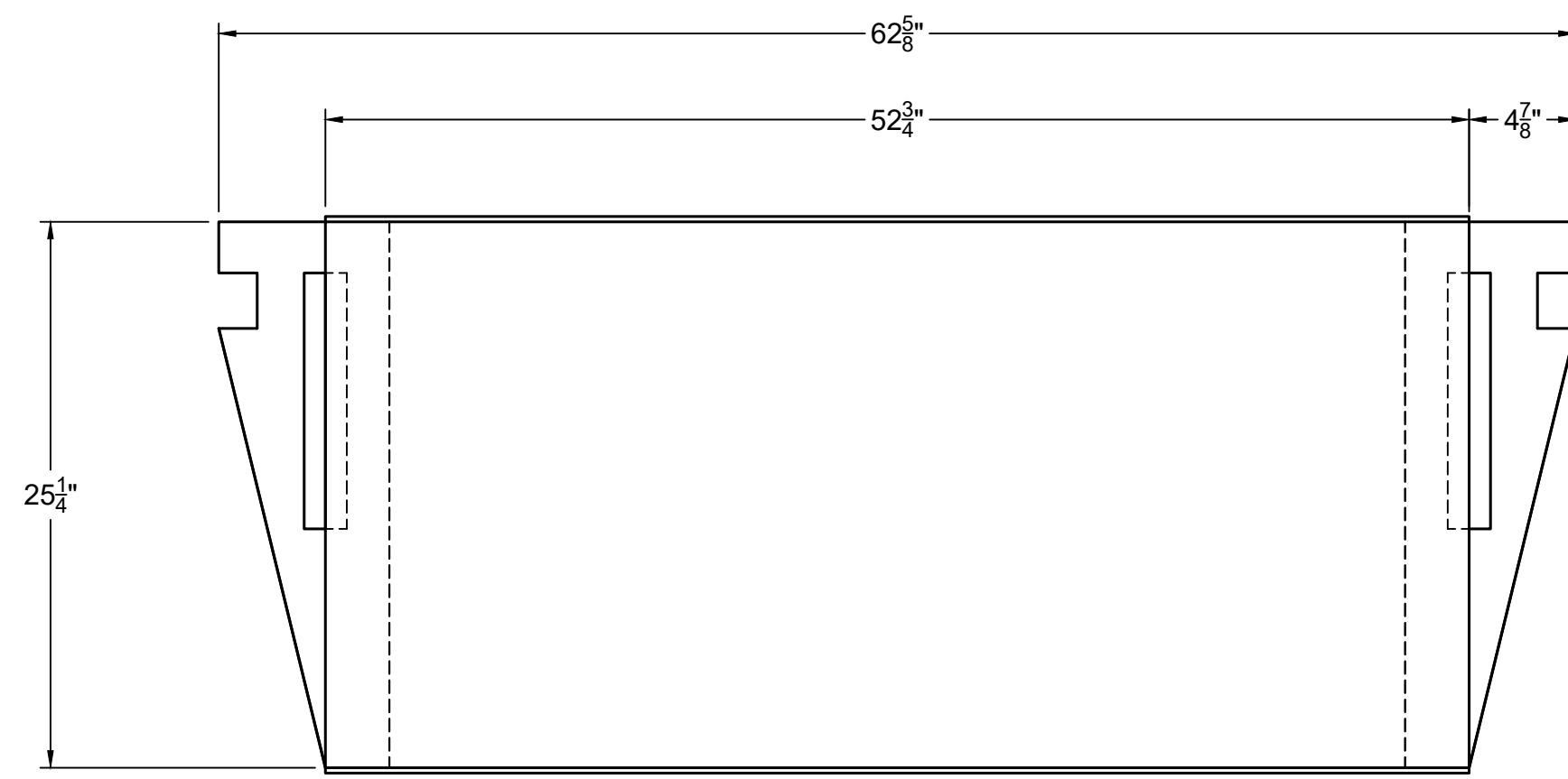


**GENERAL NOTES**

1. THIS FIREBOX IS ONLY TO BE USED WITH LISTED VENT-FREE GAS-FIRED LOG SETS WITH HEAT INPUT RATINGS UP TO 40,000 BTU/HR.
2. DO NOT BUILD A FIRE IN THIS ENCLOSURE.
3. THE VENT-FREE FIREBOX MAY BE INSTALLED AT "ZERO CLEARANCE" TO PLYWOOD SHEATHING AND TO UN-INSULATED WOOD FRAMING MEMBERS AT THE UNIT BOTTOM, SIDES, REAR AND TOP WHEN USED FOR ENCLOSING ANY LISTED UNVENTED GAS-FIRED LOG SET WITH MAXIMUM HEAT INPUT RATINGS UP TO 40,000 BTU/HR.
4. WHEN A VENT-FREE FIREBOX IS TO BE INSTALLED ON CARPETING, TILE, OR ANY COMBUSTIBLE MATERIAL OTHER THAN WOOD FLOORING OR CONCRETE, THE VENT-FREE FIREBOX SHALL THEN BE INSTALLED ON A METAL OR WOOD PANEL EXTENDING THE FULL WIDTH AND DEPTH OF THE VENT-FREE FIREBOX.
5. KEEP ALL UNSHIELDED INSULATION MATERIAL A MINIMUM OF THREE INCHES (3") AWAY FROM THE OUTSIDE SURFACES OF THE VENT-FREE FIREBOX.
6. AT THE FRONT OF THE FIREBOX, ALL COMBUSTIBLE TRIM MUST BE KEPT A MINIMUM OF 12" FROM THE TOP, AND 8" FROM THE SIDES OF THE FIREBOX OPENING.
7. PARTS OF THE COMBUSTIBLE MANTEL ASSEMBLY LOCATED ABOVE AND PROJECTING MORE THAN ONE AND ONE-HALF INCHES (1-1/2") INCHES FROM THE FIREBOX OPENING SHALL BE KEPT AT LEAST TWELVE INCHES (12") FROM THE TOP OF THE OPENING.
8. MANTEL SHELVES WITH HORIZONTAL PROJECTION OF TWELVE INCHES (12") FROM THE FACE OF THE FIREPLACE MUST BE HELD TO A MINIMUM VERTICAL DISTANCE OF THIRTY INCHES (30") FROM THE TOP OF THE FINISHED FIREPLACE OPENING.
9. IMPORTANT: MANTEL HEIGHT CLEARANCES MAY VARY AMONG GAS LOG APPLIANCE MANUFACTURERS. BE SURE TO FOLLOW THE GAS LOG APPLIANCE MANUFACTURER'S EXPLICIT INSTALLATION INSTRUCTIONS FOR MANTEL HEIGHT CLEARANCE REQUIREMENTS.
10. ALTHOUGH NON-COMBUSTIBLE HEARTH EXTENSIONS ARE NOT REQUIRED IN FRONT OF THE VENT-FREE FIREBOX, IT IS THE RESPONSIBILITY OF THE INSTALLER TO REFER TO THE VENT-FREE GAS LOG MANUFACTURER'S EXPLICIT INSTALLATION INSTRUCTIONS REGARDING THEIR REQUIREMENTS FOR NON-COMBUSTIBLE HEARTH EXTENSIONS. REQUIREMENTS MAY VARY AMONG VENT-FREE GAS LOG MANUFACTURERS. ALWAYS REFER TO LOCAL CODES GOVERNING THE NEED FOR HEARTH EXTENSIONS FOR VENT-FREE GAS LOG ENCLOSURES.
11. THESE MODELS CANNOT BE INSTALLED IN A BEDROOM UNLESS MAXIMUM BTU RATING OF INSTALLED VENT-FREE LOG SET IS LESS THAN 10,000 BTU/HR.
12. DRAWINGS ARE FOR DESIGN PURPOSES ONLY AND ARE THE SOLE PROPERTY OF EARTHCORE INDUSTRIES. ANY REPRODUCTION OR UNAUTHORIZED USE IS STRICTLY PROHIBITED.
13. EARTHCORE/ ISOKERN OR ANY DIVISION THEREOF SHALL NOT BE HELD LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES OR EXPENSES ARISING OUT OF THE USE OF THE FIREPLACES OR CHIMNEY SYSTEMS.
14. ALWAYS CHECK LOCAL BUILDING CODES GOVERNING FIREPLACES AND FIREPLACE INSTALLATIONS.

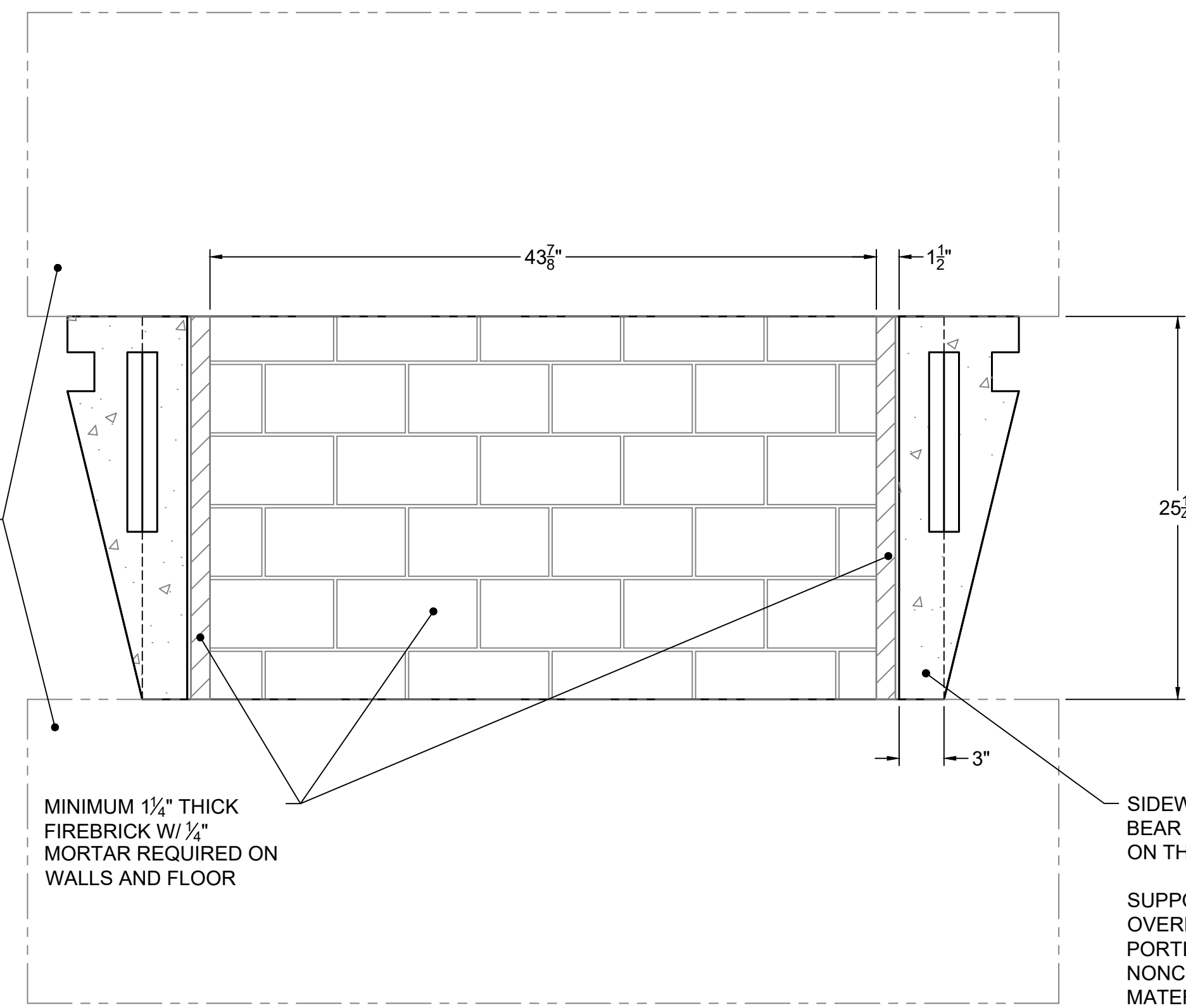
SEE DETAIL-B ON NEXT SHEET FOR CLEARANCES TO SURROUNDING COMBUSTIBLE CONSTRUCTION



**TOP VIEW**

ALTHOUGH NON-COMBUSTIBLE HEARTH EXTENSIONS ARE NOT REQUIRED IN FRONT OF THE VENT-FREE FIREBOX, IT IS THE RESPONSIBILITY OF THE INSTALLER TO REFER TO THE VENT-FREE GAS LOG MANUFACTURER'S EXPLICIT INSTALLATION INSTRUCTIONS REGARDING THEIR REQUIREMENTS FOR NON-COMBUSTIBLE HEARTH EXTENSIONS. REQUIREMENTS MAY VARY AMONG VENT-FREE GAS LOG MANUFACTURERS.

ALWAYS REFER TO LOCAL CODES GOVERNING THE NEED FOR HEARTH EXTENSIONS FOR VENT-FREE GAS LOG ENCLOSURES

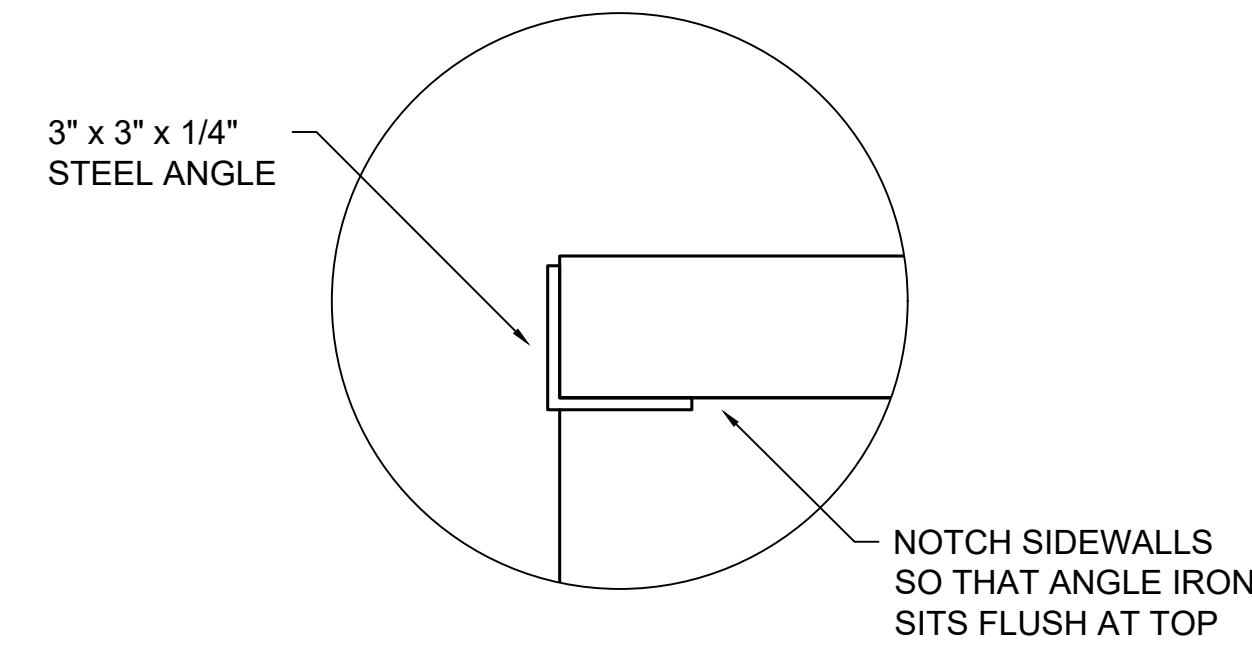


**SECTION-B-B**

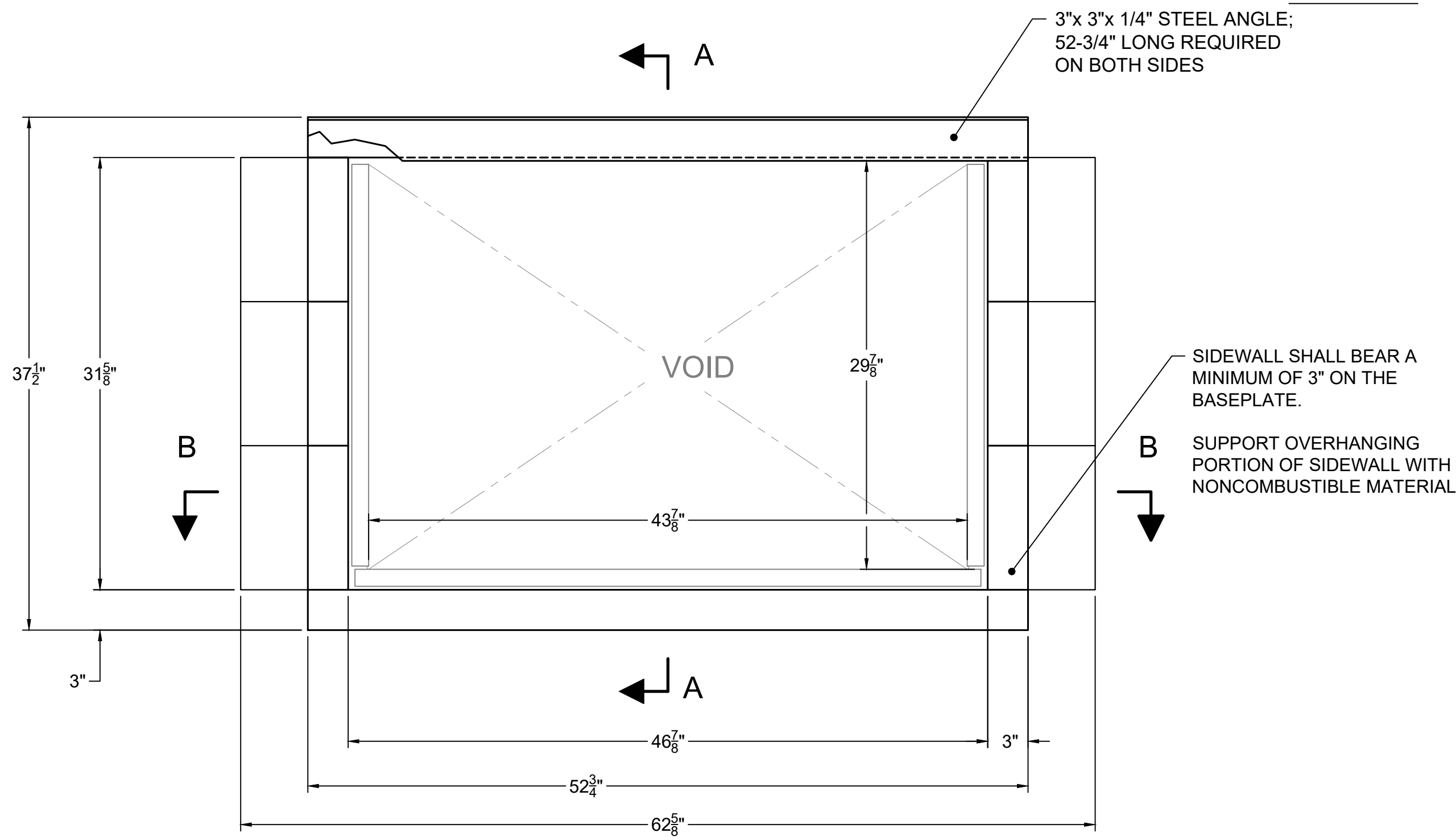
MINIMUM 1/4" THICK FIREBRICK W/ 1/2" MORTAR REQUIRED ON WALLS AND FLOOR

SIDEWALL SHALL BEAR A MINIMUM OF 3" ON THE BASEPLATE.

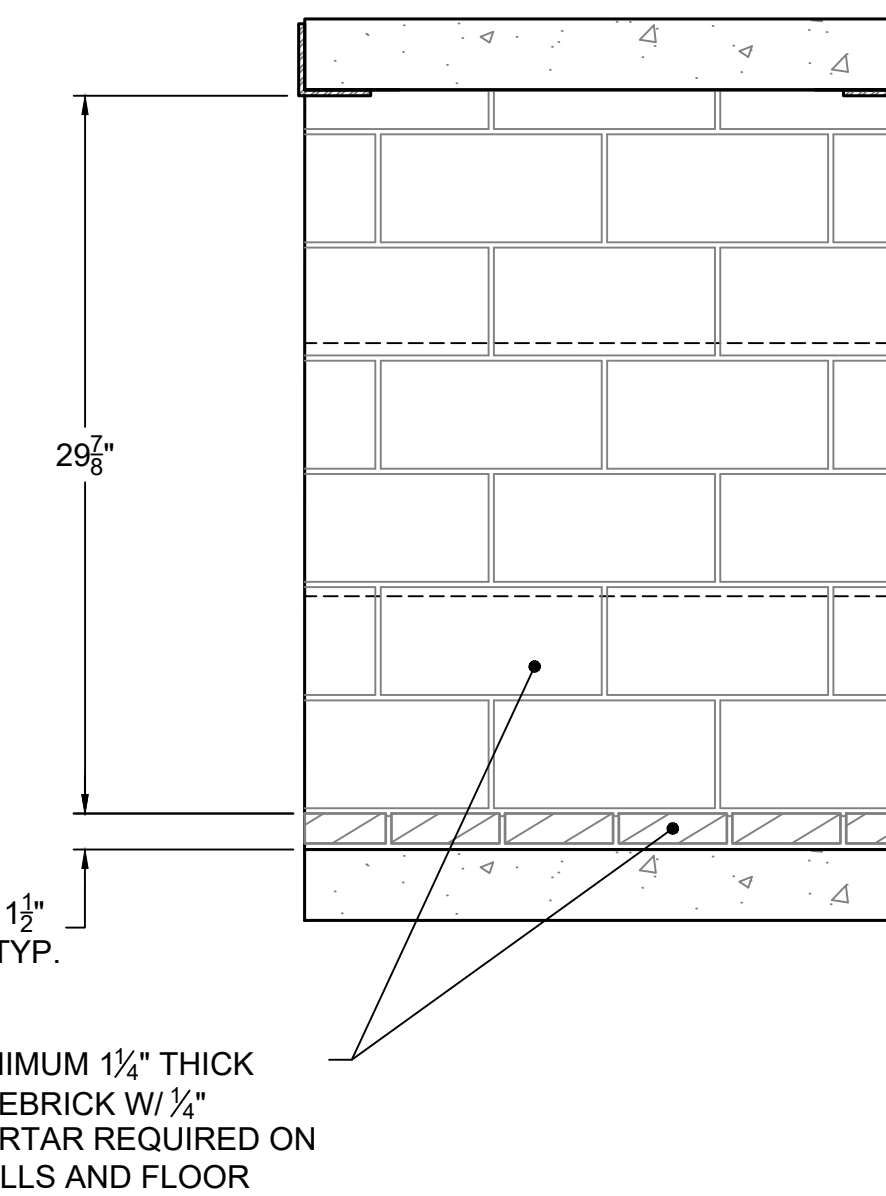
SUPPORT OVERHANGING PORTION WITH NONCOMBUSTIBLE MATERIAL



**DETAIL-A**

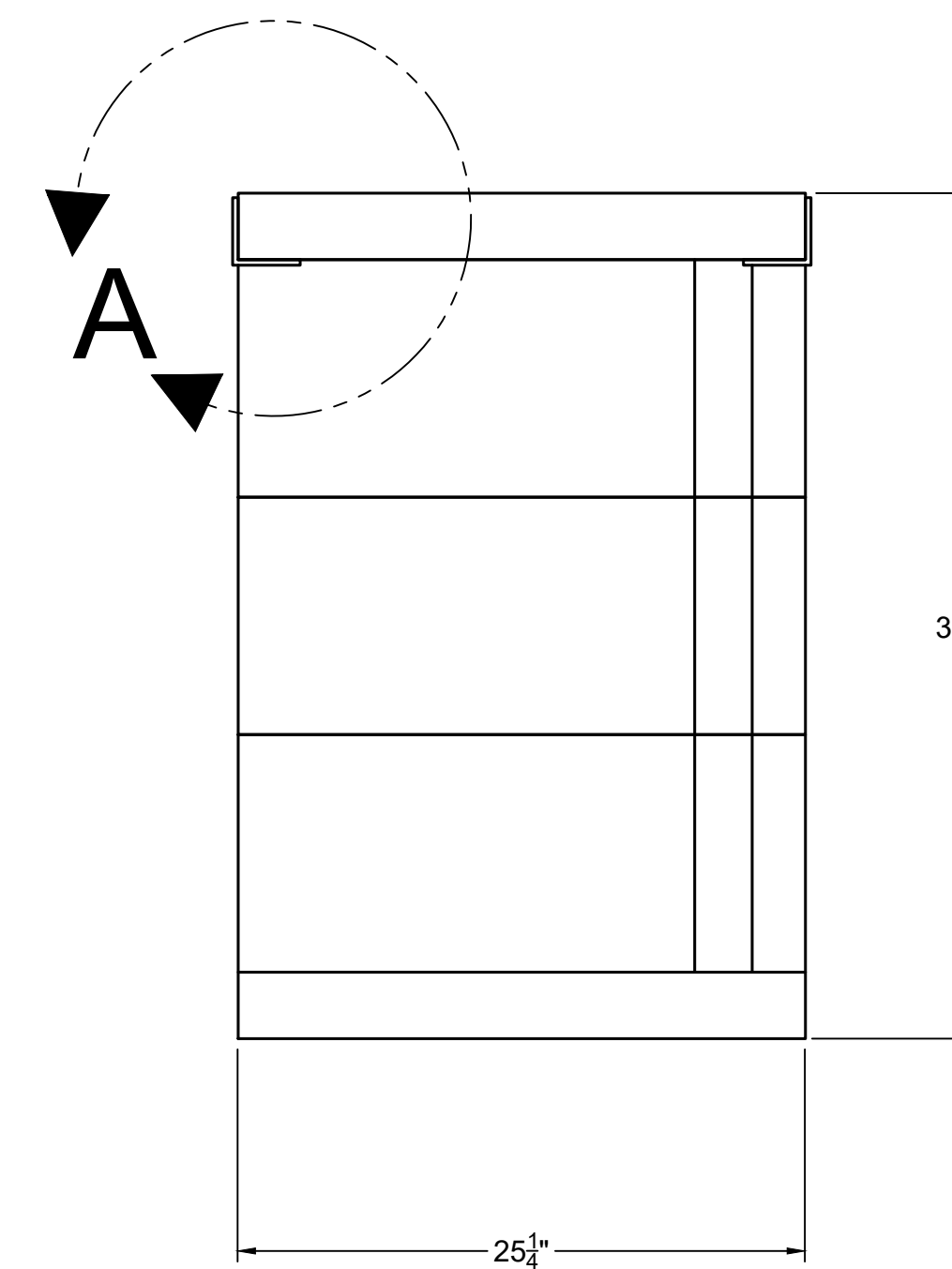


**FRONT VIEW**



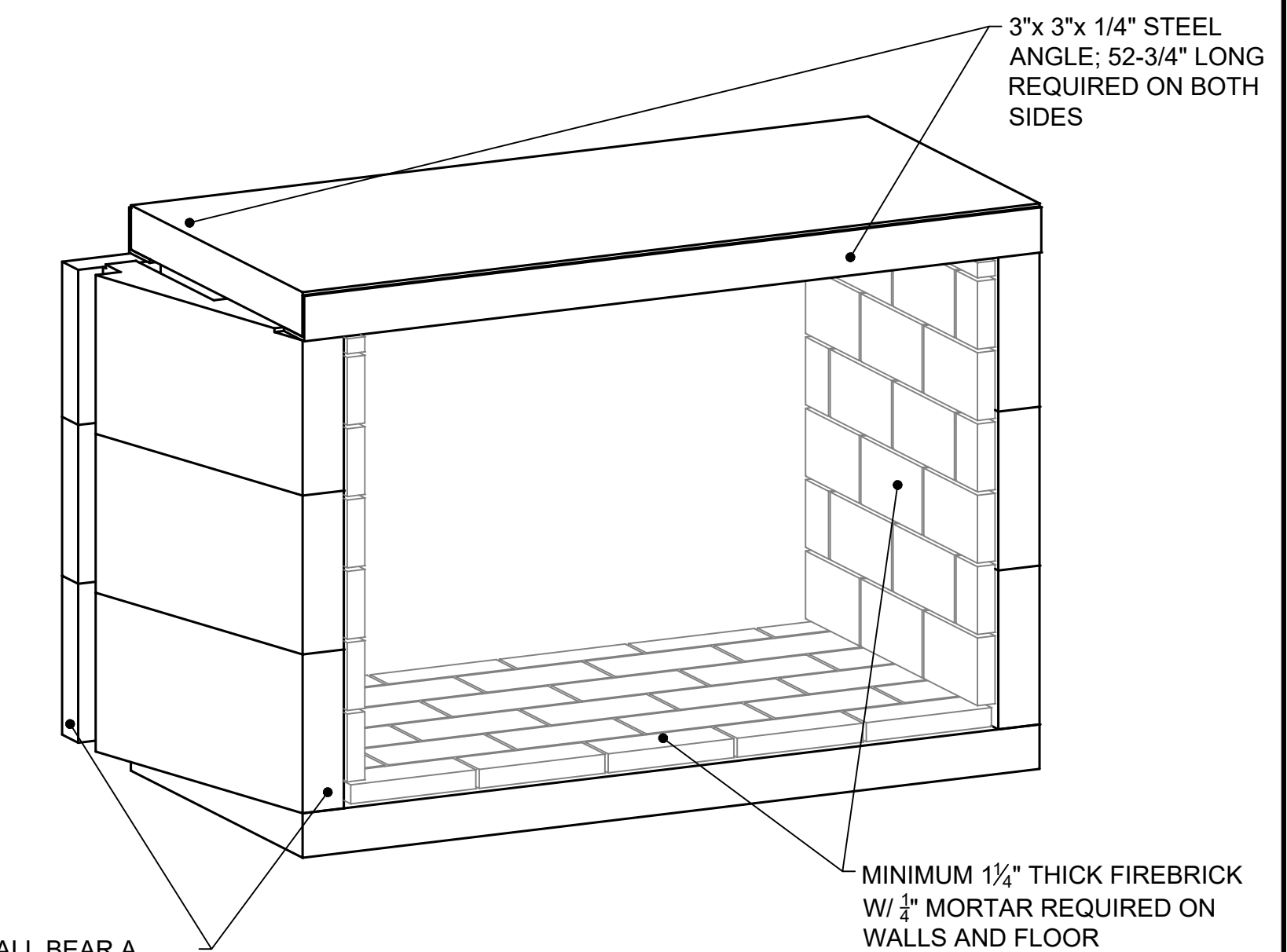
**SECTION A-A**

MINIMUM 1/4" THICK FIREBRICK W/ 1/2" MORTAR REQUIRED ON WALLS AND FLOOR



**RIGHT SIDE VIEW**

**ISOMETRIC VIEW (N.T.S)**



SIDEWALL SHALL BEAR A MINIMUM OF 3" ON THE BASEPLATE.

SUPPORT OVERHANGING PORTION WITH NONCOMBUSTIBLE MATERIAL

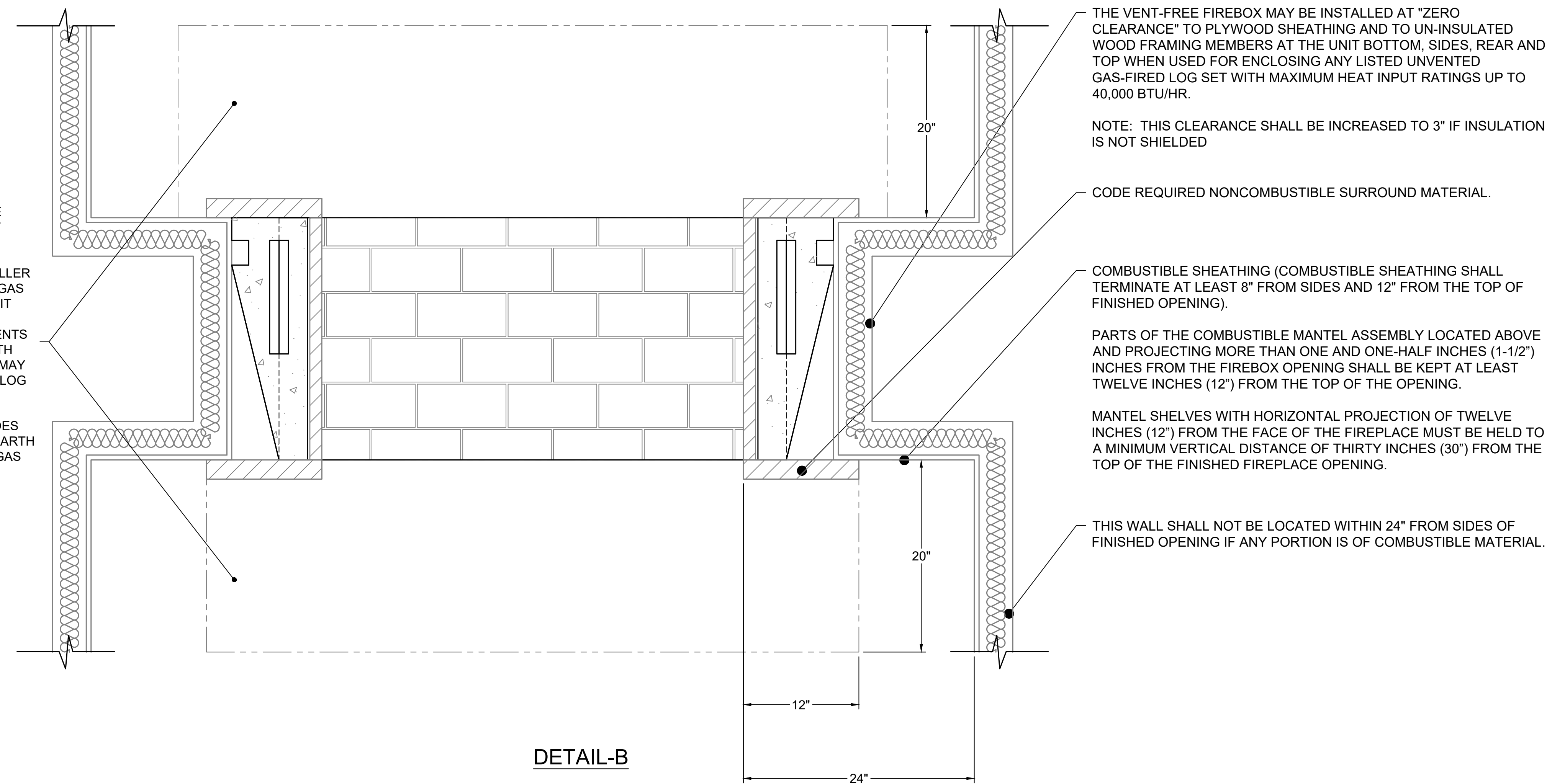
		PROJECT: <b>46" VENT FREE-SEE THRU</b> DESCRIPTION: <b>FIREPLACE CONSTRUCTION DOCUMENT</b>	
UNLESS OTHERWISE STATED, ALL DIMENSIONS ARE IN MILLIMETERS		THIRD ANGLE PROJECTION	
TOLERANCES ANG. X ± LIN. X ± XX ±		MATERIAL: <b>E.C. PUMICE MIXTURE</b> DRAWN: <b>K.B.H</b> DATE: <b>1/23/2023</b> APPROVED: DATE:	
6899 Philips Industrial Blvd. Jacksonville, FL 32256		SIZE: <b>D</b> SCALE: <b>1-1/2"=1'-0"</b>	DRAWING #: <b>81046ST</b> REV: <b>B</b>
		DO NOT SCALE SHEET # 1 OF 3	

**GENERAL NOTES**

1. THIS FIREBOX IS ONLY TO BE USED WITH LISTED VENT-FREE GAS-FIRED LOG SETS WITH HEAT INPUT RATINGS UP TO 40,000 BTU/HR.
2. DO NOT BUILD A FIRE IN THIS ENCLOSURE.
3. THE VENT-FREE FIREBOX MAY BE INSTALLED AT "ZERO CLEARANCE" TO PLYWOOD SHEATHING AND TO UN-INSULATED WOOD FRAMING MEMBERS AT THE UNIT BOTTOM, SIDES, REAR AND TOP WHEN USED FOR ENCLOSING ANY LISTED UNVENTED GAS-FIRED LOG SET WITH MAXIMUM HEAT INPUT RATINGS UP TO 40,000 BTU/HR.
4. ALTHOUGH NON-COMBUSTIBLE HEARTH EXTENSIONS ARE NOT REQUIRED IN FRONT OF THE VENT-FREE FIREBOX, IT IS THE RESPONSIBILITY OF THE INSTALLER TO REFER TO THE VENT-FREE GAS LOG MANUFACTURER'S EXPLICIT INSTALLATION INSTRUCTIONS REGARDING THEIR REQUIREMENTS FOR NON-COMBUSTIBLE HEARTH EXTENSIONS. REQUIREMENTS MAY VARY AMONG VENT-FREE GAS LOG MANUFACTURERS. ALWAYS REFER TO LOCAL CODES GOVERNING THE NEED FOR HEARTH EXTENSIONS FOR VENT-FREE GAS LOG ENCLOSURES
5. WHEN A VENT-FREE FIREBOX IS TO BE INSTALLED ON CARPETING, TILE, OR ANY COMBUSTIBLE MATERIAL OTHER THAN WOOD FLOORING OR CONCRETE, THE VENT-FREE FIREBOX SHALL THEN BE INSTALLED ON A METAL OR WOOD PANEL EXTENDING THE FULL WIDTH AND DEPTH OF THE VENT-FREE FIREBOX.
6. AT THE FRONT OF THE FIREBOX, ALL COMBUSTIBLE TRIM MUST BE KEPT A MINIMUM OF 12" FROM THE TOP, AND 8" FROM THE SIDES OF THE FIREBOX OPENING.
7. PARTS OF THE COMBUSTIBLE MANTEL ASSEMBLY LOCATED ABOVE AND PROJECTING MORE THAN ONE AND ONE-HALF INCHES (1-1/2") INCHES FROM THE FIREBOX OPENING SHALL BE KEPT AT LEAST TWELVE INCHES (12") FROM THE TOP OF THE OPENING.
8. MANTEL SHELVES WITH HORIZONTAL PROJECTION OF TWELVE INCHES (12") FROM THE FACE OF THE FIREPLACE MUST BE HELD TO A MINIMUM VERTICAL DISTANCE OF THIRTY INCHES (30") FROM THE TOP OF THE FINISHED FIREPLACE OPENING.
9. **IMPORTANT:** MANTEL HEIGHT CLEARANCES MAY VARY AMONG GAS LOG APPLIANCE MANUFACTURERS. BE SURE TO FOLLOW THE GAS LOG APPLIANCE MANUFACTURER'S EXPLICIT INSTALLATION INSTRUCTIONS FOR MANTEL HEIGHT CLEARANCE REQUIREMENTS.
10. KEEP ALL INSULATION MATERIAL TO A MINIMUM OF THREE INCHES (3") AWAY FROM THE OUTSIDE SURFACES OF THE VENT-FREE FIREBOX.
11. THESE MODELS CANNOT BE INSTALLED IN A BEDROOM UNLESS MAXIMUM BTU RATING OF INSTALLED VENT-FREE LOG SET IS LESS THAN 10,000 BTU/HR.
12. DRAWINGS ARE FOR DESIGN PURPOSES ONLY AND ARE THE SOLE PROPERTY OF EARTHCORE INDUSTRIES. ANY REPRODUCTION OR UNAUTHORIZED USE IS STRICTLY PROHIBITED.
13. EARTHCORE/ ISOKERN OR ANY DIVISION THEREOF SHALL NOT BE HELD LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES OR EXPENSES ARISING OUT OF THE USE OF THE FIREPLACES OR CHIMNEY SYSTEMS.
14. ALWAYS CHECK LOCAL BUILDING CODES GOVERNING FIREPLACES AND FIREPLACE INSTALLATIONS.

ALTHOUGH NON-COMBUSTIBLE HEARTH EXTENSIONS ARE NOT REQUIRED IN FRONT OF THE VENT-FREE FIREBOX, IT IS THE RESPONSIBILITY OF THE INSTALLER TO REFER TO THE VENT-FREE GAS LOG MANUFACTURER'S EXPLICIT INSTALLATION INSTRUCTIONS REGARDING THEIR REQUIREMENTS FOR NON-COMBUSTIBLE HEARTH EXTENSIONS. REQUIREMENTS MAY VARY AMONG VENT-FREE GAS LOG MANUFACTURERS.

ALWAYS REFER TO LOCAL CODES GOVERNING THE NEED FOR HEARTH EXTENSIONS FOR VENT-FREE GAS LOG ENCLOSURES



THE VENT-FREE FIREBOX MAY BE INSTALLED AT "ZERO CLEARANCE" TO PLYWOOD SHEATHING AND TO UN-INSULATED WOOD FRAMING MEMBERS AT THE UNIT BOTTOM, SIDES, REAR AND TOP WHEN USED FOR ENCLOSING ANY LISTED UNVENTED GAS-FIRED LOG SET WITH MAXIMUM HEAT INPUT RATINGS UP TO 40,000 BTU/HR.

NOTE: THIS CLEARANCE SHALL BE INCREASED TO 3" IF INSULATION IS NOT SHIELDED

CODE REQUIRED NONCOMBUSTIBLE SURROUND MATERIAL.

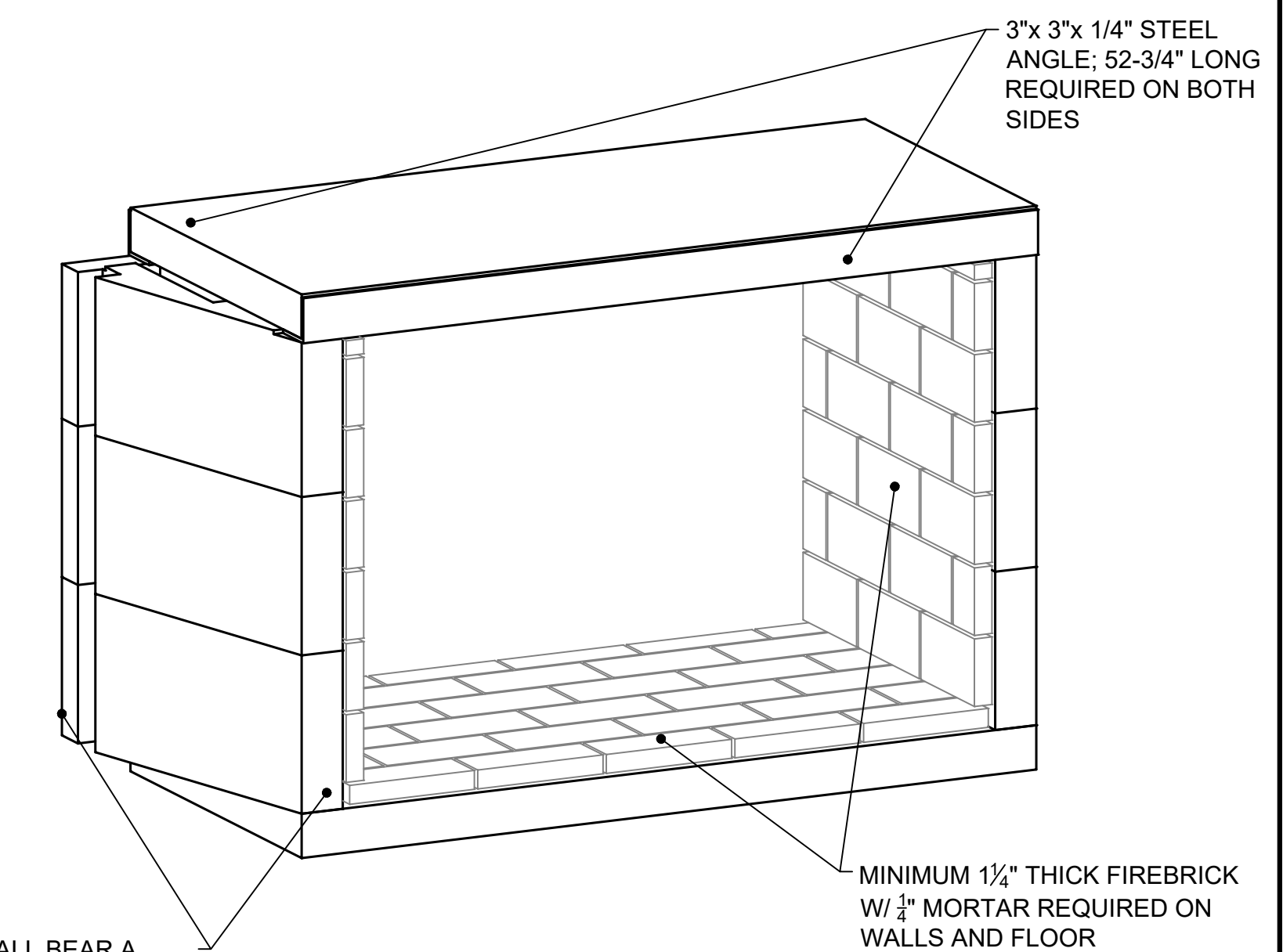
COMBUSTIBLE SHEATHING (COMBUSTIBLE SHEATHING SHALL TERMINATE AT LEAST 8" FROM SIDES AND 12" FROM THE TOP OF FINISHED OPENING).

PARTS OF THE COMBUSTIBLE MANTEL ASSEMBLY LOCATED ABOVE AND PROJECTING MORE THAN ONE AND ONE-HALF INCHES (1-1/2") INCHES FROM THE FIREBOX OPENING SHALL BE KEPT AT LEAST TWELVE INCHES (12") FROM THE TOP OF THE OPENING.

MANTEL SHELVES WITH HORIZONTAL PROJECTION OF TWELVE INCHES (12") FROM THE FACE OF THE FIREPLACE MUST BE HELD TO A MINIMUM VERTICAL DISTANCE OF THIRTY INCHES (30") FROM THE TOP OF THE FINISHED FIREPLACE OPENING.

THIS WALL SHALL NOT BE LOCATED WITHIN 24" FROM SIDES OF FINISHED OPENING IF ANY PORTION IS OF COMBUSTIBLE MATERIAL.

**ISOMETRIC VIEW (N.T.S)**



SIDEWALL SHALL BEAR A MINIMUM OF 3" ON THE BASEPLATE.

SUPPORT OVERHANGING PORTION WITH NONCOMBUSTIBLE MATERIAL

	UNLESS OTHERWISE STATED, ALL DIMENSIONS ARE IN MILLIMETERS		PROJECT: <b>46" VENT-FREE SEE-THRU</b>																													
	THIRD ANGLE PROJECTION		DESCRIPTION: <b>CLEARANCES TO COMBUSTIBLE CONSTRUCTION</b>																													
<table border="1"> <tr> <th>ANG.</th> <th>X</th> <th>±</th> </tr> <tr> <td>LIN.</td> <td>X</td> <td>±</td> </tr> <tr> <td></td> <td>X</td> <td>±</td> </tr> <tr> <td></td> <td>XX</td> <td>±</td> </tr> </table>	ANG.	X	±	LIN.	X	±		X	±		XX	±	<table border="1"> <tr> <td>DRAWN:</td> <td>K.B.H.</td> <td>DATE:</td> <td>1/23/2023</td> </tr> <tr> <td>APPROVED:</td> <td></td> <td>DATE:</td> <td></td> </tr> </table>	DRAWN:	K.B.H.	DATE:	1/23/2023	APPROVED:		DATE:		<table border="1"> <tr> <td>SIZE:</td> <td>D</td> <td>SCALE:</td> <td>N.T.S</td> </tr> <tr> <td>DRAWING #:</td> <td>81046ST</td> <td>REV:</td> <td>B</td> </tr> </table>	SIZE:	D	SCALE:	N.T.S	DRAWING #:	81046ST	REV:	B	6899 Philips Industrial Blvd. Jacksonville, FL 32256	
ANG.	X	±																														
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SIZE:	D	SCALE:	N.T.S																													
DRAWING #:	81046ST	REV:	B																													

## Required Clearance to Combustibles & Rough Framing Dimensions

FIGURE 1

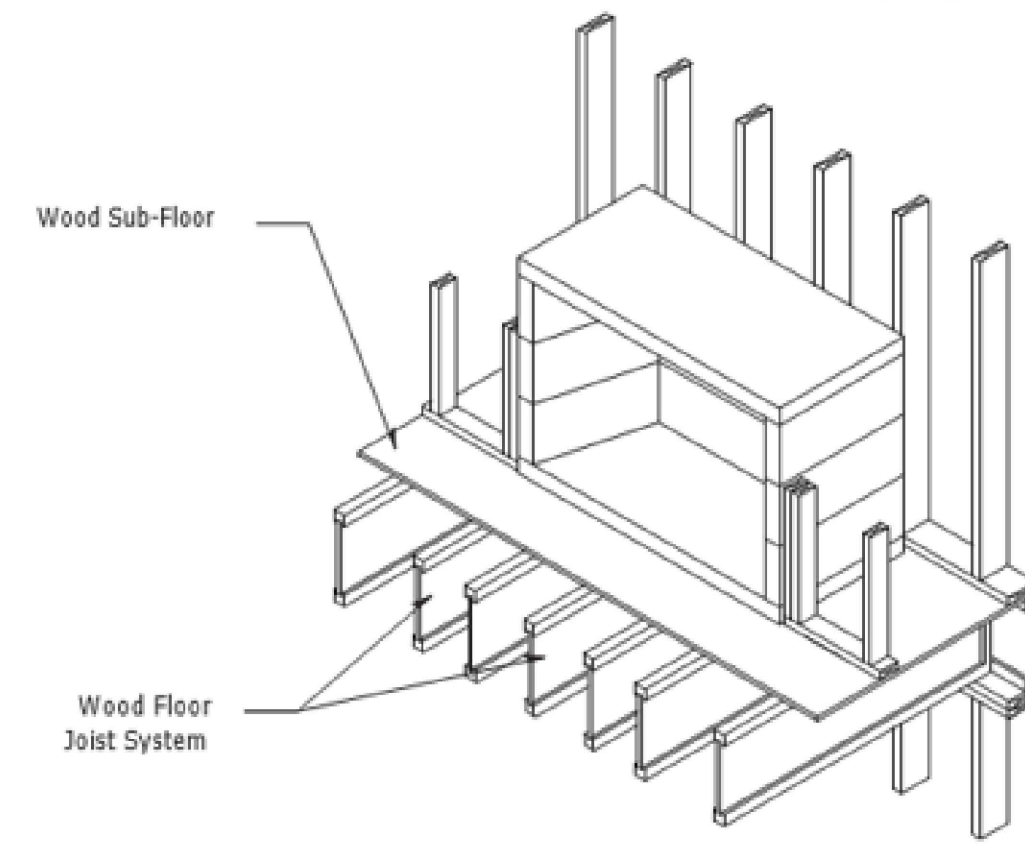


FIGURE 2

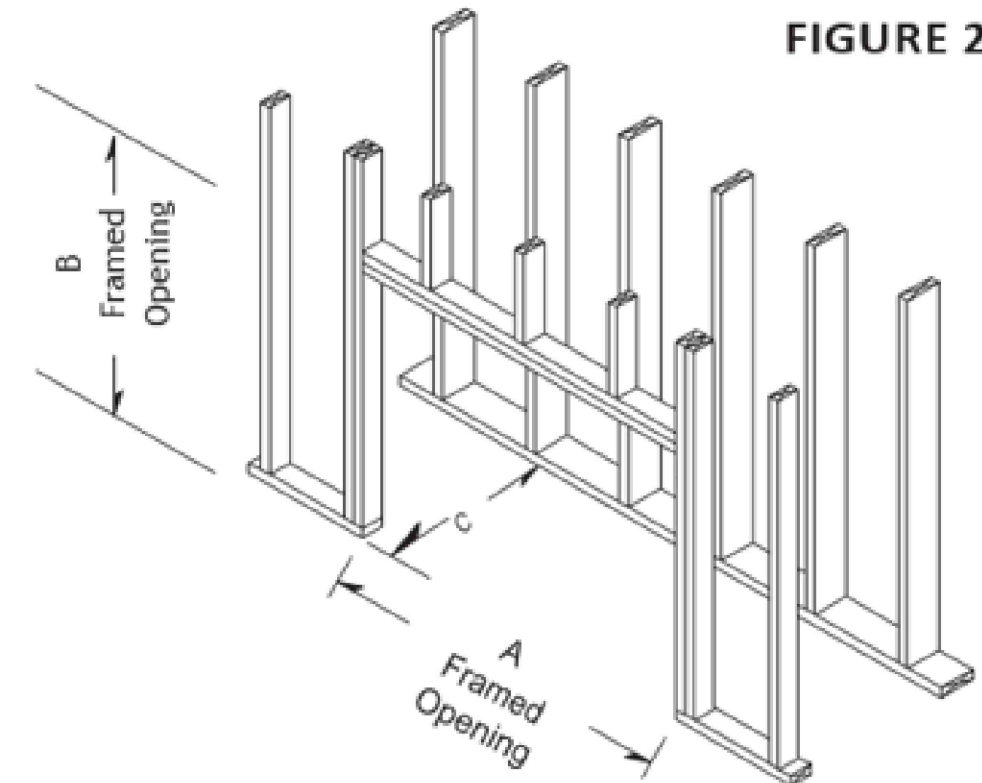
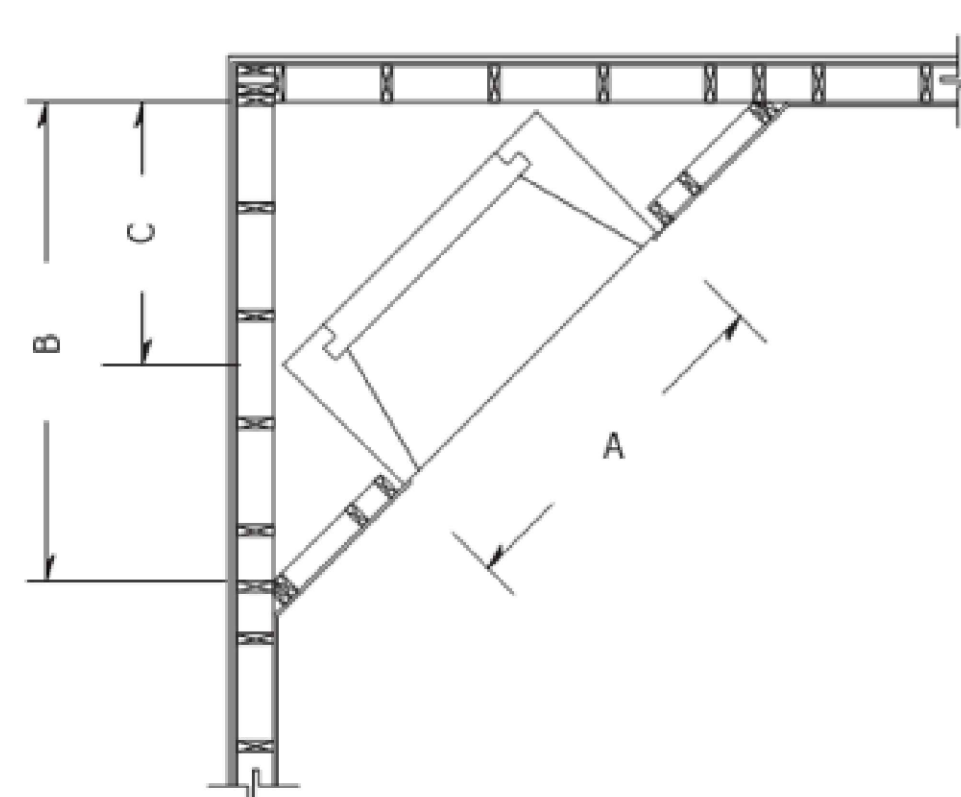


FIGURE 3



### CLEARANCE TO COMBUSTIBLES

The Vent-Free Firebox may be installed at "zero clearance" to plywood sheathing and to un-insulated wood framing members at the unit bottom, sides, rear and top when used for enclosing any listed unvented gas-fired log set with maximum heat input ratings up to 40,000 BTU/hr. (Reference Intertek Testing Services Report No. 13001A-764.) (Figure 1).

However, when a Vent-Free Firebox is to be installed on carpeting, tile, or any combustible material other than wood flooring or concrete, the Vent-Free Firebox shall then be installed on a metal or wood panel extending the full width and depth of the Vent-Free Firebox.

**NOTE:** Keep all insulation material to a minimum of three inches (3") away from the outside surfaces of the Vent-Free Firebox.

### TYPICAL INSTALLATION FRAMING DIMENSIONS (Figure 2)

Vent-Free	Width - A	Height - B	Depth - C
81036	43"	37 1/2"	25 1/4"
81042	49"	37 1/2"	25 1/4"
81046	53"	37 1/2"	25 1/4"
81060	73 1/2"	40 1/2"	25 1/4"
81072	86"	40 1/2"	25 1/4"

### NOTES:

- See-Thru application will require dimension shown in "A" to be increased by approximately 10". (See Page 16 for See-thru application).
- Dimension "B" includes the 3" thick base plate.
- Any "Raised hearth" requires additional rough opening height at "B" equal to the height of the raised hearth detail.

### CORNER INSTALLATION FRAMING DIMENSIONS (Figure 3)

Vent-Free	A	B	C
81036	43"	49 3/4"	32 1/2"
81042	49"	52 3/4"	37"
81046	53"	54 3/4"	39 1/2"
81060	73 1/2"	85 1/2"	52"
81072	86"	94 1/4"	60 3/4"

### NOTES:

- "A" reflects the width of framed fireplace opening.
- "B" dimension reflects the distance from the inside frame wall perpendicular to the firebox to the inside corner of the frame wall. (Based on 2"x4" frame wall).
- "C" dimension reflects the distance from the corner of the firebox positioned 1-1/2" from frame wall to inside corner of frame wall.

### Clearance to Combustible Trim

The Vent-Free Firebox is designed to be custom finished with facing trim and mantel to be at owner option. However, all such trim material must meet standard fireplace code requirements: non-combustible facing material must be applied to a minimum of eight inches (8") beyond the sides of the finished opening of the Vent-Free Firebox and non-combustible facing material must cover a minimum of twelve inches (12") above the finished opening of the installed unit. (Reference Intertek Testing Services Report No. 13001A-764.)

Clearance to combustible trim are those distances required to ensure that combustible mantel and facing material will not be exposed to excessive heat while the unit is operating. These clearances should be adequate to prevent discoloration or warping of trim facings due to heat. However, circumstances unique to each installation create variables that may be beyond the scope of this manual. **Therefore, be sure to follow the gas log appliance manufacturer's explicit installation instructions regarding all minimum trim facing, mantel height, and side wall clearance requirements.**

### INTERIOR WALL MATERIALS

Wall materials, such as drywall, should be set flush with the rough front face of the Vent-Free Firebox. This will allow for placement of required noncombustible surround material in such a way that the surround material can lay flat against the finished wall surface and also align with the leading edge of the fire brick interior of the Vent-Free Firebox.

### TRIM FACINGS

Parts of the combustible mantel assembly located along the sides of the firebox opening, which project more than one and one-half inches (1-1/2") from the face of the firebox, shall be kept at least eight inches (8") from the firebox opening.

### ADJOINING ROOM WALLS

Interior wall surfaces of adjoining room walls must be at a minimum horizontal measure of twenty four inches (24") away from the finished opening of the Vent-Free Firebox.

### MANTEL AND MANTEL SHELF CLEARANCE

Vent-Free Fireboxes are subject to the same building code safety clearances from the firebox opening as with any fireplace opening:

Parts of the combustible mantel assembly located above and projecting more than one and one-half inches (1-1/2") inches from the firebox opening shall be kept at least twelve inches (12") from the top of the opening.

Mantel shelves with horizontal projection of twelve inches (12") from the face of the fireplace must be held to a minimum vertical distance of thirty inches (30") from the top of the finished fireplace opening.

**IMPORTANT: Mantel height clearances may vary among gas log appliance manufacturers. Be sure to follow the gas log appliance manufacturer's explicit installation instructions for mantel height clearance requirements.**

FIGURE 21

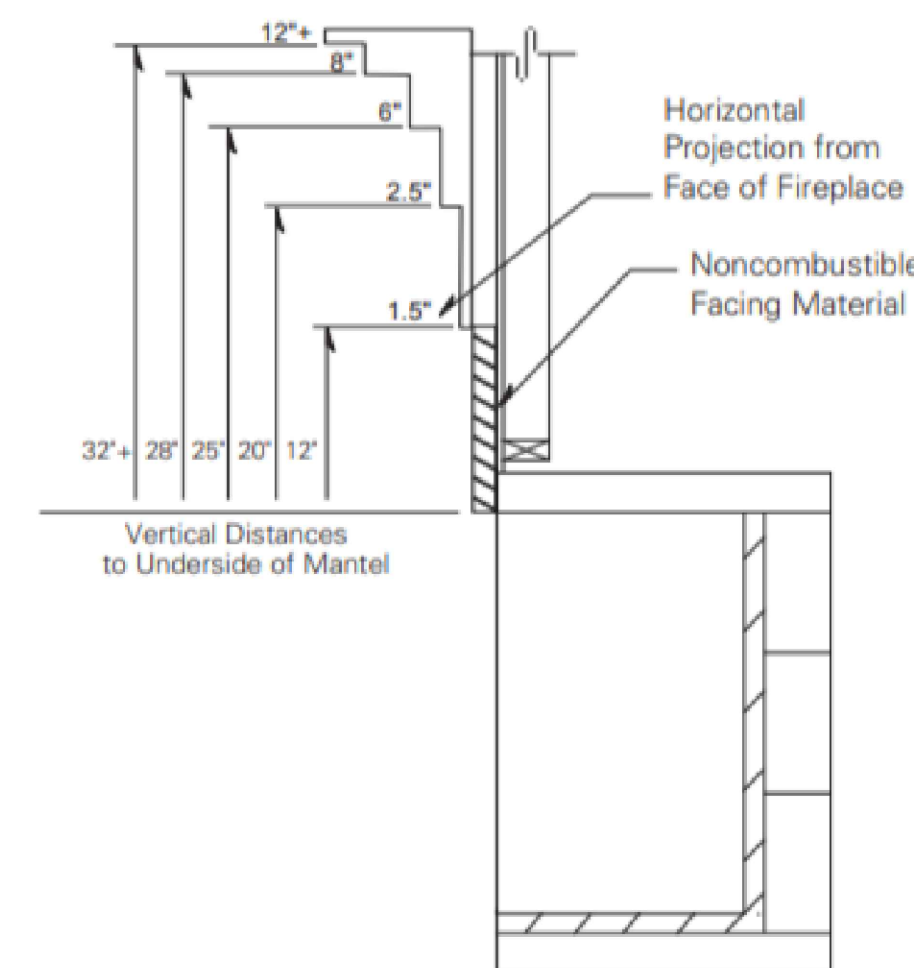
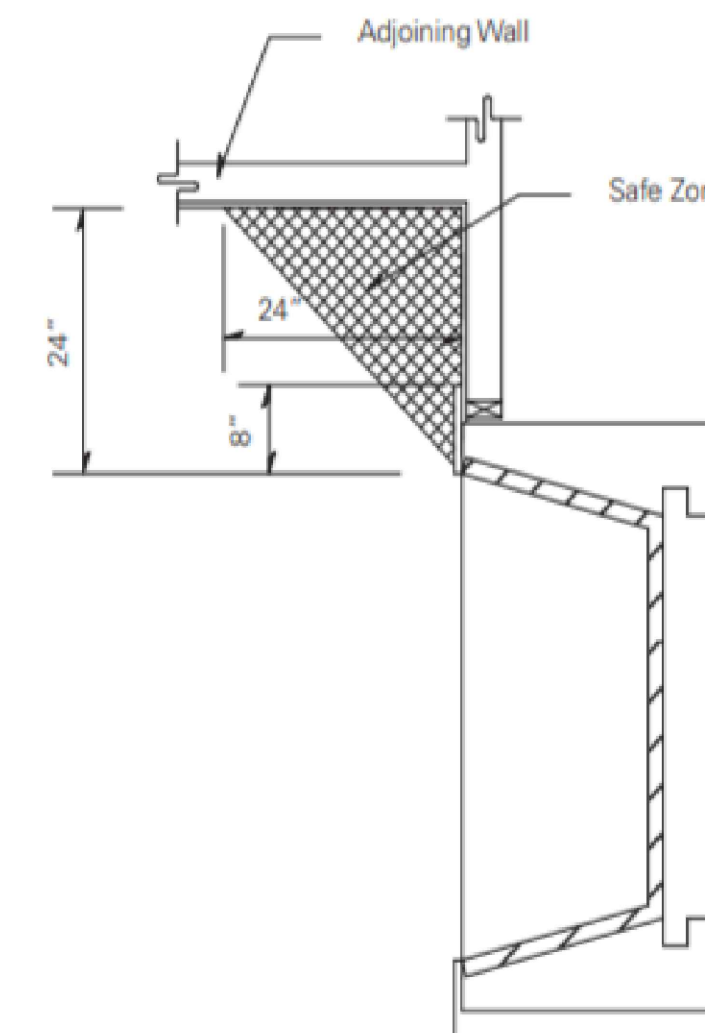


FIGURE 22



## Vent Free Series (Gas Only) Specifications

### MANUFACTURER:

ISOKERN Fireplace and Chimney Systems, North America distribution by Earthcore Industries, LLC, Jacksonville, Florida (Telephone 800-642-2920)

### PRODUCT DESCRIPTION:

Modular refractory masonry precast fireplace.

- Designed for field assembly as a masonry enclosure for a listed unvented decorative gas appliance.
- All interlocking parts necessary for assembly of a complete firebox.

### MATERIALS:

- Light weight concrete of a proprietary mixture of Icelandic volcanic aggregate and aluminum cement for precast firebox, chimney block and flue liner components.
  - Compressive Strength: Firebox Components: 972 psi.
- Premixed (dry) EARTHCORE ADHESIVE.
  - Tensile strength: 807 psi; Compressive strength: 2460 psi.
  - Tested per ASTM C109, ASTM C307, and ANSI 118.4.
- Standard 1-1/8" thick high temperature refractory brick to line firebox interior.

### INSTALLATION:

- Reference manufacturer's installation instructions for standard configurations, weights, sizes and installation details.
- Suitable masonry foundation or structural wood floor system must be provided. When installing directly on carpet, tile or other combustible material other than wood flooring, the appliance should be installed on a metal or wood panel extending the full width and depth of the appliance.
- Noncombustible hearth extension not required, but is recommended.
- Unit to be assembled on site per manufacturer's illustrated instructions.
  - Premixed EARTHCORE ADHESIVE is used at all joints between components.
  - Firebox to be lined with a minimum 1-1/8" thick rated firebrick.
- A 1-1/2" minimum clearance to combustible materials is recommended.
- A 3" minimum clearance to insulation required.

### CERTIFICATION:

- Warnock Hersey 13001A-764,
- Meets or exceeds ANSI Z21.91

### CODE COMPLIANCE:

- ICC NO. ESR 4873
- SBCCI NO. 9626

**NOTE:** Isokern components are a natural material and slight variations in dimensions may occur. These should be no more than 1/8".

SCAN QR CODE FOR LATEST INSTALLATION MANUALS



Intertek  
W/N 04830  
DO NOT REMOVE OR COVER THIS LABEL  
ESR-4873

MODEL 81036 81042 81046 81060 81072  
81036ST 81042ST 81046ST 81060ST 81072ST

**ISOKERN**

MADE IN USA  
Chesapeake, VA 23323

**Ventless Firebox Enclosure for Gas-Fired  
Decorative Type Unvented Room Heaters**

Headquarters  
Jacksonville, FL 32256

WHI-

Certified To: ANSI Z21.91-2020. May be installed at zero clearance to combustibles from floor, sides, rear, and top. Combustible mantel must be at least 12 inches above opening top. Decorative facing in contact with opening front must be non-combustible material. Fireplace screens or equivalent means designed to prevent unintentional access into the firebox interior, must be provided. For use with listed ANSI Z21.11.2 unvented decorative room heaters not to exceed 40,000 Btu/hr (11,723 W).

**WARNING: DO NOT BUILD A FIRE IN THIS ENCLOSURE-INSTALL ONLY ANSI Z223.1 LISTED UNVENTED GAS-FIRED APPLIANCES IN ACCORDANCE WITH THE INSTALLATION INSTRUCTIONS PROVIDED WITH THIS ACCESSORY AND THE GAS APPLIANCE.**

Refer to the Intertek Directory of Building Products (<https://bpdirectory.intertek.com>) for detailed information

A Product of Earthcore Industries, Jacksonville, Florida

	UNLESS OTHERWISE STATED, ALL DIMENSIONS ARE IN MILLIMETERS		PROJECT: 46" VENT-FREE SEE-THRU	
	UNSPECIFIED TOLERANCES:	THIRD ANGLE PROJECTION	DESCRIPTION: GENERAL INFORMATION AND SPECIFICATIONS	
ANG. X ±		MATERIAL:		
LN. X ±		DRAWN: K.B.H.	DATE: 1/23/2023	SIZE: D
X ±		APPROVED:	DATE:	SCALE: N.T.S.
XX ±				DRAWING #: 81046ST
				REV: B