

M. L. ROBERTS

How to install your Majestic® Energy Saving Fireplace™

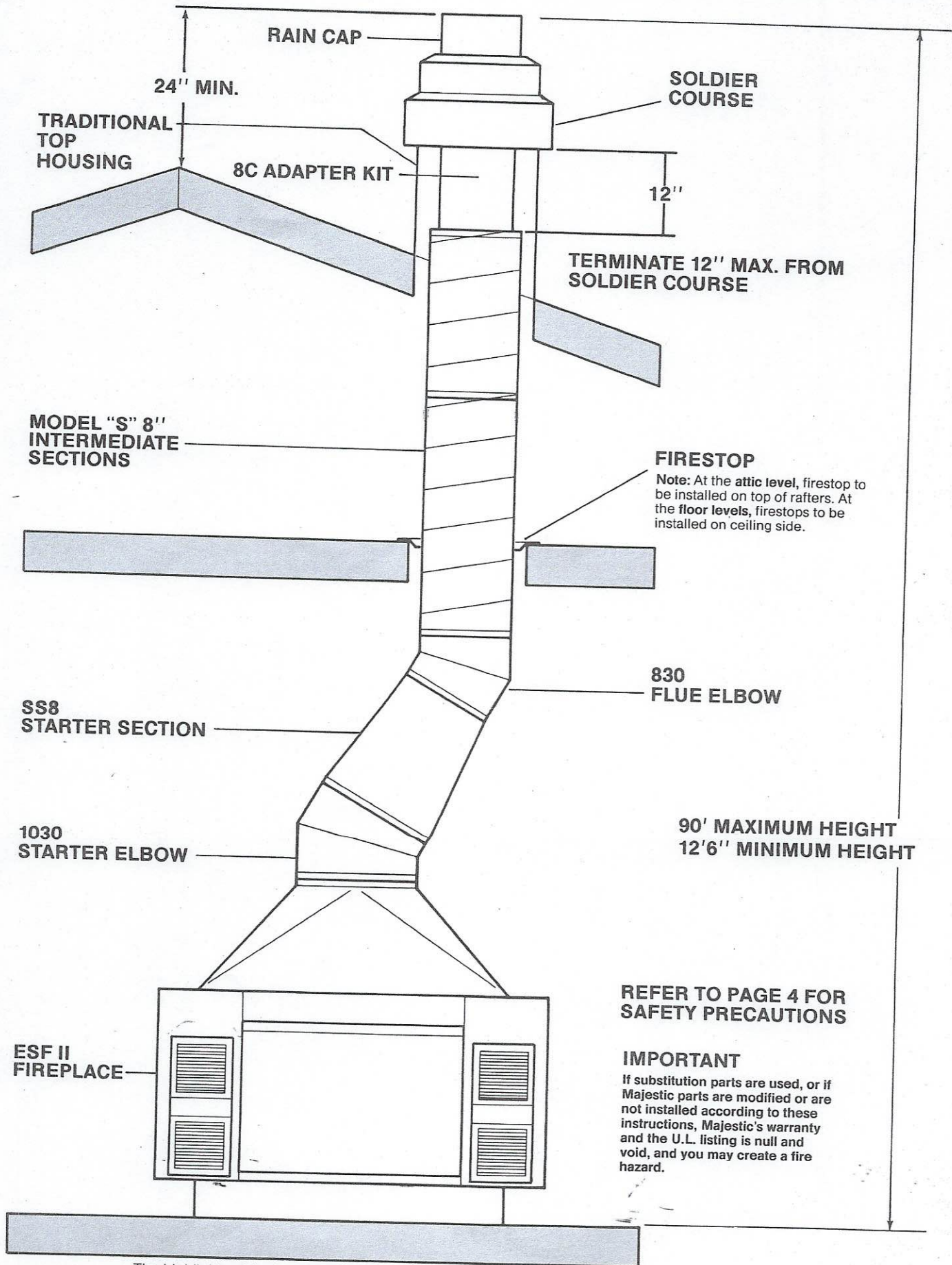
ESF™ II



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MAJESTIC®
An American-Standard Company



The highlights of the installation process are pictured on pages 9 and 10. It's a good idea to turn to these pages every now and then to make the printed instructions more meaningful.

The offset installation.

Step 1. Move the fireplace to the location where you intend to install it. Place a 4" × 58" strip of .020 min. thickness metal 2" under its front edge. This is a protection against falling embers. Anchor fireplace in position.

Carefully review the clearance requirements which are detailed on Page 5.

IMPORTANT! If Fan Kit (FK-II) is to be added to ESF II, review the separate installation instructions now.

Step 2. Measure 9½ inches from the back wall to locate the center line of the flue. Then measure over to the center of the offset chimney.

Step 3. Cut a 17½" × 17½" template from the shipping carton. Mark the ceiling area to be cut out for the chimney.

Step 4. Cut through the drywall and remove it.

Step 5. Frame the ceiling opening. The minimum inside dimensions are 17½" × 17½". This gives minimum 2" clearance.

Study the framing for the ceiling which is illustrated in Figure K on Page 6.

Step 6. Attach the offset starter elbow beginning with the stainless steel section. You can install the elbow right off the fireplace.

The offset starter elbow is illustrated in Figure M on Page 6.

Step 7. Continue with the inner and outer starter elbow sections.

Step 8. Snap the starter section into the starter elbow. The stainless steel section should go in first.

Step 9. Continue with the inner and outer starter sections. Make sure all sections engage completely.

Step 10. Insert the spiral intermediate chimney sections. The "up arrows" on each section insure proper positioning. Attach the stainless steel flue section first. TCS8 flue supports are required 45' from floor, then every 30', also, every 6' of angled run. Attach support brackets to the framing in the ceiling. Maintain minimum 2" clearance.

Step 11. Snap on the chimney elbow that returns the chimney system to the vertical position. This is a one-piece elbow.

Refer to Figure N on Page 6. The details of the one-piece elbow are pictured.

Step 12. Now attach the support brackets to the framing in the ceiling. Maintain minimum 2" clearance.

Step 13. Continue installing the spiral intermediate chimney sections. Work them down through the ceiling opening. Maintain minimum 2" clearance.

Step 14. Slip the firestop over the spiral section. Then nail it to the framing. A firestop is required at each ceiling level and on the attic floor area.

Step 15. Get the template which you fashioned from your shipping carton. Determine the center line of the flue. Use a plumb bob to locate the roof center line. Leave the template on the pipe. It keeps cutting scraps from falling down between the pipe sections.

Step 16. Drive a nail up through the roof. That marks the center line on the outside.

Step 17. Determine the pitch of the roof. (The roof opening dimensions are measured horizontally and change with the pitch of the roof.)

Step 18. Mark an outline of the roof opening. Then cut and frame it with 2 × 6's or 2 × 4's. The framing must be securely nailed. The top housing and flashing are anchored to this construction and must withstand heavy wind loads.

Figure L, Page 6 illustrates the proper framing for the roof opening.

Step 19. Continue the spiral pipe chimney sections through the opening in the roof.

Step 20. If the distance from the center of the flue to the peak of the roof is greater than 10', refer to Figure F on Page 6.

Step 21. As you can see from the 10' Rule Chart, (Figure F, Page 6) the top of the chimney should extend 24" above if it is within 10' of the roof peak. When the chimney is further than 10' from the peak of the roof, the top of the chimney should be positioned so that it is 10' or more from the closest point on the roof in a horizontal direction, and then it should extend 24" above that point. These are the minimum dimensions specified for safety by major U.S. Building Codes. The dimensions do not imply smoke-free installation.

Step 22. Refer to Figure Q on Page 6 for the height limitations of your chimney system. Do not use more than four 30° elbows per system. The maximum total length of angled run of chimney is 20 feet. Additional supports (TCS8) are to be provided every six feet for angled run of chimney.

Traditional Top Housing Installation

Step 23. We've selected the Traditional Top Housing to illustrate this installation procedure. Majestic offers a

variety of housings and they are depicted in Figures H, I, J, Page 6. If you elect to install a Contemporary Top Housing, refer to Page 8. If your installation uses a chimney chase, refer to Page 8.

Step 24. Make absolutely certain that the spiral chimney sections terminate within 12 inches of the soldier course on the housing. If not, the cooling system will be affected.

Step 25. Flashing is included with the Traditional Top Housing. Locate the upper half of the flashing over the roof opening. Nail the upper edge only. Use lead-head nails. Align the two housing brackets with the holes in the upper half of the flashing. Nail the brackets through the flashing onto the roof-opening framing. Place the housing in the brackets on the upper half of the flashing. Tip the housing towards the peak of the roof. Slide the two remaining brackets onto the housing. Then let the housing rest on the flashing. Pull the lower half of the flashing down until the flashing contacts the housing side. Align the two loose housing brackets with the holes in the lower half of the flashing. Nail through the flashing into the roof-opening framing. Using the two holes in each bracket as guides, punch holes in the top housing and insert the metal screw. Draw up securely.

Step 26. Caulk the upper sections of the flashing with roofing compound. Also caulk the lower sections.

Step 27. Insert the adapter kit into the top housing. The inner telescoping pipe slides into the housing. It connects into the inner pipe of the chimney system. Make sure it engages at least two inches.

Step 28. Snap the flue support cone onto the four brackets which are located in the top housing.

Step 29. Slide the stainless steel flue telescoping pipe into the housing. Be sure the pipe engages the chimney system at least two inches. The pipe should rest securely on the flue support cone.

Step 30. Snap the VRC or FRC rain cap onto the brackets in the top housing. Your chimney is now

completely installed.

Step 31. Frame in your fireplace. Refer to Figure E on Page 5.

Step 32. Finish the wall around the fireplace with material of your choice. If you elect to cover the black surround, you must use non-combustible materials as referred to on Page 4.

IMPORTANT! Facing material abutting grills must be non-combustible. Grills cannot be extended from surround. Grill must maintain its contact to surround. Grills may not be covered with facing material. Air flow cannot be obstructed, either in or out of grills. Grills are an integral part of the total fireplace system, and cannot be removed or altered in any manner.

Step 33. Seal the area at the top of the surround and framing with a non-combustible material.

Figure D on Page 5 illustrates this important safety feature.

Step 34. When the fireplace opening is within 40" of a side wall, that wall must be covered with a Majestic wall shield, (SP40), or non-combustible material equivalent to SP40 wall shield.

Review the clearance section, Figures B & C on Page 5.

Step 35. Install a Majestic EH36 non-combustible extended hearth or a locally-approved equivalent material. Be sure you seal the crack between the hearth and the fireplace.

This safety feature is detailed in Figure D, Page 5.

Step 36. Regardless of the face you put on your unit, close up all cracks where the material meets the metal fireplace. Use a non-combustible sealer, (e.g. asbestos rope) as referred to in #8 on Page 4. The entire firebox should be totally sealed.

Read the safety features on Page 4. Then read them again. It would be foolhardy to skim over them.

What you must do to make your fireplace safe.

1. Consult your local building codes. Investigate the requirements for installing a factory-built fireplace.
2. Do not modify any Majestic components.
3. Do not install an Energy Saving Fireplace, ESF II, in a mobile home.
4. Wear gloves while you work. The fireplace and chimney system may have sharp edges which can cut the skin.

5. The Majestic Energy Saving Fireplace, ESF II, can be installed only with Majestic Chimney and Roof Termination Components. It cannot be connected to any other flue system or components made by another manufacturer without creating a fire hazard.

6. Adjacent combustible side walls within 40" of the fireplace opening must be protected with a Majestic SP40 insulated wall panel, or Approved non-combustible material. (See #8.)

7. The chimney sections must be installed a minimum of 2" away from enclosures such as walls, ceilings, joists, floors and roof structure. The 8" flue system requires a clearance of 2" (Chimney sections are 13½" O.D.)

8. The National Fire Protection Association defines non-combustible material as "materials which will not ignite and burn, such materials consisting entirely of steel, iron, brick, tile, concrete, slate, asbestos, glass, or plasters, or combinations thereof."

9. If a mantle is installed above the fireplace it must be a minimum of 12" above top of fireplace opening. Clearance from grills to combustible items (tables, furniture, etc.) is minimum 24" from grill surface.

10. You may install non-combustible facing material over the black surround on your Fireplace. (See #12.)

11. Do not use synthetic logs along with regular wood. This causes excessive heat build-up.

12. Do not use scrap lumber in your fireplace. It produces many sparks and is hazardous.

13. Always place the logs on grates or andirons. Do not allow the logs to touch the sides of the fireplace.

14. Use Majestic Hearth Extension model EH36 or equivalent. (The equivalent shall be equal to one inch thickness of 15 lb./cu. ft. mineral fiber, $K=0.63$ Btu/ft.-degree F/in. at 1000°F, together with a one inch thick air space.)

15. Secure the hearth extension to the floor to prevent shifting. Do not build extension higher than the hearth.

16. Metal strip, minimum thickness of .020 × 4" deep × 58" wide must be used on the floor extending 2" under fireplace at point where the extended hearth meets the fireplace to protect against falling embers.

29. When the chimney reaches more than 90 inches above the roof it requires additional support. The support should be strong enough to withstand a wind load of 3½ lbs. for each inch the chimney extends beyond the 90" mark.

28. Never install a lightning rod on the fireplace chimney. It should be installed on the roof and the rod must be grounded.

27. The chimney sections must terminate within 12" from the bottom of the soldier course on the "T" Series Top Housings. These sections must not reach above the bottom of the soldier course. Also, there must be a minimum 2" engagement between the chimney section and the adaptor pipes in the "T" Series or Contemporary Top Housing.

26. A firestop must be used at each floor or ceiling that you penetrate.

25. Adequate combustion air must be provided to allow proper draft to the fireplace. The Majestic Company can assume no responsibility for poor draft caused by air-conditioning systems, heating systems, vent fans, or tightly insulated and constructed buildings. We cannot be responsible for any mechanical device which causes negative pressures in the building.

24. An exhaust fan may cause the fireplace to smoke or vent poorly. Always provide a source of fresh air for combustion to the room where the fireplace is installed. An additional air vent may be required. This would best be located near the furnace area or in a room containing a ventilating fan. The fresh air vent should equal the flue size.

23. Inspect for and fill with non-combustible material, cracks between the face of the fireplace and the non-combustible decorative facing material. A crack in this location can be a fire hazard. (See #8.)

22. Two offset elbows may not be attached together to form an offset of over 30°

21. The first two fires you build in your newly-installed fireplace should heat up slowly and be moderate in size. Do not build a roaring fire or an extremely hot fire. This could cause stress in the refractory floor. Cracks could result. Small fires that heat up slowly will help the refractory material to cure to its maximum strength. It's similar to breaking in a new car. Start slow.

20. If you go to bed before the fire has burned out, remember to close the screen. Otherwise sparks and embers may fall on the floor or rugs.

19. Do not close the damper until the fire has completely burned out.

18. IMPORTANT — NEVER START YOUR FIRE WITH FLAMMABLE LIQUIDS. NEVER FORGET THIS IMPORTANT SAFETY PRECAUTION.

17. Do not place the fireplace over shag rugs or similar floor coverings. However, you may install the fireplace on wood or other combustible flooring materials.

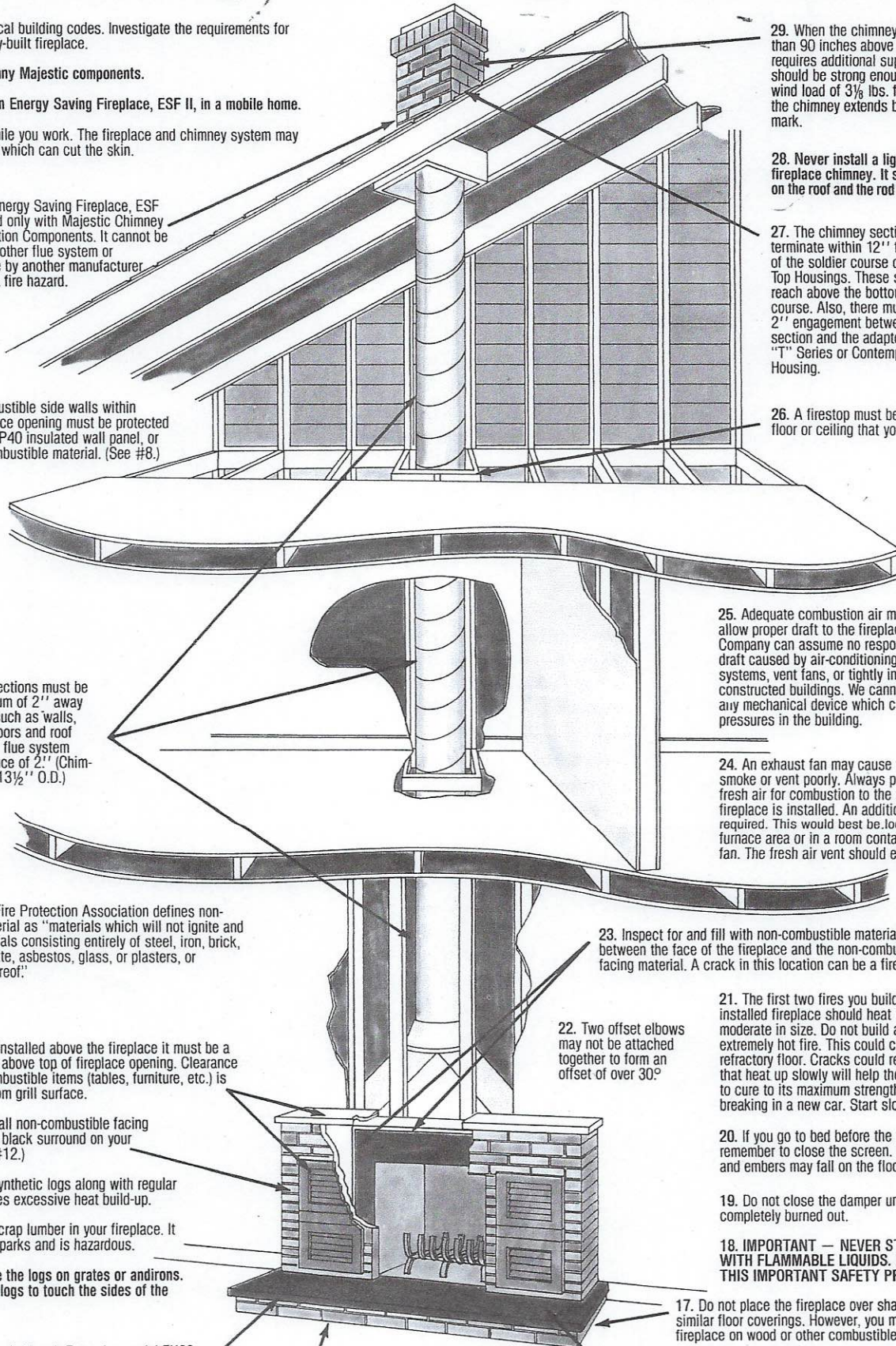
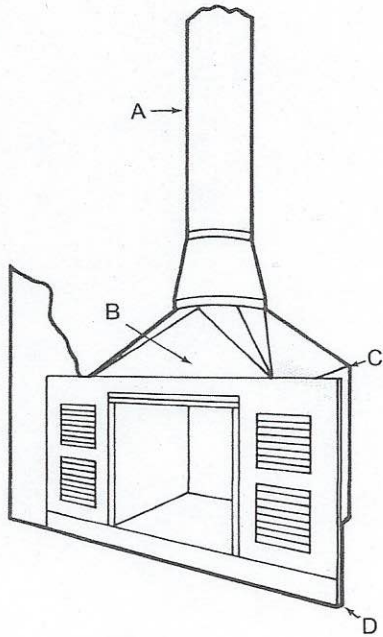


Figure A

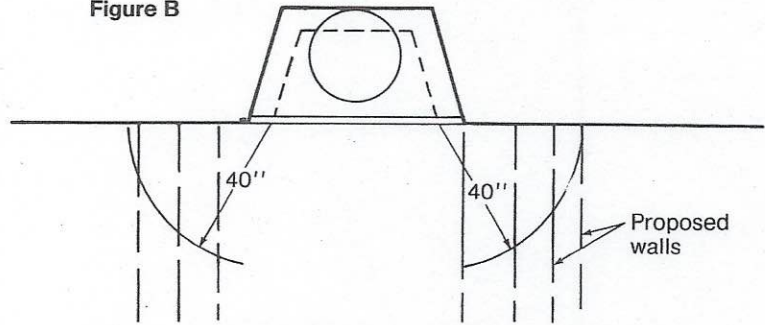


Clearances to combustibles

Area	A	B	C	D
ESF II	2"	0"	0"	0"

Do not place the fireplace over shag rugs or similar floor coverings. However, you may install the fireplace on wood or other combustible flooring materials.

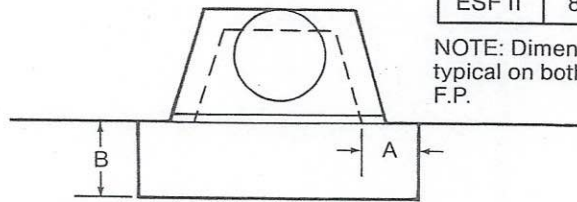
Figure B



Wall protection required for ESF II

CAUTION: Protect adjacent combustible sidewall within 40" of fireplace opening with SP40 insulated wall panel or locally approved equivalent material.

Figure C



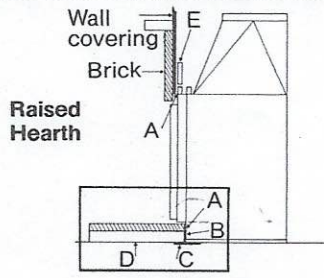
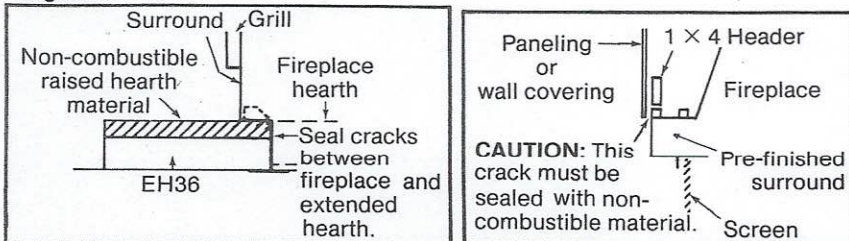
Floor protection required for ESF II

CAUTION: Majestic EH36 hearth or locally approved equivalent material *must* be used.

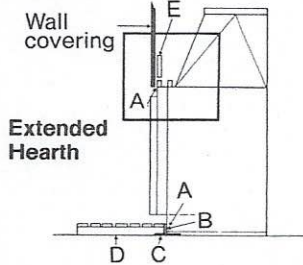
Area	A	B
ESF II	8"	16"

NOTE: Dimension "A" is typical on both sides of F.P.

Figure D



Raised hearth framing

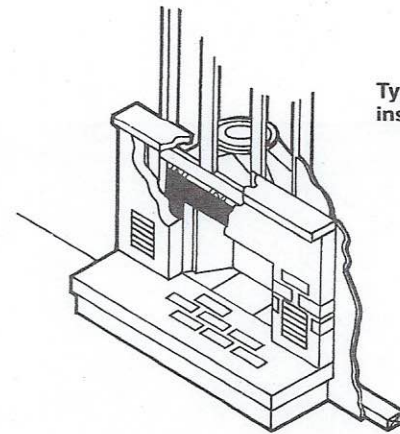


Extended Hearth

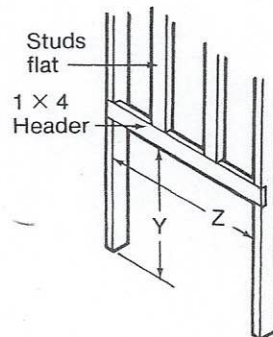
CAUTION:

- A — All cracks between fireplace surround & finishing (framing) material must be sealed with non-combustible material.
- B — 1/4" Asbestos millboard or equivalent.
- C — Flashing: (metal min. thickness of .020, 2" under unit & 2" on the closest combustible material to the hearth opening.
- D — Extended hearth, EH36 or equivalent.
- E — 1 x 4 Header must be used when rested on stand-offs, **do not** notch 1 x 4 around stand-offs.

Figure E



Typical installation



Open front framing dimensions

ESF II
Y = 35 1/4"
Z = 58 1/2"

Figure F

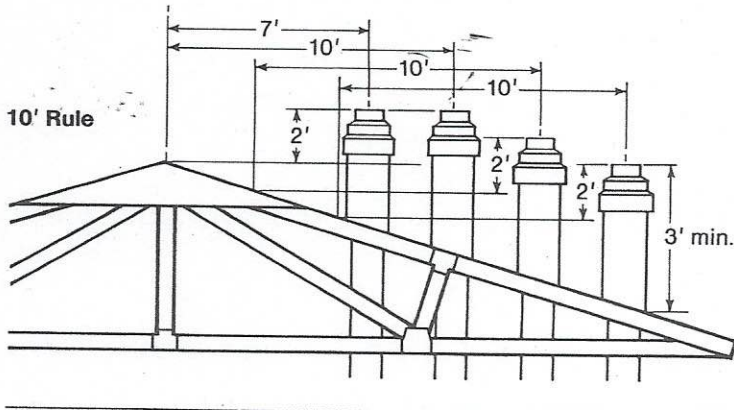


Figure G

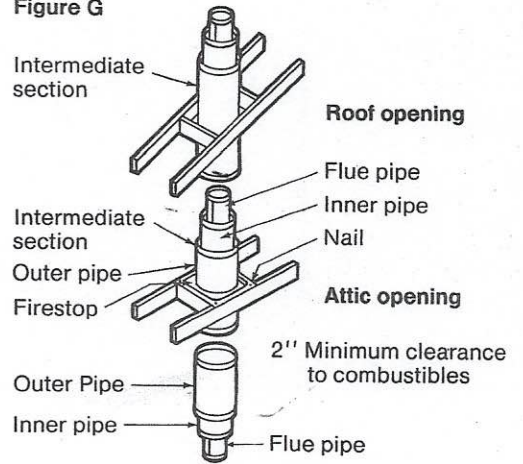
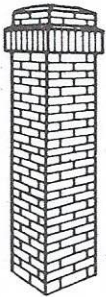


Figure H



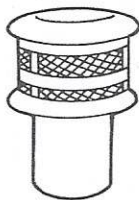
Traditional

Figure I



Contemporary square

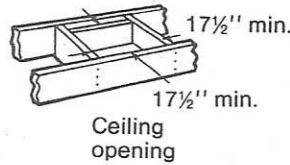
Figure J



Contemporary round

Figure K

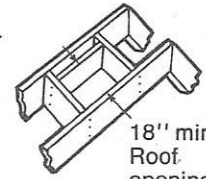
ESF II



Ceiling opening

Figure L

ESF II



18" min. Roof opening

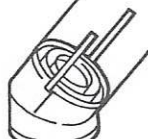
2" Minimum clearance to combustibles

Figure M
30° Elbow (Starter)



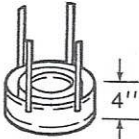
1030

Figure N
30° Elbow (Flue)



830

Figure O
Flue support



TCS8

Figure P

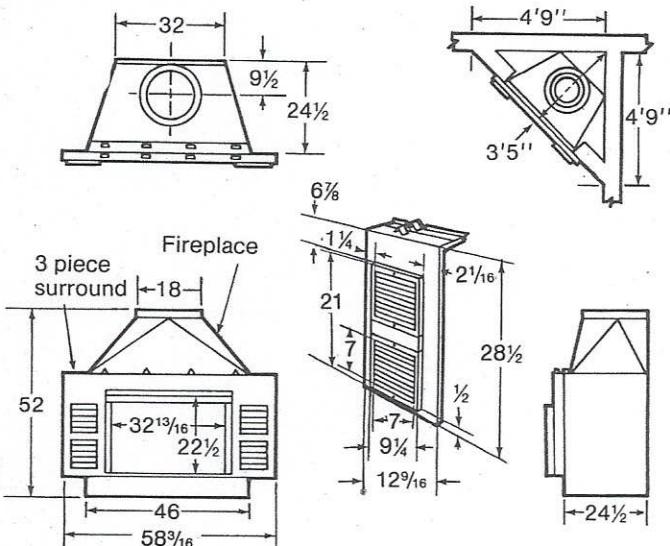
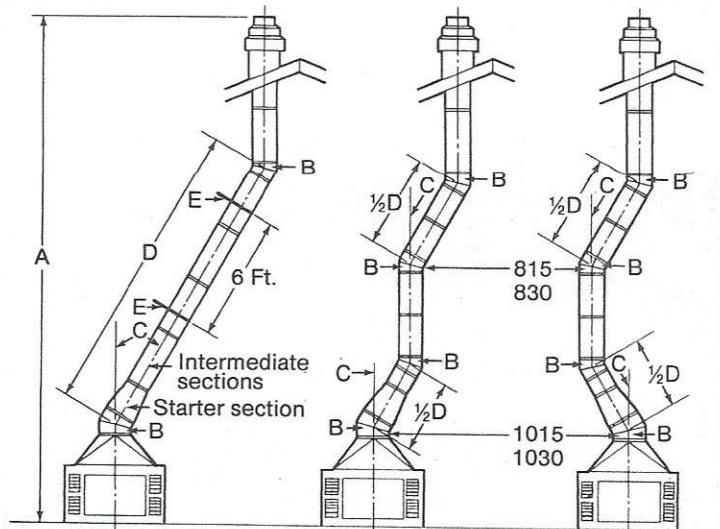
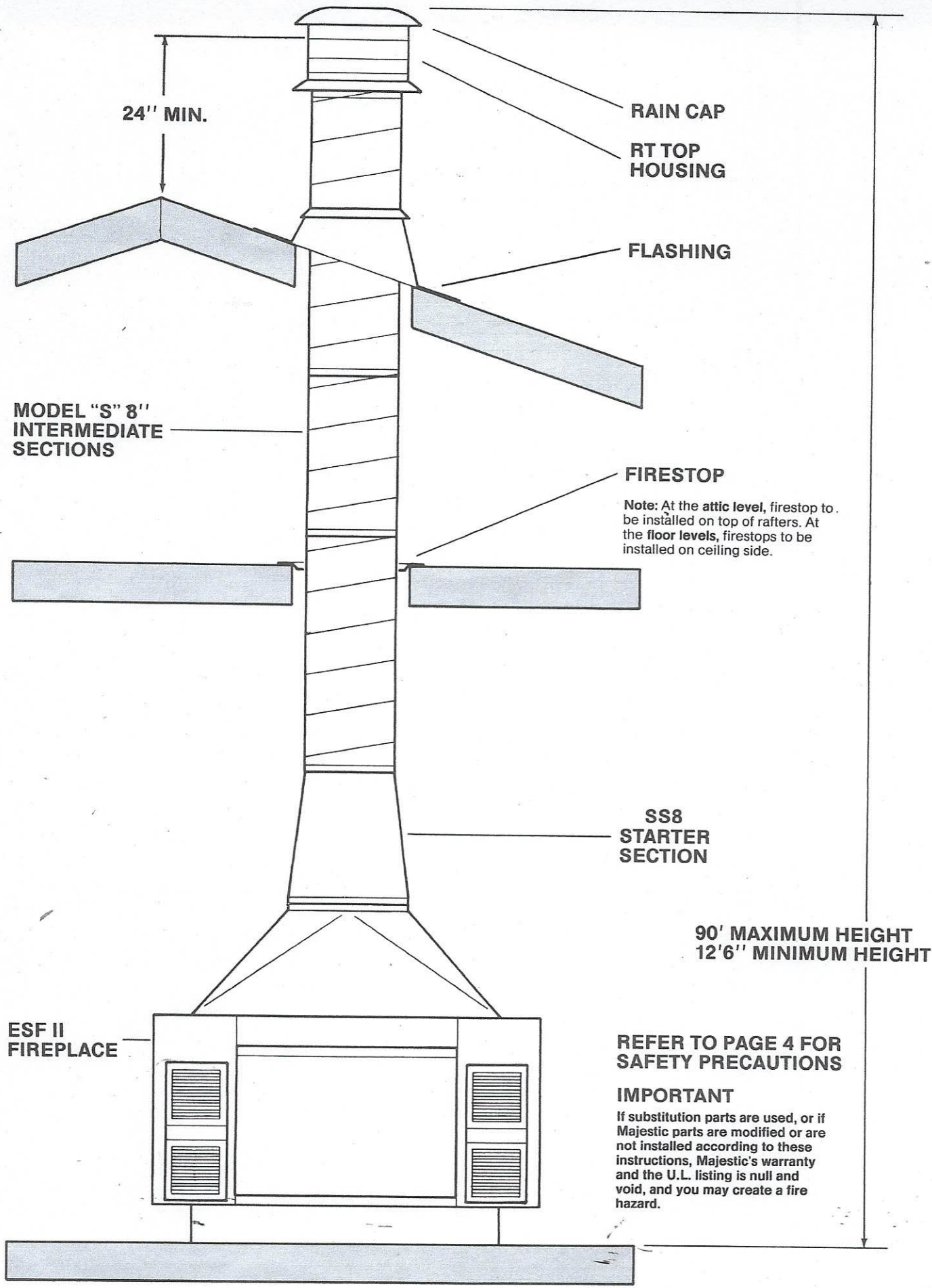


Figure Q

Typical double offset installations



- A — 90' maximum height.
12'6" minimum height.
- B — Four 30° elbows maximum per system.
- C — Chimney is to be a maximum of 30° from vertical.
- D — Maximum of 20 ft. total length of angled run of chimney.
- E — Additional support to be provided every 6 ft. for angled run of chimney.



24" MIN.

RAIN CAP

RT TOP HOUSING

FLASHING

MODEL "S" 8" INTERMEDIATE SECTIONS

FIRESTOP

Note: At the attic level, firestop to be installed on top of rafters. At the floor levels, firestops to be installed on ceiling side.

SS8 STARTER SECTION

90' MAXIMUM HEIGHT
12'6" MINIMUM HEIGHT

ESF II FIREPLACE

REFER TO PAGE 4 FOR SAFETY PRECAUTIONS

IMPORTANT

If substitution parts are used, or if Majestic parts are modified or are not installed according to these instructions, Majestic's warranty and the U.L. listing is null and void, and you may create a fire hazard.

The highlights of the installation process are pictured on pages 9 and 10. It's a good idea to turn to these pages every now and then to make the printed instructions more meaningful.

The straight up installation.

Steps 1 to 5. They are identical to the installation steps for an offset installation which are detailed on Page 2. (In Step 2, ignore second sentence.)

Step 6. Snap the starter sections to the fireplace. Center the stainless steel section and attach it first.

Step 7. Follow with the inner and outer starter sections. Make sure all sections engage completely.

Step 8. Attach the spiral intermediate chimney sections. The "up arrows" on each section insure proper positioning. The stainless steel flue section should be attached first.

Step 9. Install the inner section with the attached spacers. Then add the outer spiral sections.

Step 10. TCS8 flue supports are required 45' from floor then every 30'. Attach the support brackets to the framing in the ceiling.

Steps 11 to 22. These steps are identical to Steps 13 to 22 on Pages 2 and 3.

Contemporary Top Housing

Step 23. We've selected a Contemporary Top Housing for this installation. Majestic offers several housing varieties. If you elect to install a Traditional Top Housing, refer to Step 23 on Page 3.

Step 24. After you have framed the roof opening, continue the spiral pipe chimney sections through the opening. Do not attach the outer section until the Contemporary flashing is cut to the pitch of the roof.

Step 25. Position the Contemporary flashing on the roof. The short end should face toward the peak of the roof. Remove the shingles if necessary. Then place the outer pipe of the intermediate section on the flashing in a vertical position.

Step 26. Use a marking pencil to scribe a line around the Contemporary flashing where the intermediate section rests.

Step 27. Use tin snips to cut the line you just marked. Remove this piece of Contemporary flashing.

Step 28. Continue the spiral pipe chimney sections through the opening in the roof. Apply roof caulking compound to the outer intermediate section that has been snapped into place. Apply the compound at the area where the flashing will connect to the pipe. Lay the flashing next to the pipe and use a straight line to determine where the flashing and pipe will join.

Step 29. Slide the Contemporary flashing over the outer section. Push down to make sure of a tight fit. Then add more caulking to the area where the flashing and the spiral pipe join. This protects against water leaks.

Step 30. Apply some caulking compound under all the edges of the flashing.

Step 31. When you've finished caulking, nail the flashing to the roof.

Step 32. Attach the storm collar over the area where the pipe and flashing join. Then secure the collar tightly with the bolt that is supplied.

Step 33. Screw on the RT Series Contemporary Top

Housing to the edge of the outer spiral pipe.

Step 34. Insert the inner telescoping pipe. It connects to the inner pipe of the chimney system. Push the adapter pipe all the way down into the housing. It should rest on the flange and connect with chimney pipe at least two inches.

Step 35. The stainless steel telescoping pipe slides into the housing. It should connect with the chimney pipe at least two inches. Also, be certain you push the adapter pipe all the way down into the housing so it rests on the inner telescoping pipe flange.

Step 36. Screw the rain cap onto the legs. This completes the installation of the Majestic Contemporary Top Housing.

Steps 37 to 42. Complete the installation of your Energy Saving Fireplace, ESF II, by following Steps 31 to 36 on Page 3.

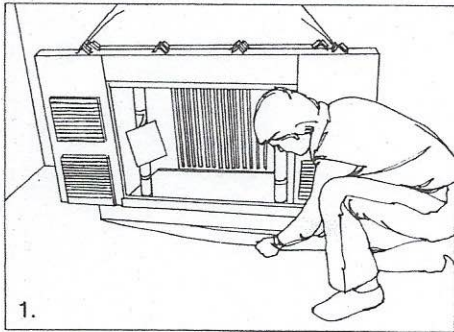
Chimney Chase Installation

1. It isn't always necessary to build a chimney system which goes up through the roof. There are times when it's best to install a chase.
2. Move the fireplace to the location where you intend to install it. Place a 4" X 58" strip of .020 min. thickness metal 2" under its front edge. This is a protection against falling embers.
3. Follow Steps 6 through 12 on Page 2 if offset used or Steps 6 through 10 on Page 8 if straight up.
4. Continue the spiral pipe chimney sections to within ten inches of the top of the chase.
5. Enclose the chimney chase with any material. Maintain a two inch clearance to combustible material.

Chase Termination

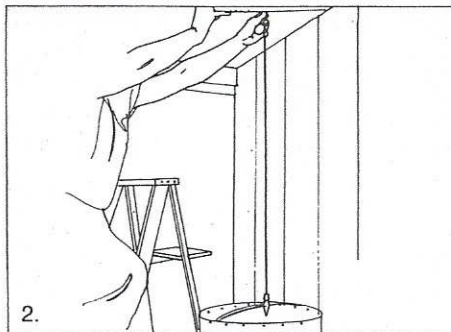
6. Use a Majestic RT8L or TS808U Termination Assembly.
7. Fabricate or purchase flashing locally. The collar on the flashing must be a minimum of three inches high and must lip over the side at least one inch.
8. Bend the support tabs on the outer adapter pipe.
9. Slide the outer adapter pipe into the collar on the flashing. Attach it by bending the tabs over the collar. This adapter pipe will connect to the outer spiral section that terminates at least ten inches from the chase top. Be sure this pipe engages two inches or more.
10. Attach the RT8L of TS808U Top Housing to the flashing collar. Secure with screws.
11. Insert the inner telescoping pipe. It should connect into the inner spiral pipe at least two inches. Push the pipe all the way down to make certain it rests securely on the flange in the top housing.
12. Insert the stainless steel telescoping pipe. It should connect into the stainless steel pipe at least two inches. Push the pipe all the way down. Be sure it rests on the inner baffle.
13. Then attach the rain cap. Secure with screws.

Step by step instructions



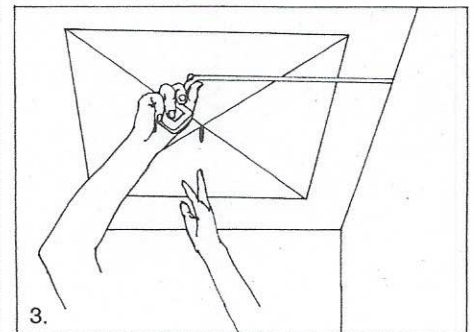
1.

Place the fireplace where you intend to install it. Place a 4" x 58" strip of metal 2" under its front edge.



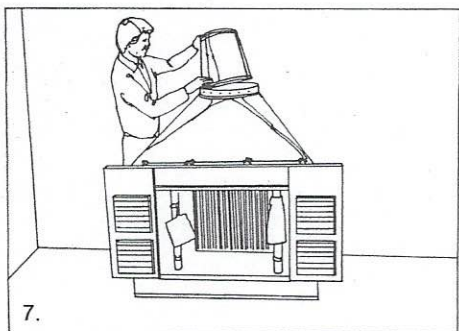
2.

Measure 9½ inches from backwall to centerline of flue.



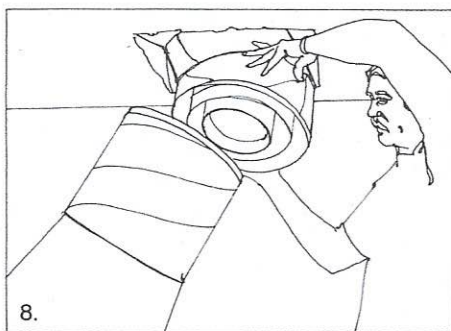
3.

Mark the ceiling area to be cut out for chimney.



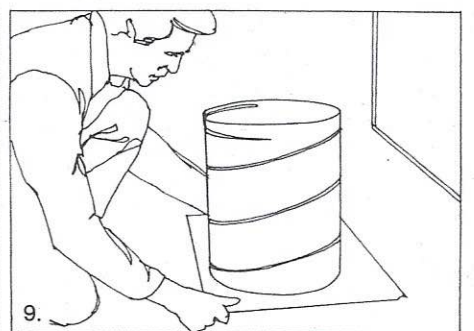
7.

Or attach the starter section if your installation is straight up.



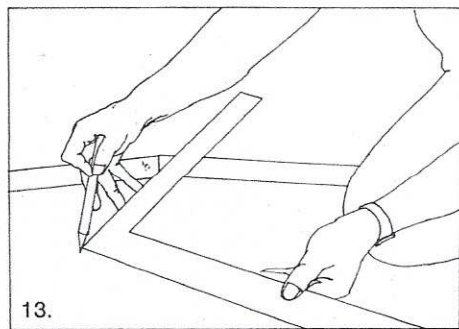
8.

Snap on the elbow that returns the chimney to a vertical position. Maintain 2" minimum clearance.



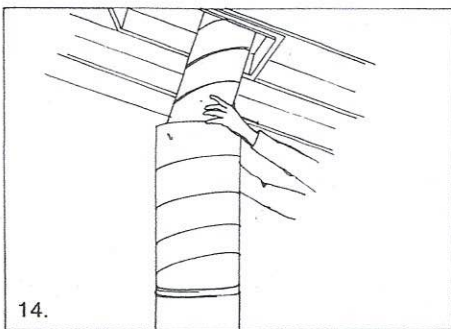
9.

Install the firestop at each ceiling line and attic floor level.



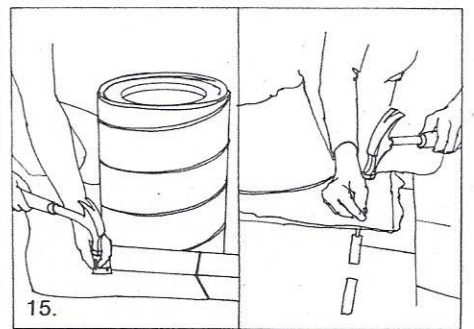
13.

Cut and frame the roof opening.



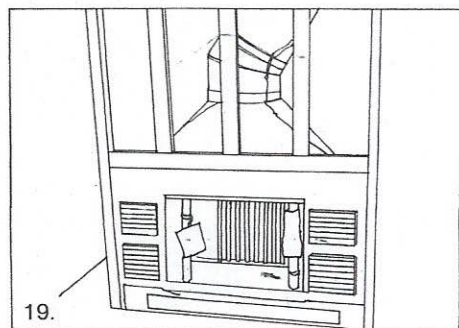
14.

Continue the spiral pipe chimney sections through the opening in the roof. Maintain 2" minimum clearance.



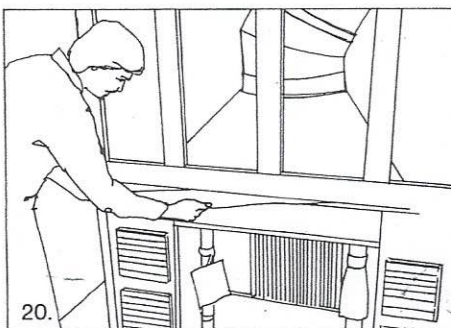
15.

Nail the flashing to the roof.



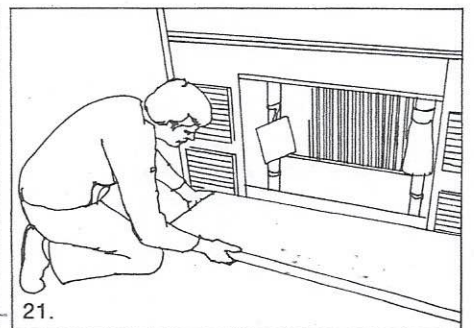
19.

Frame in the fireplace.



20.

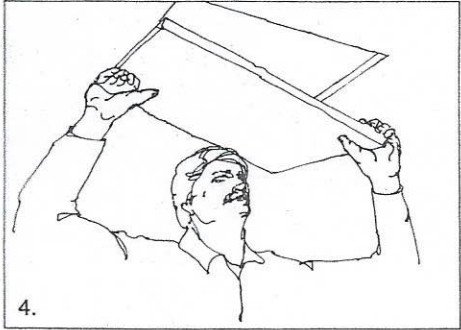
Seal the top of the surround and framing with a non-combustible material.



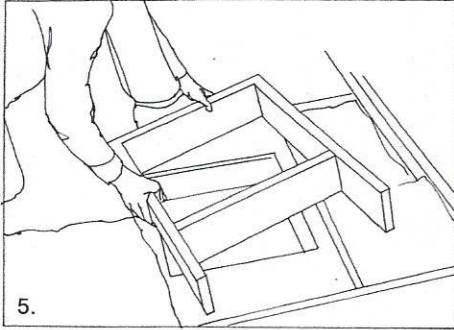
21.

Install a non-combustible extended hearth. Seal the crack between the hearth and the fireplace.

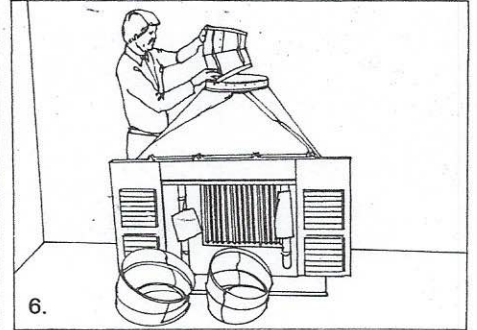
s for quick installation.



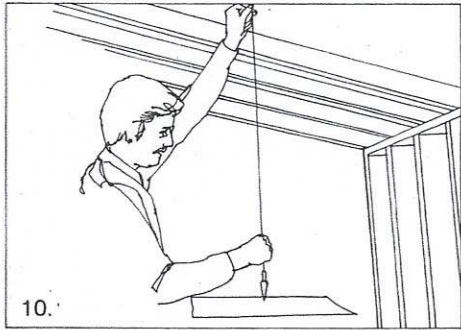
4. Cut the drywall.



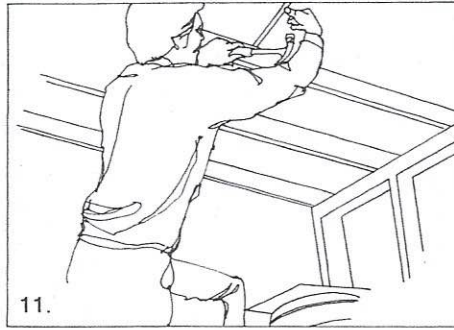
5. Frame in this area.



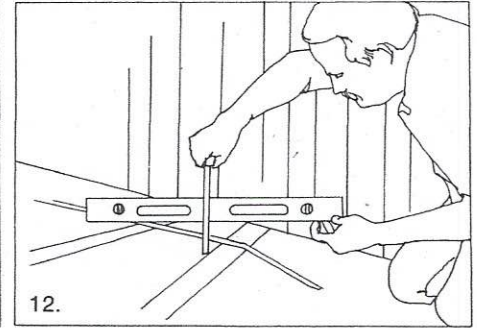
6. Attach the starter elbow for your offset installation.



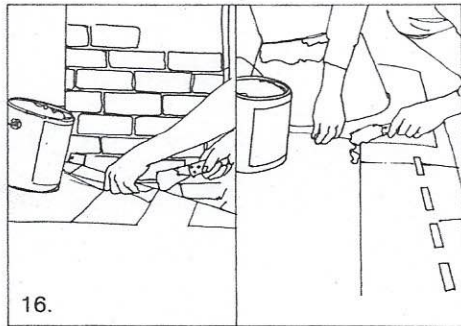
10. Determine the centerline of the flue. Use a plumb bob to locate the roof centerline.



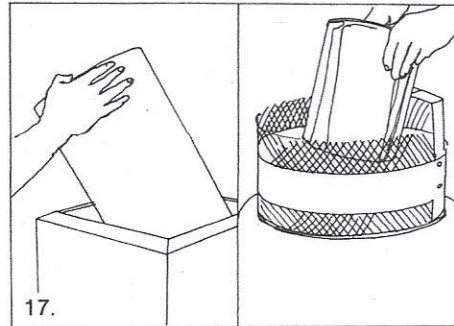
11. Drive a nail through the roof.



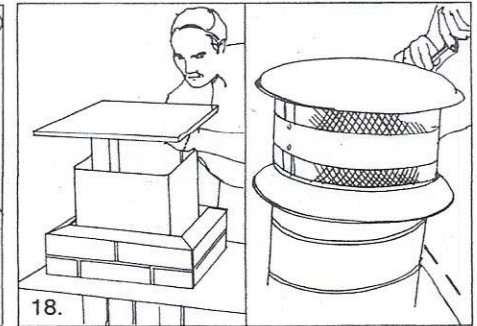
12. Determine the pitch of the roof.



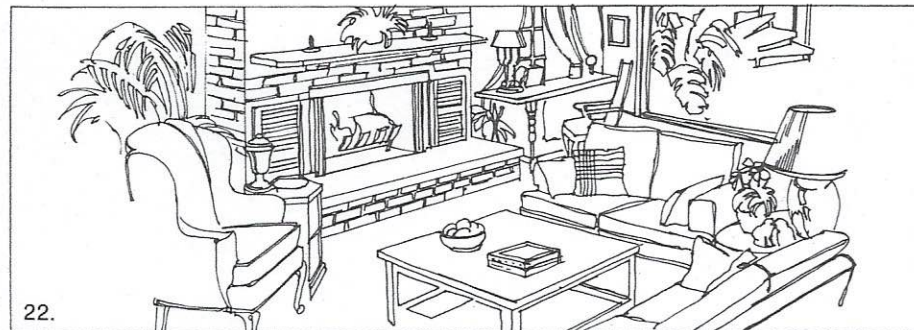
16. Caulk the flashing.



17. Insert the adapter kit into the top housing.



18. Snap the rain cap onto the top housing.



22. Finish the fireplace with the material of your choice.

Majestic Fireplaces are listed, certified, and/or accepted by leading national and local building codes and authorities:



Building
Officials
Code
Administration



International
Conference of
Building
Officials



UL Seal



Southern
Building
Code Congress

IMPORTANT

If substitution parts are used, or if Majestic parts are modified or are not installed according to these instructions, Majestic's warranty and the U.L. listing is null and void, and you may create a fire hazard.

"Majestic reserves the right to make changes at any time, without notice, in design, materials, specifications and also to discontinue colors and products."

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