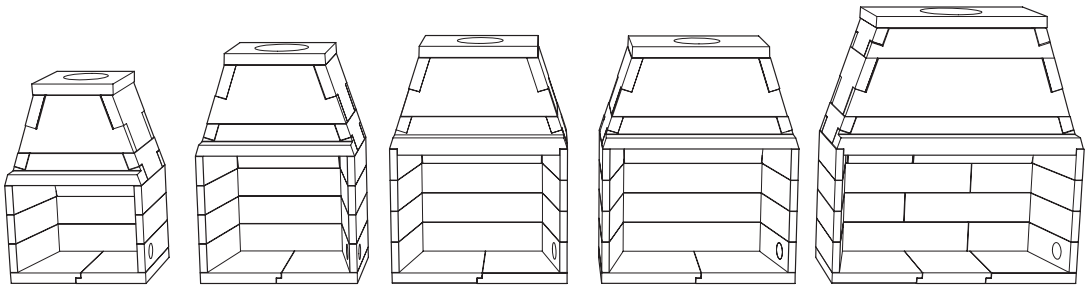
Installation and Operation Instructions

Ce manuel est disponible en français, simplement en faire la demande.

MASON-LITE
by MFI • Masonry Fireplace Industries, Inc.



Masonry Firebox Models MFP-33/39/44/49/63

⚠ WARNING

Do not install this fireplace directly on combustible material. For combustible floor installation, a Mason-Lite Metal Base or other approved non-combustible support structure must be used. See Accessories on page 34.

⚠ WARNING

Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to this manual for correct installation and operational procedures. For assistance or additional information consult a qualified installer, service agency or the gas supplier.

THIS WOOD-BURNING FIREPLACE COMPLIES WITH STANDARDS UL127 AND ULC610 AS A FACTORY-BUILT APPLIANCE.

SAVE THIS BOOK

This book is valuable. In addition to instructing you on how to install and maintain your appliance, it also contains information that will enable you to obtain replacement parts or accessory items when needed. Keep it with your other important papers.

This fireplace is approved for use as a wood burning fireplace or for use with a vented gas log approved to ANSI Z21.60 standards. It has not been tested or approved for unvented gas logs.

INSTALLER: Leave this manual with the appliance.
CONSUMER: Retain this manual for future reference.

Do not store gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

NATIONAL FIREPLACE INSTITUTE NFI CERTIFIED www.nficertified.org

We recommend that our woodburning hearth products be installed and serviced by professionals who are certified in the U.S. by the National Fireplace Institute® (NFI) as NFI Woodburning Specialists or who are certified in Canada by Wood Energy Technical Training (WETT).

Wood Energy Technical Training www.wettinc.ca

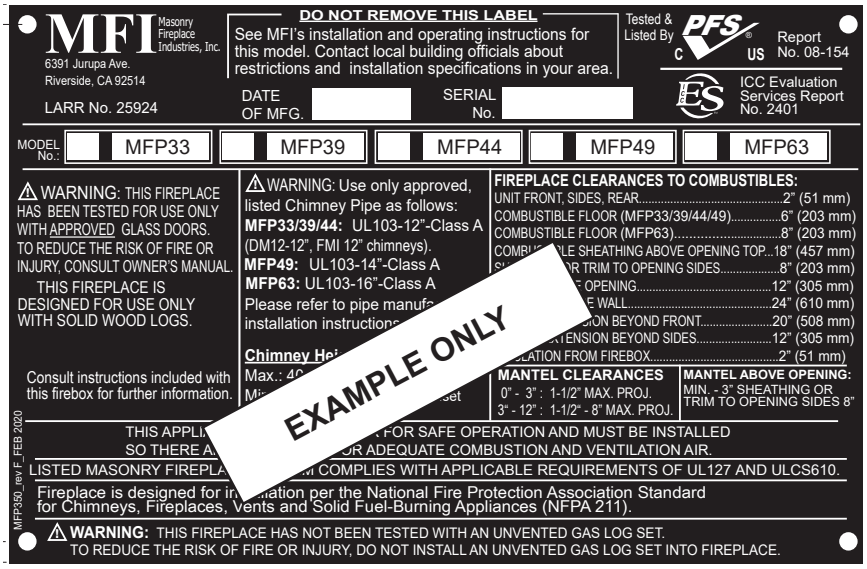
PFS® C US
Report No. 08-154

ICC ES™
ICC Evaluation Services
Report No. 2401

TABLE OF CONTENTS

EXAMPLE LABEL.

Here is a sample picture of the rating plate that is located inside the upper dome side of your fireplace. Model Number, Date of Manufacture and Serial Number should be stamped on the plate where indicated.



SAFETY INFORMATION

The Mason-Lite Masonry Fireplace is a modular refractory masonry unit designed for field assembly. The firebox is constructed using pre-cast, interlocking refractory blocks. The blocks are secured together using high temperature mortar. The system includes all parts necessary for the assembly of a complete masonry fireplace. The firebox enclosure must be lined with either 1-1/4" thick refractory firebox brick (ASTM 1261) or Mason-Lite brick panels. Refractory firebox brick or panels purchased separately.

INSTALLATION

Before Beginning the Installation

Read these instructions carefully BEFORE installing this fireplace. If installing an ANSI Z21.60 Decorative Gas Log, follow the appliance manufacturer's sizing and suitability recommendations.

Check local codes before installing this fireplace. Permits may be required.

GUIDELINES FOR USE

All current and future users of Mason-Lite Fireplaces are charged with the responsibility for full knowledge of the information contained within this manual which includes:

Strict requirements for assembly.

Detailed instructions for installation.

Cautionary guidelines for use.

On-going maintenance instructions.

It is the responsibility of the distributor, subcontractor, general contractor or whomever assumes the liability for installation of this product, to insure that the work is conducted according to the guidelines and instructions of this manual. Note that the general contractor is responsible for assuring that the clearance to combustibles specified by this manual are strictly followed.

WARNINGS

IMPORTANT

Check local codes before installing this fireplace.

⚠ WARNING

Do not install unvented appliances into this fireplace. This fireplace has not been tested for the use with unvented gas log sets.

⚠ WARNING

Do not install a fireplace insert or other products not specified for use with this fireplace.

⚠ WARNING

This fireplace is not intended to be used as a substitute for a furnace to heat an entire home. Use for supplemental heat only.

⚠ WARNING

Do not store gasoline or other flammable vapors and liquids in the vicinity of the appliancAe.

⚠ WARNING

A fire or an explosion may occur resulting in property damage, injury or loss of life if you do not follow the information in this manual.

⚠ WARNING

Specified venting parameters (type, size and height requirements) must be strictly followed. See Venting and Accessory Installation pages 27 thru 29.

⚠ WARNING

For MFP-33,39,44: Install only approved, listed UL 103-12" I.D. Class A Chimney System.

For MFP-49: Install only approved, listed UL 103-14" I.D. Class A Chimney System.

For MFP-63: Install only approved, listed UL 103-16" I.D. Class A Chimney System.

Chimney maximum height: 40 feet

Chimney minimum height: 14 feet (with offset = 17 feet) 2 offsets maximum.

Important: Follow the chimney pipe manufacturer's instructions on the installation of their specific flue system.

NOTICE: When installed in Canada, the Mason-lite needs to use ULC S-604 or ULC-610 listed chimney (Only Canadian approved chimney).

⚠ WARNING

Firebox must be lined with firebrick (ASTM-C1261) or Mason-Lite brick panels. See pages 30 & 31.

⚠ WARNING

This product can expose you to chemicals including Carbon Black, which is known to the State of California to cause cancer, and Carbon Monoxide, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

INTENDED USE

Statement of Intended Use

The Mason-Lite Fireplace is a decorative supplemental heat source designed for use with only:

-Solid Wood Logs or approved processed solid wood fuel logs

-Plumbed LPG or Natural Gas Log Lighter.

-Plumbed ANSI Z21.60 Decorative Gas Log appliance.

The Mason-Lite Fireplace is not intended as a primary means of heating and cannot substitute for a home furnace.

The Mason-Lite fireplaces and chimney systems are designed to be installed indoor or outdoor. The Mason-Lite fireplace and chimney systems are intended for installation in residential homes and other buildings of conventional construction.

Any application other than the “Intended Use” as stated above is in violation of the manufacturer’s instructions and is hereby prohibited. Such violation may cause immediate hazard, property damage or loss of life and will void all liabilities to the manufacturer and will void all warranties explicit or implied.

OPERATIONAL INFORMATION:

For solid fuel, use only properly dried cord wood or processed solid wood fuel fire logs. When using processed solid fuel fire logs, do not poke or stir the logs during burning. Use only processed solid fuel fire logs that have been evaluated for fireplace application. Follow all package instructions and warnings.

Do not store or use any flammable materials (solid, liquid or vapor) such as gasoline in the vicinity of this or any other open flame appliance.

Due to high temperatures during operation, this fireplace appliance should be located out of traffic and away from furniture and draperies. Do not place clothing, furniture or other flammable materials on or near the appliance.

When using an approved gas fire feature appliance with this fireplace, follow the gas appliance manufacturer’s installation, safety and operational instructions.

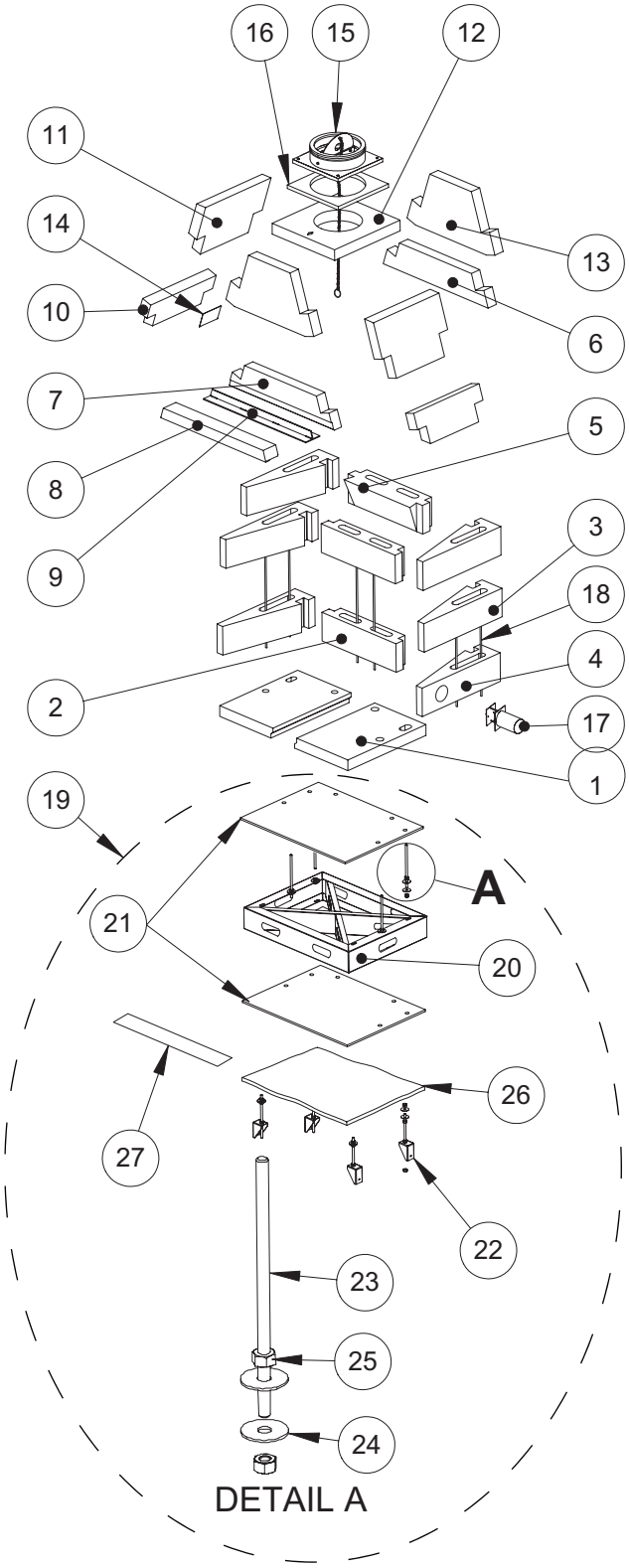
Never leave children unattended when a fire is burning in the fireplace.

FOR YOUR SAFETY

- **Do not store or use gasoline or any other flammable vapors or liquids in the vicinity of this or any other appliance.**
- **Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies.**
- **Do not place clothing or other flammable materials on or near the appliance.**
- **Never leave children unattended when a fire is burning in the fireplace.**

PARTS LIST (Combustible & Non-Combustible Floor)

MFP33 FIREBOX PARTS LIST:



ITEM	P/N	Description	QTY
1	MFP33-1	Hearth Left or Right	2
2	MFP33-2	Rear Wall	2
3	MFP49-3	Side Wall	5
4	MFP49-3A	Side Wall W/Ø4	1
5	MFP33-4	Smoke Shelf (Draft Diverter)	1
6	MFP33-5	Lower Dome	1
7	MFP33-6	Lintel	1
8	MFP33-6A	Lintel, Front	1
9	MFP33-6B	T-Bar, Steel	1
10	MFP49-7	Dome, Side - Lower	2
11	MFP49-8	Dome, Side, Upper	2
12	MFP33-9	Dome Top	1
13	MFP33-10	Dome, Front-Rear	2
14	MFP521	Rating Plate	1
15	SOLD SEPARATELY[1]	12 Inch Damper/Anchor Plate	1
16	NOT SUPPLIED [2]	Anchor Plate Insulation	1
17	MFP4-AK-M [1]	Outside Air Kit, 4" Dia	1
18	REBAR	#3 Rebar (Ø3/8") X 36"	6
	FOR COMBUSTIBLE FLOOR SYSTEMS		
19	MFPB33 [1]	Metal Base Kit	1
20	METAL BASE	Metal Base 6 Inch High	1
21	CEMENT BOARD	Cement Board	2
22	MFPSB	Assy, Floor Joist Brace	4
23	MFP364	Allthread 1/2-13 X 12"	4
24		Wide Fw 0.5625	16
25		1/2-13 Unc Hex Nut	16
26		1" Fiberglass Insulation Blanket	1
27		Ember Shield 37" x 5" 26 ga. Galvanized	1

NOTE:

[1] ITEMS NOTED ARE SOLD SEPARATELY.

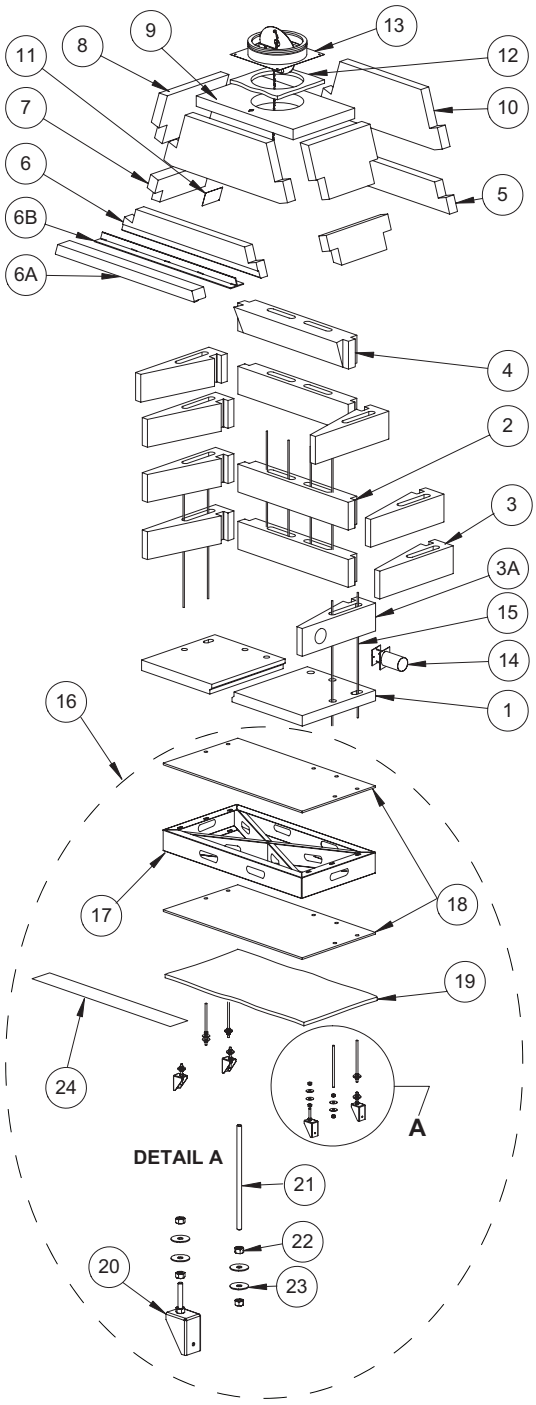
[2] ITEMS INDICATED AS "NOT SUPPLIED" CAN BE OBTAINED FROM YOUR LOCAL HARDWARE STORE.

Item 19 (Metal Base Kit) or other approved non-combustible support structure must be used when installing on combustible floor systems.

See Pages 15 thru 18 for combustible floor and framing anchoring illustrations when using a metal base kit.

PARTS LIST (Combustible & Non-Combustible Floor) *Continued*

MFP-39/44//49 FIREBOX PARTS LIST:



ITEM	P/N	Description	QTY
1	MFP39-1 MFP44-1 MFP49-1	Hearth (Left Or Right)	2
2	MFP39-2 MFP44-2 MFP49-2	Rear Wall	3
3	MFP39-3 MFP44-3 MFP49-3	Side Wall	7
3A	MFP39-3A MFP44-3A MFP49-3A	Side Wall (With Ø4" Outside Combustion Air Hole)	1
4	MFP39-4 MFP44-4 MFP49-4	Smoke Shelf (Draft Diverter)	1
5	MFP39-5 MFP44-5 MFP49-5	Dome Rear - Lower	1
6	MFP39-6 MFP44-6 MFP49-6	Lintel	1
6A	MFP39-6A MFP44-6A MFP49-6A	Lintel Front	1
6B	MFP39-6B MFP44-6B MFP49-6B	T-Bar	1
7	MFP39-7 MFP44-7 MFP49-7	Dome Side - Lower	2
8	MFP39-8 MFP44-8 MFP49-8	Dome Side - Upper	2
9	MFP39-9 MFP44-9 MFP49-9	Dome Top Ø12" Dome Top Ø12" Dome Top Ø14"	1
10	MFP39-10 MFP44-10 MFP49-10	Dome Front/Rear	2
11	MFP521	Rating Plate	1
12	NOT SUPPLIED [2]	High-Temperature Sealant or Anchor Plate Insulation	1
13	SOLD SEPARATELY [1]	Damper / Anchor Plate (Ø12 Or Ø14)	1
14	MFP4-AK-M [1]	4 Inch Dia. Outside Air Kit	1
15	REBAR	#3 Rebar (Ø3/8") X 34" L.	8
	FOR COMBUSTIBLE FLOOR SYSTEMS		
16	MFPB39 [1] MFPB44 [1] MFPB49 [1]	Metal Base Kit	1
17		6" Metal Base	1
18		Cement Board	2
19		1" Fiberglass Insulation Blanket	1
20	MFPSB	Assy, Floor Joist Brace	4
21	MFP364	All-Thread Bar, 1/2-13 Unc X 12"	4
22		Nut, 1/2-13 Unc	8
23		Washer, Ø1/2" X 1/16	8
24	MFPB39 MFPB44 MFPB49	Ember Shield 43" x 5" 26 ga. Galvanized Ember Shield 47" x 5" 26 ga. Galvanized Ember Shield 53" x 5" 26 ga. Galvanized	1

NOTE:

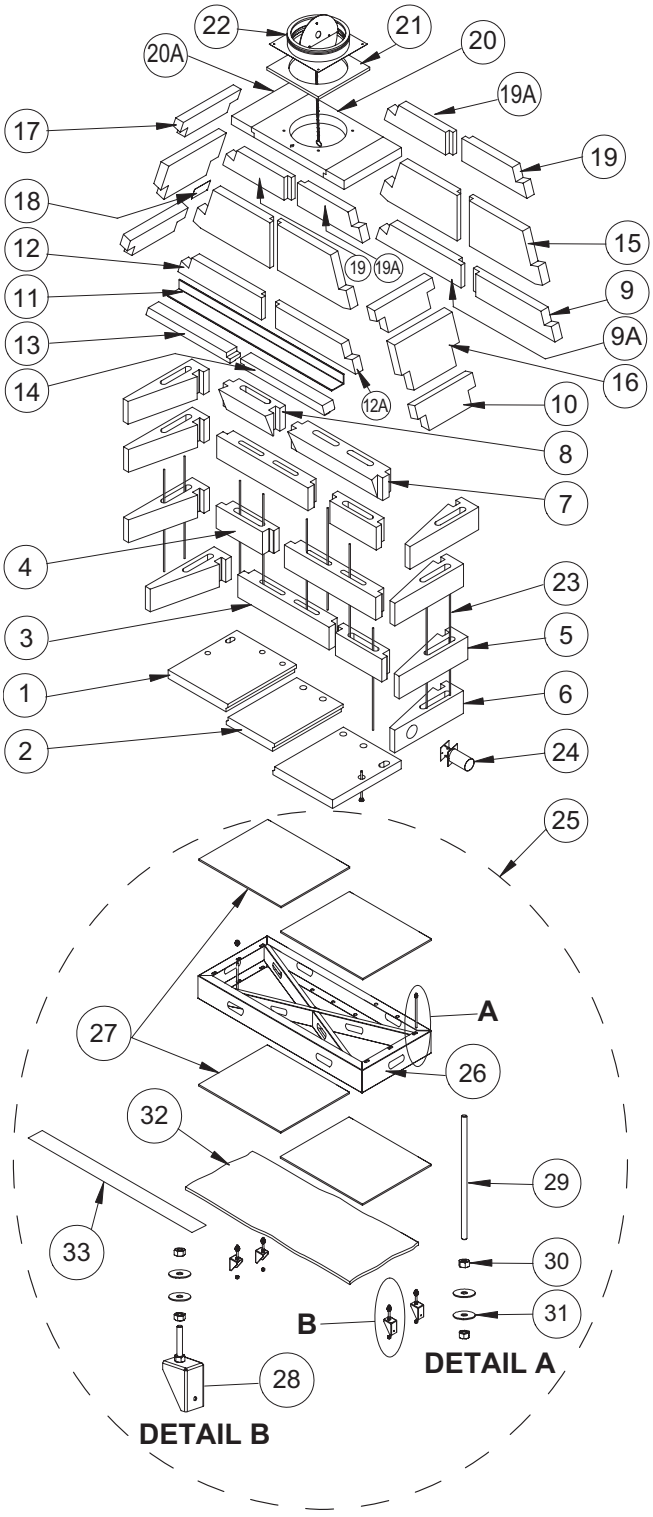
[1] ITEMS NOTED ARE SOLD SEPARATELY.
[2] ITEMS INDICATED AS "NOT SUPPLIED" CAN BE OBTAINED FROM YOUR LOCAL HARDWARE STORE.

Item 16 (Metal Base Kit) or other approved non-combustible support structure must be used when installing on combustible floor systems.

See Pages 15 thru 18 for combustible floor and framing anchoring illustrations when using a metal base kit.

PARTS LIST (Combustible & Non-Combustible Floor) *Continued*

MFP63 FIREBOX PARTS LIST:



ITEM	P/N	Description	QTY
1	MFP44-1	Hearth Side (Left Or Right)	2
2	MFP63-1A	Hearth Center	1
3	MFP44-2	Rear Wall Long	3
4	MFP63-2	Rear Wall Short	3
5	MFP49-3	Side Wall	7
6	MFP49-3A	Side Wall (With Ø4" Air Inlet)	1
7	MFP44-4	Smoke Shelf (Draft Diverter) - Long	1
8	MFP63-4A	Smoke Shelf (Draft Diverter) - Short	1
9	MFP63-5L	Lower Dome Rear Left	1
9A	MFP63-5R	Lower Dome Rear Right	1
10	MFP49-7	Lower Side Dome	2
11		6" X 4" X 1/2" X 66" - Angle Iron	1
12	MFP63-6L	Lintel Left	1
12A	MFP63-6R	Lintel Right	1
13	MFP63-6AL	Lintel Front Left	1
14	MFP63-6AR	Lintel Front Right	1
15	MFP63-10	Middle Dome Front/Rear	4
16	MFP49-8	Middle Dome Side	2
17	MFP63-7A	Upper Dome Side	2
18	MFP530	Rating Plate	1
19	MFP63-11L	Upper Dome Left	2
19A	MFP63-11R	Upper Dome Right	2
20	MFP63-9	Dome Top For 16" Class A Chimney	1
20A	MFP63-9S	Dome Top Side	2
21	NOT SUPPLIED [2]	High-Temperature Sealant or Anchor Plate Insulation	1
22	SOLD SEPARATELY [1]	Ø16" Damper / Anchor Plate.	1
23	REBAR	#3 Rebar (Ø3/8") X 34" L.	8
24	SOLD SEPARATELY [1]	4 Inch Dia. Outside Air Kit - MFP4-AK-M	1
		FOR COMBUSTIBLE FLOOR SYSTEMS	
25	MFPB63 [1]	Metal Base Kit	1
26		8" Metal Base	1
27		Cement Board	4
28		Assy, Floor Joist Brace	4
29		All-Thread Bar, 1/2-13 Unc X 12"	4
30		Nut, 1/2-13 Unc	8
31		Washer, Ø1/2" X 1/16	8
32		Fiberglass Insulation Blanket	1
33		Ember Shield 66-1/2" x 5" 26 ga. Galvanized	1

NOTE:

[1] ITEMS NOTED ARE SOLD SEPARATELY.
[2] ITEMS INDICATED AS "NOT SUPPLIED" CAN BE OBTAINED FROM YOUR LOCAL HARDWARE STORE.

Item 25 (Metal Base Kit) or other approved non-combustible support structure must be used when installing on combustible floor systems.

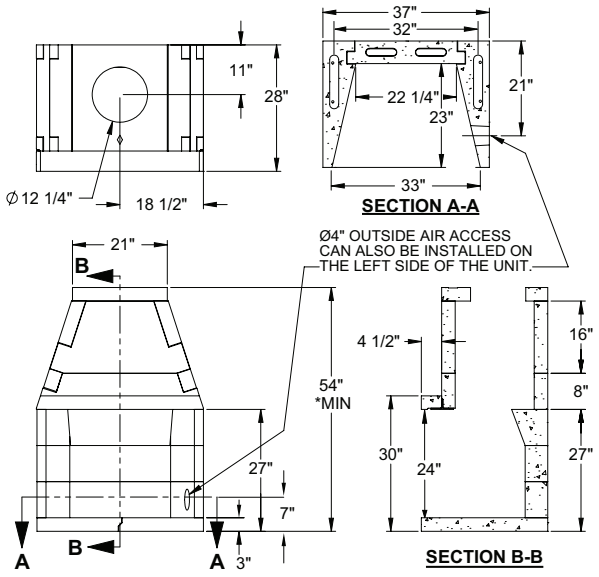
See Pages 15 thru 18 for combustible floor and framing anchoring illustrations when using a metal base kit.

FIREBOX DIMENSIONS

MFP33 AND MFP63

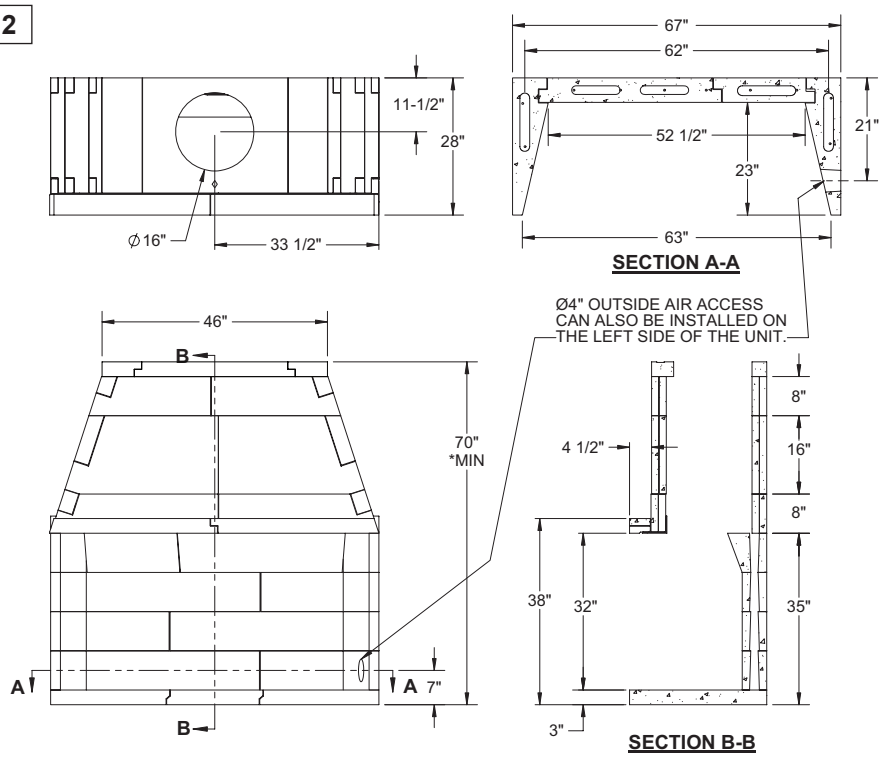
Mason-Lite **MFP33** Fireplace Overall Dimensions

Figure 1



Mason-Lite **MFP63** Fireplace Overall Dimensions

Figure 2

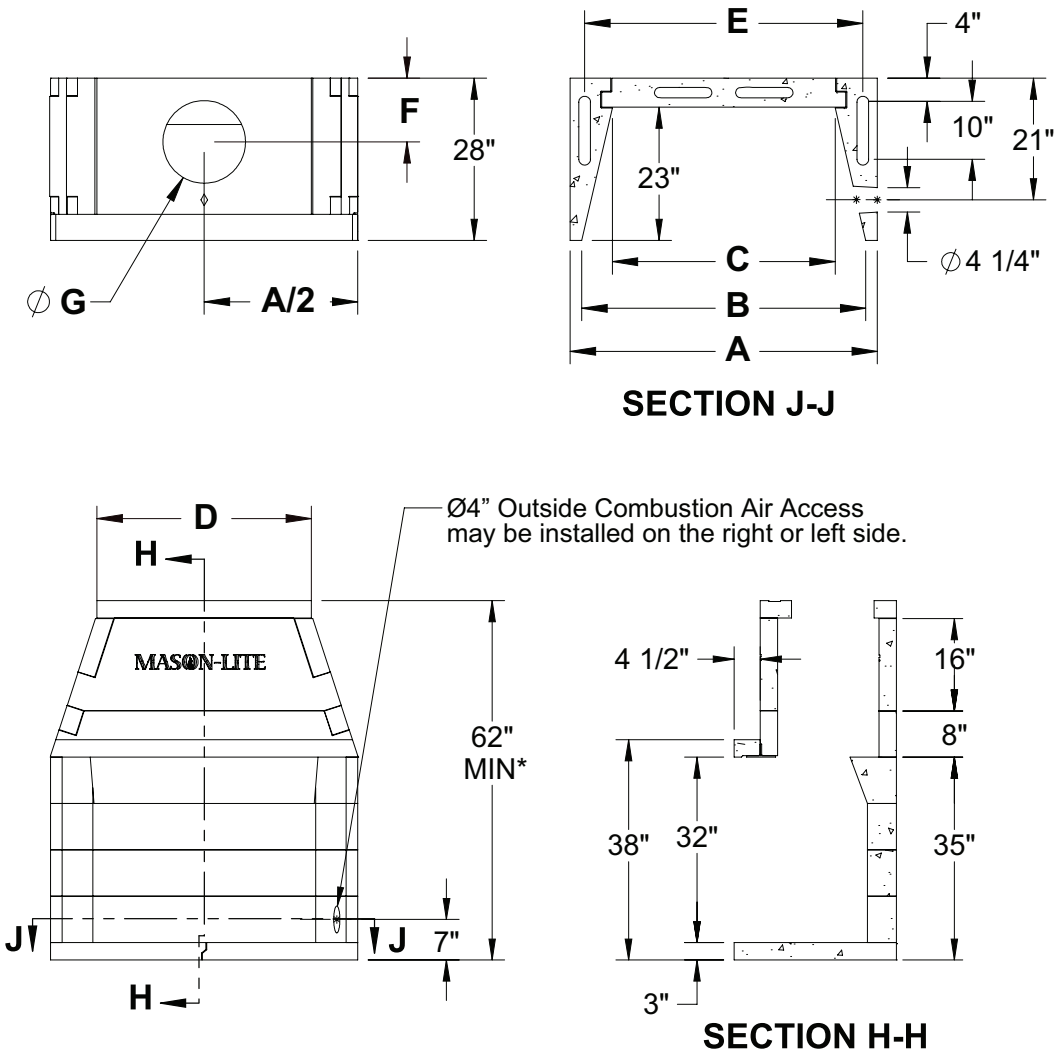


- All dimensions are in inches.
- All vertical dimensions are dry stack minimum. Mortar thickness may add up to 1 inch to the overall height.
- Firebrick / firebrick panel lining not shown.

MFP39/44/49

Mason-Lite **MFP-39/44/49** Fireplace Overall Dimensions

Figure 3



Fireplace Overall Dimensions							
Model	**A**	**B**	**C**	**D**	**E**	**F**	**G**
MFP-39	43”	39”	28-1/2”	27”	38”	11”	Ø12-1/4”
MFP-44	48”	44”	33-1/2”	32”	43”	11”	Ø12-1/4”
MFP-49	53”	49”	38-1/2”	37”	48”	11-1/2”	Ø14-1/4”

- All dimensions are in inches.
- All vertical dimensions are dry stack minimum. Mortar thickness may add up to 1 inch to the overall height.
- Firebrick / firebrick panel lining not shown.

PRODUCT OVERVIEW

INTRODUCTION

Thank you for your purchase. We appreciate your business!

Please read and understand these instructions before installing or operating.

PRODUCT OVERVIEW

Mason-Lite Fireplaces are designed as factory-built blocks to be assembled on-site and install on suitable combustible or non-combustible floors.

Construction/Assembly Phases of a Mason-Lite Fireplace:

- Planning and Site Selection

- Foundation or supporting Structure Preparation

-Firebox Assembly

-Venting Assembly

Careful step-by-step instructions for each phase of the Instructions for each phase of the installation procedure and operation of the Mason-Lite fireplace is detailed in this manual. The installer and homeowner is required to understand and comply with all information contained in this manual.

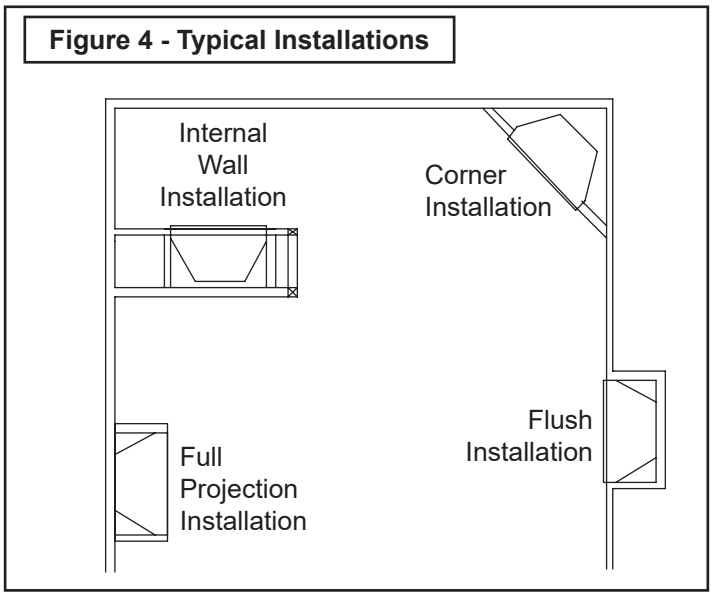


Figure 4: Typical Installations

ATTENTION: all illustrations in this manual are for general reference only. Do not scale drawings. Actual design elements will vary from case to case.

PFS-TECO Corporation is the testing and listing agency for Mason-Lite fireplaces.

ATTENTION: A residential building permit may be required to install a Mason-Lite Fireplace. Consult local jurisdictions before starting.

Note to Local Authorities and Inspectors: The Mason-Lite Fireplaces are designed for installation per the National Fire Protection Association Standard for Chimneys, Fireplaces, Vents and Solid Fuel-Burning Appliances (NFPA211).

PRE-INSTALLATION

SELECTING LOCATION

To determine the safest and most efficient location for the fireplace, consider the following:

1. The location must allow for proper clearances (see ***Figures 5, 6, 7, 8, 9 and 10***).
2. Select a location where fireplace will not be affected by drafts, air conditioning ducts, windows or doors.
3. Position fireplace to avoid cutting of joists or roof rafters.
4. Plan for combustion air inlet. (see page 28 for details).

CLEARANCES

Understanding Clearance to Combustibles

Considerable heat can build up on the outside surface of fireplaces. Minimum clearance to combustibles must be maintained.

Clearances To Combustibles

The distance to be maintained from the surfaces of the fireplace to combustibles must be observed. Below is a list of the most common combustible materials to name a few:

Drywall	Wood Flooring	Plywood
Sub-Flooring	Wood Framing	Mill Board
Particle Board	Plywood Paneling	

Maintain the following clearances:

- Unit sides, rear, Dome sides, rear & top: 2” (51 mm)
- Combustible Floors (MFP-33,39,44,49): 6” (153 mm)
- Combustible Floors (MFP-63 only): 8” (203 mm)
- Combustible Sheathing above of face opening top: 18” (457 mm)
- Sheathing or trim to face opening sides: 8” (203 mm)
- Mantel above face opening: (see Fig.11)
- Face opening to adjacent sidewall: 24” (610 mm)
- Hearth extension beyond front: 20” (508 mm)
- Hearth extension beyond sides of face: 12” (305 mm)
- Insulation from firebox: 2” (51 mm)

FIREBOX FRAMING & CLEARANCES

⚠ WARNING

Failure to position the parts in accordance with these diagrams or failure to use only parts specifically approved with this appliance may result in property damage or personal injury.

Figure 5

Cross-sectional Top View

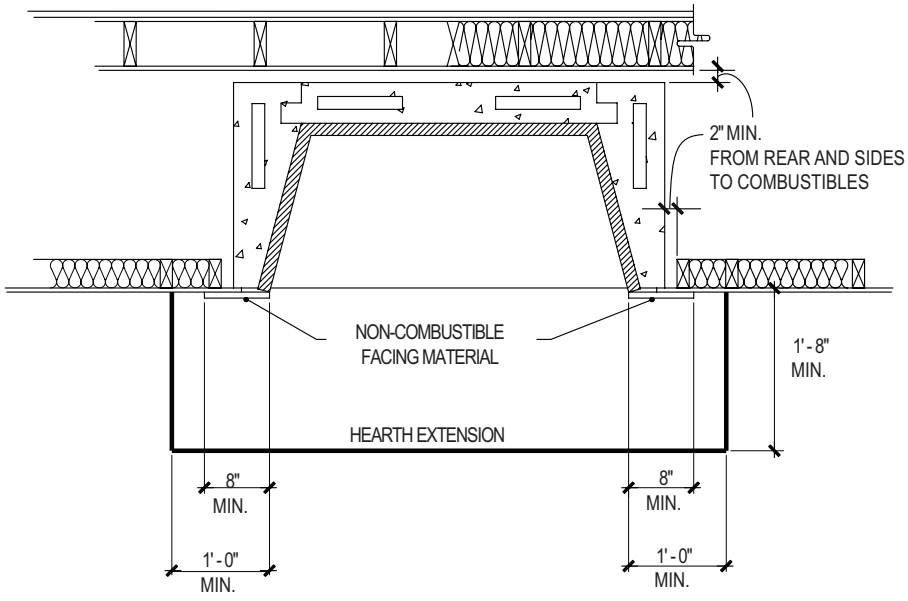
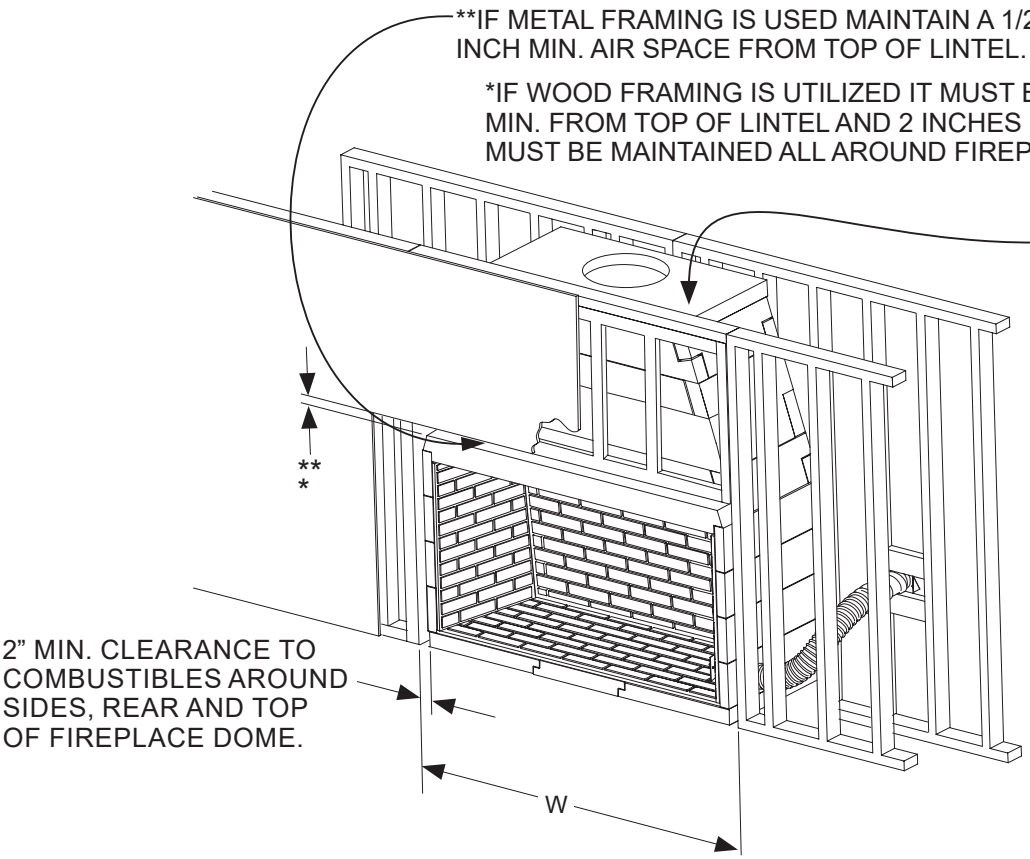


Figure 6

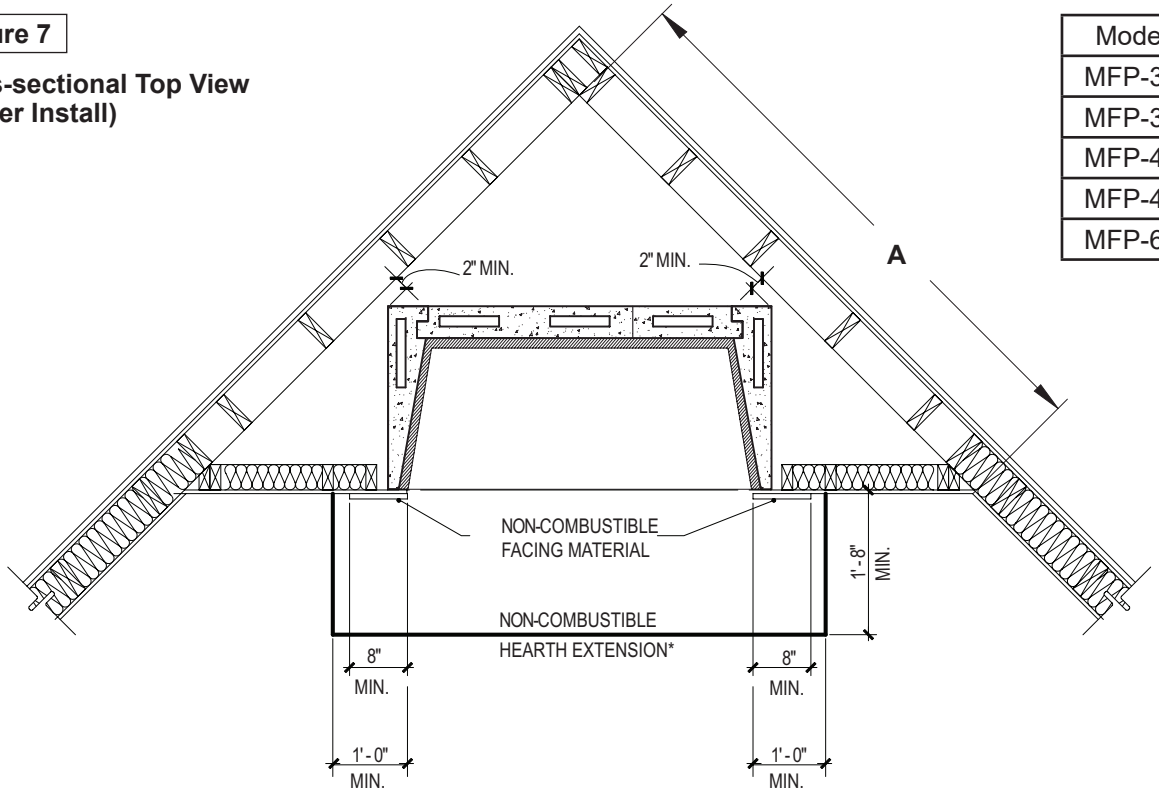
Fireplace Framing Dimensions: Non-Combustible Floor Systems



Model	W
MFP-33	41"
MFP-39	47"
MFP-44	52"
MFP-49	57"
MFP-63	71"

Figure 7

Cross-sectional Top View (Corner Install)



Model	A
MFP-33	70-1/2"
MFP-39	82-1/2"
MFP-44	84-1/4"
MFP-49	86"
MFP-63	91"

Figure 8

Non-Combustible Floor Systems

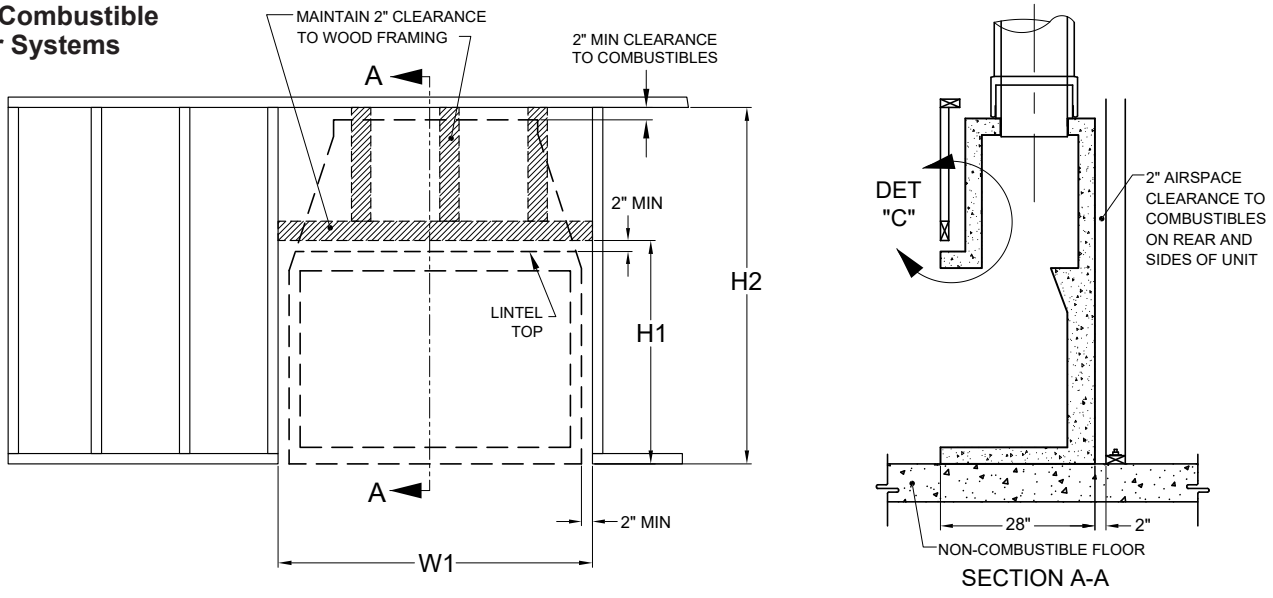
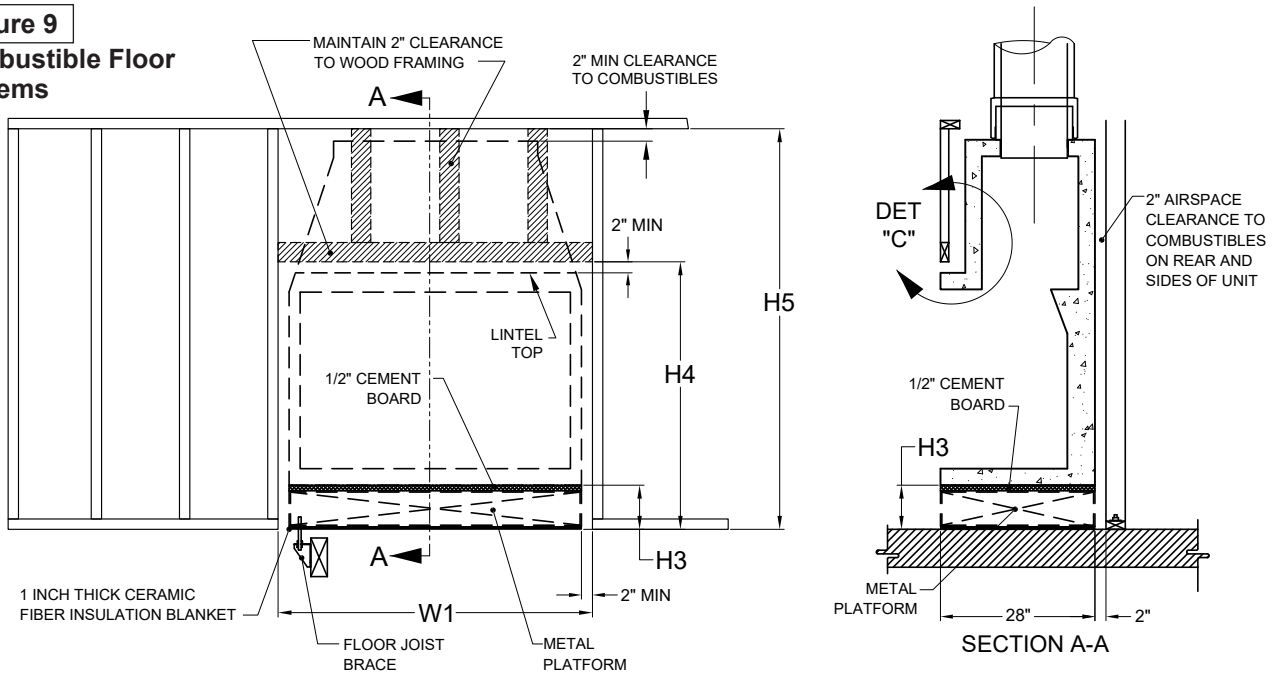
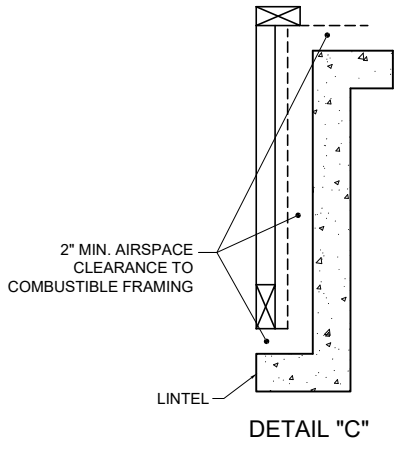


Figure 9

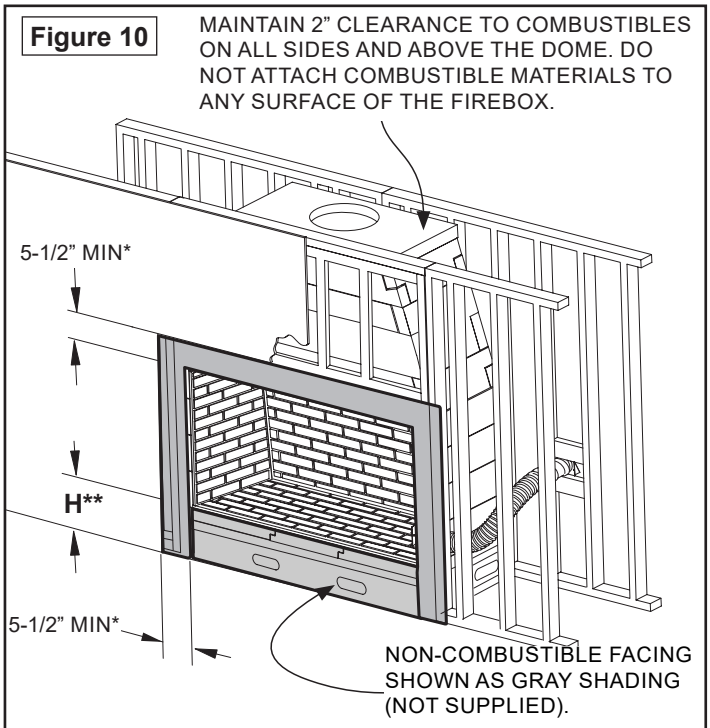
Combustible Floor Systems





MODEL	W1	H1	H2	H3	H4	H5
MFP-33	41"	32-1/2"	57"	7"	39-1/2"	64"
MFP-39	47"	40-1/2"	65"	7"	47-1/2"	72"
MFP-44	52"	40-1/2"	65"	7"	47-1/2"	72"
MFP-49	57"	40-1/2"	65"	7"	47-1/2"	72"
MFP-63	71"	40-1/2"	73"	9"	49-1/2"	82"

Figure 10



Condition	Dim. "H"**
With 6" platform	10-1/2"
With 8" platform	12-1/2"
Without platform (non-combustible floors)	4-1/2"

* MINIMUM CLEARANCE TO COMBUSTIBLE MATERIALS.
** MEASURED FROM FLOOR TO TOP OF FIREBRICK LINER.

Where the flooring material in front of the opening of the fireplace is combustible, it is required that the hearth extension be covered with 1" thickness of micore® board (or equivalent) and a non-combustible material. The extension should be set flush against the front of the fireplace front and measure 20" minimum at the front (1'-8" min.) and 12" minimum (1'-0" min.) beyond the sides of the fireplace opening as shown in ***Figures 5*** and ***7***, pages 11 and 12.

If a raised hearth extension is being installed, it must be constructed of non-combustible material and any material under the structure must also be non-combustible.

Note that 2" (minimum) clearance to combustibles must be maintained on all sides and top of the firebox (See ***Figures 6 & 10***).

COMBUSTIBLE FLOOR CLEARANCES

These Mason-Lite Fireplaces have been designed with clearance to combustible floors as indicated in pages 17 & 18. Cover any part of the combustible floor system left exposed with 1" (one inch) thick ceramic fiber insulation rated up to 2,100° F.

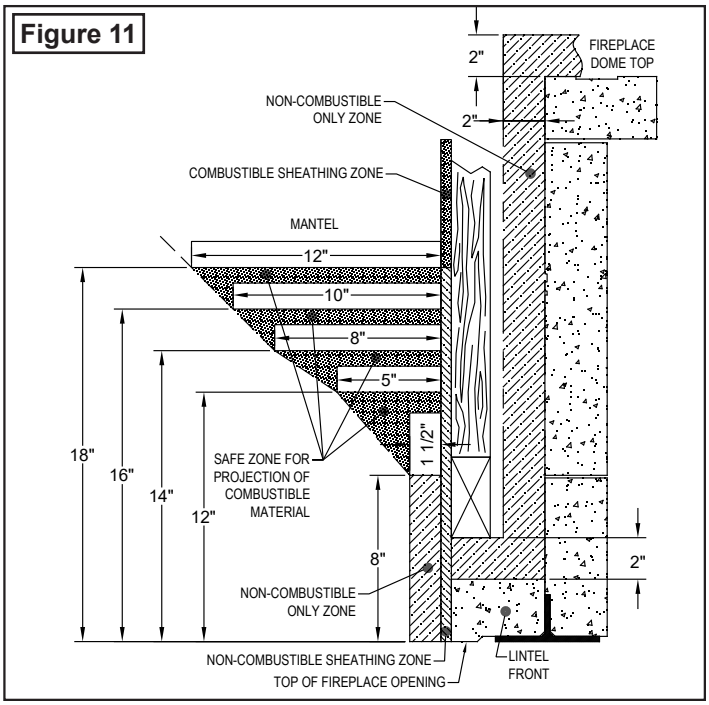
Attention: It is critical to abide by the clearances listed in this manual for all components specified as it allows for movement of hot air from the fireplace into interior areas of the chimney chase. Also, be certain that the chimney system be installed as stated below. Prior to starting the installation, check with local, regional or state codes for any restrictions or required permits regarding your fireplace installation.

Mantel and Mantel Shelf Clearances

As with any radiant heat fireplace, the Mason-Lite fireplaces must comply with building code safety clearances, per units that have openings of 6 sq. ft. or greater. For Mantel clearances see ***Figure 11***. Walls that Adjoin – Safety codes and all practical outlooks insist that your fireplace cannot be installed closer than 2 ft. to any walls in the room the fireplace is housed in or to any walls of adjoining rooms.

Caution in Regards to Combustibles – If any part of the fireplace or objects in the room (curtains, rugs, paint, cushions, etc.) start to show warping or discoloration due to heat from the fireplace, it is time to take immediate action. Do not use the fireplace until you have figured out how to address the problem. You are facing a potential fire hazard. MFI cannot be responsible for the make-up of material on the exterior of the fireplace you have chosen, nor can MFI be held responsible for the materials in a room that may be responding negatively to heat. However, in almost all cases, there is a solution to the problem, either by making adjustments to airflow or the modifications to the room itself.

Figure 11



SUPPORTING FLOOR SYSTEMS

Combustible & Non-Combustible Floor

It is the ultimate responsibility of the installer to ensure that proper concrete slab supports are used.

⚠ WARNING

To the licensed design professional and/or building contractor: It is your responsibility to be certain that the Mason-Lite can be properly supported by the combustible floor system on which the fireplace will rest.

For fireplace support foundations installed on concrete refer to Appendix I and II (pages 39 & 40) for specific instructions.

Rebar locations

Lay-out the position of the fireplace and drill holes where the rebar will be located. Secure the #3 rebar 4 inches into the concrete foundation with ITW Epoxy or Simpson Epoxy. Follow manufacturer's instructions for installation of rebar into slab.

Wood Floor

Anchorage of fireplace to wood floor construction is required. Refer to ***Figure 15***, page 17 for anchorage dimensions. Four anchors are required to attach to the sub-flooring framing.

Crawl Space or Upper Floor:

For installation of firebox over combustible crawl spaces or upper floors, anchorage of the firebox is required. Illustrations of examples of possible anchorage methods are shown in ***Figures 12*** thru ***14*** depending upon the type of floor framing. Final method of anchorage is to be determined by licensed design professional.

For conventional framing, where the floor joists are parallel with the sides of the firebox, the addition of floor joists to align with the anchor brackets allows the brackets to be directly connected to the floor joists.

Note that additional floor joists may be required to support the weight of the firebox and chimney. Where the floor joists run parallel to the front of the firebox, anchorage can be accomplished in like manner as shown in ***Figure 12*** using blocking between the floor joist.

For floors supported by I-Joists, the method of anchorage is illustrated in ***Figures 13*** and ***14***. ***Figure 16*** illustrates the general arrangement of anchorage to floor framing.

It is important to take into consideration that the load for the Mason-Lite Fireplace must be considered as additional dead load that will have to be supported by the floor framing. Additional floor joists or I-joists may be required as determined by the licensed design professional.

The dead weights for the fireplace are noted in ***Table I***, page 16. It is the task and responsibility of the general contractor/installer to see that the proper reinforcement for weight loads are made by a licensed design professional prior to the fireplace installation.

As stated above, it is desirable to place additional framing for alignment of anchor rods. Refer to ***Figure 15***, page 17 for anchor rod locations.

Attach the firebox side wall anchors to steel support frame by inserting all-thread rods through holes on the bottom flange on the steel support frame as shown in ***Figures 18*** and ***19***, pages 17 and 18. Secure with two Ø 2" o.d. x Ø 9/16" i.d. x 0.10" Washers and two 1/2"-13 UNC Nuts.

Figure 12

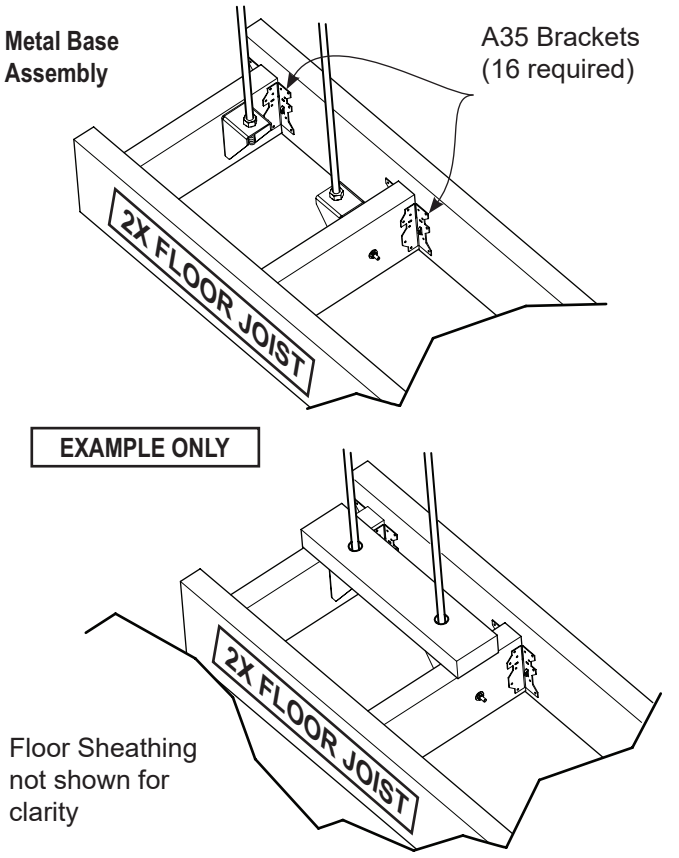


Figure 13

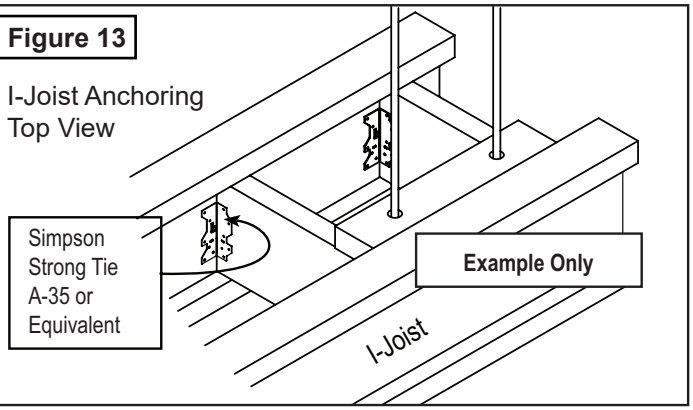
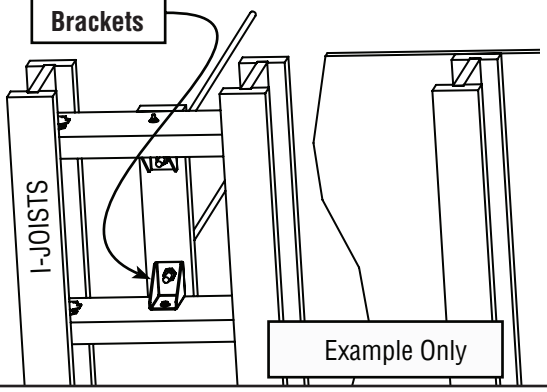


Figure 14

I-Joist Anchoring Bottom View



Mason-Lite Weight Determination

The following are dead load weight estimates for the Mason-Lite Fireplace.

Table I					
Fireplace Model	**MFP-33**	**MFP-39**	**MFP-44**	**MFP-49**	**MFP-63**
Fireplace Weight	835 lbs.	1,194 lbs.	1,250 lbs.	1,359 lbs.	1,704 lbs.
Mortar, Rebar & Ready Mix Concrete	200 lbs.	350 lbs.	357 lbs.	364 lbs.	370 lbs.
Firebrick Lining	290 lbs.	333 lbs.	345 lbs.	356 lbs.	435 lbs.
Damper/Anchor Plate	17 lbs.	17 lbs.	17 lbs.	17 lbs.	21 lbs.
Steel Platform	89 lbs.	94 lbs.	96 lbs.	100 lbs.	132 lbs.
Floor Area	37” x 28” (7.2 ft²)	42” x 28” (8.12 ft²)	48” x 28” (9.33 ft²)	53” x 28” (10.30 ft²)	67” x 28” (13 ft²)

Other Weight Considerations:

1) Fireplace finished facing (surround): This information needs to be obtained from the contractor.

2) Weight of metal flue: See chimney manufacturer’s weight specifications. Some chimney systems can weigh up to 50 lbs per lineal foot.

Table II - Deflection Limits			
Construction	**L**	**S or W**	**D +L**[1]
Floor Members	l/360	---	l/240

[1] For wood structural members having a moisture content of less than 16 per cent at time of installation and used under dry conditions, the deflection resulting from L + 0.5D is permitted to be substituted for the deflection resulting from L + D.

Note that MASON-LITE cannot accept responsibility for structural floor support details. All drawings are presented as mere illustrations to indicate the presence of the underlying floor system. It is the responsibility of the general contractor/installer to consult with a local licensed design professional for guidance in building a proper floor support system.

Figure 15

Model	A
MFP-33	32”
MFP-39	38”
MFP-44	43”
MFP-49	48”
MFP-63	62”

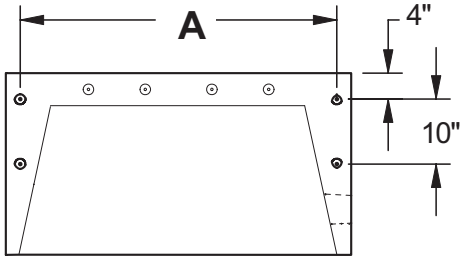


Figure 16

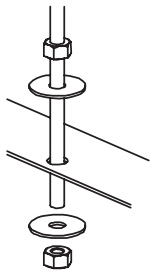
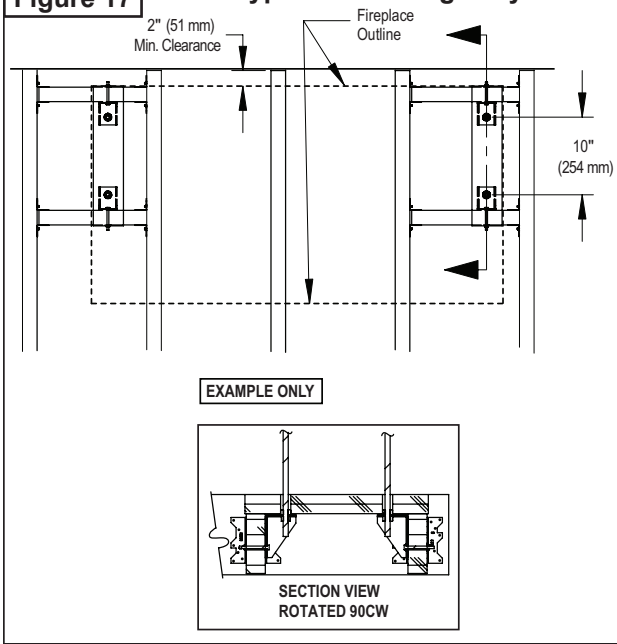


Figure 17 **Typical Anchorage Layout**



COMBUSTIBLE FLOOR INSTALLATIONS

8 Inch Metal Base (MFP-63)

The MFP-63 Mason-Lite Metal Base (MFPB63) ensures the minimum eight inch clearance above combustible flooring is maintained.

A layer of 1/2” minimum Concrete Board is required on top of the platform and 1” thick fiberglass blanket below as shown in Figure 18.

⚠ WARNING

LIFTING HAZARD. SINGLE-PERSON LIFT COULD CAUSE INJURY. USE ASSISTANCE WHEN MOVING OR LIFTING.

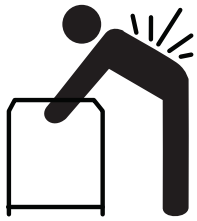
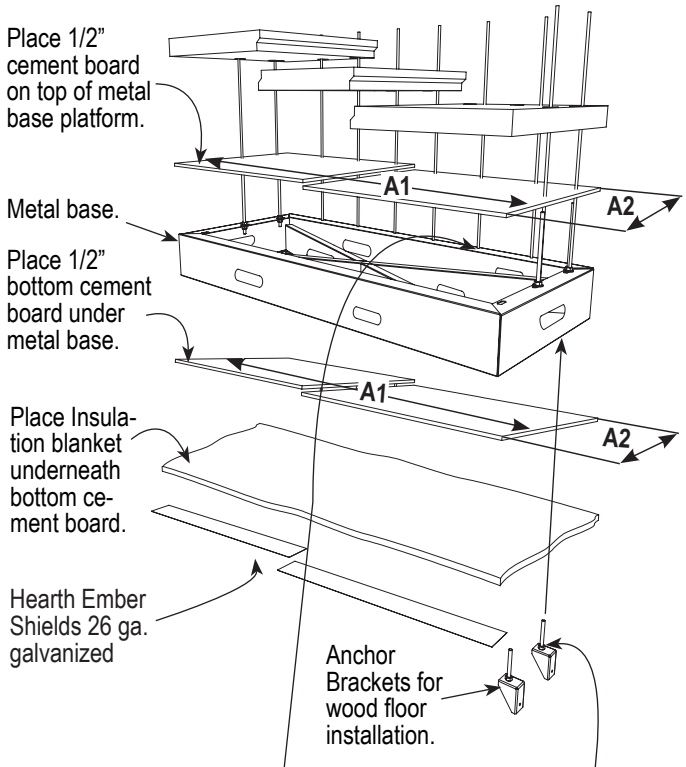


Figure 18 **MFP-63: 8" Metal Base Assembly**



Ten (10) All-Thread Rods are secured to the top flange of the Metal Base with twenty (20) flat washers (2”OD x 9/16”ID x 0.10”) and twenty (20) 1/2-13 UNC Nuts.

Anchor Bracket All-Thread Rods are secured to the bottom flange of the Metal Base with eight (8) flat washers (2”OD x 9/16”ID x 0.10”) and eight (8) 1/2-13 UNC Nuts.

⚠ WARNING

Remember to tighten up nuts below the floor after fireplace installation in order to take up any slack in the threads.

Hearth Ember Shields:

Metal safety stripping is required between the front of the Fireplace Hearth and Hearth Extension (not supplied). A 26 gauge galvanized 4" wide metal strip can be used. The length needs to extend 2 inches beyond each side of the fireplace opening. If two strips are used, make sure they overlap at least two inches in the middle. The strip is placed about 2" into the underside of the platform at the front.

Note: *When using an on-site constructed hearth extension, you may use a sand-cement grout between the hearth and extension instead.*

6 Inch Metal Base (MFP-33/39/44/49)

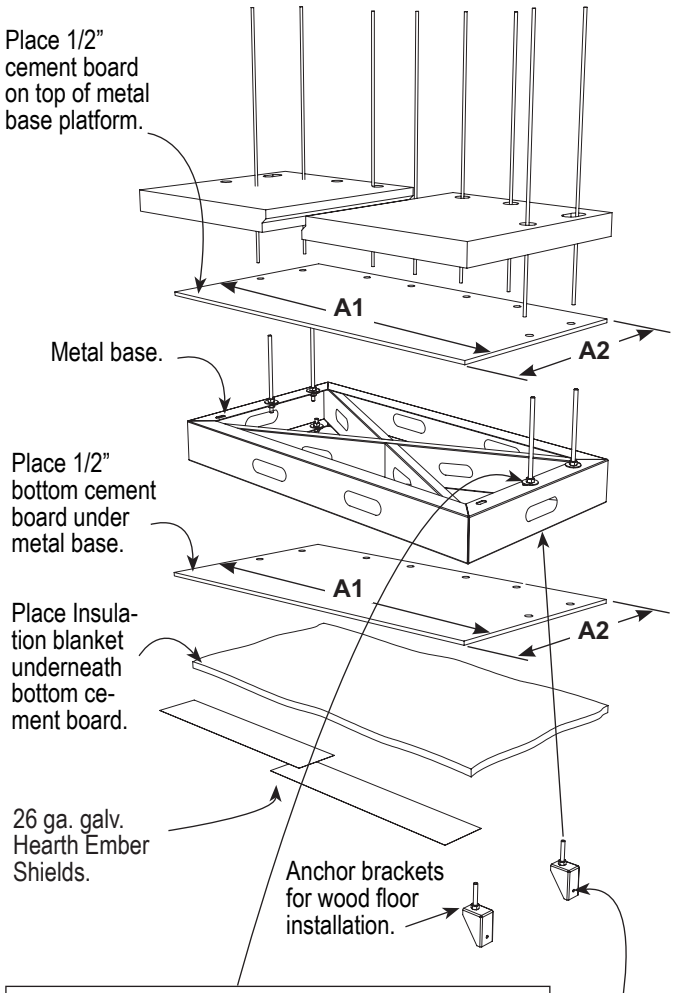
The Mason-Lite Metal Base ensures the minimum **six inch clearance** above combustible flooring is maintained.

A layer of 1/2" minimum Concrete Board is required on the top and bottom section of the Metal Base as shown in ***Figure 19***. The required sizes are shown in ***Table III***:

Note: The insulation (concrete) board chosen must meet a thermal conductivity rating ≥ 0.4 Btu-in/hr-ft2-F°.

Table III: 1/2" Thick Cement Board Dimensions		
MODEL	**A1**	**A2**
MFP-33	37"	28"
MFP-39	43"	28"
MFP-44	48"	28"
MFP-49	53"	28"

Figure 19 ***MFP-33/39/44/49: 6" Metal Base Assembly***



Eight (8) All-Thread Rods are secured to the **top flange** of the Metal Base with sixteen (16) flat washers (2"OD x 9/16"ID x 0.10") and sixteen (16) 1/2"-13 UNC Nuts.

Anchor Bracket All-Thread Rods are secured to the **bottom flange** of the Metal Base with eight (8) flat washers (2"OD x 9/16"ID x 0.10") and eight (8) 1/2-13 UNC Nuts.

VENTING

Class A Chimney Pipe

Class A chimney pipe is a double wall pipe that is designed to vent any fuel. This double wall chimney pipe is designed to stay cool in the outside, to provide a hot draft on the inside and to provide for a fire-safe design that protects both the chimney and the building.

Mason-Lite Masonry Chimney

A chimney or vent designed and constructed to develop a flow sufficient to completely remove all flue or vent gases to the outside atmosphere.

The venting system satisfies the draft requirements of the connected appliance in accordance with the manufacturers' instructions or approved methods. (See installation instructions included with the masonry chimney kit).

Mason-Lite Fireplace & Chimney System

1. The Mason-Lite is designed to be installed with a listed UL103 - Class A, Metal Chimney System.
2. This Mason-Lite fireplace is intended as a supplemental heat source only. It is not intended as a primary heat source.
3. It is the responsibility of the contractor installer (not the manufacturer) to ensure that adequate combustion air is provided for proper function of this fireplace. Fireplaces take up a large volume of replacement air from outside the house and if the house is of airtight construction, smoke spillage may occur if proper draft is not achieved.
4. There are many conditions beyond the manufacturer's control regarding improper fireplace operation. The manufacturer cannot ensure "smoke free" operation, nor can the manufacturer take on the responsibility for problems with surrounding construction; chimneys that have not been built at the correct heights; system drafts caused by faulty mechanical systems; adverse weather conditions or any other environmental situations over which the manufacturer has no control.
5. Inspect all fireplace & chimney components for evidence of damage prior to starting installation. Consult your local distributor for replacement parts if necessary.
6. Under no circumstances should you make any adjustments or modifications to the chimney system during the installation procedure. If you do, you are not only liable for negating the warranty, but you could very well cause a serious malfunction of the fireplace. You must follow these chimney instructions.
7. Caution is urged if it is decided to add insulation material to any part of the Mason-Lite Fireplace or Chimney system, be certain that the insulation material is kept at least 2" (two inches) away from any part of the system. When using insulation or vapor barrier materials, cover with a layer of plywood, particle board or gypsum board to maintain the specified 2" (two inch) clearance.
8. Air spaces around firebox must remain open. DO NOT fill these open spaces with insulation or packing material of any kind.

⚠ WARNING

Do not pack required air spaces with insulation or other materials.

Chimney System Heights

When installed, the **maximum** overall height of the chimney system from bottom of fireplace to the top/termination chimney is 40 feet. The **minimum** installed height of the completed Chimney System is 14 feet with a straight flue stack, 17 feet if the chimney includes one or two offset sections.

Seismic & Non-Seismic Code

Mason-Lite Fireplaces have been tested and passed the seismic requirements for Modular Masonry Fireplaces throughout the entire United States. We understand that not every installation needs the extra security that is involved in a high seismic zones. Rebar is ONLY REQUIRED on Mason-Lite units in seismic zones 3 & 4 shown in the map in appendix III, page 41. We will supply rebar to all fireplaces shipped to zones 3 and 4 in the United States unless otherwise requested.

Tools And Materials Required For Installation

You will find that the MASON-LITE Fireplace is designed to be completely assembled on-site, consisting of interlocking precast parts. You will need a thin-set type high temperature mortar for bonding. The parts of the fireplace are made of Mason-Lite's incredibly strong blend of specialty cement and a light weight aggregate.

⚠ WARNING

Ensure that the concrete blocks remain damp (but not saturated) to prevent them from drawing water from the high temperature mortar, which could compromise the bond. Regularly use a moist sponge on the areas where the high temperature mortar will be applied.

The installation of an anchor plate/damper is required but not supplied. You may purchase it from any chimney manufacturer or MFI. Also, an optional combustion air inlet MFP4-AK-M can be obtained from MFI.

Refractory Firebrick Liners also need to be installed. These should be a minimum of 1-1/8" (one and one-eight inches) thick. The liner will be applied within the walls and hearth area of the firebox. These are available from MFI. See accessories, page 34.

Tools needed for installations:

- One 4' level
- Roto-hammer with ½" drill bit (needed for concrete slab install only)
- Drill motor with mixer blade (to mix Mason-Lite high temperature mortar)
- Two empty 5 gallon buckets (to mix Mason-Lite high temperature mortar)
- One wheelbarrow and shovel to mix concrete.
- Grout bag
- Triangular masonry trowel
- Rubber hammer
- Sponge and water bucket to wipe down and moisten parts prior to applying high temperature mortar.

Materials needed for concrete slab (non combustible) installation

MFP33:

Six (6) pieces 3/8" rebar x 34" long (included with unit)

MFP39/44/49:

Eight (8) pieces 3/8" rebar x 34" long (included with unit)

MFP-63:

Eight (8) pieces 3/8" rebar x 34" long (included with unit).

ALL UNITS:

- Epoxy for securing rebar in footing / foundation.
- Three (3) - 90 lb. bags of Ready-Mix Concrete with 1/4" or smaller aggregate.
- Mason-Lite high temperature mortar (one 50 lb. bucket for MFP-33/39/44/49 or two 50 lb. buckets for MFP-63).

Materials needed for combustible wood floor installation:

MFP33:

Six (6) pieces 3/8" rebar x 34" long (included with unit)
Six (6) ea. All-thread x 12" long (with nuts and washers)
Metal base - 6 inch.

MFP39/44/49:

Eight (8) pieces 3/8" rebar x 34" long (included with unit)
Eight (8) ea. All-thread x 12" long (with nuts and washers)
Metal base - 6 inch.

MFP-63:

Eight (8) pieces 3/8" rebar x 34" long (included with unit).
Ten (10) ea. All-thread x 12" long (with nuts and washers)
Metal base - 8 inch.

ALL UNITS:

- 1" ceramic fiber blanket the size of the hearth base to go under the metal base.
- ½" cement boards (cut to size), included with metal base kit.
- Four or more fasteners to attach metal base to floor joists included with metal base kit.
- Mason-Lite high temperature mortar (one 50 lb. bucket for MFP-33/39/44/49 or two 50 lb. buckets for MFP-63)
- Three (3) - 90 lb. bags of ready mix concrete with 1/4" or smaller aggregate.

Field Assembly Procedures

a) Mixing the MASON-LITE high temperature mortar – The high temperature mortar comes premixed and should be dry. Be sure to use clean water and work it up into a mixture that is pasty but not lumpy. If it's too thin and the surfaces don't stay moist, the components will not adhere. Load the mixture into a standard grout bag.

b) Apply about ½" (one-half inch) thread of high temperature mortar. The high temperature mortar bead should be approximately ½" (one-half inch) away from all edges. The high temperature mortar has a considerable amount of holding power so do not overload the components with too much high temperature mortar. Keep the components moist at all times!

c) Some high temperature mortar will "ooze out" when placing components together, this is normal. Wipe excess away with a trowel. Do not cover component surfaces completely with high temperature mortar. Do not apply the high temperature mortar in thick bands even if the component you are working with is larger than the rest. You will want to apply "stripes" of mortar in these situations.

d) Make sure components are level. It's extremely important that you pay careful attention to how you are assembling the Mason-Lite Fireplace since every component builds on the next. If you have to make any kind of an adjustment, do not try to do it "by loading an opening" with mortar, this will only result in a fireplace that will not be plumb or level. Use wood shims instead. **You will find these small wood shims supplied with the Mason-Lite Fireplace** and you can nudge them in between openings to achieve the precision you need in making component adjustments. Once you have removed any shims, you will want to cover any gaps that may have resulted with the mortar.

FIREBOX INSTALLATION

HIGH TEMPERATURE DRY MORTAR MIX

Mixing Instructions:

Mix completely with clean water using a drill motor and high temperature mortar mixing tool. Mixing time should be at least five (5) minutes until smooth and the proper consistency for a grout bag (Complies with ASTM C-199).

Note: The mixing should be done in stages as needed through the firebox assembly so it doesn't dry up.

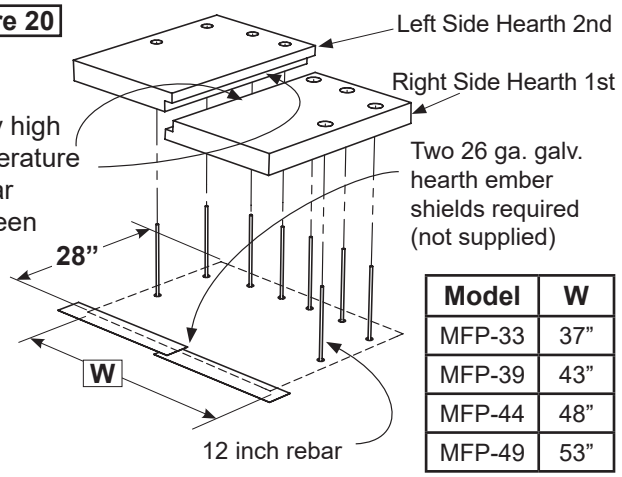
Note: Make sure to clean the mating surfaces with fresh water. Frequently run a damp sponge over these surfaces to make sure they are moist (but not soaking wet) when applying the high temperature mortar.

MFP-33/39/44/49 FIREBOX ASSEMBLY

1. Place the Mason-Lite Fireplace hearth base on top of your non-combustible floor or metal base. For concrete slabs, supporting floor needs to be rated at ASTM 90.
2. a) **Combustible Floor Installations:** Mix up a batch of high temperature Mortar and adhere hearth slabs to the cement board (see Figure 19, page 18). All-thread rods should stick up through the holes on the hearth slabs.

   b) **Non-combustible Floor Installations:** Draw an outline of the hearth area based on the dimensions shown in pages 8 and 9. Position Hearth slabs and mark rebar center locations. Drill 4 inches into concrete slab and secure the 8 pieces of 12 inch rebar with epoxy.

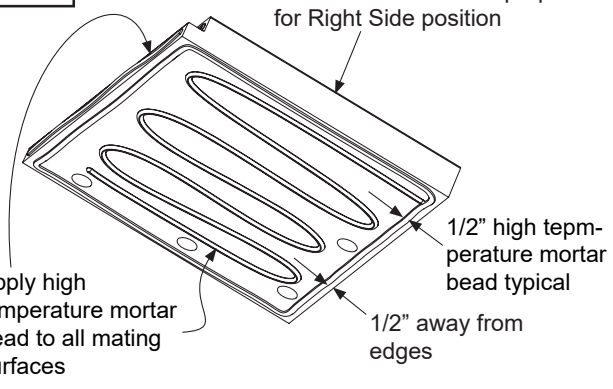
Figure 20



Model	W
MFP-33	37”
MFP-39	43”
MFP-44	48”
MFP-49	53”

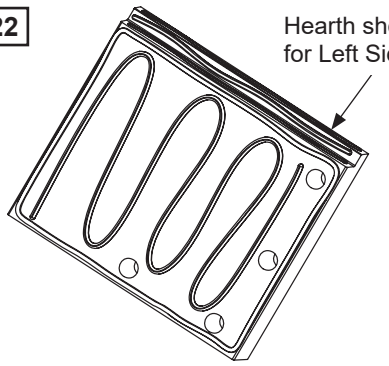
3. Mix a batch of high temperature Mortar and prepare Right Side Hearth bottom surface to be bonded as shown in Figure 21.
4. Align Right Side Hearth to the outline created. The overall width should allow for an approximate gap of 1/8” between slabs for the additional high temperature Mortar to unite the remaining slab. Check for surface flatness, level if necessary.

Figure 21



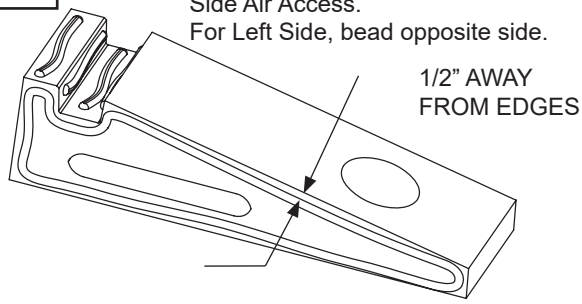
5. Apply high temperature mortar to the remaining Hearth except this time apply beading on surface to be facing floor as shown in Figure 22.

Figure 22



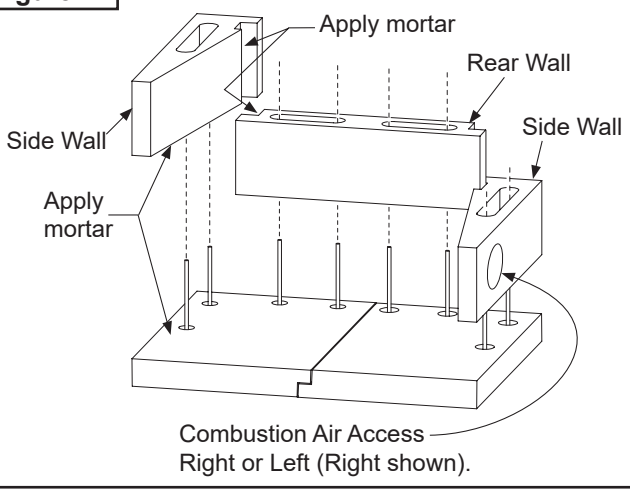
6. Before installing side walls, confirm placement of outside combustion air access (if required), this can be installed either side depending on which side is accessible to outside combustion air (all diagrams in this manual show the combustion air inlet hole on the right side). Prepare side wall and rear wall mating surfaces with the prepared high temperature Mortar and begin assembly.

Figure 23



7. Keep the assembly of the next sections of the firebox side walls moving up, keeping components moist, mixing high temperature Mortar as you need it and threading the high temperature Mortar appropriately as you stack each section, one onto the next. Constantly check for squareness and levelness while building each course of block. As you complete each section, make certain that you adhere the high temperature Mortar at each and every joint.

Figure 24



8. **MFP-33 ONLY:** After the second row of firebox is complete, install Smoke Shelf and remaining side walls (***Figure 25***). Mix approx. 2 cu. ft. of Ready-Mix Concrete. Insert 28” rebar vertically through the cells, into the holes in the hearth, adjacent to the rebar and/or all-thread sticking up from the hearth. Fill all cells with Ready-Mix Concrete mix. ***Note:*** Unit ships with 34" rebar, cut rebar to 28" before inserting thru the cells.

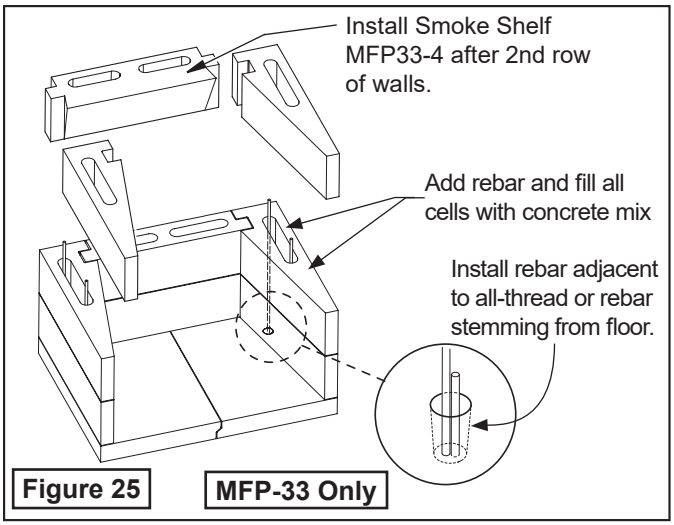


Figure 25 **MFP-33 Only**

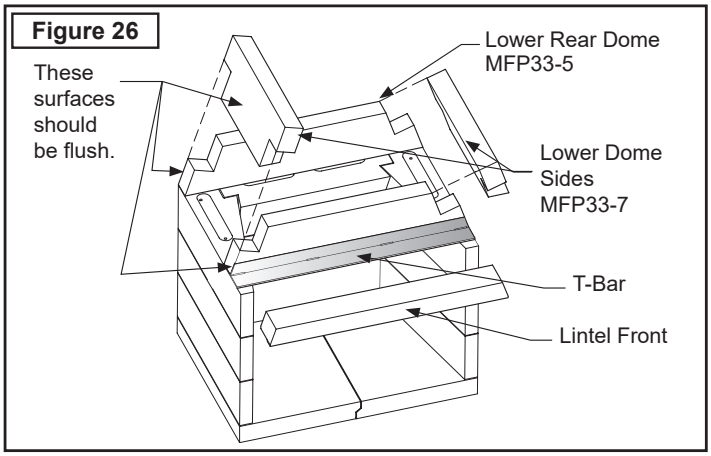
9. Set the Lintel and Lower Rear Dome in place as shown in ***Figure 26***. Check that all is level. If you need to make adjustments, use shims. Place one or more of these shims between the lowest wall component and the top surface of the base plate. Once you are satisfied with the degree of levelness, you can address any gap that may have occurred with an appropriate amount of high temperature mortar.

   Note: Although you are cautioned to use MASON-LITE high temperature mortar sparingly because it does have such holding power, you should look over the firebox assembly at the end and fill in any gaps, especially joint connections, with the high temperature mortar.

   Important: Adjustments can only be made while the high temperature mortar is still wet when correcting for squareness and leveling.

10. Assemble Lower Dome Sides as shown in ***Figure 26***. The beveled face lines up with the inward angles of the lintel sides. Top surfaces should be level.

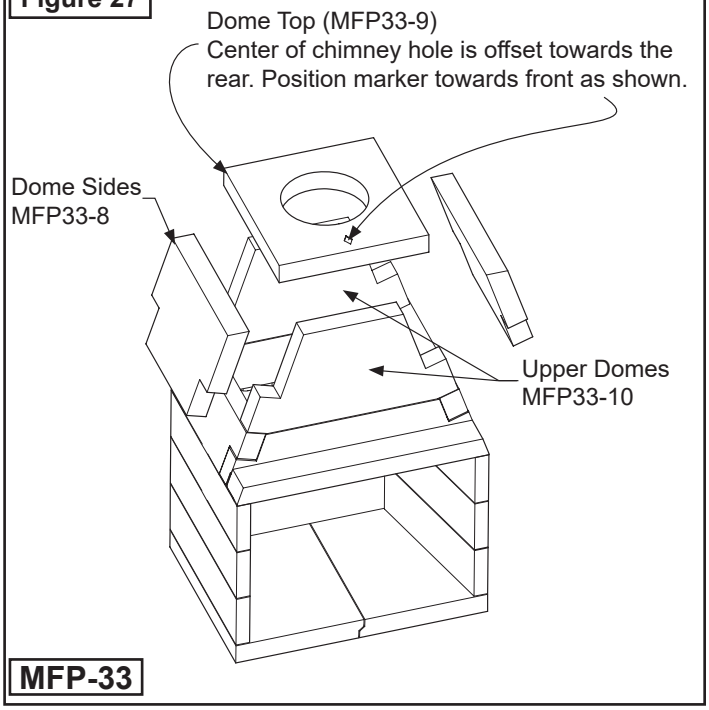
Figure 26



11. As you are connecting each MASON-LITE component, be certain you are following the instructions given previously for using MASON-LITE high temperature mortar. Stop to look at the smoke dome side, front and rear walls to see that they are aligning correctly and that the surfaces are smooth and uniform. Make sure connections are covered with an adequate amount of high temperature mortar. Remember that you have the option of using shims but they must be removed and any holes filled. Make any adjustments to the fireplace alignment before continuing to the next step.
12. Assemble Upper Dome (MFP33-10) and Dome Sides (MFP33-8) as shown in ***Figure 27***. Check your assembly here. If things are proceeding as they should be, the finished top surface should be flat and level.
13. Finally, set the Dome Top into position. Be sure that it is flush in every direction as you place it on the crest of the smoke dome wall assembly. After this is done, proceed to section on “Installing Damper and Chimney System” on page 27.

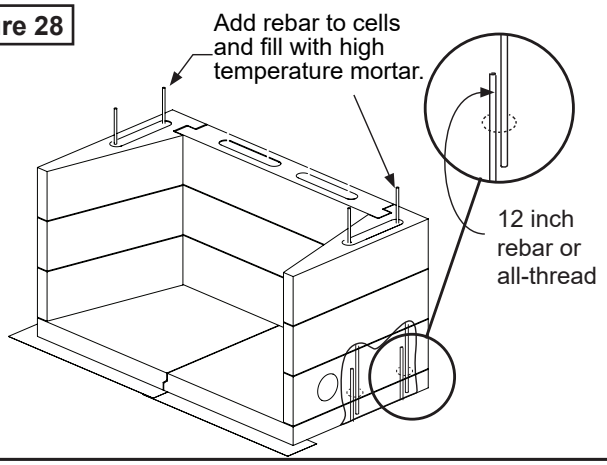
    Note: The chimney hole on the Dome Top is not centered from front to back - it should be offset closest to the rear of the fireplace (see ***Figure 27***).

Figure 27



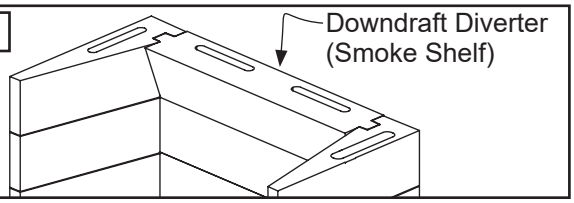
14. **MFP-39/44/49:** After the third row of firebox is complete, place #3 rebar (36” long) vertically through the cells until they reach bottom. Position them adjacent to the rebar or all-thread sticking up from the hearth. ***Figure 28***, page 23.

Figure 28



15. Install Downdraft Diverter and final row of Side Walls (***Figure 29***). All components must be level. Mix approx. 2 cu. ft. of Ready-Mix Concrete. Insert 34" rebar vertically through the cells, into the holes in the hearth, adjacent to the rebar and/or all-thread sticking up from the hearth. Fill all cells with Ready-Mix Concrete mix.

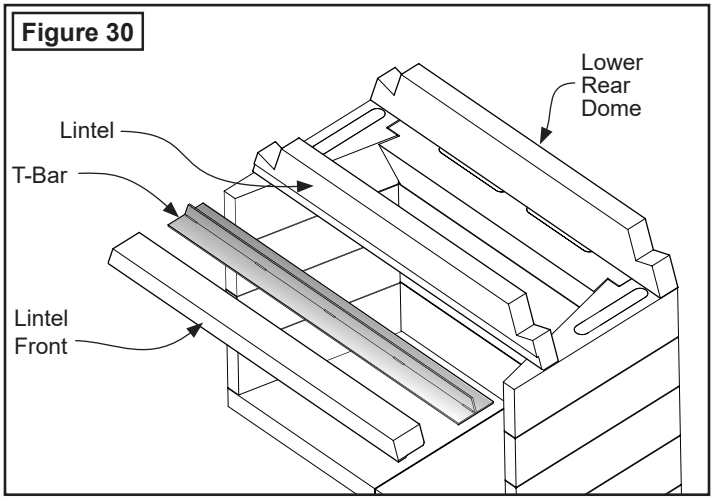
Figure 29



16. Set the Lintel, T-Bar, Lintel Front and Lower Rear Dome as shown in ***Figure 30***. Check that all is level. If adjustments are needed, use shims and fill gaps with an appropriate amount of high temperature mortar.

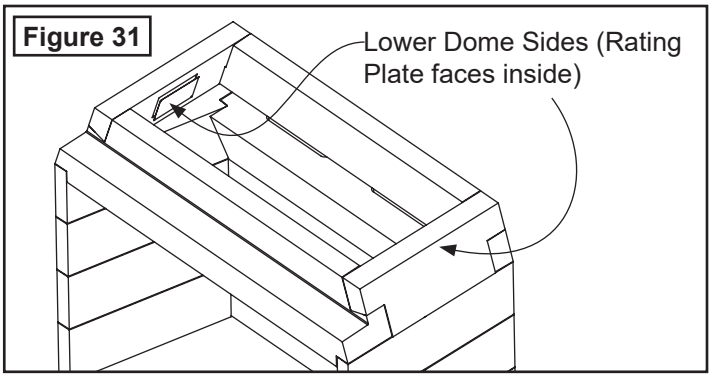
    Note: Although you are cautioned to use MASON-LITE high temperature mortar sparingly because it does have such holding power, you should look over the firebox assembly at the end and fill in any gaps, especially joint connections, with the high temperature mortar. ***Important:*** Adjustments can only be made while the high temperature mortar is still wet when correcting for squareness and leveling.

Figure 30



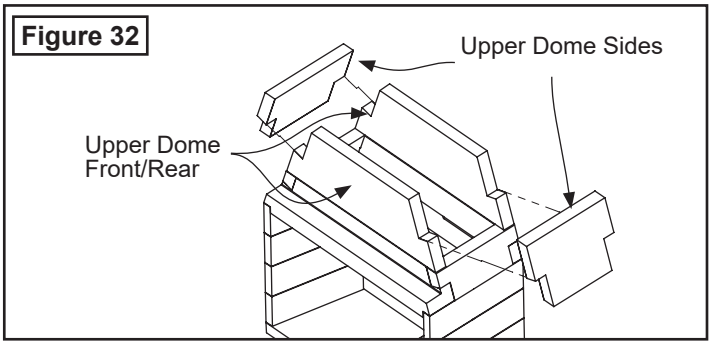
17. Assemble Lower Dome Sides as shown in ***Figure 31***. The beveled face lines up with the inward angles of the lintel sides. Resulting top surfaces should be level.

Figure 31



18. Verify that the Smoke Dome side, front and rear walls are aligning correctly and that mating surfaces are smooth and uniform. Make sure connections are covered with an adequate amount of high temperature mortar. Remember that you have the option of using shims but they must be removed and any holes filled. Make any adjustments to the fireplace alignment before continuing to the next step.
19. Assemble Upper Dome and Dome Sides as shown in ***Figure 32***. The top surfaces of all dome parts should be flat and level.

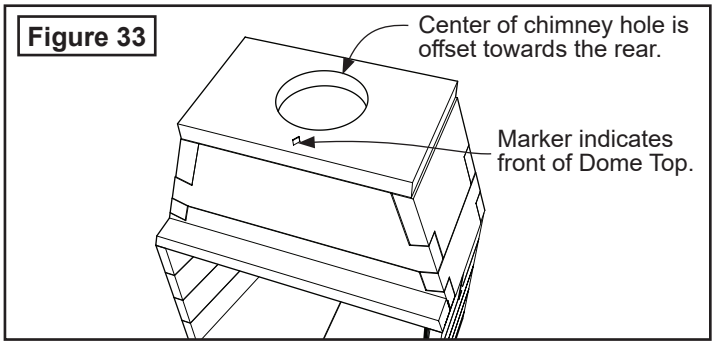
Figure 32



20. Finally, set the Dome Top into position. Be sure that it is flush in every direction as you place it on the crest of the smoke dome wall assembly.

    Note: The chimney hole on the Dome Top is not centered from front to back - it should be offset closest to the rear of the fireplace. The front of the dome is indicated by a marker (see ***Figure 33***).

Figure 33

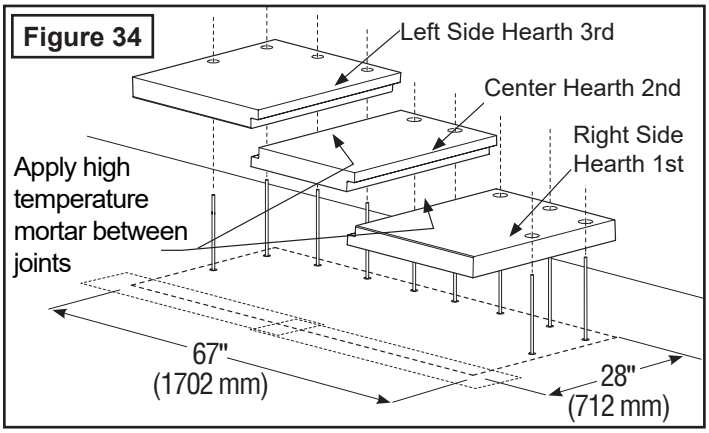


MFP63 FIREBOX ASSEMBLY

21. Place the Mason-Lite Fireplace hearth base on top of your non-combustible floor or metal base. For concrete slabs, supporting floor needs to be rated at ASTM 90.
22. a) **Combustible Floor Installations:** Mix a batch of high temperature mortar and adhere hearth slabs to the cement board (see ***Figure 18***, Page.17). All-thread rods should stick up through the holes on the hearth slabs.

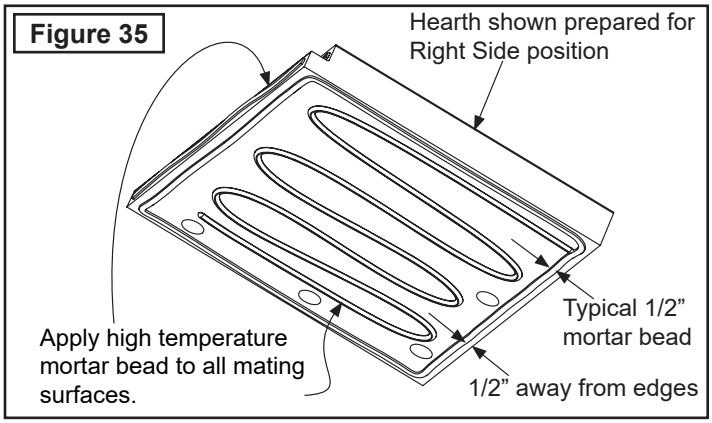
    b) **Non-combustible Floor Installations:** Draw an outline footprint 67" x 28" for the MFP63 footprint and mark the centers for the rebar locations using the hearth slabs as templates. Drill holes for rebar 4 inches into the concrete slab and secure the 10 pieces of 12" long rebar with epoxy.

Figure 34



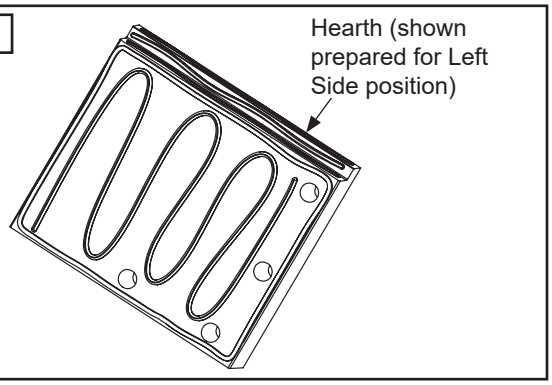
23. Mix a batch of high temperature mortar and prepare bottom surface of Right Side Hearth to be bonded (***Figure 35***), then lower the piece into place on the outline created before. Align lower Right Side Hearth on the outline created. The 67" width dimension allows for an approximate gap of 1/8" between slabs for the additional high temperature mortar to unite the remaining slabs. Continue process for remaining hearth sections while moistening and adding high temperature mortar between joints at slab ends.

Figure 35



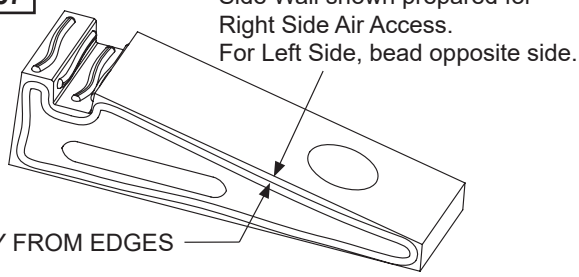
24. Apply high temperature mortar in like manner to the Center Hearth and place next to the Right Side Hearth. Check that surface is LEVEL and use shims if necessary.
25. Apply high temperature mortar to the remaining Hearth except this time apply beading on surface to be facing floor as shown in ***Figure 36***.

Figure 36



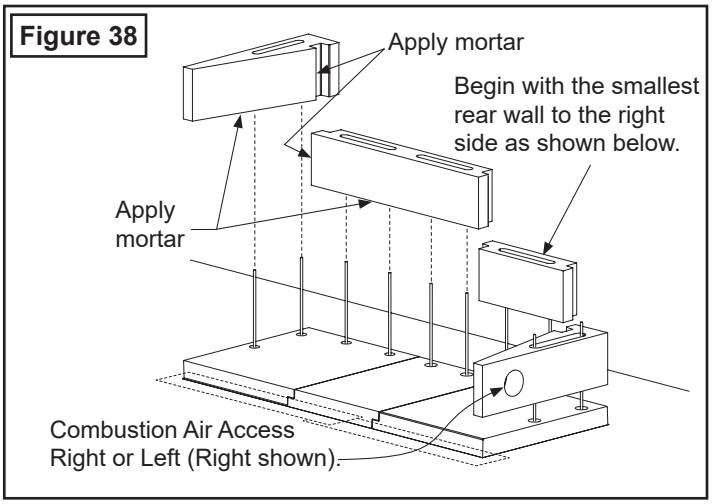
26. Before installing side walls, confirm placement of outside combustion air access (if required), this can be installed either side depending on which side is accessible to outside combustion air (all diagrams in this manual show the combustion air inlet hole on the right side).
27. Prepare side wall mating surfaces with the prepared high temperature mortar as shown in ***Figure 37***.

Figure 37



28. Keep the assembly of the next sections of the firebox side walls moving up (***Figure 38***), keeping components moist, mixing high temperature mortar as you need it and threading the high temperature mortar appropriately as you stack each section, one onto the next. Constantly check for squareness and levelness while building each course of block. As you complete each section, make certain that you adhere the mortar at every joint.

Figure 38



29. Rear walls are staggered on every row as shown in ***Figures 39*** and ***40***.

Figure 39

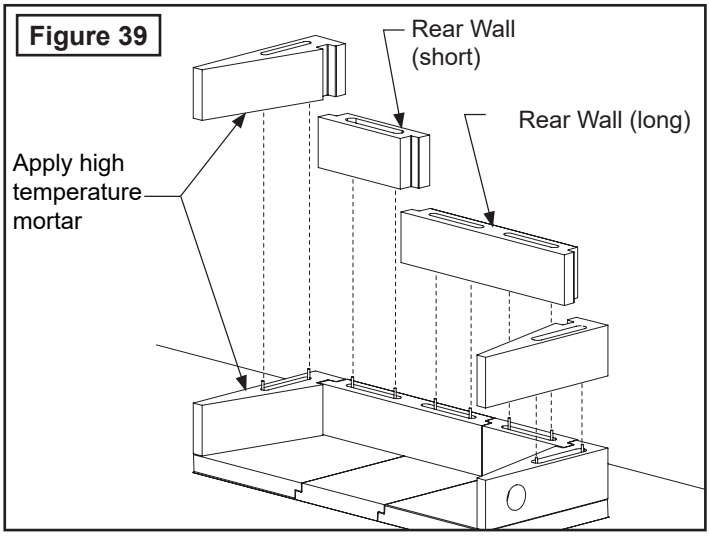
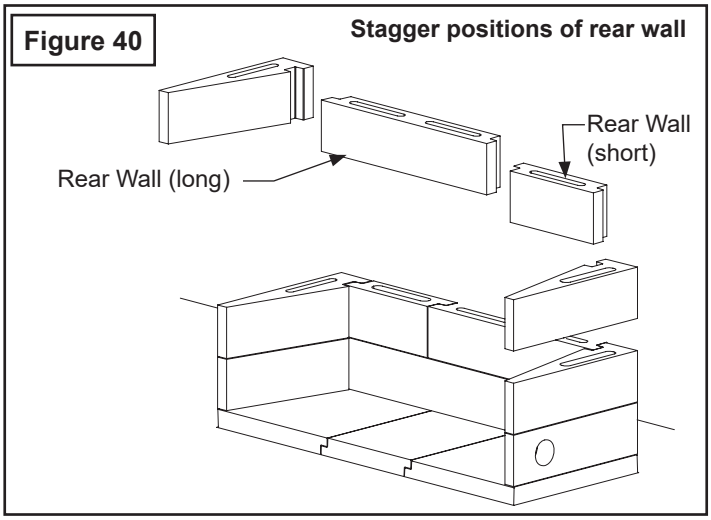
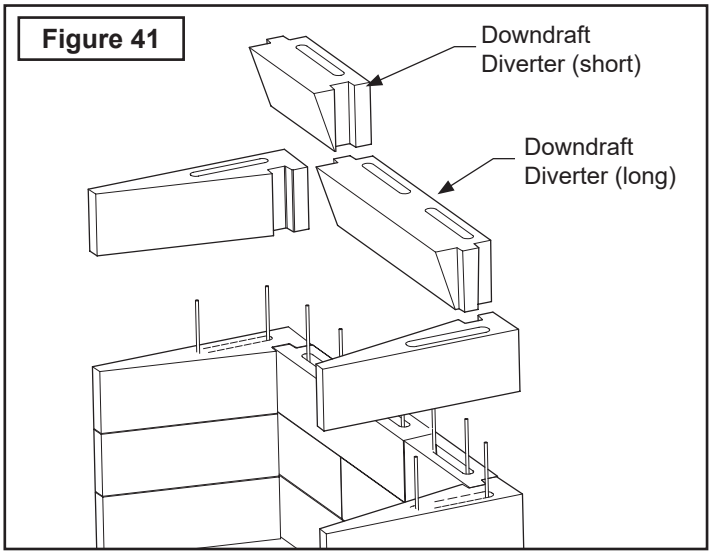


Figure 40



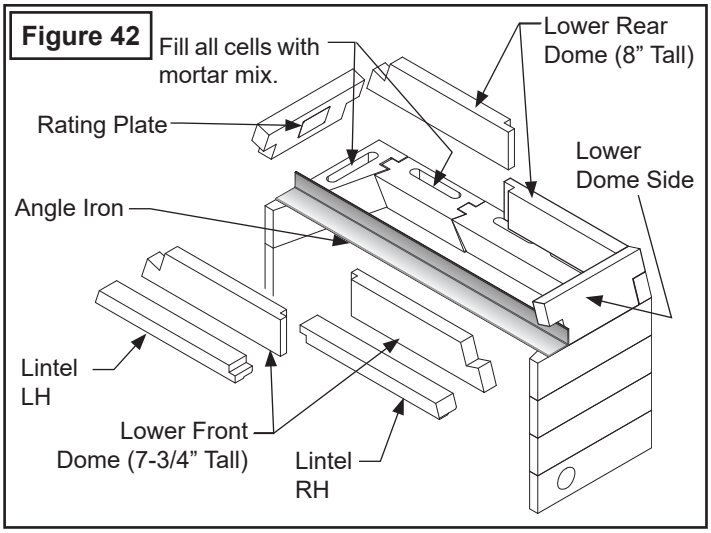
30. After the third row of firebox is complete, install Downdraft Diverter sections (MFP63-4) as shown in ***Figure 41***.

Figure 41



31. After the last side walls are installed, place #3 rebar (8 each, 34 inch long) vertically through the cells, into the holes in the hearth, adjacent to the rebar and/or all-thread sticking up from the hearth and fill all cells with Ready-Mix concrete mix.
32. Set the Lower Rear Dome sections in place (these parts are slightly taller than the Lower Front Dome parts). Set the Angle Iron with the longest side (5”) laying flat above last tier of side wall as shown in ***Figure 42***. Check that all is level. If you need to make adjustments, use shims between the lowest wall component and the top surface of the base plate. Once leveled, fill any resulting gaps with high temperature mortar.

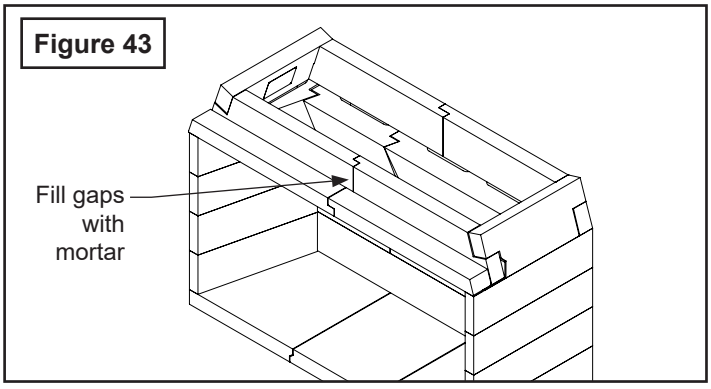
Figure 42



Important: Adjustments can only be made while the high temperature mortar is still wet when correcting for squareness and leveling.

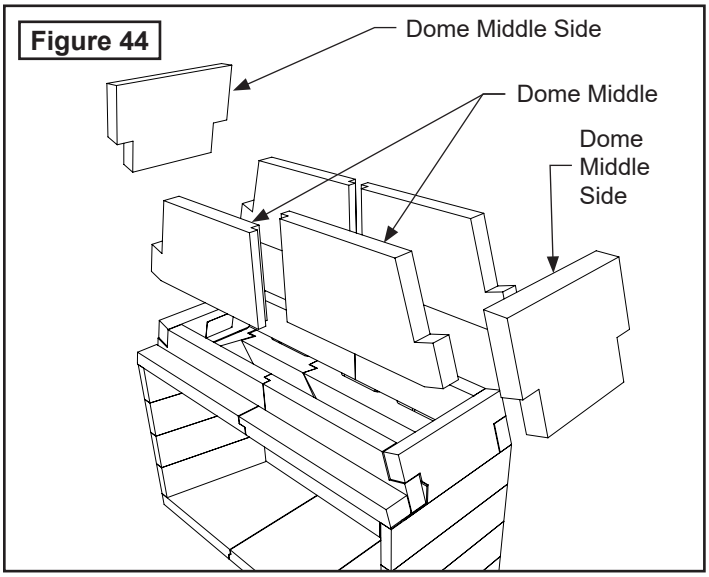
33. Fill all resulting seams with high temperature mortar as shown in ***Figure 43*** The beveled face lines up with the inward angles of the lintel sides.

Figure 43



34. Position Middle Domes so that outer faces are flush to the lower dome. Carefully install Dome Middle Sides as shown in ***Figure 44***, page 26.

Figure 44



35. As you are connecting each MASON-LITE component, be certain you are following the instructions given previously for using MASON-LITE high temperature mortar. Stop to look at the smoke dome side, front and rear walls to see that they are aligning correctly and that the surfaces are smooth and uniform. Make sure connections are covered with an adequate amount of high temperature mortar. Remember that you have the option of using shims but they must be removed and any holes filled. Make any adjustments to the fireplace alignment before continuing to the next step.
36. Assemble Upper Domes and Dome Sides as shown in ***Figure 45***. Check your assembly here. If things are proceeding as they should be, the finished top surface should be flat and level.
37. Finally, set the 3 pc. dome top into position, set middle top portion first then the top side pieces. Be sure that it is flush in every direction as you place it on the crest of the smoke dome wall assembly (see ***Figure 45***).

    Note that the chimney hole on the Dome Top is not centered from front to back - it should be offset closest to the rear of the fireplace (see ***Figure 46***).

Figure 45

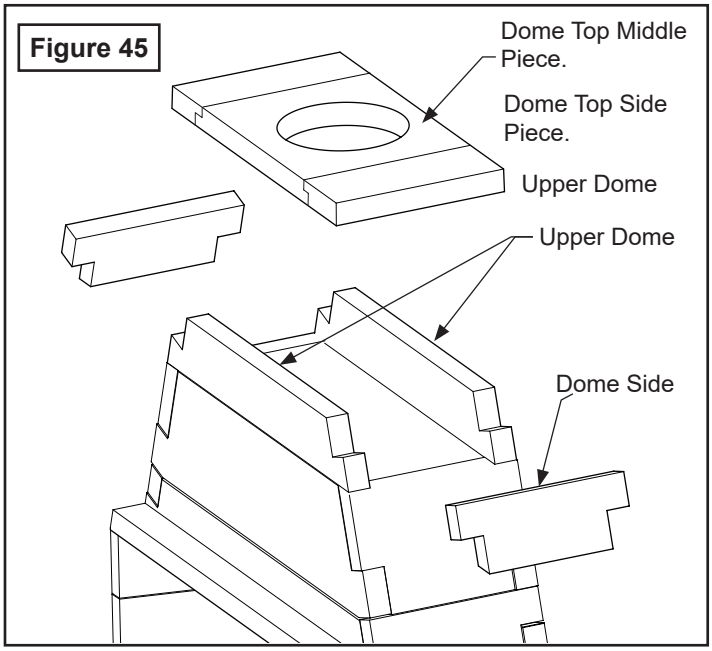
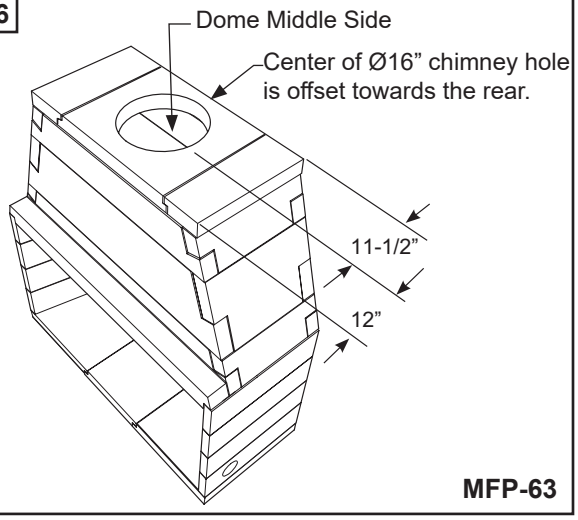


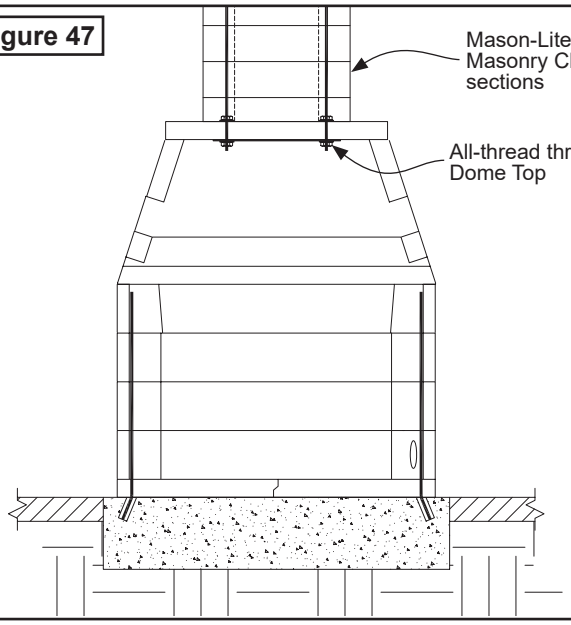
Figure 46



MFP-63

38. Now that you have completed the smoke dome assembly, all the components should stack up for a smooth transition into the flue components. Setting the smoke dome completes the MASON-LITE Firebox and Smoke Dome assembly. You are now ready to begin the installation of the necessary fire brick lining and the flue components. WARNING: DO NOT PACK REQUIRED AIR SPACES WITH INSULATION OR OTHER MATERIALS.
39. For use of Masonry Chimney sections on the Mason-lite fireplaces, please see Masonry Chimney instructions located online at **mason-lite.com**.

Figure 47



Check with local codes for use of Masonry Chimney in your area - restrictions may apply.

INSTALLING DAMPER AND CHIMNEY SYSTEM

All chimney systems must be installed with an integrated Damper System / Anchor Plate installed on or in the fireplace. Installers are cautioned to put the chimney system together exactly as instructed and shown in chimney manufacturer's guide. Any variations may have serious consequences resulting in an accident or malfunction. If instructions are not followed, the warranty on the product will become null and void.

If installing a Damper/Anchor Plate Combination *see steps 1 thru 4.*

Note: Insulation blanket below the Anchor Plate is optional but the high temp silicone is required.

1) Apply a 1/4-inch bead of high temp silicone around the base of the Anchor Plate. You can also use a 1-inch thick ceramic fiber blanket, see ***Figure 48***. Apply the remaining high temp silicone in a 1/4-inch bead on top of the smoke dome. Make sure to cover approximately 1-1/2 inches around the periphery of the chimney hole. Place the damper assembly on top of the unit, pressing the damper into the high temp silicone. Use four 1/4-inch x 1-1/4-inch masonry fasteners to secure the damper assembly in place.

Figure 48

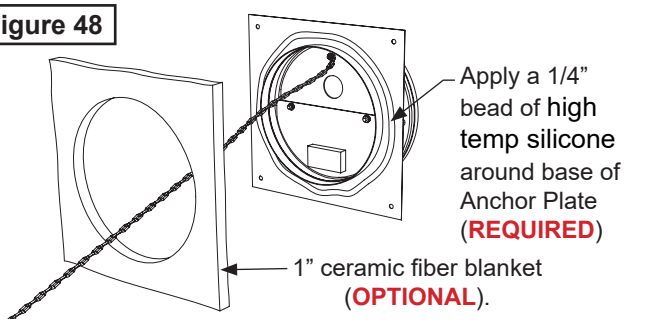
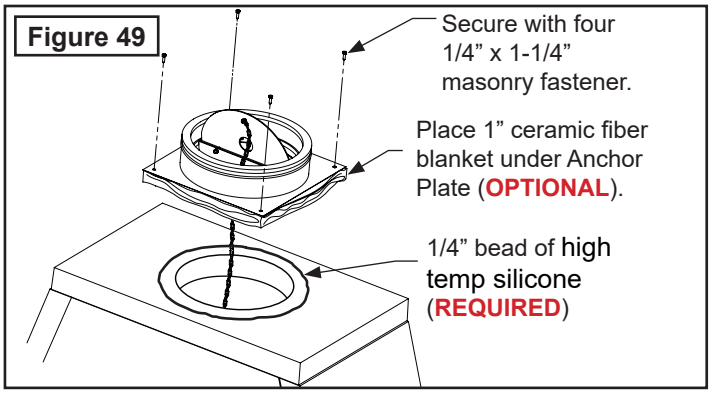


Figure 49



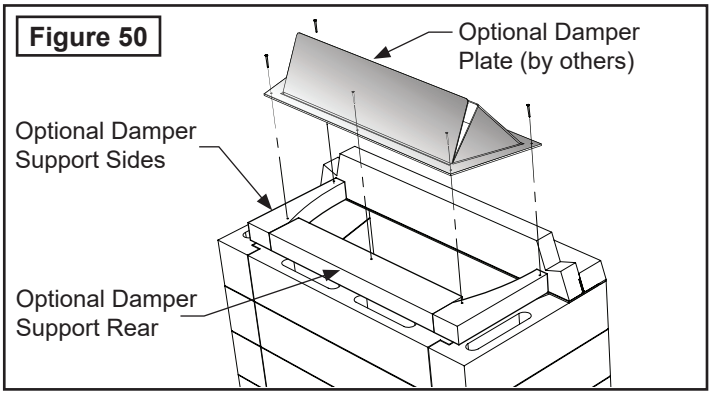
2) Place chimney adapter onto top of damper plate and center in opening using gasket supplied with adapter.

3) Attach adapter with screws supplied by carefully drilling holes into damper plate.

4) Attach damper chain stop on center rear of lintel 3" (three inch) vertical from opening using (3) #8 cement fasteners.

5) If installing a Damper Plate only as shown in ***Figure 50*** (not supplied), refer to accompanying instructions and use an Optional Damper Support Kit obtainable from MFI. **An Anchor Plate will still be required for metal flue connection. If using Masonry Chimney consult your local codes**.

Figure 50



Attention: Clearance to combustible construction cannot be reduced during course of construction. For the safe operation of the finished fireplace, these clearances must be followed when building the framework for the chimney system.

Note that the most important aspect of the installation is maintaining the minimum required clearances to combustible materials according to the chimney pipe manufacturer's recommendations, otherwise a potential fire hazard may occur.

⚠ WARNING

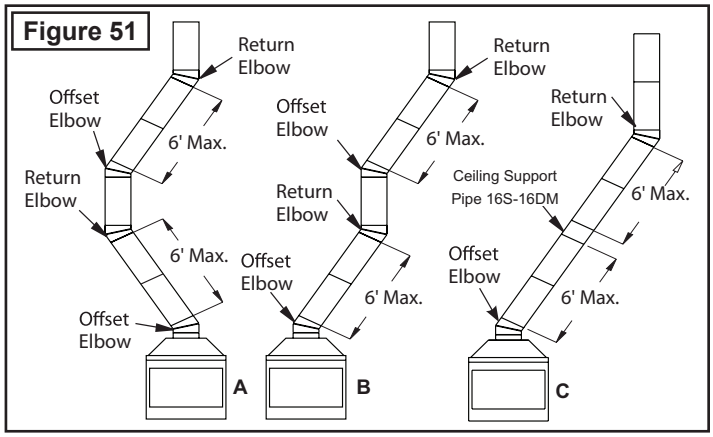
Do not interchange chimney manufacturer's parts with any other parts except those specifically required by the chimney manufacturer's recommendations otherwise a potential hazardous condition may be created.

ATTENTION: When choosing a Chimney System it must meet the following requirements:

- Designed for installation in accordance with the National Fire Protection Standard and UL 103.
- Meets the requirements of NFPA 211.
- Designed in accordance with ICC Codes.

Assuming you have sections of vertical pipe that are more than 10' (ten feet) measuring between elbows, you must insert – at midpoint – a chimney stabilizer. When installing the stabilizer, pull out the support straps with a good amount of tension and hammer to the frame.

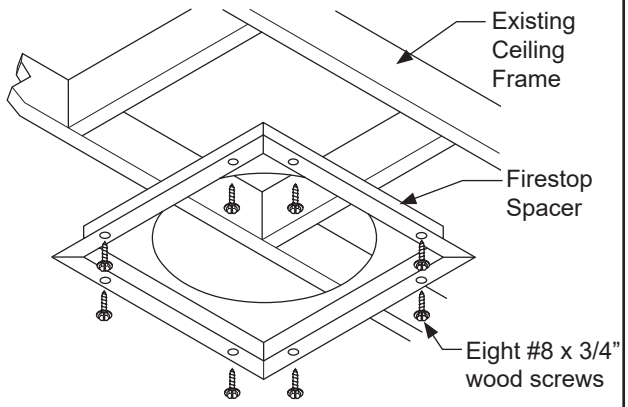
Figure 51



INSTALLING FIRESTOP RADIATION SHIELD

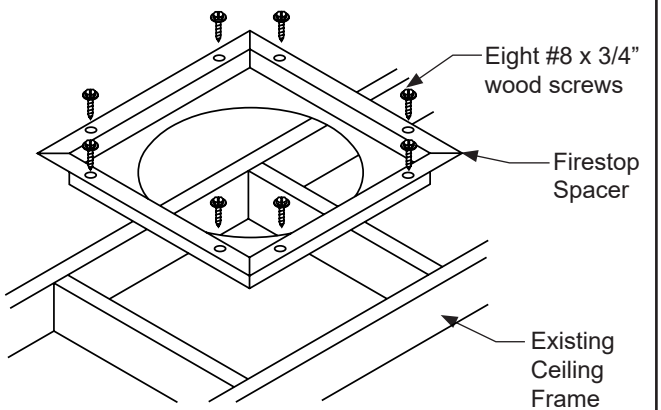
A Firestop Radiation Shield is required in multi-story installations at each floor penetration above that where the Support Box is located (***Figure 52***).

Figure 52 Firestop Spacer with Living Space Above Ceiling



Firestop Radiation Shields also provide complete separation from one floor space to another or attic space as required by most codes. When the double wall pipe passes through a framed opening into an attic space, the Firestop must be placed into an attic floor as shown in ***Figure 53***.

Figure 53 Firestop Spacer with Attic Space Above Ceiling



Follow your chimney manufacturer's instructions on specific guidelines pertaining to their chimney and Firestop Radiation Shield installation instructions.

INSTALLING OUTSIDE AIR

The Mason-Lite Fireplace needs enough replacement air to function properly and some local building codes may require outside combustion air to be provided. If no replacement air is provided, improper flue drafting may occur, creating negative pressure whereby smoke may enter the home, especially in homes that are very well insulated and tightly sealed. Check local building codes for specific requirements. ***Note:*** Always refer to the specific installation intructions provided with your air kit for detailed steps and safety precautions.

Install Combustion Air Kit MFP4-AK-M into the MASON-LITE Firebox through the side wall opening. A 4" dia. hole will also be required through the firebrick side lining. The tubing that goes out of the firebox wall must feed into a flexible metal conduit as the source for outside combustible air. When installing an air kit, the ducting can be run upwards through framing and ceiling joists with the hood installed through an outside wall. Ducting can also be run downwards through floor joists and under the home to a ventilated crawl-space that is not considered part of the living area of the home.

Be sure that you carefully check the source of the outside air before you choose the site for your air intake. You don't want a place where snow will collect, where bushes or trees will be growing or a location that is too close to any other structure.

Install a screened termination cap to keep out small animals.

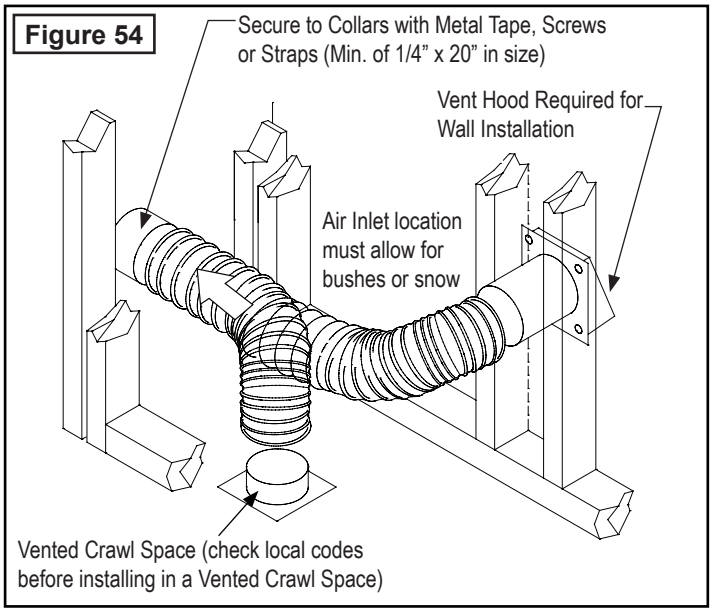
The installation of an outside air kit should be performed during the rough framing of the fireplace due to the nature of it's location.

⚠ WARNING

Combustion air inlet ducts shall not terminate in attic space.

The maximum height for the air vent cannot exceed 3 feet below the flue gas outlet of the termination.

Figure 54



IHP CHIMNEY PIPE

Install only listed UL 103 Class A Chimney or IHP 12 DM Chimney.
Chimney maximum height: 40 feet
Chimney minimum height: 14 feet (with offset = 17 feet) 2 offsets maximum.

Important: Follow the chimney pipe manufacturer's instructions on the installation of their specific flue system.

NOTICE

When installed in Canada, the Mason-lite needs to use ULC S-604 and ULC-610 listed chimney (Only Canadian approved chimney)

⚠ WARNING

Label part number 900599-01 must be applied by the installer to all chimney pipe sections but is not required on sections that will be visible after the installation is complete. Label must wrap around the circumference of the pipe.

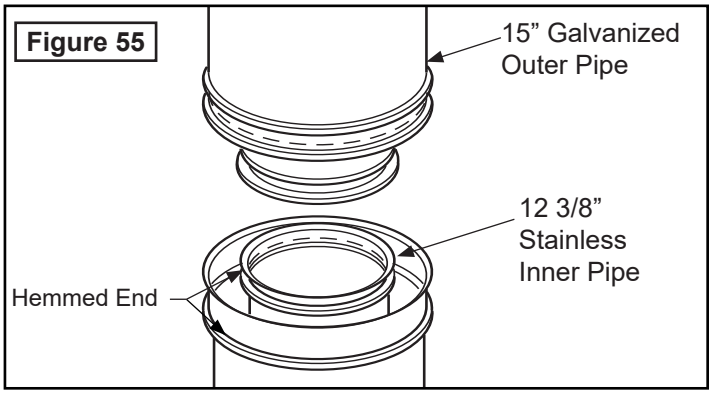
The IHP chimney system consists of 12”, 18”, 24”, 36” and 48” snap-lock, double-wall pipe segments, planned for maximum adaptability to individual site requirements. Actual lengths gained after fitting overlaps must be taken into consideration (lineal gain) and are given in the lineal gain chart (see ***Figure 55***). Lineal Gain is the actual measurable length of a part after two or more parts are connected. For Canada, use chimney parts designated “HT”.

⚠ WARNING

The opening in the collar around the chimney at the top of the fireplace must not be obstructed. Never use blown insulation to fill the chimney enclosure.

LINEAL GAIN		
PART NO.	**DESCRIPTION**	**GAIN**
Mason-Lite	Fireplace	66-1/2”
12-12DM	Pipe Section	10-5/8”
12-12HT		
18-12DM	Pipe Section	16-5/8”
18-12HT		
24-12DM	Pipe Section	23-5/8”
24-12HT		
36-12DM	Pipe Section	34-5/8”
36-12HT		
48-12DM	Pipe Section	46-5/8”
48-12HT		
RLT-12D	Round Termination	7-3/4”
RLT-12HT		
STL-12D	Square Chase-Top with Slip Section	7” to 15” *
* The lineal gain for the terminations is measured to the flue gas outlet height.		

Figure 55



ASSEMBLY AND INSTALLATION OF DOUBLE WALL CHIMNEY SYSTEM

Each double wall chimney section consists of a galvanized outer pipe, a stainless steel inner flue pipe and a wire spacer. The pipe sections must be assembled independently as the chimney is installed. When connecting chimney directly to the fireplace, the inner flue pipe section must be installed first with the lanced side up. The outer pipe section can then be installed over the flue pipe section with the hemmed end up. Press down on each pipe section until the lances securely engage the hem on the fireplace starter. The wire will assure the proper spacing between the inner and outer pipe sections. Continue to assemble chimney sections as outlined above, making sure that both the inner and outer pipe sections are locked together. When installing double wall snap-lock chimney together, it is important to assure the joint between the chimney sections is locked. Check by pulling chimney upward after locking. The chimney will not come apart if properly locked. It is not necessary to add screws to keep the chimney together.

The height of a vertical chimney pipe supported ONLY by the fireplace, must not exceeed 20 feet. Chimney heights above 20 feet must be supported.

ADDING A GAS PIPE

You may elect to add a vented decorative gas appliance (gas log) to your Mason-Lite Fireplace. If so, follow the installation instructions from the Decorative Gas Appliance manufacturer. Familiarize yourself with requirements for installation as outlined by the National Fuel Gas Code, ANSI Z223.1. This gas pipe provision should only be used on a decorative gas appliance.

You can route the gas piping practically anywhere in the firebox – the floor, back wall or side walls. You will just need a masonry drill; the instructions from the gas appliance manufacturer will be very straightforward.

Fill in the holes you have drilled around the gas piping with the regular MASON-LITE high temperature mortar.

Follow the Gas Log manufacturer’s instructions.

ADDING ELECTRICAL CONNECTIONS

Like the gas line, electrical feed lines can be run through the floor, back wall, or side walls. Follow local building and electrical code requirements.

FIREPLACE GRATES AND SCREENS

⚠ WARNING

RISK OF FIRE! Do not operate your fireplace without grate and fire screens. The grate and fire screens have been designed to keep the operation of your fireplace safe and efficient.

To complete your fireplace installation, a fireplace grate will be required for safe operation. The fireplace grate can be obtained from MFI or if choosing an alternate, it must be sized to 50% of the hearth maximum. Additionally. a fireplace screen must be installed for safety.

When ordering, please refer to the parts lists in the beginning of this manual.

PUREBURN GAS BURNER

THESE GRATES ARE ONLY TESTED AND APPROVED FOR USE IN MASON-LITE FIREPLACES

PureBurn Gas Burner Model		Used in MFP Fireplace:
Natural Gas	Propane Gas	
QWBN-33	QWBP-33	MFP-33
QWBN-39	QWBP-39	MFP-39
QWBN-44	QWBP-44	MFP-44
QWBN-49	QWBP-49	MFP-49
QWBN-63	QWBP-63	MFP-63

When our Pureburn EPA Qualified burner is in use and glass doors are installed, the glass doors must remain in the fully opened position during operation.

MASON-LITE FIREBRICK LINERS

⚠ WARNING

DO NOT OPERATE FIREPLACE WITHOUT FIREBRICK LINING. Doing so will void all warranties and may cause a hazardous condition.

- Custom Firebrick Lining is not supplied by Masonry Fireplace Industries (MFI). There is, however, the option of Modular Prefabricated Panels that can be obtained from MFI. See accessories, page 34 for details.
- If Custom Firebrick Lining is desired, it is required that the brick be at least 1-1/8” inch thick and must be rated ASTM-C1261. Important: Allow at least 1/4 inch clearance around firebrick hearth to allow for heat expansion otherwise your firebrick may crack (see ***Figure 56***).
- The pattern for the firebrick lining is exclusively your choice. Before you install the lining, remember to consider any holes your contractor may need to drill for gas, electrical or combustion air kit access holes.
- Please use a certified mason to lay-in the brick. He will follow the proper instructions from the fireplace liner manufacturer and also understand the type of adhesive or cement he is to use.
- Make sure the fireplace is installed with the finished firebrick floor of the fireplace so that it is at least 11” (eleven inches) above the combustible floor system.
- Disclaimer: Masonry Fireplace Industries wishes to express that as the manufacturer of Mason-Lite Fireplaces, they cannot take any liability or responsibility for the way the firebrick or the firebrick mortar performs. It is not unusual in the course of the life of the firebrick, or the firebrick mortar, for heat stress cracks to appear. MFI cannot be responsible for this and other wear and tear to the firebrick and high temperature mortar.

Hand laying firebrick and Joints.

When hand laying firebrick, it is essential to have a grout joint. The joints allow for thermal expansion and contraction, which is crucial given the high temperatures that firebricks are exposed to. Ensuring that the width of the joints is between 1/8" and 1/4" is essential for the structural integrity and performance of the firebrick installation (see ***Figure 56A***, page 31). This range allows for adequate space for the bricks to expand without causing stress or cracking, while also ensuring that the bricks are properly secured within the high temperature mortar.

Always follow the manufacturer’s specifications and best practices for the specific type of firebrick you’re working with to achieve the best results.

Figure 56

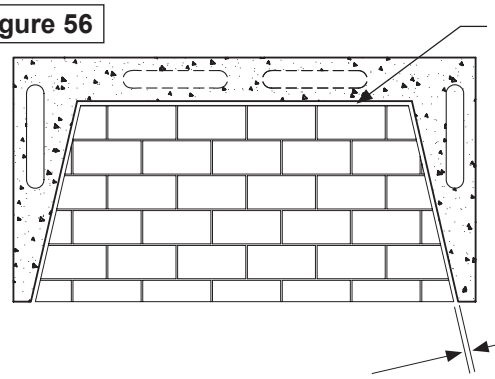


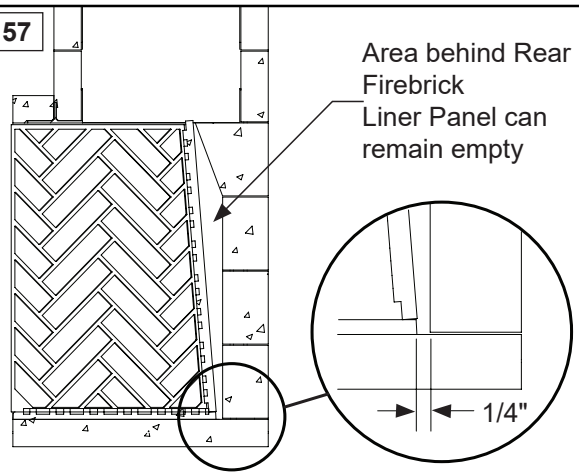
Figure 56A

When hand laying fire-brick, the joints should be between 1/8" min. and 1/4" max.

⚠ WARNING

Do not use water to put your fire out unless in case of an emergency. This could cause damage to unit and will not be covered by warranty.

Figure 57



Modular Firebrick Lining

If using our Mason-Lite Firebrick Liners, use the extra high temperature mortar we supply. Install Hearth Liner first.

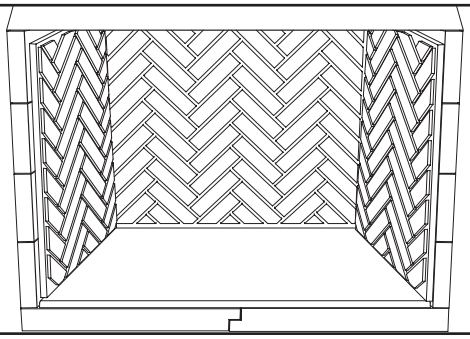
IMPORTANT: Maintain 1/4 inch clearance around hearth to allow for heat expansion. Failure to do so may cause cracks in your firebrick hearth!

Next, install the rear and sides last. Consider if brackets for grates will be required also if pre-drilling is required for gaslines, electrical or if the outside combustion air kit is to be installed. The rear Liner Panel is straight from the bottom to the top front edge of the Downdraft Diverter edge. The space behind does not have to be filled (***Figure 57***).

The following Firebrick Patterns are available from MFI:

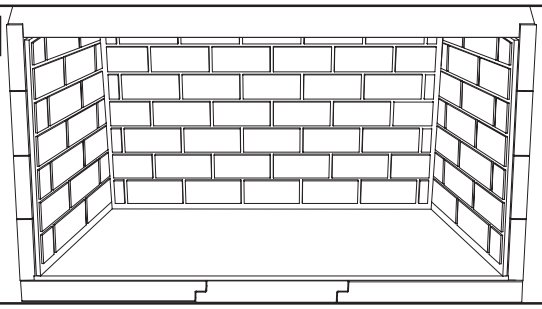
MFP(XX)SHBL- Herring Bone

Figure 58



MFP(XX)FRBL- Running Bond

Figure 59



FIREPLACE FINISHES & COMBUSTIBLE TRIM CLEARANCES

Hearth Material & Dimensions – Strict codes control the types of materials that you can select for your Mason-Lite Fireplace's hearth as well as the hearth's length and width. All hearth extensions must be made of code-rated, noncombustible materials such as tile, brick, concrete or stone.

As with any radiant heat fireplace, all MASON-LITE Fireplaces must comply with building code safety clearances, per units that have openings of 6 sq. ft. (six square feet) or greater. For Mantel clearances see ***Figure 11***, page 14. Walls that Adjoin – Safety codes and all practical outlooks insist that your fireplace cannot be installed closer than 2 ft. (two feet) to any walls in the room the fireplace is housed in or to any walls of adjoining rooms.

Caution in Regards to Combustibles – If any part of the fireplace or objects in the room (curtains, rugs, paint, cushions, etc.) start to show warping or discoloration due to heat from the fireplace, it is time to take immediate action. Do not use the fireplace until you have figured out how to address the problem. You are facing a potential fire hazard. MFI cannot be responsible for the make-up of material on the exterior of the fireplace you have chosen, nor can MFI be held responsible for the materials in a room that may be responding negatively to heat. However, in almost all cases, there is a solution to the problem, either by making adjustments to airflow or the modifications to the room itself.

MASON-LITE OWNER'S OPERATION & PRECAUTIONS

Installers of the Mason-Lite are urged to leave the owner's manual with the unit after installation is complete.

⚠ WARNING

Do not attempt to operate your fireplace without a fire safety screen installed.

⚠ CAUTION

The manufacturer cautions against using chemical chimney cleaners. Never use charcoal or coal in the fireplace under any circumstances.

WOOD BURNING INSTRUCTIONS FOR START UP AND USE

VERY IMPORTANT: **NOT FOLLOWING THESE INSTRUCTIONS COMPLETELY WILL VOID YOUR WARRANTY.**

Unit must have 28 days to cure fully before first use. Start Up procedure must be followed to insure the unit functions properly and is fully ready for standard use.

Start Up Procedure is as follows:

First Lighting - After construction is completed, all elements of the fireplace and chimney system must be completely dry. This means that the unit must stand **without** any firing for a **minimum of 28 days**.

The first fire **must** be small and well-controlled, started with a small amount of kindling. Add no more than eight pounds of wood, preferably small logs not more than 3" (three inches) in diameter. **Do not** let the fire burn for more than one hour.

Second Lighting - Start the fire slowly and gradually as you did with the first lighting, but this time you can burn up to ten pounds of firewood, probably four to five logs that are 3" (three inches) in diameter. With the second lighting you can let the fire burn two hours - **no more**.
Firebox hearth must be kept dry, no rain, snow or any moisture can accumulate inside the fire chamber. Burning fire without going through the start up process will be dangerous to you and the fireplace. Damage due to moisture accumulation is not covered under the warranty.

After **First and Second Lighting -** When the fireplace has been properly cured with 1st and 2nd lighting, you will be able to add a full fuel load to the MASON-LITE which is about 10 to 15 pounds of firewood at any given time. Over firing the fireplace will void warranty and could damage the fireplace, personal injury or property damage may occur.
Type of wood you cannot burn in a mason-lite fireplace.

- Any type of construction lumber (2 x 4's, plywood or any processed wood)
- Duraflame or any manufactured logs.

Always ensure your fireplace is attended when in use. A fire screen and grate are essential for safe operation.

Don't "over burn" - The Mason-Lite Fireplace enhances your home's ambiance, but it's important to avoid excessive burning. Establishing a habit of "over burning" can cause irreversible damage to your fireplace. It's imperative to refrain from burning household waste such as chemicals, combustibles, cardboard, office paper, scrap wood, or yard debris, especially pine, in your fireplace.

*Included as trash are plastics, gasoline, rubber, industrial solvents, flammable liquids, naptha, household garbage, material treated with petroleum products (particleboard, railroad ties and pressure treated wood), leaves, paper products, cardboard, saltwater driftwood, painted wood or any substance that emits dense smoke or an obnoxious odor.

⚠ WARNING

Burning of above mentioned materials will cause an unsafe condition and will void your warranty.

WOOD SELECTION

Selecting the right type of wood for burning is indeed crucial for achieving the desired fire characteristics and efficiency. Here's a simplified guide to help you choose:

Hardwoods

Best for: Long-lasting fires with steady heat and a beautiful bed of coals.

Examples: Oak, Maple, Birch, Ash.

Characteristics: Dense, slow to burn, higher heat value.

Softwoods

Best for: Quick, hot fires to warm up on damp, chilly mornings.

Examples: Pine, Fir, Cedar.

Characteristics: Light, fast-burning, lower heat value.

Aromatic Woods

Best for: Adding a pleasant fragrance to the fire.

Examples: Hickory, Apple, Cherry, Beech.

Characteristics: Produce a nice aroma.

Seasoning Wood: It's essential to use wood that has been properly seasoned, which means it has been dried for about a year. Seasoned wood burns more efficiently, produces more heat, and generates less creosote, which can build up in chimneys and become a fire hazard.

Remember, the key to a good fire is not just the wood type but also ensuring it's well-seasoned.

STARTING A FIRE AND BASIC OPERATION

IMPORTANT: **DO NOT BURN A FIRE WITHOUT FIREBRICK LINER.** (see Page 30 for details)

Before starting a fire in your fireplace, open the damper to its' fully open position. Crumple some paper and place it on the log grate. Use some soft, dry wood as kindling and put it on top of the paper. Place some small logs or split logs atop the paper and kindling. Top your fuel load with a couple of hardwood logs or split logs (Oak or Hickory). Make sure you stack the logs so they fall inside the grate as they burn.

Note: To get the most out of your wood, it is recommended that you let it set and completely dry out for nine months to a year.

When you are satisfied with the arrangement of your wood load, light the paper which in turn will ignite the kindling, then the softer wood and finally, the harder wood logs. As the fire burns, you can carefully lay additional logs on the flame, but make sure you place them gently without forcing them into the opening.

ANNUAL FIREPLACE MAINTENANCE

Your fireplace and chimney require seasonal and monthly maintenance. It is recommended that inspection of the fireplace and chimney take place on a monthly basis during the heating season. Start at the top, looking for birds' nests, leaves or any other obstructions. Also check the spark arrestor, for creosote or soot build-up.

A Professional Chimney Sweep may be hired to clean the firebox and chimney at least twice a year. If doing it yourself, use a plastic, wood or steel brush for the inside of the chimney.

For the spark arrestor, scrub with a wire brush. To dismantle the chimney cap for cleaning of the flue, unscrew the four screws that hold it in place. For cleaning access from below, open the damper in the firebox. It is best to use a flexible handle chimney cleaning brush made especially for the job.

If your fireplace system has any offset chimney sections, start cleaning with the flexible brush from the top of the section downward to the elbow. Then clean from the firebox up to the offset/return section. Make sure to cover the floor of the fireplace and out to the hearth with a damp sheet that has been taped securely in place. When all the soot has settled, remove the sheet and vacuum up. Don't sweep the excess soot!

Never use any chemical cleaners when cleaning the chimney system since their residue may cause a fire hazard. During heating season as you conduct your monthly inspection of the firebox and chimney, be sure to also check the outside of the chimney, metal flashing and weather seals that surround it. If you find any cracks or openings around screws or nails, seal them to avoid any roof or chimney chase leaks.

SURFACE CRACKS

Mason-Lite fireplaces are manufactured using high quality materials. During the drying process though, surface cracking may occur. These small cracks (under 1/16" will not affect the fireplace safety or performance). During the assembly process, fill surface cracks with thin-set high temperature mortar and brush when drying for a smooth surface finish.

REMOVAL OF CREOSOTE AND SOOT FORMATION

Creosote vapors are known to form in the relatively cool chimney flues of slow burning fires, hence, creosote residue collects on the flue lining.

Because of soot and creosote build-up, it is recommended that the fireplace and chimney cleaning be done twice a year. In colder climates, cleaning should be done more often.

Before performing maintenace on your fireplace make sure you shut off gas and electrical connections and allow the fireplace to cool completely.

Use only solid fuel in your fireplace. You may use a natural or LP gas log lighter as a method to start your wood fire.

The Chimney Damper must be in the OPEN position whenever there is heat in the fireplace.

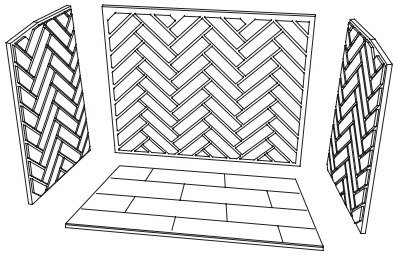
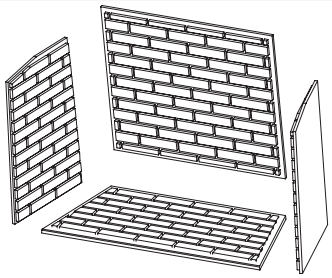
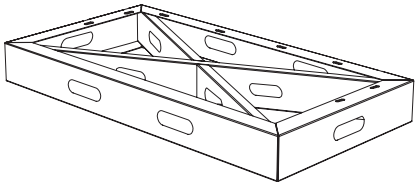
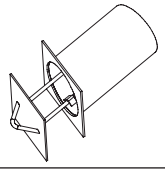
CUSTOMER SERVICE & PARTS REPLACEMENT

Parts and accessories may be purchased from your local dealer. Additional information is available from Masonry Fireplace Industries, Inc.

Accessory orders will be accepted by mail, or you may call your order in Monday through Friday from 7:00 a.m. to 3:00 p.m. (Pacific Standard Time) at: (800)-345-7078.

AVAILABLE ACCESSORIES

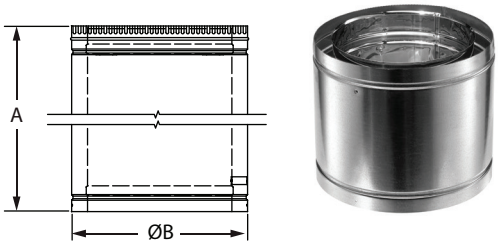
Use only parts supplied from the manufacturer. Normally, all parts should be ordered through your MFI distributor or dealer.

MODEL	DESCRIPTION	
Refractory Firebrick Liners (Herringbone Pattern)		
MFP33SHBL	Brick Panels, Herringbone for 33" Fp	
MFP39SHBL	Brick Panels, Herringbone for 39" Fp	
MFP44SHBL	Brick Panels, Herringbone for 44" Fp	
MFP49SHBL	Brick Panels, Herringbone for 49" Fp	
MFP63SHBL	Brick Panels, Herringbone for 63" Fp	
Refractory Firebrick Liners (Running Bond Pattern)		
MFP33FRBL	Brick Panels, Stacked for 33" Fp	
MFP39FRBL	Brick Panels, Stacked for 39" Fp	
MFP44FRBL	Brick Panels, Stacked for 44" Fp	
MFP49FRBL	Brick Panels, Stacked for 49" Fp	
MFP63FRBL	Brick Panels, Stacked for 63" Fp	
Arch Kit		
MFP-ARC	Masonry Arch - Fits up to MM49	
Metal Base Kit (**Includes:** Metal Base, Cement Board, Insulation Blanket & Hardware)		
MFPB33	6" Structural Metal Base Kit	
MFPB39	6" Structural Metal Base Kit	
MFPB44	6" Structural Metal Base Kit	
MFPB49	6" Structural Metal Base Kit	
MFPB63	8" Structural Metal Base Kit	
High Temperature Dry Mortar Mix		
MFP530	50 lbs Bucket Dry Mortar	
MFP530-L	55 lbs Bucket Dry Mortar	
Damper/Anchor Plate Kit		**(Not Shown)**
MFP12-AP	Damper/Anchor Plate Kit for 12” IHP Chimney Systems	
Optional Outside Ø4” Combustion Air Kit		
MFP4-AK-M	Outside Ø4” Combustion Air Kit	

AVAILABLE ACCESSORIES *Continued*

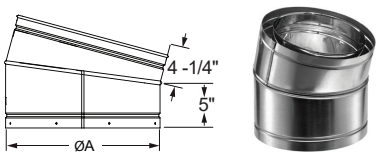
DuraChimney II pipe is available in 12“, 18”, 36”, and 48“ lengths. To calculate the installed length of DuraChimney II pipe, subtract 1” from each length of chimney pipe.

Model	A	B	
12DCA-12	12"	15"	
12DCA-18	18"	15"	
12DCA-36	36"	15"	
12DCA-48	48"	15"	
14DCA-12	12"	17"	
14DCA-18	18"	17"	
14DCA-36	36"	17"	
14DCA-48	48"	17"	
16DCA-12	12"	19"	
16DCA-18	18"	19"	
16DCA-36	36"	19"	
16DCA-48	48"	19"	



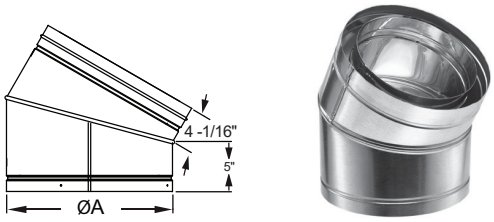
15° Elbow - Use elbows to offset obstructions such as rafters, ridgepoles, or joists. Offsets greater than 30° are not allowed. Elbows are not adjustable.

12DCA-E15	15"		
14DCA-E15	17"		
16DCA-E15	19"		



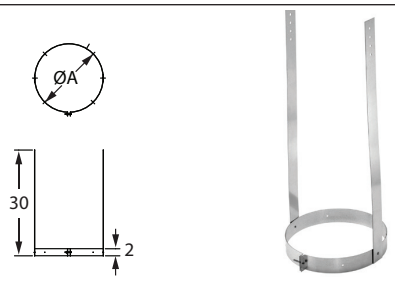
30° Elbow - Use elbows to offset obstructions such as rafters, ridgepoles, or joists. Offsets greater than 30° are not allowed. Elbows are not adjustable.

12DCA-E30	15"		
14DCA-E30	17"		
16DCA-E30	19"		



Elbow Strap - Use between two elbows to support the weight of the chimney.

12DCA-ES	15-3/8"		
14DCA-ES	17-3/8"		
16DCA-ES	19-3/8"		



Wall Strap - Use to support and to stabilize the chimney in interior or exterior installations to ensure a 2” clearance. Wall Straps are required every 8’ on exterior of the building only.

12DCA-WS	15-3/8"	18-1/8"	
14DCA-WS	17-3/8"	20-3/8"	
16DCA-WS	19-3/8"	22-1/16"	

AVAILABLE ACCESSORIES *Continued*

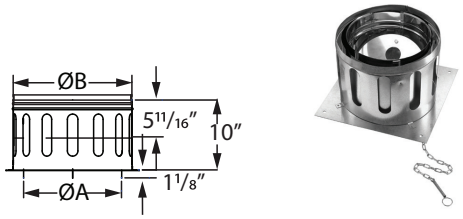
Stabilizer - Use to hold DuraChimney II in place. Use inside chase enclosures to stabilize the chimney. Refer to the fireplace manufacturer for additional requirements on the use of Stabilizer..

Model	A	B	
12DCA-ST	15-3/8"		
14DCA-ST	17-3/8"		
16DCA-ST	19-3/8"		

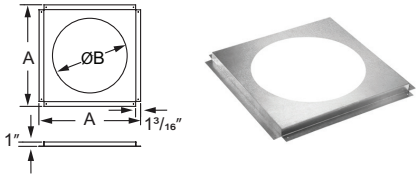
Anchor Plate - Use as a starter section for DuraChimney II. Bolts directly to the fireplace outlet.

12DCA-AP	12"	15"	
14DCA-AP	14"	17"	
16DCA-AP	16"	19"	

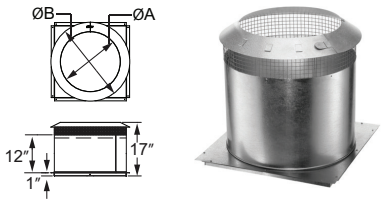
Anchor Plate with Damper - Use as a starter section for DuraChimney II. Bolts directly to the fireplace outlet. Damper section allows the chimney to be closed when the fireplace is not in use. Includes chain and lintel hook.

12DCA-APD	12"	15"	
14DCA-APD	14"	17"	
16DCA-APD	16"	19"	

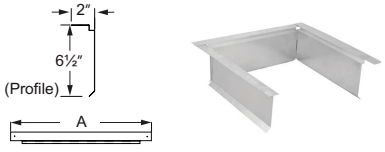
Firestop - Use in ceiling/floor penetrations above fireplace. A Firestop is not required when passing through the roof. Fits on the underside of ceiling.

12DCA-FS	21-5/8"	15-3/8"	
14DCA-FS	23-5/8"	17-3/8"	
16DCA-FS	25-5/8"	19-3/8"	

Attic Insulation Shield - Use in all installations that pass through an attic to prevent insulation and debris from accumulating near the chimney, unless the chimney is enclosed through attic. Consists of two parts – a collar and a base.

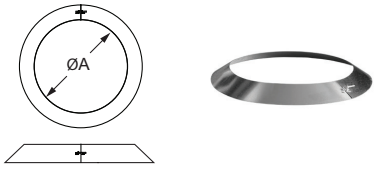
12DCA-IS	15"	19"	
14DCA-IS	17"	19"	
16DCA-IS	19"	29"	

Roof Radiation Shield - Required at the top of chase enclosure or where the chimney passes through the roof. A Roof Radiation Shield is not required if the chimney is unenclosed in the attic. Four plates (included) make up one shield. Three of the four plates shown for clarity.

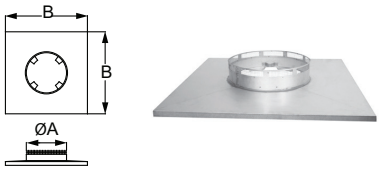
12DCA-RRS	22"		
14DCA-RRS	24"		
16DCA-RRS	26"		

AVAILABLE ACCESSORIES *Continued*

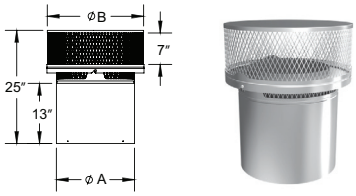
Storm Collar - Use to help prevent rain from entering the chase. Use with a flashing and a Chimney Cap.

Model	A	B	
12DCA-SC	15"	15"	
14DCA-SC	17"	15"	
16DCA-SC	19"	15"	

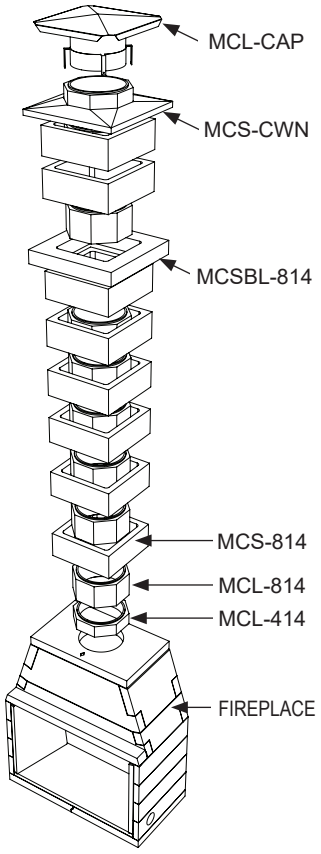
Chase Top Flashing - Encloses the top of a chase while providing a ventilation air passage to the chase. Includes spacer clips.

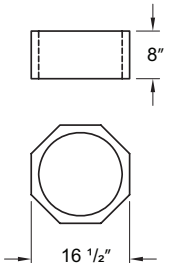
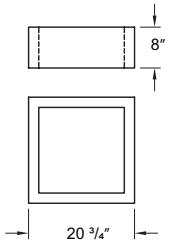
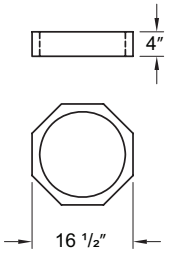
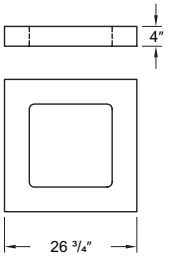
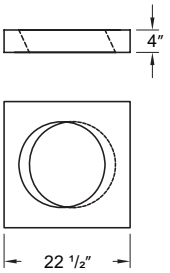
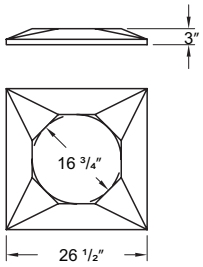
12DCA-CTF	18"	36"	
14DCA-CTF	20"	38"	
16DCA-CTF	22"	40"	

Chimney Cap - Use to terminate the chimney system. Required on all installations to allow for chimney height adjustment. Includes a Spark Arrestor.

12DCA-VC1	15"	21"	
14DCA-VC1	17"	21"	
16DCA-VC1	19"	23"	

AVAILABLE ACCESSORIES *Continued*

Mason-Lite Masonry Chimney System Kits		
MCLS-814K	12 Inner and Outer Flue Pieces (8’ Total)	
MCLS-814P	6 Inner and Outer Flue Pieces (4’ Total)	

Mason-Lite Masonry Chimney Individual Components					
MCL-814	MCS-814	MCL-414	MCSBL-814	MCSOS-814	MCS-CWN
					

MC14-AP	MCL-CAP	MCL-CAP-SS	MCL-CAP-C		
Not Shown	**Not Shown**	**Not Shown**	**Not Shown**		

Appendix I

For installations regulated by the International Residential Code, the support foundation for the fireplace installed on concrete shall consist of a minimum of 6 inches thick reinforced concrete slab. The minimum specified compressive strength of f'_c, shall be as required in Table R402.2 of the International Residential Code (IRC). Concrete subject to moderate or severe weathering as indicated in Figure R301.2(3) of the International Residential Code (IRC) shall be air entrained as specified in Table R402.2 of the International Residential Code (IRC). The maximum weight of fly ash, other pozzolans, silica fume, slag or blended cements that is included in concrete mixtures for garage floor slabs and for exterior porches, carport slabs and steps that will be exposed to deicing chemicals shall not exceed the percentages of the total weight of cementitious materials specified in Section 4.2.3 of ACI 318. Materials used to produce concrete and testing thereof shall comply with the applicable standards listed in Chapter 3 of ACI 318.

For installations regulated by the International Building Code (IBC), the support foundation for the fireplace installed on concrete shall consist of a minimum of 6 inches thick reinforced concrete slab. The concrete strength and durability shall comply with Sections 1903, 1904 and 1905 of the International Building Code (IBC).

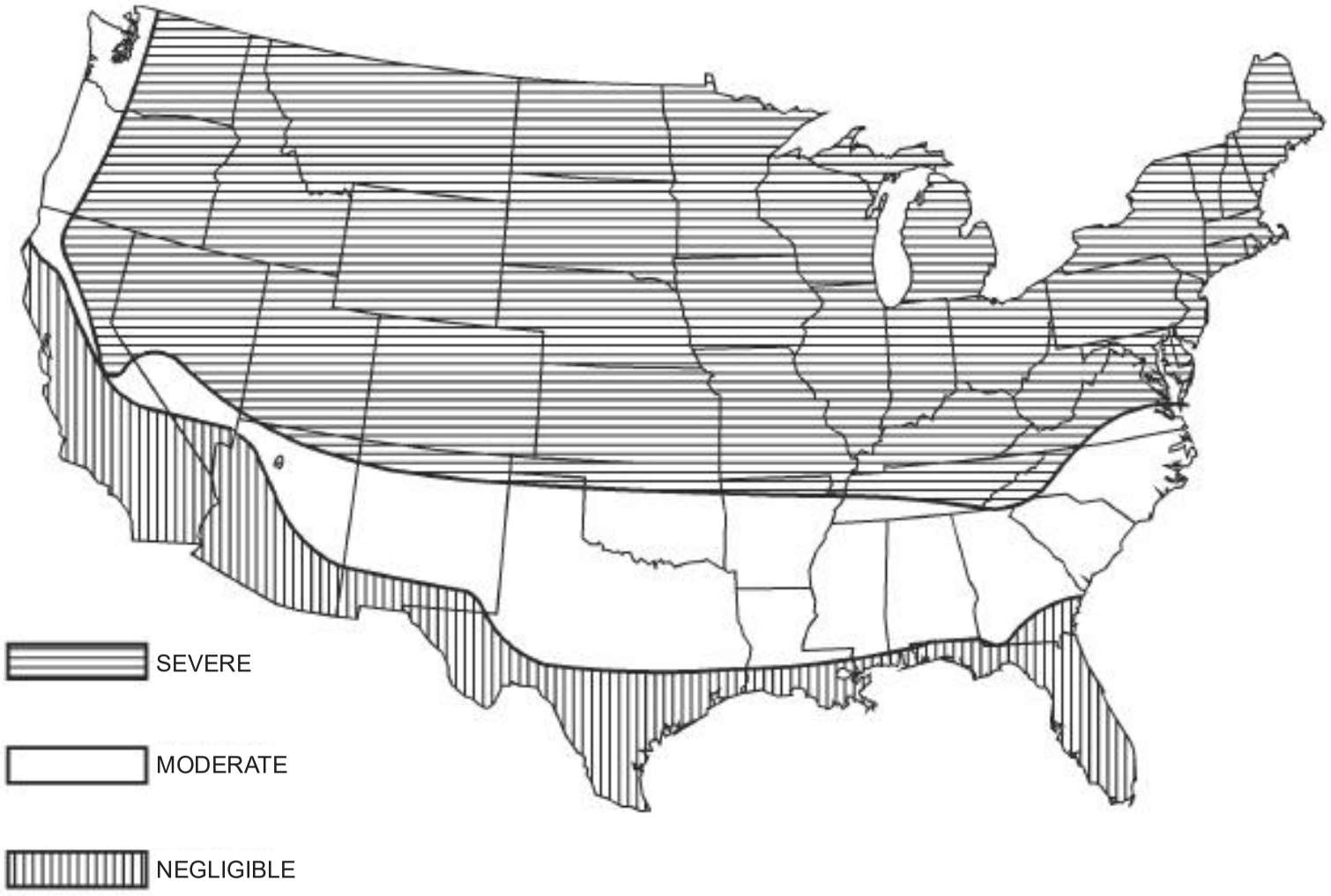
TABLE R402.2 MINIMUM SPECIFIED COMPRESSIVE STRENGTH OF CONCRETE

TYPE OR LOCATION OF CONCRETE CONSTRUCTION	MINIMUM SPECIFIED COMPRESSIVE STRENGTH[a] (f'_c)		
	Weathering Potential[b]		
	Negligible	Moderate	Severe
Basement walls, foundations and other concrete not exposed to the weather	2,500	2,500	2,500[c]
Basement slabs and interior slabs on grade, except garage floor slabs	2,500	2,500	2,500[c]
Basement walls, foundation walls, exterior walls and other vertical concrete work exposed to the weather	2,500	3,000[d]	3,000[d]
Porches, carport slabs and steps exposed to the weather, and garage floor slabs	2,500	3,000[d,e,f]	3,500[d,e,f]

a. Strength at 28 days psi.
b. See Figure R301.2(3) for weathering potential.
c. Concrete in these locations that may be subject to freezing and thawing during construction shall be air-entrained concrete in accordance with Footnote d.
d. Concrete shall be air-entrained. Total air content (percent by volume of concrete) shall be not less than 5 percent or more than 7 percent.
e. See Section R402.2 for maximum cementitious materials content.
f. For garage floors with a steel troweled finish, reduction of the total air content (percent by volume of concrete) to not less than 3 percent is permitted if the specified compressive strength of the concrete is increased to not less than 4,000 psi.

Appendix II

FIGURE R301.2(3) WEATHERING PROBABILITY MAP FOR CONCRETE

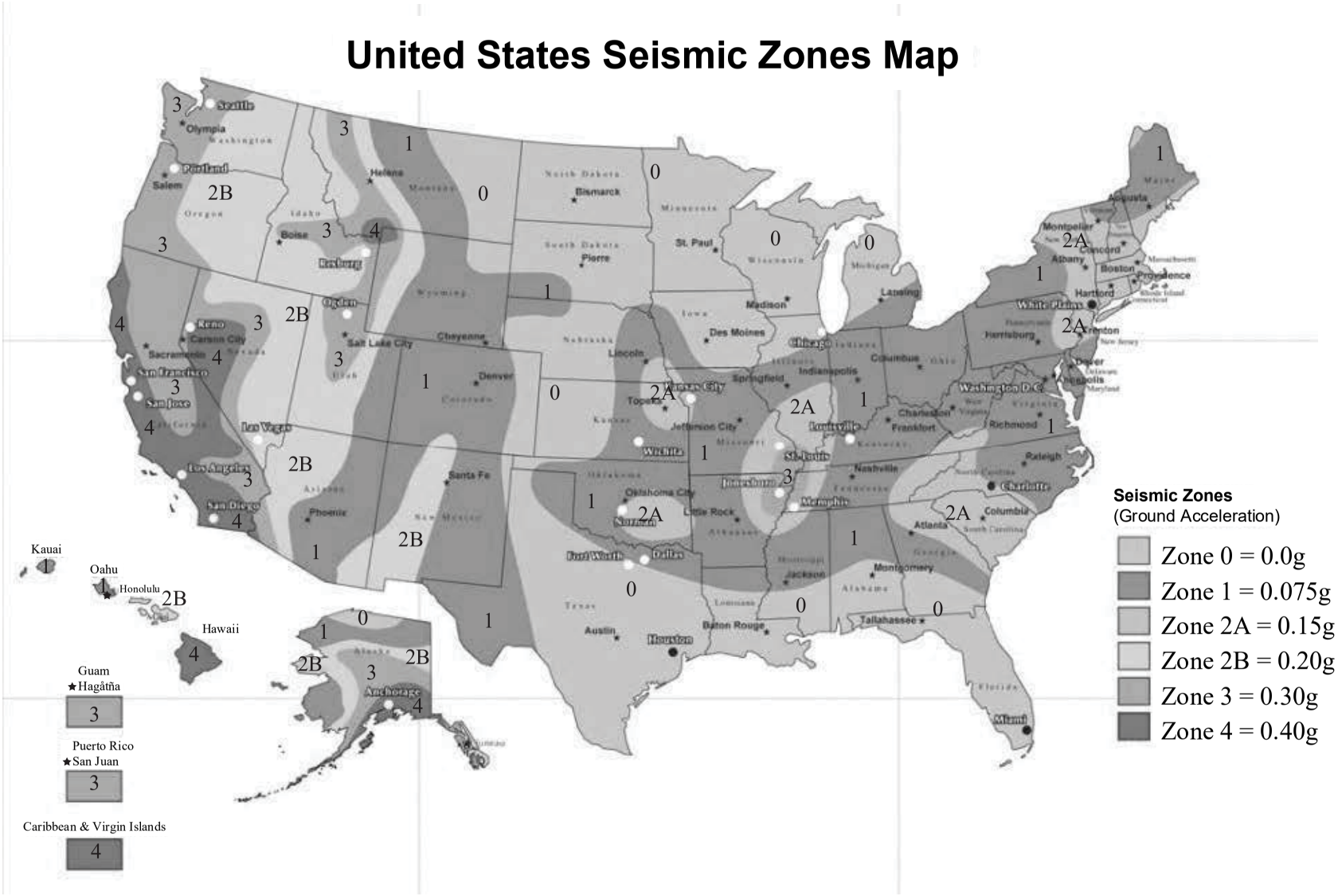


a. Alaska and Hawaii are classified as severe and negligible, respectively.

b. Lines defining areas are approximate only. Local conditions may be more or less severe than indicated by region classification. A severe classification is where weather conditions result in significant snowfall combined with extended periods during which there is little or no natural thawing causing deicing salts to be used extensively.

Appendix III

SEISMIC ACTIVITY MAP FOR THE UNITED STATES



Mason-Lite Fireplaces have been tested and passed the seismic requirements for Modular Masonry Fireplaces throughout the entire United States. We understand that not every installation needs the extra security that is involved in a high seismic zones. Rebar is ONLY REQUIRED in Mason-Lite units in seismic zones 3 & 4 shown in the map below. We will supply rebar to all fireplaces shipped to in the United States unless otherwise requested.

NOTES

Lifetime Limited Warranty

MASON-LITE FIREPLACE

Masonry Fireplaces Industries, Inc. (MFI) warrants all Mason-Lite Fireplaces to be free from defects in materials that adversely affect fireplace performance for the lifetime of the product from the date of purchase, subject to the terms and conditions of this limited warranty. MFI does not warrant accessory chimney, outside air ducts and devices not manufactured by MFI.

This warranty covers only products manufactured by MFI, specifically the modular concrete firebox, and **NO WARRANTY, EXPRESS OR IMPLIED, EXTENDS TO ANY OF THE HARDWARE, FOUNDATION, VENTING, DUCTS, OR ACCESSORIES. THIS WARRANTY DOES NOT COVER DRAFTING, SMOKING, OR SOOTING OF THE FIREPLACE SYSTEM**. Factors beyond the manufacturer's control affect drafting, smoking, and sooting and MFI cannot guarantee these aspects of performance.

Coverage under this warranty is subject to the following conditions and exclusions:

- This warranty is null and void when the fireplaces are not installed pursuant to the installation instructions provided by MFI or local building codes have not been followed completely.
- Firebrick panels one (1) year warranty for labor on replacement and five (5) year warranty for replacement panels.
- This warranty does not apply to any component or part that shows evidence of misuse, abuse, improper installation, accident or lack of regular maintenance. MFI is not responsible for misuse or mishandling of component parts.
- This warranty does not apply to any damage sustained to the appliance while in transit.
- Neither MFI, nor any affiliate thereof, is responsible for any labor costs or indirect costs incurred for the replacement of defective components. Any covered component that, in our judgment, is defective shall be repaired, replaced or refunded at MFI's option.
- Nothing in this warranty makes MFI, or any affiliate thereof, liable in any respect for any injury or damage to the building or structure in which the fireplace has been installed or to the persons or property therein arising out of the use, misuse, or installation of properly manufactured MFI products.
- The fireplace must be used in accordance with operating instructions. The proper sized grate or andirons and a safety fire screen must be installed when using the fireplace. Failure to install these two items will VOID the entire warranty.

NEITHER MFI, NOR ANY AFFILIATE THEREOF, SHALL BE HELD LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES OR EXPENSES ARISING OUT OF THE USE OF THE FIREPLACE. ALL SUCH DAMAGES AND EXPENSES ARE HEREBY EXCLUDED. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

If a component is found to be defective under the terms of this warranty, the party this warranty is extended to shall notify MFI, 6391 Jurupa Ave., PO Box 4338, Riverside, CA 92514 in writing, by registered mail, within thirty (30) days following the discovery of the defect within the lifetime warranty period. The letter shall include proof of purchase and state the (1) date of purchase, model number and serial number ; (2) place of purchase; (3) address of installation; (4) name, address and phone number of the homeowner; and (5) a brief description of the defect.

This warranty applies only to those fireplaces installed in the continental United States, Alaska and Canada. If any part of this warranty is found to be unenforceable, the remaining parts shall remain in force and effect.

THE FOREGOING WARRANTY IS EXCLUSIVE AND IS IN LIEU OF ALL OTHER WARRANTIES, TERMS OR CONDITIONS, EXPRESS OR IMPLIED EITHER IN FACT OR BY OPERATION OF LAW. MFI HEREBY DISCLAIMS ALL GUARANTEES AND WARRANTIES, EXPRESS OR IMPLIED, BEYOND THE WARRANTIES SET FORTH HEREIN, INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

Revision date: 05/08/2024

MASONRY FIREPLACE INDUSTRIES, Inc.
6391 Jurupa Ave., Riverside, California 92504
Telephone (800) 345-7078 Fax (951) 588-8046.

Rev. 05/2024

MASONRY FIREPLACE INDUSTRIES, Inc.
6391 Jurupa Ave., Riverside, California 92504

MASON-LITE
by MFI • Masonry Fireplace Industries, Inc.

Installer, please fill out the following information:

Customer	
Address	
Date of Installation	
Location of Appliance	
Installer	
Dealer/Distributor contact number	
Fireplace Model	
Fireplace Serial #	

Printed in U.S.A. Masonry Fireplace Industries, Inc.
Rev. 05/2024

MFI Masonry Fireplace Industries, Inc.

HPBA Hearth, Patio & Barbecue Association

Masonry Fireplace Industries, Inc.
6391 Jurupa Ave., Riverside, California 92504