SPECIFICATIONS

Real Fyre gas burner systems must be installed only in a wood burning fireplace with the minimum firebox dimensions and venting requirements met (see following tables). This appliance is designed to burn with yellow flames; adequate ventilation is absolutely necessary.

Product Specifications

Burner Model	BTU Rating	
	Nat. Gas	L.P. Gas
PB-16	45k	40k
PB-18	75k	60k
PB-20	90k	65k
PB-24	90k	75k
PB-30	90k	80k
PB-36	110k	90k
PB-42	130k	100k

Table 1 - Product BTUs

Burner Model (MATCH-LIT) (NAT. GAS ONLY)	Minimum Fireplace Size			
	Width *		Depth ‡	Height
	Front	Rear †		
PB-16	22"	20"	14"	17"
PB-18	24"	22"	14"	17"
PB-20	26"	24"	14"	17"
PB-24	30"	28"	14"	17"
PB-30	36"	34"	14"	17"
PB-36	42"	40"	14"	17"
PB-42	48"	46"	14"	17"

Table 2 - Minimum Fireplace Size: Match-lit (burner only)

Burner Model (WITH SAFETY PILOT KIT) (NAT. OR L.P. GAS) ▲	Minimum Fireplace Size			
	Width *		Depth ‡	Height
	Front	Rear †		
PB-16	28"	26"	14"	17"
PB-18	30"	28"	14"	17"
PB-20	32"	30"	14"	17"
PB-24	36"	34"	14"	17"
PB-30	42"	40"	14"	17"
PB-36	48"	46"	14"	17"
PB-42	54"	52"	14"	17"

Table 3 - Minimum Fireplace Size: Burner with safety pilot kit

Important Information Regarding Dimensions

* These required widths allow for centering of the unit.

† Width is at corresponding depth.

‡ If an ash lip exists, the depth requirement begins inside of the lip (see FIREPLACE REQUIREMENTS section on following page).

▲ **For Nat. gas models, a safety pilot kit is optional. For L.P. models, a kit is <u>required</u> (use the included SPK-26P, or an optional kit). See SAFETY PILOT KITS section on following page for more details.**

Note: Table 3 dimensions apply for all safety pilot kits.

Safety Control Valve Systems

THIS UNIT COMES WITHOUT A VALVE INSTALLED. NATURAL GAS MODELS CAN BE INSTALLED DIRECTLY TO AND OPERATED BY YOUR FIREPLACE VALVE. FOR PROPANE MODELS, AN SPK SAFETY PILOT KIT IS INCLUDED AND MUST BE INSTALLED WITH THE BURNER.

Alternatively, your burner system can be installed with one of the optional R.H. Peterson safety control valve systems (see below). Contact your local Real Fyre dealer when ordering.

To comply with certification, listings, and building code acceptances, and for safe operation and proper performance of this burner system, you must use ONLY R.H. Peterson parts and accessories.

Description	Model
Low Profile, Safety Pilot Kit	SPK-26(P)
High Capacity, Automatic Pilot Kit with basic transmitter & receiver	APK-10(P)
Automatic Pilot Kit with basic transmitter & receiver	APK-11(P)
Variable, Automatic Pilot Kit with basic transmitter & receiver	APK-15(P)
Low Profile, Variable, Automatic Pilot Kit with basic transmitter & receiver	APK-17(P)
Electronic Pilot Kit with on/off basic transmitter & receiver	EPK-2(P)
110 Volt Powered Electronic, non-standing pilot system	EPK-2M-AD(/LP)
110 Volt Powered Electronic, non-standing pilot system with variable flame height control	EPK-2V(P)-TR
High Capacity, 110 Volt Powered Electronic, non-standing pilot system w/variable flame height control	EPK-3V(P)-TR
Electronic Pilot System with hot surface ignition and smart valve	EPK-05(P)
Manual On/Off Valve with extension and knob handle or rod handle	AV-17 / AV-18

Table 4 - Optional Safety Control Valve Systems

Fireplace Requirements

These requirements MUST be met:

Ash Lip/Recess

DO NOT install this burner system in a fireplace with an ash lip or recess greater than 3/4". See Fig. 6-1.

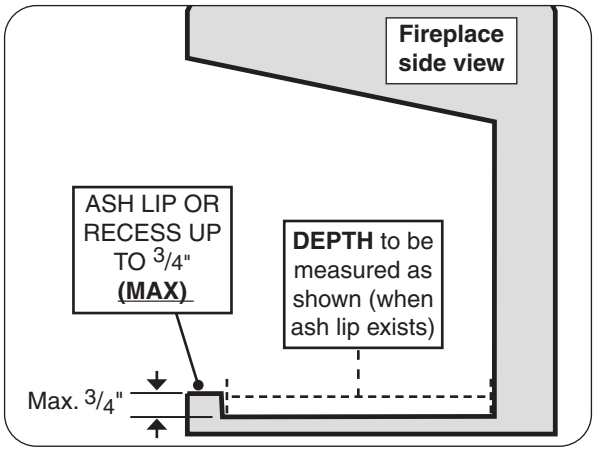

Fig. 6-1 Ash lip/recess detail

Fireplace Requirements (cont.)

Glass Doors

If this burner system is installed in a fireplace with glass doors, and the doors have a frame that OBSTRUCTS AIRFLOW to the fireplace floor, the frame MUST have slots (above the fireplace floor) that allow adequate ventilation. See Fig. 7-1.

Important: The opening (with doors fully open) MUST meet the minimum fireplace size front width and height requirements. See Table 1 (previous page) and Fig. 7-1.

Important: The glass doors MUST be fully open when the burner is in operation.

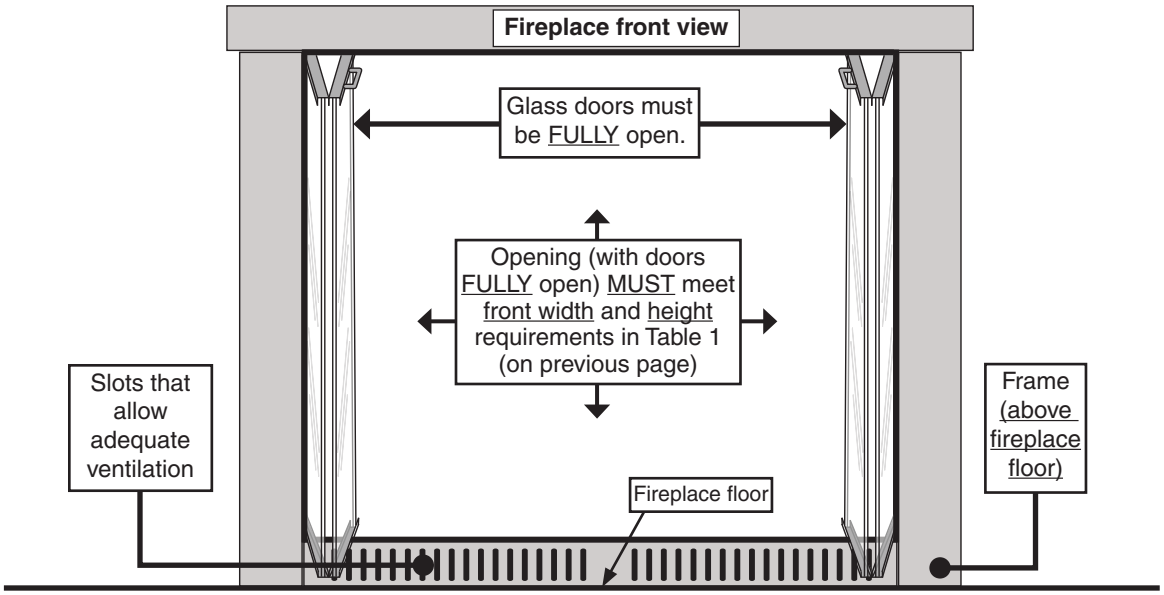

Fig. 7-1 Correct glass-doors frame setup, ventilation, and use (if applicable)

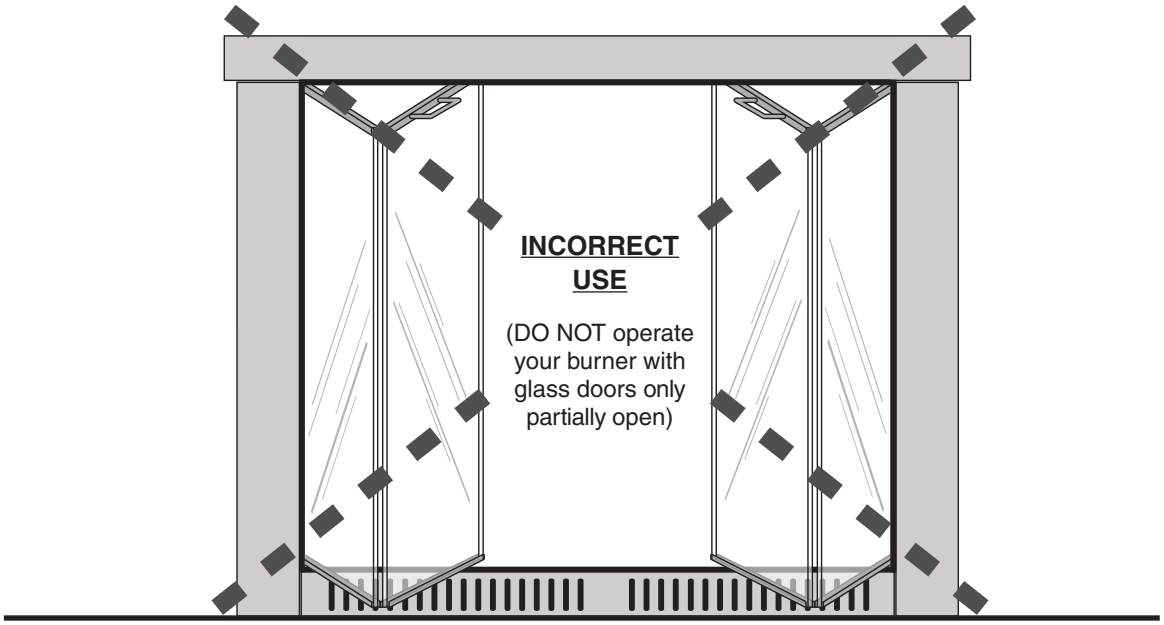

Fig. 7-2 Incorrect glass-doors frame setup, ventilation, and use (if applicable)

SPECIFICATIONS (cont.)

Only the Real Fyre decorative media options listed below are approved for use with this product. Follow the guidelines to determine the recommended amount of decorative media needed to cover your burner / fill your fireplace floor. All decorative media options are purchased separately; contact your local Real Fyre dealer when ordering.

REQUIRED BASE MEDIA

Sand / vermiculite (included with burner) **MUST FIRST BE PLACED TO FILL THE BURNER PAN**. Use the entire amount of base media provided. Do not use more than the amount given.

PRIMARY MEDIA OPTIONS (add on top of base media)

A. Cover Burner Only (minimum requirement)

Glass/gems (purchased separately) **MUST** be placed to cover the burner (at minimum).

	Burner size						
	16	**18**	**20**	**24**	**30**	**36**	**42**
Recommended Amount of Glass/Gems	7 lbs	7 lbs	8 lbs	10 lbs	12 lbs	14 lbs	16 lbs

- OR -

B. Fill Entire Fireplace (optional)

Glass/gems (purchased separately) can be placed to fill the entire fireplace floor. Determine the correct amount needed (via online calculator or manual formula).

A calculator is available online to determine the correct media amount needed.
Visit realfyre.com/fyre-glass-calculator/ or simply scan the QR code on the right.

Alternatively use the charts and steps 1-5 below.

Important: The height of glass media directly above the burner **MUST NOT** exceed 1". The website calculation (or formula below) allows for this requirement.

Determine the volume of area to be filled, then subtract a portion of the burner's volume. Finish by dividing by the glass/gems coverage amount.

Burner Volume to be Subtracted (cu. in.)						
Burner Size						
16	**18**	**20**	**24**	**30**	**36**	**42**
384	429	474	564	699	833	968

Glass/Gems Coverage Amount
16 cubic inches per lb

1. Determine the square area of the fireplace floor.
2. Multiply amount by 2 (for required 2" set height).
3. Subtract portion of burner's volume (see chart).
4. Divide by coverage amount: 16.
5. This is the number of pounds needed.

*Example using **PB-24 (Match Lit)** in single-sided trapezoid fireplace:*

Volume Formula: $\frac{(FW + RW)}{2} \times D \times H$

Front Width: 30" Rear Width: 28" Depth: 14" Height: 2" (set height)

1. $\frac{(30 + 28)}{2} \times 14 = 406$ sq. in.
2. $406 \times 2 = 812$ cu. in.
3. $812 - 564$ (per chart above) $= 248$ cu. in.
4. $248 / 16$ (per chart above) = **16 lbs** (rounded)

SECONDARY MEDIA OPTIONS (optional)

Secondary options such as river stones / fyre spheres / glass nuggets (purchased separately) may also be placed on top of the glass media.

Optional media	Recommended Amount of Media						
	Burner size						
	16	**18**	**20**	**24**	**30**	**36**	**42**
River stones	14 lbs	16 lbs	18 lbs	20 lbs	22 lbs	24 lbs	26 lbs
Fyre spheres (4")	14 pcs	20 pcs	21 pcs	24 pcs	26 pcs	28 pcs	30 pcs
Glass nuggets	14 lbs	18 lbs	20 lbs	24 lbs	28 lbs	32 lbs	38 lbs