

INSTALLER: LEAVE THIS MANUAL WITH THE APPLIANCE.

CONSUMER: RETAIN THIS MANUAL FOR FUTURE REFERENCE.



Models: #Z-42 #Z-42-CD

ZERO CLEARANCE FACTORY BUILT FIREPLACE



Z-42-CD shown with accent grills

WARNING: READ INSTRUCTIONS CAREFULLY BEFORE INSTALLATION. FAILURE TO INSTALL THIS FIREPLACE CORRECTLY CAN CAUSE SERIOUS STRUCTURAL AND FIRE HAZARDS AND MAY VOID YOUR WARRANTY.

INTRODUCTION

Read this manual before installing or operating this appliance.
Please retain this owner's manual for future reference.

CONGRATULATIONS!

We welcome you as a new owner of a Kozy Heat gas fireplace. Kozy Heat products are designed with superior components and materials and assembled by trained craftsmen who take pride in their work. The burner and valve assembly are 100% test-fired and the complete fireplace is thoroughly inspected before packaging to ensure that you receive a quality product. Our commitment to quality and customer satisfaction have remained the same for over 30 years. We offer a complete line of gas and wood fireplaces, unique cabinets and stylish accessories to compliment any décor. Adding a fireplace is one of the best ways to increase the value of your home and we are proud to offer a network of dealers throughout the country to help make your experience everything you imagine. We pride ourselves in being dedicated to not only function and reliability, but customer safety as well. We offer our continual support and guidance to help you achieve the maximum benefit and enjoyment from your Kozy Heat gas fireplace.

Jim Hussong
President



Dudley Hussong
Board Chairman



Homeowner Reference Information

We recommend that you record the following information about your fireplace.

Model Name: _____ Date purchased/installed: _____

Serial Number: _____ Location on fireplace: _____

Dealership purchased from: _____ Dealer Phone: _____

Notes: _____

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SAFETY INFORMATION

This fireplace has been tested and listed by Intertek Testing Services (Warnock Hersey) to UL 127-2008, CAN/ULC S610-M98 Safety Standards for U.S. and Canadian installations. This fireplace installation must conform with local building codes, or in the absence of local codes, with the NFPA 211 Standard for Chimneys, Fireplaces, and Vents.



IMPORTANT: BEFORE INSTALLING THIS FIREPLACE, THE AUTHORITY HAVING JURISDICTION SHOULD BE CONSULTED TO DETERMINE IF A PERMIT IS REQUIRED.

INSTALLATION AND REPAIR SHOULD BE PERFORMED ONLY BY A QUALIFIED INSTALLER.



WARNING: THIS FIREPLACE HAS NOT BEEN TESTED WITH ANY GAS COMPONENT. TO REDUCE THE RISK OF FIRE OR INJURY, DO NOT INSTALL ANY GAS COMPONENT, INCLUDING AN UNVENTED GAS LOG SET INTO THIS FIREPLACE.

WARNING: DO NOT CONNECT THIS FIREPLACE TO A CHIMNEY FLUE SERVING ANOTHER APPLIANCE.



MOBILE HOME INSTALLATIONS:

WARNING: DO NOT INSTALL IN A SLEEPING ROOM.

WARNING: THE STRUCTURAL INTEGRITY OF THE MOBILE HOME FLOOR, WALL, AND CEILING / ROOF MUST BE MAINTAINED.

- If this appliance is installed directly on carpeting, tile or other combustible material other than wood flooring, the appliance shall be installed on a metal or wood panel extending the full width and depth of the appliance.
- Combustible flooring 16" (406 mm) in front of and 8" (203mm) to each side of the fuel opening must be insulated with non-combustible floor protection with a minimum insulation R-value of 0.8.
- Do not store clothing, furniture or combustibles within 36" (914mm) of the fireplace.
- The chimney should be inspected monthly during the heating season to determine if creosote buildup has occurred. If creosote has accumulated, it should be removed to reduce the risk of a chimney fire. We recommend a professional chimney cleaner inspect and clean the chimney at least once annually.
- Children and adults should be alerted to the hazards of high surface temperatures and should stay away to avoid burns or clothing ignition.
- Young children should be carefully supervised when they are in the same room as the appliance. Toddlers, young children and others susceptible to accidental contact burns. A physical barrier is recommended if there are at risk individuals in the house. To restrict access to a fireplace or stove, install an adjustable safety gate to keep toddlers, young children and other at risk individuals out of the room and away from hot surfaces.
- The glass front or any part removed for servicing the appliance must be replaced prior to operating the appliance. Work should be done by a qualified service technician.
- Clean glass only when cool and only with non-abrasive cleansers.
- Do not operate this appliance with the glass/frame assembly removed, cracked or broken. The glass assembly, shall only be replaced as supplied by Hussong Mfg. Co., Inc. Replacement of the glass assembly must only be performed by a licensed or qualified service person. **DO NOT SUBSTITUTE MATERIALS.**
- Do not strike or slam glass assembly.
- Do not burn waste paper.
- Except when loading, the fireplace must be operated with the door / doors closed.
- Do not obstruct room air inlet and outlet grills. This may cause the fireplace to overheat.
- Burn only dry seasoned wood. Extremely hard woods, such as oak or ash can require up to two years of drying time to be sufficiently dry.
- It is recommended that smoke detectors be installed in your home as required by local building codes or the authority having jurisdiction.
- Some fuels, such as charcoal, may generate carbon monoxide, a dangerous, odorless gas. Exposure to carbon monoxide may cause serious illness or death.
- For further information on using your fireplace safely, obtain a copy of the National Fire Protection Association publication "Using coal & Wood Stoves Safely." NFPA No. HS-10

FEATURES

STANDARD FEATURES

- EPA/WA Certified/Non-Catalytic (EPA emissions rate 3.34g / hr.)
- High quality lifetime glass
- Arched glass valance (Z42)
- Large burning area
- Air-seal 10 ga. steel door (Z42)
- Twin air-seal cast iron doors (Z42-CD)
- Zero Clearance to stand-offs
- Air-wash system (keeps viewing area cleaner)
- (2) heat duct knock-outs for optional ducting (#970 kit required)



SAFETY FEATURES

- Tested by Intertek Testing Services (formerly Warnock Hersey)
- Sealed combustion chamber
- EPA certified
- Non-catalytic
- Uses 100% outside air for combustion
- U.S. and Canadian approved



OPTIONAL FEATURES

- Decorative grills in various styles and finishes
- Decorative screen doors in various styles and finishes (Z42 only)
- Automatic fan kit with variable speed control ((2) 100 CFM)
- 44" (1118 mm) lintel iron
- 6" flexible heat duct kit
- 4" non-closure air vent
- Finish material trim kits

WEIGHT

- Fireplace Weight (as packaged for shipment)
Z42: 515lbs. (233.6kg)
Z42-CD: 534lbs. (242.2kg)



SPECIFICATIONS

FIREPLACE DIMENSIONS

	LETTER KEY	A	B	C	D	E	F	G	H
	DESCRIPTION	Height	Width	Depth	Glass Frame Height	Glass Frame Width	Stand-off Height	Front to Flue Center	Back to Flue Center
FIREPLACE DIMENSIONS	INCHES	38	42	25-15/16	18-3/16	31-11/16	3-5/8	18-1/4	7-11/16
	MILLIMETERS	965	1067	658	463	805	92	463	196

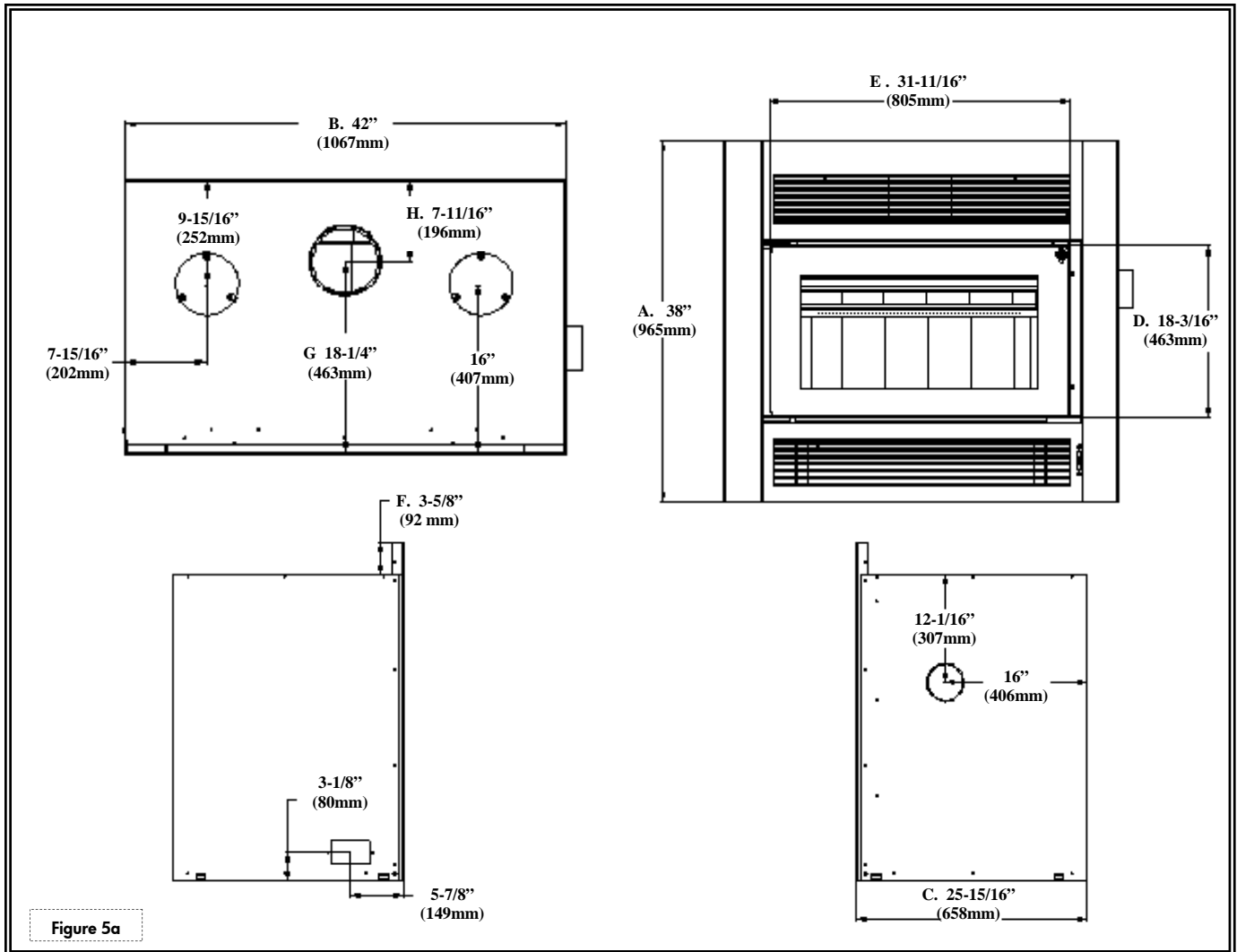


Figure 5a

CLEARANCE TO COMBUSTIBLES

WITHIN ENCLOSURE AREA

- ◆ Fireplace to back wall.....0" (0mm)
- ◆ Fireplace to sidewalls.....0" (0mm)
- ◆ Duct boots to framing.....0" (0mm)
- ◆ Top stand-off to header.....0" (0mm)
- ◆ Fireplace bottom to inside top of enclosure.....72" (1.83m)

EXPOSED AREA

- ◆ Wallboard to faceplate top edge/ sides.....0" (0mm)
- ◆ Fuel door opening to sidewall.....8" (203mm)
- ◆ Fireplace face top to 8" (203mm) mantel.....12" (305mm)
- ◆ Front of fireplace.....36" (914mm)
- ◆ Air duct vent to ceiling.....2" (51mm)



NOTE: Even though minimum clearances from back and side walls is 0", 1/4" (6mm) space is recommended for heat expansion.

INSTALLATION OVERVIEW



NOTE: The qualified installer should follow the procedure best suited for the installation.

1. If masonry (optional) will be used, prepare foundation for the masonry load. A lintel is required to support the added weight above the fireplace.
2. Frame an opening for the fireplace, allowing for vent installation and type of installation (corner, flat wall application).
3. Install optional hearth.
4. Install optional heat duct venting.
5. Install any electrical wiring.
6. Install fireplace into framing.
7. Attach combustion air pipe.
8. Install chimney.
9. Install desired facing material.
10. Install mantel.
11. Install optional fan.
12. Install firebrick.
13. Install door components and grills.
14. Install any optional decorative accessories.

PLACEMENT CLEARANCE REQUIREMENTS

- Location of doors and windows on all floors of the home in relation to the fireplace and chimney must be considered and be in compliance with applicable codes, if any.
- This fireplace must be installed on a level surface capable of supporting the fireplace and venting.
- Fireplace must be placed directly on wood or non-combustible surface (not linoleum or carpet) extending the entire depth and width of fireplace.
- Metal sealing strips must be used under fireplace and hearth extension.
- The height of the enclosure must be a minimum of 72" (1.83m). This measurement is from fireplace bottom to inside top of enclosure.
- Due to high surface temperatures, fireplace should be located out of traffic and away from furniture and draperies.



IMPORTANT: Combustible flooring 16" (406mm) in front of and 8" (203 mm) to each side of the fuel opening must be insulated with non-combustible floor protection with a minimum insulation R-value of 0.8.

Manufactured hearth materials will usually have a published **R value (resistance to heat)** or **k value (conductivity of heat)**. Use the following formula to convert a k value to an R value.

$R = 1/k \times \text{inches of thickness}$. See complete formula on page 29.

- Please be aware of the large amount of heat this fireplace will produce when determining a location.

See illustration on following page.

PLACEMENT CLEARANCE REQUIREMENTS



WARNING: FOLLOW ALL INSTRUCTIONS AND CLEARANCES AS OUTLINED THROUGHOUT THIS MANUAL.

DO NOT FILL SPACE DIRECTLY ABOVE FIREPLACE WITH ANY MATERIAL (EXCEPT WOOD FRAMING).
Do not install shelving or cupboards into this area.

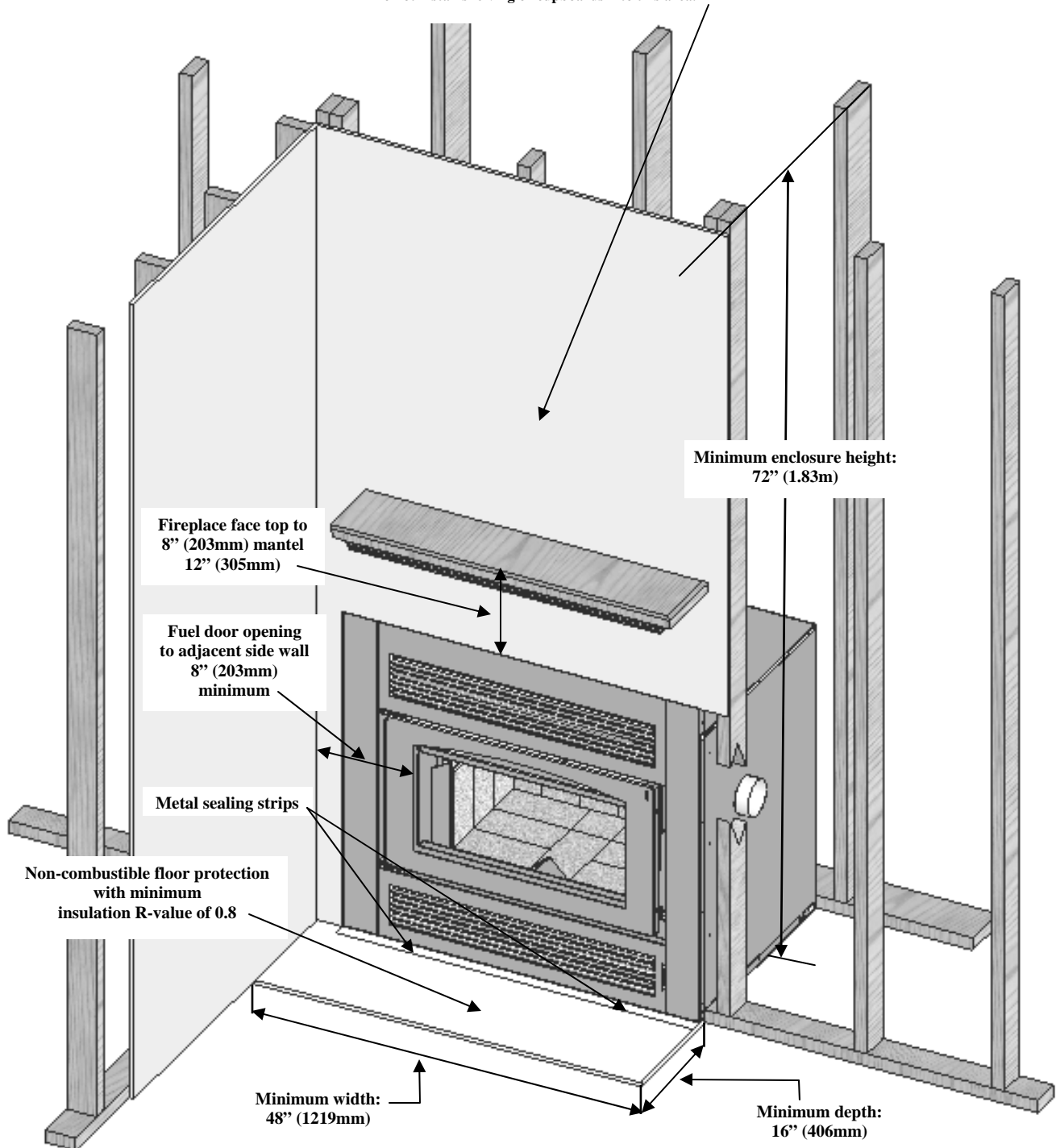


Figure 7a

TYPICAL INSTALLATION OPTIONS



IMPORTANT: If this fireplace is installed on an exterior wall, it must be insulated the same as any other exterior wall to prevent cold air from entering the home.
Combustion air pipes must be secured with screws to prevent separation and cold air transfer.

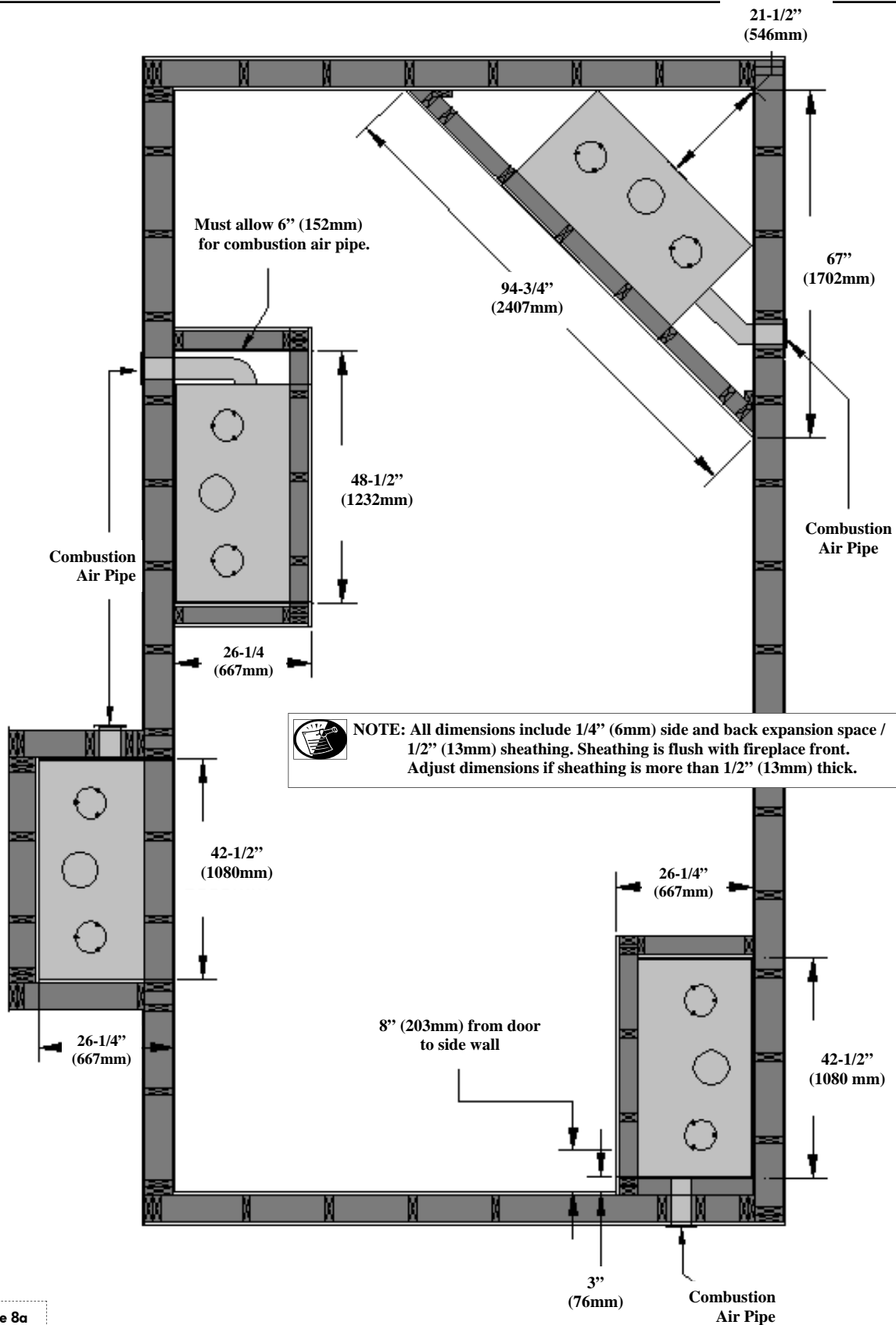


Figure 8a

FRAMING

WALL ENCLOSURE ROUGH OPENING

Frame opening to fit fireplace. All required clearances must be maintained.

MINIMUM WALL ENCLOSURE DIMENSIONS: 42-1/2" (1080mm) wide x 38-1/4" (792mm) high x 26-1/4" (667mm) deep.



IMPORTANT: Allow a minimum of 6" (152mm) in framing width dimension for the combustion air pipe which will be installed after fireplace has been inserted into framing. Please refer to illustration on previous page.

ENCLOSURE MUST BE A MINIMUM OF 72" (1.83 m) HIGH FROM BOTTOM OF FIREPLACE TO INSIDE TOP OF ENCLOSURE.

APPLIES TO BOTH RAISED AND NON-RAISED HEARTH: Combustible flooring 16" (406mm) in front of and 8" (203mm) to each side of fuel door opening must be insulated with non-combustible floor protection with a minimum insulation R-value of 0.8.

Manufactured hearth materials will usually have a published **R value** (resistance to heat) or **k value** (conductivity of heat). Use the following formula to convert a k value to an R value.

$R = 1/k \times \text{inches of thickness.}$ See complete formula on page 29.



IMPORTANT: Metal sealing strip (included with fireplace) must be used. Install sealing strip so it is centered under fireplace and hearth extension the full width of fireplace. Sand-cement grout may also be used between hearth and an on-site constructed hearth extension.



CAUTION: The lower grill must be allowed to open completely. Do not position fireplace in such a manner that would obstruct this grill.

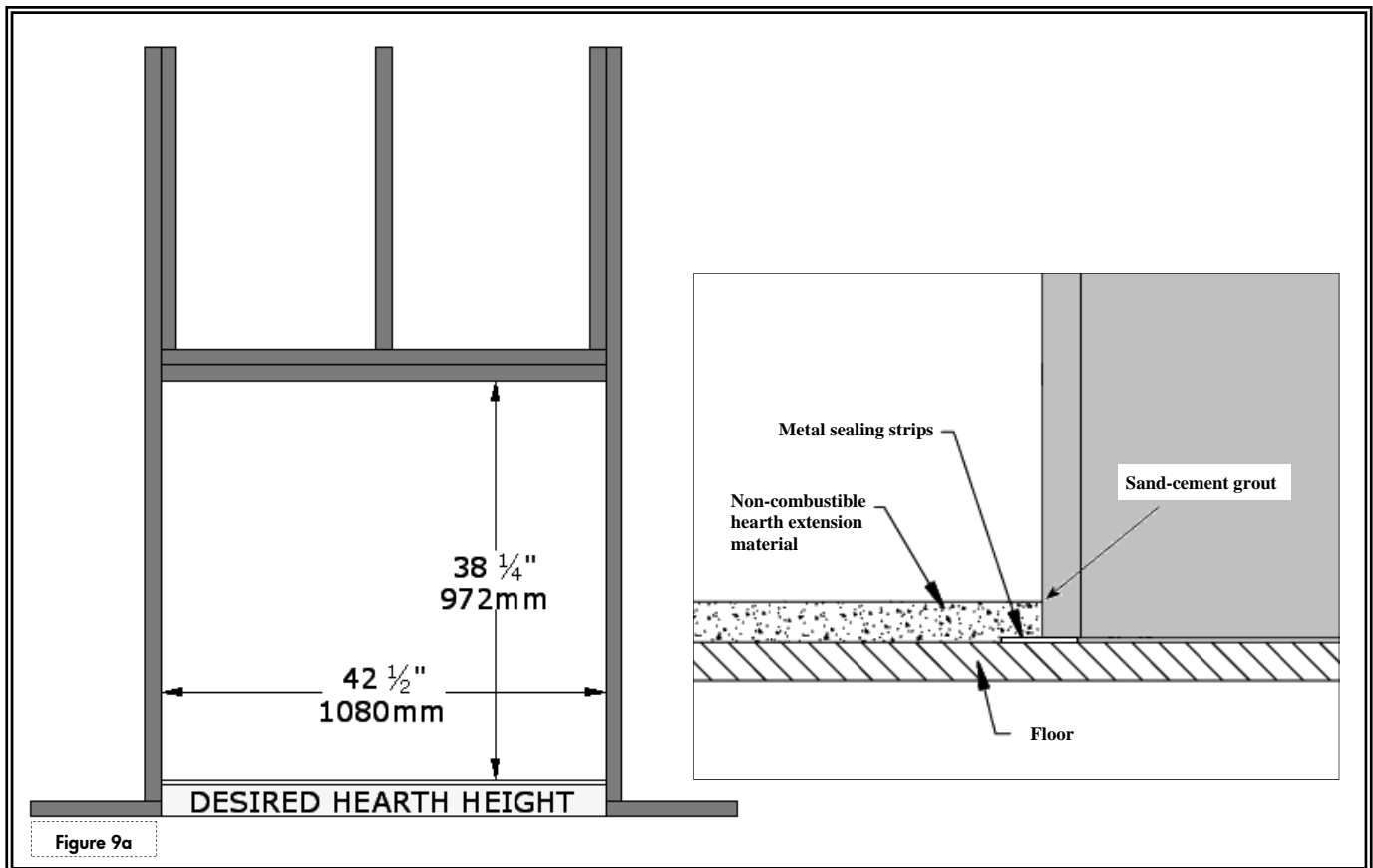


Figure 9a



NOTE: If installing optional #600-1 Fan Kit, run electrical wiring at this time.

If installing optional #970 Heat Duct Kit, please refer instructions included with kit at this time.

COMBUSTION AIR PIPE

This fireplace requires outside air for combustion and is manufactured with a collar protruding approximately 1/4" (6mm) from right side of fireplace. An outside air pipe adaptor (4" (102mm) diameter / 3" (76mm) in length), is included with fireplace to properly connect the outside air pipe to fireplace.



IMPORTANT: Do not connect outside air adaptor until after fireplace has been inserted into framing.

1. Insert combustion air intake adaptor into collar on right side of fireplace. Secure with screws.
2. Connect 4" (102 mm) galvanized or heavier pipe to adaptor and run to nearest outside wall. Secure with screws. See venting configuration on following page. Aluminum flex duct pipe approved for outside combustion air may also be used. Do not crush or tear aluminum flex duct pipe.



WARNING: DO NOT USE PLASTIC FLEX PIPE, SUCH AS DRYER VENT PIPE FOR COMBUSTION AIR PIPE VENTING.

3. Avoid running combustion air an excessive length. Follow shortest distance possible to terminate to the outside.



WARNING: DO NOT TERMINATE INTO ATTIC OR GARAGE. TERMINATION MUST BE TO THE OUTSIDE OF HOME.

If ducting beside chimney chase, terminate intake air at least 3ft. (914mm) below termination level of chimney. The air pipe may also be ducted below floor level of fireplace providing it is ducted to the outside.



NOTE: If the combustion air pipe runs for any distance outside the enclosure, but inside the house, wrap with insulation to eliminate condensation or frost build-up.

4. Mount a standard metal vent cover designed for 4" (102mm) pipe on outside exterior wall with louvers pointing downward.

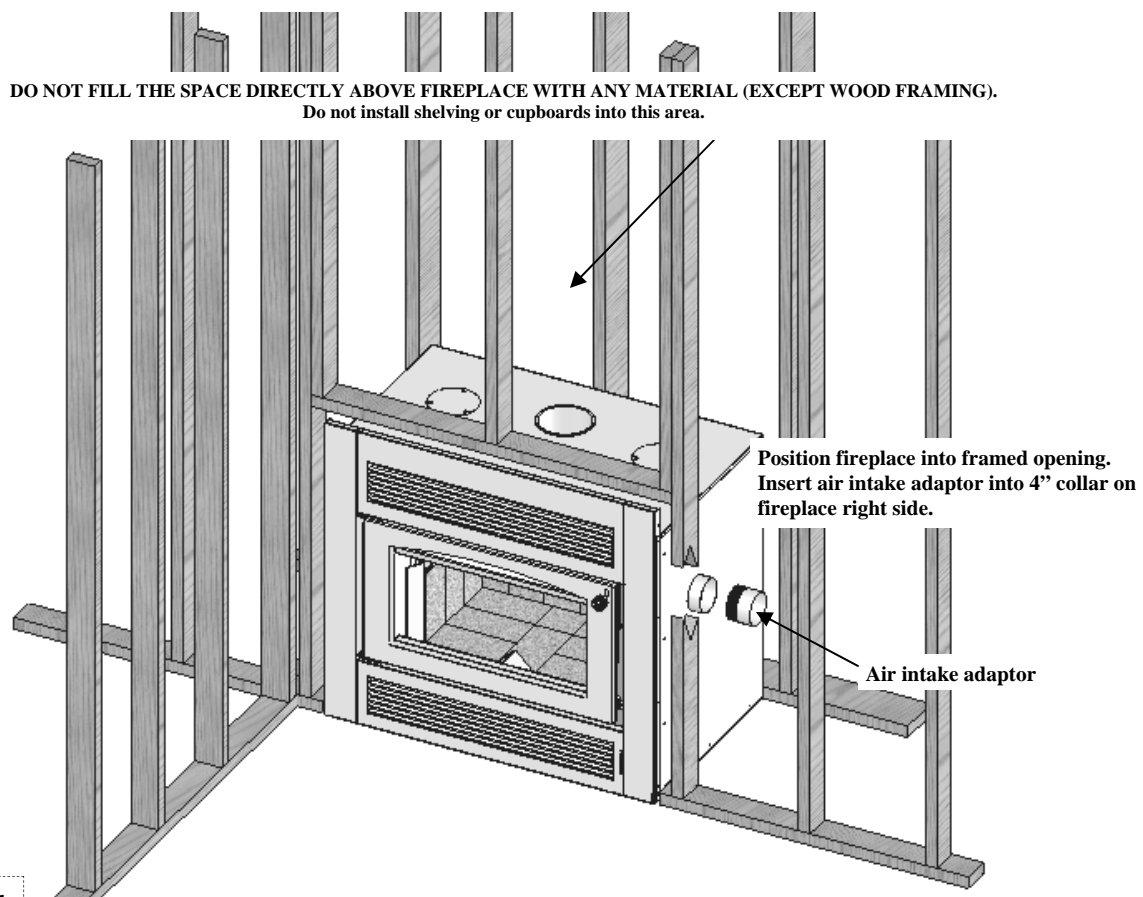


Figure 10a

COMBUSTION AIR PIPE VENTING CONFIGURATIONS

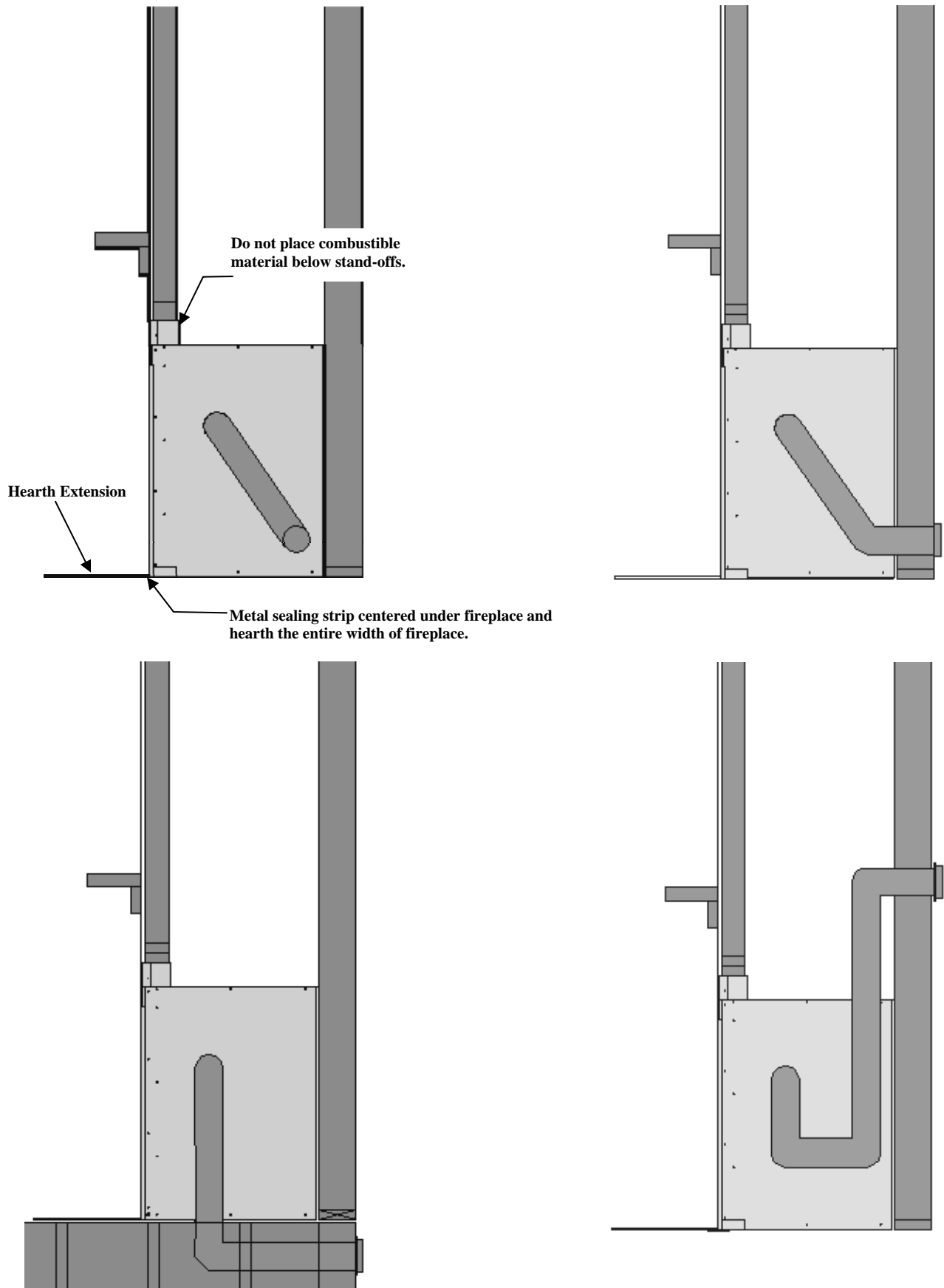
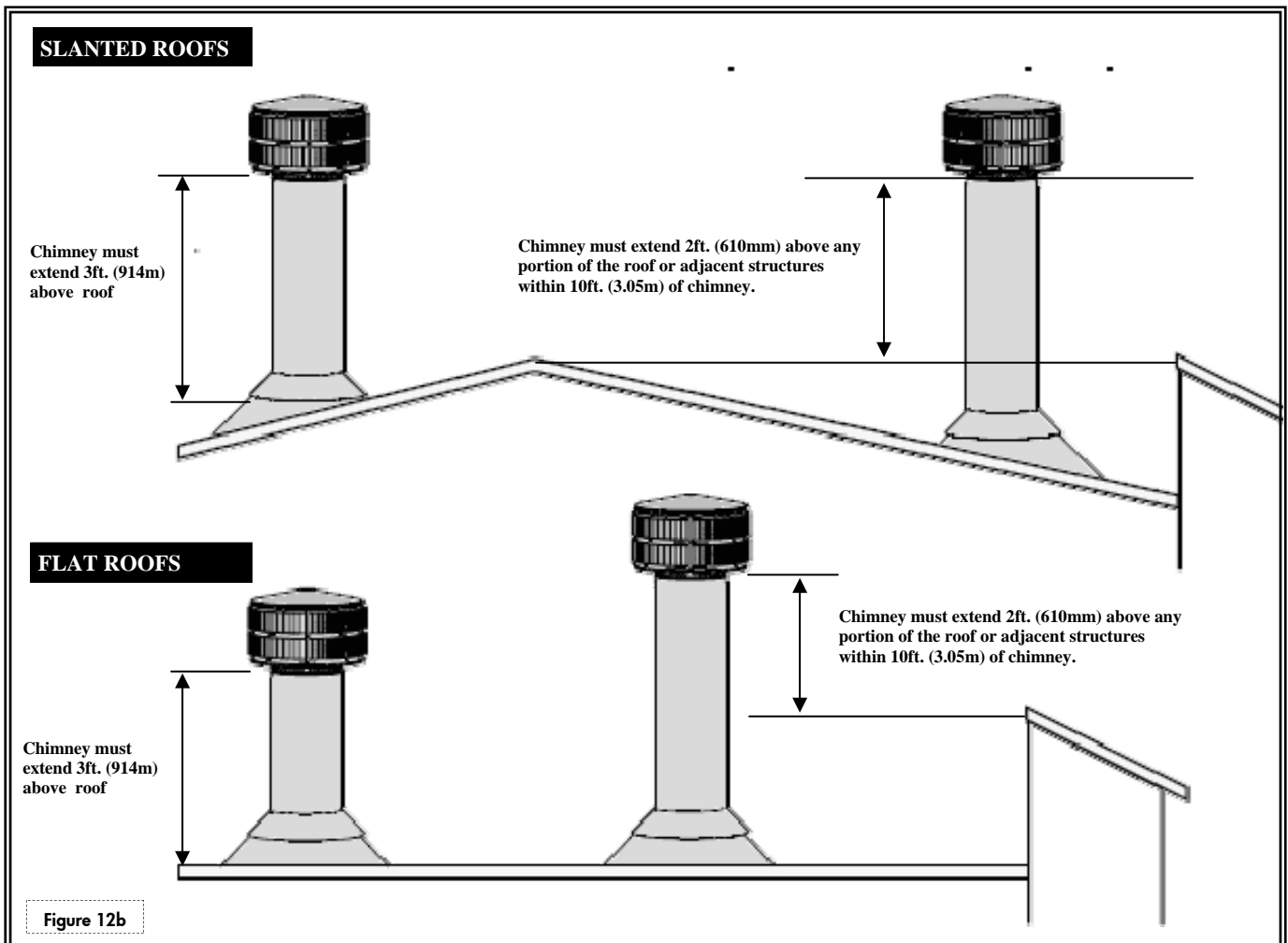
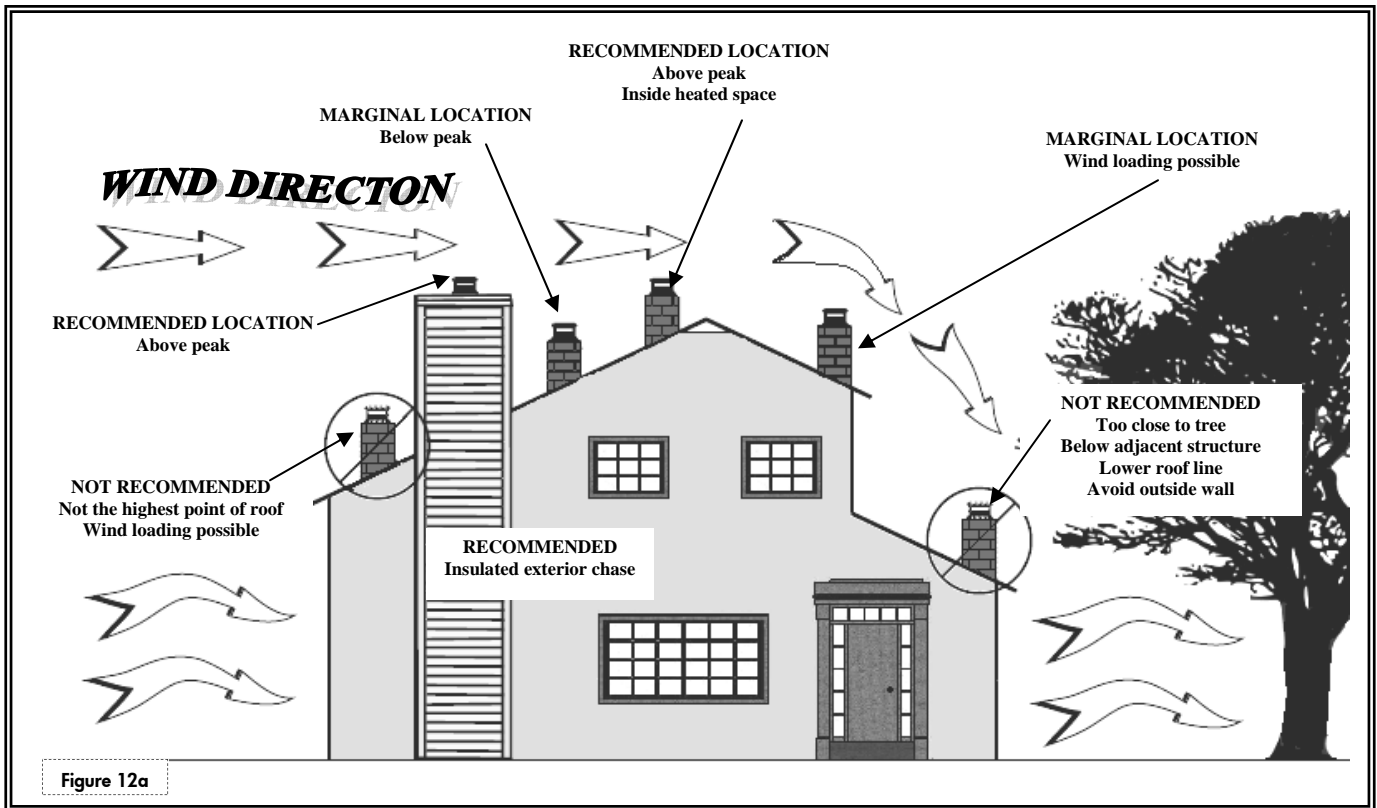


Figure 11a

CHIMNEY LOCATION



CHIMNEY INSTALLATION

CHIMNEY REQUIREMENTS

MINIMUM CHIMNEY HEIGHT: 12ft. (3.66m)

Chimney must extend a minimum of 3ft. (914mm) above highest point where it passes through roof and at least 2ft. (610mm) higher than any portion of a building within 10ft. (3.05m). See illustrations on previous page.

MAXIMUM CHIMNEY HEIGHT: 50ft. (15.24m)

ELBOWS: A maximum of (4) 30° elbows may be used (2 sets offsets).

MAXIMUM OFFSET: 4ft. (1219mm)

If (2) 30° elbows are used, chimney height must be a minimum of 14ft. (4.27m).

If (4) 30° elbows are used, chimney height must be a minimum of 25ft. (7.62m).

Do not connect this fireplace to a chimney flue serving another appliance.

APPROVED CHIMNEY SYSTEMS

Selkirk Metalbestos: UL (Ultra Temp)

Simpson Dura-Vent: Dura-Plus

Simpson Dura-Vent: Dura-Tech

American Metal Products: Amer-Tech

SuperPro / SuperVent

ICC / Excel

Alternate listed 6" diameter HT-type UL 103 All-Fuel Chimney Systems, including CAN-0S629 listed chimneys may be used.

Follow chimney manufacturer's instructions for proper chimney installation, clearance to combustibles and support bracket requirements.



CAUTION: DO NOT FILL REQUIRED CLEARANCES BETWEEN CHIMNEY AND COMBUSTIBLES WITH INSULATION!

ANCHOR PLATE INSTALLATION



IMPORTANT: The appropriate anchor plate must be purchased with chosen chimney system . Sealant and screws for attaching anchor plate to fireplace are included.

Place a bead of sealant under chimney anchor plate. Push plate collar into fireplace flue. Secure with (4) screws.



IMPORTANT: Anchor plate must fit into flue collar on fireplace to prevent creosote leakage.

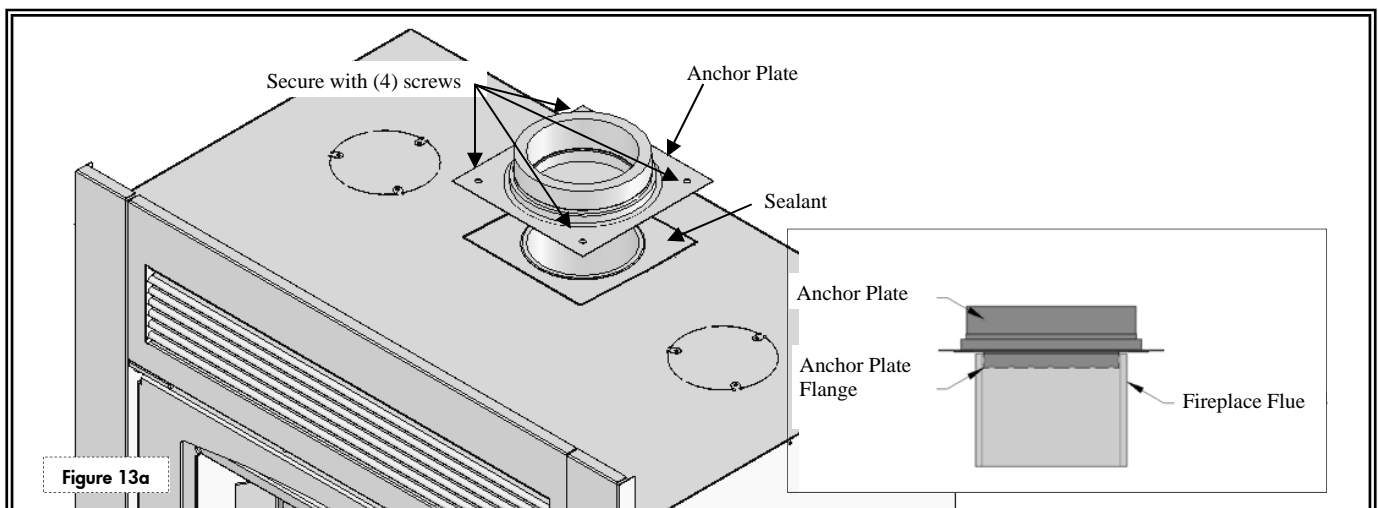


Figure 13a

CHIMNEY INSTALLATION

CHIMNEY INSTALLATION

1. After anchor plate installation, connect first chimney section per manufacturer's installation instructions.
2. Cut and frame required holes in floor, ceiling, and roof where chimney will pass through.



WARNING: REFER TO CHIMNEY MANUFACTURER'S INSTRUCTIONS FOR PROPER FRAMING SIZE, CLEARANCE TO COMBUSTIBLES AND SUPPORT BRACKET REQUIREMENTS.

WARNING: CLEARANCE BETWEEN CHIMNEY AND COMBUSTIBLES SHOULD NEVER BE LESS THAN 2" (51mm). DO NOT FILL THIS REQUIRED AIR SPACE WITH INSULATION OR OTHER MATERIALS.

FIRESTOP: A firestop must be installed where chimney passes through each floor level. Refer to chimney manufacturer's instructions for part numbers and installation procedures.

ATTIC INSULATION SHIELD: An attic insulation shield is required by chimney manufacturers for protection where the chimney passes into attic space. This will prevent debris and insulation from coming into contact with the chimney. Refer to chimney manufacturer requirements.

3. Install chimney sections, firestops, attic insulation shields, etc., following chimney manufacturer's instructions and requirements, as well as chimney minimum / maximum height requirements as outlined in this installation manual.
4. Install flashing, storm collar and chimney cap following chimney manufacturer's instructions.
5. Refer to chimney manufacturer's requirements concerning supports, bracing, anchors, etc.



WARNING: CEILING / ROOF THIMBLE MUST EXTEND COMPLETELY THROUGH CAVITY TO OUTERMOST PLANE OF ROOF.

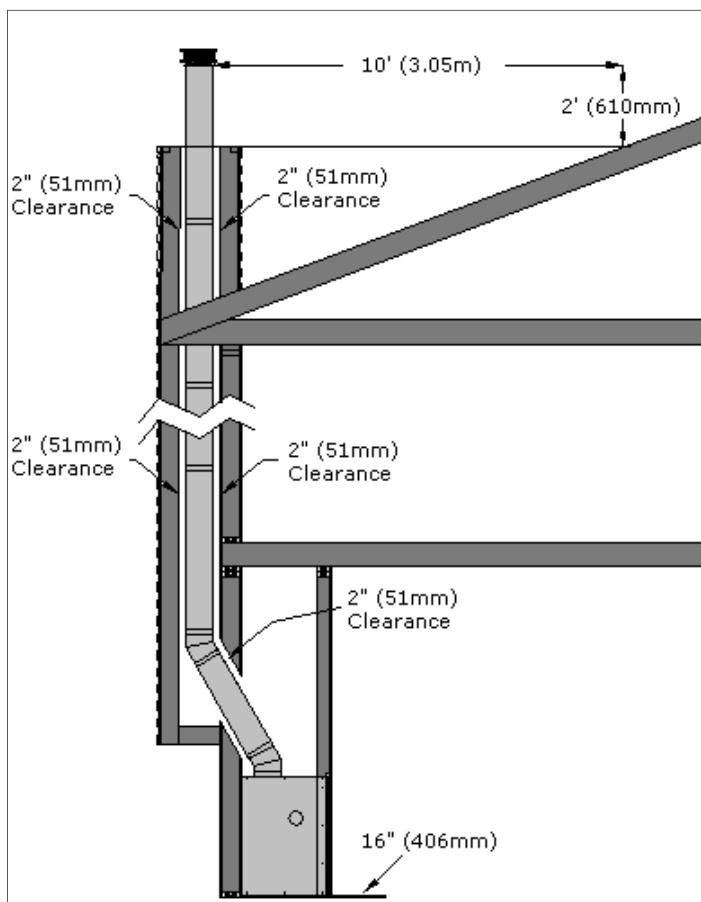
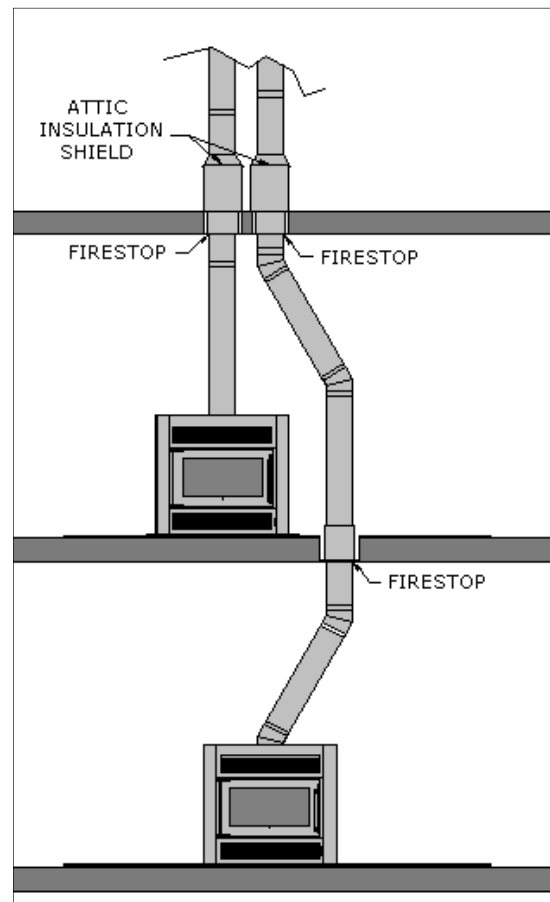


Figure 14a



OPTIONAL FAN INSTALLATION

INSTALLATION OF THIS FAN SHOULD BE DONE ONLY BY A QUALIFIED INSTALLER



WARNING: MAKE SURE HOUSEHOLD BREAKER IS SHUT OFF PRIOR TO WORKING ON ANY ELECTRICAL LINES.

WARNING: THIS APPLIANCE IS EQUIPPED WITH A THREE-PRONG (GROUNDING) PLUG FOR PROTECTION AGAINST SHOCK HAZARD AND SHOULD BE PLUGGED DIRECTLY INTO A PROPERLY GROUNDED THREE-PRONG RECEPTACLE. DO NOT CUT OR REMOVE GROUNDING PRONG FROM THIS PLUG.



IMPORTANT: Wiring must be done before enclosing fireplace sides. An electrical box and romex connector are pre-installed on a removable panel on right side of fireplace. A receptacle / speed control assembly and (3) wire nuts are included in fireplace components packet.



NOTE: Code approved line voltage wiring 14 gauge or better must be used when wiring this assembly. Refer local electrical codes for specific requirements.

NOTE: This appliance must be electrically grounded and connected in accordance with local codes, or in the absence of local codes, with the National Electrical Code, ANSI/NFPA 70 Current Edition, or the Canadian electrical Code CSA C22.1.

NOTE: This fan will not operate unless speed control has been turned ON and sufficient heat has been applied to temperature control switch. The fan will turn ON and OFF automatically as fireplace heats and cools. Adjust fan to desired speed while it is running.

The optional fan kit includes:

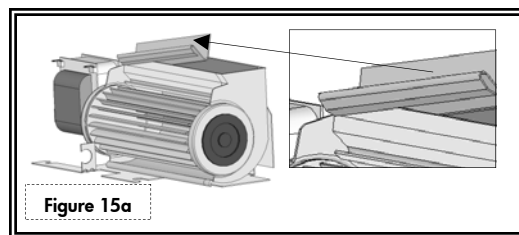
- (2) 110 CFM fan with temperature control switch and 4ft. (1.22m) fan cord
- (4) 1/4" nuts

FAN SHIELD INSTALLATION

Two fan shields are included in fireplace components packet.

These shields divert more air circulating through fans upward, increasing volume exiting through upper grill.

Slide one corner of a fan shield onto front chute on each fan, making sure 'V' portion of shield is inside chute. Slide fan shield down onto chute.



FAN INSTALLATION

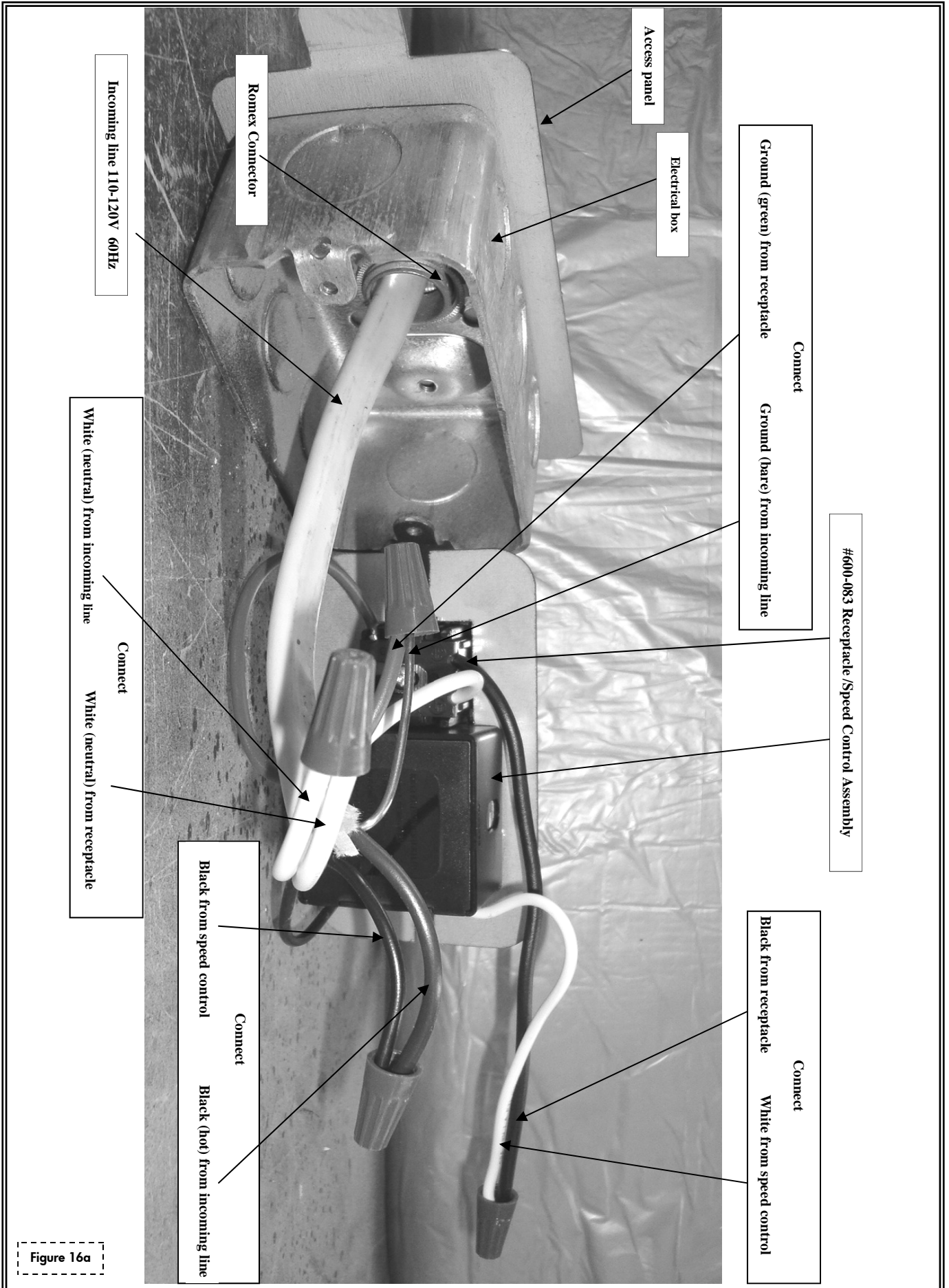
Lower grill must be removed from fireplace prior to installation of this fan. Refer to page 18 of this installation manual for assistance if necessary.

1. Insert fans through lower grill opening, push to back. Align mounting slots in fan brackets onto mounting studs. Secure with nuts.
2. Connect fan wiring by attaching connectors on right fan onto terminals on left fan.
3. From inside lower right grill opening, loosen screws securing removable access panel (with electrical box & romex connector installed). Remove panel.
4. Insert 110V - 120V wiring (with ground) through romex connector and wire to the speed control / receptacle assembly, matching black (hot), white (neutral), and green (ground) wires to corresponding wires on speed control / receptacle assembly.
5. Secure speed control / receptacle assembly to the electrical box with (2) screws provided.
6. Re-install electrical access panel. Tighten screws.
7. Attach temperature control switch to bottom of firebox.
8. Plug cord into electrical box receptacle.
9. Turn speed control counter-clockwise until it 'clicks'. This is the OFF position.
10. Turn speed control ON by turning knob clockwise past the 'click' - this is the highest setting.
11. Re-install lower grill. Refer to page 18 of this installation manual if necessary.

TEMPERATURE CONTROL SWITCH POSITION

Before adjusting temperature control switch, unplug 3-prong plug on fan cord from receptacle. Adjust position of temperature control switch to a warmer location under firebox to turn fan ON sooner or move it to a cooler location under firebox to turn fan ON later. Fan will turn on when sensor in temperature control switch reaches 110° F and will turn OFF when sensor reaches 90° F. After adjustment, plug 3-prong plug on fan cord into receptacle.

OPTIONAL FAN INSTALLATION



FIREBRICK INSTALLATION

The following firebrick are included with this fireplace:

7- 4-1/2" x 9" (114mm x 229mm)

6- 4-1/2" x 10-3/4" (114mm x 273mm)

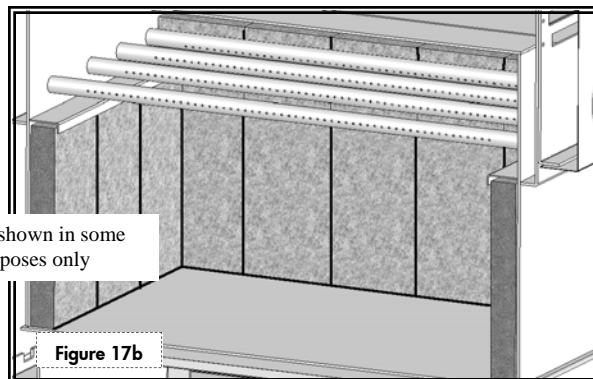
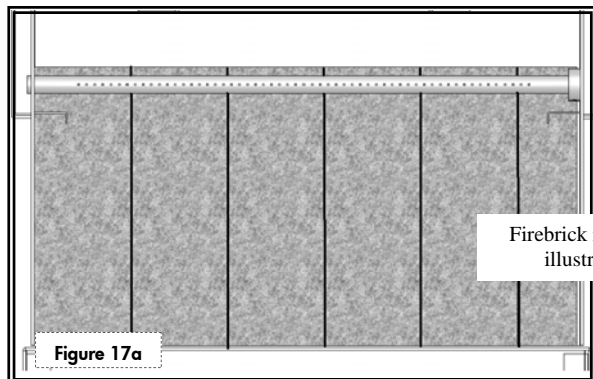
1- 4-1/2" x 4-1/2" (114mm x 114mm)

10- 4-1/2" x 13-1/2" (114mm x 343mm)

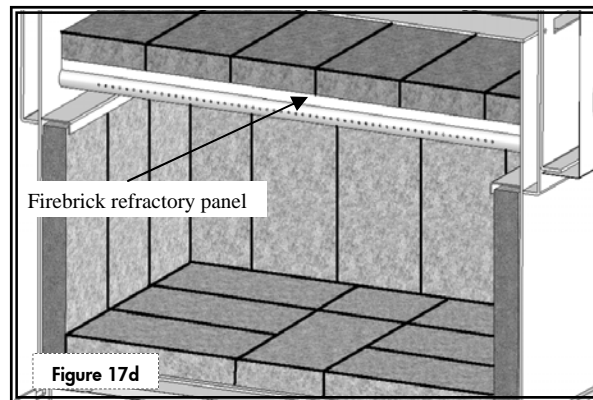
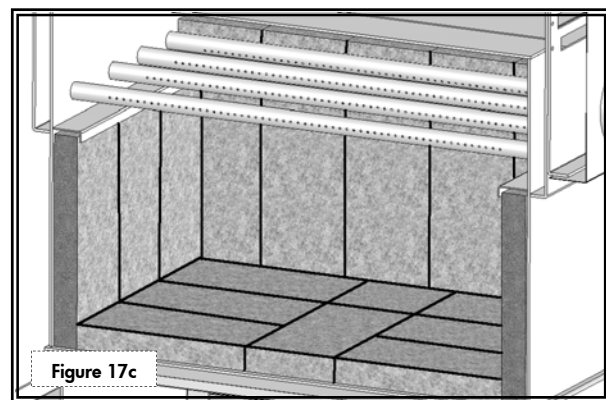
2- 2-1/2" x 13-1/2" (64mm x 343mm)

1- Firebrick retainer

Firebrick refractory panel located on top of pipes. **DO NOT DISCARD.**



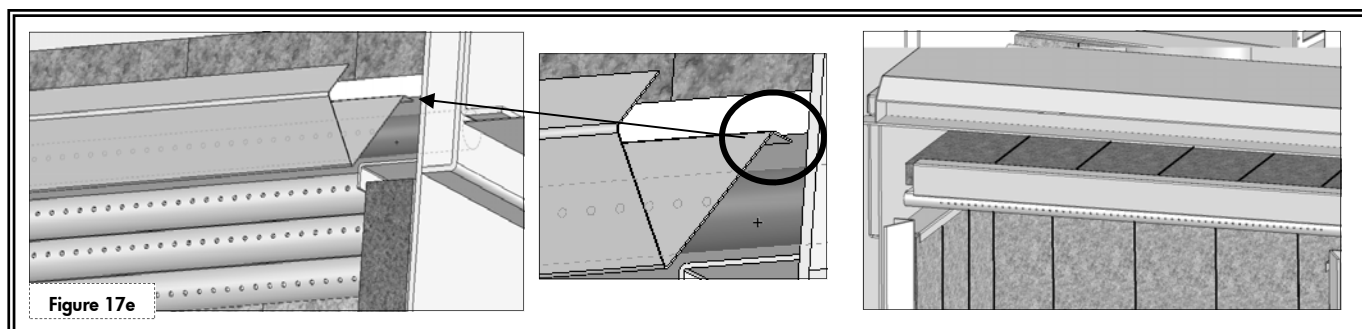
1. Position (5) 4-1/2" x 13-1/2" (114mm x 343mm) and (1) 2-1/2" x 13-1/2" (64mm x 343mm) firebrick along back wall of firebox.
2. Starting at back, position (3) 4-1/2" x 10-3/4" (114mm x 273mm) under firebrick brackets along each side of firebox.



3. Place (7) 4-1/2" x 9" (114mm x 229mm) and (1) 4-1/2" x 4-1/2" (114mm x 114mm) on firebox bottom.
4. Lay (5) 4-1/2" x 13-1/2" (114mm x 343mm) and (1) 2-1/2" x 13-1/2" (64mm x 343mm) firebrick over firebrick refractory panel resting on (4) stainless steel pipes at top of firebox.



NOTE: The 4-1/2" x 4-1/2" (114mm x 114mm) firebrick is at center back.



5. With 45° flange down, slide firebrick retainer between top of first pipe & firebrick. Push retainer back until it is against front of firebrick and under refractory panel. Set retainer down on top of pipe. The 45° flange on firebrick retainer should now be behind first pipe.

FIREPLACE FRAMING & FACING

Frame in fireplace. Maintain necessary clearances to combustibles. Framing materials should not come in actual contact with fireplace. If installing a mantel (combustible material may be used), follow mantel projection chart below.



NOTE: Non-combustible material such as brick, tile, marble, or stone may be placed over top and side face sections. This material **MUST NOT** come in direct contact with fireplace or cracking of face materials will occur. Facing material should overlap side framing members approximately 1/4" - 3/8" (6mm - 10mm).



CAUTION: If using 'thin' brick, non-combustible facing material such as rock board or metal must be used. Do not attach directly to fireplace face.

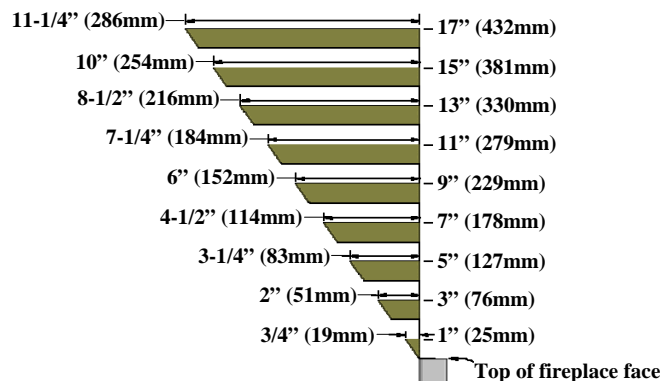


Figure 18a

FINALIZE THE INSTALLATION

GRILL SET (sold separately)

INSTALL:

- Align rods in upper grill to holes at the top of upper grill opening. Push grill up until bottom clears face frame. Set down into holes at bottom of grill opening.
- Remove nuts from lower grill assembly. Insert bolts in grill through lower grill hinges. Secure with nuts.

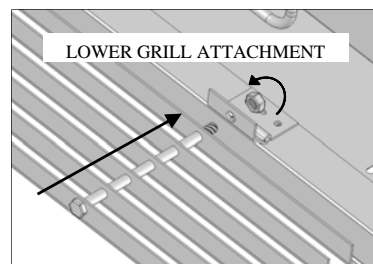
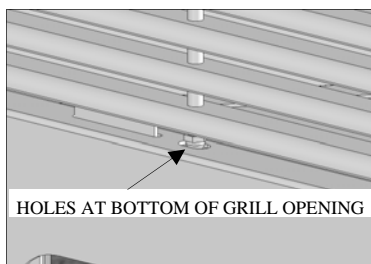
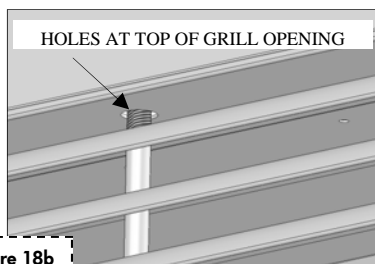


Figure 18b

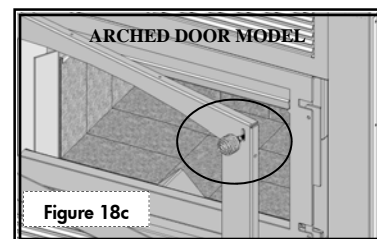
REMOVE:

- Lift upper grill up and out of opening.
- Remove nuts securing lower grill to hinges, remove grill, reattach nuts to grill.

HANDLE INSTALLATION (included with fireplace)

ARCHED DOOR: Thread black spring handle into nut located in mounting hole at top right of door front.

CAST DOOR: Thread black spring handles onto door handles.



DOOR SEAL ALIGNMENT / ADJUSTMENT (Arched Door Model)

Every effort has been made at the factory to ensure a proper door seal prior to shipment. Misalignment, however, may still occur during shipment, mishandling and / or installation.

The following procedures will help you determine if the door is sealing properly, and how to achieve a proper seal.

CHECKING THE SEAL

1. Close and latch door.
2. Check seal by pushing against corners of glass.
 - No movement indicates proper seal.
 - Any movement between the glass and firebox face at any corner indicates an inadequate seal. This will create creosote build-up on glass and cause the fire to burn faster.

HINGE ADJUSTMENT

1. Close and latch door.
2. Place wooden shim (included) between bottom of door and the face on the latch side. This is necessary to 'hold' door in horizontal alignment.
3. Determine if upper, lower, or both hinges need adjustment.



IMPORTANT: DO NOT LOOSEN NUTS SECURING DOOR HINGES AT TOP AND BOTTOM OF DOOR.

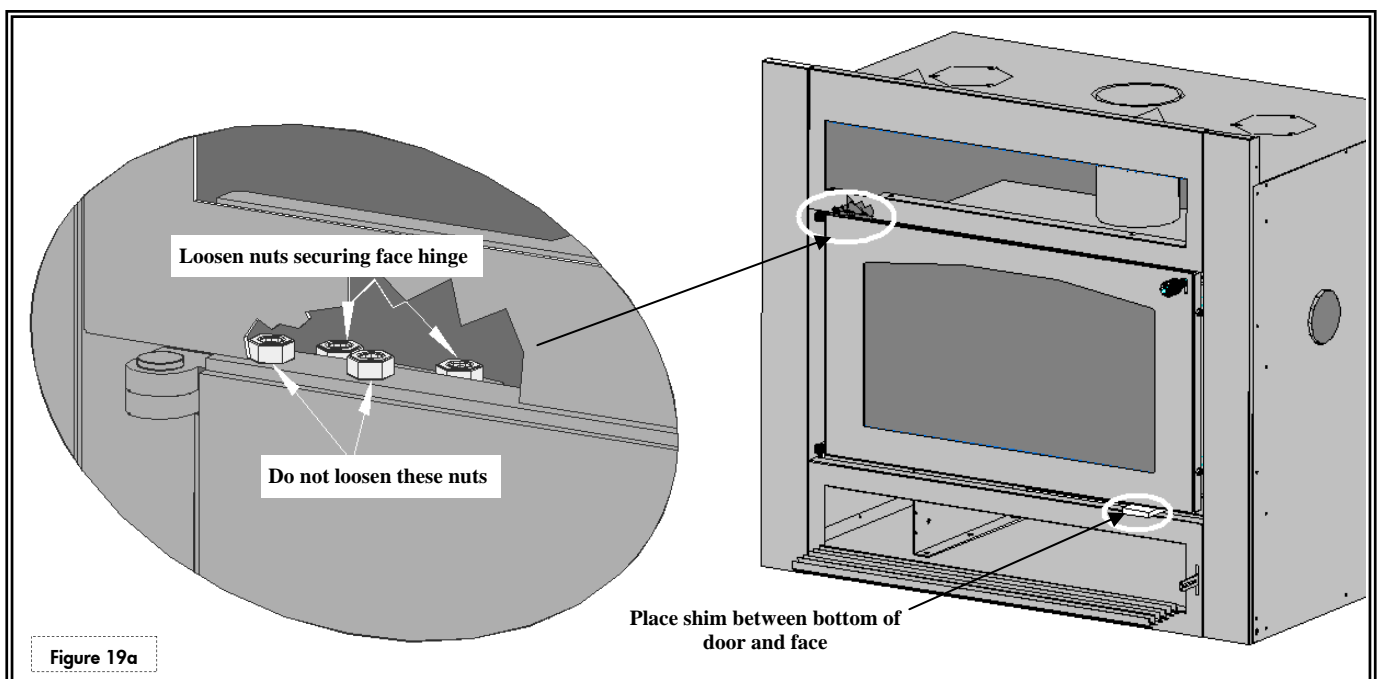
UPPER FACE HINGE: Remove upper grill. Locate two nuts securing upper face hinge.

LOWER FACE HINGE: Open lower grill, locate two nuts securing lower face hinge (similar to upper grill hinge).

4. Using a 7/16 wrench or nut driver, **LOOSEN BUT DO NOT REMOVE** the two nuts. Push door in slightly, (either top or bottom, depending on adjustment needed) to achieve a tighter door seal. Re-tighten nuts.
5. Remove shim. Repeat steps #1 & #2 in 'CHECKING THE SEAL' section above.
6. Repeat steps #1 - #5 of this section until proper door seal is achieved.



NOTE: Door may need to be 'pulled out' if binding occurs at either the top or bottom right corners.



DOOR SEAL ALIGNMENT & ADJUSTMENT (Arched Door Model)

LATCH ADJUSTMENT

1. Open door, locate 'latch dog' secured to firebox face.
2. Determine whether upper, lower, or both corners of door seal need adjustment.
3. Remove and save acorn nuts securing latch dog. Remove and save latch dog.
4. Place a washer (included in parts packet) onto top and / or bottom mounting bolt on latch dog. Re-install onto firebox face.

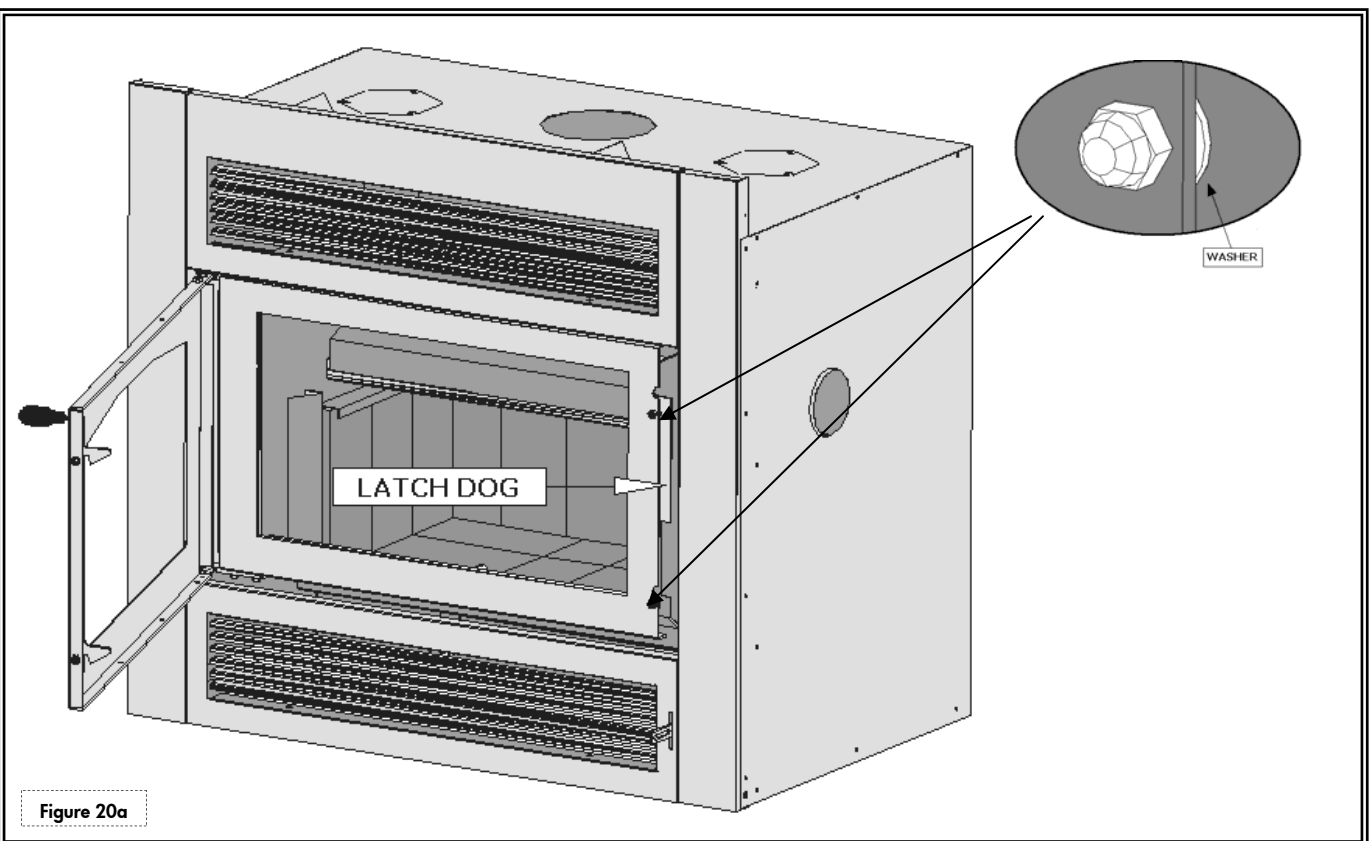


NOTE: A washer has been installed on each mounting bracket at the factory.
You may only need to place a washer at top or bottom mounting bolt, depending on where seal needs adjustment.

5. Re-install acorn nuts.
6. Re-check door seal as instructed in 'CHECKING THE SEAL' section on previous page.

NOTICE TO INSTALLER / HOMEOWNER

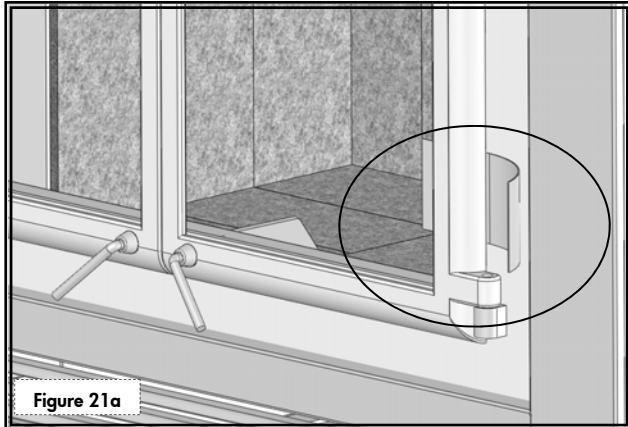
Achieving proper seal and door alignment is a trial and error adjustment. You may need to make additional minor adjustments after the first few initial burn periods. Deposits which collect on glass corner (s) while fireplace is in operation indicates an improper seal, indicating door should be adjusted as instructed above.



DOOR SEAL ADJUSTMENT (Cast Door Model)

CHECKING THE SEAL

1. Open doors, insert piece of paper between door and face frame. Close and latch doors.
2. Gently pull paper. If removed with little or no force, the door seal needs adjustment. Follow directions below for seal adjustment.
3. Perform paper test on all outside edges of doors.



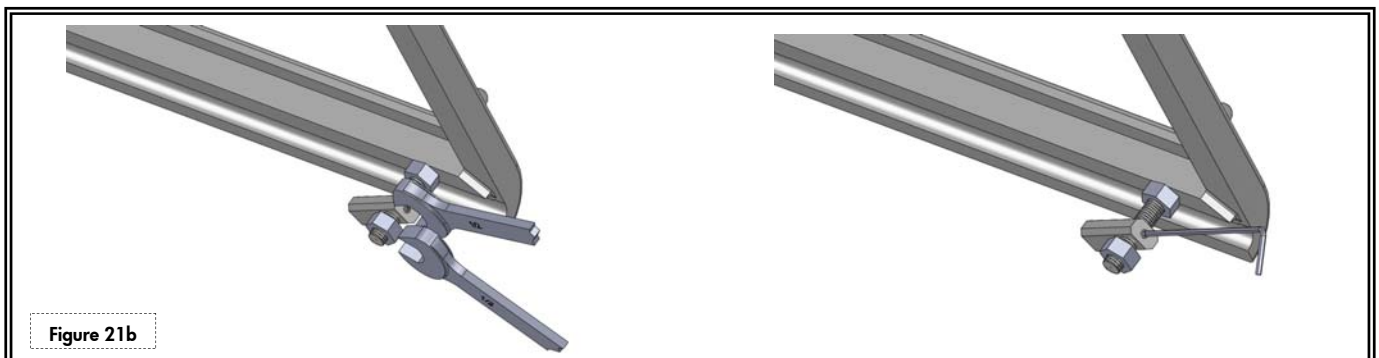
SEAL ADJUSTMENT

Tools needed: (2) 1/2" wrenches
(1) 5/64 allen wrench

1. Note orientation of latch and door handle.
2. Place one 1/2" wrench on 5/16 nut located farthest away from door frame and one on door latch, loosen nut.
3. Loosen allen screw just far enough to allow you to rotate latch.
4. Latch must be rotated one full turn in either direction, depending on whether door seal needs tightening or loosening. Latch and door handle should line up with each other when completed.
5. Tighten allen screw.
6. Re-tighten nut.



IMPORTANT: Do not tighten doors to point that paper cannot be removed. This will cause gasketing to compress and prematurely fail.



Eventually gasketing material will need to be replaced. When no amount of door seal adjustment creates a seal, replace door gasketing.

When replacing gasketing, remember to first reverse door latch several rounds to accommodate thicker material. Adjust as needed.

FIREPLACE OPERATION

This fireplace system uses outside air for combustion. Air is drawn into fireplace from outside your home, thus eliminating valuable oxygen being pulled from inside the home where it is needed for other fuel burning appliances.

Kozy Heat's air seal door system seals the fireplace, eliminating heat loss, allowing you to completely control your fire. This gives you maximum heat potential using a minimum amount of firewood.

The Kozy Heat fireplace heating system creates heat by convection air flow through the heat chamber surrounding the fireplace. Room air is drawn into lower grill, is heated as it circulates up through the chamber, and exits through upper grill. Optional Fan Kit #600-1 increases circulating air flow. This heated air can also be ducted to other rooms through use of the #970 Heat Duct Kit.



WARNING: FOR USE WITH SOLID FUEL ONLY.

Use solid wood, or processed solid fuel firelogs only. If processed solid fuel firelogs are used, do not poke or stir logs while they are burning. Use only firelogs that have been approved for use in a fireplace, and refer to firelog warnings and caution markings on packaging prior to use.

WARNING: DO NOT INSTALL A FIREPLACE INSERT OR ANY OTHER PRODUCT NOT SPECIFIED FOR USE WITH THIS FIREPLACE.

WARNING: THIS FIREPLACE HAS NOT BEEN TESTED WITH ANY GAS COMPONENT OR ACCESSORY. DO NOT INSTALL A GAS COMPONENT, INCLUDING A GAS LOG SET INTO THIS FIREPLACE.

HOW TO OPERATE YOUR Z-42

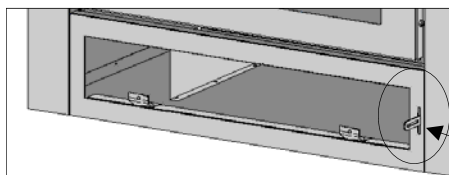
1. Open intake damper by putting it in 'O' (down) position.
2. Build fire directly on top of firebrick, no closer than 6" (152mm) from front of firebox. Do not elevate fire or use a grate. Build base with kindling and crumpled newspaper. Lay larger kindling or small logs diagonally over kindling base.
3. Light fire with matches.
NEVER USE GASOLINE, GASOLINE-TYPE LANTERN FUEL, KEROSENE, CHARCOAL LIGHTER FLUID OR SIMILAR LIQUIDS TO START OR FRESHEN UP A FIRE. KEEP ALL SUCH LIQUIDS AWAY FROM FIREPLACE WHILE IT IS IN USE.
4. Close door. Close intake damper to slow burn down.
5. When fire is burning well on kindling, open intake damper, wait 1 minute, open door and add larger wood. Slowly load firebox with average sized wood over a period of 30 minutes. **DO NOT OVER-FIRE**, this could damage the fireplace and void the warranty.



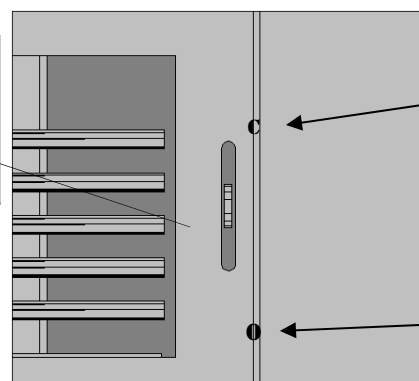
NOTE: This fireplace should be operated only with door / doors closed and latched. Operating fireplace with door / doors open causes flames to be drawn out into the living space, creating a smoke and fire risk.

6. Adjust intake damper to desired heat output position. See illustration below.

HELPFUL HINT: To keep glass cleaner, never completely close intake damper.



INTAKE AIR DAMPER CONTROL



LOW: CLOSED

MED. LOW: 1/8" (3mm) OPEN

MED. HIGH: 3/8" (10mm) OPEN

HIGH: 100% OPEN

ASH DISPOSAL

Ashes should be placed in a metal container with a tight fitting lid. The closed container of ashes should be placed on a non-combustible floor or on the ground, well away from all combustible materials, pending final disposal. If the ashes are disposed of by burial in the soil or otherwise locally dispersed, they must be retained in the closed container until all cinders have thoroughly cooled.

MAINTENANCE REQUIREMENTS

CREOSOTE INFORMATION

When wood is burned slowly, it produces tar and other organic vapors, which combine with expelled moisture to form creosote. Creosote vapors condense in the relatively cool chimney flue of a slow burning fire. As a result, creosote residue accumulates on the flue lining. When ignited, this creosote makes an extremely hot fire. The chimney should be inspected monthly during the heating season to determine if a creosote buildup has occurred. If a significant layer of creosote has accumulated (1/8" (3mm) or more) it should be removed to reduce the risk of a chimney fire.

Inspection can be accomplished from the top of chimney cap or from inside the stove by removing upper firebrick. We recommend a professional chimney cleaner inspect and clean the chimney at least once annually.

GLASS INFORMATION

Clean glass on a regular basis. Should glass become discolored with creosote, follow this procedure for easy removal. Burn fireplace with the outside air damper completely open for 30-45 minutes. This will normally clean the glass and also minimize ashes in the firebox. Oven cleaner or a cleaner specifically designed for fireplace may also be used. **DO NOT** use abrasive cleaners. Clean only when glass is cool.

Do not slam doors. This may cause glass damage.

In the event of glass breakage, let fireplace cool completely.

DO NOT USE THIS FIREPLACE WITH BROKEN OR CRACKED GLASS.

Replace only with Kozy Heat #150-380 for Model #Z-42 / #150-250 for Model Z-42-CD. **Do not substitute materials.**

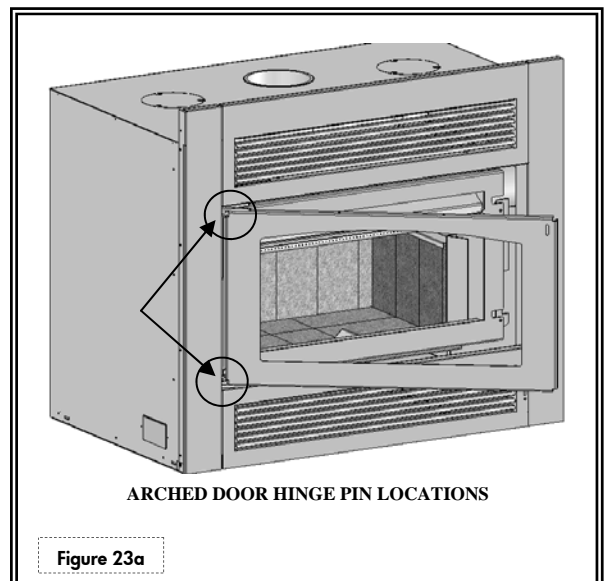
BROKEN GLASS REMOVAL

CAST IRON DOOR MODEL:

1. Remove door /doors from fireplace by lifting 'up' off hinges. Lay face down on a flat protected surface.
2. Remove and save screws and glass clips. Carefully remove broken glass. Inspect glass gasket on inside frame of door / doors. Replace if necessary.
3. Place new glass with gasket inside door frame, secure with glass clips and screws previously removed.
4. Re-install door and hinge pins, making sure pins are properly seated before closing door / doors.

ARCHED DOOR MODEL:

1. Open door to a 45° angle from face.
2. Remove bottom hinge pin.
3. Lift door up off hinges far enough to release upper hinge pin.
4. Remove door and lay face side down on a flat protected surface.
5. Remove and save screws and glass clips. Carefully remove broken glass.
6. Place new glass with gasket inside door frame (gasket with second layer should be facing you).
7. Secure glass with glass clips and screws previously removed. (Glass clips are place between first and second layers of gasket).
8. Re-install door and hinge pins.



OPTIONAL #970 HEAT DUCT KIT



CAUTION: Read and follow instructions carefully prior to and during installation of this optional heat duct kit.



WARNING: INSTALLATION OF THIS DUCT KIT & ELECTRICAL WIRING MUST BE PERFORMED BY A QUALIFIED SERVICE PERSON AND IN ACCORDANCE WITH LOCAL CODES, IF ANY, AND WITH THE NATIONAL ELECTRICAL CODE, ANSI/NFPA 70, CURRENT EDITION.

WARNING: DO NOT SUBSTITUTE THE FLEXIBLE HEAT DUCT PIPE WITH PLASTIC VENT PIPE!

This kit includes:

- | | |
|--|-----------------------------|
| (1) 6" (152mm) diameter flexible heat duct pipe, expandable to 20ft. (6.10m) | (2) Mounting bracket screws |
| (1) Register mounting frame with collar | (1) Sheet metal screw |
| (1) Register cover with screws | (4) Sheet rock screws |
| (1) Duct collar | (3) Flange nuts |
| (1) Fan assembly | (1) Strapping cord |
| (1) Fan housing cover plate | (2) Wire nuts |
| (1) Speed control mounting bracket | (2) Fan wire connectors |

A junction box, cover, and hardware must be purchased to mount speed control.

SPECIFICATIONS

Clearance to combustibles: 0" (0mm)

Clearance from air duct to ceiling: 2" (51mm)

Minimum vent run: 2ft. (609mm)

Maximum vent run: 20ft. (6.10m) in any direction including downward.

The fireplace is manufactured with (2) heat duct knock-outs. One or both may be utilized.

The register mounting frame is designed to fit between 2" x 4" stud walls, 16" (406mm) on center.

Oval duct pipe (equivalent to 6" round) may be used in conjunction with 6" (152mm) diameter flexible heat duct pipe included with this kit. It must be purchased from a HVAC supplier.

Carefully plan location of duct pipe runs and register in relation to fireplace. Refer to illustration below.

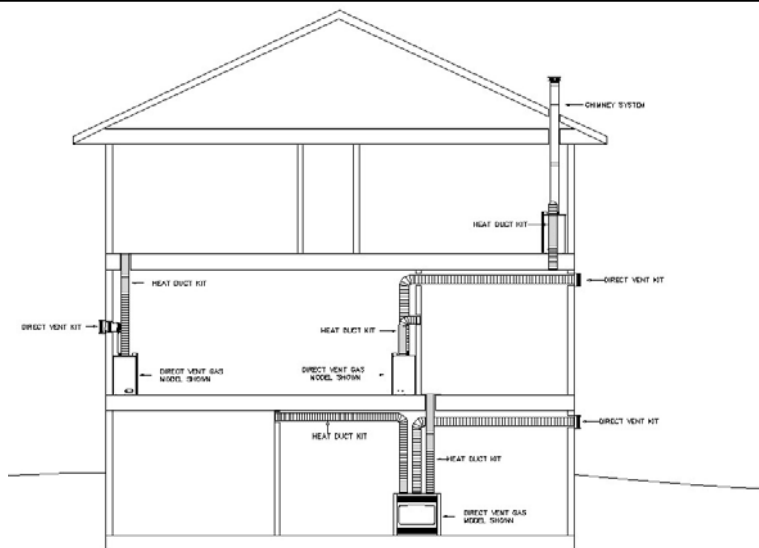


Figure 24a

OPTIONAL #970 HEAT DUCT KIT

PREPARE THE FIREPLACE (Gas burning fireplace shown in photos).

1. Remove one 6" diameter knock-out located at top of fireplace. If both heat ducts will be used, remove both knock-outs.
2. Bend 3 tabs up & out far enough to allow duct collar & duct pipe installation.
3. For each 6" knock-out removed in step1, remove knock-out located directly below previously removed knock-out.

MODEL Z-42: Remove third knock-out directly below one removed in step 3.

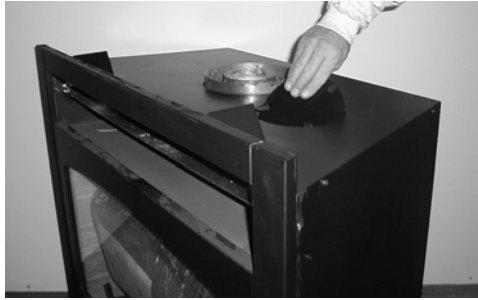


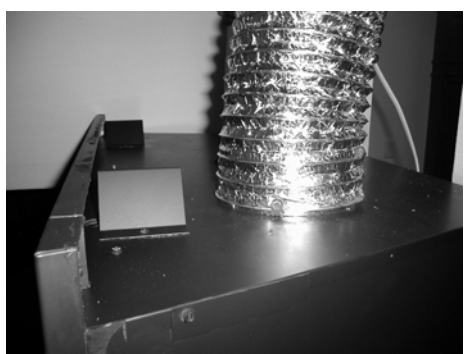
Figure 25a



4. Slide duct collar, with circulation holes facing downward, into 6" knock-out until it rests on top of heat shield.



Figure 25b



ATTACH DUCT PIPE TO FIREPLACE

1. Slide 6" (152mm) duct pipe (s) over collar (s) until resting on top of fireplace.
2. Bend tabs up and over duct pipe. Using included screws, secure duct pipe to collar thru holes in tabs, making sure screws penetrate thru both duct pipe and collar.
3. Position fireplace.

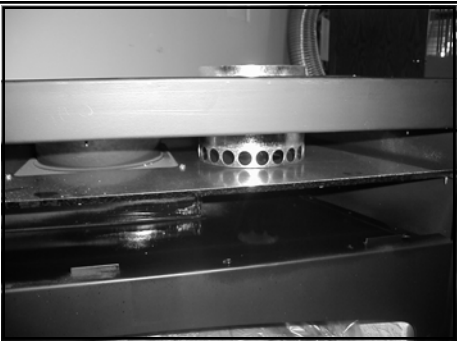


Figure 25c

OPTIONAL #970 HEAT DUCT KIT

INSTALL REGISTER MOUNTING FRAME, JUNCTION BOX, RUN WIRING

Register mounting frame and fan housing are designed to fit between 2" x 4" stud walls, 16" (406mm) on center. Additional framing is required if larger opening exists.

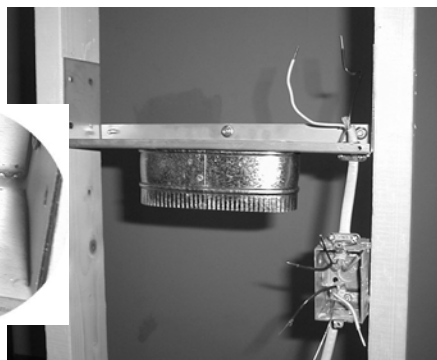


NOTE: Fan motor on heat duct kit may be on opposite side of fan shown in photos. Romex connector and grounding screw are located on motor side of bracket.

1. Locate and mark register position.
2. Place register mounting bracket into opening.
 - A. Level and adjust mounting bracket. Side of mounting bracket should be flush with front of studs, front of mounting bracket should protrude 1/2" (13mm) in front of studs, allowing enough room for sheetrock installation.
 - B. Secure mounting bracket to framing with (4) sheetrock screws, provided.
3. Install junction box on wall in desired location. This box will be used to house the speed control assembly, which controls fan speed and operation.
4. Attach (but do not tighten) flange nuts to mounting studs at back of register mounting bracket.
5. Align (3) slots on fan assembly to studs, slide fan into position. Tighten nuts to secure.
6. Slide fan wire connectors, included, onto fan terminals.



Figure 26a



IMPORTANT: Fan must be properly grounded. Use grounding screw (provided) to secure grounding wire to register mounting bracket.

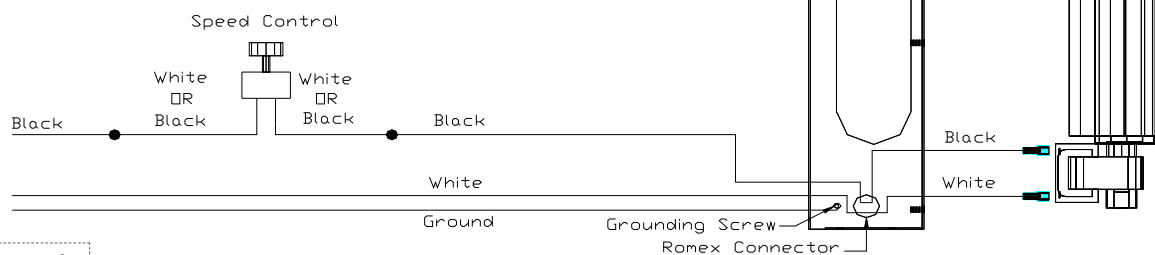


Figure 26b

OPTIONAL #970 HEAT DUCT KIT

RUN DUCT PIPE

1. Run duct pipe to register location. If oval pipe will be used in conjunction with 6" (152mm) round duct pipe, shape round duct pipe to fit **outside** oval duct pipe. Secure with screws provided.
2. If oval duct pipe has not been used, shape 6" (152mm) round duct pipe so it fits **outside** oval collar on register mounting bracket.
 - A. Slide duct pipe over oval collar until it touches register mounting bracket.
 - B. Secure duct pipe to oval collar by placing locking strap around pipe, positioning it above bead on lower end of collar. (This will prevent pipe and locking strap from sliding off collar.)
 - C. Pull locking strap tight enough to firmly secure duct pipe.

OPTIONAL: Duct pipe may be secured with additional screws (provided).

3. If oval duct pipe has been used, slide duct pipe over oval collar on register mounting bracket, secure with sheet metal screws provided.



Figure 27a

COMPLETE THE INSTALLATION

1. Install sheetrock or wall finish material as desired before attaching register cover and fan housing cover plate.
2. With cut-out portion over fan chute, align holes in fan housing cover plate to corresponding holes in register mounting plate and fan assembly. Secure with (4) screws provided.
3. Slide speed control through mounting bracket, secure with mounting nut.
4. Secure mounting bracket to junction box with (2) screws, provided.
5. Install register cover by centering it over fan housing cover plate. Secure to stud wall with provided white mounting screws.
6. Attach cover plate (not provided) and install control knob onto speed control.
7. Complete fireplace installation by following instructions included with fireplace.



Figure 27b



OPTIONAL #970 HEAT DUCT KIT

OPERATING INSTRUCTIONS

1. Upon complete fireplace installation and after the initial burn period, turn fireplace burner ON by following lighting instructions included with fireplace (gas models).
2. Allow fireplace to heat for approximately 15 minutes.
3. Put heat duct fan into operation by turning wall-mounted speed control counter-clockwise until it 'clicks'. The fan should turn on and will be running at its highest speed. Adjust speed to desired air flow level by turning speed control knob counter-clockwise.

MAINTENANCE

The duct register must be kept clear and unobstructed. Clean and vacuum as necessary to remove dust, lint, etc. from fan which will inhibit air flow.

Register cover and fan housing should be removed at least annually to remove dust, lint, etc. from fan. More frequent cleaning may be necessary.

The fireplace must be maintained and services as outlined in the unit installation and operating instructions.

ALTERNATE FLOOR PROTECTION MATERIAL WORKSHEET

How to determine if alternate floor protection materials are acceptable.

All floor protection materials must be non-combustible (i.e., metals, brick, stone, mineral fiber boards, etc.). Any organic materials (i.e., plastics, wood, paper products, etc.) are combustible and must not be used. The floor protection specified may include some form of thermal designation such as R-value (thermal resistance), K-factor (thermal conductivity), or C-factor (thermal conductance).

Procedure:

A. Convert specification to R-value:

- I. R-value given - no conversion needed.
- II. k-factor is given with a required thickness (T) in inches: $R = 1/k \times T$
- III. C-factor is given: $R = 1/C$

B. Determine the R-value of proposed alternate floor protector.

- I. Use formula in step 1 to convert values not expressed as 'R'.
- II. For multiple layers, add R-values of each layer to determine overall R-value.

C. If overall R-value of the system is greater than the R-value of specified floor protector, the alternate is acceptable.

EXAMPLE: The specified floor protector should be 3/4 inch thick material with a k-factor of .84. The proposed alternate is 4" brick with a C-factor of 1.25 over 1/8" mineral board with a k-factor of .29.

Step (a): Use formula above to convert specification to R-value. $R = 1/k \times T = 1/.84 \times .75 = .893$.

Step (b): Calculate R of proposed system.
 4" brick of $C = 1.25$, therefore $R_{\text{brick}} = 1/C = 1/1.25 = .80$
 1/8" mineral board of $k = .29$, therefore $R_{\text{mineral board}} = 1/k = 1/.29 = .431$
 $R_{\text{total}} = R_{\text{brick}} + R_{\text{mineral board}} = .80 + .431 = 1.231$

Step (c): Compare proposed system of R of 1.231 to specified R of .893. Since proposed system R is greater than required, the system is acceptable.

Definitions:

Thermal conductance = $C = \frac{\text{Btu}}{(\text{hr}) (\text{ft}^2) (^\circ\text{F})} = \frac{\text{W}}{(\text{m}^2) (^\circ\text{K})}$

Thermal conductivity = $k = \frac{(\text{Btu}) (\text{in})}{(\text{hr}) (\text{ft}^2) (^\circ\text{F})} = \frac{\text{W}}{(\text{m}) (^\circ\text{K})} = \frac{\text{Btu}}{(\text{hr}) (\text{ft}) (^\circ\text{F})}$

Thermal resistance = $R = \frac{(\text{ft}^2) (\text{hr}) (^\circ\text{F})}{\text{Btu}} = \frac{(\text{m}^2) (^\circ\text{K})}{\text{W}}$

TROUBLESHOOTING

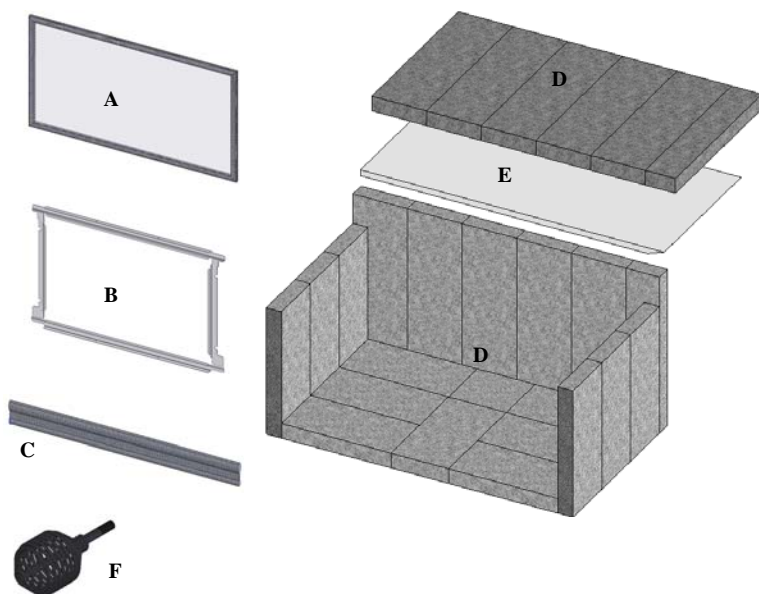
PROBLEM	CAUSE
Smoke back through door when opened.	♦ Negative pressure in the home.
Smoke back when first starting fire.	♦ Chimney not high enough.
Smoke back when fire dies down.	♦ Cool wind cooling poorly insulated chimney.
Smokes out of doors or intake pipe when wind is from a certain direction.	♦ Adjacent structures, trees, etc., too close to chimney. Remove or raise chimney.
	♦ Screen on chimney top too fine, or plugged.
	♦ Restriction within chimney (creosote, mortar, leaves, bird nest, etc.).
	♦ Ice buildup on chimney top.
Fireplace won't generate enough heat.	♦ Wood not seasoned or is wet from snow or rain.
	♦ Not enough wood being burned.
	♦ Obstructed grill openings.
There is an odor coming from the fireplace.	♦ New paint. This odor will disappear after several burn periods. Open doors & windows to ventilate during initial burn period.

Z-42 / Z-42-CD REPLACEMENT PARTS

Consult your dealer for information on optional accessories available for this fireplace.

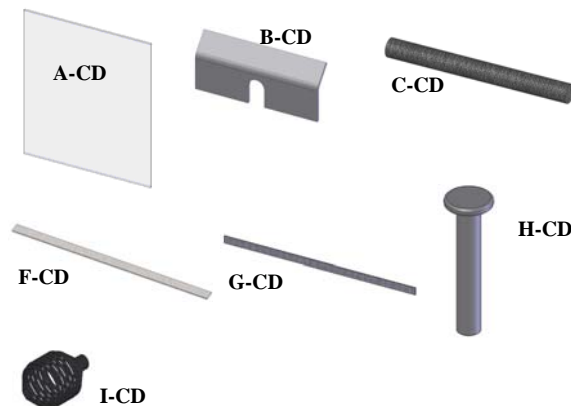
Z-42 REPLACEMENT PARTS

A	150-380	Replacement Glass
B	200-181	Glass Clips (4)
C	810	Glass Gasket
D	300-600	Firebrick (specify size)
E	Z42-900	Refractory Brick Panel
F	500-304Z	Black Spring Handle w/ Rod



Z-42-CD REPLACEMENT PARTS

A-CD	150-250	Replacement Glass
B-CD	200-160	Glass Clips (8)
C-CD	808	Glass Gasket Kit
D	300-600	Firebrick (specify size)
E	Z42-900	Refractory Brick Panel
F-CD	804	Door Gasket Kit
G-CD	500-404	Banger Rope
H-CD	300-349	Door pins
I-CD	500-307	5/16" Black spring Handle



This appliance tested & certified by:
Intertek Testing Services

Model #Z-42
Model #Z-42-CD

Manufactured by:
Hussong Mfg. Co., Inc.
204 Industrial Park Drive
Lakefield, Minnesota 56150
507-662-6641