



MUST READ BEFORE

FRAMING



IMPORTANT INFORMATION



ontario hearth ltd.

Ortal Tunnel 60 (150) Wilderness

TU 150 / TU150DG / TU150H / TU150HDG

FRAMING

DIMENSIONS

SPECIFICATIONS

HEAT RELEASE REQUIREMENTS

QR LINK FOR

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OF SPECIFICATIONS:

Building Around the Fireplace

Building Checklist

The following building checklist is a quick reference for a typical Ortal Built-In 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. 16" 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 (either 4"x6" or 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 leg height is 9 ¹³/₁₆" (to bottom viewing area). Legs cannot be removed/altered. If the desired viewing area location on the wall is higher than 9 ¹³/₁₆", a platform can be built for the fireplace to stand on. Exception: Leg height for Space Creator 200 with Double Glass is 11 ⁷/₁₆".
- ☑ **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: ⁵/₈" 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, and double glass fireplaces require an air intake (details below).
- ☑ **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. ¹/₄" 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. Side overhang depth is unlimited. No material is permitted to extend past the metal lip surrounding the fireplace viewing area to allow for glass removal.
- ☑ **⁵/₈" Type X Drywall Requirements:** One layer of ⁵/₈" Type X Drywall (or equivalent) must be installed on the exterior of the chase framing.
- ☑ **TV/Artwork:** TV/Art must be min. 4" above top of fireplace viewing area for flush-mounted TVs, and 12" for TVs recessed into the wall above the fireplace.
- ☑ **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:** Access panel highly recommended to access gas and electrical components for servicing. Depending on the model, access panel can be placed at side or back of the fireplace within 3' of the pilot. Access panel or some other form of clear access to the chase is required for power-vented fireplaces. Size recommendation: as large as possible depending on application. Min. recommended size 10"x10".
- ☑ **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 ¹/₃ of the width.
- ☑ **Air Intake:** Only required for double glass heat barrier. Must be located at or below level of double glass fans. Air intake must meet the minimum size (depending on the model) of net free air space.
- ☑ **Finishing:** For finishes flush to the fireplace, no clearances are required. For finishes where the fireplace is recessed to the finish, maintain ¹/₈" 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.

Framing Detail

The detail below shows general framing requirements for a fireplace built flush to the finish wall. It is not to drawn to scale and is intended for illustrative purposes only. For a complete list of clearance requirements, please see "General Clearances" on page 18.

Dimension labels below correspond with the diagrams in the "→ Framing Dimensions" section starting on the next page.

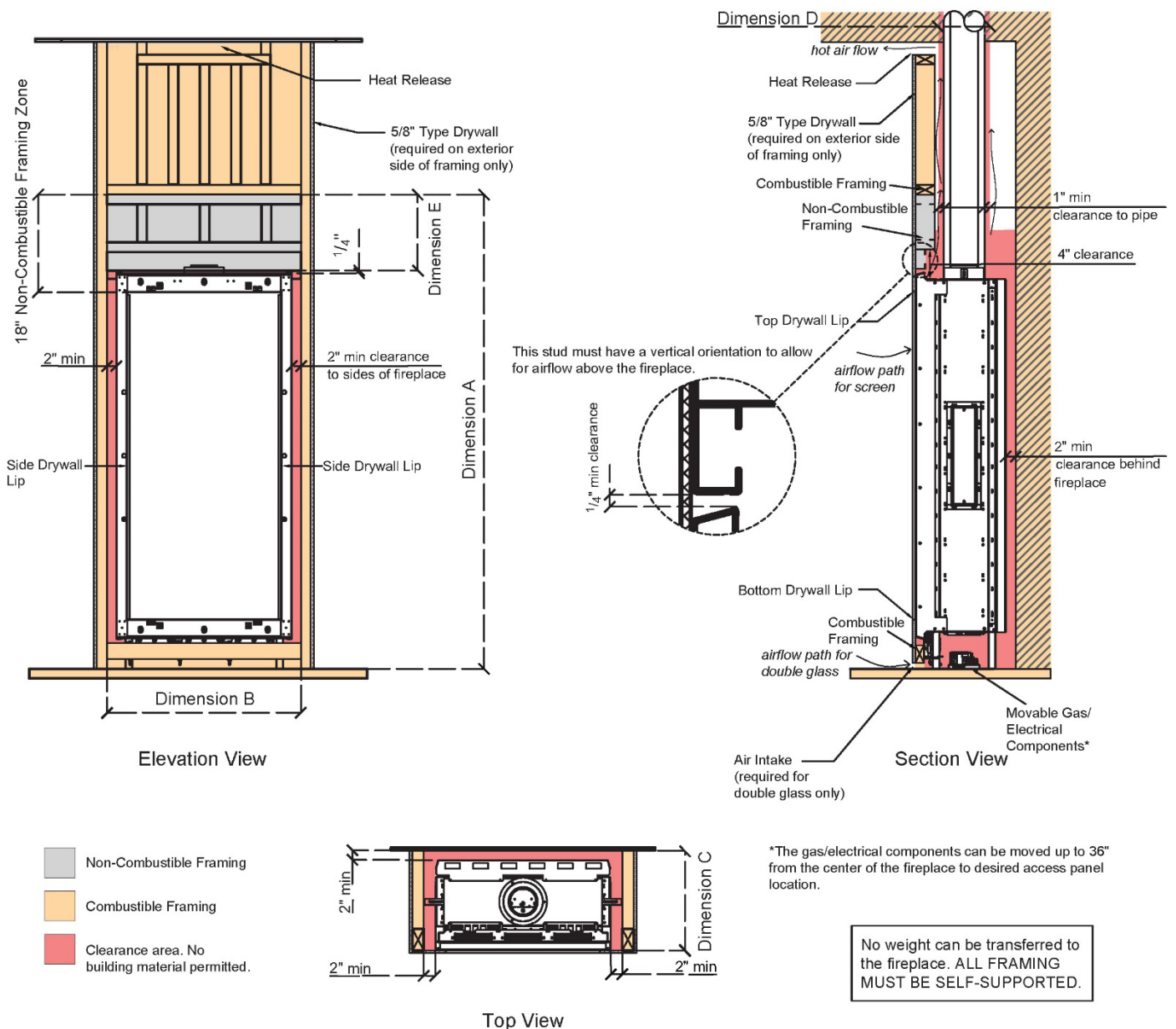
Dimension A: Rough Combustible Framing Opening Height

Dimension B: Rough Framing Opening Width

Dimension C: Framing Depth

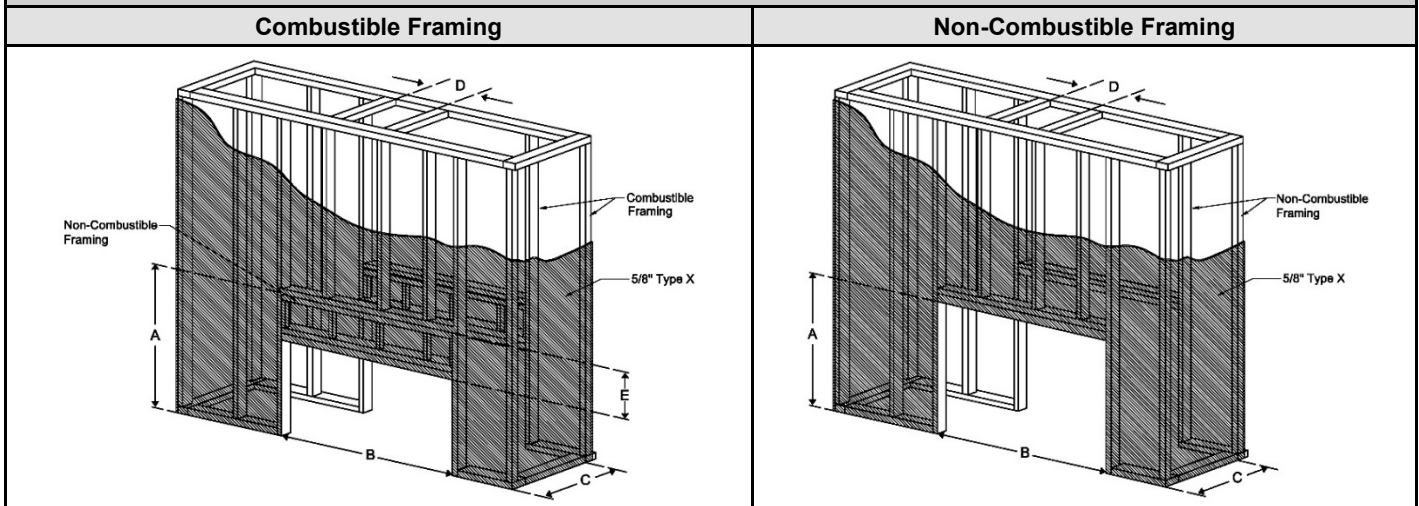
Dimension D: Firestop Opening

Dimension E: Non-combustible Framing Zone (applicable only when also framing with combustible framing)



NOTE: Fireplace model used in framing detail above is a 31H Front. All information shown in this detail applies to all fireplaces mentioned in this manual.

→ Tunnel Series Framing

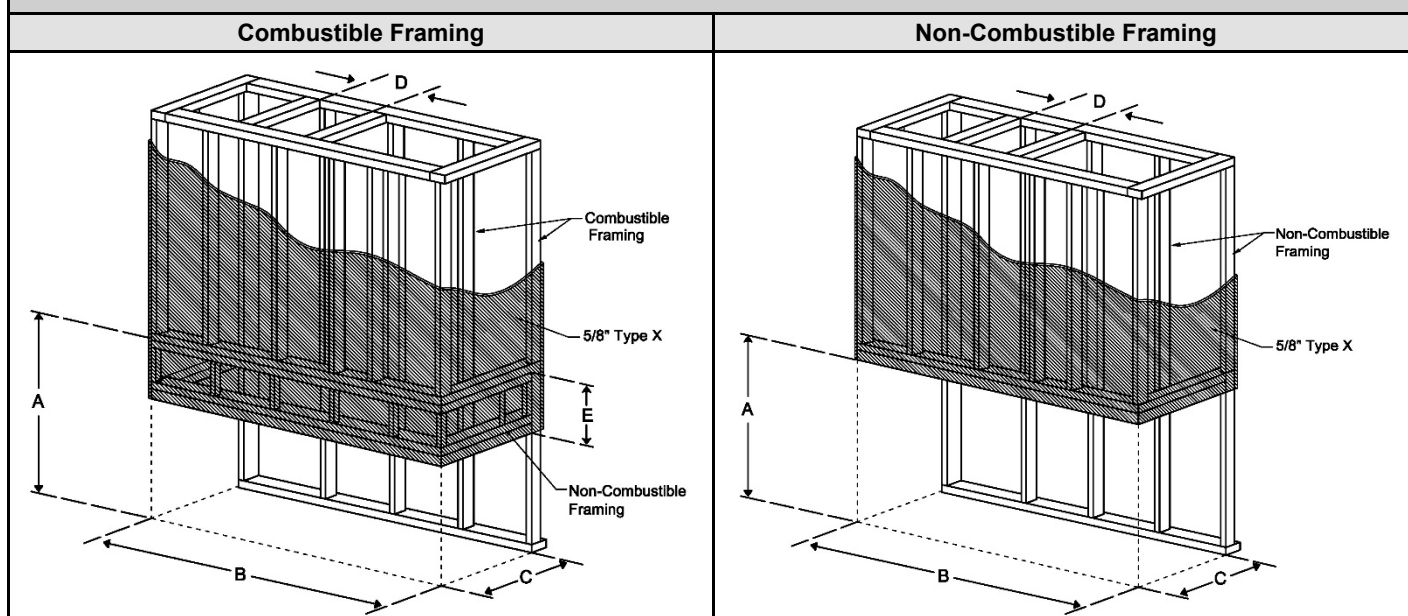


WARNING – MAINTAIN AIR FLOW CLEARANCE: Firebox front top vent must have minimum 4" of clearance to any material to allow sufficient airflow. Failure to do so could result in improper fireplace operation, property damage, or physical injury. See page 21 for details.

Review "General Clearances" section prior to framing to ensure all clearances are followed. See page 18 for details.

Model	Framing	Dimension A	Dimension B	Dimension C	Dimension D	Dimension E
40H70 TN	Combustible	55 ³ / ₈ "	24 ⁵ / ₈ "	18 ⁷ / ₈ "	Refer to pipe manufacturer's firestop dimensions	14 ³ / ₈ "
	Non-Combustible	41"				N/A
75x65 TN	Combustible	53 ³ / ₈ "	38 ³ / ₈ "	18 ⁷ / ₈ "		15 ¹ / ₈ "
	Non-Combustible	38 ³ / ₈ "				N/A
31H TN (aka 75x65H TN)	Combustible	92 ⁹ / ₁₆ "	36 ¹³ / ₁₆ "	15 ¹ / ₂ "		13 ³ / ₄ "
	Non-Combustible	74 ¹³ / ₁₆ "				N/A
60x80 TN	Combustible	57"	29 ³ / ₈ "	18 ⁷ / ₈ "		14 ⁵ / ₈ "
	Non-Combustible	42 ³ / ₈ "				N/A
110 TN	Combustible	41 ⁵ / ₈ "	51 ⁷ / ₈ "	19"		14 ¹ / ₈ "
	Non-Combustible	27 ¹ / ₂ "				N/A
110H TN	Combustible	49 ¹ / ₂ "	51 ⁷ / ₈ "	19"		14 ¹ / ₈ "
	Non-Combustible	35 ³ / ₈ "				N/A
110HH TN	Combustible	57 1/8"	51 ¹¹ / ₁₆ "	19 ¹ / ₄ "		14 ¹ / ₁₆ "
	Non-Combustible	43 ¹ / ₁₆ "				N/A
130 TN	Combustible	41 ⁵ / ₈ "	58 ⁵ / ₈ "	19"		14 ¹ / ₈ "
	Non-Combustible	27 ¹ / ₂ "				N/A
130H TN	Combustible	49 ¹ / ₂ "	58 ⁵ / ₈ "	19"		14 ¹ / ₈ "
	Non-Combustible	35 ³ / ₈ "				N/A
150 TN	Combustible	41 ⁵ / ₈ "	68 ¹ / ₂ "	19"		14 ¹ / ₈ "
	Non-Combustible	27 ¹ / ₂ "				N/A
150H TN	Combustible	49 ¹ / ₂ "	68 ¹ / ₂ "	19"		14 ¹ / ₈ "
	Non-Combustible	35 ³ / ₈ "				N/A
150HH TU	Combustible	57 ¹ / ₈ "	68 ⁵ / ₁₆ "	19 ¹ / ₄ "		14 ¹ / ₁₆ "
	Non-Combustible	43 ¹ / ₁₆ "				N/A
170 TN	Combustible	41 ⁵ / ₈ "	76 ³ / ₈ "	19"		14 ¹ / ₈ "
	Non-Combustible	27 ¹ / ₂ "				N/A
170H TN	Combustible	49 ¹ / ₂ "	76 ³ / ₈ "	19"		14 ¹ / ₈ "
	Non-Combustible	35 ³ / ₈ "				N/A
200 TN	Combustible	41 ⁵ / ₈ "	85 ³ / ₄ "	19"		14 ¹ / ₈ "
	Non-Combustible	27 ¹ / ₂ "				N/A
200H TN	Combustible	49 ¹ / ₂ "	85 ³ / ₄ "	19"		14 ¹ / ₈ "
	Non-Combustible	35 ³ / ₈ "				N/A
200HH TN	Combustible	57 ¹ / ₈ "	85 ¹ / ₄ "	19 ¹ / ₄ "		14 ¹ / ₁₆ "
	Non-Combustible	43 ¹ / ₁₆ "				N/A
250 TN	Combustible	43 ⁵ / ₈ "	104 ¹ / ₄ "	19"		14"
	Non-Combustible	29 ⁵ / ₈ "				N/A
250H TN	Combustible	49 ¹ / ₂ "	104 ¹ / ₄ "	19"		14"
	Non-Combustible	35 ¹ / ₂ "				N/A
250HH TN	Combustible	57 ¹ / ₈ "	104 ¹ / ₁₆ "	18 ¹⁵ / ₁₆ "		14 ¹ / ₁₆ "
	Non-Combustible	43 ¹ / ₁₆ "				N/A

Three Side Series Framing



WARNING – MAINTAIN AIR FLOW CLEARANCE: Firebox front top vent must have minimum 4" of clearance to any material to allow sufficient airflow. Failure to do so could result in improper fireplace operation, property damage, or physical injury. See page 21 for details.

Review "General Clearances" section prior to framing to ensure all clearances are followed. See page 18 for details.

Model	Framing	Dimension A	Dimension B	Dimension C	Dimension D	Dimension E
40H70 TS	Combustible	55 ³ / ₈ "	22 ³ / ₈ "	18 ¹ / ₄ "	Refer to pipe manufacturer's firestop dimensions	14 ¹ / ₈ "
	Non-Combustible	41 ³ / ₈ "				N/A
75 TS	Combustible	46 ³ / ₄ "	33 ⁵ / ₈ "	20 ¹ / ₈ "		13 ¹ / ₄ "
	Non-Combustible	33 ¹ / ₂ "				N/A
110 TS	Combustible	43 ⁵ / ₈ "	49	20 ⁵ / ₈ "		12 ¹ / ₂ "
	Non-Combustible	31 ¹ / ₈ "				N/A
110H TS	Combustible	49 ¹ / ₂ "	49	22 ¹ / ₄ "		12 ⁵ / ₈ "
	Non-Combustible	36 ⁷ / ₈ "				N/A
130 TS	Combustible	43 ⁵ / ₈ "	55 ⁵ / ₈ "	20 ⁵ / ₈ "		12 ¹ / ₂ "
	Non-Combustible	31 ¹ / ₈ "				N/A
130H TS	Combustible	49 ¹ / ₂ "	55 ⁵ / ₈ "	22 ¹ / ₄ "		12 ⁵ / ₈ "
	Non-Combustible	36 ⁷ / ₈ "				N/A
150 TS	Combustible	43 ⁵ / ₈ "	65 ¹ / ₂ "	20 ⁵ / ₈ "		12 ¹ / ₂ "
	Non-Combustible	31 ¹ / ₈ "				N/A
150H TS	Combustible	49 ¹ / ₂ "	65 ¹ / ₂ "	22 ¹ / ₄ "		12 ⁵ / ₈ "
	Non-Combustible	36 ⁷ / ₈ "				N/A
170 TS	Combustible	43 ⁵ / ₈ "	73 ³ / ₈ "	20 ⁵ / ₈ "		12 ¹ / ₂ "
	Non-Combustible	31 ¹ / ₈ "				N/A
170H TS	Combustible	49 ¹ / ₂ "	73 ³ / ₈ "	22 ¹ / ₄ "		12 ⁵ / ₈ "
	Non-Combustible	36 ⁷ / ₈ "				N/A
200 TS	Combustible	43 ⁵ / ₈ "	82 ³ / ₄ "	20 ⁵ / ₈ "		12 ¹ / ₂ "
	Non-Combustible	31 ¹ / ₈ "				N/A
200H TS	Combustible	49 ¹ / ₂ "	82 ³ / ₄ "	22 ¹ / ₄ "		12 ⁵ / ₈ "
	Non-Combustible	36 ⁷ / ₈ "				N/A
250 TS	Combustible	43 ⁵ / ₈ "	102 ¹ / ₂ "	20 ⁵ / ₈ "		12 ¹ / ₂ "
	Non-Combustible	31 ¹ / ₈ "				N/A
250H TS	Combustible	49 ¹ / ₂ "	102 ¹ / ₂ "	22 ¹ / ₄ "		12 ⁵ / ₈ "
	Non-Combustible	36 ⁷ / ₈ "				N/A

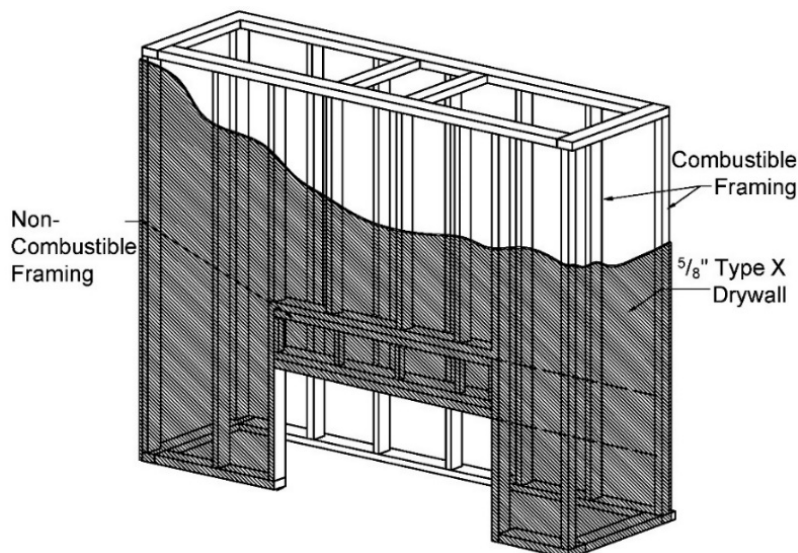
5/8" Type X Drywall Requirements

Exterior side (i.e., room-facing side) of the framing must be covered with 5/8" Type X Drywall (or equivalent). Finish material is installed on top of the drywall. This applies to combustible and non-combustible framing.

Drywall is not required on the exterior portion of an insulated outside-facing wall.

5/8" Type X Drywall may rest on the metal lip surrounding the opening of the fireplace. Drywall must not be attached to the fireplace as heat transfer from attaching materials (such as screws) can cause the drywall to crack.

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.

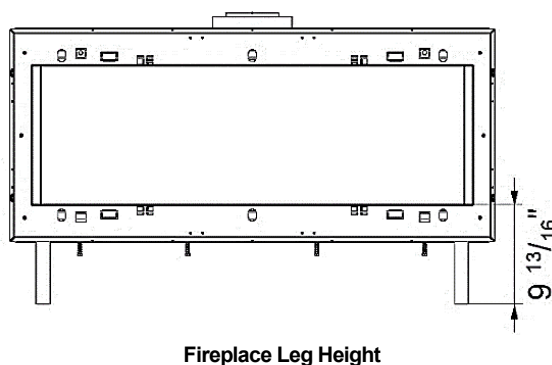


Chase Floor/Platform

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.

Fireplace leg height for all models is 9 13/16" (measured to bottom of viewing area), with the exception of the Space Creator 200 with a double glass heat barrier. This model has a leg height of 11 7/16". Legs cannot be removed, cut, or adjusted.

Raised Platform Option: To raise the fireplace higher than the leg height, 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.



NOTE: For fireplaces with the double glass heat barrier, an air intake might be necessary to incorporate into the platform depending on the design. See "Air Intake for a Platform" for details.

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

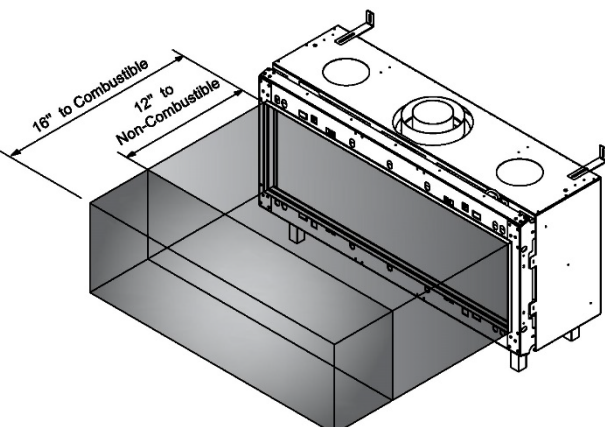
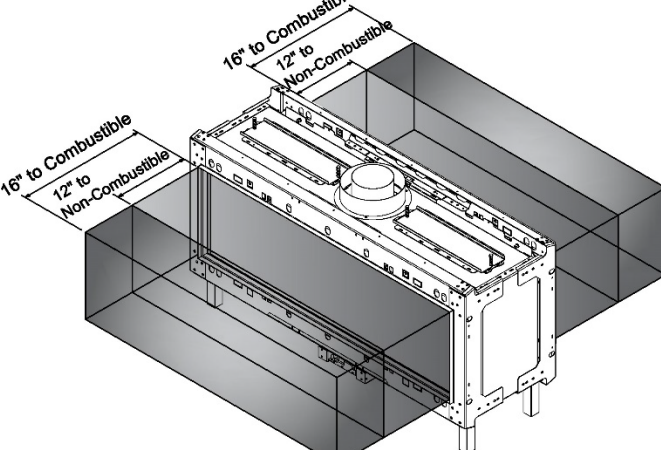
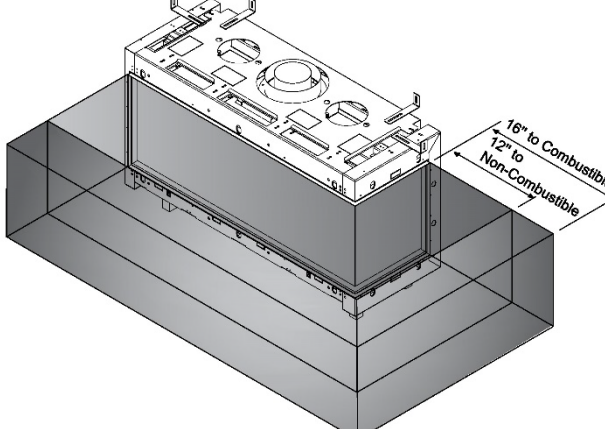
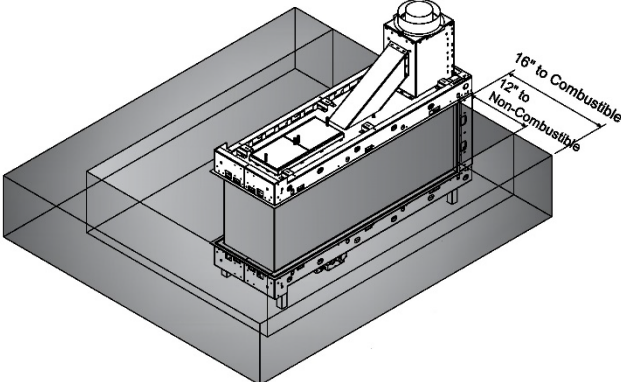
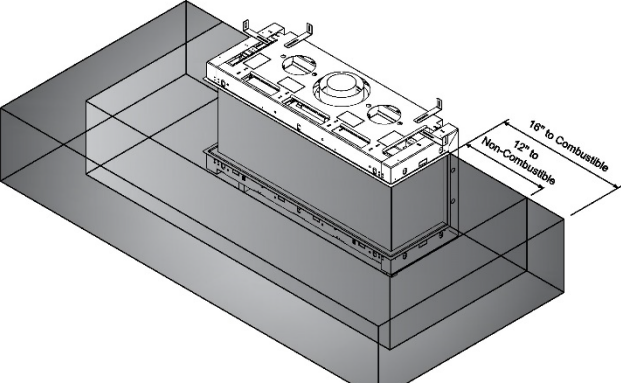
→Viewing Area Clearances

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.

Non-Combustible Materials	Must be minimum 12 inches from fireplace viewing area.
Combustible Materials	Must be minimum 16 inches from fireplace viewing area.

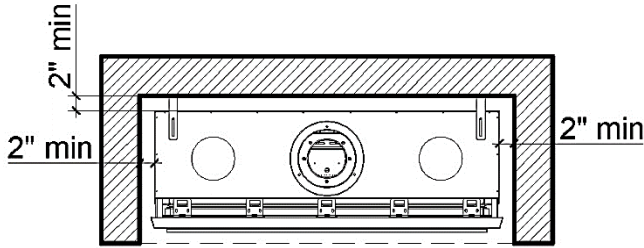
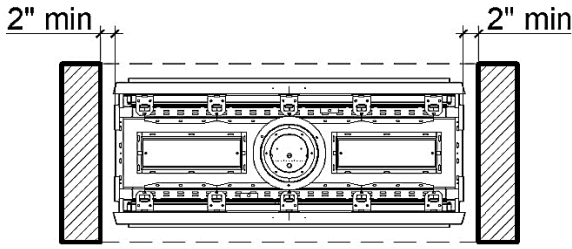
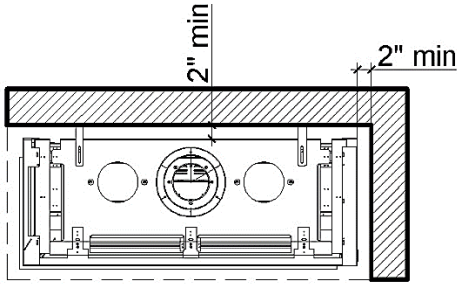
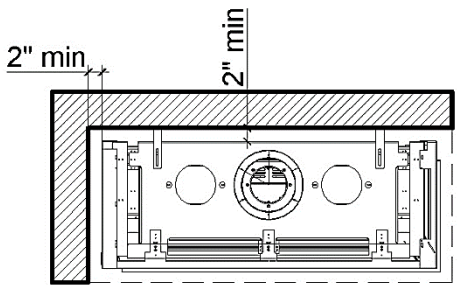
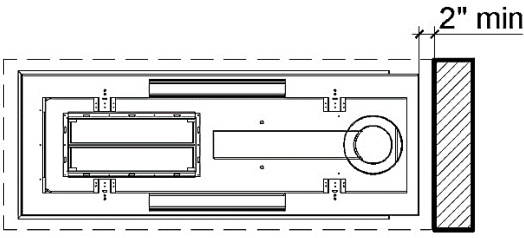
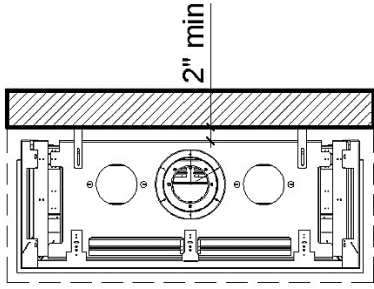
Materials (including combustible flooring and combustible finish material) are permitted below and around the viewing area clearance zone.

! IMPORTANT NOTE: When placing material near the glass, take care to consider fireplace serviceability. It is strongly recommended that any items/materials placed in front of the front (long) glass be movable for easy access to the fireplace during servicing. Recommendation does not apply to side (short) glass(es).

Viewing Area Clearances Per Model	
Front	Tunnel
	
Corner	Space Creator
	
Three Sided	
	

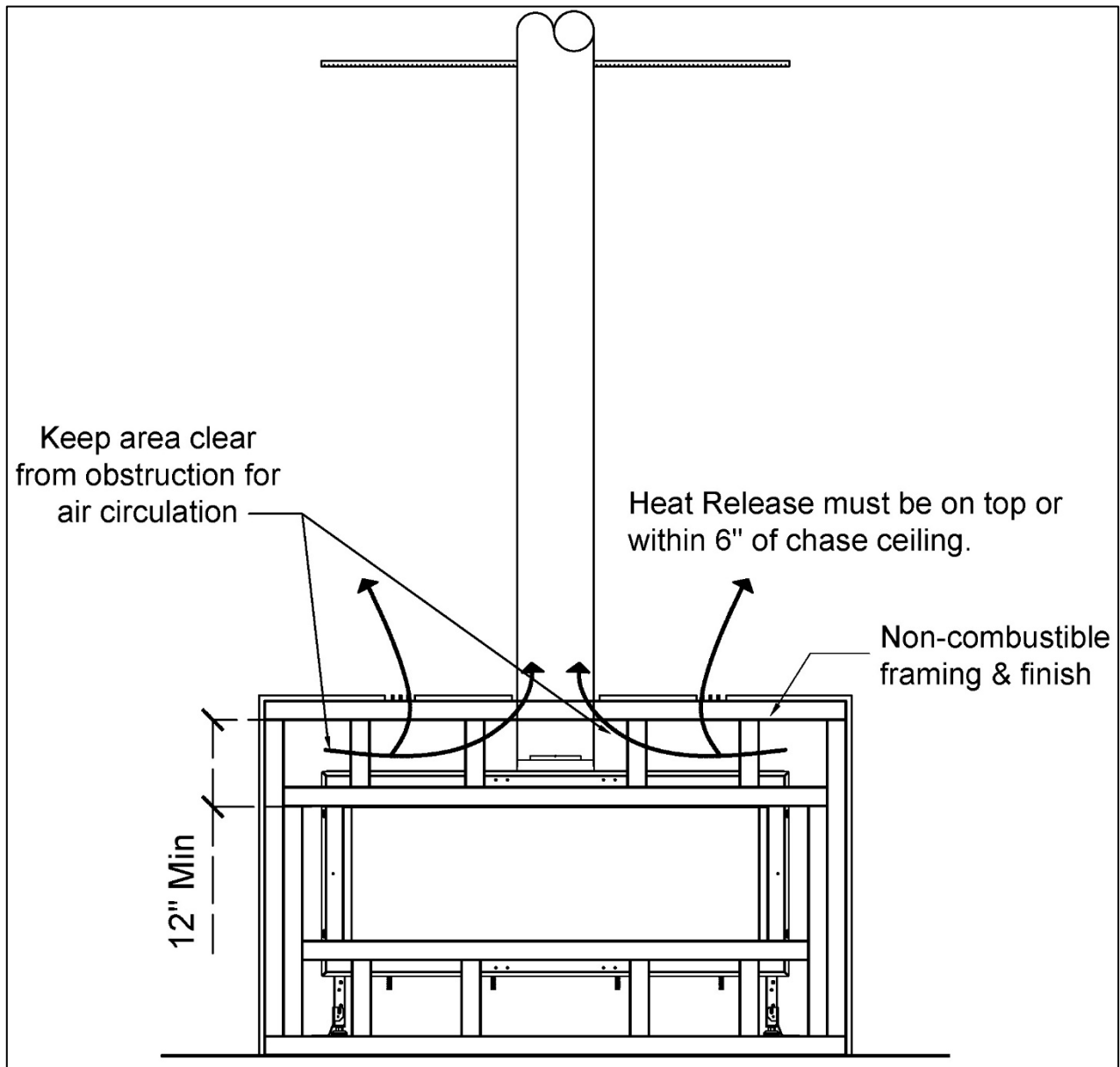
Firebox Clearance

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

Firebox Clearance Per Model	
Front	Tunnel
	
Corner: Left Side	Corner: Ride Side
	
Space Creator	Three Side
	

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.



Minimum Chase Ceiling Clearance Diagram

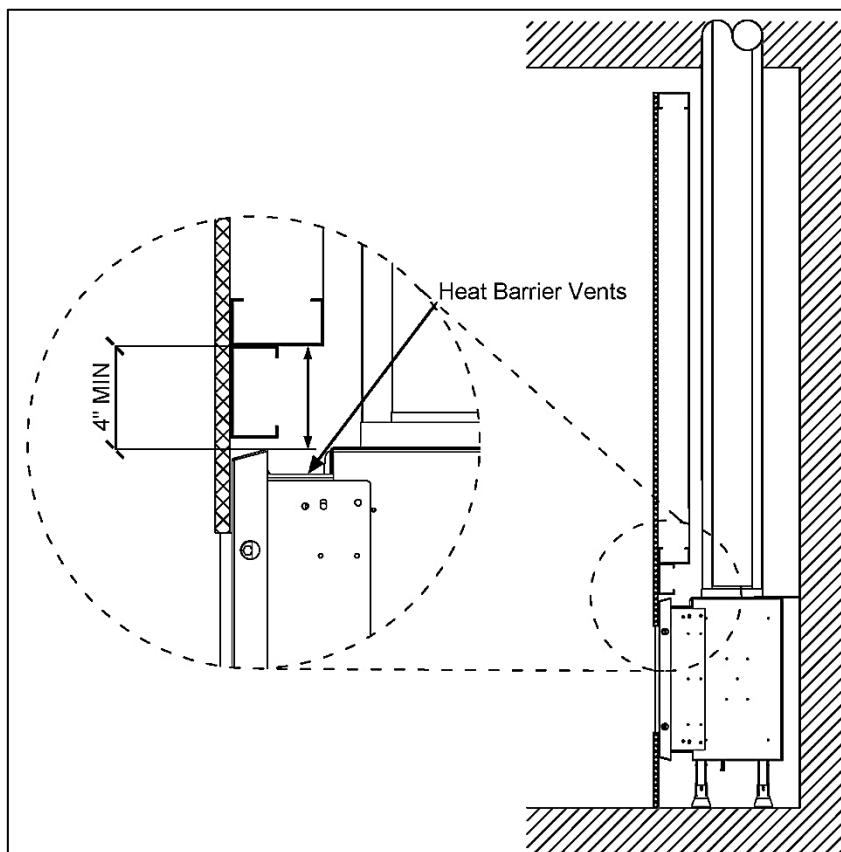


NOTES:

- 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 for details.
- Clearance around the vent pipe must be maintained (1" clearance on the sides and bottom, 3" on top). See the "Vent Clearances" section for details.

Air Flow Clearance

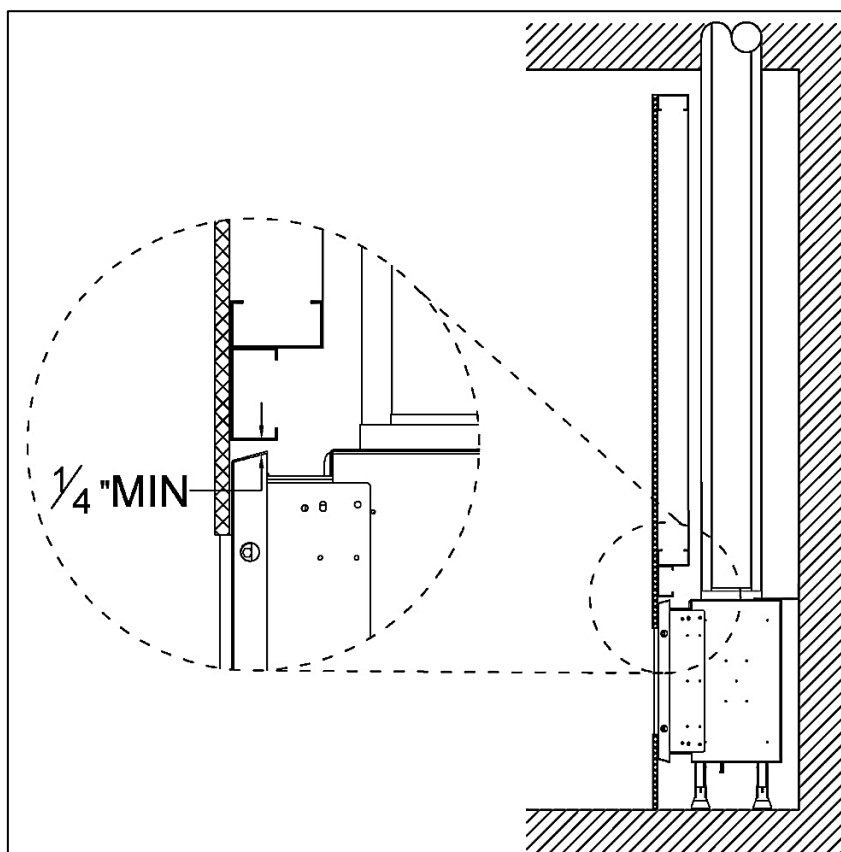
A **4-inch** clearance from the heat barrier vent openings along the top of the fireplace is required. Framing and building material is **NOT** permitted in this area. Doing so will block the vents and cause the entire surrounding to overheat.



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).

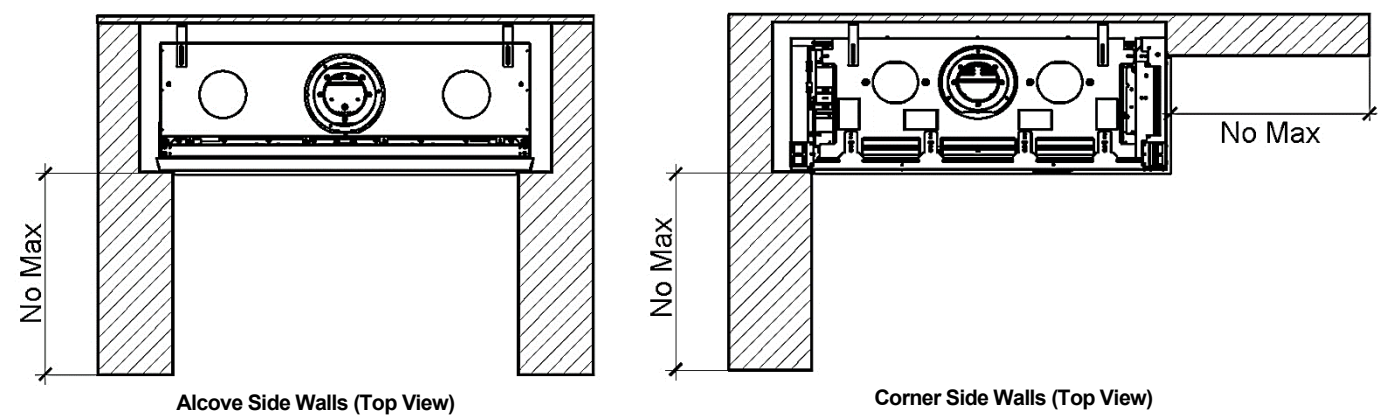
Framing Clearance

Maintain a minimum $\frac{1}{4}$ inch 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

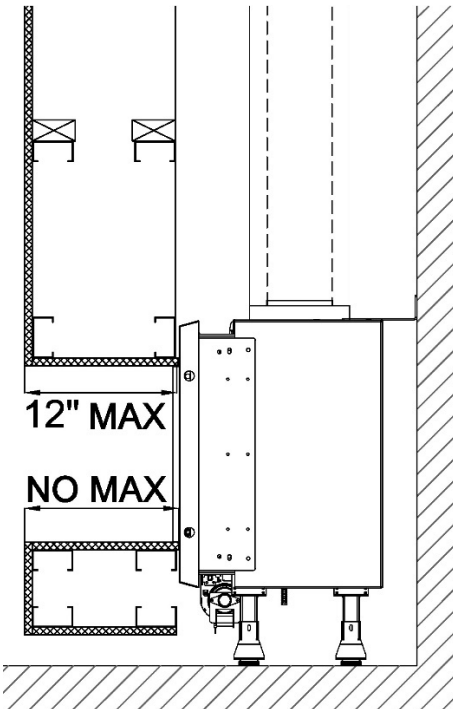
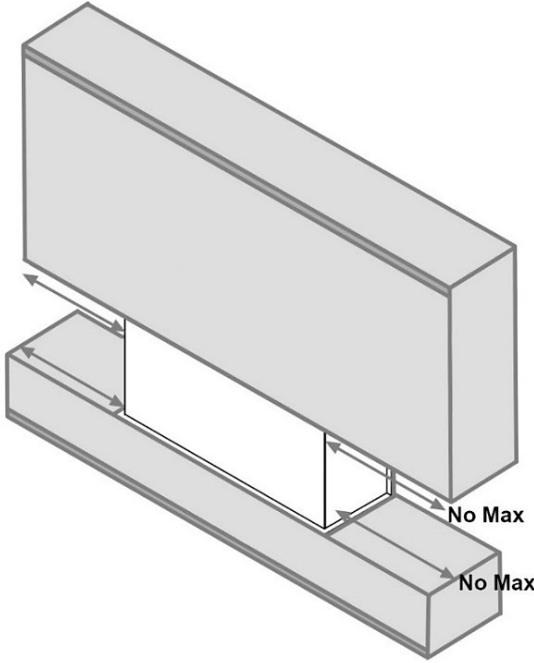
The temperature on the side wall can get as high as 150°F above ambient temperature. While the fireplace certification allows for this temperature variance, building and finish materials will have their own limitations. Consult the material manufacturer to ensure the material can safely withstand this 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 **12 inches**. Overhang depth is measured from the edge of the fireplace lip to the out-most part of the wall (including finish material). **Side overhang has no limit.** Finish material on the underside of the overhang may be combustible or non-combustible.

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.

Front (Long Side) Overhang	Side (Short Side) Overhang
 <p>12" MAX</p> <p>NO MAX</p>	 <p>No Max</p> <p>No Max</p>

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** (where the firestop is located). 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
40-75* (includes 31H)	Minimum 50 sq. in. of free air space	Minimum 65 sq. in. of free air space
110-130*	Minimum 120 sq. in. of free air space	Minimum 156 sq. in. of free air space
150-200	Minimum 200 sq. in. of free air space	Minimum 260 sq. in. of free air space
250	Minimum 250 sq. in. of free air space	Minimum 325 sq. in. of free air space

*Includes Built-In/Custom Curve & Island fireplaces. Heat release requirements do not apply to Curve & Island fireplaces with standard Ortal-provided hood options.

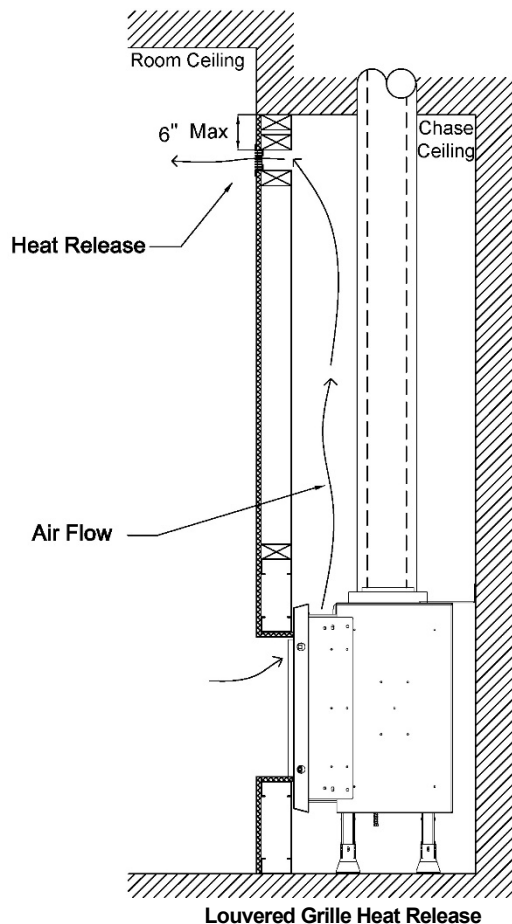
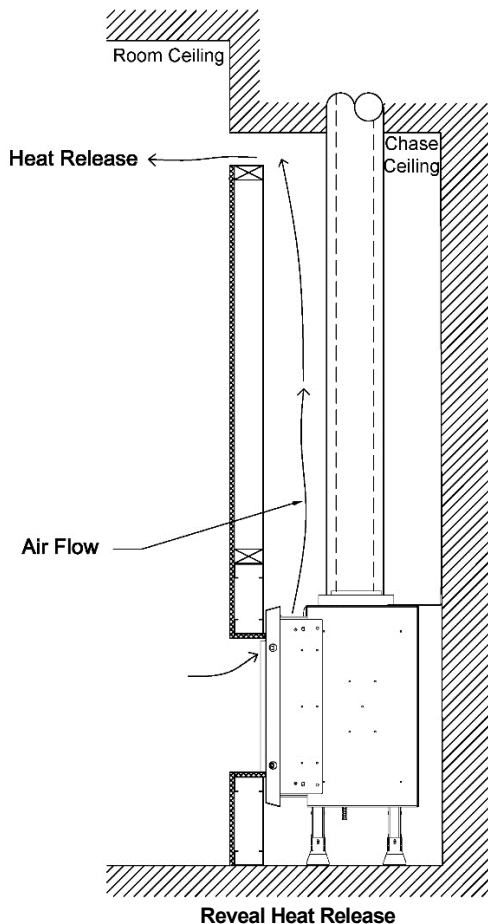
- For horizontal heat releases only, the height of the heat release must not exceed 1/3 of the width. (This does not apply to vertical heat releases.)
- The space the heat release vents into must have a minimum volume of 184 ft³.
- The heat release can be in the form of (but not limited to) a louvered 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 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.

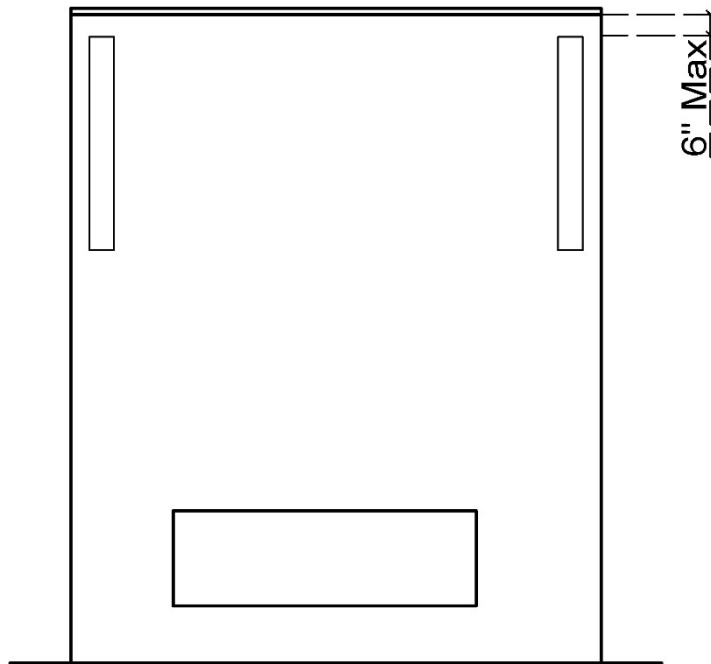
Horizontal Heat Release

Note: The chase ceiling and the room ceiling are different reference points. The chase ceiling may be lower than, equal to, or higher than the room ceiling. The heat release must start within 6" of the chase ceiling. It cannot start lower than 6" from the chase ceiling.



Vertical Heat Release: Split Front

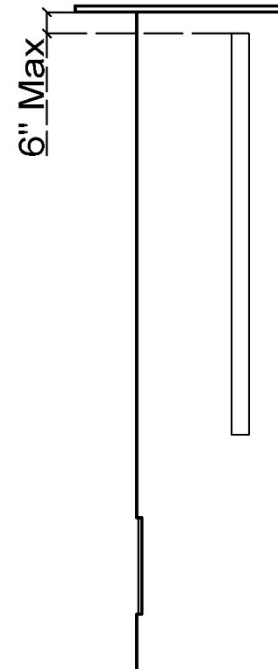
The heat release is oriented vertically and split between the two sides of the chase.



Split Front Vertical Heat Release

Vertical Heat Release: Full Side

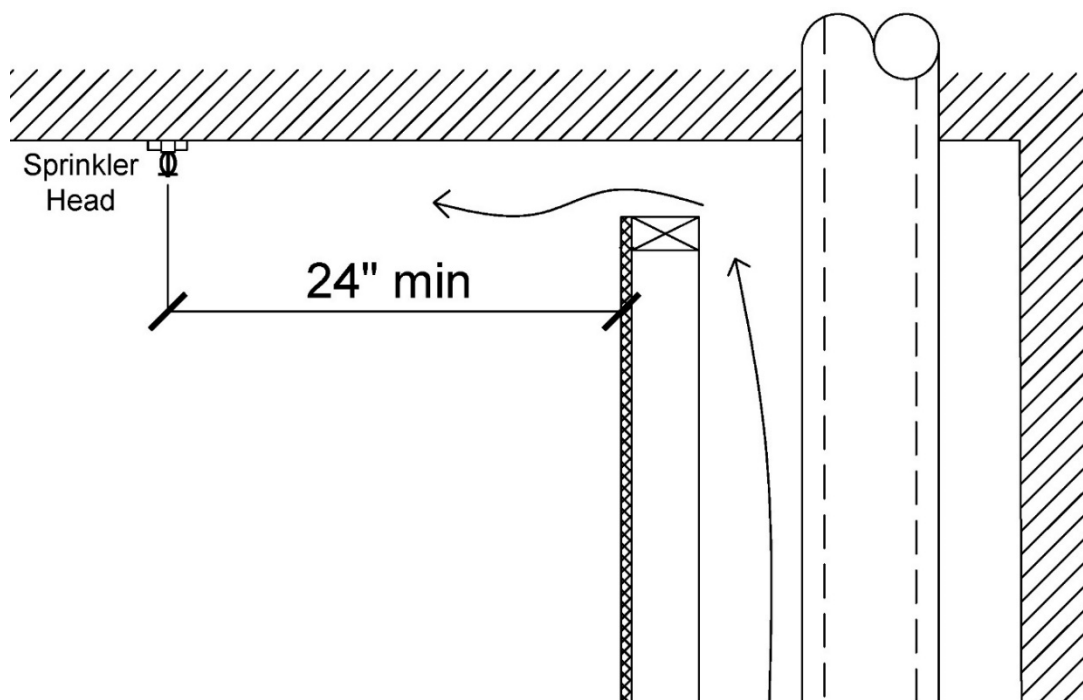
The heat release is oriented vertically. Entire heat release is on one side of the fireplace chase.



Full Vertical Heat Release on One Side

Sprinkler Clearance to Heat Release

In a situation where a sprinkler head is near the heat release, the sprinkler head must be minimum **24 inches** (linear length) from any point of the heat release opening.



Air Intake

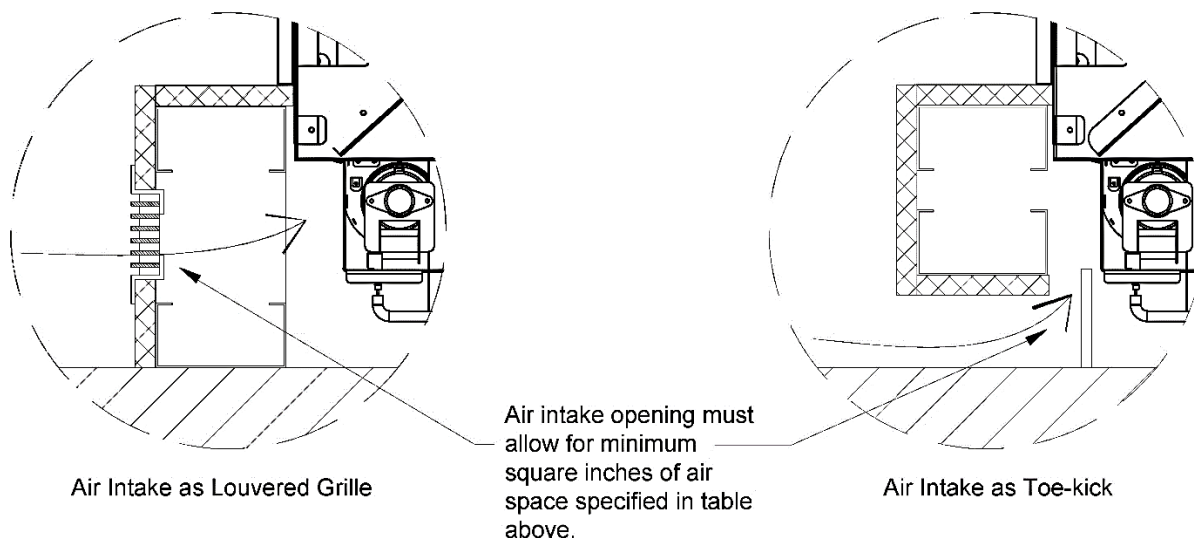
When installing a fireplace with a double glass heat barrier, it is essential to maintain cool air flow between the double glass panels. For this purpose, an opening must be provided toward the bottom of the wall to allow the double glass fans to circulate room air through the glass panels and up into the chase. This opening, called an air intake, needs to be made before closing the wall surface below the fireplace. Air intake must meet the minimum size requirement.

Fireplace Series	Air Intake
40-130* (includes 31H)	Minimum 124 sq. in. of free air space
150-200	Minimum 200 sq. in. of free air space
250	Minimum 250 sq. in. of free air space

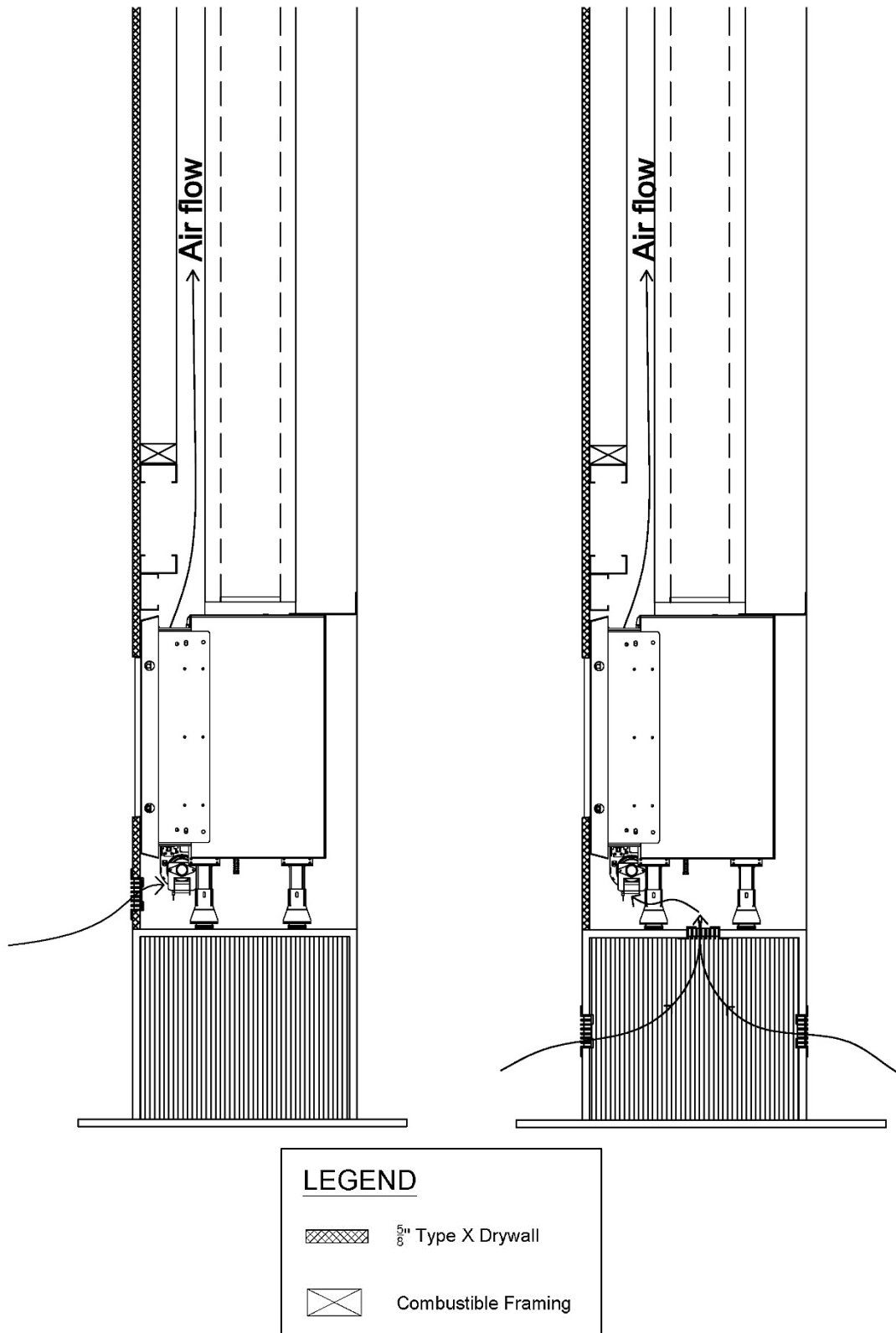
***Includes Built-In/Custom Curve & Island fireplaces. Curve & Island fireplaces with standard Ortal-provided base have an air intake already built into the base.**

The air intake can be in the form of a louvered/perforated ventilation grille, gap, or toe-kick (reveal). For louvered 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 entire air intake must be located at or below the level of the double glass fans. The air intake is not required to be on the front wall of the fireplace. The air intake cannot be on a wall that allows air from outside the house directly into the fireplace chase. Air must be from a conditioned space.



Air Intake for a Platform



NOTE: Please refer to the “Platform” section for details on platform construction.

Mounting a TV/Artwork

Ortal's Cool Wall Technology is a technique that reduces the convective heat from the fireplace and prevents heat buildup inside the fireplace chase, mitigating any damage that may result from the wall reaching high temperatures. Ortal's Cool Wall system enables the option of safely installing artwork, a TV, or other similar electronic components above the fireplace by reducing the wall temperature above the fireplace.

Location	Wall Temperature
0-6 inches above fireplace	100°F - 120°F
6-12 inches above fireplace	90°F - 100°F
12 inches above fireplace	80°F - 90°F

Maintain the following general requirements to mount a TV or artwork above the fireplace and prevent heat damage:

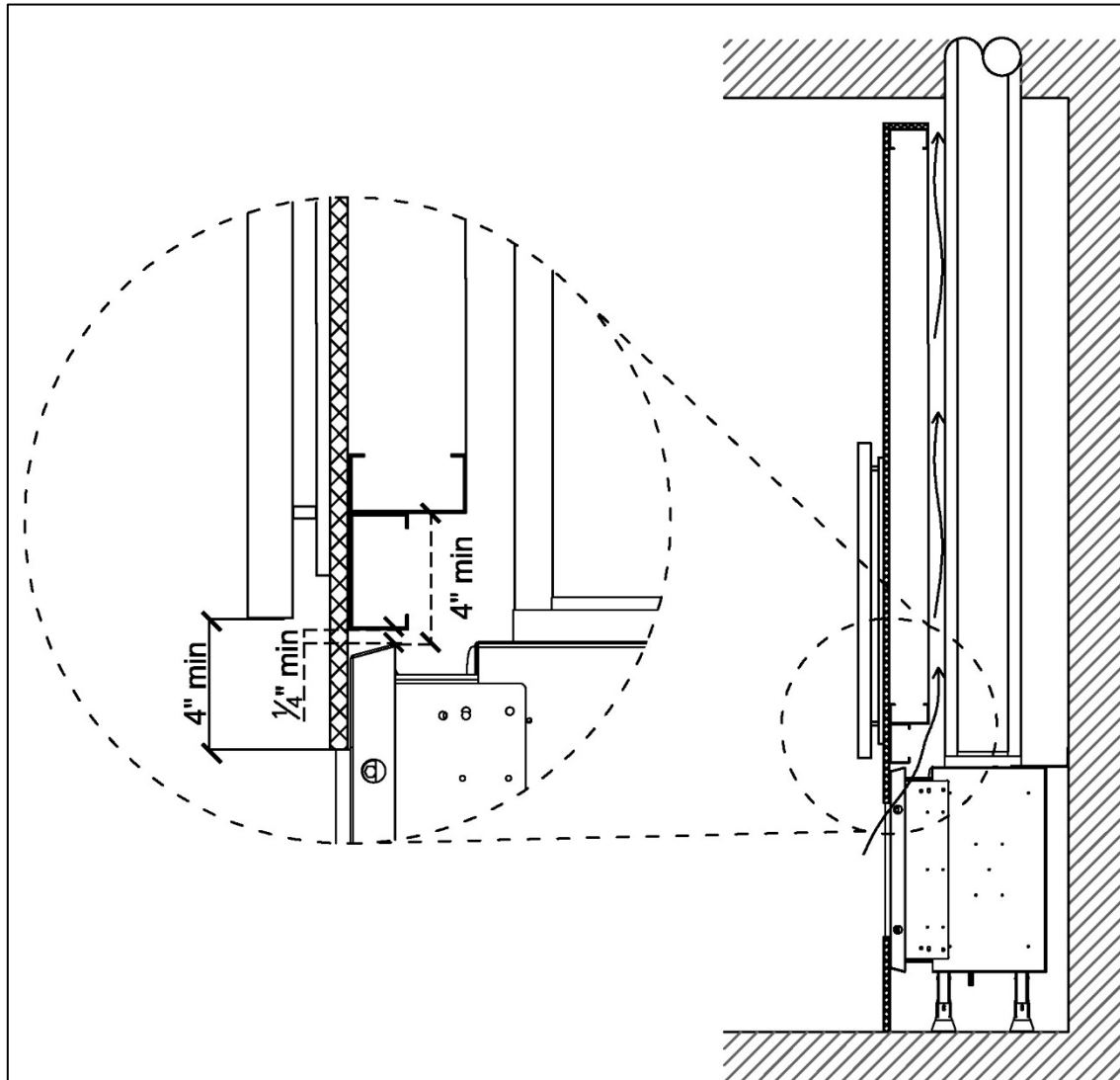
- Mount the TV or artwork at the minimum clearance above the top of the fireplace viewing area. Minimum clearance amount depends on flush or recessed installation. See sections below for more information.
- Wires inside the chase are not permitted to cross over the fireplace. Wires must be installed against a wall.

The decision to install a television above the fireplace is up to the discretion of the owner. TV and art manufacturers may specify that their product should not be installed on, near or above a heat source. Ortal will not be held liable for any adverse effects on a TV, artwork or other equipment located near the fireplace. It is the owner's responsibility to verify that their TV or artwork can withstand the wall temperatures as outlined in the above wall temperature chart.

The following diagrams can be used as a guide for customers who do decide to locate their TV and artwork above their fireplace. These drawings illustrate ways of reducing the amount of heat impact to the area surrounding the fireplace.

Flush Mounted TV/Artwork

When the TV is mounted on a wall that is flush to the fireplace, the TV must be at least **4 inches** from the top of the fireplace glass viewing area. Ensure all clearances are maintained. See diagram below for details.

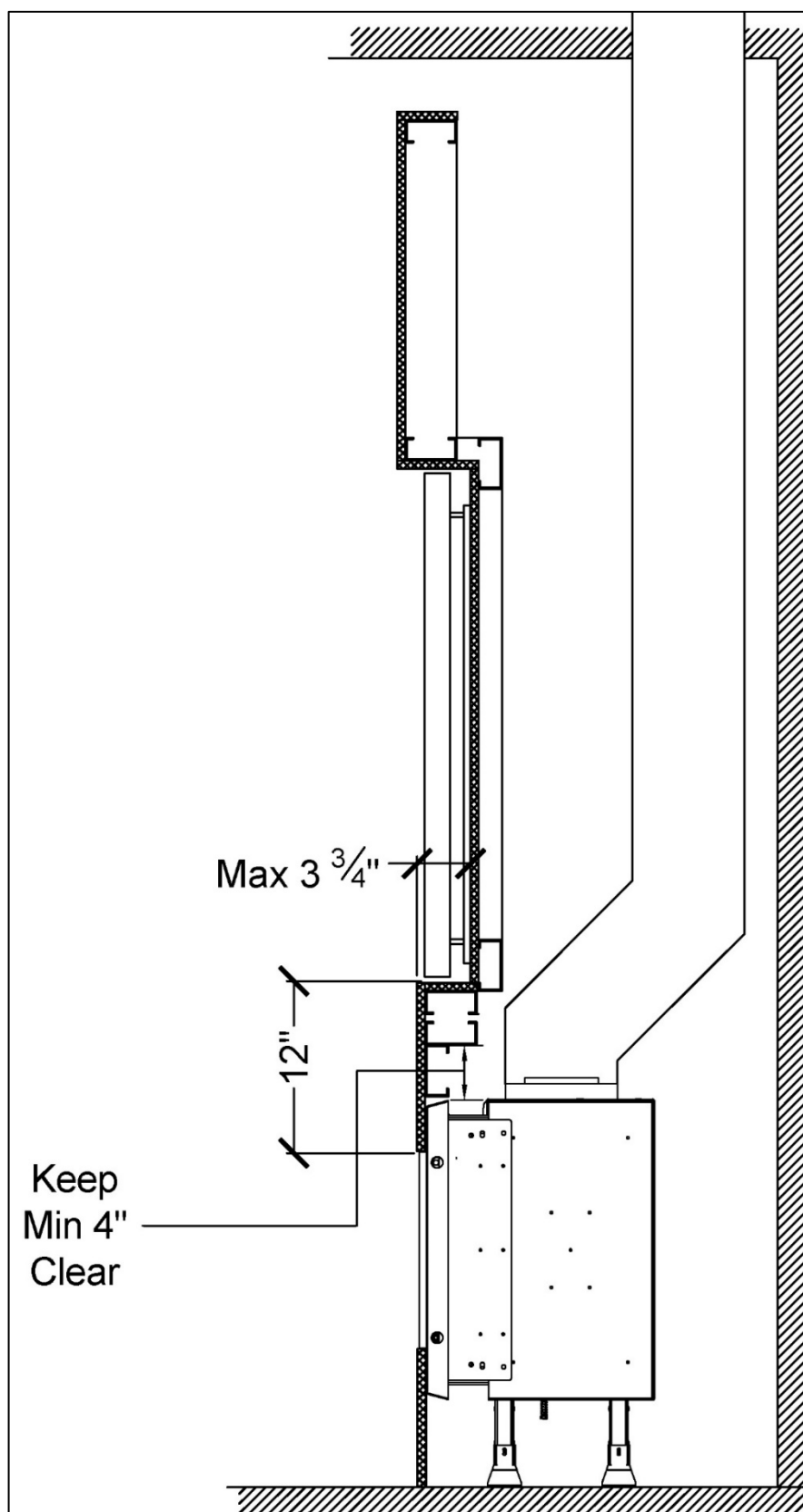


NOTE: Vent clearances must be maintained. See "General Clearances" section for details.

Recessed TV/Artwork

When the TV is mounted on a wall that recesses over the fireplace, the TV must be at least **12 inches** from the top of the fireplace glass viewing area.

At 12 inches above the fireplace viewing area, maximum possible recess is $3\frac{3}{4}$ inches. A deeper recess will interfere with required clearances to venting. Maximum possible recess increases at <12 inches above the viewing area when venting is offset (as shown in diagram below).



NOTE: Vent clearances must be maintained. See “General Clearances” section for details.

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.

Access Panel Size and Location Recommendations:

- Minimum of 10 inches x 10 inches in size
- Located within 36 inches of the pilot to the side or back of the fireplace (see "Routing the Gas Line")

The size and location of the access panel may vary, but in all cases, it must allow the technician to comfortably access and service the fireplace's gas and electrical components. These components are attached to the pilot on a flexible gas line and can be moved within 36 inches of the pilot (located at the center front of the burner).

For ease of access, move the fireplace's gas and electrical components as close to the access panel as possible. **If there is any distance between the access panel and the gas and electrical components, the access panel size must be increased accordingly.** Prior to installation, fireplace dealers/installers should work with the owner, builder, project architects and/or interior designers to determine the best size and location of their access panel.

If an access panel cannot be incorporated, the alternative method of servicing the gas and electrical components is through the fireplace. This procedure requires removing the glass panel(s) and interior design media, and lifting the grill, burner, and bottom pressure release valve. This will increase service time and difficulty. An access panel is always preferred. Fireplace dealers/installers are advised to consult with their clients regarding the advantages and disadvantages of each service option.

! NOTE: If local code requires an access panel, defer to local code requirements.

Chase Area Minimum

To ensure the convective heat within the chase passively moves to the heat release at an optimal rate, all parts of the interior of the chase must at least the same size as the fireplace heat release (see "Heat Release" section to determine your model's required heat release size) at size at any given point. To determine if your chase meets this requirement, use the following equation at the narrowest part of the chase.

Chase Area = (Chase Length x Chase Depth) – (Area of the Pipe)

Area of the Pipe:

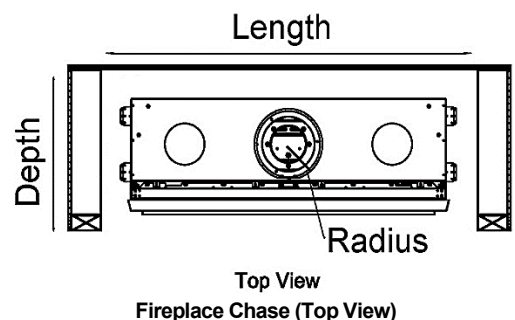
4"x6" venting = 28.27 in²

5"x8" venting = 50.27 in²

3"x5" venting* = 19.63 in²

*Used for Power Venting only

If the heat release is split into 25/75 portions due to an oversized ledge, the chase only needs to be the size of 75% of the heat release because 25% of the heat is already being released at the ledge (see "Ledge Detail" section below for details).



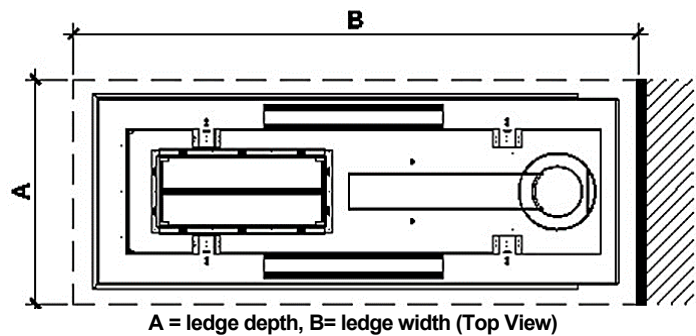
Recessed Partial Ledge

A ledge over the top of a fireplace that is less than 24 inches from the top of the fireplace viewing area must maintain a minimum of **12 inches from the top of the viewing area to the bottom of the building material. Entire structure must be non-combustible (framing and finish).**

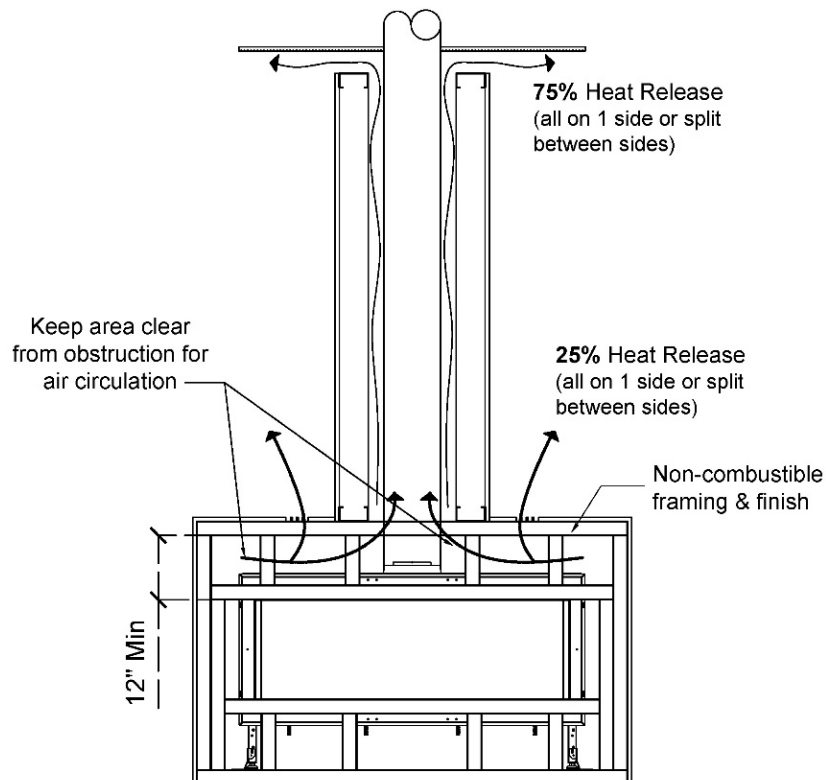
If ledge surface area exceeds the values shown in the chart below, the heat release must be divided between the ledge and the chase ceiling: 25% at the ledge and 75% at the chase ceiling. This is referred to as an oversized partial ledge (see diagram below).

Fireplace Series	Maximum Ledge Surface Area
40-75* (includes 31H)	$A \times B \leq 220$ sq. in.
90-130*	$A \times B \leq 340$ sq. in.
150-170	$A \times B \leq 410$ sq. in.
200	$A \times B \leq 520$ sq. in.
250	$A \times B \leq 580$ sq. in.

*Includes Curve & Island and 31H Series Fireplaces



Oversized Partial Ledge



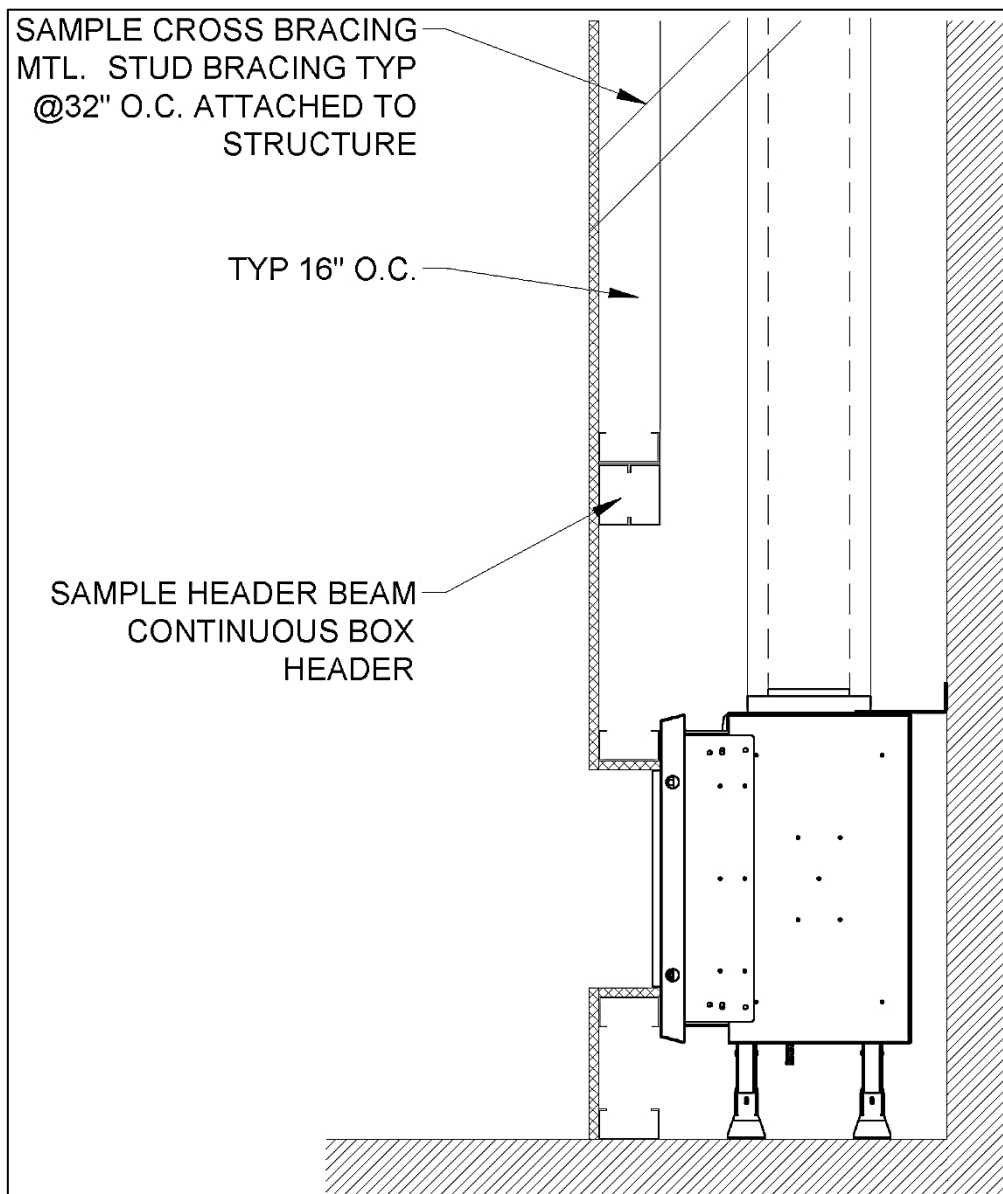
Oversized Partial Recessed Ledge Detail

NOTE: Chase area minimum requirements must be met throughout the entire fireplace chase. See "Chase Area Minimum" section above for details.

Structural Weight Support

The fireplace must not carry any structural weight. The framing must be supported by another surface. Consult with the project structural engineer and refer to your local building codes for proper wall support.

The following drawing shows a recommended approach to this type of installation. Please note that these drawings are not to scale. All fireplace drawings with correct dimensions are available on the Ortol website.



Finishing

The following diagrams show various finish applications. **Diagrams apply to both combustible and non-combustible finish material.**



IMPORTANT NOTES:

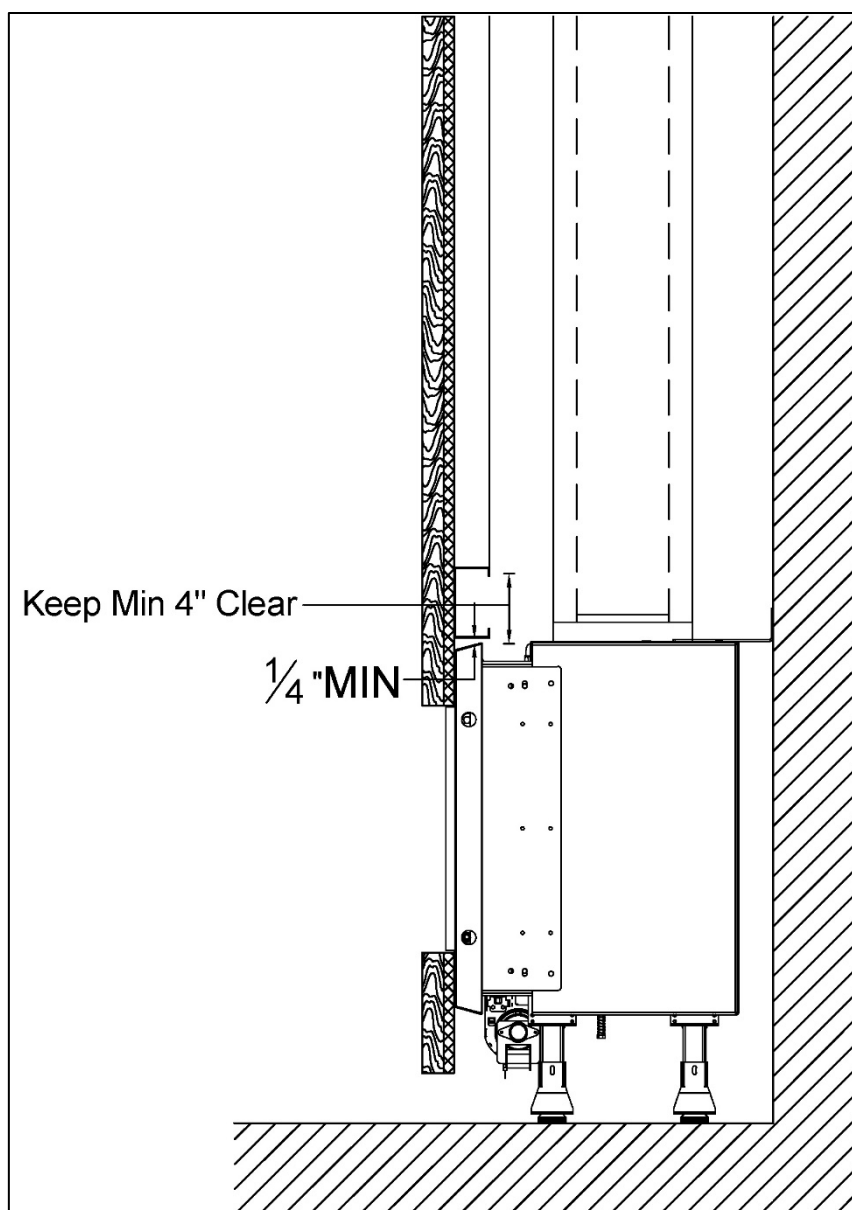
- All recessed installations must comply with applicable maximum overhang limit and side wall clearances. See "Maximum Overhang Depth" and "Clearance to a Side Wall" sections for details.
- No material is permitted to extend past the metal lip surrounding the fireplace viewing area. This area must be unobstructed to allow the heat barrier and inside glass panel to be removable.
- MANUFACTURED STONE: A minimum 2-inch recess is suggested. Consult stone manufacturer for clearance requirements.
- 5/8" DensGlass® Fireguard® Sheathing is an approved 5/8" Type X Drywall equivalent. This may be necessary for use with heavier finishes.



WARNING: Wood finish or floor/hearth extension may dry out, crack, warp or become discolored over time. Consult with floor manufacturer for required clearances to a heat source.

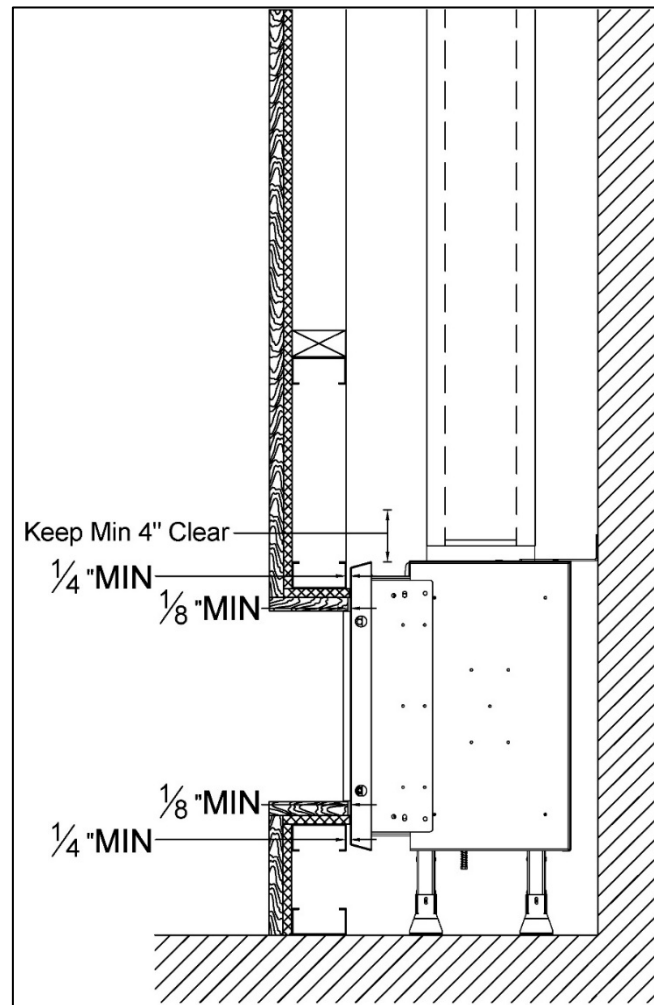
Flush Installation

Diagram applies to both combustible and non-combustible finish material.



Recessed Installation

Diagram applies to both combustible and non-combustible finish material. The finish must maintain at least a $\frac{1}{8}$ " clearance to the fireplace.



Maximum Overhang Depth

Overhang depth of a recessed fireplace must not exceed **12 inches**. Overhang depth is measured from the edge of the fireplace lip to the out-most part of the wall (including finish material). **Side overhang has no limit**. Finish material on the underside of the overhang may be combustible or non-combustible.

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.

Front (Long Side) Overhang	Side (Short Side) Overhang