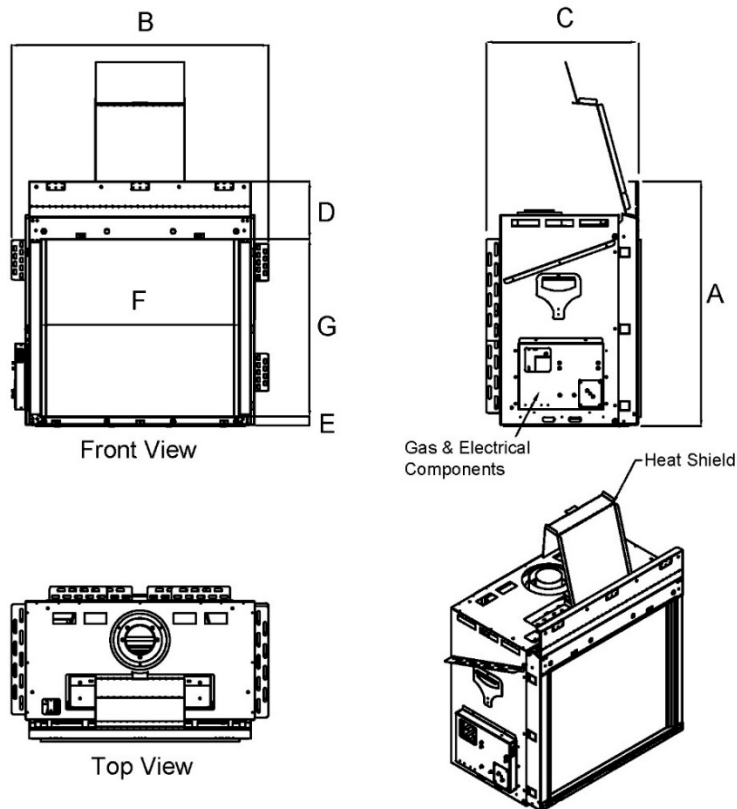


The following diagrams are for illustrative purposes only. There are multiple approved installation scenarios. A flush application is not the only permitted application. The fireplace may be recessed into the wall. Refer to diagrams and values below and in the following pages for details. **Framing dimensions are the same for combustible and non-combustible framing.**

## Framing Dimensions



Model	A: Height	B: Length	C: Depth	D: Stand-Off	E: Bottom	F: Glass Length	G: Glass Height
TR 90	43 <sup>5</sup> / <sub>8</sub> "	45 <sup>13</sup> / <sub>16</sub> "	27 <sup>1</sup> / <sub>16</sub> "	10 <sup>7</sup> / <sub>16</sub> "	1 <sup>5</sup> / <sub>8</sub> "	35 <sup>7</sup> / <sub>16</sub> "	31 <sup>5</sup> / <sub>8</sub> "
TR 110	46 <sup>1</sup> / <sub>8</sub> "	53 <sup>5</sup> / <sub>16</sub> "	27 <sup>1</sup> / <sub>16</sub> "	10 <sup>7</sup> / <sub>16</sub> "	1 <sup>5</sup> / <sub>8</sub> "	42 <sup>11</sup> / <sub>16</sub> "	34 <sup>1</sup> / <sub>8</sub> "

**NOTE:** No material is permitted to extend past the <sup>5</sup>/<sub>8</sub>" metal drywall lip surrounding the fireplace viewing area. This area must be unobstructed to allow the heat barrier and inside glass panel to be removable.

**NOTE:** Traditional series fireplaces post serial number 29731 and forward require <sup>5</sup>/<sub>8</sub>" Type X Drywall on the exterior sides of the chase when framing with combustible material.

# Building Around the Fireplace

## Building Checklist

The following building checklist is a quick reference for a typical Ortal Traditional series fireplace installation. This list is not exhaustive and does not supplement thorough review of the installation manual.

- ☑ **Fireplace Location:** Ensure the location allows for min. 40" clearance from viewing area to combustibles and 12" to non-combustibles. Make sure a clear path is established to allow the fireplace to be safely transported to installation location.
- ☑ **Venting:** Confirm vent size (5"x8" for natural vent and 3"x5" for power vent), vent clearance (1" on sides and bottom, 3" on top), vent configuration, and termination location.
- ☑ **Height from Floor:** Fireplace sits directly on the floor. Distance from the floor to bottom viewing area is 1 <sup>5</sup>/<sub>8</sub>". If desired viewing area location on the wall is higher than 1 <sup>5</sup>/<sub>8</sub>", a platform can be built for the fireplace to sit on.
- ☑ **Chase Floor/Platform:** Fireplace can stand on the chase floor or a platform. Floor or platform must be able to bear the weight of the fireplace. It can be constructed out of wood, concrete, metal, or any other solid materials (not required to be non-combustible).
- ☑ **Chase Construction:** No materials can be attached directly to the fireplace (exception: <sup>5</sup>/<sub>8</sub>" Type X Drywall). The area of the chase interior must meet minimum chase area requirements (depending on the model). All chases require a heat release.
- ☑ **Framing:** Adhere to minimum framing dimensions (or greater). Keep min. 2" clearance from back and sides (as applicable by model) of fireplace to any material. The first 18" above the top of the fireplace viewing area must always be non-combustible framing. Maintain min. <sup>1</sup>/<sub>4</sub>" clearance from front face of fireplace and front metal off-set to the framing. Maintain min. 4" space between air vents at top of fireplace to any material. For recessed fireplaces, do not exceed 12" max. front overhang depth limit. No material is permitted to extend past the metal lip surrounding the fireplace viewing area to allow for glass removal.
- ☑ **<sup>5</sup>/<sub>8</sub>" Type X Drywall Requirements:** One layer of <sup>5</sup>/<sub>8</sub>" Type X Drywall (or equivalent) must be installed on the exterior of the chase framing. When framing with combustible material and/or installing a TV above the fireplace, a layer of <sup>5</sup>/<sub>8</sub>" Type X Drywall must be installed on the interior of the chase framing as well.
- ☑ **TV/Artwork:** TV/Art must be min. 4" above top of fireplace viewing area.
- ☑ **Gas Supply Line and Power Location:** Locate gas line with manual shut off according to local code. Power provided by single gang 120V outlet in same area as gas line.
- ☑ **Access Panel:** Not required for Traditional series fireplaces (unless power venting).
- ☑ **Heat Release:** *Crucial for Cool Wall Technology.* Must start within 6" (max.) from the chase's ceiling. Heat release must meet minimum size (depending on the model) of net free air space. Height of the heat release must not exceed <sup>1</sup>/<sub>3</sub> of the width.
- ☑ **Air Intake:** Not required for Traditional series fireplaces.
- ☑ **Finishing:** For finishes flush to the fireplace, no clearances are required. For finishes where the fireplace is recessed to the finish, maintain <sup>1</sup>/<sub>8</sub>" from the finish to the front face of the fireplace.

## Framing

Fireplace chase may be framed with either combustible (typically wood studs) or non-combustible framing (typically metal studs). **Any framing within 18 inches from the top of the fireplace glass (viewing area) must be non-combustible.** This does not apply to the framing to the back or side(s) of the fireplace; these may be combustible.

The fireplace is non-load bearing. The framing of the fireplace chase must be designed to carry the entire weight of the wall and finish material. Surrounding material must not transfer weight to the fireplace (exception:  $\frac{5}{8}$ " Type X drywall or equivalent), or be connected in any way to the fireplace.

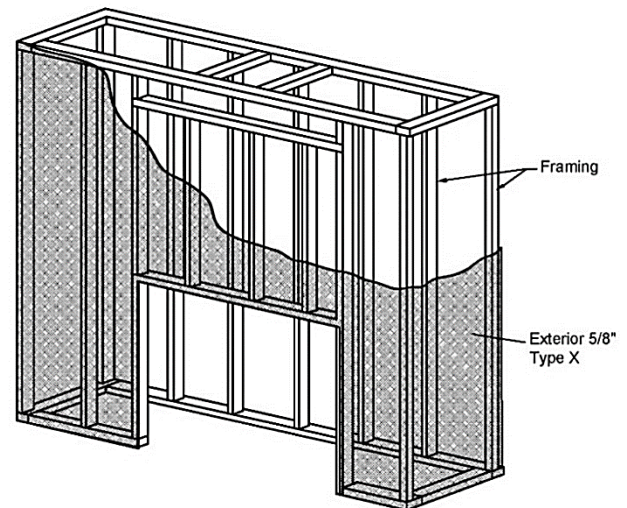
**No material is permitted to extend past the metal lip surrounding the fireplace viewing area. This area must be unobstructed to allow the heat barrier and inside glass panel to be removable.**

## $\frac{5}{8}$ " Type X Drywall Requirements

.Exterior of framing must be covered with  $\frac{5}{8}$ " Type X Drywall (or equivalent). Chase interior does not require a layer of  $\frac{5}{8}$ " Type X Drywall (or equivalent). This applies to both combustible and non-combustible framing.

**NOTE:**  $\frac{5}{8}$ " Type X Drywall is not required on the exterior portion of an insulated outside-facing wall.

**No material is permitted to extend past the metal lip surrounding the fireplace viewing area. This area must be unobstructed to allow the heat barrier and inside glass panel to be removable.**

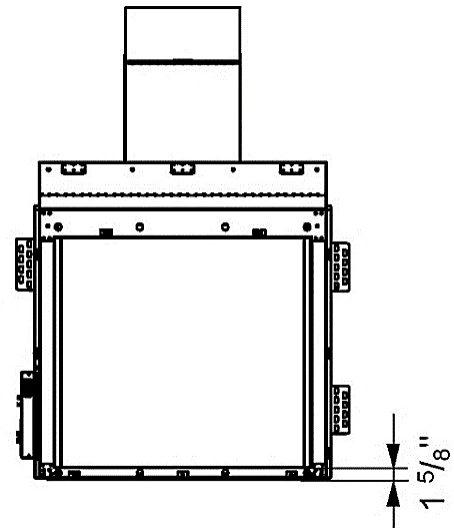


## Chase Floor/Platform

The fireplace must be installed on a flat, solid, continuous surface. Surface can be wood, concrete, metal, and other typical solid floor types. Surface material is not required to be non-combustible.

The fireplaces sit directly on the floor and do not have any legs. The distance from the bottom of the fireplace to the bottom of the viewing area is  $1 \frac{5}{8}$ ".

**Raised Platform Option:** To raise the fireplace higher than  $1 \frac{5}{8}$ ", build a platform for the fireplace to stand on. Platform must be stable and able to bear the full weight of the fireplace. Platform can be constructed out of wood, concrete, metal, or any other solid materials. Platform material is not required to be non-combustible.



## Hearth Extension

A hearth extension is not required. Any hearth extension used is for appearance only and does not have to conform to a standard hearth extension installation requirement.

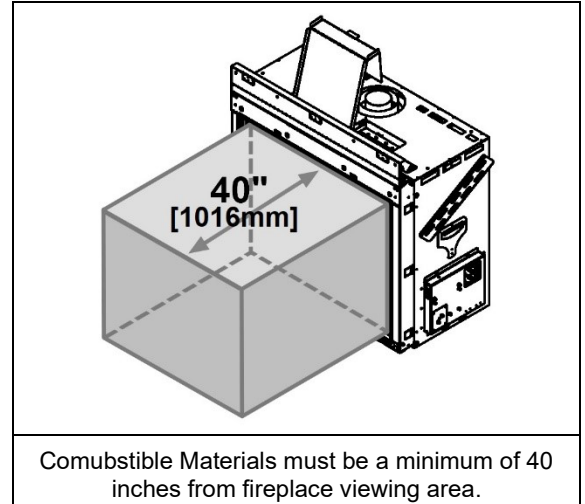
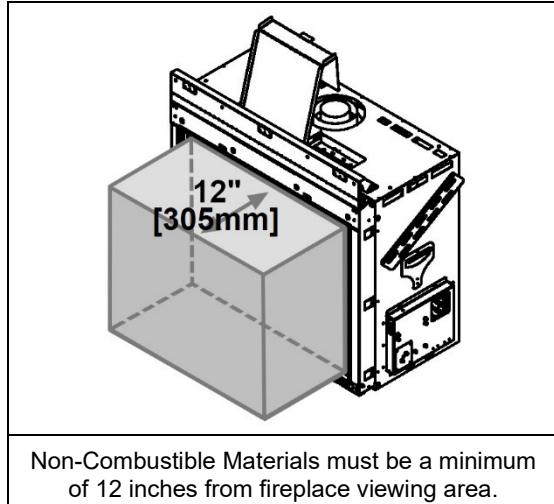
## General Clearances

### Viewing Area Clearances

The viewing area clearance zone is an area that extends perpendicular from the fireplace viewing area. The depth of the viewing area clearance zone depends on the combustibility of the material in question. Distance is measured from the fireplace heat barrier.

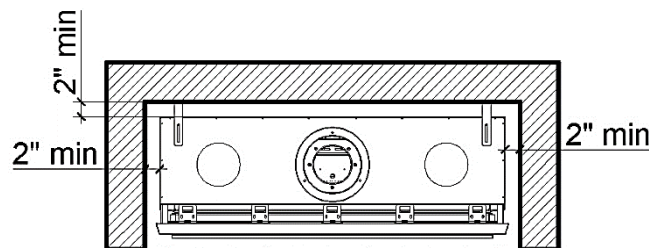
<b>Non-Combustible Materials</b>	Must be minimum <b>12 inches</b> from fireplace viewing area.
<b>Combustible Materials</b>	Must be minimum <b>40 inches</b> from fireplace viewing area.

Materials (including combustible flooring and combustible finish material) are permitted below and around the viewing area clearance zone.



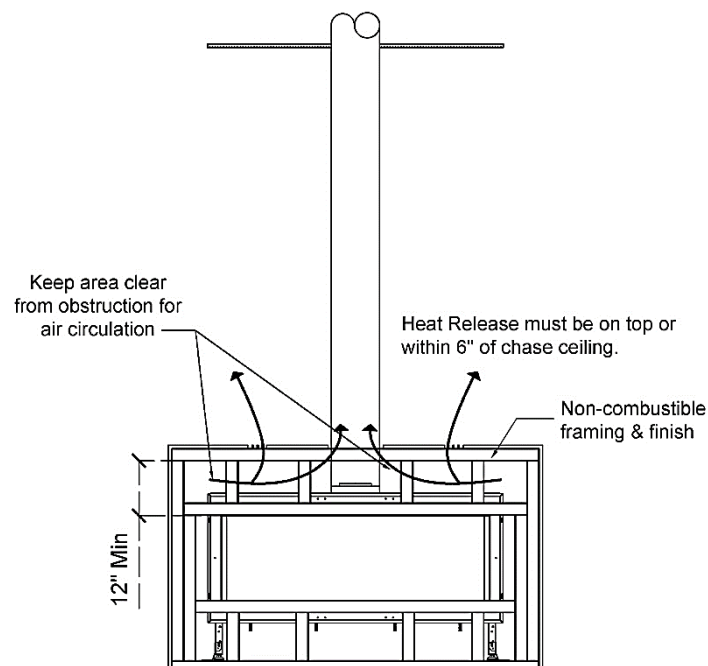
### Firebox Clearance

Maintain a **2-inch** clearance from the back and/or side of the fireplace (depending on the model) to any material.



### Clearance to Chase Ceiling

Maintain a **12-inch** clearance from the top of the fireplace viewing area to the lowest point of the ceiling or to any building materials.

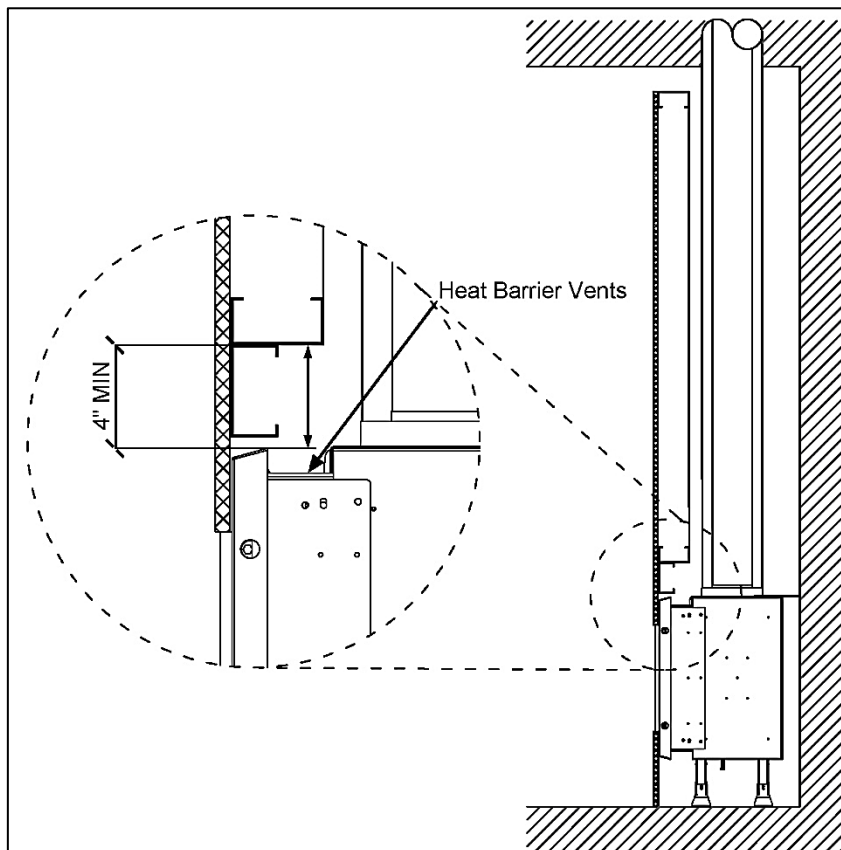


**NOTES:**

- A heat release is required for every installation, but it is not required to be split between the two sides of the chase as shown in the diagram above. It is shown in this diagram for illustrative purposes only. See the "Heat Release Requirements" section of the installation manual for details.
- Clearance around the vent pipe must be maintained (1" clearance on the sides and bottom, 3" on top).

**Air Flow Clearance**

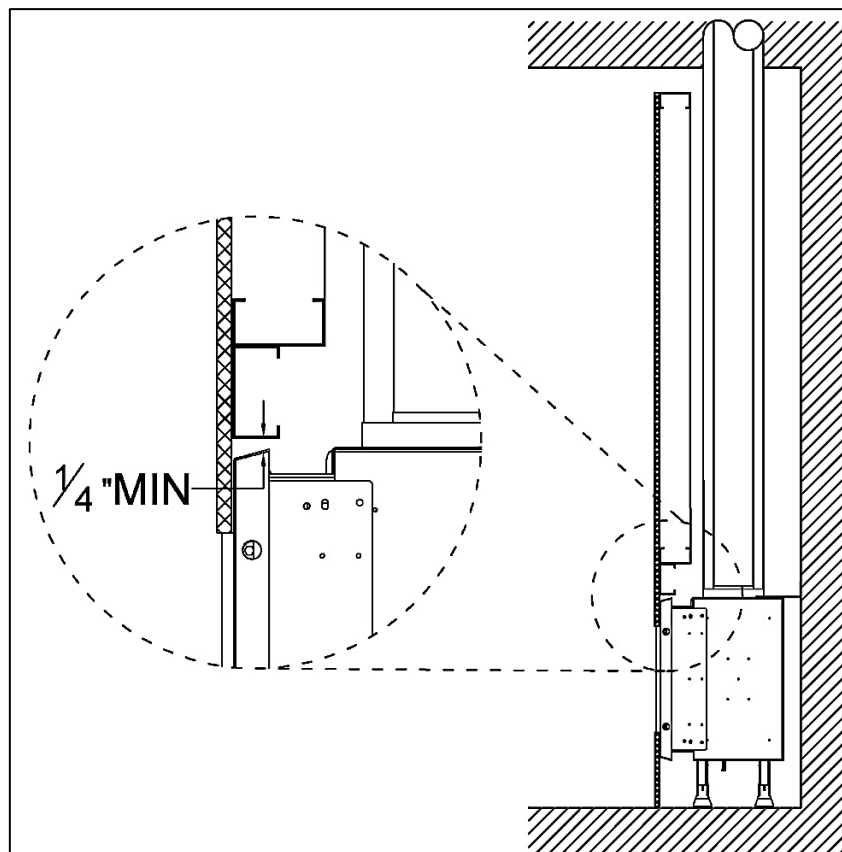
A **4-inch** clearance from the heat barrier vent openings along the top of the fireplace is required. Framing and building material is **NOT** permitted in this area. Doing so will block the vents and cause the entire surrounding to overheat.



**NOTE:** It is acceptable if the flat stud immediately above the fireplace hangs over heat barrier vents *slightly* when using standard metal framing (as shown in diagram above).

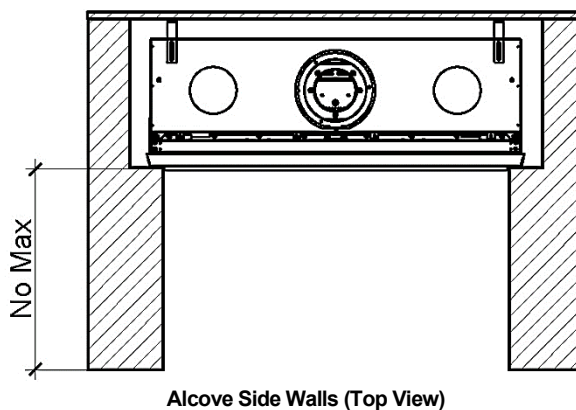
## Framing Clearance

Maintain a minimum  $\frac{1}{4}$  inches of space between the framing and the face of the fireplace.



## Clearance to a Side Wall

The fireplace viewing area is zero-clearance to a side wall. A side wall is defined as a wall that meets the viewing area at a 90° angle.



 = Building Material

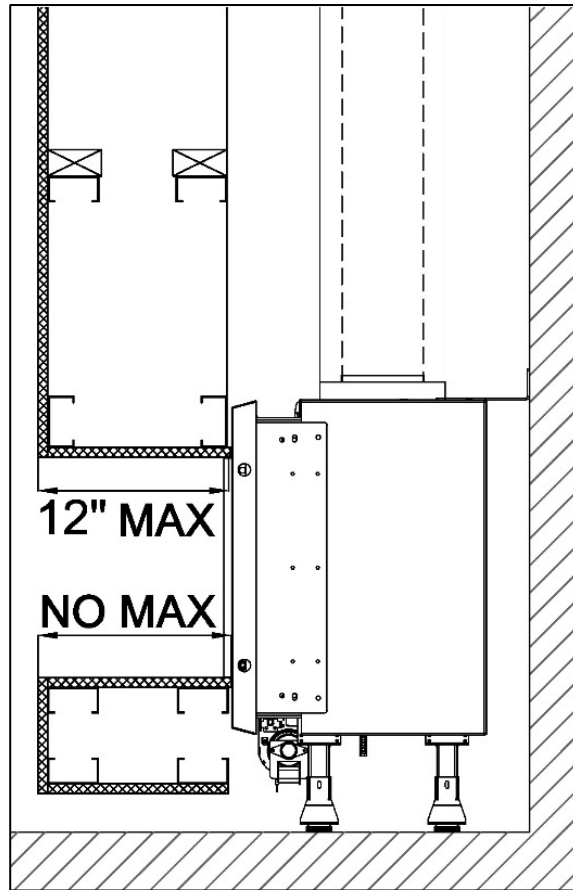
The temperature on the side wall can get as high as 150°F above ambient temperature. While the fireplace certification allows for this temperature variance, building and finish materials will have their own limitations. Consult the material manufacturer to ensure the material can safely withstand this temperature range.

This information does not apply to a wall that is constructed in front of the viewing area. For materials that will be in front of a main or side viewing area, please refer to the "Viewing Area Clearances" section.

## Maximum Overhang Depth

Overhang depth of a recessed fireplace must not exceed the clearances shown in the diagram below. Overhang depth is measured from the edge of the fireplace lip to the out-most part of the wall (including finish material).

Bottom recess (or "hearth extension") has no minimum or maximum depth requirement. If bottom recess depth exceeds 12 inches, ensure the structure is capable of supporting the weight of a fireplace technician for servicing.



## Heat Release


A heat release is an opening in the fireplace chase that allows the heat inside the chase to passively circulate into an interior room. This heat is generated convectively as the fireplace heats up. It is separate from exhaust heat produced at the combustion chamber of the fireplace. For safety purposes, a **heat release is required** to keep the wall around the fireplace cool.

### Heat Release Requirements

- The heat release must be located at or near the top of the fireplace chase and **start within 6 inches** (0-6 inches max) of the chase ceiling/firestop. It can start at the chase ceiling. It can be located on the front, sides or back of the chase. It can be released into any interior space that shares a wall with the chase.
- Minimum heat release size requirement depends on heat release orientation:

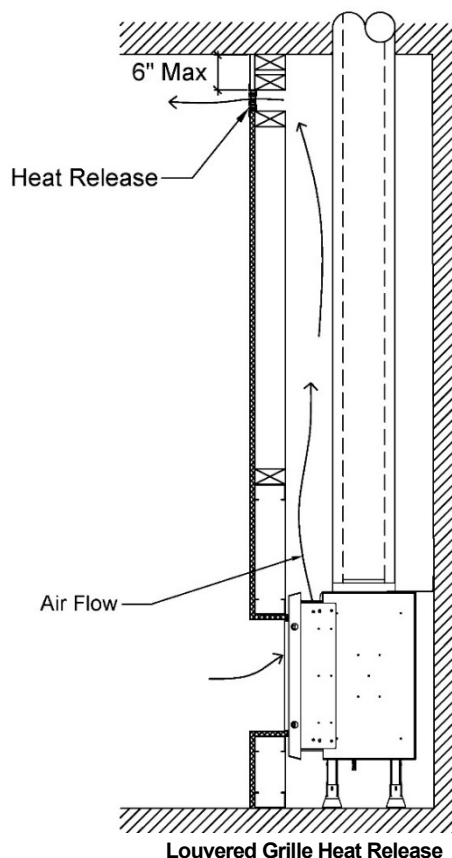
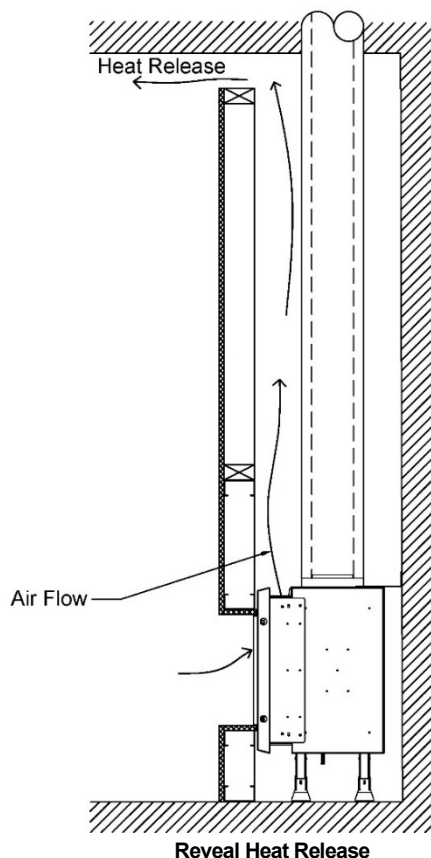
Fireplace Series	Horizontal Heat Release	Vertical Heat Release
TR 90-110	Minimum 124 sq. in. of free air space	Minimum 160 sq. in. of free air space

- For horizontal heat releases only, the height of the heat release must not exceed 1/3 of the width. (This does not apply to vertical heat releases.)
- The space the heat release vents into must have a minimum volume of 184 ft<sup>3</sup>.
- The heat release can be in the form of (but not limited to) a louvered ventilation grille, gap, or reveal.
  - For louvered/perforated ventilation grilles, the net free air space allowed in the louvered area must be equal or greater than the minimum number of square inches required per fireplace.
- The interior area of the narrowest part of the fireplace chase (in square inches) must never be less than your required heat release size (see "Chase Area Minimum" section of the installation manual for details).
- The heat release cannot be vented outdoors or to an unconditioned space.

 **NOTE: An angled heat release is not permitted.**

The following diagrams are examples of potential heat release options. These drawings serve as illustrative purposes only.

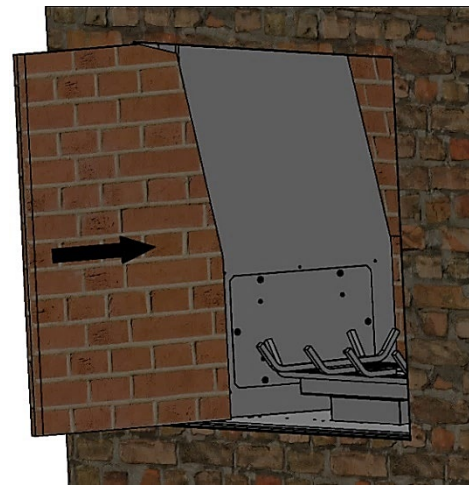
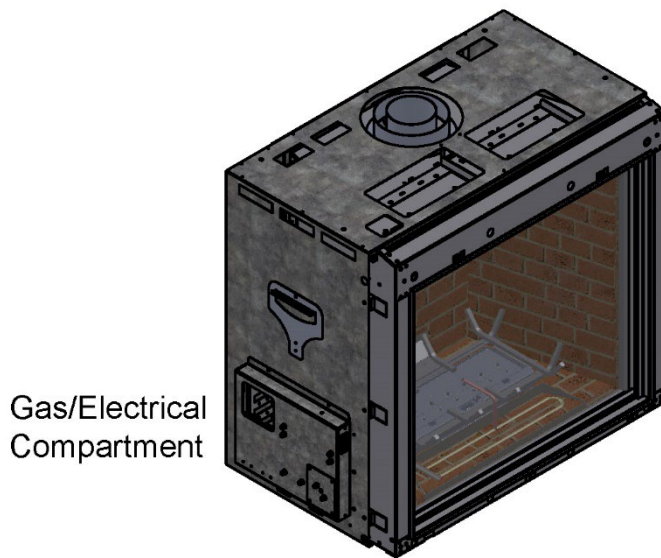
#### Horizontal Heat Release





## Access Panel

The Traditional series has an access panel built in on the left side of the interior of the firebox and does not need an access panel incorporated into the fireplace chase. This access panel is hidden behind a removable decorative interior panel, and opens to the gas and electrical components, which have been built onto the left side of the unit. To access these components, remove screen heat barrier, interior glass, and left decorative side panel, and access components through the access panel door.



Traditional Series Interior Access Panel

An access panel is not required (see notes below for exception), but it is **highly recommended**. It allows for access to the fireplace's gas and electrical components for servicing.

**NOTE:** An access panel, or some other form of clear access, is required for power vented fireplaces. For servicing purposes, the power vent control box (located at the fireplace) must be easily accessible in a way that does not require removal of the fireplace glass.