

Ortal's Deep Dive Series

Topic: TV/Art Placement / Recesses / Wall Detail

Design Flexibility can easily be achieved when using an Ortal fireplace on a project. Ortal's Cool Wall Technology engineering provides limitless finish material options and designs such as TV/Art above, recessed shelves, niches, short chase designs, or overhangs without compromising safety or performance.

This guide outlines construction requirements and the recommended best practices for four popular wall features that can be safely and effectively achieved using an Ortal Fireplace.

1. TV/Artwork Placement
2. Recessed Shelf & Niche Features
3. Short Chase Designs with or without Power Venting
4. Overhang/Fireplace Recess

Important Note: Flush framing is not the only framing allowed - The information on how to achieve specific wall features mentioned in the Installation Manual is covered more in depth in this document.

- **Stone, Tile, Solid Surface Finish Materials should be used with the recommended non-combustible substrate from the fabricator / installer.**
- **Wood or Metal Finish Materials are recommended to be used over Type X drywall. Heat does not transfer as easily thru Type X which leaves the exterior finish at lower temperature than if using a cement-based substrate.**

1. TV/Artwork Placement

There are two primary factors to consider when placing a TV or artwork above an Ortal fireplace: **height clearance** and **wall construction**. Below details the basic requirements outlined in the installation manual as well as additional "best practice" suggestions.

- **Requirements:**
 - **Height Clearance**
 - The bottom of the TV (or artwork) must be placed at a minimum of 4 inches above the top of the fireplace viewing area for wall mounted.
 - When recessing a TV or artwork into the wall, the recess must start at a minimum of 12 inches above the viewing area.
 - **Wall Construction**
 - The wall surrounding the fireplace may be constructed with non-combustible (ie. metal studs or concrete) or wood framing.
 - A layer of 5/8" Type X drywall or non-combustible substrate is required on the framing before final finish materials are installed.
 - Fire-resistant plywood – is NOT approved in place of any substrate.

- **Best Practices:**

- Always follow the TV/electronics manufacturer guidelines for installation above heat sources. Ortal cannot guarantee electronics performance if warnings advise against installation near any heat source.
- For added heat protection:
 - Install a layer of 5/8" Type X drywall to the interior side of the framing. This provides space to run power and cabling within the wall space away from heat.
 - Use of mineral wool insulation can also be used to further reduce wall temperatures.
- A recess for the TV mount only can be constructed instead of creating a full recess for the entire TV.

Design Examples of TV/Artwork Installation Designs

There are a variety of ways to design the wall above an Ortal fireplace for TV/artwork installation.

Surface Mounted on Wall

- TV/art is surface mounted directly on the wall.



Recessed Above Fireplace

- TV is recessed into the wall cavity above the fireplace.



Framing Examples

- Wood framing with interior Type X – behind TV location



- Metal framing with Type X interior for Art / TV



- Metal framing with Type X interior- TV mount recess with plywood - Type X at interior – power isolated from chase



2. Recessed Shelf & Niche Feature

Recessed niches and shelves can be built directly above the fireplace or anywhere along the fireplace wall. By adhering to specific construction requirements, a recess can be safely incorporated over the fireplace while still maintaining the required heat release within the fireplace chase.

- **Requirements:**
 - **Height Clearance**
 - If the fireplace is installed flush with the wall at the viewing area, recess can begin a minimum of 12 inches above the viewing area.
 - If the fireplace has a recessed installation, the niche or shelf may begin lower.
 - If niche or shelf is recessing deep into the chase, the location of vent pipe should be considered.
 - **Additional Heat Release**
 - If a recessed shelf exceeds 1/3 of the area of the fireplace, an additional heat release opening at the shelf may be needed to prevent heat pocket.
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 - **Wall Construction**
 - Depending on the recess, non-combustible framing and finish may be required.
- **Best Practices:**
 - To ensure less heat from the backside of the recess, 5/8" Type X Drywall should be included on the interior of the wall space.
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Design Examples of a Niche, Recessed Shelf

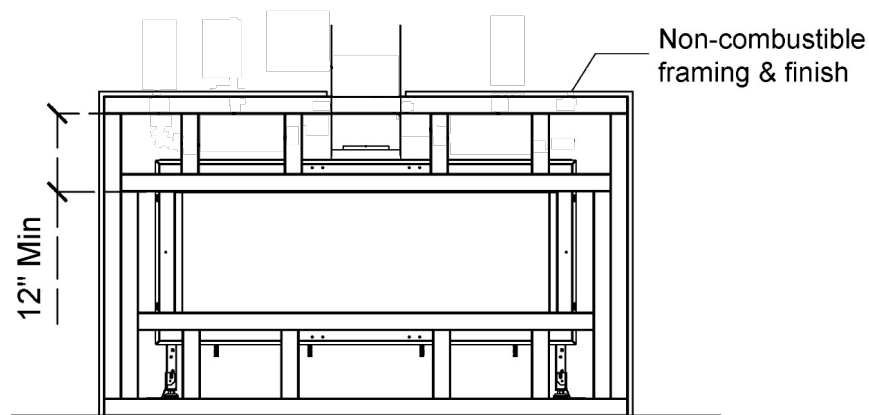


3. Short Chase with and without Power Venting

Short build chases are offer more possibilities to fireplace design and location. When paired with an Ortal Power Vent System, the chase can be as short as 23 ⁷/₁₆" from the top of the fireplace viewing area to the bottom of the framing.

Design Examples of a Short Build Chase

- **Requirements:**
 - The entire chase must be built with non-combustible framing and finishing.
 - The heat release is still required on a low-build chase. It can be located on the top of the chase, or out the front.
 - Important to note - a short chase will result in higher temperature of heat from the heat release than at a natural ceiling level. Best to confirm finish materials are rated for higher temps or use substrates that can help reduce temperature pass thru to finish.
Example: DensArmor Plus, calcium silicate board, etc.
- **Without – Power Vent**





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Short Build with Exposed Flue

- **With – Power Vent**

To achieve a short build chase without venting through the top, a Power Vent can be used to accommodate a 90-degree elbow immediately above the fireplace. The venting could then go across and up or travel below the floor to an outside wall.



Short Build chase examples With Power Vent

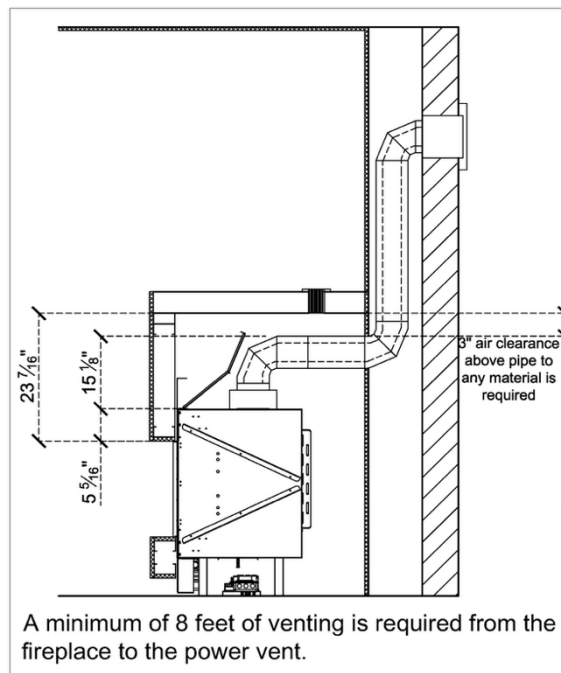


Image taken from the [Ortal Power Vent Manual](#).

- Framing examples – Short Build – non combustible (tube steel used for support of chase)



4. Overhang Feature (Recessed Installation)

Creating an overhang (recessed installation) provides

Requirements:

- **Overhang Location**
 - If the overhang is at the front face of the fireplace viewing area, the overhang can be up to 12 inches deep.
 - If the overhang is at one or more sides of a multi-sided fireplace's viewing area, there is no limit to the depth of the overhang.
- **Wall Construction**
 - The framing of the first 12 inches directly above the fireplace viewing area (front and sides, if multi-sided) must be non-combustible.
- **Best Practices:**
 - Using non-combustible framing throughout the construction of the chase will lessen the strain of expansion-contraction differences between wood and metal framing.

Design Examples of an Overhang (Recessed Installation)

- Front Overhang



- Overhang on Side(s)



- Framing Examples – recessed firebox for overhangs



5. Mantel installation

Mantels are NOT required for TV or Art above the fireplace.

Requirements:

- **Mantel Location**
 - If the mantel is at or above the viewing area, the depth can be up to 12 inches deep.
 - This applies to both Combustible or Non Combustible mantel material
- **Wall Construction with Mantel**
 - The wall must be covered with either a non-combustible substrate or Type X before installing mantel above the fireplace.

