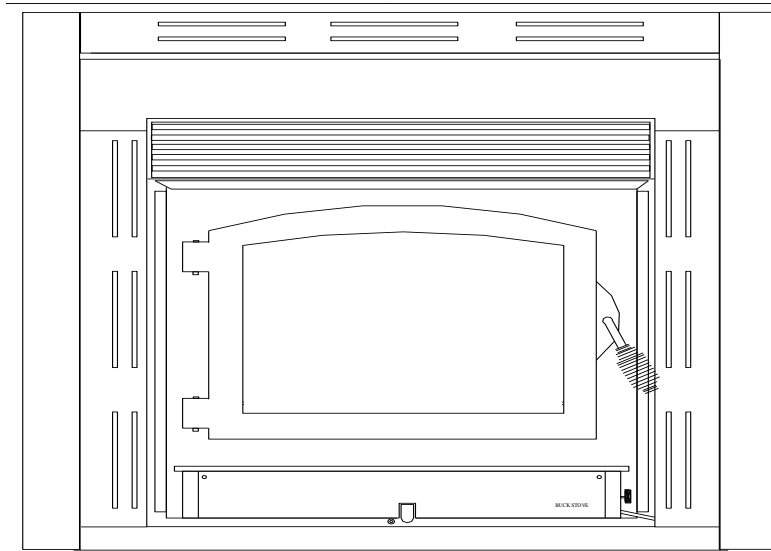


**MODEL 51ZC**  
**ZERO CLEARANCE CABINET**  
**FOR USE WITH FIREPLACE MODELS 51, T-51, 74, T-74 ONLY.**  
**MAY BE INSTALLED IN RESIDENTIAL AND MOBILE HOME.**  
 Contact your insurance company for coverage and installation inspection.



**WARNING**


**Do not attempt to build a fire in this product. It has been designed and safety tested for use only with Models 51,T-51,74,T-74 manufactured by NEW BUCK CORPORATION. Read and follow the installation and operating instructions for this model.**

**FEATURES**

<b>PREPARATIONS</b>	<b>INSTALLATION</b>
<b>OPERATION</b>	<b>SAFETY</b>
<b>MAINTENANCE</b>	

**SAFETY NOTICE** ⚠

**IF THIS HEATER IS NOT PROPERLY INSTALLED, A HOUSE FIRE MAY RESULT. FOR YOUR SAFETY, FOLLOW THE INSTALLATION INSTRUCTIONS. CONTACT THE AUTHORITY HAVE JURISDICTION (SUCH AS MUNICIPAL BUILDING DEPARTMENT, FIRE DEPARTMENT, FIRE PREVENTION BUREAU, ect.) SHOULD BE CONSULTED BEFORE INSTALLATION TO DETERMINE THE NEED TO OBTAIN A PERMIT. KEEP THESE INSTRUCTIONS FOR FUTURE USE.**

TESTED AND LISTED BY:  **ITS/WARNOCK HERSEY, MIDDLETON, WI**

**MANUFACTURED BY NEW BUCK CORPORATION**  
**200 ETHAN ALLEN DRIVE,**  
**SPRUCE PINE, N.C. 28777**

Revised January 2013

[www.buckstove.com](http://www.buckstove.com)



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## SECTION I

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# RESIDENTIAL INSTALLATION

Listed NEW BUCK CORPORATION:

**Model**

**51ZC** Zero Clearance Cabinet Assembly For Use With Models 51, T-51, 74, and T-74 Only.

**CAUTION:** Read through all of these instructions carefully. Follow approved Chimney Manufacturer's Installation exactly. Failure to install the Cabinet Fireplace, Stove and Chimney as described in the instructions will void the manufacturer's warranty and may have an effect on your Homeowner's Insurance. A major cause of chimney related fires is failure to maintain required clearances (air spaces) to combustible materials. It is of the utmost importance that these parts be installed only in accordance with these instructions.

DO NOT USE CHEMICALS OR FLUIDS TO START THE FIRE.

DO NOT BURN GARBAGE OR FLAMMABLE FLUIDS.

DO NOT BUILD A FIRE DIRECTLY INSIDE THE ZC CABINET. IT IS DESIGNED SOLELY FOR HOUSING THE MODELS 51, T-51, 74, T-74 STOVES.

WARNING: THIS FIREPLACE HAS NOT BEEN TESTED WITH AN UNVENTED GAS LOG SET. TO REDUCE THE RISK OF FIRE OR INJURY, DO NOT INSTALL AN UNVENTED GAS LOG SET INTO THIS FIREPLACE.

**CAUTION:**

Never use gasoline, gasoline type lantern fuel, kerosene, charcoal lighter fluid, or similar liquids to start or "freshen up" a fire in this fireplace. Keep all such liquids well away from the fireplace while it is in use.

**Disposal of Ashes:**

Ashes should be placed in a metal container with a tight-fitting lid. The closed container of ashes should be placed on a noncombustible floor or on the ground, well away from all combustible materials, pending final disposal. If the ashes are disposed of by burial in soil or otherwise locally dispersed, they should be retained in the closed container until all cinders have thoroughly cooled.

Do not use grate or elevate fire. Build wood fire directly on hearth in stove.

For operation and use of air and damper controls, see stoves Owners Manual.

For operation and use of electrical assemblies, see stoves Owners Manual.

USE SOLID WOOD FUEL ONLY.

The Zero-Clearance Cabinet and the Models 51, T-51, 74, and T-74 Installed (hereafter referred to as the 51ZC) is designed for installation in a family dwelling, where minimum clearance is desired.

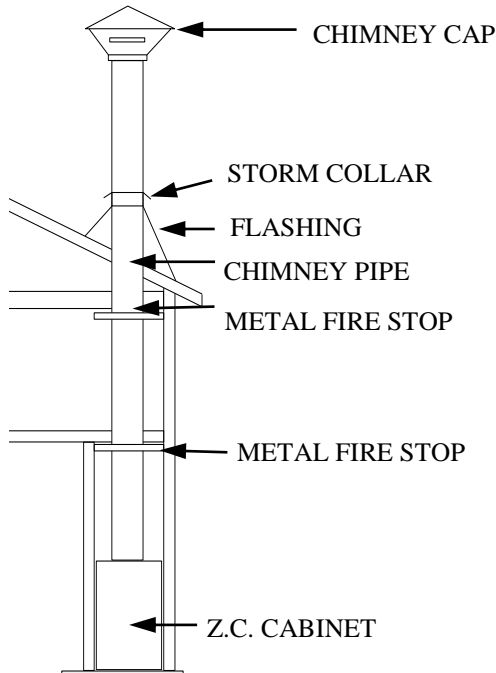
## INSTALLATION PRECAUTIONS

The following precautions are mandatory for a safe installation.

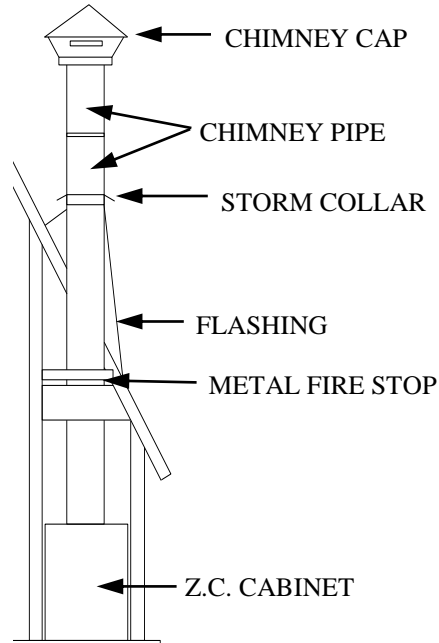
- (A) Compliance with local building codes and regulations is mandatory.
- (B) Be careful not to damage the unit in handling and unpacking component parts and accessories.
- (C) **Model 51zc Cabinet, use only 6"listed 2100° UL 103 HT TYPE Chimney with the 51zc Cabinet (ONLY AFTER) one of the following new Buck Corporation Stoves 51, T-51, 74, T-74, has been installed into the 51ZC Cabinet.**
- (D) The chimney must extend a minimum of three feet (3') above the highest point where it penetrates the roof (three feet (3') above a flat roof or up to a 2 /12 pitch roof ), and the chimney must extend a minimum of two feet (2') higher than any portion of the building within ten feet (10') of the chimney. The minimum height is fourteen feet (14'). The maximum height is thirty feet (30'). A two-inch (2") clearance must be maintained between the chimney and any combustible materials at all points.
- (E) A rain cap must be used to terminate the chimney to prevent down-draft. Use the factory approved rain cap which is approved for the type chimney being installed.
- (F) Do not connect this unit to a chimney flue serving another appliance. Do not use a flue intended for a gas appliance do not connect to any distribution duct or system.

## SELECTING A CHIMNEY INSTALLATION AND LOCATION

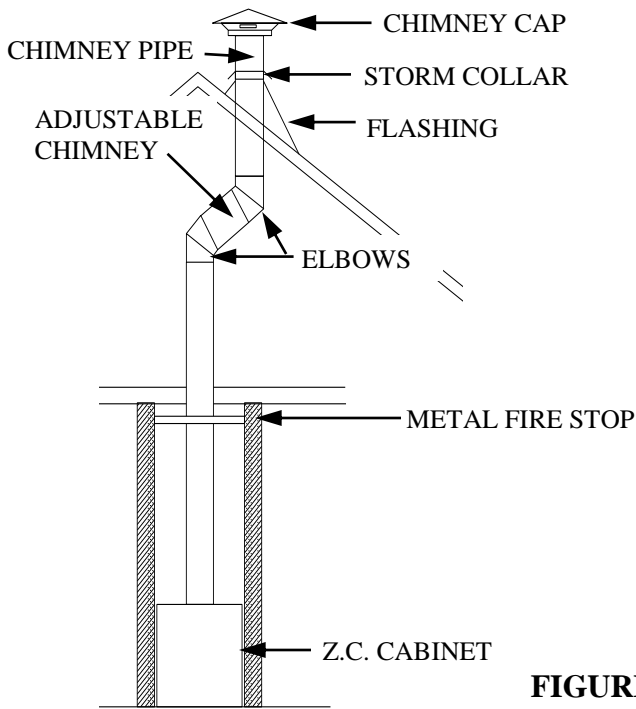
There are two basic types of chimney installation possible with the 51ZC; straight up through a ceiling, or a chase installation, either outside or inside. These are normally used as follows:



**FIGURE 1 THROUGH CEILING**



**FIGURE 2 THROUGH CATHEDRAL CEILING**



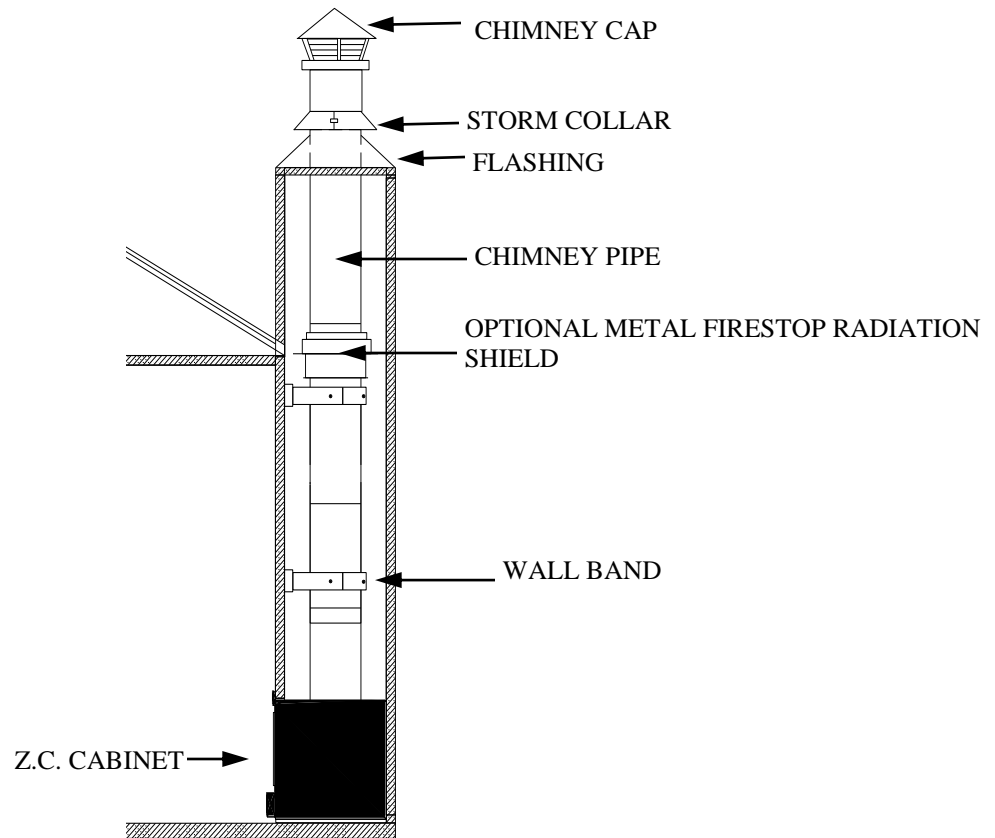
**FIGURE 3 OFFSET TO CLEAR OBSTRUCTION**

**WARNING:** Only one pair of 15 degree or 30 degree offsets can be used.

**CAUTION:** Refer to chimney manufacturer's instructions for assembly and disassembly of chimney parts. Be sure to follow chimney instructions for proper clearances to combustibles and proper air spacing required.

- A. Straight up through ceiling (See Page 4 Figures 1 and 2). This is a simple installation normally used when installing a Model 51ZC inside an existing room, and in some cases, in new construction. Refer to page 4 Figure 3 if an offset to clear an obstruction is needed.

**WARNING:** Only one pair of 15 degree or 30 degree offsets can be used.



**FIGURE 4 EXTERIOR WALL CHASE**

- B. Exterior Chase Installation: (See Figure 4). A chase is an enclosure built specifically to house a chimney. The interior of a chase is open from Model 51ZC to the roof, eliminating the need to cut through ceilings and the roof. Normally, a chase is built through the wall, and the Model 51ZC is located in the bottom of the chase, with the front of the unit flush with the interior wall. Chases are commonly veneered on the outside with brick, stone or wood to give the appearance of a conventional fireplace flue. Occasionally, they are built inside and boxed in, similar to a stairwell. When making a chase installation, it is important to read the chimney manufacturer's instructions prior to building, as there are specific requirements for bracing a free standing flue that must be planned for. There are also occasions where offsets are used within a chase to accommodate unusual building designs, or to locate the Model 51ZC further into a room.

# Floor Protection: or Hearth Protector

Floor protection must be 3/8" minimum thickness non-combustible material or equivalent.

## How to use alternate materials and how to calculate equivalent thickness.

An easy means of determining if a proposed alternate floor protector meets requirements listed in the appliance manual is to follow this procedure:

1. Convert specification to R-value:  
R-value is given—no conversion is needed.  
K-factor is given with a required thickness (T) in inches:  
C-factor is given:  $R=1/C$
2. Determine the R-value of the proposed alternate floor protector.  
Use the formula in step (1) to convert values not expressed as "R"  
For multiple layers, add R-values of each layer to determine the overall R-value.
3. If the overall R-value of the system is greater than the R-value of the specified floor protector, the alternate is acceptable.

### Example:

The specified floor protector should be 3/4" thick material with a K-factor of 0.84.  
The proposed alternate is 4" brick with a C-factor of 1.25 over 1/8" mineral board with a K-factor of 0.29.

Step (a): Use formula above to convert specification to R-value.  $R= 1/K \times T = 1/0.84 \times .75 = 0.893$

Step (b): Calculate R of proposed system. 4" brick of  $C=1.25$ , therefore  $R_{brick} = 1/C = 1/1.25 = 0.80$  1/8" mineral board of  $K = 0.29$ , therefore  $R_{min.bd.} = 1/0.29 \times 0.125 = 0.431$

Step (c): Compare proposed system R of 1.231 to specified R of 0.893. Since proposed system R is greater than required, the system is acceptable.

### Definitions:

$$\text{Thermal conductance} = C = \frac{\text{Btu}}{(\text{hr})(\text{ft}^2)(\text{°F})} = \frac{W}{(\text{m}^2)(\text{°K})}$$

$$\text{Thermal conductance} = K = \frac{(\text{Btu})(\text{inch})}{(\text{hr})(\text{ft}^2)(\text{°F})} = \frac{W}{(\text{m})(\text{°K})} = \frac{(\text{Btu})}{(\text{hr})(\text{ft})(\text{°F})}$$

$$\text{Thermal conductance} = R = \frac{(\text{ft}^2)(\text{hr})(\text{°F})}{\text{Btu}} = \frac{(\text{m}^2)(\text{°K})}{W}$$

Install in accordance with 24 CFR, Part 3280 (HUD).

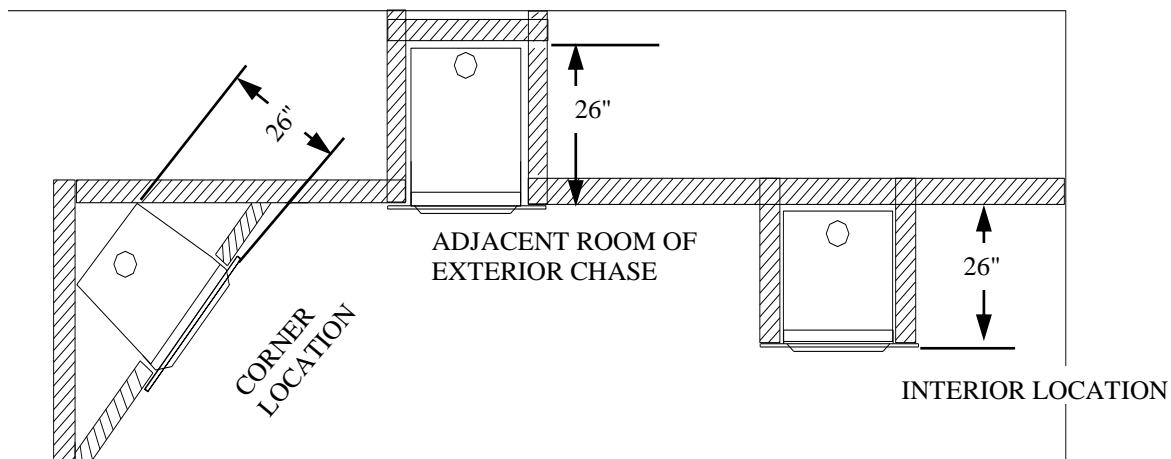


# FRAMING CONSTRUCTION AND INSTALLATION

Except as noted, the 51ZC can be installed almost anywhere you desire. There are, however, a few clearance and framing restrictions that must be followed. See Figure 9 and Figure 10 to make sure that these clearance restrictions are met. It is much wiser to place your Model 51ZC correctly at the start.

You must ensure that the floor is of adequate strength to accept the load of this unit. If inadequate, the floor will require additional support, such as bracing. **NOTE:** A wooden base constructed of plywood or 2" x 4" boards is required in order to get proper clearance above the extended hearth (millboard, rock stone, etc.).

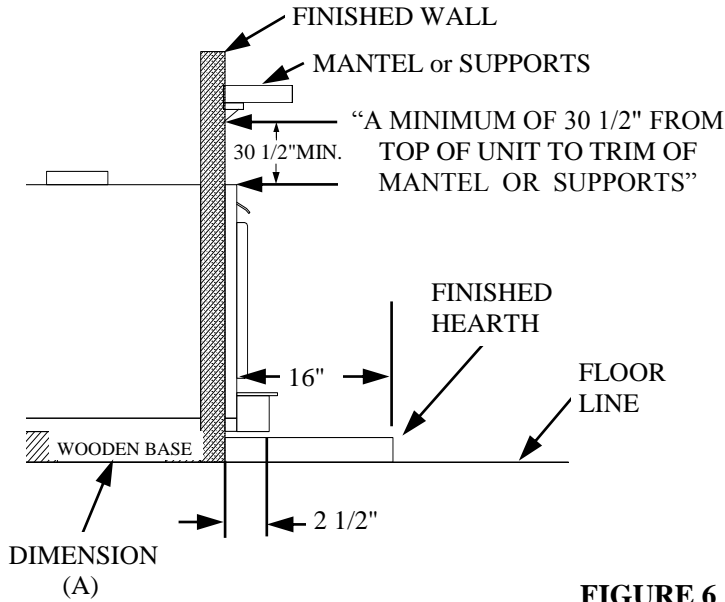
Good planning is essential for a satisfactory installation, therefore, at this point you should have decided where the 51ZC is to be located and the route the chimney will follow to the roof—straight up or chase. If you cannot decide the best route, contact your dealer for assistance with the planning.



**FIGURE 5**

Above (Figure 5) are framing location examples with depth dimensions for some typical configurations. These are finished measurements so install accordingly.

**CONTINUED FRAMING AND INSTALLATION**



**FIGURE 6**

The base for the Model 51ZC must be level with or slightly higher than the “finished” hearth height dimension (A) Figure 6.

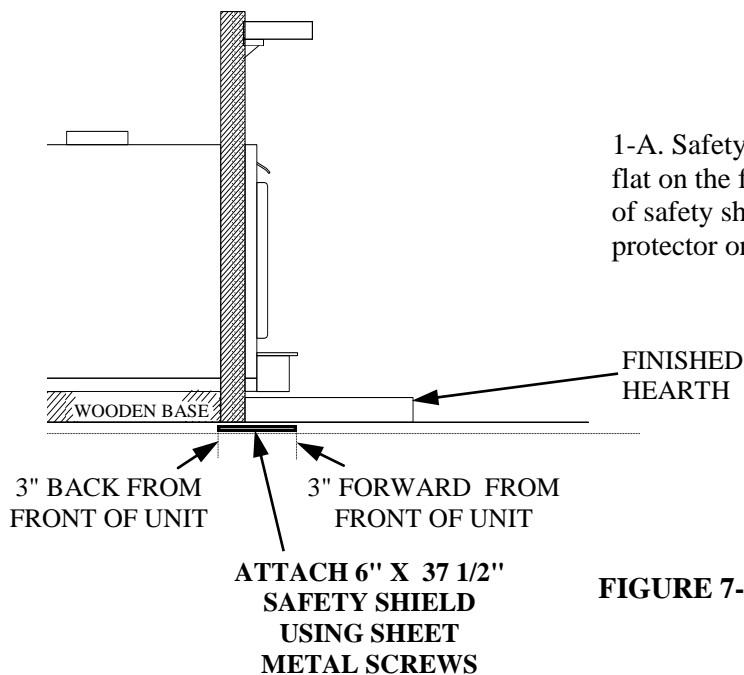
Framing must be accomplished after the Model 51ZC is set in place. The chimney can be installed after framing, but installation is considerably more difficult and in some cases, impossible. Therefore, it is recommended that the chimney be installed prior to framing when a choice exists. Figure 5 on the previous page shows framing location examples with depth dimensions for some typical configurations. These are finished measurements so install accordingly.

**NOTE:** Before framing, combustible floor coverings (carpets, tiles, etc.) must be removed to outer dimensions of the unit framing, including the 16" x 37 1/2" area for the hearth extension.

**WARNING:** Install the hearth protector only as specified. The hearth extension must be a minimum of 16" in front of the stove door opening and must be 37 1/2" wide minimum. (See page 6)

**NOTE:** No floor protector is needed directly under the Model 51ZC Cabinet, only the hearth protector. (See page 6)

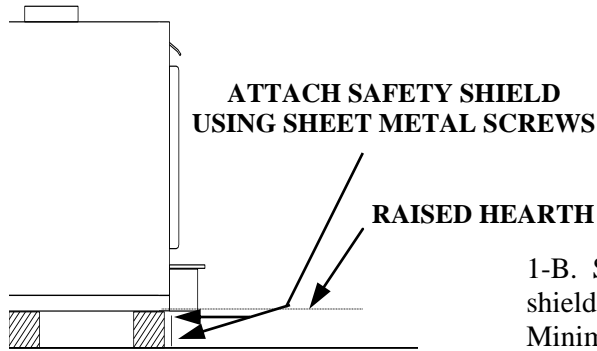
**NOTE: Safety Shield for hearth extension must be used on installation.**



1-A. Safety shield for millboard hearth extension for flat on the floor installation. Place (3") three inches of safety shield under the ZC Cabinet. Place hearth protector on top of safety shield.

**FIGURE 7-A**

## CONTINUED FRAMING AND INSTALLATION



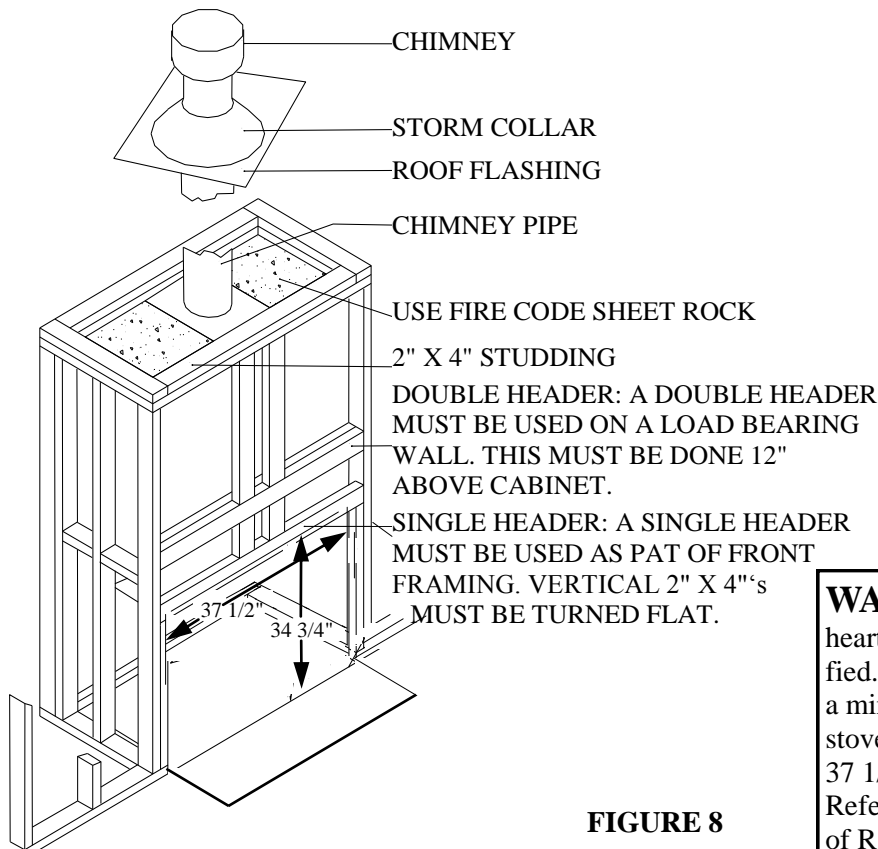
**FIGURE 7-B**

**NOTE:** For raised hearth, safety shield must be under cabinet (See Page 8, Figure 7-A). Also shield must cover any face of combustible material supporting cabinet where hearth connects. (See Figure 7-B)

1-B. Safety shields for brick or rock hearth: cut vertical shield to fit installation height as needed. Use 26 GA. Minimum metal being sure to cover any combustibles on the base area.

2. Set the Model 51ZC unit in place and attach the safety shield to the unit as shown in Figure 7-A and Figure 7-B. You must use a non-combustible material or a UL listed floor protector R-Value 0.6 (See Page 6). A minimum of 16" in front of stove door opening and 37 1/2" the width of the cabinet (See Figure 8).
3. Frame the ZC Cabinet using 2" x 4" studs or local building code framing. Some minor framing restrictions are required: Mantel Height (See Page 8 Figure 6 )
  - (A) Adjacent side walls must be at least 16" from the outer edge of the Cabinet trim panel.
  - (B) The overall opening dimensions must be at least 37 1/2" wide and 34 3/4" high and 26" in depth.
  - (C) 2"x 4" framing above the unit must be turned flat. This allows proper clearance from framing (2" minimum). (See Page 5 Figure 4.)

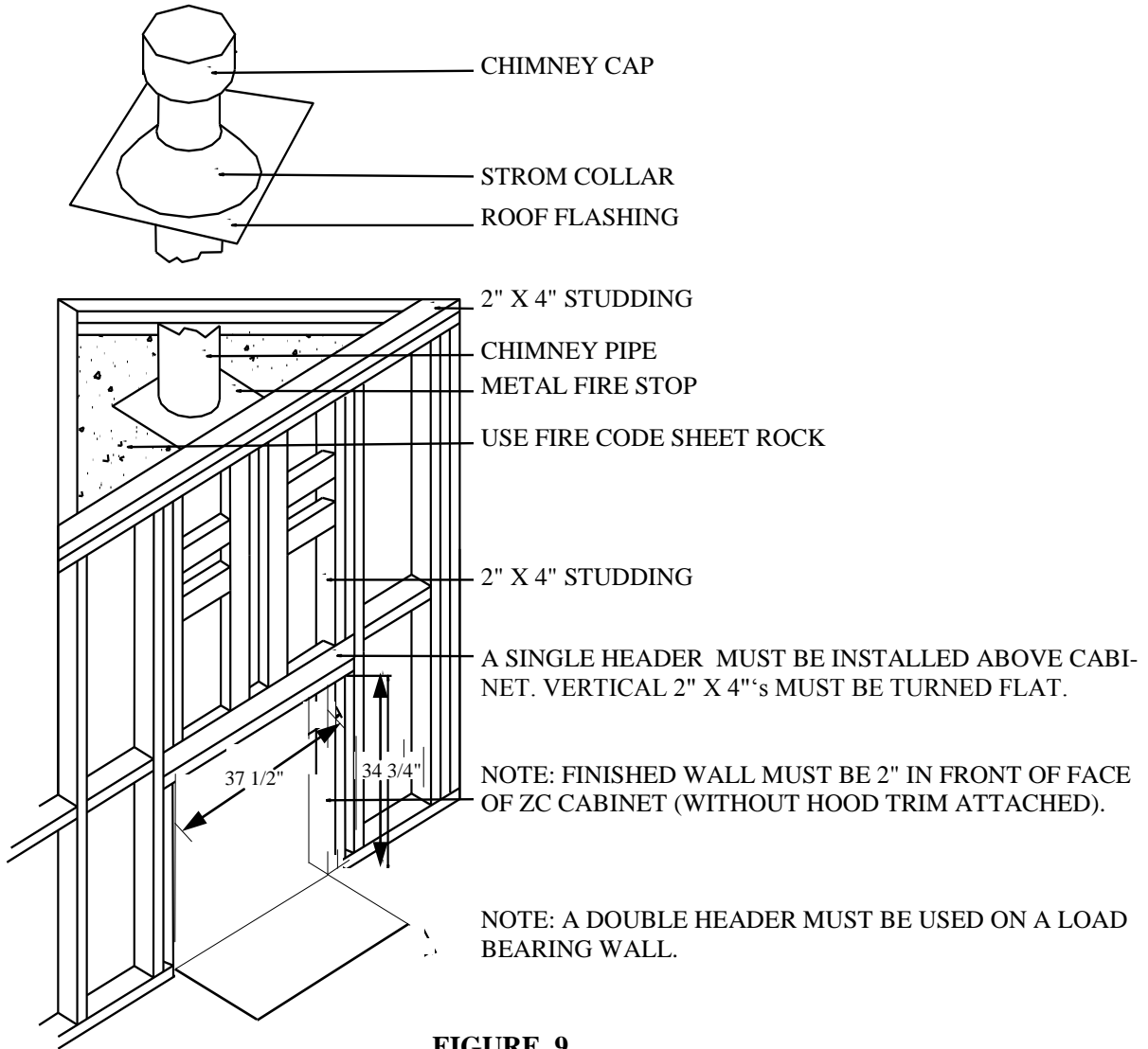
## EXTERIOR ROOF OR CHASE



**FIGURE 8**

**WARNING:** Install the hearth protector only as specified. The extension must extend a minimum of 16" in front of the stove door opening and must be 37 1/2" wide minimum. Refer to (Page 6) for calculation of R, and K values.

## CORNER LOCATION FRAMING



**FIGURE 9**

**NOTE:** No floor protector is needed directly under the Model 51ZC Cabinet, only the hearth protector is needed.

**WARNING:** Install the hearth protector only as specified. The extension must extend a minimum of 16" in front of the stove door opening and must be 37 1/2" wide minimum. Refer to (Page 6) for calculation of R, and K values.

## CONTINUED FRAMING AND INSTALLATION

Position Model 51ZC for installation as follows:

1. Thoroughly clean the area where the unit and hearth extension will be placed. Remove any carpeting/padding from the area where the 51ZC will be installed.
2. Layout the location on the floor for the ZC cabinet .(See Page 7 Figure 5.)
3. Now place the Model 51ZC in desired location.
4. A sheet metal safety shield is placed 3" under the cabinet. It must extend out under the floor protector.
5. Now you are ready to install the chimney system for the 51ZC. If you are building an outside chase, follow approved Chimney Manufacturer's instructions. If you are penetrating a ceiling, install the chimney as follows:
  - a. Drop a plumb line, locate, and mark the point on the ceiling directly over the center of the 51ZC chimney adapter.
  - b. After locating the center of the hole, install the firestop spacer, per chimney manufacturer's instructions.
6. Obtain the listed and approved chimney installation instructions and follow exactly.
  - a. Obtain the starter section of pipe and install on the 51ZC cabinet. It may be necessary to crimp the inside of the starter pipe to ease installation into the 51ZC cabinet.
  - b. Obtain the two short sheet metal "ell" brackets and sheet metal screws provided with the 51ZC and secure the starter section of pipe to the 51ZC cabinet.

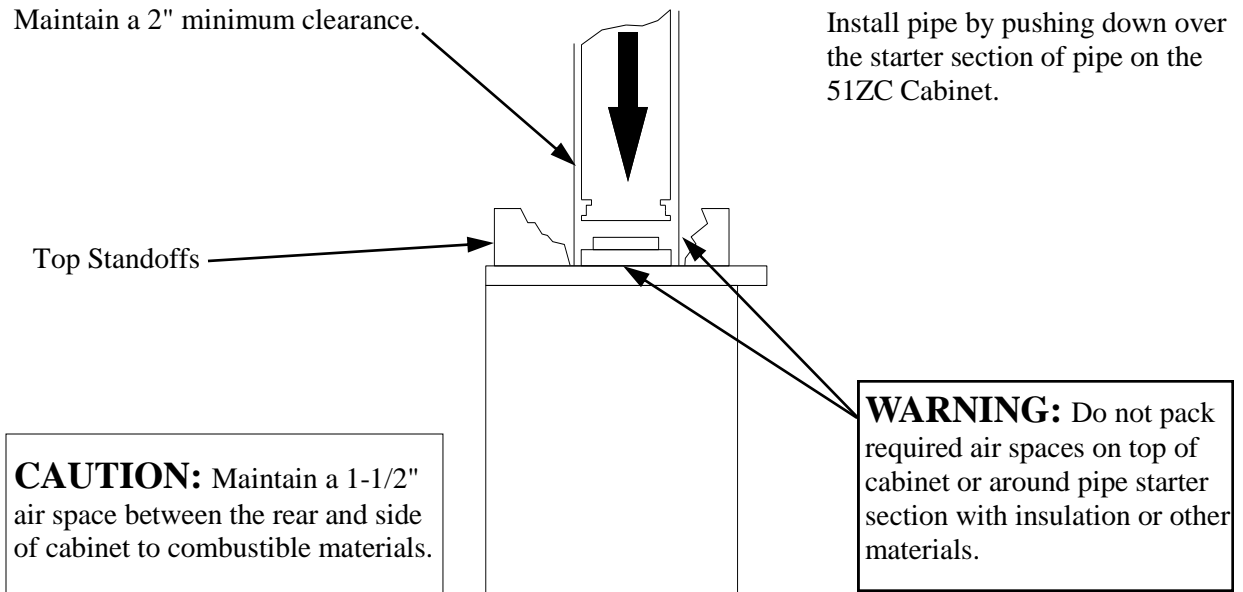


FIGURE 10

- c. Continue adding lengths of chimney until you are ready to penetrate another ceiling or the roof.
- d. Now, plumb bob the center of the ceiling or roof above the chimney and install another firestop for another ceiling penetration. You can also follow pipe manufacturer's instructions for attic and roof penetration.
- e. Once the roof penetration is made, install the flashing.
- f. Add applicable lengths of chimney, extending through the roof until the following conditions are met:

## CONTINUED FRAMING AND INSTALLATION

1. Chimney height is at least 12' to 15' minimum.
2. The chimney must extend a minimum of 3' above the highest point where it penetrates the roof.
3. The chimney must extend a minimum of 2' higher than any portion of the building within 10' of the chimney.
- g. Install the chimney cap and storm collar.
7. The 51ZC cabinet is now ready for framing as follows:
  - a. Frame the 51ZC using 2" x 4" studs or local building code framing. Some minor framing restrictions are required.
    1. Adjacent side walls must be at least 10" from the outer edge of the 51ZC trim panel.
    2. The overall opening dimensions must be at least 37 1/2" wide and 34 3/4" high.

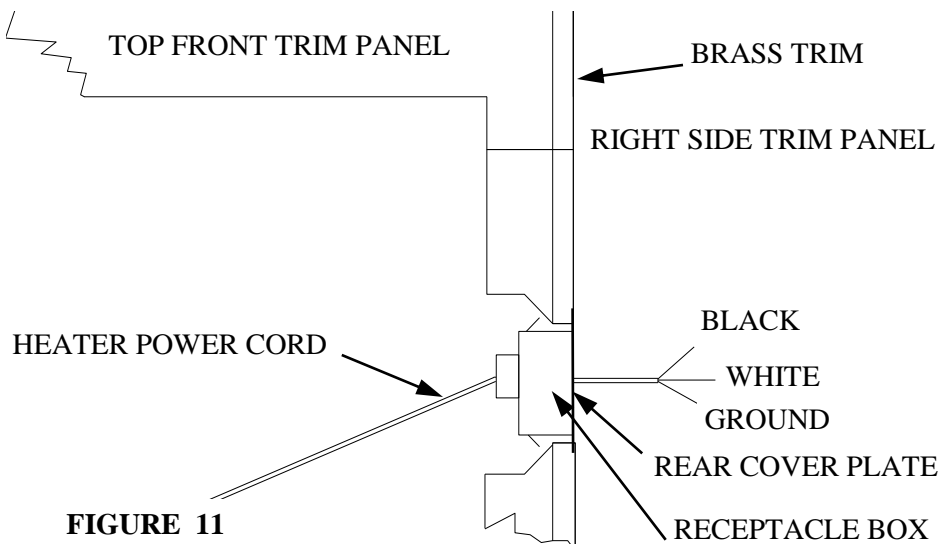
**NOTE:** Maintain 1 1/2" clearance at the side walls and rear of the cabinet and combustible material.
  - b. 2" x 4" framing above the unit must be turned flat. This allows proper clearance from framing to chimney (2" minimum). (See Page 5 Figure 4, and Page 10 Figure 9)
8. Next construct the hearth extension out of non-combustible inorganic building materials as follows:
  - a. The hearth extension must extend 16" from the stove door opening.
  - b. The hearth extension width must be at least 37 1/2".
  - c. The hearth extension must be made of brick 2" thick, or a listed "Hearth Extension" or "Floor Protector" with R- value of: R=0.6 , or a hearth extension made of non-combustible inorganic material with a K \* factor of  $K=2.5 \text{ BTU ( (HR)(ft}^2\text{)(F/in.)}$  (See Page 6)
9. The next step is the electrical installation. **NOTE:** An electrician must wire the 51ZC into the home wiring system using No. 15 AWG (with ground wiring) as minimum or in accordance with local wiring codes.

**CAUTION:** Stove is plugged into cabinet receptacle.

- a. Remove brass trim.
  - b. Remove top panel and right side panel.
  - c. Now an electrician must do the wiring.
10. Finish the wall around the 51ZC using brick, rock, sheetrock, paneling, or any type of finishing material.

**CAUTION:** Do not block any openings designed into the unit.

11. Install a mantel above the unit if desired. **NOTE** that a combustible mantel must be positioned at least 30 1/2" above the top of the stove.



**FIGURE 11**

## SECTION II

---

### MOBILE HOME INSTALLATIONS

Listed NEW BUCK CORPORATION:

**Model**

**51ZC**

Zero Clearance Cabinet Assembly For Use With Models 51,T51,74, and 74 Only.

**CAUTION:** Read through all of these instructions carefully. Follow approved Chimney Manufacturer's Installation exactly. Failure to install the cabinet fireplace, stove and chimney as described in the instructions will void the manufacturer's warranty and may have an effect on your Homeowner's Insurance. A major cause of chimney related fires is failure to maintain required clearances (air spaces) to combustible materials. It is of the utmost importance that these parts be installed only in accordance with these instructions.

**DO NOT USE CHEMICALS OR FLUIDS TO START THE FIRE.  
DO NOT BURN GARBAGE OR FLAMMABLE FLUIDS.**

The Zero-Clearance Cabinet and the with either Models 51, T-51, 74 models, and T-74 (here after referred to as the 51ZC) is designed for installation in a family dwelling, where minimum clearance is desired.

#### INSTALLATION PRECAUTIONS

The following precautions are mandatory for a safe installation.

- (A) Compliance with local building codes and regulations is mandatory.
- (B) Be careful not to damage the unit in handling and unpacking component parts and accessories.
- (C) Any 6" chimney systems that bear the UL 103 HT Label are approved for use the model ZC51.
- (D) The chimney must extend a minimum of three feet (3') above the highest point where it penetrates the roof (three feet (3') above a flat roof or up to a 2 /12 pitch roof ), and the chimney must extend a minimum of two feet (2') higher than any portion of the building within ten feet (10') of the chimney. The minimum height is fourteen feet (14'). The maximum height is thirty feet (30'). A two-inch (2") clearance must be maintained between the chimney and any combustible materials at all points.
- (E) A rain cap must be used to terminate the chimney to prevent down-draft. Use the factory approved rain cap which is approved for the type chimney being installed.
- (F) Do not connect this unit to a chimney flue serving another appliance. Do not use a flue intended for a gas appliance. Do not connect to any distribution duct or system.
- (G) Do not build a fire directly inside the ZC Cabinet. It is designed solely for housing the Models 51, T-51, 74, and T-74 stoves.
- (H) **WARNING: Do not install in a sleeping room.**
- (I) The structural integrity of the mobile home floor, wall, and ceiling/roof must be maintained.

# FRAMING CONSTRUCTION AND INSTALLATION

## FRAMING CONSTRUCTION AND INSTALLATION

Except as noted, the 51ZC can be installed almost anywhere you desire. There are, however, a few clearance and framing restrictions that must be followed. See Page 6, Figure 5, and Page 7, Figure 6, also Figure 12 to make sure that these clearance restrictions are met. It is much wiser to place your 51ZC correctly at the start of the installation than to be forced to relocate it after much of the work is done.

You must ensure that the floor is of adequate strength to accept the load of this unit. If inadequate, the floor will require additional support, such as bracing. **NOTE:** A wooden base constructed of plywood or 2" x 4" boards is required in order to get proper clearance above the extended hearth (millboard, rock, stone, etc.). (See Page 16.)

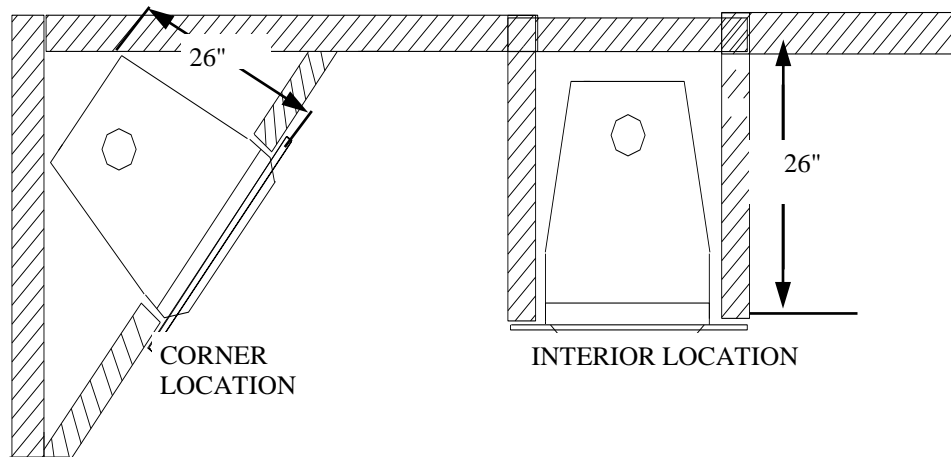


FIGURE 12

1. Thoroughly clean the area where the unit will be placed. Remove any carpeting/padding from the area where the 51ZC will be installed.
2. Layout the location on the floor for ZC cabinet.  
**NOTE:** Maintain 1 1/2" clearance between the rear of the cabinet and combustible material.

### CAUTION

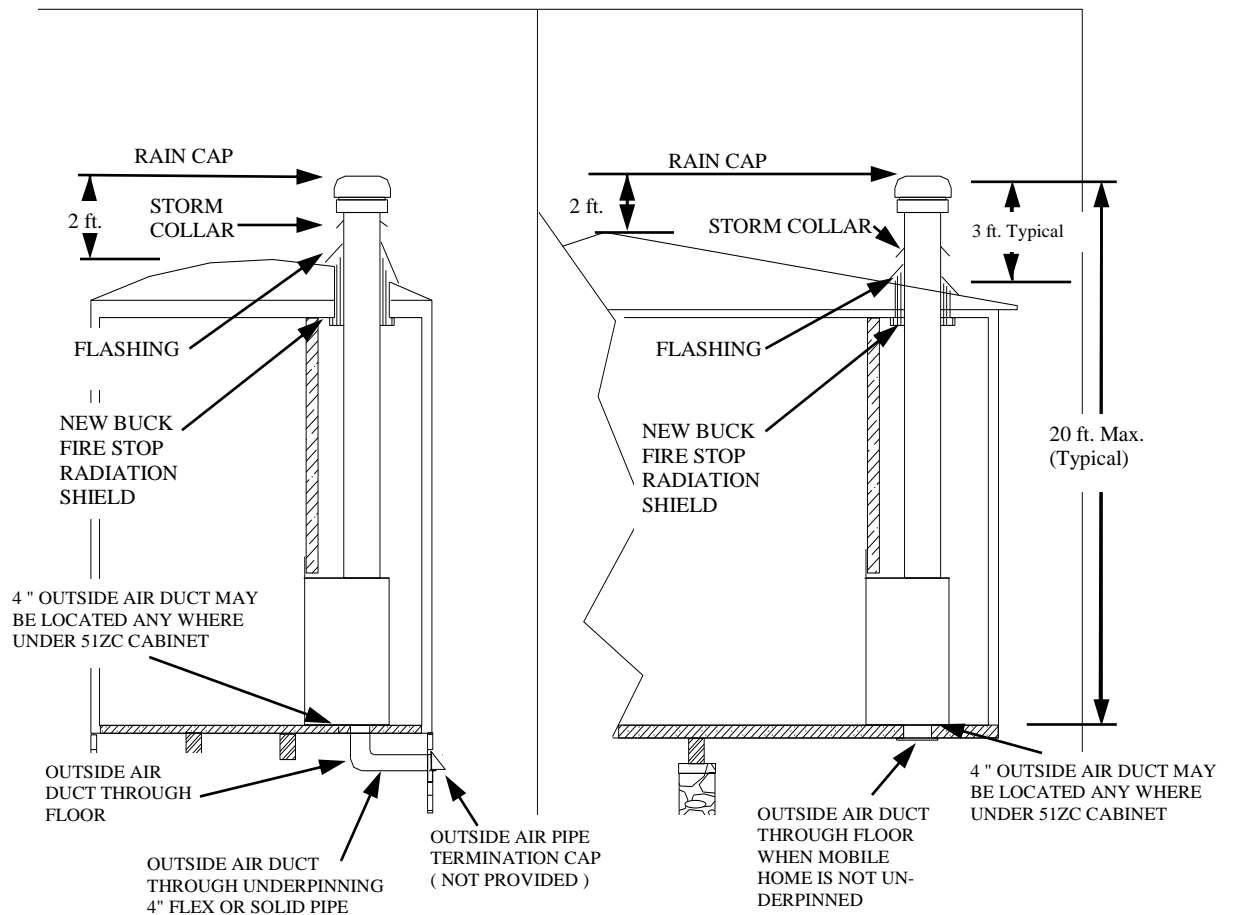
**THE STRUCTURAL INTEGRITY OF THE MOBILE HOME FLOOR, WALL, AND CEILING/ROOF MUST BE MAINTAINED.**

**(MOVE OPENING AND/OR REPOSITION HEATER LOCATION IF NECESSARY).**

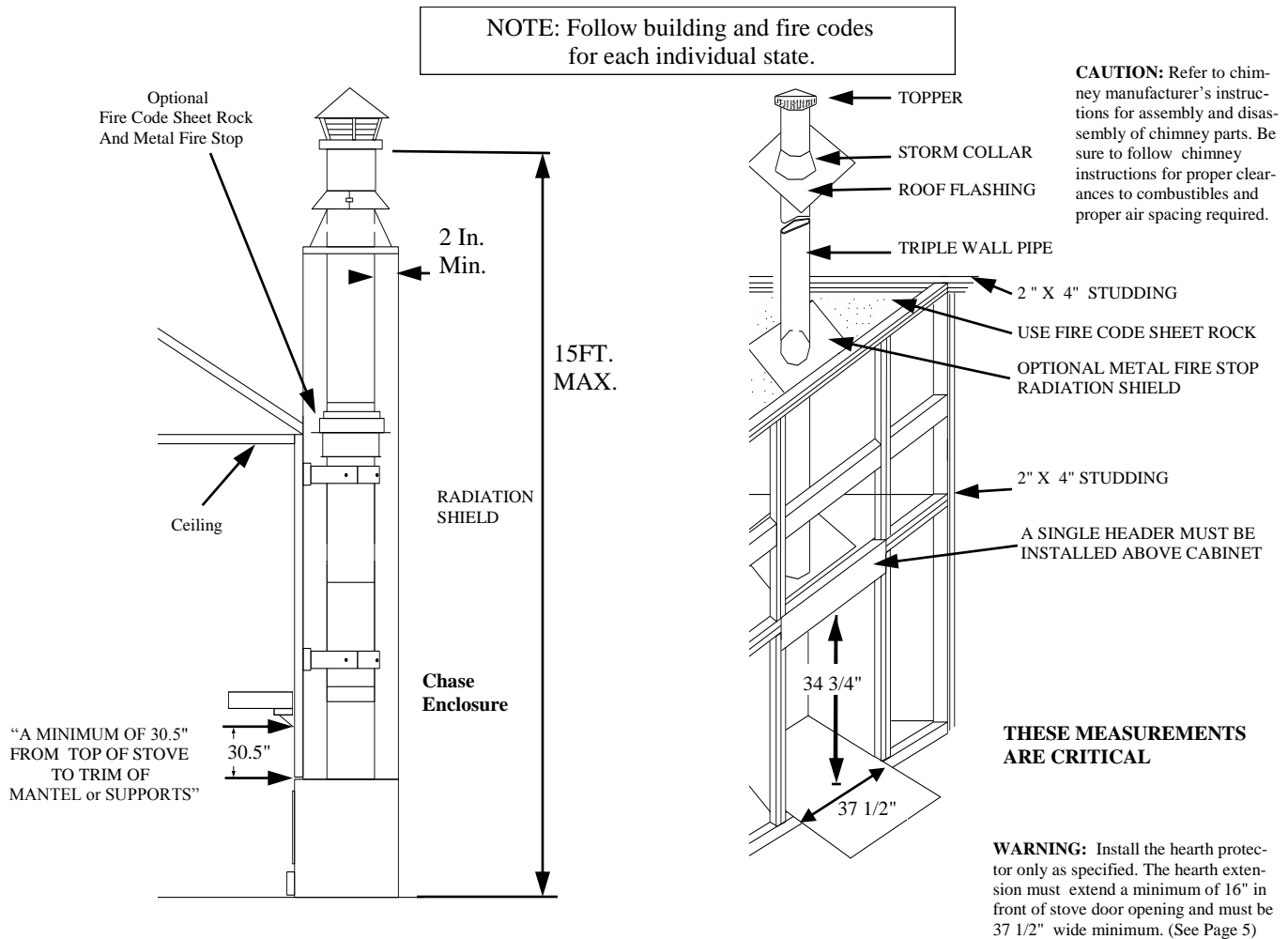
3. Layout for hearth extension preparation and removal of carpet and padding .  
The hole for the out side air kit may be located anywhere under the 51ZC Cabinet. A 4 1/4" diameter hole with a 2 1/8" radius from center line must be cut through floor. 4" Outside air duct kit # PP70075-01 is to be installed. 4" flex or solid pipe and outside air pipe termination cap ( not provided). Slide the outside air duct down through the hole in the floor, and secure out side air duct with 4 screws (not provided).  
(See Page 15, Figure 13.)  
**NOTE:** The maximum length of the out side air pipe is determined by having to reach the same atmospheric pressure with the out side air inlet as the exhaust.  
**NOTE:** Combustion air inlet ducts shall not terminate in attic spaces
4. Place the sheet safety shield provided with unit 1 1/2" under the front of the cabinet. It must extend out under the floor protector. Drop a plumb line, locate and mark point on ceiling directly over center of 51ZC chimney adapter. After locating the center of hole, install firestop spacer, per chimney manufacturer's instructions.



5. Obtain the Listed and Approved Chimney Installation instructions and follow exactly.
  - a) Obtain the starter section of pipe and install on the 51ZC cabinet. It may be necessary to crimp the inside of the starter pipe to ease installation into the 51ZC cabinet.
  - b) Obtain the two short sheet metal "ell" brackets and sheet metal screws provided with the 51ZC and secure the starter section of pipe to the 51ZC cabinet.
  - c) Add applicable lengths of chimney extending through the roof until the following conditions are met:
    1. The chimney must extend a minimum of 3' above the highest point where it penetrates the roof.
    2. The chimney must extend a minimum of 2' higher than any portion of the building within 10' of the chimney but not to exceed 15' above the hearth.
  - d) Install the flashing, storm collar, and chimney cap as indicated in the manufacturer's installation instructions.
6. The 51ZC Cabinet is now ready for framing as follows:
  - a) Frame the 51ZC using 2" x 4" studs or local building code framing. Some minor framing restrictions are required:
    1. Adjacent side walls must be at least 10" from the outer edge of the 51ZC trim panel.
    2. The overall opening dimensions must be at least 37 1/2" wide and 34 3/4" high.
    3. Clearances from mantel, and trim to the top of stove must be a minimum 30.5" (See Page 16, Figure 14).
  - b) 2" x 4" framing above the unit must be turned flat. This allows proper clearance from framing to chimney (2" minimum). (See Page 16, Figure 14).



**FIGURE 13**



**FIGURE 14 CHASE ENCLOSURE AND CORNER LOCATION FRAMING**

7. Next construct the hearth extension out of non-combustible inorganic building materials as follows:
  - a) The hearth extension must extend 16" from stove door opening .
  - b) The hearth extension width must be at least 37 1/2".
  - c) The hearth extension must be made of brick 2" thick, a listed "Hearth Extension" or "Floor Protector", or a hearth extension made of non-combustible inorganic material with a K\* factor of:

$$K = 2.5 \text{ BTU } ((\text{HR}) (\text{ft}^2) (\text{°F}/\text{in.})) \text{ or R-Value } R=0.6 \text{ See Page 6 for formula.}$$

## ALTERNATE FLOOR PROTECTORS MATERIALS

With the floor protector or hearth extension material specified as one layer of 2" thick brick with a K\* factor of 5.0, you may use alternate materials as long as the K\* factor (s) is calculated as follows:

Formula: Required thickness = (K of alternate material/K of millboard) X (thickness of millboard)  
 Example: An alternate inorganic non-combustible millboard with a K of .9375 would require a thickness as follows:  
 Required thickness = .9375.0° x 2 inch  
 = 3/8 inch

## K Factors of Alternate Materials:

Material	K	Required Thickness
Ceroform 126	.21	1/8"
Limestone	8.0	3.2"
Concrete	8.0	3.2"
Sandstone	13.0	5.2"
Marble	18.0	7.2"

Hearth extension or floor protector thickness above four (4) inches is generally not acceptable due to cost, floor load capacity, and look. The alternate we recommend is using Ceroform No. 126 millboard 1/8" thick minimum and putting any type decorative brick or stone (any thickness) on top of it.

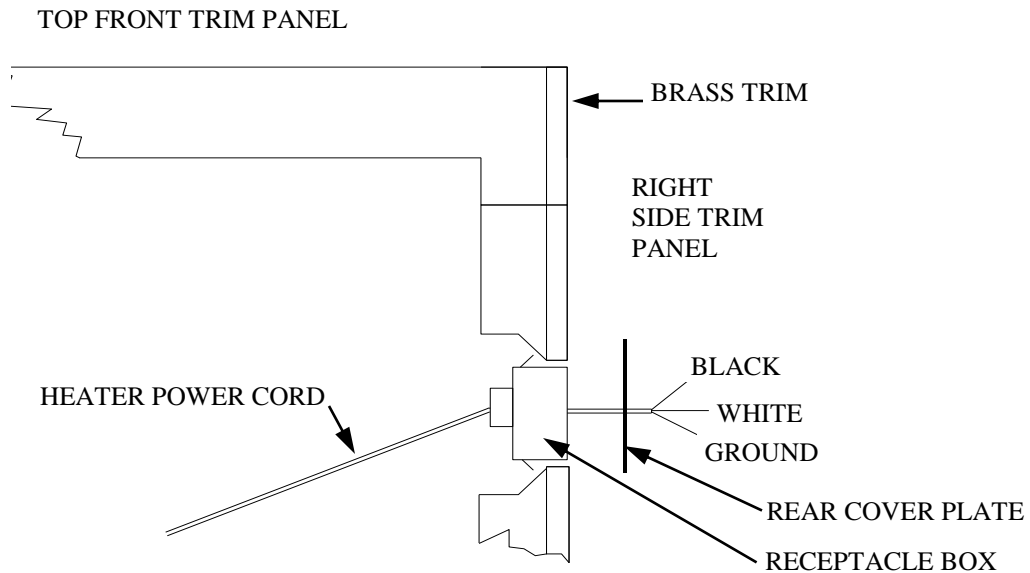
\*The K\* factor represents the thermal conductivity of a material and is the time rate of heat flow through a homogeneous material under steady-state conditions, through unit area, per unit temperature gradient in the direction perpendicular to a surface.

- The next step is the electrical installation. **NOTE:** An electrician must wire the 51ZC into the home wiring system using No. 15 AWG (with ground wiring) as minimum in accordance with local wiring codes.



**CAUTION:** Stove is plugged into cabinet receptacle.

- Remove brass trim.
- Remove top panel and right side panel.
- Now an electrician must do the wiring.



**FIGURE 15 POWER HOOK-UP**

- Finish the wall around the 51ZC using brick, rock, sheetrock, paneling, or any type finishing material. **CAUTION:** Do not block any openings designed into the unit.
- Install a mantel above the unit, if desired. Note that a combustible mantel must be positioned at least 30 1/2" above the top of the stove.
- The 51ZC and Model 51,T51,74 or T-74 fireplace are now ready for use. Refer to the stove owners manual for operation, safety, and chimney maintenance. Refer to the back of this manual for 51ZC warranty registration information.

## CLEANING THE UNIT

- A. The unit should be lightly sanded with fine sandpaper or steel wool, then repainted or touched up with high temperature black paint.
- B. If the unit is located in a moist or damp location, check thoroughly for signs of condensation during times when the unit is not in use.
- C. When the heating season is over, the unit can be cleaned out completely with a wire brush or cloth to help eliminate ash and burned wood smell.

## SAFETY PRECAUTIONS

- 1. Use smoke detectors around the stove as well as in sleeping areas.
- 2. Keep a fire extinguisher rated for Class “A” fires near the stove.
- 3. Check with your insurance company to be sure your policy covers the installation and use of a wood burning appliance.
- 4. **Creosote-Formation and Need for Removal:** When wood is burned slowly, it produces tar and other organic vapors, which combine with expelled moisture to form creosote. The creosote vapors condense in the relatively cool chimney flue of a slow-burning fire. As a result, creosote residue accumulates on the flue lining. When ignited this creosote makes an extremely hot fire.

The connector and/or chimney should be inspected at least once every two months during the heating season to determine if a creosote buildup has occurred.

If creosote has accumulated, it should be removed to reduce the risk of a chimney fire.

- 5. Relocate furniture and any other combustibles away from the stove.
- 6. Store firewood at a safe distance from the stove.
- 7. **Disposal of Ashes:** Ashes should be placed in a metal container with a tight fitting lid. The closed container of ashes should be placed on a non-combustible floor or on the ground well away from all combustible materials, pending final disposal. If the ashes are disposed of by burial in soil or otherwise locally dispersed, they should be retained in the closed container until all cinders have thoroughly cooled.
- 8. Always exercise caution when using your fireplace. Be particularly careful when there are children around an operating fireplace.

**CAUTION:** NEVER use gasoline, gasoline-type lantern fuel, kerosene, charcoal lighter fluid or similar liquids to start or “freshen-up” a fire in the fireplace. Keep all such liquids well away from the stove when it is in use. All fluids of this type give off highly volatile fumes and can and WILL EXPLODE! Don’t take a chance with the safety of your home and family.

# PREVENTIVE MAINTENANCE/ SAFETY PRECAUTIONS

## CHIMNEY

- A. The chimney should be cleaned as necessary to remove creosote, soot, leaves, birds nests, etc.

### CREOSOTE-FORMATION AND NEED FOR REMOVAL

When wood is burned slowly, it produces tar and other organic vapors, which combine with expelled moisture to form creosote. The creosote vapors condense in the relatively cool chimney flue of a slow-burning fire. As a result, creosote residue accumulates on the flue lining. When ignited this creosote makes an extremely hot fire.

The chimney connector and chimney should be inspected at least once every two months. More frequent inspection and cleaning may be necessary. Under certain conditions of use creosote build-up may occur rapidly.

Creosote is caused by low temperatures in the chimney, which is controlled by the operator of the stove.

- B. A neglected chimney can eventually cause a draw restriction or can ignite and burn hot enough to cause damage to the chimney.
- C. For proper inspection the chimney should be cleaned.

## CHIMNEY CLEANING:

1. **Access**-Chimneys must be installed so that access is provided for inspection and cleaning.
2. **When to Clean**-The chimney should be inspected at least once every two months during the heating season to determine if creosote or soot has built up. Check spark arrestor screens every 2-4 weeks. If creosote or soot has accumulated, it should be removed to reduce the risk of chimney fire.
3. **How to Clean**-Have your chimney cleaned by a professional chimney sweep if you have doubts about your ability to clean it, using a plastic, wood, or steel brush. Do not use a brush that will scratch the stainless steel liner of your chimney. Scrub the spark arrestor with a wire brush.

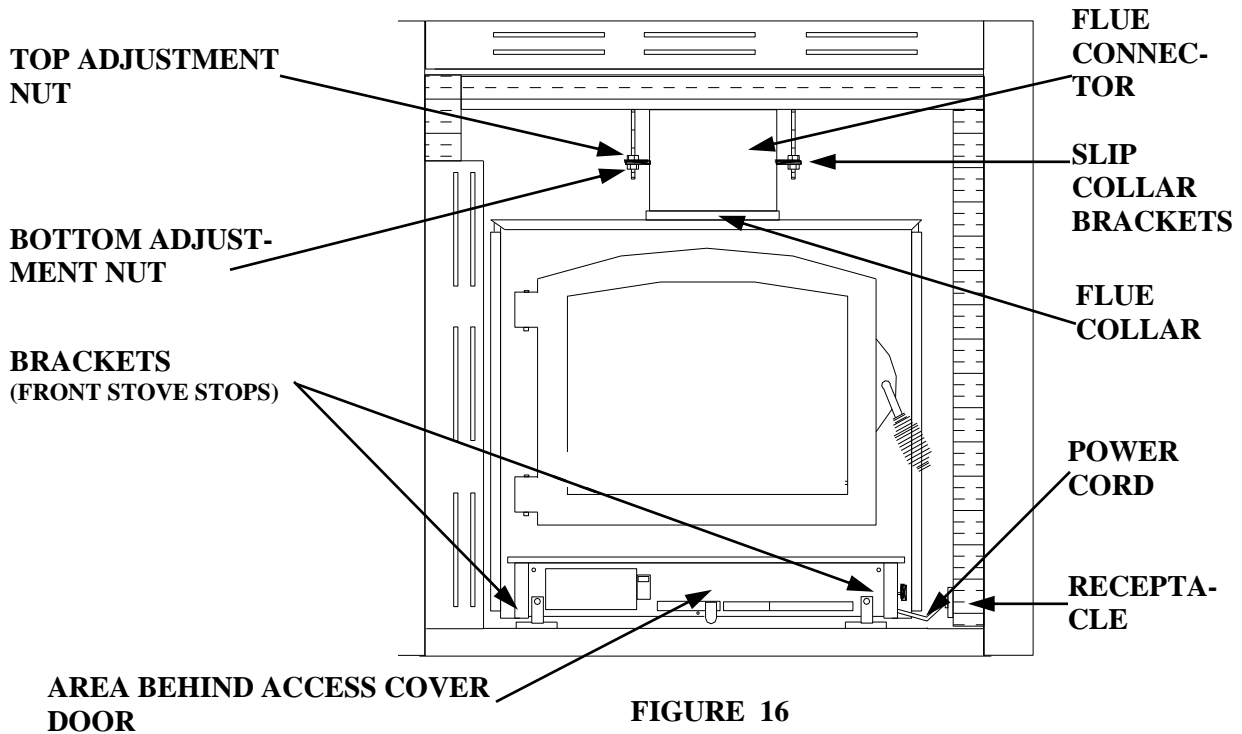
To remove the chimney cap for cleaning, unscrew the four screws that attach the cap's support legs to the cap base. The top cleanout cap can be removed once the screws are unscrewed. Remember to replace the screws when you are through cleaning the chimney.

4. **No Chemical Cleaners**-Do not use chemical chimney cleaners. Their use does not eliminate the need for mechanical cleaning and they may be highly corrosive.
5. **In Case of Fire**-If a flue fire occurs, close all appliance draft openings and call your Fire Department. Do not use the chimney again until it is inspected for possible damage.
6. **Chimney Protection**-Painting. To increase chimney life, coat all exterior metal parts with high temperature rust-proof paint. This is highly recommended, particularly in areas near the ocean. Wash the metal with a vinegar and water solution before painting.

## REMOVING MODELS 51, T-51, 74, AND T-74 ROOM HEATER FROM THE MODEL 51ZC CABINET

At some point you may need to remove your Model 51, T-51, 74, T-74 room heater from the Model 51ZC cabinet, if so follow these instruction exactly. Remember if the room heater has been in use allow time for cooling.

1. First remove the seven (7) 5/16" screws from the Top Front Trim. You may need a standard screwdriver to lift one of the outer corners of the Top Front Trim before being able to remove it.  
(See Page 22, Figure 18.)
1. Remove the three (3) 5/16" screws from the Right Side Trim. This will enable you to access the power cord and receptacle, to disconnect the power supply to the room heater.  
(See Page 22, Figure 18.)
1. Located between the room heater and the ZC cabinet is the Flue Connector. On each side of the Flue Connector there is a threaded rod which is attached to the top of the ZC cabinet and has two (2) 9/16" nuts with a bracket between them that is attached to the Flue Connector. You will first need to run the top nuts up the threaded rod about 1 1/4" (Do this on both the right and left side's). Next run

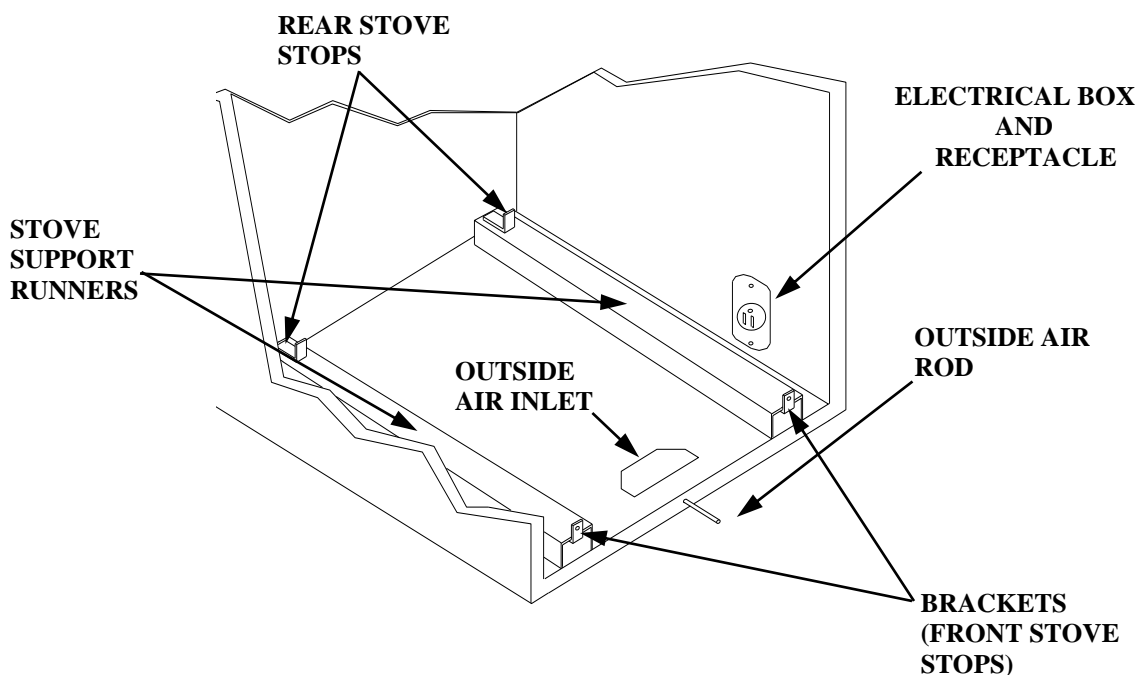


4. Remove the access cover door located at the bottom front of the room heater. There are two (2) philips head screws which must be removed, one (1) in each top corner of the access cover door.
5. Next, under the hearth on the left and right sides there are 3/8" head screws which attaches the room heater unit to a bracket (Front Stove Stop) on the ZC cabinet. These two (2) screws must be removed at this time.

**NOTE:** Disconnect the power cord from the receptacle inside the ZC cabinet before removing the Model 51, T-51, 74, T-74 room heater. Do not damage the power cord while pulling the room heater out.

## Continued Removing Room Heater From ZC Cabinet

6. Facing the unit from the front, lift the room heater up and pull out by the front corners of the room heater top. You must lift the room heater up high enough for the bottom to clear the brackets (front stove stops) on the bottom front of the ZC Cabinet. **NOTE:** If you need more clearance to lift the room heater inside the ZC cabinet at this point you may need to adjust the Flue Connector up more.



**FIGURE 17 MODEL 51ZC CABINET CUTOUT**

**NOTE:** Before pulling the room heater out of the ZC cabinet you may need to place a drop cloth where the heater is to be placed to protect your floor covering.

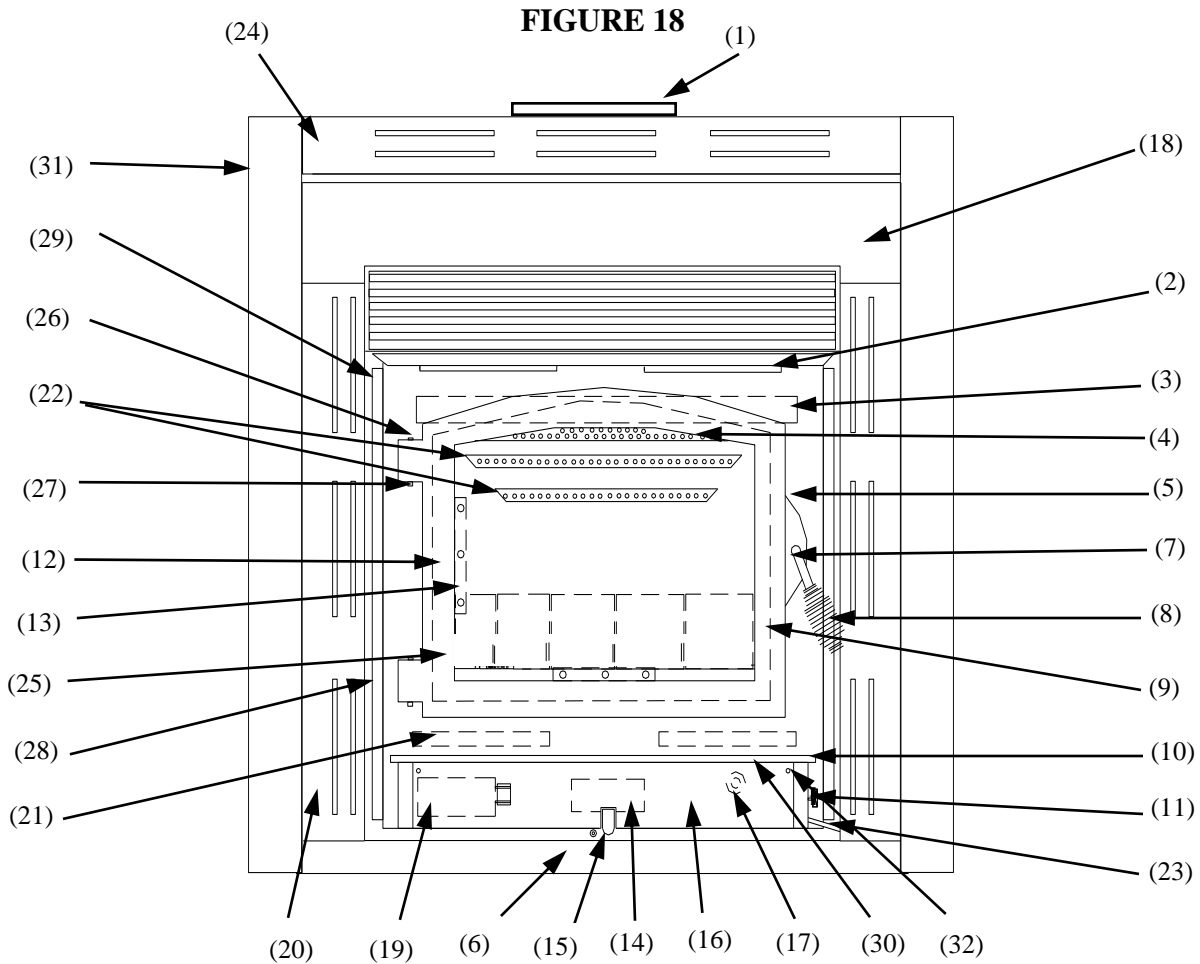
## REINSTALLING THE MODEL 51, T-51, 74, T-74 ROOM HEATER IN THE MODEL 51ZC CABINET

1. First lift the back of the room heater up and over the front stove stop brackets. The back of the heater should rest on the support runners, keep the heater angled with the front lifted up and slide the heater back into the ZC cabinet.
2. Slide the heater back until it stops at the back stove stops.
3. Next reattach the front stove stop brackets to the heater using the two (2) 3/8" head screws.  
**NOTE:** The front stove stop brackets may have become bent while sliding the heater in and out of the ZC cabinet, if so bend the brackets back in place and reattach as instructed.
4. Now you must reconnect the Flue Connector to the Model 51, T-51, 74, T-74 room heater. Run the bottom nuts down almost to the end of the threaded rod. Align the Flue Connector with the room heater and place it into the Flue collar. At this point you must run the top nuts down until they are tight and the Flue connector is secure into the Flue Collar, then run the bottom nuts back up until they are tight.

**Continued Reinstalling Room Heater In ZC Cabinet**

5. Next reconnect the heater power cord to the ZC cabinet receptacle.
6. Replace the Right Side Trim using the three (3) 5/16" screws.
7. Then replace the Top Front Trim using the seven (7) 5/16" screws.

**MODELS 51,T-51,74 or T-74 ROOM HEATERS AND MODEL 51ZC  
CABINET IDENTIFICATION  
(See Figures 16 & 17 For Additional Identification)**



- |                   |                                  |   |
|-------------------|----------------------------------|---|
| 1. 6" Flue Exit   | 13. Glass Clips                  | 24. Top Outside Trim                          |
| 2. Hot Air Vent   | 14. Second Air Intake            | 25. Glass & Logo                              |
| 3. Top Fire Brick | 15. Combustion Air Supply Handle | 26. Brass Hinge Cap                           |
| 4. Air Wash       | 16. Access Cover Door            | 27. Hinge Pins                                |
| 5. Side Brick     | 17. Thermostat                   | 28. Hinge Block                               |
| 6. Outside Trim   | 18. Top Front Trim               | 29. Optional Side Close Clearance Heat Shield |
| 7. Door Handle    | 19. Motor                        | 30. Hearth Brass                              |
| 8. Brass Spring   | 20. Left & Right Front Trim      | 31. Left & Right Outside Trim                 |
| 9. Door Rope      | 21. Bottom Fire Brick            | 32. Access Cover Mounting Screws              |
| 10. Hearth        | 22. Secondary Air Tubes          |   |
| 11. Rheostat      | 23. Power Cord                   |   |
| 12. Door          |                                  |   |



**NEW BUCK CORPORATION (NBC)**  
**"LIMITED WARRANTY" FOR THE BUCK STOVE**  
**PLEASE READ THIS WARRANTY CAREFULLY**

**PRODUCTS COVERED**

This warranty covers the New Buck Stove heating unit, so long as it is owned by the original purchaser, including optional and standard accessories purchased at the same time, subject to terms, limitations, and conditions herein set out.

**PRODUCTS NOT COVERED**

This warranty does not cover the following:  
Glass, Refractory Material, Firebrick or Gaskets.

This Warranty will also not cover any damage and/or failure caused by abuse or improper installation of the products covered.

**WARRANTY TIME PERIODS**

(A) Period I

For one year from the date of purchase, NBC will replace or repair, at its option, any part defective in materials or workmanship. The costs of parts only are included. The customer pays any labor or transportation charges required.

Thereafter

B) Period II

For the period after the first year from the date of purchase and extending for 5 years as long as the Buck Stove is owned by the original purchaser, NBC will repair or replace, at its option, any part defective in materials or workmanship, with the exception of: electrical motors, wiring, switches, components, optional and standard accessories; and all parts not permanently attached to the heating unit. Parts not permanently attached to the heating unit are defined as those items designed to be removed from the stove, including those removable with common hand tools. The costs of parts only are included. The customer pays any labor or transportation charges required.

**PROCEDURE**

Should you feel that your BUCK STOVE is defective, you should contact any Buck Stove dealer for the name of your nearest authorized Buck Stove service representative, who will instruct you on the proper procedure, depending on which Warranty Time Period (Period I or Period II) applies.

If for any reason you are dissatisfied with the suggested procedures, you may contact us in writing at:

New Buck Corporation  
Customer Service Department  
P. O. Box 69  
Spruce Pine, NC 28777  
Email: info@buckstove.com

## CONDITIONS AND EXCLUSIONS

- A. Replacement of parts may be in the form of new or fully reconditioned parts, at NBC's option.
- B. There is no other express warranty. All implied warranties of Merchantability and Fitness for Use are limited to the duration of the Express Warranty.
- C. New Buck Corporation is not liable for indirect, incidental, or consequential damages in connection with the use of the product including any cost or expense of providing substitute equipment or service during periods of malfunction or non-use.

Some states do not allow the exclusion of incidental or consequential damages, so the above exclusion may not apply to you.

- D. All warranty repairs under this warranty must be performed by an authorized Buck Stove service representative. Repairs or attempted repairs by anyone other than an authorized service representative are not covered under this warranty. In addition, these unauthorized repairs may result in additional malfunctions, the correction of which is not covered by warranty.

## OTHER RIGHTS

This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.

## OWNER REGISTRATION CARD

The attached Owner Registration Card must be completed in entirety and mailed within 30 days from the date of purchase or from the date of installation, if installed by a factory certified installer, to New Buck Corporation in order for warranty coverage to begin.

**PLEASE NOTE:** The Owner Registration Card must contain the Authorized Buck Stove Dealer Code Number and the Certified Installer's number (if applicable) for warranty coverage to begin.

To be completed by selling distributor/dealer/ customer:

Name \_\_\_\_\_  
(Last) (First)

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

*CUSTOMER EMAIL:* \_\_\_\_\_

**MODEL 51ZC / 74ZC** - Serial Number \_\_\_\_\_

Date of Installation: Day \_\_\_\_\_ Month \_\_\_\_\_ Year \_\_\_\_\_

Installer's Name \_\_\_\_\_

Installer's Certification Number \_\_\_\_\_

Dealer's Name \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_