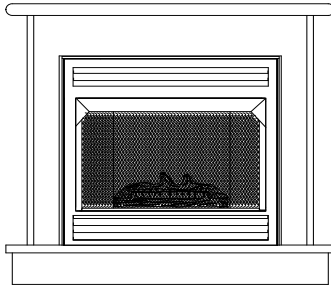


# MODEL FP-BR-10-ZC

## VENT-FREE



March 2005



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

- 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 switch; 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 cannot reach your gas supplier, call the fire department.
- Installation and service must be performed by a qualified installer, service agency or the gas supplier.

This is an unvented gas-fired heater. It uses air (oxygen) from the room in which it is installed. Provisions for adequate combustion and ventilation air must be provided. Refer to section "Producing Adequate Ventilation" page 14.

This appliance may be installed in an aftermarket, permanently located, manufactured (mobile) home, where not prohibited by local codes.

This appliance is only for use with the type of gas indicated on the rating plate. This appliance is not convertible for use with other gases.

### WARNING

This appliance is equipped for (natural or propane) gas .  
Field conversion is not permitted.

**NOTE:** An unvented room heater having an input rating of more than 6,000 Btu per hour **shall not be installed in a bathroom.**

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

Manufacturer: NEW BUCK CORPORATION  
P.O. Box 69 8000 Highway 226 South  
Spruce Pine, NC 28777



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## SAFETY INFORMATION WARNINGS

**IMPORTANT: READ THIS OWNER'S MANUAL CAREFULLY AND COMPLETELY BEFORE TRYING TO ASSEMBLE, OPERATE, OR SERVICE THIS APPLIANCE. IMPROPER USE OF THESE LOGS CAN CAUSE SERIOUS INJURY OR DEATH FROM BURNS, FIRE, EXPLOSION, AND CARBON MONOXIDE POISONING.**

Early signs of carbon monoxide poisoning resemble the flu, with headaches, dizziness, and/or nausea. If you have these signs, the heater may not be working properly. Get fresh air at once! Have burner serviced.

Some people-pregnant women, persons with heart or lung disease, anemia, those under the influence of alcohol, those at high altitudes-are more affected by carbon monoxide than others.

Make certain you understand and read all Warnings. Keep this manual for reference. It is your guide to safe and proper operation of this heater and logs.

**CAUTION: Strong drafts, such as a ceiling fan placed directly in front of the heater (pulling from either direction) may create sooting. Sooting will discolor walls.**

1. The installation must conform with local codes, or in the absence of local codes, with the *National Fuel Gas Code, ANSI Z223.1/NFPA54*.
2. This appliance may be installed in an After-Market\* Manufactured (Mobile) Home, where not prohibited by state or local codes.

\* (After-Market: Completion of sale, not for purpose of resale from the manufacturer.)

**This appliance is only for use with the type of gas indicated on the rating plate. This appliance is not convertible for use with other gases.**

**NOTE:** See Page 14, for "Producing Adequate Ventilation".

**IMPORTANT: VENT-FREE HEATERS ADD MOISTURE TO THE AIR. ALTHOUGH THIS IS BENEFICIAL, INSTALLING HEATER IN ROOMS WITHOUT ADEQUATE VENTILATION MAY CAUSE MILDEW TO FORM FROM TOO MUCH MOISTURE.**

3. Never install this heater:
  - in a recreational vehicle, bathroom.
  - where curtains, furniture, clothing, or other flammable objects are less than 42" from the front of the heater
  - in high traffic areas
  - in windy areas
4. Two models are available. One specific model for propane(LP), and one for natural gas. Use the correct type gas for your home. Do not convert from one gas type to another.

5. If this heater is used with propane gas, do not place propane supply tank (s) inside any structure.
6. **What To Do IF You Smell Gas:**  
Shut off gas supply.
  - Do not try to light any appliance.
  - Do not touch any electrical switch; 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 cannot reach your gas supplier, call the fire department.
7. When operated for the first time, the logs may emit a "paper burning" smell. This smell will gradually diminish and will be totally eliminated after the first few hours of operation. Run the gas logs with the flue damper open during this time. Do not use blower at this time.
8. **"This heater shall not be installed in a confined space or unusually tight construction unless provisions are provided for adequate combustion and ventilation air."** See *"Producing Adequate Ventilation"*, page 14.
9. Surface of gas logs becomes very hot when operating. Keep children and adults away from hot surface. Gas logs will remain hot for sometime after shutdown. Allow surface to cool before touching.
10. **Do not place clothing or other flammable material on or near the appliance.**
11. If equipped, fresh air damper must be closed.
12. **Keep appliance area clean and free from combustible materials, gasoline, and other flammable flammable vapors and liquids.**
13. If burner shuts off, do not relight until you provide fresh outside air. If burner continues to shut off, have unit serviced.
14. **Do not use this heater if any part has been under water. Immediately call qualified service technician to inspect the room heater and to replace any part of the control system and any gas control which has been under water.**
15. Turn off the heater and let cool before servicing.
16. These logs are made of bonded fiber. When removing logs and base, do not damage the bonded material. If the material is damaged extensively, loose fiber dust could be emitted into the air.
17. **Any safety screen or guard removed for servicing an appliance must be replaced prior to operating the heater.**
18. **This appliance is intended for supplemental heating.**
19. **"WARNING: Any change to this heater or its controls can be dangerous."**
20. **Installation and repairs should be performed by a qualified service 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.**

21. All heater screens must be kept clean when operating the gas logs.
22. **.”WARNING: Failure to keep the primary air opening(s) of the burner(s) clean may result in sooting and property damage.”**
24. Do not use this heater for burning trash or cooking. Never place matches, paper, garbage, or any other material on top of logs or into the flames.
24. **Do not install or operate this heater in areas where impurities in the air exist (such as tobacco smoke or heavy cooking grease). Particles from impurities may discolor walls.**
25. **Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies.**
26. **Children and adults should be alerted to the hazards of high surface temperature and should stay away to avoid burns or clothing ignition.**
27. **Young children should be carefully supervised when they are in the same room with the appliance.**
28. **An unvented room heater having an input rating of more than 6,000 Btu per hour shall not be installed in a bathroom.**
29. **The appliance and its appliance main gas valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressure in excess of 1/2 psi (3.5 kPa).**
30. **The appliance must be isolated from the gas supply piping system by closing its equipment shut-off valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psi (3.5 kPa).**
31. **.”WARNING: Do not allow fans to blow directly into fireplace. Avoid any drafts that alter burner flame patterns.”**
32. **.”WARNING: Do not use a blower insert, heat exchanger insert or other accessory not approved for use with this heater.”**

# INSTALLATION

**The Model FP-BR10-ZC Vent-Free gas fireplace may be installed in any room in a Residential home or an After-Market\* Manufactured Home.**

*(Exception: This appliance may **not** be installed in a **bathroom**.)*

\* (After Market: Completion of sale, not for the purpose of resale from the manufacturer).  
For After-Market Manufactured Home installation, check with state and local codes.

This appliance is only for use with the type of gas indicated on the rating plate. This appliance is not convertible for use with other gases.

**NOTE:** See page 14 for “Producing Adequate Ventilation”.

## CHOOSING THE LOCATION FOR YOUR FIREPLACE:

Figure 1 shows some of the many ways your fireplace may be installed. Consider the traffic pattern in your room and the location of doors and windows. Moving air from ceiling fans, open doors, and hot air grills may cause the flames to sputter. If a disturbance is found that affects the flames, it must be eliminated by turning off the ceiling fan, closing the door, or closing or moving the hot air register. A corner location may be best where space is limited.

Your fireplace weighs no more than some of your fine furniture. If the fireplace is located near a load bearing wall, additional supports to the foundation will not be necessary. **HEAVY FACINGS, SUCH AS BRICK, STONE, ETC., MAY REQUIRE ADDITIONAL FOUNDATION SUPPORT.**

**NOTE: If this appliance is installed directly on carpeting, tile or other combustible material, other than wood flooring, the appliance shall be installed on a metal or wood panel extending the full width and depth of the appliance.**

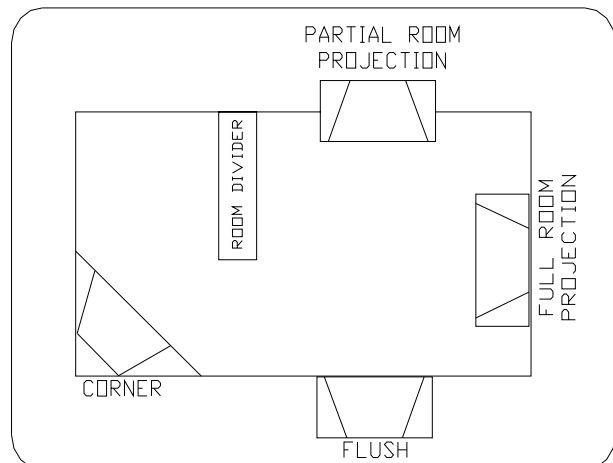
FIGURE 1

## GAS LINES

The gas supply line and electrical supply must be installed before framing in the fireplace by a licensed installer.

## DRAFTS

Do not locate the fireplace in high traffic areas or areas exposed to high drafts and winds. Locate the fireplace away from furniture and draperies.





**Fireplace and Framing Dimensions (ins.)**

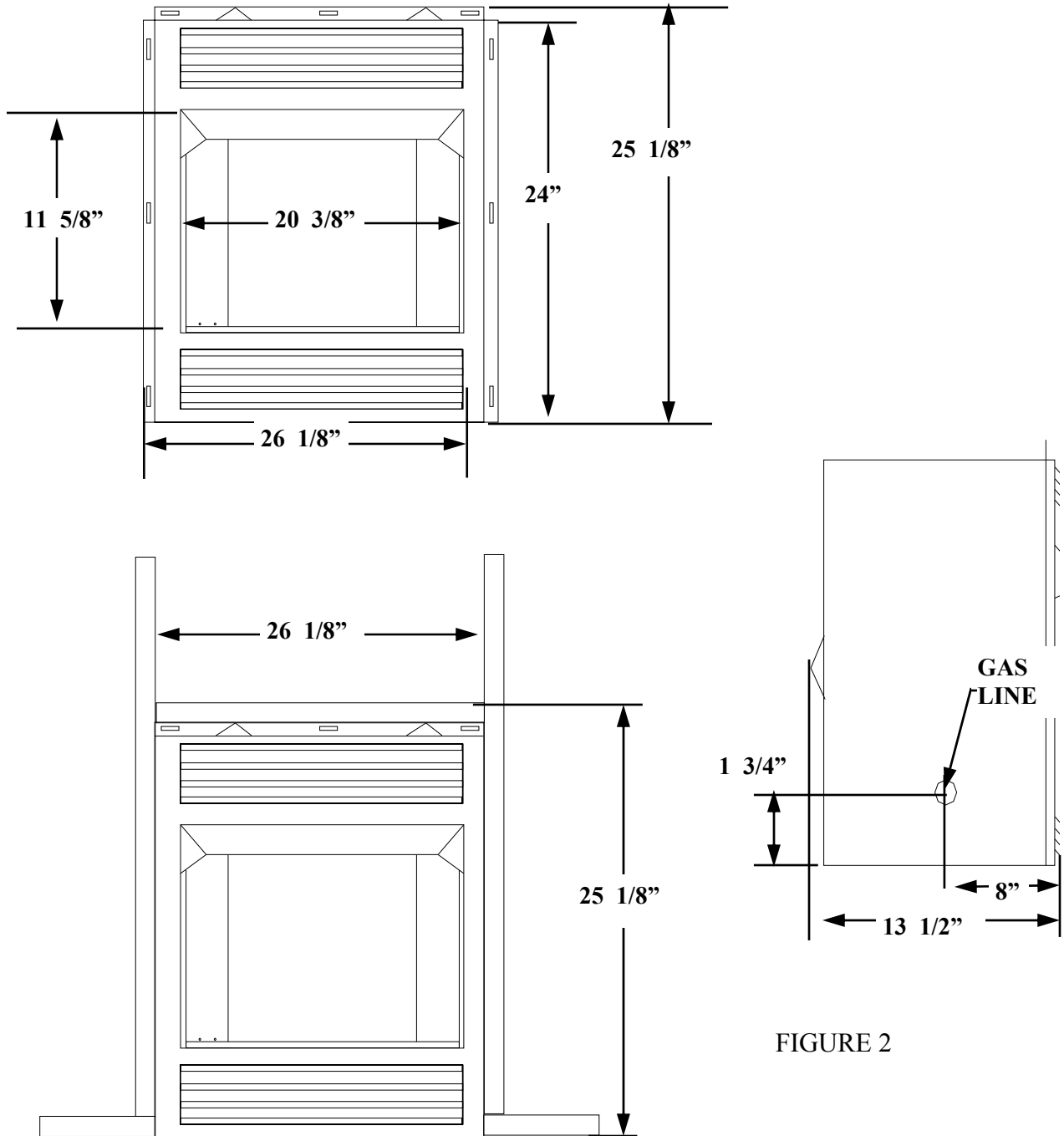


FIGURE 2

**WARNING:** Installation and repairs should be performed by a qualified service 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.

## FIREPLACE CLEARANCES

The fireplace may be placed directly on a combustible floor, against a combustible wall at marked clear-ances, or on a raised wooden platform.

If the fireplace is to be installed on a raised wooden platform, the platform must be a continuous level surface. The fireplace must be secured in place so it cannot shift positions. The nailing flanges on the sides of the firebox make securing it to the framing easy. They were designed to allow the installation of 1/2" wallboard or plywood flush with the face of the fireplace.

Only the header (see Figure 2) may rest on the stand-offs on top of the firebox.

When the firebox is installed over carpeting, (vinyl) tile, or any combustible material other than wood flooring, it must be installed on a metal or wood panel extending its full width and

depth. Alternatively, the carpeting, (vinyl) tile, etc. may be removed beneath the fireplace before installing.

**COMBUSTIBLE MATERIALS MUST NOT BE INSTALLED OVER OR TOUCH ANY BLACK PAINTED SURFACE. DO NOT BLOCK HEAT CIRCULATING AIR OUTLETS. DOING SO MAY RESULT IN POTENTIAL FIRE HAZARDS.**

1. **Sidewall Clearances:** Clearances from the side of the fireplace opening to any adjacent combustible wall should not be less than 7".

2. **Ceiling Clearances:** The ceiling height should not be less than 42" from the top of the fireplace opening.

## INSTALLING THE FIREBOX

This list of specific instructions will help you make certain that every installation operation is performed correctly. Complete the installation steps in the sequence shown. STATE AND LOCAL BUILDING CODES SHOULD BE CONSULTED IN ALL CASES AS TO THE PARTICULAR REQUIREMENTS CONCERNING THE INSTALLATION OF A FACTORY BUILT FIREPLACES. Select the location for the fireplace by taking into consideration the factors previously outlined in the "Choosing the Location." See page 5.

### Framing the Firebox

The width of the framed opening must be 26 1/8". The height of the framed opening must be 25 1/8". The entire fireplace can be elevated above the floor to achieve a raised hearth effect. This can be done by adding a small platform to achieve the desired height.

**NOTE:** The wiring for the lower blower must be installed during the framing stage. The nailing flanges on both sides were designed to allow the installation of 1/2" wallboard or plywood flush with the face of the fireplace.

When the framing is inside, the outside wall will be insulated. If the framing or chase is outside, thin insulation should be used in the framing on the back, sides, and top. The bottom should be insulated with a hard insulating board. This will prevent cold from going into the chase through the fireplace to the living space.

### Install the Firebox

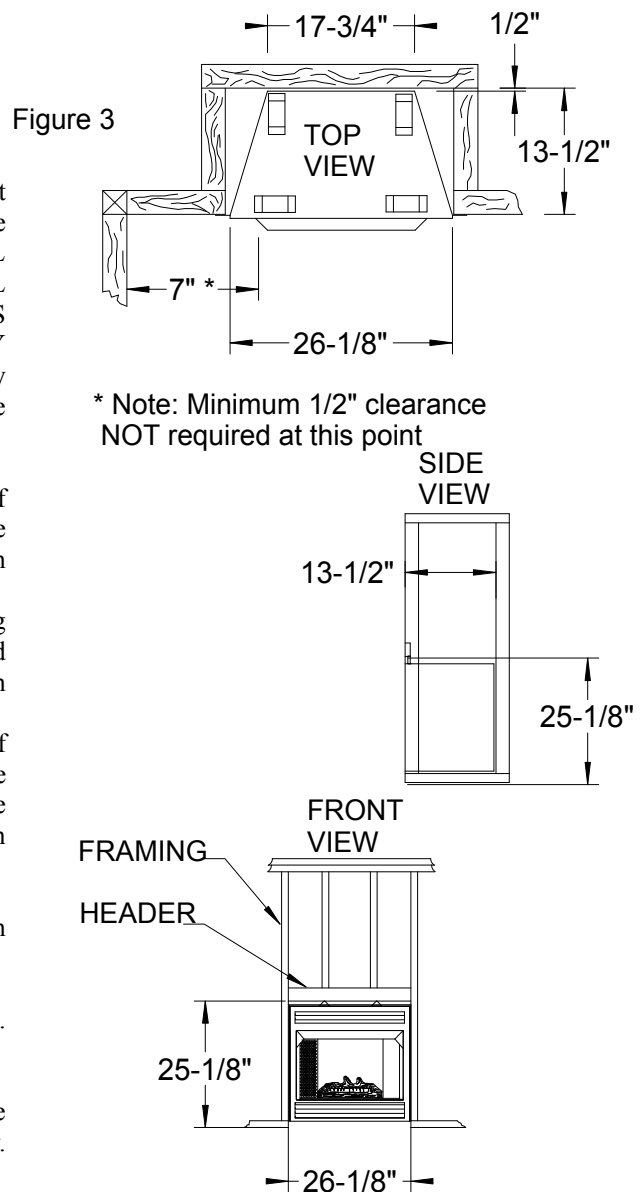
Install the firebox into the framed opening by placing it directly in front of the opening and sliding it into the proper position.

### Level the Firebox

Check the level of the firebox on the top edge of the fireplace face. Shim if necessary.

### Secure the Firebox

Secure the fireplace to the framing. The nailing flanges on the firebox will make securing the firebox to the frame quick and easy. Use appropriate size nails or screws to secure the firebox.



## FINISHING YOUR FIREPLACE

There is a wide variety of finishing material available for your fireplace from formal wall treatments with marble and mantels, to rustic wood paneling, stone or brick. Non-Combustible materials used in this installation such as slate, tile, marble, etc. must be at least 1/2" thick.

**IT IS IMPORTANT THAT THE BLACK FACE OF THE FIREPLACE NOT BE COVERED WITH ANY TYPE OF COMBUSTIBLE MATERIAL.**

Non-combustible facing materials such as marble, brick, or ceramic tile may overlap the black face of the fireplace up to the opening on either side of the fireplace. Seal all joints between the black fireplace face and the wall covering with a heat-resistant material such as rock wool insulation or mortar. Be sure to use high temperature adhesive or mortar when anchoring brick, stone, or tile to the face of the fireplace.

Check to see whether man-made brick and stone are made of non combustible materials before using them on the face of the fireplace. Some of these products contain combustible materials. Combustible wall coverings such as paneling or wallboard may not overlap the black face of the fireplace. The space between the wall covering and the fireplace should be sealed with a heat resistant material such as rock wool insulation or mortar.

**NOTE:** An "L" shaped steel lintel must be installed across the top of the firebox opening where facing materials such as brick or stone is used on the face of the firebox. It acts as a support/firestop. It should be attached to the face of the fireplace with screws and sealed to the fireplace with a heat-resistant sealer.

### CLEARANCES

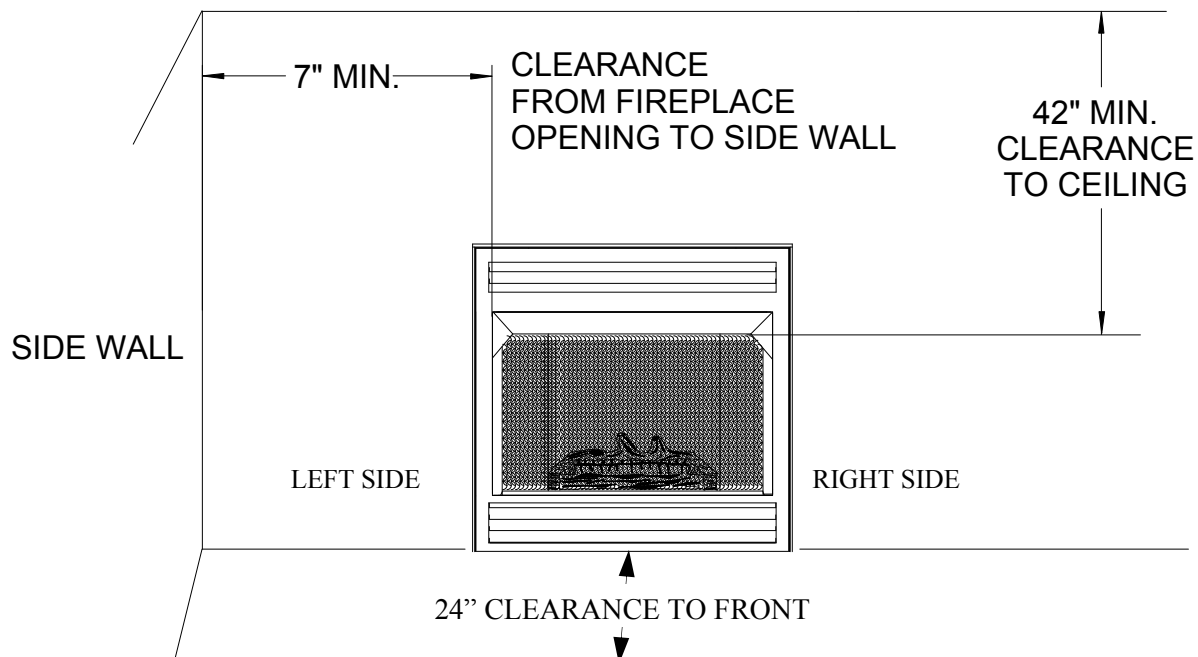
To ensure a safe installation, the following must be carefully observed.

1. **Sidewall Clearances:** Clearances from the right or left side of the fireplace opening to any adjacent combustible wall should not be less than 7", facing the unit.
2. **Ceiling Clearances:** The ceiling height should not be less than 42" from the top of the fireplace opening.

3. **Mantel Clearances:** We have provided 4 different situations to position your mantel. See Figure 5.
4. **Floor Clearances:** No clearance is required if the appliance is installed per these instructions.
5. **Front Clearances:** From the Front of the fireplace to any combustible materials should not be any less than 24".

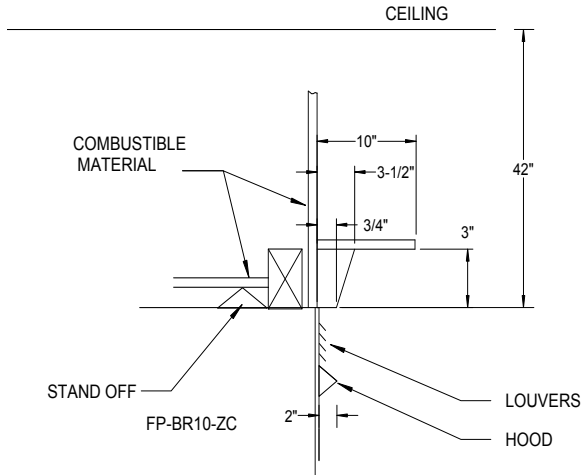
**NOTE: Adequate clearance around air openings must be maintained. Never cover any openings on the appliance with any type material.**

FIGURE 4

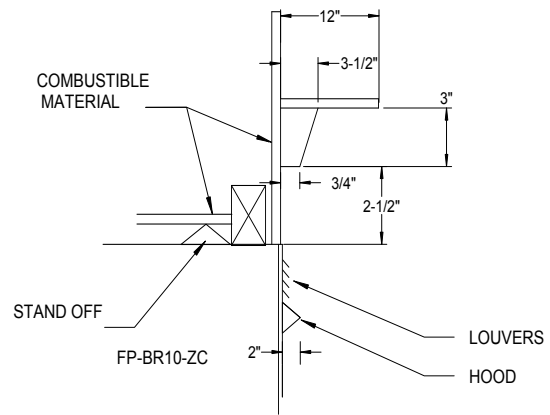


# MANTEL PROFILES FOR ZERO CLEARANCE CABINET MUST BE FOLLOWED

## MANTELS WITH 3/4" BASE

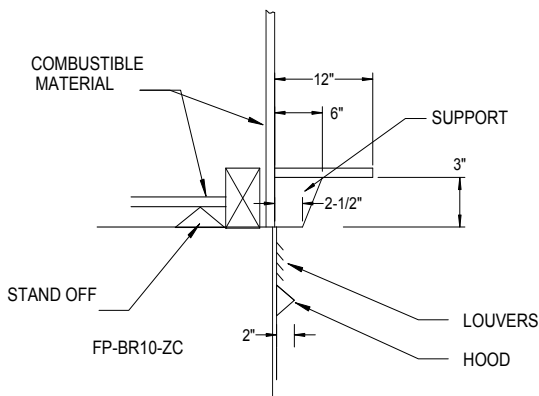


Bottom of 3/4" Base or Support must be Flush with top of Unit if mantel is 10" wide or less.

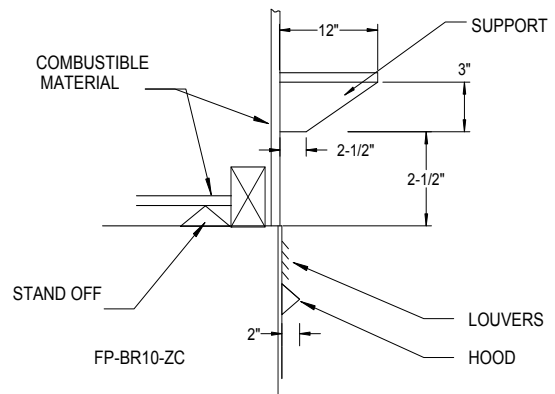


Bottom of 3/4" Base or Support must be at least 2-1/2" from top of Unit if mantel is 10" wide or more.

## MANTELS WITH 2-1/2" BASE



Bottom of 2-1/2" Base or Support must be Flush with top of Unit if mantel is 12" wide or less.



Bottom of 2-1/2" Base or Support must be at least 2-1/2" from top of Unit if mantel is 12" wide or more.

# INSTALLATION OF MODEL FP - BR10- ZC WITH OPTIONAL WOODEN MANTEL

(1) When choosing the right location for your heater and mantel keep the following in mind:

**NOTE: Due to high temperatures, this heater should be located out of traffic and away from furniture and draperies.**

**NOTE:** Kit No. (PA KDMH10) Deluxe Wooden Mantel for FP-BR10-ZC.  
Kit No. (PA KDM10) Standard Wooden Mantel for FP-BR10-ZC

**CAUTION: THE INSTALLATION MUST CONFORM WITH LOCAL CODES OR, IN THE ABSENCE OF LOCAL CODES, WITH THE *NATIONAL FUEL GAS CODES, ANSI Z223.1/NFPA 54.***

**NOTE:** See page 18 for “Gas Pressure Check”.

**WARNING: YOUNG CHILDREN SHOULD BE CAREFULLY SUPERVISED WHEN THEY ARE IN THE SAME ROOM WITH THE APPLIANCE.  
DO NOT PLACE CLOTHING OR OTHER FLAMMABLE MATERIAL ON OR NEAR THE APPLIANCE**

(2) Screen(s) can not be removed or altered (Position screen(s) in the closed position before leaving heater unattended).

(3) Follow instructions for assembly of (Optional) Wooden Mantel. See instructions supplied with mantel.

(4) After mantel has been assembled, slide the heater from the rear into the opening of the mantel.

**NOTE:** Place a cloth or blanket over the front portions of the mantel as not to scar the wood.

(5) Center the heater in the opening of the mantel. See Figure 6.

(6) Fasten mantel to hearth by using ½" wood screws.

(7) Insert the nine (9) ½" wood screws provided with mantel through slots on nailing flange and secure in place. See Figure 6.

(8) Position mantel and fireplace into desired location.

(9) To light the heater, see “Lighting Instructions” pages 19 through 30. Make sure you have the right gas valve for Natural or LP gas.

**NOTE:** Hook gas supply line into heater. Check for leaks using soap and water, not an open flame.

**NOTE: When used as a bedroom fireplace, the unit must be attached to the wall. Use the angle provided with the mantel. Also the safety screen must be kept mechanically secured to the unit as it is when it leaves the manufacturer.**

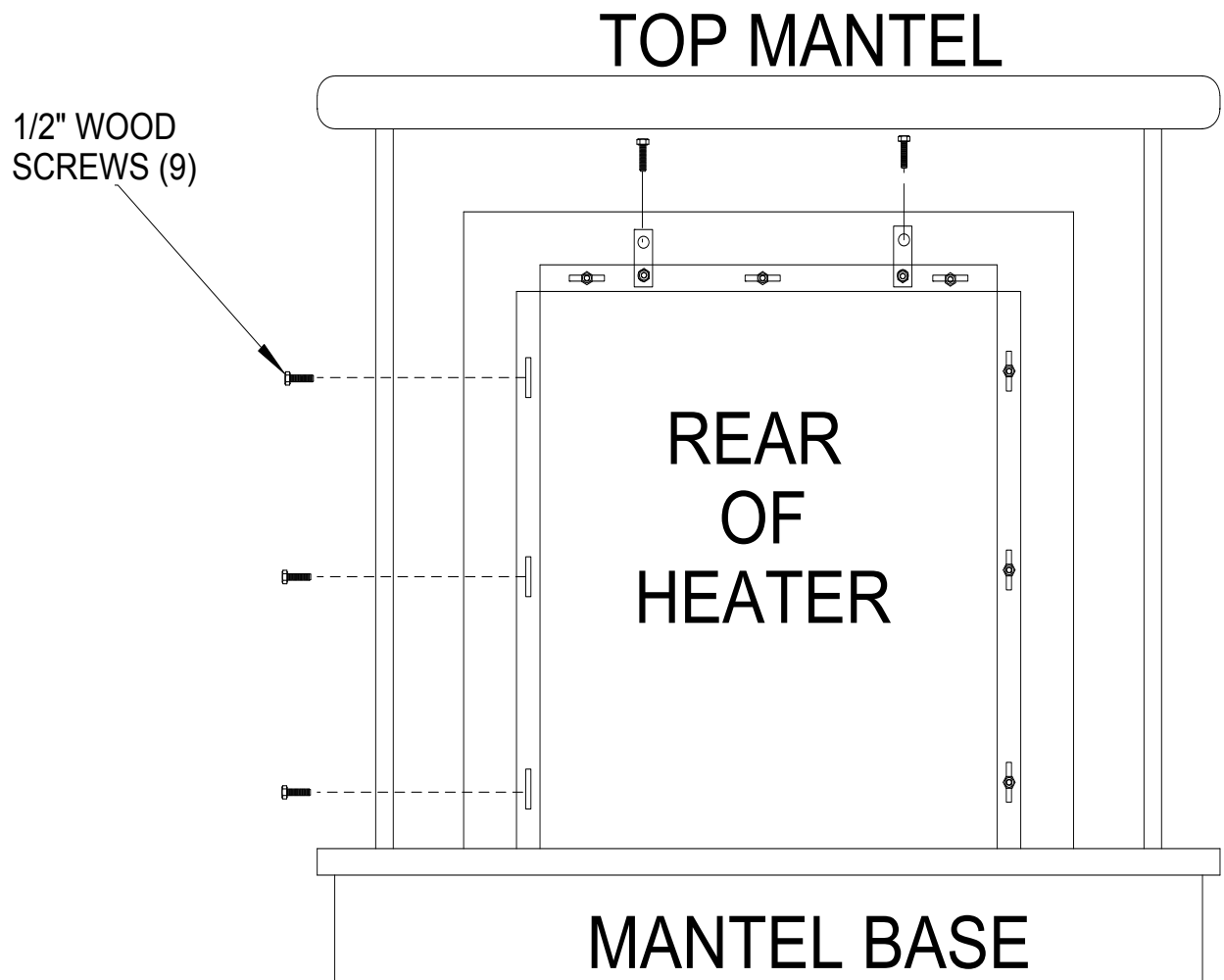


FIGURE 6

## INSTALLATION AFTER-MARKET MOBILE HOMES

**THIS APPLIANCE MAY BE INSTALLED IN AN AFTERMARKET\*, PERMANENTLY LOCATED, MANUFACTURED (MOBILE) HOME, WHERE NOT PROHIBITED BY LOCAL CODES.** \*After Market: Completion of sale, not for the purpose of resale from the manufacturer.

**THIS APPLIANCE IS ONLY FOR USE WITH THE TYPE OF GAS INDICATED ON THE RATING PLATE. THIS APPLIANCE IS NOT CONVERTIBLE FOR USE WITH OTHER GASES.**

**NOTE: For mobile home installation follow “Installation”, pages 6-19.**

**WARNING: Installation and repairs should be performed by a qualified service 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.**

## GAS CONNECTION

**CHECK GAS TYPE:** Use only the type of gas indicated on the valve rating plate. If the type of gas listed on the plate is not your type of gas supply, DO NOT INSTALL. Contact your dealer for proper model.

Always use an external regulator for all LP heaters to reduce the supply tank pressure to a maximum of 13” W.C. This in addition to the regulator furnished with the heater.

**WARNING: Connection directly to an unregulated LP tank can cause an explosion.**

The normal gas connection is 3/8” N.P.T. made at the right rear side of the appliance.

**NOTE:** The connecting pipe must be internally tinned copper tubing for use with natural gas. Test for leaks using a solution of soap and water after completing the connection. **DO NOT USE OPEN FLAME.**

### INSTALLATION SUPPLIES

Before installing the heater, gather the following materials:

- external regulator (supplied by installer for propane)
- piping (check local codes)
- manual shutoff valve\*
- test gauge connection\*
- ground joint union
- sediment trap
- tee joint
- pipe wrench
- sealant (resistant to LP gas)

**WARNING:  
ANY CHANGE TO THIS HEATER OR ITS CONTROLS CAN BE DANGEROUS.**

## PRODUCING ADEQUATE VENTILATION

**This section is for residential or manufactured (mobile) installation**

“This heater shall not be installed in a confined space or unusually tight construction unless provisions are provided for adequate combustion and ventilation air.”

The **National Fuel Gas Code, ANSI Z223.1/NFPA 54** defines a confined space as a space whose volume is less than 50 cubic feet per 1,000 BTU per hour ( $4.8\text{m}^3$  per kw) of the aggregate input rating of all appliances installed in that space and an unconfined space as a space whose volume is not less than 50 cubic feet per 1,000 BTU per hour ( $4.8\text{m}^3$  per kw) of the aggregate input rating of all appliances installed in that space. Rooms communicating directly with the space in which the appliances are installed, through openings not furnished with doors, are considered a part of the unconfined space.

**“WARNING: IF THE AREA IN WHICH THE HEATER MAY BE OPERATED IS SMALLER THAN THAT DEFINED AS AN UNCONFINED SPACE OR IF THE BUILDING IS OF UNUSUALLY TIGHT CONSTRUCTION, PROVIDE ADEQUATE COMBUSTION AND VENTILATION AIR BY ONE OF THE METHODS DESCRIBED IN THE NATIONAL FUEL GAS CODE, ANSI Z223.1/NFPA 54, SECTION 5.3 OR APPLICABLE LOCAL CODES.”**

Unusually tight construction is defined as construction where:

- a) Walls and ceilings exposed to the outside atmosphere have a continuous water vapor retarder with a rating of 1 perm ( $6 \times 10^{-11}$  kg per pa-sec- $\text{m}^2$ ) or less with openings gasketed or sealed;
- b) Weather stripping has been added on openable windows and doors, and
- c) Caulking or sealants are applied to areas such as joints around window and door frames, between sole plates and floors, between wall-ceiling joints, between wall panels, at penetrations for plumbing, electrical, and gas lines, and at other openings.

**NOTE: SOME AREAS IN THE UNITED STATES HAVE HIGHER REQUIREMENTS FOR CUBIC FEET PER 1000 BTU/ HOUR INPUT. (EX. CINCINNATI, OHIO CODES REQUIRE 70 CUBIC FEET). CHECK YOUR LOCAL CODE BEFORE INSTALLATION.**



# DETERMINING FRESH-AIR FLOW FOR HEATER LOCATION

DETERMINE IF YOU HAVE A CONFINED OR UNCONFINED SPACE

Use this worksheet to determine if you have confined or unconfined space.

SPACE: Includes the room in which you will install heater plus adjoining rooms with doorless passageways or ventilation grills between the rooms.

**1. Determine the volume of the space (length x width x height).**

Length x Width x Height = \_\_\_\_\_ cu.ft.(volume of space)

EXAMPLE: 20 ft.(Length) x 16 ft.(Width) x 8 ft.(ceiling Height)=  
2560 cu. ft. (volume of space)

If additional ventilation to adjoining room is supplied with grills or openings, add the volume of these rooms to the total volume of the space.

**2. Divide the space volume by 50 cubic feet to determine the maximum BTU/Hr the space can support.**

\_\_\_\_\_ (volume of space)/50 cu. ft. =maximum BTU/Hr the space can support)

EXAMPLE: 2560 cu. ft. (volume of space /50 cu. Ft. = 51.2 or  
51200 (maximum BTU/Hr the space can support)

**3. Add the BTU/Hr of all fuel burning appliances in the space.**

Vent-free heater	_____	BTU/Hr
Gas water heater*	_____	BTU/Hr
Gas furnace	_____	BTU/Hr
Vented gas heater	_____	BTU/Hr
Gas fireplace logs	_____	BTU/Hr
Other gas appliances*	+ _____	BTU/Hr
Total	= _____	BTU/Hr

Example: Gas water heater 40000 BTU/Hr  
Vent-free heater + 18000 BTU/Hr  
Total = 58000 BTU/Hr

\*Does not include direct-vent gas appliances. Direct-vent draws combustion air from the outdoors and vents to the outdoors.

**4. Compare the maximum BTU/Hr the space can support with the actual amount of BTU/Hr used.**

\_\_\_\_\_ BTU/Hr (maximum the space can support)  
\_\_\_\_\_ BTU/Hr (actual amount of BTU/Hr used)

Example: 51200 BTU/Hr (maximum the space can support)  
58000 BTU/Hr (actual amount of BTU/Hr used)

The space in the above example is a confined space because the actual BTU/Hr used is more than the maximum BTU/Hr the space can support. You must provide additional fresh air. Your options are as follows:















































