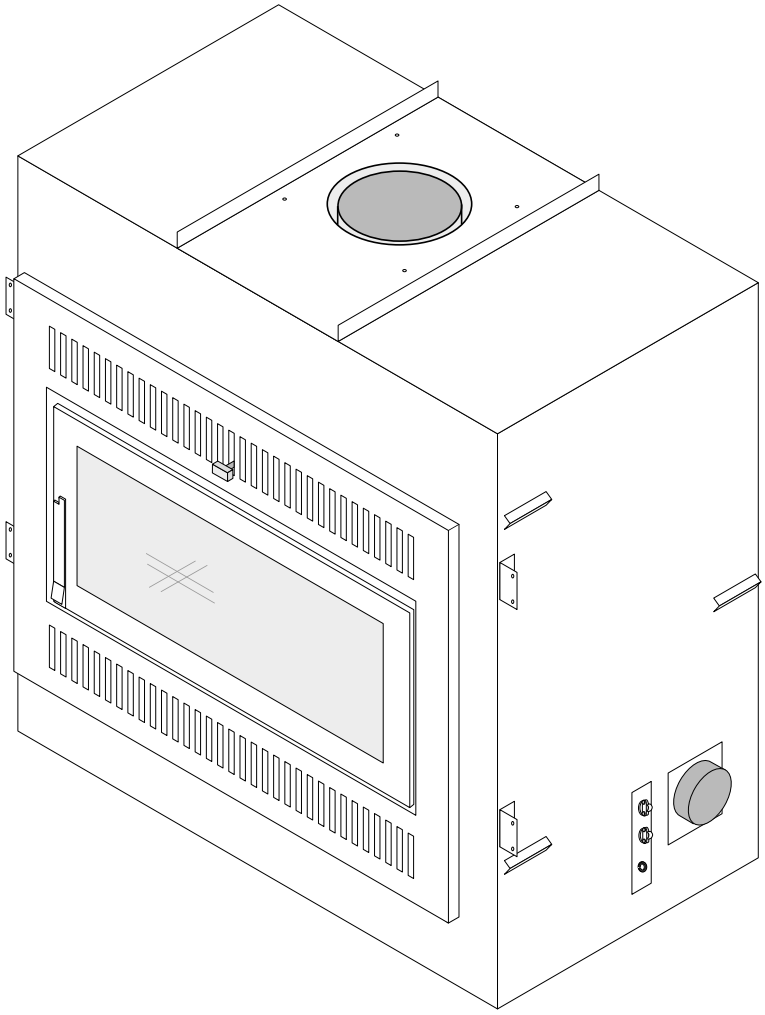
FIREPLACE

FIREPLACE XTRORDINAIR



42 Apex 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 Francais.
www.travisproducts.com

Wood-Burning
Zero-Clearance
Fireplace

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$10.00 100-01436

Tested & Listed By O-T L Portland Oregon USA
C US
OMNI-Test Laboratories, Inc.

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

2 Introduction

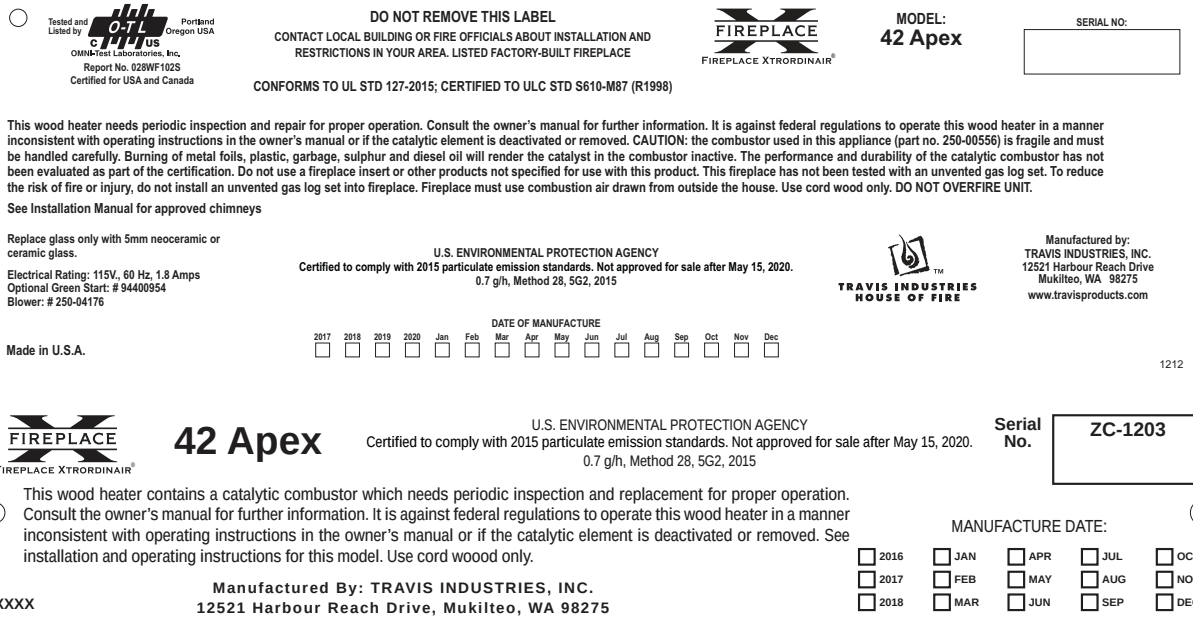
Overview

This manual details the installation requirements for the 42 Apex wood-burning fireplace. For operating and maintenance instructions, refer to the 42 Apex 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.



IAS (ICBO) Approval

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

EPA Approval

This heater meets the 2015 U.S. EPA's crib wood emission limits for wood heaters sold after May 15, 2015. Tested to Method 28, 5G2 this heater has been shown to deliver 11,000 to 38,000 BTUs/hr and an emission value of .69 g/h.

This wood heater has a manufacturer-set minimum low burn rate that must not be altered. It is against federal regulations to alter this setting or otherwise operate this wood heater in a manner inconsistent with operating instructions in this manual.

National Fireplace Institute

NATIONAL FIREPLACE INSTITUTE NFI CERTIFIED www.nficertified.org

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.

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4 Safety Precautions

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. These 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

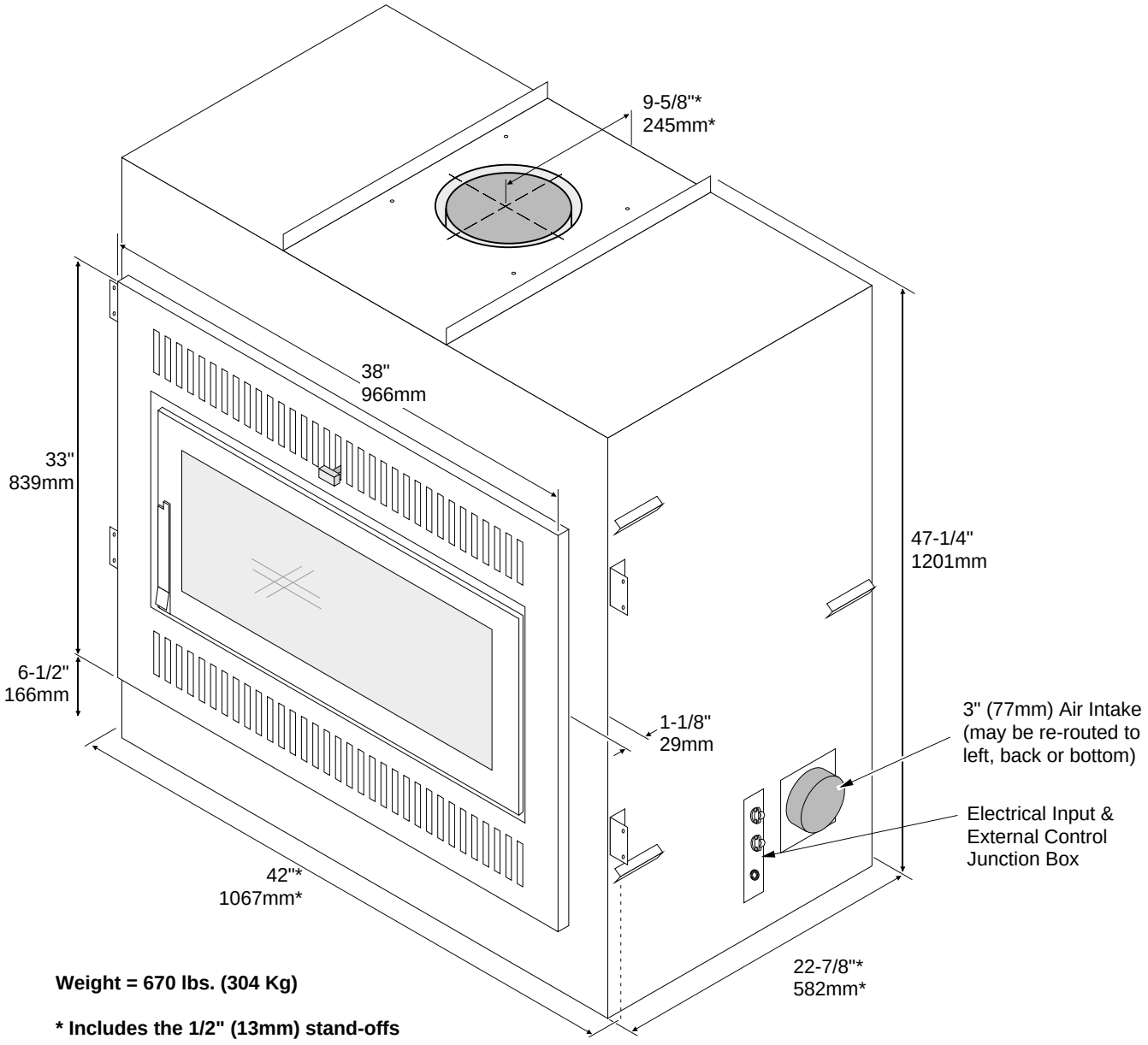
- Residential (not approved for HUD Mobile Homes)
- Straight or Corner Placement
- Raised or Floor Placement
- Raised or Floor Hearth
- Internal or External Chase
- 5 Air Intake Locations
- 1 Electrical Connection Location

Heating Specifications

Approximate Heating Capacity (in square feet)*	Up to 2,500 sq. ft.
Maximum Burning Time.....	Up to 12 Hours
BTU Output per Hour (Cord Wood Method).....	Up to 62,000 BTUs

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

Dimensions



Weight = 670 lbs. (304 Kg)

*** Includes the 1/2" (13mm) stand-offs**

6 Finalizing the Installation (for qualified installers only)

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
- Owner's manual
- Pair of gloves

Items Shipped with the Face

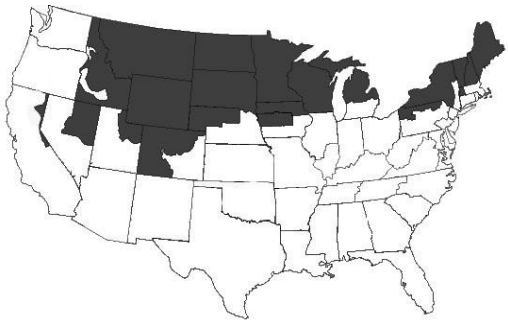
- Face
- Face Brackets with Attachment Nuts

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.
- Complete the framing above the fireplace (must be non-combustible).
- Install the hearth.
- 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.

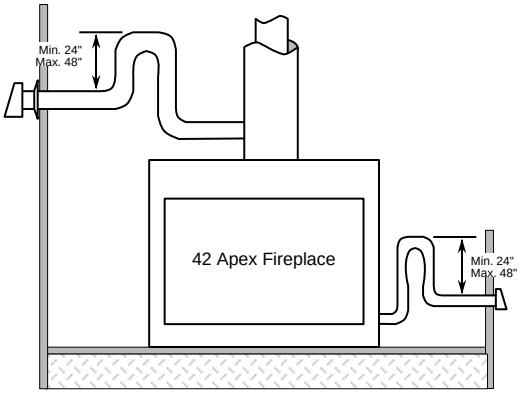


Insulated Chimney is Strongly Recommended

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 - Make sure the humidistat 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

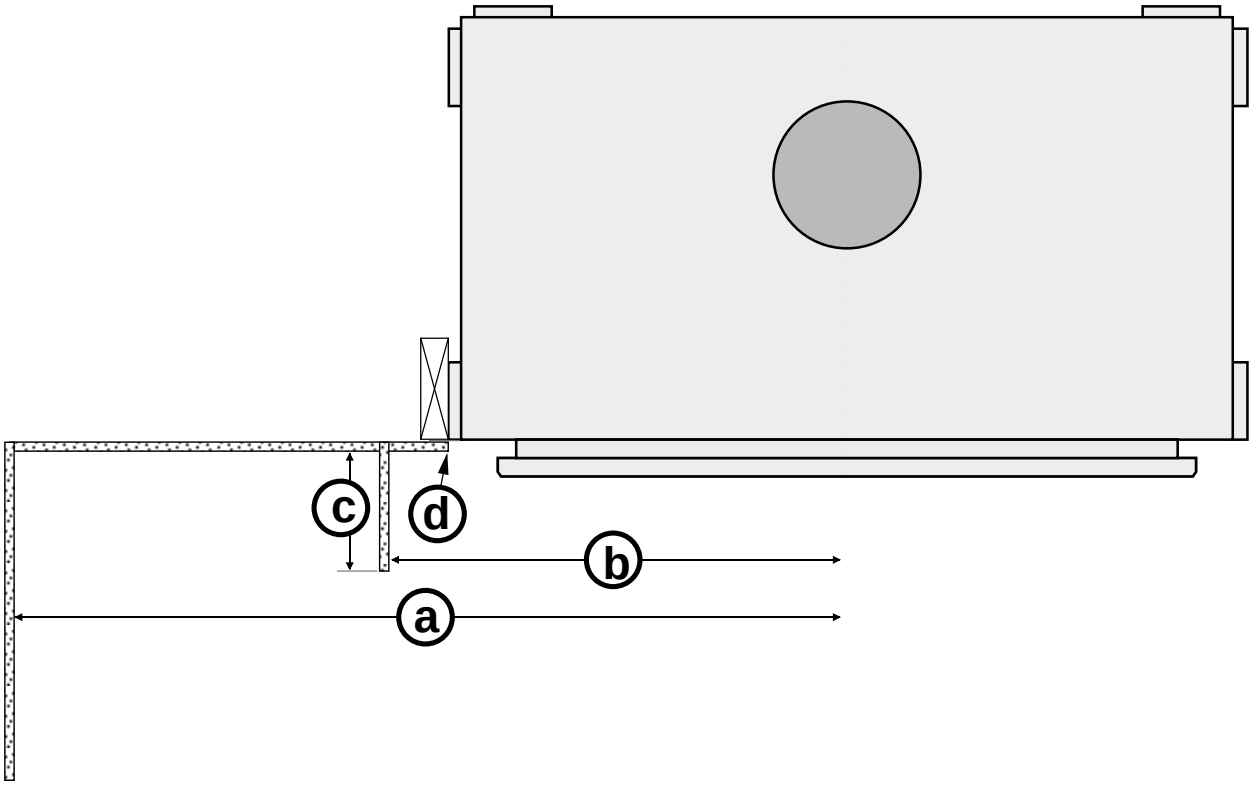
- Make sure the bypass is shut when the fireplace is not in use.
- Slide the air control fully closed when fireplace is not in use.
- Minimize the use of exhaust fans in the home when the fireplace is not in use.

8 Finalizing the Installation (for qualified installers only)

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” (178mmmm) from the front of the fireplace must be placed a minimum 24-3/8” (620mmmm) 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).

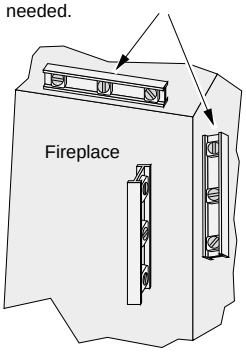


- The fireplace requires a ½” (13mm) clearance to the back and sides (stand-offs are pre-installed to provide this clearance). Do not place insulation or other material into this area. Drywall or other combustibles must maintain a ½” clearance to the sides of the fireplace (see “d” in the illustration 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.

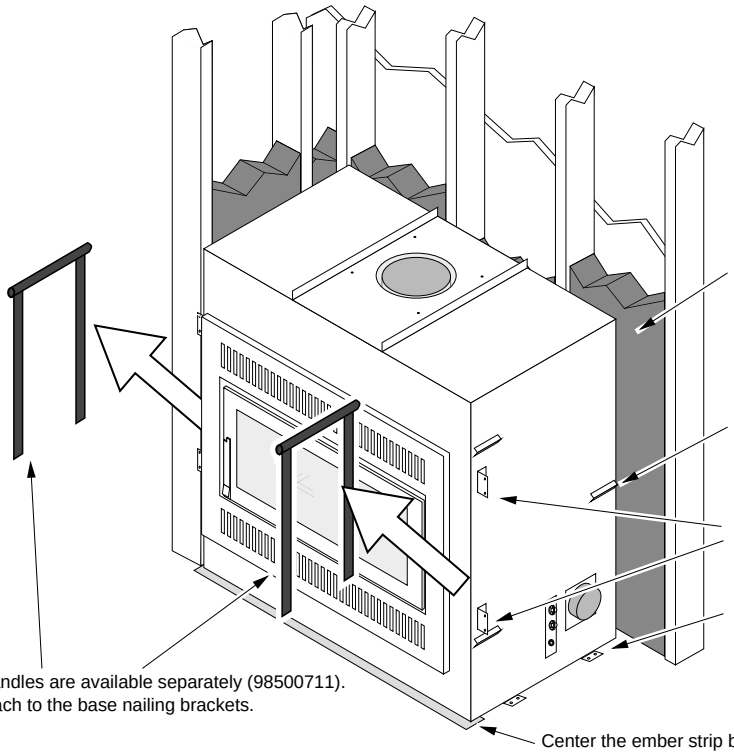
Fireplace Placement

- 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.

The fireplace must be level and plumb during installation. Use shims under the fireplace to properly level the fireplace if needed.



WARNING:
Failure to correctly level and plumb the fireplace may lead to the door swinging open or closed.

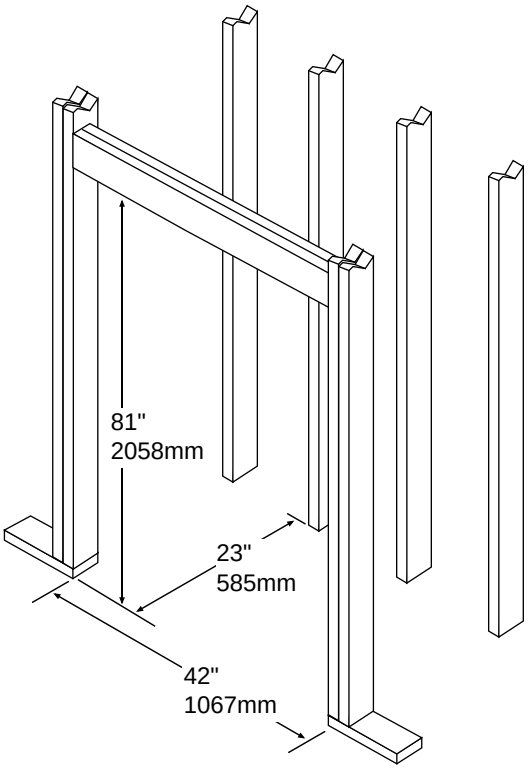


10 Finalizing the Installation (for qualified installers only)

Fireplace Framing

Minimum Framing Dimensions

- Minimum framing dimensions are shown in the illustration below. Do not build into the enclosure.
- The enclosure over the fireplace must be a minimum 81” above the base of the fireplace.



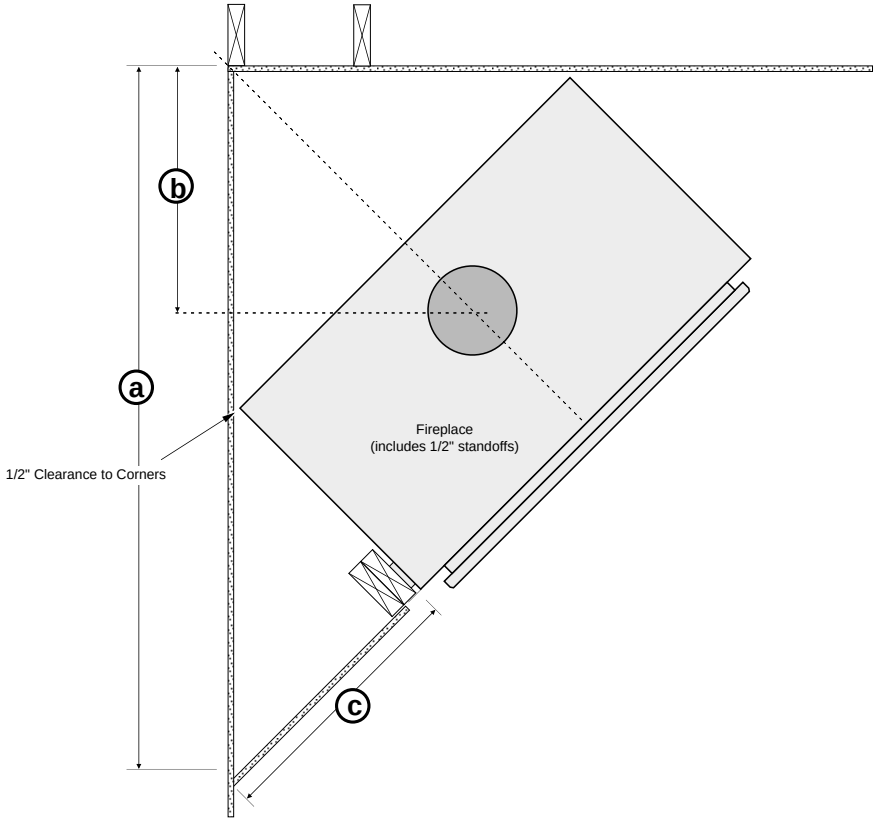
Framing Dimensions at 45°

- 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)

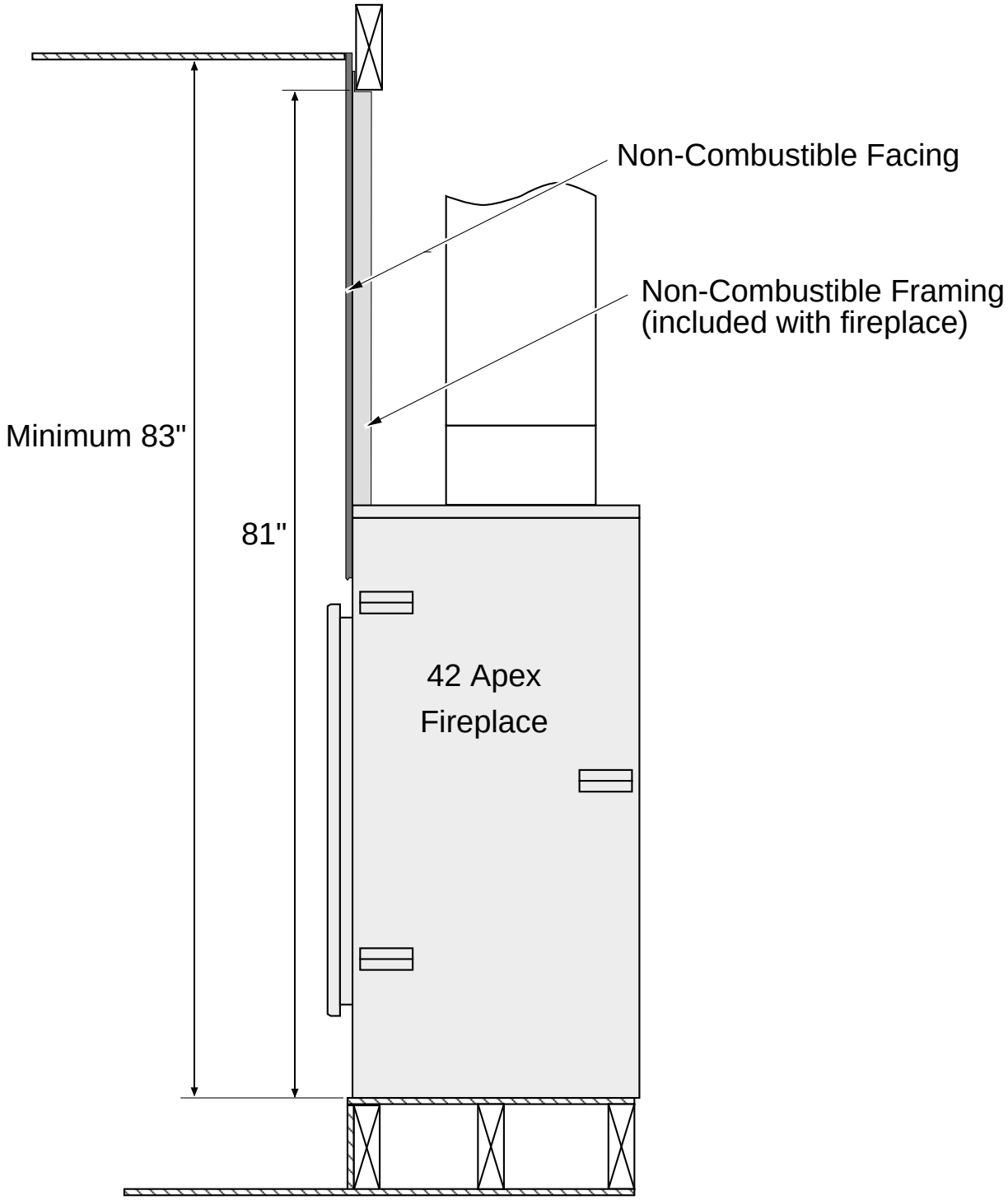
  (b) 22-1/2” (572mm)

  (c) 22-1/2” (572mm)



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 83” from the base of the fireplace.



12 Finalizing the Installation (for qualified installers only)

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.

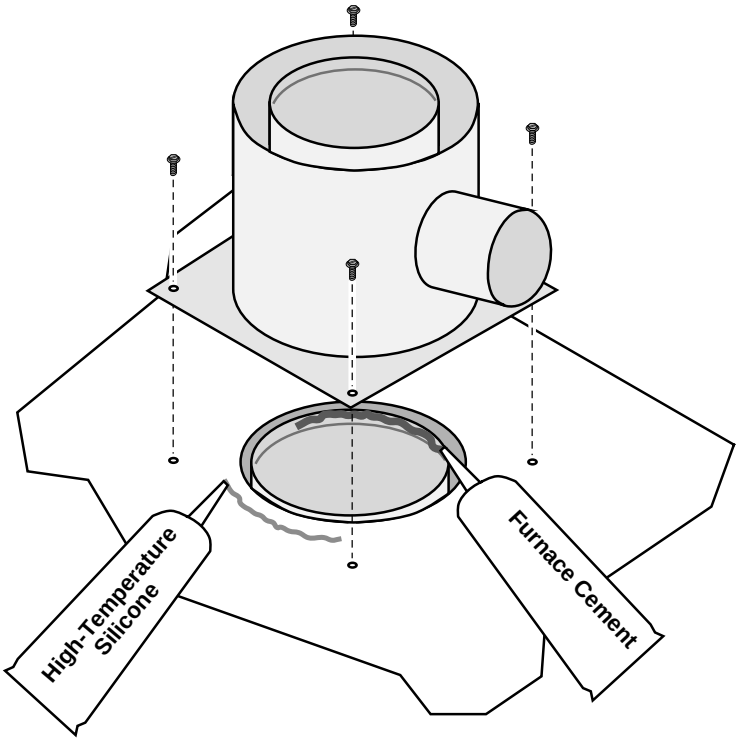
Air Cooled Chimney Requirements (8" Inner Dia., 12" Outer Dia.)

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.

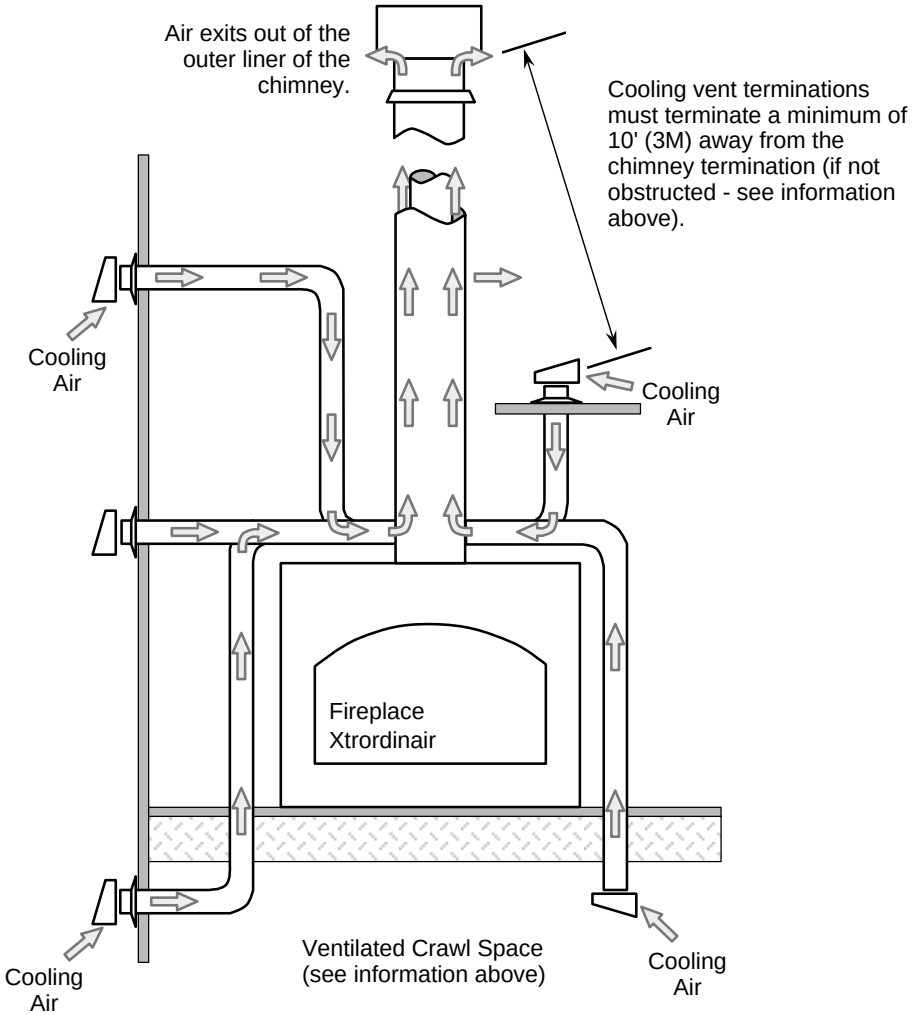


Use high-temperature silicone to seal the anchor plate.

14 Finalizing the Installation (for qualified installers only)

Cooling Duct Installation

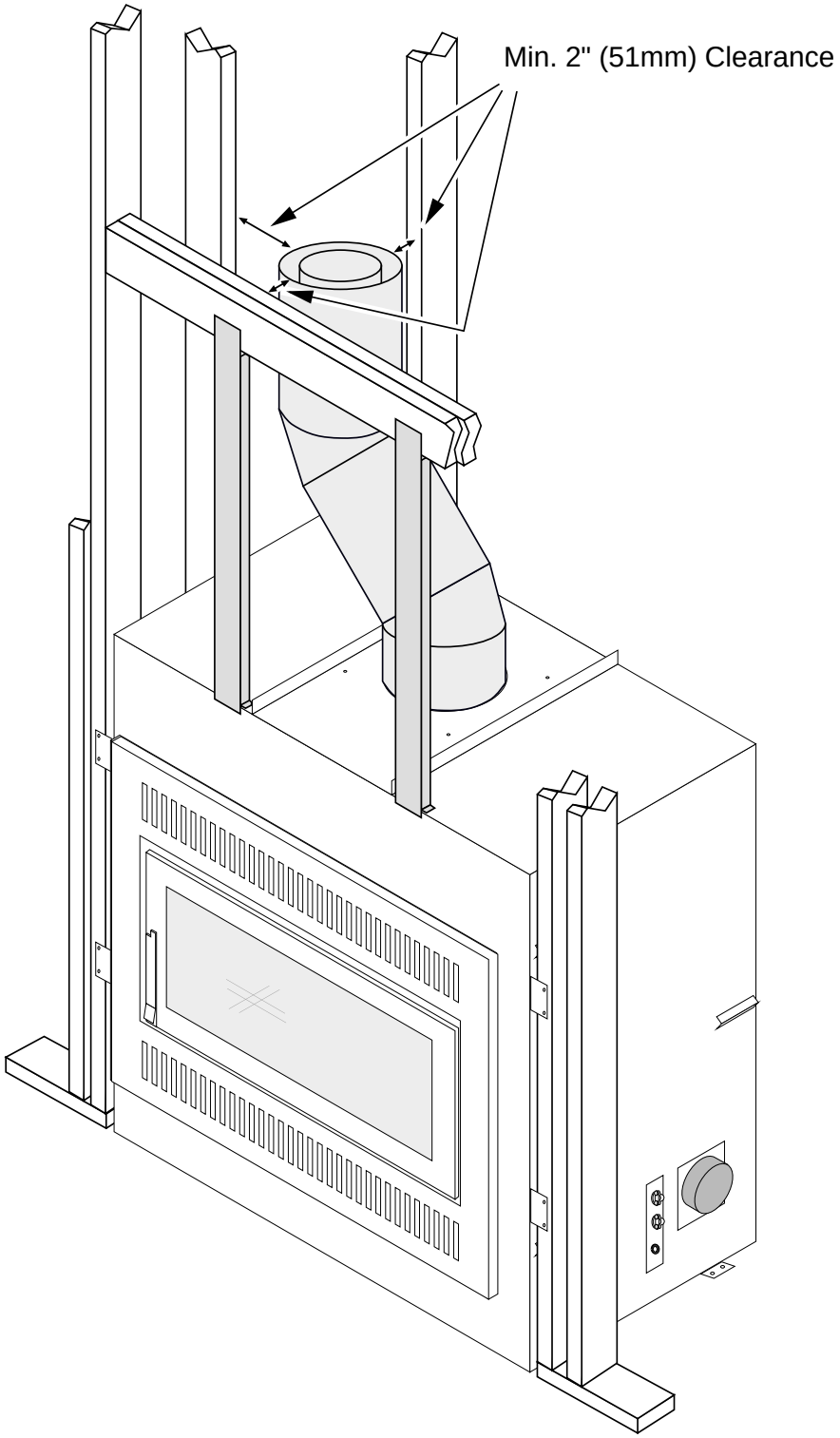
- **<u>WARNING</u>: The cooling duct provides cooling air for the chimney system. Failure to correctly install the cooling duct will lead to an extremely dangerous installation and possibly a fire.**
- The 6" diameter cooling duct routes air from outside the structure to the cooling air collar on the 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.



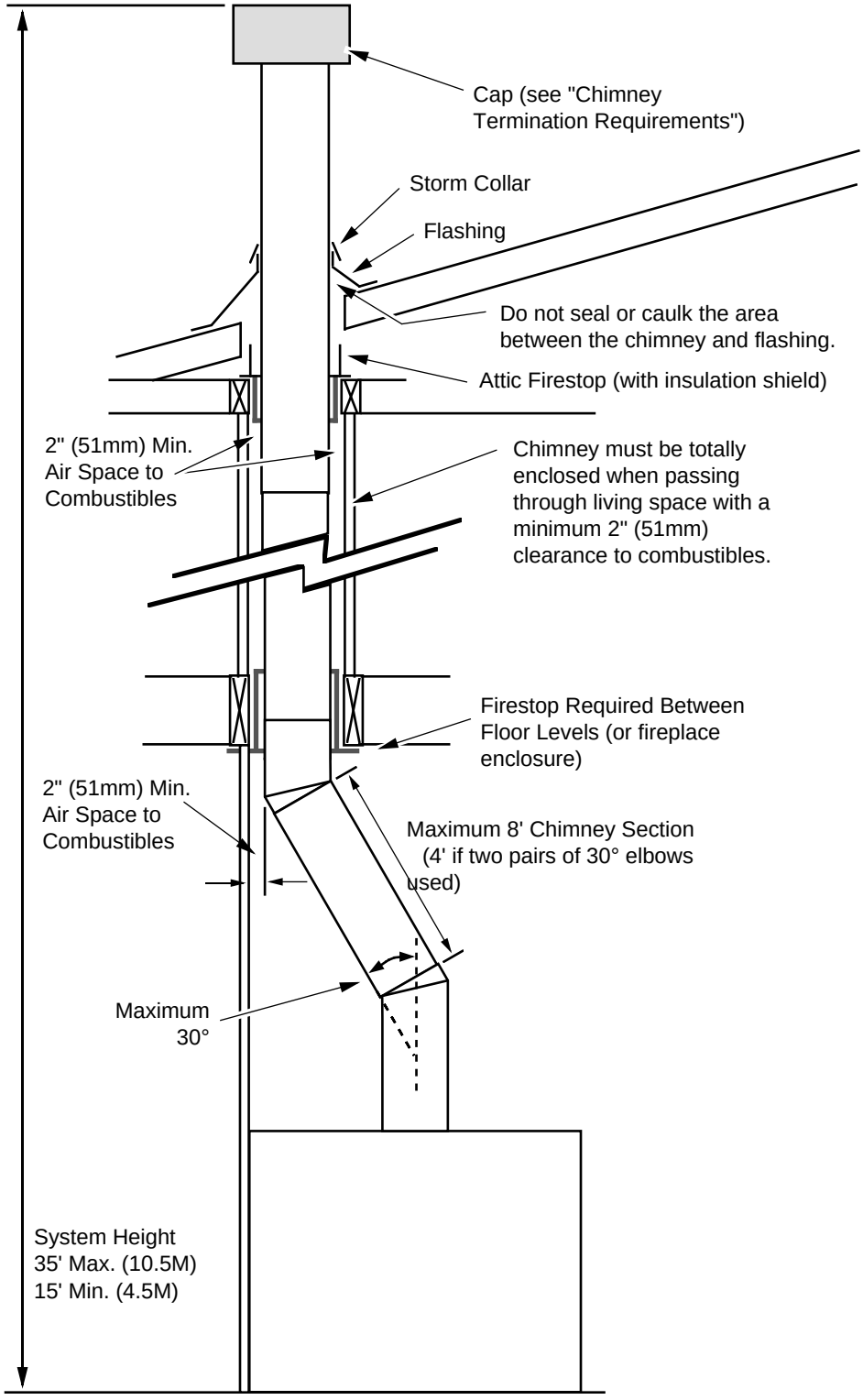
Air Cooled Chimney – Installation and System Height

- 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

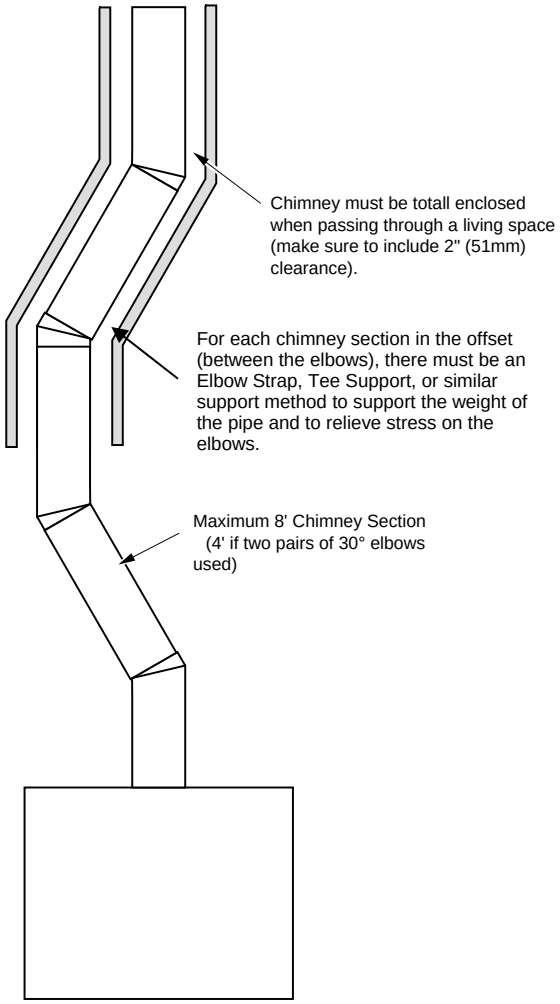
- <u>One Pair (2) Offsets</u> Mininum system height is 17'.
- <u>Two Pairs (4) Offsets</u> Minimum chimney height is 19'.

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)

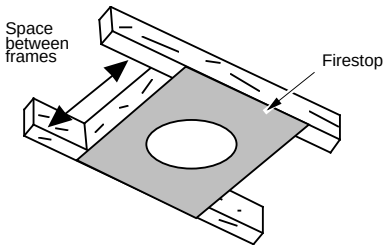
- Offsets (using a pair of 30° elbows) may be used to redirect the chimney. Typically this is done to avoid structures, align the pipe with framing, or to gain clearance to combustibles (see illustration below).
- A maximum four 30° elbows may be used.
- Each elbow must be used in conjunction with a 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 ¼	25 ½
18	12 ¼	30 ¾
24	15 ¼	36
36	21 ¼	46 ¼
48	27 ¼	56 ¼
48+12	32 ½	65 ¾
48+18	35 ½	71
48+24	38 ½	76 1/8
48+36	44 ½	86 ½
48+48	50 ½	97

18 Finalizing the Installation (for qualified installers only)

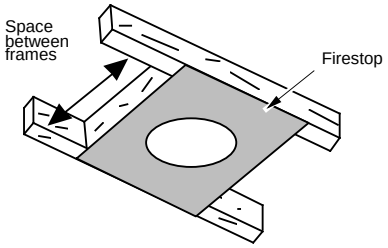
Insulated Chimney Requirements (7" Inner Diameter)

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

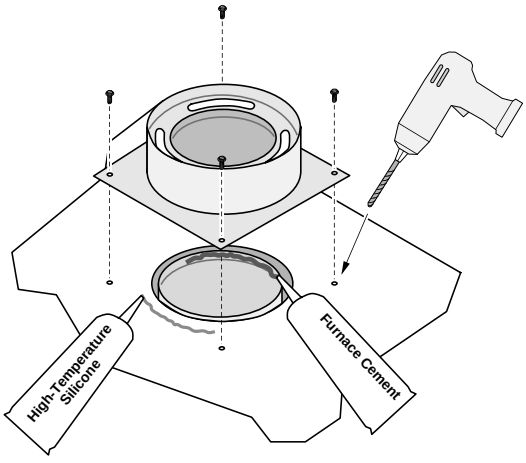
Security ASHT+ - Clearances to Combustibles

- Maintain a 2" clearance from the chimney to combustibles.
- Recommended Space Between Frames = 13-1/4"



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	29-11/16	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.

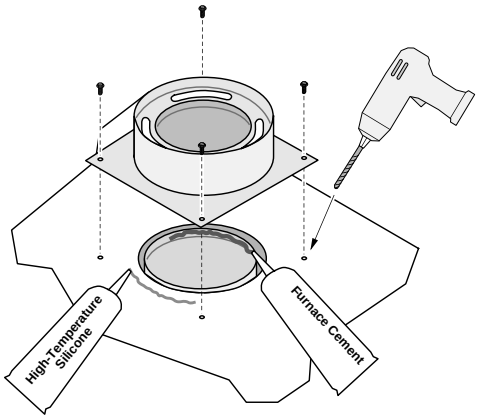
Manufacturer	Chimney Series	Anchor Plate	Outside Diameter	Clearance*	Notes
Duravent	DTC	7DTC-AP	9” ---	2”	
Duravent	Duraplus HTC	C9101 7HTC-BP	11”	2”	
ICC	EXCEL 7”	EAP7	9-1/4”	2”	
Security Oliver MacLeod	HT6000+ HT6103+	6007AP 6107AP	9” 9-9/10”	2” 2”	---
Security	ASHT+ (S2100+)	7S2100+XSP	9”	2”	Tabs on anchor plate must be removed (or order Travis # 98900290)
Selkirk	CF Sentinel SuperVent 2100JM SuperPro 2100 ALT UltimateOne	7CF-AP JM7AP JM7AP 7U1-AP	11-3/4” 11” 11” 9” ---	2” 2” 2” 2”	---
Metal-Fab **	Temp Guard 2100	7TGAP	10”	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.

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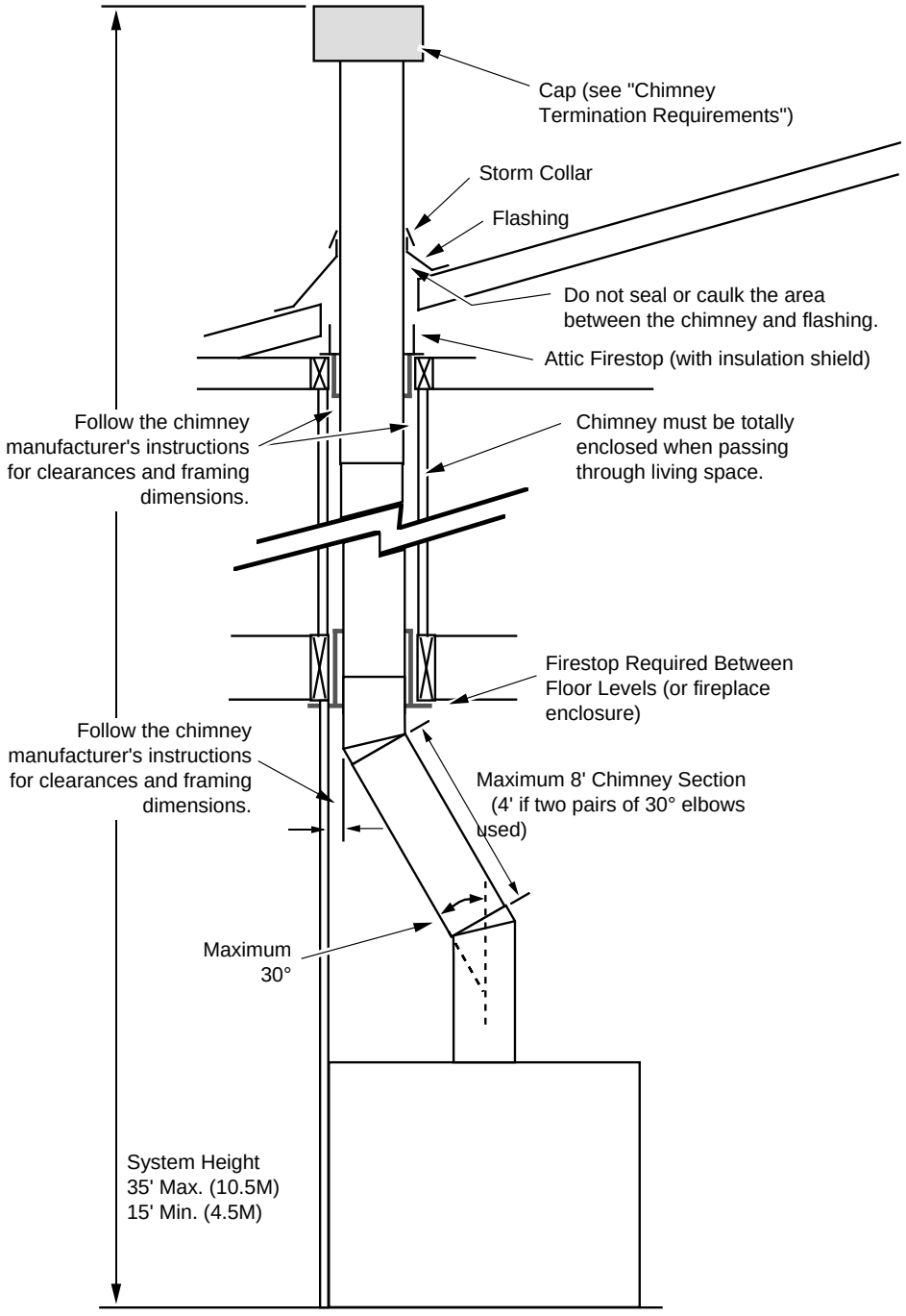
Insulated Chimney – Installation and System Height

- 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

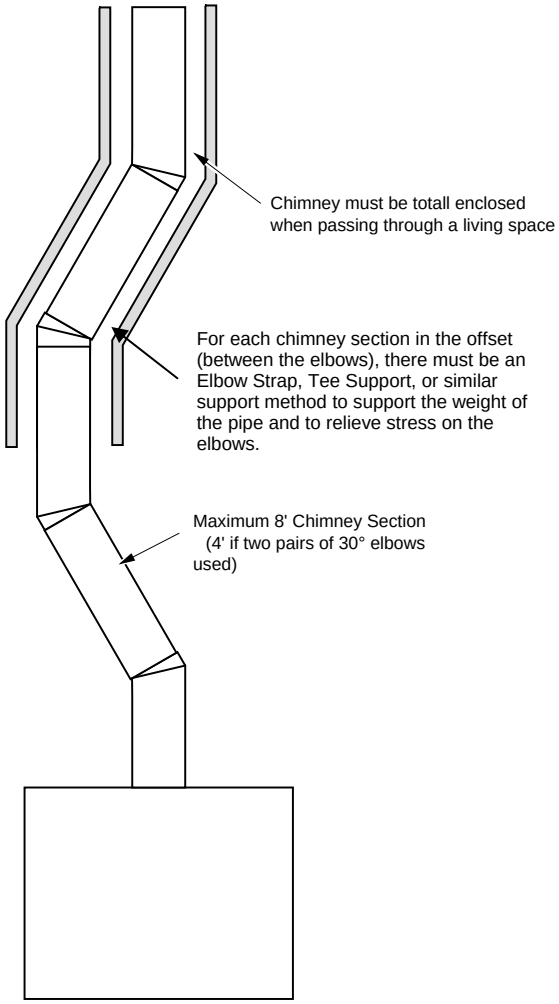
- <u>One Pair (2) Offsets</u> Mininum system height is 17'.
- <u>Two Pairs (4) Offsets</u> Minimum chimney height is 19'.

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.



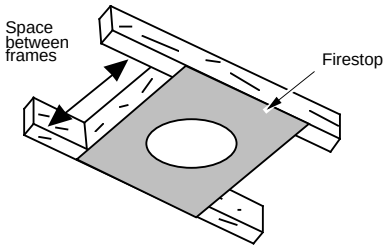
Insulated Chimney - Offset Requirements (30° Elbows)

- 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.



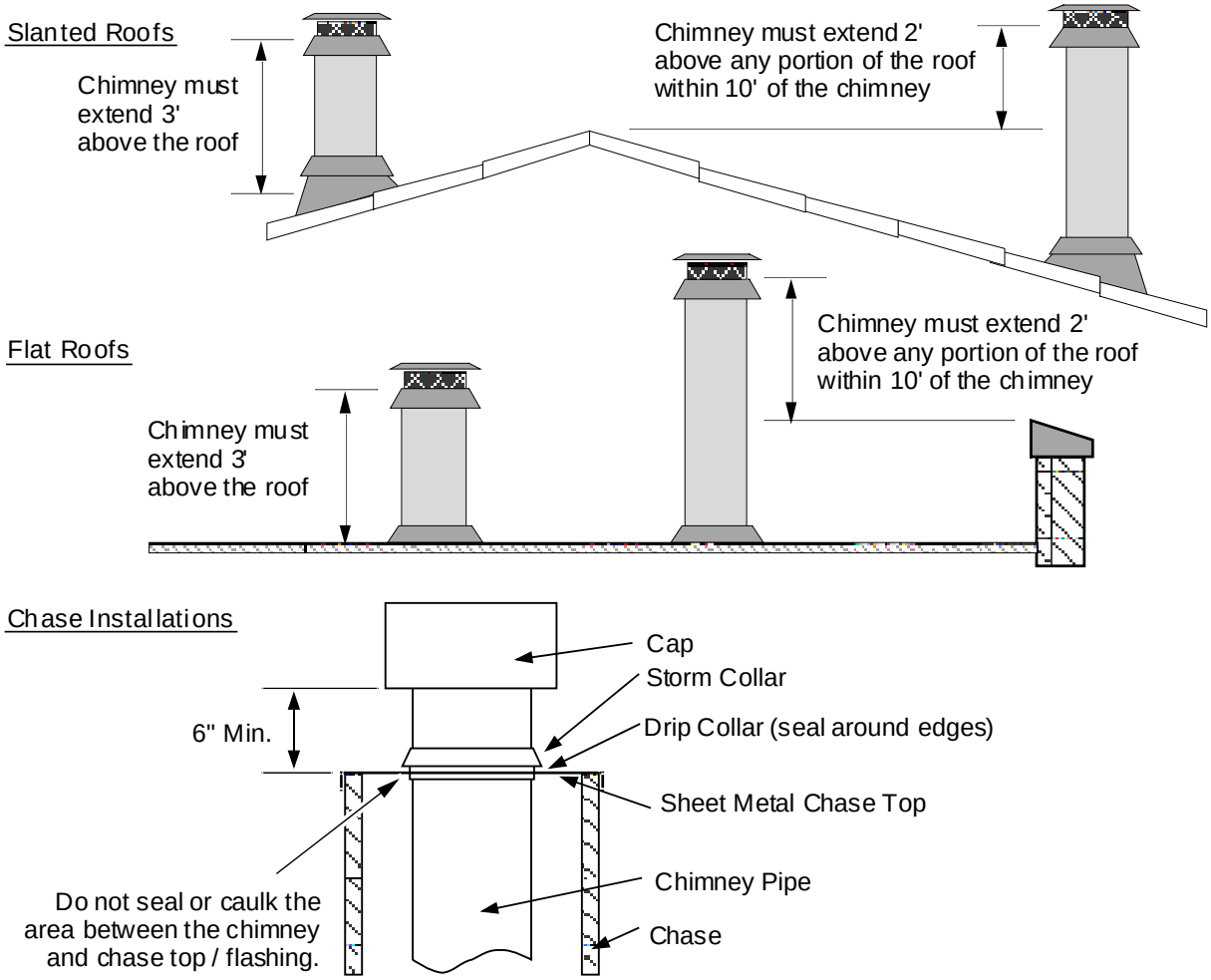
Firestops

- 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).

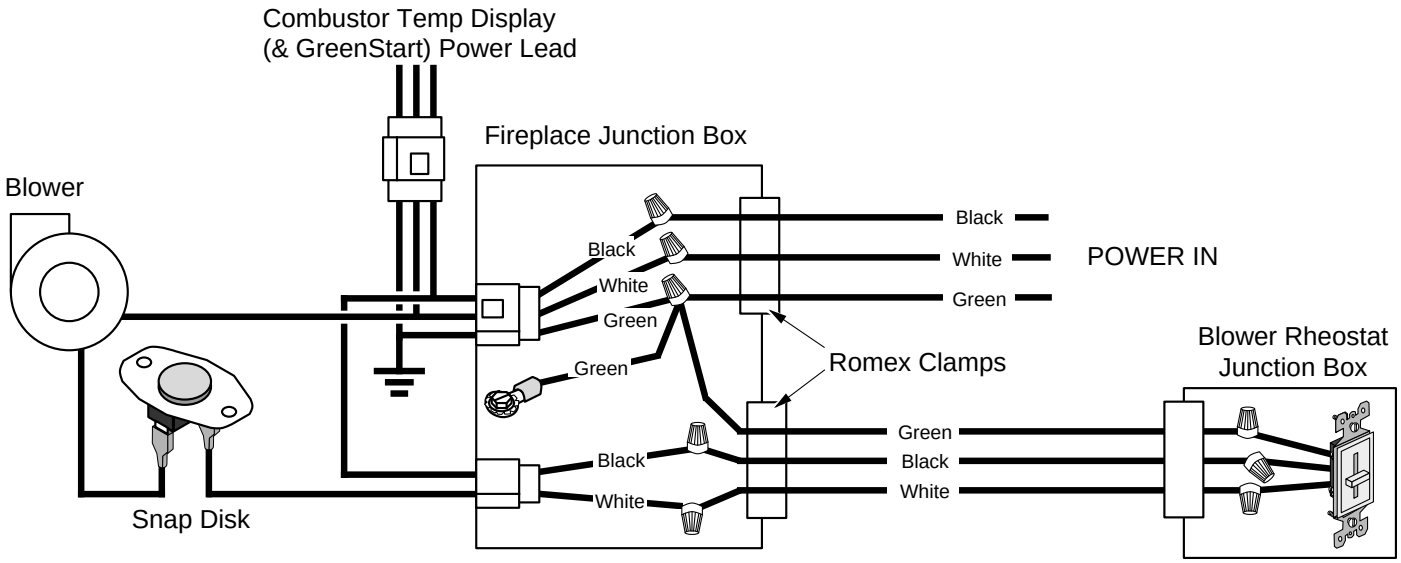


Electrical Line Hookup

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

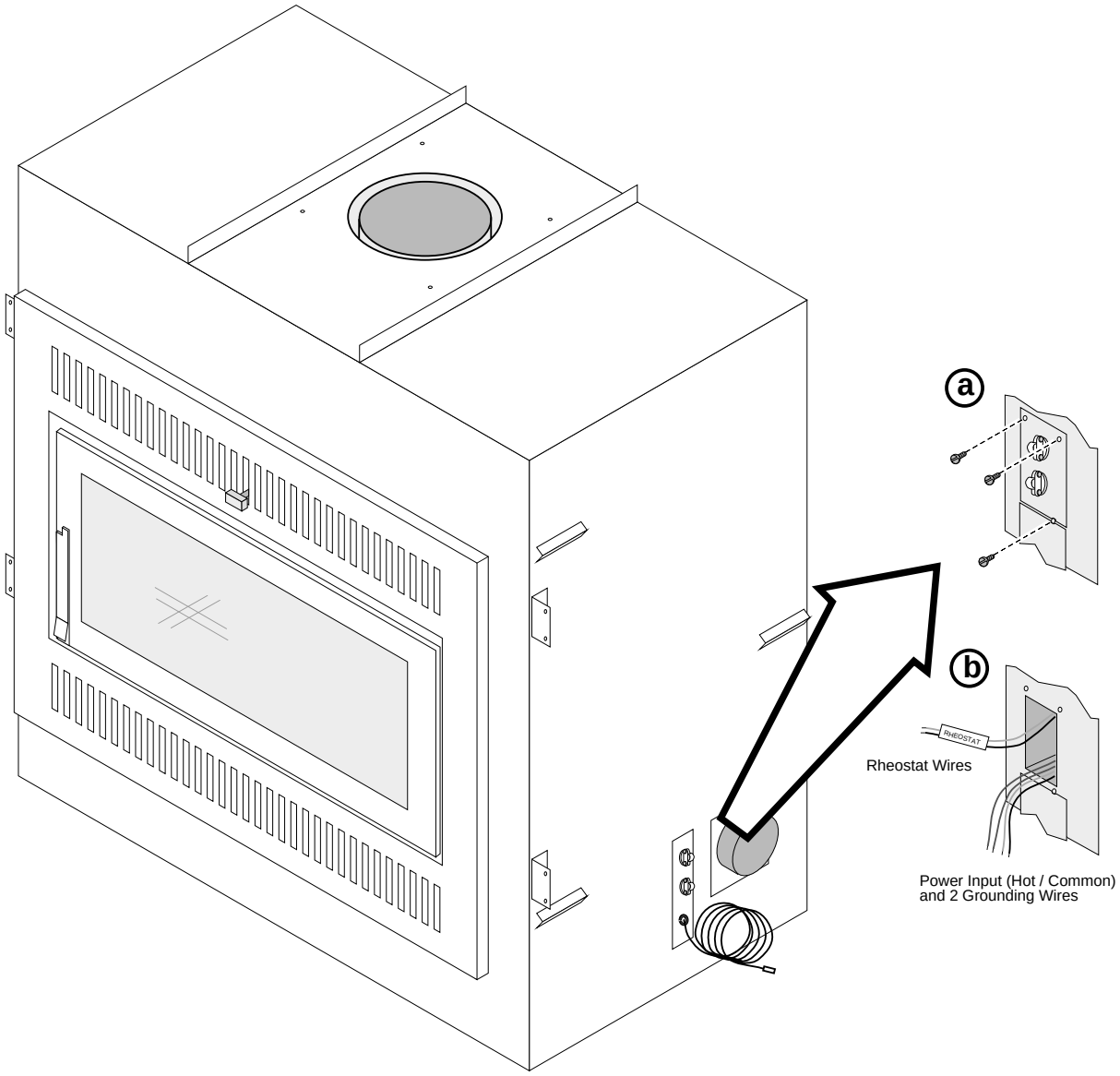


Inside of Junction Box



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Fireplace Junction Box



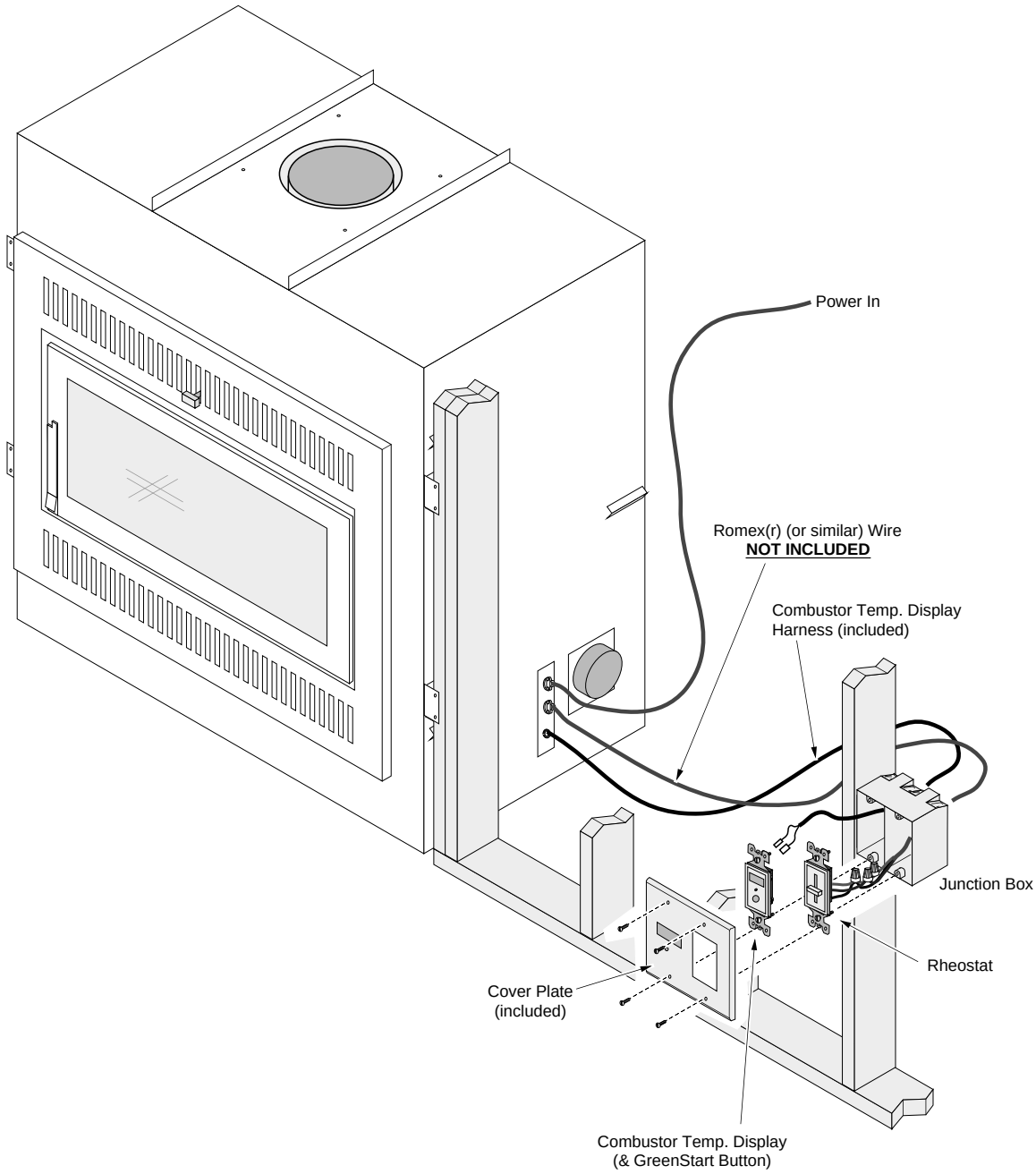
Inside of Junction Box



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.

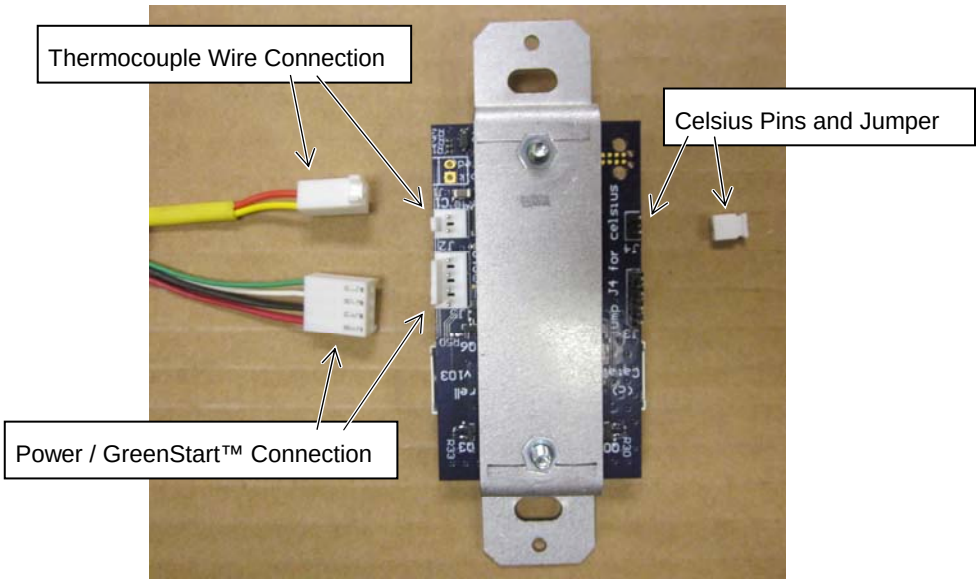


External Wiring Installation (continued)

- 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).

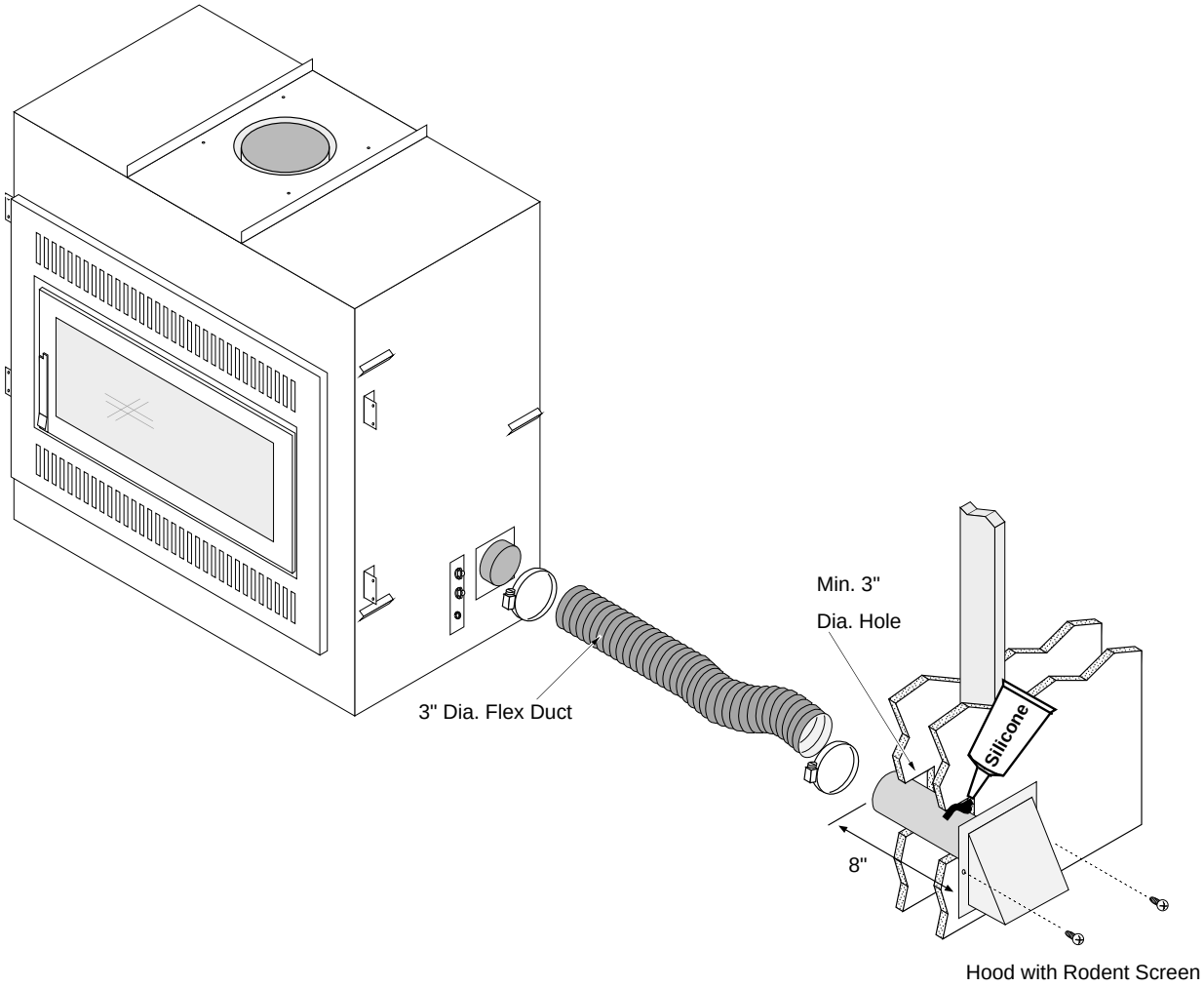
CELSIUS DISPLAY
If you wish to display Celsius instead of Fahrenheit, place the jumper over the 2 pins on the back of the circuit board (seepicture below).

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).



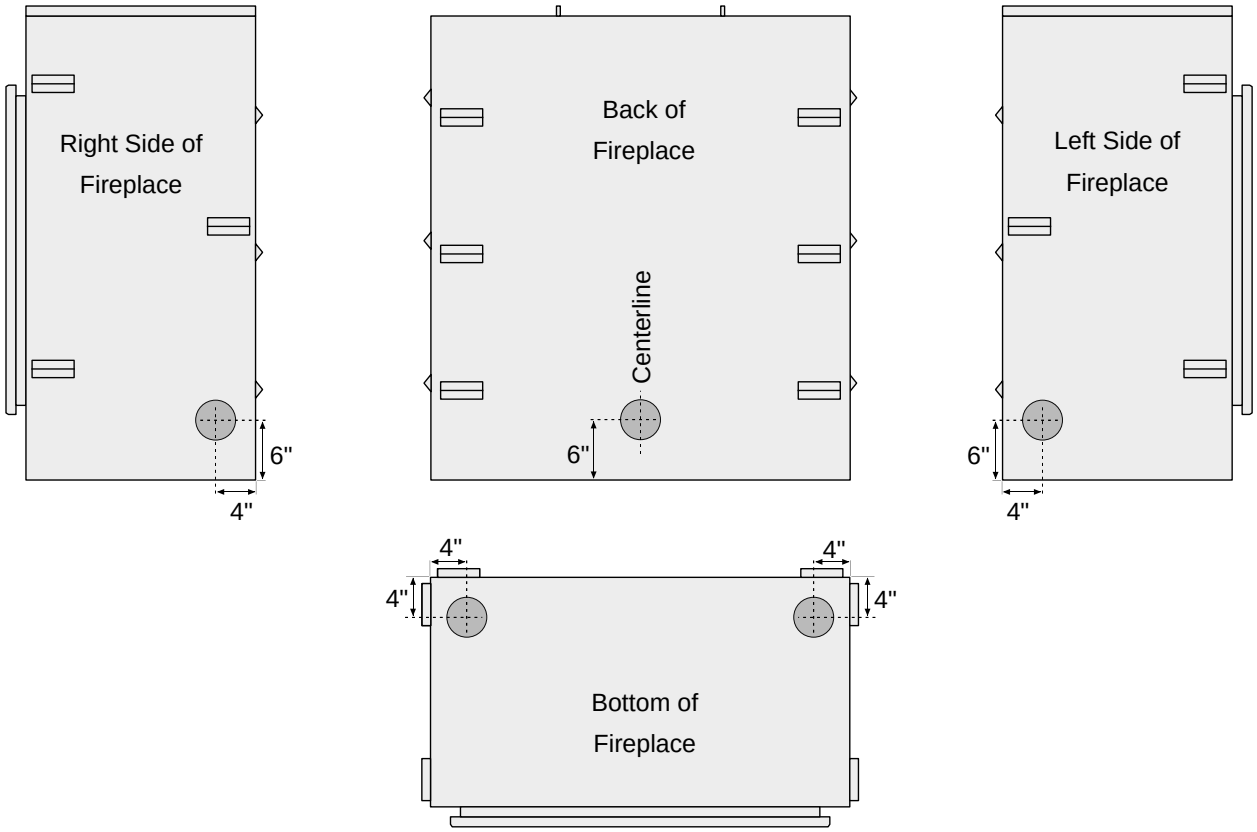
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Air Intake Locations

- The air intake collar is shipped on the right side of the fireplace. If you wish to relocate it to the left side, bottom, or back of the fireplace, follow the directions below:

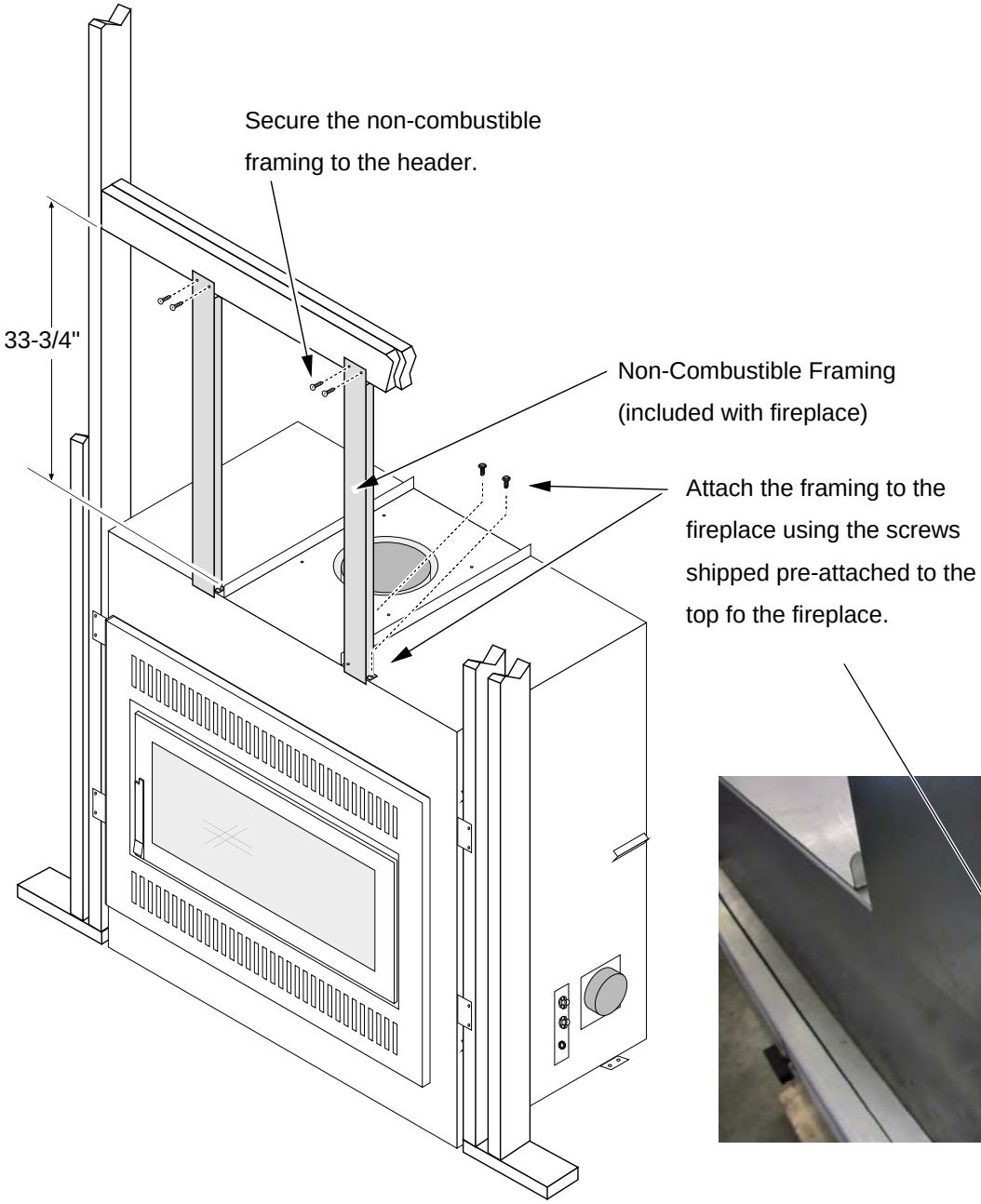
  a) Disconnect the air intake collar (4 screws hold it in place).
  b) Remove the cover plate in the location you wish to relocate the air intake to.
  c) Attach the air intake collar in the desired location (use the screws removed earlier)
  d) Place the cover plate over the stock air intake location and secure (use the screws removed earlier)

- The air intake locations are shown below.



Non-Combustible Framing (included)

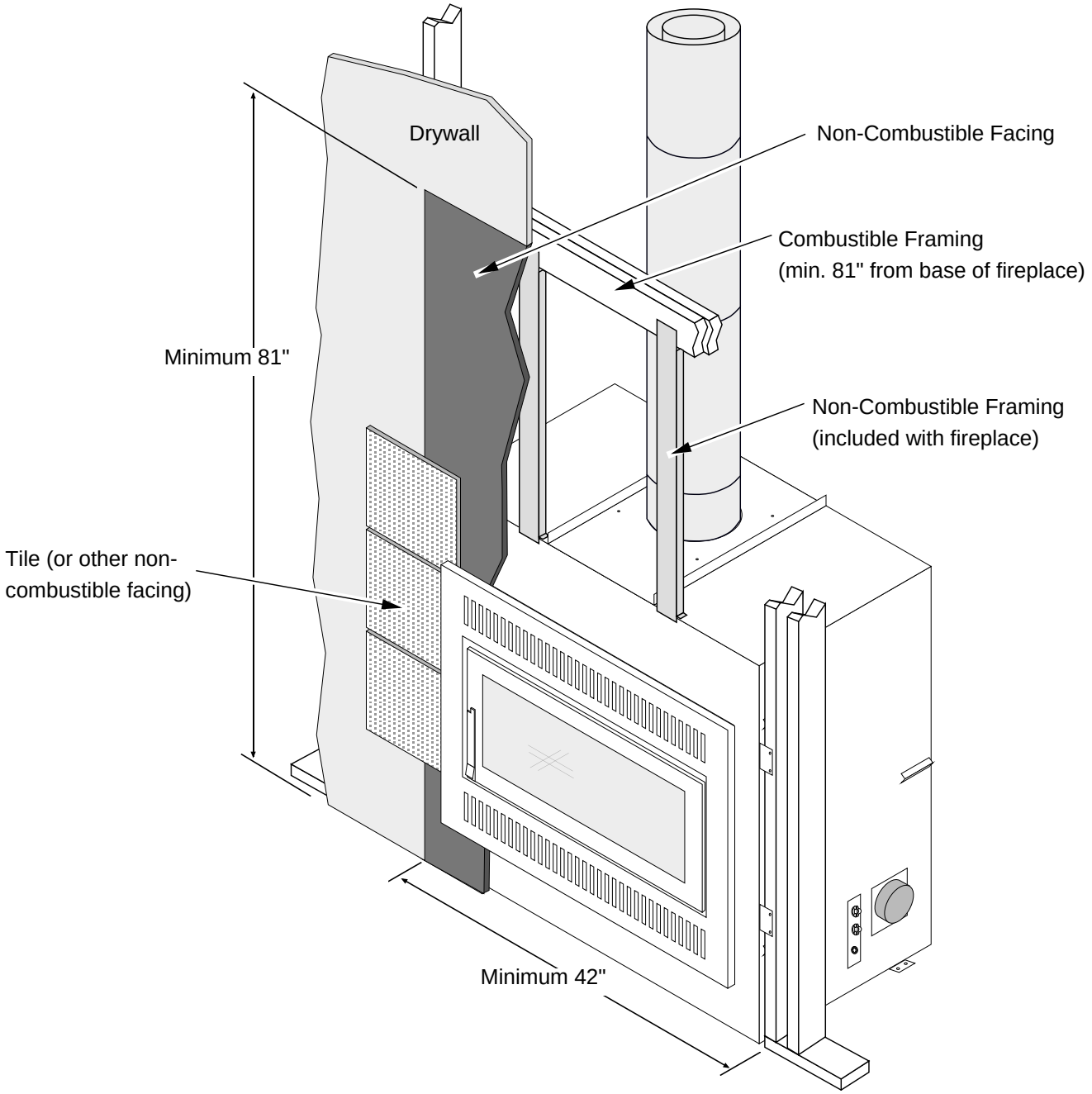
- The fireplace includes non-combustible framing members. Attach them to the fireplace and framing following the directions below.
  1) Remove the screws on top of the fireplace used to secure the framing members (see illustration below).
  2) Place the framing members in place and secure using the screws removed in step 1.
  3) Secure the framing to the header.



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Facing Requirements

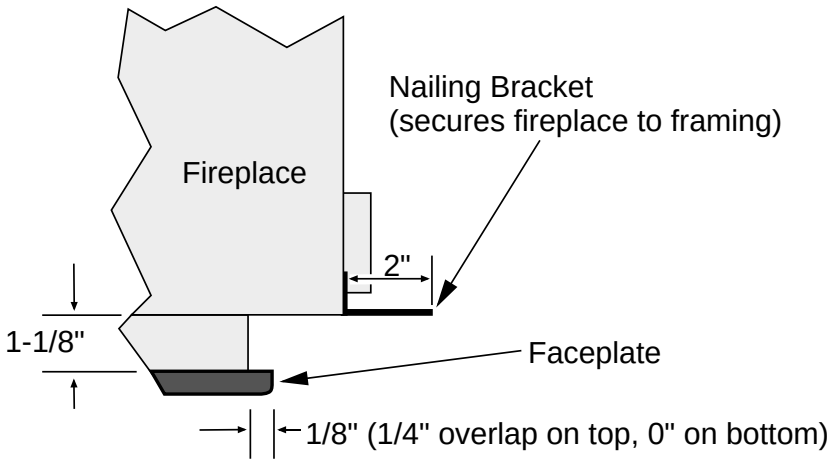
- The fireplace requires non-combustible facing (typically 1/2" thick concrete-board) from the base of the fireplace to the header (min. 81”). The non-combustible facing must extend to the framing members on both sides of the fireplace. Do not use drywall or other combustible in this area (see illustration below).
- The non-combustible facing may be attached to the front of the fireplace 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.



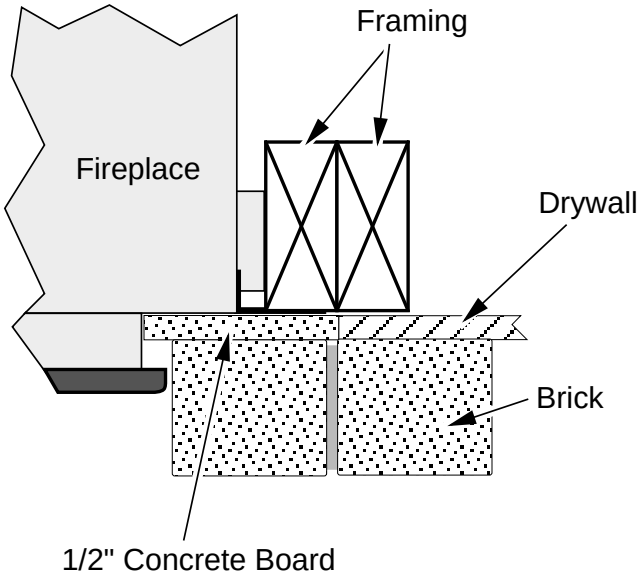
Facing Requirements (continued)

- 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 1/8" overlap on the sides, and 1/4" overlap on top.

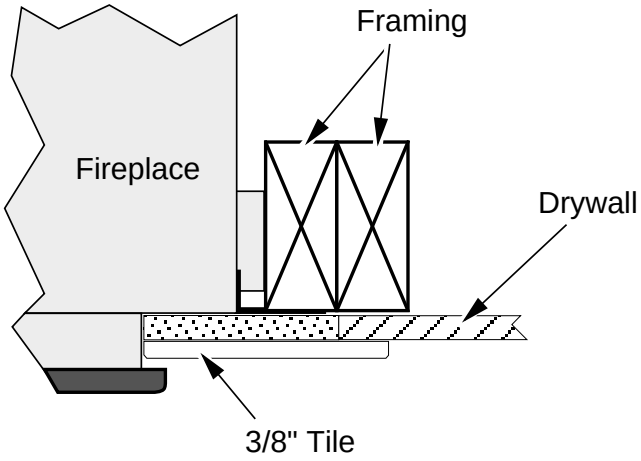
Top View of Fireplace



Brick (Thick) Facing Example



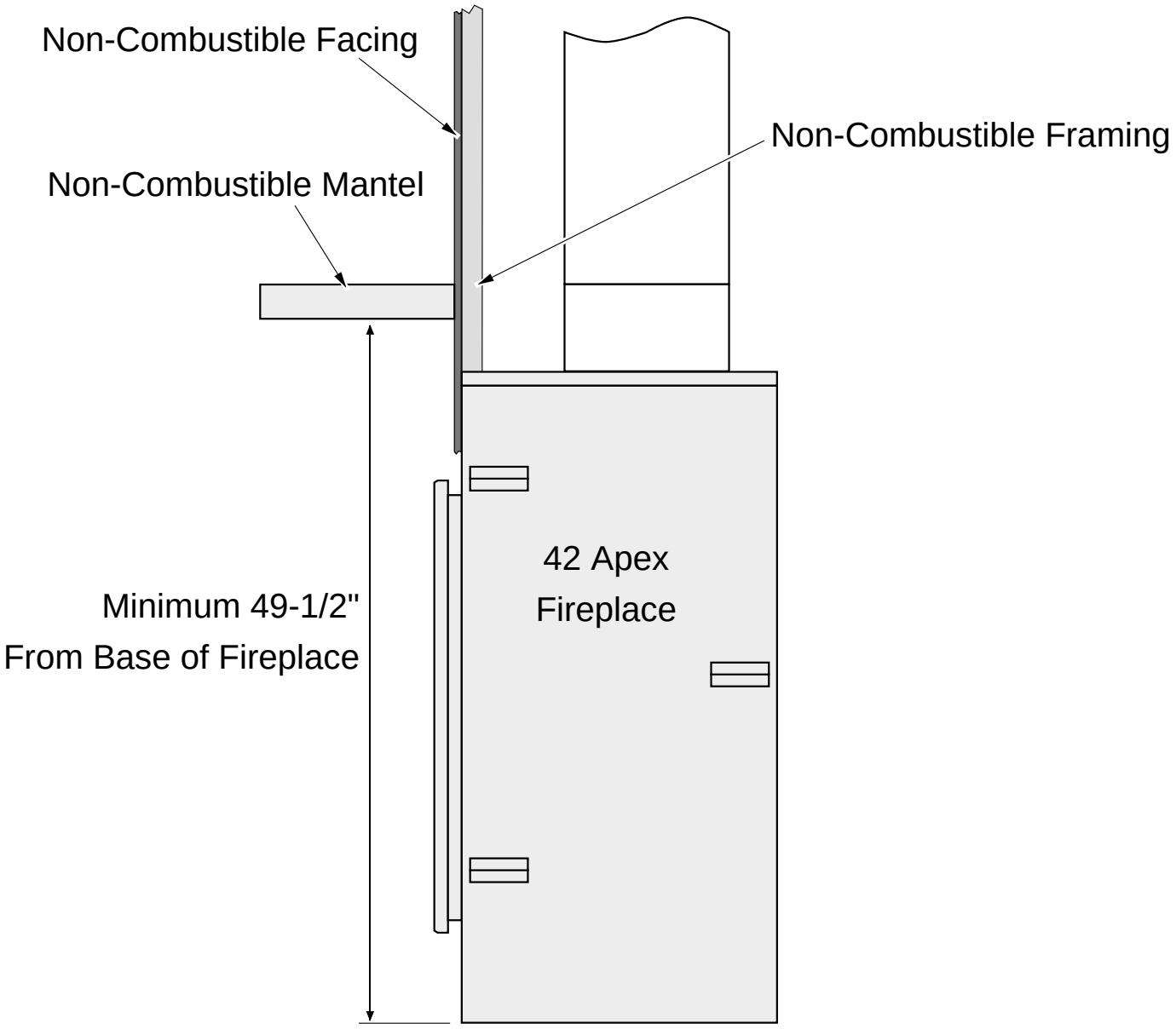
Tile (Thin) Facing Example



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Mantel Requirements

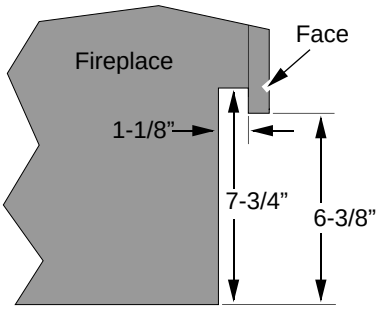
- **Mantel must be non-combustible.**
- **Mantel must be a minimum 49-1/2” above the base of the fireplace.**
- **Maximum mantel depth is 18”.**

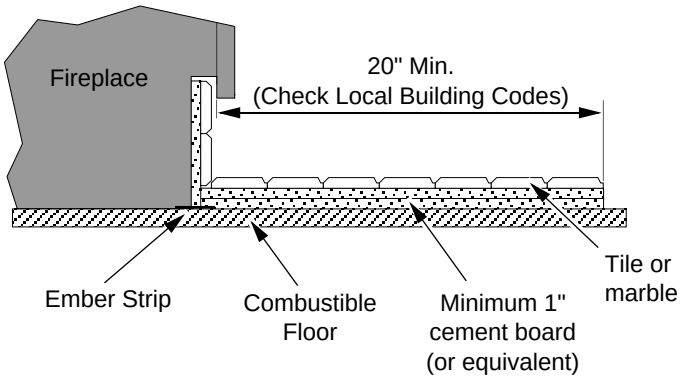


Hearth Requirements

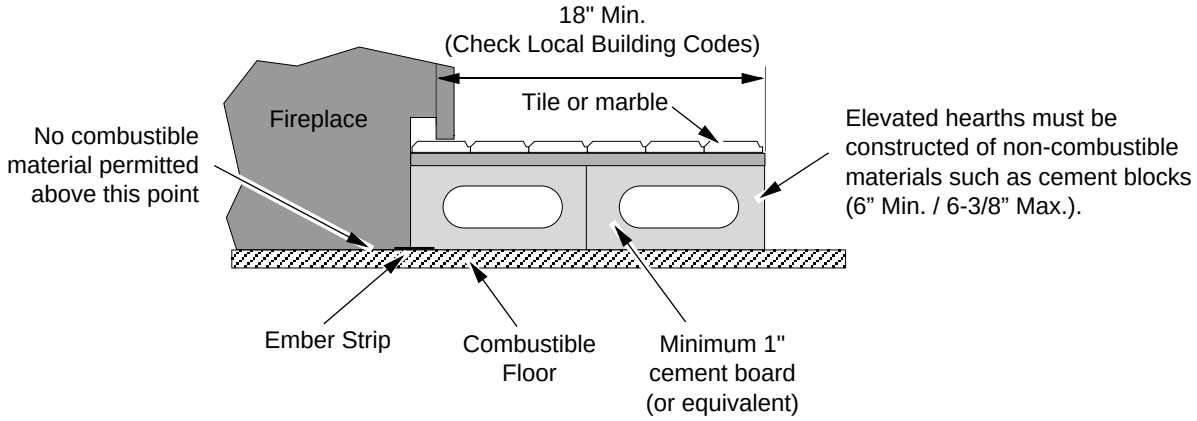
- Local building codes may require a minimum hearth requirement different of what this manual states
- Hearth must extend 20" in front of the faceplate when it is not elevated (see local building codes). Hearths raised at least 6" must extend a minimum 18".
- Hearth must extend a minimum 8" to both sides of the door opening (44” wide)
- Hearth must be a minimum 1" thick of Durock 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 6-3/8" above the base of the fireplace

FLOOR HEARTH





ELEVATED HEARTH

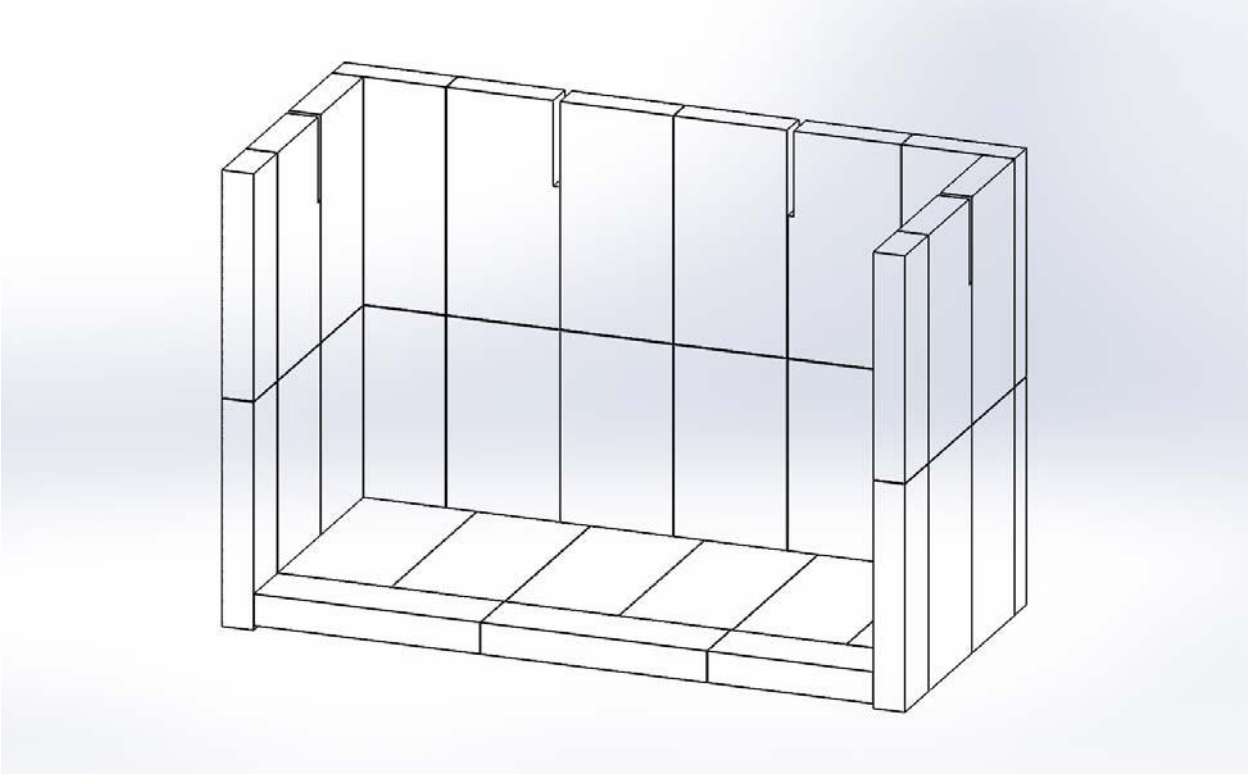


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Finalizing the Installation

- 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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