



Compatibility

- 864 Fireplaces (2018 or later) with EmberBed Feature
- ProBuilder 42 Linear Fireplace
- 4415 HO (sn# 3212-011710 or later)

NOTE: A power heat duct kit may also be available for this appliance. If so, you may use either the power heat vent kit(s) or the CoolSmart TV kit, but not both. See appliance installation manual for details.

Table of Contents

Compatibility	1
Packing List	1
864 – Details	2
864 - Installation Overview.....	2
864 - Installation Requirements	3
864 - Framing the Chase	4
864 - Fireplace Preparation	5
864 – Mantel Clearances	7
PB 42 Linear – Details	8
PB 42 Linear - Overview	8
PB 42 Linear - Installation Requirements	9
PB 42 Linear - Combustible “Over-Facing” (Optional).....	10
PB 42 Linear - Framing the Chase	11
PB 42 Linear - Fireplace Preparation	12
PB 42 Linear – Mantel Clearances	14
4415 HO Linear – Details	21
4415 HO Linear - Installation Overview	21
4415 HO - Installation Requirements.....	22
4415 HO - Combustible “Over-Facing” (Optional).....	23
4415 HO - Flush Facing Header Configuration and Facing	24
4415 HO - Framing the Chase.....	25
4415 HO - Fireplace Preparation	26
4415 HO – Mantel Clearances.....	30
CoolSmart TV Installation (864, PB 42 Linear, 4415HO)	31
Using oval pipe to get past an obstruction.....	35
Custom Valance to Disguise Outlet – (Optional)	36

Packing List

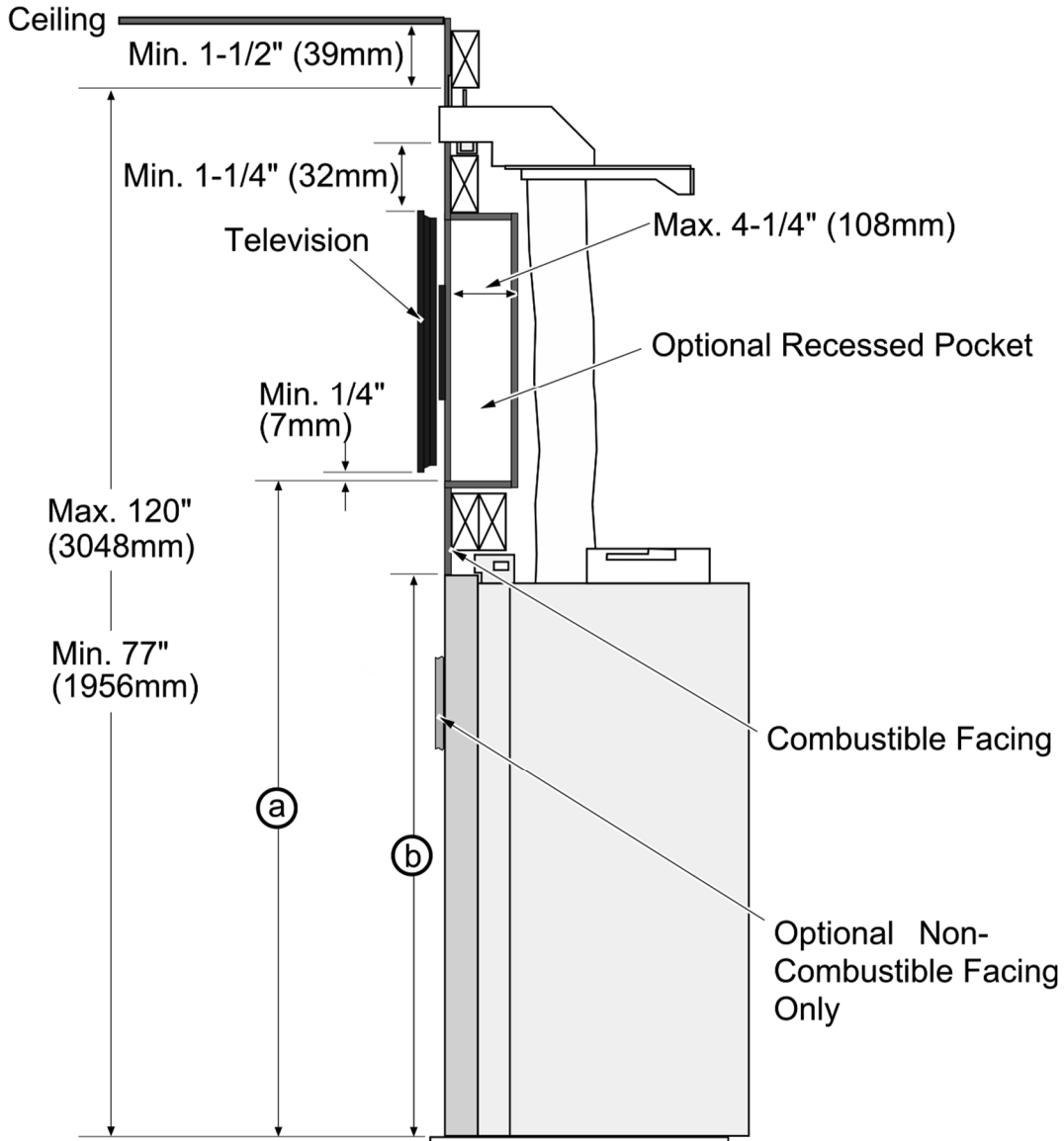
- Convection Manifold (with grill and mounting brackets pre-attached)
- (4) 5” Diameter Aluminum Flex Ducts
- (4) Starter Collars
- (36) Self-Drilling Tek Screws
- (2) Extended Support Brackets



864 – Details

864 - Installation Overview

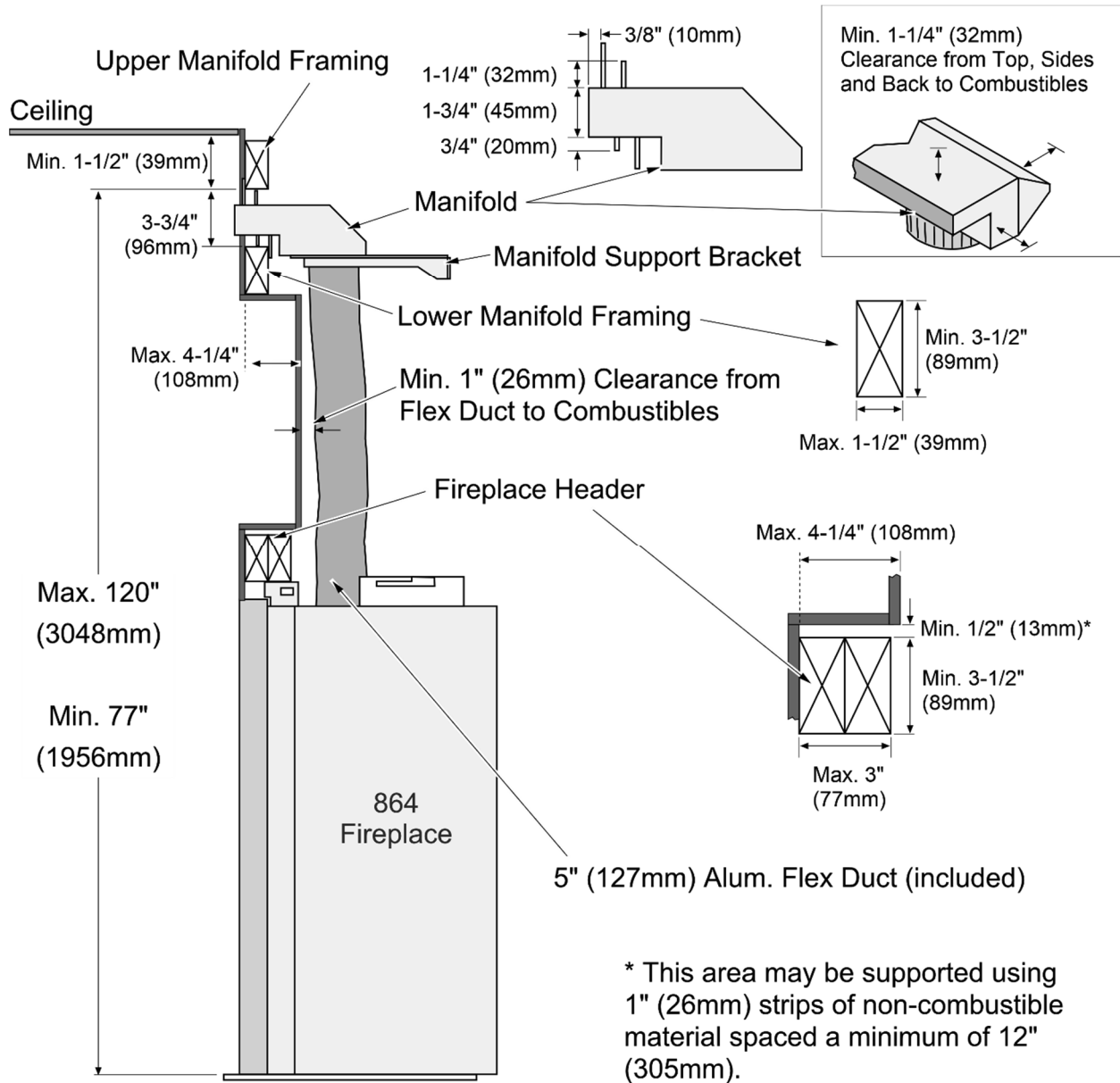
The CoolSmart system is designed to redirect the convective heat of the fireplaces from the front of the unit, just above the glass, to a location higher on the wall. The use of this kit allows for reduced clearances to televisions and a recessed cavity above the fireplace. When using this kit, disregard the standard framing dimensions and follow the framing instructions for the CoolSmart kit.



	864 (31K,40K)	864 CleanFace (31K,40K)
a	42-3/4" (1086mm)	49-1/4" (1251mm)
b	36-3/4" (934mm)	39-1/4" (997mm)



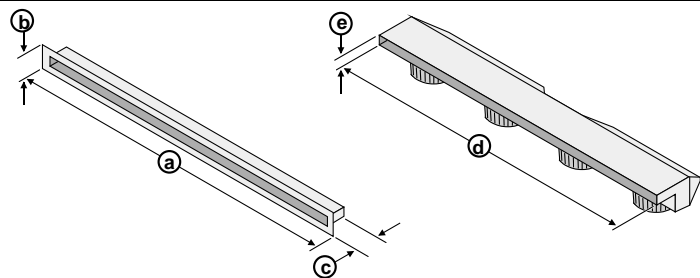
864 - Installation Requirements



Grill and Manifold Dimensions

The grill may be installed over the facing to provide an aesthetic opening for the convection outlet. (2) 8-32 x 1-1/2" screws attach the trim to the upper manifold. This allows variable thickness of finish material.

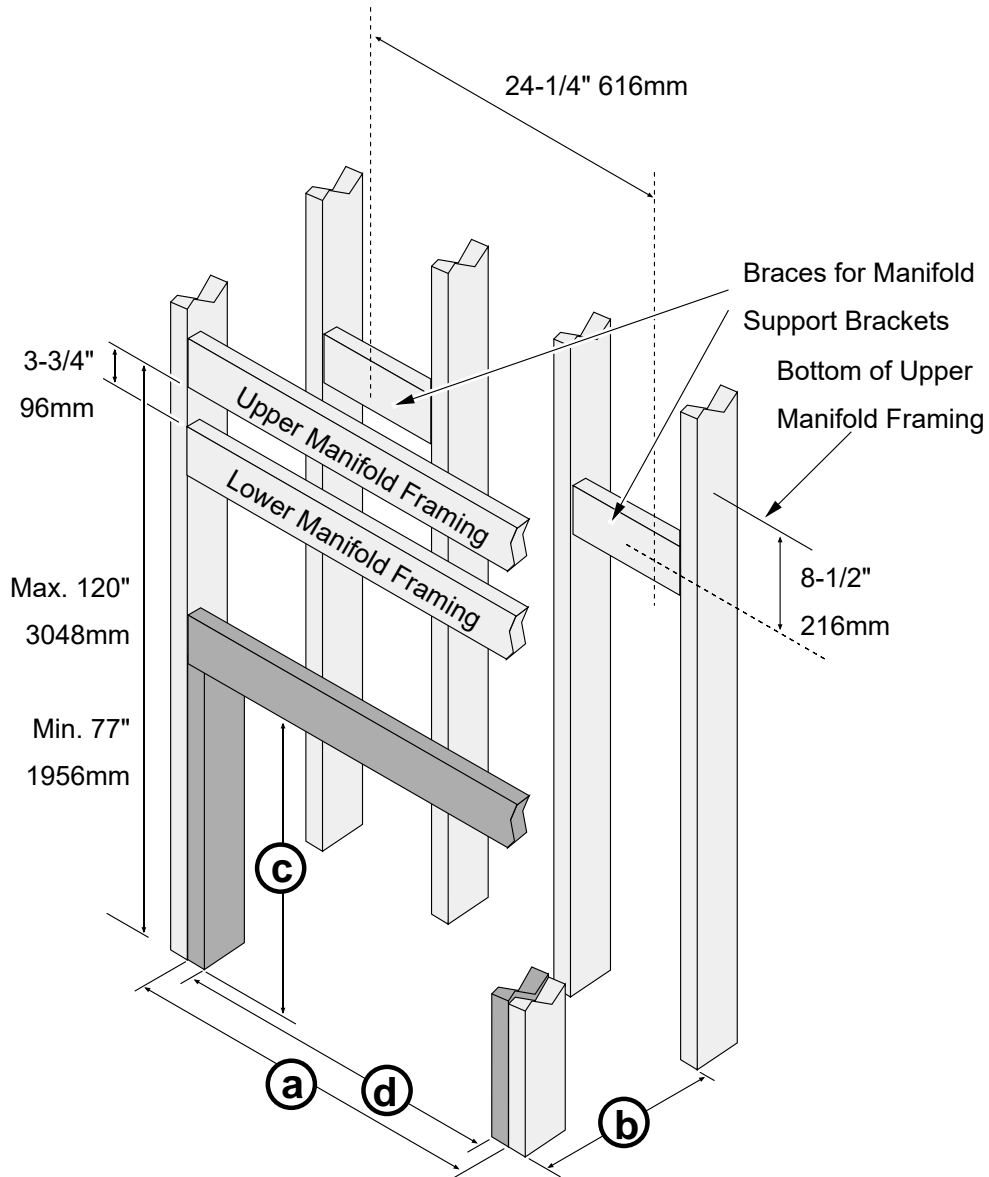
Dimensions



a	b	c	d	e
42" (1067mm)	2-7/8" (74mm)	1-1/4" (32mm)	41" (1042mm)	1-3/4" (45mm)



864 - Framing the Chase



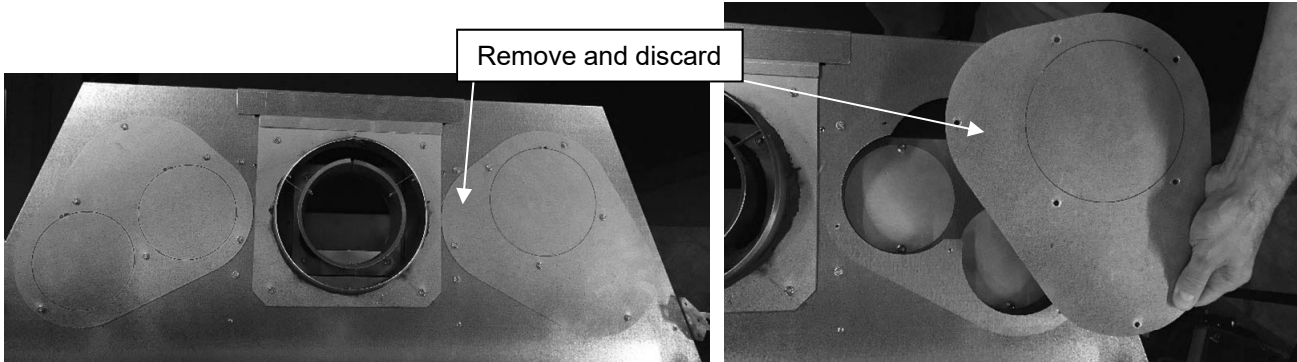
	864 (31K,40K)	864 CleanFace (31K,40K)
a	43-1/2" (1105mm)	43-1/2" (1105mm)
b	20-3/4" (528mm)	22-1/2" (572mm)
c	38-1/2" (978mm)*	45" (1143mm)*
d	41-1/4" (1048mm)*	43" 1093mm)*

* The dark-shaded framing is installed after the manifold is installed. It is used to secure the nailing brackets on the fireplace to the framing. It also provides support for the facing above the fireplace. This framing is not required in some cases (you may use other methods to secure the nailing brackets and facing).

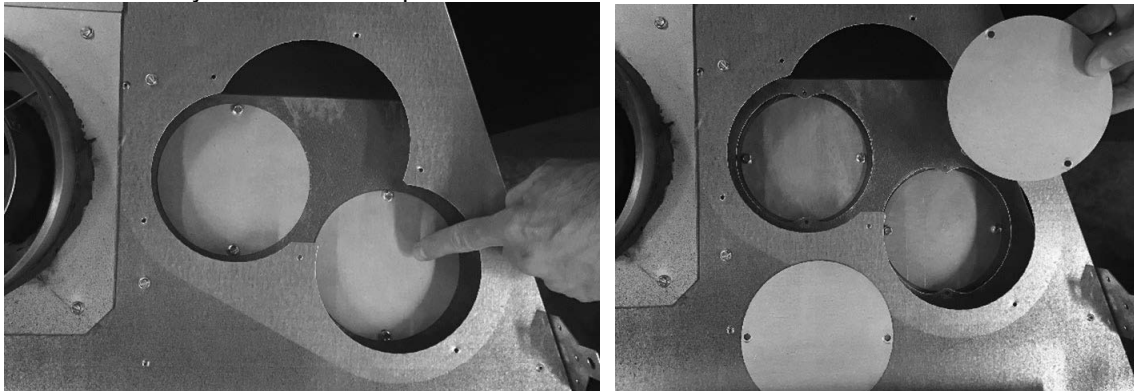


864 - Fireplace Preparation

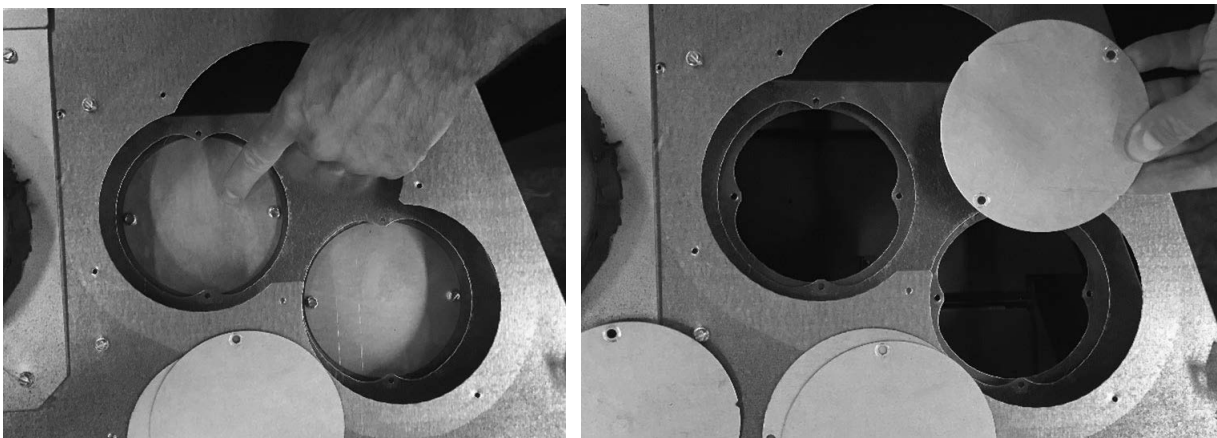
1. Remove the right cover plate (with the single knockout) from the top of the fireplace and discard it.



2. Remove the (4) screws that secure the two circular cover plates on the next layer of the fireplace. Carefully remove the two plates.



3. Repeat the previous step on the plates on the next layer. You may discard all (4) circular cover plates.



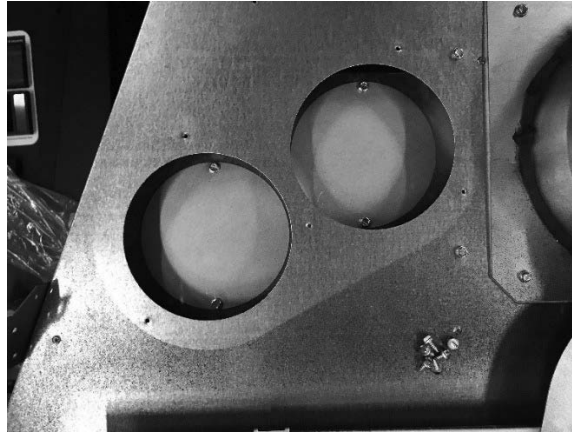


CoolSmart TV

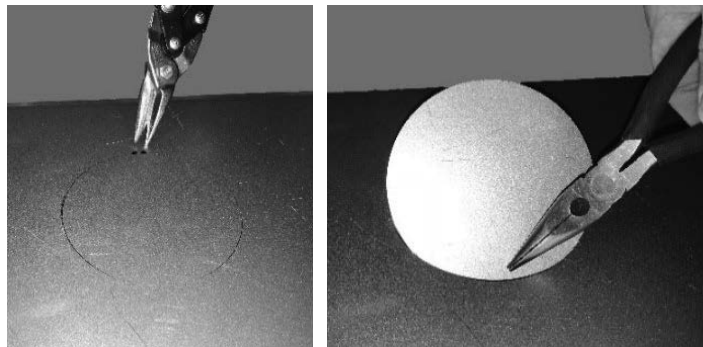
864, PB 42 Linear, 4415 HO
Sku# 98900779

4. Remove the left, top layer, cover plate. Turn it over and then reinstall it in place of the right cover plate removed in step 1. Replace all screws so there are no holes left in the top of the fireplace.

NOTE: Removal of the left cover plate will expose two 5" holes in the top surface of the fireplace.

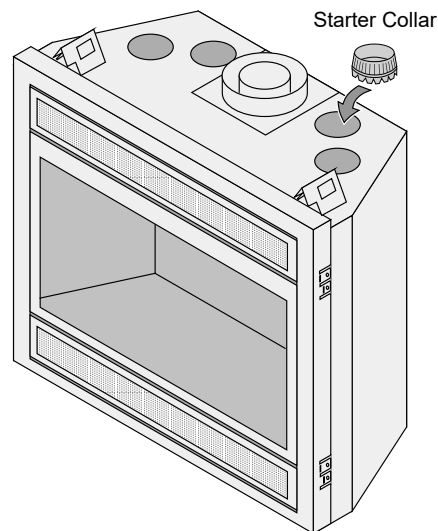
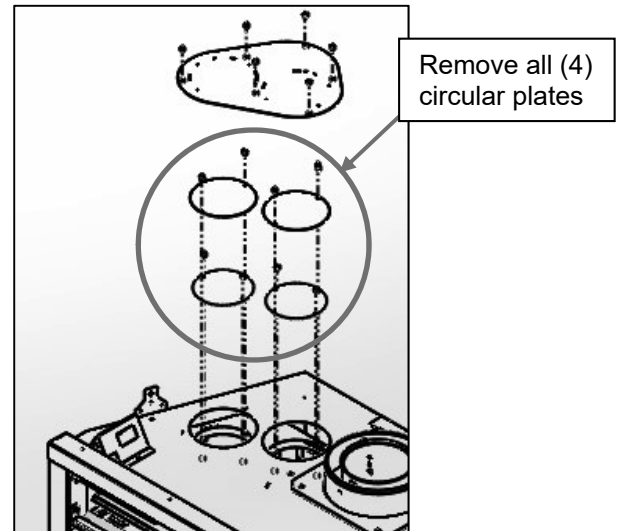
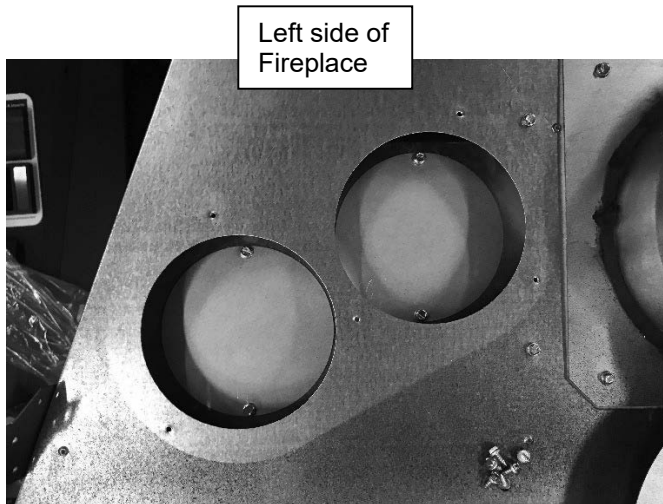


5. Use snips or diagonal cutters to snip the tab on the 2 knockouts located on the cover plate (relocated to the right side in the previous step). Press on the far side away from the tap to pop the edge of the knockout up. Grab on to the knockout with pliers and bend it back and forth until the remaining tabs break free. Repeat this step with the second knockout on the cover plate. Discard the knockouts.

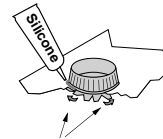




- Remove the (4) circular cover plates from the left side of the fireplace in the same manner described above. Discard the plates.



Use silicone to seal the starter collar to the top of the fireplace.



Bend the tabs on the bottom of the starter collar up to lock it in place.

- Insert a starter collar into each of the holes that were uncovered in the previous step and bend the tabs to secure the starter collar to the fireplace.. Seal the joints with silicone caulk or aluminum (U.L. 181A-P) tape

- Install the fireplace into the framed chase. See section "Installation" in the manual.

864 – Mantel Clearances

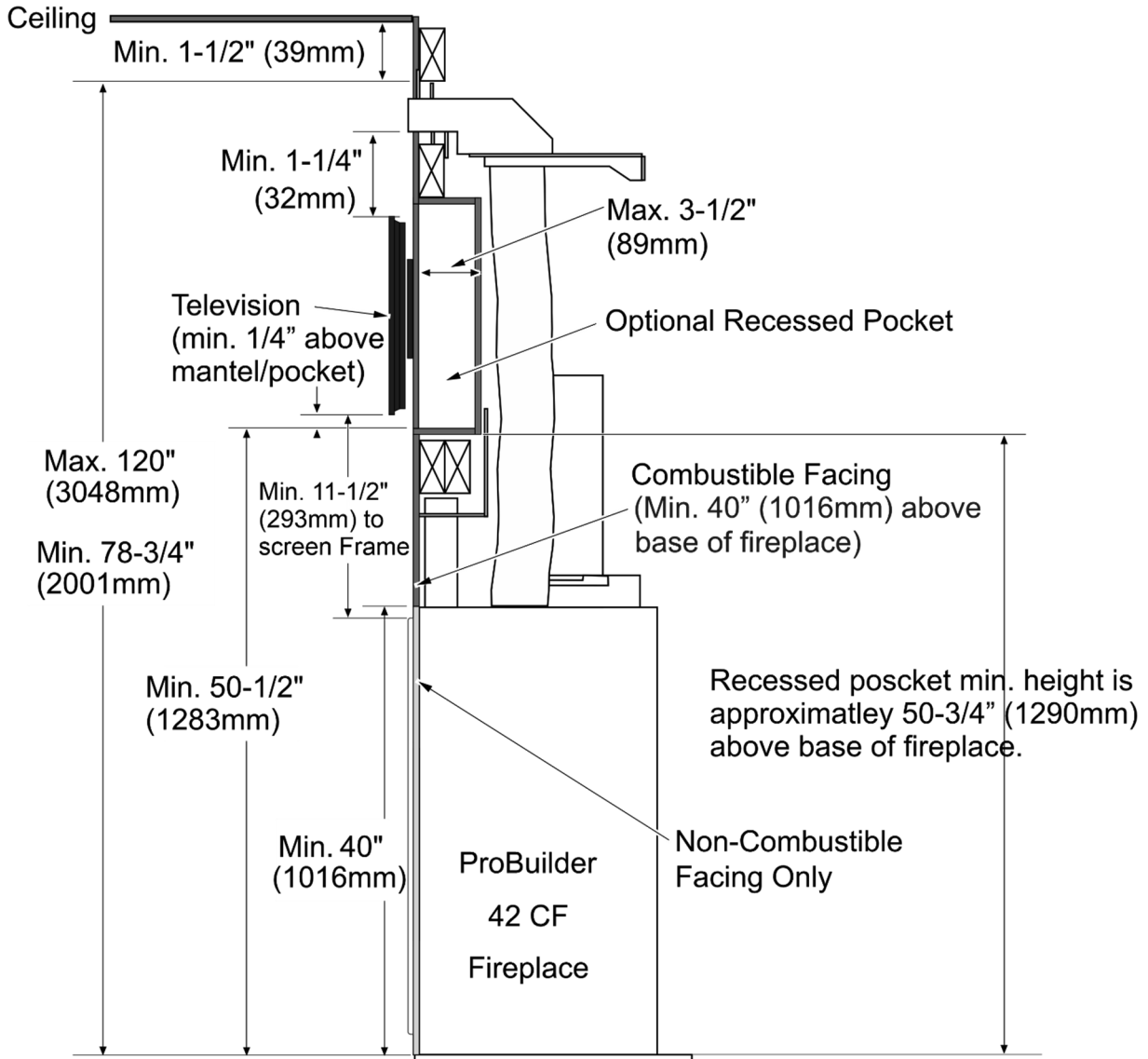
864 alternative mantel clearances are yet to be determined. Abide by the mantel clearances in the appliance manual.



PB 42 Linear – Details

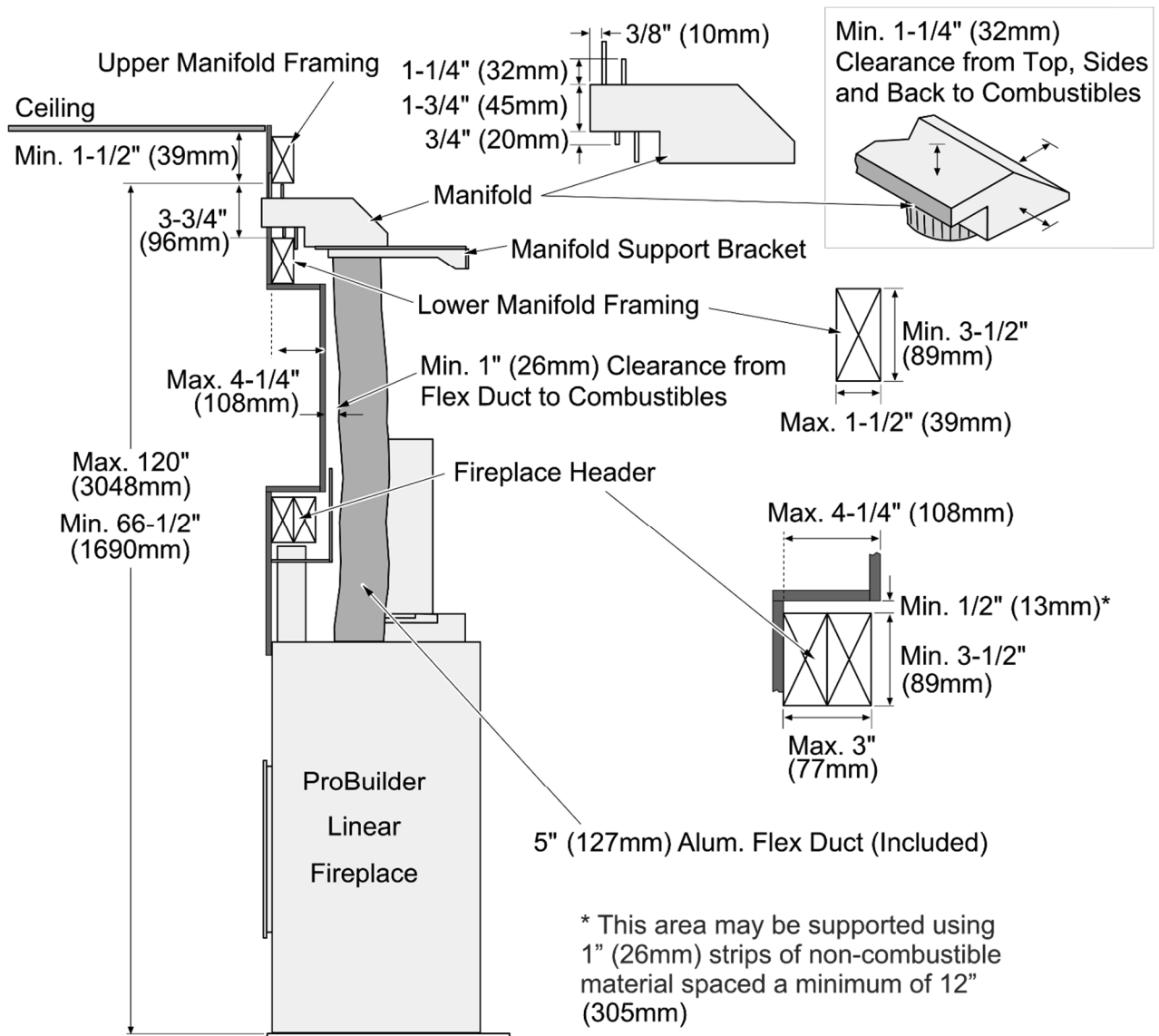
PB 42 Linear - Overview

The CoolSmart system is designed to redirect the convective heat of the fireplaces from the front of the unit, just above the glass, to a location higher on the wall. The use of this kit allows for reduced clearances to televisions and a recessed cavity above the fireplace. When using this kit, disregard the standard framing dimensions and follow the framing instructions for the CoolSmart kit.



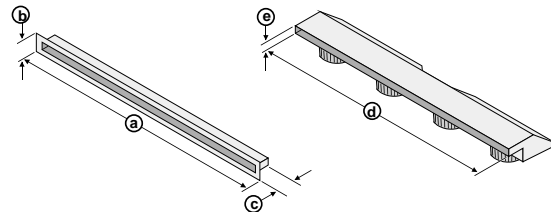


PB 42 Linear - Installation Requirements



Grill and Manifold Dimensions

The grill may be installed over the facing to provide an aesthetic opening for the convection outlet. (2) 8-32 x 1-1/2" screws attach the trim to the upper manifold. This allows variable thickness of finish material.



Dimensions

a	b	c	d	e
42" (1067mm)	2-7/8" (74mm)	1-1/4" (32mm)	41" (1042mm)	1-3/4" (45mm)



PB 42 Linear - Combustible "Over-Facing" (Optional)

! WARNING !

When using the CoolSmart TV kit, Combustible material can be installed over the non-combustible board on the front of the fireplace. To be clear, there will be (2) layers of board over the front of the appliance, one **non-combustible that covers the entire front of the fireplace**, and a second layer that can be combustible material that is placed on top of the non-combustible board.

The combustible material MUST be installed OVER 1/2" of non-combustible board.

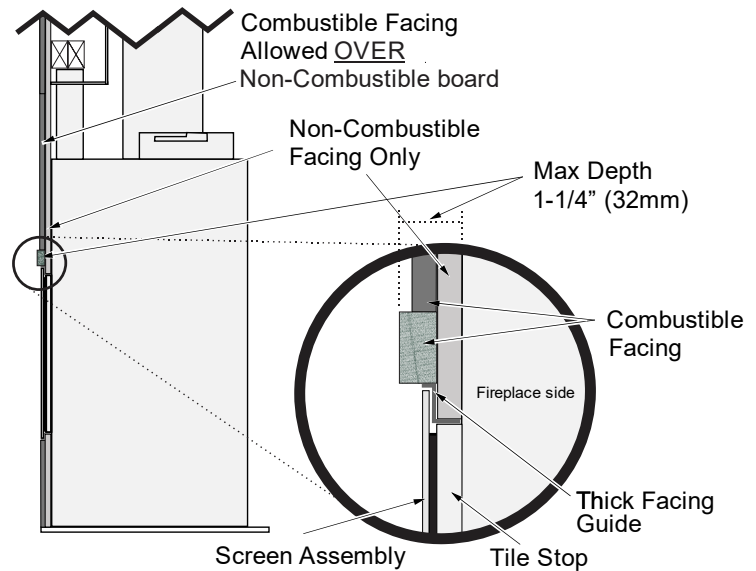
NOTE: The maximum facing depth (combustible + non-combustible facing) is 1-1/4". Any facing that extends farther than 1-1/4" must meet mantel clearances.

WARNING: The front of the appliance is subject to high temperatures which may cause discoloration and/or material degradation. Take this into account when choosing finishing materials.

Installation With Thick Facing Guide (facing butts thick facing guide) - STANDARD

NOTE: Leave the thick facing guide in place on the fireplace.

NOTE: The screen assembly mounts should be left in the stock position (all the way in).



Installation Without Thick Facing Guide (screen assembly overlaps facing)

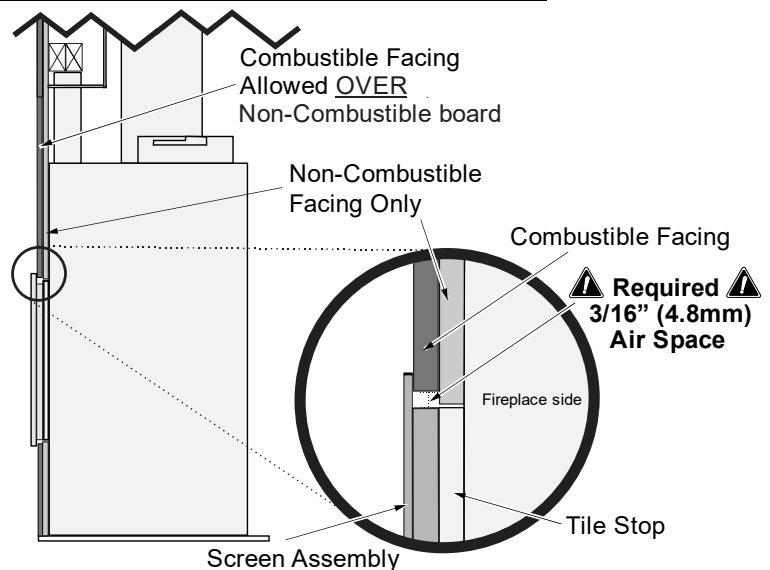
Note: Remove the thick facing guide on the fireplace (it is not used with this configuration).

Note: The screen assembly mounts will need to be moved out to accommodate the thickness of the facing (see installation manual for details).



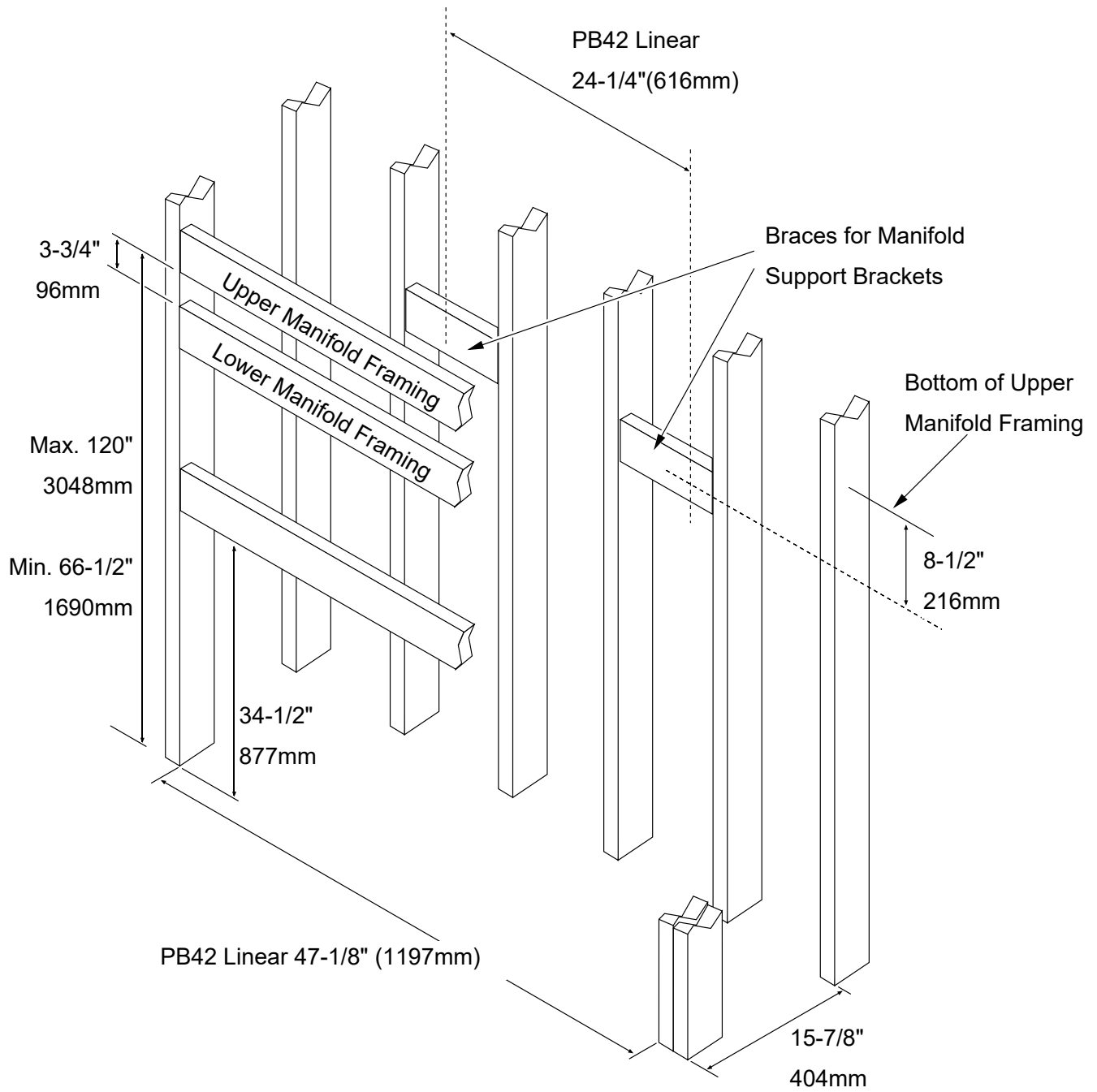
Warning:

When not using the thick facing guide, a 3/16" (4.8mm) air space is required from all four sides of the tile stop on the fireplace to the combustible facing (see details below).





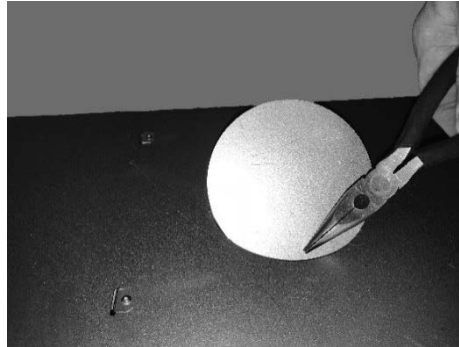
PB 42 Linear - Framing the Chase



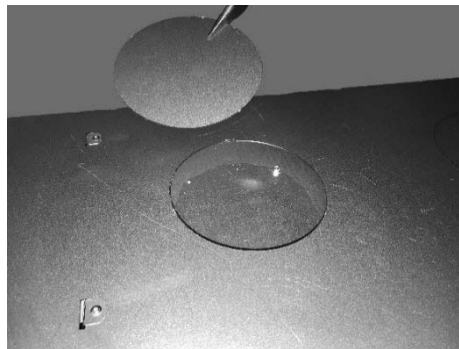


PB 42 Linear - Fireplace Preparation

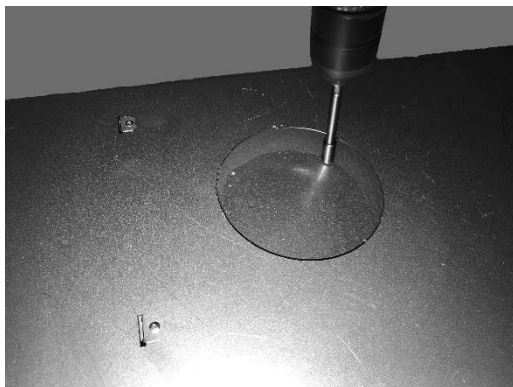
1. Use snips or diagonal cutters to snip the tab on the knockouts. Press on the far side away from the tap to pop the edge of the knockout up.



2. Grab on to the knockout with pliers and bend it back and forth until the remaining tabs break free. Discard the knock out plate.



3. Under each knock out plate, you will find a cover plate held in place with (2) ¼" screws. Use a nut driver or drill with an extension to remove the (2) screws. Reach in and remove the cover plate. You may discard the plates.

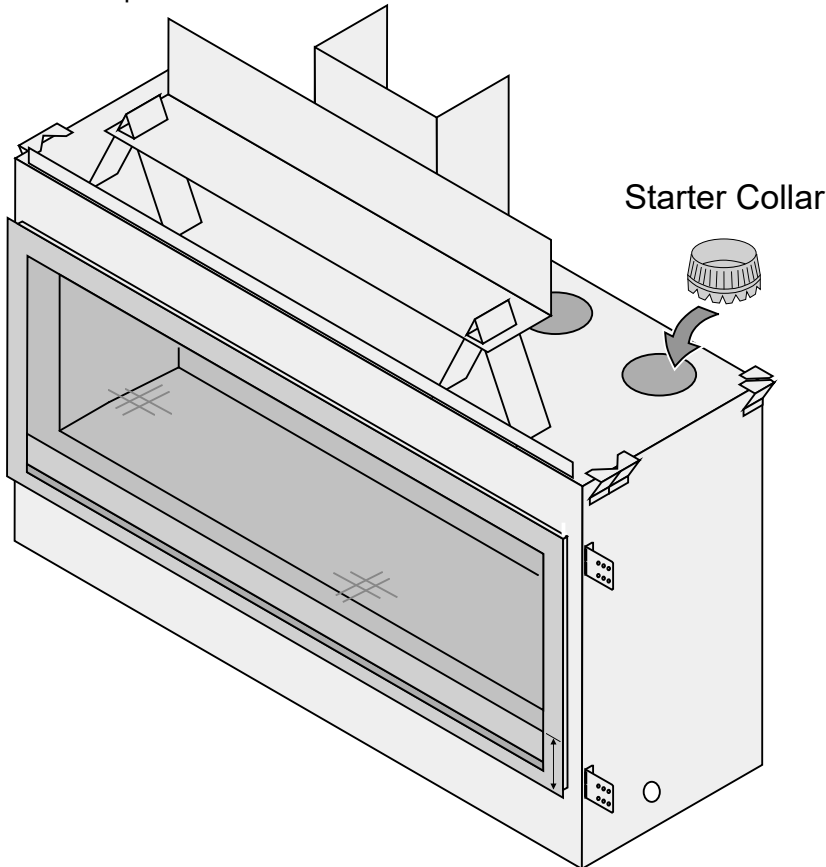




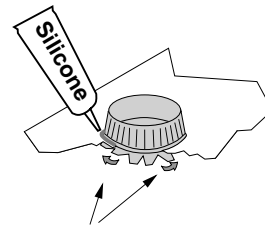
CoolSmart TV

864, PB 42 Linear, 4415 HO
Sku# 98900779

4. Insert a starter collar into each of the holes that were uncovered in the previous step and bend the tabs to secure the starter collar to the fireplace.. Seal the joints with silicone caulk or aluminum (U.L. 181A-P) tape



Use silicone to seal the starter collar to the top of the fireplace.



Bend the tabs on the bottom of the starter collar up to lock it in place.

5. Install the fireplace into the framed chase. See section "Installation" in the manual.

NOTE: With the use of this kit, the clearance to combustible material may be reduced. Combustible material may be installed to the top of the fireplace box. Non-combustible is still required on all front surfaces of the fireplace box.

CoolSmart TV

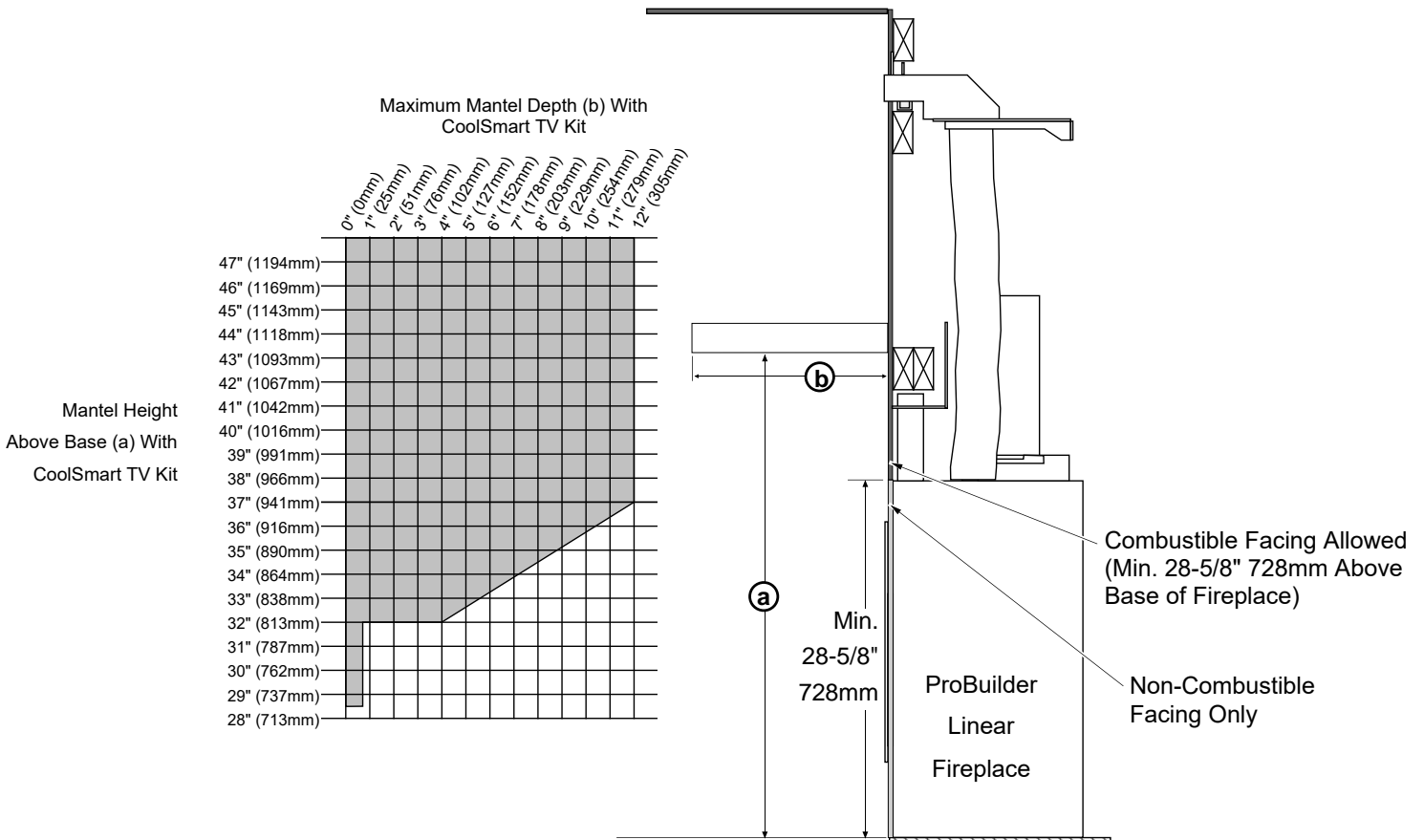
864, PB 42 Linear, 4415 HO
Sku# 98900779

PB 42 Linear – Mantel Clearances

When using this kit, disregard the combustible mantel requirements in the manual and follow the requirements shown to the right.

If you wish to place a TV above the mantel, it must meet the following requirements:

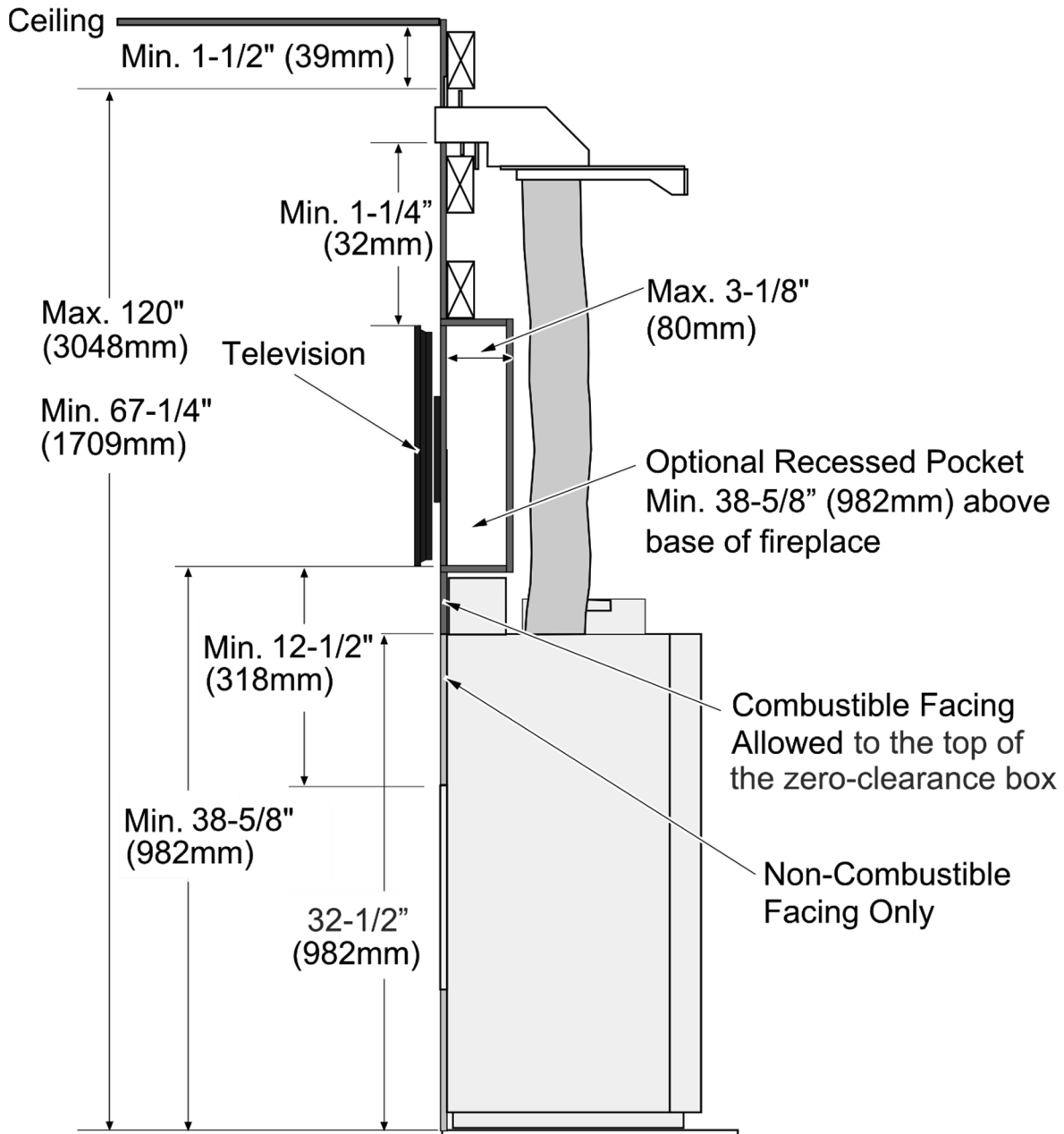
- Minimum 1" air gap behind TV to wall.
- The mantel must extend 2" in front of the TV and 1" to both sides.



4415 HO Linear – Details

4415 HO Linear - Installation Overview

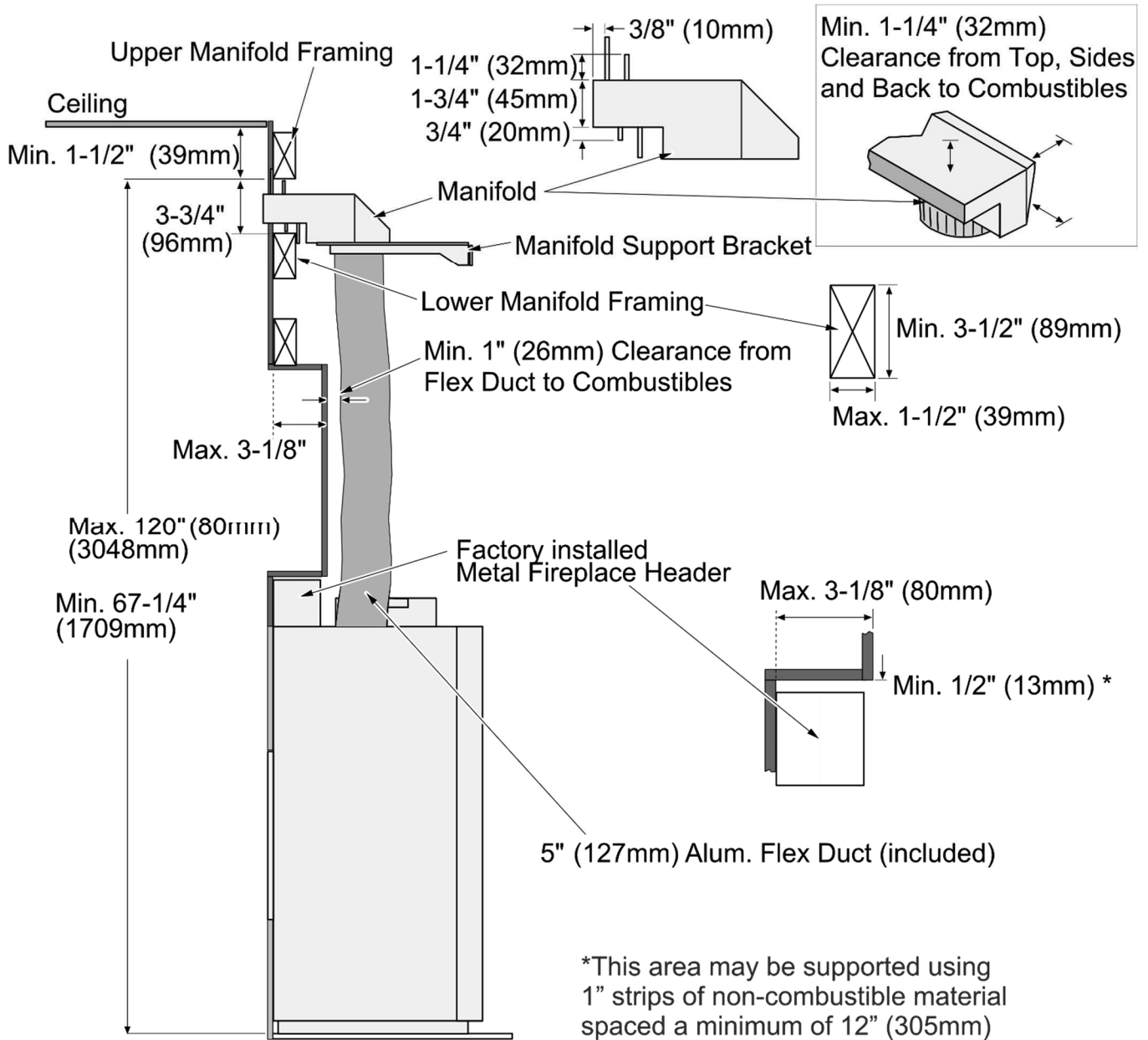
The CoolSmart system is designed to redirect the convective heat of the fireplaces from the front of the unit, just above the glass, to a location higher on the wall. The use of this kit allows for reduced clearances to televisions and a recessed cavity above the fireplace. When using this kit, disregard the standard framing dimensions and follow the framing instructions for the CoolSmart kit.



CoolSmart TV

864, PB 42 Linear, 4415 HO
Sku# 98900779

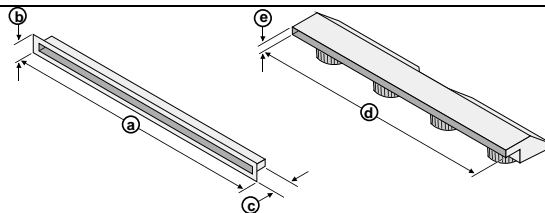
4415 HO - Installation Requirements



Grill and Manifold Dimensions

The grill may be installed over the facing to provide an aesthetic opening for the convection outlet. (2) 8-32 x 1-1/2" screws attach the trim to the upper manifold. This allows variable thickness of finish material.

Dimensions



a	b	c	d	e
42" (1067mm)	2-7/8" (74mm)	1-1/4" (32mm)	41" (1042mm)	1-3/4" (45mm)

CoolSmart TV

864, PB 42 Linear, 4415 HO
Sku# 98900779

4415 HO - Combustible "Over-Facing" (Optional)



WARNING



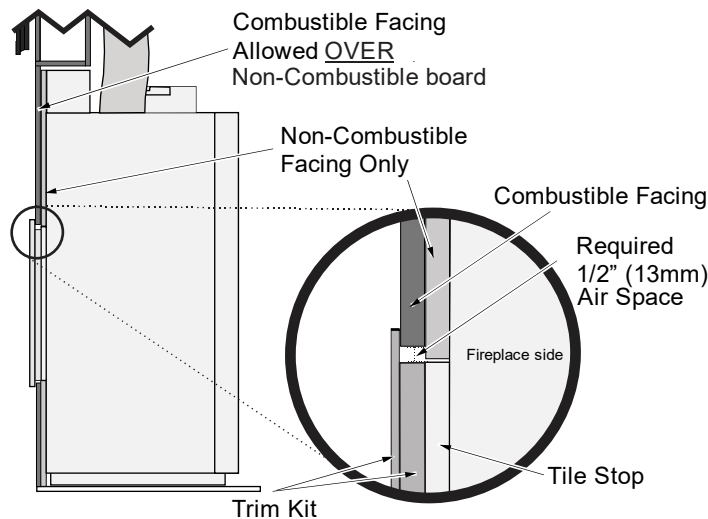
When using the CoolSmart TV kit, Combustible material can be installed over the non-combustible board on the front of the fireplace. To be clear, there will be (2) layers of board over the front of the appliance, one **non-combustible that covers the entire front of the fireplace**, and a second layer that can be combustible material that is placed on top of the non-combustible board.

The combustible material MUST be installed OVER 1/2" of non-combustible board.

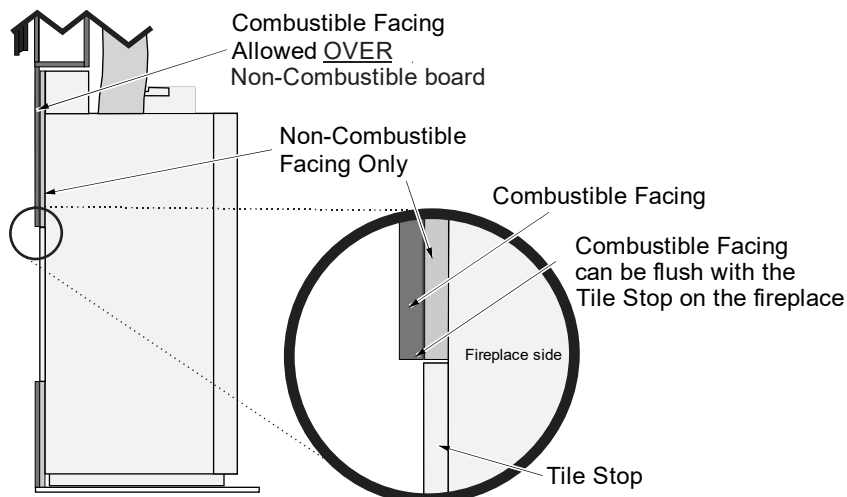
WARNING: If using a trim kit or the Gallery face, a 1/2" air space is required from all four sides of the tile stop on the fireplace. If no trim is being used, the airspace is not required (see below for details).

NOTE: The maximum facing depth (combustible + non-combustible facing) is 1-1/4". Any facing that extends farther than 1-1/4" must meet mantel clearances.

Over Facing WITH Trim Kit



Over Facing WITH OUT Trim Kit



WARNING: The front of the appliance is subject to high temperatures which may cause discoloration and/or material degradation. Take this into account when choosing finishing materials.

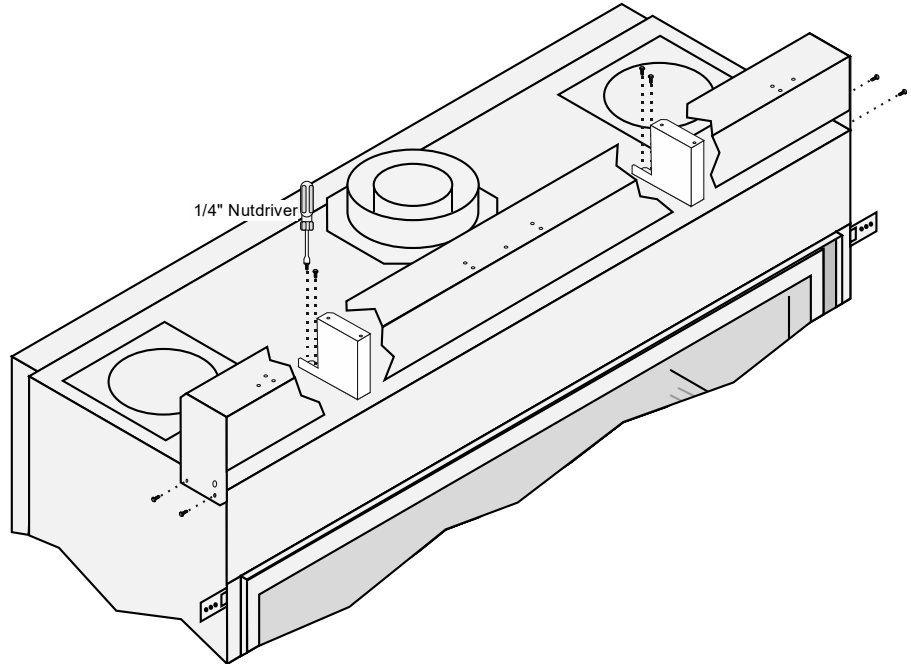
CoolSmart TV

864, PB 42 Linear, 4415 HO
Sku# 98900779

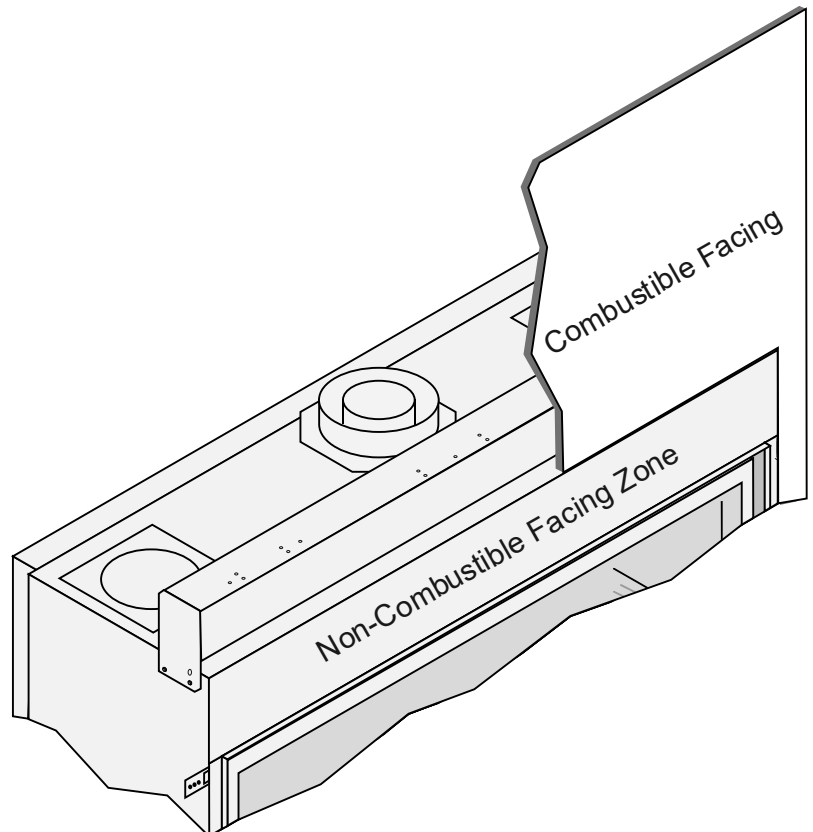
4415 HO - Flush Facing Header Configuration and Facing

For installations where only non-combustible facing will cover the front of the appliance, the metal header can be moved back $\frac{1}{2}$ " to accommodate drywall installed flush with the front of the fireplace. The drywall can contact the top $\frac{1}{2}$ " of the fireplace top.

- Use a $\frac{1}{4}$ " nut driver to remove the (8) screws that secure the header assembly to the top of the fireplace
- Slide the header assembly back $\frac{1}{2}$ ".
- Align the header assembly with the second set of holes in the fireplace. Reattach the assembly to the fireplace (use the screws removed in the first step).



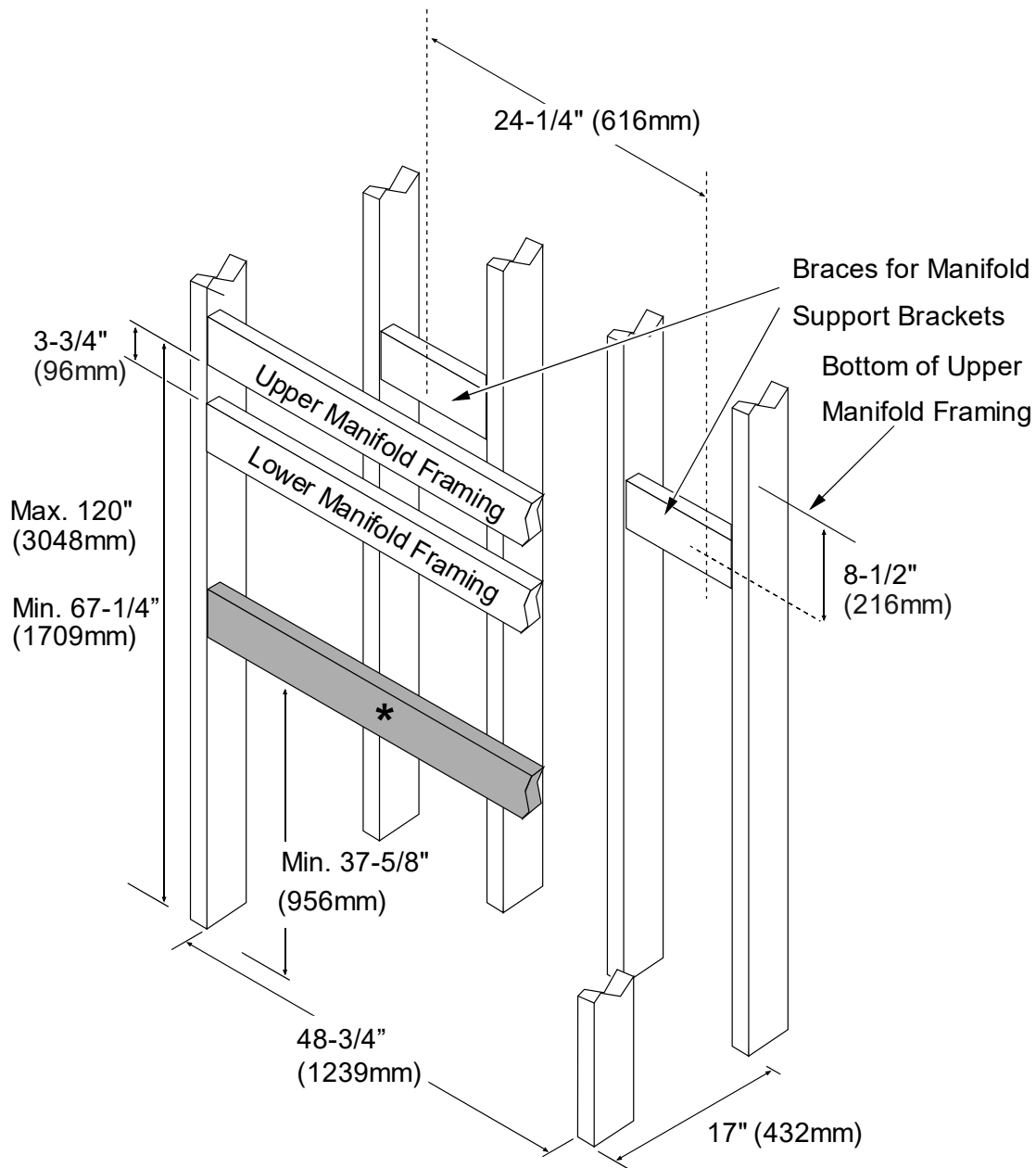
WARNING: For flush installations, combustible facing can touch the first $\frac{1}{2}$ " of the fireplace box. **ONLY NON-COMBUSTIBLE FACING** can cover the front of the appliance.



CoolSmart TV

864, PB 42 Linear, 4415 HO
Sku# 98900779

4415 HO - Framing the Chase



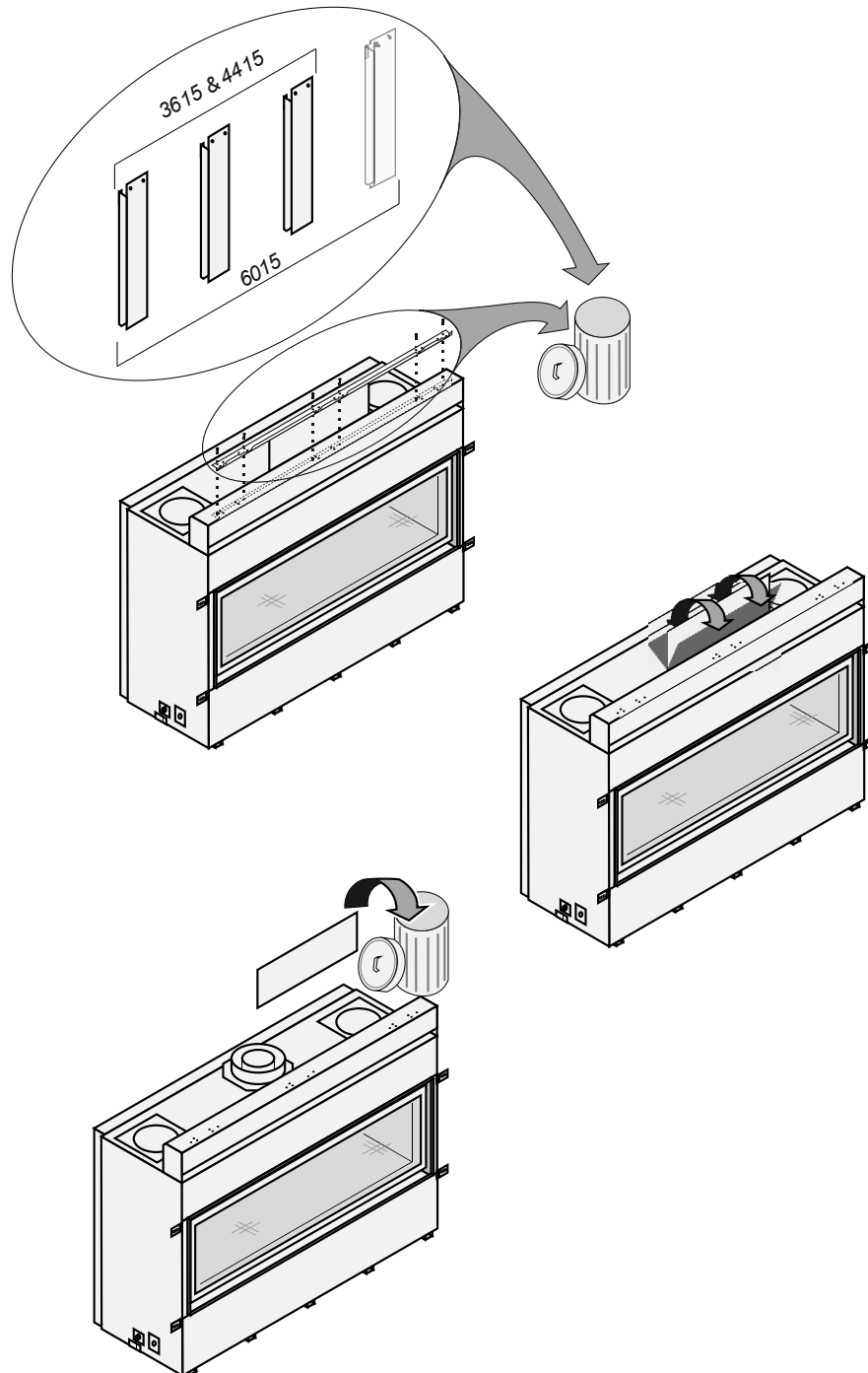
* The dark-shaded framing may be installed after the fireplace is put into position. It is used to provide support for the facing above the fireplace and nailing brackets.

CoolSmart TV

864, PB 42 Linear, 4415 HO
Sku# 98900779

4415 HO - Fireplace Preparation

- When using the CoolSmart TV kit, you may discard the metal framing members included with the fireplace (3615 and 4415 have (3) and 6015 has (4)).
- Remove the screws that secure the sheetrock backer ("L" shaped metal bracket secured to the metal header of the unit) and discard the backer (see first illustration below). Bend the pipe heat shield back and forth until it snaps off of the metal header. Discard the heat shield (see middle and right illustrations below).



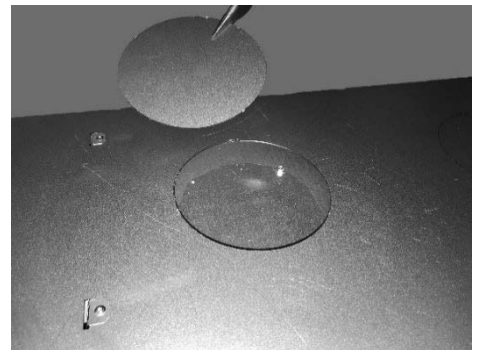
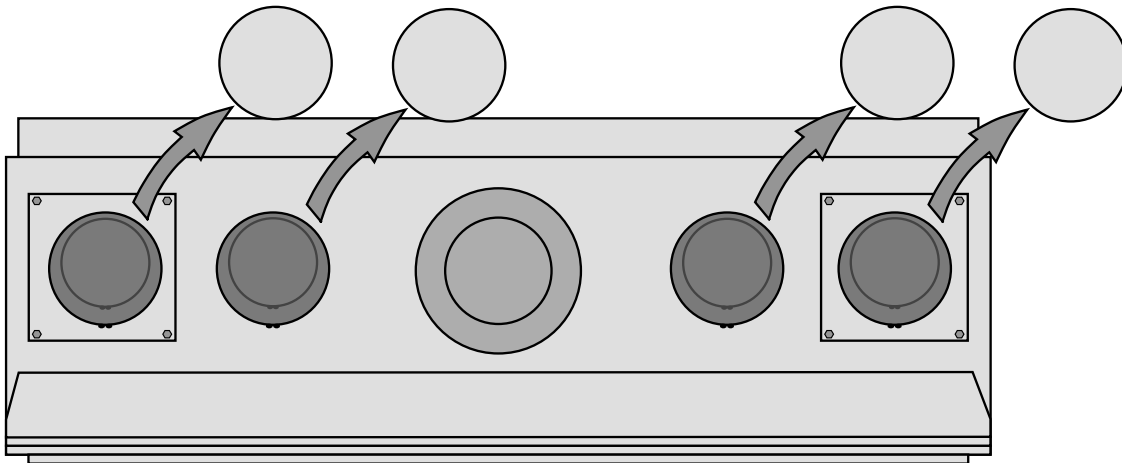
CoolSmart TV

864, PB 42 Linear, 4415 HO
Sku# 98900779

WARNING: In order to extract the heat properly from around the firebox, you will must remove (4) layers of cover plates for each of the (4) flex attachment points on the top of the fireplace. Not removing all of the cover plates can create hazardous conditions.

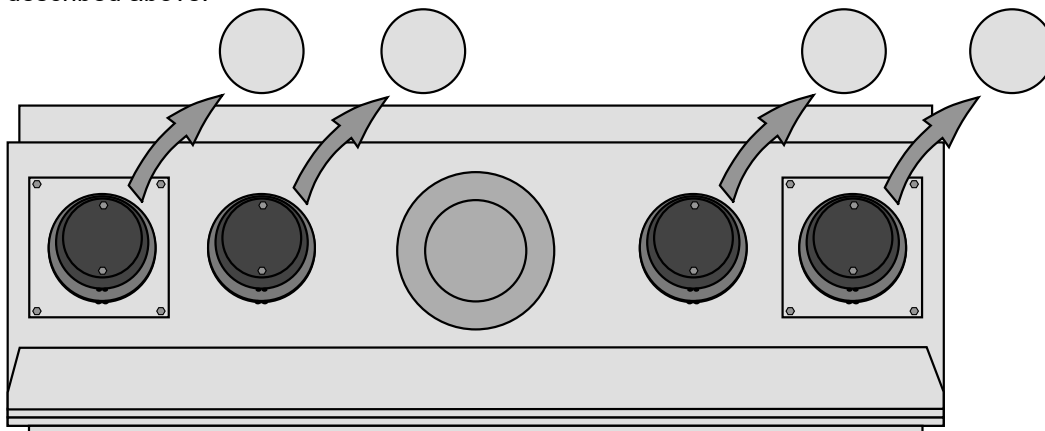
First Layer

- Remove all (4) of the 5" knockouts (leave the square cover plates in place). Use snips or diagonal cutters to snip the tab on the knockouts. Press on the far side away from the tab to pop the edge of the knockout up. Grab on to the knockout with pliers and bend it back and forth until the remaining tabs break free. Discard the knock out plate.



Second Layer

- In each of the four holes, you will see the next layer of knockouts. Remove the knockouts using the same technique described above.

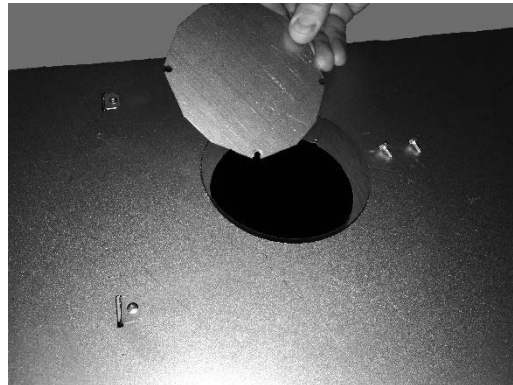
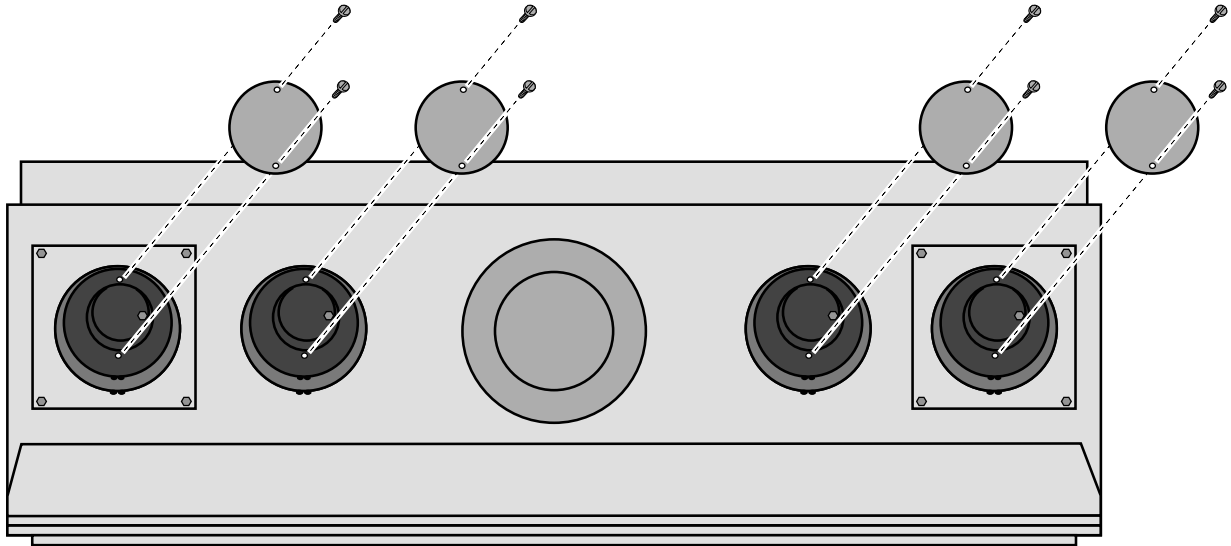


CoolSmart TV

864, PB 42 Linear, 4415 HO
Sku# 98900779

Third Layer

- Under the second layer of knockout plates, you will find cover plates held in place with (2) ¼" screws. Use a nut driver or drill with an extension to remove the (2) screws. Reach in and remove the cover plate. You may discard the plates.



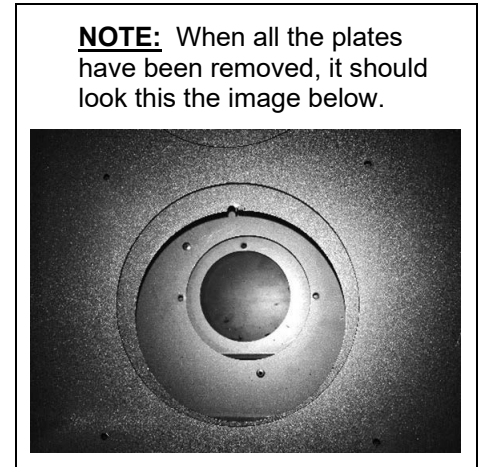
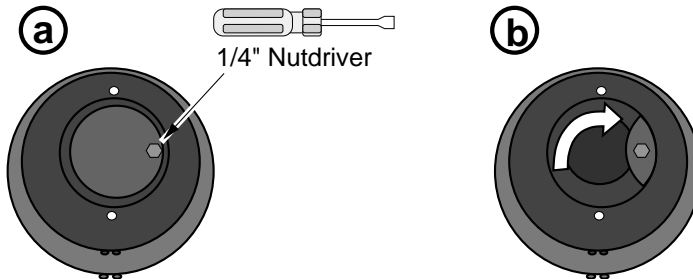
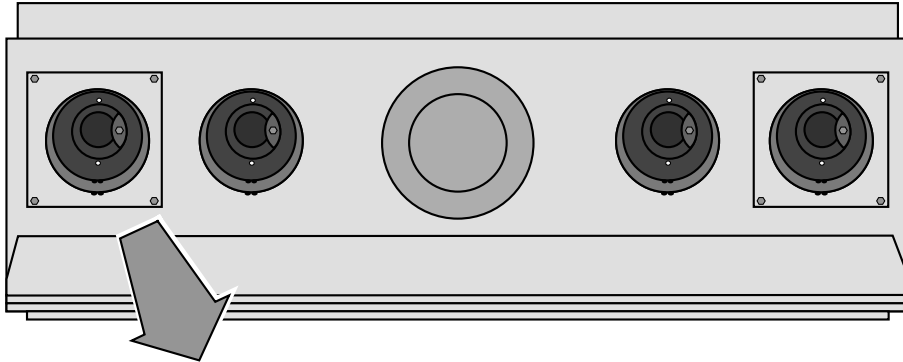
CoolSmart TV

864, PB 42 Linear, 4415 HO
Sku# 98900779

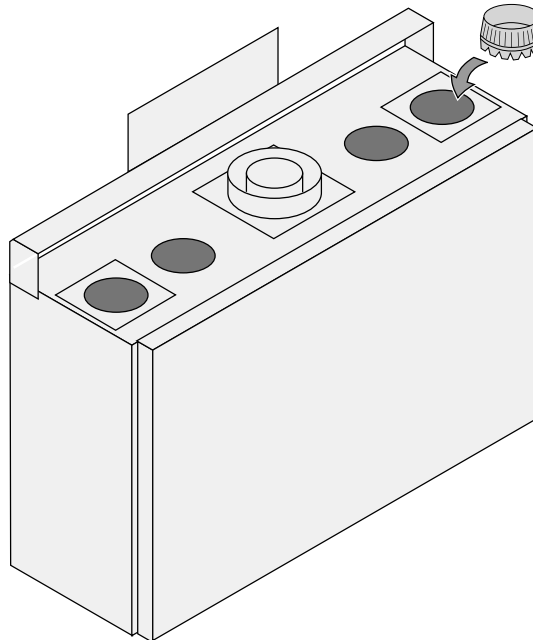
Fourth (final) Layer

- Once the third layer is removed, a final cover plate will be visible. Use a 1/4" nutdriver to loosen the screw securing the plate. Reach in and rotate the cover plate to uncover the final hole.

NOTE: The final plate does not get removed from the fireplace, just rotated to uncover the hole. Once the plate has been rotated, tighten the screw to lock the plate in place.

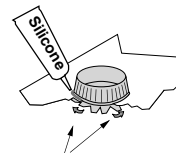


- Install the starter collars onto the fireplace (see below).



Starter Collar

Use silicone to seal the starter collar to the top of the fireplace.



Bend the tabs on the bottom of the starter collar up to lock it in place.

- Install the fireplace into the framed chase. See section "Installation" in the manual.

CoolSmart TV

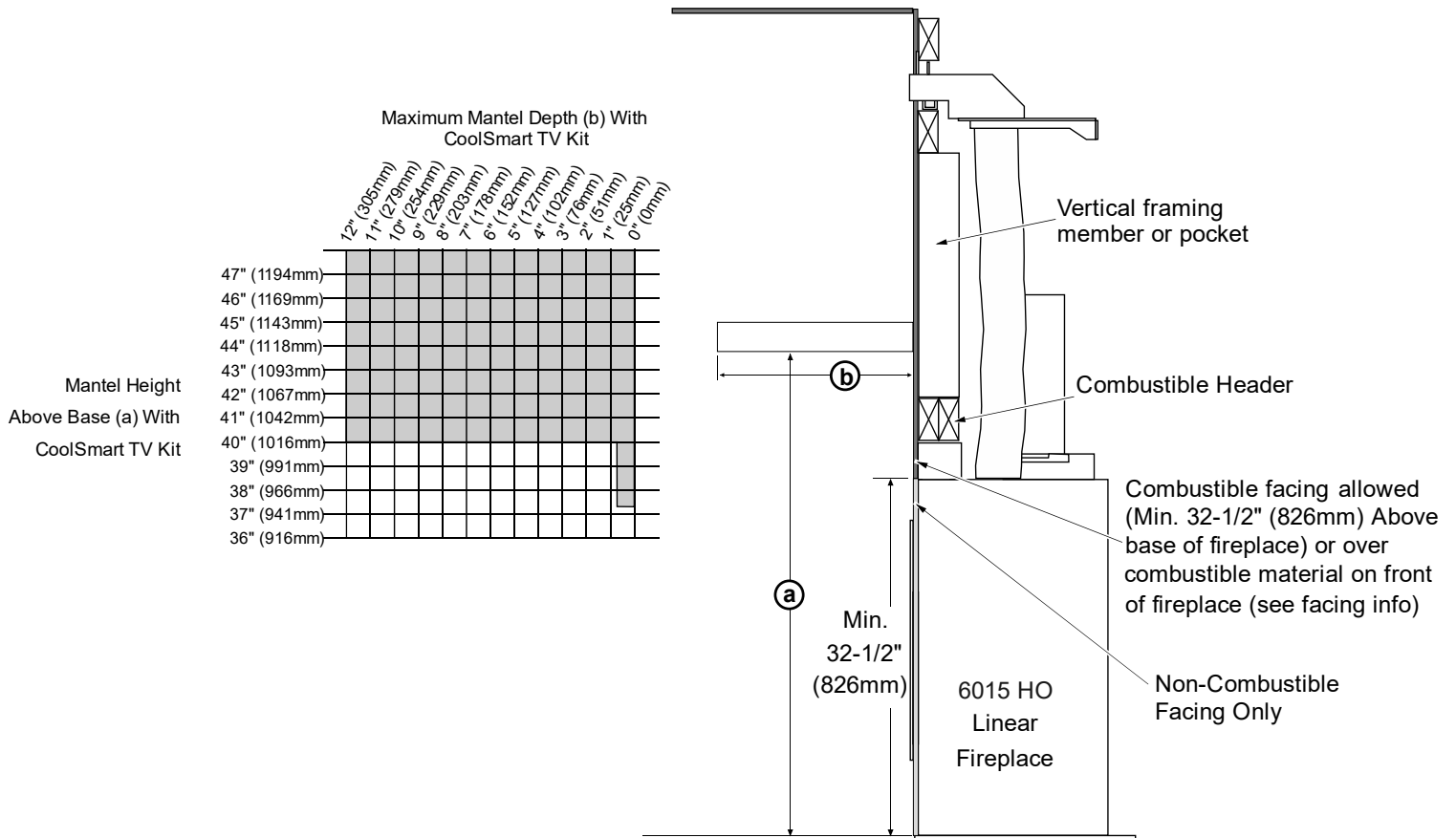
864, PB 42 Linear, 4415 HO
Sku# 98900779

4415 HO – Mantel Clearances

When using this kit, disregard the combustible mantel requirements in the manual and follow the requirements shown to the right.

If you wish to place a TV above the mantel, it must meet the following requirements:

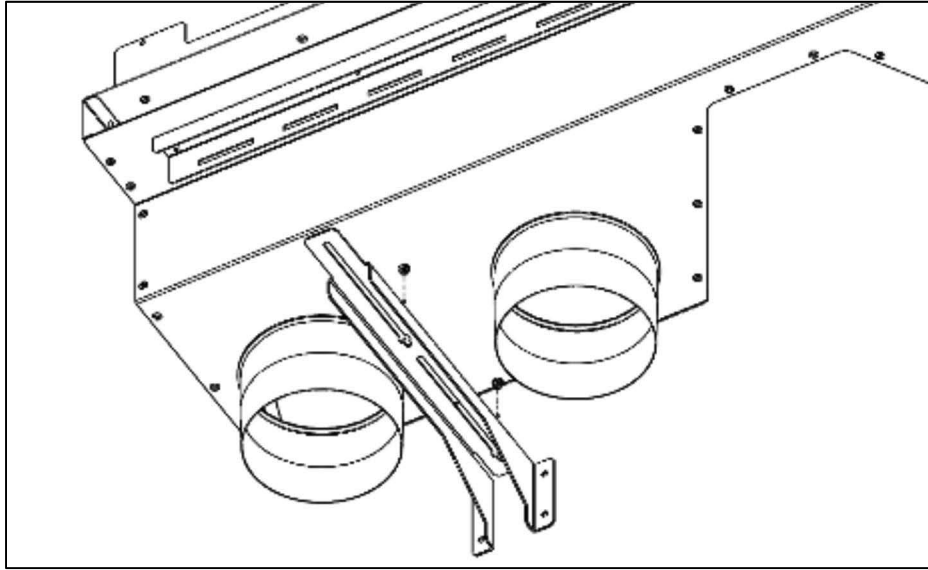
- Minimum 1" air gap behind TV to wall.
- The mantel must extend 2" in front of the TV and 1" to both sides.



CoolSmart TV
864, PB 42 Linear, 4415 HO
Sku# 98900779

CoolSmart TV Installation

1. Remove the grill from the manifold (2 screws hold it in place).
2. Remove the rear-mounting brackets by loosening 1/4" screws and sliding it out of the keyhole slots.

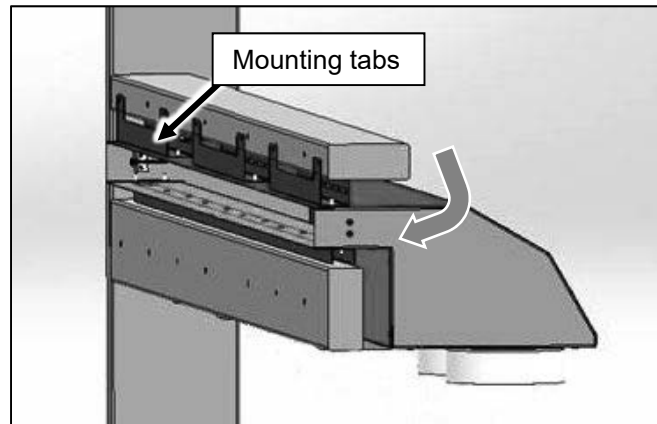


3. Determine the desired location of the bottom of the convection air outlet. Install a horizontal framing member at the desired height, parallel to the header. Install a second horizontal framing member 3-3/4" above the first. These two framing members will support the upper convection manifold in the following steps.

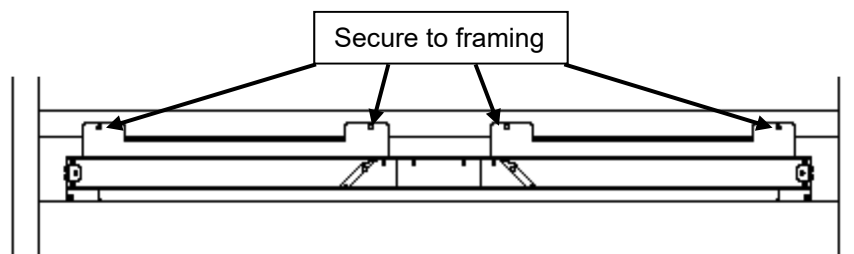
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4. Hold the upper convection manifold with the outlet facing the back of the framing members installed in the previous step. Tilt the outlet of the manifold downward until the outlet of the manifold and the two mounting tabs can fit between to two framing members. Slide the outlet into the gap and allow it to sit level again. The two mounting tabs will support the manifold.



5. Secure the manifold to the upper framing using screws (not included).



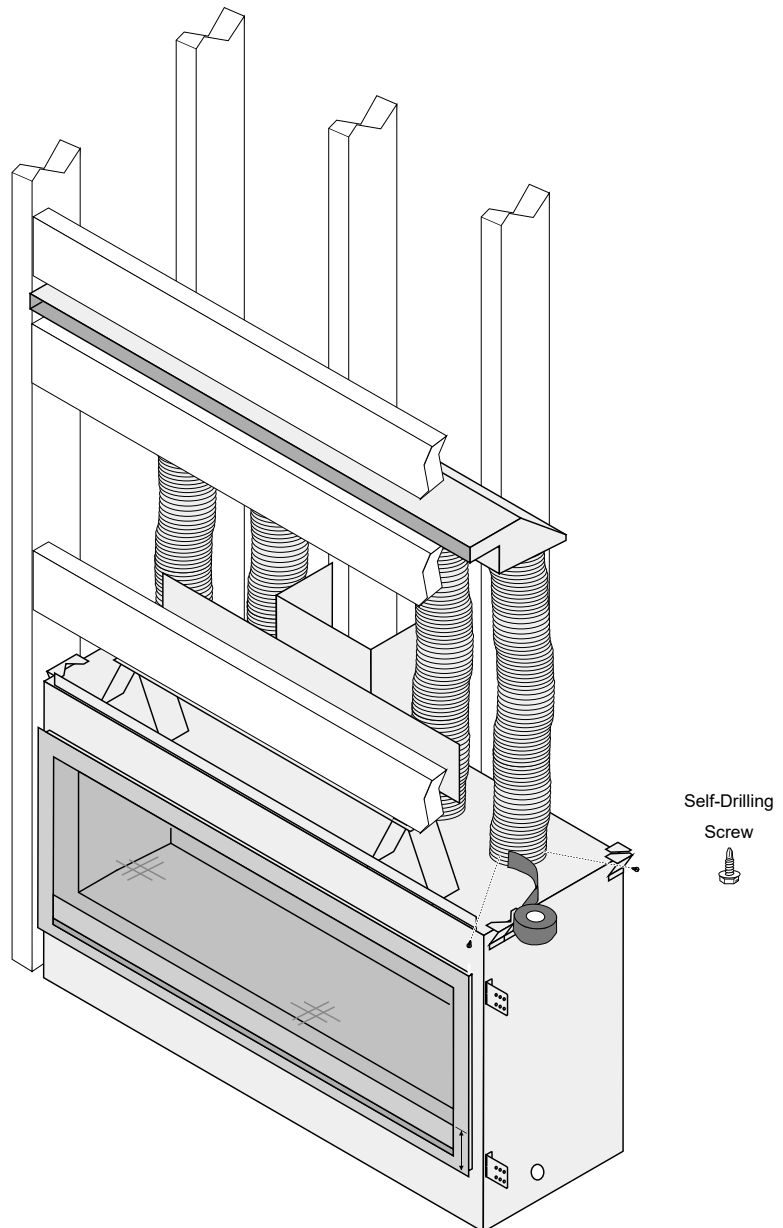
CoolSmart TV

864, PB 42 Linear, 4415 HO
Sku# 98900779

- Re-attach the two rear mounting brackets (removed in step 6) to the bottom of the convection manifold. Leave the screws loose so the brackets can be positioned to the back of the chase. Secure the brackets to the chase using screws (not included). Tighten the screws securing the brackets to the manifold.



- Stretch the included flex to its maximum length. Measure the distance between the starter collars on the fireplace and the inlets on the convection manifold. Cut the flex to the appropriate length and install between the fireplace and the manifold. Secure using (3) screws at every connection and seal the joints with silicone caulk or aluminum (U.L. 181A-P) tape.



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8. Cover the face of the fireplace and the outlet of the manifold to ensure no construction debris or sheetrock dust enters the unit.
9. Once all finish work is complete around the outlet of the manifold, install the outlet grill assembly using the two included screws (one at each end). The grill assembly will overlap finish material up to 1-1/2" (39mm) thick. See fireplace installation manual for finishing details.

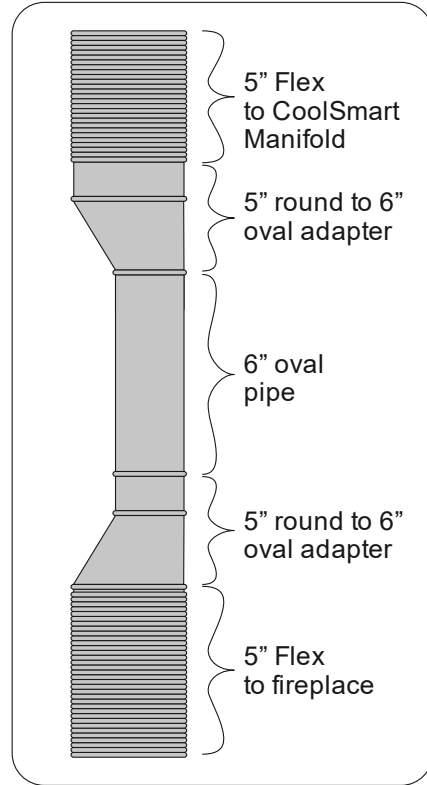
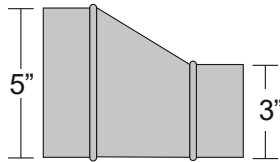
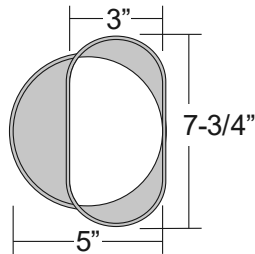
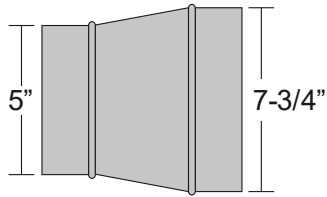
NOTE: The manifold opening protrudes 7/16" (12mm) proud of the framing. The wall may be finished to the opening if you do not wish to use the grill trim.

Using oval pipe to get past an obstruction

If a situation arises that obstructs the CoolSmart flex vent runs (such as getting past a minimum sideways vent) you may transition the 5" flex vent to a ridged nominal 6" oval pipe to get past the obstruction. Transition back to the 5" round flex and continue to the manifold.

The adapters and ridged pipe should be factory ovalized, not field ovalized.

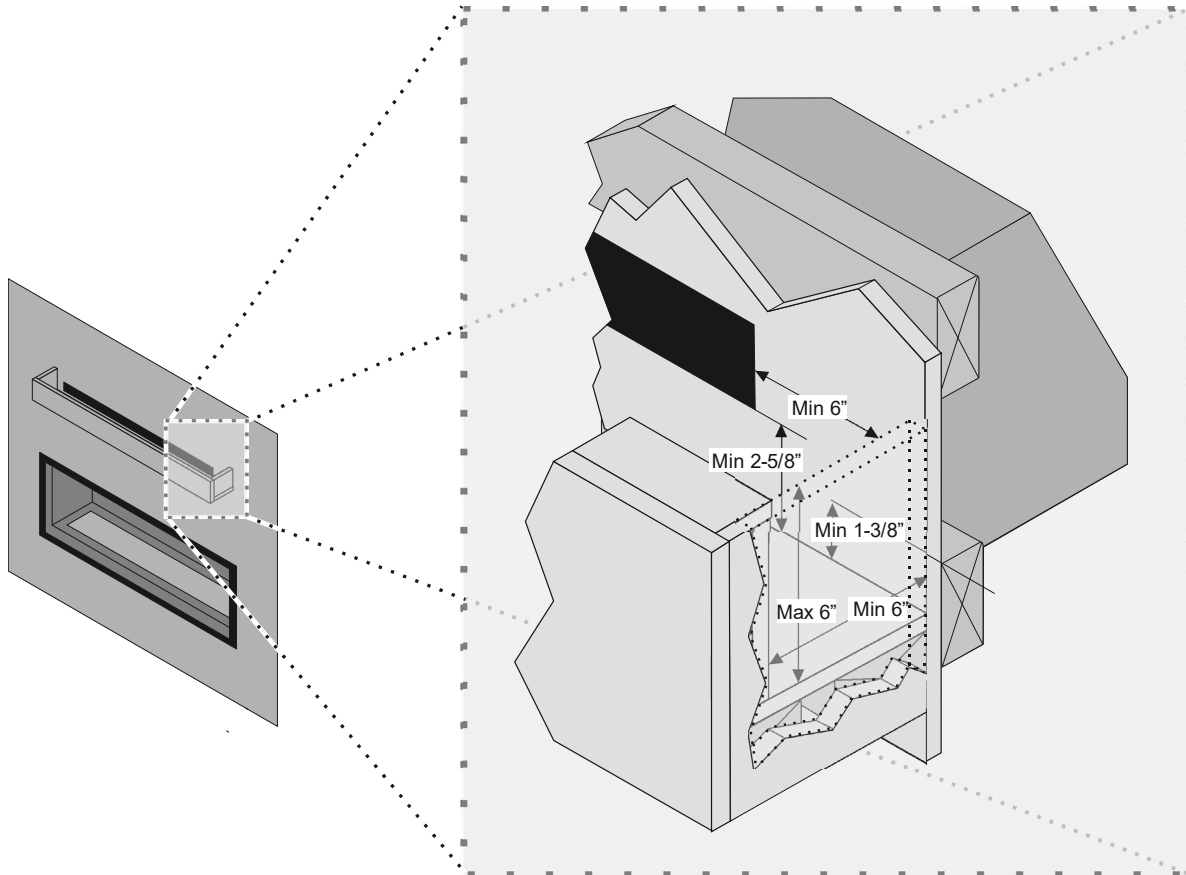
NOTE: All clearances to combustibles must be maintained.



Custom Valance to Disguise Outlet – (Optional)

A custom valance may be constructed to obscure the view of the manifold outlet. If using a valance it must meet the following requirements.

- The valance may be constructed of non-combustible or combustible material. All clearances must be maintained regardless of material.
- The top surface of the valance floor must be a minimum of 1-3/8" (35mm) below the top edge of the lower framing for the manifold (approx. 2-5/8" (67mm) from the bottom of the manifold outlet).
- The distance from the front of the manifold opening to the inside surface of the front of the valance must be a minimum of 6" (153mm).
- The front wall of the valance can be a maximum of 6" (153mm) tall (see illustration below).
- If the valance has an end cap, the inner surface of the end cap must be a minimum of 6" (153mm) from the manifold outlets edge.



NOTE: Do not place anything in the valance (artwork, decorations, etc.). Placement of items on the valance could obstruct the airflow and create a hazardous condition.