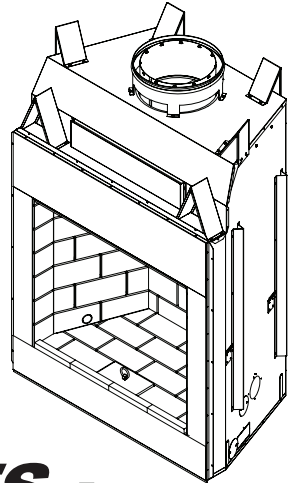




FMI PRODUCTS, LLC
OWNER'S OPERATION AND
INSTALLATION MANUAL
INDOOR WOOD BURNING
(V)GMCAT42/50(H,S)(I,R)A
SERIES
INDOOR/OUTDOOR WOOD
BURNING
(V)JMCAT42/50(H,S)(I,R)A
SERIES MASONRY FIREPLACES
WITH INSULATION



We recommend that our woodburning hearth products be installed and serviced by professionals who are certified in the U.S. by the National Fireplace Institute® (NFI) as NFI Woodburning Specialists or who are certified in Canada by Wood Energy Technical Training (WETT).



These models meet the EPA Wood Burning Fireplace Program Phase 2 emission level. NOTE: To ensure proper fireplace operation, the catalyst should be replaced at a minimum of 3 years and a maximum of 5 years.

SAVE THIS BOOK

This book is valuable. In addition to instructing you on how to install and maintain your appliance, it also contains information that will enable you to obtain replacement parts or accessory items when needed. Keep it with your other important papers.

This fireplace is approved for use as a wood burning fireplace or for use with a vented gas log approved to ANS Z21.60 and Z21.84 standards.

This wood burning fireplace complies with UL127-CAN/ULC-S610-M87 standard as a FACTORY BUILT FIREPLACE.

FOR CANADA: The authority having jurisdiction (such as the municipal building department, fire department, etc.) should be contacted before installation to determine the need to obtain a permit.

INSTALLER: Leave this manual with the appliance.
CONSUMER: Retain this manual for future reference.

For more information, visit www.fmiproducts.com

⚠ WARNING: Improper installation, adjustment, alteration, service or maintenance can cause injury, property damage or loss of life. Refer to this manual for assistance or additional information. Consult a qualified installer or local distributor.

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SAFETY

IMPORTANT: Check local codes before installing this fireplace.

Before beginning the installation of the fireplace, read these instructions through completely.

- This FMI PRODUCTS, LLC fireplace and its components are safe when installed according to this installation manual. Unless you use FMI PRODUCTS, LLC components, which have been designed and tested for the fireplace system, you may cause a fire hazard.
- The FMI PRODUCTS, LLC warranty will be voided by and FMI PRODUCTS, LLC disclaims any responsibility for the following actions.
 - a. Modification of the fireplace, components, doors, air inlet system and damper control.
 - b. Use of any component part not manufactured or approved by FMI PRODUCTS, LLC in combination with a FMI PRODUCTS, LLC fireplace system.

Proper installation is the most important step in ensuring safe and continuous operation of the fireplace. Consult the local building codes as to the particular requirements concerned with the installation of all factory built fireplaces.

⚠ WARNING: Do not install a fireplace insert in this box unless the manufacturer's instructions with the insert specifically state this fireplace has been tested for use with this insert.

FOR YOUR SAFETY

- Do not store or use gasoline or any other flammable vapors or liquids in the vicinity of this or any other appliance.
- Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies.
- Do not place clothing or other flammable materials on or near the appliance.
- Never leave children unattended when a fire is burning in the fireplace.

⚠ WARNING: Use solid wood or processed solid fuel firelogs only. When processed wood fuel fire logs are used, do not poke or stir the logs while they are burning. Use only fire logs that have been evaluated for the application in fireplace and refer to fire log warnings and caution markings on packaging prior to use.

This fireplace is not intended to be used as a substitute for a furnace to heat an entire home. Use for supplemental heat only.

SPECIFICATIONS

42" MODELS

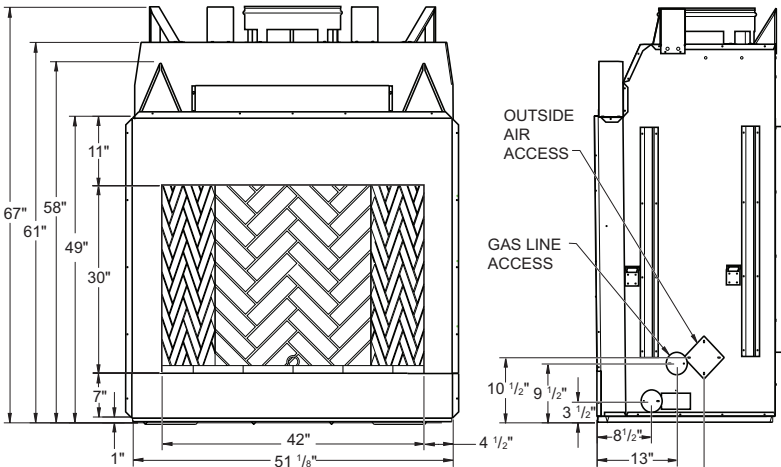
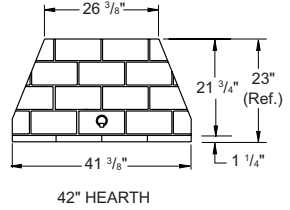
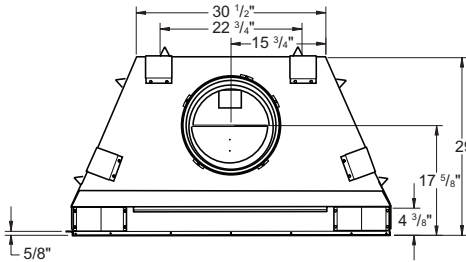
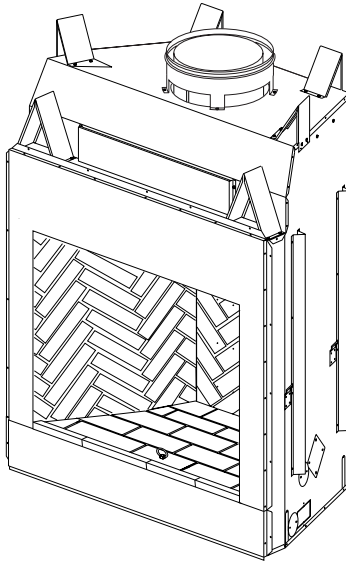


Figure 1 - 42" Models (V)GMCAT42(H,S)(I,R)A AND (V)JMCAT42(H,S)(I,R)A Series

SPECIFICATIONS *Continued*

50" MODELS

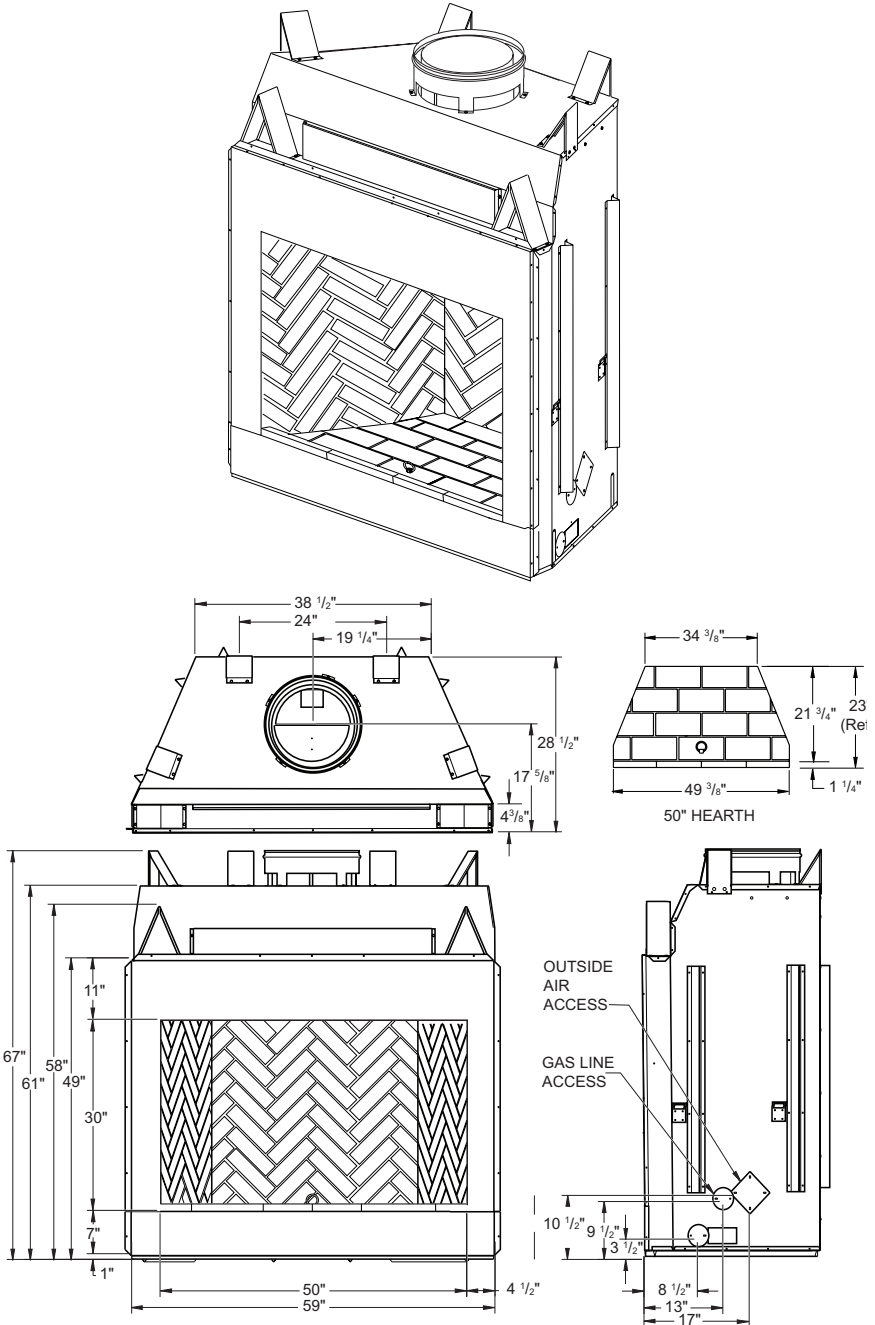


Figure 2 - 50" Models (V)GMCAT50(H,S)(I,R)A AND (V)JMCAT50(H,S)(I,R)A Series

FIREPLACE INSTALLATION

SELECTING LOCATION

To determine the safest and most efficient location for the fireplace, you must take into consideration the following guidelines:

1. The location must allow for proper clearances (see Figures 5 and 6).
2. Consider a location where fireplace will not be affected by drafts, air conditioning ducts, windows or doors.
3. A location that avoids cutting of joists or roof rafters will make installation easier.
4. An outside air kit is available with this fireplace (see *Optional Outside Air Kit* on page 7).

MINIMUM CLEARANCE TO COMBUSTIBLES

Back and sides of fireplace	1 1/2" min.*
Front of fireplace	48" min.
Floor**	0" min.
Perpendicular wall to opening	18" min.
Top spacers	0" min.
Mantel clearances	see <i>Mantels</i> , page 6
Chimney outer pipe surface	2" min.

* Not required at nailing flanges

** See step 2 of *Framing*

WARNING: Do not pack required air spaces with insulation or other materials.

Minimum/Maximum Chimney Height for Residential Installation

Minimum height of chimney, measured from base of fireplace to flue gas outlet of termination, is 16 feet for straight flue or a flue with one elbow set. Maximum distance between elbows is 6 feet. For systems with two elbow sets, minimum height is 22 feet. Maximum height of any system is 50 feet. This measurement includes fireplace, chimney sections and height of termination assembly at level of the flue gas outlet (see Figure 14, page 10).

Minimum/Maximum Chimney Height for Outdoor Installation

Minimum height of chimney, measured from base of fireplace to flue gas outlet of termination, is 9.5 feet (minimum of 4 feet of chimney pipe sections required for outdoor installation).

FRAMING

1. Frame opening for fireplace using dimensions shown in Figures 2 and 3.
2. If fireplace is to be installed directly on carpeting, tile (other than ceramic) or any combustible material other than wood flooring, fireplace must be installed upon a metal or wood panel extending full width and depth of fireplace.
3. Set fireplace directly in front of this opening and slide unit back until nailing flanges touch side framing.
4. Check level of the fireplace and shim with sheet metal if necessary.
5. Before securing fireplace to prepared framing, ember protector (provided) must be placed between hearth extension (not supplied) and under bottom front edge of fireplace to protect against glowing embers falling through. If fireplace is to be installed on a raised platform, a Z-type ember protector (not supplied) must be fabricated to fit your required platform height. Ember protector should extend under fireplace a minimum of 1 1/2". Ember protector should be made of galvanized sheet metal (28 gauge minimum) to prevent corrosion.
6. Using screws or nails, secure fireplace to framing through flanges located on sides of fireplace.

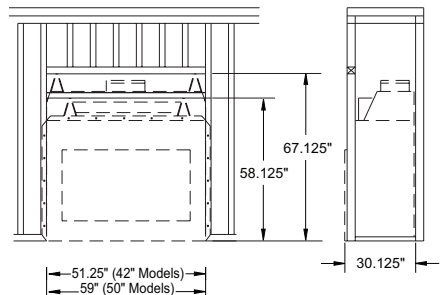


Figure 3 - Framing Dimensions

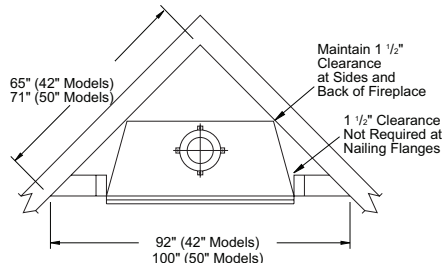


Figure 4 - Corner Installation

FIREPLACE INSTALLATION

Continued

Note: For outdoor installations, fireplace enclosure must allow for adequate drainage and fresh air ventilation. It is recommended that a sealed, corrosion resistant catch pan with provision for drainage be installed under fireplace within fireplace enclosure.

HEARTH EXTENSION

A hearth extension projecting a minimum of 20" in front of and a minimum of 12" beyond each side of fireplace opening is required to protect combustible floor construction in front of fireplace. Fabricate a hearth extension using a material which meets the following specifications: a layer of noncombustible, inorganic material having a thermal conductivity of $K=0.84$ BTU IN/FT, HR. F (or less) at 1" thick. For example, if the material selected has a K factor of 0.25, such as glass fiber, the following formula would apply:

$$\frac{0.25 \times 1.0"}{0.84} = 0.30" \text{ thickness required}$$

Thermal conductivity "K" of materials can be obtained from manufacturer or supplier of noncombustible material. If hearth extension is to be covered, use noncombustible material such as tile, slate, brick, concrete, metal, glass, marble, stone, etc. Provide a means to prevent hearth extension from shifting and seal gap between fireplace frame and hearth extension with a noncombustible material (see Figure 5).

⚠ WARNING: Hearth extension is to be installed only as shown in Figure 4.

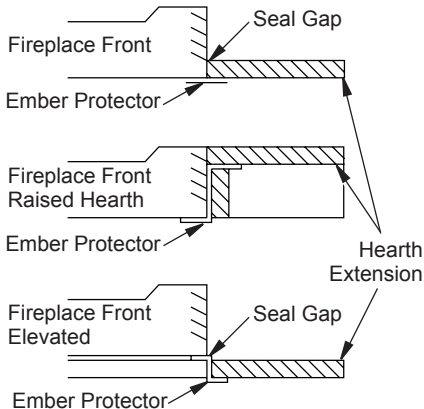


Figure 5 - Hearth Extension

MANTELS

A mantel may be installed if desired (see Figure 6). Woodwork such as wood trims, mantels or any other combustible material projecting from front face must not be placed within 18" of fireplace opening. Combustible materials above 18" and projecting more than 1 1/2" from fireplace must not be placed less than 21" from the top opening of the fireplace (NFPA STD 211, Sec. 7-3.3.3).

Mantels or any other combustible material also may come up to side edge of black metal face of fireplace as long as projections from front face fall within limit shown in Figure 6.

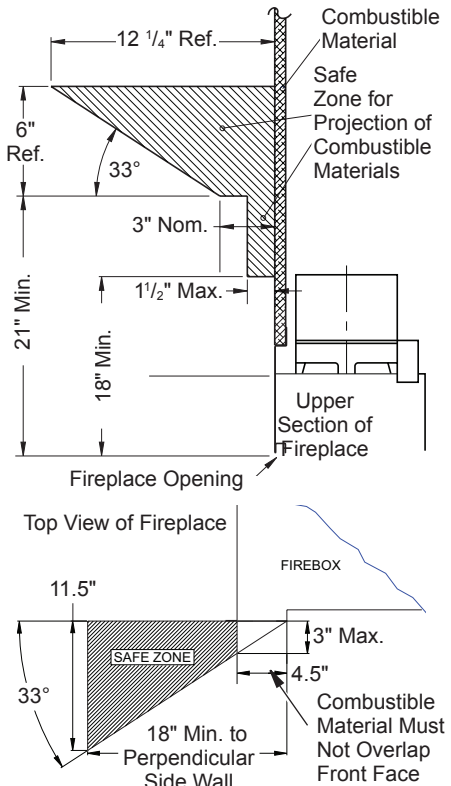


Figure 6 - Mantel Clearances to Combustible Material

VENTING INSTALLATION

OPTIONAL OUTSIDE AIR KIT (MODEL AK4/AK4F)

The installation of an outside air kit should be performed during the rough framing of the fireplace due to the nature of its location. Outside combustion air is accessed through a vented crawl space (AK4F) or through a sidewall (AK4).

CAUTION: Combustion air inlet ducts shall not terminate in attic space.

The maximum height for the air vent can not exceed 3 feet below the flue gas outlet of the termination.

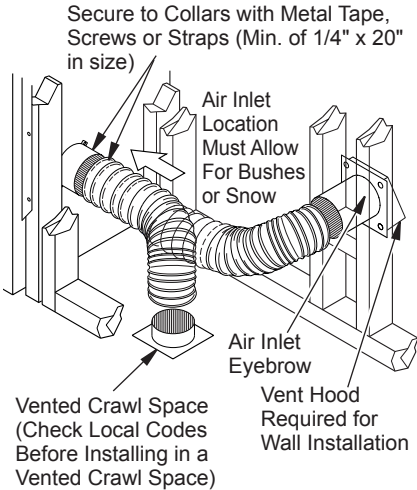


Figure 7 - Outside Air Kit

CHIMNEY PIPE

The FMI PRODUCTS, LLC chimney system consists of 12", 18", 24", 36" and 48" snap-lock, double-wall pipe segments, planned for maximum adaptability to individual site requirements. Actual lengths gained after fitting overlaps must be taken into consideration (lineal gain) and are given in the lineal gain chart (see Figure 8). Lineal Gain is the actual measurable length of a part after two or more parts are connected. For Canada, use chimney parts designated "HT".

WARNING: The opening in the collar around the chimney at the top of the fireplace must not be obstructed. Never use blown insulation to fill the chimney enclosure.

LINEAL GAIN		
PART NO.	DESCRIPTION	GAIN
Georgian	Fireplace	66 1/2"
12-12DM 12-12HT	Pipe Section	10 5/8"
18-12DM 18-12HT	Pipe Section	16 5/8"
24-12DM 24-12HT	Pipe Section	23 5/8"
36-12DM 36-12HT	Pipe Section	34 5/8"
48-12DM 48-12HT	Pipe Section	46 5/8"
RLT-12D RLT-12HT	Round Termination	7 3/4"*
STL-12D	Square Chase-Top with Slip Section	7" to 15"*

* The lineal gain for the terminations is measured to the flue gas outlet height.

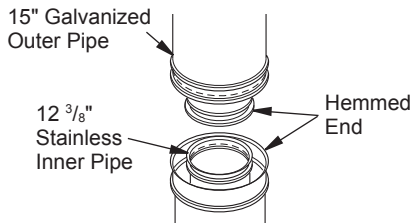


Figure 7 - Lineal Gain

ASSEMBLY AND INSTALLATION OF DOUBLE WALL CHIMNEY SYSTEM

Each double wall chimney section consists of a galvanized outer pipe, a stainless steel inner flue pipe and a wire spacer. The pipe sections must be assembled independently as the chimney is installed. When connecting chimney directly to the fireplace, the inner flue pipe section must be installed first with the lanced side up. The outer pipe section can then be installed over the flue pipe section with the hemmed end up. Press down on each pipe section until the lances securely engage the hem on the fireplace starter. The wire will assure the proper spacing between the inner and outer pipe sections.

VENTING INSTALLATION

Continued

Continue to assemble chimney sections as outlined above, making sure that both the inner and outer pipe sections are locked together. When installing double wall snap-lock chimney together, it is important to assure the joint between the chimney sections is locked. Check by pulling chimney upward after locking. The chimney will not come apart

if properly locked. It is not necessary to add screws to keep the chimney together (exception, see Figure 9).

USING ELBOW OFFSETS (30E-12DM)

1. To achieve desired offset, you may install combinations of 12", 18", 24", 36" and 48" length of double wall pipe (see offset chart and Figure 9).
2. Chimney weight above offset rests on return elbow. Straps must be securely nailed to rafters or joists (see Figure 9, details A and B).
3. Maximum length of pipe between supports (return elbow or 12S-12DM) is 6' of angle run. Maximum of two 6' angle run sections per chimney system (see Figure 11, page 9).
4. All pipe connections between the offset and return must be secured with two screws on the outer pipe only (see Figure 9). Do not penetrate the inner stainless.

OFFSET A	RISE B	CHIMNEY LENGTH				
		12"	18"	24"	36"	48"
4 3/8"	16 3/8"	ELBOW SET ONLY				
9 3/4"	25 1/2"	1				
12 3/4"	30 3/4"		1			
15"	34 3/4"			1		
18"	40"	1	1			
21 1/4"	46 1/4"				1	
23 3/4"	49 1/4"		1	1		
27 3/4"	56 3/4"					1
30"	60 3/4"	1			1	
33"	66"					1
36"	71"	1				1
38 1/4"	75"				2	
41 1/4"	80 1/4"	1	1		1	
45"	86 3/4"				2	
46 3/4"	89 1/2"	1	1			1
51"	97"				1	1
53 1/4"	101"				2	
56 1/4"	106 1/4"					2
59 1/4"	111 1/2"		1		1	1
61 3/4"	115 1/2"	1				2
64 3/4"	120 3/4"		1			2
68 1/4"	127"				2	1
70"	130"	1	1			2
74 1/4"	137 1/2"	1			2	1
76 3/4"	141 1/2"		1		2	1
79 3/4"	146 3/4"				4	

OFFSET CHART (22-50 FT. SYSTEM HEIGHT)

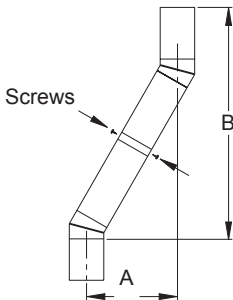


Figure 9 - Elbow Offset

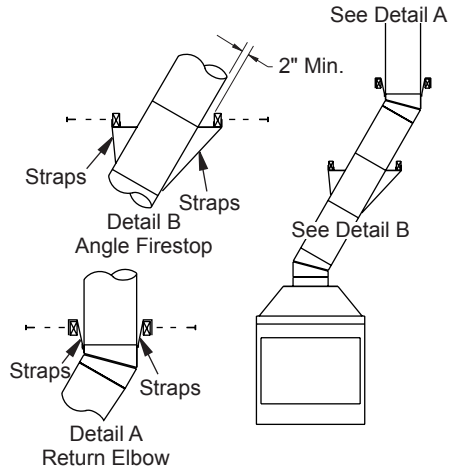


Figure 10 - Ceiling Support Pipe 12S-12DM

VENTING INSTALLATION

Continued

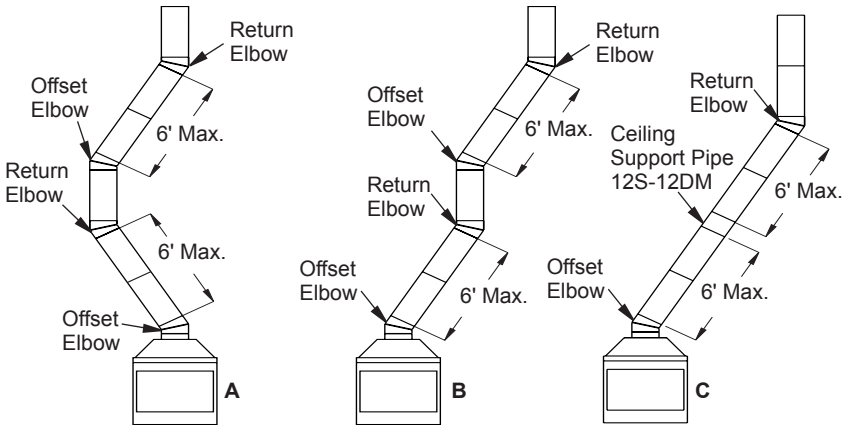


Figure 11 - Typical Offset Terminations

FIRESTOP SPACERS (FS-10)

Firestop spacers are required at each point where the chimney penetrates a floor space. Their purpose is to establish and maintain the required clearance between the chimney and the combustible materials. When the pipe passes through a framed opening into a living space above, the firestop must be placed onto the ceiling from below as shown in Figure 12.

They also provide complete separation from one floor space to another or attic space as required by most codes. When the double wall pipe passes through a framed opening into an attic space, the firestop must be placed into an attic floor as shown in Figure 13.

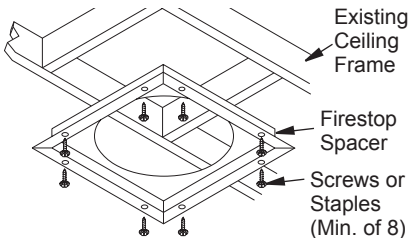


Figure 12 - Firestop Spacer with Living Space Above Ceiling

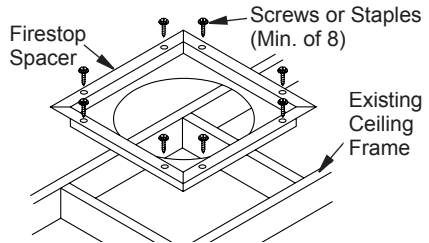


Figure 13 - Firestop Spacer with Attic Space Above Ceiling

PENETRATING ROOF

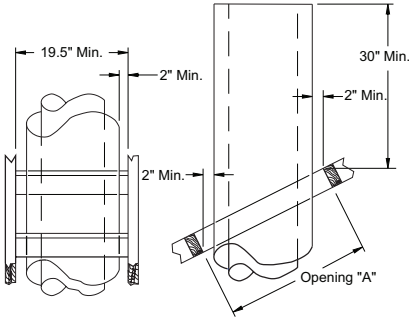
To maintain a 2" clearance to the pipe on a roof with a pitch, a rectangular opening must be cut.

1. Determine center point through which pipe will penetrate roof.
2. Determine center point of roof. Pitch is distance the roof drops over a given span, usually 12". A 6/12 pitch means that roof drops 6" for each 12" measured horizontally down from roof rafters.
3. Use roof opening chart (Figure 14, page 10) to determine correct opening length and flashing required.
4. Remove shingles around opening measured. Cut out this section.

VENTING INSTALLATION

Continued

5. Add next sections of pipe until end penetrates roof line. Check to see that proper clearances are maintained. Extend chimney by adding sections of double wall pipe until pipe is minimum of 30" above highest point of roof cutout. Termination and chimney must extend a minimum of 36" above highest point where it passes through roof.



Pitch	Slope	Opening "A" Max.	Used Flashing Model No.
Flat	0°	19.5"	V6F-10DM
0-6/12	26.6°	22"	V6F-10DM
6/12-12/12	45.0°	27"	V12F-10DM

Figure 14 - Roof Opening Measurements

FLASHING INSTALLATION (V6F-10DM OR V12F-10DM)

Determine the flashing to be used with the roof opening chart. Slide flashing over pipe until base is flat against roof. Replace as many shingles as needed to cover exposed area and flashing base. Secure in position by nailing through shingles (see Figure 15). **DO NOT NAIL THROUGH FLASHING CONE.**

Installing Flashing on a Metal Roof

When installing the flashing on a metal roof, it is required that putty tape be used between the flashing and the roof. The flashing must be secured to the roof using #8 x 3/4" screws and then sealed with roof coating to prevent leakage through the screw holes. A roof coating must also be applied around the perimeter of the flashing to provide a proper seal.

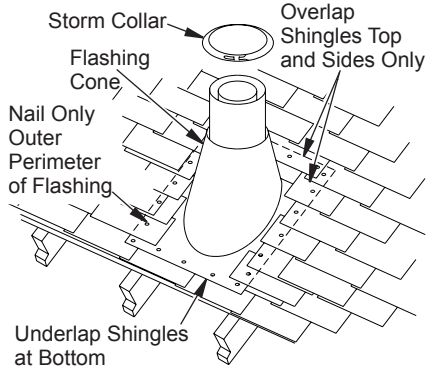


Figure 15 - Flashing Installation

Storm Collar Installation (SC2-1)

Place storm collar over pipe and slide down until it is snug against the open edge of the flashing (see Figure 16). Apply waterproof caulk around the perimeter of the collar to provide a proper seal.

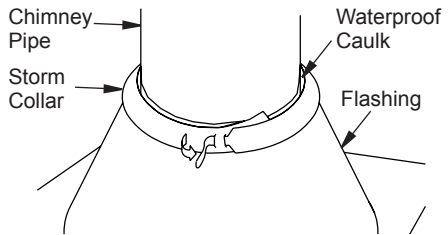


Figure 16 - Storm Collar

VENTING INSTALLATION

Continued

Terminations/Spark Arrestor

The fireplace system must be terminated with the listed round top or chase terminations. In any case, refer to the installation instructions supplied with the termination.

CAUTION: Do not seal openings on the rooftop flashing. Follow the installation instructions provided with the termination being used.

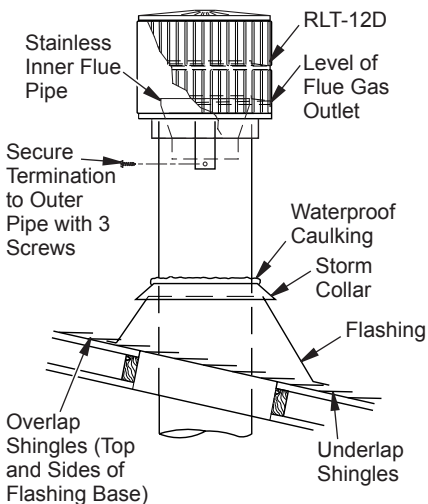


Figure 17 - Termination

CHASE INSTALLATIONS

Instructions for chase installations are included with the chase style termination chosen. In a multiple chase installation, be sure to provide adequate distance between terminations to prevent smoke spillage from one termination to another. We suggest that terminations be separated at least 24", center to center and stacked at a vertical height difference of 18" (see Figure 18).

Note: If a decorative shroud is to be installed, contact the manufacturer for specifications.

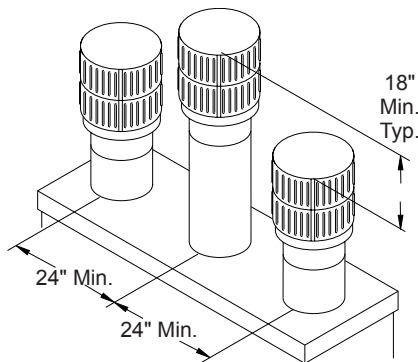


Figure 18 - Multiple Chase Installation

10 FOOT RULE

All flue gas outlet chimney terminations must extend a minimum of 3 feet in height above the highest point where it passes through the roof and must be at least 2 feet above the highest point of the roof that is within a horizontal distance of 10 feet (see Figure 19).

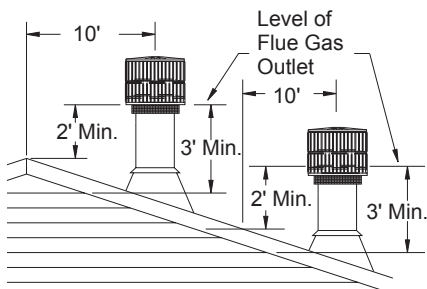


Figure 19 - 10 Foot Rule

FINISHING FIREPLACE

Combustible materials, such as wallboard, gypsum board, sheet rock, drywall, plywood, etc. may make direct contact with sides and top around the fireplace face. It is important that combustible materials do not overlap the face itself. Brick, glass, tile or other noncombustible materials may overlap the front face provided they do not obstruct essential openings like louvered slots or any other opening. When overlapping with a noncombustible facing material, use only noncombustible mortar or adhesive.

FIREBRICK WALL INSTALLATION

IMPORTANT: Installation of brick should be done after the fireplace is placed in a permanent location.

1. The fireplace is shipped with the hearth preinstalled. It is held in place for shipping with 3 shipping brackets (Figure 20). Remove these brackets before installing any of the other firebrick walls.

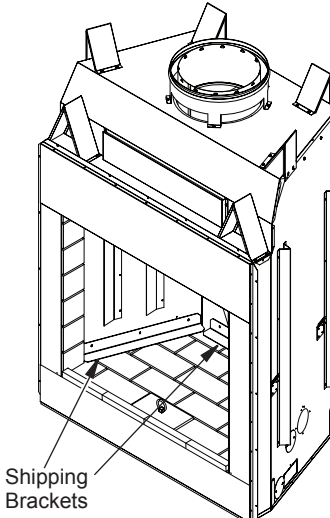


Figure 20 - Removing Shipping Brackets

2. Install the left and right firebrick walls. There is a bracket with 2 tabs on the bottom of each firebrick wall. Angle the wall into the fireplace opening and into the slots on the side of the hearth (Figure 21), then tilt the top of the panel toward the firebox surround.

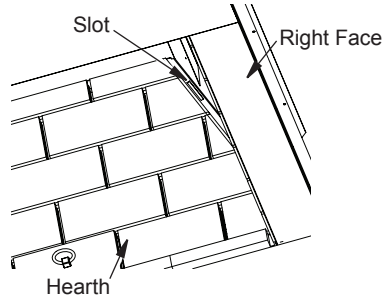


Figure 21 - Slots for Firebrick Walls

3. Secure the firebrick wall using 2 of the retainers provided. The bracket will slip underneath the metal lip on the top of the wall and screw into the inner dome of the fireplace (Figure 22).

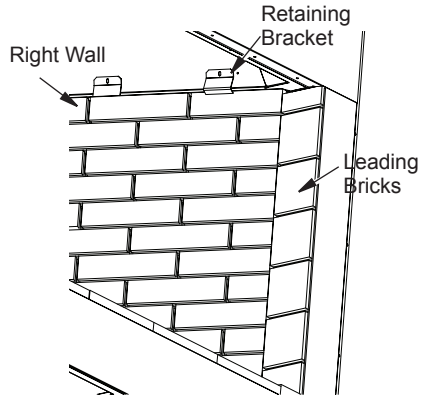


Figure 22 - Installing Side Walls

FIREBRICK WALL INSTALLATION

Continued

4. Install the rear firebrick wall last. Place the wall face side down on the hearth with the bottom of the wall toward the rear of the firebox and the top toward the front of the fireplace. Tilt the wall up toward the back of the firebox. Secure with 2 rear retaining brackets provided (Figure 23).

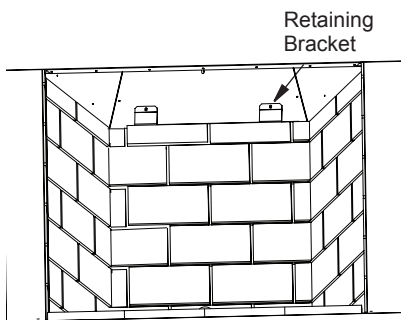


Figure 23 - Installing Rear Wall

5. It is recommended that the joints between all firebrick walls be grouted for a more finished look. See left for grouting instructions.

For more information and to watch a how to video go to www.fmiproducts.com and select Technical Support.

GROUTING INSTRUCTIONS

Material provided:

Bag of cement

Bag of sand

Material required:

Piping bag

Joints striker

Heavy duty mixing bucket

Sponge or Wet Cloth

1. Moisten brick surface with damp sponge or spray bottle just prior to application. When bricks are wet, any excess grout mixture on bricks will easily wipe off.
2. In a heavy duty mixing bucket, add equal parts cement and sand. Add enough water and mix together well using a power drill with mixing wand attachment to a yogurt like consistency. Not adding enough water can lead to grout falling out after burning.
3. The overall length of piping bag should be about 16". If the bag is longer than 16", cut it down to size by removing end with larger opening. This will make the bag easier to handle.
4. Put grout mixture into piping bag making sure the smaller opening is downward and over a moist towel to avoid spilling. Place a wet towel over the bucket making sure it is directly on the surface of grout mixture. This will keep the mixture moist and it will not dry out before use.
5. Grout all joints where two firebrick walls come together.
6. Using a trowel, remove excess grout mixture by moving trowel in the direction of the joint. Grout mixture in the joint should now be flush with brick surface. If not enough grout is applied into each space, grout may fall out after burning.
7. Using a joint striker, smooth out grout line.

**Allow 72 hours before
operating fireplace.**

FIREBRICK WALL INSTALLATION

Continued

INSTALLING SCREEN

1. Slide round end of screen rod into rings at top of screen. Attach one push-on nut to end of rod before attaching last ring of screen.
2. Insert the round end screen rod into hole on the left and right side of smoke shelf (Figure 24).
3. Mount flat end of screen rod with #10 x 5/8" to center of smoke shelf.
4. Install other screen rod in same manner.

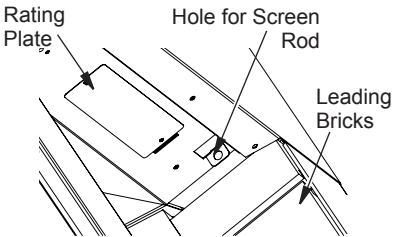


Figure 24 - Installing Fireplace Screen

INSTALLING GRATE RETAINERS

1. Place the provided grate retainers on the hearth as shown in Figure 25. The back of the retainer will be flush with the rear firebrick wall. Mark the center of the hole on the hearth with a marker.
2. Drill two holes in the hearth in the marked locations using a masonry 3/16" drill bit.
3. Secure grate retainer with masonry screws provided.

⚠ WARNING: Risk of fire! Replace grate with FMI PRODUCTS, LLC grate only (see Parts, page 22). This grate has been designed to keep the operation of your fireplace safe and efficient.

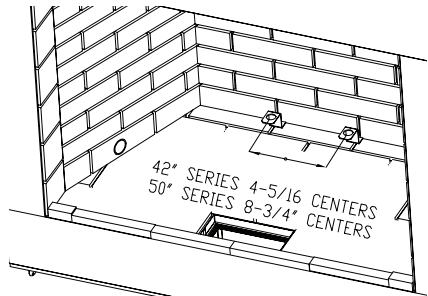


Figure 25 - Installing Grate Retainers

OPTIONAL GAS LINE INSTALLATION

Gas line hook up should be done by your supplier or a qualified service person.

Note: Before you proceed, make sure your gas supply is turned off.

Use only a 1/2" black iron pipe and appropriate fittings.

1. Remove knockout indentation on refractory or firebrick wall located above refractory hearth floor. Knockout indentation must be firmly tapped with any solid object such as a 1/2" dowel until it is released. Remove fragmented portions of refractory (see Figure 26).

2. Remove gas line cover plate located on either side of fireplace and pull out insulation from gas line conduit sleeve. Save insulation for reuse. Replace screws.

3. Run a 1/2" black iron gas line into fireplace through the rear at gas line conduit sleeve (if using a raised platform, add height). Provide sufficient gas line into fireplace chamber for fitting connection (see Figure 27).

Note: Secure incoming gas line to wood framing to provide rigidity for threaded end.

4. Repack insulation around gas line and into sleeve opening. Seal any gaps between gas line and refractory knockout hole with refractory cement or commercial furnace cement. Install the gas appliance or cap-off gas line if desired.

⚠ WARNING: Do not operate an unvented gas log set in this fireplace with the chimney removed.

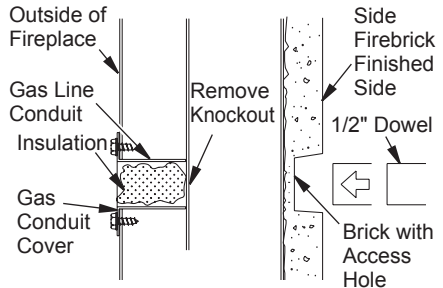


Figure 26 - Gas Line Access

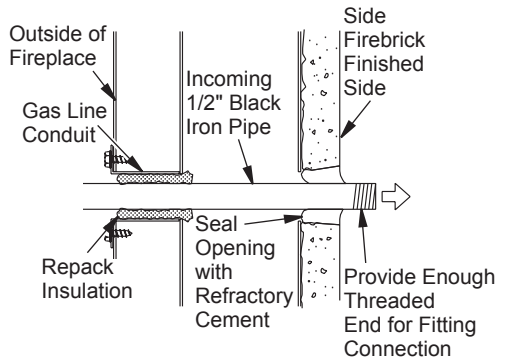


Figure 27 - Gas Line Installation

⚠ CAUTION: All gas piping and connections must be tested for leaks after the installation is completed. After ensuring that the gas valve is on, apply soap and water solution to all connections and joints. Bubbles forming show a leak. Correct all leaks at once. DO NOT USE AN OPEN FLAME FOR LEAK TESTING AND DO NOT OPERATE ANY APPLIANCE IF A LEAK IS DETECTED. LEAK TESTING SHOULD BE DONE BY A QUALIFIED SERVICE PERSON.

A gas line or gas log lighter may be installed for the purpose of installing a vented or vent-free decorative gas appliance incorporating an automatic shutoff device and complying with the *Standard for Decorative Gas Appliances for Installation in Vented Fireplaces, ANSI Z21.60* or *American Gas Association draft requirements for Gas Fired Log Lighters for Wood Burning Fireplaces, Draft NO. 4* dated August, 1993.

If you install a decorative gas appliance (vented gas log), the decorative gas appliance must comply with the *Standard for Decorative Gas Appliance for Installation in Solid Fuel Burning Fireplaces, ANS Z21.60* or *Z21.84* and shall also be installed in accordance with the *National Fuel Gas Code, ANSI Z223NFPA 54* latest edition.

OPTIONAL GAS LINE INSTALLATION

Continued

If you wish to install an unvented (vent-free) gas log set, only unvented gas log sets which have been found to comply with the standard for unvented room heaters, ANSI Z21.11.2 are to be installed in this fireplace.

⚠ WARNING: If the fireplace has been used for wood burning, the firebox and chimney must be cleaned of soot, creosote and ashes by a qualified chimney cleaner. Creosote will ignite if heavily heated.

⚠ WARNING: When using a decorative vented gas log, the damper must be removed or permanently locked in the fully open position and the glass doors must be in the fully open position.

PUREFIRE HOOD INSTALLATION

1. The PureFire hood supplied with this fireplace is packaged in a separate box and placed in the firebox during shipping.
2. Remove hood from box. Locate brackets (quantity 2) and screws (quantity 4) for hood installation in the hardware bag.
3. Using screws provided, secure the bracket to the inner dome of the fireplace as shown in Figure 28. The left and right bracket are different. The edge that is straight will be closer to the fireplace opening.
4. Lift hood up into the fireplace and place it on the retaining brackets (Figure 28). The rear of the hood will be touching the rear of the fireplace.

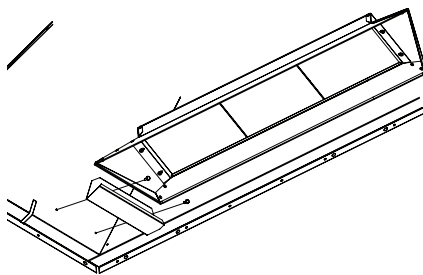


Figure 28 - Installing PureFire Hood

AIR DEFLECTOR AND GLASS DOOR INSTALLATION

INSTALLING AIR DEFLECTORS (42" MODELS ONLY)

Slide air deflector in between the front side face and side brick panel (see Figure 30, page 17). The notched end of the deflector sits on bottom hearth. Air deflector does not require any fastening.

The front side faces and side brick panels will hold the deflector in place (see Figure 30, page 17).

DOOR FRAME MODELS BDMO42/50E/G/C

Installation

1. Remove screws from smoke shelf (see Figure 29, page 30).
2. Mount top door frame and secure with screws provided (see Figure 29, page 17).
3. Place bottom door frame on top of ash lip at front of fireplace (see Figure 30, page 17).
4. Secure bottom door frame to brick with two hex screws provided as shown in Figure 30, page 17 using a 7/16" open end or adjustable wrench.

AIR DEFLECTOR AND GLASS DOOR INSTALLATION

Continued

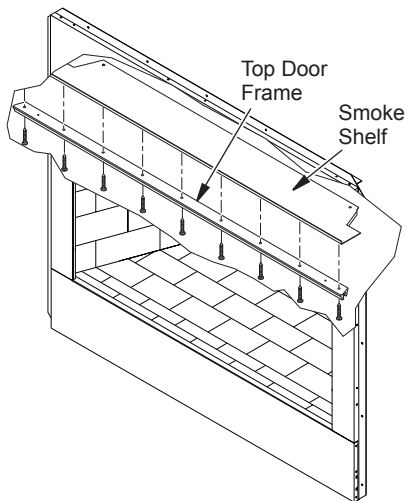


Figure 29 - Installing Top Door Frame

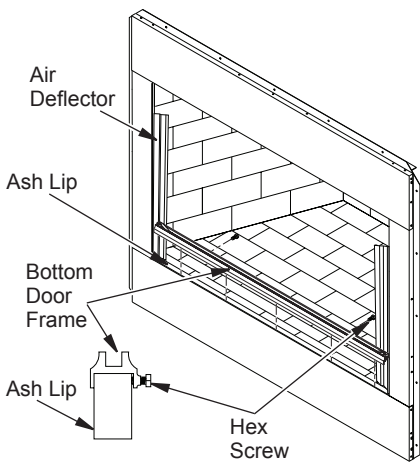


Figure 30 - Installing Bottom Door Frame and Air Deflector

INSTALLING GLASS DOORS

Spring clips have been installed but some adjustments may be needed. Install the doors using the following steps:

1. With bifold doors completely folded, insert bottom pivot pin into pivot hole located near bottom corner of front face opening and swing door to vertical position making sure top pins slide into door track. Door is installed when top door pin snaps into spring clip.
2. Repeat step 1 for remaining door.

If you find the doors do not close properly or do not appear level or straight, proceed with section on door adjustment,

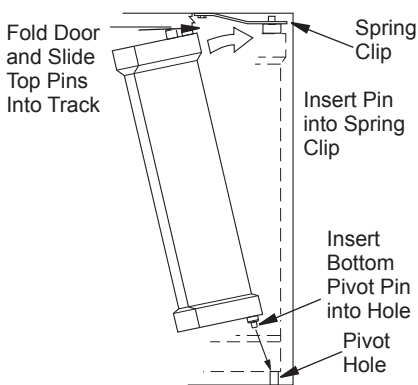


Figure 31 - Installing Bi-Fold Doors

DOOR ADJUSTMENT

Remove doors and slightly loosen lower pivot clips and upper spring clips. Replace doors and fully close them. Use 1/8" shims (any material) to level doors. Once proper setting is achieved, carefully open doors enough so that you can access spring clips with a phillips screwdriver. Tighten screws. See Figure 32.

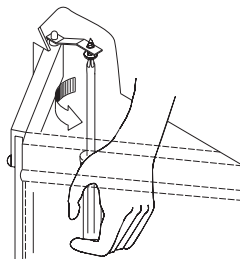


Figure 32 - Adjusting Bi-Fold Doors

OPERATION AND MAINTENANCE GUIDELINES

GLASS DOORS

Glass doors are optional with the fireplace. When fireplace is in operation, doors must be fully opened or fully closed position only or a fire hazard may be created (see Figure 33).

A fireplace equipped with glass doors operates much differently than a fireplace with an open front. A fireplace with glass doors has a limited amount of air for combustion.

Excessive heat within the fireplace can result if too large a fire is built or if combustion air gate is not completely open. The following tips should be followed to assure that both the fireplace and glass door retain their beauty and function properly. Both the flue damper and glass doors must be fully opened before starting fire. This will provide sufficient combustion air and maintain safe temperatures in firebox.

IMPORTANT: The glass must be allowed to warm slowly and evenly. The tempered glass will withstand a gradual temperature rise to 550° F, which is more than a normal fire will generate. Such materials as pitch/wax laden logs, very dry mill end lumber and large amounts of paper or cardboard boxes can create an excessively hot fire and should not be burned in this fireplace. Always keep the fire well back from the doors and never allow flames to contact the glass.

WARNING: Fireplaces equipped with glass doors should be operated only with doors fully opened or doors fully closed. Doors, if left partly open, may draw gas and flame out of the fireplace opening creating risks of both fire and smoke.

Cleaning Glass

Clean glass with any commercial glass cleaner or soap and water. Do not use any abrasive material to clean glass. Do not clean glass with any cool water if glass is still hot from the fire and smoke.

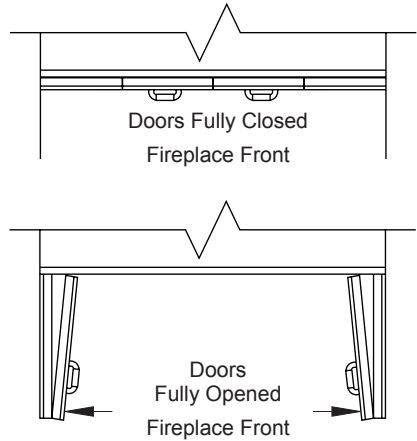


Figure 33 - Bi-Fold Glass Doors

OUTSIDE AIR AND DAMPER HANDLE OPERATION

The damper handle, which opens and closes the damper blade, is located in the upper front face of the fireplace. Pushing the handle forward and up through the keyway slot will free damper blade to automatically open. Pushing the handle forward and down will lock damper blade closed (see Figure 34).

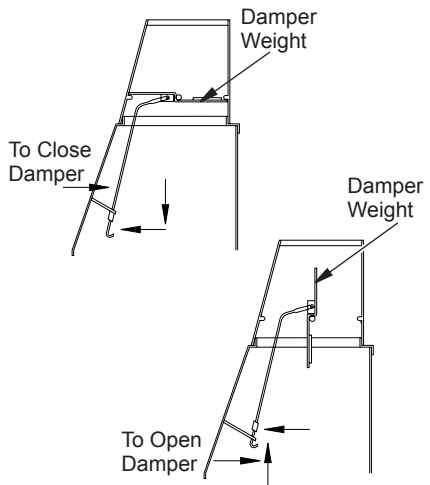


Figure 34 - Operating Damper Handle

PUREFIRE EMISSION CONTROL SYSTEM

This fireplace is equipped with a PureFire Emission Control System. The Catalytic Hood system reduces particulates emissions in a wood burning fireplace to meet the EPA Wood-Burning Fireplace Program Phase 2 emission level.

The EPA qualifying label, shown on page 20, will be affixed to the catalyst. Before lighting the first fire, remove and maintain this label in a safe place if needed for permits or building inspection. Prior to beginning installation, contact your local building official to determine the need to obtain a permit. For proper operation, catalyst must be replaced every 3 to 5 years.

FUELING GUIDELINES

The fireplace grate must always be secured to the retaining brackets provided. The position of the grate must be centered against the back wall of the firebox.

Burn only dry, seasoned (cured) wood with less than 20% moisture. Avoid the use of treated, painted and laminated wood. Never burn garbage or other foreign materials. Do not use artificial logs, colored newspaper or petroleum based fire starters. Avoid wood with high salt content. All of these materials may contain compounds which can shorten the life of the catalyst. Wet or unseasoned wood may lower catalytic temperatures and result in inefficient operation.

The catalyst is designed to function at optimum efficiency when the fireplace is burning clean, dry, cord wood as fireplace fuel. A simple visual inspection of the chimney during the wood burning process will determine catalyst performance.

The fuel load should always be placed on the back of the grate. Use clean dry wood, seasoned cord wood is the best choice. Never burn trash, plastics, gasoline, rubber, industrial solvents, flammable liquids, naphtha, household garbage, material treated with petroleum products, leaves, paper products, cardboard or salt driftwood.

Refer to your FMI PRODUCTS, LLC *Homeowner's Guide* included with your fireplace for proper fire building technique and ash removal procedures. These fueling guidelines must be followed in order to achieve maximum emissions performance from the PureFire System.

OPERATION

The proper use of a wood burning fireplace equipped with the catalyst will significantly reduce the emissions that it produces. Simple fuel considerations with regard to moisture content, size, and quality of fuel will help control the production of wood smoke and improve the performance of the catalyst and fireplace efficiency. With proper care, the catalyst will provide years of fuel savings and lowered emissions. By following some simple guidelines, you will ensure maximum performance and longevity.

The smoke that is usually seen coming out of a chimney is essentially a combination of unburned fuel (carbon and hydrogen) and moisture in the form of water vapor. The catalyst is a technology that provides secondary combustion for the wood burning process.

MAINTENANCE

The PureFire System is a maintenance free technology. Do not attempt to remove or clean the combustor. The direct flame from the fire will clean the combustor. Only a certified technician should remove the unit. To ensure proper fireplace operation, the PureFire System should be replaced every 3 to 5 years (see *Parts* on page 22).

NOTE: Chimney smoke may be visible during the first 8 to 10 minutes of fireplace operation when the fire is first getting started and the final 8 to 10 minutes of operation while the fire is dissipating. Under normal operating conditions, you should see little or no smoke coming out of the chimney. If continuous smoke is visible, make sure only dry seasoned wood is being burned. If visible smoke continues, the combustor has ceased to function or there is thermal crumbling. Call FMI PRODUCTS, LLC at 1-866-328-4537 for replacement parts.

PUREFIRE EMISSION CONTROL SYSTEM

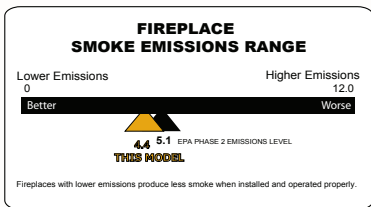
Continued

PHASE 2 QUALIFIED

U.S. Environmental Protection Agency
Wood-burning Fireplace Program

Phase 2 Qualified models are cleaner and pollute less than those models that have not met this emissions level. Exposure to smoke has been associated with respiratory illness and other health problems. Models that have lower smoke emissions may reduce your risk.

For more information go to www.epa.gov/burnwise



MANUFACTURER: FMI Products, LLC
MODEL NO.: GMCAT50 & VGMCAT50
PARTICLE EMISSIONS: 4.4 GRAMS/KG OF WOOD BURNED

For proper operation, catalyst must be replaced every 3 to 5 years.

*EPA has determined, based on testing by an accredited independent laboratory and a certification of conformity by a nationally recognized certification body, that this model qualifies at the Phase 2 emissions level for U.S. EPA's Voluntary Fireplace Program.

125574-03

WARRANTY

FMI PRODUCTS, LLC warranty obligations for the PureFire Emissions Control System are limited to the terms set forth below.

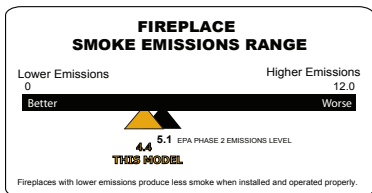
FMI PRODUCTS, LLC warrants to the consumer who purchases a new solid fuel burning fireplace containing a PureFire Emissions Control System as a new component, to replace the catalyst at no charge should it cease to function within three years from the date of purchase. The PureFire Catalytic Component is designed to perform efficiently for three years of fireplace operation. ONLY recommended fuels should be burned. Follow the fueling directions in manufacturers operation manual. For warranty purposes, proof of fireplace purchases is required. Labor for removal and/or installation of the catalytic component is not the responsibility of the manufacturer.

Neither FMI PRODUCTS, LLC nor the dealer who sells the PureFire Emissions Control System is responsible for indirect, incidental, special, punitive or consequential damages arising out of the improper use of this product or the continued use of this product beyond the required replacement period.

PHASE 2 QUALIFIED

U.S. Environmental Protection Agency
Wood-burning Fireplace Program

Phase 2 Qualified models are cleaner and pollute less than those models that have not met this emissions level. Exposure to smoke has been associated with respiratory illness and other health problems. Models that have lower smoke emissions may reduce your risk.



MANUFACTURER: FMI Products, LLC
MODEL NAME: GMCAT42 42" Woodburning Fireplace
VGMCAT42 42" Woodburning Fireplace
PARTICLE EMISSIONS: 4.4 GRAMS/KG OF WOOD BURNED

*EPA has determined, based on testing by an accredited independent laboratory and a certification of conformity by a nationally recognized certification body, that this model qualifies at the Phase 2 emissions level for U.S. EPA's Voluntary Fireplace Program.

125574-03

BurnWise
Log and Pellet Stoves

For more information go to www.epa.gov/burnwise

TECHNICAL SERVICE

You may have further questions about installation, operation, or troubleshooting. If so, contact FMI PRODUCTS, LLC at 1-866-328-4537.

When calling please have your model and serial numbers of your fireplace ready.

You can also visit our web site at

www.fmiproducts.com.

REPLACEMENT PARTS

If this product is missing a part or has a broken component, please do not return it to the store. Call FMI PRODUCTS, LLC at 1-866-328-4537 to answer questions and replace parts under warranty.

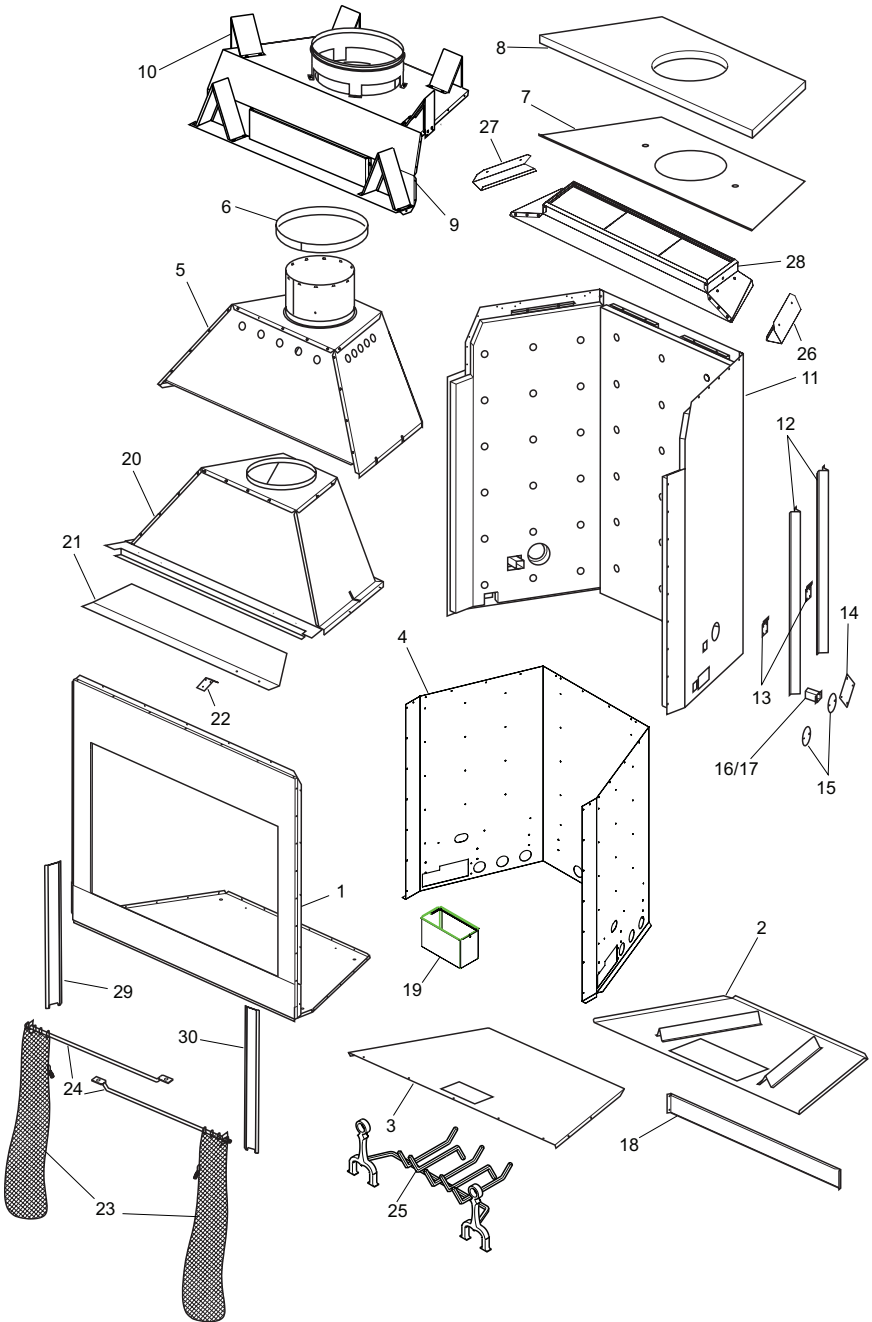
Note: Use only original replacement parts. This will protect your warranty coverage for parts replaced under warranty.

When calling or writing, please have your model and serial numbers of your fireplace ready.

Model and serial number information are in the fireplace's rating plate located on the fireplace smoke shelf.

PARTS

MODELS (V)GMCAT42/50(H,S)(I,R)A SERIES AND (V)JMCAT42/50(H,S)(I,R)A SERIES



PARTS

This list contains replaceable parts used in your firebox. When ordering parts, follow the instructions listed under Replacement Parts on page 21 of this manual.

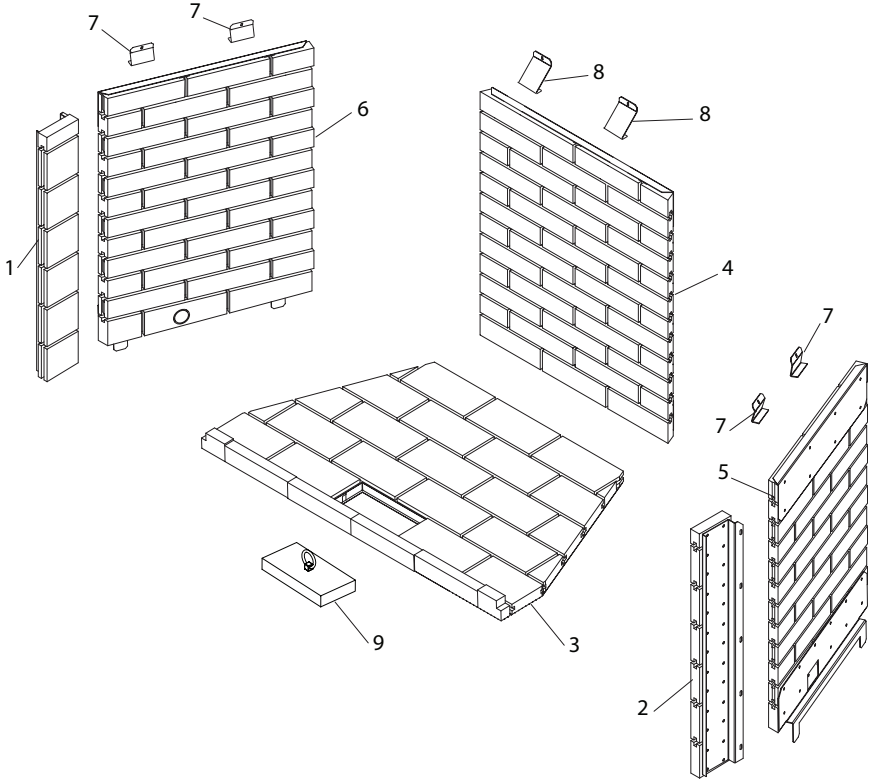
KEY NO.	PART NO.	DESCRIPTION					QTY.
			(V)GMCAT42	(V)GMCAT50	(V)JMCAT42	(V)JMCAT50	
1	**	Face Assembly	•	•	•	•	1
2	**	Firebox Bottom Assembly	•	•	•	•	1
3	**	Firebox Bottom	•	•	•	•	1
4	**	Firebox Surround	•	•	•	•	1
5	**	Outer Dome Assembly	•	•	•	•	1
6	**	Insulation Pan Support	•	•	•	•	1
7	**	Insulation Pan	•	•	•	•	1
8	**	Top Insulation	•	•	•	•	1
9	110285-02	Fireplace Top Assembly, 42"	•	•	•	•	1
	110285-01	Fireplace Top Assembly, 50"	•	•	•	•	1
10	23490SA	Standoff	•	•	•	•	4
11	**	Fireplace Surround Assembly	•	•	•	•	1
12	109720-02	Clearance Spacer	•	•	•	•	6
13	117891-01	Fireplace Handle Bracket	•	•	•	•	4
14	20042	Outside Air Cover Plate	•	•	•	•	2
15	21171	Gas Conduit Cover	•	•	•	•	4
16	109752-01	Conduit One	•	•	•	•	2
17	109752-02	Conduit Two	•	•	•	•	2
18	**	Heat Shield Support	•	•	•	•	1
19	123298-02	Ash Box Assembly	•	•	•	•	1
20	**	Inner Dome Assembly	•	•	•	•	1
21	**	Smoke Shield	•	•	•	•	1
22	**	Damper Control Bracket	•	•	•	•	1
23	109457-02	Screen 42"	•	•	•	•	2
	109457-01	Screen 50"	•	•	•	•	2
	117556-02	Screen 42" Stainless	•	•	•	•	2
	117556-01	Screen 50" Stainless	•	•	•	•	2
24	110146-03	Screen Rod 42"	•	•	•	•	2
	110146-02	Screen Rod 50"	•	•	•	•	2
	117568-02	Screen Rod 42" Stainless	•	•	•	•	2
	117568-01	Screen Rod 50" Stainless	•	•	•	•	2
25	109496-05	Grate 42"	•	•	•	•	1
	109496-04	Grate 50"	•	•	•	•	1
	117544-05	Grate 42" Stainless	•	•	•	•	1
	117544-04	Grate 50" Stainless	•	•	•	•	1
26	125864-01	Hood Retaining Bracket - Right	•	•	•	•	1
	125864-03	Hood Retaining Bracket - Right	•	•	•	•	1
27	125864-02	Hood Retaining Bracket - Left	•	•	•	•	1
	125864-04	Hood Retaining Bracket - Left	•	•	•	•	1
28	125582-01	PureFire Catalytic Hood Adj.	•	•	•	•	1
	125363-02	PureFire Catalytic Hood CAT50	•	•	•	•	1
29	126198-01	Air Deflector Left	•	•	•	•	1
30	126198-02	Air Deflector Right	•	•	•	•	1
PARTS AVAILABLE NOT SHOWN							
	124174-01	Grate Retainer	•	•	•	•	2
	124174-02	Grate Retainer Stainless	•	•	•	•	2
	109714-02	Side Firebrick Wall Spacers	•	•	•	•	4
	114913-01	Rear Firebrick Wall Spacers	•	•	•	•	2

** Not a field replaceable part.

PARTS

MODELS (V)GMCAT42/50(H,S)(I,R)A SERIES AND (V)JMCAT42/50(H,S)(I,R)A SERIES

Picture may vary from actual

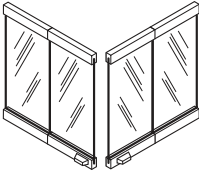


PARTS

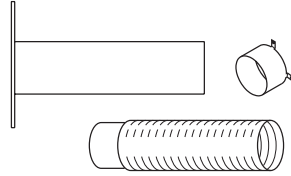
This list contains replaceable parts used in your firebox. When ordering parts, follow the instructions listed under Replacement Parts on page 21 of this manual.

KEY			(V)GM, JMCAT42SRA	(V)GM, JMCAT50SRA	(V)GM, JMCAT42HRA	(V)GM, JMCAT50HRA	(V)GM, JMCAT42SIA	(V)GM, JMCAT50SIA	(V)GM, JMCAT42HIA	(V)GM, JMCAT50HIA	QTY.
NO.	PART NO.	DESCRIPTION									
1	125118-01	Left Leading Brick 50" Red	.	.	.	.	.	.	.	.	1
	125118-03	Left Leading Brick 42"/50" Ivory	.	.	.	.	.	.	.	.	1
2	125118-02	Right Leading Brick 50" Red	.	.	.	.	.	.	.	.	1
	125118-04	Right Leading Brick 42"/50" Ivory	.	.	.	.	.	.	.	.	1
3	125037-01	Hearth 42" Red	.	.	.	.	.	.	.	.	1
	125038-01	Hearth 50" Red	.	.	.	.	.	.	.	.	1
	125037-02	Hearth 42" Ivory	.	.	.	.	.	.	.	.	1
	125038-02	Hearth 50" Ivory	.	.	.	.	.	.	.	.	1
4	125413-01	Rear Stacked 42" Red	.	.	.	.	.	.	.	.	1
	125437-01	Rear Stacked 50" Red	.	.	.	.	.	.	.	.	1
	125425-01	Rear Herringbone 42" Red	.	.	.	.	.	.	.	.	1
	125449-01	Rear Herringbone 50" Red	.	.	.	.	.	.	.	.	1
	125413-02	Rear Stacked 42" Ivory	.	.	.	.	.	.	.	.	1
	125437-02	Rear Stacked 50" Ivory	.	.	.	.	.	.	.	.	1
	125425-02	Rear Herringbone 42" Ivory	.	.	.	.	.	.	.	.	1
	125449-02	Rear Herringbone 50" Ivory	.	.	.	.	.	.	.	.	1
5	125415-01	Right Stacked 42" Red	.	.	.	.	.	.	.	.	1
	125439-01	Right Stacked 50" Red	.	.	.	.	.	.	.	.	1
	125427-01	Right Herringbone 42" Red	.	.	.	.	.	.	.	.	1
	125451-01	Right Herringbone 50" Red	.	.	.	.	.	.	.	.	1
	125415-02	Right Stacked 42" Ivory	.	.	.	.	.	.	.	.	1
	125439-02	Right Stacked 50" Ivory	.	.	.	.	.	.	.	.	1
	125427-02	Right Herringbone 42" Ivory	.	.	.	.	.	.	.	.	1
	125451-02	Right Herringbone 50" Ivory	.	.	.	.	.	.	.	.	1
6	125417-01	Left Stacked 42" Red	.	.	.	.	.	.	.	.	1
	125441-01	Left Stacked 50" Red	.	.	.	.	.	.	.	.	1
	125429-01	Left Herringbone 42" Red	.	.	.	.	.	.	.	.	1
	125453-01	Left Herringbone 50" Red	.	.	.	.	.	.	.	.	1
	125417-02	Left Stacked 42" Ivory	.	.	.	.	.	.	.	.	1
	125441-02	Left Stacked 50" Ivory	.	.	.	.	.	.	.	.	1
	125429-02	Left Herringbone 42" Ivory	.	.	.	.	.	.	.	.	1
	125453-02	Left Herringbone 50" Ivory	.	.	.	.	.	.	.	.	1
7	124134-02	Side Retainer 42"/50" (GM Series)	.	.	.	.	.	.	.	.	4
	124134-05	Side Retainer 42"/50" Stainless (JM Series)	.	.	.	.	.	.	.	.	4
8	124134-03	Rear Retainer (GM Series)	.	.	.	.	.	.	.	.	2
	124134-06	Rear Retainer Stainless (JM Series)	.	.	.	.	.	.	.	.	2
9	120848-01	Ash Brick Red	.	.	.	.	.	.	.	.	1
	120848-03	Ash Brick Ivory	.	.	.	.	.	.	.	.	1

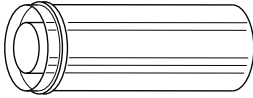
ACCESSORIES



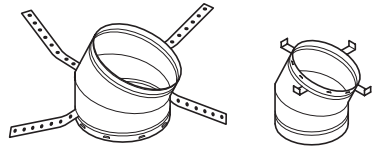
BI-FOLD GLASS DOORS
BDMO42E - 42" Ebony
BDMO42G - 42" Pewter
BDMO42C - 42" Oiled Bronze
BDMO50E - 50" Ebony
BDMO50G - 50" Pewter
BDMO50C - 50" Oiled Bronze



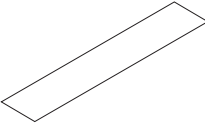
OPTIONAL OUTSIDE AIR KIT FOR FLOOR INSTALLATION - AK4F



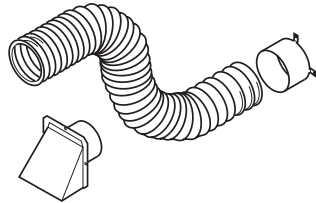
DOUBLE WALL PIPE -
12-12DM, 18-12DM, 24-12DM, 36-12DM,
48-12DM, 12-12HT, 18-12HT, 24-12HT, 36-
12HT and 48-12HT



30° OFFSET AND RETURN
30E-12DM and 30E-12HT



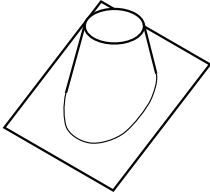
EMBER PROTECTOR -
20093



OPTIONAL OUTSIDE AIR KIT FOR SIDEWALL INSTALLATION - AK4

ACCESSORIES

Continued



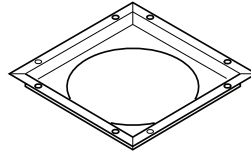
ROOF FLASHING

V6F-10DM - 0 to 6/12 Pitch

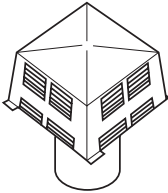
V12F-10DM - 6/12 to 12/12 Pitch



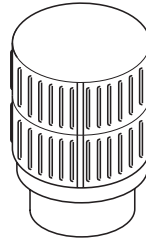
STORM COLLAR - SC2-1



FIRESTOP SPACER - FS-10



SQUARE CHASE-TOP TERMINATION - STL-12D AND STL-12DMP BLACK



ROUND TOP TERMINATIONS RLT-12D AND RLT-12HT



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