# EXPEDITED MONTGOMERY COUNTY HISTORIC PRESERVATION COMMISSION STAFF REPORT

Address: 6 East Irving Street, Chevy Chase Meeting Date: 12/2/2020

**Resource:** Contributing Resource Report Date: 11/25/2020

(Chevy Chase Village Historic District)

**Public Notice:** 11/18/2020

Michael Kyne

**Applicant:** Christopher Niemczewski

(Jane Eismeier, Agent)

Tax Credit: No

**Staff:** 

Review: HAWP

**Case Number:** 35/13-20KK

**PROPOSAL:** Installation of chimney flue

#### **STAFF RECOMMENDATION:**

Approve

Approve with conditions

#### **ARCHITECTURAL DESCRIPTION:**

SIGNIFICANCE: Contributing Resource within the Chevy Chase Village Historic District

STYLE: Colonial Revival DATE: c. 1892 - 1916



Fig. 1: Subject property.

#### **PROPOSAL:**

The applicant proposes to install a metal chimney flue on the roof of the existing addition at the south side (rear) of the subject property.

#### **APPLICABLE GUIDELINES:**

- IV. The Expedited Staff Report format may be used on the following type of cases:
  - 2. Modifications to a property, which do not significantly alter its visual character.

#### Montgomery County Code; Chapter 24A-8

- (b) The commission shall instruct the director to issue a permit, or issue a permit subject to such conditions as are found to be necessary to insure conformity with the purposes and requirements of this chapter, if it finds that:
  - (1) The proposal will not substantially alter the exterior features of an historic site or historic resource within an historic district; or
  - (2) The proposal is compatible in character and nature with the historical, archeological, architectural or cultural features of the historic site or the historic district in which an historic resource is located and would not be detrimental thereto or to the achievement of the purposes of this chapter; or
  - (3) The proposal would enhance or aid in the protection, preservation and public or private utilization of the historic site or historic resource located within an historic district in a manner compatible with the historical, archeological, architectural or cultural value of the historic site or historic district in which an historic resource is located; or
  - (4) The proposal is necessary in order that unsafe conditions or health hazards be remedied; or
  - (5) The proposal is necessary in order that the owner of the subject property not be deprived of reasonable use of the property or suffer undue hardship; or
  - (6) In balancing the interests of the public in preserving the historic site or historic resource located within an historic district, with the interests of the public from the use and benefit of the alternative proposal, the general public welfare is better served by granting the permit.
- (c) It is not the intent of this chapter to limit new construction, alteration or repairs to any 1 period or architectural style.
- (d) In the case of an application for work on an historic resource located within an historic district, the commission shall be lenient in its judgment of plans for structures of little historical or design significance or for plans involving new construction, unless such plans would seriously impair the historic or architectural value of surrounding historic resources or would impair the character of the historic district. (Ord. No. 9-4, § 1; Ord. No. 11-59.)

#### Secretary of Interior's Standards for Rehabilitation

The Secretary of the Interior defines rehabilitation as "the act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features, which convey its historical, cultural, or architectural values." The *Standards* are as follows:

2. The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.

9. New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work shall be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.

#### STAFF RECOMMENDATION:

Staff recommends that the Commission <u>approve</u> the HAWP application under the Criteria for Issuance in Chapter 24A-8(b), (1), (2) & (d) having found that the proposal is consistent with the *Chevy Chase Village Historic District Guidelines*, and therefore will not substantially alter the exterior features of the historic resource and is compatible in character with the district and the purposes of Chapter 24A;

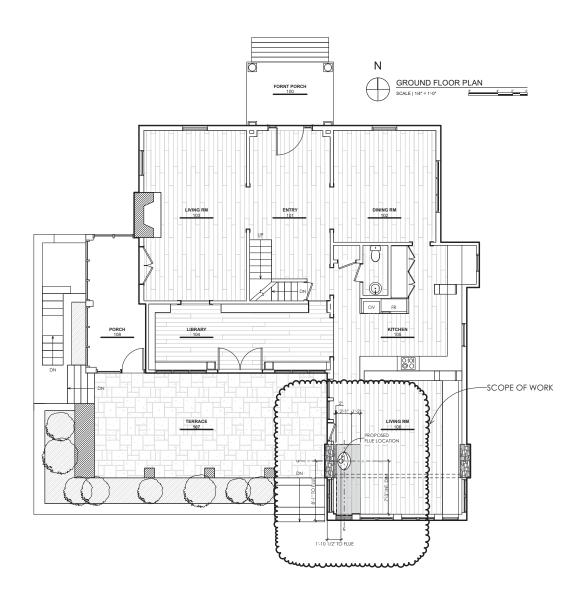
and with the Secretary of the Interior's Standards for Rehabilitation #2 and #9;

and with the general condition that the applicant shall present the 3 permit sets of drawings, if applicable to Historic Preservation Commission (HPC) staff for review and stamping prior to submission for the Montgomery County Department of Permitting Services (DPS) building permits;

and with the general condition that final project design details, not specifically delineated by the Commission, shall be approved by HPC staff or brought back to the Commission as a revised HAWP application at staff's discretion;

and with the general condition that the applicant shall notify the Historic Preservation Staff if they propose to make **any alterations** to the approved plans.

Once the work is completed the applicant will <u>contact the staff person</u> assigned to this application at 301-563-3400 or michael.kyne@montgomeryplanning.org to schedule a follow-up site visit.



ARCHITECT
HapstakDemetriou+
2715 M Street, NW 202.333.9038 Suite 4 www.hd-ad.com Washington, DC 20007 info@hd-ad.com
ARCHITECTURE   DESIGN
PROJECT NO. 19016
PROJECT CLIENT ELISE HOFFMANN CHRIS NIEMCZEWSKI
N&H RESIDENCE
6 EAST IRVING ST CHEVY CHASE, MD 20815
REV DATE ISSUED FOR
10/08/2020 FIREPLACE
GROUND FLOOR PLAN
1
A101

## Mincin Patel Milano, Inc.

Consulting Structural Engineers

6511 Harford Road, Baltimore, Maryland 21214 Phone (410) 254 7500 • Fax (410) 254 7100

DESIGN LOADS! ROOF DL = 20PSF U= 30PSF Project: NIEMCZEWSKI-HOFFMAN RESI.

Page No. \_\_\_\_\_5/

Date: \_\_\_\_\_\_ By: \_\_\_\_\_

LUMBER: P6=1000 PSI - NEW FLUE

EXTERIOR 3 りxiの

PART ROOF PLAN = 1-04



## Mincin Patel Milano, Inc.

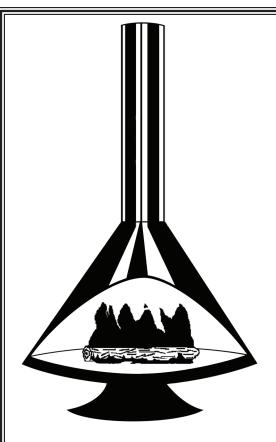
Consulting Structural Engineers
6511 Harford Road, Baltimore, Maryland 21214
Phone (410) 254 7500 • Fax (410) 254 7100

Page No. <u>\$2</u>

Project: Date: \_\_\_\_\_\_ By: \_\_\_\_ FLUE NEW (2) 2X10 HEADER NEW 2X12 AX AX 1894 GALV

RAFTER CLIP (3) 1/4 PX

2"SDS EXIST. WALL 30016 CAPACITY GALV. JOIST HANGER TEMPORARY SHORING SECTION-



# Malm Fireplace, Inc.

368 Yolanda Avenue - Santa Rosa, Ca. 95404 (707) 523-7755 Fax: (707) 571-8036

# ZIRCON 30



Tested to UL737 & ULC-S627-00 Listed by Labtest

**Assembly And Installation Instructions LEAVE THESE INSTRUCTIONS WITH THE OWNER.** 

### **SAFETY NOTICE**

If this fireplace is not properly installed, a house fire may result. To reduce the risk of fire, follow the installation instructions.

Contact local building or fire officials about restrictions and installation inspection requirements in your area.

This stove must be connected to (1) a chimney complying with the requirements for Type HT chimneys in the Standard for Chimneys, Factory-Built, Residential Type and Building Heating Appliance, UL 103, or (2) a codeapproved masonry chimney with a flue liner.

Please read this entire manual before you install and use your new fireplace.

Failure to follow instructions may result in property damage, bodily injury, or even death.

DO NOT INSTALL THIS UNIT IN A MOBILE HOME.

## ASSEMBLY AND INSTALLATION INSTRUCTIONS

- 1. Carefully remove all components from the shipping cartons and inspect for damage. If any damage is noted contact the shipping company or your dealer immediately. DO NOT INSTALL THIS UNIT IF DAMAGED OR MISSING PARTS.
- 2. Protect the flooring near the intended place of installation with an old rug, blanket, or cardboard. Place the firebox on this material.
- 3. Mix and install the Malmcrete hearth refractory as follows:
  - a. Obtain a sturdy water-tight mixing container such as a wheelbarrow or large wash tub, a bucket or can for transporting the mixture, a cement trowel, and a source for clean mixing water. It is suggested that the Malmcrete be mixed outside to avoid spillage or splatters in the dwelling.
  - b. Pour the dry Malmcrete mixture into the mixing container.
  - c. Use 1 quart water for each bag.
  - d. Add 1/2 to 3/4 of the water to the dry mix and mix thoroughly. Add additional water in small increments, mixing thoroughly between additions. Do not add more water than is necessary to get a somewhat dry mixture; to much water in the mix may cause the refractory to crack excessively, and will reduce the strength of the refractory. To test for proper water content, cut vertically into the mixture with the trowel, push the trowel sideways to open a 3 inch deep by 2 inch wide cut in the mixture, then slide the trowel back up out of the cut. The cut should stay open with very little "slumping" back into the cut. Next, run the trowel over the surface of the mixture with the blade at a slight angle to the surface of the mixture, like spreading butter. The mixture should become relatively smooth with few voids after 6 or 7 passes of the trowel using moderate pressure. Water should not float to the top of the mixture.
  - e. Transfer the mixture to the hearth (floor) area inside the firebox, spreading the mixture out as it is added. Use the trowel to spread the mix into the firebox area. Continue to add refractory until there is a minimum of 2 inches thick over the entire hearth area. To measure the depth of the mix, place a piece of tape 2 inches from the pointed end of a long nail. Insert the nail vertically through the mix every 6 inches (front to back and side to side) across the hearth; the mix should come to a uniform height up the nail, at or slightly above the tape. Trowel in the nail holes when completed.
  - f. Allow the mix to cure at least 48 hours. Additional curing time is necessary in cool temperatures. The longer Malmcrete is allowed to cure before the first fire is lit, the stronger and more durable it will become.
  - g. Make the first 3 or 4 fires very small and of short duration to allow the refractory to adjust to the high temperature of a fire.

#### **Hearth Requirements**

A floor protector is required to protect the floor in front of the fireplace opening from sparks. The floor protector must be a minimum of 3/8 inch thick non-combustible material such as brick, concrete, slate, ceramic tile, or a listed floor protection board such as Wonderboard or Homosote.

The floor protector must extend a minimum of 16 inches in front of the fireplace opening and 8 inches to either side of the fireplace. The Zircon has been designed to provide floor protection allowing for flexible design of the hearth setting.

#### **Clearance to Combustibles**

The Zircon requires a clearance to combustible walls of 10" measured from the back of the unit. For locating the center of the chimney the measurement is 15 1/2" from the backwall and 47" to the sidewall. See figure 1, page 3. For corner installation the center of the chimney is 15 1/2". See figure 2, page 3.

#### Clearance to Non-combustibles

The Zircon clearance to a combustible wall may be reduced with proper wall protection. Accepted methods for wall protection would allow reduction of the wall clearances. For appearance if desired a non-combustible wall covering can placed on the wall. The covering should consist of a listed wall protection board installed to the manufacturer's specifications. Approved protection boards at the time of this publication are Wonderboard, Dura Rock and Homosote. A non-combustible material can then be placed over the wall protection board. With most of the protection boards the clearance can be reduced to 8 inches from the original combustible wall. Be certain to check with your local building officials and or fire inspector for accepted methods in your area. Refer to NFPA 211.

## **CLEARANCES**

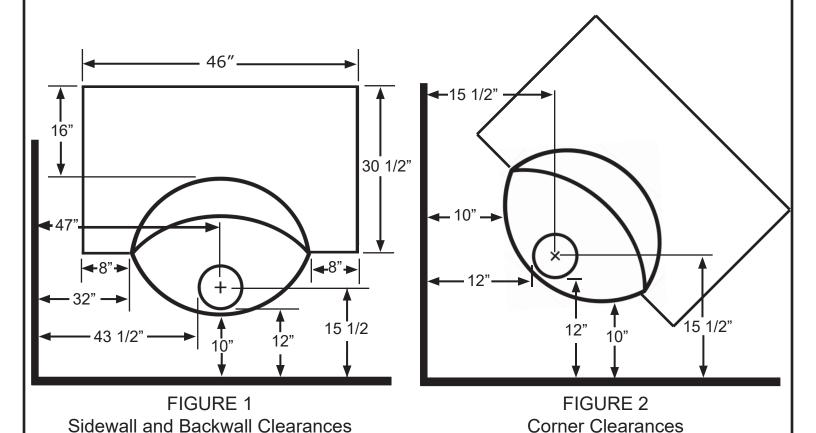
#### SIDEWALL AND BACKWALL INSTALLATION

Unit to Sidewall 32	2"
Unit to Backwall 10	ე"
Connector to Sidewall 43 1/2	2"
Center of Connector to Sidewall 47	7"
Connector to Backwall 12	2"
Center of connector to Backwall 15 1/2	2"

#### **CORNER INSTALLATION**

Unit to Adjacent Wall10	)"
Connector to Adjacent Wall12	2"
Center of Connector to Adjacent Wall 15 1/2	2"

Minimum Hearth Size ------46" x 30 1/2" Hearth is not required to extend under the Zircon's base.



Hearth dimensions shown are minimum requirements. It may be desired to exceed these minimum dimensions for a more decorative installation. The hearth material must be 3/8" or thicker noncombustible material. It is not required for the hearth material to extend under the base of the fireplace.

#### DO NOT CONNECT THIS UNIT TO A CHIMNEY FLUE SERVING ANOTHER APPLIANCE.

This stove must be connected to (1) a chimney complying with the requirements for Type HT chimneys in the Standard for Chimneys, Factory-Built, Residential Type and Building Heating Appliance, UL 103, or (2) a code-approved masonry chimney with a flue liner.

DO NOT CONNECT TO ANY AIR DISTRIBUTION DUCT OR SYSTEM.

#### **ASSEMBLY AND INSTALLATION INSTRUCTIONS Continued**

#### **Chimney Connector Installation**

The connector pipe included with the Zircon is 1 - 7" x 24" damper pipe, 1 - 7" x 24" pipe section and 1 - 7" x 24" slip connector. The slip connector is identified by 3 holes at the top of the pipe. The slip connector has one flair at the top with the 3 holes. The bottom is smooth. The damper section and intermediate pipe section have flarings at both ends. The male end is always at the bottom.

#### **Simpson Dura-Vent Chimney System**

It is required to use a Dura-Vent Connector part number 7DVL-ADC or 7DBK-ADSL to install the chimney connector.

- 1. Follow the directions for installation of the 7DVL-ADC or 7DBK-ADSL. The 7" x 24" slip pipe is then connected to the 7DVL-ADC or 7DBK-ADSL.
- 2. The 7" x 24" intermediate pipe section is then slid over the slip connector pipe. Slide the 24 inch pipe over the slip pipe only far enough as necessary to facilitate installation of the 7" x 24" damper pipe in to the unit.
- 3. Slide the 7" x 24" pipe down onto the damper pipe installed on the Zircon.
- 4. There must be a minimum of 2 inches of overlap between the 7" x 24" and 8" x 24" slip connector pipe.

#### **Metalbestos or Security**

When using Metalbestos or Security chimney systems it is required to use the Metalbestos Selkirk Stovepipe Adaptor Single Wall Connector pipe. Security users must use the ICC Excel Flue Extension (7EX).

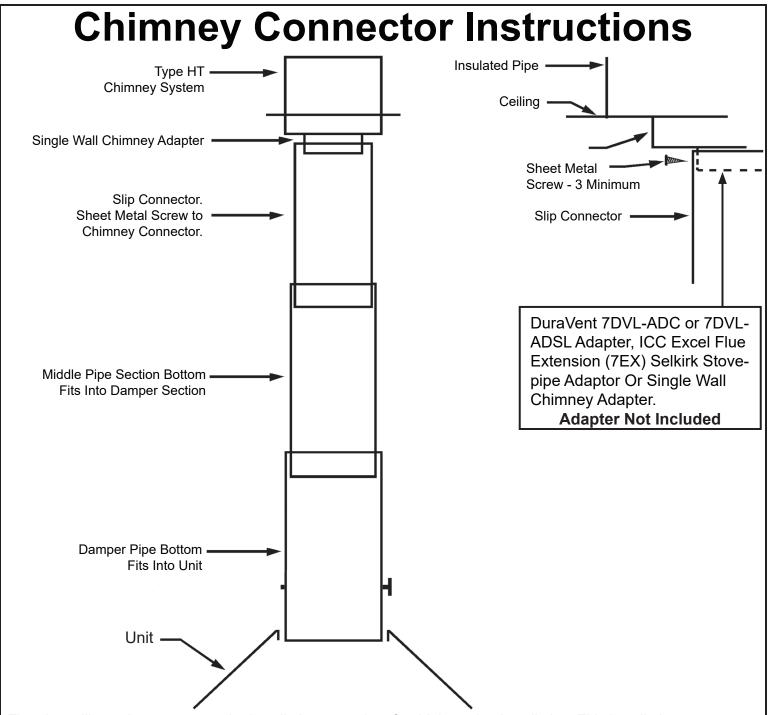
- 1. Installation of the Metalbestos or the ICC Excel Flue Extension (7EX). must be done first. Follow the manufacturers installation instructions.
- 2. Attach the 7" x 24" slip connector to the Metalbestos Selkirk Stovepipe Adaptor Single Wall Connector pipe or the Security, ICC Excel Flue Extension (7EX) adapter with 3 #8 x 3/8 inch screws.
  - 3. The 7" x 24" pipe section is then slid into the slip connector pipe. Slide the 24 inch pipe into the slip pipe only far enough as necessary to facilitate installation of the 7" x 24" damper pipe into the unit.
  - 4. Slide the 7" x 24" pipe down onto the piece installed on the Zircon.
  - 5. There must be a minimum of 2 inches of overlap between the 7" x 24" and 7" x 24" slip connector pipe.

#### Other Chimney Systems

There are many other manufacturer's of chimney systems. It is beyond the scope of this publication to cover installation with all of the different systems available. Most systems have a method of connection to the Zircon's connector pipe. Confirm installation procedures with your dealer or the manufacturer of the chimney system you have purchased.

#### Masonry Chimney

If using a masonry chimney, it must meet the minimum standards of the National Fire Protection Association (NFPA) Standard 211. The chimney must have at least a 5/8" fire clay liner or a listed chimney liner system. The chimney must be inspected for cracks, loose mortar, or any other signs of deterioration. It is best to have the chimney inspected by a professional. Make certain the chimney is cleaned prior to installation of this fireplace. The size of the chimney should be between 36 and 96 square inches. Larger chimneys should be relined to meet these requirements. Incorrect sizing of the chimney may affect the draft and result in poor fireplace performance. Do not install more than one appliance to any chimney. There are different accepted methods of connecting the fireplace to a masonry chimney through a combustible wall. This type of installation requires the use of a thimble to protect the surrounding combustible materials. Check with your local building officials or consult NFPA211. See Figure 4, Page 6.



The above illustration represents the installation procedure for dripless pipe installation. This installation method of installing the connector pipe with the male end down allows for any moisture to remain on the inside of the connector pipe.

At first glance you may become concerned that smoke will escape the pipe and enter the room. This is not how the system will work. The vacuum in the chimney system will always pull air into the chimney. If you experience a downdraft with your installation it indicates that additional chimney height or a specialty draft cap be added to your chimney system. Contact your dealer for further information regarding downdrafts.

Attach and secure the chimney connector with a minimum of three screws to the Zircon and each adjoining section.

#### **Material List**

Included with the Zircon 30 is the following:

- 1 7 x 24 damper pipe
- 1 7 x 24 pipe section
- 1 -7 x 24 slip section pipe
- 4 6lb bags of Malmcrete refractory.

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# **MASONRY THIMBLE** 2" Clearance From Studs To Chimney Walls Header 12" Of Brick From Liner To Combustibles 5/8" Fireclay Liner Minimum or Equivalent 12" Of Brick From Liner To Combustibles 12" Minimum Sill/Support Figure 4 Page - 6 Zircon30LT

### **OPERATING INSTRUCTIONS**

# Failure to properly use and maintain this appliance may void the manufacturer's warranty and could result in a house fire.

CAUTION: HOT WHILE IN OPERATION. DO NOT TOUCH. KEEP CHILDREN, CLOTHING AND FURNITURE AWAY. CONTACT MAY CAUSE SKIN BURNS. SEE NAMEPLATE AND INSTRUCTIONS. Do Not over fire. If any portion of the unit or flue starts to glow you are over firing. This is a free standing fireplace, do not use for any other purpose.

- The first few fires should be small in order to properly cure the painted surfaces and refractory. During the
  first few fires, some smoking may occur as the paint cures. You may wish to open a window to minimize
  discomfort during this curing period.
- 2. DO NOT BURN TRASH OR GARBAGE IN THIS UNIT. When building a fire, be sure the damper is fully opened and sufficient combustion air is available. Place dry kindling on dry wadded paper then ignite with a match. Add progressively larger pieces of wood until the fire is well established. Leave the damper fully open. Close only after the fire has burned out completely. Add additional firewood as needed to maintain the fire.
- The fire screen must be in place during operations. THIS FIREPLACE STOVE HAS NOT BEEN TESTED FOR USE WITH DOORS. TO REDUCE THE RISK OF FIRE OR INJURY, DO NOT INSTALL DOORS.
- 4. Use the Malm MG16 grate especially designed for long use in you Malm Zircon 30" unit.
- 5. Keep the pipe damper in the full open position when the fireplace is being used.
- 6. **CAUTION:** Heating the air in a closed building decreases the relative humidity of the air, which will dry wood and other combustible materials. This drying lowers the ignition temperature of these materials thus increasing fire hazards. To reduce the risk of fire, some provision should be made for replenishing moisture to the air whenever a structure is being heated for extended periods.
- 7. Be sure to provide combustion air into the dwelling when using this or any other wood burning appliance. A partially open window or outside air register in the vicinity of the unit would be acceptable. Combustion air must be supplied in conformance with the Uniform Mechanical Code.
- 8. CAUTION: NEVER USE GASOLINE, GASOLINE TYPE LANTERN FUEL, KEROSENE, CHARCOAL LIGHTER FLUID, OR SIMILAR LIQUIDS TO START OR "FRESHEN UP" A FIRE IN THIS HEATER. KEEP ALL SUCH LIQUIDS WELL AWAY FROM THE HEATER WHILE IN USE.
- 9. 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 to be disposed of by burial in soil or otherwise locally dispersed, they should be retained in the closed container until all cinders have thoroughly cooled.
- 10. READ MAINTENANCE INSTRUCTIONS.

#### IN CASE OF A CHIMNEY FIRE

A safe and correct installation and extra care will help prevent a fire, but accept the idea that there could be a fire. Be prepared to handle it. Make certain everyone in the house is familiar with the warning signs of a chimney fire:

- 1. Call the Fire Department immediately, before doing anything else.
- 2. Discharge a dry chemical extinguisher into the fireplace opening. If an extinguisher is not available, toss baking soda into the opening. Do not pour water on the fire.
- 3. Close all air intakes to the firebox and leave closed until the fireplace, stove or stove pipe is completely cooled.
- 4. Watch for sparks on the roof. If necessary, hose down the roof around the chimney. **DO NOT** pour water down or on the chimney.
- 5. After the fire is completely out, inspect the chimney for any signs of damage. If you are not certain, have your local Fire Department inspect the chimney for you. Never use a flammable liquid to kindle or rekindle a fire.
- 6. Never use coal in a fireplace. Coal should be used only in stoves especially designed to burn coal. If the toxic gases produced enter the room they can be fatal.

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#### MAINTENANCE INSTRUCTIONS

Failure to properly use and maintain this appliance may void the manufacturer's warranty and could result in a house fire.

- 1. Always keep the area around the unit clean and clear of furniture and other objects. Keep all furniture a minimum of 48 inches away from the heater.
- 2. Periodically the entire unit, chimney connector, and chimney system must be inspected for leaks, broken or malfunctioning parts, and loose connections. If any problems are noted, contact your dealer for repair services. Do not operate the unit until repairs have been completed.

INSPECT AND CLEAN CHIMNEY FREQUENTLY - UNDER CERTAIN CONDITIONS OF USE, CREOSOTE BUILDUP MAY OCCUR RAPIDLY.

#### CREOSOTE FORMATION AND THE NEED FOR REMOVAL.

When wood is burned slowly, it produces tar and other vapors, which combine with moisture to form creosote. Creosote vapors condense in the relatively cool chimney flue, and creosote residue accumulates on the flue lining. When ignited, this creosote can make an extremely hot fire. The chimney connector and chimney should be inspected at least twice monthly during the heating season to determine if creosote buildup has occurred. If creosote has accumulated, it should be removed to reduce the chance of a chimney fire.

#### **HOW TO REMOVE CREOSOTE.**

- 1. Clean the chimney with brushes and equipment available at local fireplace shops.
- Chemical chimney cleaners are used by adding them to the fire, but they are not intended for use in chimneys already
  containing heavy soot deposits. Rather, they are intended to inhibit soot buildup. They can be used in metal chimneys
  provided the manufacturers instructions are strictly followed. Generally these commercial cleaners are quite effective.
- 3. Call a professional chimney sweep in your area. They possess the experience and tools necessary to make the task easy.

Maintenance other than the items specifically mentioned herein are to be performed by a qualified serviceman only. Contact your dealer. For further information on using your heater safely, obtain a copy of the National Fire Protection Association publication "Using Coal and Wood Stoves Safely," NFPA HS-10-1978. The address of the NFPA is Batterymarch Park, Quincy, MA 02269. File these instructions for future reference.

NEVER STORE OR ALLOW PAPERS, KINDLING, FIREWOOD OR ANY OTHER COMBUSTIBLES WITHIN 48 INCHES OF UNIT.



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