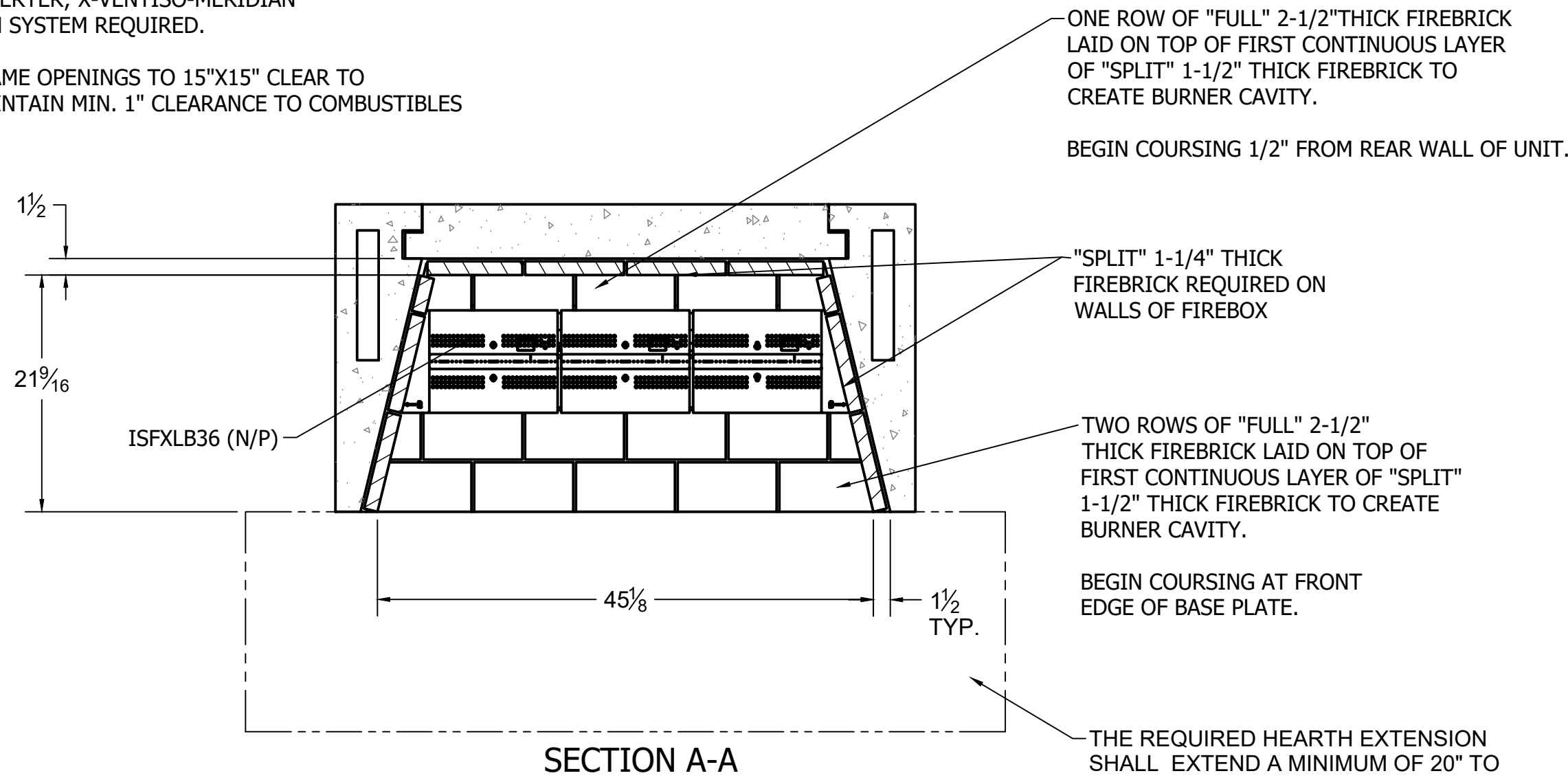


12" B-VENT PIPE W/ DOWN-DRAFT DIVERTER; X-VENTISO-MERIDIAN FAN SYSTEM REQUIRED.

FRAME OPENINGS TO 15"X15" CLEAR TO MAINTAIN MIN. 1" CLEARANCE TO COMBUSTIBLES

TOP



ONE ROW OF "FULL" 2-1/2" THICK FIREBRICK LAID ON TOP OF FIRST CONTINUOUS LAYER OF "SPLIT" 1-1/2" THICK FIREBRICK TO CREATE BURNER CAVITY.

BEGIN COURSING 1/2" FROM REAR WALL OF UNIT.

"SPLIT" 1-1/4" THICK FIREBRICK REQUIRED ON WALLS OF FIREBOX

TWO ROWS OF "FULL" 2-1/2" THICK FIREBRICK LAID ON TOP OF FIRST CONTINUOUS LAYER OF "SPLIT" 1-1/2" THICK FIREBRICK TO CREATE BURNER CAVITY.

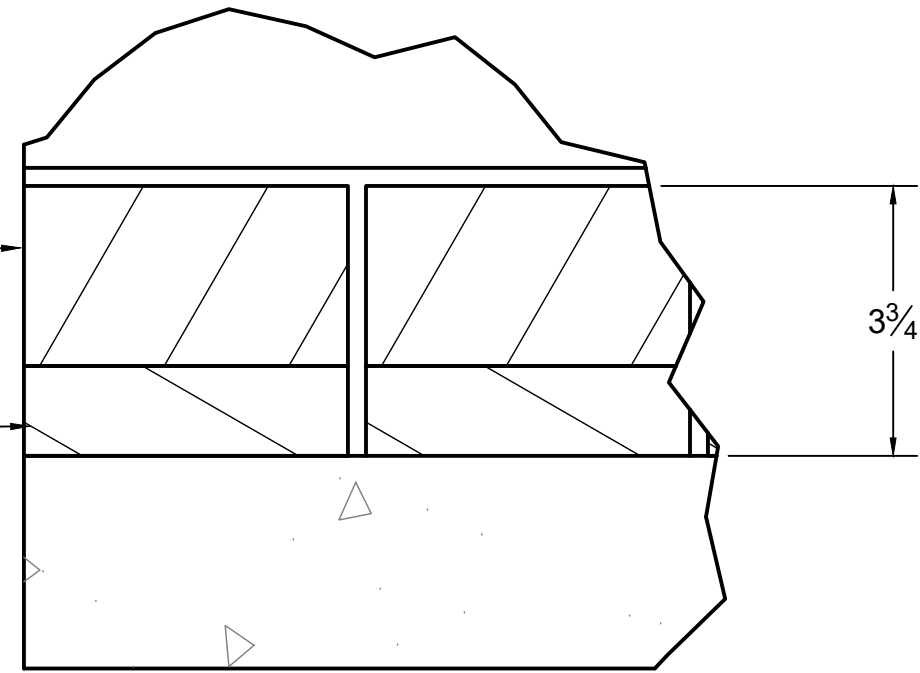
BEGIN COURSING AT FRONT EDGE OF BASE PLATE.

THE REQUIRED HEARTH EXTENSION SHALL EXTEND A MINIMUM OF 20" TO THE FRONT AND 12" TO THE SIDES OF FIREBOX'S FINISHED OPENING.

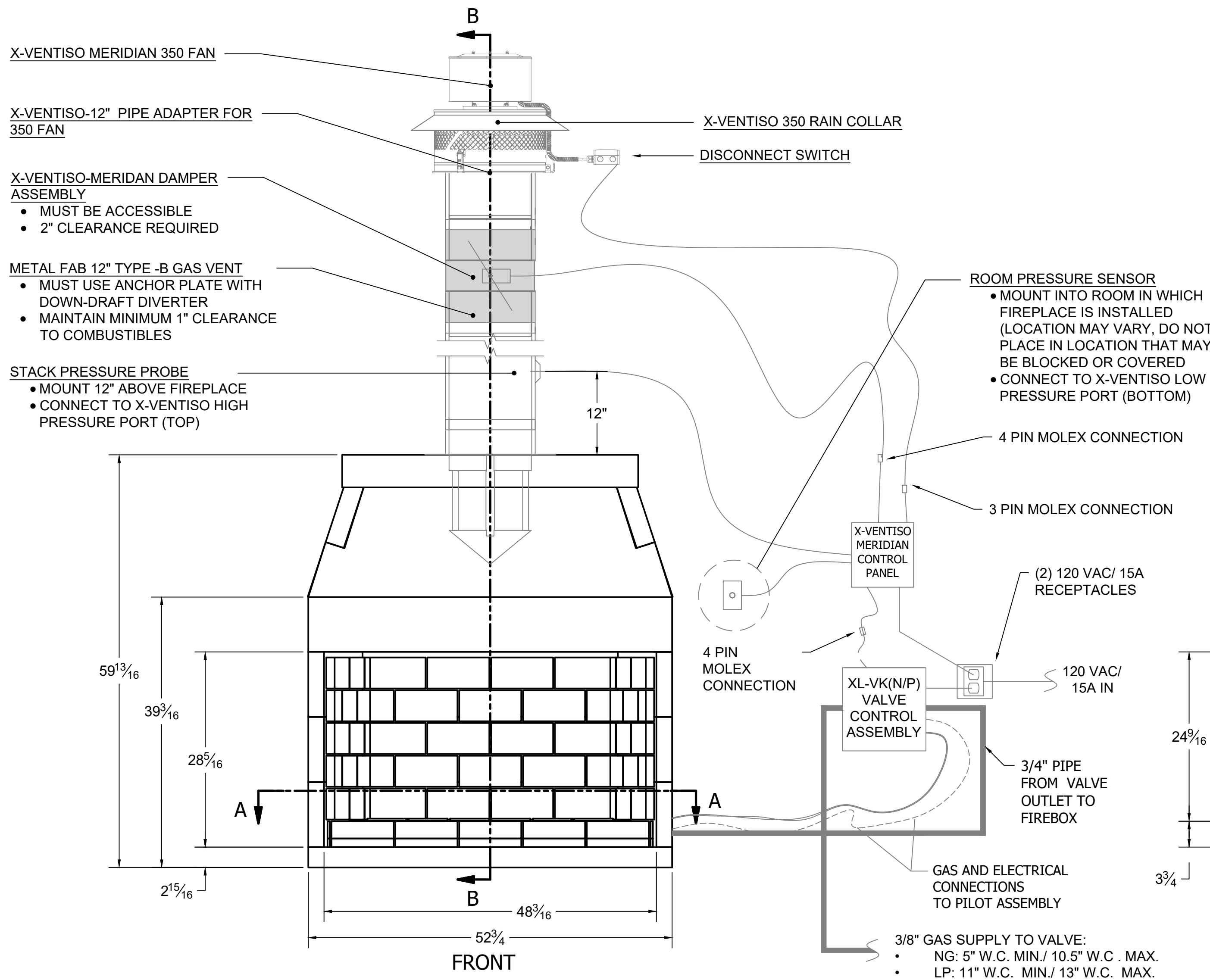
SECTION A-A

LAYER OF 2-1/2" THICK FIREBRICK LAID ON TOP OF FIRST LAYER TO CREATE BURNER CAVITY

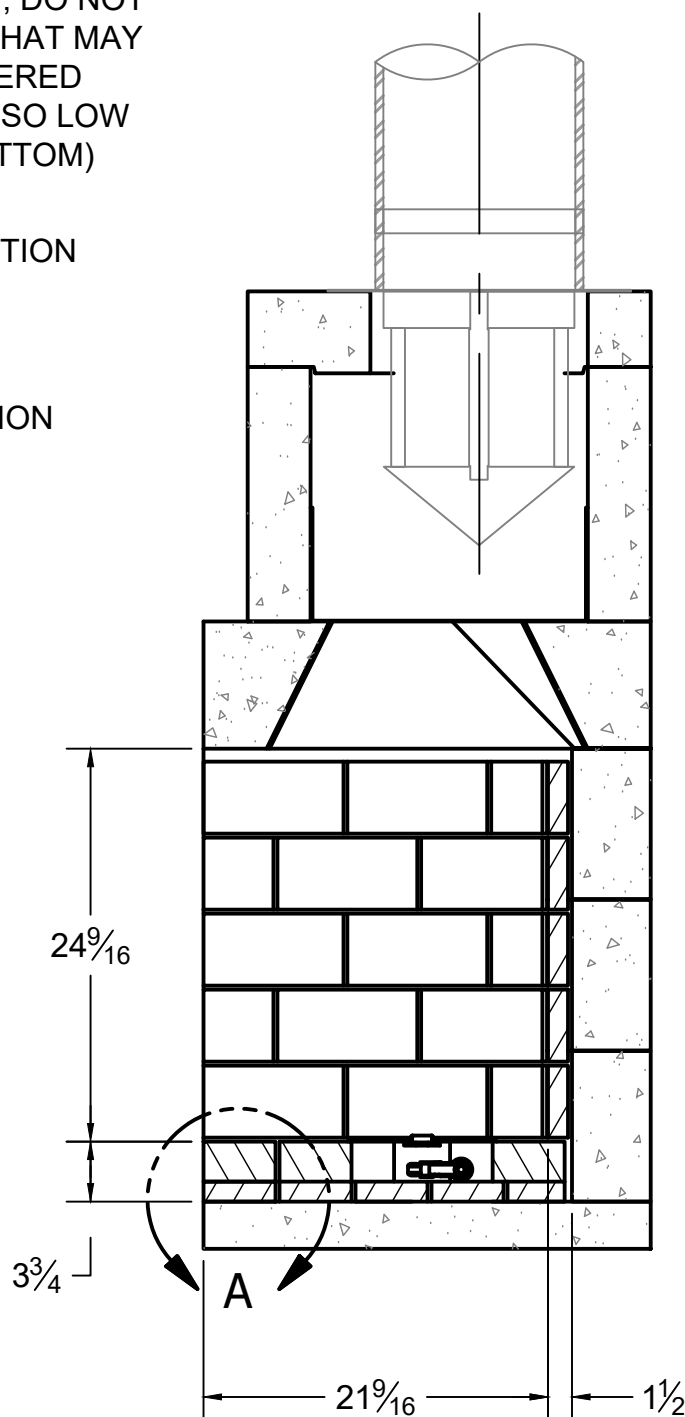
CONTINUOUS LAYER OF 1-1/4" THICK FIREBRICK TO COVER ENTIRE HEARTH FLOOR



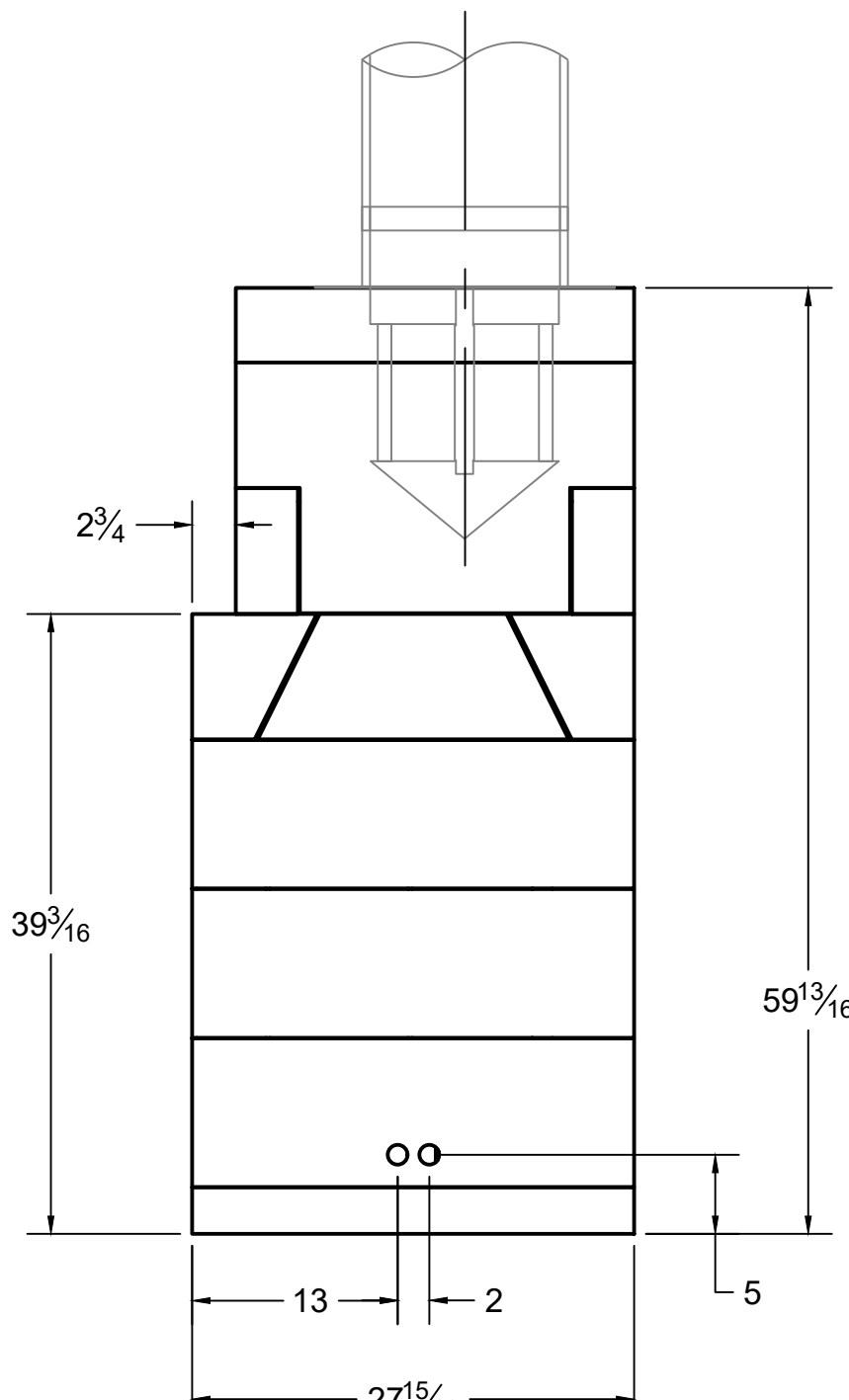
DETAIL A
SCALE .375



FRONT



SECTION B-B



RIGHT

ISOKERN COMPONENT AND ACCESSORIES LIST

PART #	QTY.	DESCRIPTION
82X48	1	48" XCELUX FIREPLACE
12MDD-EC	1	12in ANCHOR PLATE W/ DRAFT DIVERTER & ISOWOOL
ISFXLB36(N/P)	1	36" ISOFLAMES LINEAR XL BURNER (N: NATURAL GAS/ P: PROPANE)
XL-VK(N/P)	1	200 kBTU GAS VALVE CONTROL BOX (N: NATURAL GAS/ P: PROPANE)
XV-MERDML	1	X-VENTISO-MERIDIAN FAN SYSTEM (CONSISTS OF THE FOLLOWING:) <ul style="list-style-type: none">X-VENTISO-MERIDIAN-350 FAN (XV-MERD-350)X-VENTISO-350 FAN RAIN CAP (XV-350RC)X-VENTISO-12" PIPE ADAPTER FOR 350 FAN (XV-350ADP12)X-VENTISO-MERIDIAN DAMPER ASSEMBLY (XV-MERD-DAMP)X-VENTISO-MERIDIAN ROOM PRESSURE PROBE/ COVER PLATE, STACK PRESSURE PROBE, TUBING (XV-MERD-PRESSKIT)X-VENTISO-MERIDIAN CONTROL PANEL (XV-MERD-CTLR)

GENERAL NOTES

- THE ISOKERN 48" XCELUX SERIES FIREPLACE IS A TOP-VENTED, GAS ONLY FIREPLACE THAT IS APPROVED FOR USE ONLY WITH THE ISOFLAMES LINEAR XL BURNER SYSTEM AS SHOWN IN THIS DRAWING (ISFXLB36(N/P)). USAGE OF ANY OTHER BURNER IN THIS FIREPLACE IS PROHIBITED AND WILL ABSOLVE EARTHCORE/ ISOKERN OR ANY DIVISION THEREOF FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES OR EXPENSES ARISING OUT OF THE USE OF THIS FIREPLACE.
- THIS FIREPLACE'S BURNER SYSTEM (ISFXLB36(N/P)) COMES WITH A GAS CONTROL VALVE ASSEMBLY (XL-VK(N/P)) THAT INCLUDES AN AUTOMATIC DRAFT AND SAFETY SYSTEM.
- THIS APPLIANCE IS ONLY FOR USE WITH THE TYPE OF GAS INDICATED ON THE BURNER RATING PLATE. VERIFY GAS SUPPLY AND BURNER/ VALVE ARE OF SAME TYPE PRIOR TO INSTALLATION.
- THE EXHAUST FLUE GASES ARE TO BE VENTED THROUGH THE TOP OF THE UNIT WITH 12" METAL-FAB UL LISTED B-VENT PIPING WITH DOWN-DRAFT DIVERTER. THIS TWELVE INCH (12") DIAMETER, DOUBLE WALL B-VENTING SYSTEM IS NOT SUPPLIED BUT IS REQUIRED FOR PROPER OPERATION.
- THE XCELUX SERIES FIREPLACES SHALL BE INSTALLED WITH THE MINIMUM CLEARANCES TO COMBUSTIBLES AS LISTED BELOW:
 - UNIT FRONT: 0"
 - SIDES AND REAR: 1.5"
 - COMBUSTIBLE SHEATHING ABOVE OPENING TOP: 8"
 - SHEATHING OR TRIM TO OPENING SIDES: 8"
 - MANTEL ABOVE OPENING: 12"
 - OPENING TO SIDEWALLS: 24"
 - HEARTH EXTENSION BEYOND FRONT: 20"
 - HEARTH EXTENSION BEYOND SIDES (FINISHED): 12"
 - COMBUSTIBLE FLOOR: 5" (MUST USE COMBUSTIBLE FLOOR INSTALLATION APPLICATION AS DETAILED IN XCELUX INSTALLATION MANUAL, CONTINUOUS 1-1/4" THICK FIREBRICK FLOOR WITH 2-1/2" THICK FIREBRICK BURNER CAVITY, AND ISOFLAMES LINEAR XL BURNER AND VALVE)
 - INSULATION FROM FIREBOX (UNSHIELDED): 3"
- THE "REDUCED HEIGHT APPLICATION" OF THE 82X48 FIREPLACE IS SHOWN IN THIS DRAWING. THIS REDUCED HEIGHT APPLICATION IS CREATED BY OMITTING ONE COURSE OF BACK AND SIDEWALLS FROM THE STOCK 4- COURSE TALL 82X48 FIREPLACE (MAX REDUCTION OF 9-1/2" ALLOWED; 3 FULL COURSES REQUIRED).
- THIS DESIGN REQUIRES MECHANICAL VENTILATION ASSISTANCE USING THE X-VENTISO-MERIDIAN FAN SYSTEM FOR GAS-ONLY OPERATION. VENT PATHS ARE LIMITED TO A MAXIMUM OF TWO 90° ELBOWS AND MAY TERMINATE EITHER VERTICALLY OR HORIZONTALLY. REFER TO INSTALLATION MANUAL FOR MAXIMUM VENT LENGTHS AND ADDITIONAL INFORMATION REGARDING FLUE RUNS.
- ENSURE TWO 120VAC/ 15A OUTLETS ARE PROVIDED FOR GAS VALVE AND X-VENTISO-MERIDIAN CONTROL PANEL IN ACCORDANCE WITH INSTALLATION MANUAL. CONTROLS SHALL BE LOCATED IN ACCESSIBLE LOCATION.
- ALL ACCESSORIES/ EQUIPMENT INSTALLED WITH THIS FIREPLACE TO BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
- INSTALL AND SUPPORT B-VENT PIPE TO ALL MANUFACTURER SPECIFICATIONS. ENSURE MIN.1" CLEARANCE TO COMBUSTIBLES IS KEPT AT ALL TIMES.
- IMPORTANT: THE X-VENTISO-MERIDIAN DAMPER ASSEMBLY REQUIRES 2" CLEARANCE TO COMBUSTIBLES WITH HEAT SHIELD INSTALLED. IF HEAT SHIELD IS NOT INSTALLED, THIS CLEARANCE INCREASES TO 18".
- DRAWINGS ARE FOR DESIGN PURPOSES ONLY AND ARE THE SOLE PROPERTY OF EARTHCORE INDUSTRIES. ANY REPRODUCTION OR UNAUTHORIZED USE IS STRICTLY PROHIBITED.
- 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.
- ALWAYS CHECK LOCAL BUILDING CODES GOVERNING FIREPLACES AND FIREPLACE INSTALLATIONS.

ISOMETRIC VIEW (N.T.S.)

12" B-VENT PIPE W/ DOWN-DRAFT DIVERTER; X-VENTISO-MERIDIAN FAN SYSTEM REQUIRED.

FRAME OPENINGS TO 15"X15" CLEAR TO MAINTAIN MIN. 1" CLEARANCE TO COMBUSTIBLES

1-1/4" THICK FIREBRICK REQUIRED ON REAR AND SIDEWALLS

2-1/2" THICK LAYER OF FIREBRICK LAID ON TOP OF CONTINUOUS 1-1/4" THICK LAYER TO CREATE BURNER CAVITY.

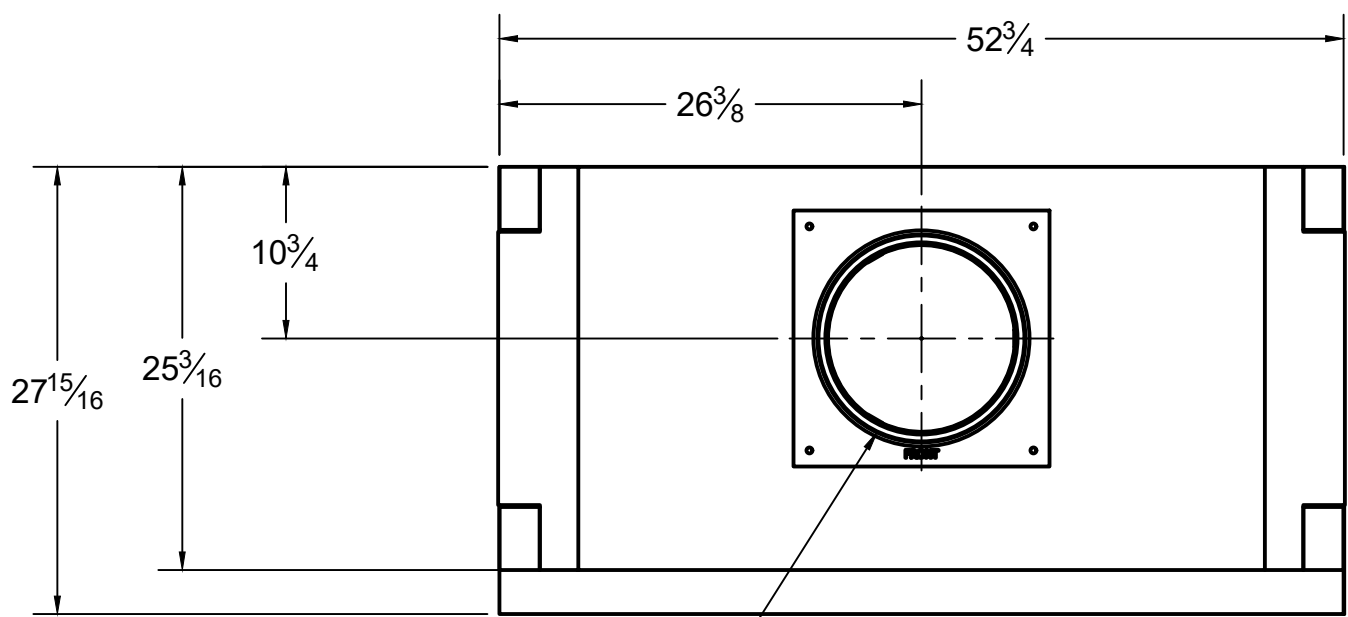
CONTINUOUS LAYER OF 1-1/4" THICK FIREBRICK ON FLOOR

ISFXLB36 (N/P)

ISOMETRIC VIEW
SCALE: N.T.S.

*REQUIRED XL-VK(N/P) VALVE ASSEMBLY NOT SHOWN

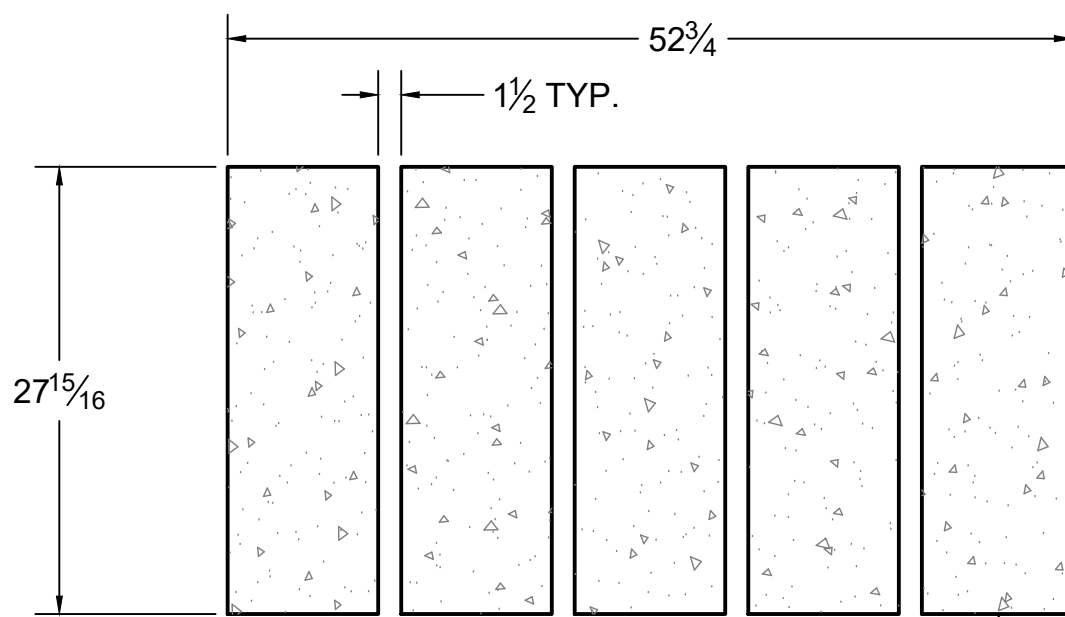
eartcore INDUSTRIES, L.L.C.		UNLESS OTHERWISE STATED, ALL DIMENSIONS ARE IN INCHES		PROJECT: 48" XCELUX SERIES	
UNSPECIFIED TOLERANCES		THIRD ANGLE PROJECTION		DESCRIPTION: NONCOMBUSTIBLE FLOOR INSTALLATION	
ANG. A ±		MATERIAL: E.C. PUMICE MIXTURE		SIZE: 1"-1'-0"	
LIN. X ±		DATE: 10/1/2024		DRAWING #: 82X48	
XX ±		APPROVED: K.B.H.		SHEET # 1 OF 5	
XXX ±		DO NOT SCALE			



12" B-VENT PIPE W/ DOWN-DRAFT DIVERTER; X-VENTISO-MERIDIAN FAN SYSTEM REQUIRED.

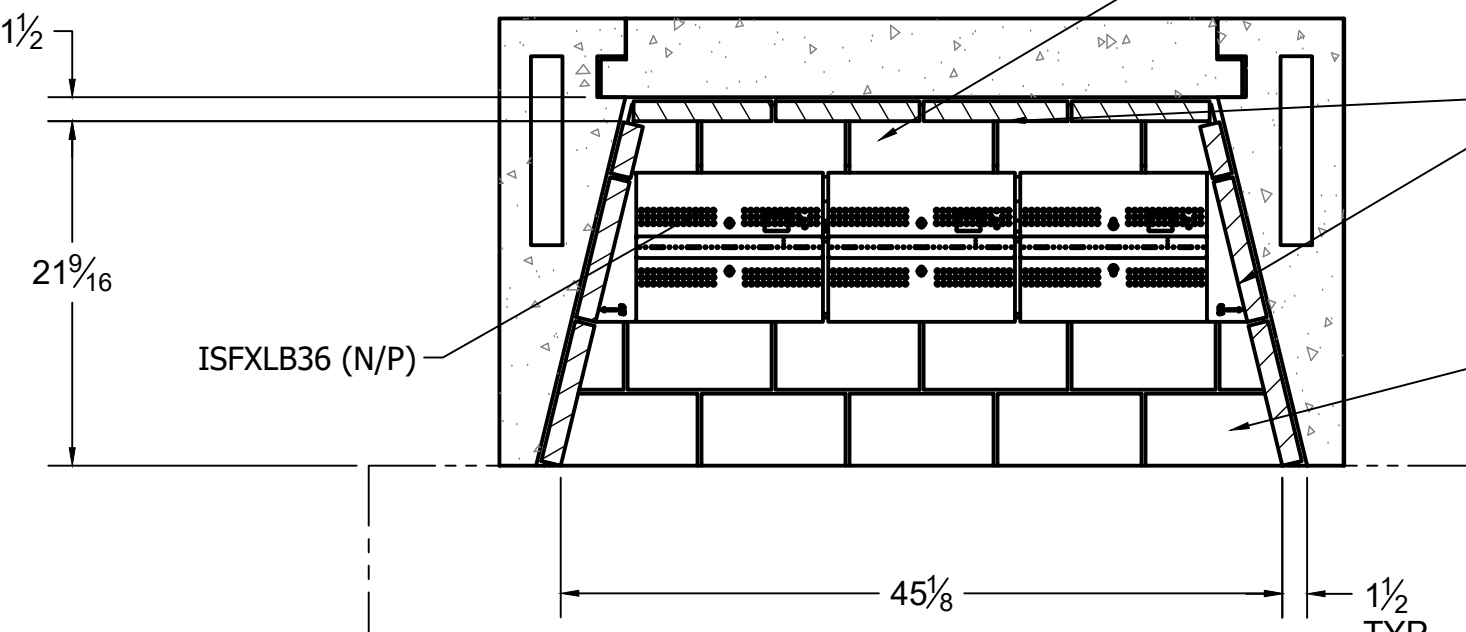
FRAME OPENINGS TO 15"X15" CLEAR TO MAINTAIN MIN. 1" CLEARANCE TO COMBUSTIBLES

TOP



SECTION C-C
SCALE 1" =1'-0"

(5x) ISOKERN #133



SECTION A-A

ONE ROW OF "FULL" 2-1/2"THICK FIREBRICK LAID ON TOP OF FIRST CONTINUOUS LAYER OF "SPLIT" 1-1/2" THICK FIREBRICK TO CREATE BURNER CAVITY.

BEGIN COURSING 1/2" FROM REAR WALL OF UNIT.

"SPLIT" 1-1/4" THICK FIREBRICK REQUIRED ON WALLS OF FIREBOX

TWO ROWS OF "FULL" 2-1/2" THICK FIREBRICK LAID ON TOP OF FIRST CONTINUOUS LAYER OF "SPLIT" 1-1/2" THICK FIREBRICK TO CREATE BURNER CAVITY.

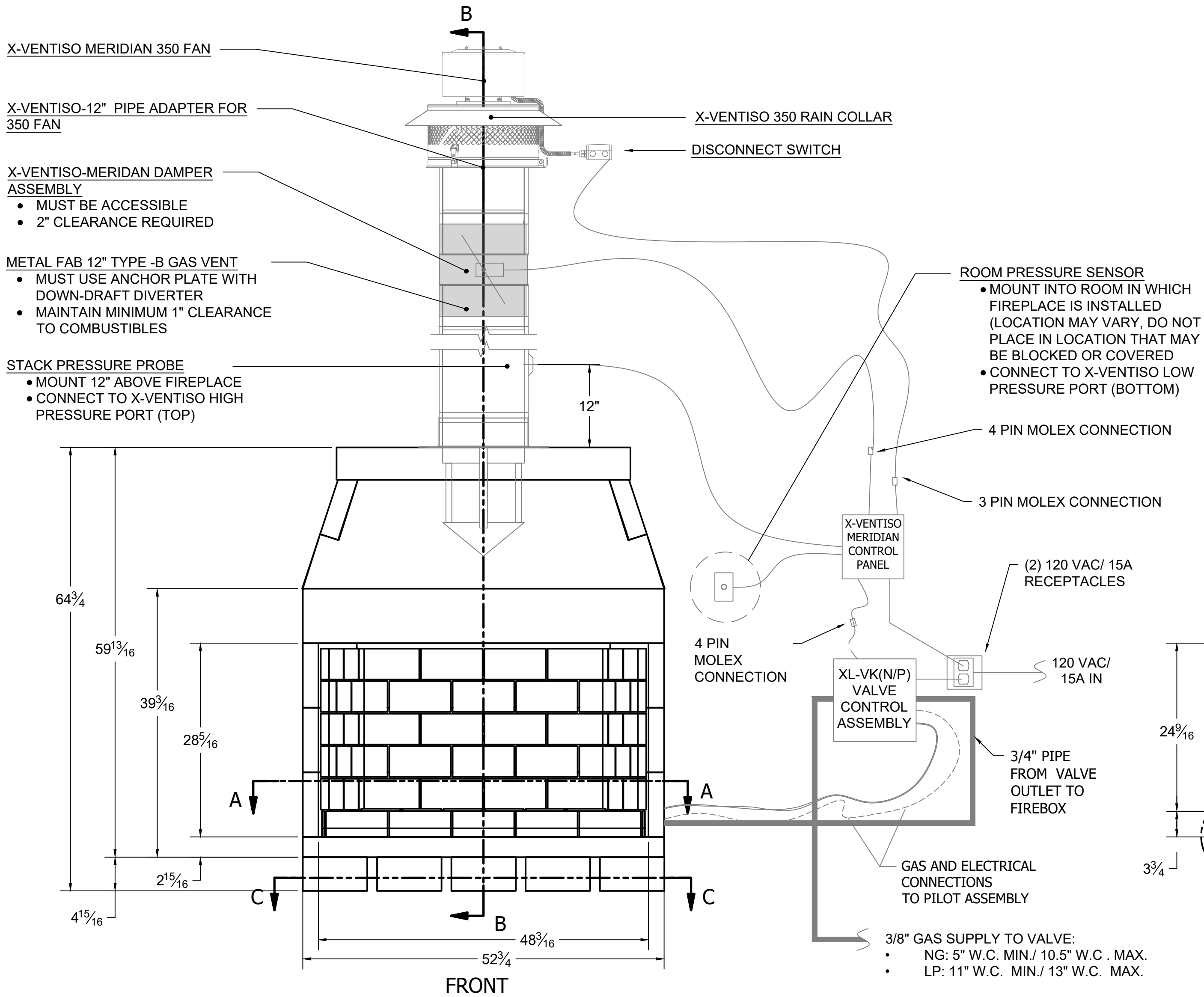
BEGIN COURSING AT FRONT EDGE OF BASE PLATE.

THE REQUIRED HEARTH EXTENSION SHALL EXTEND A MINIMUM OF 20" TO THE FRONT AND 12" TO THE SIDES OF FIREBOX'S FINISHED OPENING.

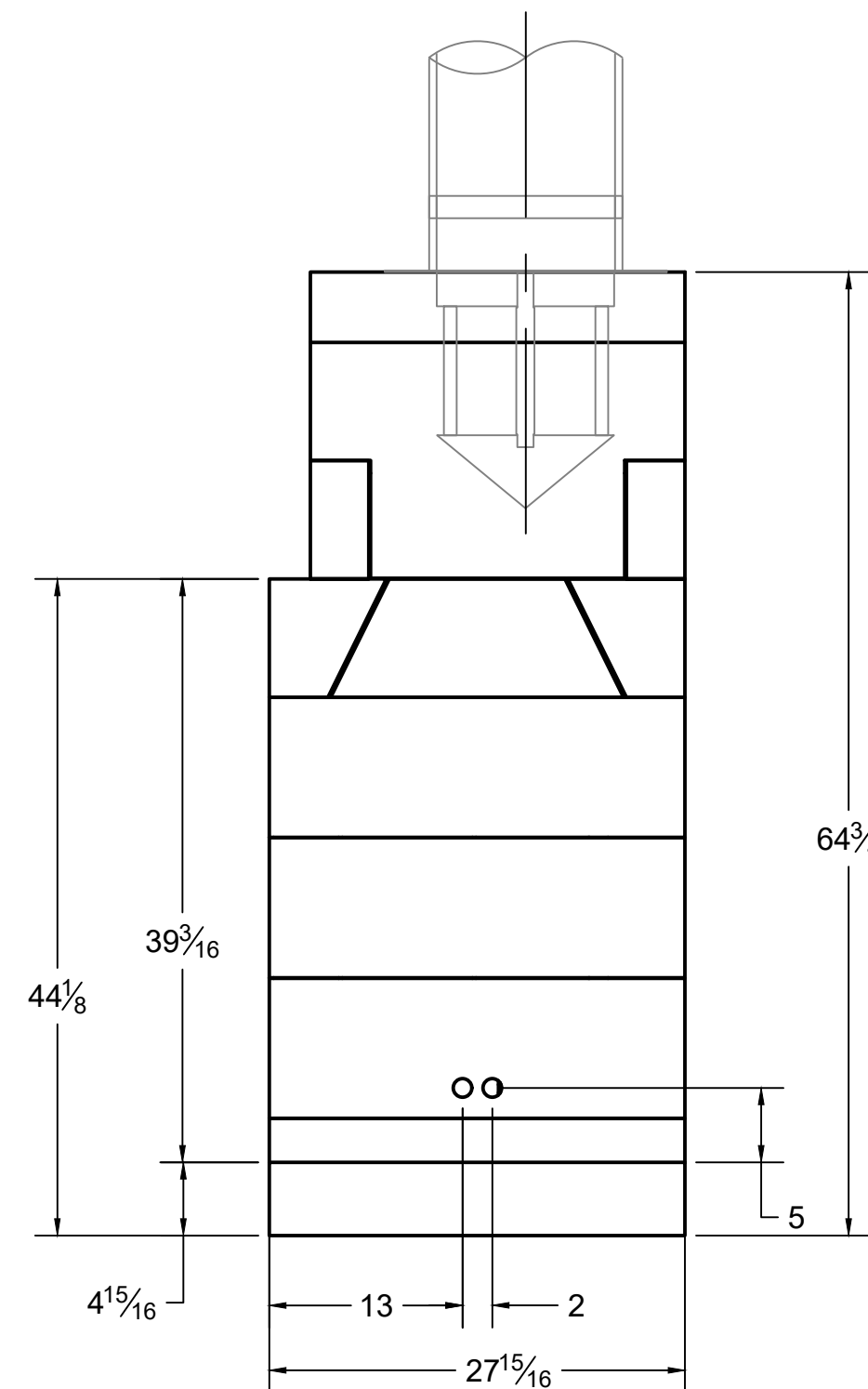
LAYER OF 2-1/2" THICK FIREBRICK LAID ON TOP OF FIRST LAYER TO CREATE BURNER CAVITY

CONTINUOUS LAYER OF 1-1/4" THICK FIREBRICK TO COVER ENTIRE HEARTH FLOOR

DETAIL A
SCALE .375



SECTION B-B



RIGHT

ISOKERN COMPONENT AND ACCESSORIES LIST

PART #	QTY.	DESCRIPTION
82X48	1	48" XCELUX FIREPLACE
12MDD-EC	1	12in ANCHOR PLATE W/ DRAFT DIVERTER & ISOWOOL
ISFXLB36(N/P)	1	36" ISOFLAMES LINEAR XL BURNER (N: NATURAL GAS/ P: PROPANE)
XL-VK(N/P)	1	200 kBTU GAS VALVE CONTROL BOX (N: NATURAL GAS/ P: PROPANE)
XV-MERDML	1	X-VENTISO-MERIDIAN FAN SYSTEM (CONSISTS OF THE FOLLOWING:)
		• X-VENTISO-MERIDIAN-350 FAN (XV-MERD-350)
		• X-VENTISO-350 FAN RAIN CAP (XV-350RC)
		• X-VENTISO-12" PIPE ADAPTER FOR 350 FAN (XV-350ADP12)
		• X-VENTISO-MERIDIAN DAMPER ASSEMBLY (XV-MERD-DAMP)
		• X-VENTISO-MERIDIAN ROOM PRESSURE PROBE/ COVER PLATE, STACK PRESSURE PROBE, TUBING (XV-MERD-PRESSKIT)
		• X-VENTISO-MERIDIAN CONTROL PANEL (XV-MERD-CTLR)
---	5	ISOKERN #133: REQUIRED FOR COMBUSTIBLE FLOOR INSTALLATION

GENERAL NOTES

- THE ISOKERN 48" XCELUX SERIES FIREPLACE IS A TOP-VENTED, GAS ONLY FIREPLACE THAT IS APPROVED FOR USE ONLY WITH THE ISOFLAMES LINEAR XL BURNER SYSTEM AS SHOWN IN THIS DRAWING (ISFXLB36(N/P)). USAGE OF ANY OTHER BURNER IN THIS FIREPLACE IS PROHIBITED AND WILL ABSOLVE EARTHCORE/ ISOKERN OR ANY DIVISION THEREOF FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES OR EXPENSES ARISING OUT OF THE USE OF THIS FIREPLACE.
- THIS FIREPLACE'S BURNER SYSTEM (ISFXLB36(N/P)) COMES WITH A GAS CONTROL VALVE ASSEMBLY (XL-VK(N/P))THAT INCLUDES AN AUTOMATIC DRAFT AND SAFETY SYSTEM.
- THIS APPLIANCE IS ONLY FOR USE WITH THE TYPE OF GAS INDICATED ON THE BURNER RATING PLATE. VERIFY GAS SUPPLY AND BURNER/ VALVE ARE OF SAME TYPE PRIOR TO INSTALLATION.
- THE EXHAUST FLUE GASES ARE TO BE VENTED THROUGH THE TOP OF THE UNIT WITH 12" METAL-FAB UL LISTED B-VENT PIPING WITH DOWN-DRAFT DIVERTER. THIS TWELVE INCH (12") DIAMETER, DOUBLE WALL B-VENTING SYSTEM IS NOT SUPPLIED BUT IS REQUIRED FOR PROPER OPERATION.
- THE XCELUX SERIES FIREPLACES SHALL BE INSTALLED WITH THE MINIMUM CLEARANCES TO COMBUSTIBLES AS LISTED BELOW:
 - UNIT FRONT: 0"
 - SIDES AND REAR: 1.5"
 - COMBUSTIBLE SHEATHING ABOVE OPENING TOP: 8"
 - SHEATHING OR TRIM TO OPENING SIDES: 8"
 - MANTEL ABOVE OPENING: 12"
 - OPENING TO SIDEWALLS: 24"
 - HEARTH EXTENSION BEYOND FRONT: 20"
 - HEARTH EXTENSION BEYOND SIDES (FINISHED): 12"
 - COMBUSTIBLE FLOOR: 5" (MUST USE COMBUSTIBLE FLOOR INSTALLATION APPLICATION AS DETAILED IN XCELUX INSTALLATION MANUAL, CONTINUOUS 1-1/4" THICK FIREBRICK FLOOR WITH 2-1/2" THICK FIREBRICK BURNER CAVITY, AND ISOFLAMES LINEAR XL BURNER AND VALVE)
 - INSULATION FROM FIREBOX (UNSHIELDED): 3"
- THE "REDUCED HEIGHT APPLICATION" OF THE 82X48 FIREPLACE IS SHOWN IN THIS DRAWING. THIS REDUCED HEIGHT APPLICATION IS CREATED BY OMITTING ONE COURSE OF BACK AND SIDEWALLS FROM THE STOCK 4- COURSE TALL 82X48 FIREPLACE (MAX REDUCTION OF 9-1/2" ALLOWED; 3 FULL COURSES REQUIRED)
- THIS DESIGN REQUIRES MECHANICAL VENTILATION ASSISTANCE USING THE X-VENTISO-MERIDIAN FAN SYSTEM FOR GAS-ONLY OPERATION. VENT PATHS ARE LIMITED TO A MAXIMUM OF TWO 90° ELBOWS AND MAY TERMINATE EITHER VERTICALLY OR HORIZONTALLY. REFER TO INSTALLATION MANUAL FOR MAXIMUM VENT LENGTHS AND ADDITIONAL INFORMATION REGARDING FLUE RUNS.
- ENSURE TWO 120VAC/ 15A OUTLETS ARE PROVIDED FOR GAS VALVE AND X-VENTISO-MERIDIAN CONTROL PANEL IN ACCORDANCE WITH INSTALLATION MANUAL. CONTROLS SHALL BE LOCATED IN ACCESSIBLE LOCATION.
- ALL ACCESSORIES/ EQUIPMENT INSTALLED WITH THIS FIREPLACE TO BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
- INSTALL AND SUPPORT B-VENT PIPE TO ALL MANUFACTURER SPECIFICATIONS. ENSURE MIN.1" CLEARANCE TO COMBUSTIBLES IS KEPT AT ALL TIMES.
- IMPORTANT: THE X-VENTISO-MERIDIAN DAMPER ASSEMBLY REQUIRES 2" CLEARANCE TO COMBUSTIBLES WITH HEAT SHIELD INSTALLED. IF HEAT SHIELD IS NOT INSTALLED, THIS CLEARANCE INCREASES TO 18".
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- ALWAYS CHECK LOCAL BUILDING CODES GOVERNING FIREPLACES AND FIREPLACE INSTALLATIONS.

ISOMETRIC VIEW (N.T.S.)

12" B-VENT PIPE W/ DOWN-DRAFT DIVERTER; X-VENTISO-MERIDIAN FAN SYSTEM REQUIRED.

FRAME OPENINGS TO 15"X15" CLEAR TO MAINTAIN MIN. 1" CLEARANCE TO COMBUSTIBLES

1-1/4" THICK FIREBRICK REQUIRED ON REAR AND SIDEWALLS

2-1/2" THICK LAYER OF FIREBRICK LAID ON TOP OF CONTINUOUS 1-1/4" THICK LAYER TO CREATE BURNER CAVITY.

CONTINUOUS LAYER OF 1-1/4" THICK FIREBRICK ON FLOOR

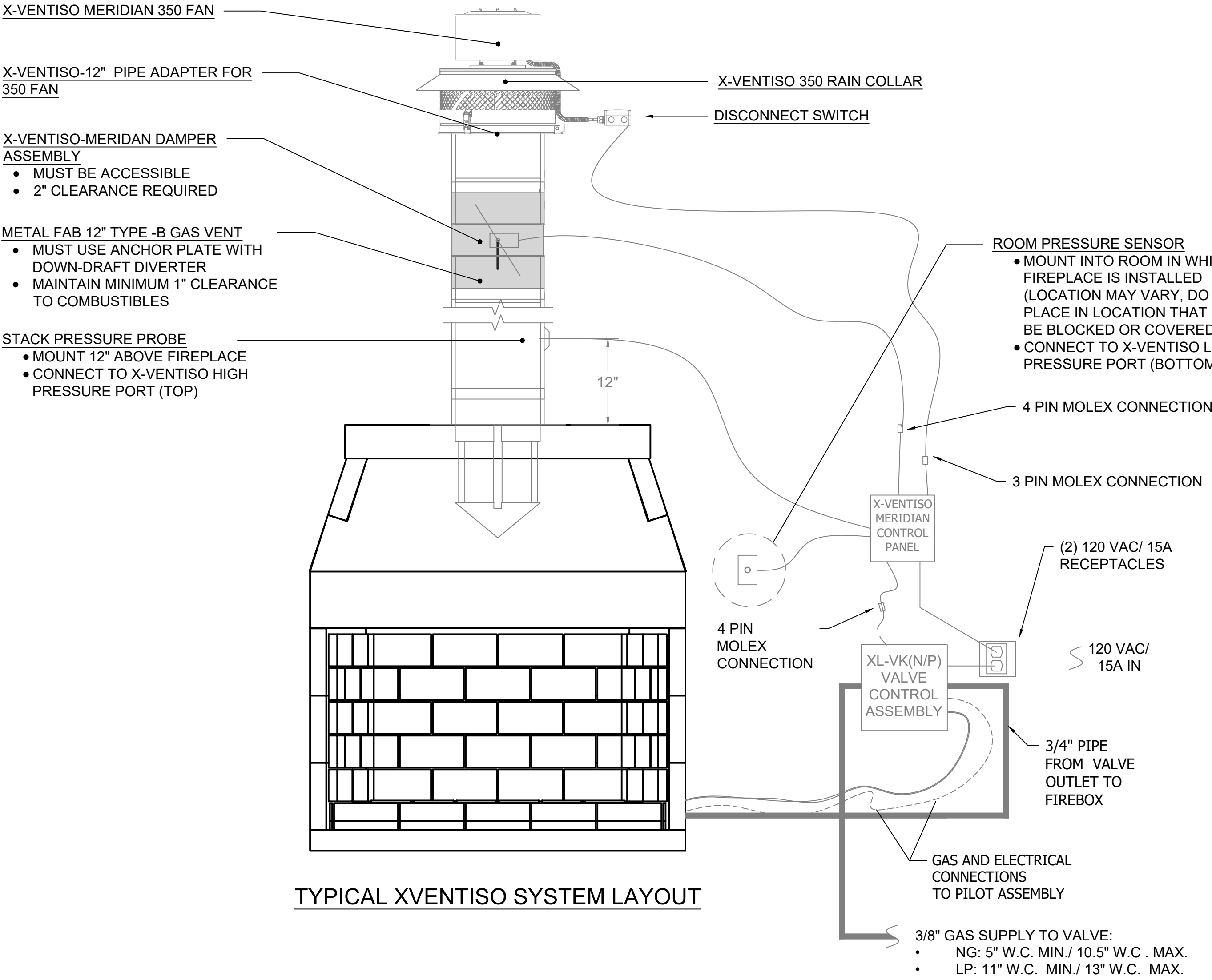
ISFXLB36 (N/P)

ISOMETRIC VIEW

#133 SPACED PER INSTALLATION MANUAL

*REQUIRED XL-VK(N/P) VALVE ASSEMBLY NOT SHOWN

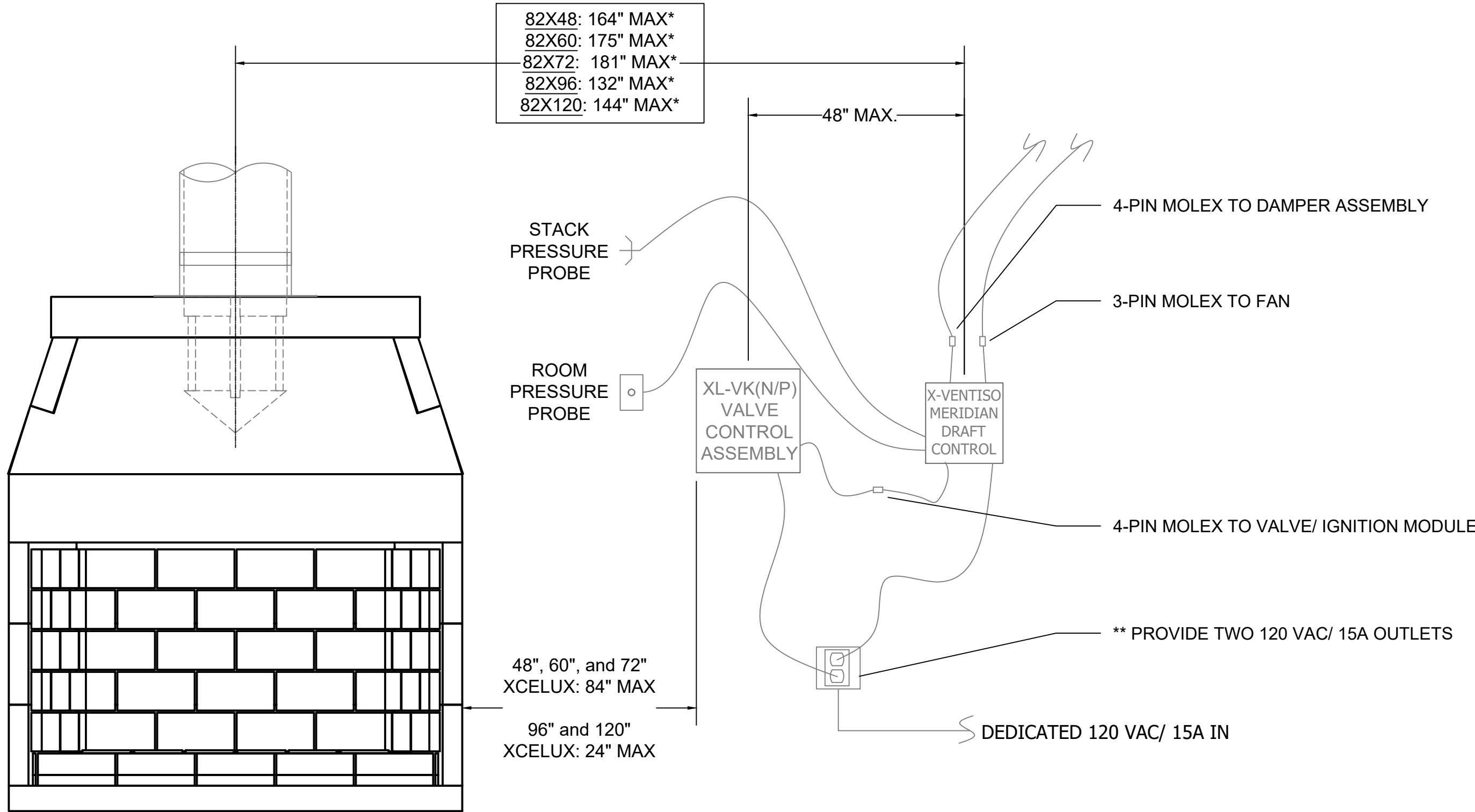
earthcore INDUSTRIES, L.L.C.		UNLESS OTHERWISE STATED, ALL DIMENSIONS ARE IN INCHES		PROJECT: 48" XCELUX SERIES	
		UNSPECIFIED TOLERANCES	THIRD ANGLE PROJECTION	DESCRIPTION: COMBUSTIBLE FLOOR INSTALLATION W/ #133	
ANG. A	±			MATERIAL: E.C. PUMICE MIXTURE	
LIN. X	±			DRAWN: K.B.H.	
XX	±			DATE: 10/1/2024	
XXX	±			APPROVED:	
				SIZE: D	
				SCALE: 1"=1'-0"	
				DRAWING #: 82X48	
				SHEET # 2 OF 5	



TYPICAL XVENTISO SYSTEM LAYOUT

* Maximum values as shown are derived from length of Molex connectors to the gas valve control assembly.

** Outlet locations must be within the extents of the 72" power supply cables of the Meridian Control Panel and the XL-VK(N/P) Gas Valve/ Control Assembly



XVENTISO AND XL-VK(N/P) LOCATION GUIDELINES

ISOKERN COMPONENT AND ACCESSORIES LIST

PART #	QTY.	DESCRIPTION
82X48	1	48" XCELUX FIREPLACE
12MDD-EC	1	12in ANCHOR PLATE W/ DRAFT DIVERTER & ISOWOOL
ISFXLB36(N/P)	1	36" ISOFLAMES LINEAR XL BURNER (N: NATURAL GAS/ P: PROPANE)
XL-VK(N/P)	1	200 kBTU GAS VALVE CONTROL BOX (N: NATURAL GAS/ P: PROPANE)
XV-MERDML	1	X-VENTISO-MERIDIAN FAN SYSTEM (CONSISTS OF THE FOLLOWING:)
		• X-VENTISO-MERIDIAN-350 FAN (XV-MERD-350)
		• X-VENTISO-350 FAN RAIN CAP (XV-350RC)
		• X-VENTISO-12" PIPE ADAPTER FOR 350 FAN (XV-350ADP12)
		• X-VENTISO-MERIDIAN DAMPER ASSEMBLY (XV-MERD-DAMP)
		• X-VENTISO-MERIDIAN ROOM PRESSURE PROBE/ COVER PLATE, STACK PRESSURE PROBE, TUBING (XV-MERD-PRESSKIT)
		• X-VENTISO-MERIDIAN CONTROL PANEL (XV-MERD-CTLR)
---	5	ISOKERN #133: REQUIRED FOR COMBUSTIBLE FLOOR INSTALLATION
---	9	ASTM C90 16X8X8 CMU: REQUIRED FOR ALTERNATE COMBUSTIBLE FLOOR INSTALLATION

GENERAL NOTES

- THE ISOKERN 48" XCELUX SERIES FIREPLACE IS A TOP-VENTED, GAS ONLY FIREPLACE THAT IS APPROVED FOR USE ONLY WITH THE ISOFLAMES LINEAR XL BURNER SYSTEM AS SHOWN IN THIS DRAWING (ISFXLB36(N/P)). USAGE OF ANY OTHER BURNER IN THIS FIREPLACE IS PROHIBITED AND WILL ABSOLVE EARTHCORE/ ISOKERN OR ANY DIVISION THEREOF FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES OR EXPENSES ARISING OUT OF THE USE OF THIS FIREPLACE.
- THIS FIREPLACE'S BURNER SYSTEM (ISFXLB36(N/P)) COMES WITH A GAS CONTROL VALVE ASSEMBLY (XL-VK(N/P)) THAT INCLUDES AN AUTOMATIC DRAFT AND SAFETY SYSTEM.
- THIS APPLIANCE IS ONLY FOR USE WITH THE TYPE OF GAS INDICATED ON THE BURNER RATING PLATE. VERIFY GAS SUPPLY AND BURNER/ VALVE ARE OF SAME TYPE PRIOR TO INSTALLATION.
- THE EXHAUST FLUE GASES ARE TO BE VENTED THROUGH THE TOP OF THE UNIT WITH 12" METAL-FAB UL LISTED B-VENT PIPING WITH DOWN-DRAFT DIVERTER. THIS TWELVE INCH (12") DIAMETER, DOUBLE WALL B-VENTING SYSTEM IS NOT SUPPLIED BUT IS REQUIRED FOR PROPER OPERATION.
- THE XCELUX SERIES FIREPLACES SHALL BE INSTALLED WITH THE MINIMUM CLEARANCES TO COMBUSTIBLES AS LISTED BELOW:
 - UNIT FRONT: 0"
 - SIDES AND REAR: 1.5"
 - COMBUSTIBLE SHEATHING ABOVE OPENING TOP: 8"
 - SHEATHING OR TRIM TO OPENING SIDES: 8"
 - MANTEL ABOVE OPENING: 12"
 - OPENING TO SIDEWALLS: 24"
 - HEARTH EXTENSION BEYOND FRONT: 20"
 - HEARTH EXTENSION BEYOND SIDES (FINISHED): 12"
 - COMBUSTIBLE FLOOR: 5" (MUST USE COMBUSTIBLE FLOOR INSTALLATION APPLICATION AS DETAILED IN XCELUX INSTALLATION MANUAL, CONTINUOUS 1-1/4" THICK FIREBRICK FLOOR WITH 2-1/2" THICK FIREBRICK BURNER CAVITY, AND ISOFLAMES LINEAR XL BURNER AND VALVE)
 - INSULATION FROM FIREBOX (UNSHIELDED): 3"
- THE "REDUCED HEIGHT APPLICATION" OF THE 82X48 FIREPLACE IS SHOWN IN THIS DRAWING. THIS REDUCED HEIGHT APPLICATION IS CREATED BY OMITTING ONE COURSE OF BACK AND SIDEWALLS FROM THE STOCK 4- COURSE TALL 82X48 FIREPLACE (MAX REDUCTION OF 9-1/2" ALLOWED; 3 FULL COURSES REQUIRED)
- THIS DESIGN REQUIRES MECHANICAL VENTILATION ASSISTANCE USING THE X-VENTISO-MERIDIAN FAN SYSTEM FOR GAS-ONLY OPERATION. VENT PATHS ARE LIMITED TO A MAXIMUM OF TWO 90° ELBOWS AND MAY TERMINATE EITHER VERTICALLY OR HORIZONTALLY. REFER TO INSTALLATION MANUAL FOR MAXIMUM VENT LENGTHS AND ADDITIONAL INFORMATION REGARDING FLUE RUNS.
- ENSURE TWO 120VAC/ 15A OUTLETS ARE PROVIDED FOR GAS VALVE AND X-VENTISO-MERIDIAN CONTROL PANEL IN ACCORDANCE WITH INSTALLATION MANUAL. CONTROLS SHALL BE LOCATED IN ACCESSIBLE LOCATION.
- ALL ACCESSORIES/ EQUIPMENT INSTALLED WITH THIS FIREPLACE TO BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
- INSTALL AND SUPPORT B-VENT PIPE TO ALL MANUFACTURER SPECIFICATIONS. ENSURE MIN.1" CLEARANCE TO COMBUSTIBLES IS KEPT AT ALL TIMES.
- IMPORTANT: THE X-VENTISO-MERIDIAN DAMPER ASSEMBLY REQUIRES 2" CLEARANCE TO COMBUSTIBLES WITH HEAT SHIELD INSTALLED. IF HEAT SHIELD IS NOT INSTALLED, THIS CLEARANCE INCREASES TO 18".
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- ALWAYS CHECK LOCAL BUILDING CODES GOVERNING FIREPLACES AND FIREPLACE INSTALLATIONS.



UNLESS OTHERWISE STATED, ALL DIMENSIONS ARE IN INCHES	
UNSPECIFIED TOLERANCES	THIRD ANGLE PROJECTION
ANG. A ±	
ANG. X ±	
ANG. XX ±	
ANG. XXX ±	

PROJECT: 48" XCELUX SERIES	
DESCRIPTION: XVENTISO AND XL-VK(N/P) LAYOUT AND LOCATIONS	
MATERIAL: E.C. PUMICE MIXTURE	
DRAWN: K.B.H.	DATE: 10/1/2024
APPROVED:	DATE:
SIZE: D	SCALE: N.T.S.
DRAWING #: 82X48	REV:
DO NOT SCALE	
SHEET # 4 OF 5	

Rough Framing Dimensions

TYPICAL INSTALLATION FRAMING DIMENSIONS			
Model #	A - Width	B - Height	C - Depth
82X48	56"	71"	29-1/2"
82X60	77"	71"	29-1/2"
82X72	89"	71"	29-1/2"
82X96	112"	71"	29-1/2"
82X120	135"	71"	29-1/2"

NOTES:

- "B" includes the required 3" thick base plate.
- Rough framing dimension for Height "B" will need to be increased by height of Isokern #133 or 8" CMU Block if they are used.
- If the XCELUX installation is to be elevated, this "Raised hearth" installation will require additional rough opening height at "B" that is equal to the height of the raised hearth.
- Rough framing dimension for depth "C" allows for the required 1 -1/2" clearance at the back of the fireplace. Note that this 29-1/2" is typically used on interior walls that do not have insulation present.

IMPORTANT: Unless the insulation on an exterior wall is installed behind plywood sheathing, a depth of 31" is often used to account for the required 3" clearance to insulation. Even with this increased distance, the installer should be aware that spray foam insulation may expand past the face of the stud wall and will require trimming prior to firebox installation to maintain the required 3" clearance. It is important that any insulation that is not installed behind sheathing shall be installed in such a manner that it cannot fall on the firebox and encroach on this clearance.

Firebrick Installation - XCELUX Fireplace

- Start the "Split" firebrick at the front edge of the floor of the Isokern firebox, proceeding inward toward the back. Let the floor brick gap approximately 1/2" off the back wall and side walls. This air space allows heat expansion of the firebrick and is to be left empty of mortar.
- Starting approximately 1/2" from the rear of the firebox, lay one course of "Full" sized firebrick on top of "Split" firebrick floor. Ensure a gap of approximately 1/2" is kept between firebrick and sidewall to allow for expansion.
- Lay two courses of "Full" sized firebrick so that the leading edge of the coursing is aligned with opening of the firebox. Ensure a gap of approximately 1/2" is kept between firebrick and sidewall to allow for expansion.
- Apply "Split" firebrick to the rear wall of the unit. Ensure approximately 1/2" gap is kept between firebrick and sidewall, as well as an 1/4" gap is kept between firebrick and damper beam assembly to allow for expansion.
- Starting at the front edge of the unit's sidewall, apply "Split" firebrick to the side wall of the unit. Ensure approximately 1/2" gap is kept between firebrick and damper beam/damper block assembly to allow for expansion.
- Repeat on opposite side wall.

IMPORTANT: Ensure that the required holes for the Isoflames XL Burner's 3/4" gas supply line and pilot assembly gas and electrical connections are drilled prior to firebrick installation. **DO NOT COVER THESE AREAS WITH FIREBRICK!**

NOTE: Gas and electrical connections may be brought through the rear wall of the unit and into the area of the firebrick cavity. A gap will need to be left in the firebrick extending from the cavity to the rear wall of the unit for passage of the 3/4" gas line, pilot tube, and electrical connections. Ensure all holes are filled with mortar after installation.

DETAIL A
ONE CONTINUOUS FIRST LAYER OF "SPLIT" 1-1/4" THICK FIREBRICK TO COVER ENTIRE HEARTH FLOOR.
A LAYER OF "FULL" 2-1/2" THICK FIREBRICK ON TOP OF THE FIRST LAYER IS USED TO CREATE THE BURNER CAVITY

BOTTOM LAYER: "SPLIT" FIREBRICK **TOP LAYER: "FULL" FIREBRICK**

BURNER CAVITY

Burner Cavity Construction

BURNER CAVITY DIMENSIONS (in)			
Burner Model	Height	Width	Length
ISFXLB36	2-1/2"	≈9"	FULL
ISFXLB48	2-1/2"	≈9"	FULL
ISFXLB60	2-1/2"	≈9"	FULL
ISFXLB72	2-1/2"	≈9"	FULL
ISFXLB96	2-1/2"	≈9"	FULL

Flooring System

NONCOMBUSTIBLE FLOORS

XCELUX Fireplaces must be built upon a concrete support slab with no wood underpinnings. Proper reinforced concrete support slab for fireplace installations may include the following types:

- Slab on grade: standard residential, minimum four inch (4") thick, 2500 psi concrete foundation on properly compacted fill.
- Off-grade slab on foundation walls and footings: Projects with off-grade floor systems as well as upper-story installations require this type of support. When building off-grade support slabs the code required hearth extension substrate should be built as a continuation of the support slab for the fireplace unit. Supports for off-grade slabs must be concrete or steel and capable of supporting the slab, Isokern unit, and the chimney.

NOTE: For multi-floor and back-to-back installations proper weight computation on an individual basis is required. Consult a local structural engineer for load bearing requirements.

IMPORTANT: Foundations and footings must meet local code and be approved by the local building authority. For any foundation design and load requirements check with a local structural engineer. It is the responsibility of the General Contractor to ensure adequate foundations.

For a raised hearth (floor of the firebox elevated above the room's noncombustible floor), the XCELUX base plate can be set on a Isokern #133, CMU Block, or poured concrete platform that is built up to the desired raised hearth height on the concrete support slab. When calculating raised hearth height, be sure to allow for the three inch (3") thick base plate plus the one and one-half inch (1-1/2") thick fire brick floor in addition to the height of the concrete block platform. CMU used for base plate support should be rated ASTM 90.

COMBUSTIBLE FLOORS

For installation on combustible floor, 5" thick Isokern material (Part #133) or alternatively 8" CMU block may be used to create the required clearance to combustible between the firebox and combustible floor system. See Table 1 and 2 for block layout pattern and spacing.

TABLE 1
ISOKERN

MODEL	ISOKERN #133 QUANTITY	SPACING (A)
82X48	5	1-1/2"
82X60	6	3-3/8"
82X72	7	3-3/8"
82X96	9	3"
82X120	11	2-3/4"

TABLE 2
CMU BLOCK

MODEL	CMU BLOCK QUANTITY	FRONT SPACING (B)	REAR SPACING (C)
82X48	8	3"	3-3/4"
82X60	12	3-5/8"	1-3/4"
82X72	14	2"	2-1/8"
82X96	17	3"	2-1/2"
82X120	21	4"	2"

Recessed Application on Combustible Floor System

If the design preference is for a flush hearth installation of the XCELUX Fireplace (floor of the fireplace at the same level the room's floor), the Isokern #133 or 8" CMU block can be lowered to the recessed floor system with advanced planning. When calculating depth of recess required for a flush hearth, be sure to account for the assembled thickness of the Isokern 133 or 8" CMU block.

IMPORTANT: Whether a flush hearth is preferred or a raised hearth, the XCELUX Fireplace requires that the combustible floor in front of the fireplace must be covered with a noncombustible hearth extension set tight against the fireplace front and extend at least 20" out from the finished fireplace and at least 12" beyond the finished sides of the fireplace opening.

NOTE: Field verified dimensions should make allowance for hearth extensions in front (20") and sides (12" ea.) from the fireplace opening. Also, make sure fireplace sides and rear have minimum 1-1/2" clearance to combustibles.

IMPORTANT: The level of the finished firebrick hearth floor and noncombustible hearth extension shall not be recessed below the level of the finished floor.

Clearance to Combustible Trim

NOTE: "Clearance to Combustible Trim" are those distances required to ensure that a fireplace mantel or facing will not catch fire. In most cases the distances should also be adequate to prevent any discoloration or warping due to heat. However, each installation presents a unique and completely different set of circumstances involving many variables.

These variables include paint or finish composition, previous exposure to heat, methods and quality of construction, air flow patterns, etc. Because of these variables, the manufacturer does not guarantee that heat warping, or discoloration will never occur.

MANTEL AND MANTEL SHELF CLEARANCES:
XCELUX units are designed to be installed so that the rough front face(s) of the Isokern firebox and smoke dome sit flush with the face of the rough framing members that create the room wall finish.

All combustible trim projecting less than one-and-one-half inch (1-1/2") must be kept a minimum of eight inches (8") from the sides/top of the firebox openings.

All combustible trim projecting more than one and one-half inch (1-1/2") must be kept a minimum of twelve inches (12") from the fireplace opening.

Parts of the combustible mantel assembly located along the sides of the fireplace opening, which project more than one-and-one-half inches (1-1/2") from the face of the fireplace, shall have additional clearance equal to that of the projection.

Parts of the combustible mantel assembly located above and projecting more than one- and one-half inches (1- 1/2") from the fireplace opening shall not be placed less than twelve inches (12") from the top of the fireplace opening

ADJOINING WALLS:
Side walls and walls to rooms adjoining the Isokern fireplace installation cannot be closer than twenty-four inches (24") to the finished fireplace opening.

CEILINGS:
The minimum clearance from the top of the fireplace opening to a ceiling is forty-two inches (42").

XL-VK(N/P) Valve Location

7" FOR MODELS ISFXLB 36/48/60/and 72(N/P)
OR
2" FOR MODELS ISFXLB96 (N/P)

PFS ISOKERN GAS FIREPLACE LISTED VENTED GAS FIREPLACE PER ANSI/UL 50-2019 CSA 2.22-2019

ISOFLAMES MADE IN THE USA CHESAPEAKE, VA 23323

NOT FOR USE WITH SOLID FUEL

SERIAL NO: XL00001

MODEL # 82X48 82X72 82X60 82X96 82X120

FOR USE WITH PROPANE (LP) OR NATURAL GAS, SEE GAS IDENTIFYING TAG ON BURNER

82X48 NATURAL GAS MAX BTU 75,000; PROPANE MAX BTU 65,000
82X60 NATURAL GAS MAX BTU 100,000; PROPANE MAX BTU 87,000
82X72 NATURAL GAS MAX BTU 125,000; PROPANE MAX BTU 109,000
82X96 NATURAL GAS MAX BTU 150,000; PROPANE MAX BTU 131,000
82X120 NATURAL GAS MAX BTU 200,000; PROPANE MAX BTU 195,000

See Burner Rating Plate for Additional Information

MANIFOLD PRESSURE: PROPANE (LP): 10" WATER COLUMN; NATURAL GAS: 3.5" WATER COLUMN
MINIMUM PERMISSIBLE GAS SUPPLY PRESSURE FOR PURPOSE OF INPUT ADJUSTMENT: PROPANE (LP): 11" WATER COLUMN; NATURAL GAS: 5" WATER COLUMN

ELECTRICAL RATING: UNIT: ELECTRONIC 1 PH 60 HZ 120 VOLTS LESS THAN 15 AMPS

CLEARANCE TO COMBUSTIBLES:
UNIT FRONT: ~ 0 in
UNIT SIDES AND REAR: ~ 1.5 in
COMBUSTIBLE SHEATHING ABOVE OPENING TOP: ~ 8 in
SHEATHING OR TRIM TO OPENING SIDES: ~ 8 in
MANTEL ABOVE OPENING: ~ 12 in
INSULATION FROM FIREBOX: ~ 3 in

CAUTION: THIS APPLIANCE IS ONLY FOR USE WITH THE TYPE OF GAS INDICATED ON THE RATING PLATE. THIS APPLIANCE IS NOT CONVERTIBLE FOR USE WITH OTHER GASES, UNLESS A CERTIFIED KIT IS USED.

This appliance must be installed in accordance with local codes, if any, if none, follow the current ANSI Z223.1/NFPA 54 or CSA B149.1

EARTHCORE INDUSTRIES HEADQUARTERS - 6899 PHILLIPS INDUSTRIAL BLVD JACKSONVILLE, FL 32256

SCAN QR CODE FOR LATEST INSTALLATION MANUALS

XCELUX 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 and chimney system.

- Designed for field assembly as a fireplace and B-vent chimney system.
- All interlocking parts necessary for assembly of a complete firebox and smoke dome.
- Isoflames XL Linear Burner and XL Valve system (per installation manual)
- 12" B-vent chimney flue (per installation manual)
- Mechanical draft system (per installation manual)
- Combustible floor installation requires model specific combustible floor installation application as detailed in XCELUX instruction manual

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 Block: 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" high temperature refractory brick to line firebox interior walls.
- Standard 1-1/8" high temperature refractory brick to line firebox floor.
- Standard 2-1/2" high temperature refractory brick to create burner cavity on top of 1-1/8" thick firebrick floor.

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. Combustible floor installation requires combustible floor installation application as detailed in XCELUX instruction manual
- Non combustible hearth extensions must be provided.
- 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" rated firebrick on the walls and floor. An additional 2-1/2" rated firebrick trough is created on top of firebrick floor for Isoflames XL Linear Burner installation.
 - A 1-1/2" minimum clearance to combustible materials is required for firebox side and back-walls.
 - A 3" minimum clearance to insulation required.
- Shall be installed only with the approved Isoflames XL Linear Burner and XL Valve System as detailed in the instruction manual.
- Installation must use 12" B-vent pipe as detailed in the instruction manual (Anchor Plate with Down-Draft Diverter required).
- Only approved mechanical draft systems shall be utilized, as detailed in the instruction manual.

CERTIFICATION:

- PFS Corporation, PFS Report No. F24-349
- Meets or exceeds ANSI Z 21.50-2019, CSA 2.22-2014

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

Weights and Load Calculations

For framing for XCELUX installation will need to be designed and built to accept substantial dead loads spread over a relatively small floor area. The following weights and sizes can be used to calculate loading. It is the contractor's responsibility to provide adequate floor system load capacity.

WEIGHTS AND LOAD CALCULATIONS Total dead load amounts include (but are not necessarily limited to) the following items and their corresponding weight estimates as listed below:

- Isokern unit weights:
 - XCELUX— 48: 1,645 lbs. (no burner, flue, or accessories)
 - XCELUX— 60: 2,115 lbs. (includes steel angle, but no burner, flue, or accessories)
 - XCELUX— 72: 2,420 lbs. (includes steel angle; but no burner, flue, or accessories)
 - XCELUX— 96: 3,000 lbs. (includes steel angle; but no burner, flue, or accessories)
 - XCELUX— 120: 3,550 lbs. (includes steel angle; but no burner, flue, or accessories)
- Approximate weight of glass media: 100 lbs.
- Fire brick and Adhesive: 350 lbs.- 2000 lbs. depending on brick size and pattern
- Facing material: per general contractor
- B-Vent metal flue: per manufacturer and installation requirements

NOTE: Raised hearth applications with Isokern Support Blocks or CMU Blocks increases dead load weight

The floor area for each model is as follows:

- XCELUX — 48: @ 53" x 28" = 10.3 sq. ft.
- XCELUX — 60: @ 73 x 1/2" x 28" = 14.3 sq. ft.
- XCELUX - 72: @ 85 x 3/4" x 28" = 16.67 sq. ft.
- XCELUX — 96: @ 108 x 1/4" x 28" = 21.04 sq. ft.
- XCELUX — 120: @ 131 x 3/4" x 28" = 25.62 sq. ft.

Earthcore is not responsible for structural floor support details for this fireplace system. Unless otherwise noted all floor framing drawings in this manual are merely illustrations to indicate the presence of an underlying floor system. Consult your local structural engineer for proper floor system design, sizing, and specifications.

earthcore INDUSTRIES, L.L.C.	UNLESS OTHERWISE STATED, ALL DIMENSIONS ARE IN INCHES		PROJECT: 48" XCELUX SERIES			
	UNSPECIFIED TOLERANCES		THIRD ANGLE PROJECTION			
	ANG. 1A ±		DESCRIPTION: GENERAL INFORMATION AND SPECIFICATIONS			
	LIN. X ± XX ± XXX ±		MATERIAL:			
DRAWN: K.B.H.		DATE: 10/1/2024	SIZE: D	SCALE: N.T.S.	DRAWING #: 82X48	REV:
APPROVED:		DATE:	DO NOT SCALE		SHEET # 5 OF 5	