

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.
- \square **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.

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.





Chase

Ceilind

Vertical Heat Release: Split Front

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

Vertical Heat Release: Full Side

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



Split Front Vertical Heat Release

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.





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

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 noncombustible (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 x B ≤ 220 sq. in.
90-130*	A x B ≤ 340 sq. in.
150-170	A x B ≤ 410 sq. in.
200	A x B ≤ 520 sq. in.
250	A x B ≤ 580 sq. in.

*Includes Curve & Island and 31H Series Fireplaces



A = ledge depth, B= ledge width (Top View)

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.

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 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.

















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