

SOUTHWEST FIREBIRD MFG

SONORAN UNVENTED Model VFST36/VFST42

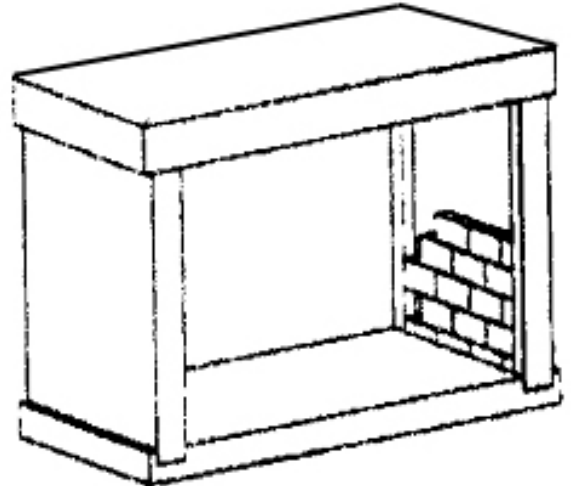
INSTALLATION INSTRUCTIONS

PREFABRICATED MODULAR MASONRY- UNVENTED SONORAN 36/42
See Through TO BE USED WITH UNVENTED GAS LOGS.

SAVE THIS BOOK

This book is valuable. In addition to instructions for installing and maintaining this fireplace, it contains information that will enable you to obtain replacement parts or optional accessory items when needed. Keep it with your other important papers.

**CHECK LOCAL CODES
BEFORE INSTALLATION**



**Carefully review the instructions supplied with the decorative type unvented room heater for the minimum fireplace size requirement .
DO NOT INSTALL AN APPLIANCE IN THIS FIREBOX UNLESS THIS FIREBOX MEETS THE MINIMUM DIMENSIONS REQUIRED FOR THE INSTALLATION.**

WARNING: If the information in this manual is not followed exactly, a fire or explosion may cause damage, personal injury or loss of life.

FOR YOUR SAFETY

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

WHAT TO DO IF YOU SMELL GAS

Do not try to light any appliance.

Do not touch any electrical switches; do not use any phone in your building.

Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.

If you can not reach your gas supplier, call the fire department.

FOR USE ONLY WITH LISTED GAS-FIRED UNVENTED DECORATIVE ROOM HEATER NOT TO EXCEED 40,000 BTU/H. " DO NOT BUILD A WOOD FIRE"

Manufactured by

Southwest Firebird Manufacturing Inc
4646 Menaul N.E.
Albuquerque, NM 87110
INTRODUCTION

OMNI- Test Laboratories, Inc
LISTED

FACTORY-BUILT FIREPLACE
Test UL 127, ANSI Z21.91 Standard



BEFORE YOU BEGIN

Before beginning the installation of your Unvented Fireplace, read these instructions through completely.

The Southwest Firebird Manufacturing Inc. warranty will be voided by, and Southwest Firebird Manufacturing Inc. disclaims any responsibility for the following actions:

- A) Modification of the fireplace or any of the components manufactured by Southwest Firebird Manufacturing Inc. unless otherwise permitted by Southwest Firebird Manufacturing Inc.
- B) The use of a fireplace insert or any other component part not approved by Southwest Firebird Manufacturing Inc. in combination with a Southwest Firebird Manufacturing Inc. fireplace.
- C) Installation and/or operation in a manner other than instructed in this manual.
- D) The burning of anything other than the type of gas approved for use in this gas Unvented Fireplace.

The installation must conform with local codes or, in the absence of local codes, with the National Fuel Gas Code ANSI Z2231.1-1988./NFPA 54.

NOTE: Installation and repair should be done by a qualified installer familiar with fireplaces. The fireplace system should be inspected and cleaned before use and periodically thereafter, especially during the heating season, to prevent the excessive build-up of soot and creosote and to ensure a safe operating system.

THIS FIREPLACE IS NOT INTENDED TO BE USED AS A PRIMARY SOURCE OF HEAT

Model Sonoran Unvented 36ST/42ST is intended and approved for installation in either residential homes or buildings of standard construction.

This model is not for use in mobile homes.

DO NOT INSTALL THIS UNVENTED ASSEMBLY IN SLEEPING QUARTERS.

This model's serial number and other specific rating information may be found on the **OMNI-Test Laboratories, Inc. RATING PLATE** located inside the fireplace opening.

This Southwest Firebird Manufacturing fireplace and its approved components are safe when installed according to this installation manual and operated as recommended by Southwest Firebird Manufacturing Inc. Unless you use Southwest Firebird Manufacturing Inc. approved components tested for this fireplace, **YOU MAY CAUSE A FIRE HAZARD!**

SELECTING LOCATION

PROPER INSTALLATION is the most important step in ensuring a safe and continuous operation of this fireplace.

This fireplace complies with **UL 127 as a FACTORY-BUILT FIREPLACE**, and is tested and listed by **OMNI-Test Laboratories, Inc.**

To determine the safest and most efficient location for your Unvented Fireplace, you must take into consideration the following guidelines:

1. The location must allow for all proper clearances (see Page 4).
2. Consider a location where heat output would not be affected by drafts, air conditioning ducts, windows or doors.
3. A location that minimizes modifications on existing framing will make installation easier.

A flush installation is recommended where living space is limited or at a premium. Check local codes for any restrictions. Projected installations can extend any distance into the room. A projection may be ideal for a new addition on an existing, finished wall.

Corner installations make use of space that may not normally be used and provides a wider and more efficient range for radiant heat transference. An internal wall installation provides a discreet option for room separation and can also be ideal as an addition to existing wall.

IN SELECTING A LOCATION, THE FOLLOWING PRECAUTIONS MUST BE OBSERVED:

1. Install in an area providing ventilation and adequate combustion air.
2. Due to high temperatures, the Unvented Fireplace should be located out of traffic and away from furniture and draperies.
3. NEVER obstruct the front opening of the Unvented Fireplace or the flow of combustion and ventilation air. Keep control compartments accessible.
4. Do not locate in the vicinity where gasoline or other flammable liquids may be stored. The Unvented Fireplace area must be kept clear and free from these combustible materials.
5. DO NOT INSTALL THIS UNVENTED ASSEMBLY IN SLEEPING QUARTERS.

Preparation for Firebox Assembly

Tools Needed: 4" plastic putty knife or metal drywall knife.
 Metal scraper or painter's tool.
 4" disposable coarse paint brush.
 Carpenters square.
 4' level.

FRAMING

Construct framing using dimensions width A" and height B" and depth C" Use figures applicable to your particular installation 36" or 42".

If the fireplace is installed on a combustible material, the bottom heat shield is required with 4" clearance to combustible with 1 ¼" airspace. Framing height is a minimum of 55". Construct framing using dimensions shown depending on your particular installation.

A 36" long 1/2" NPT SCHD 40 flexible gas line complying with the National Fuel Gas Code ANSI Z223.1-1988/NFPA 54, may be run from the regulator to the exterior of the Unvented Fireplace for access to your incoming 1/2" NPT black iron gas line or you may route incoming gas line directly to the regulator.

The incoming gas line may be routed towards the Unvented Fireplace either from the left hand or right hand sides of the Unvented Fireplace's outer surround. Remove the gas line cover plate from the Unvented Fireplace's outer surround at the location to be used. Run gas line through until regulator can be reached.

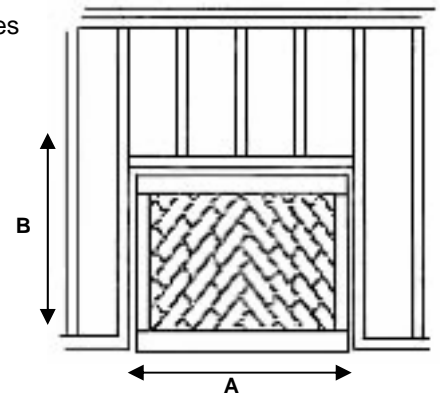
A sediment trap should be included between incoming gas line and regulator connection.

The sediment trap must extend a minimum of 3" down below the center of the incoming pipe.

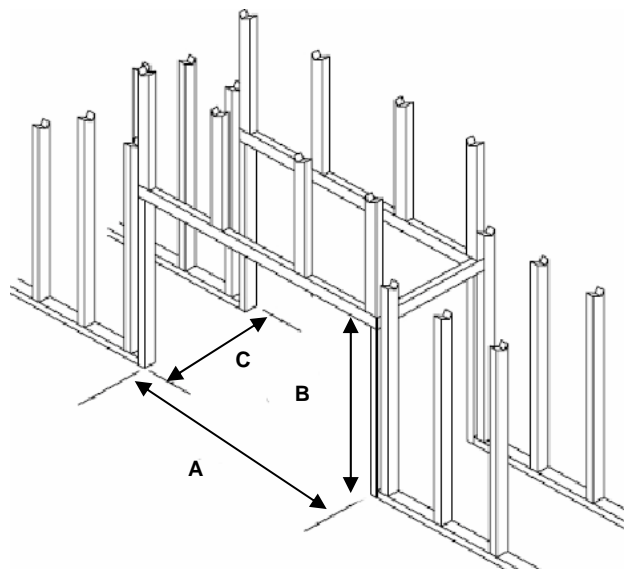
Prepare incoming black iron gas line with Teflon tape or pipe joint compound (check with local codes as to the use of Teflon tape).

Compounds used on threaded joints of gas piping shall be resistant to the action of Liquefied Petroleum (LP or Propane), and should be applied lightly to ensure excess sealant does not enter

the gas line.



FRAMING DIMENSIONS			
	Widths A	Height B	Depth C
Sonoran 36ST	46"	38"	24"
Sonoran 42ST	52"	38"	24"



Complete your gas installation by connecting incoming gas line to regulator. Secure all joints tightly with wrench but do not over-tighten. If a flexible gas line is used, take care not to kink connector.

Pack insulation in and around the conduit sleeve and flexible gas line.

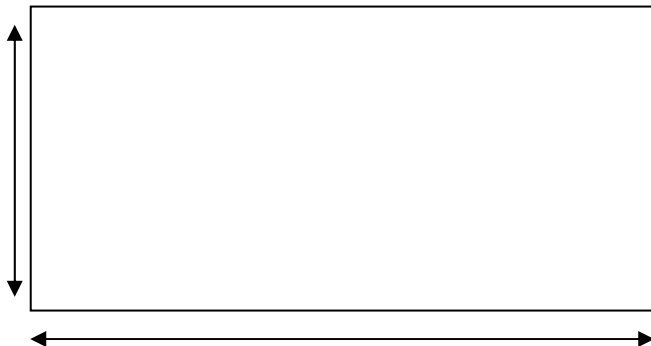
CAUTION: All gas piping and connections must be tested for leaks-before the installation is completed. After ensuring that the gas valve is on, apply a soap and water solution to all connections and joints. If bubbles appear, leaks can be detected and corrected. **DO NOT USE AN OPEN FLAME FOR LEAK TESTING AND DO NOT OPERATE ANY APPLIANCE IF A LEAK IS DETECTED.**

CLEARANCES

MINIMUM CLEARANCES TO COMBUSTIBLES ARE:

Sides	0"
Top space	1"
Adjacent perpendicular side wall	5"

Depth of firebox	
Sonoran 36ST	24"
Sonoran 42ST	24"



Enclosure:

- 0" from side of unit to framing
- 0.5" from top of unit to combustibles

Width of firebox

Sonoran 36	43"
Sonoran 42	49"

In front:

- 5" from fireplace opening to side wall
- 13" from Fireplace opening to Mantel
- 7" from fireplace opening to Top Trim
- 3" from fireplace opening to side trim

Floor:

- No thermal protection required
- Floor in front of unit flush with fireplace opening
- Floor under unit is the same as wood fire clearances

FIREBOX

A. BASE PEDESTAL PREPARATION

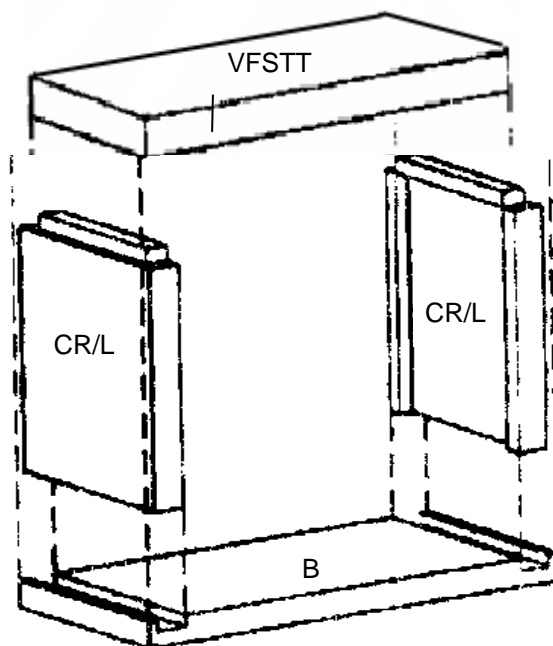
Make sure floor is level

B CENTER SECTION INSTALLATION

Apply a 3" wide X 1/4" thick bed of refractory adhesive to base approximately 1" in from edges of sides and back. (Where sides and back will sit.) Stand both sections of back wall on base and support while applying adhesive to cover the joint line between front & rear sections. The coating of cement should cover the seam all around the outer edges of the back wall. This coat should be smooth but not excessive. (1/8" thick max.)

- *Assemble side walls (bond beam up) to base and back wall assembly.
- ** Use carpenters square placed on the base {inside firebox} to ensure the walls are plumb and perpendicular to the floor of the firebox. Using 4' level make sure the walls are level front to back & side to side. Proceed with assembly of top section.

*Remember to moisten all mating (bonded) surfaces before applying adhesive.



** Take care to maintain firebox front opening dimensions (square & plumb) or any future installation of glass doors, Etc. will be difficult if not impossible.

C. TOP SECTION INSTALLATION

Apply refractory mortar to the top edges of the center section. with a liberal 3" wide by 1/4" thick trip of refractory mortar applied on the edges. Align with the back, sides and front of the center section.

WARNING! DO NOT BLOCK REQUIRED AIR SPACES WITH INSULATION OR ANY OTHER MATERIAL. DO NOT OBSTRUCT EFFECTIVE OPENING OF FIREPLACE WITH ANY TYPE OF FACING MATERIAL. COMBUSTIBLE MATERIAL MUST NOT BE IN CONTACT WITH THE BLACK FRONT FACE OF THE FIREPLACE.

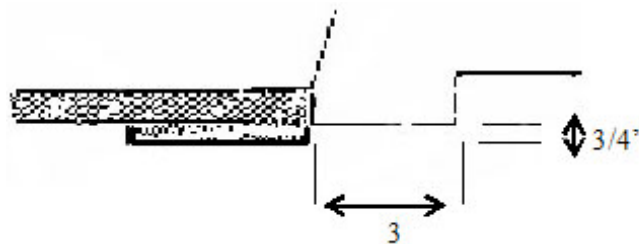
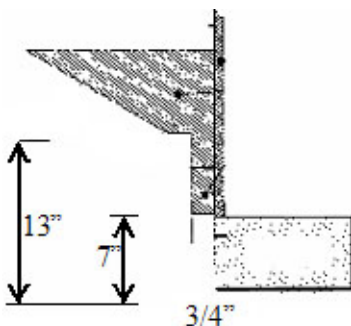


MANTLE CLEARANCES

Woodwork such as wood trims, mantles, and other combustible materials must be placed at least 7 inches away from the opening of the fireplace and extend no more than 3/4".

Combustible material above and projecting more than 1 1/2" inches from the front face of the fireplace must be placed at least 13 inches away from the fireplace opening. (ref: NFPA std. 8-3.3).

Mantles or any other combustible material also may come up to the side periphery of the face of the fireplace as long as the projection from the front face falls within the limits shown below.



GAS SUPPLY TESTING

NOTE: This section is intended as a guide for qualified technicians installing gas to this Unvented Fireplace.

DO NOT CONNECT UNVENTED FIREPLACE BEFORE PRESSURE TESTING GAS PIPING. DAMAGE TO GAS VALVE MAY RESULT AND AN UNSAFE CONDITION MAY BE CAUSED.

The appliance and its individual shut-off valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psig (3.5 kPa). The appliance must be isolated from the gas supply piping system by closing its individual manual shut-off valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psig (3.5 kPa).

GAS LINE INSTALLATION

NOTE: This section is intended as a guide for qualified technicians installing gas to this Unvented Fireplace.

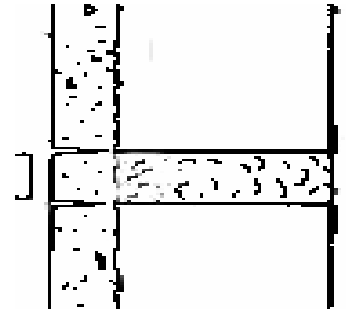
GAS LINE HOOK-UP SHOULD BE DONE BY YOUR GAS SUPPLIER OR A QUALIFIED SERVICE PERSON.

NOTE: BEFORE YOU PROCEED, BE SURE YOUR GAS SUPPLY IS OFF!

A gas line may be installed for use with a **decorative gas appliance**, available through your local distributor. Use only 1/2-inch black iron pipe and appropriate fittings. When installing a gas line, a shut-off valve designed for installation outside the fireplace is recommended.

Installation procedure:

1. Remove the knockout indentation on the refractory (or firebrick) wall, located approximately 2 inches above the refractory hearth floor. To remove, pry knockout (inside fireplace) with a chisel, screwdriver or sharp object until knockout is released. Use 3/4 " masonry drill bit to remove remaining firebrick. Remove fragmented portion of refractory.
2. Remove gas line cover plane on right- or left-hand side of fireplace (depending on which way incoming gas line is routed to the fireplace). Pull out insulation from gas line sleeve.
3. Run a 1/2-inch NPT black iron gas line into the fireplace 8 1/2 inches from the floor, and route into the fire chamber through the gas line sleeve. (If using a raised platform, add height of platform to specified 8 1/2 inches.) Provide sufficient gas line into fireplace chamber for fitting connection.



NOTE: Secure incoming gas line to wood framing to provide rigidity for threaded end.

4. Pack insulation around gas line and into sleeve openings. Seal any gaps between gas line and refractory knockout hole with refractory cement or commercial furnace cement. Either install decorative gas appliance (per instructions included with appliance) or cap off gas line.

CAUTION: All gas piping and connections must be tested for leaks after installation is complete.

With gas turned ON, apply a soap and water solution to all connections and joints. If bubbles appear, leaks can be detected and corrected.

DO NOT USE AN OPEN FLAME FOR LEAK TESTING. DO NOT OPERATE ANY APPLIANCE IF A LEAK IS DETECTED.

The gas pipe is only intended for connection to a decorative gas appliance that 1) incorporates an automatic shut-off device, and 2) complies with the **Standard for decorative gas appliances for Installation in Vented Fireplaces, ANSI Z21.60-1 990**. The gas pipe must be installed in accordance with the **National Fuel Gas code, ANSI Z223.1-1992**.

FINISHING THE FIREPLACE

FIREPLACE FACING

Any **non-combustible** material may be used for facing (glass, tile, brick, etc.), as long as proper clearances are maintained (refer to section on clearances), and fireplace openings are not blocked or obstructed in any way.

Use only heat-resistant, non-combustible mortar or adhesive to secure facing material to front of fireplace.

When placing facing at the upper edge of the **effective opening** of the fireplace, install an "U" shaped piece of metal extending the full width of the opening. Secure metal with sheet metal screws at a distance high enough from the edge as to not interfere with the operation of the doors. This ensures that the facing material over time should not block the opening if it were to lose cohesion.

OPERATING GUIDELINES AND MAINTENANCE INSTRUCTIONS

When lit for the first time, the Unvented Fireplace will omit a slight odor for about an hour or two. This is a normal occurrence which is due to the "curing" of logs and "burn-in" of internal paints and lubricants used in the manufacturing process.

Keep control compartment, logs, burners, and area surrounding the logs clean by vacuuming or brushing at least twice a year. Temporary removal of the log set may ease the cleaning of the burner and pilot assembly. In cleaning, take care not to alter the settings on the pilot assembly.

The firebox canopy must not be modified or replaced with a canopy that may be provided with the unvented decorative room heater.

THE LOGS CAN GET VERY HOT!! HANDLE ONLY WHEN COOL.

IMPORTANT- Turn off gas and remote wall switch before servicing appliance. Any safety screen or guard removed for servicing must be replaced prior to operating the appliance.

Installation and repair should be done by a qualified person. The appliance should be inspected before use and at least annually by a professional service person. More frequent cleaning may be required due to excessive lint from carpeting, bedding material, etc. It is imperative that control compartments, burners and circulating air passageways of the appliance be kept clean.

"WARNING: Any change to this heater or its controls can be dangerous."

FOR LIGHTING AND OPERATING THIS UNVENTED FIREPLACE, PLEASE REFER TO THE UNVENTED GAS LOGS MANUFACTURER'S INSTRUCTION MANUAL.

Never obstruct the flow of combustion and ventilation air. Keep the front of the fireplace clear of all obstacles and materials.

WARNING! CHILDREN AND ADULTS SHOULD BE ALERTED TO THE HAZARDS OF HIGH SURFACE TEMPERATURES AND TO STAY AWAY FROM THESE TO AVOID BURNS OR CLOTHING IGNITION. YOUNG CHILDREN SHOULD BE CAREFULLY SUPERVISED WHEN THEY ARE IN THE SAME ROOM AS THE FIREPLACE. FOR FURTHER OPERATING GUIDELINES, INSTRUCTIONS, AND WARRANTY INFORMATION, REFER TO YOUR OWNER'S MANUAL OR CONTACT YOUR AUTHORIZED DEALER.

REPLACEMENT AND ACCESSORY PARTS

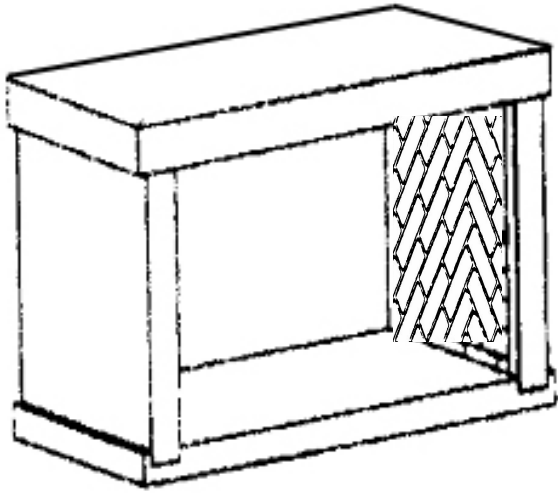
BEFORE ORDERING

- Please have your fireplace's model name or number and the part number of the item(s) you are ordering ready.
- Refer to the parts list and diagrams when ordering replacement parts.
- Repair parts or accessory items may be bought from your distributor/dealer.
- All product specifications are subject to change without notice.

OPTIONAL ARCHED OPENING



FIREBOX



STB Base
STCL/R Side 2x
VFSTT Top Plate

