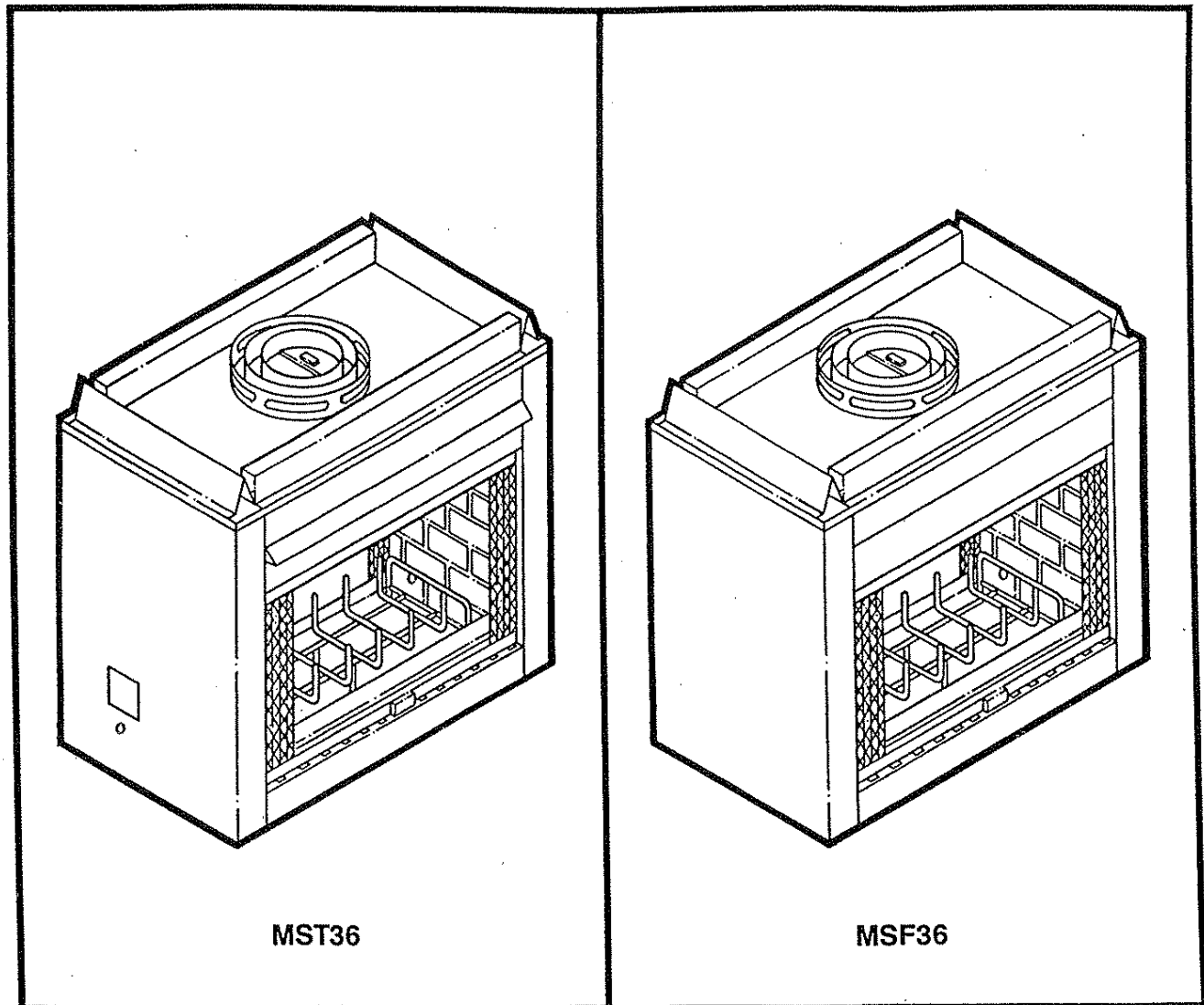


INSTALLATION MANUAL

for the **MAJESTIC**®

MST36/MSF36
SEE-THROUGH FIREPLACE



IMPORTANT: Read all instructions carefully before starting installation. Failure to follow these installation instructions may result in a possible fire hazard and will void the MAJESTIC warranty.

Save this manual for future reference.

MAJESTIC®

IDENTIFICATION OF PARTS

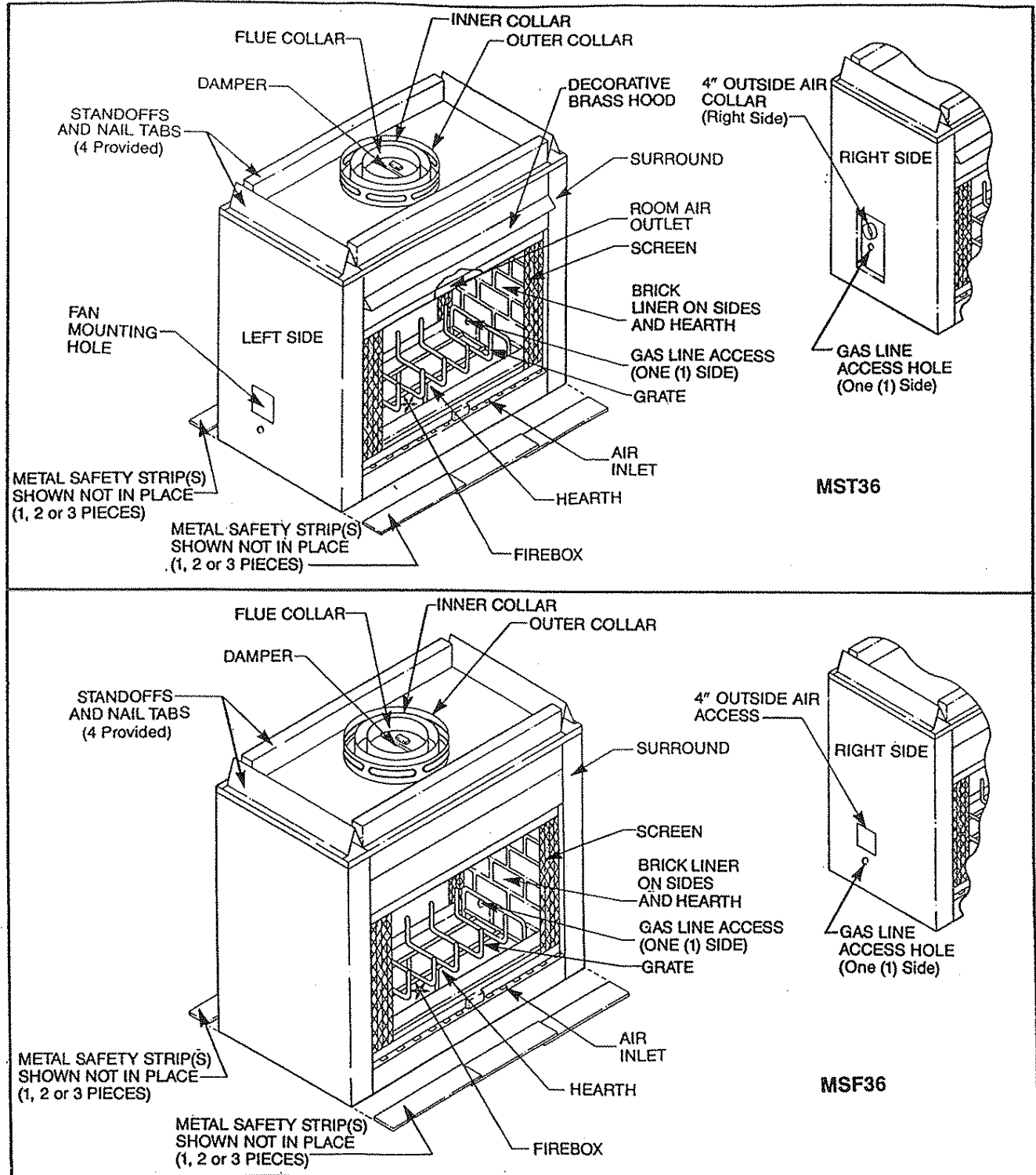


Fig. 1. Parts of the MAJESTIC MST and MSF Series fireplace.

Table of Contents

	Page
Identification of Parts	2
Installation Precautions	3
Installation Instructions	3
Reference Data	13 & 14
Accessory Parts	15

INSTALLATION PRECAUTIONS

This MAJESTIC Fireplace and its components have been tested and will operate safely when installed in accordance with this Installation Manual. Read all instructions **before** starting installation, then follow these instructions carefully during installation to maximize fireplace benefit and safety.

Report to your dealer any parts damaged in shipment. Specifically, check for loose insulation in the fireplace and damper operation.

Since this fireplace and chimney assembly is a highly engineered system, unless you use Majestic or Majco Building Specialties (MBS) components which have been designed for the system, you may create a possible fire hazard.

The MAJESTIC warranty will be voided by, and MAJESTIC disclaims any responsibility for, the following actions:

- Installation of any damaged fireplace or chimney component;
- Modification of the fireplace, chimney assembly or any of the component parts thereof; (except for chase flashings as detailed in MBS Chimney Top installation instructions.)
- Installation other than as instructed by MAJESTIC; or
- Installation and/or use of any component part or accessory not manufactured or approved by MAJESTIC in combination or assembly with a MAJESTIC fireplace system, notwithstanding any independent testing laboratory or other third party approval of such component part or accessory.

Any such action may create a possible fire hazard.

Consult your local building codes.

This fireplace and chimney system must be vented out-of-doors.

Do not obstruct or modify air inlet/outlet grilles in any manner.

Do not install combustible materials onto the black fireplace surround.

Burn solid wood fuel only.

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

THE MST AND MSF SERIES FIREPLACES ARE NOT APPROVED FOR INSTALLATION IN MOBILE HOMES.

Prior to first firing, read Owner's Manual for operating instructions.

INSTALLATION INSTRUCTIONS

A. Installing the Fireplace

A-1. CHECK HOW ACCESSORIES ARE INSTALLED

Determine where selected accessories fit into this fireplace installation procedure by checking the installation instructions provided with each accessory. See *Accessory Parts*, page 15.

NOTE: The outside air system (MST and MSF) and electrical connection (MST) for the fireplace cannot be installed after the fireplace is completely installed.

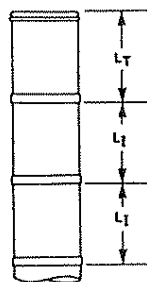
A-2. DETERMINE FIREPLACE LOCATION

The fireplace can be mounted on any of the following surfaces: 1) A flat, hard, combustible surface
2) A raised wooden platform

The fireplace must maintain a 1/2 inch air space at sides to combustible materials and insulation.

Refer to *Air Space Data and Dimensions* on pages 13 and 14 to be sure that the location which you have selected for your fireplace provides for clearance and framing restrictions.

At this point you should have decided what components to include in your installation, where the fireplace is to be located, and how the chimney will be routed to the roof (straight-up, offset, or chase*). If this has not been done, stop and consult your Majestic Dealer for assistance with this planning.



CHIMNEY MODEL NO.		DIMENSIONS IN INCHES	
DOUBLE WALL	TRIPLE WALL	TOTAL LENGTH (L _T)	INSTALLED LENGTH (L _I)
CF81	81	11½	10½
CF818	818	17½	16½
CF83	83	35½	34½
CF84	84	47½	46½

Fig. 2. Installed lengths of chimney sections.

Note that the installed length of any chimney section is less than its total length (except for the last section installed), because of its overlap at joints. (See Fig. 2.)

A-3. INSTALL METAL SAFETY STRIPS UNDER FIREPLACE

See Step G, Insulating Fireplace Enclosure for Cold Climates, before completing Step A-3.

Thoroughly clean intended fireplace location area. Move fireplace to the location where it is going to be installed. Lift fireplace front slightly to slide metal safety strip(s) under front bottom edge about 1½ inches, allowing the remainder to extend out in front of the fireplace. Overlap the strips at least ½ inch to provide a positive joint. (See Fig. 3.) (Flat safety strips are packed with fireplace.)

In the event the fireplace is elevated above the floor, a "Z" shaped metal safety strip should be fabricated and used to protect combustible surfaces in front of the fireplace. This "Z" shaped safety strip is not provided, but must be fabricated of metal with each horizontal leg at least 1½ inches wide — equal in length to the metal strips provided with each fireplace.

When positioning the fireplace on all mounting surfaces (see Step A-2), the metal safety strips must be installed as described above to provide protection to combustibles (burnable) surfaces in front of the fireplace.

NOTE: Safety strip is not required over non-combustible floors where all supports at the base of the fireplace are non-combustible.

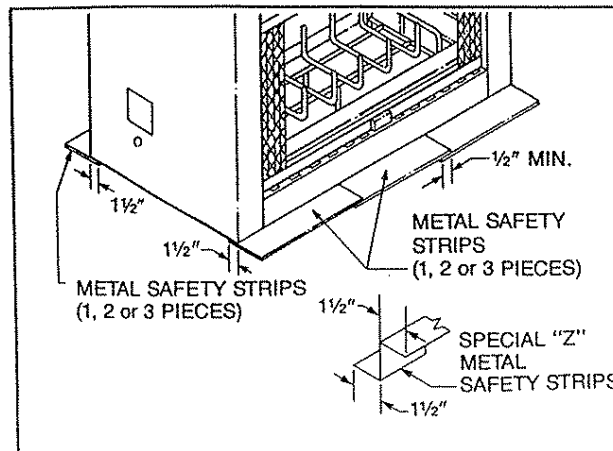


Fig. 3. Install metal strip(s) under both fronts of fireplace.

□ A-4. ANCHOR FIREPLACE IN POSITION.

To prevent shifting of the fireplace and to maintain sealing (described later), anchor the fireplace. One method is to use the side fastening tabs provided on the bottom of the fireplace. (See Fig. 4.) The fireplace can then be secured within the vertical framing members. Refer to Framing and Finishing Section H.

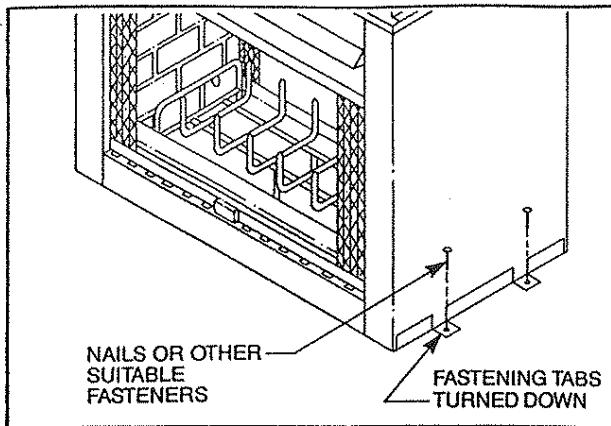


Fig. 4. Fasten fireplace in position using the fastening tabs.

B. Installing the Chimney

CAUTION:

REPORT TO YOUR DEALER ANY PARTS DAMAGED IN SHIPMENT, SPECIFICALLY, CHECK THE END CONNECTIONS OF CHIMNEY SECTIONS AND ELBOWS.

NOTE: The MST and MSF Series fireplaces may use MBS Model CF8, 2 wall chimney components or MBS Model S, 3 wall chimney system. The installation procedure described in Section B (Installing the Chimney), applies to both systems. Either system may be used, but 2 wall and 3 wall components may not be mixed. For clarification, refer to the Accessory Section of this manual beginning on page 15. Components from Section 1 are common to all installations. Chimney components may be selected from Section 2 or Section 3, but may not be mixed.

□ B-1. LOCATE CENTERPOINT OF CHIMNEY — STRAIGHT UP INSTALLATION

The fireplace is ideally suited as a room divider, and for optimal heat performance should be centrally located. You should consider ceiling and roof rafters that may require cutting, plumbing and wiring that may have to be moved when deciding where to locate the firebox. Then, using a plumb bob positioned directly over the center point of the fireplace flue collar, mark the ceiling to establish the chimney center point. (See Fig. 5.)

□ B-2. LOCATE CENTERPOINT OF CHIMNEY — OFFSET INSTALLATION

In order to clear an obstruction, it may be necessary to offset the chimney from the vertical plane. This is done by using MBS 30° CHIMNEY ELBOWS: Model CF830A and 830A (30°). Each offset requires a pair of elbows. Use Table 1 and Fig. 6 to determine the offset that may be obtained using the various elbows.

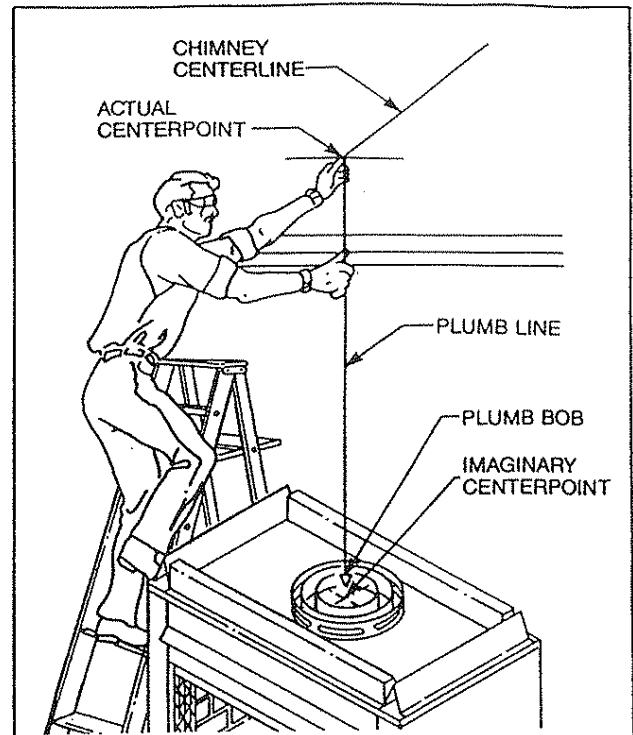


Fig. 5. Locate centerpoint of chimney with plumb line.

Table 1. Offset dimensions.

	DIMENSIONS	
	T	S
No Intermediate Section	0'3"	0'11"
One 1' Section	0'8 1/4"	1'8"
One 1 1/2' Section	0'11 1/4"	2'1 1/4"
Two 1' Sections	1'1 1/2"	2'5 1/4"
One 1' and One 1 1/2' Section	1'4 1/2"	2'10 1/4"
One 3' Section	1'8 1/4"	3'4 3/4"
Two 1' and One 1 1/2' Sections	1'9 3/4"	3'7 1/2"
One 4' Section	2'2 1/4"	4'3 1/4"
One 3' and One 1 1/2' Section	2'4 1/4"	4'7 1/4"
One 4' and One 1' Section	2'7 1/2"	5'0 1/4"
One 1', One 3' and One 1 1/2' Section	2'10 1/2"	5'5 1/2"
Two 3' Sections	3'1 1/2"	5'10 3/4"

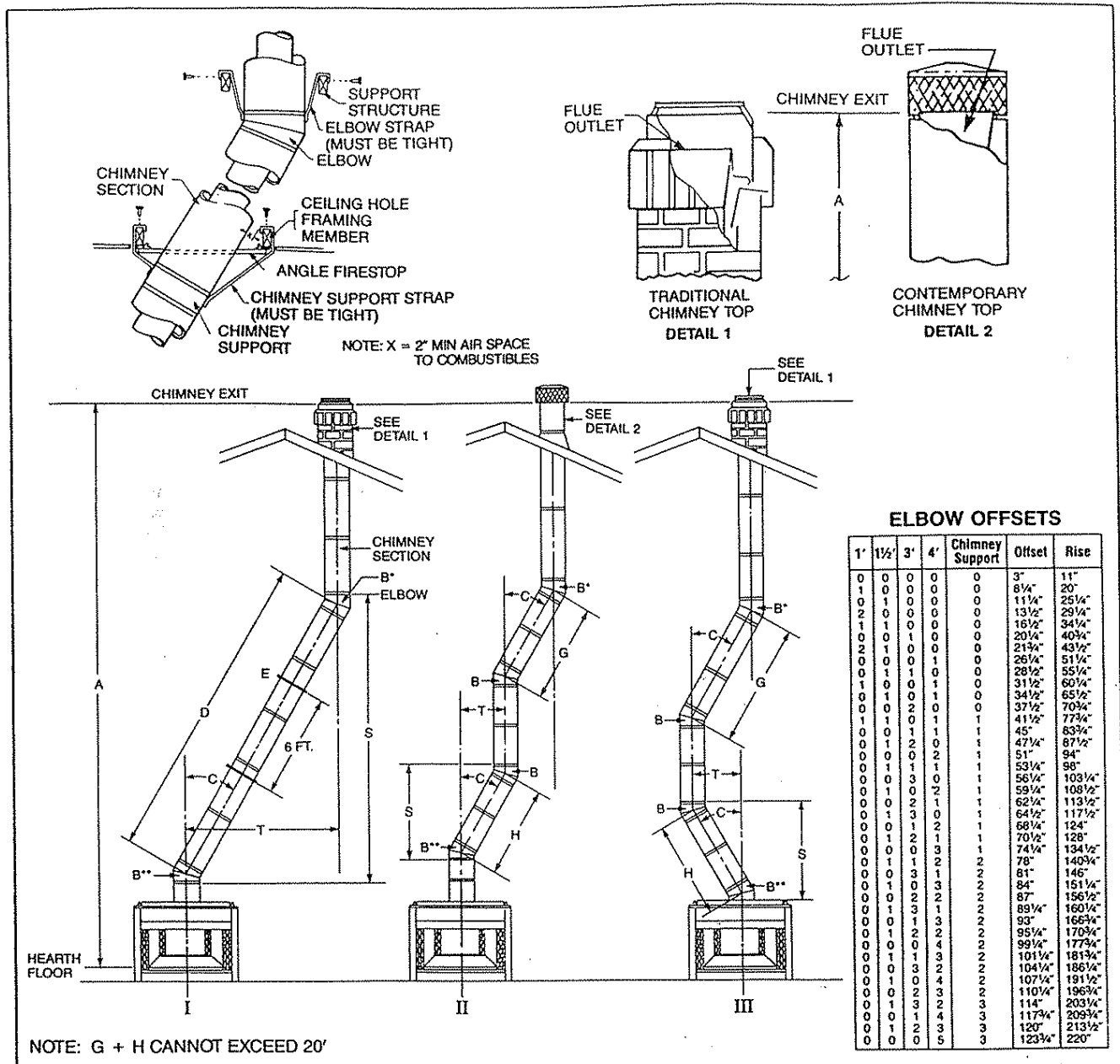


Fig. 6. Typical offset installations.

The following safety rules apply to offset installations. (The letters below match the letters in Fig. 6.)

A. Height of the chimney measured from the hearth to the chimney exit at top:

MST36/MSF36	
Maximum:	45 Feet
Minimum:	
Without Elbows	15 Ft. 8 In.
With 2 Elbows	15 Ft. 8 In.
With 4 Elbows	24 Ft. 6 In.

B. Do not use more than four elbows per chimney.

* Attach the straps of the top elbows to a structural framing member.

** The first elbow of any pair does not have straps.

C. The chimney cannot be more than 30° from the vertical plane.

D. The maximum length of the angled run of the total chimney system is 20 feet.

E. A chimney support (Model TCS8A) is required every 6 feet of angled run of chimney. A chimney support is required at 30 feet of chimney height above the hearth also.

Determine the offset distance of your chimney arrangement from the centerline of the fireplace to the centerline of the chimney where it is to pass through the first ceiling. NOTE: This offset distance may not be your full offset distance (T).

Locate on the ceiling the centerpoint of the chimney, as though a straight up chimney arrangement is to be used, by following the procedure outlined in Step B-1. Then measure your offset dimension from the actual chimney centerpoint on the ceiling. (Fig. 7.) (See below.)

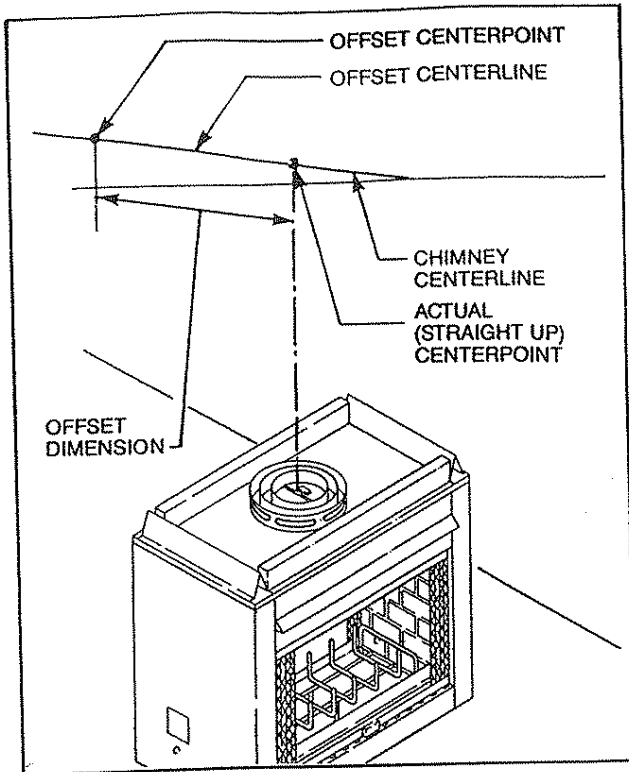


Fig. 7. Measure ceiling offset distance from actual straight up centerpoint.

B-3. MARK AREA OF CEILING CHIMNEY HOLE

The size of the ceiling chimney hole will vary with the angle at which the chimney passes through the ceiling. Refer to Table 2.

Drive a nail up through the ceiling at the marked chimney centerpoint. Go to the floor above and check where the hole will be cut, relative to the ceiling joists and any obstructions such as wiring or plumbing runs. If necessary, re-position the chimney and/or the fireplace to better accommodate these joists and/or obstructions.

B-4. CUT CEILING CHIMNEY HOLE

After covering the opening of the fireplace collar, cut the chimney hole through the ceiling. Recheck the hole to be sure that it measures the hole size selected from Table 2.

B-5. FRAME CEILING CHIMNEY HOLE

Frame the ceiling chimney hole as shown in Fig. 8. It is good practice to use framing lumber that is the same size as the ceiling joists. (This is a requirement at the attic level.)

The inside dimension of the frame must be the same as the hole size selected from Table 2 in order to provide the required 2 inch air space between the outside diameter of the chimney and the edges of the framed ceiling hole.

Table 2. Sizes of ceiling chimney hole for installing firestop spacer.

Size of Chimney	Angle of chimney at ceiling	
	Vertical	30°
8" Flue	17½ x 17½	17⅞ x 29%

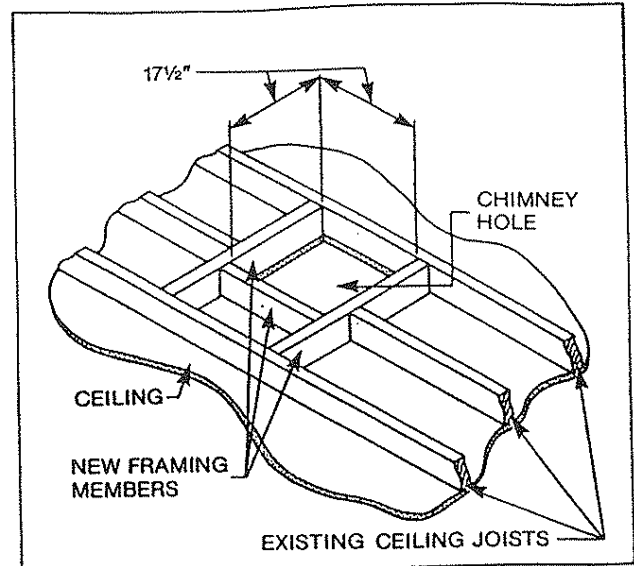


Fig. 8. Typical frame for ceiling chimney hole.

B-6. INSTALL FIRESTOP SPACER

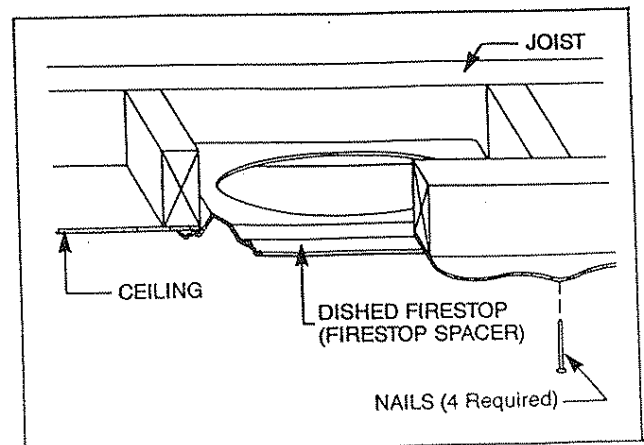
Firestop spacers are required for safety. The hole sizes listed in Table 2 for angled firestop spacers provide the minimum required air space to the chimney pipe for ceiling thicknesses up to 8 inches. When the combined thickness of the ceiling material, ceiling joists and flooring material exceeds 8 inches, adjustments must be made in the framing to assure that the minimum air spaces to the chimney are maintained.

If the area above the ceiling is not an attic, position the firestop spacer with the flange on the ceiling side and the dished or angled portion extending up into the hole. If the area above the ceiling is an attic, position the firestop spacer with the flange on the top of the framed hole and the dished or angled portion extending down into the hole. (See Figs. 9 & 10.)

Nail each corner of the firestop spacer to the framing members of the ceiling hole. NOTE: A firestop spacer is not required at the roof.

Table 3. Firestop model numbers.

TYPE FLUE	TYPE OF SPACER	MODEL NO.
8" straight	Dished	FS2A
8" 30° inclined	Angled	FS6A



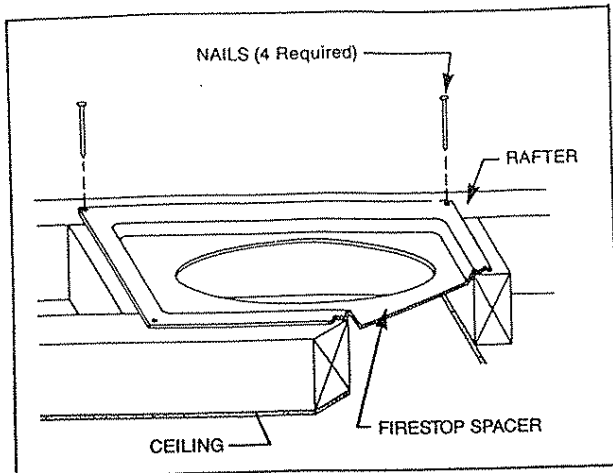


Fig. 10. Position of firestop when area above ceiling is an attic.

□ B-7. ATTACH CHIMNEY SECTIONS

Attach the first straight chimney section to the fireplace collar, or if offset installation, attach elbow to the fireplace collar. (Refer to Step B-8.) Mount the flue pipe first, using the built-in snap-lock fasteners. (See Fig. 11.) Then mount the additional pipe(s). Position each pipe section so the direction arrow is pointing UP.

Make sure each pipe is firmly snapped and locked together as it is mounted.

Continue installing chimney sections until ONE SECTION (all pipes) extends up through the ceiling hole. To extend through the ceiling, it may be necessary to assemble all pipes, push them up through the ceiling hole and then slide them down one at a time to connect them.

□ B-8. ATTACH FIRST ELBOW — OFFSET INSTALLATION

If the first elbow is not to be attached to the fireplace, install chimney sections as required.

Attach first elbow where required. Note that only the outer pipe snap-locks.

Attach the straps of all upper elbows to a structural framing member. (See Fig. 6.)

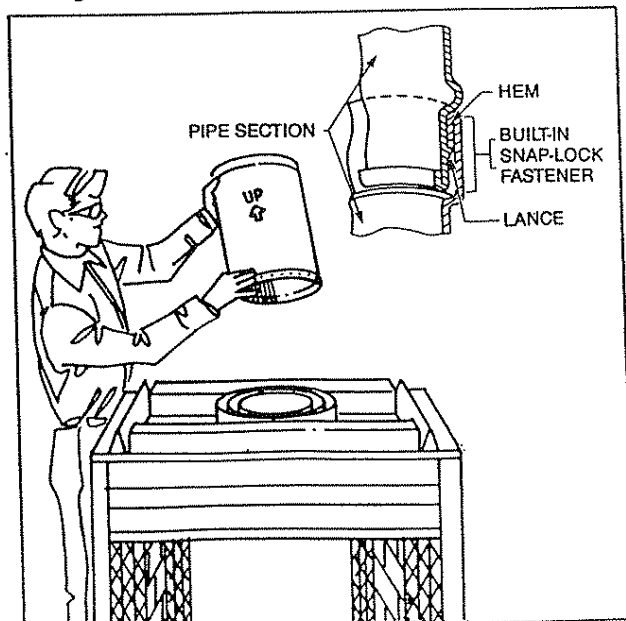


Fig. 11. Use built-in snap-lock fasteners to attach

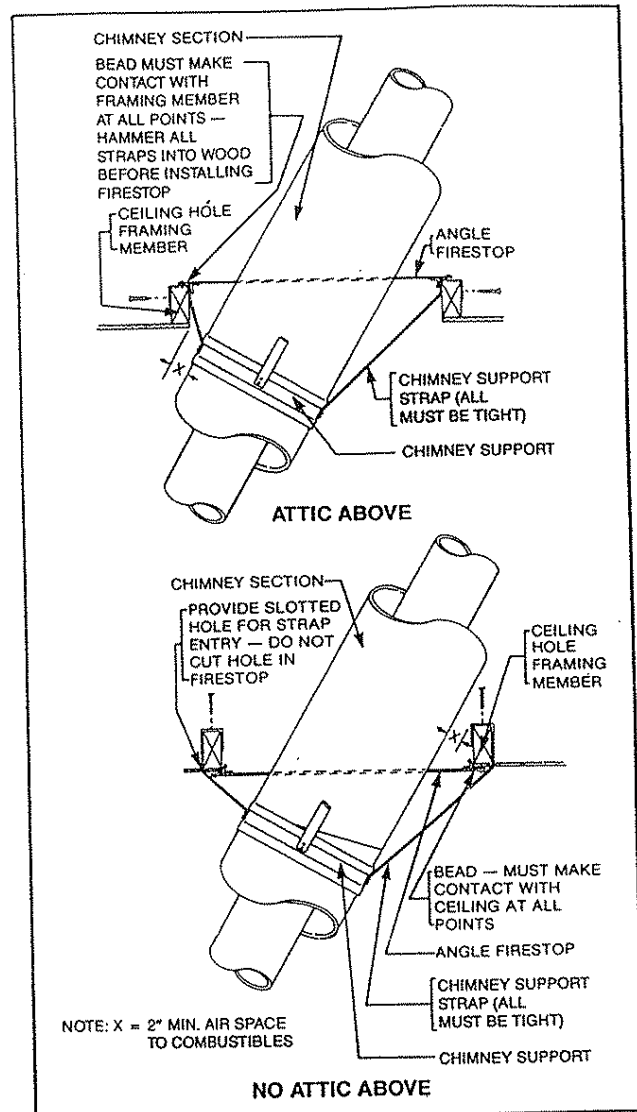


Fig. 12. Mount chimney supports at ceiling hole frames or other structural framing.

□ B-9. DETERMINE HOW MANY CHIMNEY SUPPORTS ARE NEEDED

The chimney system is supported by the fireplace for chimney heights less than 30 feet of vertical height above the hearth. Chimney supports are required if the chimney height exceeds 30 feet. Locate chimney supports at ceiling holes or other structural framing at 30 foot heights. Spacing between chimney supports must not exceed 30 feet. Use MBS Chimney Support Model TCS8A. (NOTE: The TCS8A can not be mounted directly to the fireplace.) Support provided by elbow straps fulfills the support requirement only if they are spaced as required above.

Angled chimney runs require support every 6 feet in addition to the elbow straps. MBS Chimney Supports are used for this function.

Refer to Step B-2 to determine how many chimney supports are needed and where they will be placed in the chimney run.

NOTE: A chimney support is 2½ inches long when installed. This dimension must be considered when determining how many straight chimney sections are needed to provide the desired offset.

B-10. INSTALL CHIMNEY SUPPORTS

Chimney supports are attached to chimney sections the same way elbows are attached. Refer to Step B-8. Nail the chimney support straps to adjacent structural framing, as shown in Fig. 12. Bend the straps as necessary and make sure they are tight so they will be able to support the weight of the chimney.

B-11. LOCATE CENTERPOINT OF NEXT CEILING HOLE

NOTE: If there is no other ceiling, you have completed Section B. Turn now to Section C, *Penetrating the Roof*. In a manner similar to that used in Steps B-1 and B-2, mark the centerpoint of the next ceiling hole.

B-12. PREPARE SECOND CEILING HOLE

Repeat Steps B-3. Mark area of ceiling chimney hole; B-4, Cut ceiling chimney hole; B-5, Frame ceiling chimney hole; and B-6, Install firestop spacer.

B-13. CONTINUE INSTALLING CHIMNEY SECTIONS

Continue installing chimney sections and chimney supports (as required), until the chimney passes through the second ceiling hole.

NOTE: Repeat Steps B-11 through B-13 as many times as necessary to pass through all the ceilings in the building and bring the chimney just short of the roof.

C. Penetrating the Roof

The chimney system must be vented out-of-doors and must be terminated in an approved MBS top termination.

NOTE: If you are using a chase, go to Section D.

C-1. LOCATE CHIMNEY CENTERPOINT AT ROOF

Use the same procedure detailed in Steps B-1 and B-2.

Drive a nail up through the roof at the marked centerpoint. This will mark the centerpoint on the outside of the roof.

C-2. CUT AND FRAME ROOF HOLE

The size of the roof hole varies with the type of chimney top that will be installed. Refer to the installation instructions provided with your MBS chimney top termination to find the correct size of roof hole for this installation. There must be at least 2 inch air space between the outermost portion of the chimney sections and any adjacent combustible (burnable) surfaces.

WARNING: DO NOT PACK REQUIRED AIR SPACES WITH INSULATION OR OTHER MATERIALS.

(Combustible surfaces include such things as ceiling members, joists, flooring, combustible insulation and roof structures.)

Mark the outline of the roof hole around the centerpoint nail. **Note:** The hole dimensions given in the chimney top installation instructions are **horizontal** dimensions; therefore, the hole size must be marked on the roof accordingly.

Cover the opening of the installed chimney.

Cut and frame the hole. It is good practice to use framing lumber that is the same size as the rafters. **Install frame securely. Chimney top and flashing anchored to frame must withstand heavy winds.**

C-3. DETERMINE MINIMUM CHIMNEY HEIGHT ABOVE ROOF

Major U.S. building codes specify minimum chimney height above the roof top. These specifications are summarized in the *Ten Foot Rule*. (See Fig. 13.) The key points of this rule are:

1. If the horizontal distance from the center of the chimney to the peak of the roof is 10 feet or less, the top of the chimney must be at least 2 feet above the peak of the roof, but never less than 3 feet in height above the highest point where it passes through the roof.
2. If a horizontal distance from the center of the chimney to the peak of the roof is more than 10 feet, a chimney height reference point is established that is on the surface of the roof a distance of 10 feet from the center of the chimney in a horizontal plane. (See Fig. 13.) The top of the chimney must be at least 2 feet above this reference point, but never less than 3 feet in height above the highest point where it passes through the roof.

These chimney heights are necessary in the interest of safety and do not assure a smoke-free operation.

C-4. INSTALL REMAINDER OF CHIMNEY SECTIONS

Continue installing chimney sections up through the roof hole. Check your chimney top installation instructions for data on how high above the top of roof the CHIMNEY SECTIONS (all pipes) should go.

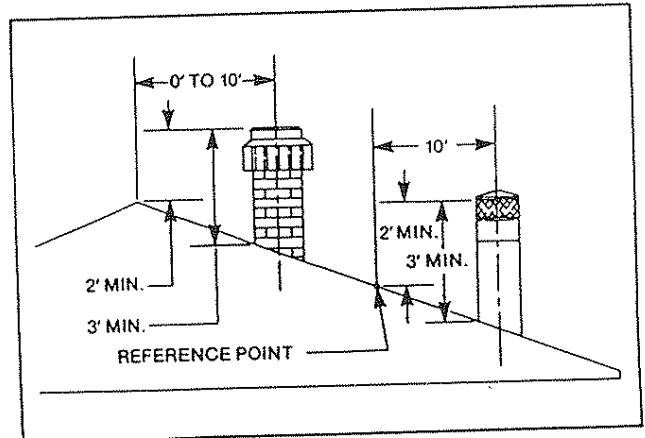


Fig. 13. Ten foot rule for chimney height.

C-5. INSTALL CHIMNEY TOP HOUSING OR TERMINATION

Follow the installation instructions provided with the MBS chimney top you have selected.

D. Installing Chimney in a Chase

A chase is a vertical box-like structure built to enclose the fireplace and/or its chimney.

CAUTION: Treatment of firestop spacers and construction of the chase may vary with the type of building. These instructions are not substitutes for the requirements of local building codes. Therefore, your local building codes must be checked to determine the requirements for these steps.

NOTE: Other material may be required in addition to MBS Firestop Spacers.

Refer to *Framing and Finishing* on page 10. Upon completion of building your chase frame, install the chimney system. Follow the instructions for *Installing the Chimney* starting on page 4. Then proceed to Step D-1.

D-1. INSTALL FLASHING AND CHIMNEY TOP

Follow the installation instructions provided with the MBS chimney top you have selected.

E. Install the Electrical Connection (MST Only)

E-1. ELECTRICAL CONNECTION

Fan Junction Box is directly connected to the fan motor and assembly. See instructions shipped with the FK-MST fan kit.

CAUTION: ALL WIRING SHOULD BE DONE BY A QUALIFIED ELECTRICIAN AND SHALL BE IN COMPLIANCE WITH ALL LOCAL, CITY AND STATE BUILDING CODES.

E-2. ELECTRICAL POWER

The fans require 120 VAC, 60 Hz power available at the left side of the fireplace. The power should be available to the fireplace through a single Listed 15 AMP, 125 V wall switch. (Switch not provided.)

E-3. INSTALLATION OF FIELD WIRING

A junction box is provided with the fan.

Next, route the field supplied wiring from the switch box to the junction box in accordance with local electrical codes. Be sure wiring does not contact outer fireplace surfaces and support wiring in a manner that will assure clearance from the fireplace components.

Insert 120 V, 60 Hz power lines through either knockout in the back or side of the junction box. The ground wire from the power should be attached to the ground stud in the top of the junction box with one of the supplied retaining nuts.

Using wire nuts, connect the ends of the white and black power leads to the fireplace leads (See Wiring Diagram, supplied with fan kit), making sure the wire nuts are tight to the leads. All black leads should be connected together and all white leads should be connected together.

E-4. SERVICING OF FANS

It is recommended to service fans once a year. Servicing involves cleaning of the blower mesh vent and oiling the bearing. Removal of the fan should not be necessary. Vacuuming dust and lint from blower housing will increase fan efficiency. We recommend using a light weight oil once a year on both front and rear bearings. Installation instructions accompanying fan kit will show location of oil ports.

If the fan needs to be removed, turn off power to fan, and disconnect the wires. Remove top screw holding the fan up. With the screw removed, the fan can be lifted and removed from fireplace side.

E-5. ADDING FAN ON INSTALLED UNITS

Installation on some units may not be advisable. You will have to cut an access hole of 12" x 12" located near the unit in order to allow access to the fan for better servicing. The hole must be cut on the opposite side of the outside air control (left side). The bottom of the 12" x 12" hole must start 2-inches up from the bottom of the fireplace. Refer to fan installation instructions for proper location.

F. Installing Optional Outside Air Kit and Fan Kit

Later addition of outside air and fans (without preinstalled Wiring Kit) will require significant reconstruction. These accessories should be installed at the time of original

F-1. INSTALL OUTSIDE AIR KIT

Install outside air kit if desired or required by local code. Refer to AK-MST installation instructions supplied with the appropriate kit.

F-2. INSTALL FAN KIT (MST Only)

See individual instruction sheets on the Fan Kit and Junction Box.

G. Insulating Fireplace Enclosure For Cold Climates

When installing the fireplace, it is always good building practice to insulate as you would an outside wall of your home.

In cold climates, insulation of the enclosure around the fireplace is critical to avoid future problems with cold air. The following steps are suggested to minimize potential cold air problems.

G-1. INSULATE BASE OF FIREPLACE

Insulate the base of the fireplace with a non-combustible insulation rated for a minimum of 300°F. This step is particularly important for outside wall installations over concrete slab floor construction. If a platform is used to raise the fireplace, the insulation should be placed on top of the platform before the fireplace is set (See Fig. 14.)

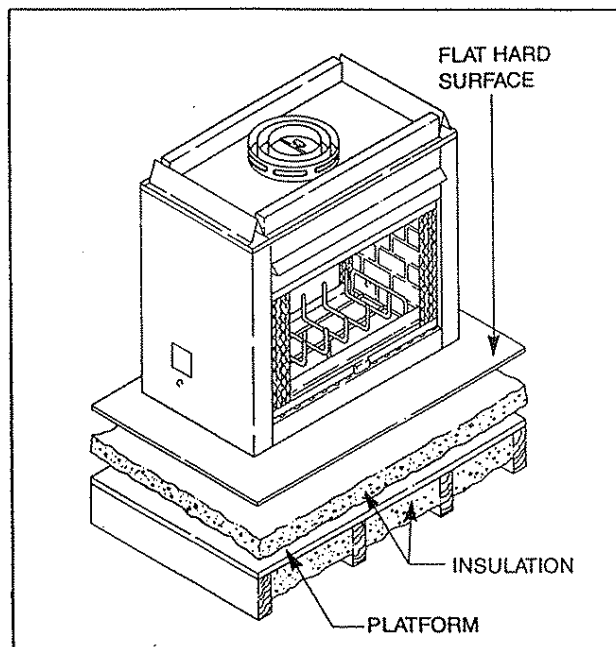


Fig. 14. Insulation between platform and fireplace.

G-2. INSPECT JOINTS

Inspect joints of the fireplace as well as the points of sealing between the fireplace and the finishing materials. Any cracks should be sealed with non-combustible caulking or insulation. See Fig. 15 for details of sealing spaces between the fireplace and finishing materials.

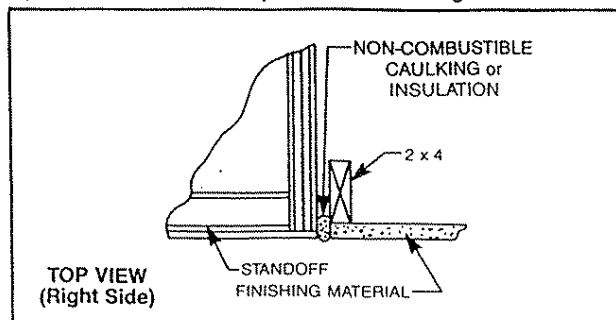


Fig. 15. Sealing spaces between fireplace and finishing

G-3. INSULATION OF ENCLOSURE

When a fireplace is installed in a chase, the enclosure should be insulated like any other wall of the home. Insulation should be installed on the inside wall. In a chase, it is also a good idea to install a firestop at the first ceiling level above the fireplace and close the chase with sheeting material. Insulation may then be installed above the sheeting material to assure the space around the fireplace is totally protected.

CAUTION: WHILE INSTALLING A FIREPLACE IN AN INSULATED ENCLOSURE, BE SURE ALL MARKED AIR SPACES ARE MAINTAINED.

H. Framing and Finishing

H-1. DETERMINE WHEN TO INSTALL FRAMING

Fireplace framing can be built before or after the fireplace is set in place. Fig. 16 shows the minimum framing dimensions.

H-2. BUILD FRAMING

The fireplace framing should be constructed of 2 x 4 lumber or heavier. Refer to *Dimensions* on page 14 for basic fireplace dimension that will affect the framing dimensions.

The header may rest on the fireplace standoffs.

Framing should be positioned to accommodate wall covering and fireplace facing material. (See Figs. 22 and 23 for typical arrangements.) Standoff nailing tabs provided on the top of the fireplace can be used to position the fireplace for a 5/8" finished wall covering, as well as anchor the fireplace. Nail through the tabs (4) into the horizontal framing members. (See Figs. 4 and 16.)

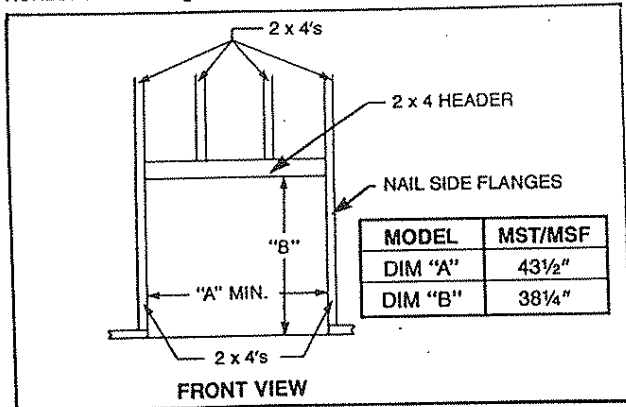


Fig. 16. Minimum fireplace enclosure dimensions.

CAUTION: All joints between the finished wall and the fireplace surround (top and sides) must be sealed with non-combustible material. Only non-combustible material may be applied as facing to the fireplace surround.

H-3. FINISH WALL

Finish the wall with material of your choice. Do not install a combustible mantel less than 12" above the outlet grille on MST36 or 12 inches above fireplace opening on MSF36. If a combustible material is used below a flat mantel shelf, consult your local building codes for the minimum clearance from the top of the fireplace opening to the bottom of the material.

All joints (top, bottom and sides), where the wall or decorative facing material meets the fireplace surround must be completely sealed with a non-combustible material. (See Figs. 17, 18 and 19.)

Only non-combustible material may be applied as facing to the black fireplace surround.

When finishing the fireplace, never obstruct or modify

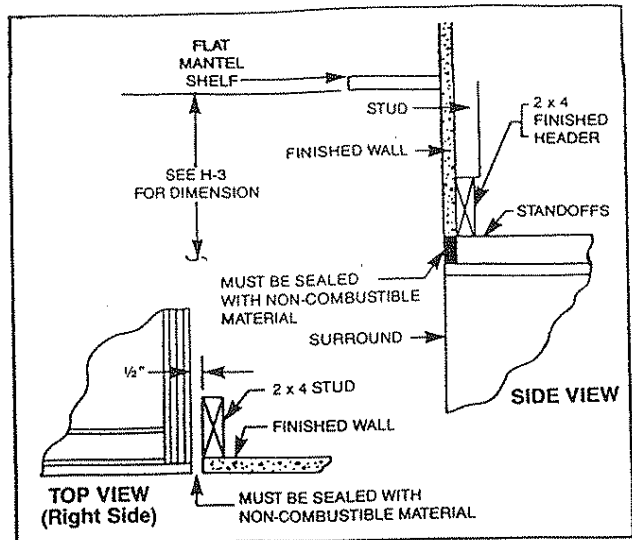


Fig. 17. Fireplace surround flush with finished wall.

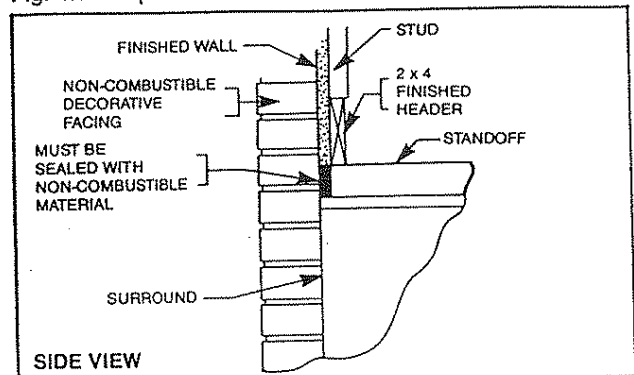


Fig. 18. Fireplace surround flush with finished wall.

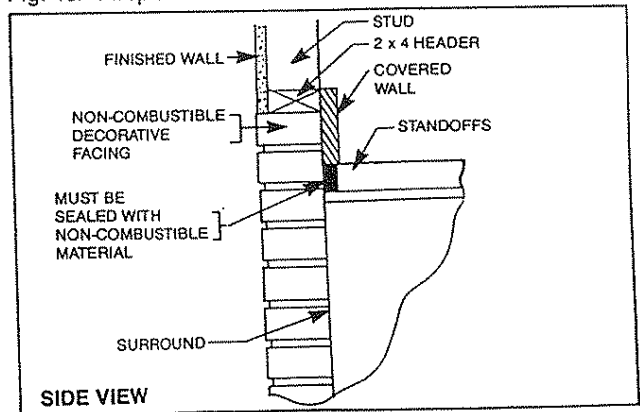


Fig. 19. Facing on fireplace surround flush with finished wall.

H-4. ADD PROTECTION TO SIDE WALLS

Adjacent combustible side walls that are within 14" of the MST fireplace openings must be protected with MBS Wall Shield Model SP40 or a built up wall shield described in Fig. 20. (See Figs. 20 and 21.)

The built-up wall shield design described in Fig. 20 is an alternate method for adding protection to side walls and can be used in place of the SP40 with the same wall clearances specified for the SP40.

EXAMPLES OF INSULATIONS:

1. Manville — CERAFORM 126, K = .27, 1/2" required.
2. Majco Building Specialties — EH2416, K = .458, 1" required.

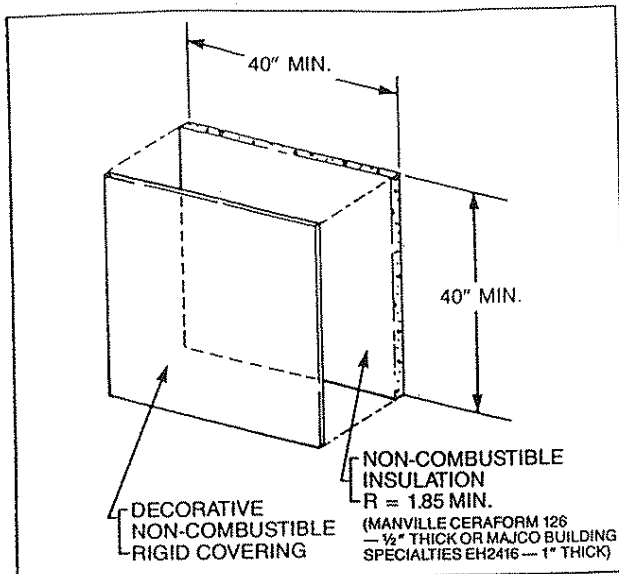


Fig. 20. Non-combustible wall shield dimensions.

H-5. INSTALL HEARTH EXTENSION.

A hearth extension is required to protect combustible floor construction around the fireplace, and it must be a hearth extension constructed of a rigid insulation or a durable non-combustible material with equal or greater (total) insulating value than $R_T = 1.16$, sized as shown in Fig. 21. (See Table 4 for examples.) The overall height (above combustible floor), depth and width must be as indicated, with it centered to the fireplace opening.

MATERIAL	K*	R	MINIMUM THICKNESS
U.S. Gypsum Corp. MICORE CV230	0.43	2.32	.50 in.**
Majco Building Specialties EH2416	0.458	2.18	.53 in.
Common Brick	5.0	0.20	5.81 in.

R Value is for one (1) inch
 * Units of K = BTU/SQ FT/HR/°F/IN
 ** Thickness of Listed Material

TABLE 4. Common materials and their factors.

The top of the rigid insulation must be covered with a non-combustible decorative covering or a piece of .018" minimum sheet metal, to protect the hearth extension materials. (See Fig. 21.)

Secure the hearth extension to the floor to prevent shifting, using trim molding or other similar means at the three (3) outer edges. Seal the crack between the fireplace hearth and the hearth extension with a non-combustible material. (See Figs. 22 and 23.)

WARNING: HEARTH EXTENSION MUST BE INSTALLED IN ACCORDANCE WITH FIGS. 21, 22 AND 23.

Alternate, non-combustible materials may be used, providing the (total) thermal resistance (R_T value) of the alternate material employed is greater than or equal to an $R = 1.16$. The thermal resistance (R) or the thermal conductivity (K), may be obtained from the manufacturer of the material. The factors are related by the formula $K = 1/R$.

T = given thickness

R = thermal resistance for a given thickness (T)

K = thermal conductivity

Non-combustible materials with a lower R value per inch may be used, provided the thickness of the material is sufficiently greater to maintain an equivalent (total) thermal resistance ($R_T = 1.16$).

EXAMPLE OF DETERMINING HEARTH EXTENSION EQUIVALENT

To determine the thickness required for any new material:

$$\text{NEW required thickness} = \frac{K \text{ of new material (per inch)}}{K \text{ of listed material (per inch)}} \times \text{thickness of listed material}$$

EXAMPLE FOR MAJCO BUILDING SPECIALTIES EH2416 MILLBOARD

$$T \text{ (new)} = 0.458/0.43 \times 0.50 \text{ in.} = 0.53 \text{ in. (new required thickness)}$$

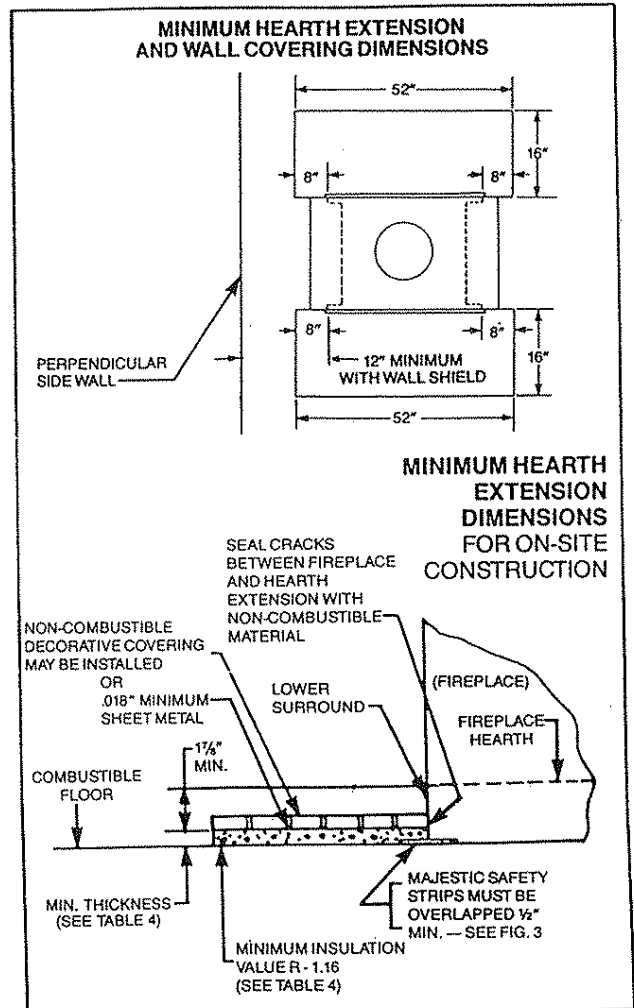


Fig. 21. Protection of adjacent combustible side walls and hearth extension dimensions.

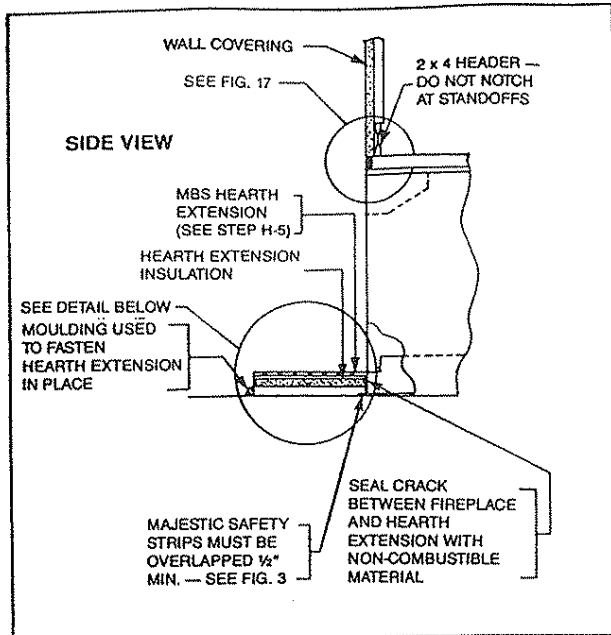


Fig. 22. Sealing detail.

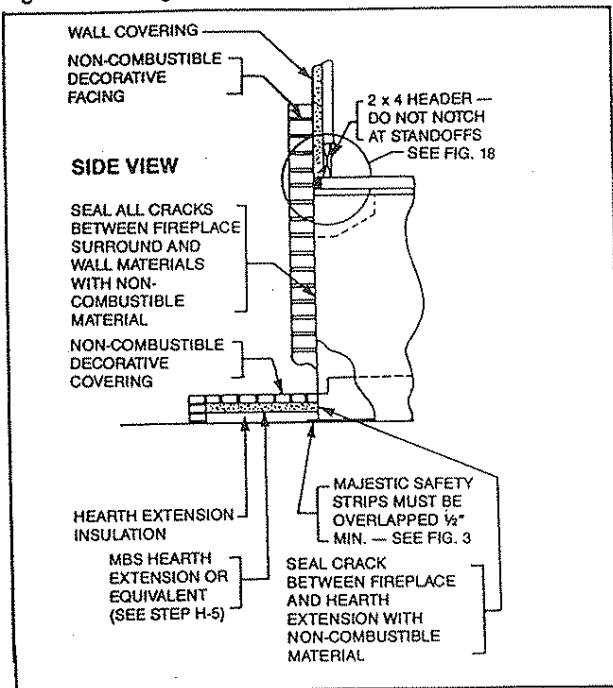


Fig. 23. Sealing detail.

□ H-6. INSTALL DECORATIVE GAS APPLIANCE

The Majestic MST and MSF Series fireplaces are designed to accept a 1/2 inch gas line for an approved gas appliance. Have the appliance installed by a qualified plumber in accordance with all building codes.

Locate the gas line hole in the right outer casing of the fireplace and remove the insulation from the gas line tube.

Next, insert a 1/2 inch gas pipe through the gas line tube from the outside of the fireplace and forcibly punch out the ceramic or metal knockout on inside of the fireplace. Now, install the 1/2 inch gas pipe through the opening. After the gas pipe installation is complete, use the insulation that was removed from the gas line tube to repack the space around the pipe. This should be inserted from the outside of the fireplace and packed tightly to totally seal between the pipe and the tube.

NOTE: The gas pipe should not come in contact with any wood structures until it has reached a point at least one (1) inch away from the fireplace side. (See Fig. 24 for installation clarification.)

NOTE: Local codes may require removal of the flue damper when installing any type of gas appliance in a fireplace. For instructions on damper removal, contact your Majestic Dealer or refer to Majestic Instruction BF151. Heat output of a gas appliance installed in the fireplace should be rated less than 100,000 BTU/Hr.

The gas pipe installation is intended for connection to a decorative gas appliance only (1) incorporating an automatic shutoff device and (2) complying with the Standard for Decorative Gas Appliances for Installation in Vented Fireplaces, ANSI Z21.60.

The decorative gas appliance should be installed in accordance with the National Fuel Gas Code, ANSI Z223.1-1988.

CAUTION: WHEN USING DECORATIVE GAS APPLIANCE, THE FLUE DAMPER MUST BE SET IN THE FULLY OPEN POSITION.

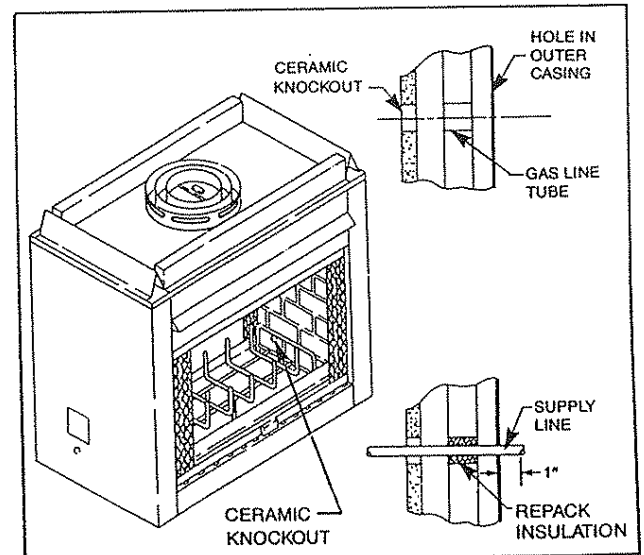


Fig. 24. Install iron pipe gas line through provided hole in right side of fireplace.

Reference Data

AIR SPACE DATA

The MAJESTIC MST and MSF Series fireplaces can be located directly on a flat hard-surfaced combustible floor or on a wooden platform without air space from combustible construction. Some protection, however, is required for adjacent surfaces as detailed in Fig. 25.

Framing members can be placed within $\frac{1}{2}$ " of the sides of the fireplace.

The minimum air space-to-combustibles requirements for chimney sections and dome are detailed in Fig. 25.

WARNING: DO NOT PACK REQUIRED AIR SPACES WITH INSULATION OR OTHER MATERIALS.

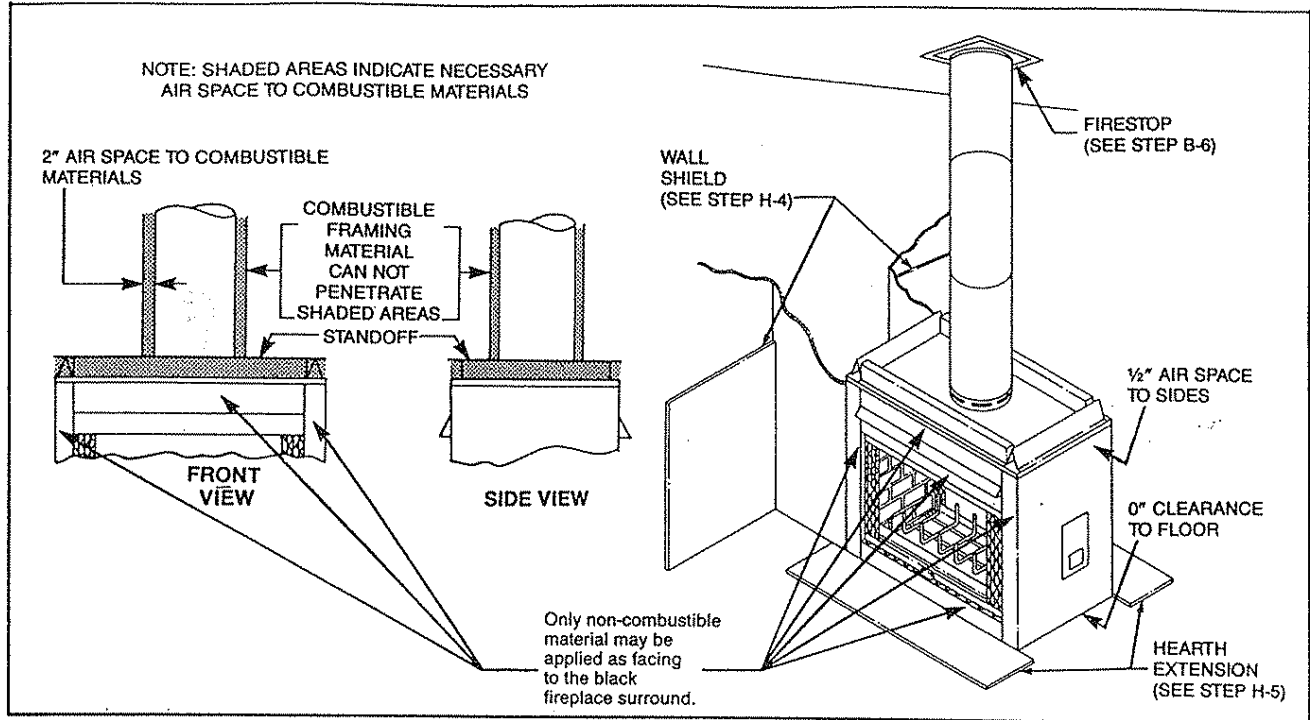


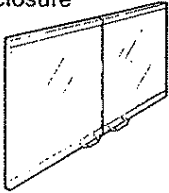
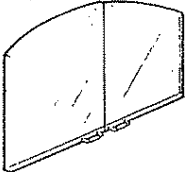
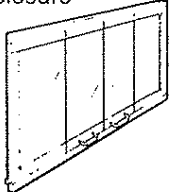
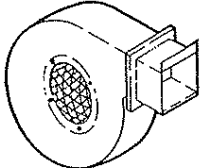
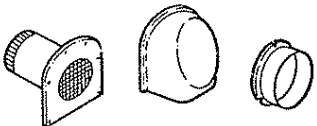

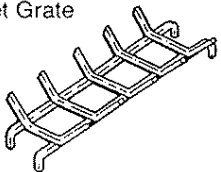
Fig. 25. Minimum air spaces to combustible materials.

Accessory Parts

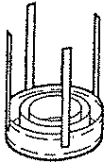
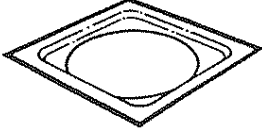
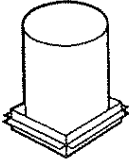
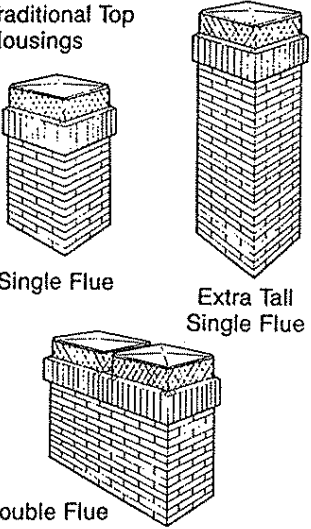
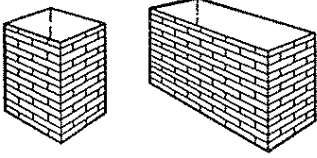

The following accessory parts can be obtained from your Majestic Dealer. The fan kit, top terminations, outside air kit, glass doors, and hearth patching kits are supplied with installation instructions packaged with the unit. Should you need additional information beyond what your dealer can furnish, contact the Majestic Company, Huntington, Indiana 46750, Attention: Director of Customer Service.

CAUTION: This fireplace and chimney assembly is a highly engineered system and, as such, must be operated only with Majestic or Majco Building Specialties approved components that have been designed as parts of the system. If you use an unapproved component or make any modifications, you may possibly cause a fire hazard and will void the Majestic warranty. In addition, such action may void the coverage provided by the owner's house insurance.

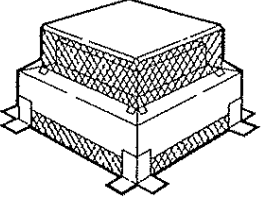
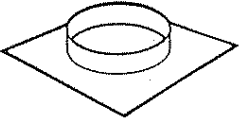
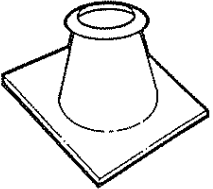
SECTION 1

Accessory	Description	Model No.
Glass Enclosure Kit 	Designed to enclose the MST36/MSF36 fireplace opening with glass doors allowing the fire to remain visible. Two (2) doors supplied in kit.	GDA-MST (Cabinet Style)
Glass Enclosure Kit 	Arched style glass doors designed to enclose the fireplace opening, allowing the fire to remain visible.	MAR
Glass Enclosure Kit 	Designed to enclose the fireplace openings with glass doors, allowing the fire to remain visible. Two (2) doors should be ordered.	HGD-36 (Bi-Fold Style)
Fan Kit 	Designed for use with the fireplace to provide forced air flow. For use with MST36 fireplace.	FK-MST
Outside Air Kit 	Designed to provide outside air for fuel combustion in the firebox. This accessory must be installed before the fireplace is installed.	AK-MST
Hearth Extension 	Located on the floor in front of the fireplace opening to protect the floor from heat, hot embers, ashes, etc.	EH2416
Basket Grate 	Used in the firebox to hold firewood.	Standard Equipment Replacement RBGSF36


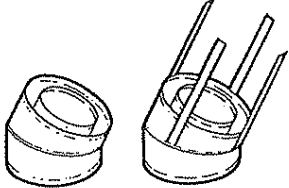
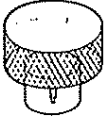
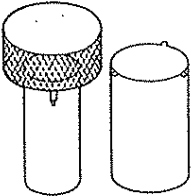

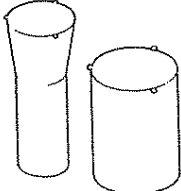
SECTION 1 (Continued)

Accessory	Description	Model No.
<p>Chimney Support</p> 	<p>Used to support the chimney at each 30 feet of vertical height above the hearth and at every 6 feet of inclined chimney run. Each support adds 2½ inches to chimney length.</p>	<p>TCS8A (8" flue)</p>
<p>Firestop</p> 	<p>Required at each floor level and attic on multi-story installation.</p>	<p>FS2A (8" straight flue) FS6A (8" 30° inclined flue)</p>
<p>Radiant Shield</p> 	<p>Used as an alternate to the FS2A firestop to reduce the clearance from the chimney to combustible framing.</p>	<p>RS-8A</p>
<p>Traditional Top Housings</p>  <p>Single Flue</p> <p>Extra Tall Single Flue</p> <p>Double Flue</p>	<p>Gives traditional chimney top look using simulated brick in red, tan or white color. Brick pattern is embossed into galvanized steel unit. Roof flashing is included. Appropriate adapter is required. See Sections 2 and 3.</p>	<p>T20A/T20B (single flue) TL20A/TL20B (extra tall single flue) T44A/T44B (double flue)</p>
<p>Housing Extensions</p> 	<p>Required to extend Traditional Top Housings on steeply pitched roofs.</p>	<p>202036 (single flue) 204436 (double flue)</p>
<p>Wall Shield</p> 	<p>Used to protect walls adjacent to the fireplace.</p>	<p>SP40</p>



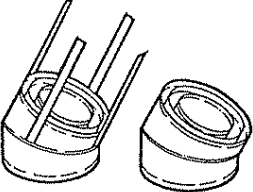
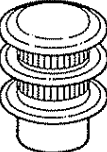
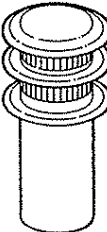
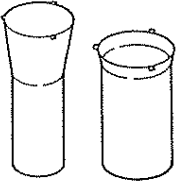
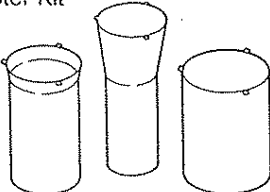
SECTION 1 (Continued)

Accessory	Description	Model No.
<p>Contemporary Chase Top Termination</p> 	<p>Used to terminate chimney at the top of a chase. Flashing is not included. Appropriate adapter is required. See Sections 2 and 3.</p>	<p>TT200B/TT200C</p>
<p>Chase Top Flashing</p> 	<p>Used with chase terminations to prevent rain entry.</p>	<p>FL88 (8" flue)</p>
<p>Contemporary Flashing</p> 	<p>Required for contemporary round top termination on the roof to prevent rain entry.</p>	<p>8-6-12 (8" flue: 0 to 6/12 pitch) 8-12-12 (8" flue: 6/12 to 12 pitch)</p>
<p>Hearth Patching Kit</p>	<p>Used to patch cracks in hearth.</p>	<p>HPC1</p>

SECTION 2
(2 Wall Chimney Components)

Accessory	Description	Model No.
<p>Chimney Sections</p> 	<p>Used to build chimney systems.</p>	<p>8" flue CF81 (1' long) CF818 (1½' long) CF83 (3' long) CF84 (4' long)</p>
<p>Chimney Elbows</p> 	<p>Used to develop offset chimney systems. 30° elbows are available. (Packed 2 per carton — upper and lower elbow set)</p>	<p>CF830A/2 (8" 30° flue)</p>
<p>Contemporary Round Top Termination</p> 	<p>Used to terminate chimney on the roof. Flashing not included.</p>	<p>CFC8-42</p>
<p>Extended Round Top Chase Termination</p> 	<p>For use with MBS type "CF8" Chimney Systems. Used to terminate chimney at the top of a chase. Adapter kit included. Flashing not included.</p>	<p>CFC8L-42</p>
<p>Adapter Kit</p> 	<p>Required to unite chimney with Traditional Top Housing.</p>	<p>CF8CA (8" flue)</p>
<p>Adapter Kit</p> 	<p>Required to unite chimney with Contemporary Chase Top.</p>	<p>CFTT8CB (8" flue)</p>

SECTION 3
(3 Wall Chimney Components)

Accessory	Description	Model No.
<p>Chimney Sections</p> 	<p>Used to build chimney systems.</p>	<p>8" flue 81 (1' long) 818 (1½' long) 83 (3' long) 84 (4' long)</p>
<p>Chimney Band</p> 	<p>Used ONLY with 3 wall chimney to reduce air infiltration.</p>	<p>TWC8A</p>
<p>Chimney Elbows</p> 	<p>Used to develop offset chimney systems. 30° elbows are available. (Elbows packed 2 per carton — upper and lower elbow set)</p>	<p>830A/2 (8" 30° flue)</p>
<p>Contemporary Round Top Termination</p> 	<p>Used to terminate chimney on the roof. Flashing not included.</p>	<p>RT8C (8" flue)</p>
<p>Extended Round Top Chase Termination</p> 	<p>Used to terminate chimney at the top of a chase. Adapter kit included. Flashing not included.</p>	<p>RT8CL (8" flue)</p>
<p>Adapter Kit</p> 	<p>Required to unite triple-wall chimney with Traditional Top Housing.</p>	<p>8CA (8" flue)</p>
<p>Adapter Kit</p> 	<p>Required to unite triple-wall chimney with Contemporary Chase Top.</p>	<p>TT8CB (8" flue)</p>

10/1/88

LISTINGS FOR RESIDENTIAL CONSTRUCTION: MST36 and MSF36

- UNDERWRITERS LABORATORIES REPORT NO. MH11960
- CABO REPORT NO. NER-181 (MST36 ONLY)



Underwriters' Laboratories, Inc.



Council of American Building Officials

MAJESTIC

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