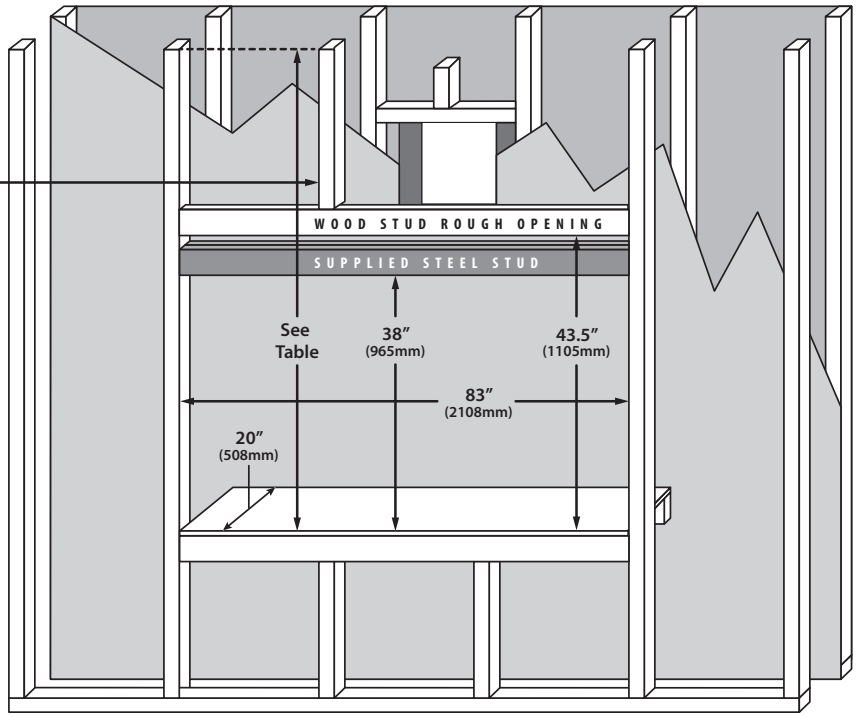
C-17441

C72I-4 FIREPLACE

Installation Reference Guide

REFER TO OWNER'S MANUAL FOR SPECIFIC INSTALLATION REQUIREMENTS AND ADDITIONAL PRODUCT INSTRUCTIONS

Minimum Framing Dimensions

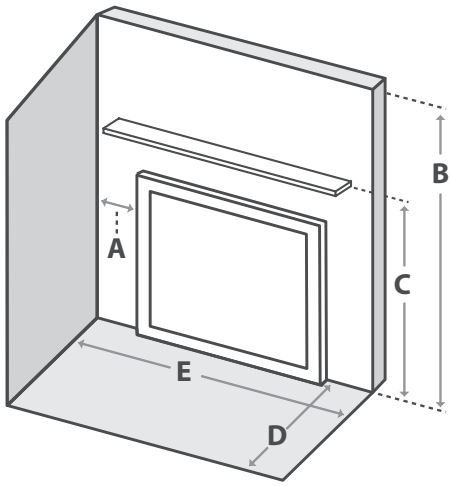


Depth	20"	508 mm
Width	83"	2108 mm
Header Height	38"	965 mm
Rough Opening Height	43.5"	1105mm
Enclosure Ceiling (non-CSS)	84"	2134 mm
Enclosure Ceiling (Ducted CSS)	91"	2310mm
Enclosure Ceiling (Non- Ducted CSS)	96"	2438mm

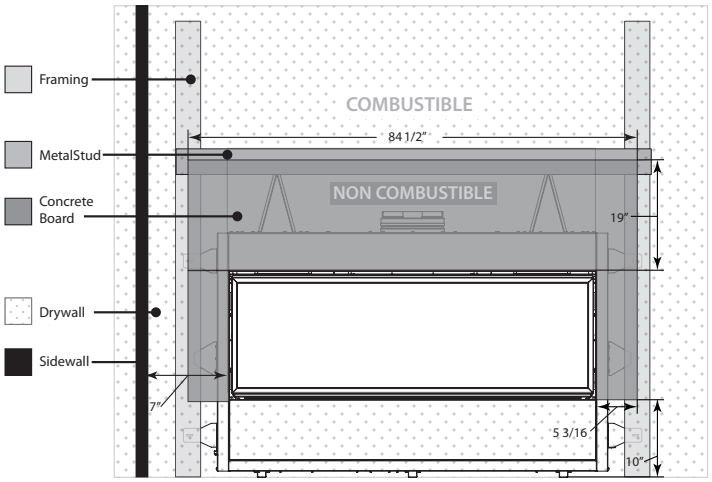
Note: Vent size = Co-axial 5 x 8"

Clearance to Combustibles

A - Finishing edge to side wall	7"	229mm
B - Minimum clearance to enclosure ceiling	84"	2134 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	88"	2235 mm



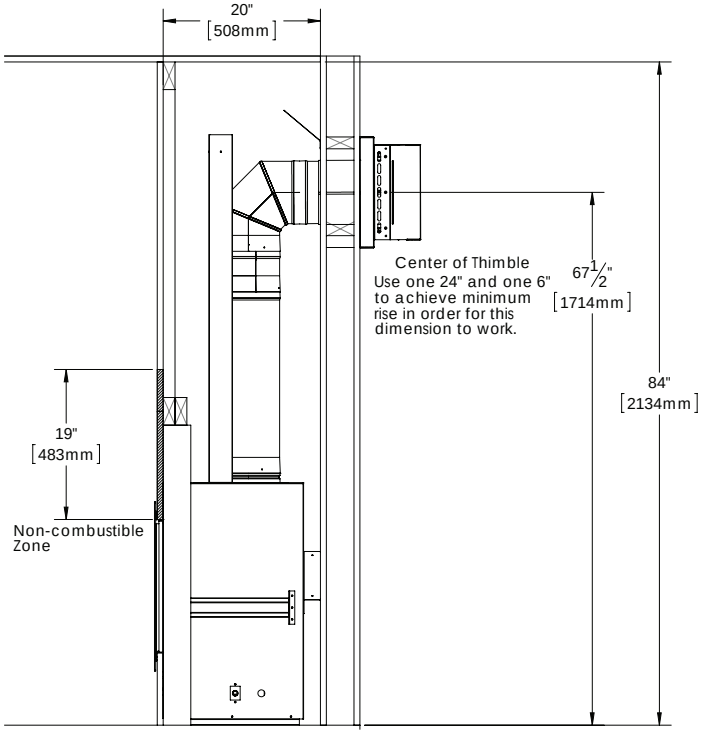
Non-Combustible Board Placement



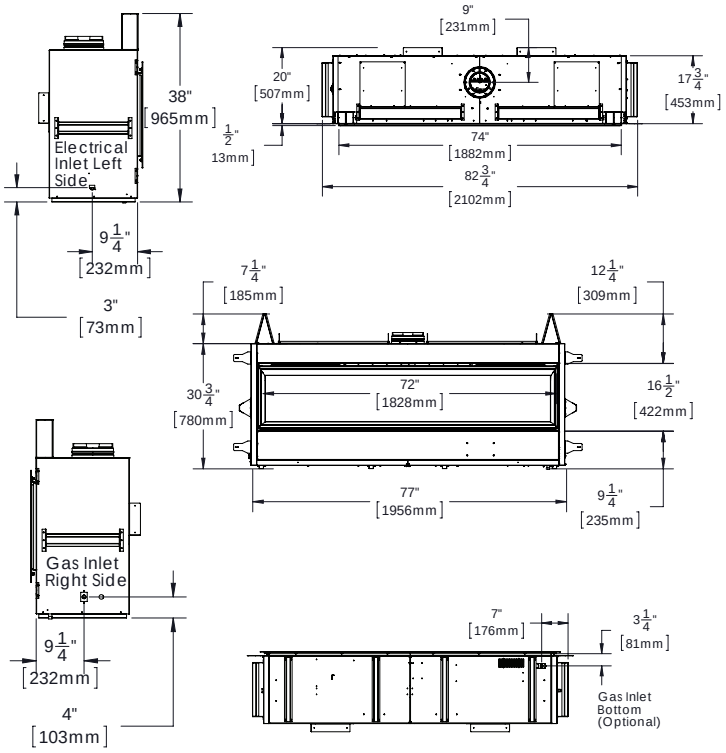
Note: Non-Combustible board not required when CSS is activated / used.

Minimum Venting Requirements

Minimum permitted venting is shown below. The framing height to the center of the thimble is 67.5". Minimum venting must include a 24" & 6" 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.

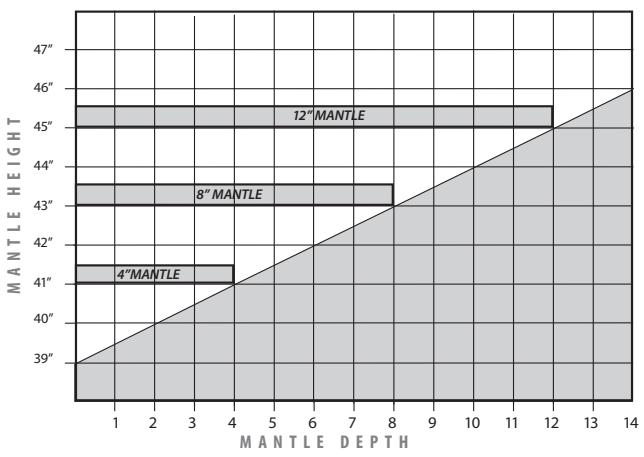


Fireplace Dimensions



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) - Non Ducted

Option 1: Front Discharge (flush wall installations) - Construct the framing in a way that provides a **minimum 77" (1956mm) 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).

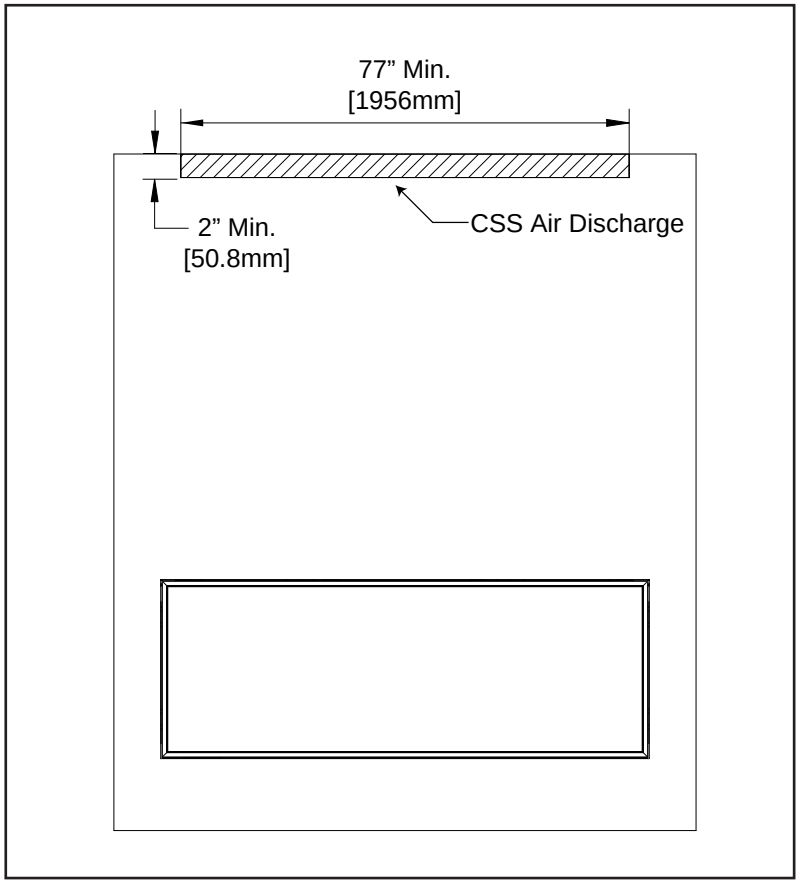


Figure 1: CSS Front Discharge

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 ¾" [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.

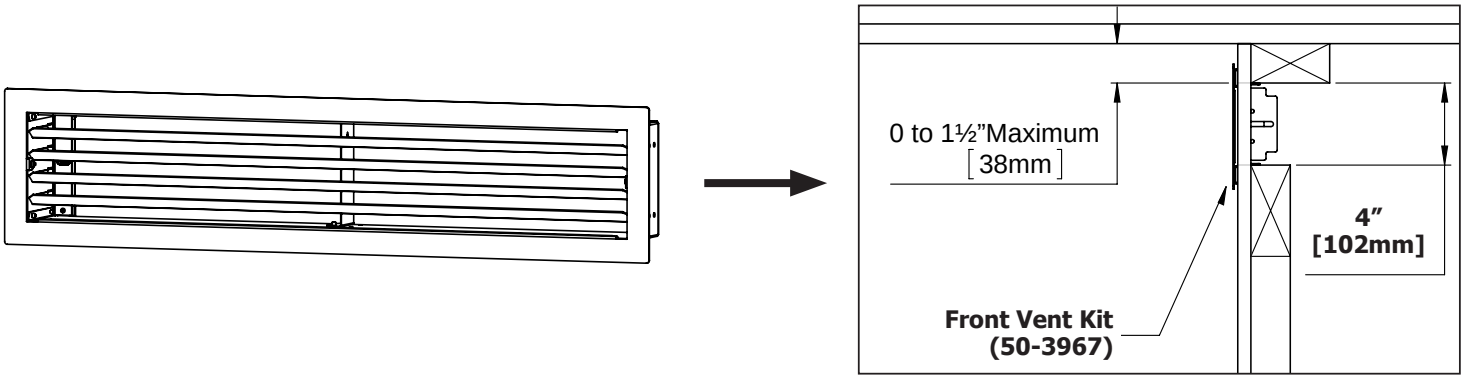


Figure 2: Front Vent Kit

OPTIONAL STEP Cool Surface System (CSS) - Non Ducted

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).

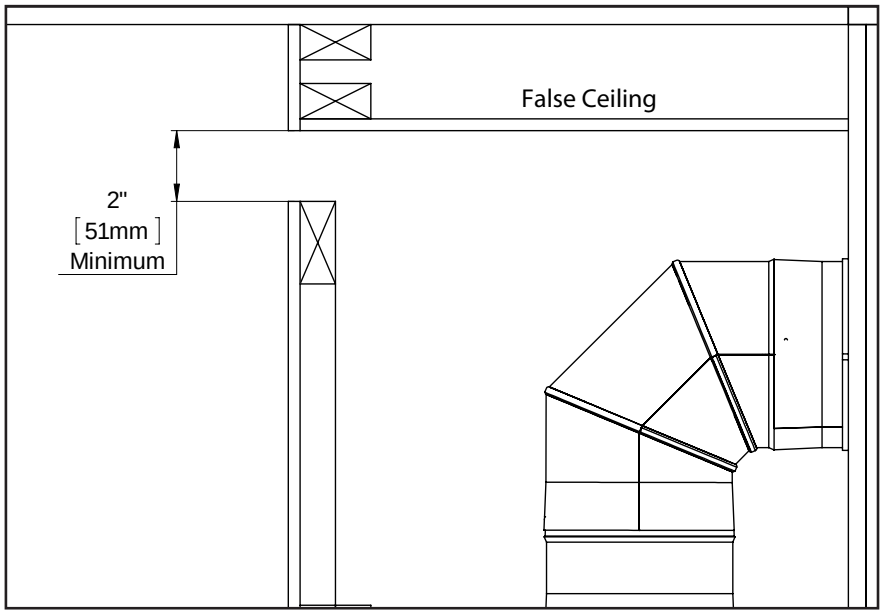


Figure 3: False Ceiling

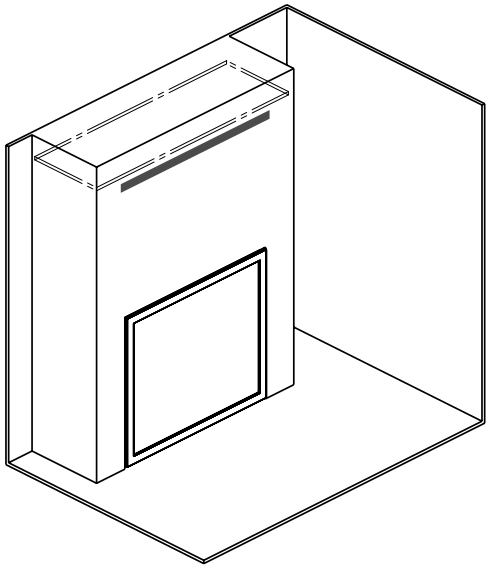


Figure 4: False Ceiling - Iso View

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. 2in x 77in = 154 in^2).
For example - 5" [127mm] x 15.5" [394mm] x 2 Vents = 155 in^2
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 a minimum 13" (33 cm) wide.
- 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.

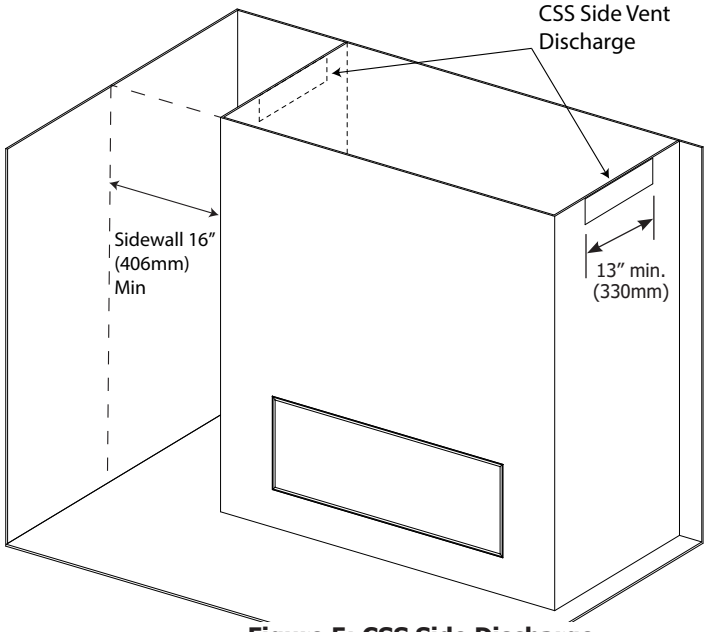


Figure 5: CSS Side Discharge

OPTIONAL STEP Cool Surface System (CSS) - Non Ducted

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.

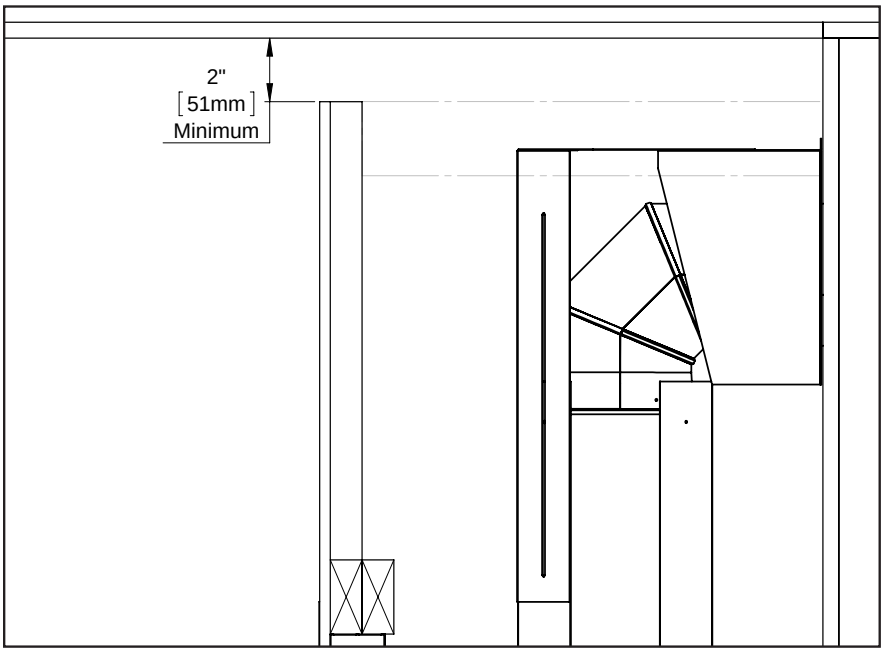


Figure 5: Open Chase / Shadow Line

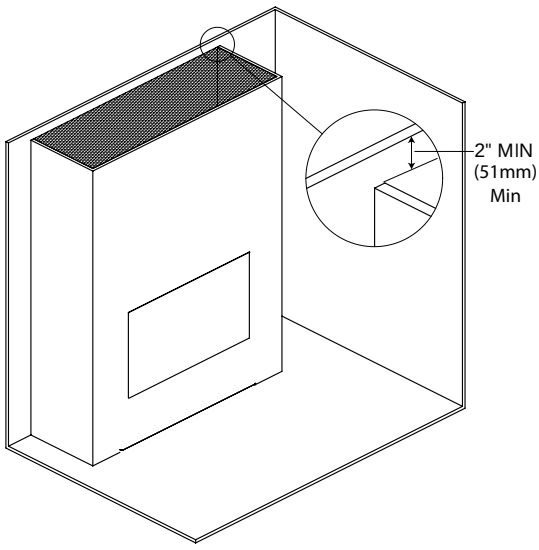


Figure 6: Open Chase - Iso View

OPTIONAL STEP Cool Surface System (CSS) - Ducted

Option 1: 50-4131 C72 CSS Front Vent Kit - For installations where CSS is desired but the lower ceiling height of 91" is required. See installation guide of 50-4131 for more detailed information. Ducting not included.

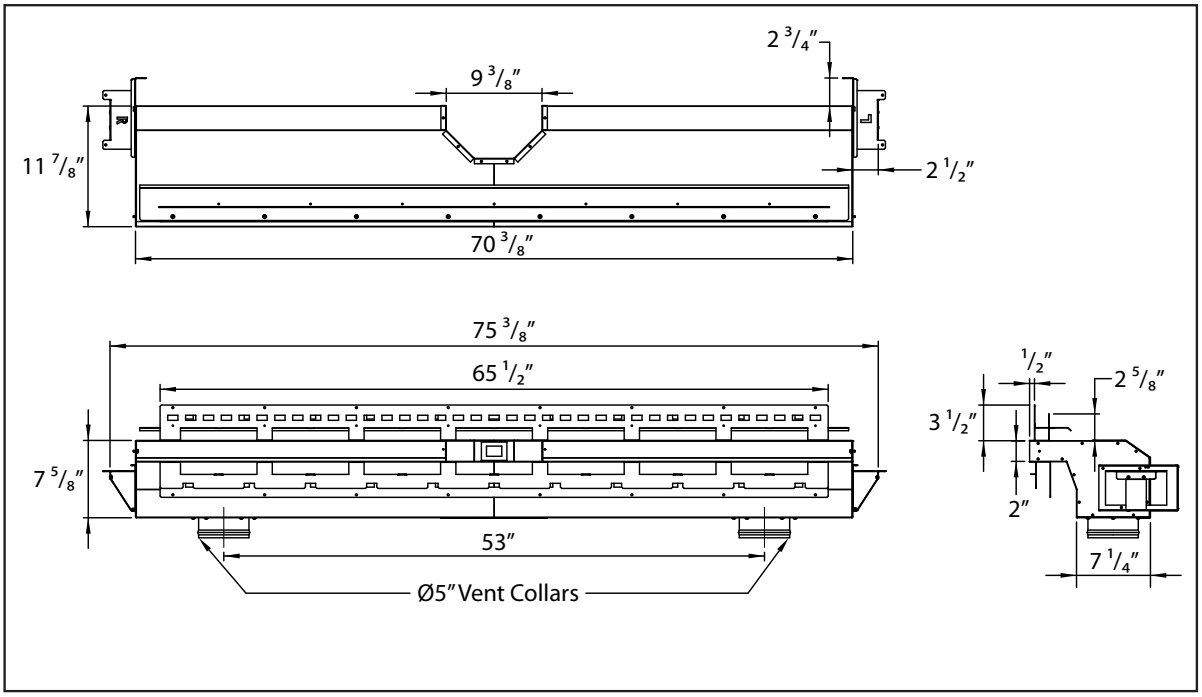


Figure 7: C72 CSS Front Vent Kit - Dimensions

OPTIONAL STEP Cool Surface System (CSS) - Ducted

Venting Clearances - Front Vent

Shown here are the minimum framing and clearances for the CSS when the fireplace is installed with the minimum allowable vent length:

Min. Ceiling Clearance from top of CSS outlet = 4" (10.2 cm)
Min. Ceiling Clearance in wall from top of CSS Body = $5\frac{5}{8}$" (14.3 cm)
CSS Body Min. Rear standoff = $2\frac{3}{4}$" (69.8 cm)

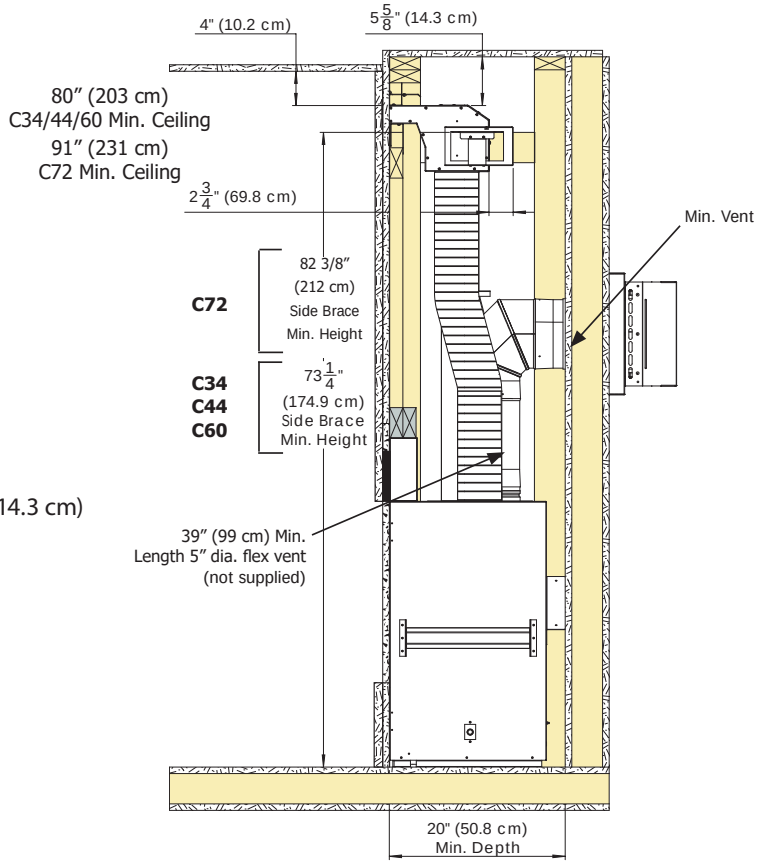


Figure 8: C72 CSS Front Vent Kit - Min. Install

Option 2: 50-3455 C-Series CSS Side Vent Kit - For installations where CSS is desired but the lower ceiling height of 91" is required. The Side Vent Kit may be installed in a horiztonal (shown below) or vertical orientation. See installation guide of 50-3455 for more detailed information. Ducting not included.

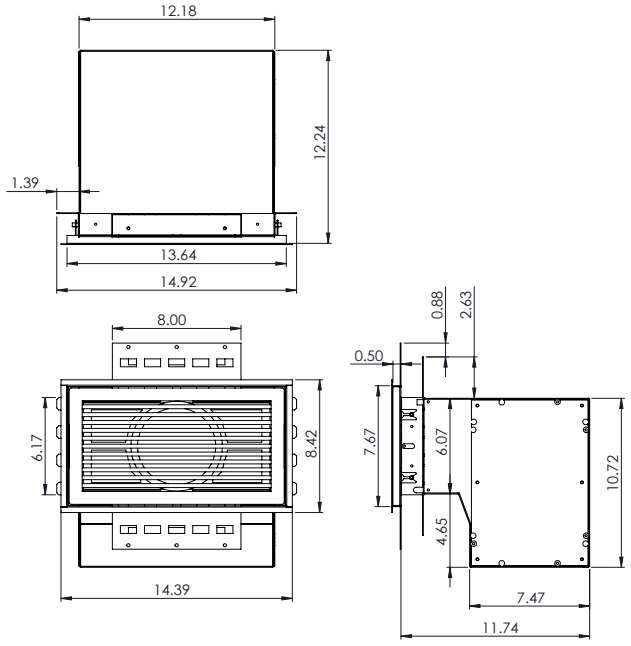


Figure 8: C-Series CSS Side Vent Kit - Dimensions

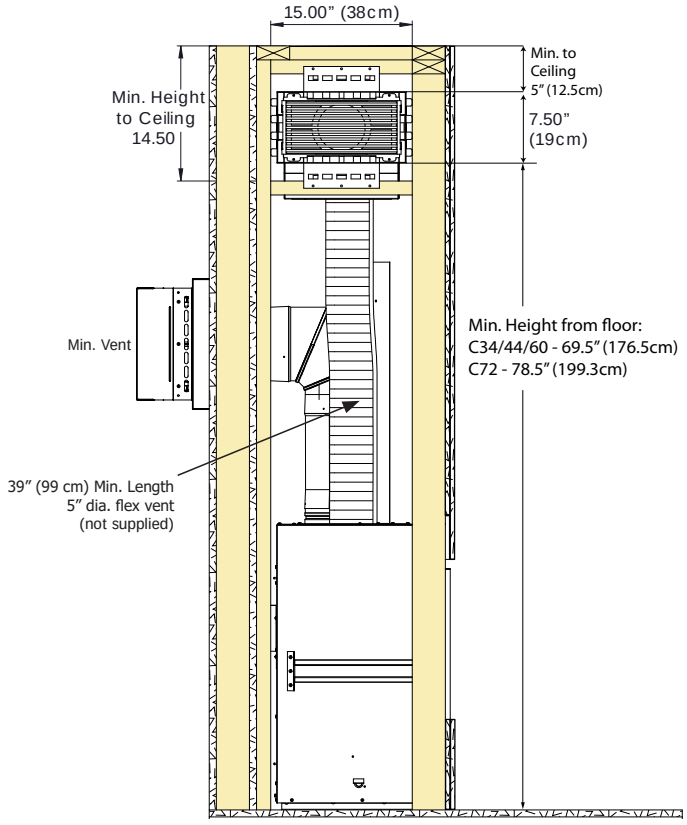


Figure 9: C72 CSS Side Vent Kit - Min. Install

TV INSTALLATION Cool Surface System (CSS)

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 guarantee 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 11). 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.

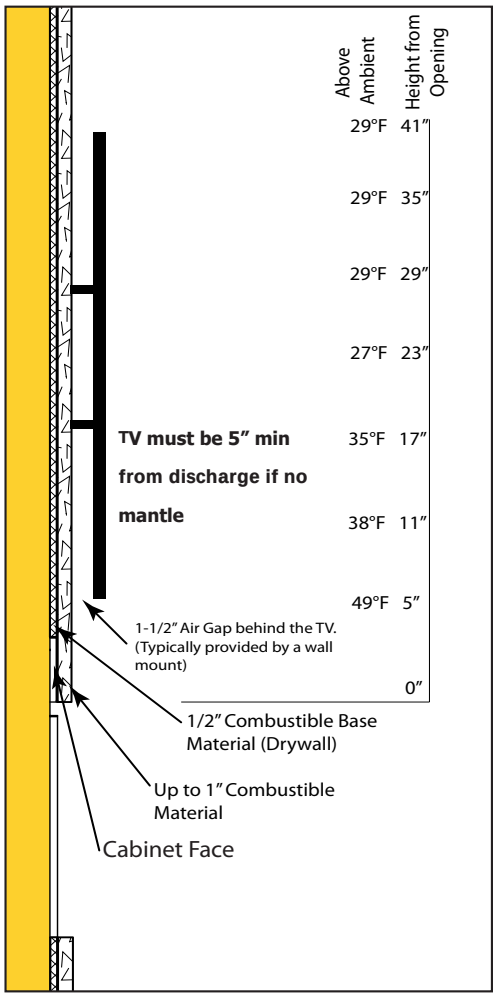


Figure 10: CSS TV - Flat Wall

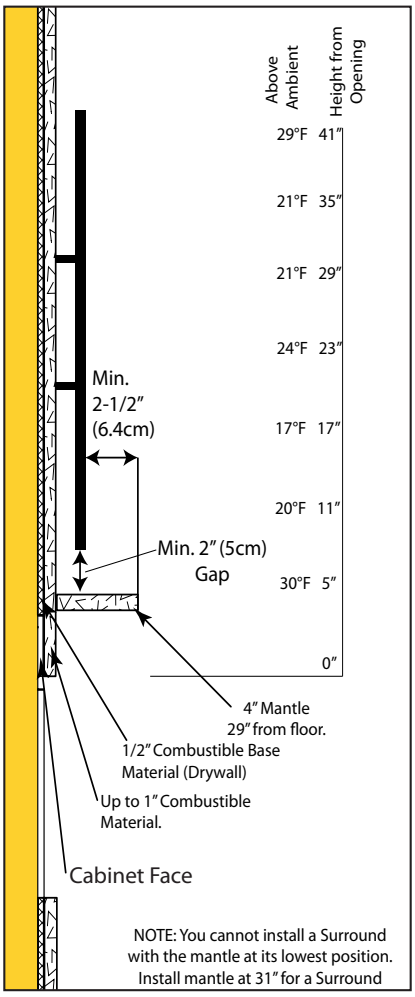


Figure 11: CSS TV - Mantle