



**MUST READ BEFORE**

**FRAMING**



**IMPORTANT INFORMATION**



EST. 2004

ontario hearth ltd.

**Regency City Series 50**

CV50E-NG / CV50E-LP

**FRAMING**

**DIMENSIONS**

**SPECIFICATIONS**

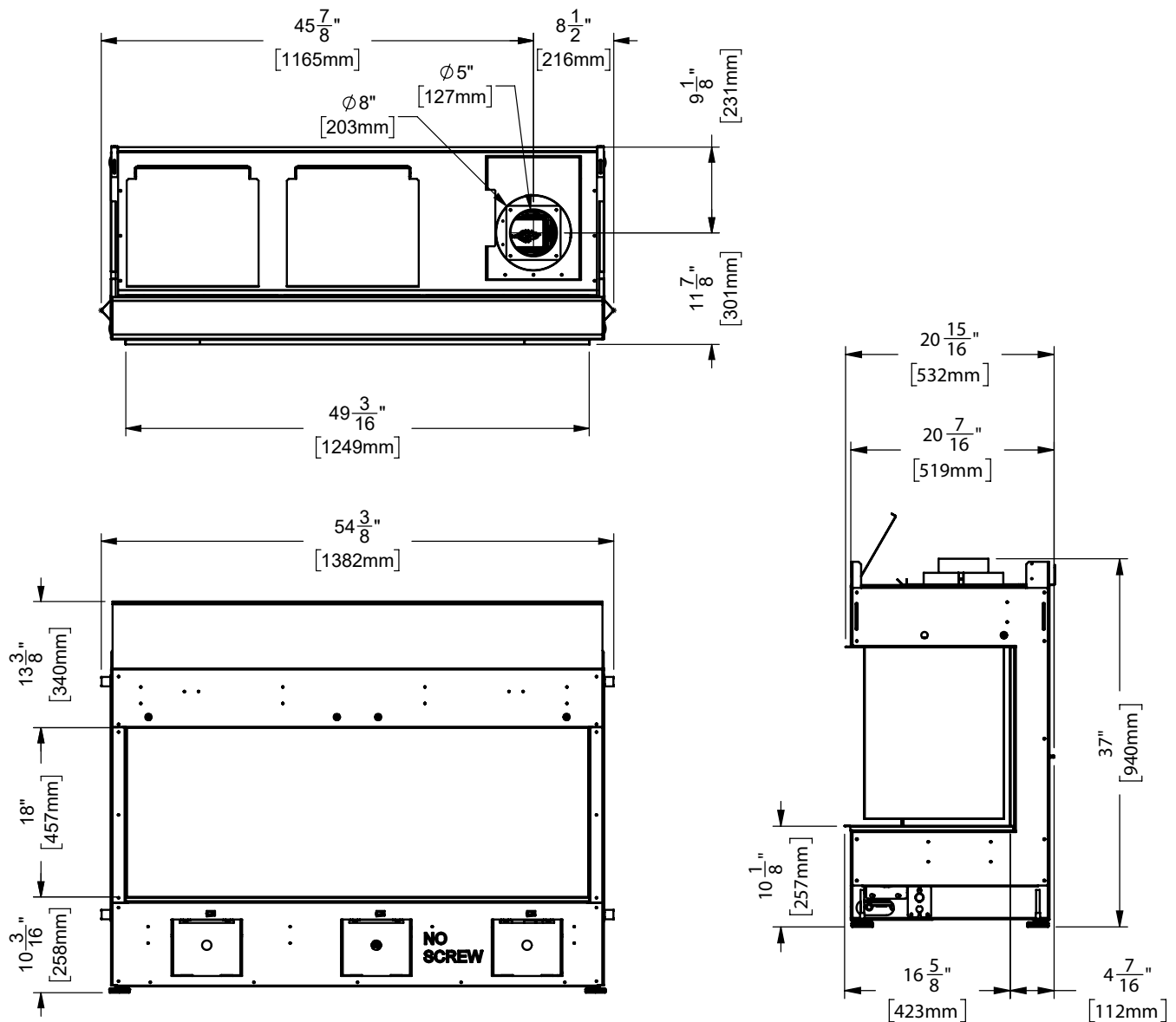
**HEAT RELEASE REQUIREMENTS**

**QR LINK FOR**

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**OF SPECIFICATIONS:**

## Dimensions



Note: Height Dimension is taken with leveling legs fully inserted and may vary depending on the height of the leveling legs, when unscrewed or extended.

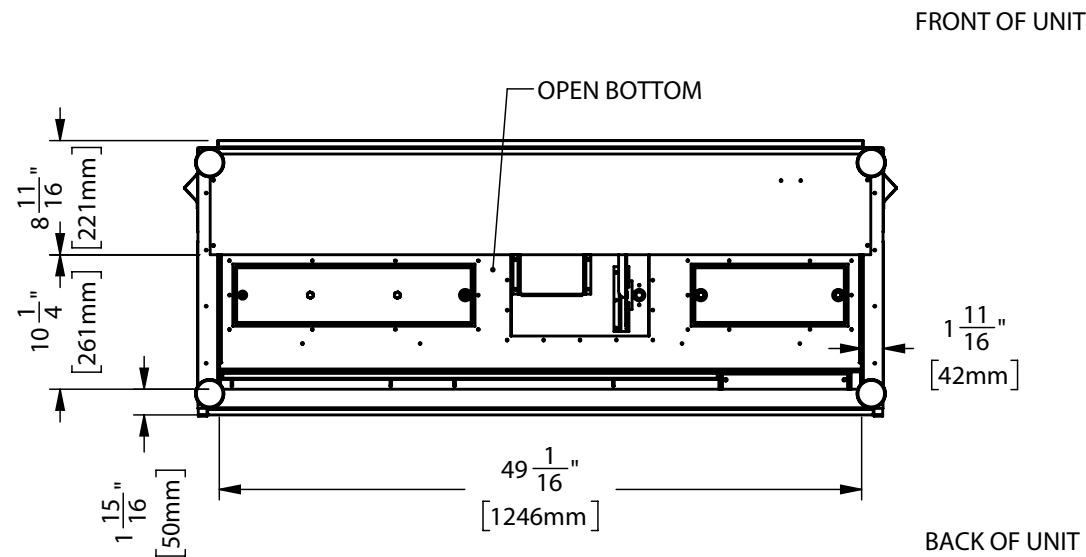
Dimensions will appear as (inches)" / (metric) mm throughout this manual. The inches are rounded to the nearest 1/16" when converted, when greater accuracy is required, use the metric dimensions.

Note: These units are non-load bearing.

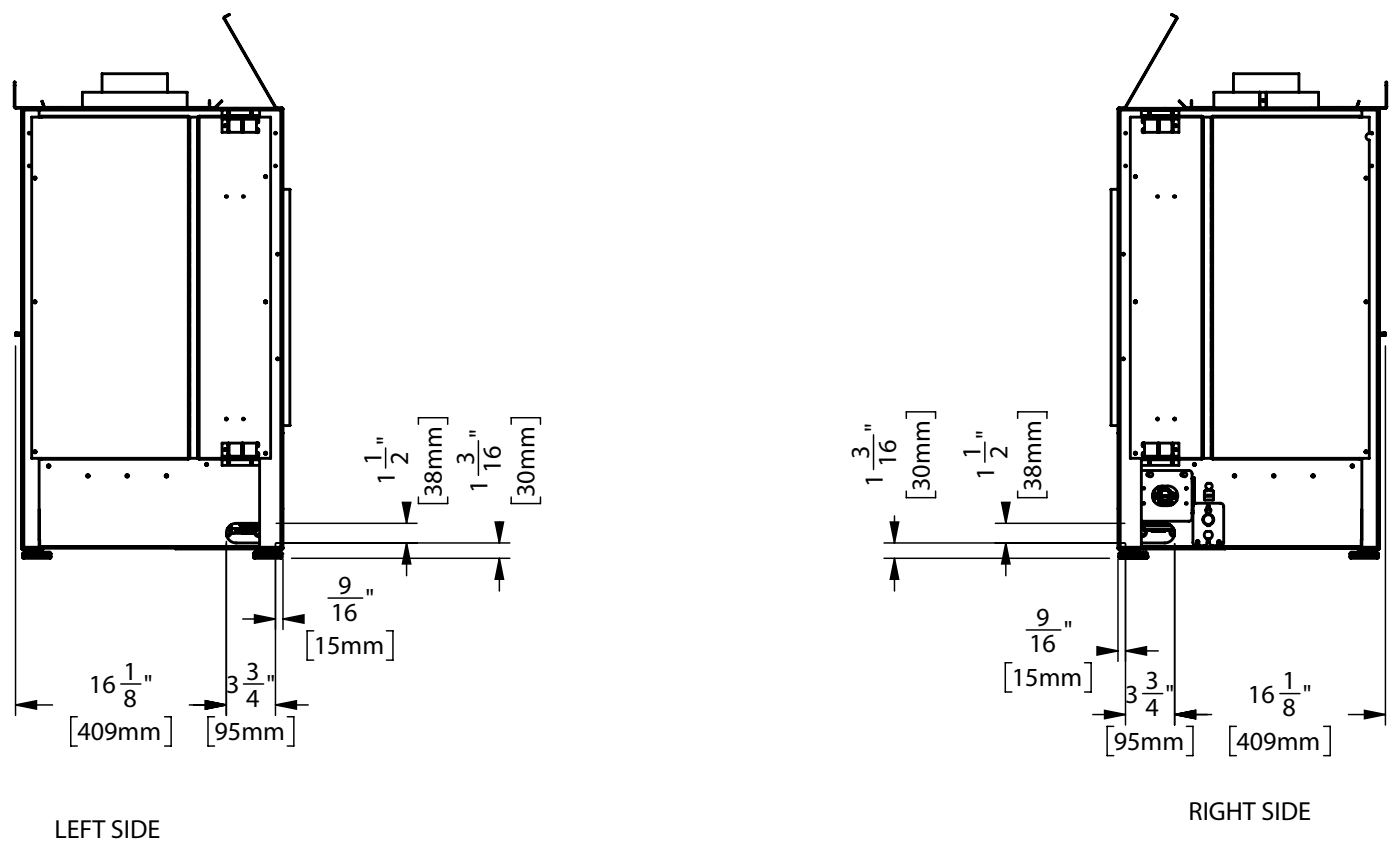
ALL PICTURES / DIAGRAMS SHOWN THROUGHOUT THIS MANUAL ARE FOR ILLUSTRATION PURPOSES ONLY. ACTUAL PRODUCT MAY VARY DUE TO PRODUCT ENHANCEMENTS.

dimensions

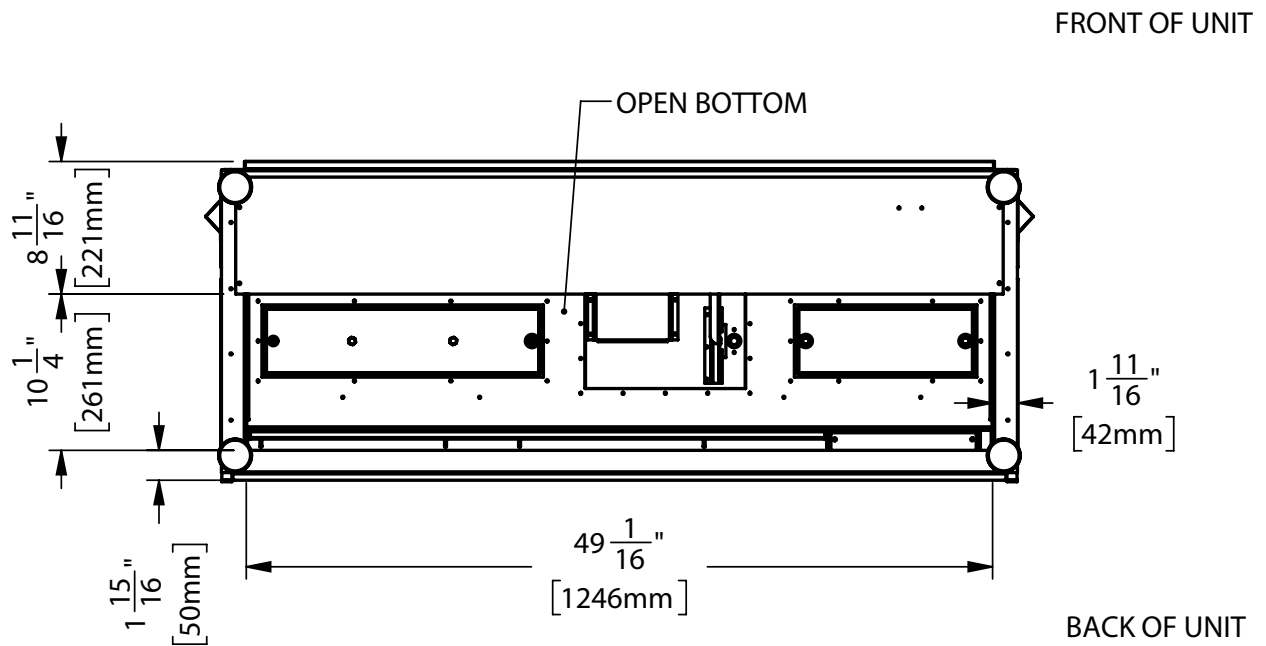
Gas Connection - Bottom of Unit



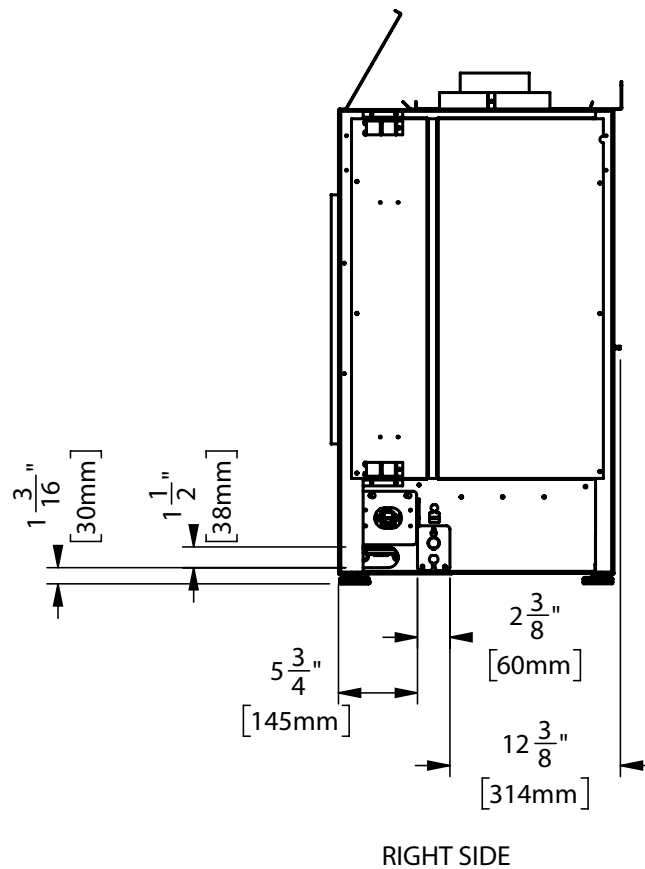
Gas Connection - Side of Unit



## Electrical Connection - Bottom of Unit



## Electrical Connection - Side of Unit



## Ventilation Openings

Regency's patented Cool Wall system releases warmth at ceiling level. This system reduces excessive radiant heat in front of the fireplace so you can enjoy your fireplace more often.

- Design your own chase vent solution to suit your home
- Use optional front or left & right side chase vent grills
- Release warmth into the room discreetly

### Ventilation Opening Locations

The following are examples of how the ventilation openings may be placed above the fireplace.

The air travelling through the heat exchanger is heated by the fireplace and then directed out the back of the fireplace. The combined warmed air is then vented back into the room.

If using the optional heat wave kit, this does not reduce the size of the ventilation opening. The ventilation opening(s) must be a minimum 152 square inches regardless.

#### Front Exit

The ventilation opening may be placed in front ensuring it meets the 152 square inch opening & is located 0-2" (51mm) from the enclosure ceiling.



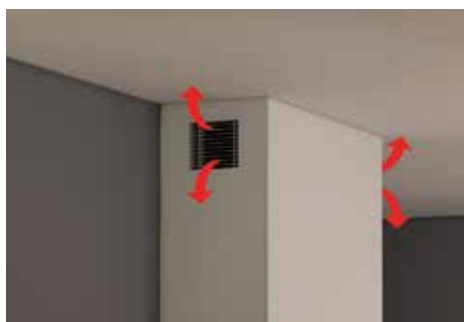
#### Side Exit (Left/Right)

Ventilation openings, when placed on both sides, must be of the same size. They must have an equal split (50/50) free air opening to balance air flow. A ventilation opening may never be on one side only.

The ventilation openings cannot be any smaller than 6" (152mm) wide to equal the total area of 152 square inches of free open area.

Example: 6" (152mm) wide x 15" (381mm) High = 90 square inches per side of free open area. A second ventilation grill is installed on the other side to =100%.

The ventilation openings must be located 0-2" (51mm) from the enclosure ceiling.



#### Top Exit

The ventilation opening may be short of the ceiling as shown below. Minimum opening height must be 1-3/4" (44mm) measured from top of enclosure to the ceiling and must be open in front and both sides to meet the minimum 152 square inches free open air requirement.



The ventilation opening may be fully open at the top of the enclosure. This type of ventilation opening would be used when the top of the enclosure is not visible from above and where the ceiling within the room is higher than normal. When creating this type of ventilation opening, measures should be in place to avoid having objects of any type falling or be thrown into the ventilation opening. Mesh screen or other preventative measures should be put into place.



The ventilation opening may be placed on top ensuring it meets the 152 square inch opening. This type of ventilation opening would be used when the top of the enclosure is visible from above and where the ceiling within the room is higher than normal.



# installation

## Chase Enclosure

When choosing to install the ventilation openings from the front or both sides, The top of the ventilation opening cannot be any lower than 0-2" (51mm) from the top of the chase enclosure for all installations.

Minimum height of enclosure from base of appliance is 62-7/8" (1597 mm).

A minimum 152in<sup>2</sup> opening in the enclosure is required to maintain safe operating temperatures. This can be achieved in a number of ways including the examples shown in this manual.

### IMPORTANT:

**Exterior wall/Alcove enclosure:** When installing into an exterior cavity or alcove enclosure (ceiling, back and sides), regardless of where appliance is placed within the home, requires the use of either drywall or other means such as plywood, wood studs, etc. to prevent heat from escaping anywhere above /through the enclosure other than the required grill / ventilation opening.

**Internal chase:** When installing as an internal chase framing installation ,regardless of where appliance is placed within the home, requires the use of either drywall or other means such as plywood, on the rear wall of the chase to eliminate heat escaping into the rear wall cavity. If the chase is extended to the ceiling ,the ceiling will also need to be finished in a manner to prevent heat escaping into floor joist/attic space.

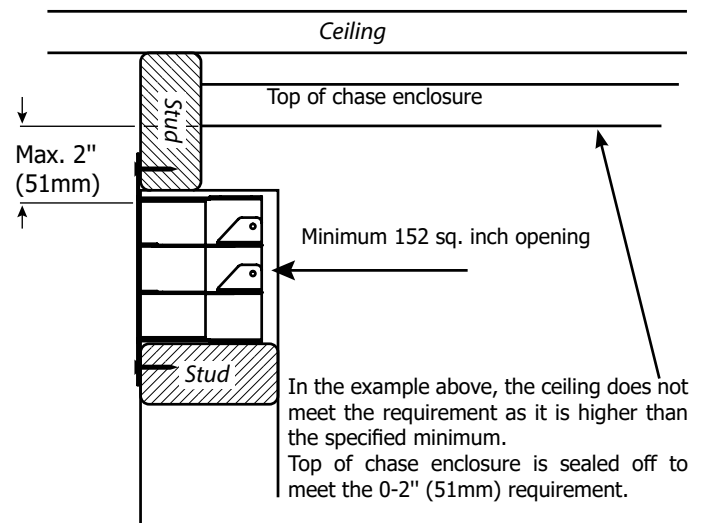
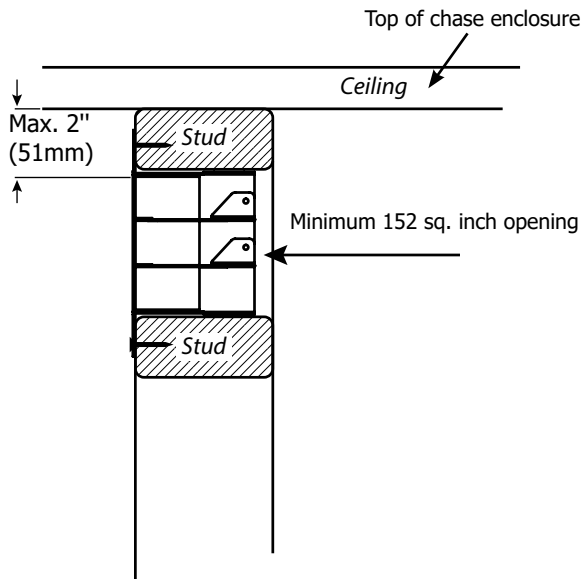
One of the following methods must be used to prevent the heat from escaping.

- If choosing drywall, ensure that the drywall is butt up tight with no gaps.
- Plywood, wood studs, etc. installed tightly with no gaps.

As this appliance has been designed with all hot air escaping through the chase enclosure ventilation/grill openings only, if hot air is trapped as a result of the hot air escaping through joints, crevasses, open studs, or other openings within the enclosure above, this will change the clearances within the enclosure causing the enclosure to overheat. It is vital that all the hot air from within the enclosure exits through the ventilation openings only.

Ensure that the ventilation openings are made as such to prevent debris, objects from falling into the enclosure.

Warning: DO NOT cover or place objects in front of the ventilation opening air outlet(s).



## Clearances

Note: The clearances listed below are minimum distances unless otherwise stated.

A major cause of chimney-related fires is failure to maintain required clearances (air space) to combustible materials. It is of the greatest importance that this fireplace and vent system be installed only in accordance with these instructions.

Clearance	Dimension	Measured From:
A1: Mantel Height (min.)	**	Top of Fireplace Opening
A: From Floor (min.)	10-3/16" (462 mm)	Bottom of fireplace opening
B: Sidewall (on one side) min.	5" (127 mm)	Side of fireplace opening
B1: Sidewall (on one side) min.	24" (610 mm)	Side air outlet to side wall (min.)
C: Enclosure Width (min.)	54-3/8" (1381 mm)	Side of fireplace opening
D: Mantel Depth (max.)	**	
E: Alcove Width	92" (2337 mm)	Sidewall to sidewall (minimum)
F: Alcove Depth	35" (889 mm)	Front to unit (maximum)
G: Convection Air Outlet Opening Offset (min.)	*0-2" (0-51 mm)	Max. offset from top of chase enclosure
H: Convection Air Outlet	*152 in <sup>2</sup> (981 cm <sup>2</sup> )	
I: Framing Depth (min.)	20-7/16" (519 mm)	From back wall to chase front
J: Opening Height	18" (457 mm)	Bottom/top of fireplace opening
K: minimum clearance to ceiling	1-3/4" (44 mm)	Top of chase to ceiling
L: Chase Enclosure (min.)	62-7/8" (1597 mm)	From base of unit/floor to top of enclosure
M: Clearance to Sprinkler Head (min.)	36" (914mm)	Perpendicular from chase grill
Ceiling Height	81-1/4" (2064 mm)	From base of unit/floor to top of alcove
Hearth	0"	No hearth required
** See mantel clearances chart in the manual.		

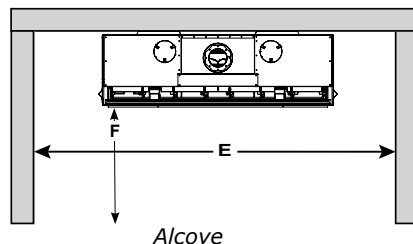
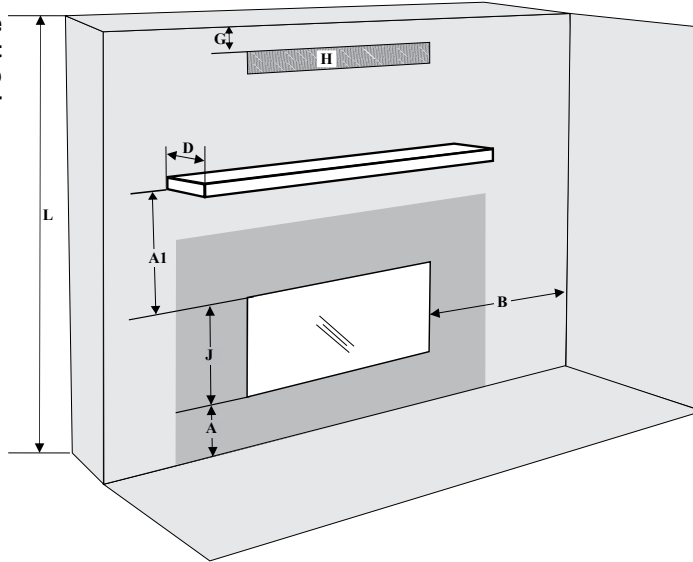
### Flue Clearances to Combustibles

Horizontal - Top	3" (76 mm)
Horizontal - Side	2" (51 mm)
Horizontal - Bottom	2" (51 mm)
Vertical	2" (51 mm)
Passing through wall/floor/ceiling - when firestop is used.	1-1/2" (38 mm)

Note: This appliance uses 5" x 8" (127 mm x 203 mm) venting for the Non Power Vent.

When installed as a power vent, the venting must be reduced to 4" inner x 6-5/8" outer (102 mm x 168 mm) in all applications. See required reducers required in this manual if using rigid/flex pipe.

**\*A minimum of 152 square inches of open area, not lower than 0-2" from top of enclosure, required for all installations.**



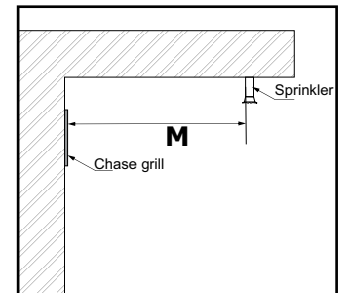
Alcove

### Caution Requirements

The top, back and sides of the fireplace are defined by standoffs. The metal ends of the standoff may **NOT** be recessed into combustible construction.

### WARNING

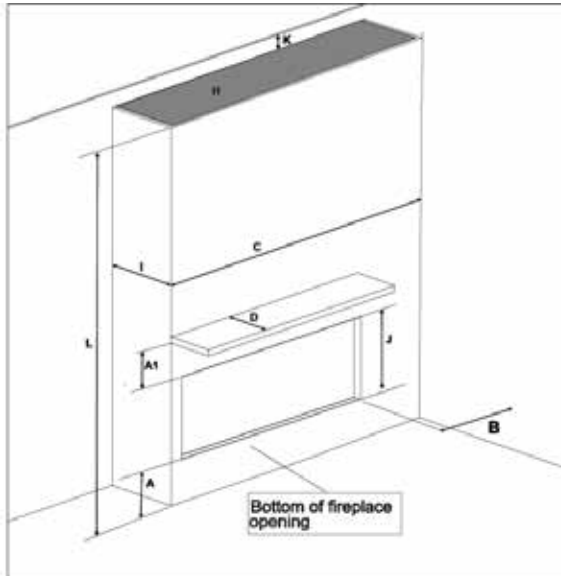
**Fire hazard is an extreme risk if these clearances (air space) to combustible materials are not adhered to. It is of greatest importance that this fireplace and vent system be installed only in accordance with these instructions.**



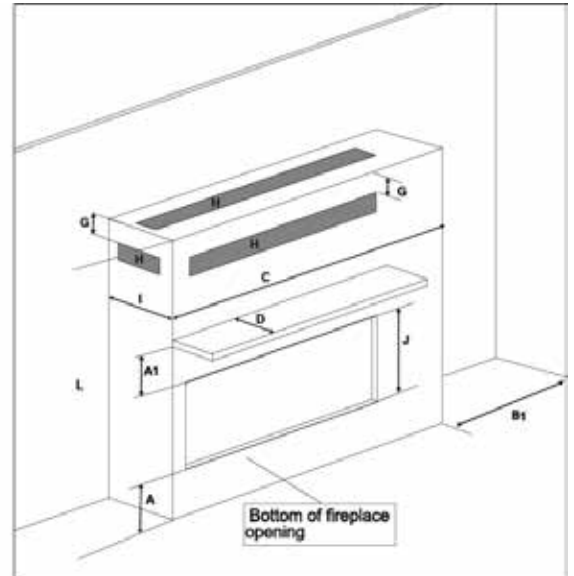
Side view

# installation

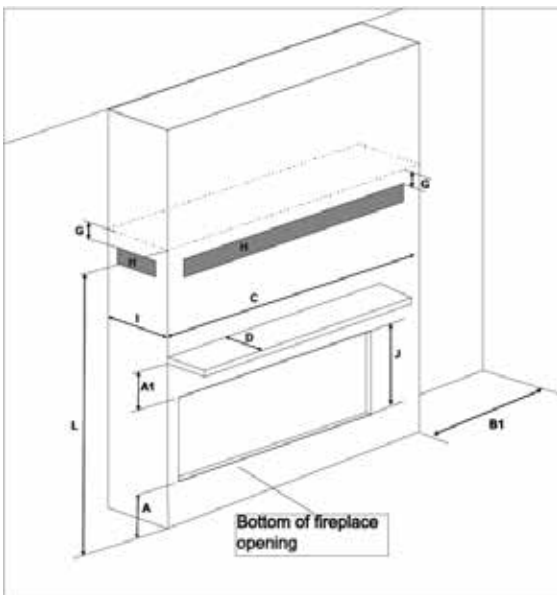
## Clearances



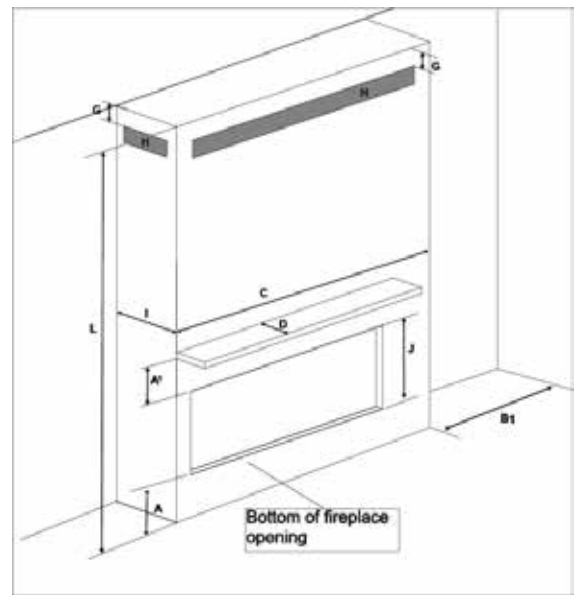
Floor to ceiling with top opening.



Full framing with vents in front, 2 sides, or top.



Full framing with low vents in front or 2 sides.



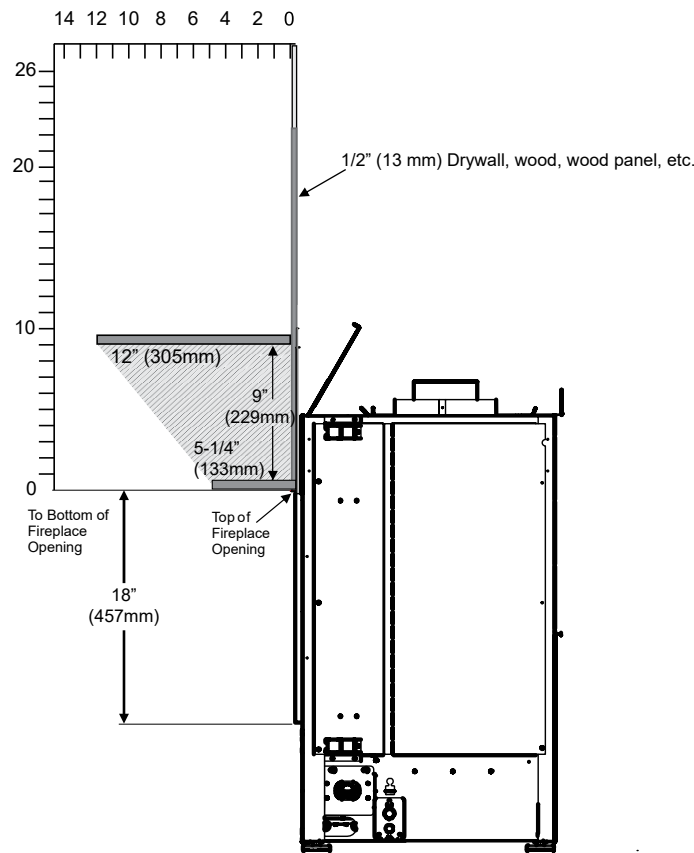
Full framing with vents in front or 2 sides.

The ventilation opening may only be placed above, on both sides and in front as shown above. Ventilation grills can never be placed behind the appliance.



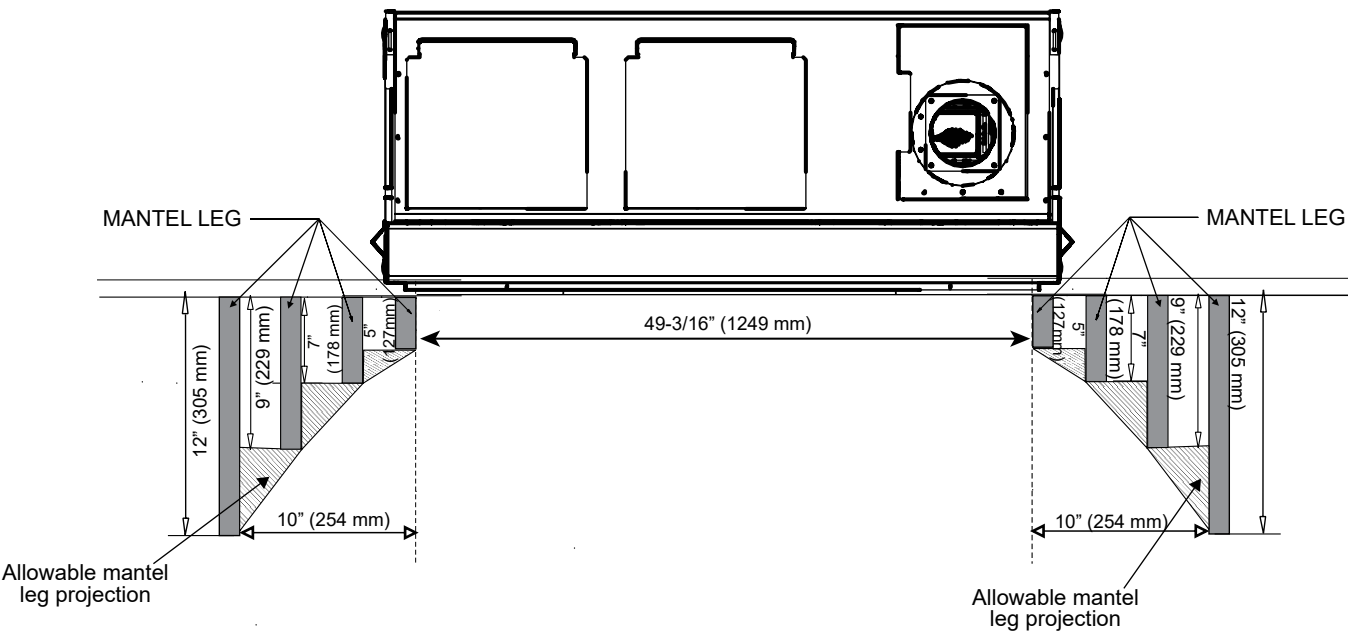
Mantel Clearances

Combustible mantel clearances from top of front facing are shown in the diagram below.



Mantel Leg Clearances

Combustible mantel leg clearances as per diagram:



# installation

## Framing Dimensions

**NOTE:** Framing may be constructed of combustible material (i.e. 2 x 4/2 x 6) and does not require steel studs.

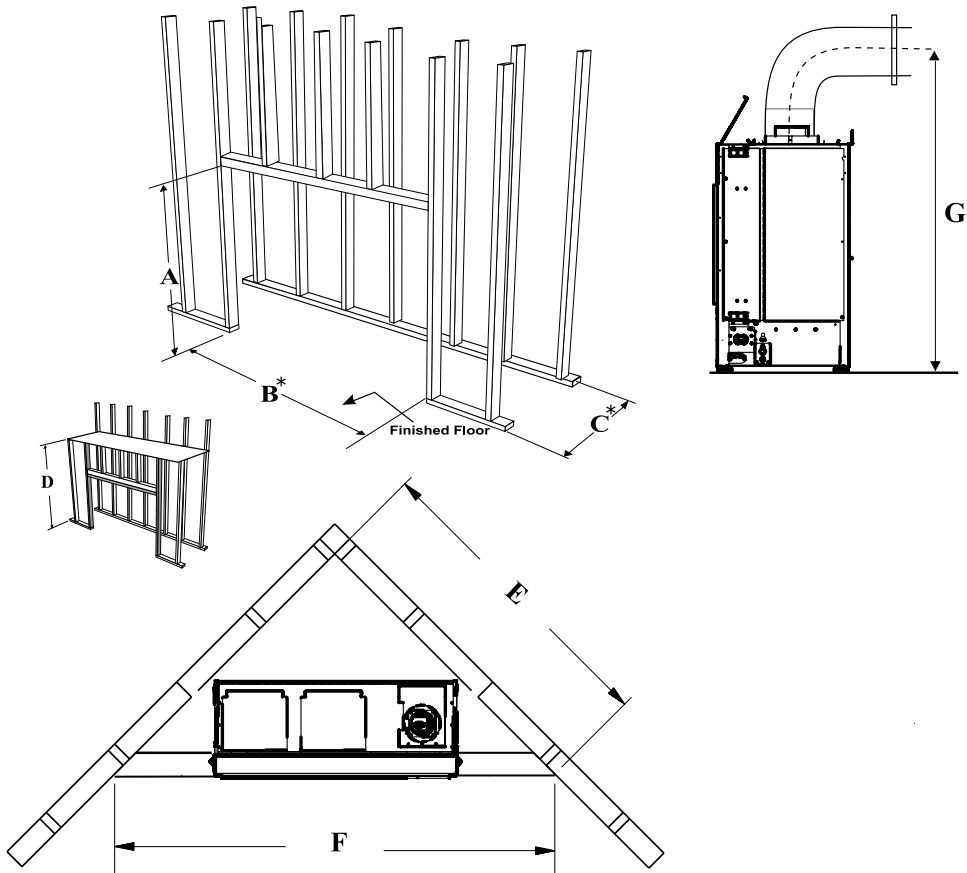
Framing Dimensions	Description	CV50E
A	Framing Height	2 x 4 : 44-3/4" (1137 mm) 2 x 6 : 51-7/8" (1318 mm)
B*	Framing Width	54-3/8" (1381 mm)
C*	Framing Depth	20-7/16" (519 mm)
D	Minimum Height to Combustibles	62-7/8" (1597 mm)
E	Corner Wall Depth	66" (1676 mm)
F	Corner Facing Wall Depth	93-3/8" (2372 mm)
G	Vent Centerline Height	45-3/4" (1162 mm)

\*\* See manual for alternate Gas/ Electrical connection options

The lift handles add approximately 4 inches to the width of the appliance. If the appliance will be lifted off the ground and slid into the framed opening, we suggest changing the framing width from 54-3/8" (1381 mm) to 58-3/8" (1483 mm) to allow the appliance to slide into position with the handles on, or creating a platform in front of the framed opening where the lift handles can be removed prior to installation. If the framing is raised off the ground you can install it after the appliance is in place with handles removed to maintain the framing width of 54-3/8" (1381 mm). Ensure that the wood base for the appliance is strong enough to support its shipping weight of 480 pounds.

Note: A combined minimum of 152 square inches of open area is required for the convection air outlet to cool the enclosure. Ensure clearances for convection air outlets are met. See clearances in this manual for different ways to achieve this.

Note: This appliance must be installed on a solid surface such as a plywood floor which must be the full width and depth of the appliance.

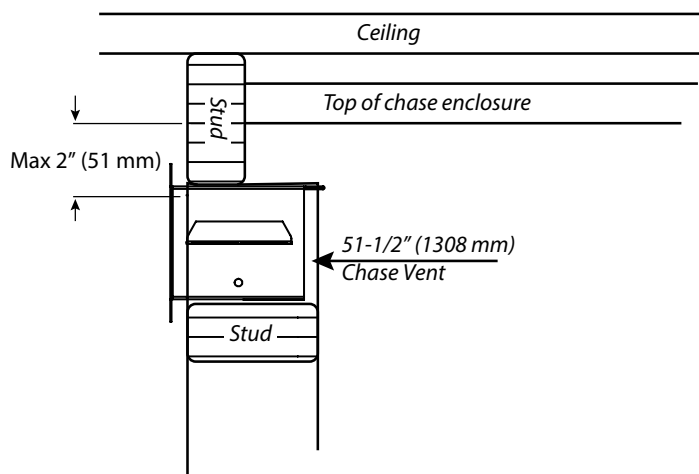
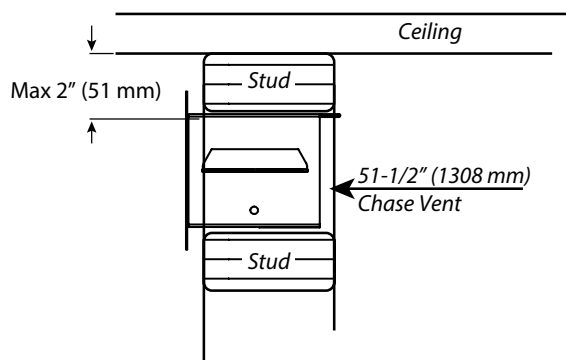
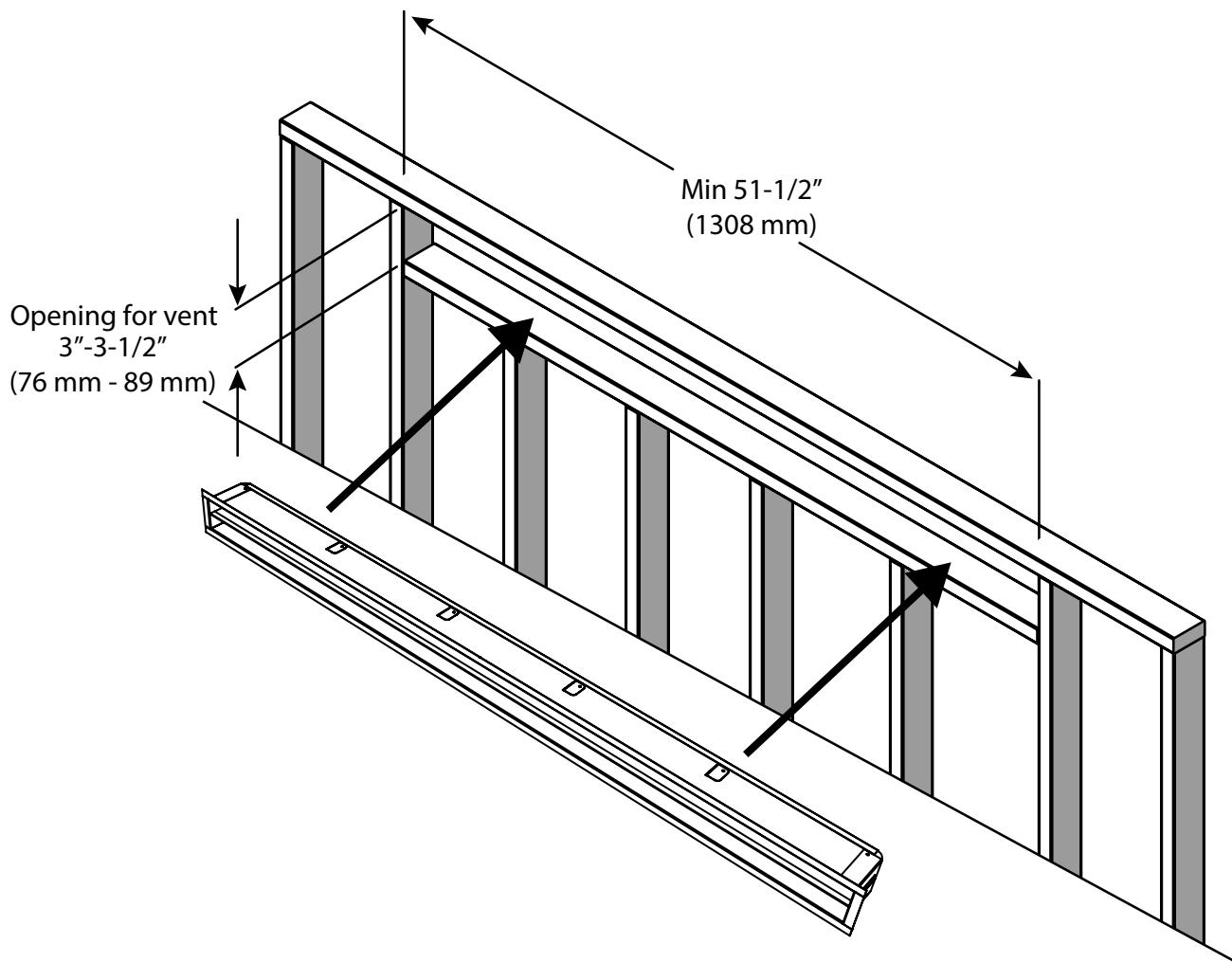


\* The framing depth/width does not take into account drywall/wood or similar materials against the back /side wall. The framing depth will need to change based on the thickness of the material.  
Example: B - 54-3/8" framing width +1/2" drywall per side = 55-3/8")  
Example: C - 20-7/16" framing depth +1/2" drywall = 20-15/16")

## Chase Vent Installation Part #482-991 (White)

In this application, both the flange and screws to secure the chase vent are exposed as this chase vent is designed to be installed after the finished facing has been placed on the wall.

Framing Opening must be between 3" (76 mm) and 3-1/2" (89 mm) tall, and at least 51-1/2" (1308 mm) wide to accommodate the Chase vent. The top of the chase vent opening must be 2" (51 mm) or less from the top of the chase enclosure.



# installation

## Wall Board/Drywall Installation

**WARNING! Risk of Fire!** Comply with all minimum clearances to combustibles as specified.

### Finishing Instructions

It is important to follow the framing and finishing instructions to ensure proper placement of fireplace into the surrounding framing/finishing materials. Wall board materials 1/2 in. thick are specified in this installation manual to properly align with the optional finishing methods offered with this appliance. The CV50E may be finished to the appliance opening with 1/2 inch thick drywall.

Ensure that the back and side clearances are maintained.

**WARNING! Risk of Fire!** Maintain specified air space clearances to combustibles. Inadequate air space could cause overheating and fire.

DO NOT use screws more than 1/2 inch in length on the lower access cover panel. Longer screws may penetrate gas line or damage valve or electrical components.

Note: It is acceptable to use a high temperature silicone sealant to adhere drywall to lower access cover panel.

The appliance is designed to be used with a minimum 1/2 in. wall sheathing materials such as drywall, plywood, wood composites, or non-combustible materials. Thicker materials may be used. Refer to facing and finishing details in this manual.

### Facing Material

- Facing and/or finishing materials must never overhang into the glass opening. See finishing details in this manual.
- Facing materials may be combustible or non-combustible

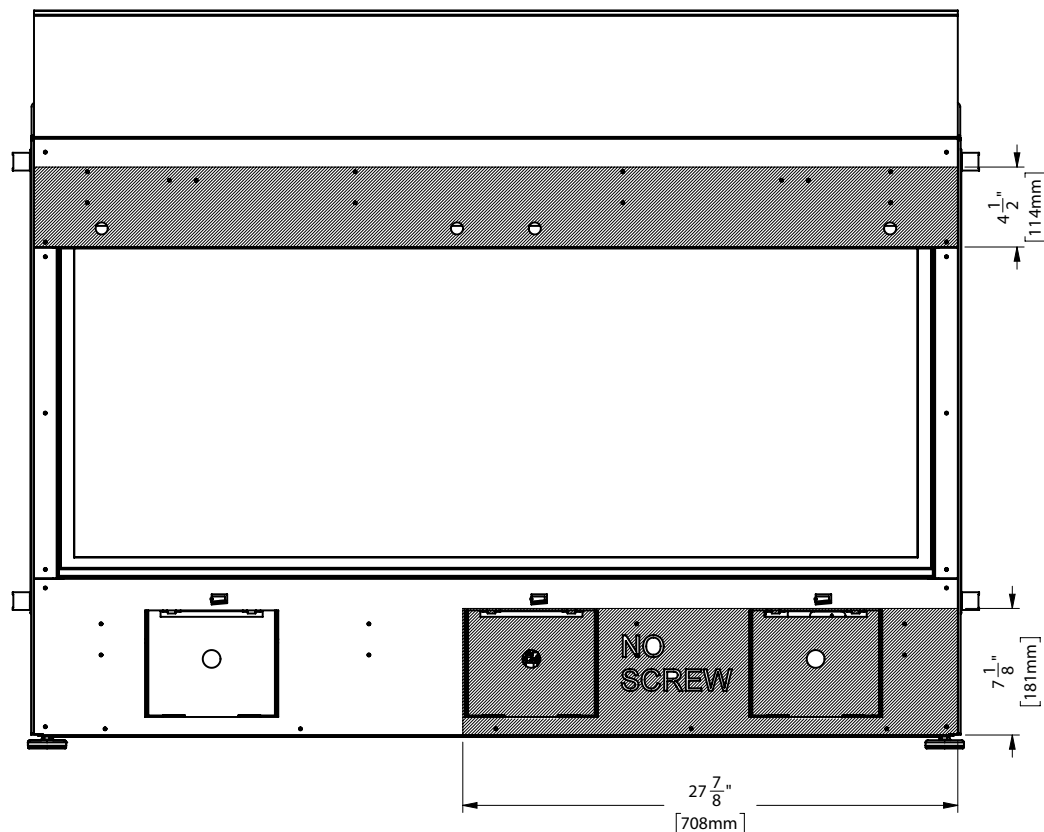
**WARNING! Risk of Fire! DO NOT** apply combustible materials beyond the minimum clearances. Comply with all minimum clearances to combustibles as specified in this manual. Overlapping materials could ignite and will interfere with proper operation.

### PAINTING

If desired finishing includes a painted wall, 100% acrylic latex, oil-based or standard acrylic paints may be used. Follow paint manufacturer's instructions for paint and primer application.

## No Screw Zones

No screw zones (in shaded areas) as shown below must be adhered to.



## Framing and Finishing Inset Installations

1. Frame in the enclosure for the unit with framing material

**Note:** When constructing the framed opening ensure there is access to install the gas lines, electrical. Also the wiring harness must be wall mounted using the receptacle provided with the appliance. The wiring harness will be located on the right hand side of the appliance if facing the unit from the front. This must be done prior to any finishing.

2. For exterior walls, insulate the enclosure to the same degree as the rest of the house, apply vapour barrier and drywall, as per local installation codes. (Do not insulate the fireplace itself.)

**WARNING:** Failure to insulate and add vapor barriers to the inside of the exterior wall will result in operational and performance problems including, but not limited to: excessive condensation on glass doors, poor flame package, carbon, blue flames etc. These are not product related issues.

### 3. IMPORTANT:

**Exterior wall/ Alcove enclosure:** When installing into an exterior cavity or alcove enclosure (ceiling, back and sides), regardless of where appliance is placed within the home, requires the use of either drywall or other means such as plywood, wood studs, etc. to prevent heat from escaping anywhere above /through the enclosure other than the required grill/ventilation openings.

**Internal chase:** When installing as an internal chase framing installation, regardless of where appliance is placed within the home, requires the use of either drywall or other means such as plywood, on the rear wall of the chase to eliminate heat escaping into the rear wall cavity. If the chase is extended to the ceiling, the ceiling will also need to be finished in a manner to prevent heat escaping into floor joist/attic space.

One of the following methods must be used to prevent the heat from escaping :

- a. If choosing drywall, ensure that the drywall is butt up tight with no gaps.
- b. Plywood, wood studs, etc. installed tightly with no gaps.

As this appliance has been designed with all hot air escaping through the chase enclosure ventilation / grill openings only, if hot air is trapped as a result of the hot air escaping through joints, crevasses, open studs, or other openings within the enclosure above, this will change the clearances within the enclosure causing the enclosure to overheat. It is vital that all the hot air from within the enclosure exits through the ventilation openings only. Ensure that the ventilation openings are made as such to prevent debris, objects from falling into the enclosure.

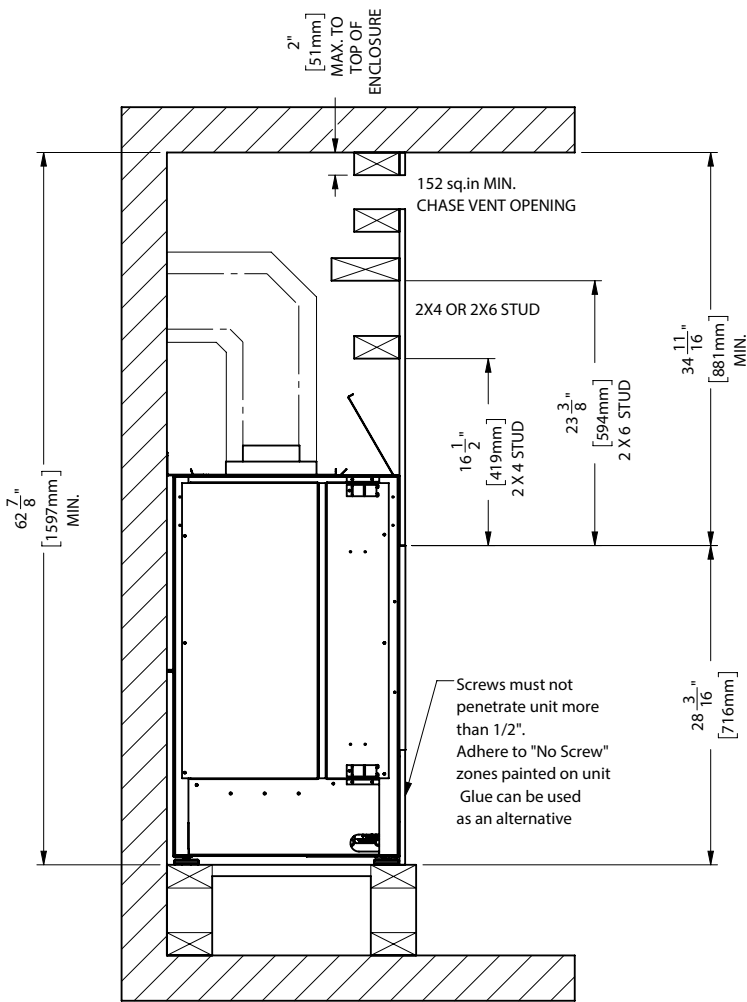
4. Combustible material (drywall, wood, wood panels, etc.) may be brought up to the appliance (top, bottom and sides)
5. Ensure that the material being used does not encroach anywhere in the area of the glass. This would cause dangerous operating conditions.
6. This appliance comes with a 1/2" lip at top and bottom to hide the ends of the drywall. The 1/2" side and bottom lip supplied with the appliance can alternatively be removed (see Diagram 1) and replaced with J Style Trim or Metal Corner Bead purchased at your local hardware store to cover cut/ exposed edges of the combustible facing material or any other finishing materials being used. 6 screws secure the bottom lip — see Diagram 1. These will be hidden so the outer panels will need to be removed to access the screws. See outer panel removal in this manual.
7. This appliance can also be recessed (using combustible materials) with a hearth in front of the appliance. This can also extend to the top. See manual for details.

**Note :** Combustible material may extend a minimum of 1/2" and to a maximum of 5-1/4" (133 mm) from the front top (with larger glass). See mantle clearance chart for details. The base and side (with smaller glass) have no limit regarding how far the combustible material may extend from the appliance. Ensure that no material encroaches anywhere in the area of the glass as it is defined by the finishing lip surrounding the appliance.

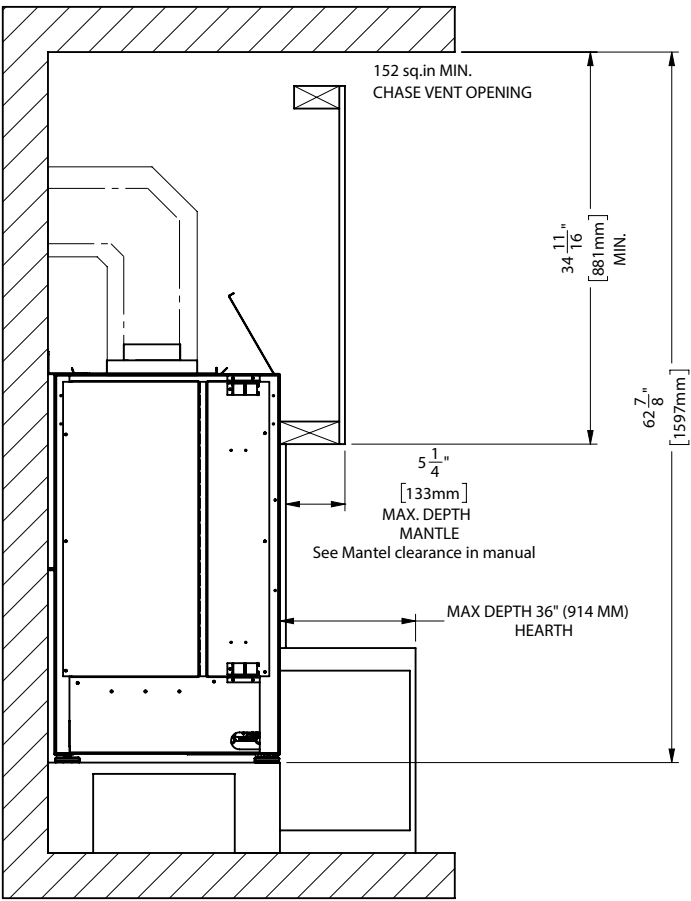
# installation

## Typical Installations

### Flush Install

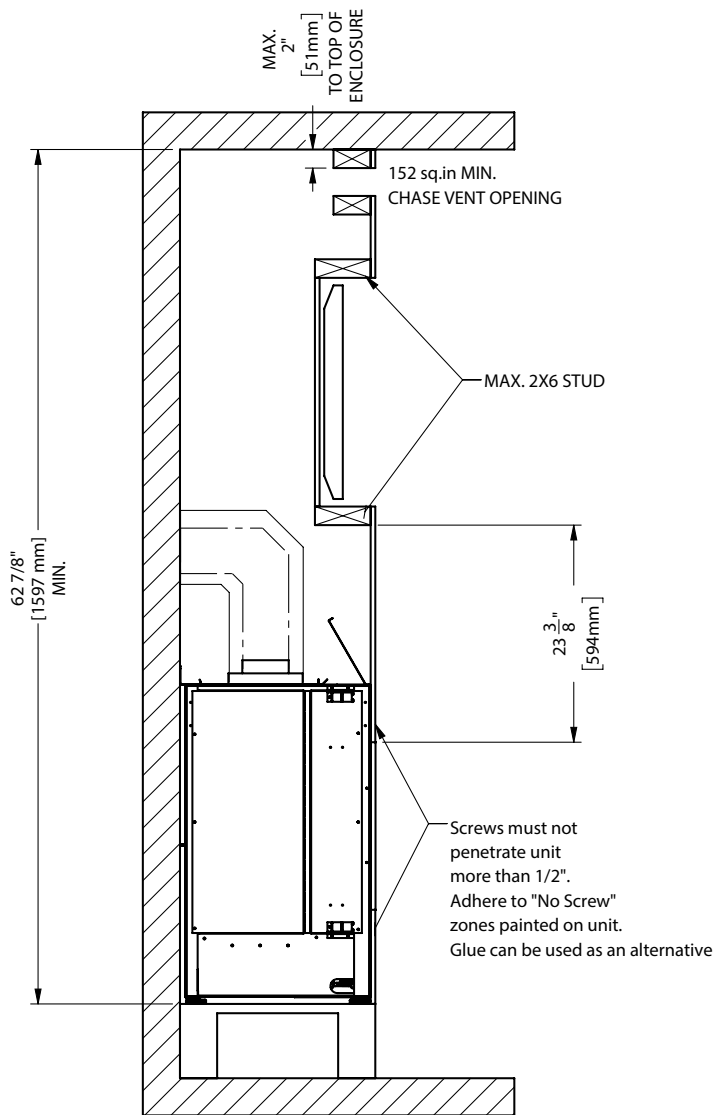


### Recessed Install

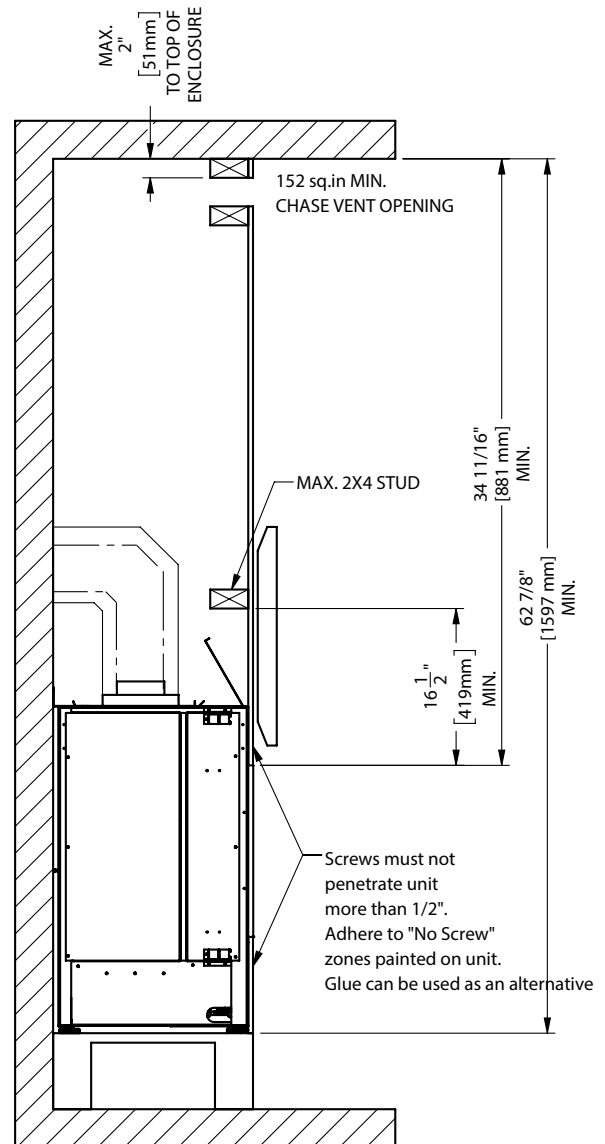


## Typical Installations

### Maximum TV Recess



### Flush TV with Hearth

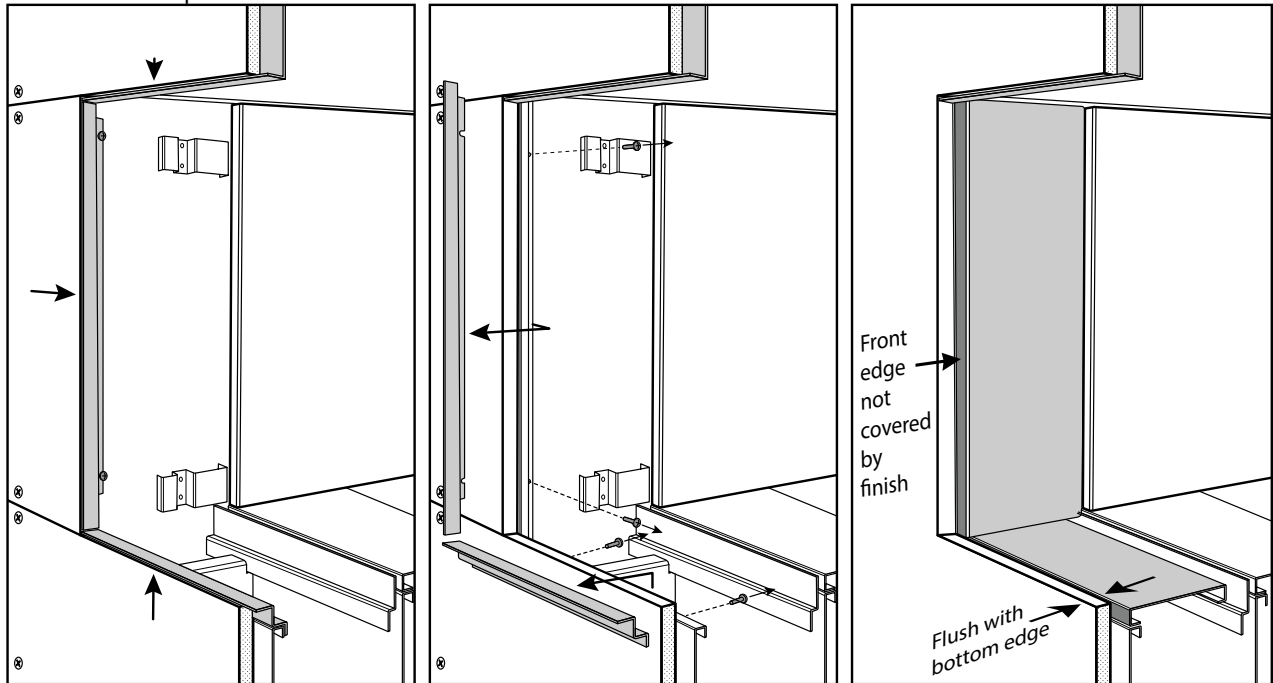


**Note:** The TV mounting bracket cannot be secured directly to the appliance. It must be secured to framing. The TV depicted in the picture may need to be higher depending on the style of TV mounting bracket used.

# installation

## Finishing

Flush Install Example



- Finish up to trim on all 4 sides

- Loosen screws using supplied Offset Screwdriver and remove bottom and side trim pieces

- Front edge of side liner panels must not be covered by finishing material or removal of the Firebox Glass will not be possible  
- Bottom edge should be flush with top surface of Inner Liner Panel

Recess Install Example

