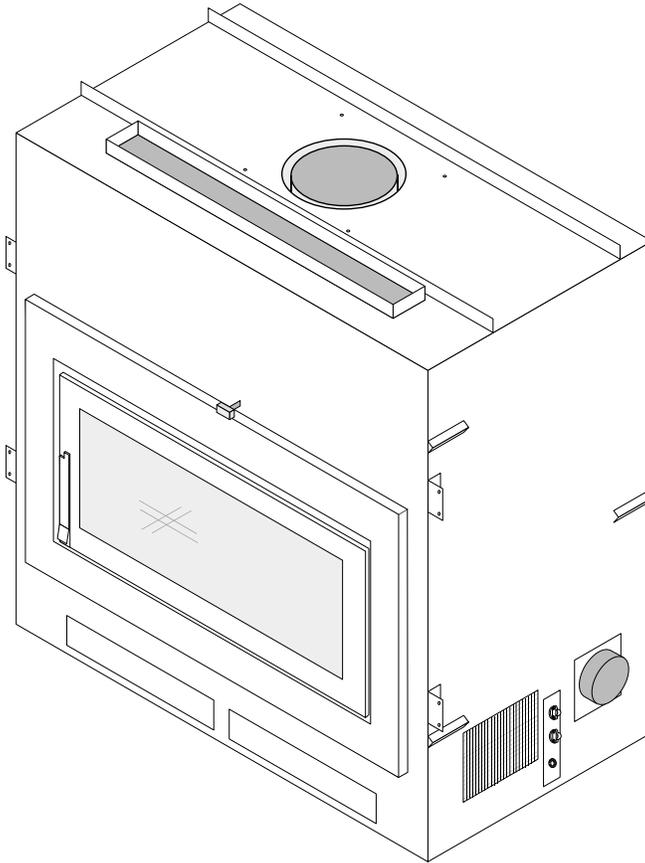


FIREPLACE

XTRORDINAIR



42 Apex Clean Face Installation Manual



**TRAVIS INDUSTRIES
HOUSE OF FIRE**

12521 Harbour Reach Drive
Mukilteo, WA 98275

This manual is available online in French.
Manuel est disponible en ligne en Français.
www.travisproducts.com

Wood-Burning
Zero-Clearance
Fireplace

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\$10.00 100-01450



Report # 028WF102S
U.L. 127-2015 and ULC-S610-M87
(R1998)

Overview

This manual details the installation requirements for the 42 Apex Clean Face (CF) wood-burning fireplace. For operating and maintenance instructions, refer to the 42 Apex CF Owner's Manual.

Keep this manual for future use.

Listing Details

This appliance was listed by OMNI Test Labs to U.L. 127 and ULC-S610-M87 – report number 028WF102S. The listing label is attached to the base of the fireplace and can be viewed by accessing the fan compartment.



DO NOT REMOVE THIS LABEL
CONTACT LOCAL BUILDING OR FIRE OFFICIALS ABOUT INSTALLATION AND RESTRICTIONS IN YOUR AREA.
LISTED FACTORY-BUILT FIREPLACE
CONFORMS TO UL STD 127-2015; CERTIFIED TO ULC STD S610-M87 (R1998)



MODEL:
42 Apex

SERIAL NO:

This wood heater contains a catalytic combustor, where both need periodic inspection and replacement for proper operation. Consult the owner's manual for further information. It is against federal regulations to operate this wood heater in a manner inconsistent with operating instructions in the owner's manual, or if the catalytic element is deactivated or removed. CAUTION: the combustor used in this appliance (part no. 250-00556) is fragile and must be handled carefully. Burning of metal foils, plastic, garbage, sulphur and diesel oil will render the catalyst in the combustor inactive. The performance and durability of the catalytic combustor has not been evaluated as part of the certification. Do not use a fireplace insert or other products not specified for use with this product. This fireplace has not been tested with an unvented gas log set. To reduce the risk of fire or injury, do not install an unvented gas log set into fireplace. Fireplace must use combustion air drawn from outside the house. Use cord wood only. **DO NOT OVERFIRE UNIT.**

Approved chimney: Simpson Duravent 7" Duravent DuraPlus HTC & Simpson Duravent 8" X12" sold through Travis Industries

Replace glass only with 5mm neoceramic or ceramic glass.

Electrical Rating: 115V, 60 Hz, 1.8 Amps
Optional Green Start: # 9440953
Blower: # 9940954

Made in U.S.A.

U.S. ENVIRONMENTAL PROTECTION AGENCY
Certified to comply with 2020 particulate emission standards using cord wood.
0.93 g/h, EPA Alt-125, ASTM E3053-17, ASTM 2515-11, CSA B415.1-10



Manufactured by:
TRAVIS INDUSTRIES, INC.
12521 Harbour Reach Drive
Mukilteo, WA 98275
www.travisproducts.com

DATE OF MANUFACTURE

<input type="checkbox"/>															
2018	2019	2020	2021	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

1212



42 Apex

U.S. ENVIRONMENTAL PROTECTION AGENCY
Certified to comply with 2020 particulate emission standards using cord wood.
0.93 g/h, EPA Alt-125, ASTM E3053-17, ASTM 2515-11, CSA B415.1-10

Serial No. **ZC-1203**

This wood heater contains a catalytic combustor, where both need periodic inspection and replacement for proper operation. Consult the owner's manual for further information. It is against federal regulations to operate this wood heater in a manner inconsistent with operating instructions in the owner's manual, or if the catalytic element is deactivated or removed. See installation and operating instructions for this model. Use cord wood only.

Manufactured By: TRAVIS INDUSTRIES, INC.
12521 Harbour Reach Drive, Mukilteo, WA 98275

MANUFACTURE DATE:

<input type="checkbox"/>				
2018	JAN	APR	JUL	OCT
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2019	FEB	MAY	AUG	NOV
<input type="checkbox"/>				
2020	MAR	JUN	SEP	DEC

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IAS (ICBO) Approval

This appliance was listed by OMNI Test Labs – IAS (ICBO) # TL-130.

Emissions

This heater meets the 2020 U.S. EPA's cord wood emission limits for wood heaters. Tested to EPA Alt-125, ASTM E3053-17, ASTM 2515-11, CSA B415.1-10 this heater has been shown to deliver heat at rates ranging from 13,537 to 49,626 BTU/hr and an emission value of .93 g/h. Report No. 0028WF102E



National Fireplace Institute



We suggest that our gas hearth products be installed and serviced by professionals who are certified in the U.S. by the National Fireplace Institute® (NFI) as NFI Gas Specialists.

www.nficertified.org

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Installation Warnings

- Read this entire manual before installing the fireplace.
- Failure to install this fireplace in accordance with all local codes and the requirements listed in this manual may result in property damage, bodily injury, or even death.
- Notify your insurance company before installing this fireplace.
- Contact your local building officials to obtain a permit and information on installation restrictions or inspection requirements in your area.
- Notify your insurance company of this fireplace.
- The requirements listed below are divided into sections. All requirements must be met simultaneously. The order of installation is not rigid – the qualified installer should follow the procedure best suited for the installation.
- Modifications of the fireplace (doors, air inlet systems, damper control, or any other component supplied by Travis Industries) or use of any component part not approved by Travis Industries in combination with this fireplace system will void the listing and warranty.
- This fireplace is not approved for use in a mobile home.
- **Travis Industries, Inc. grants no warranty, implied or stated, for the installation or maintenance of your heater, and assumes no responsibility of any consequential damage(s).**

Operating Warnings

- **WARNING: FIREPLACE SHOULD BE OPERATED ONLY WITH DOORS FULLY OPEN OR DOORS FULLY CLOSED. IF DOORS ARE LEFT PARTLY OPEN, GAS AND FLAME MAY BE DRAWN OUT OF THE FIREPLACE OPENING, CREATING RISKS OF BOTH FIRE AND SMOKE.**
- **Creosote – Formation and Need for Removal**
When wood is burned slowly it produces tar and other organic vapors which combine with expelled moisture to form creosote. The creosote vapors condense in the relatively cool chimney flue of a slow-burning fire. As a result, creosote residue accumulates on the flue lining. When ignited this creosote makes an extremely hot fire.
The chimney shall be inspected at least twice a year during the heating season to determine when a creosote buildup has occurred.
When creosote has accumulated it shall be removed to reduce the risk of a chimney fire.
- Never use gasoline, gasoline-type lantern fuel, kerosene, charcoal lighter fluid, or similar liquids to start or ‘freshen up’ a fire in this fireplace. Keep all such liquids well away from the fireplace while it is in use.
- **Disposal of Ashes**
Ashes should be placed in a metal container with a tight-fitting lid. The closed container of ashes should be placed on a noncombustible floor or on the ground, well away from all combustible materials, pending final disposal. If the ashes are disposed of by burial in soil or otherwise locally dispersed, they should be retained in the closed container until all cinders have thoroughly cooled.
- A fireplace insert shall not be installed in a factory-built fireplace unless tested with the fireplace.

Proposition 65 Warning: Fuels used in gas, woodburning or oil fired appliances, and the products of combustion of such fuels, contain chemicals known to the State of California to cause cancer, birth defects and other reproductive harm.

California Health & Safety Code Sec. 25249.6

Travis Wood Burning Fireplaces, Stoves and Inserts are protected by one or more of the following patents; U.S. 9,170,025, 4,665,889 as well as other U.S. and Foreign Patents pending.

Installation Options

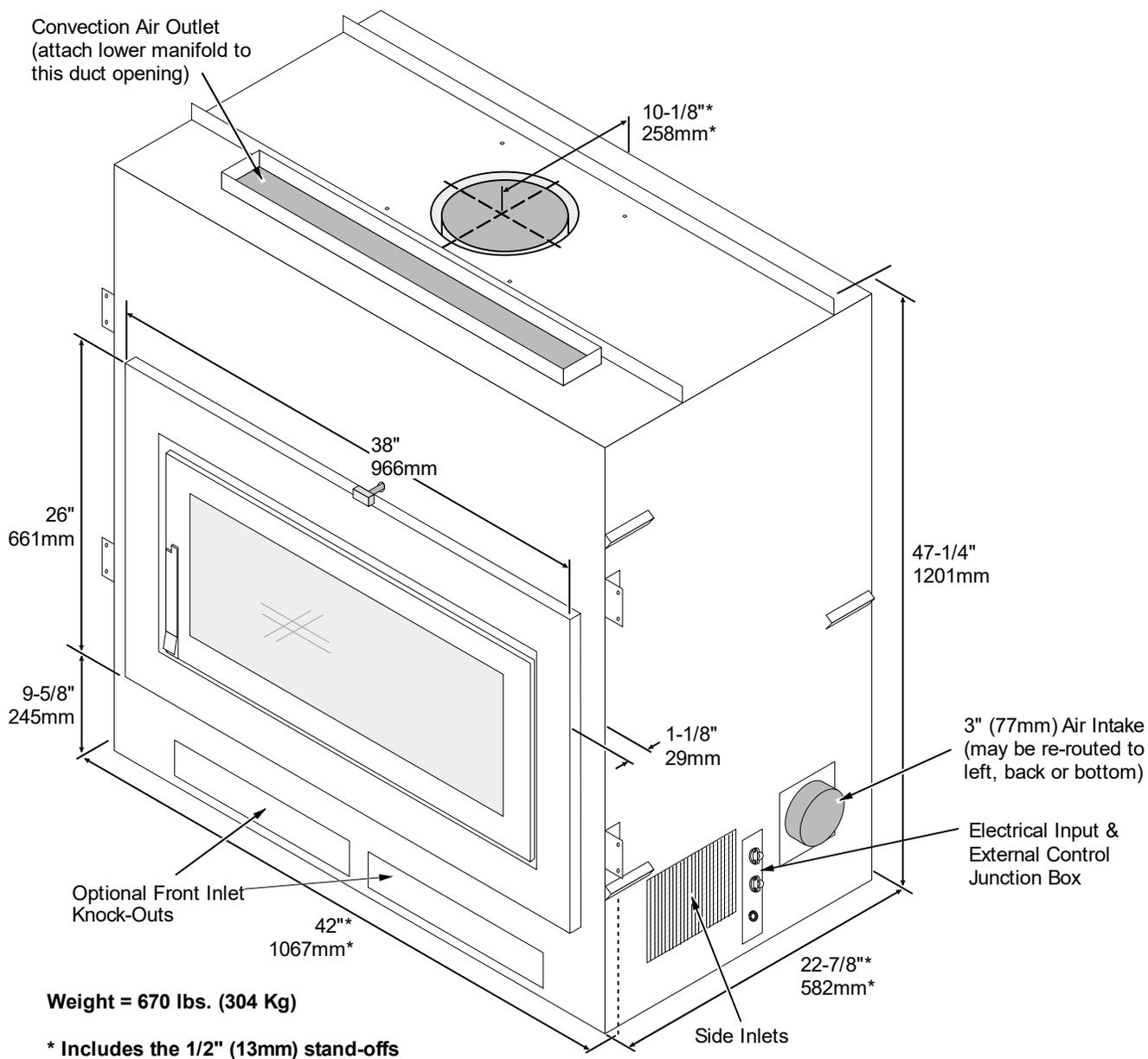
- Residential (not approved for HUD Mobile Homes)
- Straight or Corner Placement
- Raised or Floor Placement
- Raised or Floor Hearth
- Internal or External Chase
- 5 Air Intake Locations
- 1 Electrical Connection Location

Heating Specifications

Approximate Heating Capacity (in square feet)* Up to 2,500 sq. ft.
 Maximum Burning Time Up to 12 Hours

* Heating capacity will vary with floor plan, insulation, and outside temperature.

Dimensions

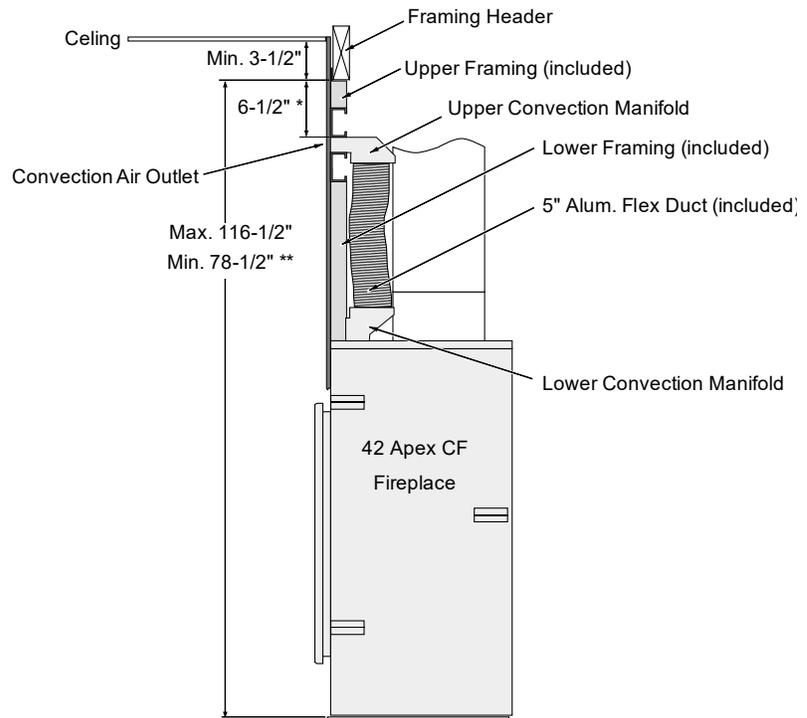




ITEMS UNIQUE TO THIS FIREPLACE

Header Height is Determined by the Convection Air Outlet

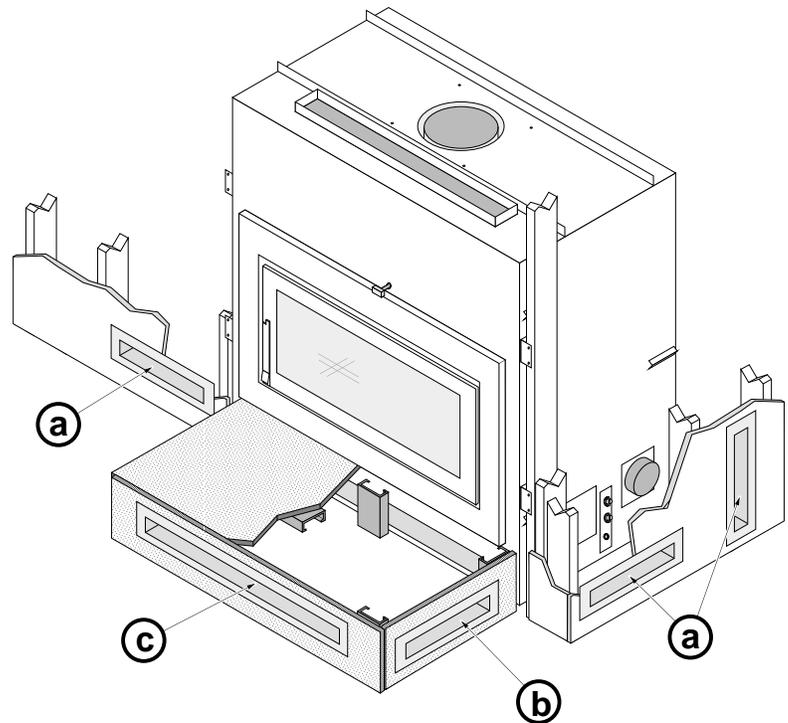
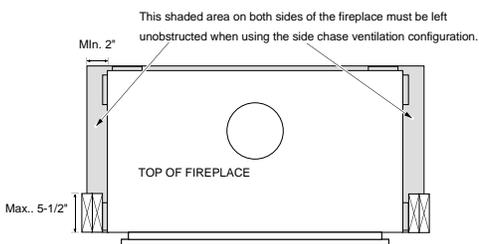
The height of the convection air outlet determines the framing header height (see illustration to the right and page 13 for details). The desired outlet height should be determined prior to framing. Make sure all minimum clearances are maintained.



The Chase (fireplace enclosure) Must Be Ventilated

The chase (fireplace enclosure) must be ventilated to provide proper fireplace cooling (see illustration to the right and page 14 for details). Grills are included for this purpose.

If ventilated to the sides, a minimum 2" air space is required (see illustration below and page 17 for details). The framing may need to be altered to provide proper ventilation.



Air-Cooled Chimneys Offsets Inside Chase Must Be Directed to the Rear to Clear Manifold

When using offsets inside the chase the offsets will need to be angled back slightly to allow the chimney to clear the upper manifold (see page 23). In most installations this offset will need to be angled back 1-1/2".

Packing List

NOTE: The log stop is secured for shipping with a set screw on the back of the log stop support. Loosen the set screws with a 1/8" hex wrench and remove the log stop to access the internal components.



- Bricks (2 boxes – left side and right side)
- Baffle
- Air Intake Parts (10' of 3" diameter duct, intake hood, hood bezel, and 2 hose clamps)
- Ember strip
- Switch Plate with Combustor Temp. Display and Rheostat
- Door Tool
- Manifold / Non-Combustible Framing Parts
- Face (ships pre-attached to the fireplace)
- Owner's manual
- Pair of gloves
- Upper Manifold Trim
- Front Ventilation Grill
- Small Ventilation Grills
- 5" Aluminum Flex Duct

Recommended Order of Installation

- Frame the opening for the fireplace. Leave the non-combustible framing and facing above the fireplace open to allow for chimney installation.
- Secure the fireplace to the framing/floor.
- Install the chimney (and cooling air, if applicable), electrical, external wiring (rheostat, catalytic temp reader, etc.), and outside air.
- Install the Convection Air Manifold and non-combustible framing – see "Convection Air Manifold Installation".
- Install the ventilation grills used for chase ventilation
- Install the hearth (if applicable)
- Install the non-combustible facing.
- Install the non-combustible mantel (if applicable).
- Finalize the installation/

Installation Recommendations for Cold Environments

If you live in the area depicted in black in the illustration to the right (or in Canada), we recommend the following steps be taken to minimize cold air infiltration.

Insulated Chimney is Strongly Recommended

Insulated chimney does not require cooling ducts and is therefore preferred for cold environments. This is the number one method for improving cold weather performance.

Use “P” Trap & Insulated Duct in the Cooling Duct.

If using air-cooled chimney, we recommend insulating the intake duct and putting in a “P” trap to help prevent air circulation when the fireplace is not in use. A typical “P” trap design is shown in the illustration to the right.

Use Bi-Metallic Damper with Air-Cooled Chimney

If using air-cooled chimney, we recommend the use of the bi-metallic damper. This component (part # 250-01741) is an 18” section of Duravent pipe that is installed at the top of the chimney, directly below the cap. It has a heat-activated damper that helps reduce cold air from entering the cooling ducts while the fireplace is not in operation.

Use Outside Air “P” Trap and Insulated Duct

We recommend putting in a “P” trap in the outside air duct (used to supply air to the firebox) to prevent air circulation when the fireplace is not in use. A typical “P” trap design is shown in the illustration above. In addition, you should insulate the outside air duct to help reduce air circulation when the fireplace is not in use.

Daily Requirements for Homeowners

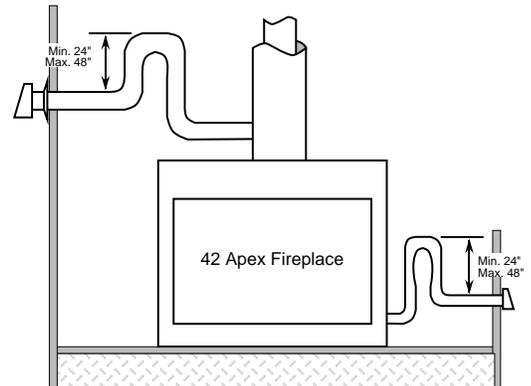
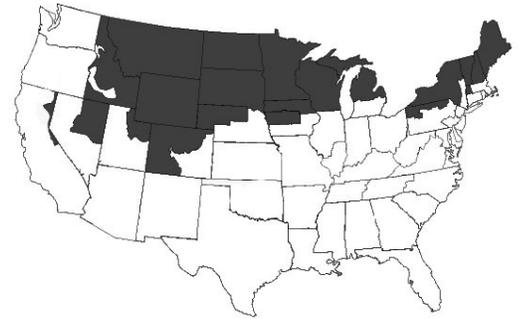
HUMIDITY – If the home is equipped with a humidistat, make sure it is set correctly. The chart below details the correct setting for the temperature you are experiencing outdoors.

Outdoor Temperature		Recommended Humidity Controller Setting
°F	°C	
-20	-29	15
-10	-23	20
0	-18	25
+10	-12	30
+20	-7	35
>+20	>-7	40

Note: If using a humidifier, let the homeowner know that it should be shut off or turned to a lower setting to eliminate condensation on the front of the fireplace.

OTHER ITEMS

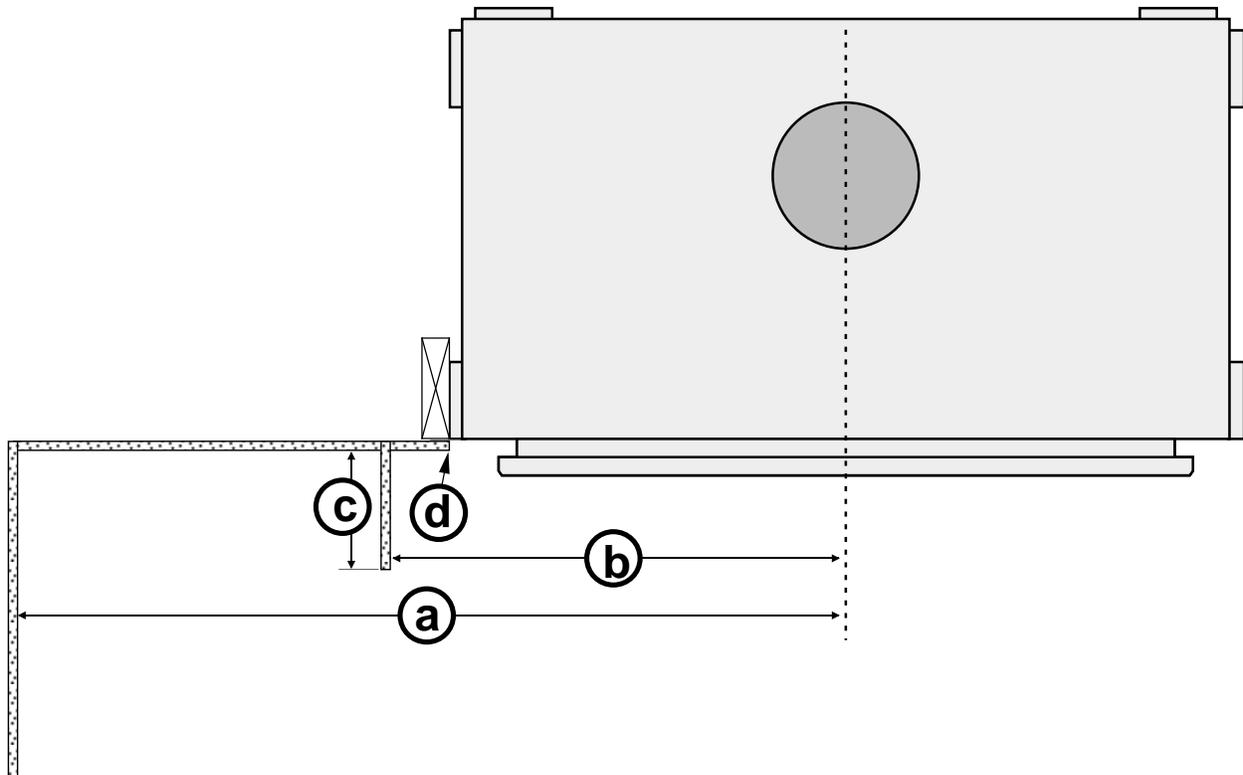
- Make sure the bypass is shut when the fireplace is not in use.
- Slide the air control fully closed when fireplace is not in use.
- Minimize the use of exhaust fans in the home when the fireplace is not in use.



Fireplace Placement Requirements

Clearances to Fireplace

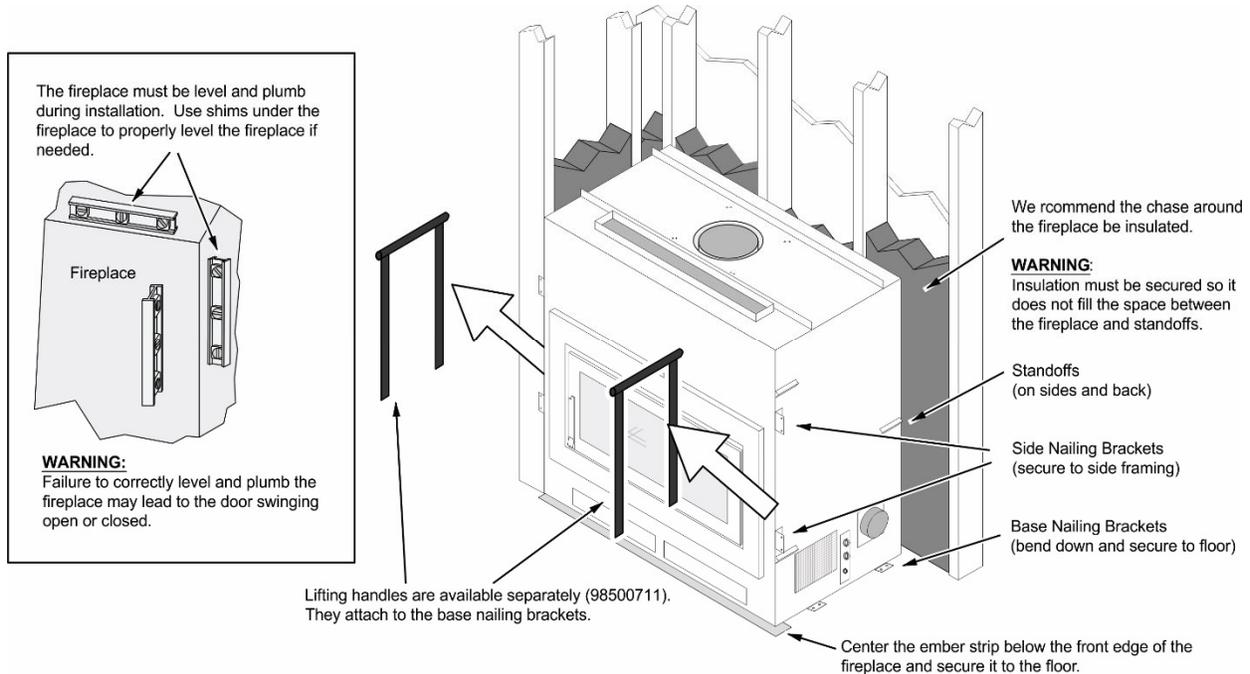
- Sidewalls to the front of the fireplace must be 45" (1143mm) from the centerline of the fireplace (see "a" in the illustration below).
- Any combustible (bookshelf, column, etc.) that protrudes less than 7" (178mm) from the front of the fireplace must be placed a minimum 24-3/8" (620mm) from the centerline of the fireplace. If this combustible protrudes farther, it must meet the sidewall clearance (see "b" and "c" in the illustration below).



- The fireplace requires a 1/2" (13mm) clearance to the back and sides (stand-offs are pre-installed to provide this clearance). Do not place insulation or other material into this area. Drywall or other combustibles must maintain a 1/2" clearance to the sides of the fireplace (see "d" in the illustration above).
- Fireplace should be located such that no doors, drapes, furniture or other combustibles can be placed close or swing closer than the minimum 48" clearance. Due to the high heat output of this fireplace, choose a location away from high traffic areas.

Fireplace Placement

- The fireplace must be secured to the floor and/or framing (see “nailing brackets” in the illustration below).
- Fireplace must be placed directly on wood or non-combustible surface (not on linoleum or carpet).
- Fireplace must be installed on a level surface capable of supporting the fireplace and chimney.
- Place the ember strip included with the fireplace below the front edge of the fireplace (see illustration below). This prevents embers from sliding between the fireplace and hearth.
- Fireplace must be placed so the vents below and above the glass do not become blocked.



Minimum Framing Dimension

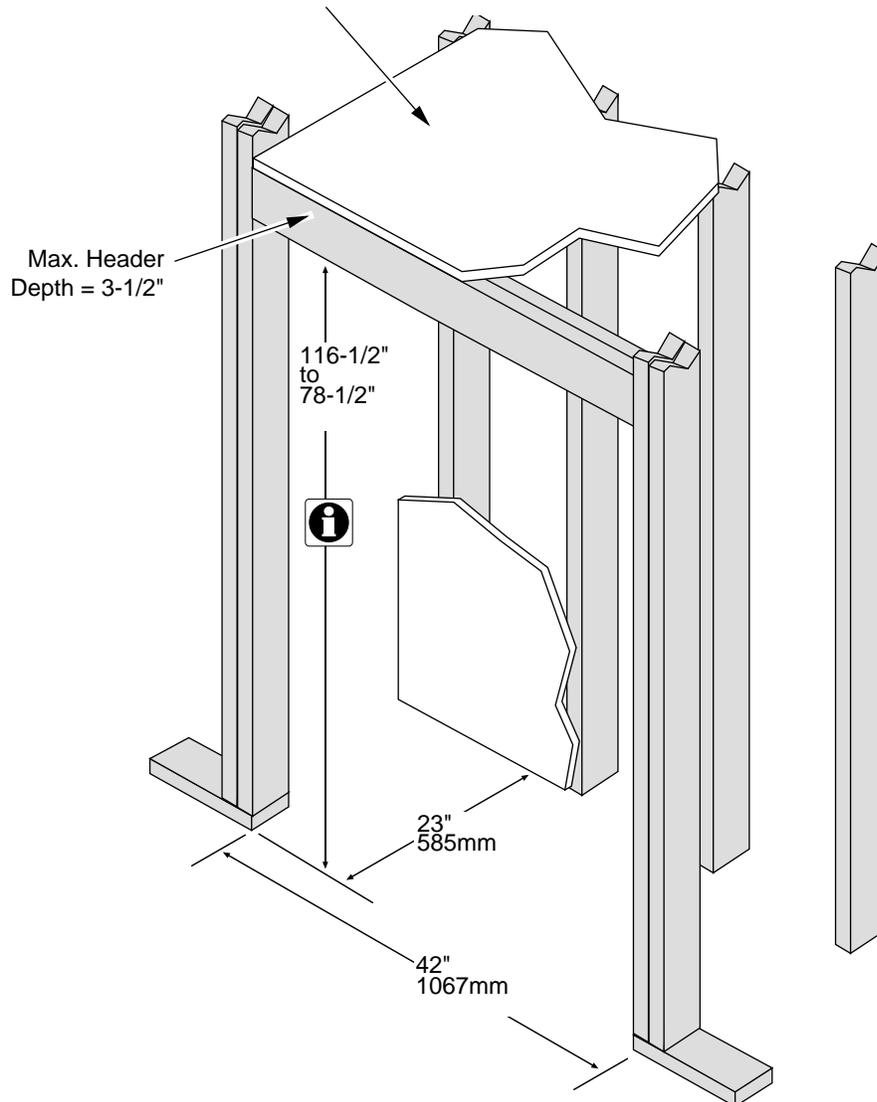


FRAMING HEIGHT

Framing height is determined by the height of the upper convection air manifold. See the section "Convection Air Manifold" for details.

- Minimum framing dimensions are shown in the illustration below. Do not build into the enclosure.

Min. Ceiling or Enclosure Height = 3-1/2" above framing header.



- The enclosure over the fireplace must be a minimum 3-1/2" (89mm) above the framing header.
- The ceiling in front of fireplace must be a minimum 3-1/2" (89mm) above the framing header (min. 10" above the manifold outlet).
- NOTE: The enclosure circulates room air. We recommend dry-walling the interior of the enclosure or using suitable means to prevent dust or building debris from being circulated into the room. **MAKE SURE TO ADD AN ADDITIONAL 1/2" TO THE DEPTH/WIDTH IF USING DRYWALL.**
- The fireplace enclosure (chase) conveys room air. This area must be insulated and drywall applied if on an exterior wall.

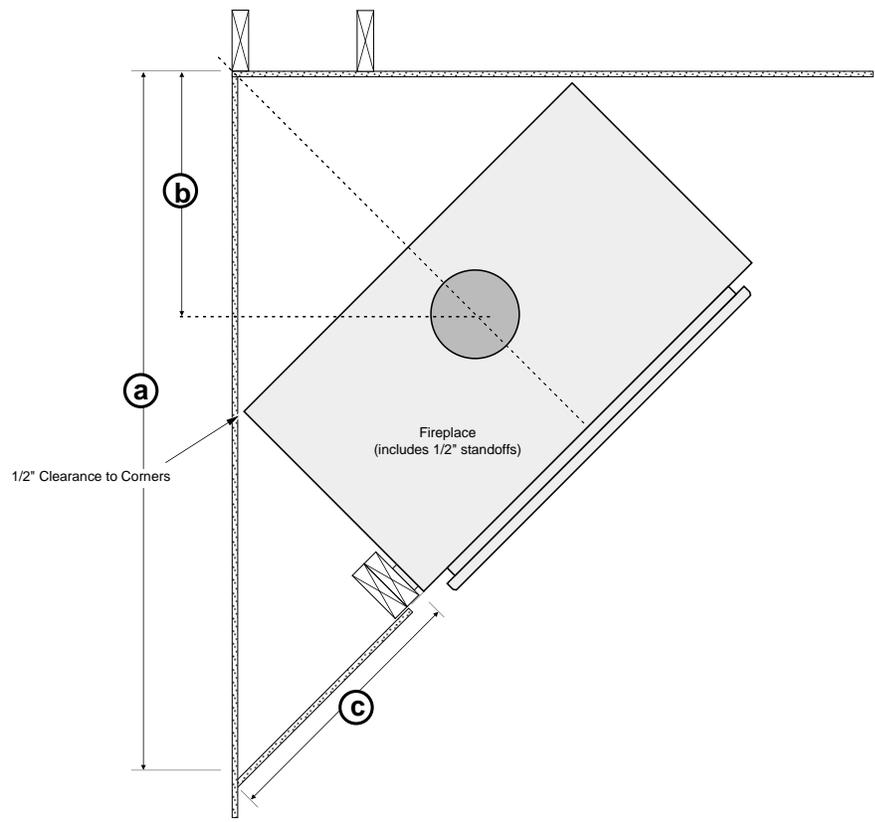
Framing Dimensions at 45°

- Typical framing dimensions for 45° installation are shown below. Additional space may be required for vent and outside air installation.

(a) 61-3/4" (1569mm)

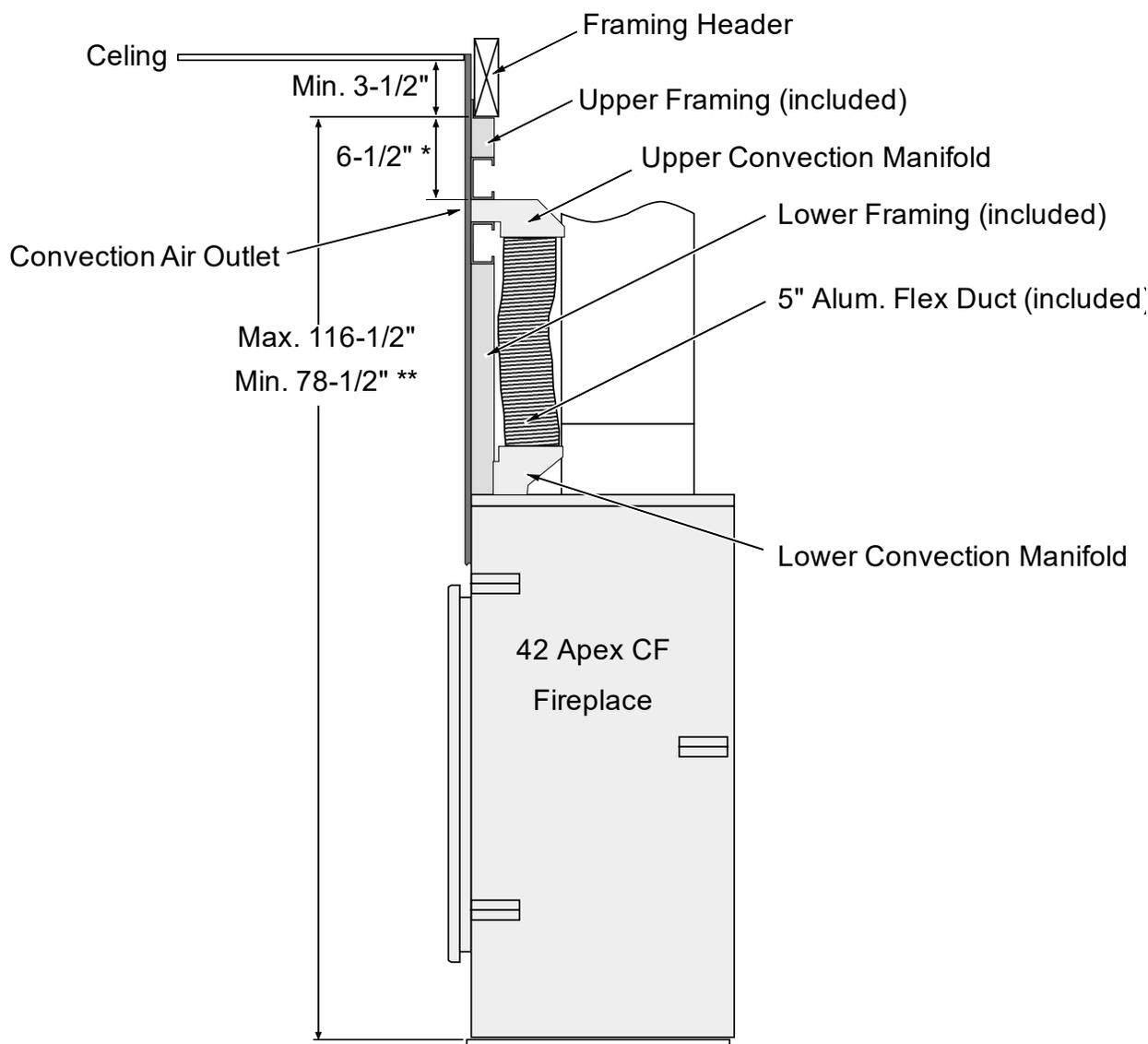
(b) 22-1/2" (572mm)

(c) 22-1/2" (572mm)



Convection Air Manifold

- The convection air manifold is assembled on site and attached to the top of the fireplace. It directs the hot convection air out of the fireplace and into the room.



* When using the included upper framing members the manifold outlet will be 6-1/2" below the header. This is the most common installation, placing the outlet at the tallest position. If you wish to make this dimension lower, you may supply longer pieces of non-combustible framing to place the outlet in a lower position.

** When the header is placed between 116-1/2" and 92-1/2" above the base of the fireplace, the supplied lower framing members are installed without modification. If you wish to place the header between 92-1/2" and 78-1/2", the lower framing members will need to be cut down in length (use hack saw, nail-clippers, etc.).

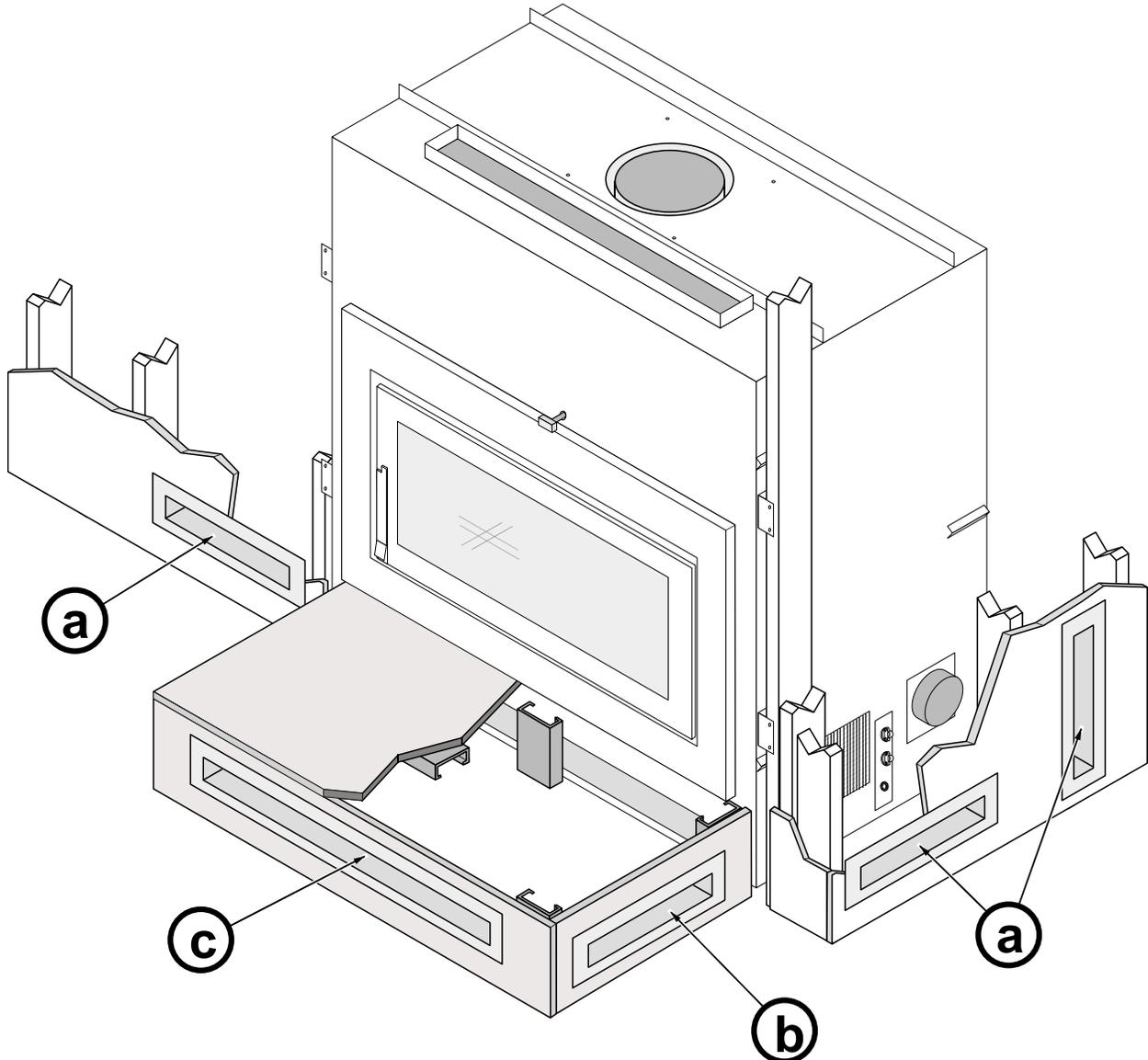
Chase Ventilation (REQUIRED)

WARNING: The chase must be ventilated in accordance with the requirements listed below to allow for proper fireplace cooling. Failure to do this will create a severe fire risk.

- The chase (fireplace enclosure) circulates room air. We recommend dry-walling the interior of the enclosure or using suitable means to prevent dust or building debris from being circulated into the room. Plastic sheeting may not be used in place of dry wall.

Chase Ventilation Overview

- The chase may be ventilated from the sides (see “a” below) or from the front (see “b” and “c” below).

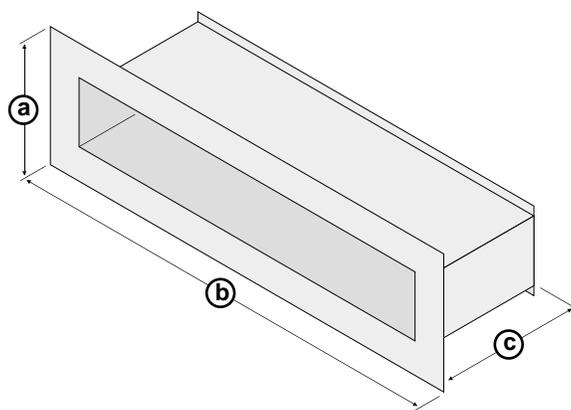


Chase Ventilation Grills

- Use the included grill(s) to ventilate the chase (and fireplace). These grills provide a 50 square inch opening (free air) to the chase. If alternative grills are desired, they must provide a minimum 50 square inches of free air to the fireplace (contact your dealer for details).

Dimensions

	Height (a)	Width (b)	Depth (c)	Min. Framing Height	Min. Framing Width
Front Ventilation Grill	3-3/4"	38"	1-1/8"	2-1/2"	36"
Small Ventilation Grill	4"	16-1/4"	4-5/8"	2-3/4"	14-3/8"



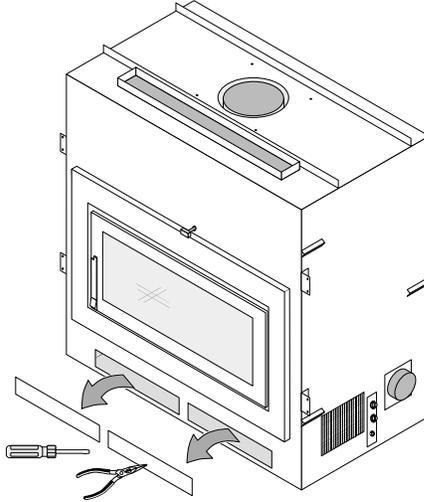
- The grills must be attached directly to the chase cavity.
- The included grills use 1/4" screen to prevent debris, etc. from entering the chase.
- Do not place any items inside the included ventilation grills. Grills should not be placed inside shelving or near a location where it would become blocked by furniture or other items.
- The chase air is drawn from the grills and exits a built-in channel on the upper manifold.
- The ventilation air for the chase **MUST** be drawn from the same room containing the fireplace.

16

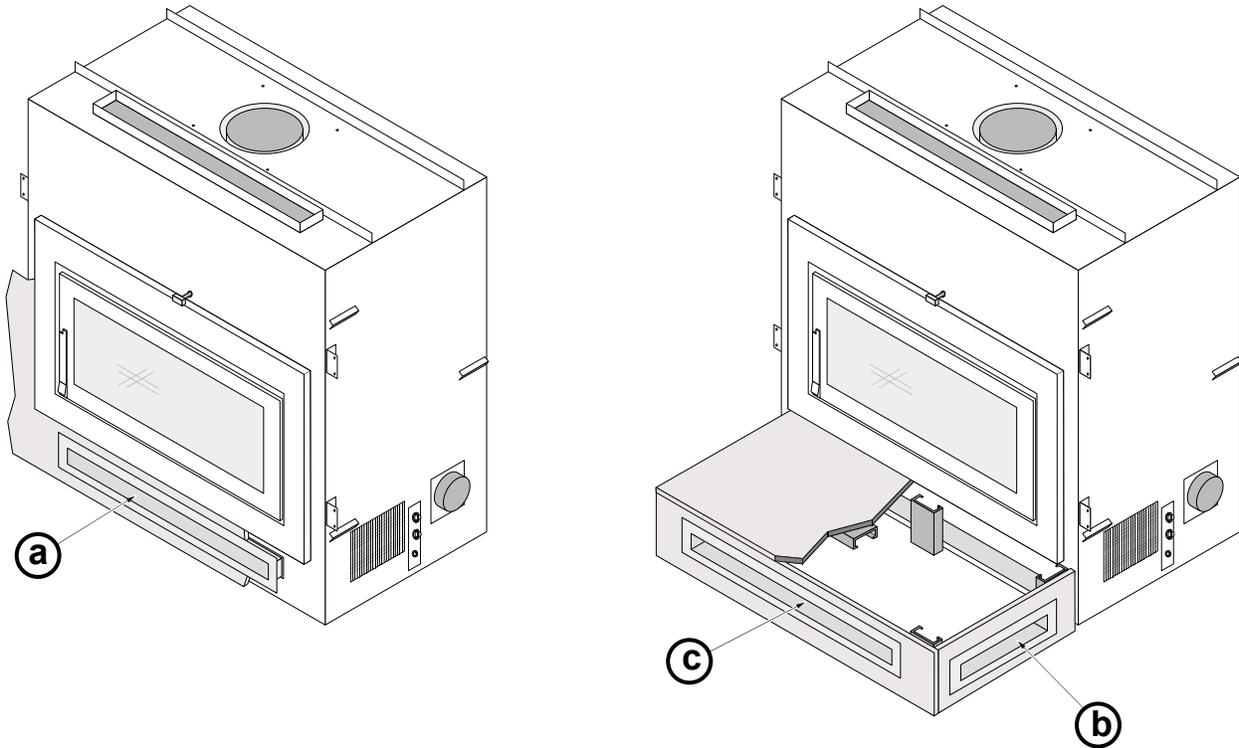
Installation (for qualified installers only)

Chase Ventilation – Front Configuration

- If ventilation is provided from the front, you must remove both front inlet knockouts located under the door opening. The ventilation air passes through the front of the fireplace and exits through the convection air outlet. In addition, some of this air passes out of the side vents and ventilates the chase.



- When ventilating through the front, the grill is either placed directly on the fireplace or installed into a raised non-combustible hearth. This hearth must be hollow and able to freely convey air to the fireplace.

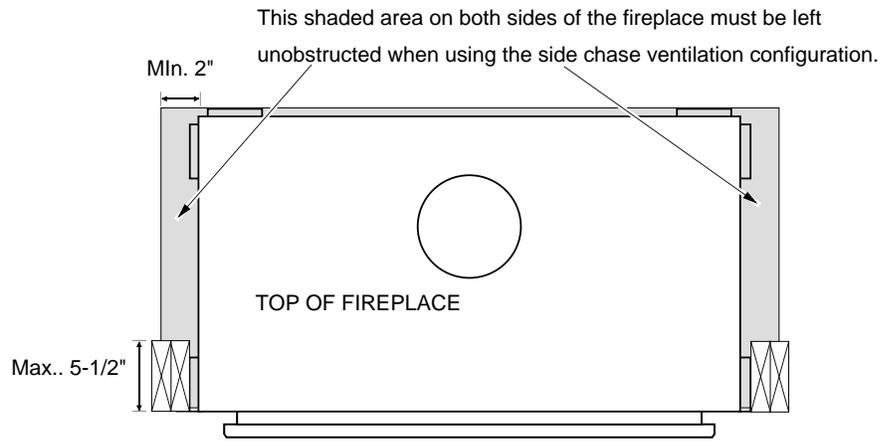


NOTE: If supports are provided in front of these knockouts, these supports must not limit the air opening to less than 50 square inches.

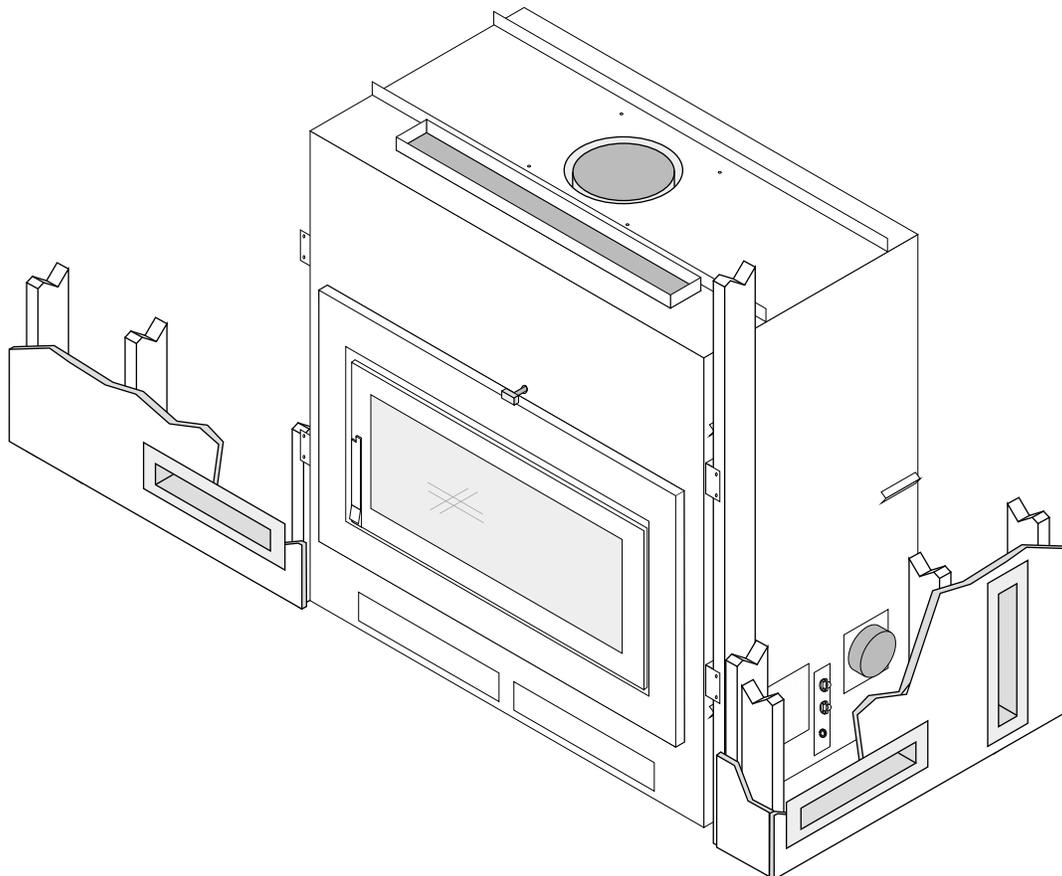
- For front configurations, you must use the large grill (38" x 3-3/4" outside dim.), or both small grills (16-1/4" x 4" outside dim.), or equivalent free air opening (see note above).

Chase Ventilation – Side Configuration

- If ventilation is provided from the side, you must leave a 2" air gap to the both sides of the fireplace (see illustration below). The ventilation air passes from the grills, through the chase, into the side vents and exits through the convection air outlet.

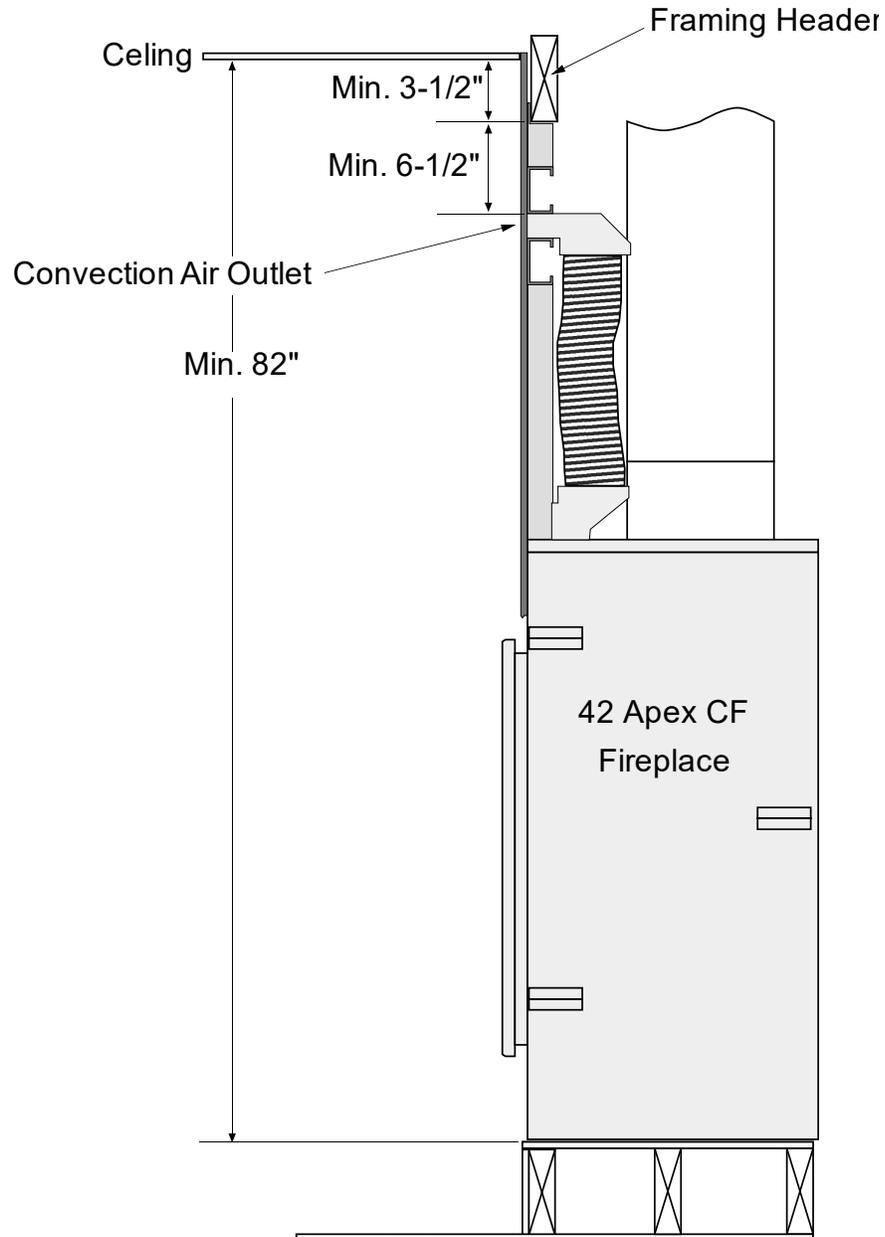


- When ventilating from the sides, you must use both small grills (16-1/4" x 4" outside dim.), or equivalent free air opening (see note above). One grill must be placed on each side of the fireplace.
- Vertically, the grills must be placed within 24" of the base of the fireplace (see illustration below).
- If placed on a side wall, the grills must be placed directly to the side of the fireplace.
- If placed on the front wall, the grills must be placed within 12" of the fireplace.



Raised Fireplaces

- The fireplace (and hearth, if desired) may be placed on a platform designed to support the fireplace and vent (approximately 600 lbs.). See illustration below.
- The ceiling in front of the fireplace must be a minimum 82" from the base of the fireplace.



Approved Chimney

This fireplace requires one of two types of chimney (no exceptions – do not intermix):

←

Air-Cooled Chimney

- Use Travis Industries air cooled pipe only. Part numbers are listed in the section “Air Cooled Chimney”.
- This chimney requires the use of the air-cooled starter section and cooling duct inlet (see the section “Air Cooled Chimney” for details).

→

Insulated Chimney

- Security ASHT+ Chimney
(available from Travis Industries or Security)
(use 98900290 Anchor Plate)
- Alternative Manufacturers
(see the section starting on page 18 for details)

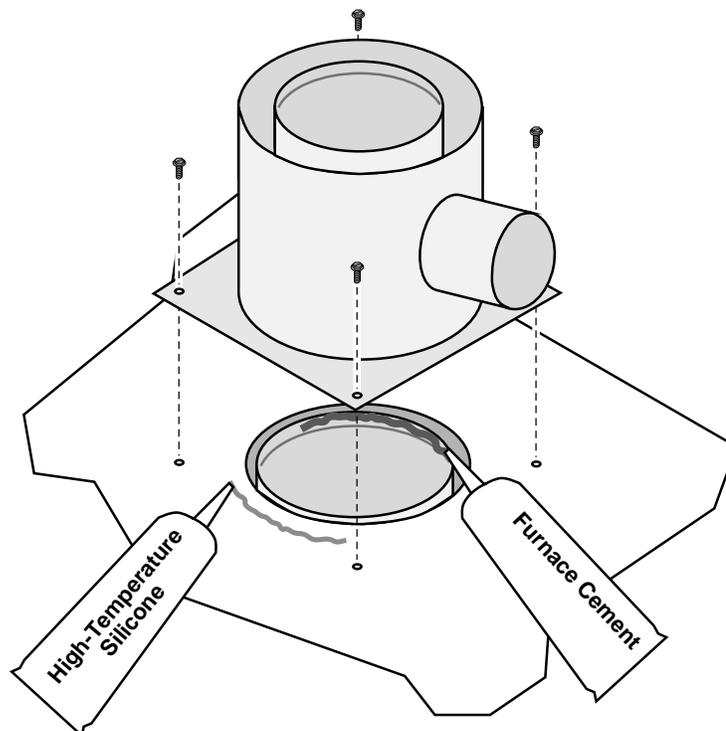
- The entire chimney system must be installed to meet all local requirements as well as those requirements listed by the chimney manufacturer. Depending on the manufacturer and where the chimney is to be installed, chimney supports, roof braces, radiation shields, attic insulation shields, attic enclosures, spark arrestors, locking bands, etcetera, may be required as part of the chimney system. The manufacturer's installation instructions, which are reviewed by the listing agency, specifies when and where each of these components must be used. Follow the manufacturer's instructions for the use of flashing and an adjustable storm collar at the roof line to prevent water from entering the house. Manufacturers require that chimneys extending beyond a certain height above the roof (typically above 5') must be braced.

Air Cooled Chimney Requirements (8" Inner Dia., 12" Outer Dia.)**Part Numbers (available through Travis Industries)**

Chimney Components	Part #
Anchor Plate – Air Cooled Chimney - REQUIRED	98900016
Cooling Duct Kit -6" Diameter - REQUIRED	98900108
48" Chimney Section	98900001
36" Chimney Section	98900002
24" Chimney Section	98900003
18" Chimney Section	98900004
12" Chimney Section	98900005
30° Offsets / Elbows (Qty 2)	98900006
Firestop (90°)	98900007
Firestop (30° - for angled sections)	98900008
Storm Collar	98900009
Round Termination Cap	98900010
Flashing 0-6/12 (for flat roofs up to 6/12 pitch - 26.5°)	98900011
Flashing 7-12/12 (for roofs 6/12 pitch to 12/12 – 26.5° to 45°)	98900012
Attic Insulation Shield	98900015

Anchor Plate Installation

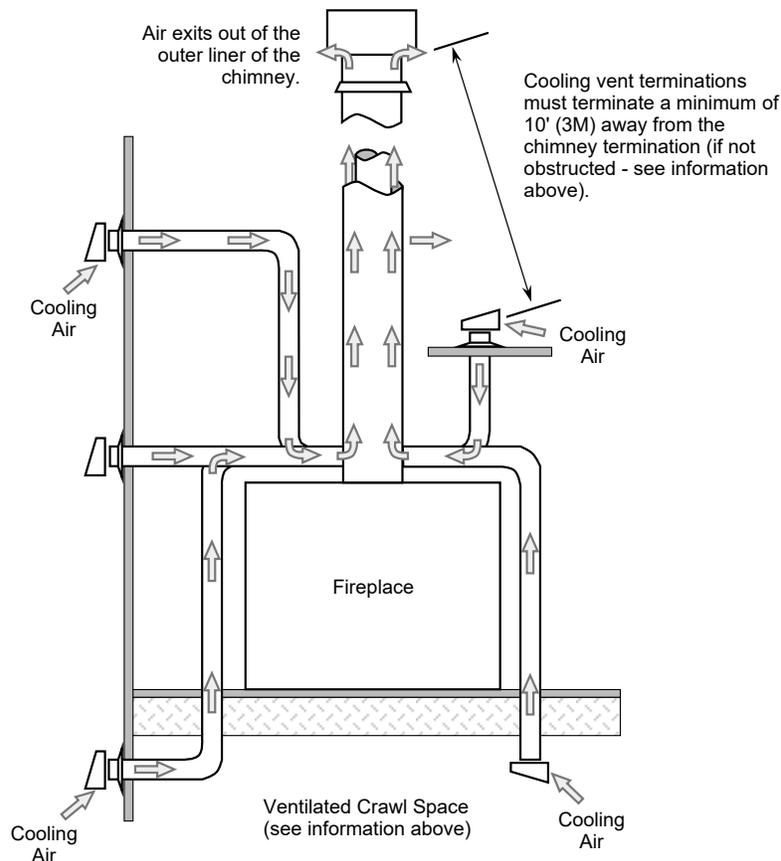
- The air-cooled chimney requires an anchor plate that includes a cooling duct inlet. Attach the anchor plate to the top of the fireplace with the four included sheet-metal screws (see illustration below). The cooling duct inlet can be directed to any direction (typically it is directed to the right rear).
- Seal the fireplace connection with high-temperature silicone.
- Seal the flue liner with furnace cement.



Use high-temperature silicone to seal the anchor plate.

Cooling Duct Installation

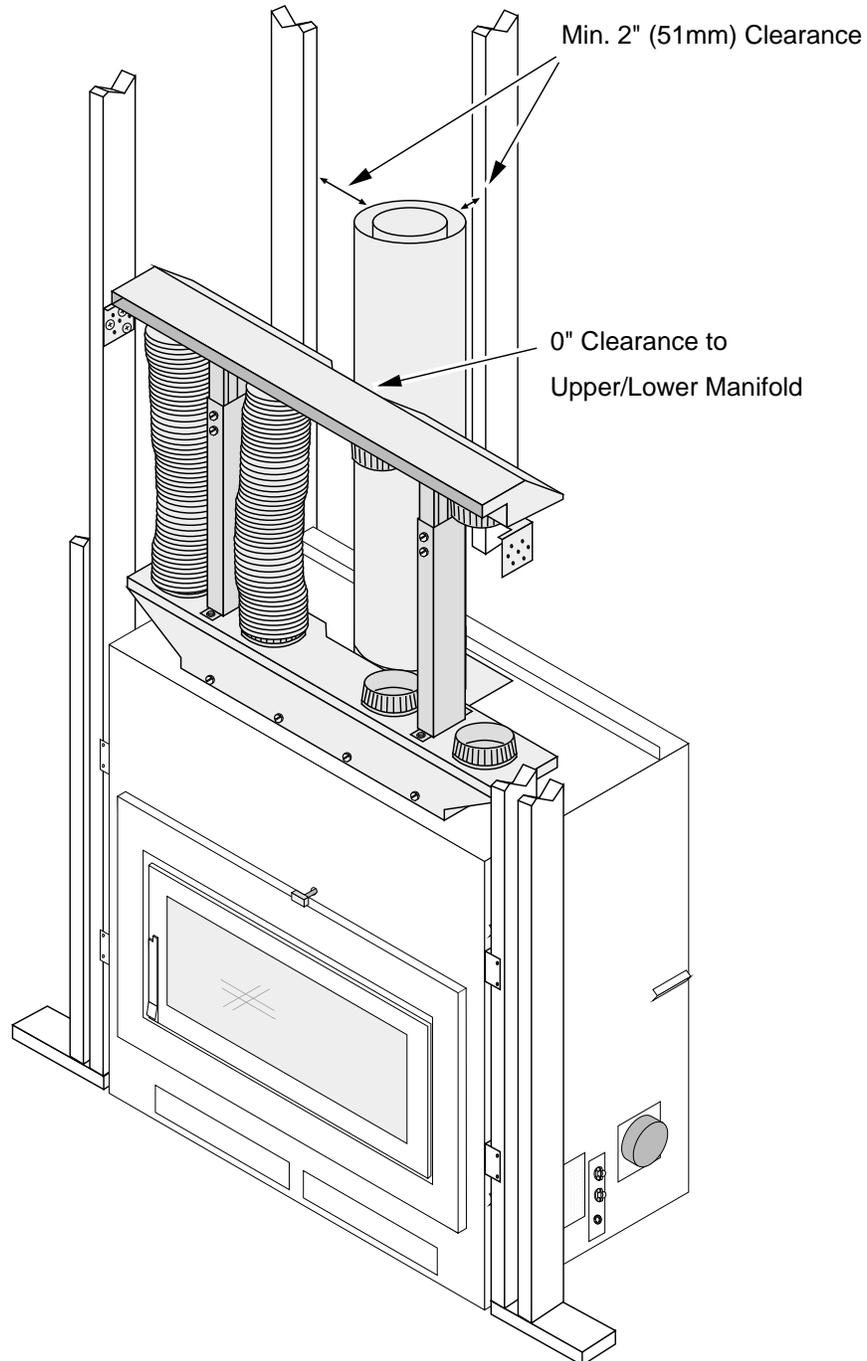
- **WARNING:** The cooling duct provides cooling air for the chimney system. Failure to correctly install the cooling duct will lead to an extremely dangerous installation and possibly a fire.
- The 6" diameter cooling duct routes air from outside the structure to the cooling air collar on the starter section. Do not draw air from a garage or other enclosed, unventilated, area.
- The maximum distance of the cooling duct is 30'. When routing the duct, use a minimum of bends and keep the bend radius as large as possible. The maximum bends for the duct is 540° (six 90° bends). Cooling duct must maintain 2" clearance to chimney. Cooling duct must be non-combustible.
- The Cooling Duct Kit (98900108) includes 30' of cooling duct, collar, and external termination. Attach the external termination to the structure (use storm collar if needed) with the opening facing downwards (to prevent water or other material from entering). Secure the cooling duct to the collar and external termination using high-temperature aluminum tape and/or sheet metal screws.
- Locate the duct termination so it does not become blocked by snow, vegetation or other material.
- The duct termination must be a minimum 5' below the chimney termination. In addition, the intake must be 10' away from the chimney termination to prevent flue products from entering (measure the distance air must travel between the two terminations).
- The cooling air duct termination may be installed to draw air from a ventilated crawl space or attic if approved by local building codes. **NOTE:** certain codes require a fire curtain damper in these cases.
- The cooling air duct termination must be flashed and sealed to meet local building code requirements.



Air Cooled Chimney - Clearances to Combustibles

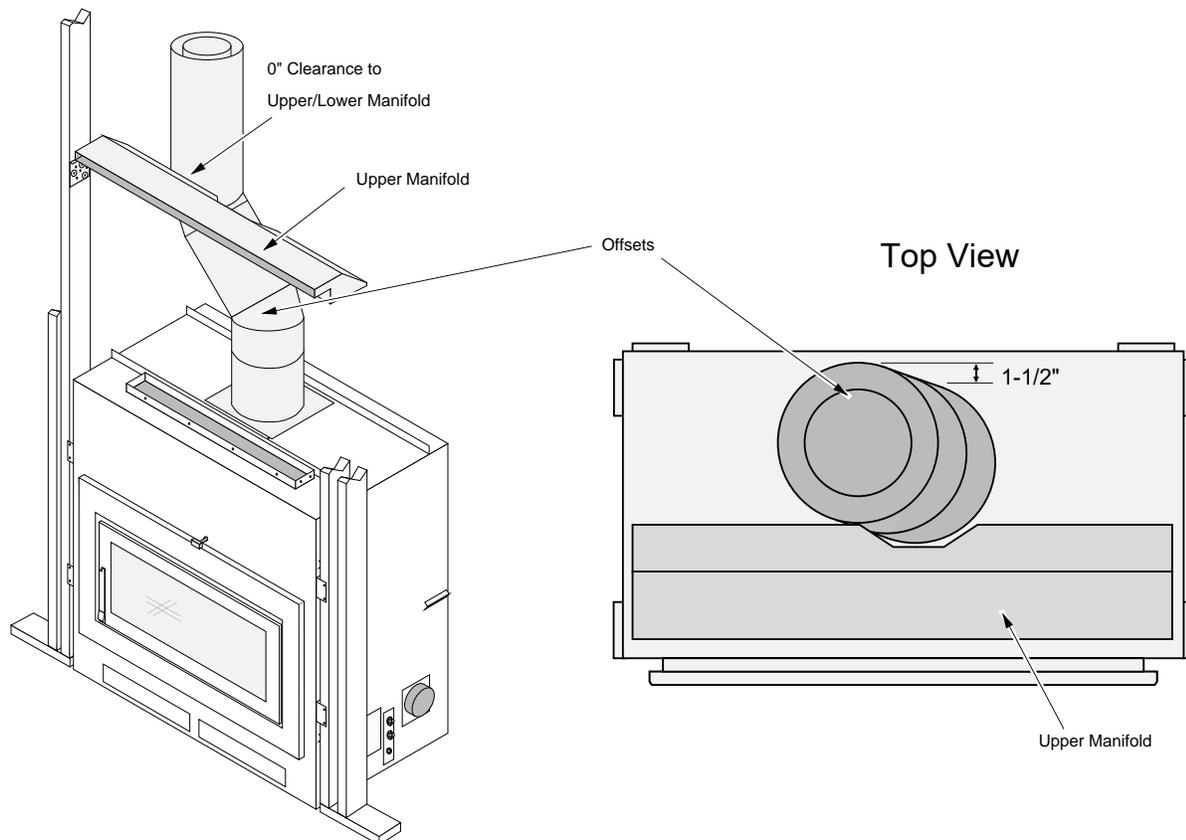
WARNING: Follow the clearances listed below - do not follow the clearances listed in the chimney instructions.

- Maintain a 2" clearance from the chimney to combustibles - see illustration below.



Air Cooled Chimney – Use of Offsets in Chase

- When using offsets inside the chase the offsets will need to be angled back slightly to allow the chimney to clear the upper manifold (see illustration below). In most installations this offset will need to be angled back 1-1/2".
- Make sure to maintain the minimum 2" clearance from the pipe to combustibles.



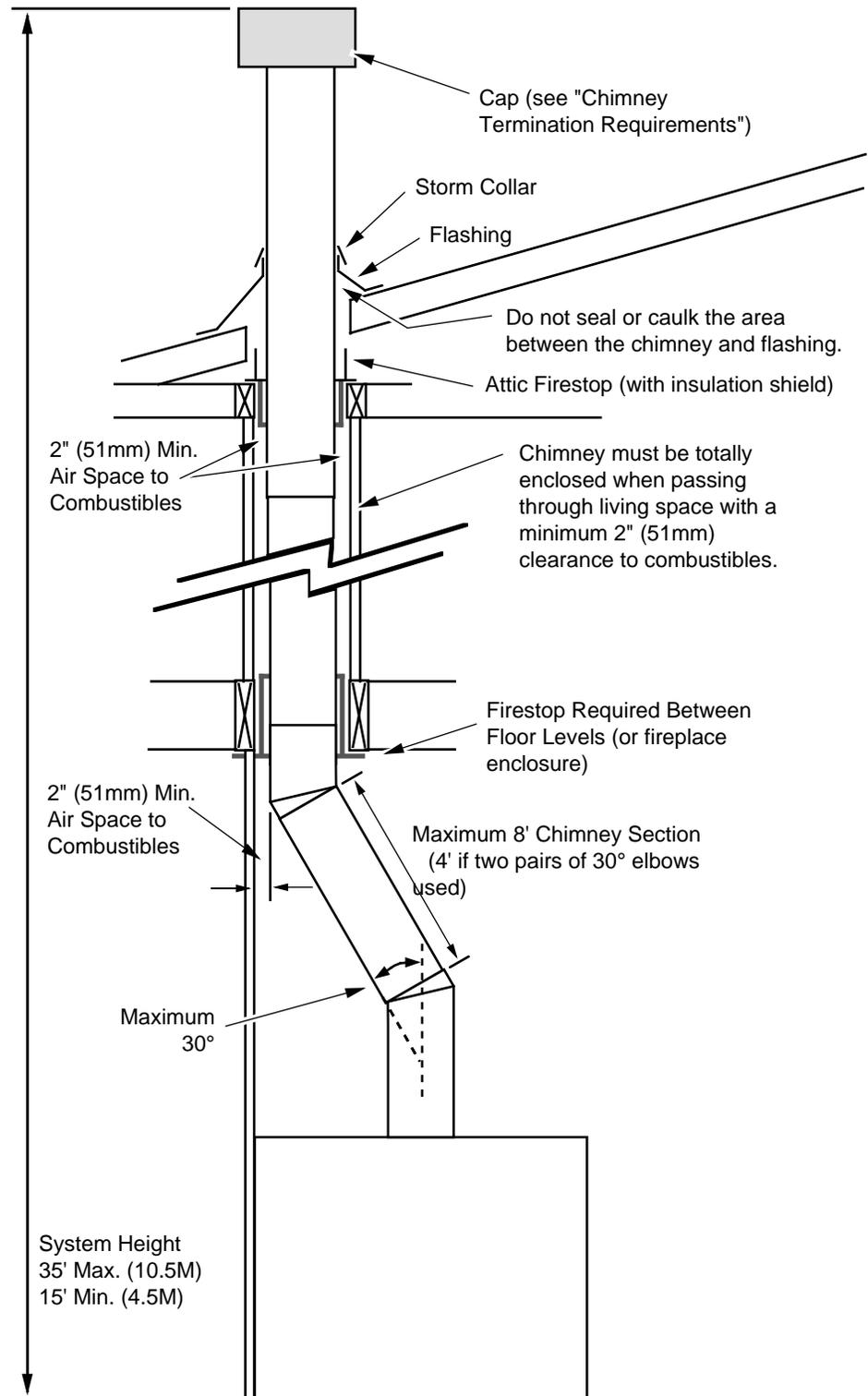
Air Cooled Chimney – Installation and System Height

- Minimum 15' system height (measured from the base of the fireplace)
- Maximum 35' system height (measured from the base of the fireplace)

MINIMUM HEIGHT WITH OFFSETS

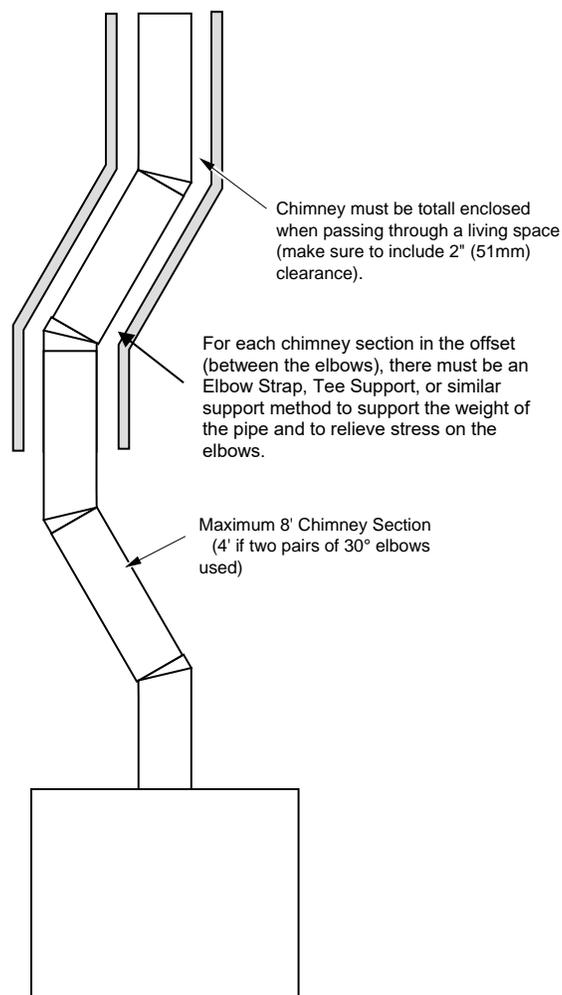
- One Pair (2) Offsets
Minimum system height is 17'.
- Two Pairs (4) Offsets
Minimum chimney height is 19'.

NOTE: In problematic locations (areas with high wind or at altitude, etc.) additional chimney height above the specified minimum may be necessary to reduce wind-induced down drafts, back puffing, or smoke spillage. By adding additional chimney, the fireplace will have increased draft and encounter less negative operating characteristics.



Air Cool Chimney - Offset Requirements (30° Elbows)

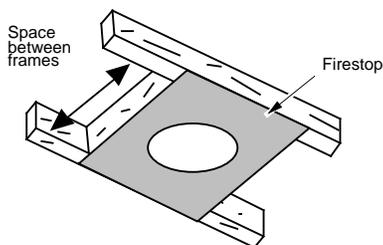
- Offsets (using a pair of 30° elbows) may be used to redirect the chimney. Typically this is done to avoid structures, align the pipe with framing, or to gain clearance to combustibles (see illustration below).
- A maximum four 30° elbows may be used.
- Each elbow must be used in conjunction with a return elbow (so the chimney returns to a vertical direction)
- If using a single offset (two 30° elbows) a maximum of 8' of inclined chimney may be used between elbows.
- If using two offsets (four 30° elbows) a maximum of 4' of inclined chimney may be used between each set of elbows.
- For every 6' of inclined chimney a flue support is required – follow the chimney manufacturer's instructions for supporting the chimney.
- Elbows may be used directly off the top of the fireplace.



Firestops

- Whenever the chimney penetrates a floor or ceiling a firestop is required on the bottom side of the floor joists (see illustration below).
- When passing through an attic the firestop must be placed on the attic side of the joists
- When the chimney passes through a living space it must be totally enclosed (maintain the minimum 2" clearance to combustibles)
- The space between frames that hold the firestop in place should be measured as follows:

Space Between Frames = 16"



Chimney Offset Chart

8" Air Cooled Chimney		
Inclined Pipe Length	Offset	Rise
0	4	16 3/8
12	9 1/4	25 1/2
18	12 1/4	30 3/4
24	15 1/4	36
36	21 1/4	46 1/4
48	27 1/4	56 1/4
48+12	32 1/2	65 3/4
48+18	35 1/2	71
48+24	38 1/2	76 1/8
48+36	44 1/2	86 1/2
48+48	50 1/2	97

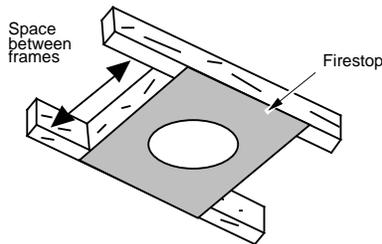
Insulated Chimney Requirements (7" Inner Diameter)

Security ASHT+ (S2100+) Part Numbers (available through Travis Ind.)

Security ASHT+ (S2100+) Chimney Components 7" Internal diameter, 9" outside diameter	Part #
VENT, 7" ANCHOR PLATE (REQUIRED) – Includes Instruction Sheet	98900290
VENT, 7" 48" CHIMNEY	98900280
VENT, 7" 36" CHIMNEY	98900281
VENT, 7" 24" CHIMNEY	98900282
VENT, 7" 18" CHIMNEY	98900283
VENT, 7" 12" CHIMNEY	98900284
VENT, 7" 30° OFFSETS (INCLUDES 2 ELBOWS W SUPPORT)	98900285
VENT, 7" RAD FIRESTOP	98900286
VENT, 7" ATTIC SHIELD	98900287
VENT, 7" FLASH 0-6/12	98900288
VENT, 7" FLASH 7-12/12	98900289
VENT, 7" WALL STRAP	98900292
VENT, 7" EXT ROOF BRKT	98900293
VENT, 7" STORM COLLAR	98900294
VENT, 7" CHIMNEY CAP	98900295

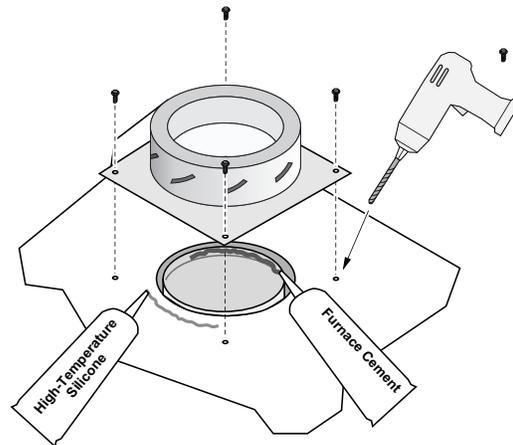
Security ASHT+ - Clearances to Combustibles

- Maintain a 2" clearance from the chimney to combustibles.
- Recommended Space Between Frames = 13-3/8"



Security ASHT+– Anchor Plate Installation

- The chimney requires an anchor plate. Attach the plate to the top of the fireplace with the four included sheet-metal screws (see illustration to the right).
- Tabs on anchor plate will need to be crimped before installation.
- Seal the fireplace connection with high-temperature silicone.
- Seal the flue liner with furnace cement.



Use high-temperature silicone to seal the anchor plate.

Security ASHT+– Offset Chart

ANGLE	INCHES	ONE LENGTH BETWEEN ELBOWS						TWO LENGTHS BETWEEN ELBOWS					
		8	12	18	24	36	48	8 & 48	12 & 48	18 & 48	24 & 48	36 & 48	48 & 48
30°	Offset	7-7/16	9-7/16	12-7/16	15-7/16	21-7/16	27-7/16	30-13/16	32-13/16	35-13/16	38-13/16	44-13/16	50-13/16
	Rise	20	23-1/2	28-11/16	33-7/8	44-1/4	54-11/16	60-9/16	64	69-1/4	74-7/16	84-13/16	95-1/4

Insulated Chimney – Alternative Manufacturers

- The following list chimney brand/series have been reviewed and are compatible with this fireplace.

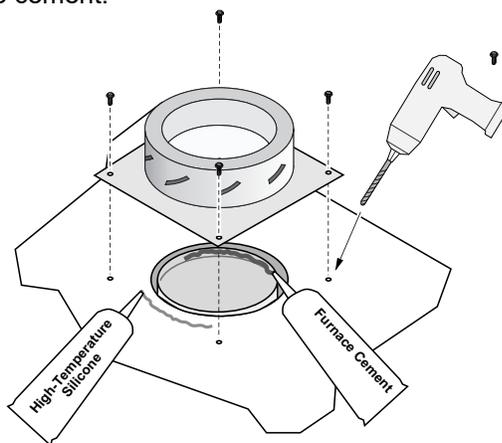
Brand	Chimney Series	Anchor Plate	Outside Diameter	Clearance*	Notes
DuraVent	DTC	7DTC-AP	9"	2"	Tabs on anchor plate must be removed (or order Travis # 98900290)
	DTP	7DTP-AP	11"	2"	Tabs on anchor plate must be removed
ICC	EXCEL 7"	EAP7	9-1/4"	2"	
Security	ASHT+	7ASHT-SP	9"	2"	Tabs on anchor plate must be removed (or order Travis # 98900290)
	S2100+	7S2100-XSP	11"	2"	Tabs on anchor plate must be removed
Selkirk	CF Sentinel	7CF-AP	11-3/4"	2"	
	SuperVent 2100JM	JM7AP	11"	2"	
	SuperPro 2100 ALT	JM7AP	11"	2"	
	UltimateOne	7U1-AP	9"	2"	
Metal-Fab **	Temp Guard 2100	7TGAP	10"	2" **	
Olympia	Ventis	VA-AP07	9-1/2"	2"	

* See pipe manufacturer's instructions for details on installation and minimum framing dimensions.

** **NOTE:** This chimney requires a 2" clearance when used with the 42 Apex (disregard the 1-1/2" clearance listed on the chimney).

Anchor Plate Installation

- Each chimney system requires an anchor plate. Attach the plate to the top of the fireplace with the four included sheet-metal screws (see illustration below).
NOTE: each anchor plate may have a slightly different mounting hole location. Before attaching the anchor plate, pre-drill the holes for the mounting screws (the screw penetrates two layers of steel).
- Seal the fireplace connection with high-temperature silicone.
- Seal the flue liner with furnace cement.



Use high-temperature silicone to seal the anchor plate.

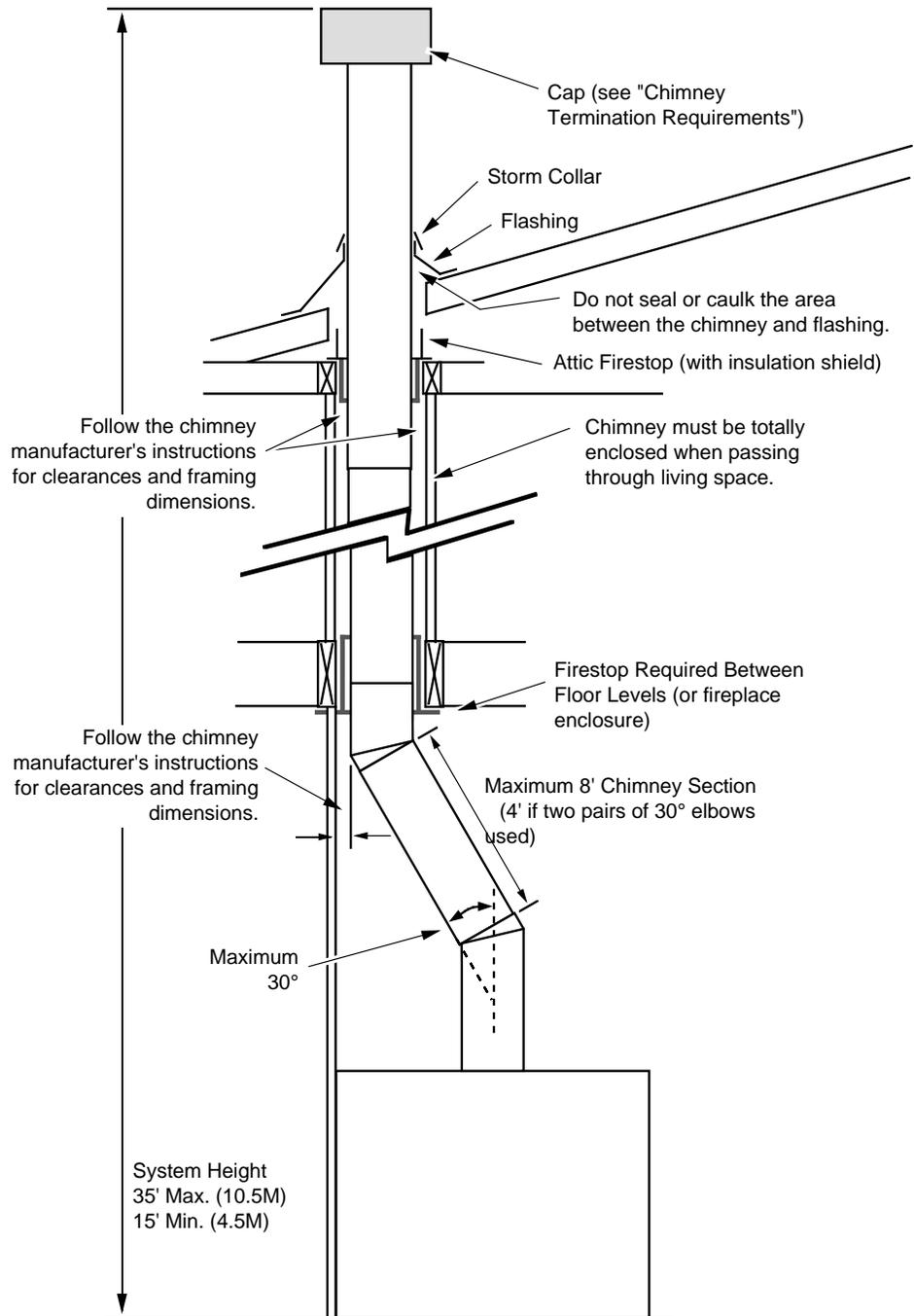
Insulated Chimney – Installation and System Height

- Minimum 15' system height (measured from the base of the fireplace)
- Maximum 35' system height (measured from the base of the fireplace)

MINIMUM HEIGHT WITH OFFSETS

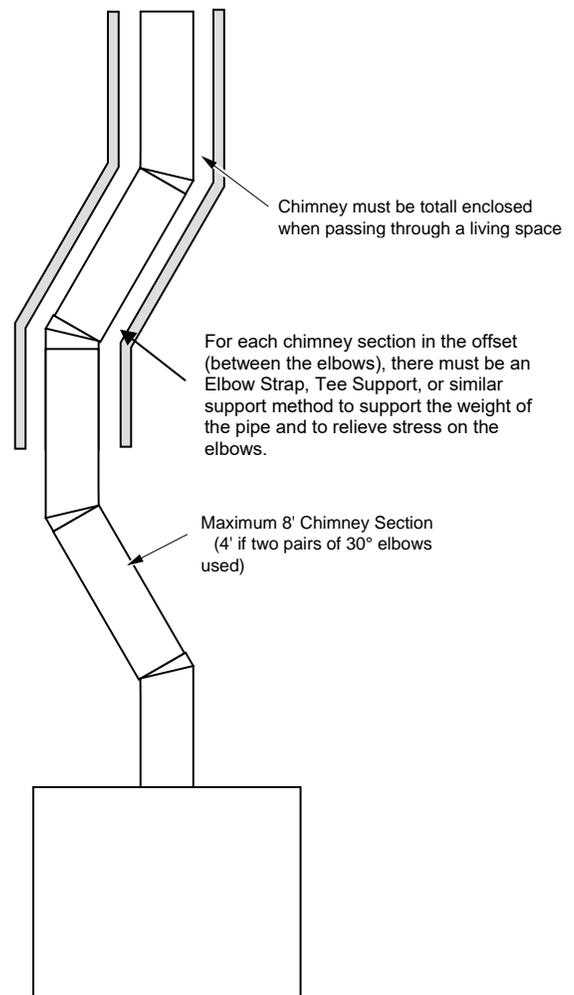
- One Pair (2) Offsets
Minimum system height is 17'.
- Two Pairs (4) Offsets
Minimum chimney height is 19'.

NOTE: In problematic locations (areas with high wind or at altitude, etc.) additional chimney height above the specified minimum may be necessary to reduce wind-induced down drafts, back puffing, or smoke spillage. By adding additional chimney, the fireplace will have increased draft and encounter less negative operating characteristics.



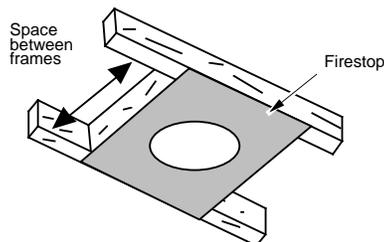
Insulated Chimney - Offset Requirements (30° Elbows)

- Offsets (using a pair of 30° elbows) may be used to redirect the chimney. Typically this is done to avoid structures, align the pipe with framing, or to gain clearance to combustibles (see illustration below).
- A maximum four 30° elbows may be used.
- Each elbow must be used in conjunction with a return elbow (so the chimney returns to a vertical direction)
- If using a single offset (two 30° elbows) a maximum of 8' of inclined chimney may be used between elbows.
- If using two offsets (four 30° elbows) a maximum of 4' of inclined chimney may be used between each set of elbows.
- For every 6' of inclined chimney a flue support is required – follow the chimney manufacturer's instructions for supporting the chimney.
- Elbows may be used directly off the top of the fireplace.



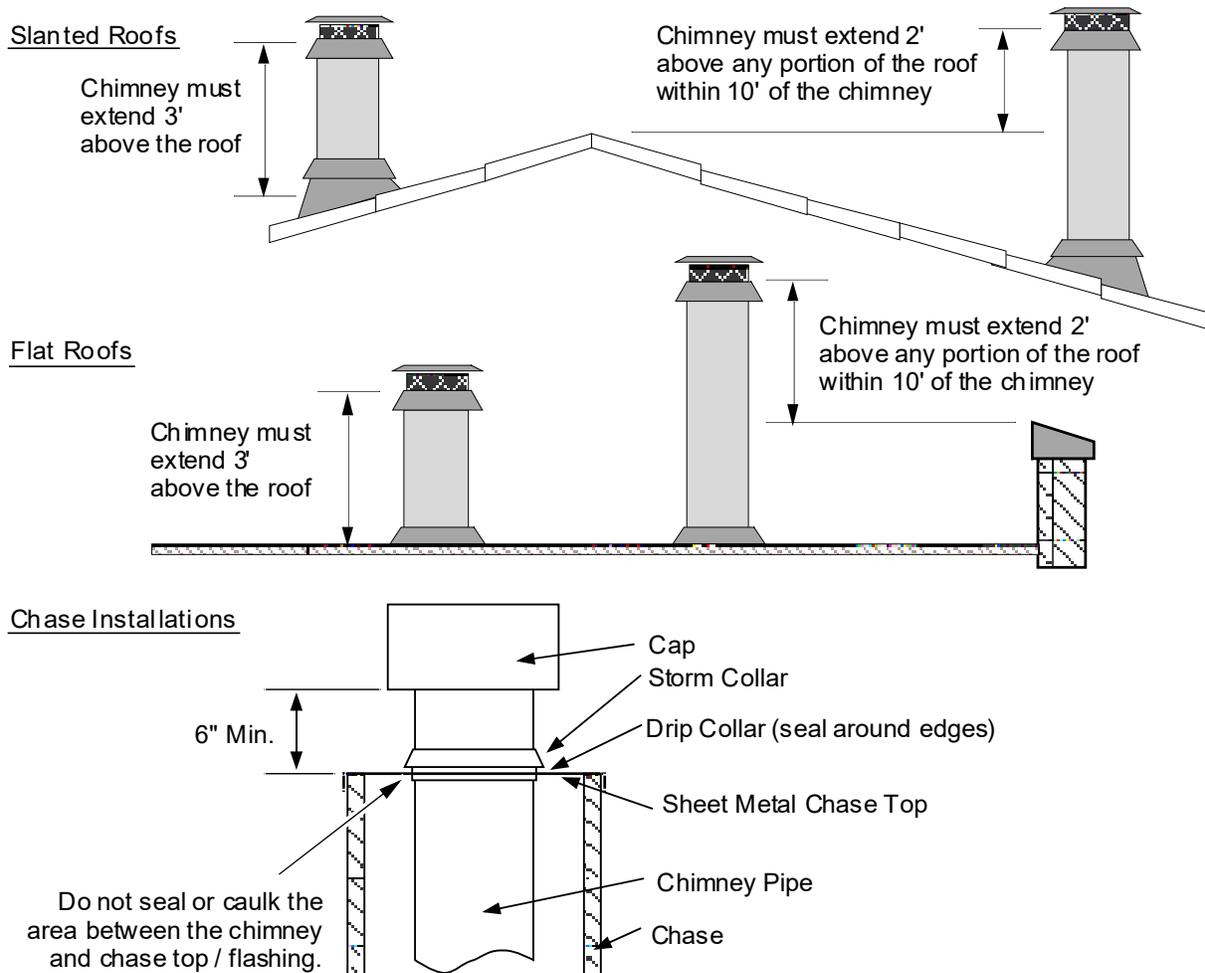
Firestops

- Whenever the chimney penetrates a floor or ceiling a firestop is required on the bottom side of the floor joists (see illustration below).
- When passing through an attic the firestop must be placed on the attic side of the joists
- When the chimney passes through a living space it must be totally enclosed.
- The space between frames that hold the firestop in place must meet the chimney manufacturer's minimum framing requirements.



Chimney Termination Requirements

- The chimney must terminate a minimum 3' above the roof and 2' above any portion within 10' (measured horizontally – see illustration below). This applies to flat and sloped roofs.
- The chimney must have a chimney cap. A spark arrestor may be required in your area (check with the local building department).
- When using a chase to enclose a chimney, the chimney termination is not required to be 3' above the chase as long as the chase is above the roof structure. The chimney cap must still maintain the 2, 3, 10 clearance to any other structure. See the illustration below.
- Chimneys extending beyond a certain height (frequently 5') above the roof may require braces (check the instructions included with the chimney for details)
- Chimney termination must be a minimum 10' (3M) from any adjacent building. It must also be 2' above any wall within 10'. Walls 10' or farther from the chimney termination may extend above the chimney (this may negatively impact draft).
- Follow the chimney manufacturer's requirements for installation in a chase (a roof radiation shield may be required).

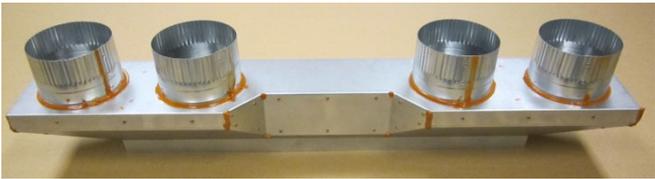
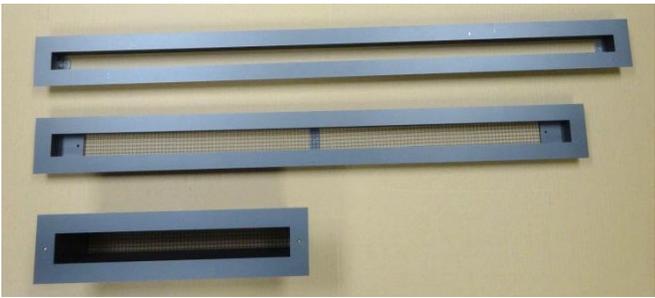


Convection Air Manifold and Non-Combustible Framing

Contents of Framing Hardware Box

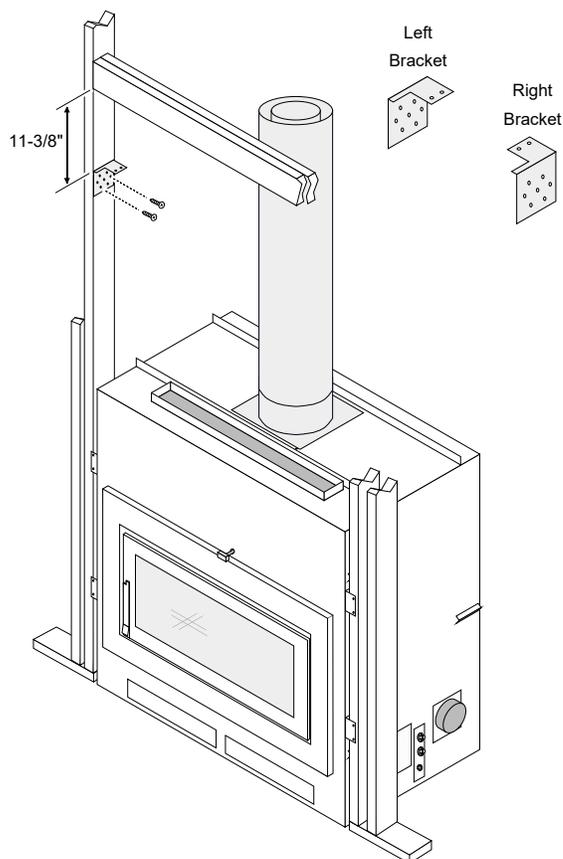
<ul style="list-style-type: none"> (36) Sheet Metal Screws (SM) NOTE: These screws are weighed, not counted, so an extra 3-5 screws will be present. 	
<ul style="list-style-type: none"> (44) Self-drilling screws (SD) NOTE: These screws are weighed, not counted, so an extra 3-5 screws will be present. 	
<ul style="list-style-type: none"> (2) 8-32 x 1-1/2" BLK BLACK 	
<ul style="list-style-type: none"> (4) #6 x 1-1/2 BK 	
<ul style="list-style-type: none"> (3) 8-32 x 1/2 BK 	
<ul style="list-style-type: none"> (2) Upper Framing Members (Non-Combustible) 	
<ul style="list-style-type: none"> (2) Upper Manifold Brackets (L and R) 	

Contents Strapped to Exterior of Fireplace & Inside Firebox

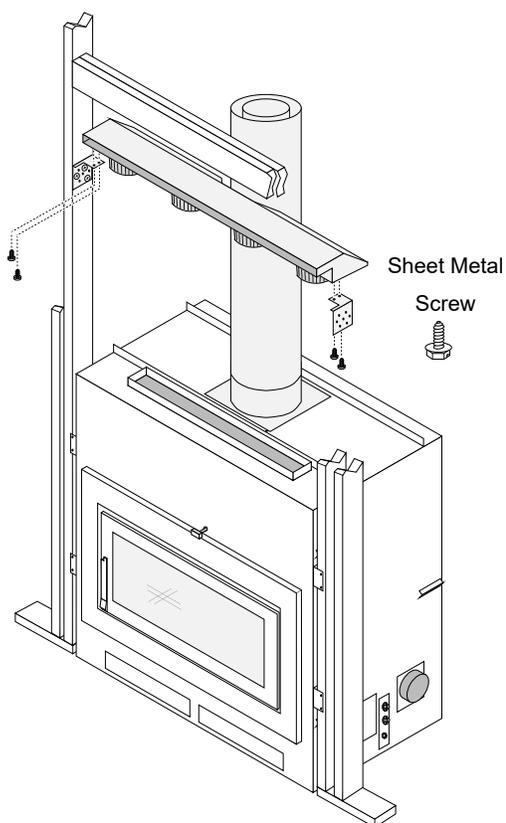
<ul style="list-style-type: none"> • Upper Manifold 	
<ul style="list-style-type: none"> • Lower Manifold 	
<ul style="list-style-type: none"> • (2) Horizontal Framing Members (Non-Combustible) • (2) Lower Framing Members – Telescoping (Non-Combustible) • (2) Telescoping Manifold Support 	
<ul style="list-style-type: none"> • (1) Upper Manifold Trim • (1) Front Ventilation Grill • (2) Small Ventilation Grills (inside firebox) 	
<ul style="list-style-type: none"> • Flex Duct 	

Steps for Installing the Convection Air Manifold

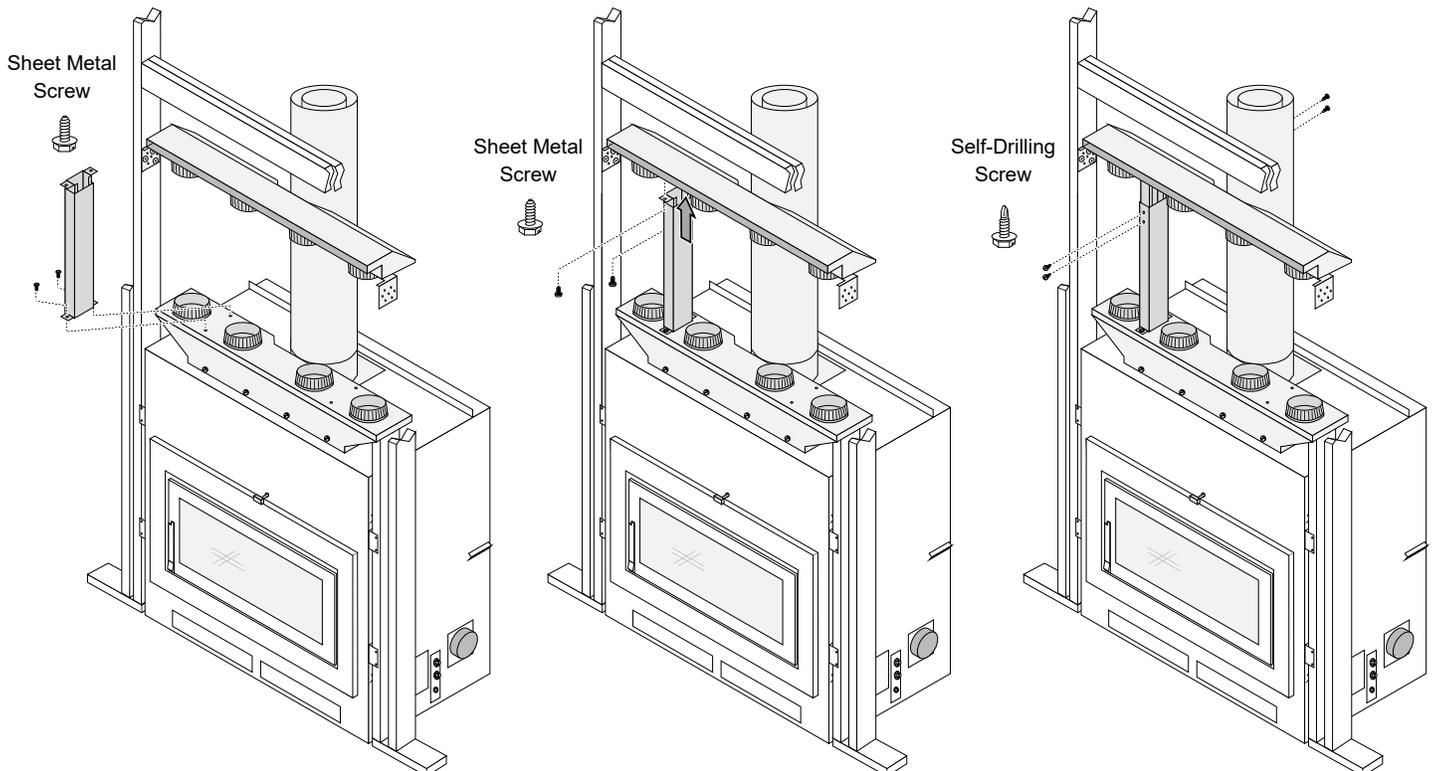
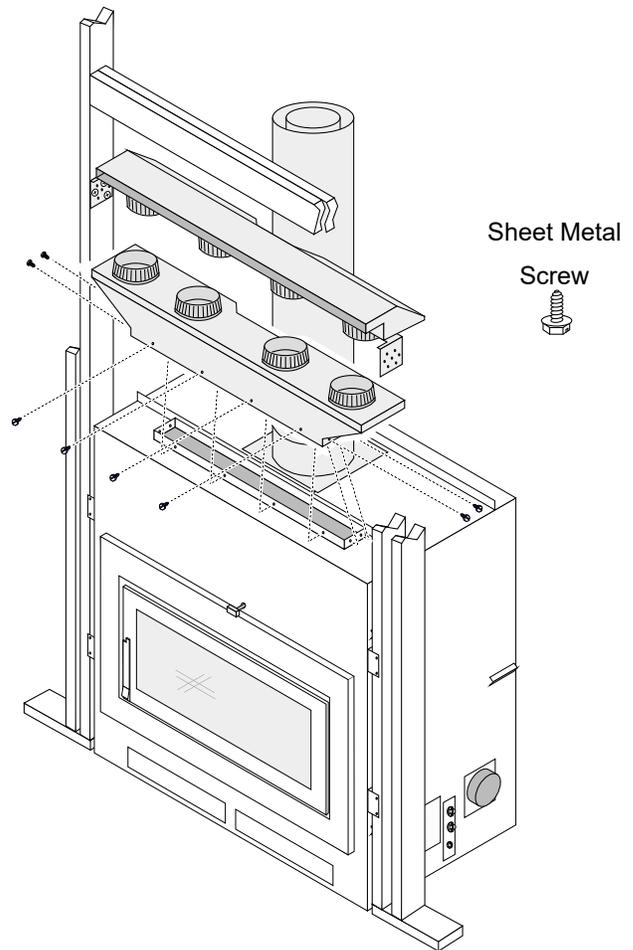
- Attach the Upper Manifold Brackets to the side framing of the enclosure 11-3/8" below the header* (min. 14-7/8" under ceiling). **The brackets must be flush with the side framing members and level with each other** (see picture below).



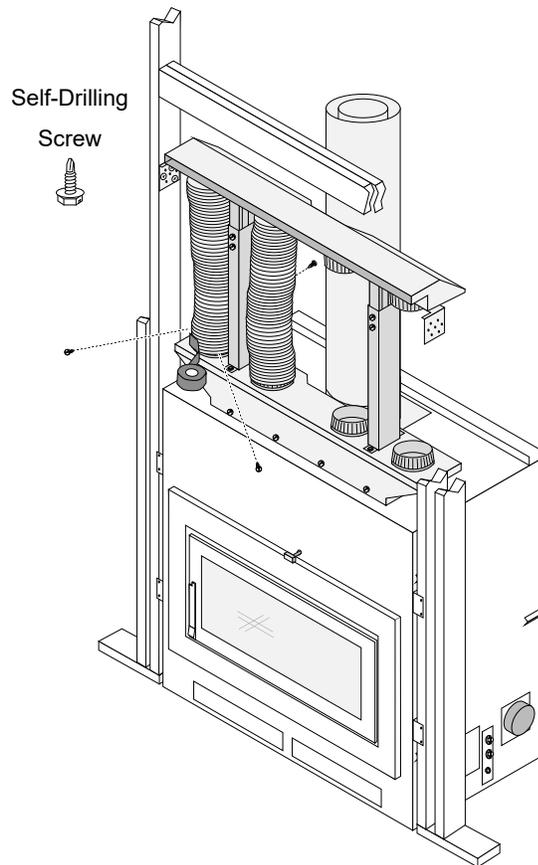
- Attach the Upper Manifold to the support brackets (use 2 SM screws on each side).



- Secure the Lower Manifold to the convection air outlet of the fireplace using 8 SM screws.
- Attach the lower tabs of the telescoping manifold supports to the Lower Manifold (4 SM screws). Extend the supports and attach them to the bottom of the Upper Manifold (4 SM screws). Use 4 SD screws on each telescoping section to lock the support in to the proper length.

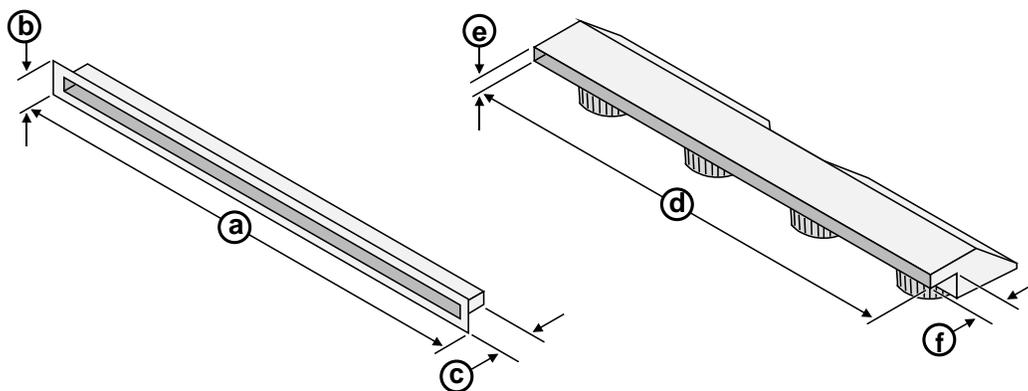


- Stretch the included 5" aluminum flex duct to its full length. Cut sections of the duct to the proper length to reach from the lower to upper manifold collars. Secure each section of duct to the manifold collars with 3 SD screws. Seal the ducting with aluminum (U.L. 181A-P) tape.



Upper Manifold and Trim Dimensions

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

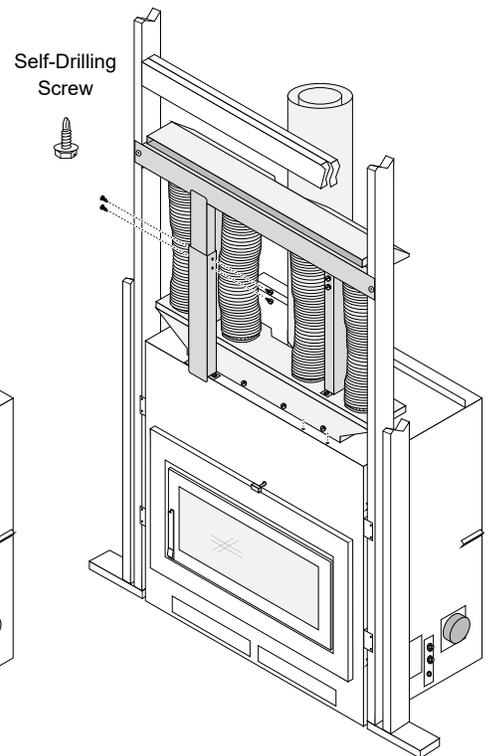
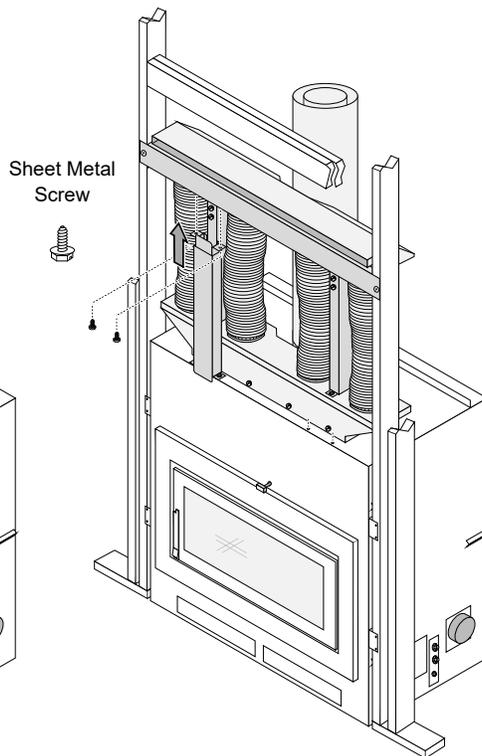
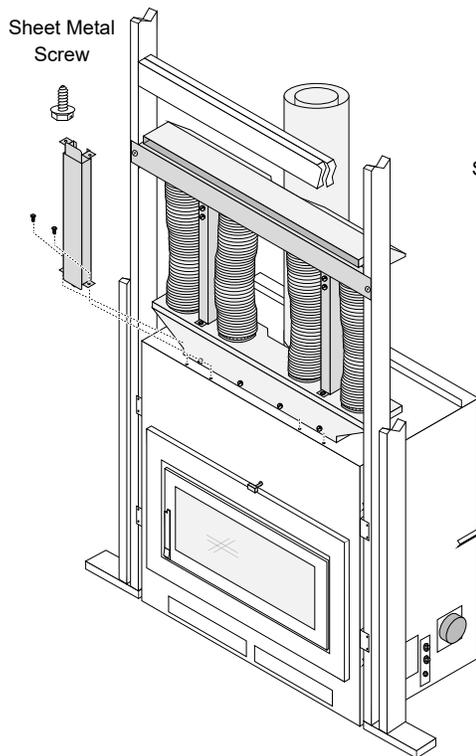
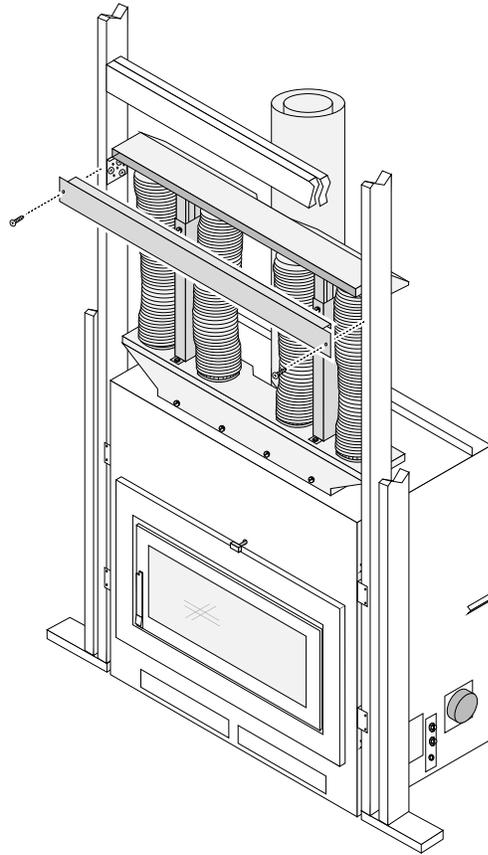


Dimensions

a	b	c	d	e	f
41-15/16"	3-1/2"	1-5/16"	40"	1-11/16"	2-1/4"

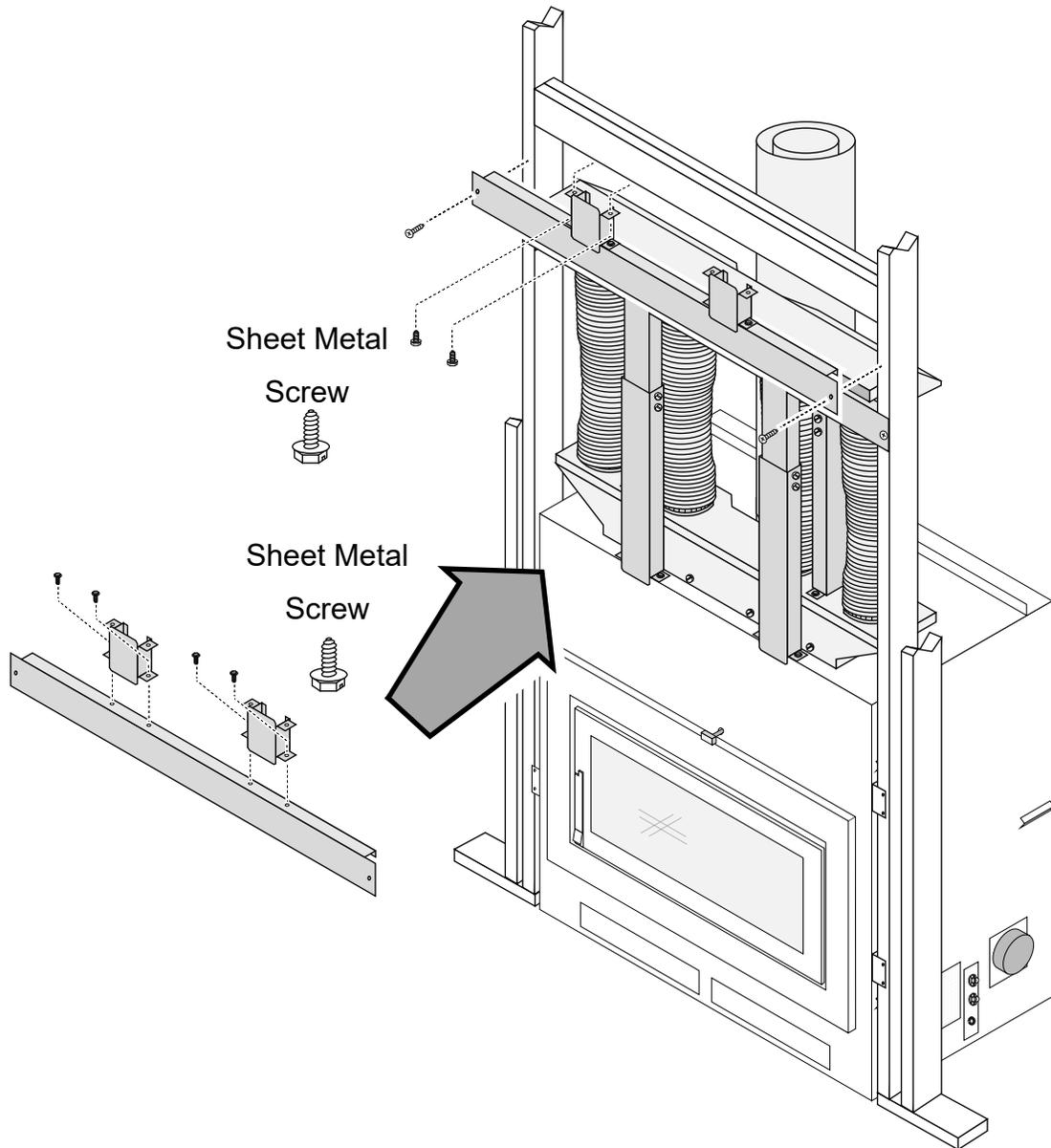
Steps for Installing the Non-Combustible Framing

- Place one Horizontal Framing Member below the outlet of the upper manifold and secure it to the side framing of the enclosure.
- Install the two Lower Framing Members to the top of the fireplace (use 4 SM screws). Extend the Lower Framing Members until they reach the Horizontal Framing Member. Attach using 4 SM screws. Use 4 SD screws on each telescoping section to lock the support to the proper length.



- Attach the two Upper Framing Members to the top of the second Horizontal Framing Member (use 4 SM screws). Place the Horizontal Framing Member directly above the outlet of the upper manifold

with the spacers facing upward. Attach the Upper and Horizontal Framing Members to the framing and header.



Electrical Line Hookup



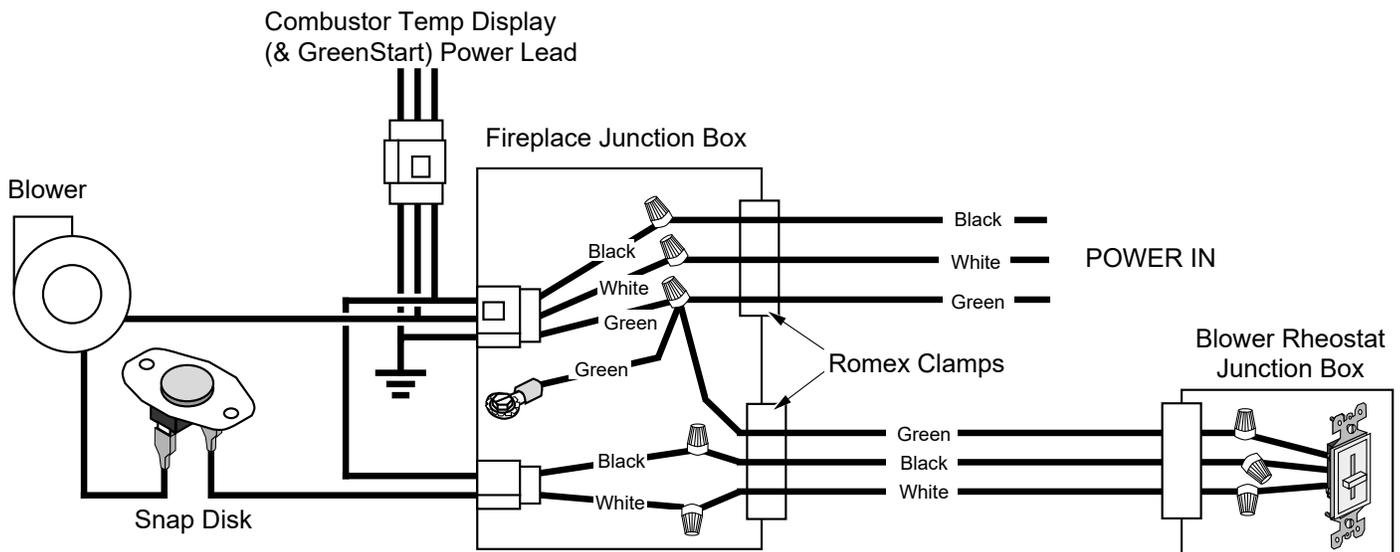
Make sure the household breaker serving the fireplace is shut off prior to working on any electrical lines.

- The electrical line leading to the junction box inside the fireplace must be installed by a qualified installer and must meet all local codes.
- The appliance, when installed, must be electrically grounded in accordance with local codes or, in the absence of local codes, with the National Electrical Code, ANSI/NFPA 70, or the Canadian Electrical Code, CSA C22.1.
- The electrical line must supply 120 Volts, 60 Hz, and 10 amps (2A for blower, 8A for optional igniter).
- Route the electrical supply line through the junction box cover plate and attach to the hookup wires (see illustration below).

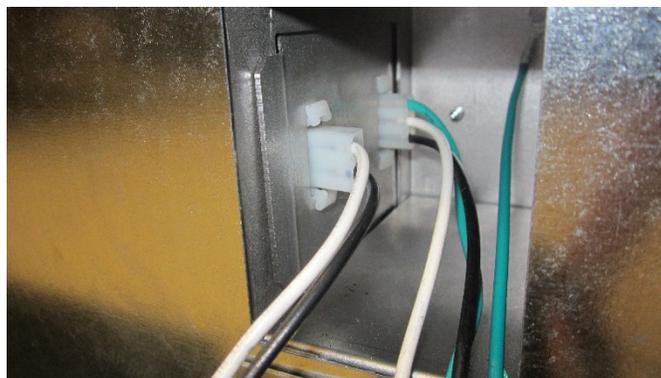
NOTE: Details on the junction box are shown on the following page.

- After all wiring is in place, replace the junction box cover and tighten the Romex clamps to secure the wiring.

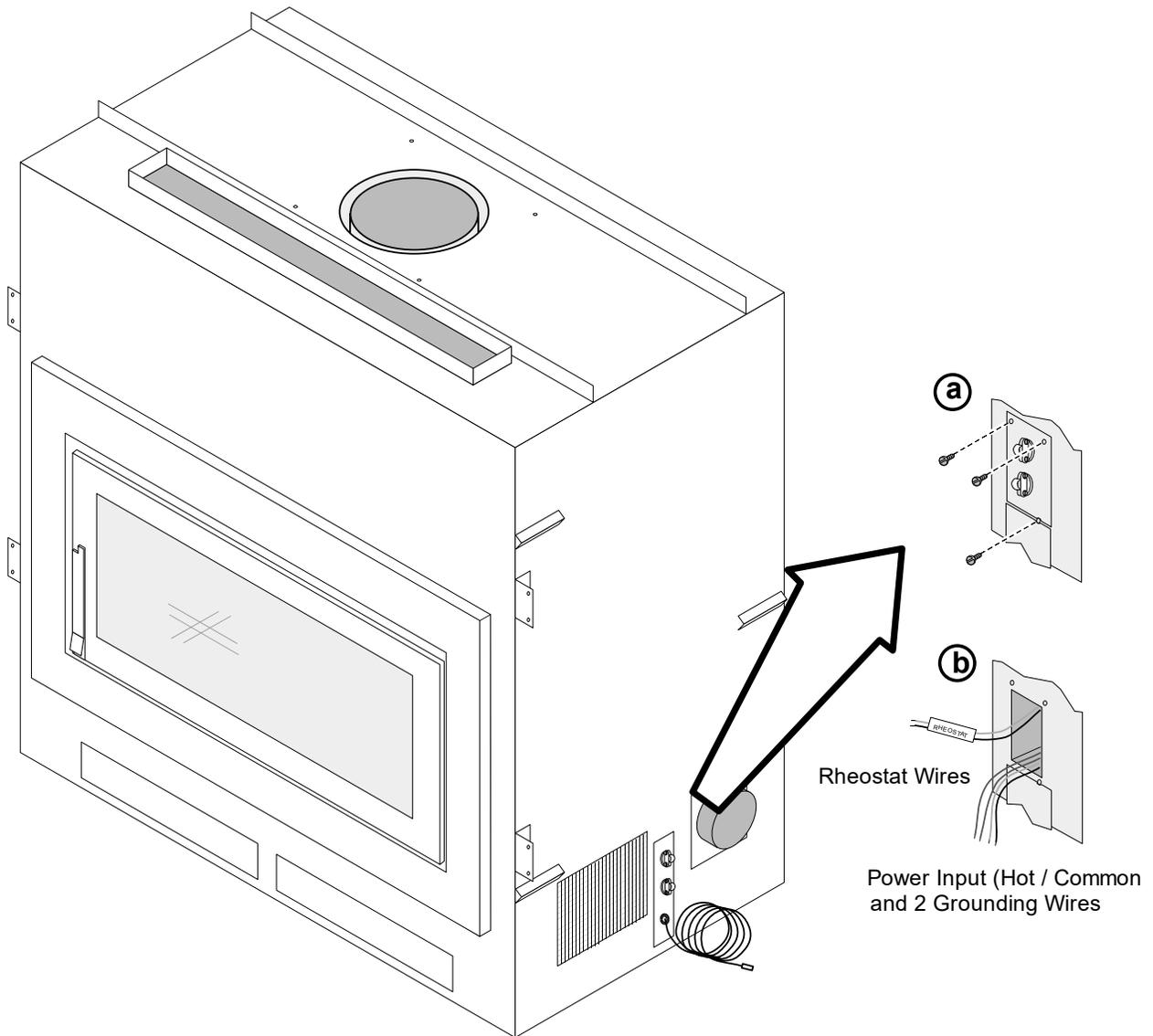
Wiring Diagram



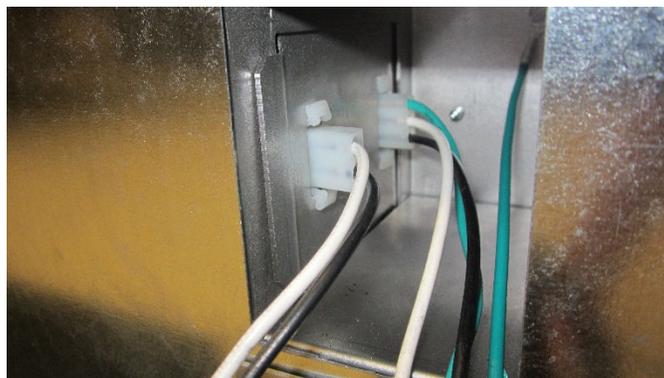
Inside of Junction Box



Fireplace Junction Box



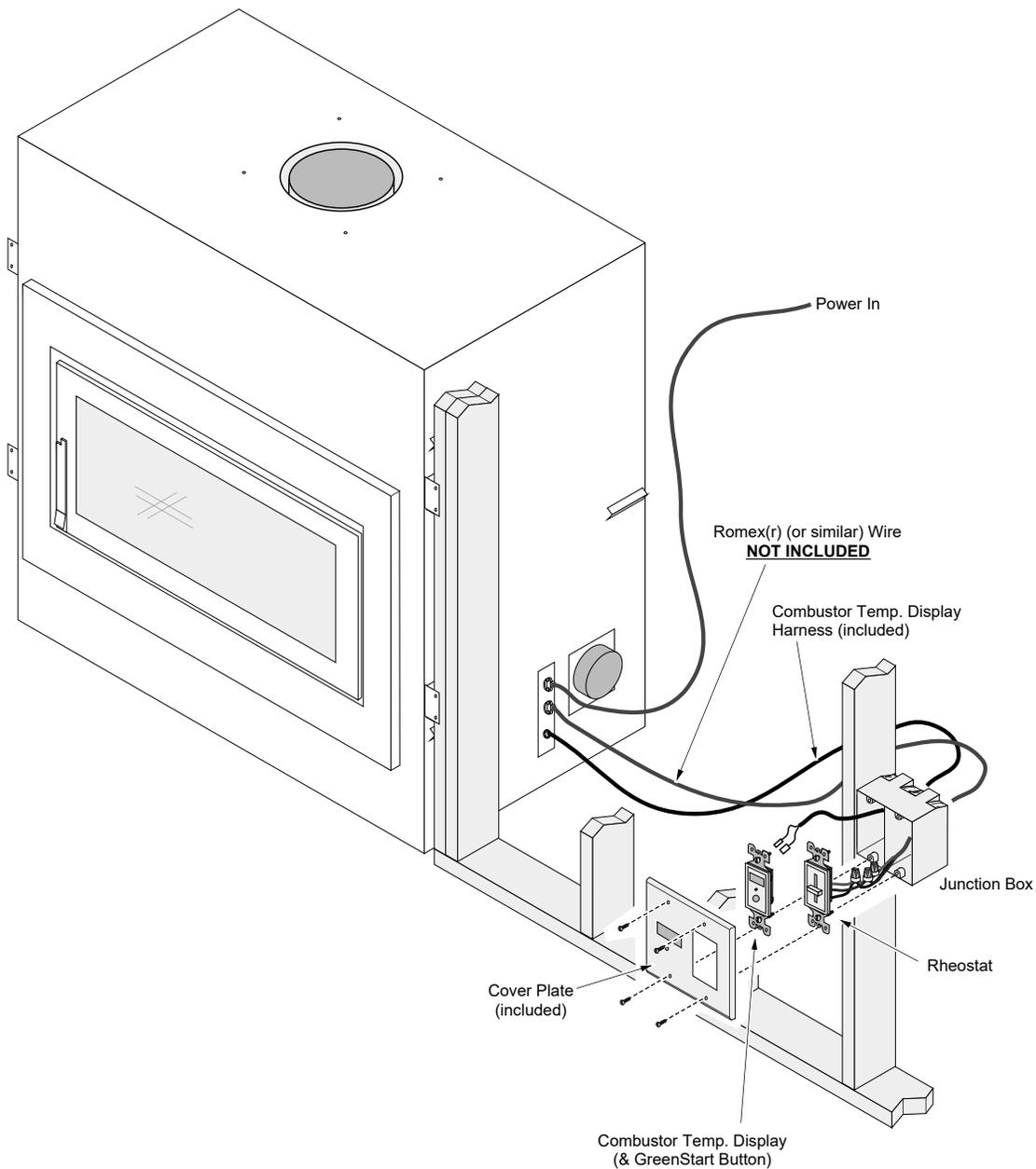
Inside of Junction Box



External Wiring Installation

Make sure the household breaker serving the fireplace is shut off prior to working on any electrical lines.

- Determine a location for the rheostat and combustor temp. display. Place it in a location that may be reached by the 20' harness exiting the right side of the fireplace. Mount the included double-gang junction box in this location.
- Route the wire harness from the fireplace to the junction box. Do not route the wire over the top of the fireplace or within 2" of the chimney.
- Route an approved electrical line (e.g. Romex® wire) from the fireplace junction box to the rheostat. Do not route the wire over the top of the fireplace or within 2" of the chimney.



External Wiring Installation (continued)

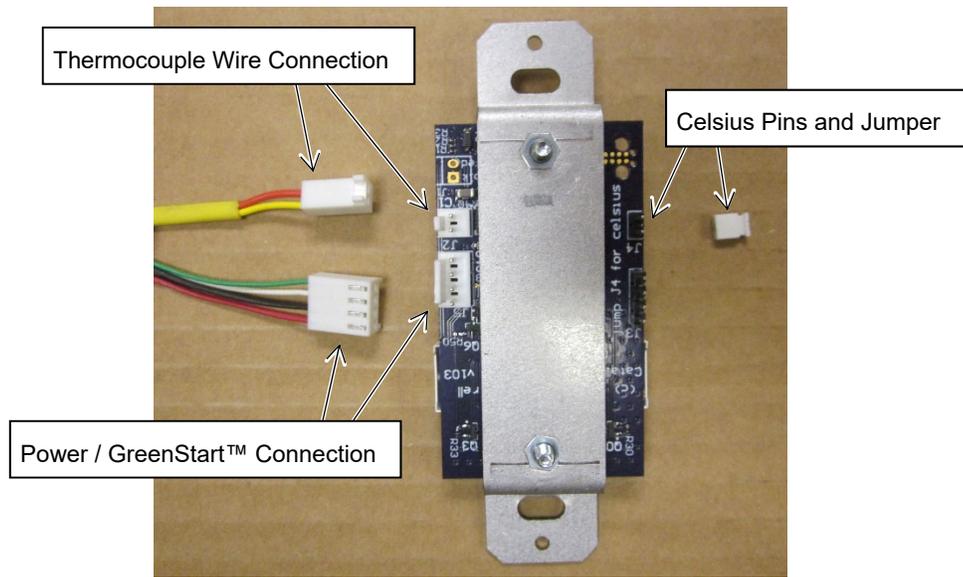
- Connect the thermocouple wire (2-wire) to the thermocouple connection (see picture below).
- Connect the power/GreenStart™ wire (4-wire) to the power/GreenStart™ connection (see picture below).



CELSIUS DISPLAY

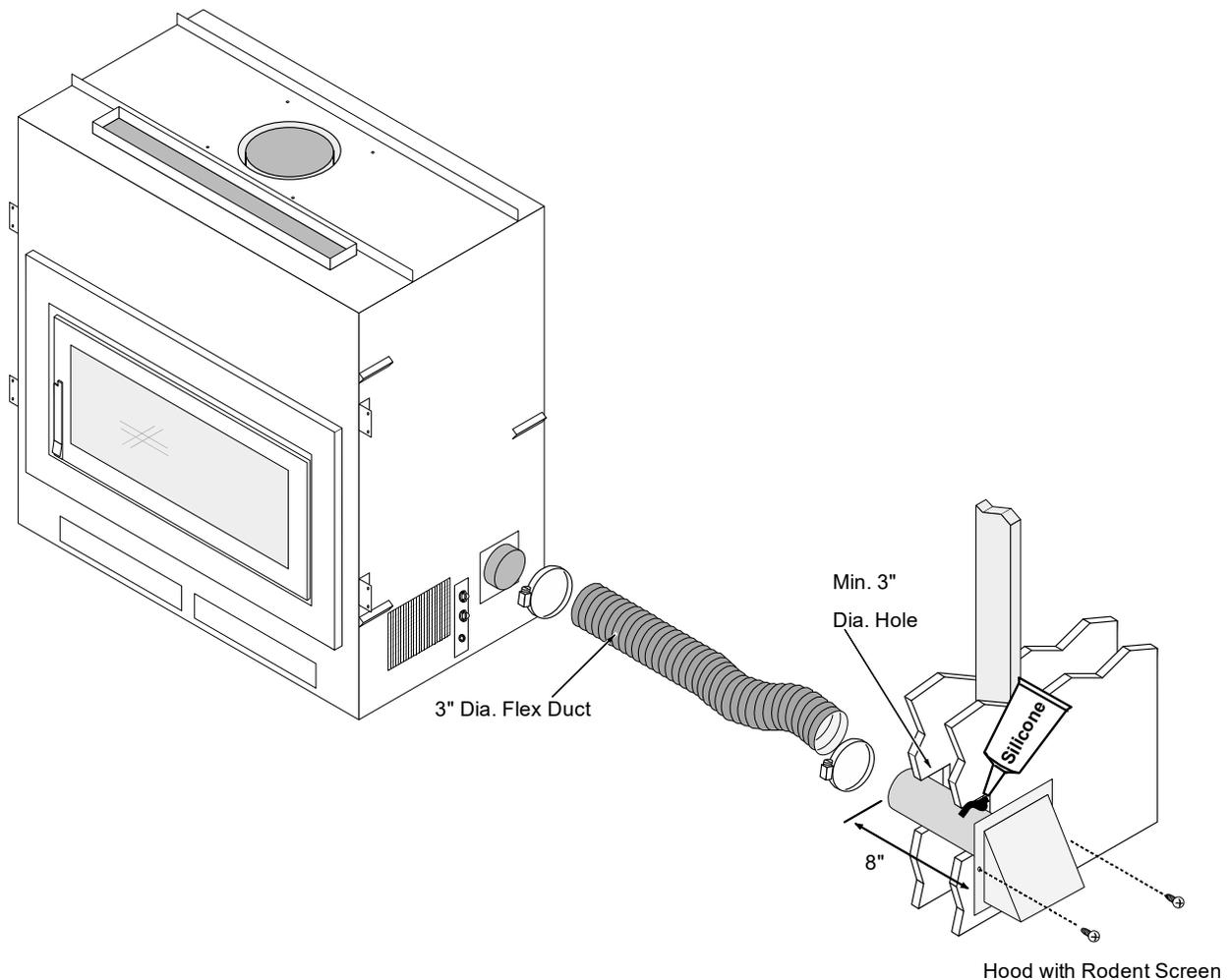
If you wish to display Celsius instead of Fahrenheit, place the jumper over the 2 pins on the back of the circuit board (see picture below).

Back Side of the Combustor Temp Display



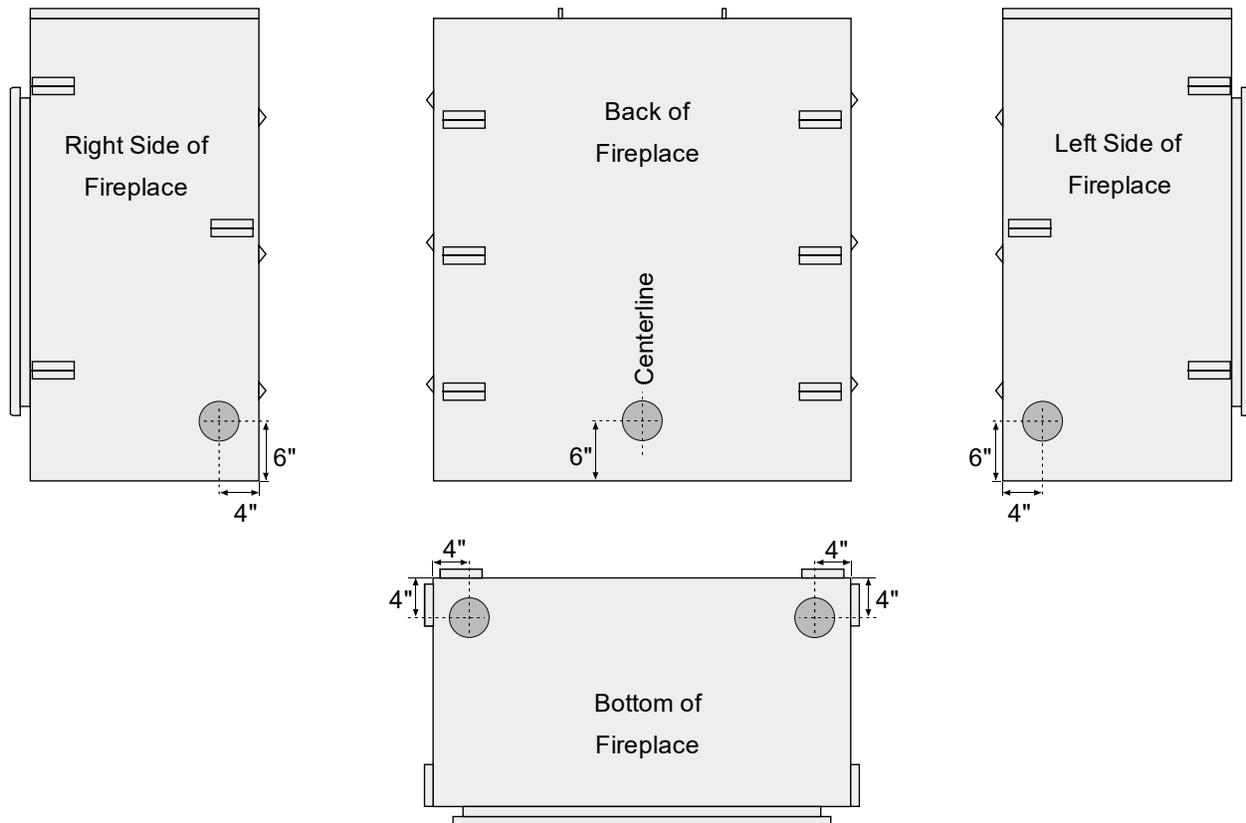
Air Intake Installation

- This fireplace requires an air intake to supply combustion air to the fireplace.
- The fireplace includes 10' of 3" diameter duct, hood with screen, and two (2) hose clamps.
NOTE: The maximum air intake length is 10' with 3" duct. If you use 4" diameter duct the length may be increased to 20' (use 3" to 4" increasers at the fireplace and hood), from 20-30' increase to 5" diameter duct. The maximum bends for the duct is 540° (six 90° bends).
- Determine a location for the intake hood.
 - Hood must be positioned so it does not become blocked by snow or debris.
 - Intake air may be drawn from a ventilated crawl space (check with local jurisdiction for requirements in your area).
 - Do not draw air from an enclosed space (such as a garage or un-ventilated crawl space).
 - Certain localities may require the air intake termination to be located at a point lower than the firebox opening. Consult your local jurisdiction for details.
- The fireplace is shipped with the intake on the right side. The air intake may be redirected to the left, back (either side), or bottom of the fireplace. To switch intake location, remove the cover plate from the desired location, and swap it with the air intake (both are held in place with four screws).



Air Intake Locations

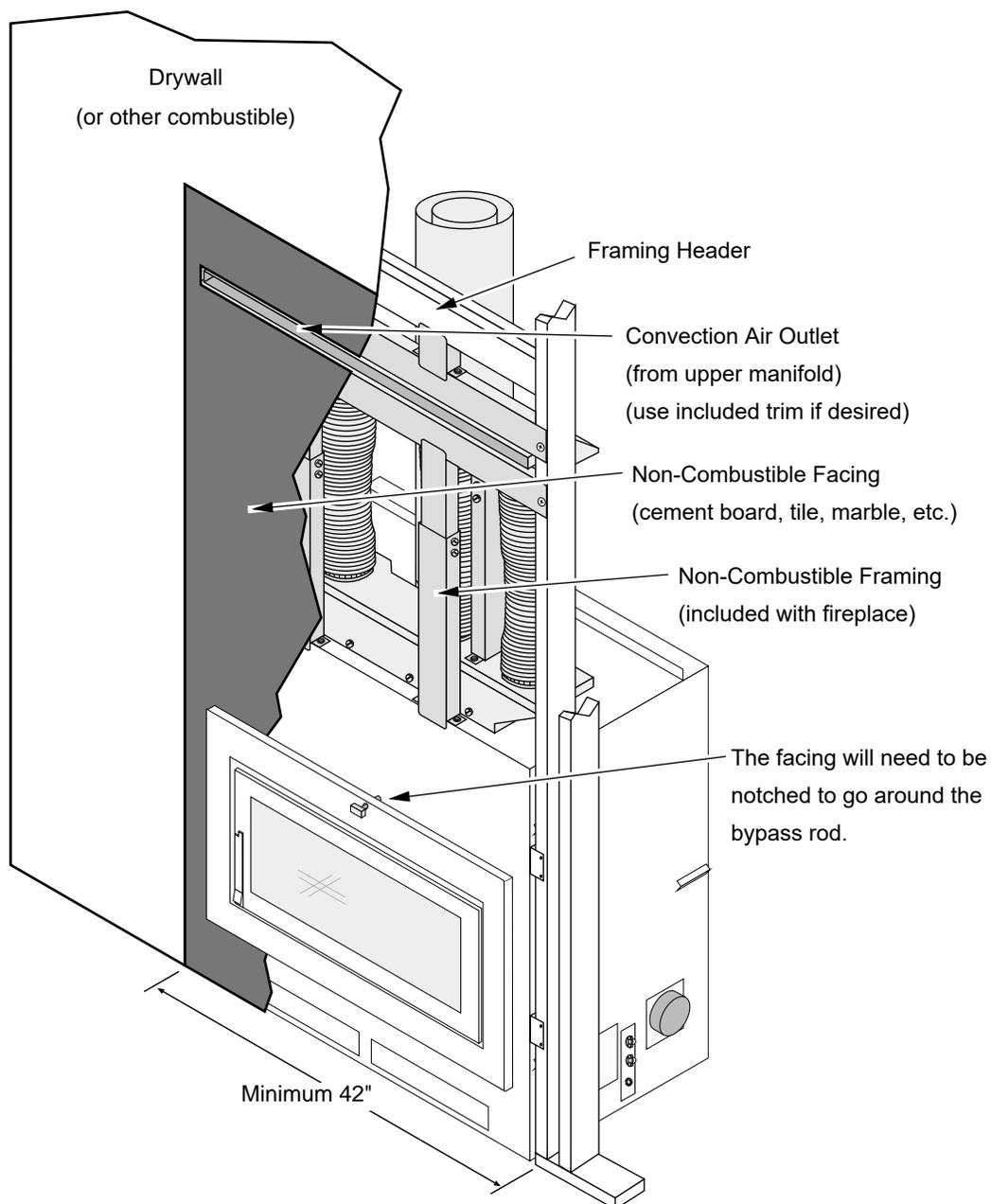
- The air intake collar is shipped on the right side of the fireplace. If you wish to relocate it to the left side, back or bottom of the fireplace, follow the directions below:
 - a) Disconnect the air intake collar (4 screws hold it in place).
 - b) Remove the cover plate in the location you wish to relocate the air intake to.
 - c) Attach the air intake collar in the desired location (use the screws removed earlier)
 - d) Place the cover plate over the stock air intake location and secure (use the screws removed earlier)
- The 5 air intake locations are shown below.



Facing Requirements

- The fireplace requires non-combustible facing (typically 1/2" thick concrete-board) from the base of the fireplace to the framing header (min. 78-1/2"). The non-combustible facing must extend to the framing members on both sides of the fireplace. Do not use drywall or other combustible in this area (see illustration below).
- The non-combustible facing must have an opening for the convection air outlet (see illustration below).
- The non-combustible facing may be attached to the front of the fireplace and non-combustible framing with screws. Do not penetrate the fireplace more than 3/4".
- Facing over 1" thick (brick, thick marble) may be used around the perimeter of the faceplate.

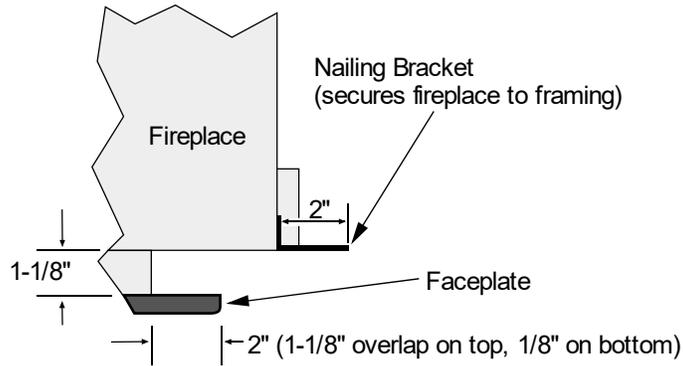
NOTE: leave a minimum of 1/8" between the top of the face and the surrounding facing material to accommodate removal of the face.



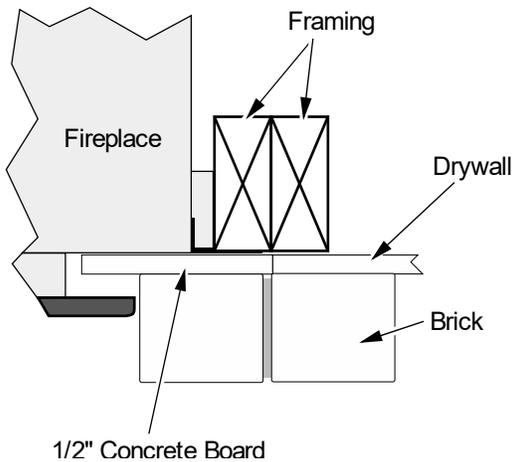
Facing Requirements (continued)

- Facing may be installed so it inserts behind the faceplate (see illustration below). NOTE: the faceplate protrudes 1-1/8" from the front of the fireplace, has a 2" overlap on the sides, 1-1/8" overlap on top, and 1/8" overlap on the bottom.

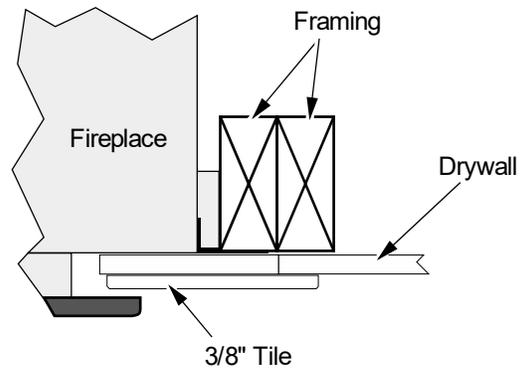
Top View of Fireplace



Brick (Thick) Facing Example

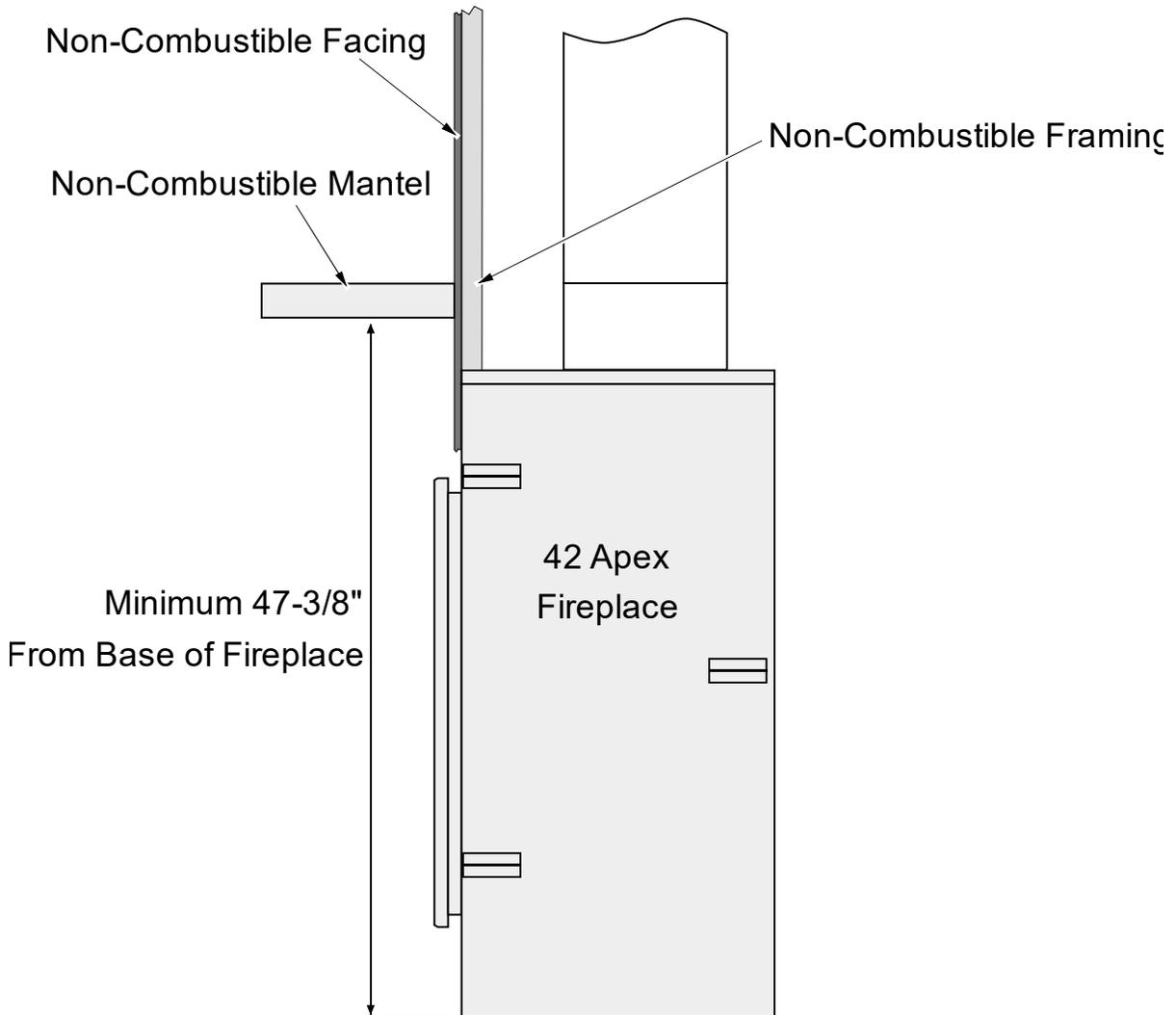


Tile (Thin) Facing Example



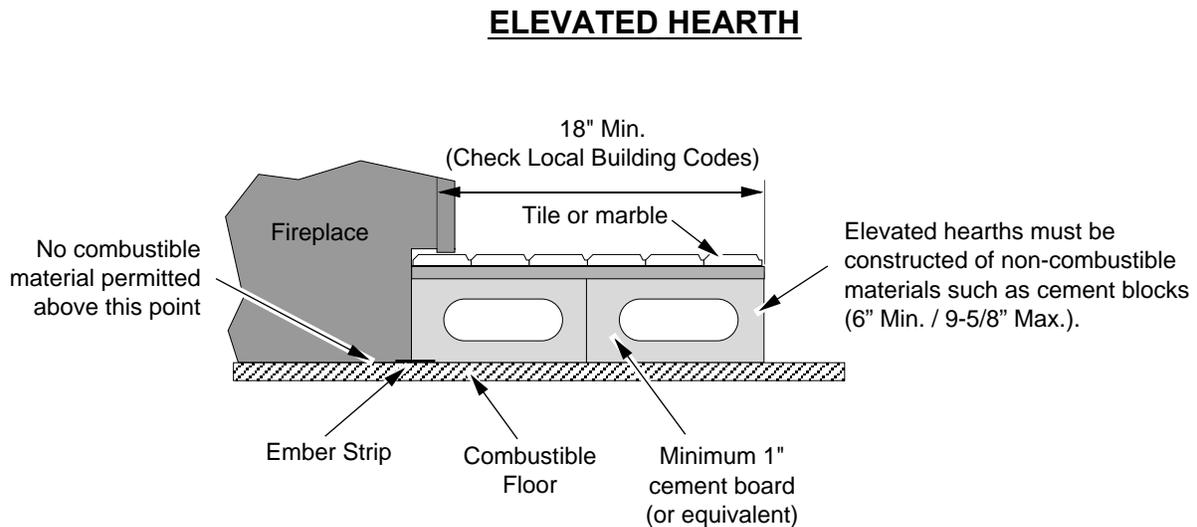
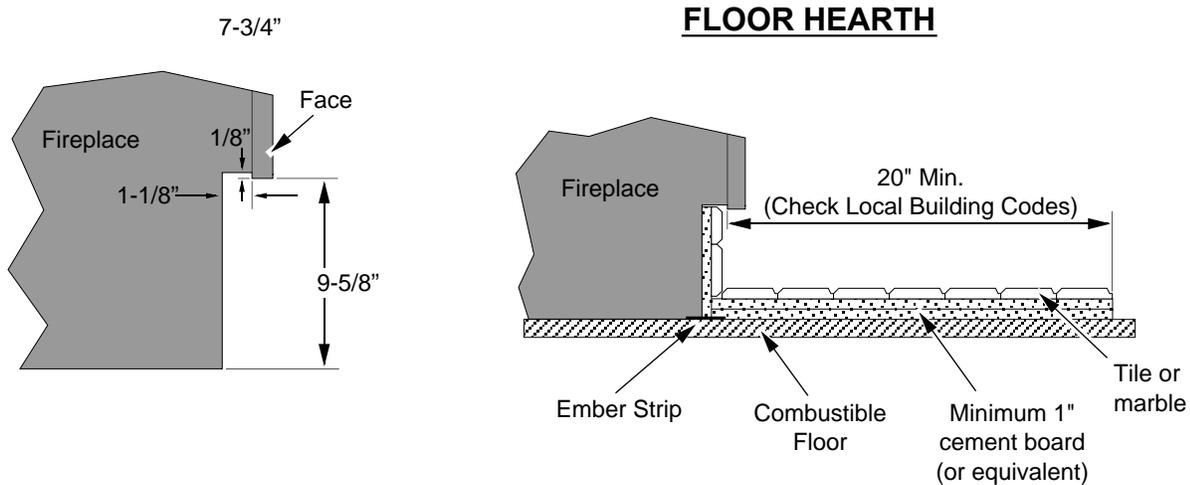
Mantel Requirements

- Mantel must be non-combustible.
- Mantel must be a minimum 47-3/8" above the base of the fireplace.
- Maximum mantel depth is 18".



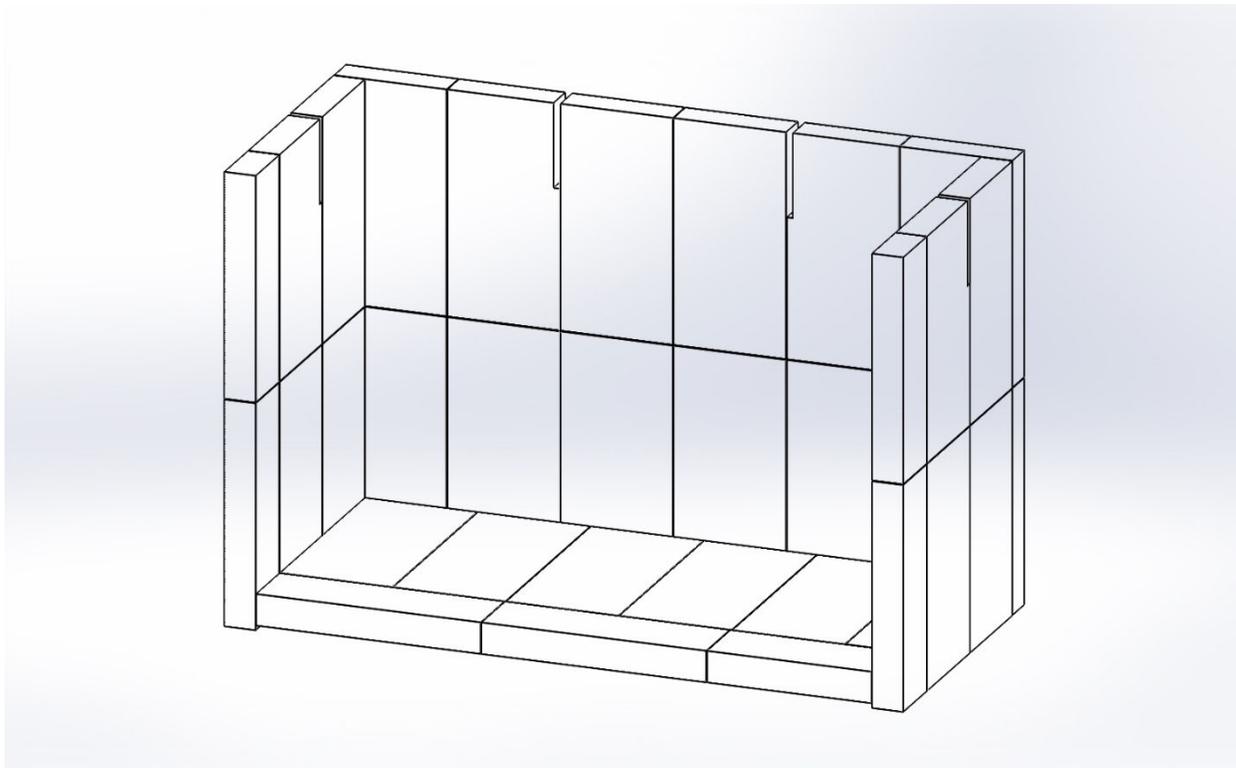
Hearth Requirements

- Local building codes may require a minimum hearth requirement different of what this manual states
- Hearth must extend 20" in front of the faceplate when it is not elevated (see local building codes). Hearths raised at least 6" must extend a minimum 18".
- Hearth must extend a minimum 8" to both sides of the door opening (44" wide)
- Hearth must be a minimum 1" thick of Durarock Next Generation Cement Board (or equivalent material) with an R-value of 1.00. Multiple cement boards may be stacked to meet the required R-value of 1.00. For example, two half-inch boards each with an R-value of 0.5 can be stacked together to meet the 1.00 requirement.
- Hearth must not rise more than 9-5/8" above the base of the fireplace



Finalizing the Installation

- Once the fireplace is in place, with hearth and facing complete, the fireplace may be finalized following the directions below.
 - 1) Install the firebrick as shown below.



- 2) Place the baffle in position (see pictures below). **Make sure it is pushed back so the tabs inside the firebox insert into the slots on the baffle.**



- 3) Replace the log stop.



- 4) Attach the face (see instructions included with face).

Verify Door Operation

Open the door handle and swing the door shut. Press down on the handle to lock the door in place (take care to not pinch your hand between the handle and door frame).



The door may be tight the first time it is closed. This is because the gasket is new and has not compressed. We suggest opening and closing the door several times to help compress the gasket.

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