



Surround Installation



Mantel & Surround Planning Guide

Whether you are adding a fireplace to your home or giving an existing fireplace a much needed update, it can be approached in different ways. Careful planning upfront is an important key for ensuring a completely positive experience and outcome for your project. This guide shows three of the most common installations for a fireplace and will walk you through the measurements you need to keep in mind as you begin your project. Provide as much information as possible to your local hearth professional to customize based on your mantel choice and budget*.

Installation Type: Mark with an X where applicable

New Construction Existing Addition

Room: _____ Level of house: _____

Fireplace Type: Mark with an X where applicable

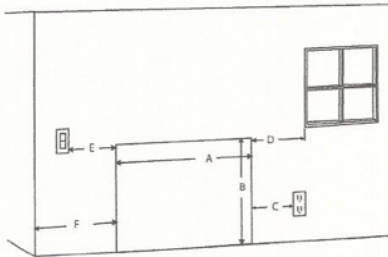
Masonry Insert Manufactured

Fuel Type: Wood Gas Pellet
Electric Other

If Manufactured:

Manufacturer Name: _____

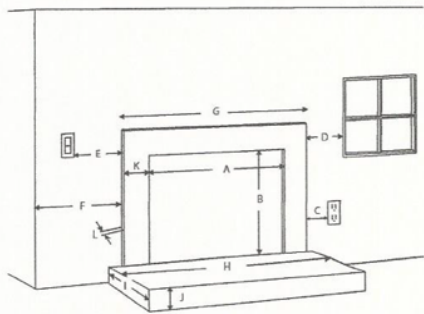
Model: _____



Fireplace Installed Flush With The Wall

- A _____ Firebox opening width
- B _____ Firebox opening height
- C _____ Firebox opening to outlet
- D _____ Firebox opening to window
- E _____ Firebox opening to wall switch
- F _____ Firebox opening to inside/outside corner
- G _____ Are the walls square and level?

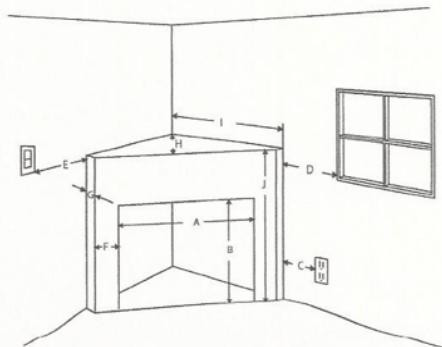
If your installation will have a hearth, list dimension under H, I & J below under "Fireplace With Existing Fireplace Surround Materials".



Fireplace With Existing Fireplace Surround Material

- A _____ Firebox opening width
- B _____ Firebox opening height
- C _____ Firebox opening to outlet
- D _____ Firebox opening to window
- E _____ Firebox opening to wall switch
- F _____ Firebox opening to inside/outside corner
- G _____ Surround material outside width
- H _____ Hearth width
- I _____ Hearth depth
- J _____ Hearth height
- K _____ Surround material leg width
- L _____ Surround material thickness
- M _____ Are the walls square and level?

Existing surround material Used _____



Corner Fireplace

- A _____ Firebox opening width
- B _____ Firebox opening height
- C _____ Firebox opening to outlet
- D _____ Firebox opening to window
- E _____ Firebox opening to wall switch
- F _____ Leg width
- G _____ Leg depth
- H _____ Top depth
- I _____ Shelf depth (along wall)
- J _____ Outside height
- K _____ Are the walls square and level?

If your fireplace installation will have a hearth, list dimensions on H, I & J above under "Fireplace With Existing Fireplace Surround Materials"

*Refer to your local building codes for minimum clearances to combustibles for each fuel type. FSF-1011U-0210

finishing

7 Finishing

A. Finishing Material

Refer to Sections 1.B. and Sections 1.C. for combustible/non-combustible materials. Refer to Figure 7.1 for non-combustible zone.

WARNING! Risk of Fire! You must maintain clearances.

- **Do NOT cover metal fireplace front with combustible materials.**
- Install combustible materials only to specified clearances on top front and side edges.
- Complete framing and apply facing material (drywall) over framing.
- A bead of 300-deg F minimum non-combustible sealant must be used to close off any gaps at the top and sides between the fireplace and facing to prevent cold air leaks.
- Large gaps can be bridged with fiberglass rope gasket.
- Only non-combustible materials may be used to cover the metal fireplace front.

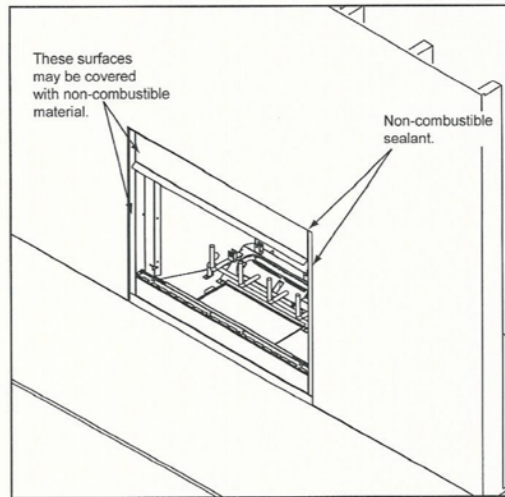


Figure 7.1 Non-combustible Facing

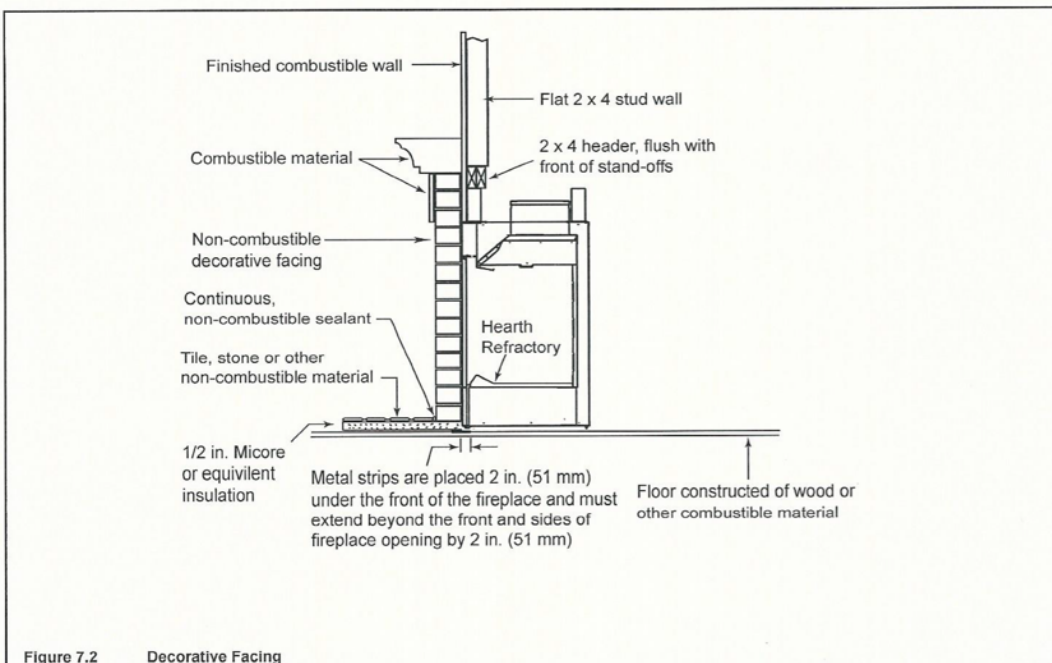


Figure 7.2 Decorative Facing

Hearth extensions

B. Hearth Extension, Building and Finishing

WARNING! Risk of Fire! High temperatures, sparks, embers or other burning material falling from the fireplace may ignite flooring or concealed combustible surfaces.

- Protective metal hearth strips **MUST** be installed.
- Hearth extensions **MUST** be installed exactly as specified.

A hearth extension must be installed with all fireplaces to protect the combustible floor in front of the fireplace from both radiant heat and sparks.

- You **MUST** use a hearth extension with this fireplace.
- Refer to Figure 7.3 for minimum dimensions.
- This fireplace has been tested and approved for use with a hearth extension insulated to a minimum R value of 1.03.
- The hearth extension material **MUST** be covered with tile, stone or other non-combustible material.
- Manufactured hearth materials will usually have a published **R value** (resistance to heat) or **k value** (conductivity of heat). Refer to the formula in Table 7.1 to convert a k value to an R value,
- Refer to Table 7.2 for hearth extension insulation alternatives.

WARNING! Risk of Fire!

Hearth & Home Technologies is not responsible for discoloration, cracking or other material failures of finishing materials due to heat exposure or smoke.

- Choose finishing materials carefully.

WARNING! Risk of Fire!

- Maintain clearances.
- Use only non-combustible material below standoffs, material such as cement board is acceptable.
- Framing or finishing material used on the front of the fireplace closer than the minimums listed, must be constructed entirely of non-combustible materials (i.e., steel studs, concrete board, etc.).

WARNING! Risk of Fire!

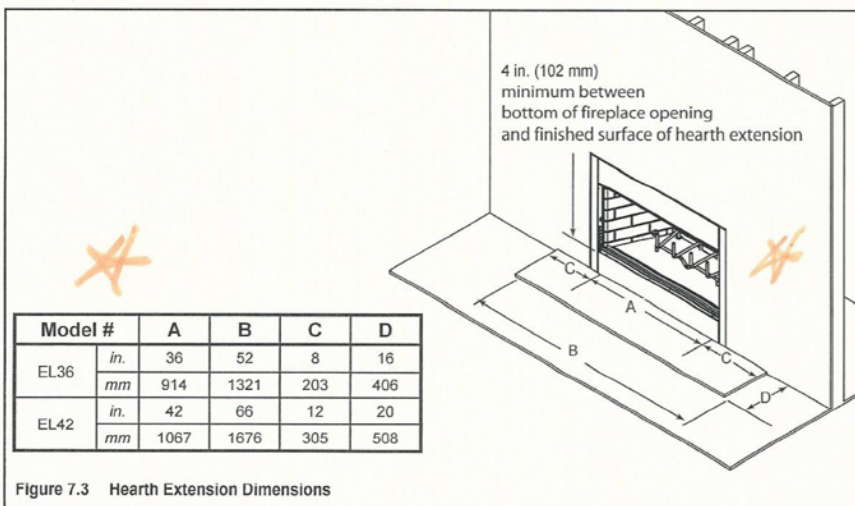
Hearth extensions are to be installed only as illustrated to prevent high temperatures from occurring on concealed combustible materials.

Table 7.1

$$R = 1/k \times \text{inches of thickness}$$

Table 7.2

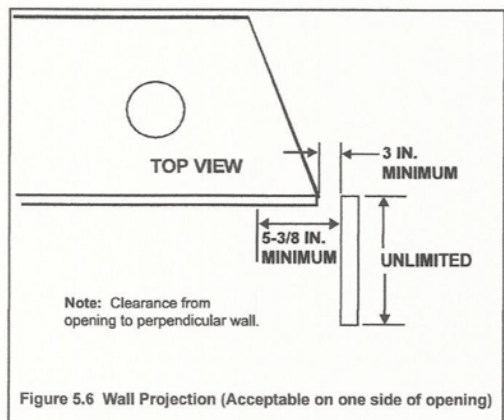
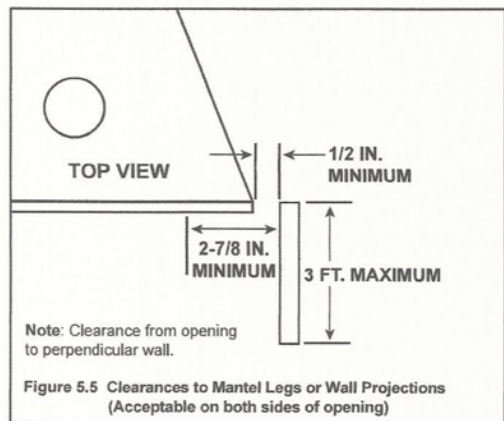
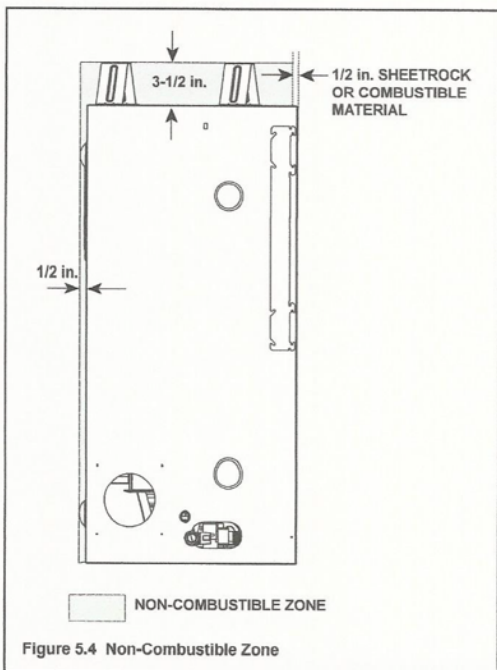
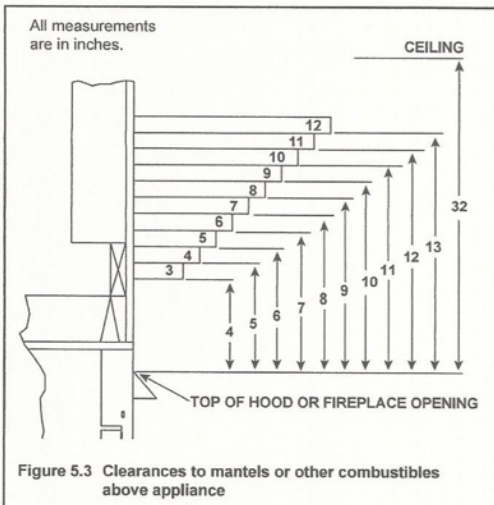
Hearth Extension Insulation Alternatives, R Value = 1.03			
Material	k per inch thick	r per inch thick	Minimum thickness required
Hearth & Home HX3, HX4	0.49	2.06	1/2 in.
USG Micore 300™	0.49	2.06	1/2 in.
USG Durock™ Cement Board	1.92	0.52	2 in.
Cement Mortar	5.0	0.20	5 1/8 in.
Common Brick	5.0	0.20	5 1/8 in.
Ceramic Tile	12.50	0.08	12 1/4 in.
Armstrong™ Privacy Guard Plus	0.46	2.18	1/2 in.
Marble	14.3-20.0	0.07-0.05	14 5/8 in. - 20 3/8 in.



Mantel shelf specs

D. Mantel and Wall Projections

WARNING! Risk of Fire! Comply with all minimum clearances to combustibles as specified. Framing or finishing material closer than the minimums listed must be constructed entirely of noncombustible materials (i.e., steel studs, concrete board, etc).



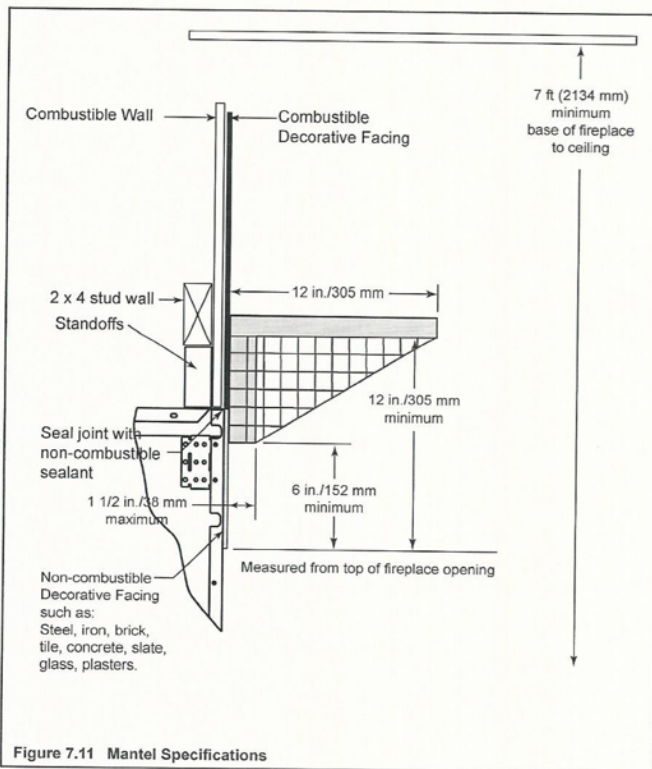
Mantel shelf specs 2

D. Mantel and Wall Projections

A combustible mantel may be positioned no lower than 40 1/2 in. (1029 mm) from the base of the fireplace.

The combustible mantel may have a maximum depth of 12 in. (305 mm). Combustible trim pieces that project no more than 1 1/2 in. (38 mm) from the face of the fireplace can be placed no closer than 6 in. (152 mm) from the top or side of the decorative front. Combustible trim must not cover:

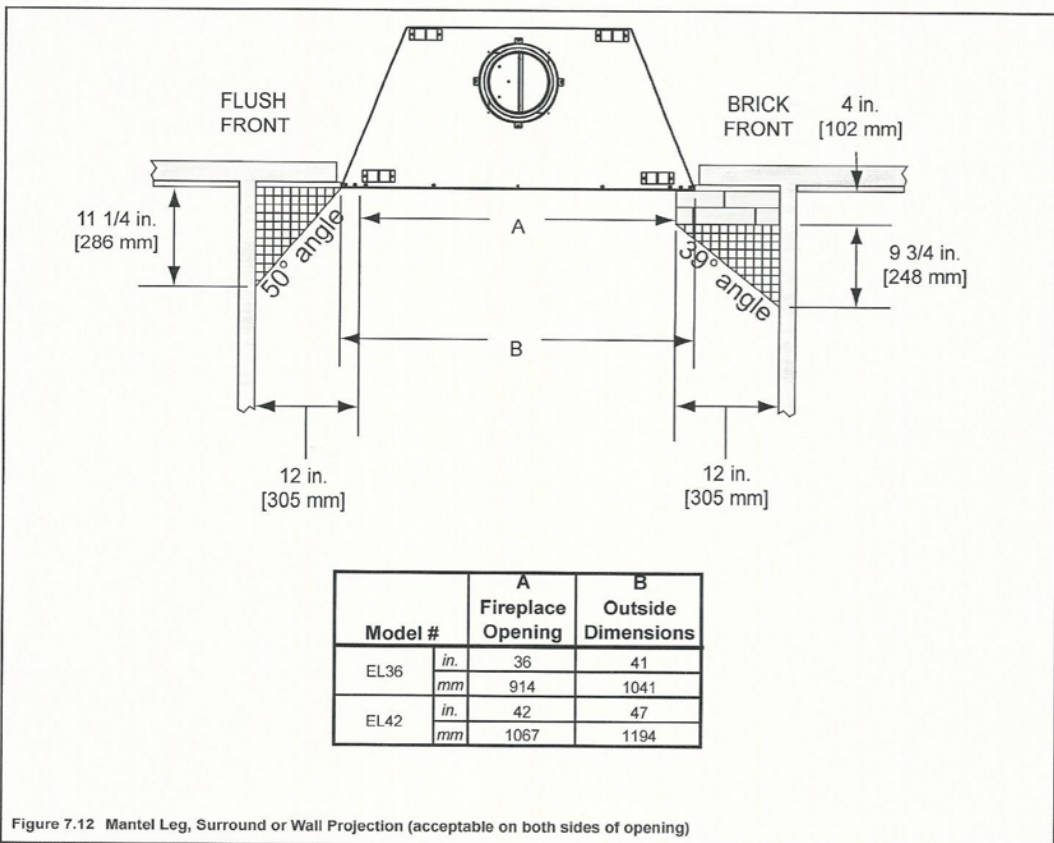
- the metal surfaces of the fireplace
- where the non-combustible board is placed over the metal surfaces
- the space between the metal face of the fireplace and framing members



Mantel leg specs

E. Sidewalls/Surrounds

- Locate adjacent combustible sidewalls a minimum of 12 in. (305 mm) from fireplace opening.
- Mantle leg, surround, stub wall, whether combustible or non-combustible, may be constructed as shown in Figure 7.12.



Cut sheet

3/1/2010	F/P	HEARTH	HEADER	LEGS	RISER	MANTEL
BRAND	MODEL	20 X ?	12" OR 8"	6.5" OR 8"	SIZE	SIZE
HEATILATOR	BC36R	60	49	26 5/8	36 X 4.5	60-47-38-1.5
	E36	60	49	26 5/8	36 X 5	60-47-38-1.5
	EC36	60	49	29 3/8	N/A	60-47-38-1.5
	EL36	60	49	27 3/8	36 X 6	60-47-38-1.5
	E42	66	55	26 5/8	42 X 5	66-53-38-1.5
	EC42	66	55	29 3/8	N/A	66-53-38-1.5
	EL42	66	55	27 3/8	42 X 6	66-53-38-1.5
	A36R	60	49	29 7/8	36 X 5.5	60-47-38-1.5
	A36C	60	49	34 5/8	N/A	60-47-42-1.5
	A42R	66	55	29 7/8	42 X 5.5	66-53-38-1.5
	A42C	66	55	34 5/8	N/A	66-53-42-1.5
	ODY42	66	55	29 5/8	42 X 6	66-53-38-1.5
	I60CT/H	60	49	34 7/8	36 X 6.125	60-47-42-1.5
	I80CT/H	72 / 66	55	34 7/8	42 X 6.125	7253421.5/6653421.5
	I100CT/H	N/A	N/A	N/A	N/A	SPECIAL
	BIR42	72	57	40 5/8	N/A	SPECIAL
	BIR50	N/A	N/A	N/A	N/A	SPECIAL
	T3600	60	49	27 1/4	36 X 6	60-47-38-1.5
	T4200	72 / 66	55	29 1/2	42 X 5.375	7253381.5/6653381.5
*****	T4800	72	61	34 1/8	48 X 6	72-57-42-1.5
	ST36D	60	49	26 7/8	36 X 4.25	60-47-38-1.5
	ST42A	72 / 66	55	29 1/2	42 X 4	7253381.5/6653381.5
	DV3732SBI	60	49	30 1/8	N/A	60-47-42-1.5
	NDV4236	60	49	31 5/8	N/A	60-47-42-1.5
	NDV4842	66	55	31 5/8	N/A	66-53-42-1.5
	GDST4336I	60	49	33 5/8	N/A	60-47-42-1.5
	GDST5244I	66	57	36 5/8	44 X 5.5	SPECIAL
	RBV4236IT	60	49	29 1/8	36 X 6.5	60-47-38-1.5
	RBV4842IT	66	55	29 5/8	42 X 6	60-47-38-1.5
HEAT-N-GLO	6000	60	49	33 3/8	N/A	60-47-42-1.5
	8000	66	55	36 1/8	N/A	66-53-42-1.5
	SL550	60	48	29 5/8	N/A	60-47-38-1.5
	SL750	60	49	33 3/8	N/A	60-47-42-1.5
	SL950	66	55	37 3/8 X 6 (2)	N/A	66-53-42-1.5
	BE36C	60	49	29 5/8	N/A	60-47-38-1.5
	ST-TRC	60	49	31 3/8	N/A	60-47-38-1.5
	ST42TVFL	60	49	31 5/8	N/A	60-47-38-1.5
	RHW41	60	49	26 5/8	36 X 5	60-47-38-1.5
	RHW47	66	55	26 5/8	42 X 5	66-53-38-1.5
	EM485T	66	55	35 3/8	N/A	66-53-42-1.5
	SFE35	60	49	29 5/8	N/A	60-47-38-1.5
	36EBU	60	49	29 5/8	36 X 3.5	60-47-38-1.5
	42EBU	66	54.5	29 5/8	41.5 X 3.625	66-53-38-1.5
	32EXL	60	48	28 1/8	N/A	SPECIAL
	ST-HVB-IP1	60	49	32 3/8	N/A	60-47-42-1.5
	MONTANA42	66	55	28 5/8	42 X 5	66-53-38-1.5
	DAKOTA42B	66	55	31 1/8	42 X 5	66-53-38-1.5
	TWILIGHT-II-B	60	49	31 5/8	N/A	60-47-38-1.5
***** DENOTES SPECIAL SIZES WHICH REQUIRE EXTRA MARBLE, GRANITE, OR SLATE THAT MUST COME FROM A REPLACEMENT HEARTH (RH??).						
NOTICE: ADD 1/4" TO THE HEIGHT OF LEGS AND RISERS FOR SLATE DIMENSIONS.						
NOTICE: WHEN ENTERING A WRAP, YOU MUST ENTER A "PLATFORM" AND DIMENSIONS ALONG WITH A REPLACEMENT HEARTH ("RH??") AND DIMENSIONS. ALL ARE LINE ITEMS.						
NOTICE: REFER TO STOCK SIZES SHEET FOR MARBLE, GRANITE, AND SLATE.						
NOTICE: ALL HEAT-N-GLO GAS UNITS ARE SET ON PRESSURE TREATED 1 X 4 MATERIAL.						
NOTICE: YOU MUST SPECIFY 8" LEGS.						
Standard Stocked Sizes		36" Fireplace Kit		42" Fireplace Kit		
Hearth		60 X 20		(72 & 66) X 20		
Header		49 X 12		56 X 12		
Legs		36 X 6.5		36 X 6.5		
Riser		42 X 6.5		42 X 6.5		

Surround fabrication



Surround fabrication



Loaded van



Fireplace before



Floor level



Install micore



Center micore



Install hearth



Apply adhesive



Adhesive applied



Install leg 1



Leg 1 installed



Install leg 2



Install header



Secure header



Header secured



Caulk edges



Top of mantel



Back of mantel legs



Front of mantel legs



Dowel holes



Breast assembly



Installing mantel legs



Installing mantel legs



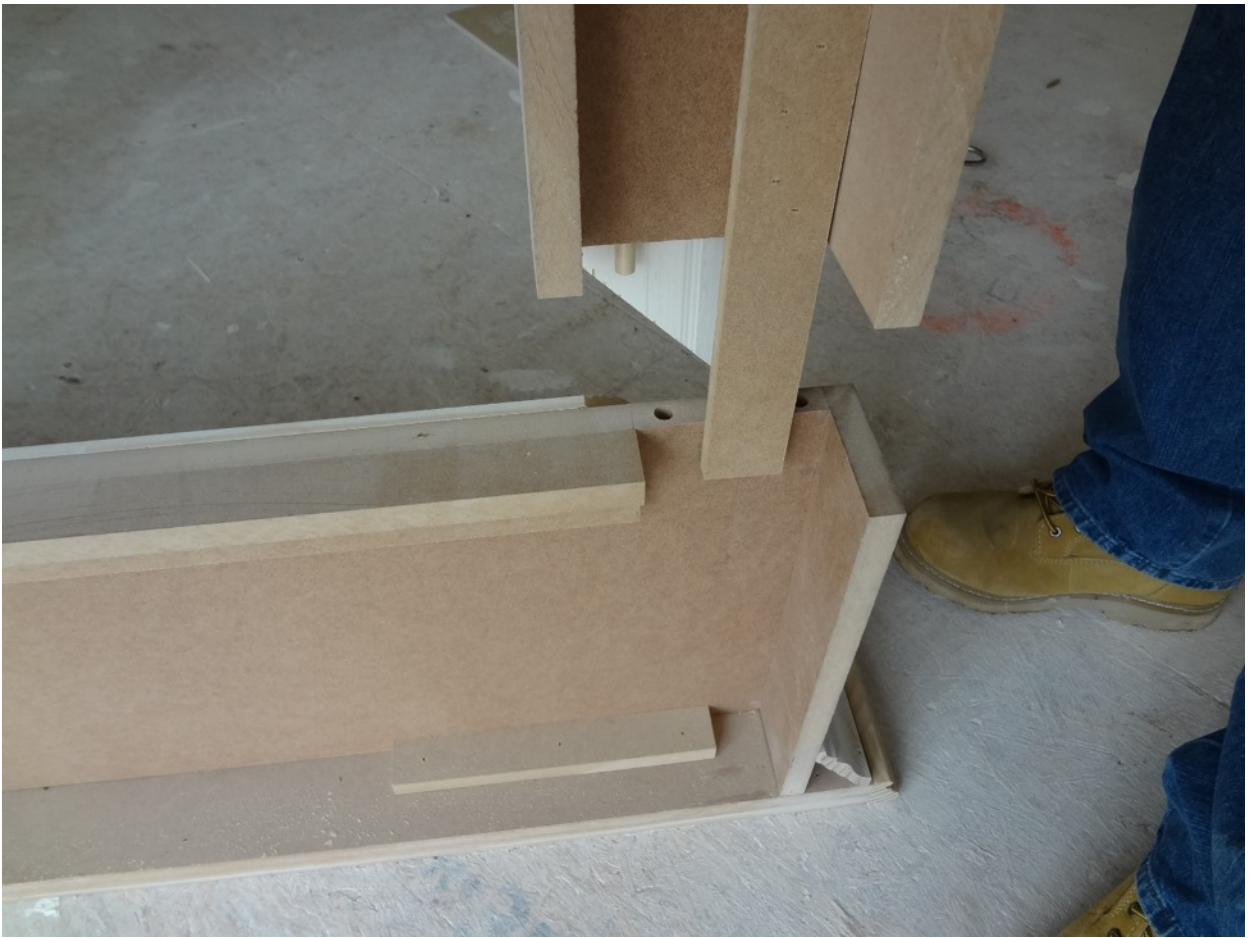
Mantel legs installed



Front of mantel



Installing leg 2



Securing legs



Securing back of legs



Leg view from the side



Applying adhesive



Applying adhesive



Raising mantel



Legs flush with hearth



Securing mantel



Securing mantel



Mantel void



Installing scribe



Installing top scribe



Mantel installed



Caulk micore



Caulk behind surround



Sand mantel



Install hearth protector

