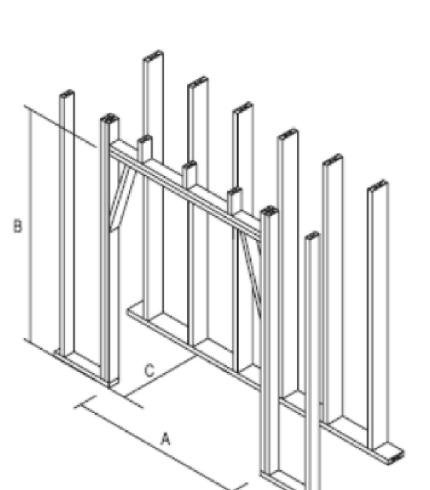


| PARTS LIST   |   |  |  |  |  |  |  |  |  |
|--|---|--|--|--|--|--|--|--|--|
| PART NUMBER  | QTY   | DESCRIPTION  |  |  |  |  |  |  |  |
| 82L72  | 1   | ISOKERN MAXIMUS LINEAR-72  |  |  |  |  |  |  |  |
| N/A<br>ISF60LB (N/P)   | 1   | 6"x6"x1/2" STEEL ANGLE (NOT PROVIDED BY EARTHCORE, MUST SOURCE LOCALLY)<br>60" LINEAR BURNER ASSEMBLY AND VALVE/ CONTROLS (N: NATURAL GAS/ P: PROPANE) |  |  |  |  |  |  |  |
| 12MDD  | 1   | METAL- FAB 12" B-VENT DOWN DRAFT DIVERTER  |  |  |  |  |  |  |  |
|  |   | X-VENTISO-MERIDIAN MAX LINEAR FAN SYSTEM (CONSISTS OF THE FOLLOWING:)  |  |  |  |  |  |  |  |
|  |   | <ul> <li>X-VENTISO-MERIDIAN-350 FAN (XV-MERD-350)</li> <li>X-VENTISO-350 FAN RAIN CAP (XV-350RC)</li> </ul>  |  |  |  |  |  |  |  |
| XV-MERDML  | <ul> <li>X-VENTISO-12" PIPE ADAPTER FOR 350 FAN (XV-350ADP12)</li> <li>X-VENTISO-MERIDIAN DAMPER ASSEMBLY (XV-MERD-DAMP)</li> </ul> |  |  |  |  |  |  |  |  |
|  |   | X-VENTISO-MERIDIAN ROOM PRESSURE PROBE/ COVER PLATE, STACK PRESSURE PROBE,   |  |  |  |  |  |  |  |
|  |   | TUBING (XV-MERD-PRESSKIT)<br>• X-VENTISO-MERIDIAN CONTROL PANEL (XV-MERD-CTLR)   |  |  |  |  |  |  |  |
| GENERAL NOTES  |   |  |  |  |  |  |  |  |  |
|  |   |  |  |  |  |  |  |  |  |
| <ol> <li>THE ISOKERN 72" MAXIMUS LINEAR FIREPLACE IS A TOP-VENTED, GAS ONLY FIREPLACE THAT IS APPROVED<br/>FOR USE ONLY WITH THE ISOFLAMES LINEAR BURNER SYSTEM AS SHOWN IN THIS DRAWING (ISF60LB(N/P)).<br/>USAGE OF ANY OTHER BURNER IN THIS FIREPLACE IS PROHIBITED AND WILL ABSOLVE EARTHCORE/<br/>ISOKERN OR ANY DIVISION THEREOF FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES OR EXPENSES<br/>ARISING OUT OF THE USE OF THIS FIREPLACE.</li> <li>THIS FIREPLACE'S BURNER SYSTEM (ISF60LB N/P) COMES WITH A GAS CONTROL VALVE ASSEMBLY<br/>(E-VK(N/P)/THAT INCLUDES AN AUTOMATIC DRAFT AND SAFETY SYSTEM.</li> <li>THIS APPLIANCE IS ONLY FOR USE WITH THE TYPE OF GAS INDICATED ON THE BURNER RATING PLATE.<br/>VERIFY GAS SUPPLY AND BURNER VYSLEW WITH THE TYPE OF GAS INDICATED ON THE BURNER RATING PLATE.<br/>VERIFY GAS SUPPLY AND BURNER' VALVE ARE OF SAME TYPE PRIOR TO INSTALLATION.</li> <li>THE KAHAUST FLUE GASES ARE TO BE VENTED THOR OF THE UNT (12") DIAMETER, DOUBLE WALL<br/>B-VENTING SYSTEM IS NOT SUPPLIED BUT IS REQUIRED FOR PROPER OPERATION.</li> <li>THE MAXIMUS LINEAR SERIES FIREPLACES SHALL BE INSTALLED WITH THE MINIMUM CLEARANCES TO<br/>COMBUSTIBLES AS LISTED BELOW:<br/>• UNIT FROMT; 0"</li> <li>SIDES AND REAR: 1.5"</li> <li>• OCOMBUSTIBLE SHEATHING ABOVE OPENING TOP: 8"</li> <li>• SIDES AND REAR: 1.5"</li> <li>• ORENNIG TO SIDE VAULS: 24"</li> <li>• HEARTH EXTENSION BEYOND FRONT: 20"</li> <li>• INSULATION FROMT: 12"</li> <li>• OCOMBUSTIBLE SHEATHING ABOVE OPENING TOP: 12"</li> <li>• OCOMBUSTIBLE SHEATHING ADDES (FINISHED): 12"</li> <li>• OCOMBUSTIBLE SHEATHING ANDLY OPENING SIDES: 12"</li> <li>• OCOMBUSTIBLE SHEATHING ADDY CONTEND: 20"</li> <li>• INSULATION FROM FIRE ORG CAS-ONLY OPENING TOP: 3"</li> <li>THIS DESIGN REQUIRES MECHANICAL VENTILATION NANDAL FOR MAXIMUM OF TWO 90°<br/>ELBOWS AND MAY TERMINATE EITHER VERTICALLY OR HORIZONTALLY. REFER TO INSTALLATION MANUAL<br/>FOR MAXIMUM VENT LENGTHS AND ADDIDITIONAL INFORMATION REGARDING FLUE RUNS.</li> <li>• INSULATION FROM FIRE ORG CAS-ONLY OPEN THAT HAS R</li></ol> |   |  |  |  |  |  |  |  |  |
|  |   | ISOMETRIC VIEW (N.T.S.)  |  |  |  |  |  |  |  |
|  |   | METAL-FAB 12" B-VENT PIPE (12"   |  |  |  |  |  |  |  |
| 72" MAXIMUS LIN  | IEAR –  | I.D./13" O.D.) W/ DOWN-DRAFT<br>DIVERTER; X-VENTISO-MERIDIAN MAX<br>LINEAR FAN SYSTEM REQUIRED.  |  |  |  |  |  |  |  |
|  |   | FRAME OPENINGS TO 15" X 15" CLEAR<br>TO MAINTAIN MIN. 1" CLEARANCE TO  |  |  |  |  |  |  |  |
|  |   | COMBUSTIBLES.  |  |  |  |  |  |  |  |
|  |   |  |  |  |  |  |  |  |  |
|  | /   | 6"x6"x1/2" STEEL<br>ANGLE (NOT   |  |  |  |  |  |  |  |
|  |   | PROVIDED BY<br>EARTHCORE, MUST   |  |  |  |  |  |  |  |
|  |   | SOURCE LOCALLY)  |  |  |  |  |  |  |  |
|  |   |  |  |  |  |  |  |  |  |
| 1-1/4" THICK   |   |  |  |  |  |  |  |  |  |
| AND REAR WALLS   |   |  |  |  |  |  |  |  |  |
|  |   |  |  |  |  |  |  |  |  |
|  |   |  |  |  |  |  |  |  |  |
|  |   |  |  |  |  |  |  |  |  |
| 2-1/2" THICK –<br>FIREBRICK ON FLOOR   |   |  |  |  |  |  |  |  |  |
| ISF60LB (N/P)  |   |  |  |  |  |  |  |  |  |
|  |   |  |  |  |  |  |  |  |  |
|  |   | UNLESS OTHERWISE STATED, ALL PROJECT: 6' MAXIMUS LINEAR  |  |  |  |  |  |  |  |
| Carthe   |   | UNSPECIFIED THIRD ANGLE DESCRIPTION:<br>TOLERANCES PROJECTION FIREPLACE CONSTRUCTION DOCUMENT W/-X-VENTISO-MERIDIAN                                    |  |  |  |  |  |  |  |
| INDUSTRIE  | S, L.L.C.   | LIN. X ± DRAWN: DATE: SIZE: SCALE: DRAWING #: REV:   |  |  |  |  |  |  |  |
|  |   | XX ±     K.B.H     8/29/2024     D     1"=1'-0"     82L72     E       XXX ±     APPROVED:     DATE:     D     1"=1'-0"     82L72     E                 |  |  |  |  |  |  |  |

# **Rough Framing Dimensions**



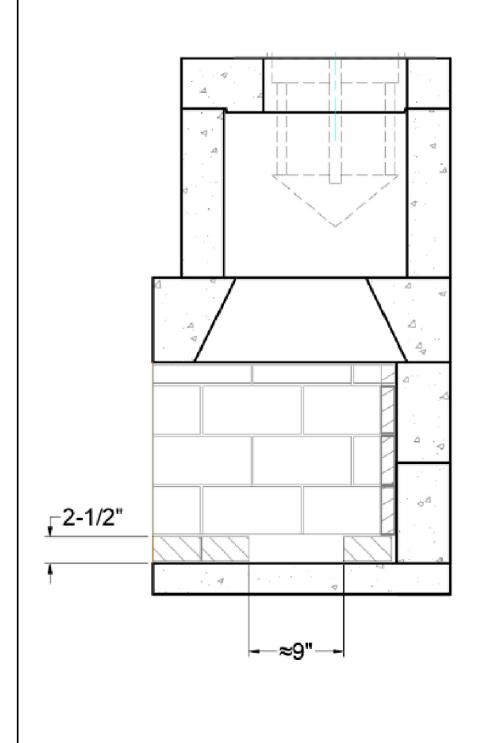
| TYPICAL INSTALLATION FRAMING DIMENSIONS |           |                   |           |  |  |  |  |  |
|---|-----------|-------------------|-----------|--|--|--|--|--|
| Model #                                 | A - Width | <b>B</b> - Height | C - Depth |  |  |  |  |  |
| 82L48                                   | 56"       | 51″               | 29-1/2"   |  |  |  |  |  |
| 82L60                                   | 77"       | 51"               | 29-1/2"   |  |  |  |  |  |
| 82L72                                   | 89″       | 51″               | 29-1/2"   |  |  |  |  |  |
| 82L96                                   | 112″      | 51″               | 29-1/2"   |  |  |  |  |  |
| 82L120                                  | 135″      | 51″               | 29-1/2″   |  |  |  |  |  |

### NOTES:

- 1) "B" includes the required 3" thick base plate.
- If the Maximus Linear 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 - Maximus Linear Fireplace**

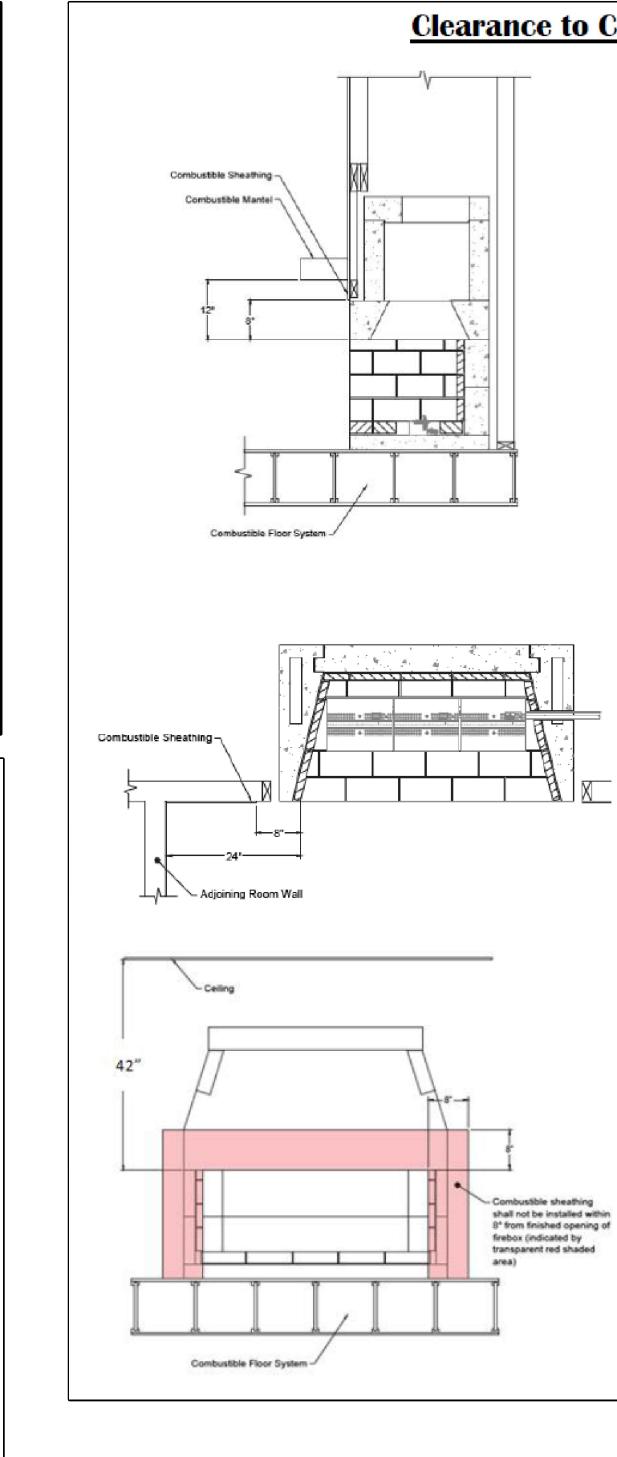


- Starting approximately 1/2" from the rear of the firebox, lay one course of "full" sized firebrick on floor. Ensure a gap of approximately 1/2" is kept between firebrick and sidewall to allow for expansion.
- 2) Lay two courses of "full" sized firebrick so that the leading edge of the coursing is aligned with opening of the firebox. Ensure a gap of approximately ½" is kept between firebrick and sidewall to allow for expansion.
- 3) 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.
- 4) Starting at the front edge of the unit's sidewall, apply "split" firebrick to the side wall of the unit. Ensure approximately ¼" gap is kept between firebrick and damper beam/damper block assembly to allow for expansion.
- 5) Repeat on opposite side wall.

### IMPORTANT:

Ensure that the required holes for the Isoflames Linear burner's 3/8" gas supply line and pilot assembly gas and electrical connections are drilled prior to firebrick installation. **DO NOT COVER THESE AREAS** WITH FIREBRICK!

| PFS REPORT NO. F19 - 1   | ISOKERN LINEAR GAS FIREPLA<br>LISTED VENTED GAS FIREPLACE PER ANSI Z21<br>CSA 2.22-2019<br>NOT FOR USE WITH SOLID F<br>SERIAL NO: L000001   | SO - 2019 SO<br>MAD<br>CHESAF  | DE IN THE USA<br>DE IN THE USA<br>DEAKE, VA 23323<br>2148 82L72<br>2160 82L96                   |  |
|--|---|--|---|--|
| ANIFOLD PRESS  | NE (LP) OR NATURAL GAS, SEE GAS IDENTIFYI<br>AL GAS MAX BTU 54,000; PROPANE MAX B<br>AL GAS MAX BTU 72,000; PROPANE MAX B<br>AL GAS MAX BTU 90,000; PROPANE MAX B<br>AL GAS MAX BTU 108,000; PROPANE MAX<br>RAL GAS MAX BTU 108,000; PROPANE MAX<br>RAL GAS MAX BTU 110,000; PROPANE MAX<br>"See Burner Rating Plate For Additional Infor<br>URE: PROPANE (LP): 10" WATER COLUMN; NATUR<br>ERMISSIBLE GAS SUPPLY PRESSURE FOR PURPOSE | BTU 48,000<br>BTU 64,000<br>BTU 80,000<br>BTU 96,000<br>X BTU 105,000<br>mation<br>AL GAS: 3.5" WATER C<br>OF INPUT ADJUSTME | OLUMN   | 7' FOR MODELS ISF36/48/60LB<br>&<br>2' FOR MODELS ISF72/96LB |
| ELECTRICAL RATING:<br>UNIT: ELECTRONIC<br>1 PH<br>60 HZ<br>120 VOLTS<br>LESS THAN 5 AMPS<br>UTION: THIS APPLIANCE IS 0 | ANE (LP): 11" WATER COLUMN; NATURAL GAS: 5"<br>CLEARANCE TO COMBUSTIBLES:<br>UNIT FRONT<br>UNIT SIDES AND REAR<br>COMBUSTIBLE SHEATHING ABOVE OPENING<br>TOP SHEATHING OR TRIM TO OPENING SIDES<br>MANTEL ABOVE OPENING<br>INSULATION FROM FIREBOX  | Open Front Only<br>= 0in<br>= 1.5in.<br>= 8in<br>= 8in<br>= 12in.<br>= 3in.  | Glass Front Only<br>= 0in<br>= 1.5in.<br>= 0in<br>= 0in<br>= 0in<br>= 3in<br># APPLIANCE IS NOT |  |
|  | THER GASES, UNLESS A CERTIFIED KIT IS USED."<br>led in accordance with local codes, if any, if none, f<br>CSA B149.1<br>EARTHCORE INDUSTRIES HEADQUAR<br>JACKSONVILLE, FL 32256   |  | Z223.1/NFPA 54 or   |  |



## **<u>Clearance to Combustible Trim</u>**

**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:

Maximus Linear units are designed to be installed so that the rough front face(s) of the Isokern firebox and smoke dome sit flush with the f ace of the rough framing members that create the room wall finish.

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

All combustible trim projecting <u>more</u> than one and onehalf 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:

Combustble sheathing shall not be installed within 8" from finished opening of frebox (indicated by transparent red shaded area) Side walls and walls to rooms adjoining the Isokern fireplace installation cannot be closer than twentyfour 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").

# E-VK(N/P) VALVE LOCATION

### SCAN QR CODE FOR LATEST INSTALLATION MANUALS



# Maximus Linear 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.

- 1. Designed for field assembly as a fireplace and B-vent chimney system.
- 2. All interlocking parts necessary for assembly of a complete firebox, smoke dome, and Glass-Front Kit (Glass-Front Kit is installation option of the Maximus Linear series and is not required for all installations).
- 3. Isoflames Linear Burner and Valve system (per installation manual)
- 4. 12" B-vent chimney flue (per installation manual)
- 5. Mechanical draft system (per installation manual)

### MATERIALS:

- A. Light weight concrete of a proprietary mixture of Icelandic volcanic aggregate and aluminum cement for precast firebox, chimney block and flue liner components.
  - 1. Compressive Strength: Firebox Block: 972 psi.
- B. Premixed (dry) EARTHCORE ADHESIVE.
  - 1. Tensile strength: 807 psi; Compressive strength: 2460 psi.
- 2. Tested per ASTM C109, ASTM C307, and ANSI 118.4.
- C. Standard 1-1/8" high temperature refractory brick to line firebox interior walls.
- D. Standard 2-1/2" high temperature refractory brick to line firebox floor.

### INSTALLATION:

- A. Reference manufacturer's installation instructions for standard configurations, weights, sizes and installation details.
- B. Suitable masonry foundation or structural wood floor system must be provided.
- C. Non combustible hearth extensions must be provided.
- D. Unit to be assembled on site per manufacturer's illustrated instructions.
  - 1. Premixed EARTHCORE ADHESIVE is used at all joints between components.
  - 2. Firebox to be lined with a minimum 1-1/8" rated firebrick on the walls and 2-1/2" rated
  - firebrick on floor (trough created in firebrick floor for Isoflames Linear Burner installation).
    3. A 1-1/2" minimum clearance to combustible materials is required for firebox side and back-walls.
  - 4. A 3" minimum clearance to insulation required.
- E. Shall be installed only with the approved Isoflames Linear Burner and Valve System as detailed in the instruction manual.
- F. Installation must use 12" B-vent pipe as detailed in the instruction manual (Anchor Plate with Down-Draft Diverter required).
- G. Only approved mechanical draft systems shall be utilized, as detailed in the instruction manual.

### **CERTIFICATION**:

- A. PFS Corporation, PFS Report No. F19-161
- B. Meets or exceeds ANSI Z 21.50-2014, CSA 2.22-2014

### CODE COMPLIANCE:

A. ICC NO. ESR 4873

<u>NOTE</u>: 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

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

- 1) Isokern Maximus Linear- Open Front unit weights:
  - a) Maximus Linear Open Front 48: 1,275 lbs. (no burner, flue, or accessories)
  - b) Maximus Linear Open Front 60: 1,720 lbs. (includes steel angle; but no burner, flue, or accessories)
  - c) <u>Maximus Linear Open Front 72</u>: 1,990 lbs. (includes steel angle; but no burner, flue, or accessories)
  - d) <u>Maximus Linear Open Front 96</u>: 2,450 lbs. (includes steel angle; but no burner, flue, or accessories)
  - e) Maximus Linear Open Front 120: 2,997 lbs. (includes steel angle; but no burner, flue, or accessories)
- 2) <u>Approximate weight of glass media</u>: 100 lbs.
- 3) Fire brick and Adhesive: 350 lbs. 1800 lbs. depending on brick size and pattern
- 4) Facing material: per general contractor
- 5) B-Vent metal flue: per manufacturer and installation requirements

The floor area for each model is as follows:

- <u>Maximus Linear Open Front 48</u>: @ 53" x 28" = 10.3 sq. ft.
- <u>Maximus Linear Open Front 60</u>: @ 73-1/2" x 28" = 14.3 sq. ft.
- Maximus Linear Open Front 72: @ 85-3/4" x 28" = 16.67 sq. ft.
- Maximus Linear Open Front 96: @ 108-1/4" x 28" = 21.04 sq. ft.
- <u>Maximus Linear Open Front 120</u>: @ 131-3/4" 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.

|                    | UNLESS OTHERWISE STATED, ALL<br>DIMENSIONS ARE IN INCHES |             |        | E STATED, ALL<br>E IN INCHES | 6' MAXIMUS LINEAR         |                    |       |                 |                     |      |      |
|--------------------|--|-------------|--------|------------------------------|---------------------------|--------------------|-------|-----------------|---------------------|------|------|
| CELLANCOLE         |  |             | NCES   | THIRD ANGLE<br>PROJECTION    | DESCRIPTION:<br>GENERAL I | NFORMATION         | AND   | SPECIFICATIC    | NS                  |      |      |
| INDUSTRIES, L.L.C. | ANG.   | А           | ±      | MATERIAL:                    |                           |                    |       |                 |                     |      |      |
|                    | LIN.   | .X          | ±      | $\bigcirc \bigcirc$          | DRAWN:<br>K.B.H           | DATE:<br>8/29/2024 | SIZE: | SCALE:<br>N.T.S | DRAWING #:<br>82L72 |      | REV: |
|                    |  | .XX<br>.XXX | ±<br>± | т -                          | APPROVED:                 | DATE:              |       | DO NOT SCALE    | SHEET # 2 0         | DF 2 | 2    |