

## HEAT RELEASE OVERVIEW

The heat release opening is required for all fireplaces and allows warm air to passively flow back into the room. This controls the temperature of the surrounding walls, keeping them relatively cool, and allowing a TV or art piece to hang 12" from the glass opening regardless of fireplace size, style, or safety barrier.

#### **Heat Release Keys:**

- 1. Must remain open at all times.
- 2. Must be at the top of the enclosure and within 1'' 3'' of the non-combustible firestop.
- 3. Can be located on any interior side of the surround
- 4. If placed on the side of the surround it must be on both sides and sized equally
- 5. The heat release must be interior facing
- **6.** The heat release may be oriented horizontally or \*vertically.
  - \* Vertically oriented heat releases must be 30% larger than horizontally oriented heat releases and must be kept 3" below the firestop and 24" above the top of the fireplace.
- 7. Restriction created by finishing over opening must be considered when calculating open-air flow
- 8. All sizing is assuming the surround stops a minimum of 40" above the fireplace

Fireplaces sized 30" – 50" the vent area must be at least 100 square inches of open-air flow.

(\*130 square inches of open-air flow if vertically oriented)

Fireplaces sized 60" – 70" the vent area must be at least 140 square inches of open-air flow.

(\*182 square inches of open-air flow if vertically oriented)

Fireplaces sized **80" – 100"** the vent area must be at least **200 square inches of open-air flow**. (\*260 square inches of open-air flow if vertically oriented)

# NOTE

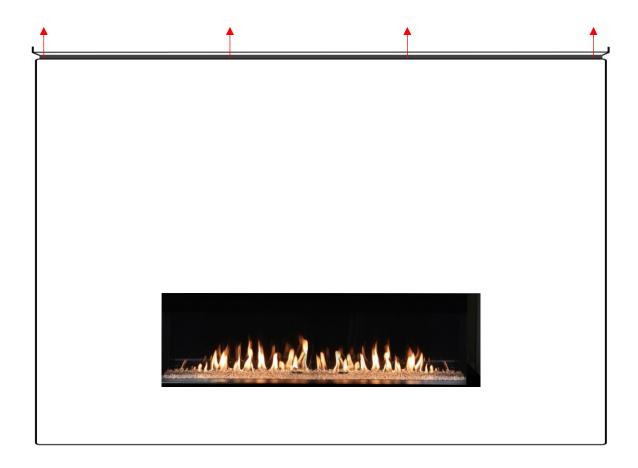
Any opening greater than the minimum size is highly recommended and will help reduce the temperature of the surrounding walls. Make sure a non-combustible fire stop is placed atop the inside of the chase and is framed in a way that does not allow any pockets of heat to be formed. All heat should be able to rise to the fire stop and freely flow out of the heat release opening into the room.



# **HEAT RELEASE EXAMPLES**

## SHADOW LINE

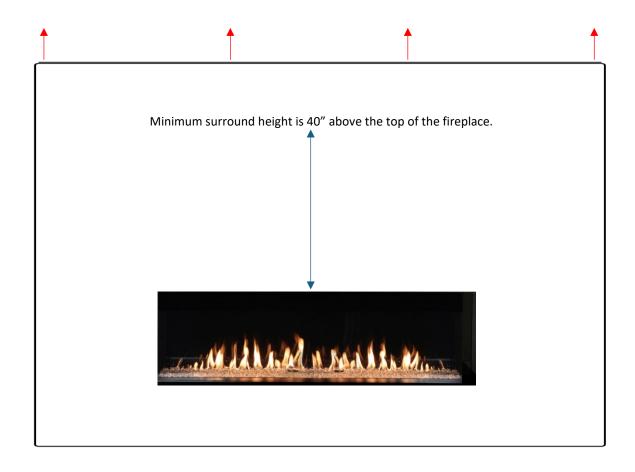
The shadow line heat release is implemented by dropping your surround 1'' - 3'', recessing your build back 3'' - 4'' then finishing to the ceiling. This will create a small L-shaped reveal at ceiling level where the portion of the reveal running parallel to the ceiling is left open across the length and/or sides of the surround.





#### DROP WALL

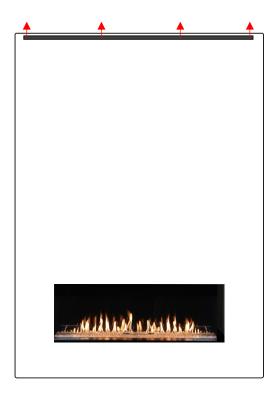
The drop-wall heat release is implemented by creating a surround that reaches the minimum ceiling level of 40" above the top of the fireplace, and instead of bringing the surround all the way to the ceiling you hold your entire surround from the ceiling, opening the top of the surround to allow heat to rise out of the top and into the room.

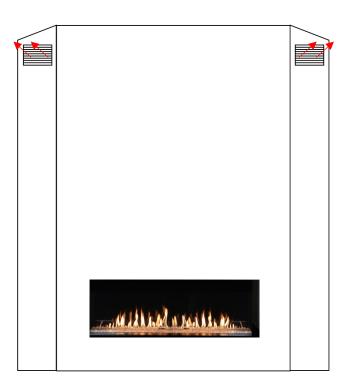




#### LINEAR SLOT OR LOUVERED GRATE

The linear slot or louvered grate heat release is implemented by creating an opening in your fireplace surround within 1'' - 3'' of the non-combustible firestop which meets the open air-flow requirements and allows the heat to enter the room through the opening provided.





# **NOTE**

Once you understand we use natural air flow to cool the area around the fireplace, you'll see there are many ways to design an effective heat release. Our manual can't show every possibility, but if you have a design idea, please contact us. We're happy to approve it for you.