INSTALLATION & OPERATING MANUAL -

MODELS: Z-42 / Z-42 CD
ZERO CLEARANCE
FACTORY BUILT FIREPLACE

Arched Door Model

Cast Iron Door Model

IMPORTANT:
READ INSTRUCTIONS CAREFULLY BEFORE
INSTALLATION. FAILURE TO INSTALL THIS
FIREPLACE CORRECTLY CAN CAUSE SERIOUS
STRUCTURAL AND FIRE HAZARDS AND MAY
VOID YOUR WARRANTY.

Keep these instructions for future use.  September 2008 REV07
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INSTALLATION & OPERATING INSTRUCTIONS -

MODELS: Z-42 / Z-42CD
ZERO CLEARANCE
FACTORY BUILT FIREPLACE

This fireplace has been tested and listed by Intertek Testing Services (Warnock Hersey) to U.L. 127-1999, CAN/ULCS610-M98 Safety Standards for U.S. and Canadian installations. This fireplace installation must conform with local building codes, or in the absence of local building codes, with the NFPA 211 Standard for Chimneys, Fireplaces, and Vents.

IMPORTANT: BEFORE INSTALLING THIS FIREPLACE, THE AUTHORITY HAVING JURISDICTION SHOULD BE CONSULTED TO DETERMINE THE NEED TO OBTAIN A PERMIT.

INSTALLATION AND REPAIR SHOULD ONLY BE DONE BY A QUALIFIED INSTALLER.

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

NOTE: THE ARCHED DOOR MODEL IS SHOWN IN ALL DIAGRAMS THROUGHOUT THIS INSTALLATION MANUAL.

CHIMNEY REQUIREMENTS:
The following 6" chimney systems have been individually tested and approved for this fireplace:

   Selkirk Metalbestos: UL (Ultra Temp)   American Metal Products: Amer-Tech
   Simpson Dura-Vent: Dura-Plus           SuperPro / SuperVent
   Simpson Dura-Vent: Dura-Tech          ICC/Excel

Alternate listed 6" diameter HT-type UL 103 All-Fuel Chimney systems, including CAN-S629 listed chimneys may be used. Contact the factory for additional information.

Do not connect this fireplace to a chimney flue serving another appliance.

Follow manufacturer’s instructions for proper installation of the chimney.

The chimney brand you purchase must also include the appropriate anchor plate for proper connection to the fireplace.

The chimney must be a minimum of 12' tall above the fireplace and must extend a minimum of 3 ft. above the highest point where it passes through the roof and at least 2 ft. higher than any portion of a building within 10 ft..
SPECIFICATIONS:

Height: 38"
Width: 42"
Depth: 26"

Flue size: 6"
Heat ducts: 6"

CLEARANCES TO COMBUSTIBLES:

WITHIN ENCLOSURE AREA:
Fireplace to back wall: 0"
Fireplace to sidewalls: 0"
Duct boots to framing: 0"
Top Stand-off to header: 0"

EXPOSED AREA:
Wallboard to faceplate top edge/sides: 0"
Fuel door to sidewalk: 8"
Top of fireplace face to 8" mantel: 12"
(refer to chart at right)
Front of fireplace: 36"
Remote outlet air grills to ceiling: 2"

NOTE: Even though the minimum clearance from the back and side wall is 0", 1/4" expansion space is recommended to allow for heat expansion. We have included 1/4" expansion space at the back & sides in the minimum framing dimensions.

MINIMUM ENCLOSURE:

THE HEIGHT OF THE FIREPLACE ENCLOSURE MUST BE A MINIMUM OF 72". THIS IS MEASURED FROM THE BOTTOM OF THE FIREPLACE TO THE INSIDE TOP OF THE ENCLOSURE. Refer to Figure 1, page #3.

CAUTION: Subsequent renovations, additions of cupboards or storage space must not interfere with the required minimum enclosure height / air flow.

IMPORTANT: Combustible flooring 16 inches in front of and 8 inches to each side of the fuel opening must be insulated with non-combustible floor protection with a minimum insulation R-value of 0.8.

HEARTH EXTENSION: This fireplace may be installed on combustible flooring with or without a raised hearth. Any combustible flooring 16 inches in front of and 8 inches to each side of the fuel opening must be insulated with non-combustible floor protection with a minimum insulation R-value of 0.8. Refer to page #22 to determine if material desired meets the minimum R-value requirements.

FOUNDATION: Although no special foundation is required for the unit and its metal chimney, the foundation must be sufficient to carry the weight of the face brick and/or rock front, if used.
DETERMINE LOCATION:

1. Determine desired location of the fireplace. All clearance to combustible requirements must be maintained and should be considered when determining the location of the fireplace and chimney. Refer to the 'room diagram' on page #4 for installation options.

2. Location of doors and windows on all floors of the home in relation to the fireplace and chimney must be considered and be in compliance with applicable building codes, if any.

HEAT DUCTS (OPTIONAL)

Optional heat outlet ducts may be vented into the same room as the fireplace or may be vented to other rooms. Venting should be completed before framing in the fireplace. Duct kit #970 is available from your dealer and the only duct system approved for this fireplace. A maximum run of 20' is recommended.

Follow installation instructions included with the #970 Heat Duct Kit.

FAN INSTALLATION OPTION:

NOTE: If using the optional fan kit, 115V wiring should be run into the lower left of the fireplace by a qualified technician. A removable electrical box panel with romex connector is located on the left side of the fireplace. If a fan is going to be installed, the wiring should be run prior to enclosing the sides of the fireplace.
COLD AIR TRANSFER AREAS:

A) If this fireplace is installed on an exterior wall, it must be insulated the same as any other exterior wall to prevent a cold air transfer into your home.

B) Combustion air pipes must be secured with screws to prevent them from coming apart and leaking cold air.

Figure 2

NOTE: ALL DIMENSIONS INCLUDE 1/4" SIDE & BACK EXPANSION SPACE AND 1/2" SHEATHING. SHEATHING IS FLUSH WITH THE FIREPLACE FRONT. DIMENSIONS MUST BE ADJUSTED IF YOUR SHEATHING IS MORE THAN 1/2" THICK.
PREPARE THE OPENING

1. This fireplace may be placed on any flat combustible or non-combustible floor surface without carpeting or linoleum. A minimum depth of 26", width of 42" is required for installation.

IMPORTANT: Combustible flooring 16 inches in front of and 8 inches to each side of the fuel opening must be insulated with non-combustible floor protection with a minimum insulation R-value of 0.8.

HEARTH EXTENSION: Any combustible flooring 16 inches in front of and 8 inches to each side of the fuel opening must be insulated with non-combustible floor protection with a minimum insulation R-value of 0.8. This applies to non-raised and raised hearths. Refer to Figure 1, page #3.

IMPORTANT: A metal sealing strip (included with this fireplace) must be used. Install the sealing strip so that it is centered under the fireplace and hearth extension the full width of the fireplace. See Figure 1, page #3 and Figure 5, page #7. A sand-cement grout may also be used between the hearth and an on-site-constructed hearth extension.

CAUTION: The lower grill must be allowed to open. Do not place the fireplace in a manner that would obstruct this grill.

IMPORTANT: THE ENCLOSURE MUST BE A MINIMUM OF 72" HIGH, MEASURED FROM THE BOTTOM OF THE UNIT TO THE INSIDE TOP OF THE ENCLOSURE.

2. Frame an opening to fit the fireplace. All required clearances must be maintained.

   The minimum framing dimensions are: 42 1/2" wide, 38 1/4" high and 26 1/4" deep. See Figure 3 below.

   IMPORTANT: Allow a minimum of 6" in the framing width dimension for combustion air pipe. Refer to Figure 2, page #4 for various installation options and Figure 5, page #7 for combustion air pipe configurations.

Figure 3

3. Place the fireplace into the framed opening.
COMBUSTION AIR PIPE

This fireplace requires outside air for combustion and is manufactured with a collar protruding approximately 1/4" out from the right side. An outside air pipe adaptor, 4" diameter and 3" in length, is included with this fireplace to properly connect the outside air pipe to the fireplace.

1. Slide the combustion air intake adaptor into the collar on the right side of the fireplace. Secure with additional screws. Refer to Figure 4 below.

   **IMPORTANT:**
   DO NOT CONNECT THE ADAPTOR ONTO THE FIREPLACE UNTIL THE FIREPLACE HAS BEEN SLID INTO THE FRAMED OPENING!

![Figure 4](image)

2. Connect and screw 4" 30 ga. galvanized or heavier pipe to this adaptor and run to the nearest outside wall. Refer to Figure 5, page #7 for various venting configurations.

   Aluminum flex duct pipe approved for outside combustion air may also be used with the fireplace. Do not crush or tear the aluminum flex duct pipe.

   **CAUTION:** DO NOT USE PLASTIC FLEX PIPE, SUCH AS DRYER VENT PIPE FOR THE COMBUSTION AIR PIPE VENTING.
3. Avoid running the combustion air an excessive length and use the shortest distance possible to the outside. DO NOT terminate in the attic or in a garage.

If ducting beside the chimney chase, terminate the intake air at least three feet below the termination level of the chimney. The air pipe can also be ducted below the floor level of the fireplace providing it is ducted to the outside.

Note: If the combustion air pipe runs for any distance outside the enclosure, but inside the house, wrap it with insulation to eliminate condensation or frost build up.

4. Mount a standard metal vent cover designed for 4" pipe on the outside exterior wall with the louvers pointing downward.
CHIMNEY INSTALLATION:

FOLLOW CHIMNEY MANUFACTURER’S INSTALLATION INSTRUCTIONS INCLUDED WITH THE CHIMNEY SYSTEM YOU ARE INSTALLING. INSTALLATION OF THE CHIMNEY MUST BE IN COMPLIANCE WITH THE INSTRUCTIONS INCLUDED.

CAUTION: DO NOT FILL REQUIRED CLEARANCES BETWEEN THE CHIMNEY AND COMBUSTIBLES WITH INSULATION!

IMPORTANT: The appropriate anchor plate must be purchased with the chimney system you are installing. Sealant and screws for attaching the anchor plate to the fireplace are included. See Figure 6.

1. Place a bead of sealant under the chimney anchor plate and push the plate collar into the fireplace flue. See Figure 6. Secure with metal screws. Connect the first chimney section per the manufacturer’s installation instructions.

IMPORTANT: The anchor plate flange must fit into the flue collar on the fireplace to prevent creosote leakage. See Figure 6A.

MINIMUM CHIMNEY HEIGHT: The chimney must be a minimum of 12’ high and must extend a minimum of 3 ft. above the highest point where it passes through the roof and at least 2 ft. higher than any portion of a building within 10 ft.

MAXIMUM CHIMNEY HEIGHT: 50 FT.

ELBOWS: A maximum of (4) 30° elbows may be used (2 sets offsets)

Maximum offset: 4 ft.

If (2) 30° elbows are being used, the chimney must be a minimum of 14’ high.

When (4) 30° elbows are used, the chimney must be minimum of 25’ high.

Follow chimney manufacturer’s clearance to combustibles and support bracket requirements.
2. Cut and frame the required holes in the floor, ceiling, and roof where the chimney will be passing through.

REFER TO THE CHIMNEY MANUFACTURER’S INSTRUCTIONS FOR PROPER FRAMING SIZE, CLEARANCE TO COMBUSTIBLES AND SUPPORT BRACKET REQUIREMENTS.

The clearance between the chimney and combustibles should never be less than 2". DO NOT fill this air space with insulation.

FIRE STOP: A fire stop must be installed where the chimney passes through each floor level. Refer to the chimney manufacturer’s instructions for proper part number and installation procedures.

ATTIC INSULATION SHIELD: An attic insulation shield is required by the chimney manufacturer for protection where the chimney passes into the attic space. This will prevent debris and insulation from coming in contact with the chimney. Refer to the chimney manufacturer’s requirements.

3. Install chimney sections, fire stops, attic insulation shields, etc., following the manufacturer’s installation requirements.

REMINDER: The chimney must extend at least 3 ft. above the highest point where it passes through the roof of a building, and at least 2 ft. higher than any portion of a building within 10 ft. See Figure 7, page #10.

4. Install the flashing, storm collar & chimney cap following the chimney manufacturer’s instructions.

5. Refer to the chimney manufacturer’s requirements concerning supports, bracing, anchors, etc.
Examples of Chimney Installation - Figures 7 & 8

IMPORTANT: Follow the chimney manufacturer's installation manual for complete installation instructions and components required for installation.

Figure 7
FAN INSTALLATION

INSTALLATION OF THIS FAN SHOULD BE DONE ONLY BY A QUALIFIED INSTALLER.

IMPORTANT: IF THE LOWER GRILL HAS BEEN INSTALLED, IT MUST BE REMOVED TO PROPERLY INSTALL THIS FAN.

NOTE: The fan wiring must be done prior to enclosing the sides of the fireplace. An electrical box & romex connector are pre-installed on a removable panel on the left or right side of the fireplace. A receptacle speed control assembly and (3) wire nuts are included in the fireplace components packet.

Your optional fan kit includes:

1. Right and left fan assemblies with fan and limit switch already mounted.
2. Components package: (4) nuts

NOTE: To wall-mount the speed control, you will need to purchase a speed control assembly & mounting plate, an electrical box to mount the speed control and a cover / switch plate with screws.

IMPORTANT: Code approved line voltage wiring 14 gauge or better must be used when wiring this assembly. Refer to your local electrical codes for specific requirements in your area.

WARNING: This appliance is equipped with a three-prong (grounding) plug for protection against shock hazard and should be plugged directly into a properly grounded three-prong receptacle. Do not cut or remove the grounding prong from this plug.

IMPORTANT: INSERT 115V WIRING (WITH GROUND) THROUGH THE ROMEX CONNECTOR AND WIRE TO THE SPEED CONTROL / RECEPTACLE ASSEMBLY MATCHING THE BLACK, WHITE AND GREEN (GROUND) WIRES TO THE CORRESPONDING WIRES ON THE SPEED CONTROL / RECEPTACLE ASSEMBLY. NOTE: 3 WIRE NUTS ARE PROVIDED IN THE FIREPLACE COMPONENTS PACKET. See wiring diagram below.

Fan Wiring Diagram
1. Remove the lower grill, if installed. (Refer to the fireplace installation manual if necessary.)
2. OPTIONAL: For easier installation, the fans may be separated by unplugging the white three-prong plug from the receptacle in the right fan assembly.
3. Slide the left fan (A) (without receptacle) through the lower grill opening and place over the (2) left mounting studs (B) located towards the back of the fireplace.
4. Place nuts on mounting studs and tighten.
5. If the fans were separated in step #2 above, plug fans together by inserting the white three-prong male end on the short fan cord on the left fan assembly into the receptacle in the right fan assembly.
6. Remove the (2) screws securing the removable access panel (with electrical box & romex connector installed) from the side of the fireplace.
7. Insert 115V wiring (with ground) through the romex connector and wire to the speed control / receptacle assembly matching the black (hot), white (neutral) and green (ground) wires to the corresponding wire on the speed control / receptacle assembly. NOTE: (3) wire nuts are included in the fireplace components packet.
8. Secure the speed control / receptacle assembly (E) into the electrical box with the (2) screws provided.
9. Re-install the electrical access panel and secure with the (2) screws removed.
10. Place the thermostatic control switch on the bottom of the firebox.
11. Plug the fan cord (F) into the receptacle in the electrical box.
12. Turn on/off speed control counter-clockwise until it ‘clicks’. This is the ‘OFF’ position.
13. Turn the speed control ‘ON’ by turning the knob clockwise past the ‘click’ - this is the highest setting.
14. Re-install lower grill, if removed in step #1 above.

**NOTE:** The fan will not operate unless the speed control has been turned ‘ON’. The fan will not turn ‘ON’ until sufficient heat is applied to the thermostatic control switch. The fan will turn ‘ON’ and ‘OFF’ automatically when the fireplace heats and cools. Adjust fan to desired speed while it is running.

**TEMPERATURE CONTROL SWITCH POSITION:** Prior to adjusting the temperature control switch, unplug the 3-prong plug on the fan cord from the receptacle. Adjust the position of the temperature control switch to a warmer location under the firebox to turn the fan ‘ON’ sooner or move it to a cooler location under the firebox to turn the fan ‘ON’ later. The fan will turn on when the sensor in the temperature control switch reaches 110°F and will turn ‘OFF’ when the sensors reach 90°F. After adjustment, plug the 3-prong plug on the fan cord into the receptacle.

**FIGURE 9**

**NOTE:** This appliance must be electrically grounded and connected in accordance with local codes, or in the absence of local codes, with the National Electrical Code, ANSI/NFPA 70-Current edition, or the Canadian Electrical Code, CSA C22.1.
FIREPLACE FRAMING & FACING

1. Frame in the fireplace. Maintain the necessary clearances to combustibles. The framing materials should not come in actual contact with the fireplace. If installing a mantel, (a combustible mantel may be used) follow the mantel projection chart on page #2. The distance is measured from the bottom of the mantel to the top of the fireplace face.

Example: An 8" mantel would be installed 12" above the top of the fireplace face.

2. Complete the fireplace front.

NOTE: A non-combustible material such as brick, tile, marble, or stone may be placed over the top and side face pieces. This material MUST NOT come in direct contact with the fireplace or cracking of the face materials will occur.

CAUTION: If using "thin" brick, a non-combustible facing material such as rock board or metal, must be used in front of the fireplace face. This facing must not be attached to the fireplace face.

Trim kits are available for this purpose and may be purchased from your dealer.

NOTE: The facing material should overlap the side framing studs approximately 1/4" -3/8".

COMPLETE THE INSTALLATION

1. Attach the Spring Handle (Arched Door Model only):

A) Thread the black spring handle, (included in the components packet), into the nut through the mounting hole at the top right of the door front. Figure 10A.

2. Upper Grill - Install:

A) Line the rods of the grill up with the upper holes.
B) Place the rods in the holes and push up until the bottoms of the rods clear the glass frame.
C) Place the bottom of the rods into the lower holes and release. The grill will set down into place.

Upper Grill - Remove:
A) Lift the upper grill up far enough to clear the bottom holes and pull bottom of grill out.

3. Lower grill - Install: See Figure 10B

A) Remove the 1/4" nuts (B) from the lower grill assembly.
B) Slip the bolt through the hinge (A).
C) Re-attach the 1/4" nut (B).
D) Repeat "A" through "C" for the remaining hinge.
4. INSTALL THE FIREBRICK - Figures 11A - 11E

The following firebrick are included with this fireplace:

(7) 4 1/2" x 9" firebrick  
(6) 4 1/2" x 10 3/4" firebrick  
(1) 4 1/2" x 4 1/2" firebrick  
(10) 4 1/2" x 13 1/2" firebrick  
(2) 2 1/2" x 13 1/2" firebrick  
(1) Firebrick retainer

Step 1: Position (5) 4 1/2" x 13 1/2" & (1) 2 1/2" x 13 1/2" firebrick at the back of the firebox. Figure 11A.

Step 2: Starting at the back, position (3) 4 1/2" x 10 3/4" under the firebrick brackets at each side. (6 firebrick used). Figure 11B.

Step 3: Place the remaining firebrick, (7) 4 1/2" x 9" & (1) 4 1/2" x 4 1/2", into the bottom of the firebox. Figure 11C.

NOTE: The 4 1/2" x 4 1/2" firebrick is at the center back.

Step 4: Lay (5) 4 1/2" x 13 1/2" & (1) 2 1/2" x 13 1/2" firebrick over the (4) stainless steel pipes as shown in Figure 11D.

Step 5: With the 45° flange down, slide the firebrick retainer between the top of the first pipe & firebrick. Push the retainer back until it is against the front of the firebrick and under the refractory panel. Set the firebrick retainer down so it is setting on top of the pipe. The 45° flange on the firebrick retainer should now be behind the first pipe. Figure 11E.
Z-42 ARCHED DOOR MODEL ONLY
DOOR SEAL ADJUSTMENT & ALIGNMENT PROCEDURES

Every effort has been made at the factory to ensure proper seal by checking and verifying it prior to the fireplace final approval. Misalignment, however, may still occur during shipping, mishandling and/or installation.

The following procedures will help you determine whether or not the door is sealing against the firebox face as designed and instruct you how to achieve the proper seal.

CHECKING THE SEAL:

1. Close and latch door.
2. Check the seal by pushing against the corners of the glass.
   - No movement indicates proper seal.
   - Any movement between the glass and firebox face at any corner indicates the seal is not adequate. This will cause creosote to collect on the glass when burning the fireplace and will cause the fire to burn faster.

ADJUSTING THE Hinges (LEFT SIDE OF DOOR)

1. Close and latch the door.
2. Place the shim, included in the fireplace components packet, between the bottom of the door and face on latching side as shown in Figure 12, page #17. This is necessary to ‘hold’ the door in horizontal alignment.
3. Determine if the upper, lower or both hinges need adjusting.

IMPORTANT: DO NOT LOOSEN THE NUTS SECURING THE DOOR HINGES AT THE TOP AND BOTTOM OF THE DOOR!

Upper face hinge: Remove the upper grill and locate the two nuts securing the upper face hinge inside the upper grill opening. Figure 12, page #17.

Lower face hinge: Open the lower grill and locate the two nuts securing the lower face hinge inside the lower grill opening (similar to the upper face hinge).

4. Using a 7/16” wrench or nut driver, LOOSEN BUT DO NOT REMOVE, the two nuts. Push the door ‘in’ slightly, (either at the top or bottom, depending on adjustment needed) to achieve a tighter door seal and re-tighten the nuts.

5. Remove the shim and repeat steps #1 and #2 in the ‘CHECKING THE SEAL’ section above.

6. Repeat steps #1-#5 of this section until proper door seal is achieved.

NOTE: The door may need to be ‘pulled out’ if the door is binding at either the top or bottom right corner.
ADJUSTING THE LATCH (RIGHT SIDE OF DOOR)

NOTE: 2 washers have been included in the fireplace components packet for adjusting the latch.

1. Open the door and locate the 'latch dog' secured to the firebox face. Figure 13.
2. Determine whether the upper, lower or both corners of the door seal need adjusting.
3. Loosen and remove the acorn nuts securing the latch dog and remove the latch dog.
4. Place a washer onto the top and/or bottom mounting bolt on the latch dog and re-install onto the firebox face.
   (Note: A washer has been installed on each mounting bolt at the factory.)
5. Secure with the acorn nuts removed in step #3.
6. Re-check the door seal as instructed under the 'CHECKING THE SEAL' section on page #16.

NOTE: You may only need to place a washer either at top or bottom mounting bolt, depending on where the seal needs adjusting.

NOTICE TO INSTALLER / HOMEOWNER
Achieving the proper seal and door alignment is a trial and error adjustment. You may need to make additional minor adjustments after the first few initial times burning the fireplace. Deposits which collect on the glass at any corner while the fireplace is in operation indicates an improper seal and the door should be adjusted as instructed above.
FIREPLACE OPERATION

This fireplace system uses outside air for combustion. The air is drawn into the fireplace from outside your home to provide oxygen for the fire. This eliminates robbing valuable oxygen from your home and starving other fuel burning appliances of combustion, ventilation, and dilution air.

Kozy Heat's air-seal air tight door system seals the fireplace eliminating heat loss and allowing you to completely control your fire. This gives you maximum heat potential, using a minimum of firewood to produce this heat. This is accomplished by controlling the burn rate with the inlet air control.

The Kozy Heat fireplace heating system creates heat for your home by a convective air flow through the heat chamber that is constructed around the fireplace. Room air is drawn in through the lower grill, the air then circulates upward around the fireplace as heat radiates off the fireplace. This heated air exits the chamber through the upper grill area back into the room. Air can also be ducted to another room through the use of the #970 heat duct kit.

The optional blower, part #600-1, increases the circulating air flow.

FOR USE WITH SOLID FUEL ONLY - Use solid wood, processed solid fuel firelogs fuel only. If processed solid fuel firelogs are used, do not poke or stir the logs while they are burning. Use only firelogs that have been evaluated for the application in fireplace and refer to firelog warnings and caution markings on packaging prior to use.

DO NOT USE A FIREPLACE INSERT OR OTHER PRODUCTS NOT SPECIFIED FOR USE WITH THIS PRODUCT.

WARNING: THIS FIREPLACE HAS NOT BEEN TESTED WITH ANY GAS COMPONENT OR ACCESSORY. DO NOT INSTALL A GAS COMPONENT, INCLUDING A GAS LOG LIGHTER INTO THIS FIREPLACE.

How to use your Kozy Heat Zero Clearance Fireplace

1) Open intake damper by putting it in the 'down' position.
   
   The damper is closed when it is in the 'up' position.

2) Unlatch and open the door and place two logs (3" to 6" diameter) into the unit with the ends front to back and approximately 12" of space between them. Crumble a few pieces of newspaper (or use small kindling) and lay it between the logs. Now lay 2 to 4 pieces of larger kindling across the first two logs (bridging over the kindling.)

   NOTE: Build the fire directly on the firebrick. Do not elevate the fire or use a grate.

3) Build the fire no closer than 6" from the front of the fireplace.

4) Light paper and kindling with matches.

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

5) Close the intake damper to slow down the burn.

6) When the fire is burning well on kindling, open damper, wait 1 minute, then open the door and add larger wood.

   NOTE: Slowly load your firebox with average sized split wood. Approximately 30-50 pounds over a period of one-half hour. DO NOT OVERFIRE, this could damage the fireplace and void the warranty.

7) Close door and latch.

   NOTE: This fireplace is equipped with a door and should be operated only with the door fully closed and latched. If the door is left partly open, gas and flame may be drawn out of the fireplace opening due to the operation of other appliances in the home such as a clothes dryer, range fan, bathroom exhaust fan, etc., creating risks of both fire and smoke.
8) Adjust intake damper position to desired heat output.

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<td>1/8&quot; Open</td>
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<tr>
<td>Medium High:</td>
<td>3/8&quot; Open</td>
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<tr>
<td>High:</td>
<td>100% Open</td>
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9) When adding wood, first open the intake damper, wait 1 minute, then open the door slowly and add wood. This will prevent any smoke spillage from entering your home.

10) Always leave the intake damper slightly open. This will help keep the glass doors cleaner.

11) 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 the soil or otherwise locally dispersed, they must be retained in the closed container until all cinders have thoroughly cooled.

PRECAUTIONS:

1) Do not burn waste paper.

2. Except when loading, the fireplace may not be operated with the door open.

3) Do not obstruct room air inlet and outlet grills. This can cause the fireplace to overheat.

4) Do not store clothing, furniture or combustibles within 36" of the fireplace.

5) The chimney should be inspected monthly 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. We recommend a professional chimney cleaner inspect and clean the chimney at least once annually.

6) Burn only dry seasoned wood. Extremely hard woods, such as oak or ash can require up to two years of drying time to be adequately dried.

7) It is recommended that smoke detectors be installed in your home as required by local building codes or the authority having jurisdiction.

8) Some fuels, such as charcoal, may generate carbon monoxide, a dangerous odorless gas. Exposure to carbon monoxide may cause serious illness or death.

9) For further information on using your heater safely, obtain a copy of the National Fire Protection Association publication "Using Coal & Wood Stoves Safely," NFPA No. HS-10.
Maintenance Requirements

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 should be inspected at least twice during the heating season to determine if a creosote buildup has occurred. If a significant layer of creosote has accumulated (1/8 inch or more) it should be removed to reduce the risk of a chimney fire.

Inspection can be accomplished from the top of the chimney by removing the chimney cap or from inside the stove by removing the upper firebrick. We recommend a professional chimney cleaner inspect and clean the chimney at least once annually.

Should the glass become discolored with creosote clean on a regular basis. The simplest way to clean this fireplace is to periodically burn it with the outside air damper completely open for 30 - 45 minutes. This will usually clean the glass and minimize the ashes.

Oven cleaner or a cleaner specifically designed for fireplace glass may be used. DO NOT use abrasive cleaners. Clean only when the glass is cooled.

In the event of glass breakage, due to overfiring or a log falling against the glass, let the fireplace cool completely. Do not use the fireplace with broken or cracked glass. Replace only with Kozy Heat part #150380 for Model Z-42 and part #150250 for Model Z-42-CD. Do not substitute materials.

Do not slam doors shut. This may cause glass breakage.

TO REMOVE BROKEN GLASS:

ARCHED DOOR MODEL:

1. Unlatch the door and open it until it is at a 45° angle from the face.
2. Remove the bottom hinge pin securing the door to the fireplace.
3. Lift the door up off the hinges far enough to release the upper hinge pin from the face hinge.
4. Place the door (right side down) on a flat protected surface.
5. Remove the glass clips and carefully remove the broken pane.
6. Properly discard the broken glass.
7. Place the new glass w/ gasket inside the door frame. NOTE: The gasket with second layer should be facing you.
8. Secure the glass with the glass clips removed and screws removed in step #5. NOTE: The glass clips are placed between the first and second layers of the gasket.
9. Re-install the door and hinge pins.

CAST IRON DOOR MODEL:

1. Remove the door from the fireplace by lifting it 'up' off the hinges. Lay the door (face down) on a clean, flat surface.
2. Loosen and remove screws securing the glass clips (4 clips total) at the top & bottom of the door. Set the screws & glass clips aside for re-installation.
3. Carefully remove the broken glass & properly discard.
4. Inspect the glass gasket around the inside of frame and replace if necessary.
5. Place the glass in the door and secure with the glass clips & screws removed in step #2.
6. Re-install the door and hinge pins. Make certain the hinge pins are all the way in before closing the door.
<table>
<thead>
<tr>
<th>Problem</th>
<th>Cause</th>
</tr>
</thead>
</table>
| Smokes back through the door when it is opened, when first starting or when the fire dies down. | A. Negative Pressure in the home.  
B. Chimney not high enough.  
C. Cold wind cooling poorly insulated chimney.  
D. Chimney cap too close to flue termination.  
E. Adjacent structures, trees, etc. too close to chimney, remove or raise chimney.  
F. Screen on chimney top plugged, or too fine.  
G. Restriction within chimney, creosote, mortar, leaves, bird nest, etc.  
H. Ice build-up on chimney top. |
| OR                                                                    |                                                                       |
| Smokes out the doors or the intake pipe when the wind is blowing from a certain direction. |                                                                       |
| The fireplace won’t generate enough heat.                              | A. Wood is not seasoned or it is wet from snow or rain.  
B. Not enough wood being used. 30-50 lbs. of wood is necessary for optimum heat.  
C. Obstructed grill openings.                                           |
| There is an odor coming from the fireplace.                            | A. New paint. This odor should not last past the third burn at a moderate burn rate. Open doors & windows to ventilate during the initial burn period. |
ALTERNATE FLOOR PROTECTION MATERIAL WORKSHEET

How to determine if alternate floor protection materials are acceptable.

All floor protection materials must be non-combustible (i.e., metals, brick, stone, mineral fiber boards, etc.). Any organic materials (i.e., plastics, wood, paper products, etc.) are combustible and must not be used. The floor protection specified may include some form of thermal designation such as R-value (thermal resistance), k-factor (thermal conductivity), or C-factor (thermal conductance).

PROCEDURE:

1. Convert specification to R-value:
   i. R-value given - no conversion needed.
   ii. k-factor is given with a required thickness (T) in inches: R = 1/k x T
   iii. C-factor is given: R = 1/C

2. Determine the R-value of the proposed alternate floor protector.
   i. Use the formula in step (1) to convert values not expressed as “R”.
   ii. For multiple layers, add R-values of each layer to determine 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 inch thick material with a k-factor of .84. The proposed alternate is 4" brick with a C-factor of 1.25 over 1/8" mineral board with a k-factor of .29.

Step (a): Use formula above to convert specification to R-value. R = 1/k x T = 1/.84 x .75 = .893.

Step (b): Calculate R of proposed system.
   4" brick of C = 1.25, therefore Rbrick = 1/C = 1/1.25 = .80
   1/8" mineral board of k = .29, therefore Rmin.bd. = 1/29 x .125 = .431
   Total R = Rbrick + Rmineral board = .8 + .431 = 1.231

Step (c): Compare proposed system of R of 1.231 to specified R of .893. Since proposed system R is greater than required, the system is acceptable.

Definitions: Thermal conductance = C = \( \frac{W}{(\text{hr})(\text{ft}^2)(^\circ\text{F})} \)

Thermal conductivity = k = \( \frac{(\text{Btu})(\text{in})}{(\text{hr})(\text{ft}^2)(^\circ\text{F})} \)

Thermal resistance = R = \( \frac{(\text{ft}^2)(\text{hr})(^\circ\text{F})}{\text{Btu}} \)
REPLACEMENT PARTS

The following replacement parts and options are available for Model Z42. Consult your dealer for availability and pricing.

<table>
<thead>
<tr>
<th>#</th>
<th>Part Description</th>
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</tr>
</thead>
<tbody>
<tr>
<td>#500-333</td>
<td>Brass Grill Set</td>
<td>#617</td>
<td>44&quot; Lintel Iron</td>
</tr>
<tr>
<td>#500-334</td>
<td>Brass Accent Grill Set</td>
<td>#945</td>
<td>4&quot; Air Vent Non-Closure</td>
</tr>
<tr>
<td>#500-356</td>
<td>Prairie Design Series Grill Set</td>
<td>#150-380</td>
<td>15 ½&quot; x 28&quot; Glass - Model Z-42</td>
</tr>
<tr>
<td>#500-358</td>
<td>Mission Design Grill Set</td>
<td>#200-181</td>
<td>Glass Clips(4) - Model Z-42</td>
</tr>
<tr>
<td>#936-200</td>
<td>Black Upper Grill</td>
<td>#900-006</td>
<td>1 1/8&quot; Glass Gasket - Model Z-42</td>
</tr>
<tr>
<td>#936-201</td>
<td>Black Lower Grill</td>
<td>#500-302</td>
<td>5/16&quot; Wood Cone Handle - Model Z-42 CD</td>
</tr>
<tr>
<td>#936-20B</td>
<td>Brass Upper Grill</td>
<td>#150-250</td>
<td>12&quot; x 14&quot; Glass - Model Z-42 CD</td>
</tr>
<tr>
<td>#936-21B</td>
<td>Brass Lower Grill</td>
<td>#200-160</td>
<td>Glass Clips (8) Model Z-42 CD</td>
</tr>
<tr>
<td>#600-1</td>
<td>Fan Kit</td>
<td>#808</td>
<td>Glass Gasket Kit - Model Z-42 CD</td>
</tr>
<tr>
<td>#404-4</td>
<td>Limit Switch Assembly</td>
<td>#807</td>
<td>Door Gasket Kit - Model Z-42 CD</td>
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<tr>
<td>#600085</td>
<td>Speed Control</td>
<td>#300-405</td>
<td>Banger Rope - Model Z-42 CD</td>
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<tr>
<td>#970</td>
<td>Heat Duct Kit</td>
<td>#300-349</td>
<td>Black 1 ½&quot; Door pins (4) - Model Z-42 CD</td>
</tr>
<tr>
<td>#Z42100</td>
<td>3/8&quot; Finish Material Trim Kit</td>
<td>#300-600</td>
<td>Firebrick</td>
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<tr>
<td>#Z42101</td>
<td>1&quot; Finish Material Trim Kit</td>
<td>#Z42-900</td>
<td>Refractory Brick Panel</td>
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<tr>
<td></td>
<td></td>
<td>#300-604</td>
<td>Touch-up Paint</td>
</tr>
</tbody>
</table>

Manufactured by:

Model Z42
Weight: 525 lbs.
U.S. and Canadian Installations
September 2008

Hussong Mfg. Co., Inc.
204 Industrial Park Drive
Lakefield, Minnesota 56150

www.kozyheat.com