

# **STR/CVR Series Woodburning Fireplace**



Homeowner's Installation and Operating Manual

For Models:

**STR33 STR36 STR42 CVR36 CVR42** 





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 Wood Energy Technical

DO NOT DISCARD THIS MANUAL: Retain for future use.

## **Safety Information**

## PLEASE READ THIS MANUAL BEFORE INSTALLING AND USING FIREPLACE.

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

## Description

The STR/CVR Series fireplaces are multi-side solid fuel, woodburning fireplaces. These are radiant models only and include a preinstalled outside air kit.

## Precautions

Majestic Fireplaces and component parts have been highly tested and will operate safely when installed in accordance with instructions provided in this manual. Carefully read and understand all instructions **before** beginning installation.

If you notice any damage to fireplace or component parts, immediately report damage to your Majestic Fireplaces dealer.

Only use CFM Corporation components or the warranty will be voided and a fire hazard may be created.

CFM Corporation warranty will be voided by and CFM Corporation disclaims any responsibility for the following actions:

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

**Any such action may possibly cause a fire hazard.** Consult local building codes to ensure that you are in compliance **before** installing the fireplace. Fireplaces must be vented to the out-of-doors.

Do not obstruct or modify air inlets/outlets in any manner.

Do not install combustible materials on any of the black fireplace surround.

Burn only solid wood fuel or gas logs.

# Do not install a solid fuel burning insert or other products not specified for use with this fireplace.

**Proposition 65 Warning:** Fuels used in gas, woodburning or oil fired appliances, and the products of combustion of such fuels, contain chemicals known to the State of California to cause cancer, birth defects and other reproductive harm.

California Health & Safety Code Sec. 25249.6

WARNING: Check with your electronics manufacturer before installing a television or other electronic device above this fireplace.

## Drafts

The fireplace should not be located in areas that create drafts (ie: frequently opened doors and central heating air inlets/outlets) that hamper the normal flow of air into the fire.

## Gas Logs

If you plan to install a gas log, the gas line should be installed **before** framing the fireplace. The gas line must be installed by a certified gas line installer.

## STR33 / STR36 / STR42 CVR36 / CVR42

Listed UL 127 / ULC-S610 Standard for Factory Built Fireplaces

Units: EC20R0, FC20R0, GC20R0, FD20R0, GD20R0

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Fig. 2 CVR Series specifications and framing.



Fig. 3 STR/CVR Parts Identification.



Fig. 3a Hearth dimensions.



Fig. 4 Fireplace and chase parts identification.

## Chimney Requirements - Offset Installations



## **Illustration Key**

The following safety rules apply to offset installations (letters correspond with illustration above):

**A.** Height of the chimney is measured from the hearth to the chimney exit.

	CVR / STR Series
Maximum:	90'0"
Minimum:	
Without Elbows	s 15'6"
With 2 Elbows*	17'6"
With 4 Elbows*	21' 0"

**B.** Do not use more than 4 elbows per chimney.

Attach the straps of the return (top) elbow to a structural framing member.

The offset (first) elbow of any pair does not have straps.

\* In Canada, two (2) SK845 are allowed.



**C.** The chimney cannot be more than 30° (45° in Canada) from the vertical plane in any installation\*.

**D.** The maximum length of the angled run of the **total** chimney system is 20 feet. (G plus H cannot exceed 20 feet.)

**E.** A chimney support (Models TCS8A or 11CS) is required every 6 feet of angled run of chimney. Chimney supports are required for every 30 feet and 60 feet (SK8 & CF11 pipe) of vertical chimney height above the hearth.

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. See Examples 2 and 3.

OFFSET RISE						
3(	) E	=IK	00\	<u> </u>	Offsets	5
1'	1½'	3'	4'	Chimne) Support	Offset	Rise
0	0	0	0	0	3"	11"
1	0	0	0	0	81⁄4"	20"
0	1	0	0	0	111/4"	251/4"
2	0	0	0	0	13½"	291/4"
1	1	0	0	0	161⁄2"	341⁄4"
0	0	1	0	0	201/4"	403⁄4"
2	1	0	0	0	21¾"	431/2"
0	0	0	1	0	261/4"	511/4"
0	1	1	0	0	281/2"	551/4"
1	0	0	1	0	311/2"	601/4"
0	1	0	1	0	341⁄2"	65½"
0	0	2	0	0	371⁄2"	70¾"
1	1	0	1	1	411/2"	773⁄4"
0	0	1	1	1	45"	83¾"
0	1	2	0	1	471⁄4"	871⁄2"
0	0	0	2	1	51"	94"
0	1	1	1	1	531/4"	98"
0	0	3	0	1	561/4"	1031⁄4"
0	1	0	2	1	591/4"	1081⁄2"
0	0	2	1	1	621/4"	1131/2"
0	1	3	0	1	641⁄2"	117½"
0	0	1	2	1	681/4"	124"
0	1	2	1	1	701/2"	128"
0	0	0	3	1	741/4"	134½"
0	1	1	2	2	78"	1403⁄4"
0	0	3	1	2	81"	146"
0	1	0	3	2	84"	151¼"
0	0	2	2	2	87"	156½"
0	1	3	1	2	891/4"	1601/4"
0	0	1	3	2	93"	166 <sup>3</sup> /4"
0	1	2	2	2	95 <sup>1</sup> /4"	1703⁄4"
0	0	0	4	2	99 <sup>1</sup> /4"	1773/4"
0	1	1	3	2	1011/4"	181¾"
0	0	3	2	2	1041/4"	1861/4"
0	1	0	4	2	1071/4"	191½"
0	0	2	3	2	1101/4"	1963/4"
0	1	2	2	3	114"	2031/4"
0	0	1	4	3	1173⁄4"	2093/4"
0	1	2	3	3	120"	20374 213½"
0	0	0	5	3	123¾"	220"

## **Planning Information**

Preplanning an installation is very important to ensure safety and to save time and money. An installer must predetermine where a fireplace will be set and how the chimney system will be run.

**NOTE:** STR33/36 and CVR36 models use CFM Corporation SK8 (2-wall) chimney systems. STR/CVR42 Fireplaces use <u>only</u> model 11CF chimney system.

#### Mounting the Fireplace

A fireplace may only be mounted on the following surfaces:

- 1. A flat combustible surface.
- 2. A raised wooden platform.
- 3. A concrete block or other solid object placed beneath each of the four (4) corners of the fireplace.

The fireplace **must** be spaced 1/2" (13mm) from a combustible back wall and 1/2" (13mm) from a combustible side wall or support. (Page 14, Fig. 20)

#### Planning the Chimney Run

Determine how the chimney will be run, length of run and chimney components required to complete the job. (Fig. 6) **Never** install a chimney below minimum heights.

MODEL SK &	TOTAL	INSTALLED
MODEL 11 CF	LENGTH	LENGTH
2 WALL CHIMNEY	(L <sub>T</sub> )	(L <sub>1</sub> )
SK81 / 11CF1	11½"	10½"
SK818 / 11CF18	17½"	16½"
SK83 / 11CF3	35½"	34½"
SK84 / 11CF4	47½"	46½"

Fig. 6 Installed lengths of chimney sections.

In planning a chimney system, it is important to know:

- 1. The height of a chimney is measured from the hearth to the exit point on the termination.
- 2. A chimney cannot be offset more than 30° from a vertical plane.
- 3. A chimney may run straight up or it may be necessary to offset it to avoid obstructions.
- 4. The maximum length of an angled run (total chimney system) is 20' (6m).
- No more than 2 offsets (4 total 30° elbows in U.S./or 2 total 45° elbows in Canada) per fireplace may be used.
- 6. A guy wire stabilizer is required for chimneys extending more than 6' (1.8m) above a roof line.

## The Ten Foot Rule

Major U.S. building codes specify a minimum chimney height above the roof top. The "Ten Foot Rule" is a fire safety rule and not a draft rule. To ensure proper draft, it is recommended that you always meet or exceed the "Ten Foot Rule," especially when installing a termination on a high pitch roof. (Fig. 7)

The key points of the "Ten Foot Rule" are:

- 1. If the horizontal distance from the chimney to the peak of the roof is 10' (3m) or less, the top of the chimney must be at least 2' (610mm) above the peak of the roof, but never less than 3' (914mm) in height above the highest point where it passes through the roof.
- 2. If a horizontal distance from the chimney to the peak of the roof is more than 10' (3m), a chimney height reference point is established on the surface of the roof a distance of 10' (3m) from the chimney in a horizontal plane. The top of the chimney must be at least 2' (610mm) above the reference point, but never less than 3' (914mm) in height above the highest point where it passes through the roof.



Fig. 7 Ten Foot Rule illustration.

## **Chimney Supports**

The chimney system is supported by the fireplace for vertical chimney heights less than 20' (6m) above the hearth. Chimney supports are required if the vertical height exceeds 20' (6m). Locate chimney supports at ceiling holes or other structural framing at 20' (6m) heights. Spacing between chimney supports **must not** exceed 20' (6m). Use Chimney Support Model SKCS8 for SK8 chimney, and Model 11CS for 11CF chimney. **(NOTE: the chimney support can not be mounted directly to the fireplace.)** Support provided by elbow straps fulfills the support requirement only if they are spaced as previously described. (A chimney support is 21/2'' (64mm) long when installed.)

Angled chimney runs require a support every 6' (1.8m) in addition to the elbow straps. Chimney supports are used for this function. (Fig. 9)

## Chase Installation

A chase is a vertical box-like structure which encloses the fireplace and/or chimney. Chases are typically built on the outside of the house with fireplace opening cut into the outer wall of a room. (Page 5, Fig. 4)

If you need help in determining fireplace location or how the chimney system should be run, contact your Majestic dealer for assistance.



Fig. 8 Chimney support installation

## Installation

## Insulating Fireplace Enclosure for Cold Climates

If you live in a cold climate, it is not required but **highly recommended** that you insulate fireplace enclosure to eliminate cold air penetration as much as possible.

Insulate base of fireplace with a non-combustible insulation rated for a minimum of 300°F. Insulating is **very important** for outside wall installations over a concrete slab. If fireplace is installed on a platform, insulation should be placed on top of the platform **before** fireplace is set. (Fig. 9)

When a fireplace is installed in a chase or on a outside wall, enclosure should be treated like any outside wall in a home. Insulation should be installed on the inside wall as well as the outside wall(s). In a chase, it is also a good idea to install a firestop at the first ceiling level above the fireplace and enclose the chase with sheeting material. Insulation may then be installed above sheeting material to assure the space around the fireplace is totally protected. (Fig. 4)

When installing the chimney, **DO NOT** caulk between outer pipe and firestop. It is vital that some air be allowed to flow through this very thin gap.

**CAUTION:** WHEN INSTALLING A FIREPLACE IN AN INSULATED ENCLOSURE, BE SURE ALL REQUIRED AIR SPACES ARE MAINTAINED. (Page 14, Fig. 20)

#### Framing

Framing can be constructed before or after the fireplace is set in place, however, most installers build the frame before setting the fireplace.

Frame fireplace with 2 x 4 lumber or heavier materials. Refer to framing dimensions in Figures 1, 2, 3 or 4 for basic fireplace specifications. Headers and support studs must be turned on end as illustrated on Page 5, Figure 4.

**NOTE:** Framing should be positioned to accommodate wall covering and fireplace facing material. **Maintain** 1/2" (13mm) air space between the outer dome and any combustible framing materials that may be supported by the ledge brackets. Refer to Figures 20 and 26 for details.



Fig. 9 Insulating between platform and fireplace.

#### **Chimney Set-up**

Since you have already preplanned the chimney run, you should know exactly how the installation is to be accomplished — how much pipe is required, the number of elbows, if any, and type of termination to be used.

**CAUTION:** REPORT TO YOUR DEALERS ANY PARTS DAMAGED IN SHIPMENT, SPECIFICALLY CHECK THE END CONNECTION OF CHIMNEY SEC-TIONS AND ELBOWS.

**NOTE:** STR33/36 and CVR36 models use CFM Corporation SK8 (2-wall) chimney systems. STR/CVR42 Fireplaces use <u>only</u> model 11CF chimney system.

## **Straight-Up Chimney Installation**

To locate the centerline of the flue put the fireplace in final position and place a plumb bob from the ceiling to the center of the fireplace flue collar. Mark this spot on the ceiling. Draw a line through that mark to either side of the firebox and indicate dimension X to locate the side wall framing. (Fig. 10) Be sure to observe clearance requirements for side and parallel combustible walls as noted in Page 16, Figure 23.

## **Offset Installation**

In order to clear an obstruction, it may be necessary to offset chimney from vertical. This is accomplished by using CFM Corporation elbows. Use the *30° Offset Elbow* table on Page 6 to determine proper offset and parts required.

Each offset requires two (2) elbows. The second elbow is equipped with support straps. It is very important to install the second elbow in each offset as close to the ceiling or support as possible so that the elbow straps can be secured to framing members to help support the weight of the chimney.

Determine offset distance of your chimney arrangement from centerline of fireplace to centerline of chimney where it is to pass through ceiling.

Locate center point of the chimney on ceiling as though a straight up chimney arrangement is to be used. Measure your offset dimension from the chimney center point on the ceiling.



Fig. 10 Locate centerline of chimney with plumb line.

#### Ceiling Chimney Hole/ Possible Obstructions

The size of the hole in ceiling will vary with the angle at which the chimney passes through ceiling.

Drive a nail up through ceiling at marked chimney center point. Go to floor above and see where hole will be cut. Check to see where existing ceiling joists and other possible obstructions are located...i.e. wiring, plumbing etc... If necessary, re-position chimney and/or fireplace to avoid obstructions.

## **Cutting the Hole**

Cover fireplace collar opening and cut proper sized chimney hole in chimney. The SK8 pipe allows you to run pipe through a typical 16" on center joist without cutting joists.

## Framing the Ceiling Hole

Frame the ceiling chimney hole as shown in Figure 12. It is good practice to use framing lumber that is the same size as the ceiling joists; this is a requirement at attic level.

The following table gives firestop spacer model numbers:

	Angle of Chimney at Ceiling			
Size of Chimney	Vertical	30°		
8" Flue	SKFS2A	SKFS6A		
"SK" Series	14½" x 14½"	14½" x 25½"		
	(368mm x 368mm)	(368mm x 648mm)		
	FS2A	FS6A		
11" CF 2-Wall	17½" x 17½"	17%" x 29%"		
	(445mm x 445mm)	(454mm x 753mm)		

**Fig. 11** Ceiling chimney hole sizes necessary for installing firestop spacer.

The **inside dimension** of the frame **must be** the same as the hole size selected from Figure 12 in order to provide the required air space (1<sup>1</sup>/2" (38mm)with SK8, 2" (51mm) with Model 11CF) between the outside diameter of the chimney and the edges of the framed ceiling hole.



Fig. 12 Typical frame for ceiling chimney hole.

#### Positioning, Safety Strips, Securing the Fireplace

Slide fireplace into position.

Lift the fireplace front slightly and slide the metal safety strips under front bottom edge about  $1\frac{1}{2}$ " (38mm), allowing the remainder to extend in front of firebox. Overlap strips at least 1/2" (13mm) to provide a positive joint. (Flat safety strips are packed with fireplace.) (Fig. 13)

Safety strips are used to ensure that any combustible materials in front of the fireplace are protected even though a noncombustible hearth extension is required.

If fireplace is to be elevated above the floor, a "Z" shaped metal safety strip must 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" (38mm) wide and equal in length to the metals strips provided with the fireplace.

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

Eight (8) nailing flanges are supplied with the fireplace (found on the fireplace hearth). To level the box and secure it firmly in place, remove the nailing flanges from the hearth and install at the sides of the fireplace as shown in Figure 14.

## Outside Air Kit

An outside air kit damper is installed in all STR/CVR Series Fireplaces. If desired, or if local codes mandate the use of an air kit, then an AK-MST is required to complete the installation (from air kit to the outdoors). If the outside air kit is to be used, the AK-MST Air Termination Kit **MUST** be installed **BEFORE** the fireplace is enclosed. Refer to the AK-MST instructions for field installation. The outside air kit control is located in the lower left hand side of the fireplace behind the screen panel. (Fig. 15) To operate, simply lift up to close or push down to open .



Fig. 13 Safety strip installation.







Fig. 15 Outside air operation.

## Installing the Chimney System

Start by attaching the first chimney section to the collar on top of the fireplace.

Install the pipe as pictured in Figure 16. When you get a good lock, you will hear the pipe clearly snap together. Once sections are snap-locked in place, it is extremely difficult to get them apart. Make sure the pipe is firmly snapped and locked together as each pipe section is mounted.

When installing elbows, only outer pipe will snaplock. Middle pipes simply slide into position. Be sure to always attach straps on upper elbow to a structural framing member. (Fig. 17)

Continue installing the pipe as required until pipe is installed up through the ceiling. At this point, you must install a firestop spacer. Refer to Figure 18 for appropriate spacer orientation.

#### Installing the Firestop Spacer in the Ceiling Hole

A firestop spacer is used to keep pipe spaced properly and required for safety.

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

Hole sizes listed in Figure 12 for angled firestop spacers provide minimum required air space to chimney pipe for ceiling thickness up to 8" (203mm). When combined thickness of ceiling material, ceiling joists and flooring material exceeds 8" (203mm), adjustments must be made in framing to assure that minimum air spaces to chimney are maintained.

## **Proper Firestop Spacer Installation**

Figure 18 shows different installation procedures for both an area that is an attic and an area that is not an attic.



Fig. 16 Install pipe, listening for the snap-lock to fasten.







Fig. 18 Installing firestop spacer.

the hole.

If the area above the

down into the hole.

Firestop spacers are not available for nor are they required on vertical walls.

**DO NOT** put any sealant around the area where the outer pipe slides through the firestop spacer. If you seal this area, **it may cause a fire hazard**.

## Canadian Requirements for Insulation Shield

In Canada, an attic insulation shield is required to prevent attic insulation from contacting the chimney section. Framing dimensions for the chimney hole should measure  $14\frac{1}{2}$ " x  $14\frac{1}{2}$ " (368 x 368mm)(SK8). (An attic shield MUST be installed on top of attic joists (above the floor level). (Fig. 19)

**NOTE:** In the U.S., it is a good idea, although not always required, to install an attic insulation shield where blown-in insulation is planned to be used in the attic.

Install the attic insulation shield with the flanges on its base extending down into the framing hole. Nail each corner of attic insulation shield to the framing members of the ceiling hole using 8d nails. Attic shields are not required at the roof.

## Continue Installing Pipe to Complete Run

Continue attaching pipe sections to complete system to next level always being careful that the pipe is firmly snapped locked in place before proceeding to next pipe section.

## **Chimney Supports**

If chimney supports are required, they are installed the same as elbows. Nail chimney support straps to adjacent structural framing, as shown on Figure 8, Page 8. Bend straps as necessary and make sure they are secure so they will support the weight of the chimney. A chimney support is 21/2" (64mm) long when installed. Consider this dimension when determining how many straight chimney sections are needed.

**NOTE:** Chimney supports are generally used in long runs in a chase installation. A chimney support cannot be mounted directly to the fireplace.

## Additional Ceilings

If you encounter additional ceilings, repeat same steps required for first ceiling installation. Refer to firestop illustration on Page 12, Figure 18.

## Penetrating the Roof

Run pipe to roofline. Since chimney system must be vented to the out-of-doors, you **must** use an approved termination.

If a chase is used, refer to the installation manual provided with the termination cap.





## Locate Chimney Centerpoint on Roof

Use same procedure detailed in locating centerpoint of the flue system.

Drive a nail up through roof at the centerpoint. This will determine center point on outside of the roof.

## **Cut and Frame Roof Hole**

Size of roof hole varies with the type of chimney termination installed. Refer to installation instructions provided with the chimney termination to find correct size of roof hole.

**NOTE:** The air space dimensions in this manual that pertain to model 11CF chimney pipe have been changed from 2" to 1" (51 - 25mm) clearance for first joist space only. This change only applies to Majestic Fireplaces models STR42 and CVR42 fireplaces. Because of framing concerns these models, and only these models, have been tested and approved at the reduced clearance. In all other cases the minimum air space referred to on the UL label on the 11CF pipe must be maintained. A special firestop is shipped with these units that will maintain the 1" (25mm) clearance at the first joist. The chimney hole size for this firestop will be 15½" (394mm). Refer to Figure 18 for ceiling joist installation instructions.

There must be an air space (1½" (38mm) with SK8 and 1" (25mm) with 11CF) between outermost portion of chimney sections and any adjacent combustible surfaces. (Fig. 20) (Combustible surfaces include burnable materials such as: ceiling members, joists, flooring, combustible insulation and roof structures.)

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

Mark an outline of the roof hole around the center of the point nail. **NOTE:** 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 so debris cannot get into the system.

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

## **Install Remainder of Chimney Sections**

Since you have already preplanned the height of your termination according to the *Ten Foot Rule*, continue to install pipe to the predetermined height.

Check the chimney top installation instructions for details on how high above the roof top the chimney sections (all pipes) should extend.

## Installing Top Housing or Termination

Follow the installation instructions provided with the chimney termination you have selected.

#### Installing Chimney In a Chase

Refer to Page 5, Figure 4 for an illustration of a typical chase installation.

**CAUTION:** Treatment of firestop spacers and construction of chase may vary with type of building. These instructions are not a substitute for local building codes. You **must** check your local building codes to determine specific requirements for your city or state. **NOTE:** Other building materials may be required in addition to Firestop Spacers.

## Finishing

**CAUTION:** All joints between the finished wall and the fireplace surround (top/sides) must be sealed with noncombustible material to prevent cold air leakage into the room. Only noncombustible material may be applied to the facing of the fireplace surround. (Black painted area) (Fig. 20)

## **Finish Wall**

Finish the wall with material of your choice. Do not install a combustible mantel shelf less than 12" (305mm) above the front opening. Do not install a mantel face plate less than 6" (159mm) from top of fireplace opening. (Fig. 21) If a combustible mate-



Fig. 20 Minimum clearances to combustibles.

rial is used below a flat mantel shelf, consult your local building codes for minimum clearance from top of fireplace opening to bottom of mantel shelf.

**NOTE:** No side wall protection is required for fireplaces installed at 45° to two (2) side walls (corner installation).

Adjacent combustible side walls that are within 16" (406mm) (STR33/36 and CVR36) and 20" (508mm) (STR42 and CVR42) of fireplace opening must be protected with CFM Corporation Wall Shield Model SP40 or a specifically built wall shield described in Figure 20 & 24.

Often a decorative surround or vertical portion of the mantel is desired. If this is constructed of any combustible material, it must be within the safe zone indicated in Figure 24.



Fig. 21 Fireplace surround flush with finished wall.



Fig. 22 Combustible mantel clearances.

#### **Side Wall Protection**

All joints (top, bottom and sides) where wall or decorative facing material meets fireplace surround must be completely sealed with a noncombustible material. (Figs. 20 and 24)

The special wall shield design described in Figure 20 is an alternate method of adding protection to side walls and can be used in place of the SP40 with the same wall clearances specified for the SP40. Rt must =1.85 minimum.

#### Examples of wall shield insulation:

- 1. Manville CERAFORM 126, K=.27, 1/2 inches thick
- CFM Corporation EH2416, K = .458, 1 inch thick required.



Fig. 23 Minimum firebox dimensions from combustible materials.



Fig. 24 Combustible side wall protection and hearth extension dimensions.

#### **Hearth Installation**

A hearth extension is required to protect a combustible floor in front of the fireplace. Refer to Figure 24 for minimum dimensions and mounting detail.

# Note: Hearth Extension must not cover the air inlet opening of a fireplace.

The hearth extension described in Figure 24 must be a durable noncombustible material with a minimum (total) Rt value of 1.09; refer to Figure 25 for examples. The overall height (above a combustible floor), depth and width must be as indicated, with the extension centered to the fireplace opening.

The top of the insulation material must be covered with a noncombustible decorative covering **or** a piece of .018" minimum sheet metal, to protect hearth extension material. (Fig. 24)

Secure the hearth extension to the floor to prevent shifting, using trim molding or other similar means at three (3) outer edges. Seal crack between the fireplace hearth and hearth extension with a noncombustible material. (Figs. 24 and 26)

## WARNING: HEARTH EXTENSION MUST BE IN-STALLED IN ACCORDANCE WITH FIGURES 24 AND 25.

Alternate noncombustible materials may be used providing the (total) thermal resistance (Rt value) of the alternate material employed is greater than or equal to R = 1.09. Thermal resistance (R) or thermal conductivity (K), may be obtained from manufacturer of the material. Factors are related by the formula K = 1/R.

- T = given thickness
- R = thermal resistance for a given thickness (T)
- K = thermal conductivity

Noncombustible material with a lower R value may be used, provided thickness of material is sufficiently greater to maintain an equivalent (total) thermal resistance (Rt).

#### **Example of Determining Hearth Extension** Equivalents

To determine the thickness required for any new material.

NEW	K of new material (per inch)		thickness
required =		Х	of listed
thickness	K of listed material (per inch)		material

#### **Example for Common Brick**

T (new) = 5.0 / 0.458 x 0.50 in. = 5.46 in. (new required thickness).



Fig. 25 Hearth extension material factors.



Fig. 26 Finish wall treatments and gap sealing.







NOTE: If noncombustible material is not used between the stainless steel plate and fireplace opening, the steel must be attached to the front of the unit a minimum of four (4) places on each piece with sheet metal screws no longer than 1/2".

NOTE: The size of the insulation and stainless steel plate must be within limits stated above and covers all combustible framing material.

Fig. 28 Recessed installation.

## Installing Line for Gas Logs

Majestic Fireplaces are designed to accept a 1/2" (13 mm) gas line for installation of an approved gas appliance. (CFM Corporation manufactures a wide variety of gas logs for use in Majestic fireplaces.)

Be sure to have the appliance installed in accordance with building codes.

Gas connection may enter from either left or right side of the fireplace.

Locate appropriate gas line in the outer casing of fireplace and remove insulation from gas line tube. (Fig. 29)

From inside the fireplace, locate the knockout on the firebrick -- be sure you are on the appropriate or "gas line" side of the fireplace. Using a flat bladed screw-driver or small chisel and hammer, carefully tap around the knockout until it loosens and falls out.

Install 1/2" (13 mm) certified gas pipe through opening. After gas pipe installation is complete, use insulation that was removed from gas line tube to repack space around the pipe. Material should be inserted from outside of the fireplace and packed tightly to totally seal between the pipe and tube.

#### NOTE: Gas pipe should not come in contact with any wood structures until it has reached a point at least 1" (25 mm) away from fireplace side.

**Note:** Local codes may require removal of flue damper when installing any type of gas appliance in a fireplace.

**NOTE:** When installing an ANSI Z21.11.2 ventless appliance, the fninshing material used for the mantel must be rated at 250°F or greater.

BTU input of a gas appliance installed in fireplace should be rated less than 100,000 BTU/Hr.

Gas pipe installation is intended for connection to a decorative gas appliance only when (1.) incorporating an automatic shutoff device and (2.) complying with the Standard for Decorative Gas Appliances for Installation in Vented Fireplaces (ANSI Z21.60) **or** CSA draft requirements for Gas-Fired Log Lighters for Woodburning Fireplaces (Draft No. 4, August 1993).

Decorative gas appliance should be installed in accordance with the National Fuel Gas Code, ANSI Z223.1/ NFPA 54 (latest edition).



Fig. 29 Gas line access.



CAUTION: WHEN USING DECORATIVE GAS APPLIANCE, FLUE DAMPER MUST BE SET IN FULLY OPEN POSITION. IF YOU HAVE GLASS DOORS ON THE FIREPLACE, THEY MUST ALSO BE FULLY OPENED.



WARNING: DO NOT OPERATE AN UNVENTED GAS LOG SET IN THIS FIRE-PLACE WITH THE CHIMNEY REMOVED.



WARNING: WHEN INSTALLING AN UNVENTED GAS LOG SET, THE CFM CORPORATION MODEL AH3244BK OR AH3244PB 4" ADJUSTABLE HOOD MUST BE USED.

If installing an unvented gas log set, refer to statement below:

Only unvented gas log sets which have been found to comply with the Standard for Unvented Room Heaters, ANSI Z21.11.2, are to be installed in this fireplace.



CFM Corporation reserves the right to make changes in design, materials, specifications, prices and discontinue colors and products at any time, without notice.

# CVR36/42 SERIES

Ref.	Description	CVR36	CVR42
1.	Flue Damper	RP102	RP161
2.	Damper Actuator	7548170	7548169
3.	Damper Handle Push Nut	7512903	7512903
4a.	Screen Rod Assembly - Side (two per fireplace)	3030126	3032112
4b.	Screen Rod Assembly - End	7554342	7554342
5a.	Screen Assembly - Side (four per fireplace)	7554338	7554340
5b.	Screen Assembly - End	7554340	7554340
6.	Screen Pulls (four per fireplace)	5584139	5584139
7a.	Firebrick - Hearth	3102103	3101105
7b.	Firebrick - Side Ash Lip (two per fireplace)	3102102	3101103
7c.	Firebrick - End Ash Lip	3101104	3101104
7d.	Firebrick - Side	3079147	3079147
7e.	Firebrick - Side Filler (two per fireplace)	3079148	3079148
8.	Top Brick Retainers (two per fireplace)	3079130	3079130
9.	Cable Clips (twelve per fireplace)	7512135	7512135
10.	End Panel (Glass and Extrusion)	3080145	3080145
11.	Tempered Glass (two per fireplace)	20000399	20000399
12.	Nailing Flange (four per fireplace)	5069164	5069164
13.	Basket Grate	2056100	2058100
14.	O.S.A. Assy.	20003212	20003212



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# **STR33/36/42 SERIES**

Ref.	Description	STR33	STR36	STR42
1.	Flue Damper	RP102	RP102	RP161
2.	Damper Handle	7548170	7548170	7548169
3.	Damper Handle Push Nut	7512903	7512903	7512903
4.	Screen Rod Assembly (two per fireplace)	3049122	3030126	3032112
5.	Screen Assembly (four per fireplace)	7554338	7554338	7554340
6.	Screen Pulls (four per fireplace)	5584139	5584139	5584139
7a.	Firebrick - Hearth	3100103	3102103	3101105
7b.	Firebrick - Side Ashlip (two per fireplace)	3100102	3102102	3101103
7c.	Firebrick - Side (two per fireplace)	3079147	9079147	3079147
7d.	Side Filler (four per fireplace)	3079148	3079148	3079148
8.	Top Brick Retainers (four per fireplace)	3079130	3079130	3079130
9.	Cable Clips (eight per fireplace)	7512135	7512135	7512135
10.	Nailing Flange (eight per fireplace)	5069164	5069164	5069164
11.	Basket Grate	2056100	2056100	2058100
12.	O.S.A. Assy.	20003212	20003212	20003212

## Accessories

The following accessories for this appliance are available from your local Majestic Fireplaces distributor. Should you need additional information beyond what your distributor can furnish, contact: CFM Corporation, 2695 Meadowvale Blvd., Mississauga, Ontario, Canada L5N 8A3, Attn: Technical Services.

CAUTION: This fireplace and chimney assembly is a highly engineered system, and, as such, must be operated only with CFM Corporation approved components. If you use an unapproved component to make any modifications, you may create a possible fire hazard and will void the CFM Corporation warranty. In addition, such action may void the coverage provided by the owner's insurance.

Accessory	De	escription	Model Number
Glass Door	Bi-Fold door set	Brushed Brass finish	36GDKBB - STR36, CVR36 42GDKBB - STR42, CVR42
		Black finish	36GDKBK - STR36 42GDKBK - STR42
		Polished Brass finish	33GDKDP - STR33 36GDKDP - STR36 42GDKDP - STR42
		Pewter finish	36GDKS - STR36, CVR 36 42GDKS - STR42, CVR42
End Panel Extrusion (CVR Models only)	Allows the end panel to be changed to black, polished or pewter finish		36EPKBK (black) 36EPKDP (polished brass) 36EPKS (pewter)
Outside Air Termination	Completes connect out-of-doors	tion from air kit to	AK-MST
Hearth Extension Insulation	Provides hearth extension floor protection		EH2416
Basket Grate	Holds firewood in firebox		RBG36ST (33" & 36" models) RBG42ST (42" models)
Hearth Patch Compound	Patch cracks in hea	arth	HPC-1

#### Contact your Majestic Fireplaces distributor or dealer for finishing Marble and Mantels, available in a wide selection of styles.

# Chimney Components

## U.S.

Component	Description	Model Number
Round Top Termination	Round termination to be used with SK8 chimney system. (Flashing not included.)	RLTSK8
Round Top Termination	Round termination to be used with 11CF chimney system. (Flashing not included.)	RLTCF11
Long Round Top Termination	Round top to be used with a chase installation utilizing SK8 chimneysystem.	RLTSK8L
Long Round Top Termination	Round top to be used with a chase installation utilizing 11CF chimney system.	RLTCF11L
Knock-down Shroud - Pyramid	Black pyramid knock-down shroud used for chase installations with any RLT round top termination. Gives appearance of a pyramid cap.	PKDSBL
Knock-down Shroud - Square	Black square knock-down shroud used for chase installations with any RLT round top termination. Gives appearance of a square cap.	SKDSBL Adaptor required
Square Termination	Top housing with simulated brick pattern. (Red, Tan or Black) Proper adapter must be used. Includes flashing.	T20B
Adapter	Required adapters for T20B top housing.	CF8CA (SK8) 8CA (11CF)
Housing Extensions	Extends Square Termination on steep pitched roofs.	202036
Flashing	Metal finishing required around Contemporary Termination to prevent rain leakage.	8-6-12 with 8" flue: 0-6/12 pitch 8-12-12 with 8" flue: 6/12-12/12 pitch
Square Termination	Top housing of simulated brick pattern available in red, tan or white. Appropriate adapter required. Flashing included.	Т20В
SK8 Chimney Sections	Pipe used to build 8" SK8 flue systems.	SK81 (1' Long) SK818 (1½' Long) SK83 (3' Long) SK84 (4' Long)
11CF Chimney Sections	Pipe used to build 11" (11CF) flue systems.	11CF1 (1' Long) 11CF18 (1½' Long) 11CF3 (3' Long) 11CF4 (4' Long)
Chimney Elbows	Elbow used to create an offset in a chimney system. Only 30° elbows available. Packaged 2 per carton (offset and return).	SK830 / 2 (SK8) 11CF30 / 2 (11CF)

## U.S. Chimney Components, cont'd.

Component	Description	Model Number
Firestop	Required at each floor level of chimney installation. (Plus attic on multi-story installation.)	SKFS2A — SK8 (8" straight flue) SKFS6A — SK8 (8" 30° inclined flue) FS2A (Model 11CF) (straight flue) FS6A (Model 11CF) (30° inclined flue)
Chimney Support	Used to support chimney for each of: 20' vertical height and 6' of angled chimney run.	SKCS8 - SK8 11CS - 11CF
Attic Insulation Shield	Used to prevent insulation from coming in contact with the chimney system.	AIS-SK - SK8 FS2100-HT - 11CF

## Canada

Component	Description	Model Number
Attic Insulation Shield	Used to prevent insulation from coming in contact with the chimney system.	AIS-SK - SK8
Attic Insulation Shield	Used to prevent insulation from coming in contact with the chimney system. For use with CF11 pipe.	
SK8 Chimney Sections	Used to build chimney systems exposed above roof.	SK818CAN (1½') SK8 SK84CAN (4') SK8
45° Chimney Elbows	Provides 45° offset and return. <b>FOR CANADIAN</b> <b>INSTALLATIONS ONLY.</b> For use with SK8 chimney only. (Maximum use of 2, or 1pair.)	SK845/2

## LIMITED WARRANTY & 30 YEAR PROTECTION PLAN For MAJESTIC FIREPLACES® PRE-ENGINEERED Fireplace Systems

CFM Corporation warrants its MAJESTIC FIREPLACES® Pre-Engineered Fireplace ("Fireplace") and the CFM Corporation supplied firegrate, glass doors, outside air system, fan motor, and liners to be free from defects in material or workmanship, as follows:

**A. Fireplace and Chimney Components:** (exclusive of CFM Corporation-supplied firegrate, glass doors, outside air system, fan motor, and liners all of which are covered by separate warranties under paragraphs B through D below): At its option for a period of thirty (30) years from the date the Fireplace is installed, CFM Corporation will;

(1) For a period of five (5) years from the date the Fireplace is installed, CFM Corporation, at its option, will repair or replace any defective part without charge.

(2) Thereafter, through the 10th year after the date the Fireplace is installed, if replacement parts are available, CFM Corporation will provide a replacement for any defective part without charge for the part itself. The consumer must pay for everything else other than the part.

(3) Thereafter, through the 30th year after the date the Fireplace is installed, if replacement parts are available,CFM Corporation will provide a replacement for any defective part at a cost to the consumer of CFM Corporation then current list price, FOB CFM Corporation factory.

#### B. Firegrate, Glass Doors, Outside Air System:

For a period of 90 days from the date the Fireplace is installed CFM Corporation, at its option, will provide a replacement for any defective part, without charge for the part itself, FOB CFM Corporation factory, (The consumer must pay for everything else other than the part.).

#### C. Fan Motor:

(1) For a period of one (1) year from the date the Fireplace is installed, CFM Corporation, at its option, will repair or replace any defective part without charge.

(2) Thereafter, through the 30th year after the date the Fireplace is installed CFM Corporation, at its option, if replacement parts are available, will provide a replacement for any defective part at a cost to the consumer of CFM Corporation then current list price, FOB CFM Corporation factory.

#### D. Liners (Refractory or Metal):

(1) For a period of two (2) years from the date the Fireplace is installed, CFM Corporation, at its option, will repair or replace any defective part without charge.

(2) Thereafter, through the 30th year after the date the Fireplace is installed CFM Corporation, if replacement parts are available, will provide a replacement for any defective part at a cost to the consumer of CFM Corporation then current list price, FOB CFM Corporation factory.

This warranty is subject to the following conditions and limitations:

(1) This warranty is extended only to a Fireplace installed in the continental United States, the state of Alaska and Canada; only if and so long as the Fireplace is installed according to the installation instructions furnished with the Fireplace, and operated at all times under normal conditions, use and service according to the operative instructions furnished with the Fireplace, and only if and so long as the Fireplace is not removed from its original installation.

(2) This warranty is non-transferrable, and is made to the original owner, provided that the purchase was made through an authorized supplier of the Company.

(3) The sole and exclusive remedies for breach of any warranties hereunder shall be for the repair, replacement or provision of a replacement part at CFM Corporation then current list price, FOB CFM Corporation factory, for any defective part as specified in paragraphs A through D.

(4)CFM Corporation shall not be liable for damage from any smoking of a MAJESTIC FIREPLACES Pre-Engineered Fireplace System related to environmental geographic conditions (such as, for example, nearby structures or roof peaks, trees, hills, or mountains), inadequate ventilation, or negative air pressure in the place where the Fireplace system is installed, related to any mechanical system (such as, for example, furnaces, fans, air conditioners, clothes dryers, etc.)

(5) Except as otherwise expressly specified in paragraphs A through D, NONE OF THESE WARRANTIES COVER, AND CFM CORPORATION SHALL NOT BE RESPONSIBLE FOR, ANY CONSTRUCTION, INSTALLATION, LABOR, TRANS-PORTATION OR OTHER COSTS OR EXPENSES ARISING FROM A DEFECTIVE PART, ITS REPAIR OR REPLACEMENT OR OTHERWISE, NOR SHALL CFM CORPORATION IN ANY EVENT BE RESPONSIBLE FOR ANY INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES EXCEPT TO THE EXTENT REQUIRED BY LAW. Some states do not allow the exclusion or limitation of incidental or consequential damages, so this exclusion or limitation may not apply to you.

NO IMPLIED WARRANTIES, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, SHALL REMAIN IN EFFECT AFTER THE EXPIRATION OF THE WARRANTIES SET FORTH IN PARAGRAPHS A THROUGH D. Some states do not allow limitations on how long an implied warranty lasts, so this limitation may not apply to you.

In order to obtain performance of any of the above warranty obligations write to CFM Corporation at this address:

CFM Corporation

2695 Meadowvale Blvd.

Mississauga, Ontario, Canada L5N 8A3 Attention: Director of Warranty Services

Since local building requirements may vary greatly throughout the country, users of CFM Corporation products should determine in advance whether there are any building code restrictions on the use of a specific product. CFM CORPORA-TION MAKES NO REPRESENTATION OR WARRANTY RE-GARDING, AND SHALL NOT BE RESPONSIBLE FOR, ANY BUILDING CODE COMPLIANCE.

The foregoing warranties give you specific legal rights and you may also have other rights which vary from state to state.

## **CFM** Corporation

2695 Meadowvale Blvd. • Mississauga, Ontario, Canada L5N 8A3 800-668-5323 • www.cfmcorp.com