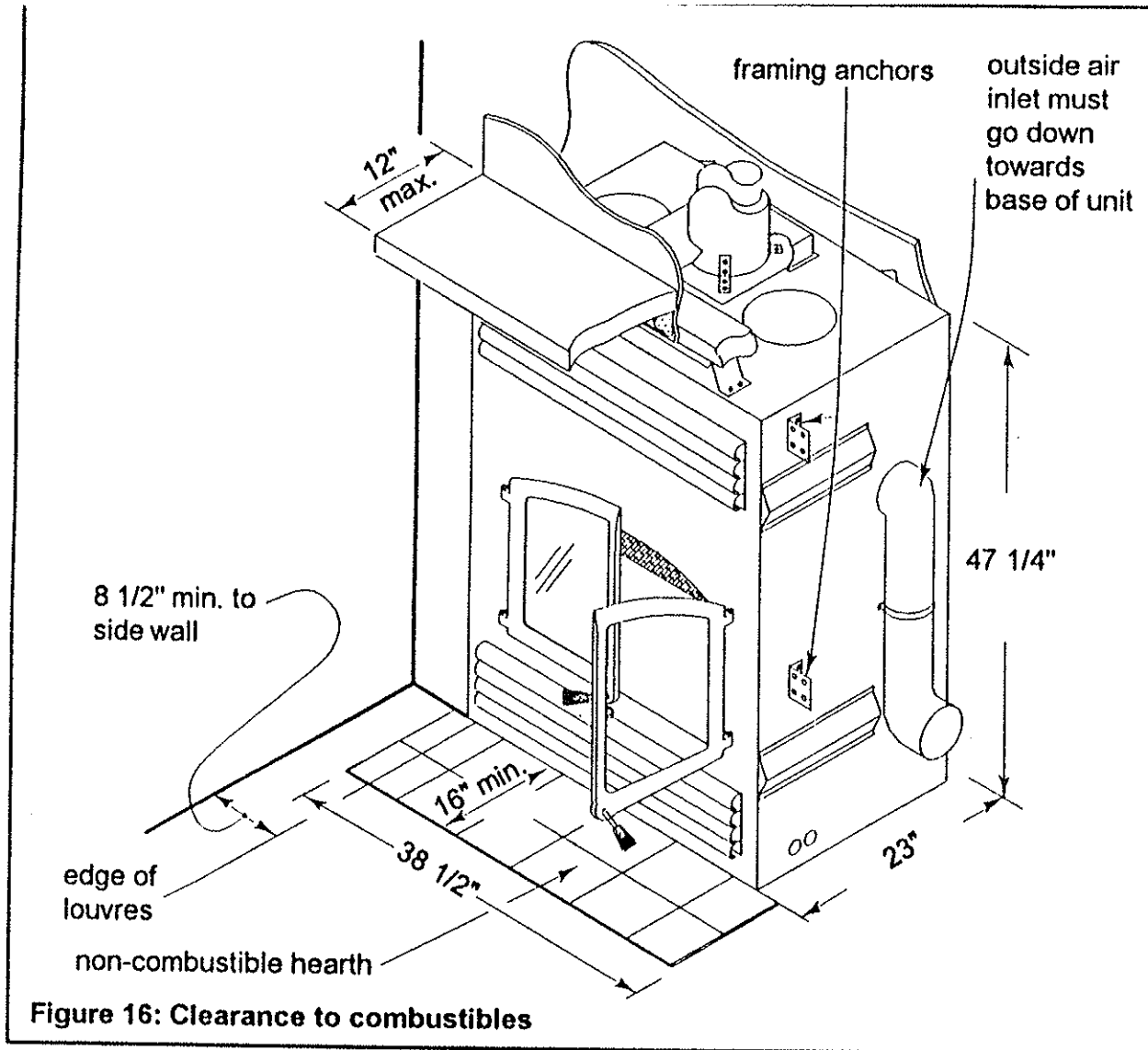


Figure 15: Unit dimensions

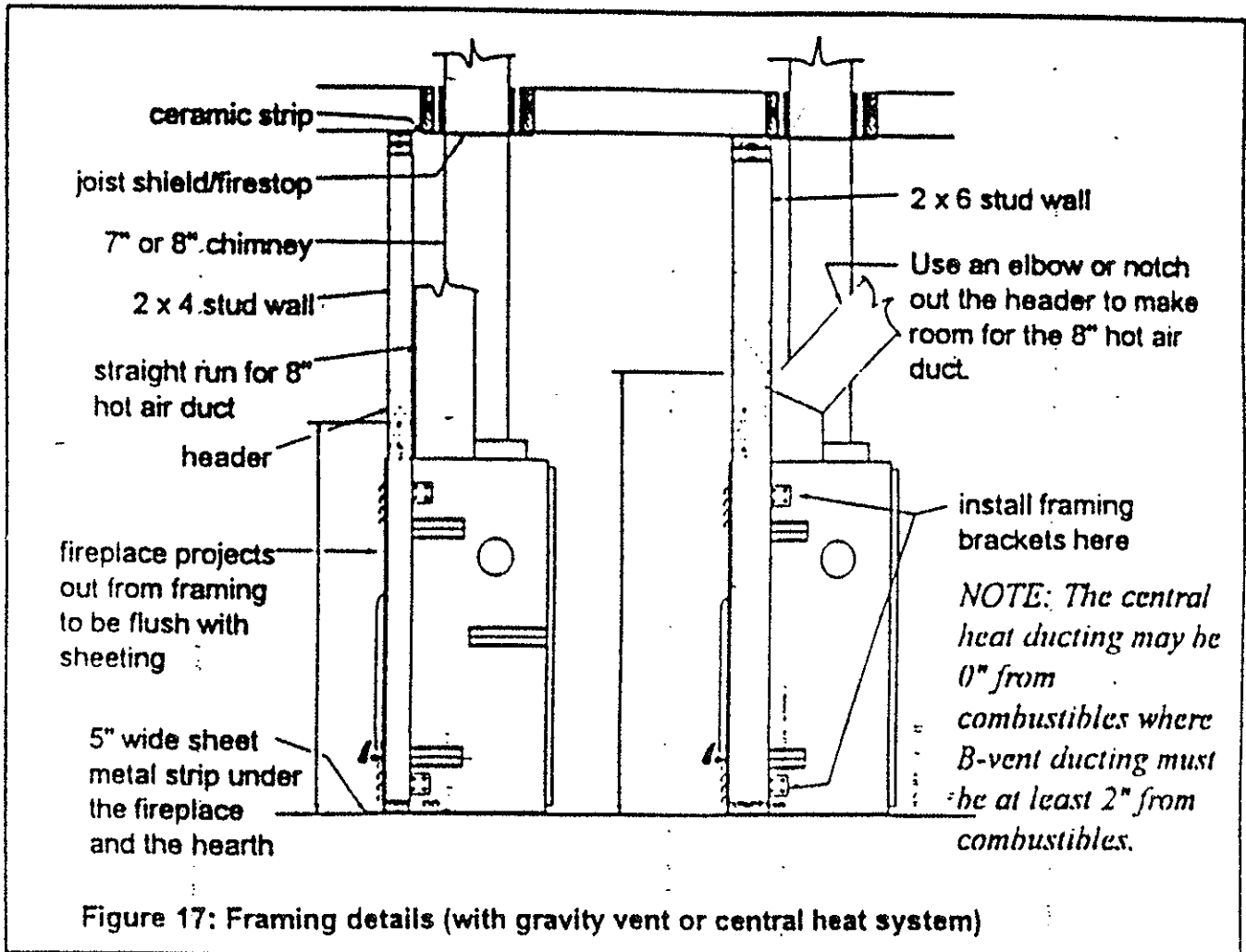


offset).

FRAMING IN

The enclosure walls can be framed with any suitable materials (2x4 or 2x6 studs, plywood, gypsum board, etc.). Because of the high heat output potential of the OPEL 2000, combustible material must NOT go closer to the fireplace than the standoffs, top, back and sides. You must cover the area between the framing and the front of the unit with a non-combustible material such as concrete board or sheet metal.

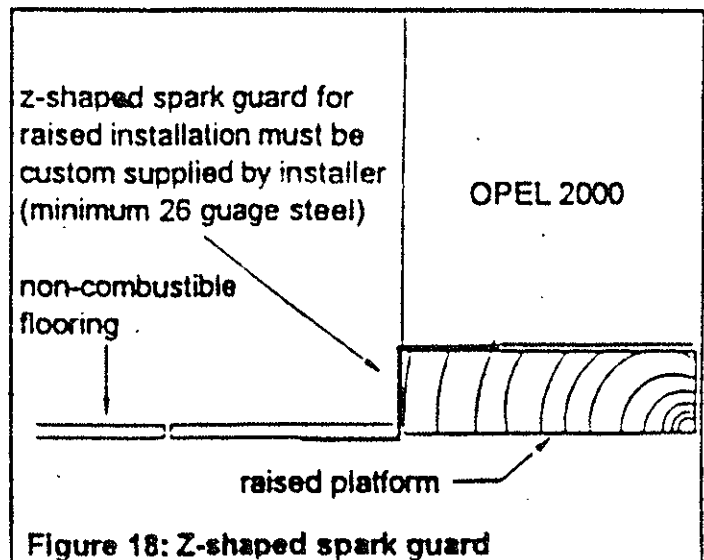
Note that when you use 2x6 studs to frame in the fireplace that you will have to use an elbow to allow your gravity vent or central heat ducting to pass around the header (see Figure 17). You may also notch out the header to make room for the ducting.



If you like, framing can be set back to allow the facing to be level with the front of the fireplace.

SPARK GUARD

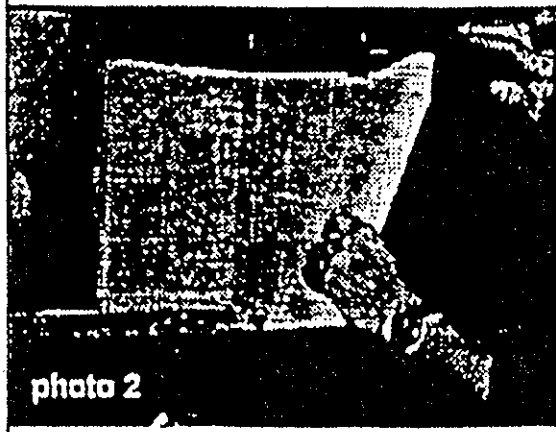
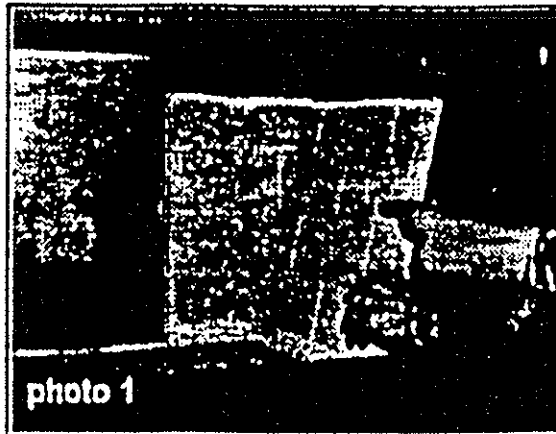
Install a 5" piece of sheet metal centred under the joint between the fireplace and the hearth extension. This will make certain that sparks cannot lodge in the crack and start a fire. If you are preparing a raised installation, then a "Z" shaped spark guard must be installed. The height of the Z-shaped hearth guard must equal the distance between the floor and the base of the unit. The minimum depth the spark guard must extend beneath the OPEL 2000 is 2 1/2 inches. The spark guard must run the full length of the fireplace. (Z-SHAPED GUARD NOT SUPPLIED)



FIREBOX LINER INSTALLATION

The liner panels and brick must be installed in the right sequence.

1. Make sure the firebox is clear of any debris.
2. Install one of the rear panels. *Note: there is a left and right to side panels. The brick pattern should match as in the photographs.*
3. Install the rear side panel sliding it under the retainer (see photo 1).
4. Slide the front side panel under the retainer (see photo 2).
5. Repeat the procedure with the other side.



MANTEL

A masonry or other non-combustible mantel may be placed directly above the top louvres. If a wood or other combustible mantel is desired; then it must be at least 25 inches above the top of the door opening (see Figure 20).

HEARTH EXTENSION

The area immediately in front of the fireplace must be protected by a non-combustible material such as brick, tile, stone, or slate. The protection must extend at least 16" in front and 8" on both sides of the fireplace opening. There is no minimum thickness required for the hearth extension.

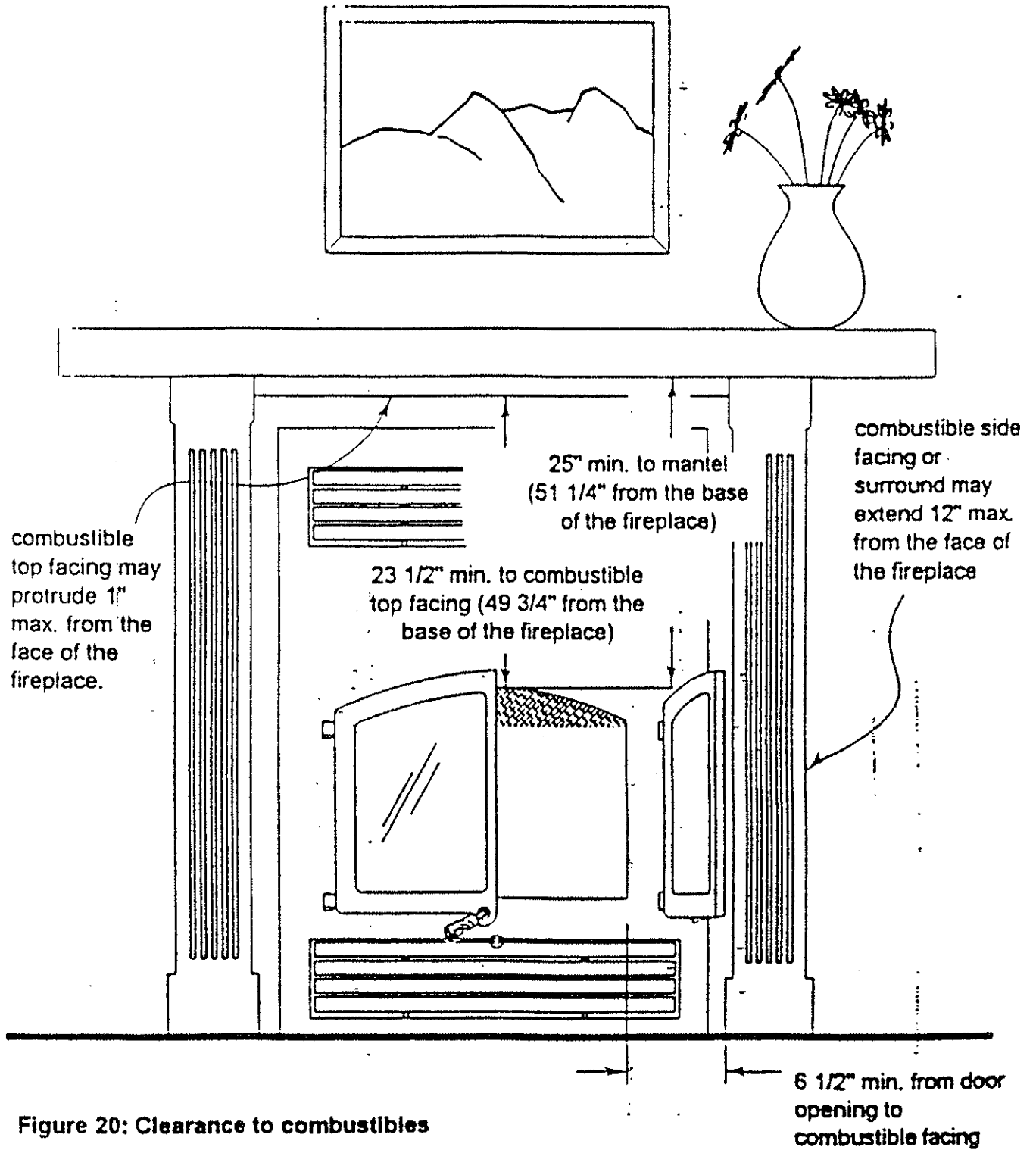


Figure 20: Clearance to combustibles

OPEL 2000 OPTIONS

Just a few comments about your OPEL 2000 options. The size and shape of your home and how you intend to use your fireplace, will determine the options you require.

For a basic, high-efficiency fireplace, you won't need any options or electricity.

Temperature control can be accomplished by adding the thermostat option (part FD-HC4). The thermostat automatically controls the amount of combustion air to the fire, leaving your home at an even preset temperature. If you seriously plan to heat your home with the fireplace, the thermostat option will increase comfort, end the fuss of continued manual adjustment, and reduce wood consumption.

For more heat out put and increased air circulation, you can add the internal blower (part FD-HB5). For larger homes in colder climates, this is an important option if you plan to use the fireplace as a serious source of heat.

NOTE: It will be difficult to install the internal blower if wiring is not run during framing. If there is any chance that this option will be installed in the future, power should be run to the fireplace and wire must be run to a switch box at a convenient place on the wall for mounting the blower control.

If you have rooms directly above or adjacent to the room with the fireplace, which you would like to heat, you may consider the gravity vent option (part FD-V). The gravity vent distributes hot air to these rooms and requires no blower to assist its operation. However, with the internal blower (FD-HB5-N) installed, there will be some increase in warm air movement to rooms serviced by the gravity vent.

If you desire even heat throughout your home strictly from your fireplace, or if you want to move heat to a remote area of your home, it is recommended that you incorporate the central heat option (parts FD-HB6, FD-HC6 and FD-HC6-1). A thermostatically controlled blower takes heat from the fireplace, and distributes the warm air throughout your home - even a couple of stories up or down.

WALL THERMOSTAT (FD-HC4)

This optional kit allows you to control the temperature by a remote electric wall mounted thermostat.

NOTE: It is strongly recommended that this kit be installed during framing so that the

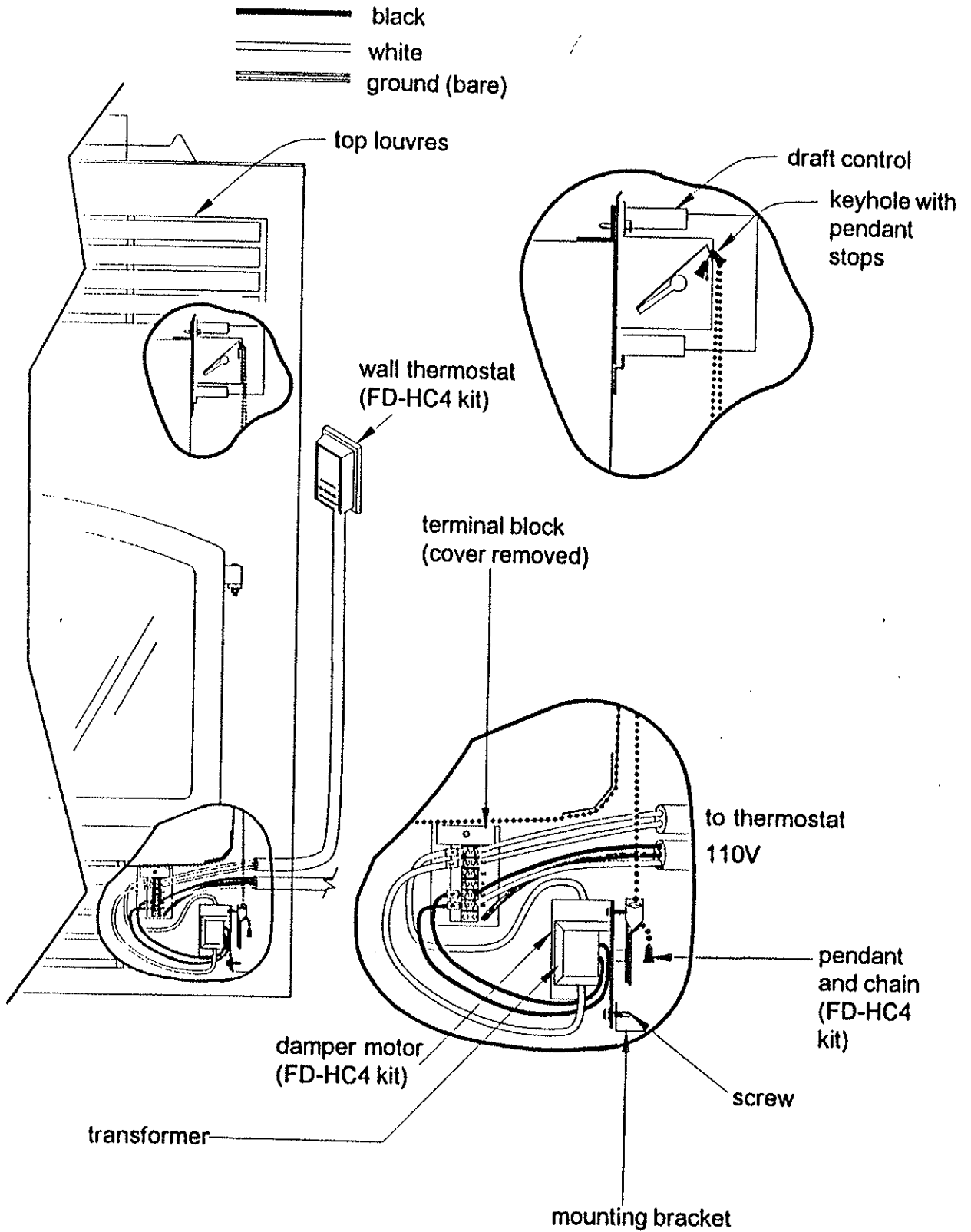


Figure 21: Thermostat control installation

See wiring diagram Figure 43.

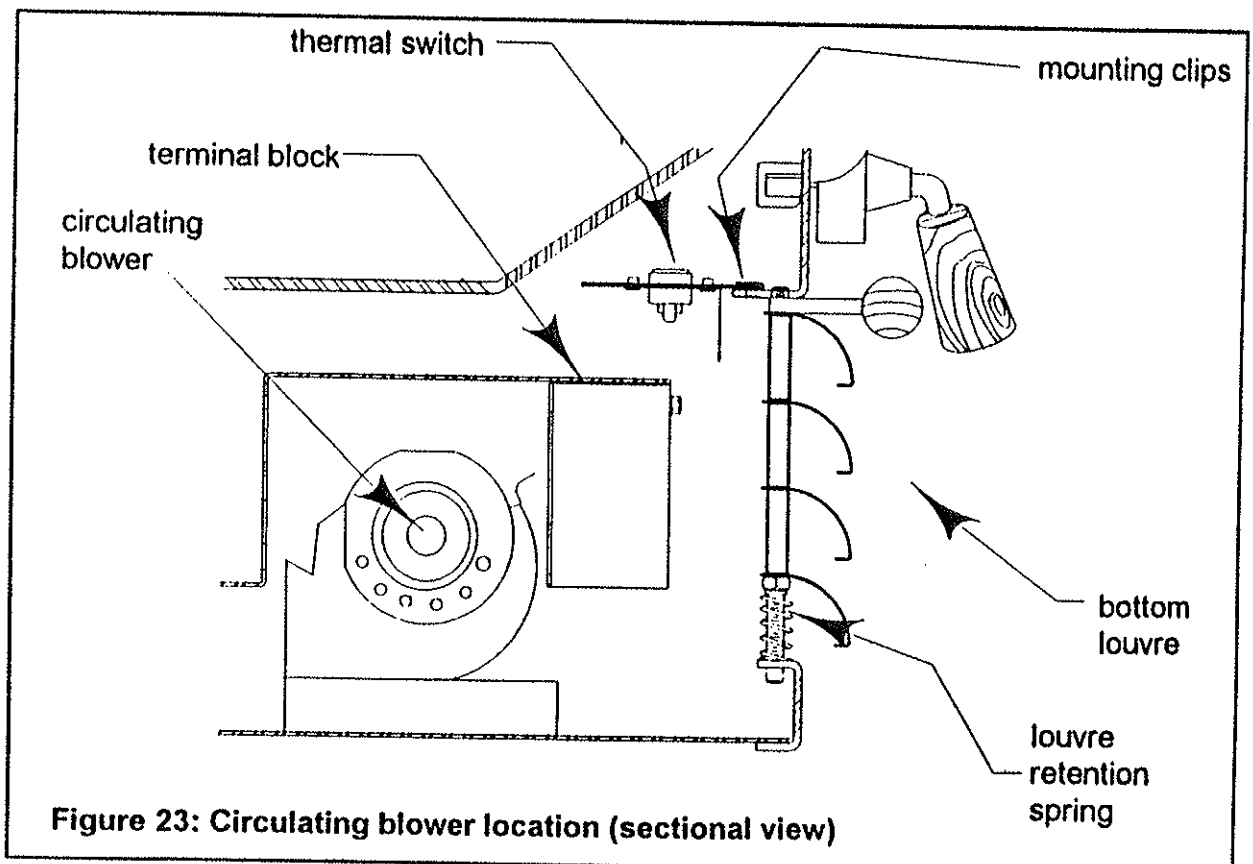
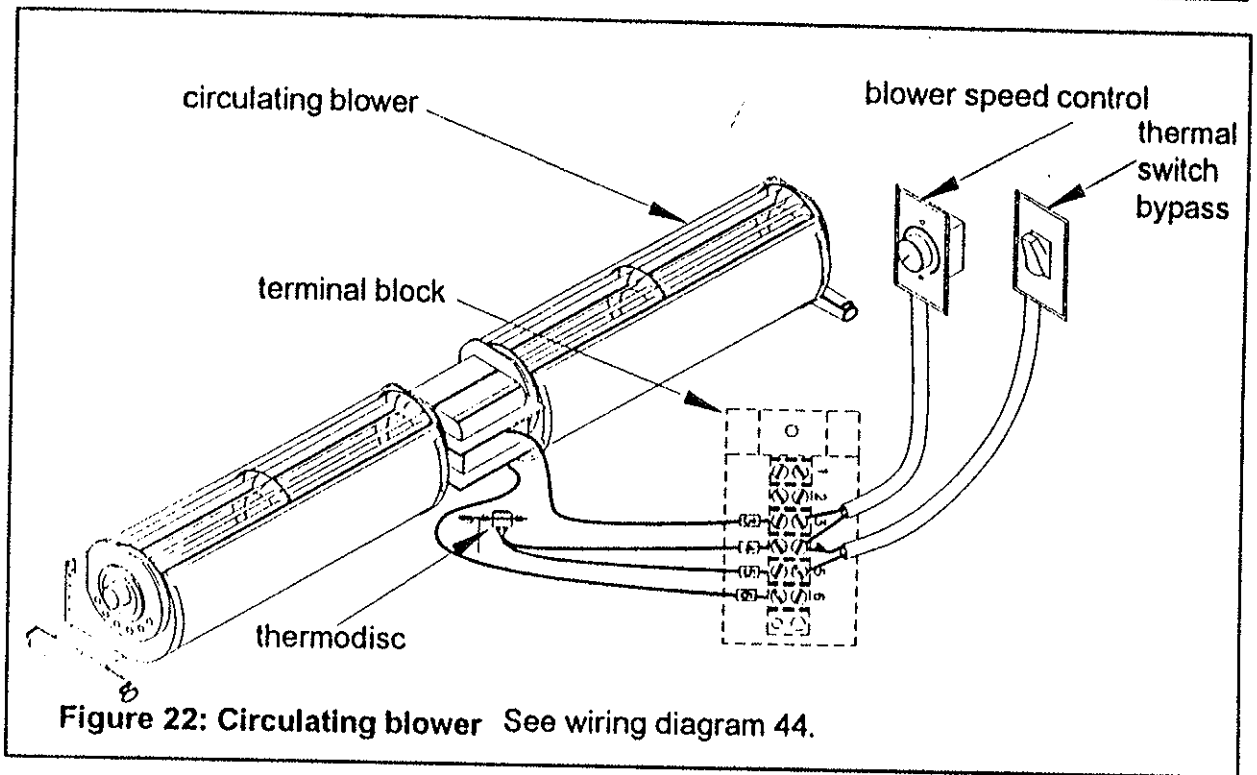
wiring can be easily hidden.

1. Remove both top and bottom louvres. They are held in place by springs underneath, so push down from the top, then rotate and pull forward.
2. The damper motor and transformer are mounted on a bracket in the bottom right hand corner of the fireplace (see Figure 21).
3. BEFORE fastening the controls with the 2 screws provided, thread the supplied chain through the spare keyhole in the draft control and attach a pendant to the end, just like the chain that is beside it. Let the chain down on the same side of the heat shield as the existing chain, and attach it to the lever on the damper motor with another pendant. Push the pendant snug into the hole in the lever. Then mount the controls to the bracket.
4. Adjust the chain on the draft control lever until it is just snug but the damper is still closed. When the damper motor is energized, the damper should open all the way. Lock the chain onto the keyhole with another pendant just like the chain beside it.
5. Wire the thermostat as shown in Figure 21, making sure the wall control is sufficiently away from the direct radiation of the fireplace. Make certain that it is at least 10 ft. away from the fireplace, but in the same room.

CIRCULATING BLOWER (FD-HB5-N)

NOTE: It is important that the wiring for the blower kit is installed during framing so that the wiring can be easily hidden.

1. Remove the bottom louver. It is held in place by springs underneath. Therefore, push down from the top, then rotate and pull forward.
2. Hold the blower with the outlet facing up from the back. Fit the blower through the louver opening.
3. Slide the blower into place between the two brackets.
4. Mount the thermal switch as shown in Figure 23. The front face of the fireplace is bent into a flange just above the lower opening. It has 2 holes to hold the bottom louver rods. The thermal switch mounts just to the right of the right hole. Push the clips on to the flange as far as they will go.



NOTE: One thermal switch is all that is required to operate either the internal blower, the central heat blower, or both.

5. Locate the provided speed control in a switch box at a convenient location on the wall and connect it with conventional 90° C 14 gauge wire (see figure 22).

OPEL CATALYTIC KIT INSTALLATION

(See also the instruction sheet included with the catalytic combustor kit.)

The OPEL FG-CCO Catalyst Kit includes:

- cotter pin
- template
- bypass rod
- bypass damper
- catalytic bypass frame
- catalytic converter
- tapping screws and retaining bracket
- control eye/handle/extension

REMOVAL OF EXISTING BAFFLE:

1. Looking up inside the firebox , you will see the non-catalytic system (A).
2. Remove the cotterpin and secondary air pipe.
3. Bend the retaining tabs out of the way (B), and push up on the baffle which is sitting

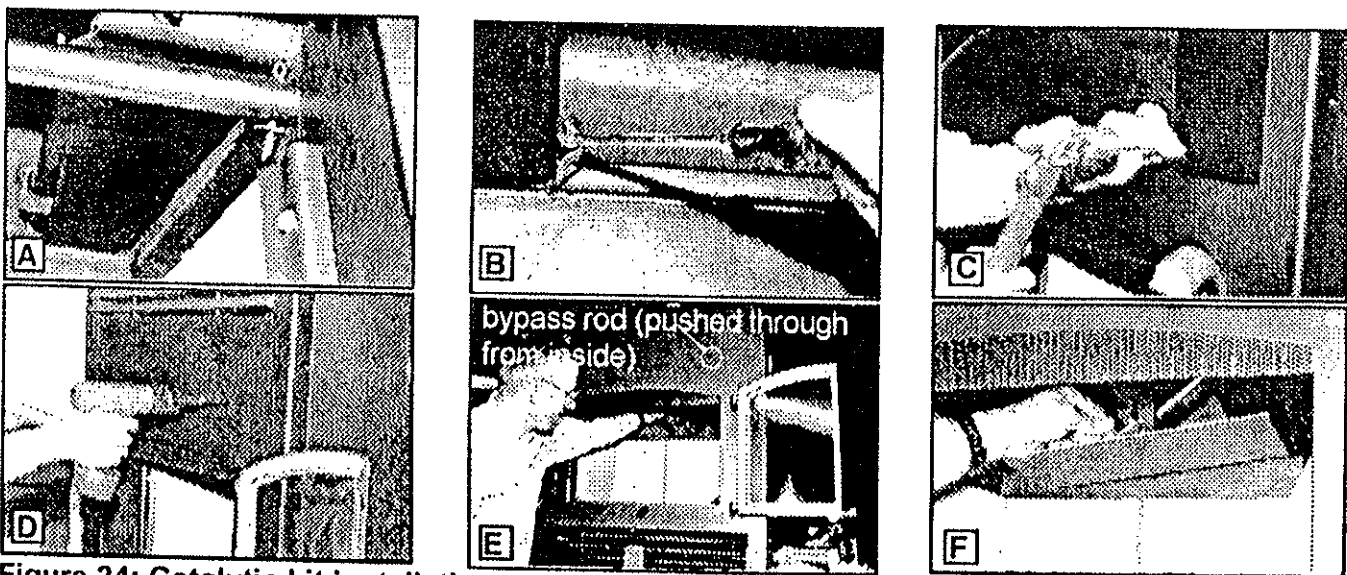


Figure 24: Catalytic kit installation

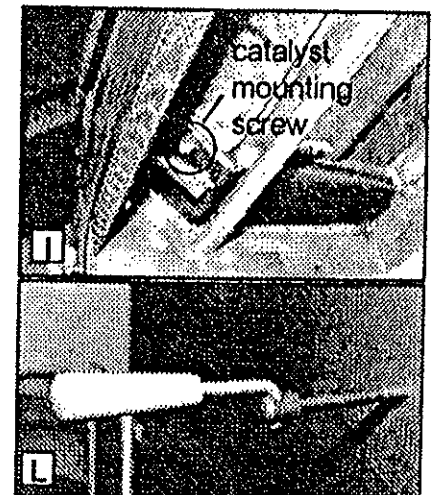
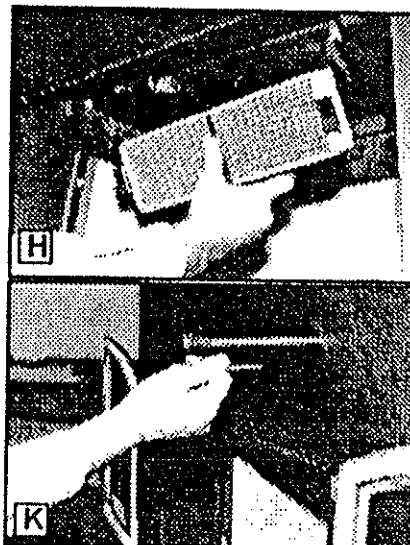
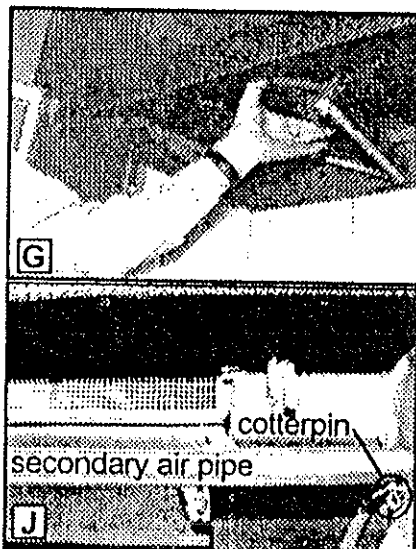
on a ridge. Then pull it out of the firebox. Discard.

BYPASS DAMPER INSTALLATION

1. Hook the template provided into the louvre opening, flush with the right side.
2. Use a punch to make a mark through the small hole on the front of the template (C), then remove template and discard. Make a pilot hole at the punchmark, then drill a 3/64" hole (D).
3. Take the bypass rod and, from inside the fireplace, push the long end through the hole you just drilled (E). On the outside, pull the bar out as far as it will go.
4. With a cotter pin, connect the bypass rod to the bypass damper (F). The bent lip side faces the back of the unit with the connecting bracket facing up.
5. Push the bypass rod/damper up through the large upper hole and rest them on the frame (F).
6. Install the catalytic bypass frame with the opening towards the rear (G) & gasket facing down.
7. Check that the bypass opens and closes freely by pulling on the bypass rod.

CATALYTIC COMBUSTOR INSTALLATION

1. Carefully install the catalytic combustor in the opening just above the door (H) with the stainless steel clips facing down into the firebox opening.



2. Take 2 screws and 2 retaining brackets (in small package) and tighten the screws through the brackets through the predrilled holes (I).

SECONDARY AIR PIPE AND CONTROL EYE/HANDLE INSTALLATION

1. Reinstall the secondary air pipe with the holes facing forward and up 45° (J).
2. Use the cotter pin to secure the pipe (J).
3. Attach the control eye to the bypass rod by tightening the set screw with a 1/8" Allen wrench (K).
4. If the bypass rod is too short due to thick brick facing, attach the extension. Measure the required length from the threaded end and cut off excess before installing the control eye (K).
5. Insert the handle into the control eye (L).

GOLD OR ENAMEL LOUVRES

The standard black louvres above and below the doors can be replaced with a gold plated (part #FD-L) or black enamel (part #FD-LE) set. You may order these from your dealer.

DISMANTLING AND ASSEMBLING LOUVRES

1. The louvres are held in place by springs underneath. Therefore, push down from the top and pull out.
2. Take the assembly apart by removing the top nuts from the rods. Note that there are two washers underneath the top nuts on the bottom louvres. These washers are placed to provide space for the air control lever. Make sure they go back when you reassemble the louvres.
3. Assemble the new louvres the same way the old ones came apart, reusing the original rods and spacers. Leave about 1/4" of the rod protruding above the top nut. Make sure you replace the washers under the top nuts of the bottom louvres.
4. Put the reassembled louvres back into the fireplace by inserting the rods into the lower holes, and rotating the louvres into place.

NOTE: Although the gold plating will not tarnish, care must be taken not to scratch the surface.

ROCK RETAINER KIT (FD-K)

FACING

Facing material may only be non-combustible such as metal, brick, rock, concrete board, or ceramic tile. Gypsum board is **NOT** an acceptable facing material.

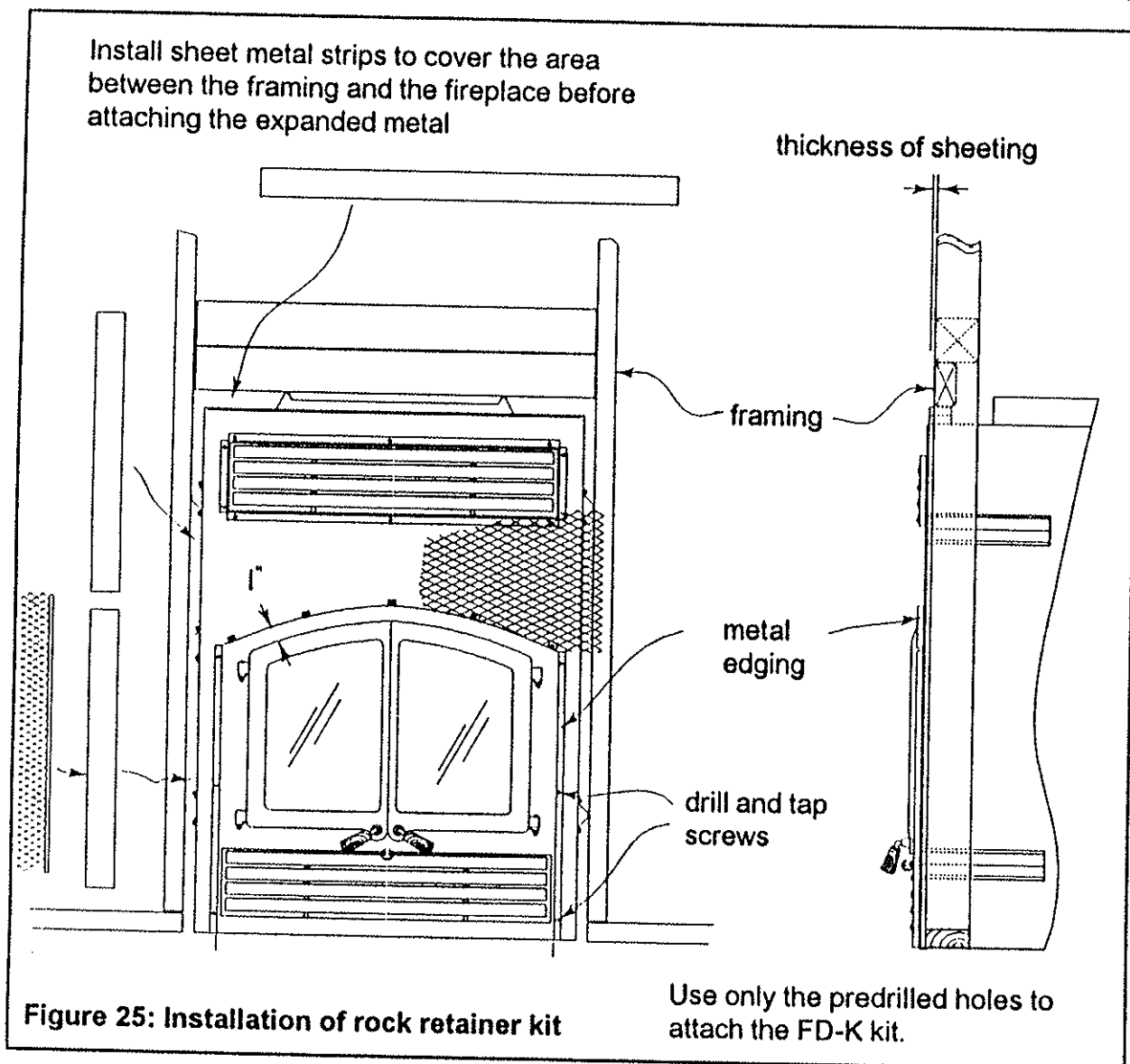
WARNING: DO NOT restrict air flow through the inlet and outlet louvres of the stove. Only with two (2) gravity vent kits installed with the dampers removed, may the upper louvre area be blocked.

If you desire to fully face the fireplace with thin masonry, it is recommended that you purchase the rock retainer kit (part #FD-K with the upper louvres in place, or the FD-K-1 with the upper opening blocked) to help keep the facing in place. It is **NOT** recommended for brick or other self-supporting materials. Follow these steps:

NOTE: Remove the fireplace doors and louvres, and store them in a safe place until the masonry work is finished. Acid from the cleaning operation will permanently damage the gold plating.

INSTALLATION

1. Mount the supplied 3" wide sheet metal strips between the perimeter of the fireplace and the framing to seal the fireplace enclosure. Install the heavy expanded metal on the top half of the fireplace using drill and tap screws at locations shown (see Figure 25). If there is a bypass rod above the door, allow for it to come through. For thick rock, the rod extension (part #R6414) may be required.
2. Install the metal edging on each side of the doors, making sure that the edges fit nicely with the arch edge above. There are right and left side expanded metal pieces. The expanded metal is correctly installed when the expanded metal is facing upwards, to catch the mortar. A wider steel lintel bar may be required for heavy rock.
3. Cover the rest of the area with wire mesh, or metal lath, overlapping the heavy expanded metal. Make sure nails or staples used for fastening mesh penetrate the studs at least 1".



4. Mortar must be "thin set" or "thin bed" type, inherently polymer modified. Do not add water to the mixture (this applies to the grout as well). If the mortar is not modified, you should add a synthetic latex additive. Mix to a firm, moist consistency.
5. Using a plaster's or mason's trowel, apply a scratch coat that covers the wire mesh. Let the mortar set before adding another coat. This will take several hours. Afterwards, apply a thinner coat and the facing. Do not spread plaster over more than a workable area so that the mortar will not set before the facing is applied.
6. If additional mortar is required, use a grout bag to fill in the joints. Take extra care to avoid smearing on the surface of the facing.

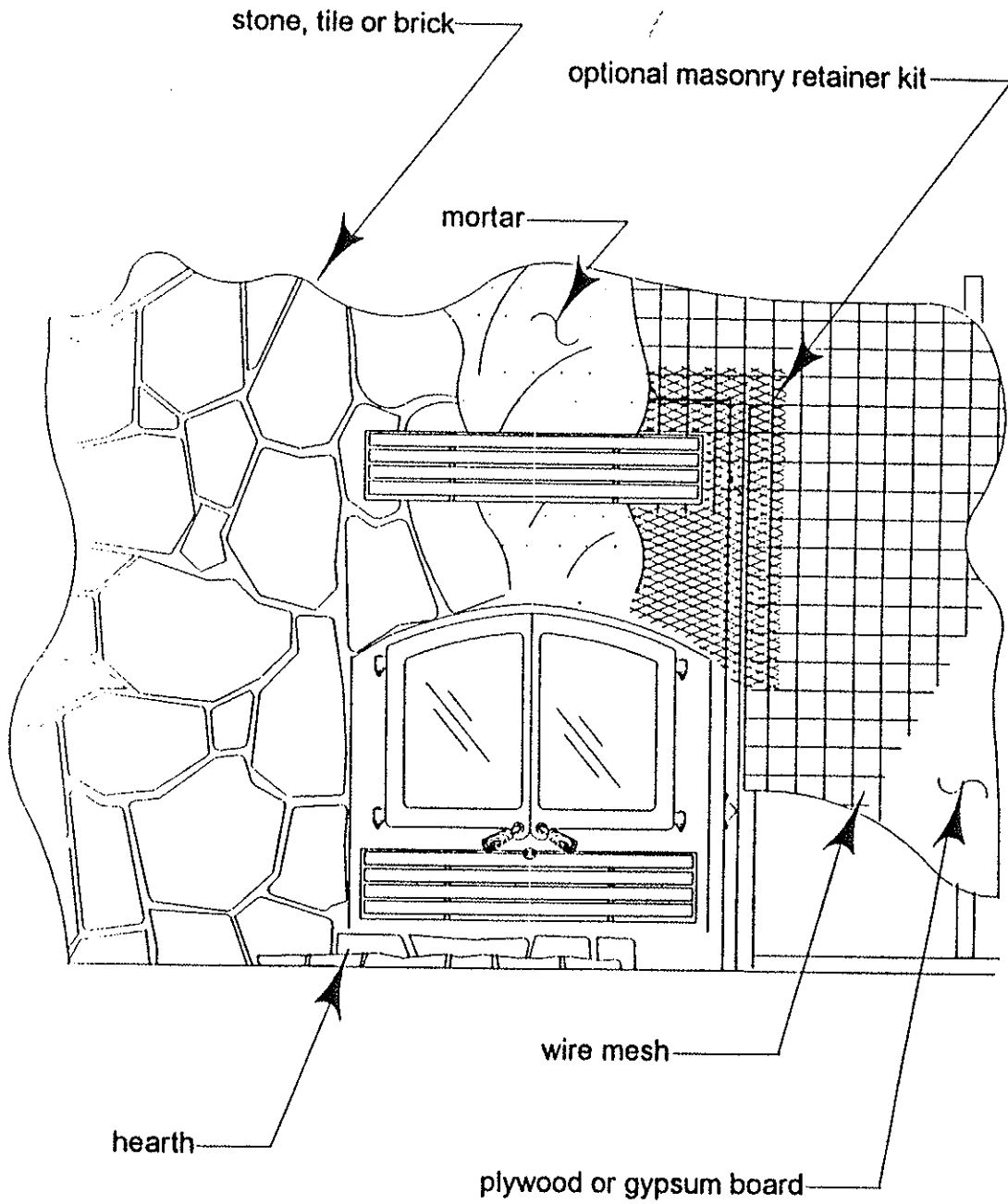
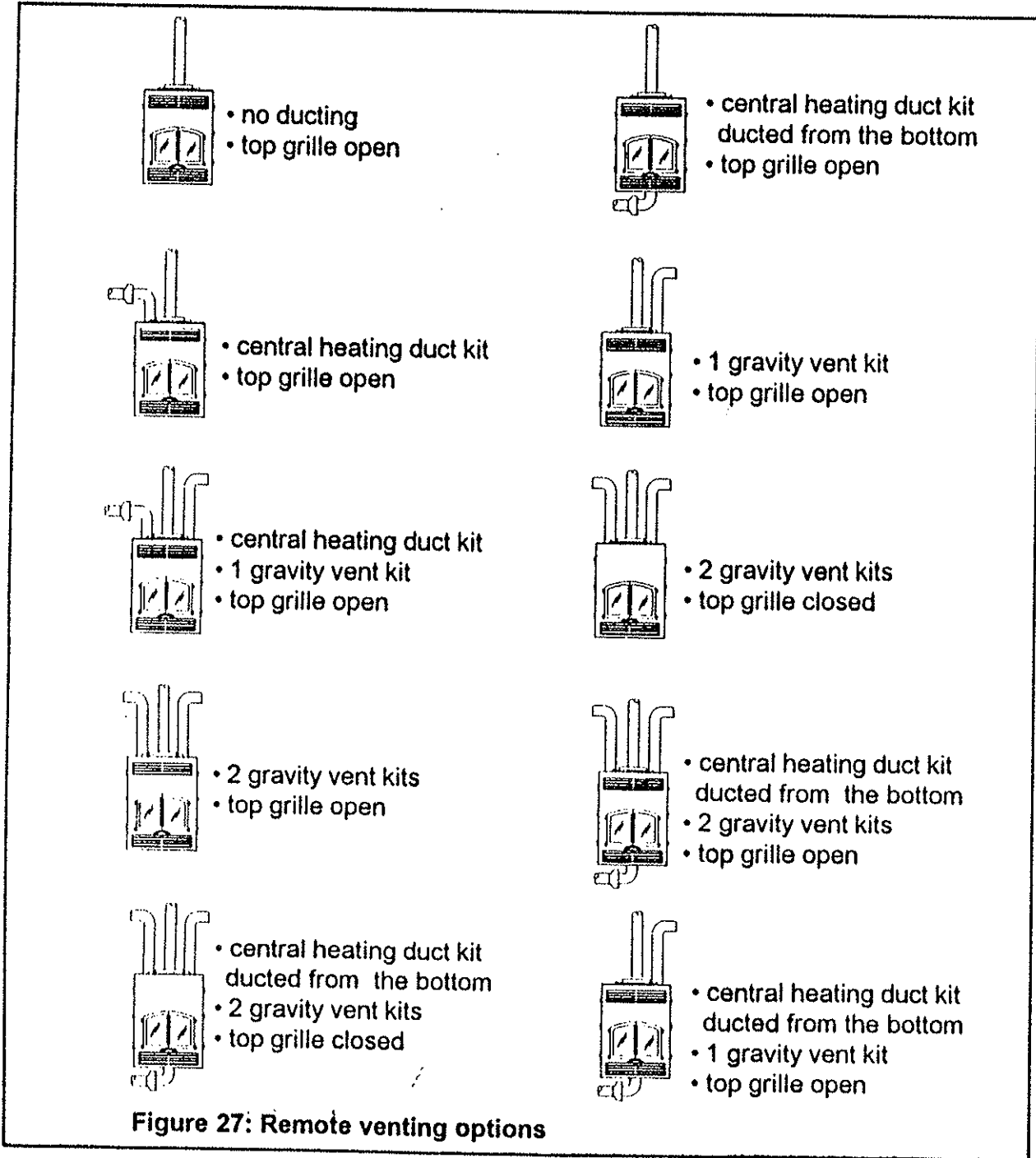


Fig.26: Facing with masonry

REMOTE VENTING

The gravity vent system can distribute air to an upper level or a room next door without an extra blower. If you use two gravity vent kits you may block off the upper louvre area with the desired facing. The central heat option allows heat to be sent up to 50 ft. away. Figure 27 illustrates various certified ways of incorporating the two systems.



THE GRAVITY VENT SYSTEM (part FD-V)

The FD-V Kit includes:

- a grille
- a grille adaptor
- a B-vent starter section
- a shut-off damper (do not use with upper louvres blocked)

IMPORTANT: No substitution of any of these parts is allowed. These genuine RSF ENERGY parts have the correct clearances. These clearances must be maintained for your safety.

The FD-V system incorporates standard 8" B-vent components for installation. Single wall pipe is **not allowed** due to the high temperature of the air in a gravity vent system. Any listed brand of 8" B-vent pipe may be used and is not a part of the FD-V. The maximum pipe length is 15 ft. from the top of the fireplace to the outlet.

NOTE: If two gravity vent lines are installed, then two FD-V kits must be ordered.

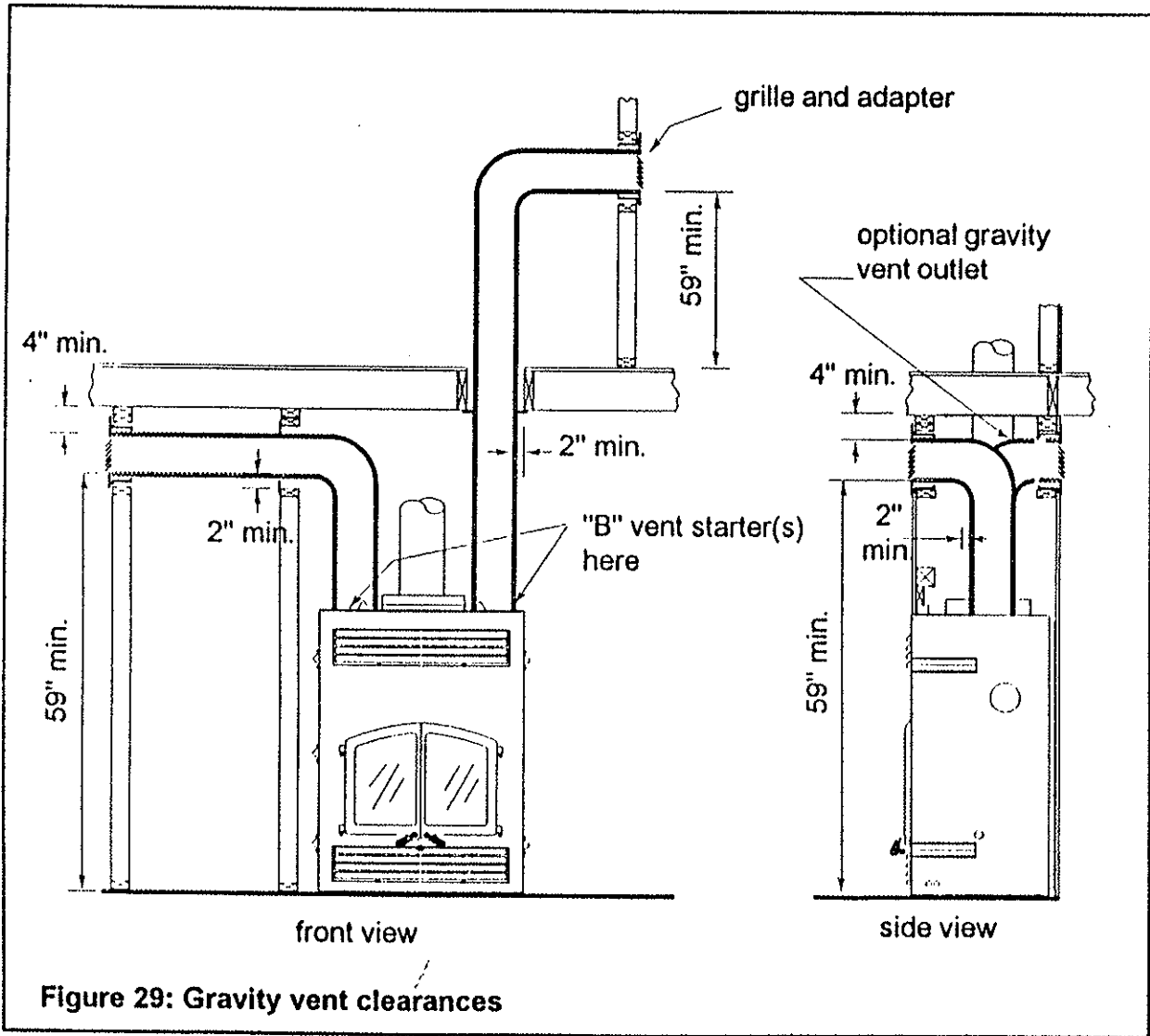
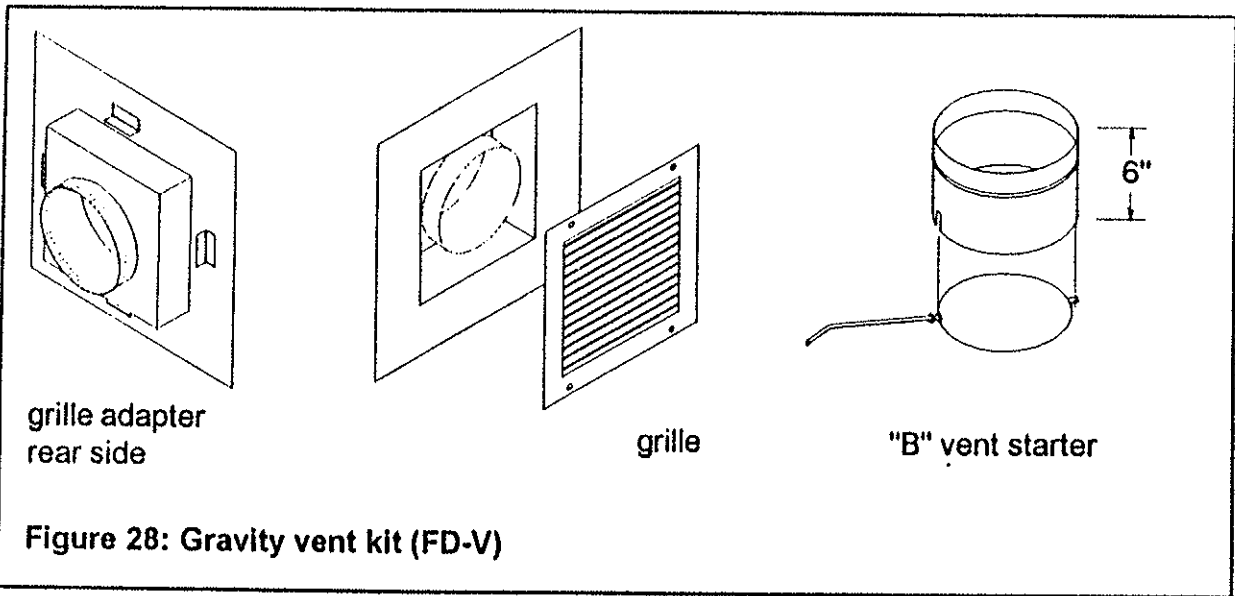
Figure 29 indicates the minimum clearances and framing dimensions. Passing through a combustible wall or ceiling requires a minimum clearance of 2" from combustibles.

WARNING: *Every measurement and clearance on the illustrations must be followed to assure safety of the installation.*

INSTALLATION

CAUTION: *Do not replace the grille from the FD-V with shutters. Do not allow heat to be trapped in the gravity vent system.*

1. Plan the gravity vent run first. Be aware that the maximum actual pipe length between the top of the fireplace and the outlet is 15 feet. There is no maximum number of elbows in a run, but the run must never go in a downward direction as this can trap heat in the gravity vent system.
2. The grille adapter is designed to be installed underneath the gypsum board in the wall. In the desired location, frame a 13" x 13" hole to accept the gravity vent grille adaptor. Fit the gravity vent grille adaptor into the framed hole and fasten it into place with nails or screws. If you are installing the outlet in an already finished area, you must remove the gypsum board and frame a 13" x 13" hole in the existing framing, in



order to meet the required clearances.

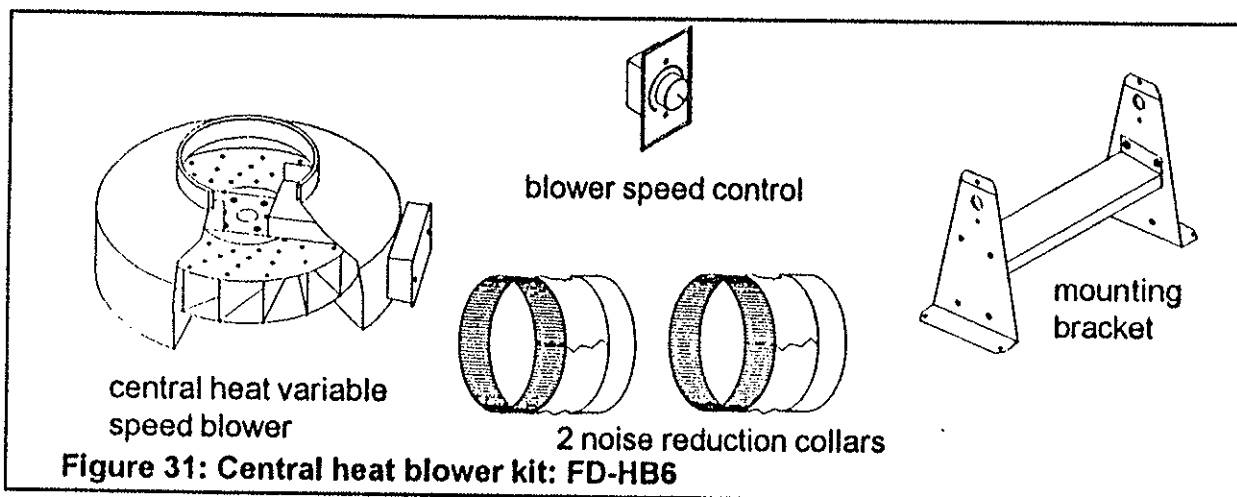
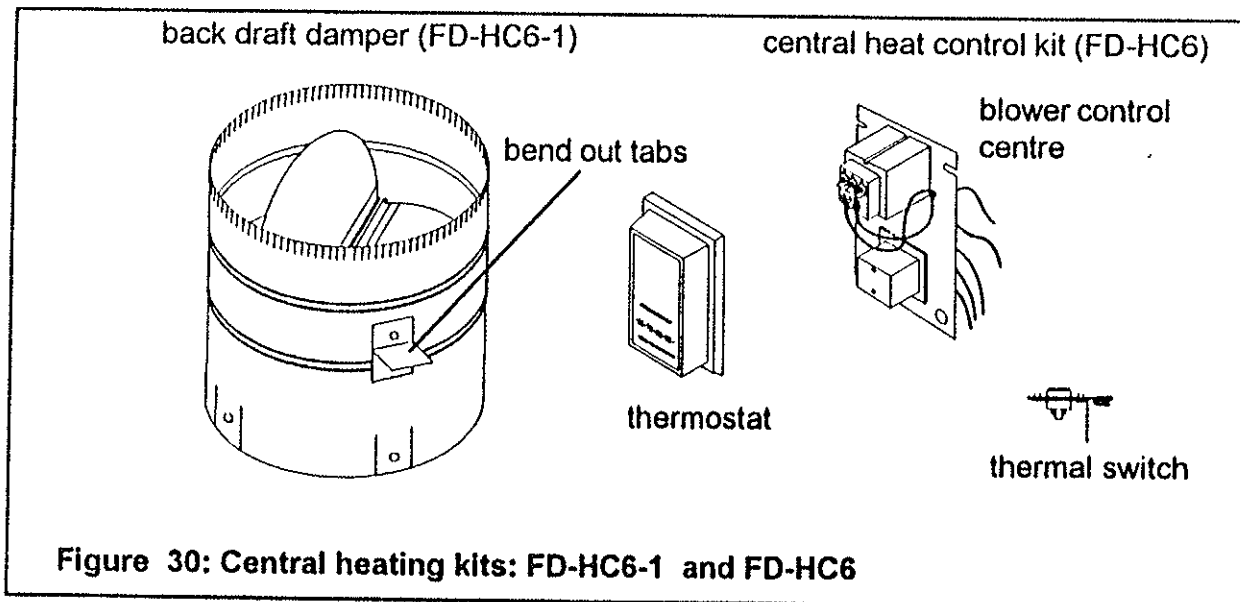
3. Remove the outer cover to the left, right, or both sides of the flue outlet, on the OPEL 2000.
4. Cut the insulation to the size of the opening and remove the cover plate underneath (it is taped in place).
5. Install the B-vent starter section. The slot in the B-vent starter section should be facing the front and the hole should be facing the back. Bend up the four tabs at the base of the starter section to hold it in place.
6. Install the "shut off" damper at the base of the starter section. The shut off damper enables the manual control of hot air flowing through the gravity vent pipe. With the top louvre removed, and the angular portion of the rod in hand, insert the damper rod into the hole in the starter section. Next, make sure that the washer and spring on the control arm are both on the outside of the starter section and that the rod has fit snugly into the slot. A definite tension should exist between the shut off damper rod, and the starter section. Replace the louvres. The damper rod should protrude above the top of the louvres.

Note: If you are blocking off the upper louvres of the OPEL 2000, you may not install the shutoff dampers.

7. Install the B-vent pipe between the B-vent starter and the grille adapter. Fasten each joint with 3 screws (if the B-vent pipe manufacturer allows this in its instruction manual). Insert the B-vent pipe in the grille adapter and fasten it with three screws. The B-vent pipe needs only to be inserted into the adapter enough to be able to screw it in place. This allows you about 3 1/2" of play.
8. Once the wall facing around the gravity vent grille adapter has been completed, install the grille with the supplied screws. The gravity vent is now ready for operation.

THE CENTRAL HEAT SYSTEM

RSF Energy has recently added a new feature to the central heat blower option to all fireplaces with serial number 7821 or later. If you wish, you are now able to duct from the bottom of the OPEL 2000 fireplace. This option allows greater flexibility in ducting and offers quieter central heat operation. Also, a blower control relay has been added to the central heat system. You may use two gravity vents with the bottom-

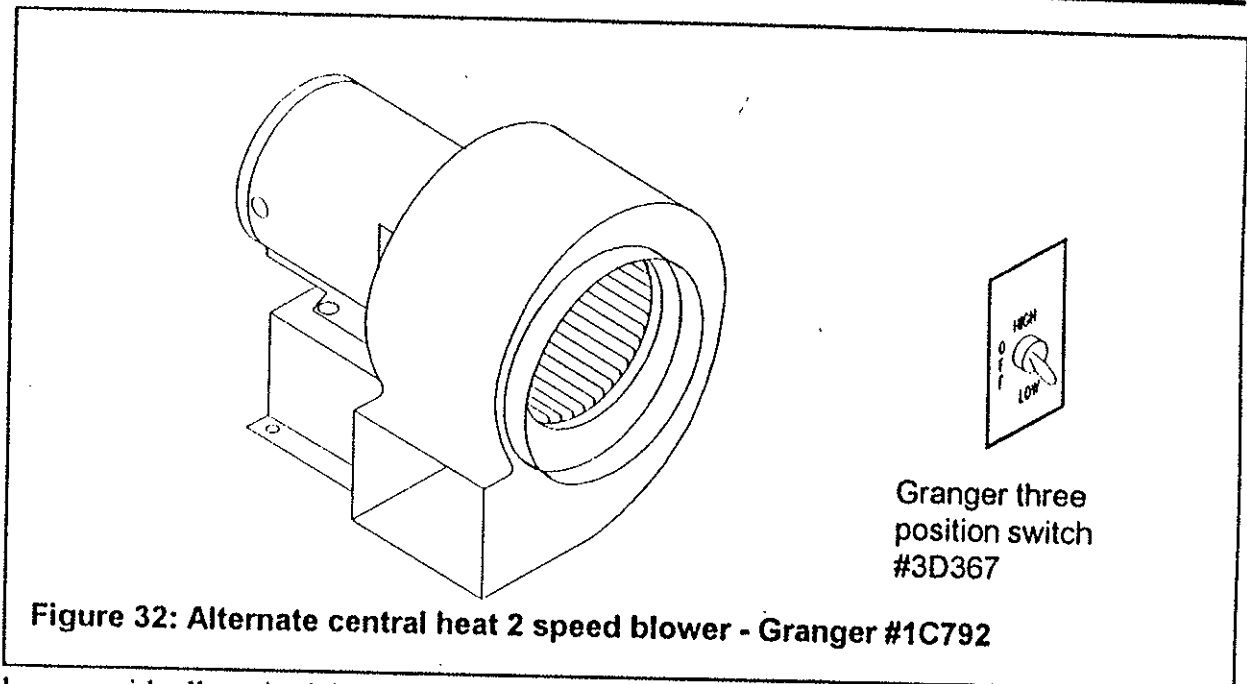


ducted blower. However, you may still only have one blower system connected to the fireplace

- 1) Part FD-HC6 - A blower control centre, a thermostat and a thermal switch.
- 2) Part FD-HC6-1 - A back draft damper
- 3) Part FD-HB6 - A maximum 650 c.f.m. blower with a variable speed motor, 2 noise reduction collars, a blower speed control, and a mounting bracket.

OR

The Granger two speed blower #1C792 (with Granger 3 position switch #3D367) may also be available from your dealer. This blower has a higher maximum output, and may



be more ideally suited for longer ducting runs (see Figure 32). See Figures 47 and 48 for the two speed blower wiring diagrams. The blower is supplied with a two speed switch. If you are using 8" round duct in your home, RSF ENERGY supplies a square-to-round adapter for use with the two speed blower (part # FD-SRD).

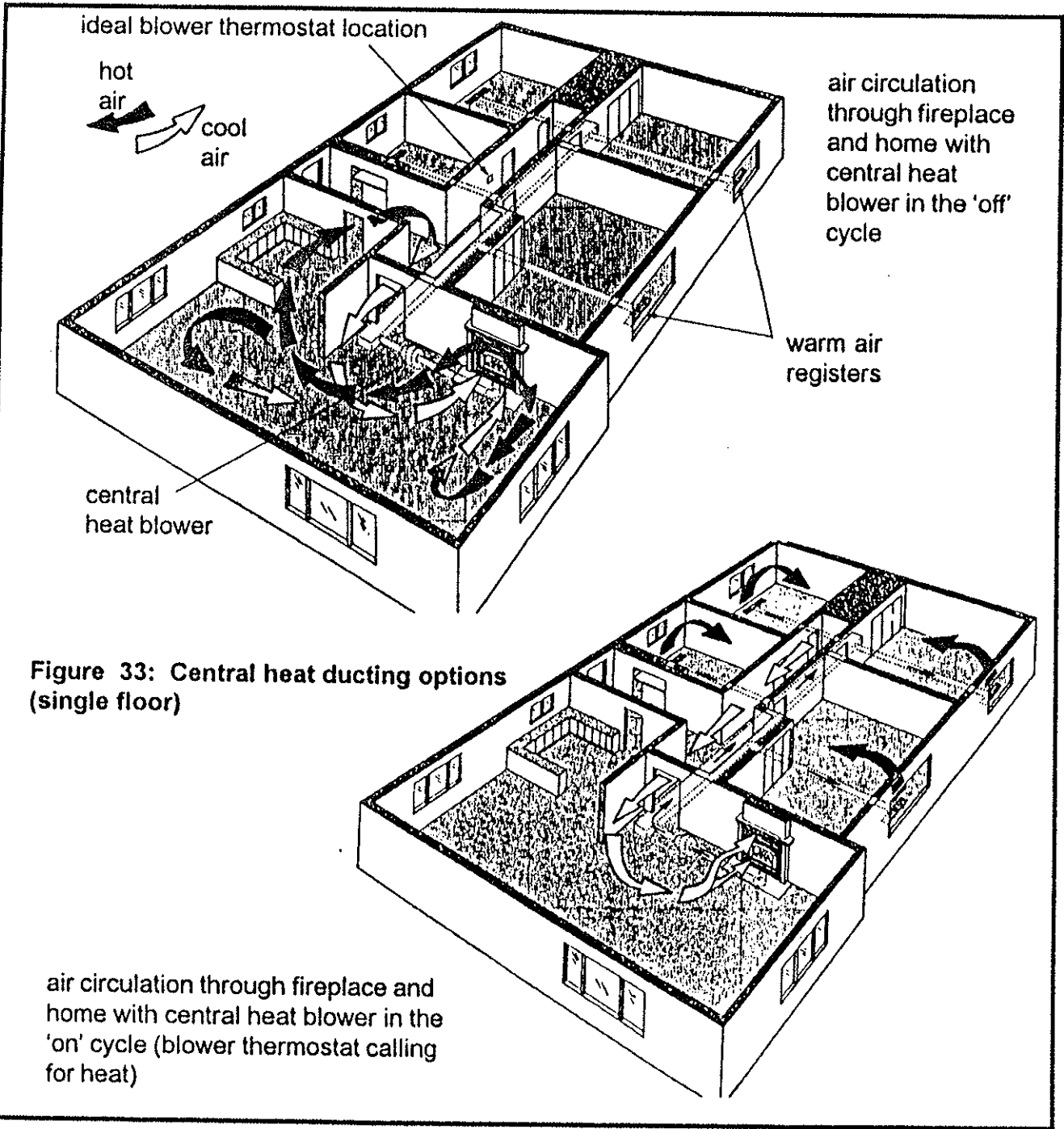
NOTE: Both part numbers must be used together for this system. Use of any substitutes will decertify the system.

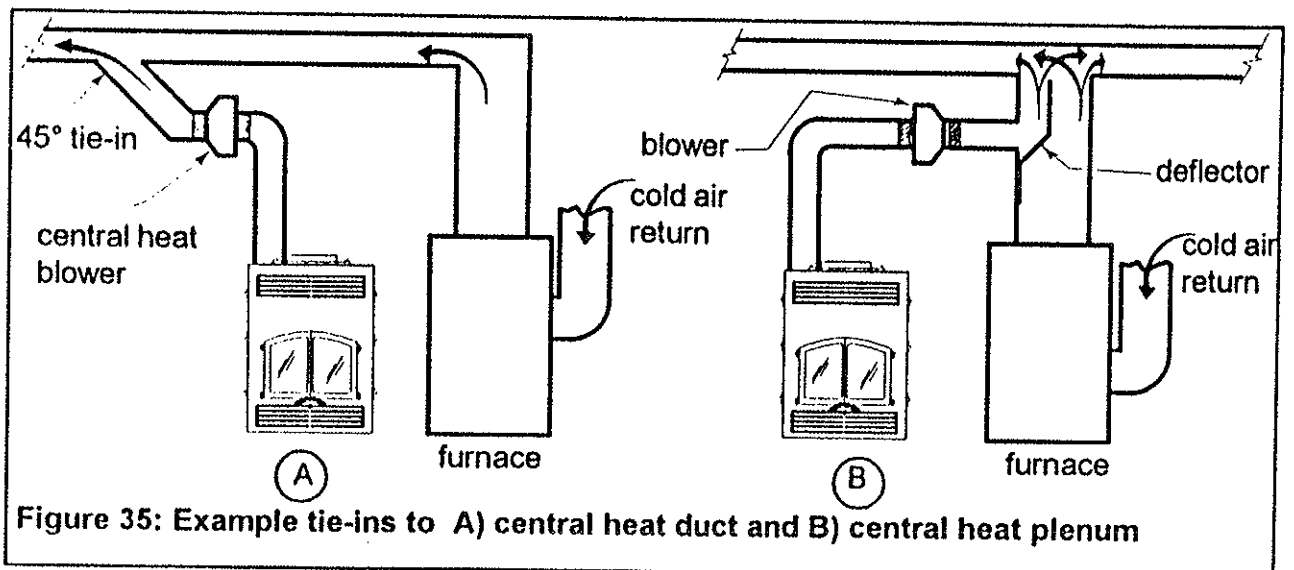
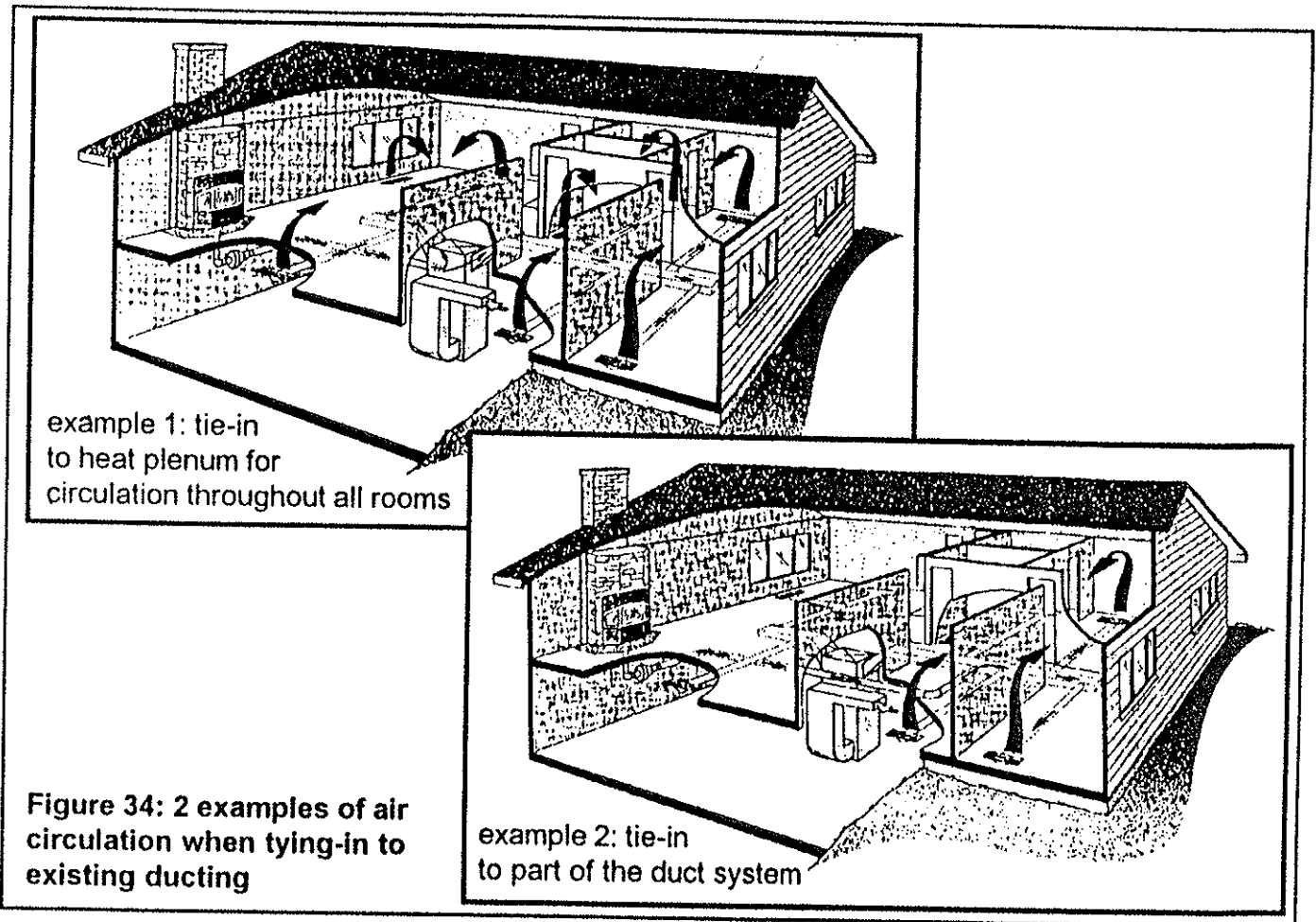
If you decide to duct out of the bottom of the fireplace, do not use the back draft damper. The 8" backdraft damper prevents hot air from travelling into the 'C' vent (single wall) ducting unless the Central Heat Blower (FD-HB6) is operating. When the thermostat calls for heat, the blower turns on and opens the one-way valve. At the same time, the room air is drawn through the upper and lower louvres, which mixes and reduces the overall temperature of the forced air that travels through the ducting.

WARNING: *If you are ducting out of the top of the fireplace and the backdraft damper is not installed, the central heat ducting may become too hot for the surrounding combustible materials. Any substitute for the F-DHC6-1 kit will void all warranty coverage by RSF ENERGY.*

INSTALLATION

If you have decided to draw air from the bottom of the OPEL 2000, you will need to have a hole in the floor at the appropriate location, before you move the fireplace into position. Skip to step 5. If you are ducting from the top, begin at step 1.





1. Remove the cover left side only.
2. Cut the insulation to the size of the opening and remove the cover plate underneath (it is taped in place).
3. Bend out the 4 tabs (see Figure 30).
4. Install the back draft damper crimped side up, making sure it is pushed all the way down. Fasten to the top using 4 self-tapping screws.
5. Before proceeding with the installation of the blower, make sure that the electrical service to the blower is in the "OFF" position. All wiring should be in accordance with local ordinances and the National Electric Code.

NOTE: The blower can basically be installed anywhere in the home. However, some thought should go into the planning, to ensure that the blower noise does not affect rooms you would like kept quiet. If the central heating system duct work is passing

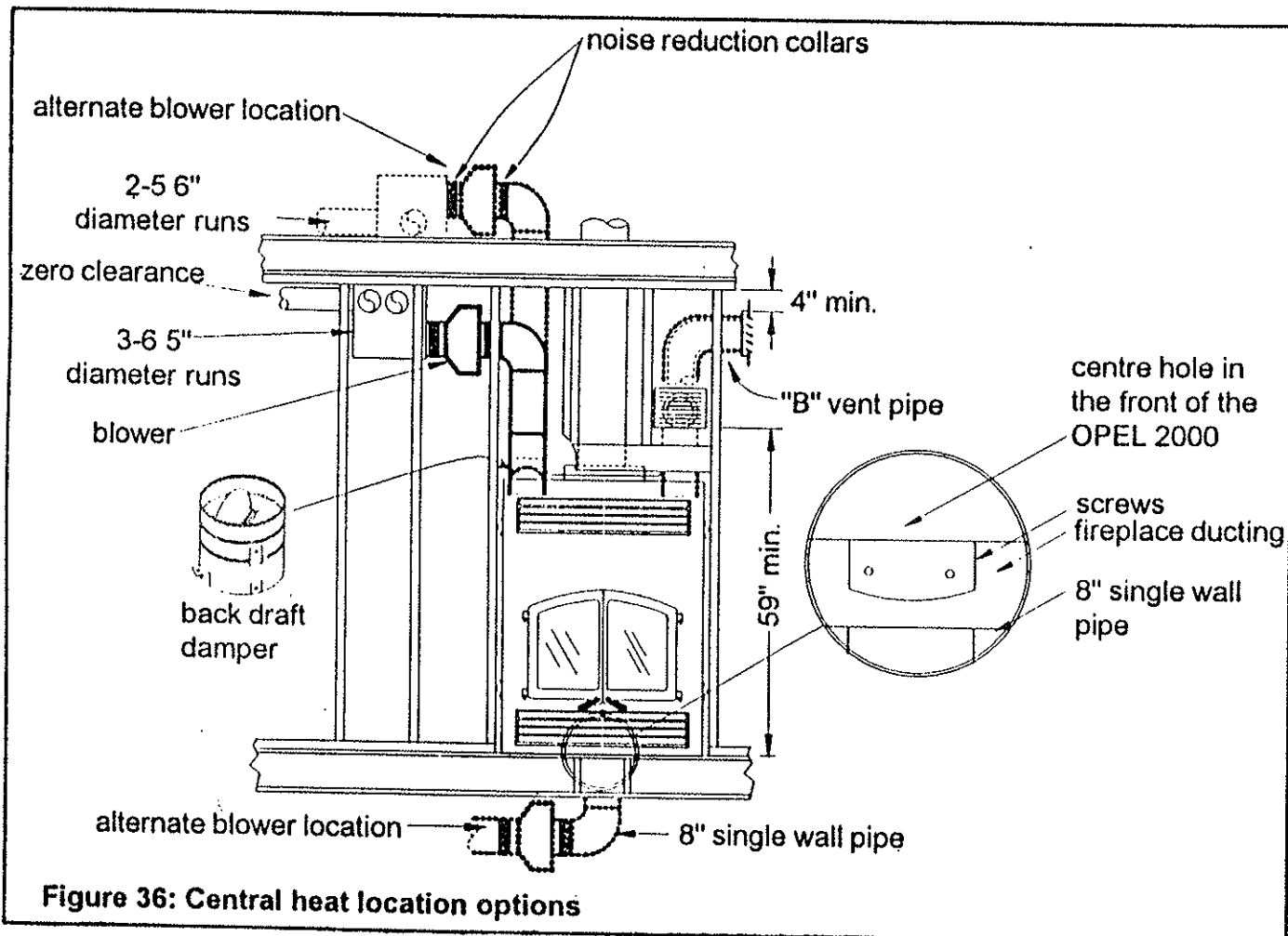


Figure 36: Central heat location options

through an area in your home that you do not wish to be heated, then the ducting should be insulated. Length of runs should be as short as possible to conserve space and minimize cost. Maximum duct length should not exceed 50 feet from the fireplace to the furthest outlet. There is a loss of about 15% performance at 50 feet. Also: The blower automatically shuts off if the air temperature reaches 180° F inside the ducting.

6. Locate the blower in a convenient location. The blower may be installed vertically or horizontally. The horizontal installation can utilize either the supplied mounting bracket or, if you want to install the blower farther away from the ceiling, you can use plumber's strapping. A vertical installation must include the mounting bracket.

Note: If you have an existing hot air system, you may safely 'tie in' to this hot air system. However, no hot air duct is to be connected to the return air of another central heating system.

7. Connect the INLET of the blower to the ducting coming from the fireplace, using 8" diameter metal ducting (rigid or flex). Any other size will not work properly. **Use only metal ducting between the fireplace and the blower.** You may use plastic ducting after the blower, provided the temperature rating of the ducting is at least 250° F. Do not use plastic ducting in a chase. If you are ducting out of the bottom of the fireplace, put the first piece of central heat duct into the flange under the firebox, then put a couple of drill and tap screws through the flange and the duct to hold the duct in place.

Note: The central heat ducting may be run at a 0" clearance to combustibles.

8. To install the blower (for the FD-HB6 only): attach the noise reduction collars to either side of the blower using 1/2" self-tapping screws.

9. Duct-work can then be run to the desired rooms. Up to six 5" or five 6" diameter runs can be installed from this system.

Note: Runs must be balanced as air travels along the path of least resistance. Balance the air flow by diameter and length of runs. Longer runs should have larger diameters. Houses vary in size and layout, so duct systems must be specifically designed for each home. The diagrams on this sheet are examples only. The cross sectional area of the distribution system must total at least 50 square inches. If you have more than 50 square inches, some of the system may be shut off, but there must always be 50 square inches of ducting open at all times. For example, if 5" pipe is used for distribution, the cross section of each is 20 square inches. The minimum allowable

ducting would be three runs of 5" pipe.

Figures 34 & 35 illustrate two examples of "tying-in" to existing duct work. Directing air in the right direction will reduce reverse flow when the existing furnace blower is off. Some reverse flow will not cause any problems.

CAUTION: *Tie-ins into existing duct work must be down stream from the existing furnace.*

Note: When the central heating blower is in operation, it removes air from the room containing the fireplace. If this room can be closed off from the rest of the house (e.g. with a door), a grille with at least a 100 square inch open area must be installed to allow the air to return to the fireplace. Otherwise periodic smoking from the fireplace will result.

10. Wire the blower to a 115 volt, 15 amp breaker through the thermostat provided. The variable speed switch provided should be installed in a convenient location near the fireplace so the blower can be shut off during refuelling. The blower control centre should be placed in an accessible location near the blower. It should be mounted in a 4x4 electrician's box. You have two options of how you can connect the central heat blower to the blower control assembly.

a) If you would like the blower to turn on when the thermostat calls for heat, first locate the thermostat in the principal room heated by the duct system. Do not install it in the room where the fireplace is installed. There are yellow black and red wires coming out of the relay as shown in the wiring diagram. Connect the wire from #4 of the terminal block to the black wire and put the marrette connector on the red wire for protection. See Figures 45 and 47 for schematic wiring diagrams.

b) If the fireplace is in a small room and/or you would like the central heat blower to remove air from this room when it becomes too hot, locate the thermostat in the room with the fireplace. Connect the wire from #4 of the terminal block to the red wire and put the marrette connector on the black wire for protection. See Figures 45 and 47 for schematic wiring diagrams.

WARNING: *Do not interchange the variable speed control between the central heat blower kit and the internal blower kit.*

Figure 36 shows some ways of ducting the hot air from the blower. You are not restricted in the size of pipe, as long as the total cross sectional area of all runs combined

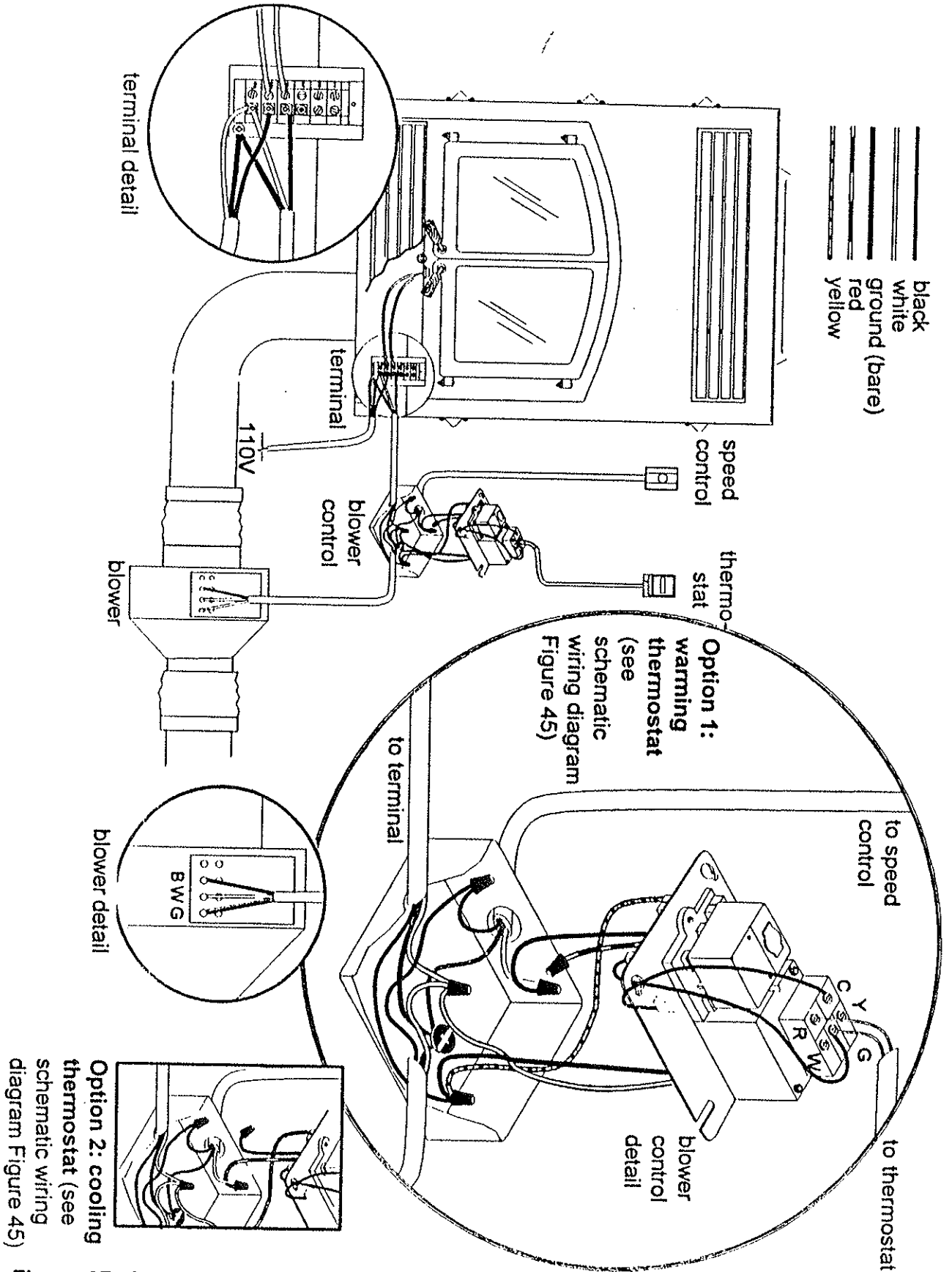


Figure 37: Control heat system wiring diagram

is not less than 50 square inches. The diagram shows alternate blower locations. Only one external blower can be installed.

1. If the blower fails to operate, check the following:
 - a. Consult the wiring diagram to assure proper connections.
 - b. To assure proper contact, check the motor lead wiring, incoming supply wiring, and capacitor connections.
 - c. If possible, use a meter to test for continuity between the fan leads. Please note that the capacitor will show no reading if it is tested with a meter.
2. If the blower still fails to operate, consult your local RSF ENERGY authorized dealer for repair / replacement instructions.

ZONE HEATING (FD-HCZ1 AND FD-HCZ2)

For more regional heat control, the OPEL 2000 is ideally suited for zone heating. Figure 38 shows an example of a three zone system. The thermostat simultaneously opens the desired valve and starts the blower when heat is required. The zone control system consists of:

- | | |
|-------------|------------------------------|
| 1 - FD-HCZ1 | - 1 control box |
| | - 1 blower transformer relay |
| | - 1 thermal switch |

NOTE: The FD-HCZ1 replaces the FD-HC6 if you are installing the zone system

- | | |
|------------------|----------------------------------|
| 1 to 3 - FD-HCZ1 | - 1 zone valve (normally closed) |
| | - 1 thermostat |

The system is wired similarly to the central heat system (Figures 45,47) with the addition of the blower control and the blower centre (see Figure 50). The whole system runs on 24V AC. Make sure that the thermostats are matched with the correct zone valve.

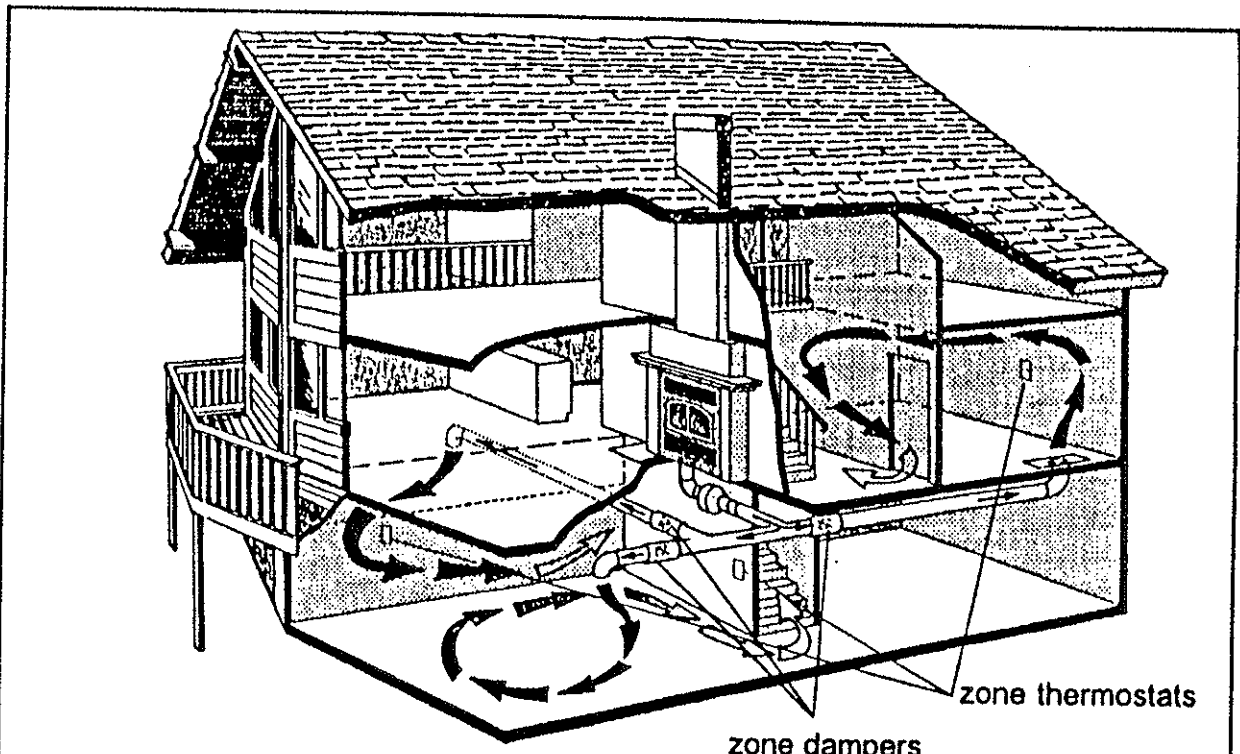


Figure 38: Zone heating - example 3 zone

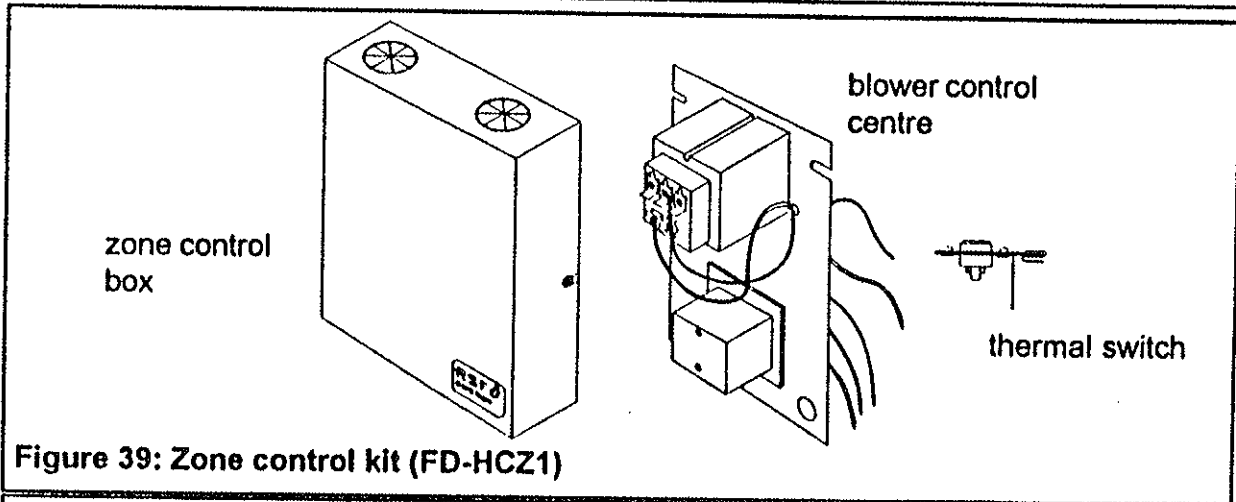


Figure 39: Zone control kit (FD-HCZ1)

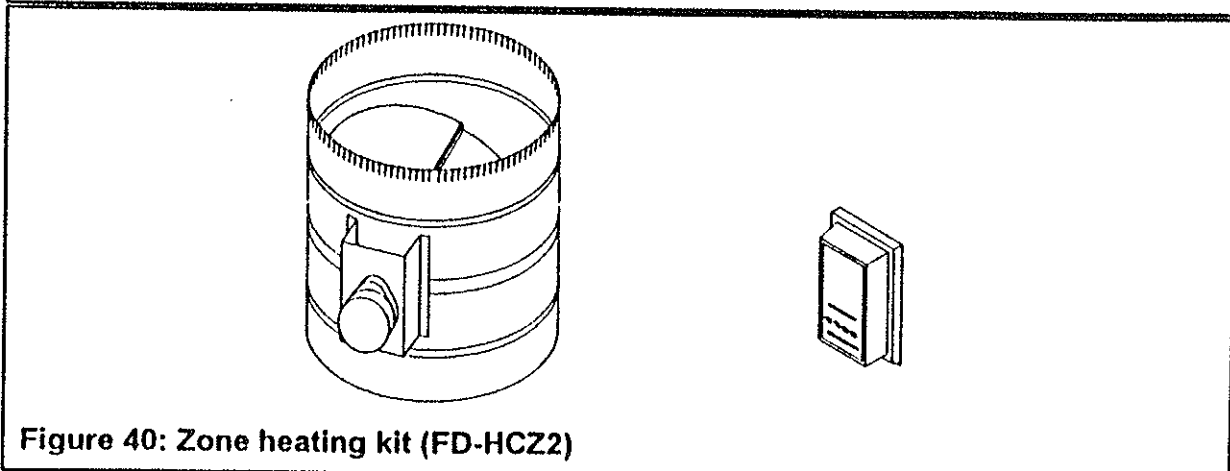


Figure 40: Zone heating kit (FD-HCZ2)

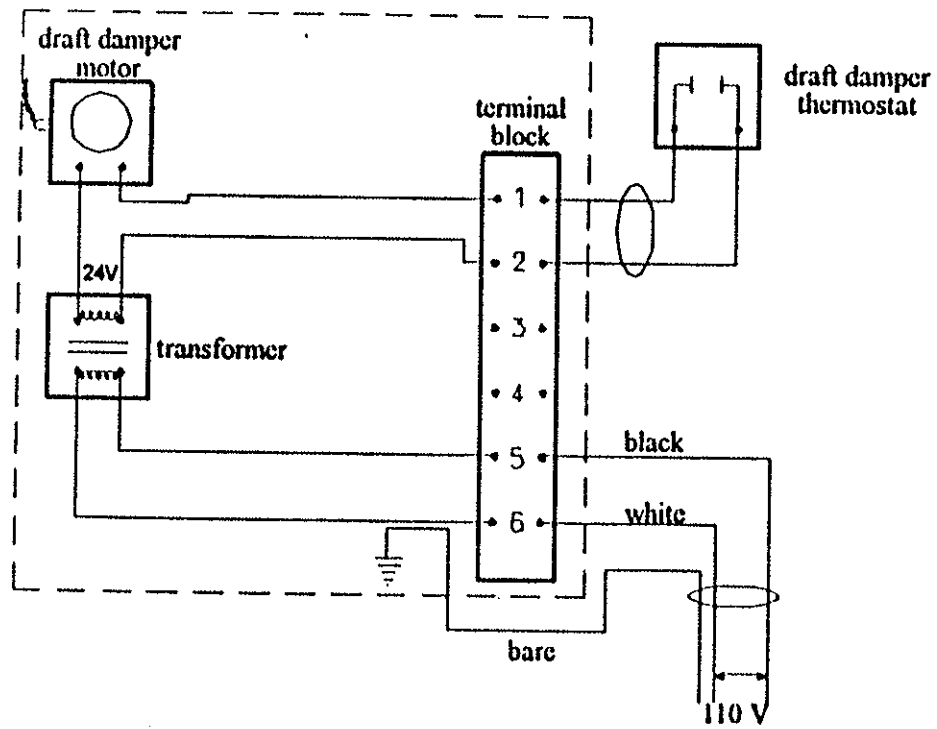


Figure 43: Wiring for the thermostat

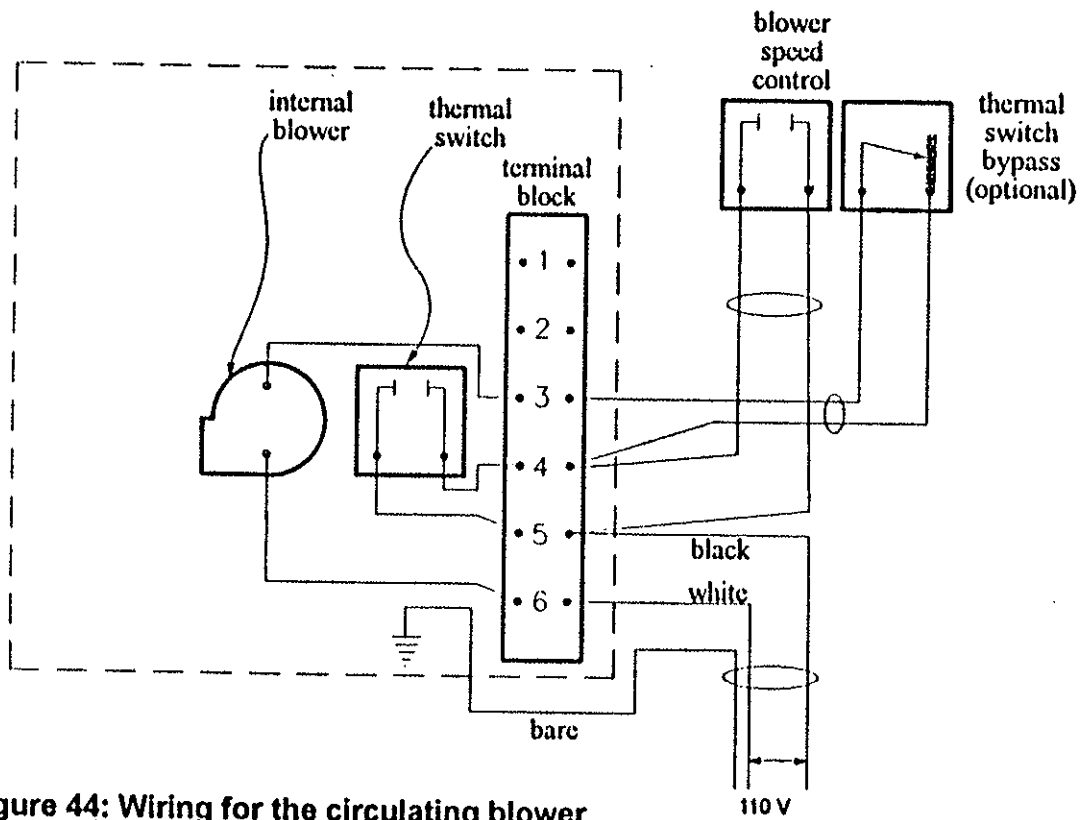
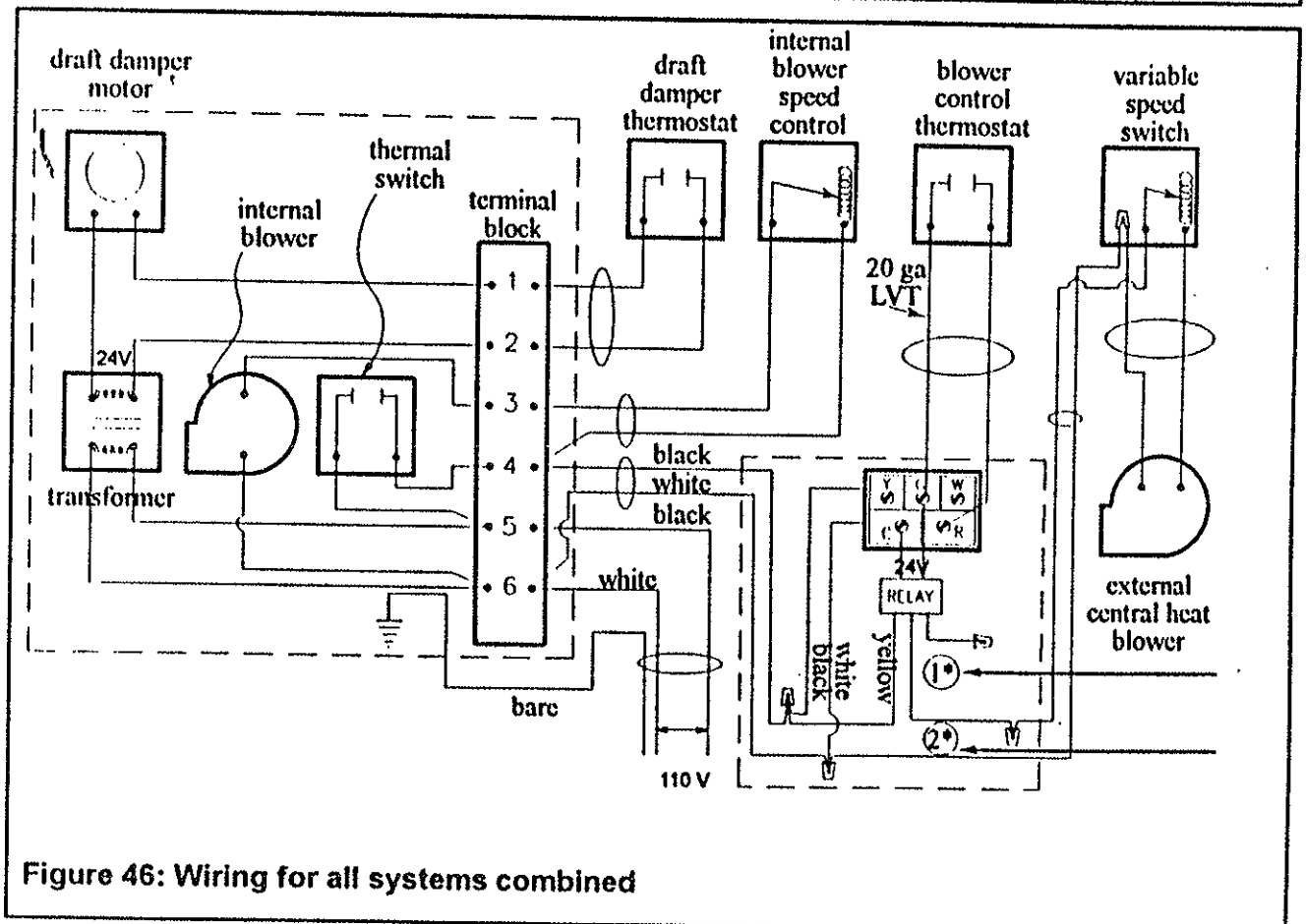
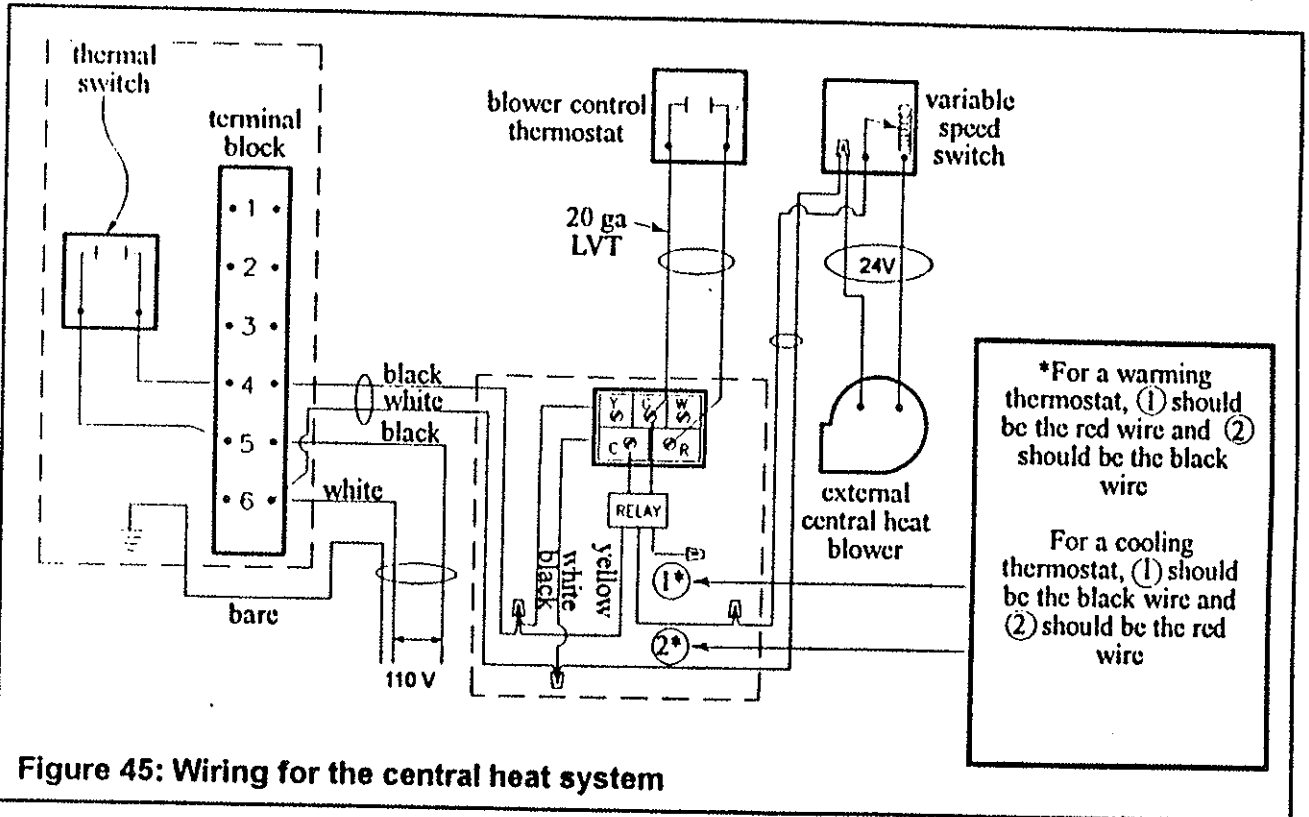


Figure 44: Wiring for the circulating blower



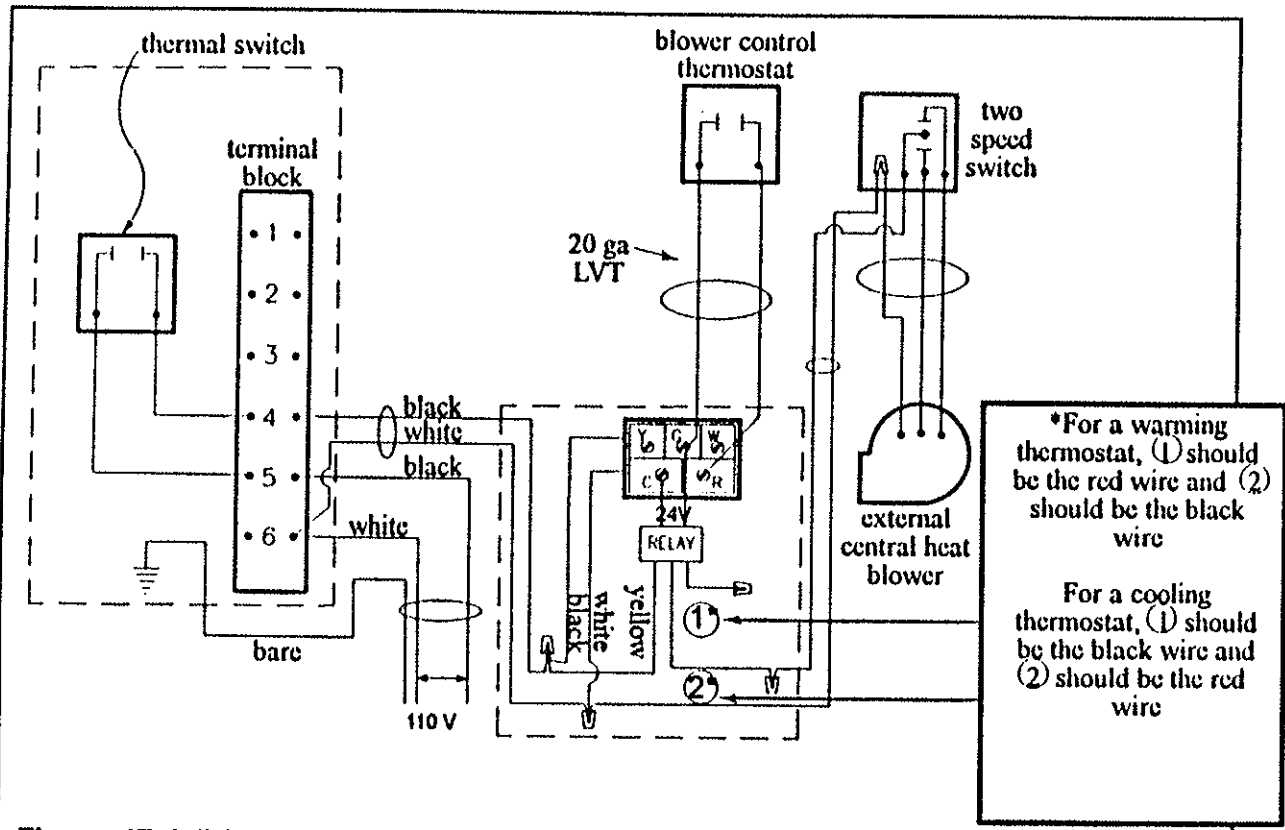


Figure 47: Wiring for the central heat system with the two speed blower

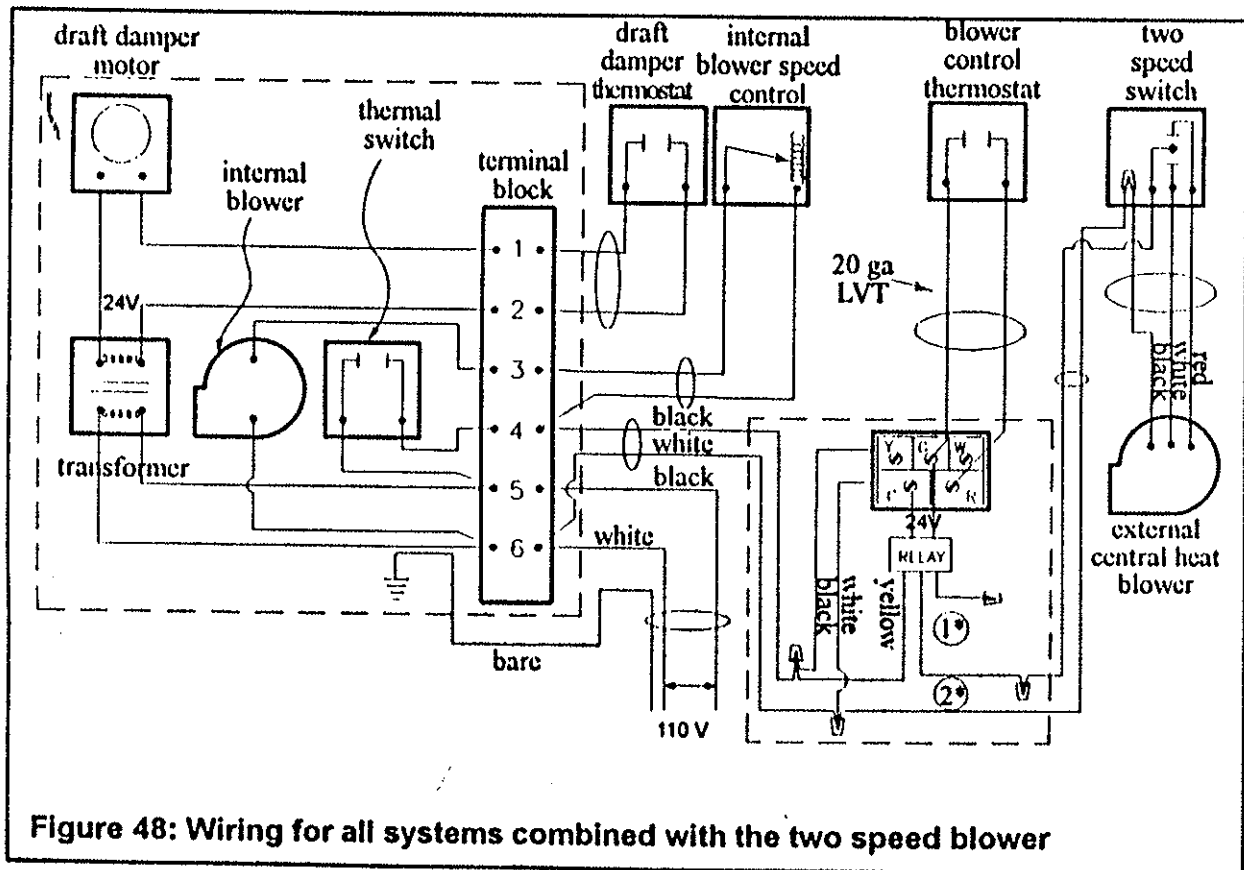


Figure 48: Wiring for all systems combined with the two speed blower

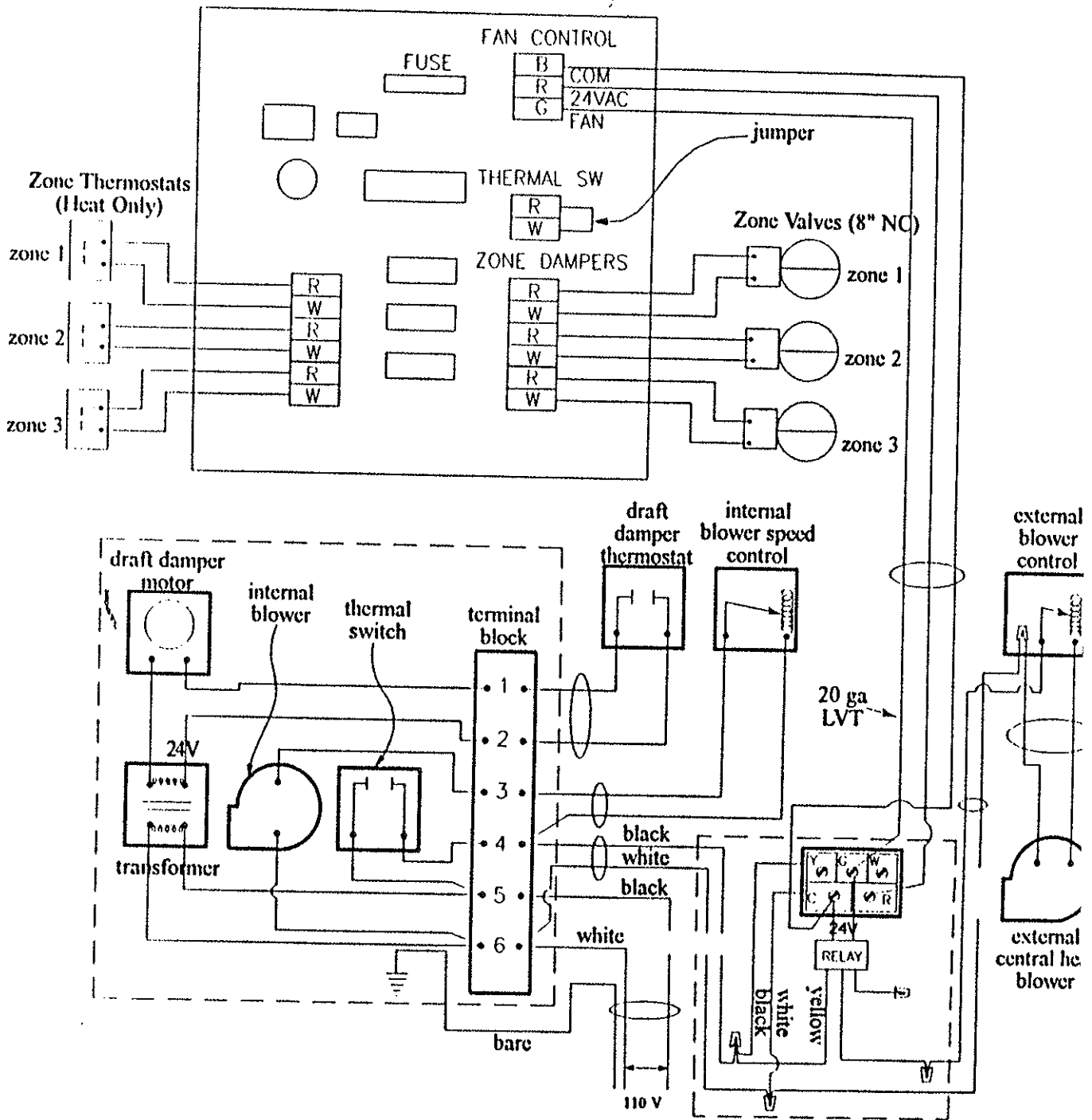
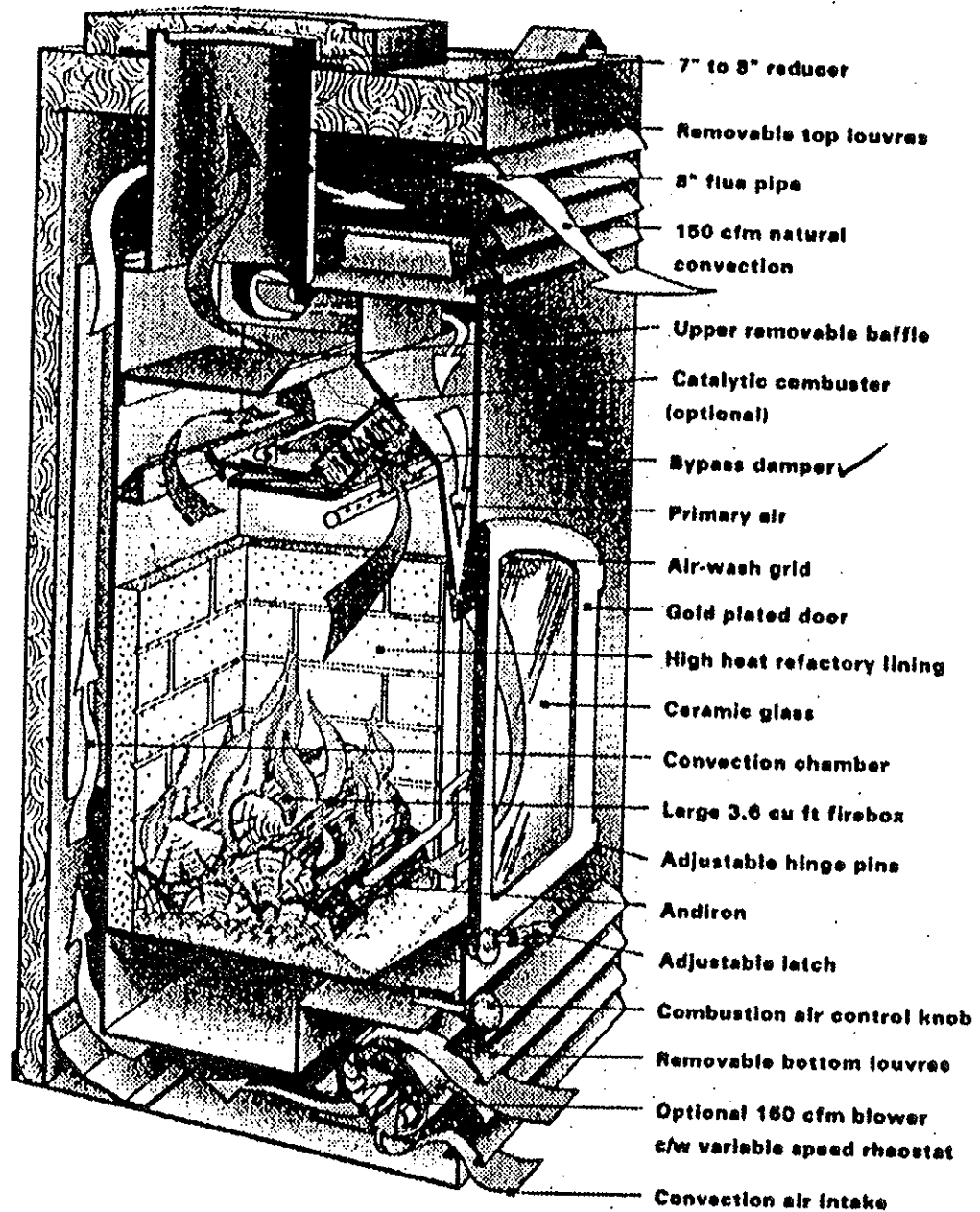


Figure 50: Wiring for all systems with a zone heat system

REPLACEMENT PARTS (See illustration on page 65)

PART #			
A148	Damper motor lever	R4101	Refractory side
A941	Baffle	R4102	Refractory back
A942-2	Air distributor screen	R4151	Refractory bottom left
A942R2	Air distributor screen	R4152	Refractory bottom right
A949W	Ash pan (pre-serial #663)	R6000	1" diameter control knob
A953W	Draft control lever	R6012	Door handle grip
A959	Louvre fins	R6110	Control chain
A959-1	Logo	R6121	Control chain end
A960	Louvre assembly	R6149	Louvre spacer
A969A	Spindle screen door assembly	R6223L	Cast iron door (left)
A970A	Door handle (left)	R6223LP	Cast iron door (left gold)
A971A	Door handle (right)	R6223R	Cast iron door (right)
A975	Door glass retainer	R6223RP	Cast iron door (right gold)
A984	Lever extension arm	R6257	Ceramic glass for left door
A985	Draft control assembly	R6259	Ceramic glass for right door
A986W	Thermal disc bracket	R6271	Plug button
A989	Draft control gasket	R6307	Tension spring for control
A990	Radiant shield for door centre	R6309	Retention spring for louvres
		R6410	Door hinge pin
AA1071	Flame deflector	R6414	Bypass extension rod
AA1073	Replacement baffle (Model 'C' only)	R6416	Louvre rod
AA1081	Bypass frame assembly (Model 'C' only)	R6426	Door handle spacer
AA1084	Bypass damper assembly (Model 'C' only)	R6704	Chimney adapter
AA1085	Bypass damper rod (Model 'C' only)	R6710	'B' vent grille adaptor
AA1088W	Terminal bracket assembly	R6711	'B' vent starter
AA1089	Terminal cover	R6716	5" fresh air hood
AA1092	Baffle	R6724	Air inlet
AA1137	Secondary air pipe (Model 'C' only)	R6905	Interam (1/16 x 2)
AA1175	Smoke deflector	R6906	Interam (1/6 x 3)
AA1182	C-channels (for gas log option)	R7005	Gasket (5/8)
AA1283	Door closer pawl	R7009	Gasket (1/4)
AA1283B	Door closer pawl	R8306	Instruction manual
		R9474	Box noise reduction collar
R1833	Cotter pin		
R2008	Damper motor		
R2010	Transformer		
R2031A	Thermostat		
R2076	Controller		
R2077	Control centre		
R2121	Electric Blower spd control (5 amp)		
R2123	Electric Blower spd control (3 amp)		
R2220	Electric Blower c/w thermal switch		
R2225	Electric fan mini pack		



FIREPLACE OPTIONS

FD-CCO Opel catalytic kit
 FD-FS Fire screen
 FD-GRK2 Gasket replacement kit
 FD-HB5-N Blower
 FD-HB6 Blower - central heat
 FD-HC4 Thermostat kit
 FD-HC6 Central heat control
 FD-HC6-1 Back draft damper
 FD-HD Power shut-off

FD-HZ1 Zone heat control
 FD-HZ2 Zone damper (elec)
 FD-K Rock retainer kit
 FD-K-1 Rock retainer kit w/o opening
 FD-L Gold louvre kit
 FD-LE Enamel louvre kit
 FD-LN Nickel louvre kit
 FD-M Brick chimney adaptor
 FD-O Outside shut-off valve



Simply The Best!

Limited Warranty OPEL 2000/ONYX - 30 Year Limited Warranty

RSF ENERGY Ltd. warrants the RSF ENERGY OPEL 2000/ONYX against defects in workmanship and material for a period of 30 years, subject to the following conditions:

- 1) During the first 5 years, RSF ENERGY Ltd. will replace, repair, or cause to be repaired, at our option, any part or parts which, upon examination by an authorized RSF Energy representative is found to be defective, except the parts listed in the EXCLUSIONS portion of this warranty.
- 2) From 5 to 30 years, RSF ENERGY will provide replacement parts at 50% off the then current price, with exception of the parts listed in the EXCLUSIONS portion of this warranty.

EXCLUSIONS

This Limited Warranty covers only repairs or replacements resulting from defects caused by normal use, operation and maintenance.

Excluded from coverage by the Limited Warranty are:

- a) Repairs or replacements necessitated by the use of the unit other than for normal home use as directed in the instruction manual.
- b) Repairs or replacements of motors, transformers, thermostats, blowers, etc., beyond 1 year from the date of purchase.
- c) Repairs or replacements necessitated by vandalism, neglect, abuse or failure to adequately service the unit, as stated in the instruction manual.
- d) Repairs or replacements necessitated by work or service not authorized by RSF ENERGY Ltd.
- e) Replacement of any glass, gasket or refractory brick parts.

LIMITATIONS

- 1) All items found to be defective will be replaced or repaired upon return of the defective part to an authorized RSF ENERGY Ltd. dealer.
- 2) Any OPEL 2000/ONYX or part thereof that is replaced or serviced during either the five year or one year warranty period, will be warranted under the terms of that particular limited warranty for a period not exceeding the remaining term of the original limited warranty, or six months, whichever is longer.
- 3) This warranty is transferrable. However, proof of purchase is required before service or replacement of any defective part is performed.
- 4) This Limited Warranty does not apply to damage to the appliance while in transit. Any claim of such must be directed to the common carrier. Any operation or attempt to operate the fireplace may negate the possibility of processing the claim with the carrier.
- 5) If the installation does not conform to local building or fire codes, or in their absence, the installation requirements in the instruction manual, any claims are not valid and will not be processed.
- 6) The remedies set forth herein are exclusive, and the liability of the seller shall not exceed the price of the fireplace or part thereof upon which the liability is based.

This warranty is expressly in lieu of all other warranties expressed or implied, including the warranties of merchantability and fitness for use and all other obligations or liabilities on the part of RSF ENERGY Ltd.

**Note: Record your serial number here
for reference when ordering parts.**

Model – Opel 2000

Serial #:

Date of Installation:

Name of Installer:

Address of Installer:

Signature of Installer:

you years of satisfaction

Quality and Service are the cornerstones of the RSF ENERGY philosophy. Over the years and now into our second decade in the industry, RSF ENERGY has been committed to utilizing the most current technology to create functional, clean and efficient home heating systems. Around the world, consumer and environmental demands are constantly changing, to which RSF ENERGY responds with state-of-the-art innovations. RSF ENERGY engineers have initiated the most recent advancements of woodburn science, with features tested and refined by its founder, Hans Deurichen, who has specialized in wood-waste burning and pollution control. Our concern for the form and function of woodburning technology has been built into every RSF ENERGY unit. Our objective is to provide comfortable home heating while enjoying the aesthetic ambience of a cozy wood fire. RSF ENERGY has established the lead that others follow. Our professional staff, devoted to serving customers' needs, ensures your complete satisfaction with RSF ENERGY.

A Factory Built

Fireplace by:



Simply The Best!


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