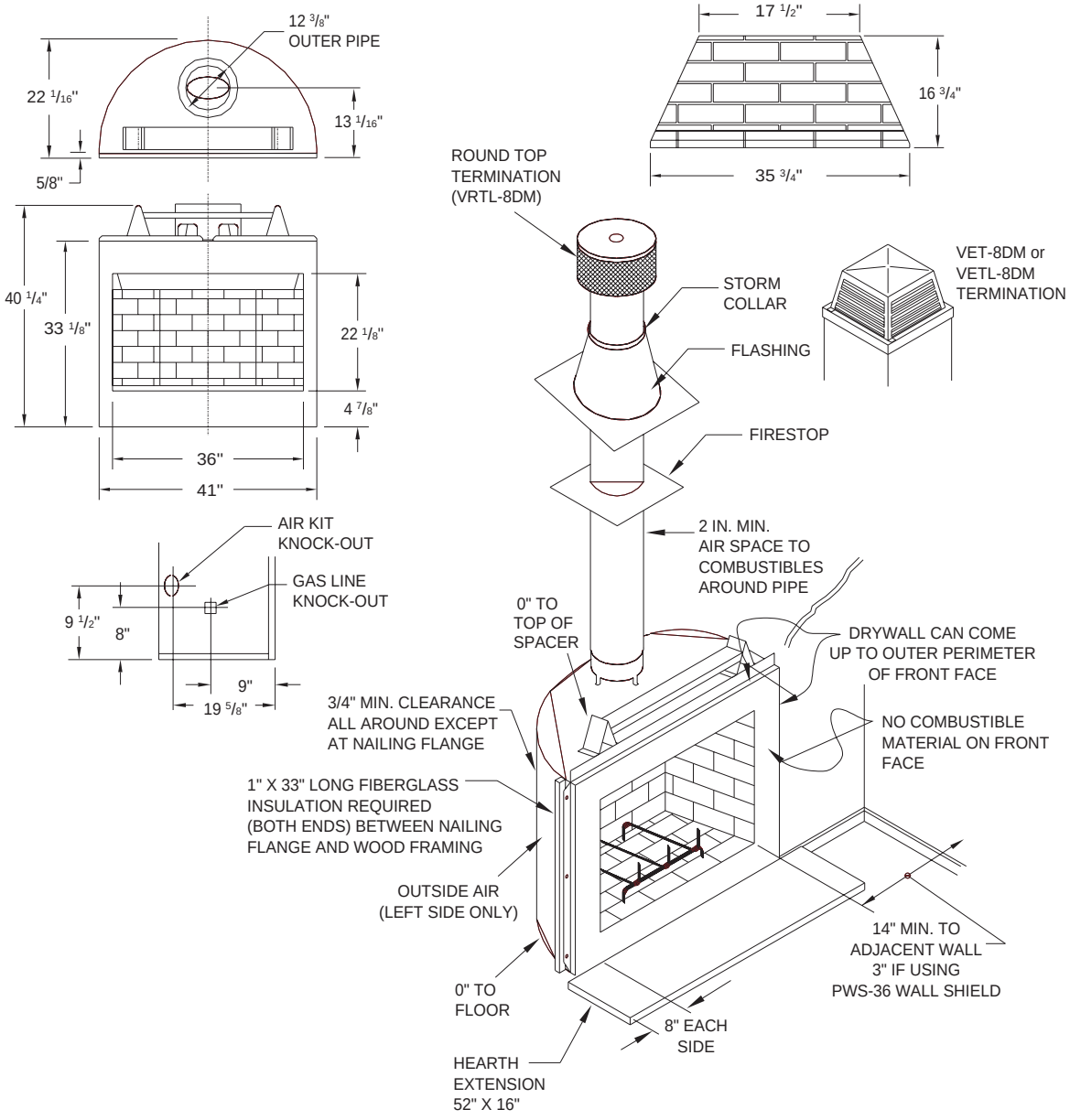
VANGUARD®

ARISTOCRAT™ MODEL V36E
WOOD-BURNING FIREBOX

INSTALLATION INSTRUCTIONS

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 optional accessory items when needed. Keep it with your other important papers.



DESA INTERNATIONAL,
2701 INDUSTRIAL DRIVE
P.O. BOX 90004
BOWLING GREEN, KY
42102-9004

Model _____

Serial No. _____

Date Purchased _____

55508
Rev. B
08/99

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 firebox.**

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.

WARNING: THIS FIREBOX IS INTENDED FOR USE WITH WOOD, OR IF A VENT-FREE OR DECORATIVE GAS APPLIANCE IS INSTALLED, BURN PROPANE OR NATURAL GAS ONLY.

CHECK LOCAL CODES PRIOR TO INSTALLATION

INTRODUCTION

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

These DESA International components and this fireplace are designed and manufactured for satisfactory performance when installed and used according to this manual. Unless you use DESA International components, which have been designed and tested for this fireplace system, you may cause a fire hazard.

Careless or improper operation may also cause a fire hazard.

The DESA International warranty does not cover, and DESA International disclaims any responsibility for, damage or malfunction caused by 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 DESA International in combination with an DESA International fireplace system.

This wood burning fireplace complies with **UL 127** as a FACTORY BUILT FIREPLACE and is listed and tested by **Underwriters Laboratory Inc.**

This model is not for use in mobile homes.

MINIMUM CLEARANCE TO COMBUSTIBLES

Framing and enclosures may safely make direct contact with the spacers on the top of the fireplace. The fireplace may sit directly on combustible flooring. The fireplace opening must not be less than 14" from a combustible, perpendicular sidewall (see front cover). A 2" minimum air space clearance between combustible materials and the chimney must be absolutely maintained. A 16 1/2 inch inside chase dimension is recommended as a minimum size. A 3/4 inch air space is required around back and sides of fireplace.

This firebox is not intended to be used as a substitute for a furnace to heat an entire home. Use for supplementary heating only.

WARNING: DO NOT PACK REQUIRED CLEARANCE SPACES WITH INSULATION OR OTHER MATERIALS.

HEIGHT

The minimum height of the chimney, measured from the base of the fireplace to the flue gas outlet, is 14 feet for straight flues or a flue with one elbow set. For the systems with two-elbow sets, the minimum height is 22 feet. The maximum height of any system is 60 feet; this measurement includes the fireplace, chimney sections and the effective height of the termination assembly

INSTALLING THE FIREPLACE

STEP 1: Frame the opening for the fireplace using dimensions shown in Figures 1, 2, or 3.

STEP 2: Set the fireplace directly in front of this opening and slide back until the nailing flanges on each side are about 1/4" away from the prepared wood framing. Before securing to wood framing, make sure the fiberglass insulation strip (provided) is place between frame and nailing flange (see illustration on front cover).

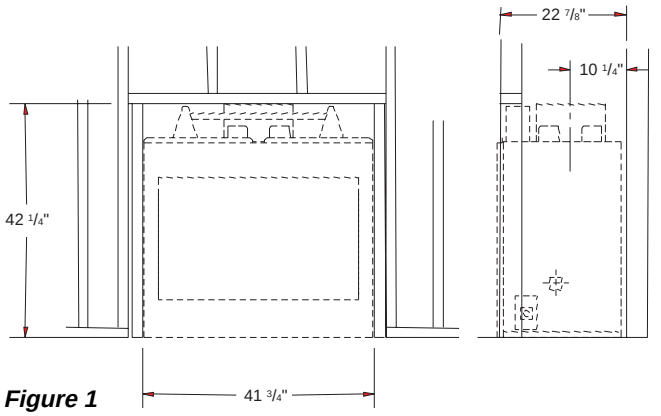


Figure 1

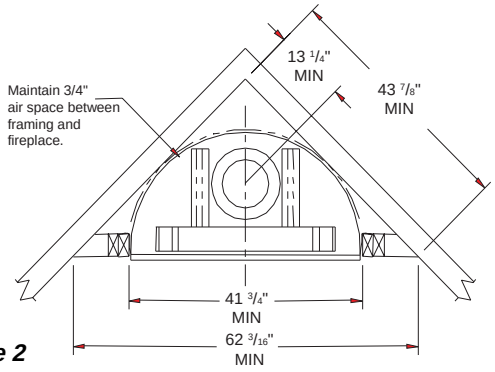


Figure 2

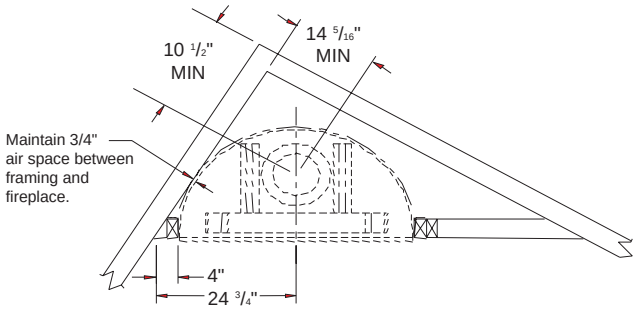


Figure 3 FRAMING DIMENSIONS AT 30°

STEP 3: Check the level of the fireplace and shim with sheet metal spacers if necessary.

STEP 4: When the fireplace is installed upon a combustible floor a galvanized sheet ember protector (provided) must be installed between the fireplace and the hearth extension as illustrated in Figure 16, page 6.

STEP 5: Secure the fireplace to the framing through the flanges located on the sides on the fireplace with 8-penny nails.

NOTE: The 3/4" clearance is not required at the nailing flange (see Figure 18).

ASSEMBLING AND INSTALLING YOUR DOUBLE-WALL CHIMNEY SYSTEM

Each double wall chimney section consists of an outer pipe, flue pipe and one wire spacer. The pipe sections are not united and must be assembled independently as the chimney is installed. When starting the chimney directly on the fireplace, the flue pipe section must be installed first, with the hemmed end down. The outer pipe section can then be installed over the flue pipe section with the hemmed end up (see Figure 4).

Press down on each pipe section until the lances on the lower end securely engage the knurl on the fireplace starting collar. The wire spacer will assure the proper figure spacing between the inner and outer pipe sections.

WARNING: THE OPENINGS IN THE COLLAR AROUND THE BASE OF THE CHIMNEY AT THE TOP OF THE FIREPLACE MUST NOT BE OBSTRUCTED. NEVER USE BLOWN INSULATION TO FILL THE CHIMNEY ENCLOSURE (SEE FIGURE 5).

Continue to assemble chimney sections as outlined above, making sure that both inner outer pipe sections are locked together. When installing double wall "snap lock" chimney together, it is important to assure the joints between the chimney's sections are 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.

LINEAL GAIN CHART

PART # NO.	DESCRIPTION	LINEAL GAIN
V36E	FIREPLACE	40"
V12-8DM	PIPE SECTION	10 5/8"
V18-8DM	PIPE SECTION	16 5/8"
V24-8DM	PIPE SECTION	23 5/8"
V36-8DM	PIPE SECTION	34 5/8"
V48-8DM	PIPE SECTION	46 5/8"
VRTL-8DM	ROUND TOP TERMINATION	6"
VETL-8DM	CHASE TERMINATION	1" to 12"

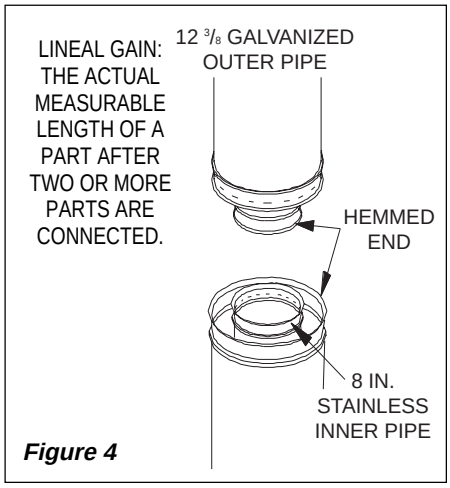


Figure 4

FIRESTOP SPACERS

Firestop spacers are required at each point where the chimney penetrates a floor or ceiling joist space. Their purpose is two fold; they establish and maintain the required clearance between the chimney and combustible materials.

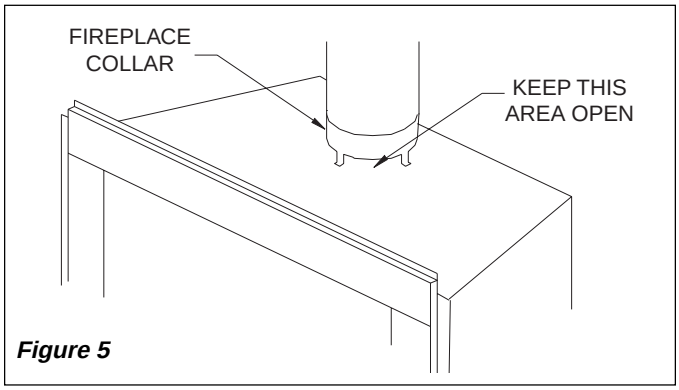


Figure 5

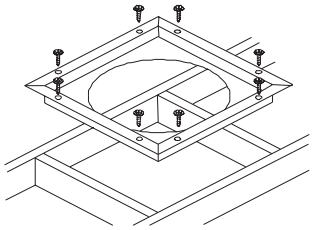


Figure 6

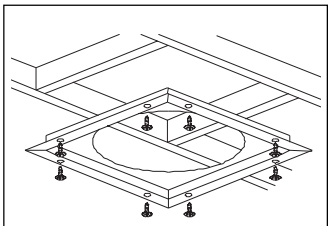


Figure 7

They also provide complete separation from one floor space to another floor 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 place into the attic floor as in Figure 6.

When the pipe passes through a framed opening into a living space above, the firestop must be placed onto the ceiling from below as in Figure 7.

SUPPORT SECTIONS

The chimney support section is a 4-strap 12" length of pipe. A chimney support is required every 30 feet above the fireplace after a straight chimney run, or above a return elbow after a straight chimney run (see Figure 8). This support is designed to relieve the extra weight load on the fireplace and elbow when high chimneys are installed.

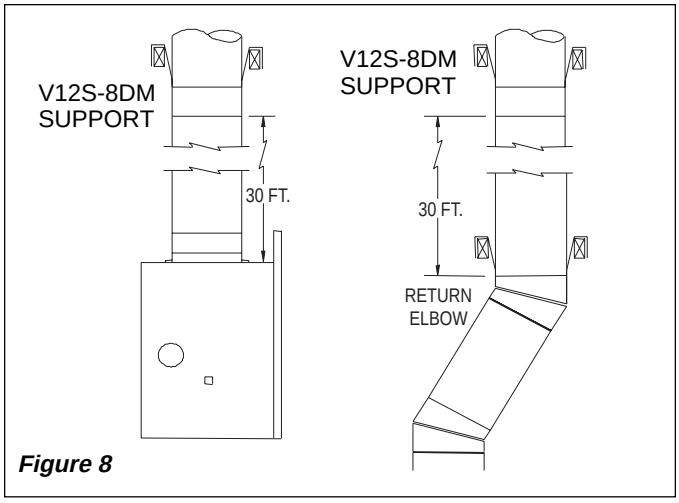


Figure 8

INSTRUCTIONS WHEN OFFSET OF CHIMNEY IS NEEDED TO INSTALL ELBOWS

1. To achieve desired offset, you may install combinations of 12", 18", 36", and 48" lengths of double wall pipe (See *Rise and Offsets* Chart and Figures 9 and 11).
2. Chimney weight above offset rests on return elbow. Straps must be securely nailed to rafter or joists (see Figure 10 and Details A & B).
3. Maximum length of pipe between supports (return elbow or V12S-8DM) is 6' of angled run. Maximum of two (2) 6' angled run section per chimney system (Figure 11).

RISE AND OFFSETS

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

NOTE: **ANY OFFSET GREATER THAN 6 FEET YOU MUST USE A V12S-8DM.**

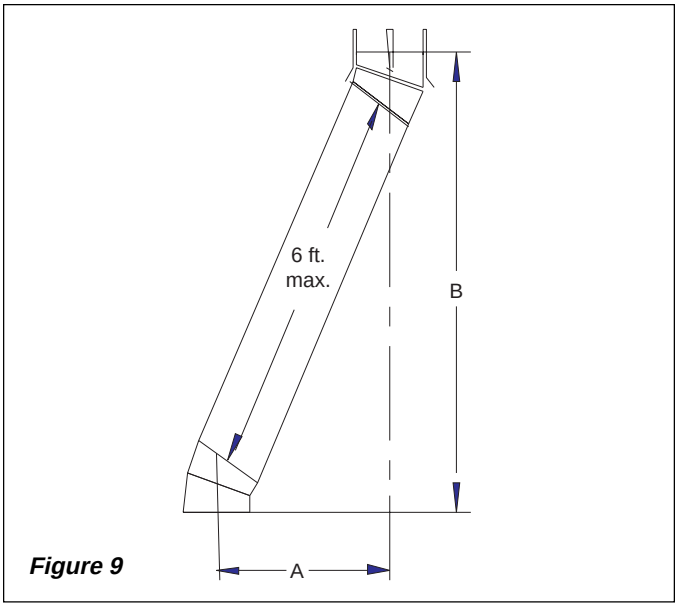


Figure 9

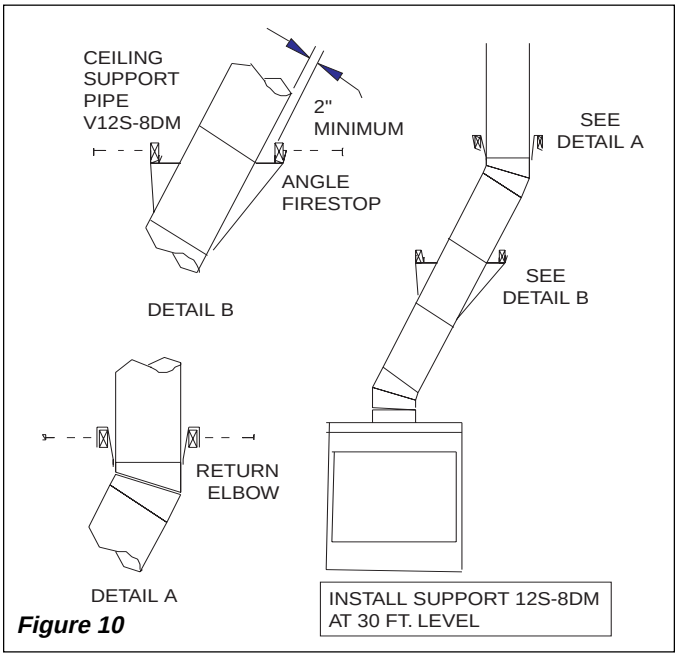


Figure 10

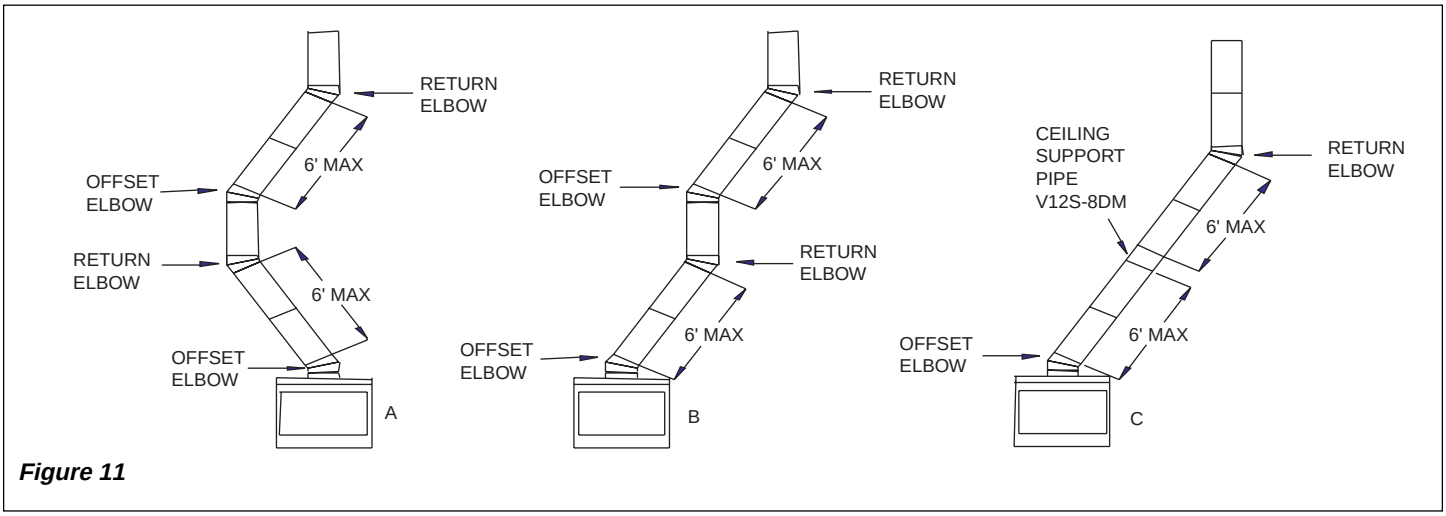


Figure 11

PENETRATING THE ROOF

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

STEP 1: Determine the center point through which the pipe will penetrate the roof.

STEP 2: Determine the pitch of the roof. Pitch is the distance the roof drops over a given span, usually 12 inches. A 6/12 pitch means that the roof drops 6 inches for each 12 inches measured horizontally down the roof.

STEP 3: From the center point determined in STEP 1, measure an opening 17 1/4 inches wide (8 5/8 inches to each side of the center point). For a roof pitch between 0/12 (flat) and 6/12, measure an opening 21 inches long (10 1/2 above and below the center point).

6/12 to 12/12 pitches: Measure 26 inches (13 above and below).

STEP 4: Remove the shingles around the opening measured and cut out this section.

STEP 5: Add the next sections of pipe until the end penetrates the roofline. Check to see that proper clearances are maintained. Extend chimney by adding sections of double wall pipe until pipe is a minimum of 30 inches above highest point of roof cutout. Termination and chimney must extend a minimum of 36 inches above highest point where it passes through roof. See 10' rule (Figure 12).

10 FOOT RULE

All 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 peak of the roof if within a horizontal distance of 10 feet from the peak (see Figure 12).

TERMINATIONS

The fireplace and chimney system must be vented to the out-of-doors and must be terminated with the listed round top or chase terminations. If a chase termination is desired, refer to the instructions supplied with the termination.

CAUTION: DO NOT SEAL VENTILATION OPENINGS ON THE ROOFTOP FLASHING. FOLLOW THE INSTALLATION INSTRUCTIONS PROVIDED WITH THE TERMINATION BEING USED.

FOR ROUND TOP TERMINATION

STEP 1: Slide the flashing over the pipe (no firestop is needed at the roof level). Tack the flashing down at the top two corners with roofing nails. Lay tile over the top and sides of the flashing and secure them to the roof through the flashing with roof nails. Lay tiles under the lower edge and secure these to the roof. Mastic all nail heads.

STEP 2: Install storm collar on double wall chimney, apply waterproof caulking around flashing top and push storm collar down securely on sealer and flashing (see Figure 13).

STEP 3: Place the termination onto the pipe end as illustrated and secure with screws provided.

IMPORTANT: If an exposed portion of chimney is greater than 5 feet above the roof line, use support wires to keep chimney secure. The support wires may be attached to the outer pipe of the chimney with screws, provided the screws are not long enough to penetrate the inner flue pipe.

A gas line may be installed for the purpose of installing a gas appliance available through your local distributor. Use only 1/2" black iron pipe and appropriate fittings. When installing a gas line, a shut-off valve designed for installation outside the firebox is recommended.

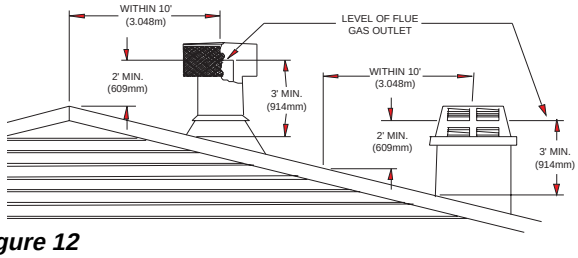


Figure 12

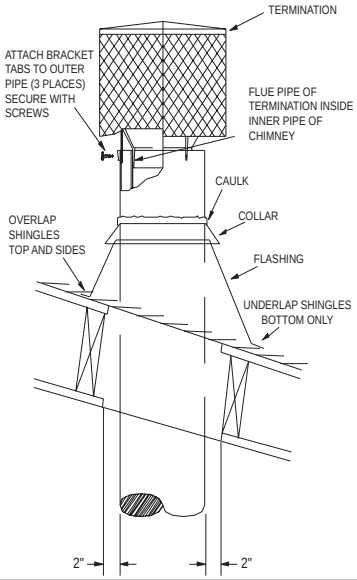


Figure 13

To install a gas line, remove the gas line plug located in the side firebrick approx. 2" above the bottom. The plug must be tapped out from the finished side towards the unfinished side (see Figure 14, page 6). Insert the gas line parallel to the face. Fill any gap between the gas line and the hole in the firebrick with the refractory cement or commercial furnace cement (see Figure 15, page 6).

WARNING: All the gas piping and connections must be tested for leaks after the installation is completed. Be sure gas valve is turned on. Apply soapsuds solution to all connections and joints. If bubbles appear, leaks must be detected and corrected. DO NOT use a match or open flame of any kind to test leaks. Never operate any appliance with leaky connections.

The gas pipe is intended for connection to an unvented gas log set or to a decorative gas appliance.

If you will install an unvented gas log set, ONLY UNVENTED GAS LOG SETS WHICH HAVE BEEN FOUND TO COMPLY WITH THE STANDARD FOR UNVENTED ROOM HEATERS, ANS/IAS/AGA Z21.11.2, ARE TO BE INSTALLED IN THIS FIREPLACE.

NOTE: An appropriate Vanguard hood must be installed when using an unvented gas log set.

WARNING: DO NOT OPERATE AN UNVENTED GAS LOG SET IN THIS FIREPLACE WITH THE CHIMNEY REMOVED.

If you will install a decorative gas appliance, the decorative gas appliance must comply with the **Standard for Decorative Gas Appliances for Installation in solid Fuel burning Fireplaces, ANS Z21.60-1996** and shall also be installed in accordance with the **National Fuel Gas code, ANS Z223.1-1996.**

WARNING: WHEN USING A DECORATIVE APPLIANCE, THE DAMPER MUST BE REMOVED OR PERMANENTLY LOCKED IN THE FULLY OPEN POSITION.

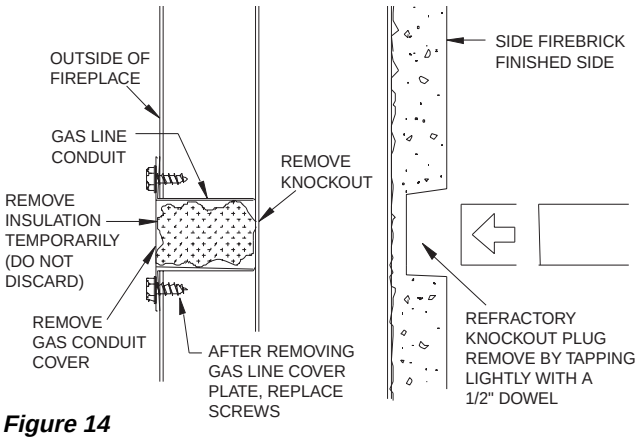


Figure 14

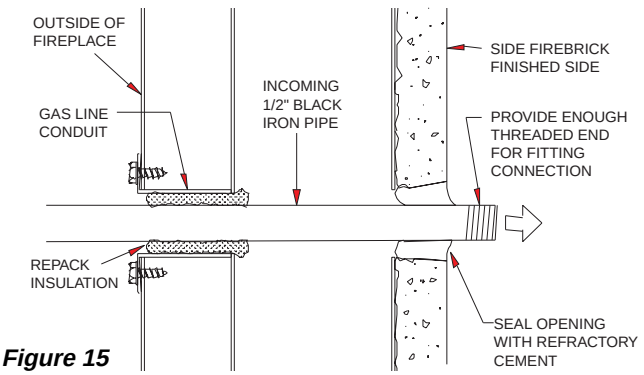


Figure 15

HEARTH EXTENSION

A hearth extension projecting a minimum of 16" in front and a minimum of 8" beyond each side of the fireplace opening is required to protect combustible floor construction in front of the fireplace. Use a layer of noncombustible, inorganic material having a thermal conductivity of K=0.84 BTU in/ft hr F (or less) at 1" thick.

Example of determining hearth extension equivalent: If the material selected has a K Factor (obtainable from supplier) of 0.25, such as glass fiber, then the following formula would apply; 0.25/ 0.84 x 1"=.30 thk. This must be converted by any noncombustible materials such as tile, slate, brick, concrete, metal, glass marble, stone, etc. Fasten the hearth extension to the floor to prevent shifting and seal the gap between the fireplace frame and hearth extension with a noncombustible material (see Figure 16).

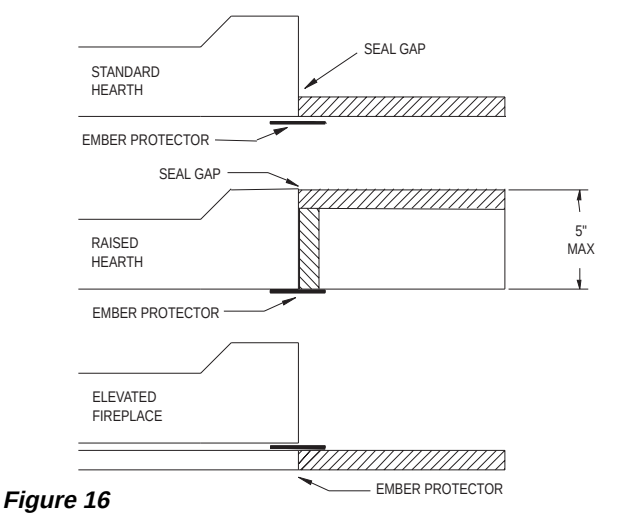


Figure 16

WARNING: HEARTH EXTENSION IS TO BE INSTALLED ONLY AS ILLUSTRATED.

COLD CLIMATE INSTALLATION:

The following installation procedures are recommended when installing an VANGUARD fireplace system in a COLD CLIMATE AREA. Following these steps will aids in reducing cold air infiltration from the fireplace enclosure into living space.

1. The fireplace must be placed on a solid, continuous surface. You should insulate under the fireplace in all cold climate areas.
2. In the case of a raised platform or cantilevered chase, you should insulate under the structure to reduce air infiltration.
3. Insulate the walls of the chase, both the outer and interior partitioning wall (see Figure 17).
4. Fire stopping a chase at the ceiling level is recommended for safety and reducing cold air movement.
5. DO NOT insulate the chase with BLOWN OR FILL TYPE INSULATION. Insulation should only be in contact with the fireplace where framing would normally be in proximity.
6. DO NOT INSULATE on top of the firebox. You must not block the airflow system of the flue pipe.

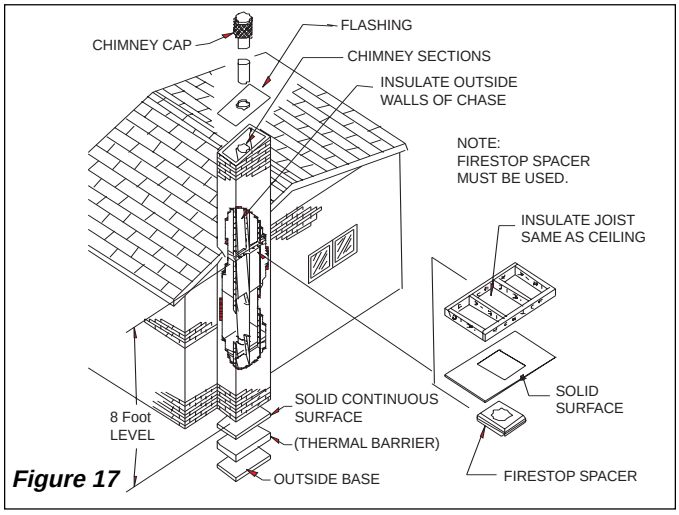


Figure 17

7. Before finishing the fireplace enclosure, inspect all joints around fireplace periphery. Any gaps between the nailing flanges and the framing should be sealed with noncombustible installation or caulking (see Figure 18). If the fireplace is mounted on a raised platform, insulate below the platform to prevent cold air permeation (by means of conduction).

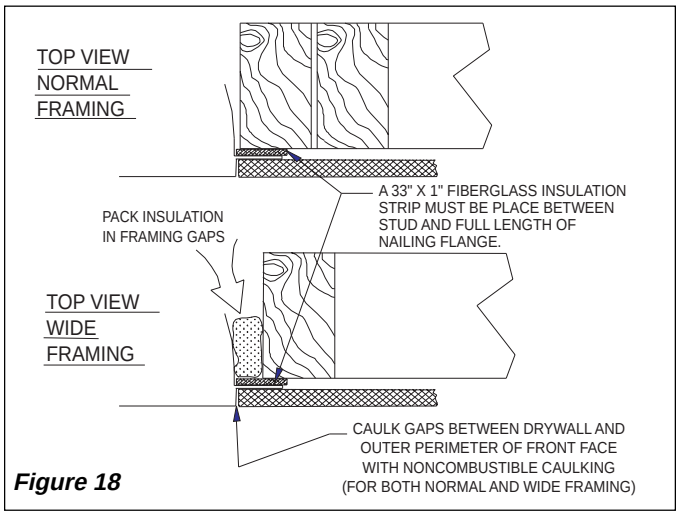


Figure 18

IMPORTANT: Following the above steps will aid in the reduction of cold air infiltration into living space. Negative pressures created by today's tightly sealed homes contribute to cold air infiltration and this is in no way the deficiency of the fireplace.

OUTSIDE AIR KIT (MODEL VAK-4E)

The VAK-4E air kit is available as an optional accessory. The installation of this kit provides necessary combustion air when a fire is burning in the fireplace; it also counteracts possible downdrafts in tightly sealed homes. The kit should be installed prior to finishing the fireplace since access to the fireplace outer surround is necessary for its installation. Installation instructions are included with the kit.

FINISHING YOUR FIREPLACE

Combustible materials, such as wallboard, gypsum board, sheet rock, drywall, plywood, etc. may make direct contact with sides and top periphery of 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). When overlapping with noncombustible facing material use only noncombustible mortar or adhesive.

MANTELS

A mantel may be installed if desired. Woodwork such as wood trims, mantels, or any other combustible material projecting from the front face must not be placed within 6 inches of the fireplace opening.

Combustible material above 6 inches and projecting more than 1 1/2 inches from the fireplace face must not be placed less than 12 inches from the top of the opening of the fireplace (NFPA STD 211, Sec. 7-3.3.3, see Figure 19).

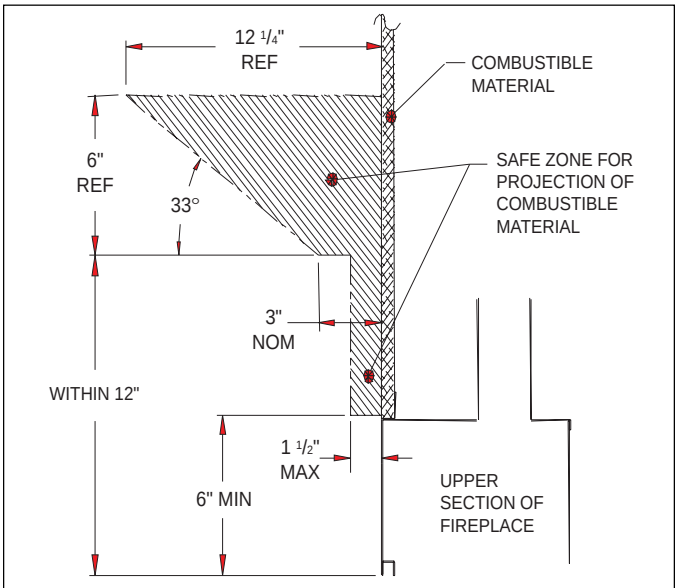


Figure 19 MODEL 36E

Mantels or any other combustible material may come up to the side periphery of the black metal face of the fireplace just as long as the projection from the front falls within the "safe zone" depicted in Figure 20.

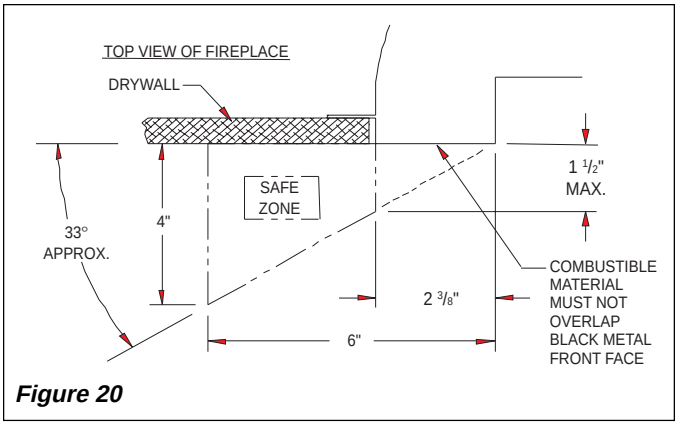


Figure 20

DAMPER OPERATION

The damper handle is located at the center of the rear refractory. Pushing the handle back into the keyway slot will free the damper blade to automatically open. To close, reach in (make sure it is cool before touching) and push the handle back into the keyway slot then pull down and push forward to lock in place (see Figures 21 & 22).

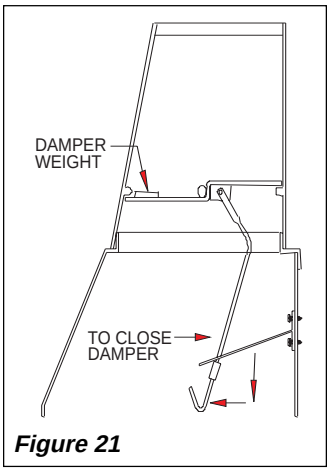


Figure 21

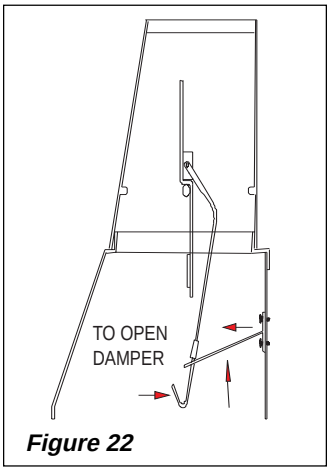


Figure 22

AIR KIT OPERATION:

The handle of the air kit damper rod extends from behind the rear refractory at the upper left side (see Figure 23). Push the rod up to open and down to close the air intake.

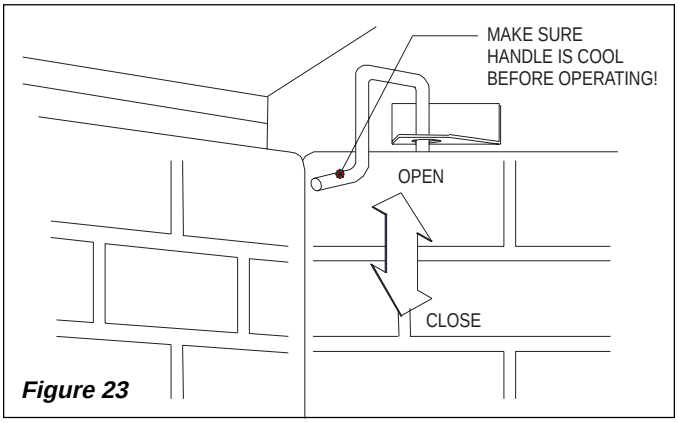


Figure 23

REPLACEMENT AND ACCESSORY PARTS

Purchase replacement parts or accessories from your local dealer. If they can not supply these accessories, call DESA International's Parts Department at 1-800-972-7879 for referral information. You can also write to the address listed on the front cover of this manual. When calling DESA International, have ready

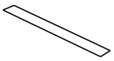
- model number of your heater
- the replacement part number

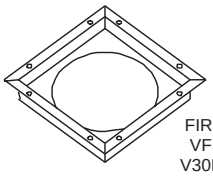
NOTE: USE OF ANY OTHER GLASS DOOR ASSEMBLY NOT TESTED WITH THIS FIREPLACE MAY CONSTITUTE A FIRE HAZARD AND WILL VOID THE DESA INTERNATIONAL WARRANTY.

WARNING: Risk of fire damage. When replacing grate, replace with DESA International Model 36GR grate only.

Fuel - Use wood or if a vent-free or decorative gas appliance is installed, burn Propane or Natural Gas only.

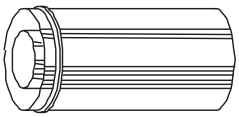
EMBER PROTECTOR
EP-36



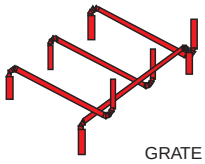


FIRESTOP
VFS-8DM
V30FS-8DM

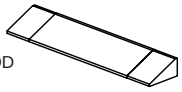
DOUBLE WALL CHIMNEY



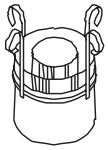
V12-8DM
V18-8DM
V24-8DM
V36-8DM
V48-8DM



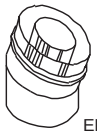
GRATE
MODEL No.36GR

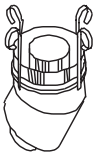


ADJUSTABLE HOOD
BLACK - GA6050
POLISHED BRASS - GA6052
ANTIQUE BRASS - GA6053



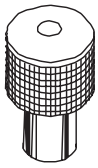
SUPPORT
PIPE
V12S-8DM



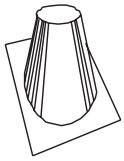


ELBOW SET
V30E-8DM

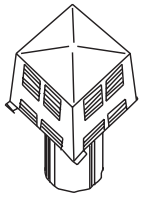
ROUND TOP
TERMINATION
VRTL-8DM
VRTTL-8DM
VADS-8DM



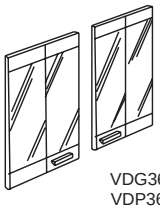
STORM COLLAR
VSC2-20 (20 PACK)
For use with
VRTT-8DM and
VRTTL-8DM



FLASHING
ROOF PITCH
V6F-8DM - 0 to 6/12
V12F-8DM - 6/12 to 12/12



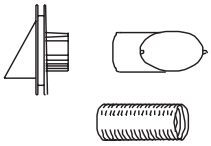
ECONO TOP
TERMINATION
VETL-8DM
VET-8DM
VETO-8DM
VETLO-8DM



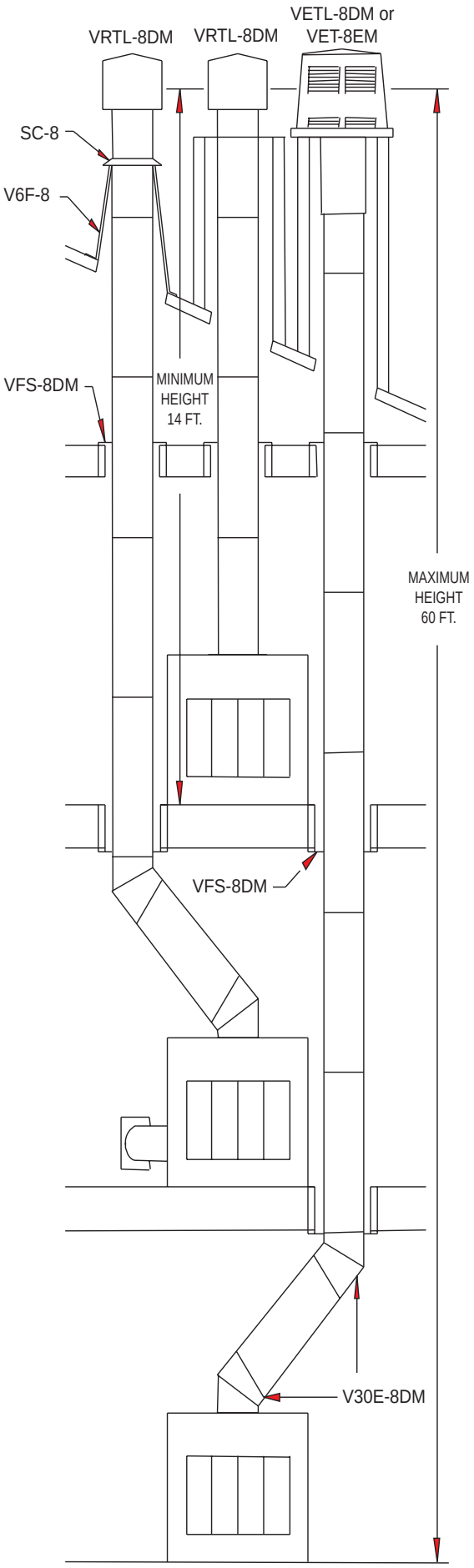
GLASS DOOR
KIT

VDG36E (Brushed Brass)
VDP36E (Polished Brass)

AIR KIT
VAK-4E



COMPONENT PARTS



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