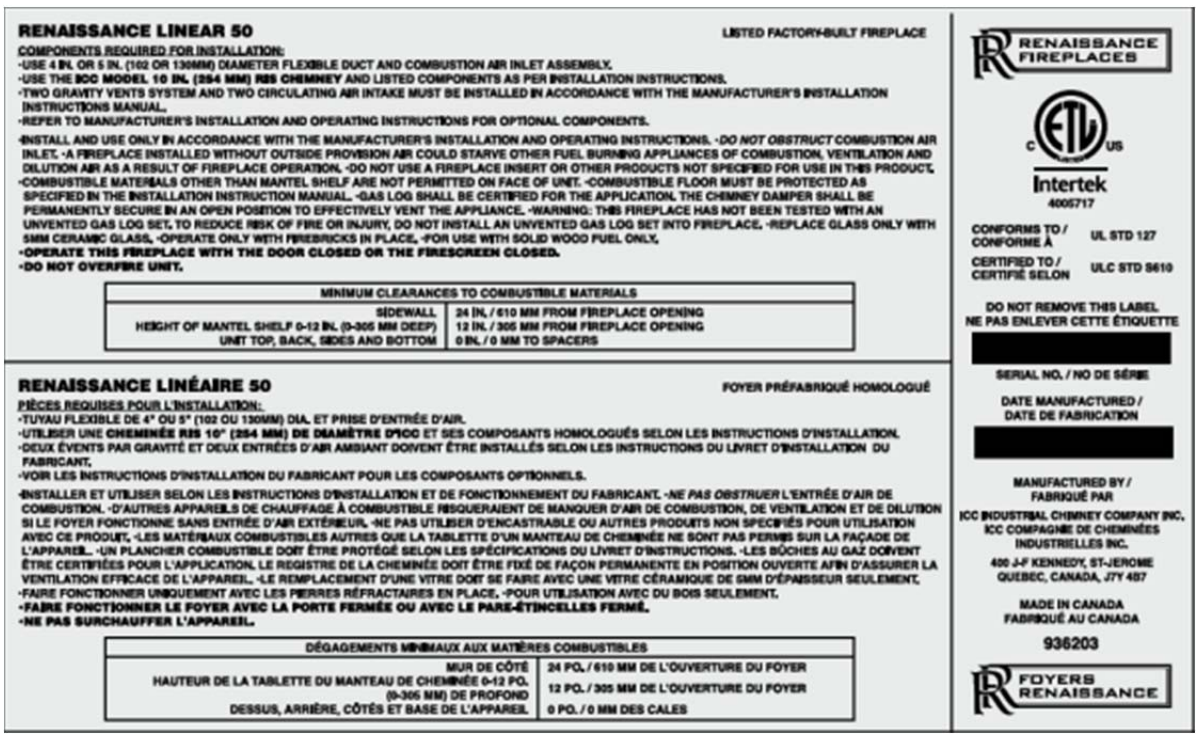
RENAISSANCE FIREPLACES

CLEAN DOESN'T MEAN COMPROMISE

LINEAR 50
INSTALLATION MANUAL

We strongly recommend that our products be installed and serviced by professionals who are certified by the National Fireplace Institute in the U.S. or by Wood Energy Technology Transfer Inc. in Canada.



RENAISSANCE LINEAR 50 — LISTED FACTORY-BUILT FIREPLACE

COMPONENTS REQUIRED FOR INSTALLATION:
- USE 4 IN. OR 5 IN. (102 OR 130MM) DIAMETER FLEXIBLE DUCT AND COMBUSTION AIR INLET ASSEMBLY.
- USE THE **DCC MODEL 10 IN. (254 MM) RSS CHIMNEY** AND LISTED COMPONENTS AS PER INSTALLATION INSTRUCTIONS.
- TWO GRAVITY VENTS SYSTEM AND TWO CIRCULATING AIR INTAKE MUST BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS MANUAL.
- REFER TO MANUFACTURER'S INSTALLATION AND OPERATING INSTRUCTIONS FOR OPTIONAL COMPONENTS.
- INSTALL AND USE ONLY IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION AND OPERATING INSTRUCTIONS. -*DO NOT OBSTRUCT* COMBUSTION AIR INLET. -A FIREPLACE INSTALLED WITHOUT OUTSIDE PROVISION AIR COULD STARVE OTHER FUEL BURNING APPLIANCES OF COMBUSTION, VENTILATION AND DILUTION AIR AS A RESULT OF FIREPLACE OPERATION. -DO NOT USE A FIREPLACE INSERT OR OTHER PRODUCTS NOT SPECIFIED FOR USE IN THIS PRODUCT.
- COMBUSTIBLE MATERIALS OTHER THAN MANTEL SHELF ARE NOT PERMITTED ON FACE OF UNIT. -COMBUSTIBLE FLOOR MUST BE PROTECTED AS SPECIFIED IN THE INSTALLATION INSTRUCTION MANUAL. -GAS LOG SHALL BE CERTIFIED FOR THE APPLICATION. THE CHIMNEY DAMPER SHALL BE PERMANENTLY SECURE IN AN OPEN POSITION TO EFFECTIVELY VENT THE APPLIANCE. -WARNING: THIS FIREPLACE HAS NOT BEEN TESTED WITH AN UNVENTED GAS LOG SET. TO REDUCE RISK OF FIRE OR INJURY, DO NOT INSTALL AN UNVENTED GAS LOG SET INTO FIREPLACE. -REPLACE GLASS ONLY WITH 5MM CERAMIC GLASS. -OPERATE ONLY WITH FIREBRICKS IN PLACE. -FOR USE WITH SOLID WOOD FUEL ONLY.
- **OPERATE THIS FIREPLACE WITH THE DOOR CLOSED OR THE FIRESCREEN CLOSED.**
- **DO NOT OVERFIRE UNIT.**

MINIMUM CLEARANCES TO COMBUSTIBLE MATERIALS	
SIDEWALL	24 IN. / 610 MM FROM FIREPLACE OPENING
HEIGHT OF MANTEL SHELF 0-12 IN. (0-305 MM DEEP)	12 IN. / 305 MM FROM FIREPLACE OPENING
UNIT TOP, BACK, SIDES AND BOTTOM	0 IN. / 0 MM TO SPACERS

RENAISSANCE LINÉAIRE 50 — FOYER PRÉFABRIQUÉ HOMOLOGUÉ

PIÈCES REQUISES POUR L'INSTALLATION:
- TUYAU FLEXIBLE DE 4" OU 5" (102 OU 130MM) DIA. ET PRISE D'ENTRÉE D'AIR.
- UTILISER UNE **CHEMINÉE RSS 10" (254 MM) DE DIAMÈTRE D'DCC** ET SES COMPOSANTS HOMOLOGUÉS SELON LES INSTRUCTIONS D'INSTALLATION.
- DEUX ÉVENTS PAR GRAVITÉ ET DEUX ENTRÉES D'AIR AMBIANT DOIVENT ÊTRE INSTALLÉS SELON LES INSTRUCTIONS DU LIVRET D'INSTALLATION DU FABRICANT.
- VOIR LES INSTRUCTIONS D'INSTALLATION DU FABRICANT POUR LES COMPOSANTS OPTIONNELS.
- INSTALLER ET UTILISER SELON LES INSTRUCTIONS D'INSTALLATION ET DE FONCTIONNEMENT DU FABRICANT. -*NE PAS OBSTRUER* L'ENTRÉE D'AIR DE COMBUSTION. -D'AUTRES APPAREILS DE CHAUFFAGE À COMBUSTIBLE RISQUERAIENT DE MANQUER D'AIR DE COMBUSTION, DE VENTILATION ET DE DILUTION SI LE FOYER FONCTIONNE SANS ENTRÉE D'AIR EXTÉRIEUR. -NE PAS UTILISER D'ENCASTRABLE OU AUTRES PRODUITS NON SPÉCIFIÉS POUR UTILISATION AVEC CE PRODUIT. -LES MATÉRIAUX COMBUSTIBLES AUTRES QUE LA TABLETTE D'UN MANTEAU DE CHEMINÉE NE SONT PAS PERMIS SUR LA FAÇADE DE L'APPAREIL. -UN PLANCHER COMBUSTIBLE DOIT ÊTRE PROTÉGÉ SELON LES SPÉCIFICATIONS DU LIVRET D'INSTRUCTIONS. -LES BÛCHES AU GAZ DOIVENT ÊTRE CERTIFIÉES POUR L'APPLICATION. LE REGISTRE DE LA CHEMINÉE DOIT ÊTRE FIXÉ DE FAÇON PERMANENTE EN POSITION OUVERTE AFIN D'ASSURER LA VENTILATION EFFICACE DE L'APPAREIL. -LE REMPLACEMENT D'UNE VITRE DOIT SE FAIRE AVEC UNE VITRE CÉRAMIQUE DE 5MM D'ÉPAISSEUR SEULEMENT.
- FAIRE FONCTIONNER UNIQUEMENT AVEC LES PIERRES RÉFRACTAIRES EN PLACE. -POUR UTILISATION AVEC DU BOIS SEULEMENT.
- **FAIRE FONCTIONNER LE FOYER AVEC LA PORTE FERMÉE OU AVEC LE PARE-ÉTINCELLES FERMÉ.**
- **NE PAS SURCHAUFFER L'APPAREIL.**

DÉGAGEMENTS MINIMAUX AUX MATIÈRES COMBUSTIBLES	
MUR DE CÔTÉ	24 PO. / 610 MM DE L'OUVERTURE DU FOYER
HAUTEUR DE LA TABLETTE DU MANTEAU DE CHEMINÉE 0-12 PO. (0-305 MM) DE PROFOND	12 PO. / 305 MM DE L'OUVERTURE DU FOYER
DESSUS, ARRIÈRE, CÔTÉS ET BASE DE L'APPAREIL	0 PO. / 0 MM DES CALES

RENAISSANCE FIREPLACES

C ETL US
Intertek
4005717

CONFORMS TO / CONFORME À — UL STD 127
CERTIFIED TO / CERTIFIÉ SELON — ULC STD S610

DO NOT REMOVE THIS LABEL
NE PAS ENLEVER CETTE ÉTIQUETTE

[redacted]

SERIAL NO. / NO DE SÉRIE

DATE MANUFACTURED / DATE DE FABRICATION

[redacted]

MANUFACTURED BY / FABRIQUÉ PAR
ICC INDUSTRIAL CHIMNEY COMPANY INC.
ICC COMPAGNIE DE CHEMINÉES INDUSTRIELLES INC.
400 J-F KENNEDY, ST-JEROME
QUEBEC, CANADA, J7Y 4B7

MADE IN CANADA
FABRIQUÉ AU CANADA

936203

FOYERS RENAISSANCE

The listing label has been placed on a thin steel plate inside the guillotine bay on the far right. Both the firescreen and the glass door must be open to access it. Make sure to push it back as far as it goes inside so it does not impede proper movement of the glass door and/or the firescreen.

Keep these instructions for future use.

Dear Installer,

The Renaissance Linear 50 is a member of the Renaissance Fireplaces family of ultra-high end fireplaces. The LINEAR 50 is unique in its design. The 50" wide opening provides an enormous linear space to watch the fire. It combines technology with elegance, allowing you to enjoy an open fire in a modern fashion.

We have designed your new Renaissance LINEAR 50 to be easy to install, operate, and maintain. It is critical for you to study this manual to be sure that the installation is correct, and then also to be familiar with the guidelines for operation and maintenance contained in the Owner's Manual. Be sure to present both manuals to the owner or leave them in a prominent place.

We at Renaissance Fireplaces™ appreciate the importance of careful work and professional knowledge in installing this fireplace system exactly according to the instructions.

Sincerely,

Renaissance Fireplaces™ Team

August 2015

Industrial Chimney Company Inc.
400 J.-F. Kennedy, St-Jerome,
QC, Canada, J7Y 4B7
Telephone: (450) 565-6336
www.icc-rsf.com

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IMPORTANT INSTALLATION SAFETY PRECAUTIONS

DO'S AND DON'TS

If this fireplace is not properly installed, a house fire could result. For issues of safety and liability, follow the installation directions carefully. Contact your local authority having jurisdiction (such as municipal building department or fire department) regarding restrictions and installation requirements, and the need to obtain a permit.

To ANYONE installing this fireplace: these **DO's** and **DON'Ts** are for proper performance and safety of this fireplace system, as well as for your personal safety and protection. Detailed explanations follow in this manual and in the Owner's Manual.

1. **DO** read this entire manual and the Owner's manual before installing this fireplace system.
2. **DO** exercise caution in moving and placing the fireplace. See "Moving The LINEAR 50" on page 19 for detailed instructions.
3. **DO** inspect the fireplace, chimney, and parts/components for damage before installation.
4. **DO** install all required parts/components as instructed in this manual.
5. **DO** be aware of differences in installation procedures and specifications for this fireplace and other similar products.
6. **DO NOT** modify the fireplace and do not install any parts/components not approved for use with this fireplace.
7. **DO NOT** install an unvented gas log set, gas lighter, wood burning fireplace insert of other products not specified for use with or in this fireplace.
8. **DO NOT** over fire this unit in testing or demonstrating it. See Owner's Manual for details about proper operation.
9. **DO NOT** allow combustible materials closer to heat sources (fireplace and chimney) than allowed in minimum clearance instructions.
10. **DO NOT** allow non-combustible materials such as insulation in required air spaces (e.g. insulation contacting the chimney).

COMBUSTIBLE VS NON-COMBUSTIBLE MATERIALS

It is important to distinguish clearly between combustible and non-combustible materials. National Fire Protection Association (NFPA) defines the differences:

Combustible Materials

- Materials made of or surfaced with any of wood, plant fibers, plywood/OSB, compressed paper, plastic, gypsum board (drywall/sheetrock)[1]
- Any material that can ignite and burn, whether it is flame-proofed or not, plastered or not

[1] Note that gypsum board, whether fire-rated or not is considered combustible.

Non-combustible Materials

- Materials that, as used and under anticipated conditions, will not ignite, burn, support combustion, or release combustible vapors when subjected to flame or heat
- Materials reported as passing ASTM E 136, Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750°C[2].

GENERAL SPECIFICATIONS

The LINEAR 50 fireplace is a decorative fireplace that provides a magnificent view of the fire. It is defined as a fireplace (primarily for aesthetics) under the 2015 EPA (United States Environmental Protection Agency) regulation since it offers more than 500 square inches of pure fire viewing (710 square inches are visible). Small amounts of firewood can fill the firebox with large, beautiful flames in this exceptional fireplace.

OPTIONS

The LINEAR 50 comes fully equipped with a built-in guillotine glass door and a guillotine firescreen.

The Heat Redistribution System is mandatory, and requires the installation of intakes and outlets to allow ambient air in and warmed air out of the fireplace. Included with the fireplace are two air intake grills, two hot air outlets and two insulated flexible duct with the outlet grill adapters. We also offer different styles of grills in option:

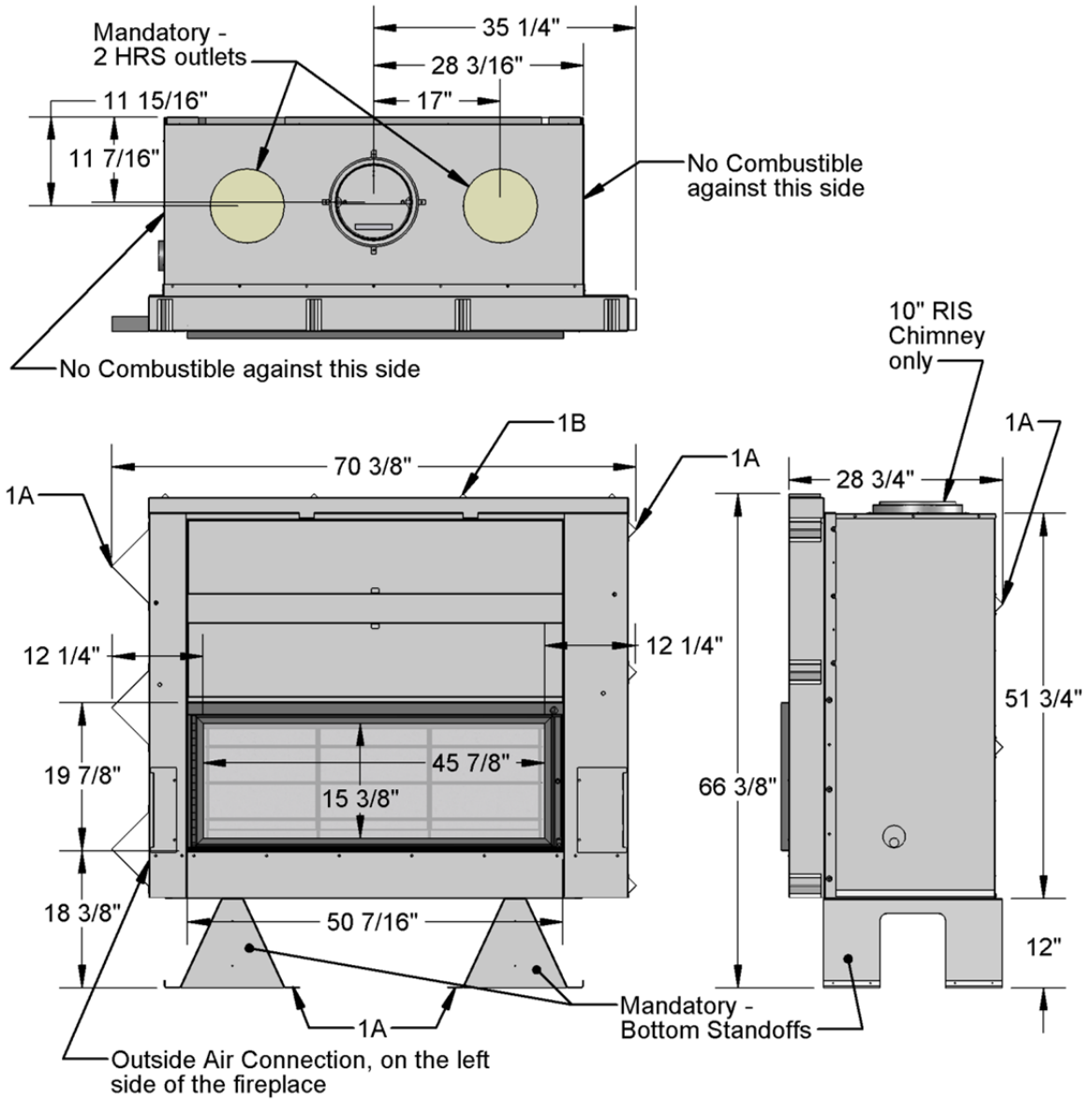
- If you would prefer one long linear grill for the hot air outlet (above the fireplace) instead of two rectangular outlet grills, we offer the Long Linear Outlet Grill (EO-LLG-OUT). Please refer to the installation instructions of the option for installation restrictions compared to the hot air outlet grills provided.
- You can also change the two rectangular intake grills for one Long Linear Intake Grill (EO-LLG-IN). Please refer to the installation instructions of the option for installation restrictions compared to the rectangular grills provided.
- Installations in an 8' ceiling require specific Air Outlet Grills to ensure adequate heat is vented from the fireplace. The Square Grills for 8' Ceiling (EO-SG) includes two 13" square grills and two outlet grill adapters that are required when the ceiling is only at 8'. Please refer to the installation instructions of the option for installation restrictions compared to the rectangular grills provided.

Vented gas logs sets are permitted, unvented gas log are not. Go online to the Renaissance web site: www.renaissancefireplaces.com for more information.

> **WARNING:** **THIS FIREPLACE HAS NOT BEEN TESTED WITH AN UNVENTED GAS LOG SET. TO REDUCE RISK OF FIRE OR INJURY, DO NOT INSTALL AN UNVENTED GAS LOG SET INTO THIS FIREPLACE. DO NOT INSTALL A GAS LIGHTER BECAUSE THE HEAT PRODUCED BY THE FIREPLACE MAY PERMANENTLY DAMAGE THE GAS LIGHTER.**

[2] NFPA 211, Chimneys, Fireplaces, Vents, and Solid Fuel-Burning Appliances

FIREPLACE



The fireplace bottom standoffs are mandatory for all installations. They permit air flow into the fireplace casing and MUST be installed regardless of whether the fireplace is installed on combustible or non-combustible flooring or platforms. See section "Fireplace Installation: Installing The Bottom Standoffs" for all the details regarding the requirements to use the fireplace bottom standoffs.

FIGURE 1 FIREPLACE DIMENSIONS

TABLE 1 FIREPLACE CLEARANCES AND SPECIFICATIONS

			Manual Ref.
A	Distance to combustible material from side, back and bottom standoffs.	0" (0 mm)	Figure 1
B	Framing against the top standoff.	Non-combustible	Figure 1
C	Minimum distance from the side of the fireplace opening to a perpendicular side wall.	24" (610 mm)	Figure 2
D	Minimum ceiling height: measured from the bottom of the bottom standoff to the lowest point of the ceiling above the fireplace. Applies both to the inside and outside of the fireplace enclosure.	9' (2.7 m)	Figure 3
E	Minimum depth of non-combustible hearth extension: measured from the front of the fireplace.	20" (508 mm)	Figure 2
F	Minimum width of non-combustible hearth extension, centered on the fireplace opening.	74.5" (1.89 m)	Figure 2
G	Minimum width of the spark guard.	74.5" (1.89 m)	Figure 2

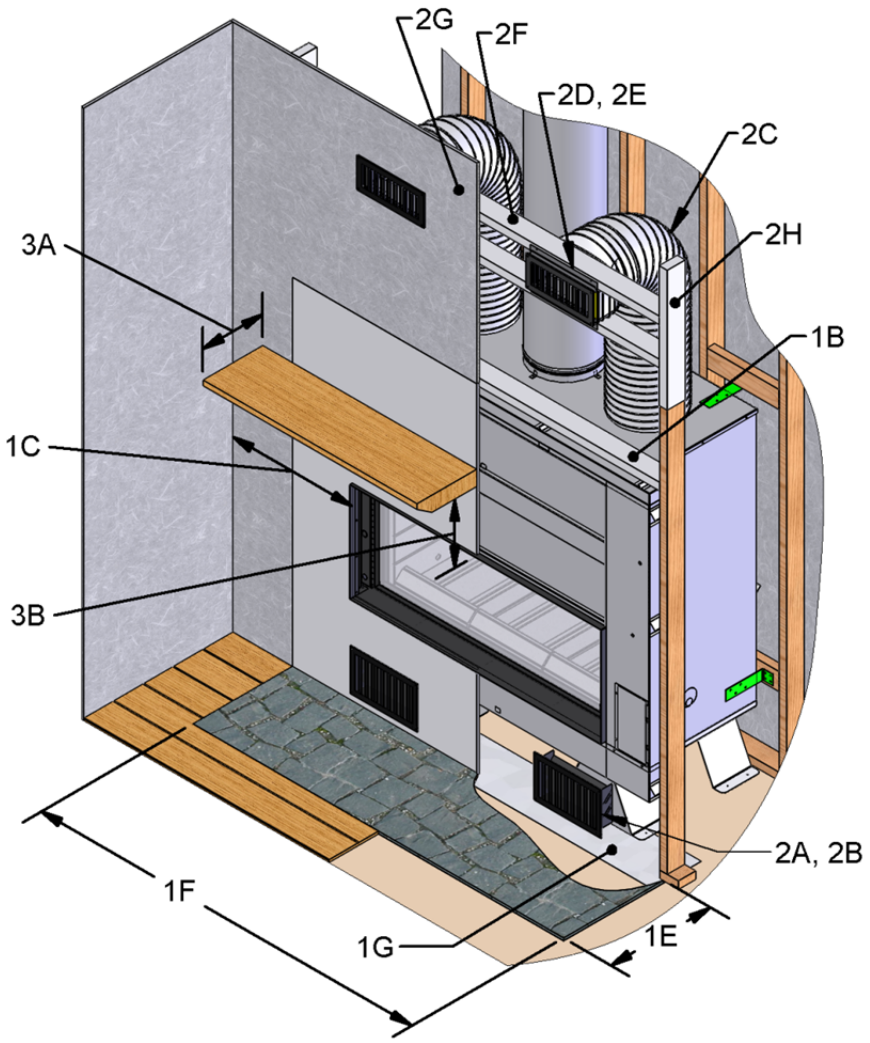


FIGURE 2 FIREPLACE, HRS AND MANTEL CLEARANCES

HEAT REDISTRIBUTION SYSTEM (HRS)

TABLE 2 HEAT REDISTRIBUTION SYSTEM (HRS) CLEARANCES AND SPECIFICATIONS

			Manual Ref.
A	Minimum height of the air intake grill above the floor.	1.5" (38 mm)	Figure 2
B	Maximum height of the air intake grill above the floor when the fireplace is sitting on the floor. Height can increase if fireplace is raised.	18" (457 mm)	Figure 2
C	Minimum clearance between the outside of the hot air outlet duct and any combustibles above, below or beside the duct.	6" (152 mm)	Figure 2
D	Minimum clearance from the hot air outlet grill to the ceiling: measured from the top of the outlet grill to the ceiling above.	11" (280 mm)	Figure 2, Figure 14
E	Minimum height of the hot air outlet grill above the top of the fireplace: measured from the bottom edge of the hot air outlet grill to the top of the casing of the fireplace main body.	26" (660 mm)	Figure 2, Figure 14
F	Framing around the hot air outlet grills and their adapters.	Non-combustible	Figure 2, Figure 5, Figure 14
G	Wall surface surrounding the hot air outlet grills.	Non-combustible	Figure 2, Figure 15
H	Minimum height of non-combustible framing for the hot air outlets, centered on the hot air outlet grills.	22" (559 mm)	Figure 2, Figure 5, Figure 14
I	Maximum length of each outlet duct: measured from the top of the fireplace to the outlet grill	15' (4.57 m)	

MANTEL

TABLE 3 MANTEL CLEARANCES AND SPECIFICATIONS

			Manual Ref.
A	Maximum depth of a combustible mantel shelf above the fireplace opening.	12" (305 mm)	Figure 2
B	Minimum height of a combustible mantel shelf above the top of the fireplace opening: measured from the lowest point/bottom of the combustible mantel.	12" (305 mm)	Figure 2

CHIMNEY

This fireplace is certified for use with 10" ICC Model RIS chimney only. Please refer to Figure 3 and Table 4 for chimney clearances and specifications with the LINEAR 50 fireplace.

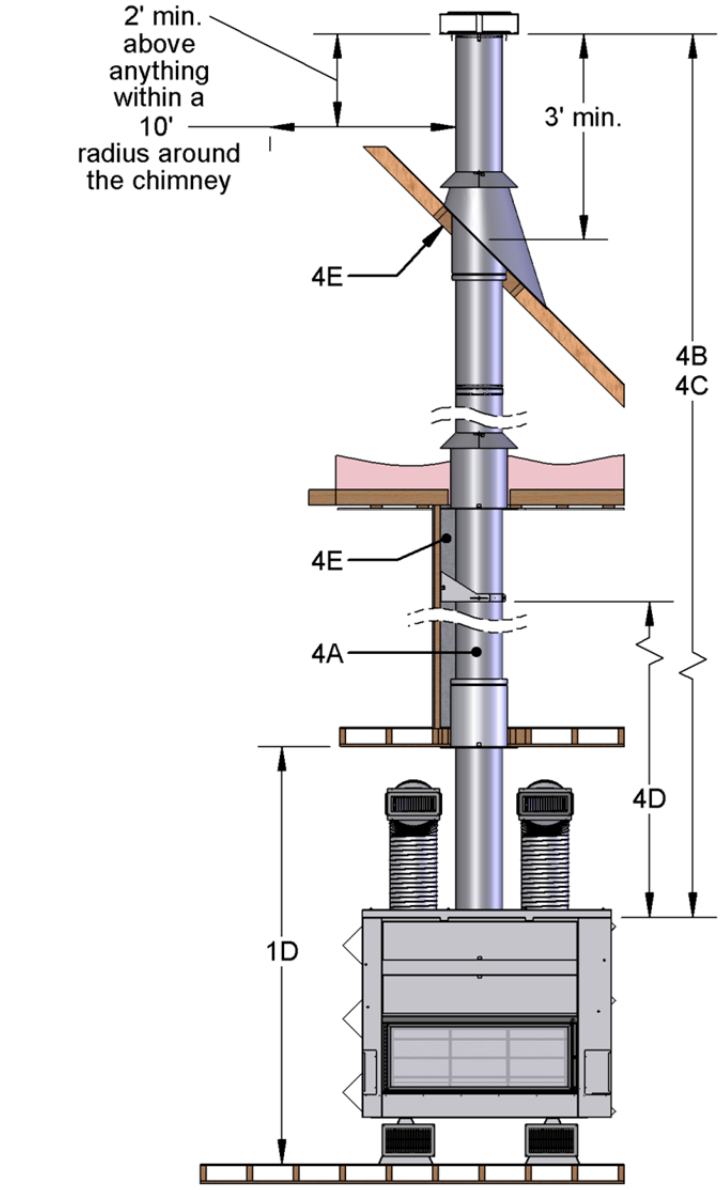


FIGURE 3 GENERAL CHIMNEY REQUIREMENTS

TABLE 4 CHIMNEY CLEARANCES AND SPECIFICATIONS

			Manual Ref.
A	Chimney Size and type	RIS 10" only	Figure 4, Figure 3
B	Minimum chimney height: minimum total chimney height from the top of the fireplace to the rain cap without offsets.	12' (3.66 m)	Figure 3, Table 7
C	Maximum chimney height: maximum total chimney height from the top of the fireplace to the rain cap.	38' (11.58 m)	Figure 3
D	Maximum chimney height supported by the fireplace	12' (3.66 m)	Figure 3
E	Minimum clearance between the exterior of the chimney and any combustibles	2" (51 mm)	Figure 3

PLANNING THE INSTALLATION:

FOLLOWING RECOMMENDATIONS AND MEETING REQUIREMENTS

The planning process may involve a number of people, including sales, estimating, and installing personnel, the local authority having jurisdiction (such as municipal building, fire department, or fire prevention bureau officials, and, of course, the owners who purchase the system. Close attention to detail and clear communication are important in that process.

There are numerous factors and many details that are involved in choosing a suitable location for the fireplace and chimney. Some of these factors are options and recommendations for optimum performance and owner enjoyment. Others are strict requirements that may be essential for acceptable performance and safety.

We introduce recommendations and requirements for planning factors here, but it may be necessary to refer to the installation details in the Installation section that follows for exact details that can affect planning decisions. We strongly recommend that you take the time to plan your entire installation (fireplace, air duct systems, and chimney) before beginning the actual installation (see Figure 4).

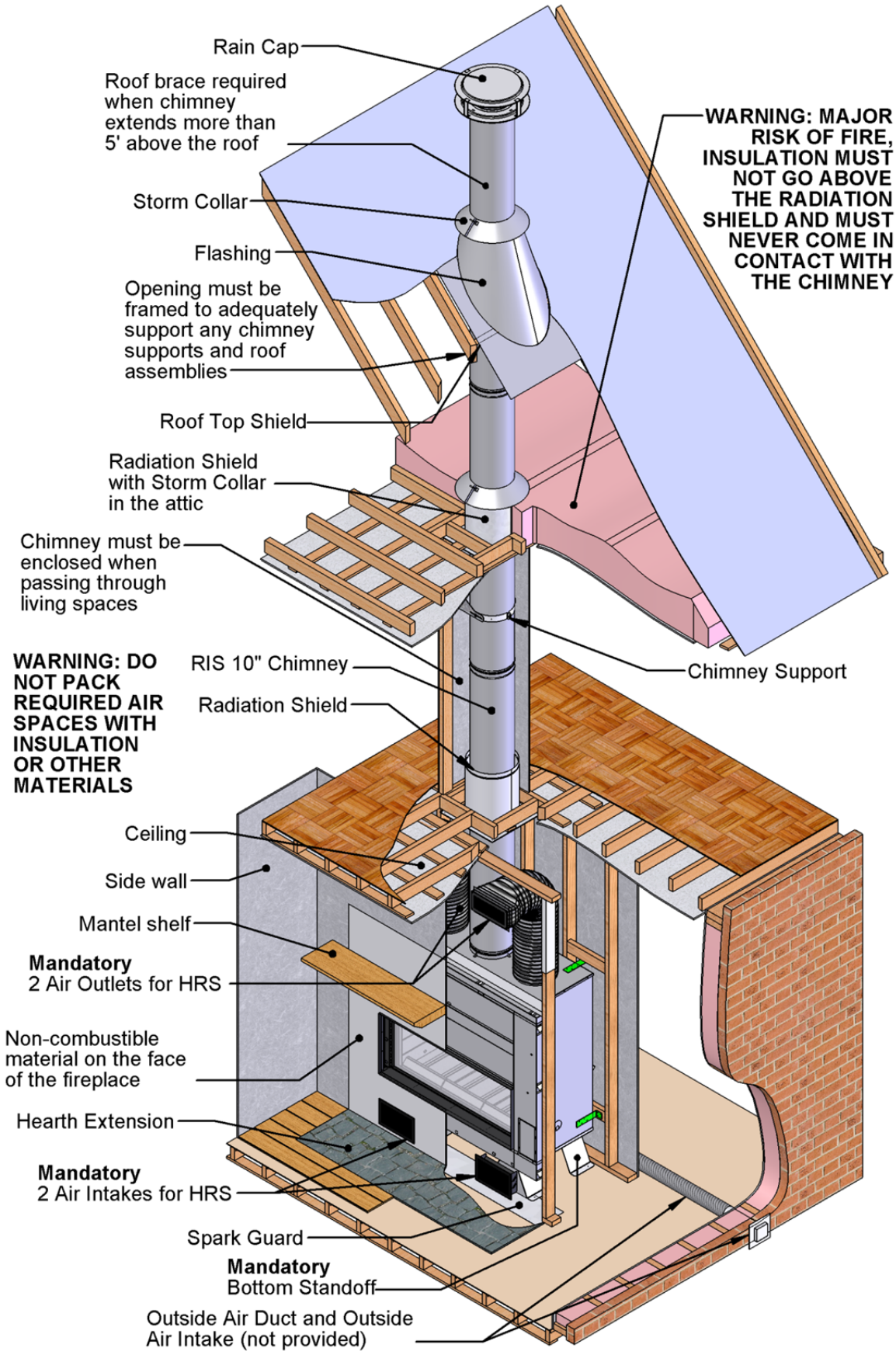
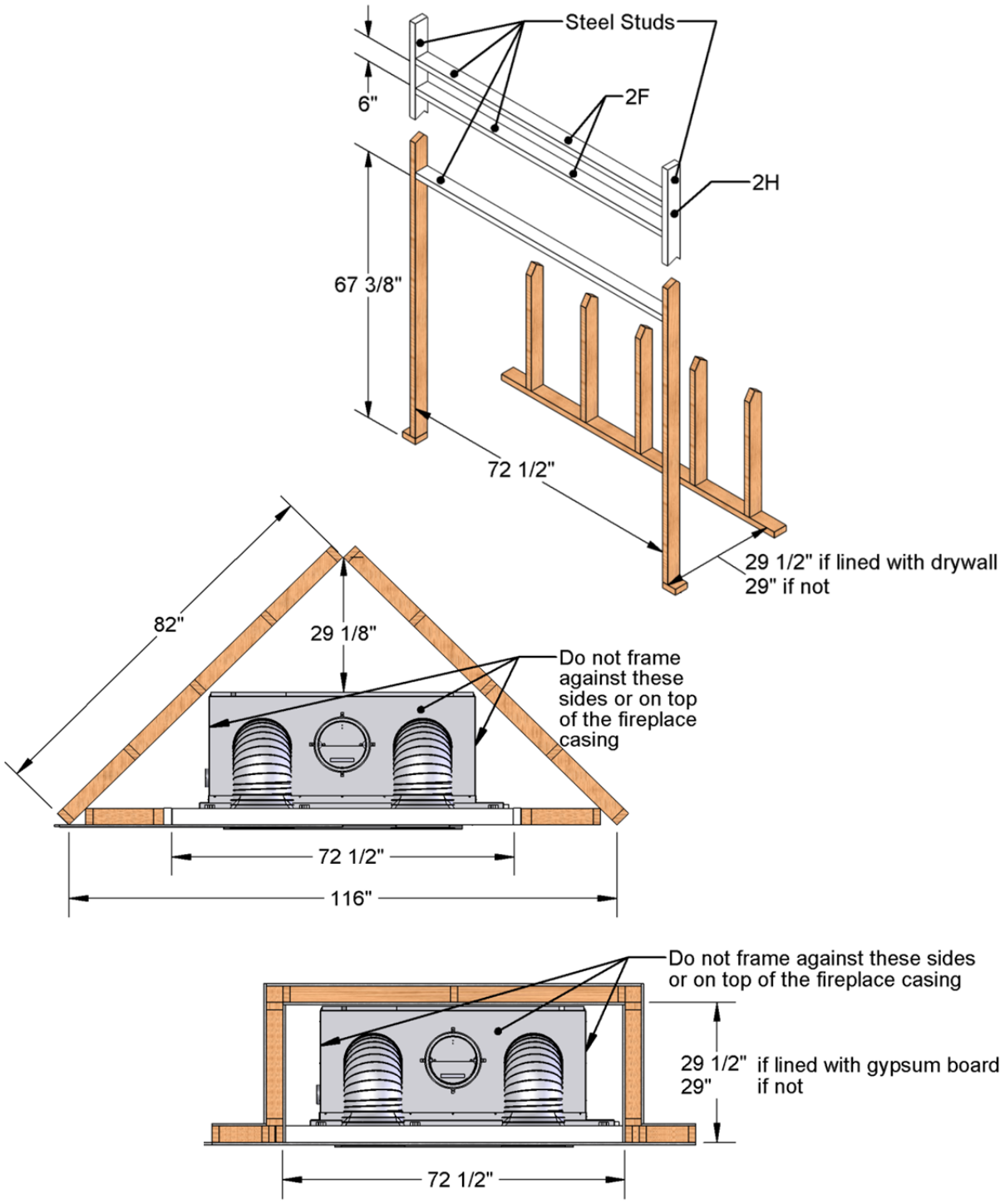


FIGURE 4 GENERAL INSTALLATION



The framing dimensions are larger than required for ease of installation.

The horizontal stud going across the top of the fireplace (at 67 3/8") MUST be a steel stud whether the HRS outlets are installed above the fireplace or elsewhere.

All framing around the HRS outlets MUST be in steel studs whether they are installed above the fireplace or elsewhere.

FIGURE 5 FRAMING EXAMPLES

SELECTING A LOCATION IN THE HOUSE

PERFORMANCE CONSIDERATIONS

The room in the house where the fireplace may well be determined by its use by the owners. If there are options, the performance of the venting system might be considered:

- Installation where as much of the chimney is within the building envelope (toward the center of the house and with the termination close to the peak of the roof) enhances draft.
- Installation in an insulated chase enclosure may be an acceptable alternative for locations where much of the chimney would be exposed to cold air.

RESTRICTIONS

There are a number of factors that may prevent installation in a particular room (see "Factors Affecting Location in a Room" below), but there are also locations where the installation of this fireplace is prohibited:

- The LINEAR 50 must be installed within the vapor barrier of the home.
- It cannot be installed outdoors, or on a three season porch.

FACTORS AFFECTING LOCATION IN A ROOM

With the selection of a particular room in the house, the focus turns to the specific location within the chosen room. The desired location may be dictated by room orientation, furniture arrangement, and other design, comfort, and utility factors. We focus now on installation details that determine whether a chosen location is possible, and what alternatives are available.

ROOM PLACEMENT OPTIONS

The LINEAR 50 can be installed in a number of ways in a room: along a wall, as a room divider, across a corner. For each location, there are numerous factors that determine what exactly is possible and where, which we introduce below and provide details for in the "Fireplace Installation" and in the "Chimney Installation" Section.

FLOORING REQUIREMENTS

Before installing your LINEAR 50, make sure the floor surface and floor structure are level and can sustain the weight of the complete fireplace and whatever finishing material you will use to cover the facing of your fireplace.

You can install your fireplace at the floor level or build a platform to elevate it to the desired height. Again, make sure the platform is built to sustain the weight of the fireplace and the finishing material you will use to finish the facing of your fireplace.

You **MUST** install the fireplace onto the fireplace bottom standoff along with the bottom casing provided with the fireplace, whether it is installed on combustible or non-combustible flooring.

If it is installed on a typically framed combustible floor, you must reinforce the sub-floor to help spread the load from the legs of the bottom standoff throughout the floor structure to prevent sagging.

CEILING HEIGHT

The minimum ceiling height is measured from the base of the bottom standoffs to the ceiling. This requirement applies to the ceiling above the fireplace in the enclosure and the ceiling height in the room in front of the fireplace. Refer to Table 1 (D) for the required height. **This height can be reduced to 8' with installation of the optional Square Grills for 8' Ceilings (EO-SG).**

FIREPLACE CLEARANCES

See Figures 1 and 2 and Table 1 on pages 6, 7 and 7 for complete unit specifications and clearances. Framing examples are provided in Figure 5. It is important to understand and plan for other factors in addition to the clearances to the unit and the chimney:

- No recessed shelves or cupboards can be in the area above the fireplace. This space must be kept empty.
- The enclosure walls can be framed with any suitable materials (2"x4" or 2"x6" studs, plywood, gypsum board, etc.). Because of the high heat output potential of the LINEAR 50, combustible materials must NOT go closer to the fireplace than the back and sides' standoffs; refer to Figure 5.

MANDATORY HEAT REDISTRIBUTION SYSTEM (HRS)

As the firebox heats up, a significant amount of heat builds up in the space between the firebox and the casing that surrounds it. In order to reduce temperatures in this area and deliver more heat into the living space, the LINEAR 50 requires installation of a Heat Redistribution System (HRS) which is provided.

The HRS consists of air intakes and air outlets which circulate room air through the space between the casing and the firebox and then return the heated air to the room. The HRS relies on natural draft and does not require a blower or electricity.

There are a number of options for locating the intakes and outlets of the system, as well as important requirements. Proper planning and installation of this system are critical to ensure the safety of the family and their home.

The instructions in this manual are for the HRS system included with the fireplace. If you have purchased another of Renaissance Fireplaces certified grill options, follow the instructions included with that option.

Refer to Table 2 for the HRS clearances and specifications with the LINEAR 50 fireplace.

CHIMNEY

LOCATION OF THE CHIMNEY

Note the location of roof and floor joists. Choose a location that does not require cutting them if possible.

We recommend the chimney be installed in the interior of the building as it will provide better performance than an exterior chimney. In areas with continuous temperatures below 32°F (0°C) the use of an exterior chimney may result in operating problems such as poor draft and excessive condensation of combustion products. If you do install an exterior chimney we recommend that you install it within an insulated enclosure (see "

Outside Chase Enclosure" on page 16).

> **WARNING:** THE CLEARANCE BETWEEN THE CHIMNEY AND COMBUSTIBLE MATERIAL MUST BE 2" OR MORE. DO NOT FILL THIS AREA WITH INSULATION.

OFFSETTING THE CHIMNEY

An elbow may be installed directly on top of the fireplace if required. Refer to Table 5 for the 10" RIS offset chart or to the RIS chimney installation manual which can also be found at: www.icc-rsf.com/en/model-ris-offset-tables. Use the offset option if you need to clear a joist or pass around a cupboard. See Figure 18 for example.

Adding offsets to the chimney will increase the minimum required chimney height. Refer to Table 7 for specifics.

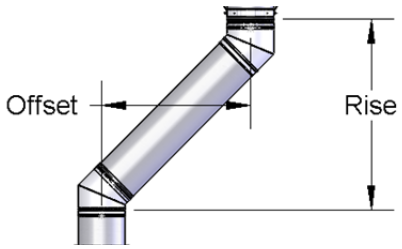
The maximum offset angle:

- In **USA**: 30°;
- In **Canada**: 45°.

The maximum number of elbows per system is four, resulting in two offsets and returns.

TABLE 5 10" RIS OFFSET

Length between elbows	15° Offset		30° Offset		45° Offset	
	Rise	Offset	Rise	Offset	Rise	Offset
No length	11 7/8"	1 5/8"	14 1/8"	3 ¾"	15 7/8"	6 5/8"
12" length	22 ¼"	4 3/8"	23 3/8"	9 1/8"	23 ½"	14 1/8"
24" length	33 7/8"	7 ½"	33 ¾"	15 1/8"	32"	22 5/8"
48" length	57"	13 5/8"	54 5/8"	27 1/8"	48 7/8"	39 5/8"
48" + 12"	67 3/8"	16 ½"	63 7/8"	32 ½"	56 ½"	47 ¼"
48" + 24"	79"	19 ½"	74 ¼"	38 ½"	65"	55 ¾"
48" + 24" + 12"	89 3/8"	22 3/8"	83 5/8"	43 7/8"	72 5/8"	63 3/8"
48" + 48"	102 ¼"	25 ¾"	95"	50 ½"	82"	72 ¾"



GOING THROUGH A WALL

If necessary, the chimney can go through a wall at an angle. You will need to use an Insulated Angled Wall Radiation Shield (RM-10WRSI30 or RM-10RWSI45) to protect the combustible wall structure from the heat of the chimney. See Table 6 for installation dimensions and minimum ceiling height.

TABLE 6 THROUGH THE WALL INSTALLATION DIMENSIONS

	30° Offset Through the Wall US and Canada	45° Offset Through the Wall Canada Only
Minimum required ceiling height ⁂ ✱	10' (3,05 m)	8' 6" (2,59 m)
Height of the center of the hole in the wall⁂	7' 11" (2,41 m)	7' ½" (2,13 m)
Minimum height of the hole	47 ½" (1,19 m)	32 ¾" (812 mm)
Position of the hole	Centered on the chimney coupling of the fireplace or on the fireplace casing (not on the guillotine bay at the front)	
Minimum width of the hole	16" (406 mm)	

⁂ These heights assume that the first elbow is directly on the fireplace as depicted in Figure 20. If this is not the case, these heights have to be increase by the length of chimney installed on the fireplace before the first elbow.

✱ This minimum ceiling requirement is only for the chimney installation through a wall. It does take into account other aspects that might require a higher minimum ceiling height such as the HRS clearances.

OUTSIDE CHASE ENCLOSURE

If the chimney runs up the outside of the house, we recommend that it be enclosed in a chase structure. The chase should be constructed in such a way that it is an extension of the home (see Figure 19). It should be well insulated between the footings and the floor of the home to prevent heat loss. If the climate in your area is mild, insulate the chase at least to the first firestop. If the climate in your area is very cold, insulate the chase to the top to keep the chimney warmer, increase the draft, and reduce creosote buildup. We also recommend insulating the ceiling of the chase just as if it were in the attic space. This will prevent cold air from dropping down through the chase and into the room where the fireplace is installed (see Figure 19).

Some local codes require that the walls be insulated, vapor sealed and sheathed with a fire rated gypsum board (see Figure 19). We strongly recommend this procedure for all installations to prevent cold drafts from originating in the fireplace enclosure. If you follow this procedure, we recommend that you do not insulate the wall above the front of the fireplace.

REMEMBER: CHECK LOCAL CODES CONCERNING INSTALLATION REQUIREMENTS AND RESTRICTIONS IN YOUR AREA.

CHIMNEY HEIGHT

We recommend that the minimum height be increased by approximately 6" for every 1000' elevation above sea level. Every 15°, 30° or 45° offset (one pair of elbows) also increases the minimum height. See Table 7 for more precise recommended flue heights.

For example, if you are living 6015' above sea level, your chimney should terminate at least 15' from the top of the fireplace if it is a straight chimney or at least 18'6" if one 30° offset is used as shown in Table 7.

TABLE 7 RECOMMENDED MINIMUM FLUE HEIGHT

Elevation (ft)	Number of Offsets						
	Straight Chimney	1 x 15°	2 x 15°	1 x 30°	2 x 30°	1 x 45°	2 x 45°
0 - 1000	minimum 12'	13'	14'	15'	18'	16'	20'
1001 - 2000	12'6"	13'6"	14'6"	15'6"	19'	16'6"	20'6"
2001 - 3000	13'	14'	15'	16'	19'6"	17'	21'6"
3001 - 4000	13'6"	14'6"	15'6"	17'	20'	18'	22'6"
4001 - 5000	14'	15'	16'	17'6"	21'	18'6"	23'
5001 - 6000	14'6"	15'6"	17'	18'	21'6"	19'	24'
6001 - 7000	15'	16'	17'6"	18'6"	22'6"	20'	25'
7001 - 8000	15'6"	16'6"	18'	19'	23'	20'6"	25'6"
8001 - 9000	16'	17'	18'6"	20'	24'	21'	26'6"
9001 - 10000	16'6"	17'6"	19'	20'6"	24'6"	22'	27'

Flue height is measured from the top of the fireplace to the top of the chimney before installing the rain cap.

If you have two different offsets (two pairs of different elbows), simply use the column for two offsets of the biggest pair of elbows at your elevation to get your Minimum Flue Height.

FIREPLACE INSTALLATION

WARNING: **IF THIS FIREPLACE IS NOT PROPERLY INSTALLED, A HOUSE FIRE CAN RESULT. FOR YOUR SAFETY, FOLLOW THE INSTALLATION INSTRUCTIONS AND CLEARANCES. DO NOT PACK REQUIRED AIR SPACES WITH INSULATION OR OTHER MATERIALS.**

UNPACKING YOUR LINEAR 50

Two transportation blocking brackets are in place to prevent the guillotine glass door from moving during shipping. Do not attempt to move the guillotine glass door before removing these transportation safety devices.

The fireplace crate includes all of the following:

(A) Fireplace in transportation configuration (approximately 950 lb)

(B) Four black lintels wrapped in paper

(C) Two bottom standoffs

(D) Three left side spacers

(E) Spark guard

(F) Four anti-tip stability brackets: attached to the top of the fireplace casing

(G) In the manual bag (attached to the side of the fireplace casing):

- One bag with 16 large self-tapping screws (1")
- One bag with 6 small self-tapping screws (½")
- One bag with 6 small self-tapping screws (½") and 6 flat washers
- A removable glass door handle
- An owner's manual
- An installation manual
- Two black round caps
- One bag with 15 rivets
- One bag with 16 black screws (1¼")
- A 5" external air coupling
- High temperature grease

(H) Two air intake frames

(I) Two air outlet grills (¼" thick aluminum)

(J) Two outlet adapters (pre-installed in flexible duct)

(K) Two 10" diameter insulated flexible ducts

All these items will be referred to by the above letters throughout the installation instructions of the fireplace itself.

MOVING THE LINEAR 50

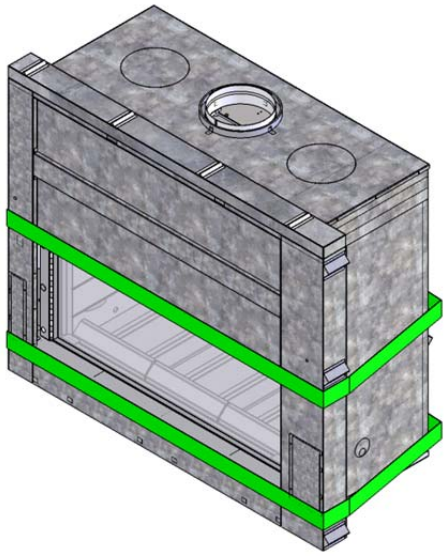
> **WARNING:** **THE FIREPLACE IS HEAVY. ALWAYS MAINTAIN CONTACT WITH THE FIREPLACE WHEN MOVING IT TO PREVENT ANY UNDUE TILTING.**

The fireplace arrives with two transportation handles, one on each side of the fireplace. They are solidly attached and can be used to lift and transport the fireplace without the pallet. Moving straps or dollies can also be used. Always handle the fireplace by its casing. The front of the fireplace, or guillotine bay, cannot be used to lift the rest of the fireplace. The LINEAR 50's main body weighs 950 lb. as shipped.

You can use an Escalera to move the fireplace. If you do, make sure to position the attachment straps at the locations shown in Figure 6. Do not put the attachment straps anywhere else or you will damage the guillotine system by doing so.

Be aware that once the LINEAR 50 is removed from its pallet, leaning it on its side may damage the guillotine bay that is wider than the rest of the fireplace casing.

If needed, you can reduce the weight of the fireplace by removing the refractory bricks and the insulation panel (260 lb total) and/or by removing the glass door (50 lb).



The upper strap must be just at the level of the reinforcement, just above the firebox opening.

The lower strap must be at the level of the metal front step.

FIGURE 6 **ATTACHMENT STRAPS LOCATION**

If you decided to remove the refractory bricks and the insulation panel, first follow the steps to complete the installation of the guillotine glass door (see page 21) to allow you to open both the firescreen and the guillotine glass door. You can then follow the refractory bricks installation section (see page 32) in the reverse order to remove all the refractory bricks and the insulation panel. Make sure to close the guillotine glass door and lock it in place by reinstalling the two transportation blocking brackets (see Figure 7) at the bottom of the guillotine frame. Make sure to also close the firescreen.

If you decide to remove the glass door, make sure that the guillotine frame is locked in its transportation position by the two brackets (see Figure 7).

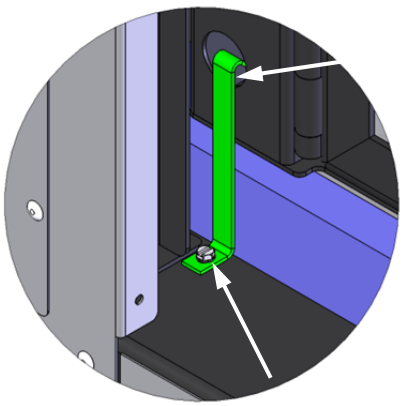


FIGURE 7 **GUILLOTINE FRAME TRANSPORTATION BLOCKING BRACKETS**

WARNING: YOU WILL PERMANENTLY DAMAGE THE GUILLOTINE SYSTEM IF YOU ATTEMPT TO REMOVE THE GLASS DOOR WHILE THE GUILLOTINE SYSTEM IS UNLOCKED.

If you wish to remove the door, you must first open the firescreen. To open the firescreen, follow the steps starting on page 21. Once the firescreen is open, open the glass door on its hinge by inserting the handle into the bolts on the right side of the glass door and turning counter-clockwise (see the Owner's manual). Either have someone hold the glass door or place a cushion under it to hold it open. Using a $^{5}/_{32}$" Allen key, remove the four screws holding the hinge to the guillotine frame. Start by the bottom and move your way up. Be careful not to drop the glass door once you start unscrewing the last screw.

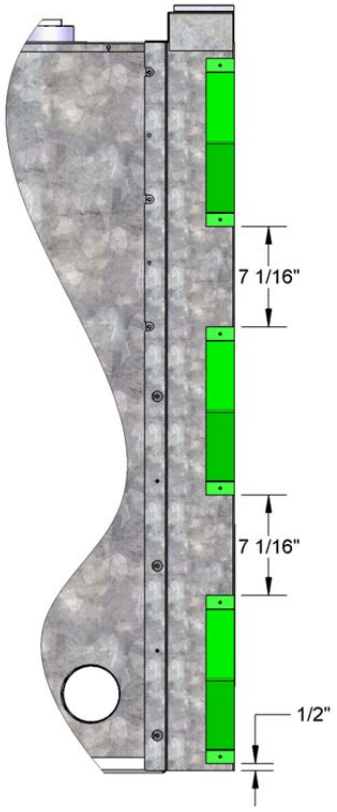
INSTALLING THE LEFT SIDE STANDOFFS

Three standoffs (D) need to be installed on the left side of the guillotine bay. Align the pre-punched holes in the standoffs and the side of the guillotine bay covers as shown in Figure 8. Use the six small self-tapping screws (G) provided.

INSTALLING THE BOTTOM STANDOFFS

Ensure floor requirements are met. Refer to page 13.

1. Start by positioning the two bottom standoffs (C) on the floor, centered in the framing and against the back wall. Slide the spark guard (E) under the front of the bottom standoffs as shown in Figure 9. Refer to the "
2. Hearth Extension" section on page 30 for additional information.
3. Using at least 1½" wood screws (not provided) solidly attach both bottom standoffs to the floor. If possible, attach the bottom standoff to the floor joists below using 3" wood screws (not provided).
4. Refer to "Lifting the Fireplace" for assistance in raising the fireplace above the bottom standoffs. Install it on the fireplace bottom standoffs making sure that the base of the fireplace is centered with the bottom standoffs.



View of the left side

FIGURE 8 POSITIONING THE LEFT SIDE STANDOFFS

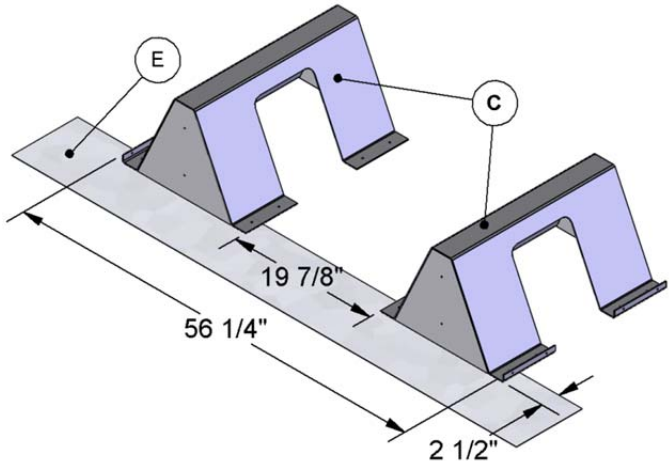


FIGURE 9 POSITIONING AND INSTALLING THE FIREPLACE BOTTOM STANDOFF AND CASING

LIFTING THE FIREPLACE

The LINEAR 50 weighs approximately 950 lbs as shipped. One effective method to raise it above the bottom standoffs is to connect a chain or strap to the four transportation handles located on the sides, then use a hoist or come-along winch to raise the fireplace. The hoist should be secured to a structural beam or joist to ensure it is secure.

SECURING THE FIREPLACE

The fireplace MUST be solidly attached to the back wall.

You MUST install two anti-tip stability brackets (F) at the top of the fireplace. They must be solidly screwed to the back wall and to the top of the fireplace. Depending on your specific installation, you can install the anti-tip stability brackets in two different ways. Refer to Figure 10 for examples of installation of the anti-tip stability brackets. Use eight of the large self-tapping screws provided (G) to attach both anti-tip stability brackets to the top of the fireplace casing.

You also MUST to install one anti-tip stability brackets (F) on each side of the fireplace casing, just a couple of inches above the bottom casing. They must be solidly screwed to the back wall. Use eight of the large self-tapping screws provided (G) to attach both anti-tip stability brackets to the sides of the fireplace casing.

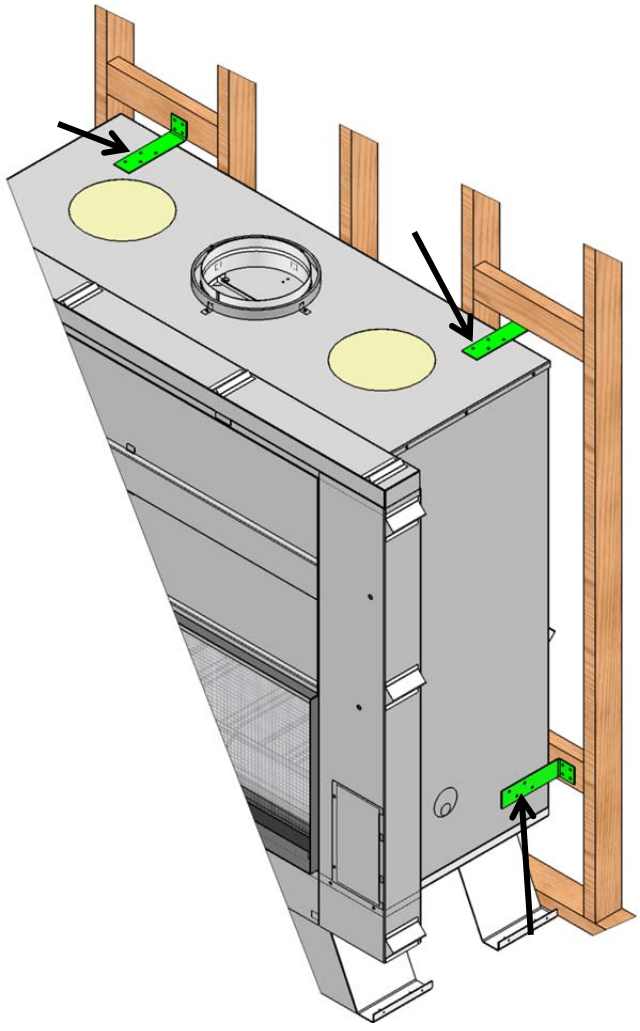


FIGURE 10 ANTI-TIP STABILITY BRACKET INSTALLATION

GLASS DOOR AND FIRESCREEN INSTALLATION

Now that the fireplace is correctly positioned, you can finish unpacking the guillotine system. Start by completing the installation of the guillotine glass door.

1. To be able to install the counterweights, the front finishing cover should be removed and reinstalled later (see Figure 11). Take the time to notice how it is installed and keep all the screws.
2. There is a blocking rod that is holding the firescreen counterweight on the left. Start by breaking away the end cap on the back side of the left guillotine bay cover.

3. Get a good hold on the cable, between the left and central pulleys; wear gloves for a better grip. Pull gently on the cable to lift the counterweight from the blocking rod. It weighs about 10 lb.
4. Pull the blocking rod out from the font of the guillotine bay casing.
5. Gently lower the counterweight and release the cable.
6. The firescreen is ready to be moved up and down.

Try moving the firescreen up and down slowly while looking at the cable and the pulleys. Make sure the cable is able to move freely and is centered over the pulleys in a straight line. If needed, realign the pulleys. If you do so, do not forget to tighten the pulleys' nuts and bolts without over tightening.

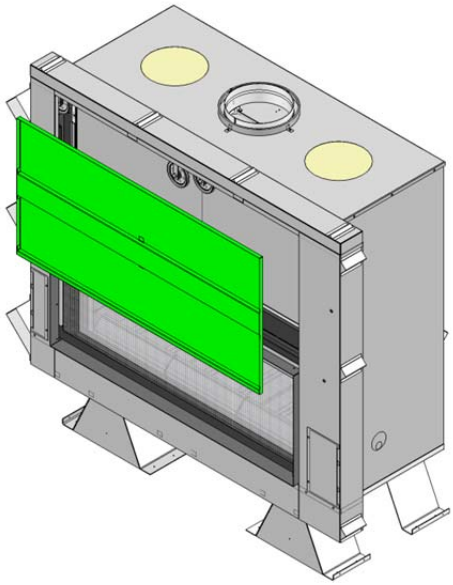


FIGURE 11 **PARTS TO BE REMOVED TO ALLOW THE INSTALLATION OF THE GLASS DOOR AND FIRESCREEN**

7. Find the two black round caps from the manual bag (G).
8. There is a blocking rod that is holding the glass door counterweight on the right. Start by breaking away the end cap on the back side of the right guillotine bay cover.
9. Get a good hold on the cable, between the right and central pulleys; wear gloves for a better grip. Pull gently on the cable to lift the counterweight from the blocking rod. It weighs about 50 lb.
10. Pull the blocking rod out from the front of the guillotine bay casing.
11. Gently lower the counterweight and release the cable.
12. The guillotine glass door is kept closed by two transportation blocking brackets. There is a blocking bracket at the bottom of the guillotine glass door on each side. Remove the screw holding the blocking bracket on both sides.
13. You can now install the two black round caps (G) provided over the two holes in the guillotine frame. Just push them in place.
14. The guillotine glass door can now be moved up and down.

Try moving the glass door up and down slowly while looking at the cable and the pulleys. Make sure the cable is able to move freely and is centered over the pulleys in a straight line. If needed, realign the pulleys. If you do so, do not forget to tighten the pulleys nut and bolts without over tightening.

Make sure the guillotine glass door and the firescreen are closed before continuing.

15. Reinstall the front finishing cover (see Figure 11).

We recommend that both the guillotine glass door and the firescreen remain closed while completing the fireplace and chimney installation.

HEAT REDISTRIBUTION SYSTEM (HRS) INSTALLATION

HRS AIR INTAKES

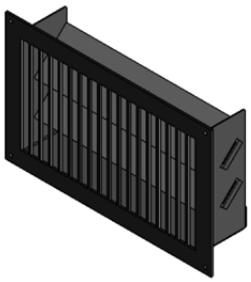


FIGURE 12 HRS AIR INTAKE

The HRS Air Intake provided with the fireplace consists of two black rectangular frames with a grill at the front (see Figure 12). Both air intakes must be installed so that they permit air into the bottom portion of the fireplace enclosure. The air intakes do not connect directly to the fireplace, but will provide the fireplace with the air necessary to maintain a safe installation.

1. On the sides or front of the fireplace, frame two 12" wide by 7" high openings for the installation of each air intake. The air intakes are designed to be installed on top of the cement board/drywall. We recommend that the hole be framed for a more sturdy installation, but you can also use gypsum anchors behind the air intakes to secure the four screws.
2. Once the wall is covered with cement board/drywall, insert the air intakes (H) into the opening and attach the grill with the black screws (G) provided in the corner holes.

> **WARNING:** **ONLY USE GRILLS CERTIFIED BY RENAISSANCE FIREPLACES. SUBSTITUTING THE GRILLS PROVIDED WITH THE FIREPLACE OR FIREPLACE OPTIONS WILL RESULT IN LOSS OF WARRANTY AND POSE A FIRE HAZARD.**
>
> **DO NOT BLOCK AIR FLOW IN FRONT OF THE INTAKE GRILLS. YOU MUST ALLOW FREE AIR MOVEMENT.**

The HRS air intakes are now ready for operation.

HRS AIR OUTLETS

The HRS Air Outlets distribute the heated air that was drawn into the air intake and circulated through the fireplace. The HRS Air Outlets consist of:

- Two air outlet grills (I),
- Two outlet grill adapters (J) (pre-installed in duct), and
- Two 10” flexible insulated ducts (K).

Refer to Figure 13 to identify the various parts.

> **WARNING:** **NO SUBSTITUTION OF CERTIFIED RENAISSANCE PARTS AND OPTIONS IS PERMITTED.**
>
> **CERTIFIED RENAISSANCE PARTS PROVIDE THE CORRECT CLEARANCES. THESE CLEARANCES MUST BE MAINTAINED FOR YOUR SAFETY. EVERY MEASUREMENT AND CLEARANCES MUST BE FOLLOWED CAREFULLY.**

> **WARNING:** **DO NOT BLOCK AIR FLOW IN FRONT OF THE OUTLET GRILLS. YOU MUST ALLOW FREE AIR MOVEMENT.**

WARNING: **FRAMING OF THE RECTANGULAR GRILL OUTLET MUST BE COMPOSED OF NON-COMBUSTIBLE MATERIALS.**

THE WALL SURFACE AROUND THE RECTANGULAR AIR OUTLET MUST BE COMPOSED OF NON-COMBUSTIBLE MATERIALS.

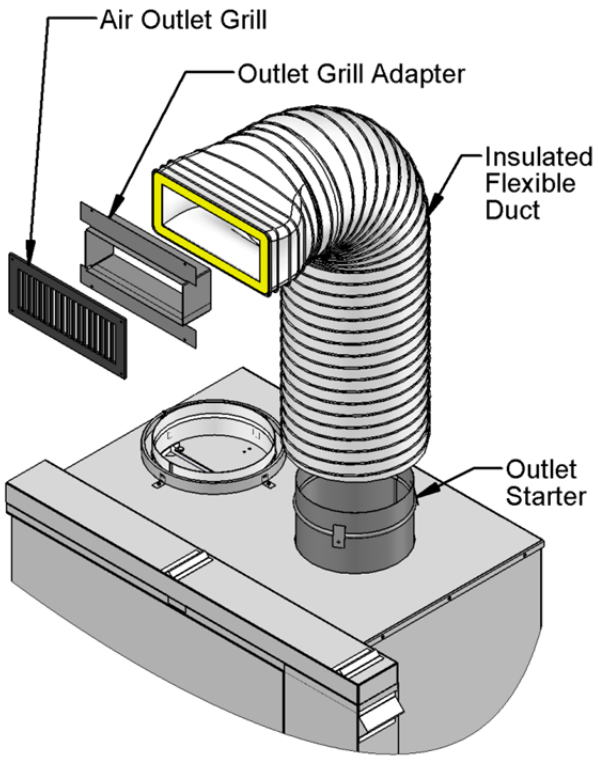


FIGURE 13 **HRS AIR OUTLET GENERAL INSTALLATION**

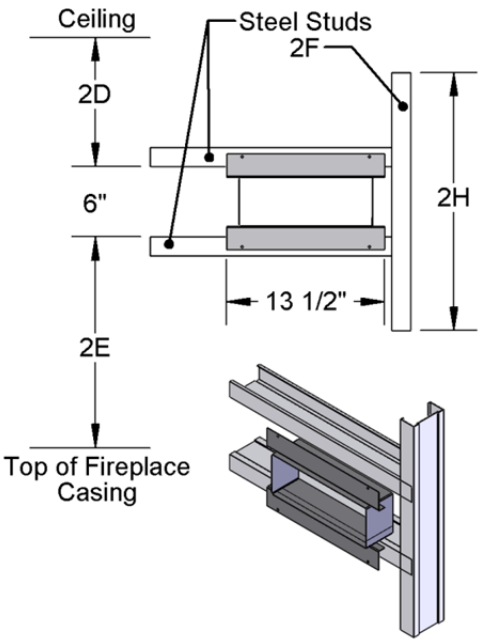


FIGURE 14 **HRS OUTLET FRAMING AND CLEARANCES**

1. Attach the round end of the insulated flexible duct (K) to the HRS outlet starter on the fireplace (see Figure 13). Ensure the insulated flexible duct completely covers the HRS outlet starter protruding above the top of the fireplace. Using three of the self-tapping screws with three flat washers provided (G), screw through the insulated flexible duct to attach it to the HRS starter.
2. Extend the insulated flexible duct as desired. You may need some plumber's strapping to support the duct if it runs horizontally. To extend the duct beyond the 5' provided, additional 5' lengths can be ordered with the part code EO-DUCT.

WARNING: **ALL SPECIFICATIONS AND CLEARANCES IN TABLE 2 MUST BE RESPECTED.**

BOTH DUCTS MUST TERMINATE AT THE SAME HEIGHT, AND THEY MUST NEVER SLOPE DOWNWARDS.

3. Using steel studs, install a header at the location and height you wish to mount the air outlet grills. Refer to Figure 14 for framing requirements.

4. Attach the outlet grill adapters (J) that are pre-installed in the duct to the steel stud header.
5. Install a second steel stud to frame the grill adapters on top and bottom as shown in Figure 14.
6. When ready, cover the wall with cement board. The outlet grill adapters have a ½" lip for the cement board to butt against.
7. Screw the air outlet grills (I) to the wall with the black screws provided (G).

See Figure 15 for an example.

The HRS outlets are now ready for operation.

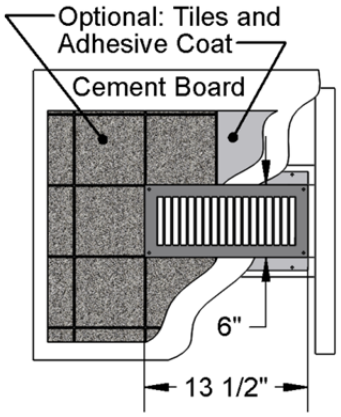


FIGURE 15 HRS OUTLET FINISHING

OUTSIDE AIR DUCT

After the fireplace is correctly positioned, connect the outside air intake of the fireplace to the outside of the house (see Figure 16).

Use an insulated aluminum flexible duct rated at over 200°F (93°C) (not provided). The duct should not exceed 12' vertical rise above the base of the bottom standoff.

The outside air intake MUST be at least 5' below the top of the chimney flue and must never terminate in an attic space.

> **CAUTION: WHEN RUNNING THE DUCT AROUND CORNERS, AVOID CRUSHING THE DUCT, WHICH CAN RESTRICT THE COMBUSTION AIRFLOW.**

A 4" diameter duct can be used if the total duct run is less than 25'. We recommend the FO-INT outside air kit. For longer runs, use 5" diameter duct. Both 4" and 5" connecting sleeves are provided with the fireplace

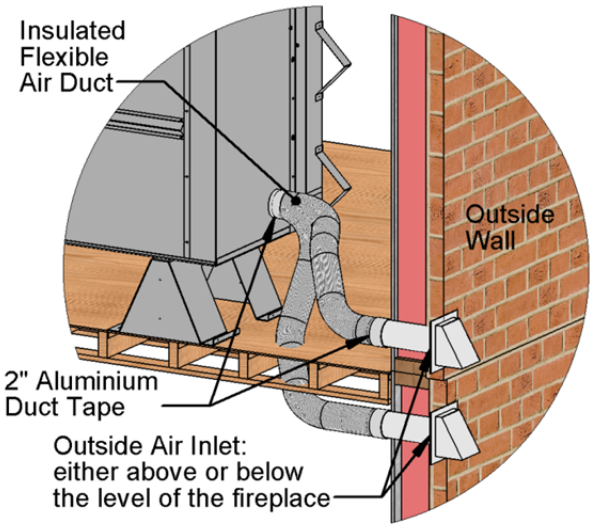


FIGURE 16 OUTSIDE AIR CONNECTION AND INSTALLATION EXAMPLE

1. Find a convenient location for the outside air intake. The outside air intake can be above or below floor level.
2. Make a 4 ¼" (5 ¼" if using a 5" diameter duct) hole in the outside wall of the house. Push the round sleeve of the outside air hood in from the outside. Seal the joint between the air hood and the outside wall with an appropriate sealant.
3. Place the insulated flexible duct over the round sleeve on the outside air hood. At both ends, carefully pull back the insulation and plastic cover, exposing the flexible duct. Then at each end, attach the duct with metal screws to the air hood sleeve and to the fireplace connecting sleeve. Carefully push the insulation and cover back over the duct. Tape the plastic cover in place with 2" aluminum duct tape.

LINTEL INSTALLATION

Lintels (B) are provided with the fireplace to easily finish the border of the front opening. Use the rivets provided (G) to attach the lintels to the fireplace as shown in Figure 17.

These lintels protrude past the front of the fireplace by 1" allowing ½" for the cement board panels that must cover the front and ½" for your non-combustible finishing materials.

If thicker lintels are required, though not provided, you can use the provided lintels as a template to have custom lintels made.

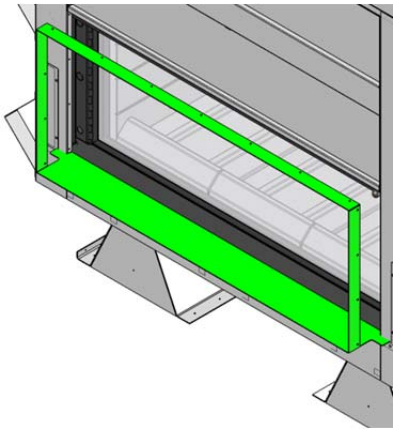


FIGURE 17 SURROUND LINTEL INSTALLATION

CHIMNEY INSTALLATION

Read the RIS Chimney installation manual concerning requirements for supports, bracing, anchors, etc. It can be found online at: www.icc-rsf.com/en/installation-instructions-model-ris-canada-and-usa. Refer to Table 1 (D) for the maximum chimney height that can be supported by the top of the fireplace.

> **WARNING: THE CLEARANCE BETWEEN THE CHIMNEY AND COMBUSTIBLE MATERIAL MUST BE 2" OR MORE. DO NOT FILL THIS AREA WITH INSULATION.**

1. Cut and frame the required holes in the floor(s), ceiling(s) and roof where the chimney will pass through. The rough opening in the framing is 16" square (the opening can be slightly bigger, up to 16 ½", but NEVER smaller).
2. At each floor where the chimney passes through, you must install a radiation shield. At the attic level, install a radiation shield and a storm collar as shown in Figure 4.

> **WARNING: A RADIATION SHIELD MUST BE INSTALLED AT EACH FLOOR WHERE THE CHIMNEY PASSES THROUGH.**

3. Install the first chimney length on top of the flue adapter of the fireplace and secure it with the screws provided. Continue adding lengths and supports as required until the chimney penetrates the roof deck or top of the chimney chase.

   The chimney must extend at least 3' above its highest penetration of the roof and at least 2' higher than any wall, roof, or building within 10' horizontally of it. If the chimney extends higher than 5' above the roof, it must be secured using a roof brace.
4. At the roof, install a roof top shield.
5. Put the roof flashing into place. Seal the joint between the roof and the flashing with roofing tar. For sloping roofs, place the flashing under the upper shingles and on top of the lower shingles. Secure the flashing to the roof with roofing nails or screws.

   If the chimney is enclosed to the roof: use a vented flashing.

   If the chimney is not enclosed in the attic: use a regular flashing.

6. Place the storm collar over the chimney and flashing. Seal it around the chimney with silicone sealer (DO NOT use roofing tar).
7. Fit the rain cap on the chimney. Secure it tightly in place with the screws provided.

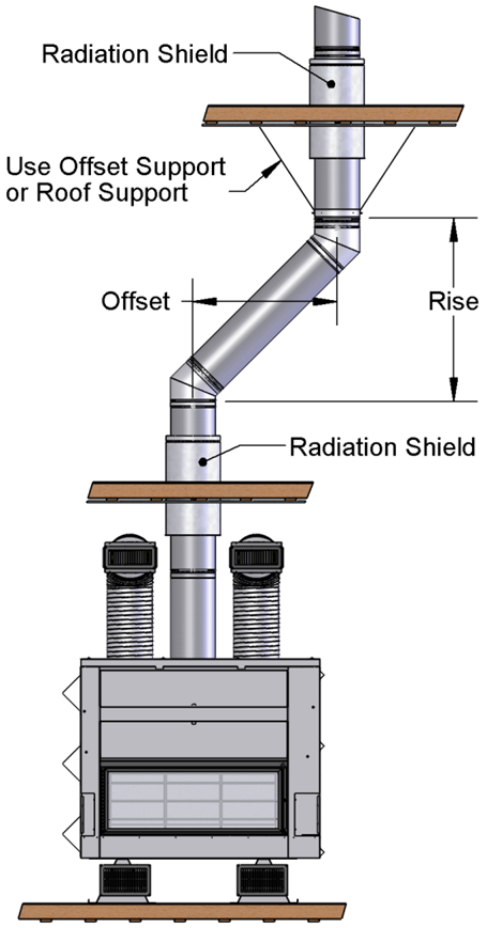


FIGURE 18 OFFSET CHIMNEY INSTALLATION EXAMPLE

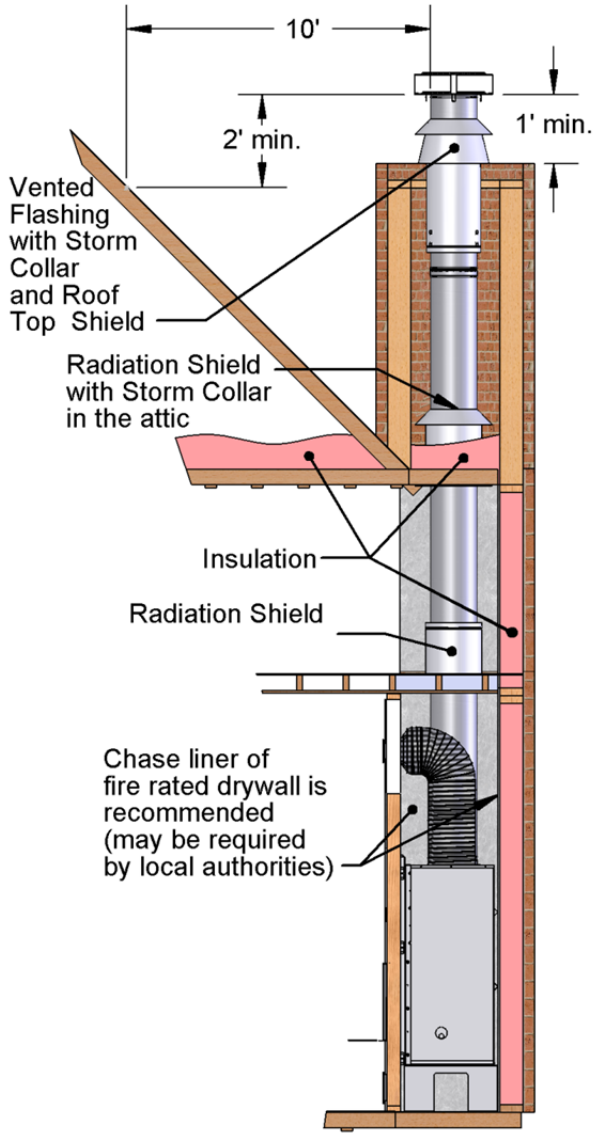


FIGURE 19 CHIMNEY INSTALLED WITH AN OUTSIDE CHASE ENCLOSURE EXAMPLE

TO OFFSET THE CHIMNEY

Install the fireplace and chimney as described earlier. When you require an elbow, proceed as follows:

1. Install the elbow. Turn it in the desired direction, and fasten it to the other section with 4 metal screws at the joints.
2. Install enough lengths to obtain the desired offset. Secure each joint with 4 metal screws.

3. Use another elbow to return the chimney to the vertical direction. Again fasten it to the other section with 4 metal screws at the joints.

4. Install a roof support, a wall support, or an offset support above each offset to support the weight of the chimney (elbows are not designed to support the chimney above an offset).

THROUGH THE WALL OFFSET

You can also go through a wall at an angle starting directly at the fireplace as depicted in Figure 20. An angled wall insulated radiation shield (RM-10WRSI30 or RM-10RWSI45) must be used wherever the chimney passes through a wall.

Refer to Table 6 for dimensions pertaining to the installation of the angled wall insulated radiation shield (RM-10WRSI30 or RM-10RWSI45). Make sure to have enough ceiling height for your installation. If the ceiling height is too low for the planned installation you may want to consider installing the fireplace in an outside chase.

Refer to the angled wall insulated radiation shield installation sheets for detailed installation instructions.

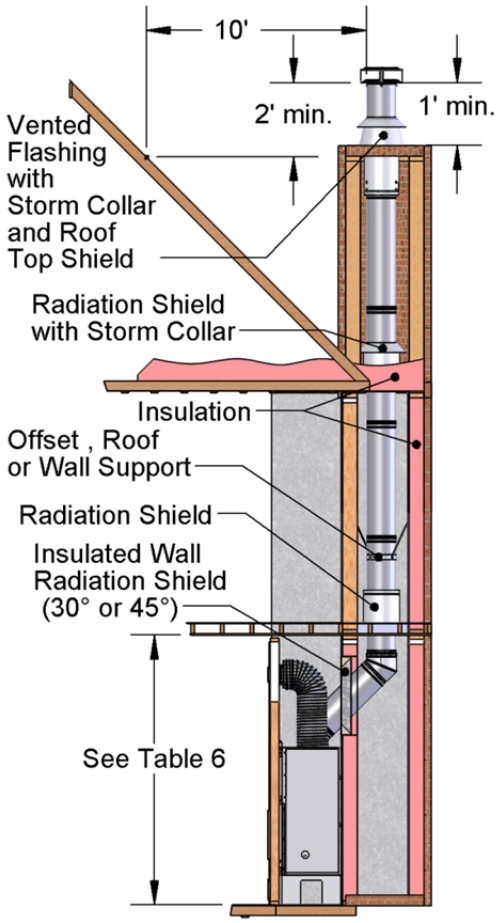


FIGURE 20 OFFSET CHIMNEY THROUGH A WALL EXAMPLE

FINISHING

FIREPLACE FACING

The LINEAR 50 MUST be covered with at least ½" cement board panels such as James Hardie HardieBacker® or USG Durock® cement boards. Either product will then allow you to finish the facing of the fireplace with any non-combustible material you like.

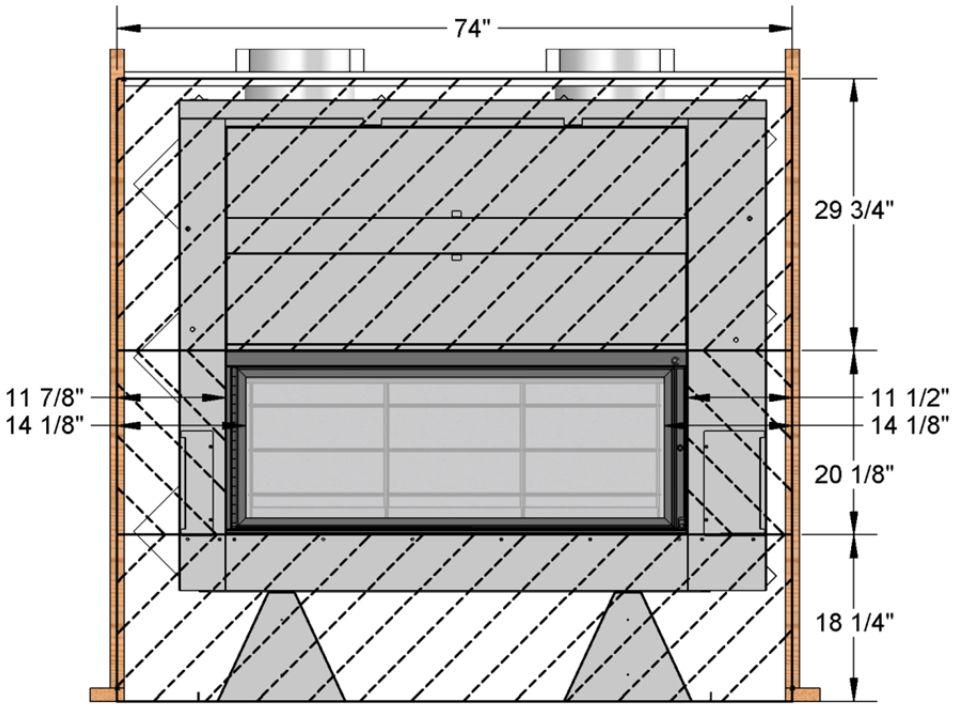
> **WARNING: DO NOT USE GYPSUM BOARDS.**

INSTALLING THE CEMENT BOARD PANELS

> **WARNING: MAKE SURE THE GUILLOTINE GLASS DOOR AND FIRESCREEN ARE BOTH CLOSED BEFORE INSTALLING THE CEMENT BOARD PANELS.**

Refer to Figure 21 for minimum area that MUST be covered by the cements boards along with recommended minimum dimensions for the various cements panels to be prepared and installed.

Make sure to use 1" screws and only screw where specified in Figure 22 otherwise you may damage the guillotine system or impede its operation.



IMPORTANT: the horizontal stud going across the top of the fireplace MUST be a steel stud whether the gravity vents are installed above the fireplace or elsewhere.

FIGURE 21 CEMENT BOARD PANELS MINIMUM DIMENSIONS

COVERING THE FIREPLACE FACING

Facing materials must be NON-COMBUSTIBLE such as metal, brick, slate or ceramic tile. Gypsum board is NOT an acceptable facing material. The only combustible material accepted on the facing of the fireplace is for a mantel shelf.

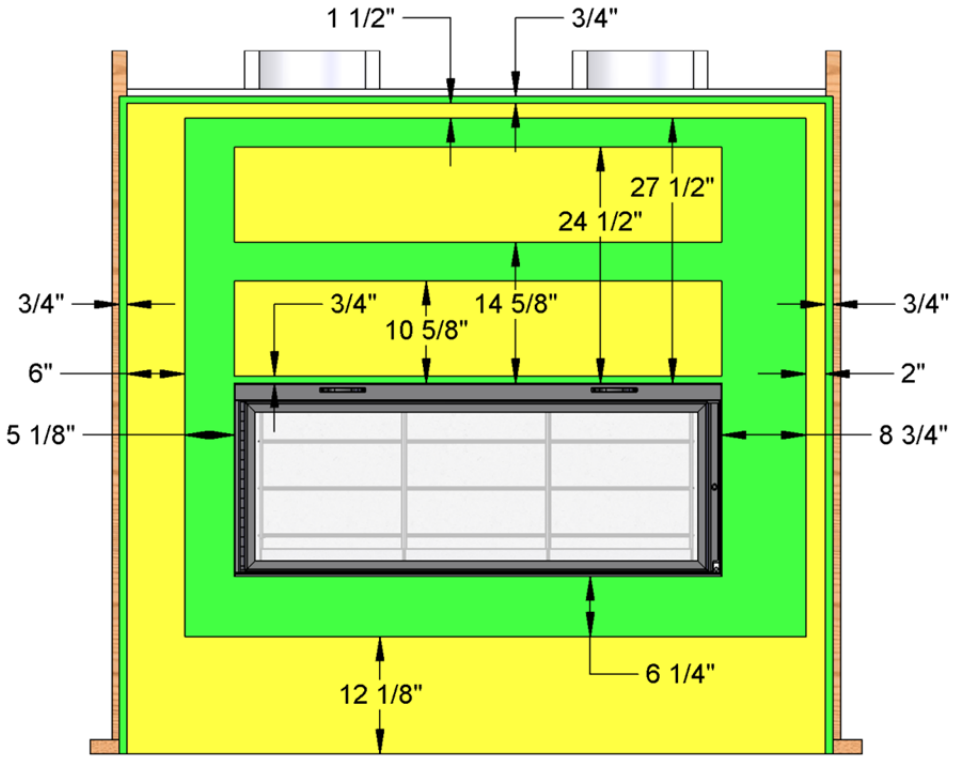
The cement boards can be painted, textured or tiled just as you would over gypsum boards. The lintels provided with the fireplace are appropriate for thin facing materials. A wider steel lintel may be required for heavy rock. If so, contact your local sheet metal contractor for a custom steel lintel.

If you need to attach anything to the front of the fireplace, make sure to close the guillotine glass door and firescreen before attempting to do so. Refer to Figure 22 to know where you are allowed to screw. Use screws that penetrate the front surface of the cement boards by no more than ¾".

Any deeper penetration of the screw tip or placing the screws anywhere else will either prevent the proper operation of the firescreen and/or the guillotine glass door, or eventually cause difficulty dismantling the guillotine system.

CAUTION: IF ABSOLUTELY NECESSARY, YOU CAN SCREW INTO THE CEMENT FACING ELSEWHERE AS LONG AS THE SCREW TIP DOES NOT COMPLETELY PENETRATE THE ½" CEMENT BOARD PANELS.

Confirm that you have not impeded the normal operation of the firescreen and the guillotine glass door by moving them slowly as you proceed with installing the screws.



Appropriate to attach the cement boards. The screws will grab into the metal of the finishing covers offering more strength.

Not for cement board attachment. The screws will only be attached to the cement panels at the front.

FIGURE 22 PERMISSIBLE SCREWS AREAS

HEARTH EXTENSION

The area immediately in front of the fireplace must be protected if the surface is combustible. Refer to Table 1 (E-F) for the depth and width that the hearth extension protection should extend beyond the front and both sides of the fireplace opening (see Figure 2). Refer to Figure 23 for various alternatives of hearth extension installation.

The protection required for combustible flooring in front of the fireplace includes:

1. Spark Guard

   The spark guard provided (E) must be installed 2½" under the fireplace bottom standoff and 2½" under the hearth extension, centered on the fireplace opening. When installed in this manner, its size will also cover the entire floor area under the metal front step of the fireplace (see Figure 23). This guard prevents sparks from lodging in this area and starting a fire.

   If you are installing the fireplace on a raised combustible platform, you will need a second spark guard (not provided) with the same dimensions as the one we have provided. One spark guard will be installed at the floor, below the hearth extension

and the raised platform. The second spark guard will be installed at the base of the fireplace itself. Both spark guards must be centered on the fireplace opening.

Non-combustible flooring material such as brick, tile, stone, or slate must be used as finishing material over the hearth extension area.

The non-combustible flooring material must have the same minimum dimensions as the hearth extension (see Table 1 (E-F)).

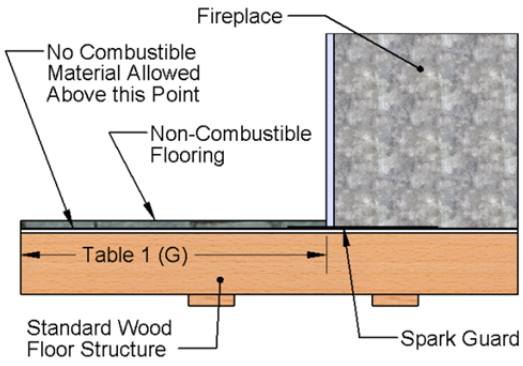
If the LINEAR 50 is installed on a non-combustible floor, none of the protection above is needed.

RAISED HEARTH EXTENSION

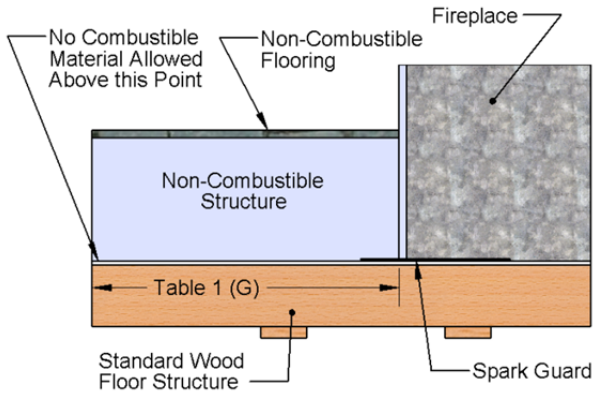
It is allowed to have a raised hearth extension as long the materials used to make the structure and to cover it are all non-combustible such as steel studs, cement blocks, etc. No combustible materials are allowed above the floor level on which the bottom standoff resides below the fireplace.

A non-combustible raised hearth extension can be constructed as high as the hearth threshold, making it a flush hearth extension.

REGULAR HEARTH EXTENSION



RAISED HEARTH EXTENSION



RAISED FIREPLACE HEARTH EXTENSION

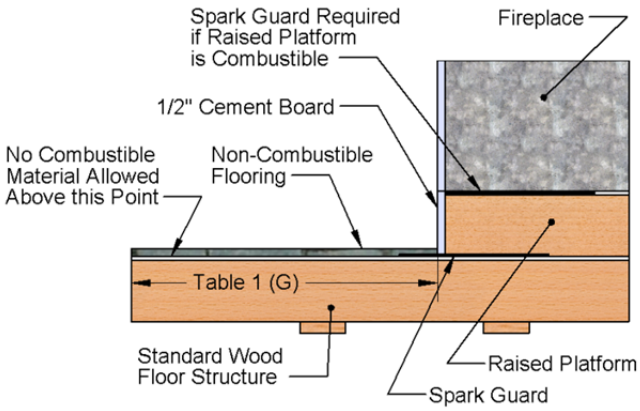


FIGURE 23 HEARTH EXTENSION EXAMPLES

MANTEL

Masonry and other non-combustible mantels (shelf and posts) can be placed anywhere around the fireplace opening.

For combustible mantel shelves, please see Table 3 (A-B) for the maximum depth and its installation clearance requirements. See Figure 2 for an example.

Vertical mantel posts on the sides of the fireplace opening must be non-combustible. Combustible mantel posts are not permitted unless they meet the clearance required to a perpendicular sidewall (see Table 1 (C)).

The only combustible material accepted on the facing of the fireplace is for a mantel shelf.

If you need to attach the mantel to the front facing of the fireplace, refer to page 29 to know where screws are permitted on the front of the fireplace facing.

FIREBOX LINING INSTALLATION

The refractory bricks and insulation panel of the LINEAR 50 fireplace are placed in the fireplace at the factory. If, for any reason, they should need to be replaced, the following order should be observed. To remove any of the refractory bricks, just follow the installation procedure in the reverse sequence. Refer to Figure 24 to adequately identify each component at each step of the installation.

If you have removed the refractory bricks and the insulation panel to facilitate moving the fireplace, you must make sure they are properly installed inside the firebox before making your first fire. This is easily accomplished with the following instructions.

1. First install the left refractory brick, placing it as forward as possible.
2. Then do the same for the right side.
3. Then install the three back refractory bricks. Be careful to slide them under the supports at the top of the back of the firebox. Take the time to center them, leaving a small gap between each.
4. There is a piece of soft insulation that goes on the bottom of the firebox. It is cut tight so place it at the front first then push it down at the back. It will fit snuggly in between the back and side refractory bricks.

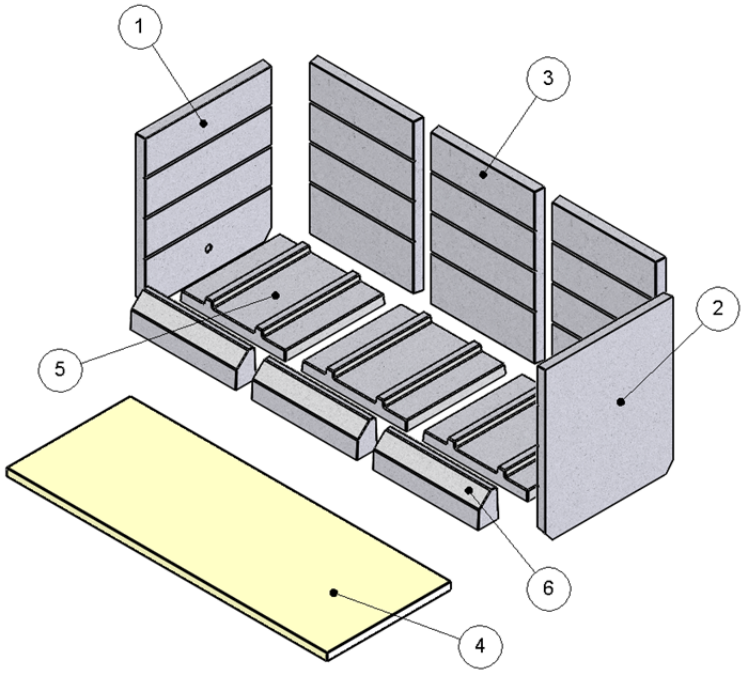


FIGURE 24 REFRACTORY BRICKS AND INSULATION PANEL

5. You can then place the three bottom bricks. Again take the time to center them, leaving a small gap between each.
6. Finish by placing the three ash step refractory bricks. Make sure to place them with the angled side towards you.

> **WARNING:** **THE FIREPLACE SHOULD NEVER BE BURNED WITHOUT THE FIREBOX INSULATION AND REFRACTORY BRICKS PROPERLY INSTALLED.**

GLASS CLEANING

If the glass needs cleaning after installation is complete, use a glass cleaner specifically formulated for wood stove ceramic glass. Do not use an abrasive cleaner and do not clean the glass while it is hot. You may want to recommend a wood stove glass cleaner to the owner.

REPLACEMENT PARTS

A complete list of replacement parts is available on our web site: www.renaissancefireplaces.com

WARRANTY

30 YEAR LIMITED WARRANTY FOR RENAISSANCE FIREPLACES™

All **Renaissance Fireplaces™** models are warranted against defects in material and workmanship for a period of 30 years, subject to the following conditions:

During the first year **Renaissance Fireplaces™** will repair or replace, at our option, any parts which upon examination by an authorized **Renaissance Fireplaces™** representative, are found to be defective, except the parts listed in the EXCLUSIONS portion of this warranty. **Renaissance Fireplaces™** will also pay reasonable labor costs for the repair work.

During the second through fifth years **Renaissance Fireplaces™** will repair or replace, at our option, any parts which upon examination by an authorized **Renaissance Fireplaces™** representative, are found to be defective, except the parts listed in the EXCLUSIONS portion of this warranty. **Renaissance Fireplaces™** shall not be responsible for any labor costs associated with this repair work.

During the sixth through thirtieth years **Renaissance Fireplaces™** will provide replacement parts, if available, at 50% of the published retail price, except for the parts listed in the EXCLUSIONS portion of this warranty. **Renaissance Fireplaces™** shall not be responsible for any labor costs associated with this repair work.

EXCLUSIONS:

- Glass.
- Damage due to normal wear and tear, such as paint discoloration, worn gaskets, eroded or cracked rigid insulation panels or firebox lining components.

- Repairs or replacements necessitated by vandalism, neglect, abuse, over-firing, improper fuel or fuel loads, or failure to adequately service the unit, as stated in the owner's manual.
- Repairs or replacements (particularly charges for travel and labor) not authorized by **Renaissance Fireplaces™** in advance.

LIMITATIONS:

- All items found to be defective will be replaced or repaired upon return of the defective part to an authorized **Renaissance Fireplaces™** dealer. **Renaissance Fireplaces™** will not be responsible for freight costs related to shipping replacement parts.
- Any complete fireplace, or part thereof, that is replaced or serviced under this warranty, will be warranted for a period not exceeding the remaining term of the original warranty.
- This warranty is not transferable.
- This warranty does not apply to damage to the appliance while in transit.
- This warranty does not apply if the installation does not conform to the installation requirements in the installation and owner's manuals.
- **Renaissance Fireplaces™** is free of liability for any damages caused by the appliance, as well as material and labor charges incurred in the removal or re-installation of any **Renaissance Fireplaces™** fireplace under this warranty. Incidental or consequential damages are not covered by this warranty.
- The remedies set forth herein are exclusive, and the liability of the seller shall not exceed the price of the fireplace or part thereof upon which the liability is based.
- This warranty is expressly in lieu of all other warranties expressed or implied, including the warranties of merchantability and fitness for use and all other obligations or liabilities on the part of **Renaissance Fireplaces™.**