

Installation Reference Guide



Minimum Framing Dimensions



Note: Vent size = Co-axial 5 x 8"

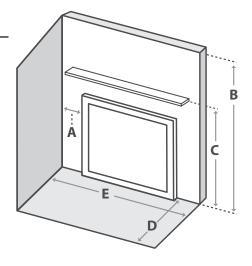
Clearance from WOOD STUD ROUGH OPENING See 20" (508mm)

C-16873

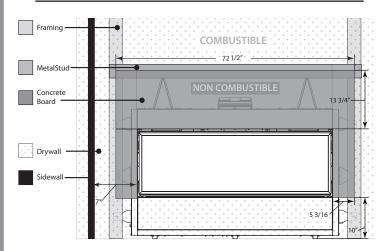
Clearance to Combustibles

A - Finishing edge to side wall	7"	229mm
B - Minimum clearance to enclosure ceiling	72"	1829 mm
C - Minimum clearance to mantel height	See Chart	See Chart
D - Front of door to edge of floor protection	0"	0 mm
E - Minimum alcove width	76"	1930 mm

1" (25mm)



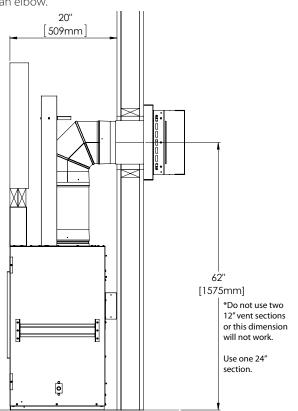
Non-Combustible Board Placement



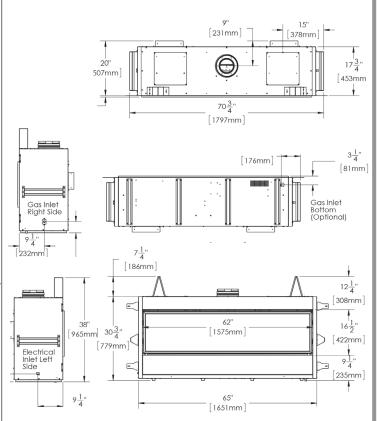
Note: Non-Combustible board not required when CSS is activated.

Minimum Venting Requirements

Minimum permitted venting is shown below. The framing height to the center of the thimble is 62". Minimum venting must include a 24" vertical section and a 90 degree elbow which is then terminated horizontally. For a vertical termination please follow the vent pipe manufacturer's installation instructions for vertical vent termination framing. A minimum of 1 in. (25 mm) clearance on all sides of the vertical vent pipe must be maintained. For every 12" of horizontal run there must be a 1/4" of rise. 1" of clearance between framing and venting must be maintained at all times. 2" above the venting and 3" above an elbow.

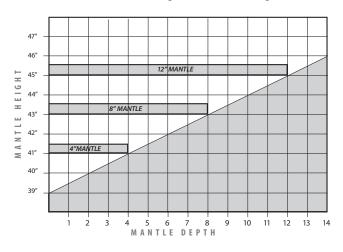


Fireplace Dimensions



Mantle Clearances

Mantle graph dimensions are measured from the bottom of the fireplace, if you wish to reference the mantle height from the tiling edge subtract 15 inches (381mm) from the mantle height depicted on the graph. If you plan to install a TV above your fireplace refer to the final page of this guide as well as the appropriate sections of the owner's manual for available options. It is acceptable to install a combustible mantel over top of the non-combustible board. If you are activating the Cool Surface System you are eligible to subtract 12" (305mm) from the mantel height shown in this diagram.



OPTIONAL STEP Cool Surface System (CSS)

Option 1: Front Discharge (flush wall installations) - Construct the framing in a way that provides a **minimum 65" (1651mm) x 2" (50.8mm) opening** at the top of the facing wall. It is essential that these dimensions are respected and not deviated away from them when using combustible materials inside or outside the chase (see Figure 1).

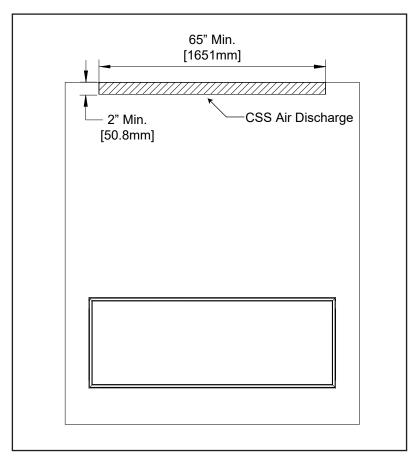
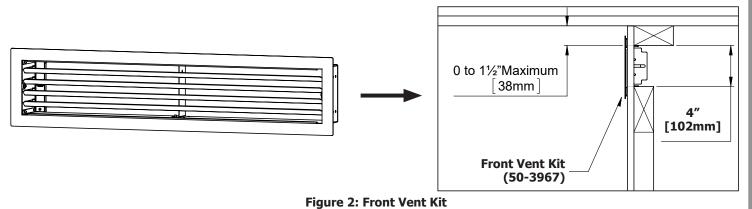


Figure 1: CSS Front Discharge

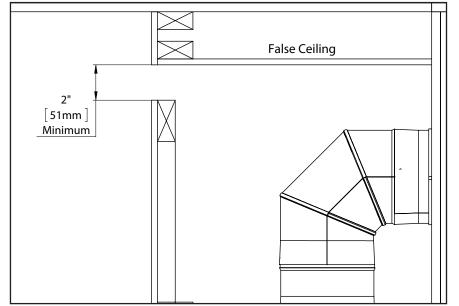
Option 2: Front Vent Kit (50-3967) - If desired, an optional Front Vent Kit may be used to accentuate the front discharge (figure 2). This installation will also cover the edge of the finishing material at the cutout. A **64** ³/₄" **[1644mm] x 4**" **[102mm] framed opening** will be required. The top of the cutout cannot be more than 1 1/2" [38mm] from the top of the chase. Refer to the Front Vent Kit installation manual for further instructions and details.

Note: If you wish to construct the CSS air discharge part way up a tall wall then it is essential to build a false ceiling inside the chase at the desired height to direct the rising heat out of the gap.



OPTIONAL STEP Cool Surface System (CSS)

Optional: False Ceiling - If your ceiling dimension is greater than the minimum required height you may want the CSS discharge lower on the wall. To do this a false ceiling is required to properly evacuate the heat from the chase (figure 3).



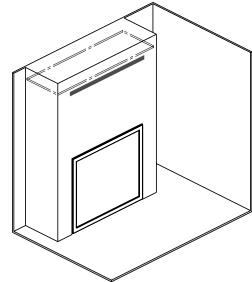


Figure 3: False Ceiling

Figure 4: False Ceiling - Iso View

Option 3: Side Discharge (built-out installations) - The framing can also be constructed in a way that provides two side vents as shown in Figure 5. The size of the side vents must provide a minimum open area equal to the area provided by the front CSS discharge shown in Figure 1 (i.e. $2 \text{in } \times 65 \text{in} = 130 \text{ in}^2$). For example - 4" [102mm] x 16.25" [413mm] x 2 Vents = 130 in²

Alternatively, the **optional Side Vent Kit (50-3950)** may be used to accentuate the side discharges. Refer to the Side Vent Kit installation manual for further instructions and details.

- Side CSS openings must be at least 60" (152 cm) away from the nearest fire sprinkler head.
- A wall directly in front of any side CSS opening must be at least 16" (406mm) away

Note: If you wish to construct the CSS air discharge part way up a tall wall then it is essential to build a false ceiling inside the chase at the desired height to direct the rising heat out of the gap. See above.

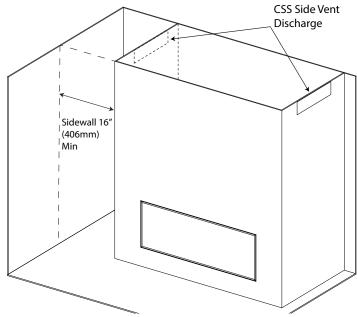
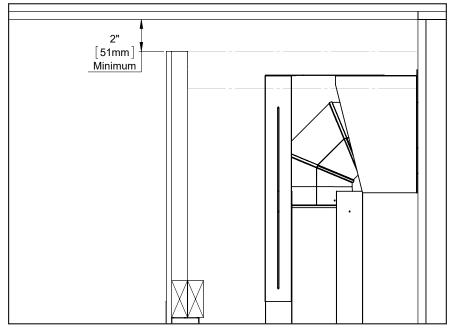


Figure 5: CSS Side Discharge

OPTIONAL STEP Cool Surface System

Option 4: Open Chase / Shadow Line (for built-out installations) - This could be considered the most discreet option when considering the CSS. The chase must be constructed in a way that stops short of the ceiling, leaving it totally vented above. Minimum framing dimensions must be followed when constructing this option and not to deviated from them when using combustible materials.

Note - Chase cannot be open to joists or rafters above.



2" MIN (51mm) Min

Figure 5: Open Chase / Shadow Line

Figure 6: Open Chase - Iso View

TV INSTALLATION Cool Surface System

If you are planning to mount a TV above your fireplace some considerations must be made to ensure it is protected from the heat.

During testing temperatures did not exceed 121°F (49°C) midway up the front wall (see figures on right). There is no quarantee that these temperatures will not harm the longevity of your TV. Make sure to consult your TV manufacturer's specifications to find the maximum allowable operating temperature. Since every home and installation is unique, temperatures should be verified at the time of install if possible. If desired, front wall temperatures can be lowered to 104°F (40°C) with the use of a mantle (see figure 8). Refer to the Mantle Clearances section on the first page of this guide. A TV should not be installed if temperatures exceed the manufacturers maximum allowable temperature.

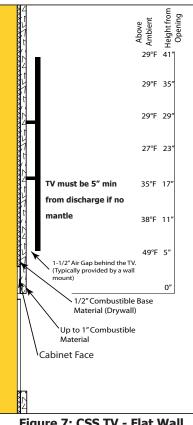


Figure 7: CSS TV - Flat Wall

