

This framing guide 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.

# Combustible Framing Combustible Framing Non-Combustible Framing Non-

WARNING – MAINTAIN AIR FLOW CLEARANCE: Firebox top vent must have minimum 4" of clearance to any material achieve sufficient airflow. Failure to do so could result in improper fireplace operation, property damage, or physical injury. Review Installation Manual to ensure all clearances are followed.

Model	Framing	Dimension A	Dimension B	Dimension C	Dimension D	Dimension E
TR 90	Combustible	51 <sup>7</sup> / <sub>8</sub> "	46 <sup>1</sup> / <sub>8</sub> "	26 <sup>3</sup> / <sub>4</sub> "	Refer to pipe manufacturer's firestop dimensions	13 <sup>3</sup> / <sub>8</sub> "
	Non-Combustible	37 <sup>7</sup> / <sub>8</sub> "	44 <sup>7</sup> / <sub>8</sub> "	26 <sup>1</sup> / <sub>8</sub> "		N/A
TR 110	Combustible	54 <sup>3</sup> / <sub>8</sub> "	53 <sup>5</sup> / <sub>8</sub> "	27 <sup>3</sup> / <sub>4</sub> "		13 <sup>3</sup> / <sub>8</sub> "
	Non-Combustible	41 <sup>1</sup> / <sub>8</sub> "	52 <sup>3</sup> / <sub>8</sub> "	26 <sup>1</sup> / <sub>8</sub> "		N/A

# **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. 36" 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.
- ☑ Platform Height: Determine desired fireplace viewing area location on the wall. Average height of bottom of glass to the floor is 12"-24". Platform must be able to bear the weight of the fireplace. Platform can be constructed out of wood, concrete, metal, or any other solid materials (not required to be non-combustible). A platform is not required. The fireplace may sit directly on the floor. The floor has the same construction requirements as a platform.
- ☑ **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). A heat release at the top of the chase is required.
- ☑ Framing: Adhere to minimum framing dimensions (or greater). Keep min. 2" clearance from back and sides of the 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 ¹/₂" metal lip surrounding the fireplace viewing area to allow for glass removal.
- ☑ **5/8" 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 building with combustible framing or when hanging a TV/ Artwork above the fireplace, <sup>5/</sup><sub>8</sub>" Type X Drywall (or equivalent) is required on the inside of the fireplace chase. <sup>5/</sup><sub>8</sub>" Type X Drywall (or equivalent) may be fastened to the front face of the fireplace with 1" self-tapping drywall screws 16" on center a minimum of 2 <sup>1</sup>/<sub>2</sub>" from the metal lip (above the viewing area).
- ☑ **TV/Artwork:** TV/Art must be min. 12" above top of fireplace viewing area.  ${}^{5}/{}_{8}$ " Type X Drywall (or equivalent) is required on the inside of the fireplace chase for heat protection.
- ☑ **Gas Supply Line and Power Location:** Locate gas line to the lower left side of the fireplace. Add manual shut off according to local code. Power provided by single gang 120V outlet in same area as gas line.
- ☑ Access Panel: An access panel is built into the inner left side of the combustion chamber, allowing access to the gas and electrical components located within a compartment attached to the left side of the fireplace. An additional access panel is required for power-vented fireplaces, allowing access into the fireplace chase. 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.
- $\Box$  **Finishing:** For finishes flush to the fireplace, no clearances are required. For finishes where the fireplace is recessed to the finish, maintain  $\frac{1}{8}$  from the finish to the front face of the fireplace.

# **Framing**

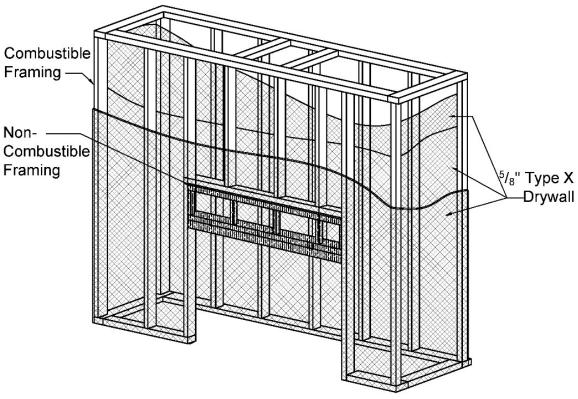
Fireplace chase may be framed with either combustible (typically wood studs) or non-combustible framing (typically metal studs). Any framing within 18 inches from the top of the fireplace glass (viewing area) must be non-combustible.

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 or be connected in any way to the fireplace, with the exception of  $\frac{5}{8}$  Type X drywall (or its equivalent). It may be fastened to the front face of the fireplace with 1-inch self-tapping drywall screws 16 inches on center, with a minimum of 2  $\frac{1}{2}$  inches from the metal lip (above the viewing area).

IMPORTANT: No material is permitted to extend past the <sup>1</sup>/<sub>2</sub>" metal lip surrounding the fireplace viewing area. This area must be unobstructed to allow the heat barrier and inside glass panel to be removable.

# <sup>5</sup>/<sub>8</sub>" Type X Drywall Requirements

Traditional series fireplaces require 5/8" Type X Drywall (or equivalent) on the exterior side (i.e., room-facing side) of the chase. When building with combustible framing, or installing a TV/Artwork above the fireplace, an additional layer of 5/8" Type X Drywall is required to line the inside of the chase as well.



### **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.

To raise the fireplace higher than standard height, build a platform to which the fireplace can be secured. 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. Material is not required to be non-combustible.

### **General Clearances**

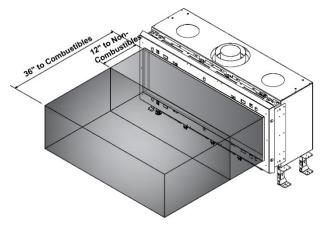
### Viewing Area Clearances

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 36 inches from fireplace viewing area.		

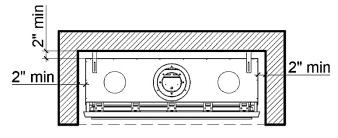
Materials (including combustible flooring and combustible finish material) are permitted below and around the viewing area clearance zone.

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.



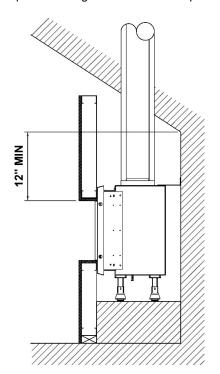
### Firebox Clearance

Maintain a 2-inch clearance from the back and sides of the fireplace to any material.



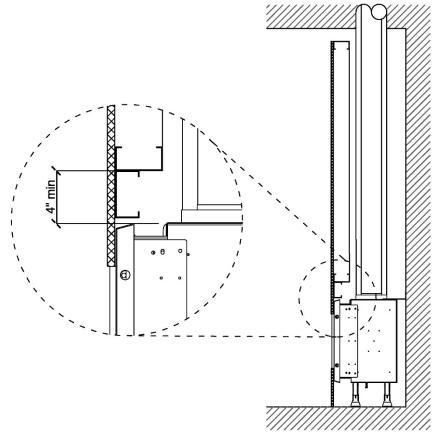
### Clearance to Ceiling

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.

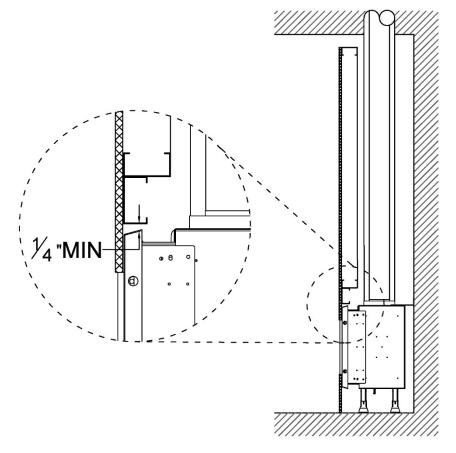


## Air Flow Clearance

A 4-inch clearance from the vent openings on the top of the firebox is required. Framing and/or building material is NOT permitted in this area. Doing so will block the air vents on the fireplace and cause the entire surrounding to overheat.

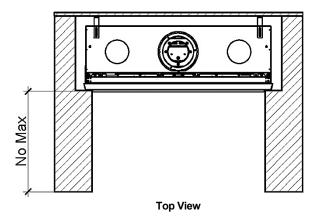


**Framing Clearance**Maintain a minimum <sup>1</sup>/<sub>4</sub> inches of space between the framing and the face of the fireplace.



### 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.



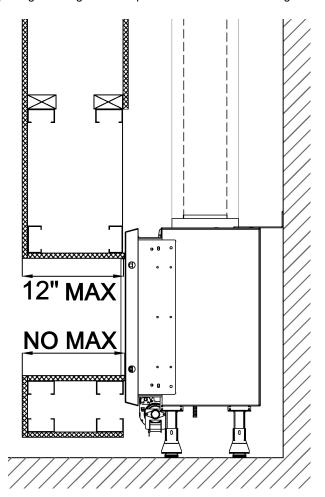


This information does not apply to a wall that is constructed in front of the viewing area. For materials that will be in front of a main or side viewing area, please refer to the "Viewing Area Clearances" section.

### Maximum Overhang Depth

Overhang depth of a recessed fireplace must not exceed the clearances shown in the diagrams 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 (draft stop). 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	
90-110	Minimum 124 sq. in. of free air space	Minimum 160 sq. in. of free air space	

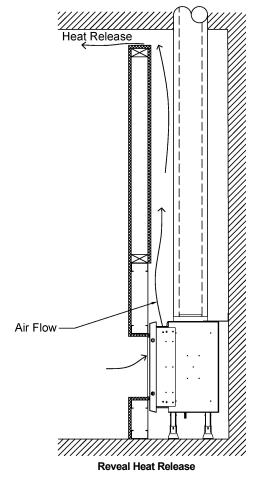
- For horizontal heat releases only, the height of the heat release must not exceed 1/3 of the width. (This does not apply to vertical heat releases.)
- The space the heat release vents into must have a minimum volume of 184 ft³.
- The heat release can be in the form of (but not limited to) a louvered 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 in the Installation Manual for details).
- The heat release cannot be vented outdoors as this would expose the fireplace to outdoor elements.

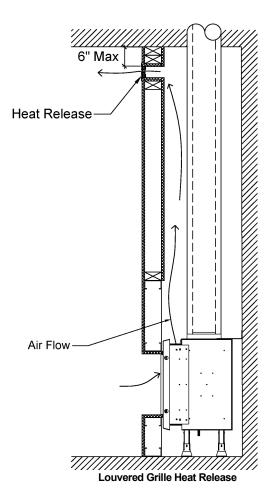


NOTE: An angled heat release is not permitted.

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

### **Horizontal Heat Release**

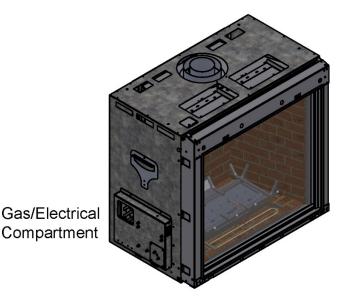


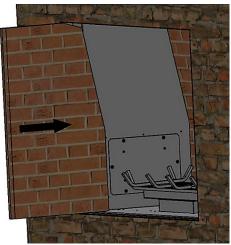


### **Access Panel**

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.

NOTE: An access panel at the fireplace is <u>required</u> for fireplaces with a power vent to allow access to the power vent control box for servicing. Recommended size is minimum 10"x10".





**Traditional Series Interior Access Panel**