City of Portland, M	Taine - Bui	lding or Use	Permi	t Applicatio	n Pe	rmit No:	Issue Date		СВ	L:	
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		Chimney Swe	eping E	tc	Spr	ingvale			20	763610	<b>)</b> 11
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ldobson		12/05/2008				Zoning Approval					
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1. This permit applicate Applicant(s) from a			1						l		
Federal Rules.	meeting applic	Lable State and	Shoreland		☐ Variance			Not in District or Landma			
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3. Building permits are void if work is not started			Flood Zone			Conditional Use			Requires Review		
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# APPLICATION FOR PERMIT HEATING OR POWER EQUIPMENT

}		

351.A.00C

To the INSPECTOR OF BUILDINGS, PORTLAND, ME.

White - Inspection

Yellow - File

Pink - Applicant's

Gold - Assessor's Copy

The undersigned hereby applied	s for a permit to install t	he following heating, co	ooking or power equipment in
accordance with the Laws of Maine, th	e Building Code of the C	City of Portland, and the	e following specifications:

Location / CBL	Use of Building Kesiden tra Date 12-05-08
Name and address of owner of appliance $R$ OBERT Sixu	ER
Installer's name and address Chimney Sweeping Ere  Spring Vale, Max	forthand ME 04103
Installer's name and address Chimney Sweeping Etc	
Spring vale, Me	Telephone <u>(356 / 0 / / </u>
Location of appliance:	Type of Chimney:
☐ Basement	☐ Masonry Lined
☐ Attic ☐ Roof	Factory built
Type of Fuel:	☐ Metal
☐ Gas ☐ Oil ☐ Solid (Pa/lets)	Factory Built U.L. Listing #
Appliance Name: Was I Pellet Stone U.L. Approved Presper No	
Appliance Name: Was 2 10 16 + 3 + 6 WE	Direct Vent
U.L. Approved Yesta No.	Type UL#
Will appliance be installed in accordance with the manufacture's	Type of Fuel Tank
installation instructions? X Yes	☐ Oil
,	☐ Gas
IF NO Explain:	
	Size of Tank
The Type of License of Installer:	Number of Tanks
☐ Master Plumber #	
□ Solid Fuel #	Distance from Tank to Center of Flame feet.
□ Oil #	
☐ Gas #	Cost of Work: \$ \$ 2000.000
☐ Other	Permit Fee: \$
Approved	Approved with Conditions
Fire:	See attached letter or requirement
	$\int \int $
Ele.:	(/th X ) 12 /a/06
Bldg.:	Inspector's Signature Date Approved
Signature of Installer	

Permit No: Date Applied For: CBL: City of Portland, Maine - Building or Use Permit 08-1525 12/05/2008 351 A006001 389 Congress Street, 04101 Tel: (207) 874-8703, Fax: (207) 874-8716 Location of Construction: Owner Name: Owner Address: Phone: 40 SHEPHERD LN SINGER ROBERT E & KRISTINA 40 SHEPHERD LN Business Name: Contractor Name: Contractor Address: Phone Chimney Sweeping Etc Springvale (207) 636-1011 Permit Type: Lessee/Buyer's Name Phone: **HVAC** Proposed Use: **Proposed Project Description:** Single Family Home - install a wood Breckwell wood Pellet Stove install a Breckwell wood Pellet Stove Dept: Zoning Status: Approved Reviewer: Chris Hanson **Approval Date:** 12/09/2008 Ok to Issue: Note: Dept: Building Status: Approved with Conditions Reviewer: Chris Hanson 12/09/2008 **Approval Date:** Note: Ok to Issue: 1) This appliance/stove shall be installed, operated and maintained per the manufacturers specifications and the UL listing 2) Maintain proper setback(s) from property lines/buildings and proper clearances from verticle openings when direct venting. 3) The appliance shall be installed in accordance with the IMC 2003 and NFPA 211

4) Installation shall comply with 2003 International Mechanical Code and State of Maine Oil and Solid Fuel Board Laws and Rules

#### **BUILDING PERMIT INSPECTION PROCEDURES**

Please call 874-8703 or 874-8693 (ONLY)

to schedule your inspections as agreed upon Permits expire in 6 months, if the project is not started or ceases for 6 months.

The Owner or their designee is required to notify the inspections office for the following inspections and provide adequate notice. Notice must be called in 48-72 hours in advance in order to schedule an inspection:

By initializing at each inspection time, you are agreeing that you understand the inspection procedure and additional fees from a "Stop Work Order" and "Stop Work Order Release" will be incurred if the procedure is not followed as stated below.

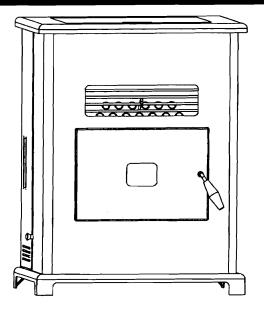
A Pre-construction Meeting will take place u	pon receipt of your building permit.
X Final inspection required at comple	etion of work.
Certificate of Occupancy is not required for cert your project requires a Certificate of Occupancy	- · ·
If any of the inspections do not occur, the pro REGARDLESS OF THE NOTICE OR CIRC	•
CERIFICATE OF OCCUPANICES MUST I THE SPACE MAY BE OCCUPIED.	BE ISSUED AND PAID FOR, BEFORE
Signature of Applicant/Designee	Date
Signature of Inspections Official	Date

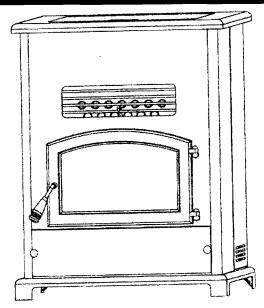
**CBL:** 351 A006001 **Building Permit #:** 08-1525



Hearth Products

### THE BIG ECONOMICAL TO BUY EFFICIENT TO OPERATE EASY TO USE





THE BIG E UTILITY FURNACE

THE BIG E HOME HEATER

# **OWNER'S MANUAL**

- WARNING: If your appliance is not properly installed a house fire may result. For your safety, follow the installation directions. Contact local building or fire officials about restrictions and installation inspection requirements in your area.
- PLEASE read this entire manual before installation and use of this pellet fuel-burning room heater. Failure to follow these instructions could result in property damage, bodily injury, or even death.
- Save these instructions.

### PROFESSIONAL INSTALLATION IS HIGHLY RECOMMENDED



Manufactured by National Steelcrafters of Oregon, Inc. Eugene, Oregon **Grand Prairie, Texas** www.breckwell.com

©BRECKWELL HEARTH PRODUCTS

## INTRODUCTION

Thank you for purchasing the Breckwell Pellet Burning Stove. You are now prepared to burn wood in the most efficient, convenient way possible. To achieve the safest, most efficient and most enjoyable performance from your stove, you must do three things: 1) Install it properly; 2) Operate it correctly; and 3) Maintain it regularly. The purpose of this manual is to help you do all three.

PLEASE read this entire manual before installation and use of this pellet fuel-burning room heater. Failure to follow these instructions could result in property damage, bodily injury or even death.

Keep this manual handy for future reference.

This stove has been independently tested to ASTM E1509-95 Standard Specification for Room Heaters, Pellet Fuel Burning Type 1, <u>UL 1482-1998 Standard for Solid Fuel Room Heaters</u>, Oregon Administrative Rules for Mobile Homes (814-23-900 through 814-23-909) and Installation as a Stove Heater.

This pellet stove, when installed, must be electrically grounded in accordance with local codes, or in the absence of local codes, with the *National Electrical Code, ANSI/NFPA 70*.

This appliance is designed specifically for use only with pelletized wood. It is designed for residential installation according to current national and local building codes as a freestanding room heater. It is also approved as a mobile home heater which is designed for connection to an outside combustion air source.

The stove will not operate using natural draft or without a power source for the blower systems and fuel feed system and must not be burned with any type of coal (see **PROPER FUEL**).

This stove is designed to provide the optimum proportions of fuel and air to the fire in order to burn free of smoke and soot. Any blockage of the air supply to or from the stove will seriously degrade its performance and will be evidenced by a smoking exhaust and a sooting window. For best operation the ash content of the pellet fuel should be less than 1% and the calorific value approximately 8200 BTU/LB. Avoid high ash content fuels because this will rapidly fill up the burn pot and eventually cut off the combustion air supply.

Commercial and industrial installations of Breckwell Pellet Stoves should not be used since operational control is often not well managed in these settings.

IMPORTANT INFORMATION
Model: The Big E Style: Serial Number:
Purchase Date:
Purchased From:

### MAIL YOUR WARRANTY CARD TODAY

To receive full warranty coverage, you will need to show evidence of the date you purchased your stove. We suggest that you attach your sales invoice to this page, and fill in the form on the left, so that you will have all the information you need in one place should the need for service or information occur.

### **SAFETY PRECAUTIONS**



Do not operate your stove if you smell smoke coming from it. Turn it off, monitor it, and call your dealer.

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

Never block free airflow through the open vents of the stove.

Keep foreign objects out of the hopper.

The stove will not operate during a power outage. If an outage does occur, check the stove for smoke spillage and open a window if any smoke spills into the room.

Disconnect the power cord before performing any maintenance or repairs on the stove.

NOTE: Turning the stove "off" does not disconnect all power from the stove.

During the start up period; 1) DO NOT open the viewing door; 2) DO NOT open the damper more than 3/2"; 3) DO NOT add pellets to the burnpot by hand; 4) DO NOT use the Fuel Feed button (unless you are priming the auger after running out of pellets) as a dangerous condition could result.

Do not unplug the stove if you suspect a malfunction. Turn the stove off, periodically inspect it, and call your dealer.

Contact your local building officials to obtain a permit and information on any installation restrictions or inspection requirements in your area. Notify your insurance company of this stove as well.

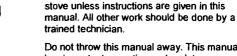
This unit must be properly installed to prevent the possibility of a house fire. The instructions must be strictly adhered to. Do not use makeshift methods or compromise in the installation.

Your stove requires periodic maintenance and cleaning. Failure to maintain your stove may lead to smoke spillage in your home.

This stove must be connected to a standard 120 V., 60 Hz grounded electrical outlet. Do not use an adapter plug or sever the grounding plug. Do not route the electrical cord underneath, in front of, or over the stove

The exhaust system should be checked, at a minimum, at least twice a year for any build up of soot or creosote.



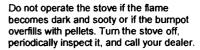


Do not throw this manual away. This manual has important operating and maintenance instructions that you will need at a later time. Always follow the instructions in this manual.

Never try to repair or replace any part of the

Do not place clothing or other flammable items on or near the stove.

The viewing door must be closed and latched during operation.



Hot while in operation. Keep children, clothing, and furniture away. Contact may cause skin burns. Educate all children of the danger of a high temperature stove. Young children should be supervised when they are in the same room as the stove.

If the stove is installed in a room without air conditioning, or in an area where direct sunlight can shine on the unit, it is possible this can cause the temperature of the stove to rise to operational levels; one of the sensors could then make the stove start on its own. It is recommended that the stove be unplugged when not in use for extended amounts of time (i.e. during the summer months).



The exhaust system **must** be completely airtight and properly installed. The pellet vent joints must be sealed with RTV 500°F (260°C) silicone sealant, and with UL-181-AP foil tape.



Allow the stove to cool before carrying out any maintenance or cleaning. Ashes must be disposed in a metal container with a tight lid and placed on a no combustible surface well away from the home structure.



This stove is designed and approved for pelletized wood fuel only. Any other type of fuel burned in this heater will void the warranty and safety listing.



When installed in a mobile home, the stove must be bolted to the floor, have outside air, and **NOT BE INSTALLED IN A BEDROOM** (Per H.U.D. requirements). Check with local building officials.



Breckwell Hearth Products grants no warranty, implied or stated, for the installation or maintenance of your stove, and assumes no responsibility of any consequential damage(s).















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# INSTALLATION

#### **SPECIFICATIONS**

Width: 25 3/4" Height: 32 5/8" Depth: 23 7/8" Weight: 275 lbs. Flue size: 3" or 4"

Hopper Capacity: Up to 140 lbs.

(This can vary widely depending on pellet

size, length, and diameter) EPA status: exempt

Burn time: 1 lb. to 5.5 lbs. per hour BTU range: 8,200 to 55,000

Approved installations: mobile home, alcove,

conventional

#### PREPARATION

Factory packaging must be removed, and some minor assembly work is required prior to installation. Access to the rear of the stove is necessary.

NOTE: Normally, your dealer will perform these functions.

#### **CLEARANCES**

The Big E has been tested and listed for installation in residential and mobile homes.

FLOOR PROTECTION: Freestanding installations, minimum 30" wide by 32" deep. The stove must be placed on a continuous (grouted joints) noncombustible material such as ceramic tile, cement board, brick, 3/8" millboard or equivalent, or other approved or listed material suited for floor protection.

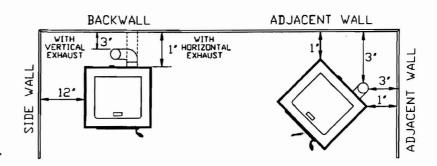
THE MATERIAL(S) USED MUST HAVE, OR COMBINE TO HAVE, A MINIMUM INSULATIVE RATING OF 'R1'.

NOTE: ceramic tile, or any tile, requires a continuous sheet beneath to prevent the possibility of embers falling through to the combustible floor if cracks or separation should occur in the finished surface, this would include floor protection for Built-in raised hearths. Check local codes for approved alternatives.

Clearances are measured from the sides, back and face (door opening) or stove body (refer to fig. 2).

DO NOT USE MAKESHIFT MATERIALS OR COMPROMISES IN THE INSTALLATION OF THIS UNIT.

INSTALL VENT WITH CLEARANCES SPECIFIED BY THE VENT MANUFACTURER.



#### MIMINUM SIDEWALL CLEARANCES

FIGURE 1

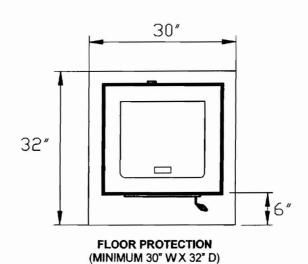


FIGURE 2

#### **COMBUSTION AIR SUPPLY**

For a mobile home installation the stove must be connected to an outside source of combustion air. A 2" inside diameter metallic pipe, either flexible or rigid, may be attached to the inlet at the stove's rear (refer to figure 3). A rodent guard (minimum ¼" wire mesh)/wind hood must be used at the terminus (refer to figure 4). All connections must be secured and airtight by either using the appropriately sized hose clamp and/or UL-181-AP foil tape.

For mobile home installations only: 2" inside diameter pipe may be used for the first 5 feet of combustion air supply run. From 5 to 10 feet use 2 %" inside diameter pipe. No combustion air supply may exceed 10 feet.

#### Sources of Outside Combustion Air

- In fireplaces
  - Chimney top.
  - Ash clean out door.
- b. For freestanding installations
  - A hole in floor near stove rear terminating only in a ventilated crawl space.
  - A hole in the wall behind the stove.

#### WHEN OUTSIDE AIR IS NOT USED

If outside air is not used, it is important that combustion air is easily available to the air inlet. A closeable outside air register can be used in tightly insulated homes.

#### **VENTING**

The Big E is certified for use with listed TYPE L-Vent, 3" or 4" diameter in size. The stove was tested with Simpson Duravent brand. Class "A" chimney is not required. Refer to the instructions provided by the vent manufacturer, especially when passing through a wall, ceiling or roof.

This is a pressurized exhaust system. All vent connector joints must be sealed with 500°F (260°C) RTV silicone sealant to ensure consistent performance and avoid smoke spillage. All horizontal connector joints must be sealed with UL-181-AP foil tape. We recommend that all vertical vent connector joints be secured with a minimum of 3 screws.

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

DO NOT INSTALL A FLUE DAMPER IN THE EXHAUST VENTING SYSTEM OF THIS UNIT.

INSTALL VENT AT CLEARANCES SPECIFIED BY THE VENT MANUFACTURER.

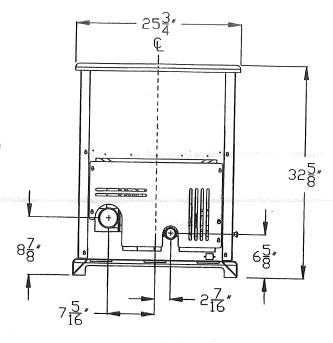


FIGURE 3

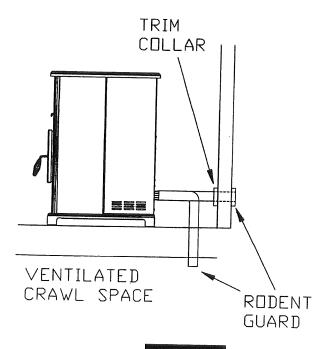


FIGURE 4

## INSTALLATION

#### **Equivalent Vent Length (EVL)**

The longer the run of pipe in your installation, the more restriction there is in the system. Therefore, larger diameter pipe should be used.

- Use 4" pipe if you have more than 15 feet of equivalent vent length.
- Horizontal runs shall not exceed 10' of EVL.
- Recommended vertical runs to be a minimum of 8'.
- · To calculate EVL, use the following conversions:

90° elbow or "T"

= 5 equivalent feet

45° elbow

= 3 equivalent feet

Horizontal Pipe Run

= 1 equivalent foot per actual

foo

Vertical Pipe Run

= 0.5 equivalent foot per actual

foot

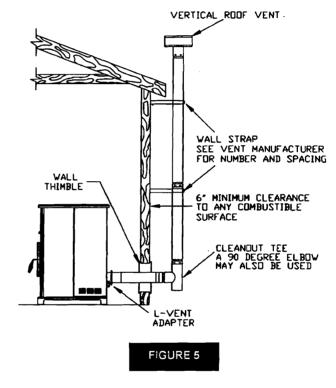
NOTE: At altitudes above 3,000 feet, we suggest the use of 4" diameter vent at an EVL of 7 feet or more.

#### **BIG E INSTALLATION**

#### A. HORIZONTALLY THROUGH WALL (refer to Figure 5)

NOTE: Follow L-Vent chimney manufacturer's instructions.

- 1. Position stove, adhering to clearances shown in Figure 1.
- Locate position of hole in wall; directly behind stove exhaust vent (refer to figure 3).
- 3. Always maintain 3" clearance from combustible materials.
- Install L-Vent wall thimble per L-Vent manufacturer's instructions.
- Attach enough piping to penetrate and extend at least 6" beyond extenor walls. An 8-foot vertical pipe run is suggested where possible to reduce the possibility of smoke spillage in the event of a loss of negative pressure.
- Attach cap and seal outside wall thimbles with nonhardening waterproof mastic.
- Termination should not be located so that hot exhaust gases can ignite trees, shrubs, or grasses or be a hazard to children. Exhaust gases can reach temperatures of 500°F and cause serious burns if touched.



Locate terminations: a) not less then 3 feet above any forced air inlet located within 10 feet; b) not less than 4 feet below or horizontally from, or one foot above, any door, window or gravity air inlet into any building; c) not less than two feet from an adjacent building and not less than 7 feet above grade when located adjacent to a public walkway. Mobile home installations must use a spark arrester.

#### B. VERTICALLY WITH NEW CHIMNEY SYSTEM (Refer to Figure 6)

NOTE: Follow L-Vent chimney manufacturer's instructions.

**OPTION:** To achieve a center vertical installation a 45° elbow and a clean-out tee can be used to offset the pipe from the exhaust outlet to the rear center of the stove.

**OPTION:** Install L-Vent elbow in place of clean-out tee. Locate stove. Drop plumb bob to center of tee outlet, mark point on ceiling. Install ceiling support and L-Vent pipe per L-Vent manufacturer's instructions.

- Always maintain 3" clearance from combustible materials. When passing through additional floors or ceilings, always install firestop spacer.
- After lining up for hole in roof, cut either around or square hole in roof, always 3" larger all the way around pipe. Install upper edge and sides of flashing under roofing materials, nail to the roof along upper edge. Do not nail lower edge. Seal nail heads with non-hardening waterproof mastic.
- Apply non-hardening, waterproof mastic where the storm collar will meet the vent and flashing. Slide storm collar down until it sits on the flashing. Seal and install cap. Mobile home installations must use a spark arrester.

#### C. VERTICALLY INTO EXISTING CHIMNEY SYSTEM

Adapters are available to adapt from 3" L-Vent to 6" or 8" Class-A chimney. (Figure 7)

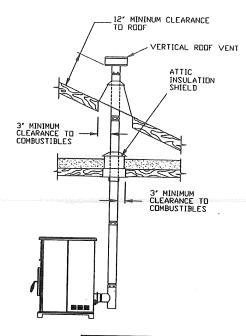
As an alternative, 3" or 4" L-Vent can be run inside existing chimney to termination. (Figure 8)
This is the preferred method.

Follow guidelines for equivalent vent length.

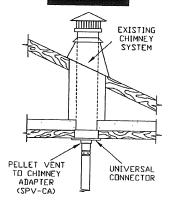
#### D. VERTICALLY INTO EXISTING MASONRY FIREPLACE

NOTE: Follow L-Vent chimney manufacturer's instructions.

- Have the masonry chimney inspected by a qualified chimney sweep or installer to determine its structural condition.
- You will need a pipe length equal to the chimney height from the hearth. If outside combustion air is to be used, you will need a pipe length equal to the chimney height plus 18 inches.
- Install a blanking plate and the chimney pipe, and if used the outside air pipe, as shown in Figure 9.
- 4. Attach the L-vent adapter, a section of pipe and clean out tee, making sure the clean out tee is centered in the chimney flue area. Use RTV, metallic tape, and a minimum of three self-taping screws at all joint connections to ensure a tight seal.
- 5. Position the stove, adhering to the clearances in Figure 1.
- Measure and build chimney top plate. Cut out holes for chimney pipe, and if used the outside air pipe. Install and seal with non-hardening mastic to prevent water leakage. Install vent cap.



#### FIGURE 6



#### FIGURE 7

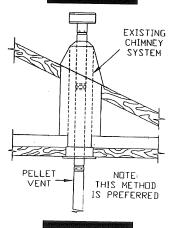


FIGURE 8