

Installation and Operation Instructions

Stone Age Brick and Vecchio™ Pizza Ovens



1.0 Introduction

The following provides instructions for the installation, operation and care of Stone Age Brick and Vecchio™ Pizza Ovens, manufactured by Stone Age Manufacturing, Collinsville, Oklahoma.

Three generations of wood-burning oven knowledge and experience have gone into the design, construction and use of these pizza ovens. A completed Vecchio oven, finished in rock, is shown in Figure 1.



Figure 1. Vecchio™ Pizza Oven

The only differences between the Vecchio and Brick Oven are size and the manner in which the front header attaches to the side walls. These differences can be seen in Figures 2 and 3. Tables 1 and 2 show the components and dimensions of the two.

Table 1 Vecchio/Brick Oven Dimensions		
Size (In.)	Vecchio	Brick Oven
Width	25"	25"
Depth	28"	26"
Opening Height	9"	21"
Opening Width	25"	21"

If installing the oven on something other than a StoneAge base cabinet, make sure that it will support the weight of the oven.

2.0 Pizza Oven Components

Components for the Brick Oven and Vecchio Pizza Ovens are shown in Figures 2 and 3.

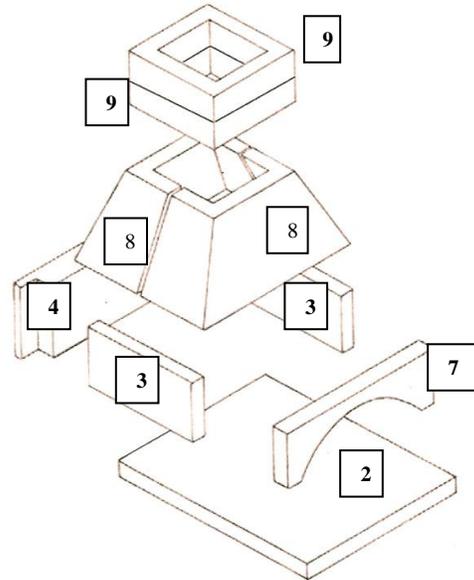


Figure 2. Vecchio™ Pizza Oven Components

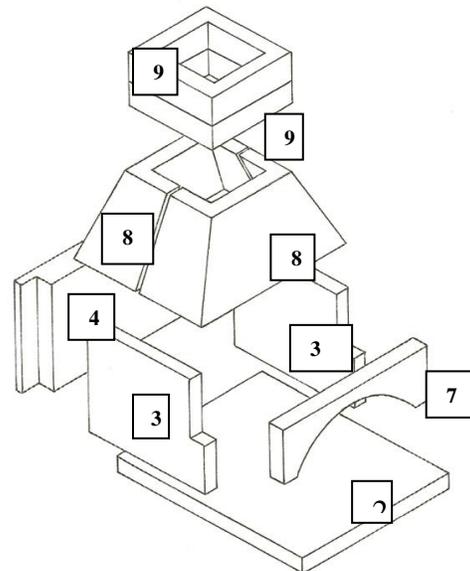


Figure 3. Brick Oven Pizza Oven Components

Table 2 Pizza Oven Components				
	Vecchio™ Pizza Oven SA VPO-34		Brick Oven SA-BO	
Description	Part No.	Qty	Part No.	Qty.
Base Plate (2)	VPO2	1	BO2 (2)	1
Side Walls (3)	VPO3	2	BO3 (3)	1
Back Plate (4)	VPO4	2	BO4 (4)	2
Front Header (7)	VPO7	1	BO7 (7)	1
Throat Sections (8)	SA24-8	2	SA24-8 (8)	2
Flue (9)	SAFL1313-6	1	SAFL1313-6	2
Fire Brick Full Size (not shown)	SA-S1006	35	SA-S1006	35
Fire Brick Split	SA-S1001	20	SA-S1001	40

Figure 2 and 3 components and part numbers are identified in Table 2. Item numbers in Table 2 correspond with the item numbers in Figure 2 and 3.

3.0 Safety

Working around an oven that can generate up to 800°F can be dangerous if proper clothing and tools are not used. Also, combustible materials in the vicinity of the oven may be at risk.

WARNING: When working around a pizza oven, make sure that proper clothing is worn and proper tools are used. Make sure that combustible materials not necessary to baking pizza are kept away from the oven.

3.1 Clothing

- A. It is advisable that long-sleeved shirts be worn when inserting and removing pizzas into/from the oven.
- B. Use a non-combustible oven mitt when stoking and adding wood to the fire.
- C. Use the non-combustible mitt when inserting and removing or turning pizzas.

3.2 Tools

Special tools are available for the management of oven fires and inserting and removing food. These tools can be obtained from Stone Age Manufacturing and are shown later in this manual.

4.0 Installation

The pizza ovens and base cabinets are not specifically designed as a “do it yourself” project. This is primarily because of component weight and the care required when applying mortar. However, it can be done if one has the necessary weight-lifting equipment, and can use a mortaring trowel. We recommend that you contract with a professional mason or landscape contractor to install and finish your installation.

Although not included with the oven package, an optional base cabinet, part of our standard outdoor kitchen island system, used primarily for storage, is available from Stone Age Manufacturing. You may, however, install the oven on your own base. If so, make sure it will support the weight.

4.1 Installing the Base Cabinet

The Stone Age Cabinet Component System island kits will structurally support a Vecchio or Brick Oven but are a different dimension than the base of the ovens. The base plate dimensions of Vecchio or Brick Oven are 34” wide from side to side and 42”

deep from front to back so consider these dimensions if an alternate structurally sufficient base is installed.

4.1 Installing the Oven

Once the base cabinet is installed it is ready to receive the base for the pizza oven. If the Stone Age cabinet is not used, it is assumed that a satisfactory base surface has been prepared from concrete blocks or other materials; is at the desired height, and will receive the weight of the pizza oven.

- A. Install the base plate on top of the base you have selected. Check the level from front to back, side to side.
- B. Install full size firebrick from side to side using mortar with a high-temperature additive. Stone Age All Purpose Redi-Mix is recommended. See Figure 4.



Figure 4. Install Firebrick on Baseplate

- C. Figure 5 shows how the oven components go together. After the firebrick mortar sets up, lay a 2-inch bead of the same mortar along the back and each side of the firebrick surface.

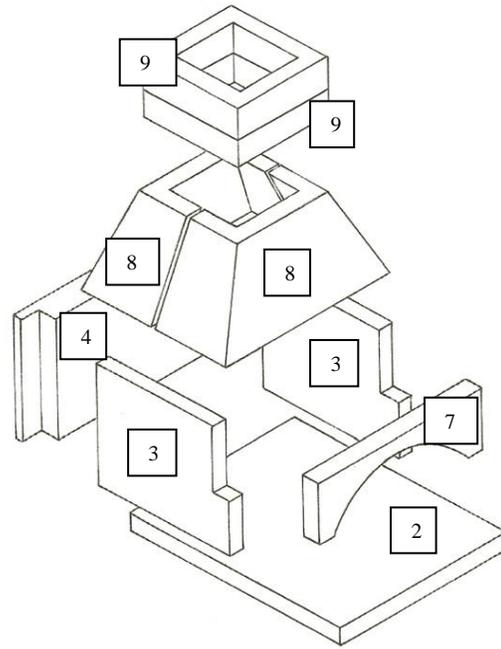


Figure 5. Oven Components

- D. Assemble the rear wall (4), side walls (3), as shown in Figure 6.



Figure 6. Set Side Walls and Back Plate

- E. Line the box with split brick as shown in Figure 7. Split brick are half the thickness of full brick (1 ¼-inch thick).



Figure 7. Line Box with Brick

- F. Install the front header (7). In the example shown in Figures 6 and 7, a Brick Oven, the front header rests on the front ledge of the side walls. In the Vecchio Pizza Oven, the arched wall rests on the fire brick floor.
- G. Install the two throat sections (8) and the two flue sections (9) on top of the oven. Mortar inside as well as on top, as shown in Figure 8. Check to make sure the installation is level.
- H. Inspect the mortared joint on both sides, inside and out and make sure it is smoothed out with no gaps.



Figure 8. Set Throat and Flue

The following steps are optional and apply only to the Brick Oven. With these options, the oven is more efficient and the temperature and fire are easier to regulate.

- A. Install frame and doors (Figure 9). The door frame has a piece of insulation to seal between the metal frame and oven masonry.
- B. Use set screws provided to attach the metal frame to oven front wall. Insert the screws through tabs on the frame. The set screws will thread into the masonry securely.



Figure 9. Install Frame and Door

- C. Install bracket to connect damper chain (Figure 10).

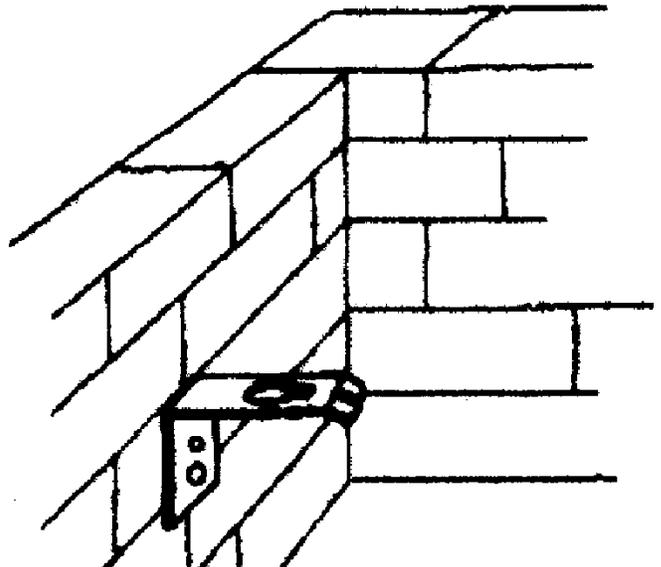


Figure 10. Install Damper Bracket

- D. Install damper (Figure 11) and top cap (Figure 12). Connect damper cable to bracket in firebox (Figure 10).

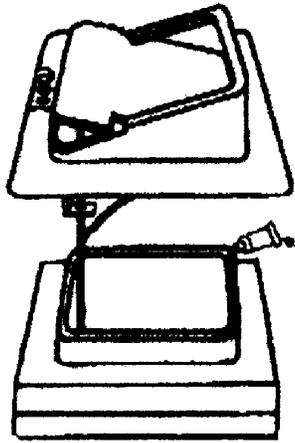


Figure 11. Install Damper



Figure 12. Install Top Cap

Installation of the oven is now complete and ready for the outside finish to be installed. Brick, rock or slate, masonry or concrete compatible veneer materials can be used for this outside finish, depending on your desires and the motif of your outside kitchen/patio. A rock finish is shown in Figure 13.



Figure 13. Vecchio Pizza Oven Finished

As with any cooking appliance, heat transfer will occur from the inside cooking chamber to the outside walls of the oven. Thermal cycling can also cause expansion and contraction in the oven components and the mortar joints. This will be visible in the exterior veneer when it is applied directly to the surface of the oven. These expansion and contraction cracks do not compromise the structural integrity of the oven and are only cosmetic. If the visibility of these hairline cracks is not desired, it is recommended that the oven be encapsulated with concrete block, metal framing with concrete board attached or surrounded with other non-combustible materials. If this method is used, leave a minimum of 3 inches of air space between the encapsulating walls and oven unit. This space can be left void or filled with insulating materials like lava rock, perlite or vermiculite to further insulate and stop any heat transfer. The outside profile of the oven can be changed to create any shape or design when using this method.

Another option is to cover the oven with a ceramic fiber blanket wrapped with metal lathe and scratch coated with cement before applying veneer materials.

5.0 Building a Fire

The owner should wait a minimum of 28 days after construction is completed to build the first fire. It is important that all moisture be gone from the oven before the first fire is laid. After that, the first three

fires should be small to gently season and break in the oven.

In order to reduce the possibility of moisture collection, it is recommended that the oven be treated with a water sealer after completion of the exterior.

WARNING: Do not start a fire in a unit that has been exposed to excessive moisture.

To protect from moisture, keep the oven door in place when the oven is not in use.

5.1 Selection of Wood

Any cured wood that is suitable for smoking meats can be used in pizza ovens. Hickory, pecan and mesquite wood are good. Oak is good for heating ovens and generating a bed of coals. Flavored wood such as apple and cherry fruitwoods, soaked in water, can be used for smoking when the cooking starts.

Charcoal and natural lump charcoal are also an option for cooking along with fruitwood chips for flavor.

Avoid use of green uncured wood as it will have a much stronger smoke flavor which can be overbearing, and will produce more soot and oils.

Caution: Do not use paper, trash, synthetic logs, or wood treated with petroleum or other chemicals.

5.2 Starting and Keeping a Fire

It takes time and experience to learn the nature of a wood-fired oven. There are a lot of variables affecting cooking such as type and quantity of wood, ambient temperature, size of oven and the dish being cooked.

Recommended length of wood sticks is 12-18 inches for these ovens. Stores selling BBQ supplies will have smoking wood in chunks or cut smaller for smokers and wood fired ovens.

Just like the oven in your home or an outdoor gas cooking appliance a wood fired oven will require a certain amount of cleaning and maintenance after usage.

Wood fired ovens are designed to retain heat and therefore will produce a certain amount of smoke spillage out of the front opening of the oven and leave soot, creosote or smoke stains on the face of

the ovens exterior. This spillage and staining is common on all brands of wood fired ovens without power vented chimneys. The degree of staining will vary depending on type of wood used for cooking, how cured the wood is, amount and length of usage, wind direction and speed along with several other factors that will vary with each application. This adds character and gives an authentic old world appearance to your oven but the staining can also easily be removed with a wire brush and water or by using a masonry cleaning solution for soot and smoke that can be purchased at most hardware stores, home improvement stores, specialty fireplace retailers or on the internet.

Fire management tools are shown in Figure 14.



Figure 14. Fire Management Tools

The sequence for building a fire is as follows:

- Build a fire in the center of the oven floor and develop a good bed of coals. The size will depend on what is to be cooked and the quantity.
- Heat the oven to 350° to 600°F. This may take as much as two hours. Heating above 800°F is not recommended.
- When desired temperature is reached, push the fire and coals to the rear of the oven. Use one of the tools shown in Figure 14.
- Insert pizzas on a pizza pan and cook directly on the oven floor.
- Add wood as necessary to maintain desired temperature. If cooking several pizzas, it may be necessary to pull the fire back to the middle and rebuild it to reheat the floor.

5.3 Cooking

If the oven has been exposed to moisture 48 hours prior to use, build a small fire and heat the oven to 250-300°F for two hours before increasing the heat to cooking temperature. An easy solution is to burn an 8-10 pound bag of match lite charcoal and let it burn completely. This will slowly dry out the moisture that the oven has absorbed.

As stated, we recommend cooking in a temperature range of 350° to 600°F. Time of cooking will depend on the temperature and the item being cooked. The floor is the heat source that will do most of the cooking. An infra-red temperature gauge like that shown in Figure 15 can be used to measure temperature at any location in and around the oven.

Cooking pizza in a wood-fired oven is somewhat like grilling or smoking meats in that there are many variables such as the type of wood used, ambient temperature and humidity, oven temperature and thickness of crust and toppings, that affect the outcome. Be prepared to spend a few times testing recipes and techniques. Practice and experimentation will show how to best cook your favorite style of pizza.

- A traditional Italian pizza with a thick crust and a thin layer of toppings should cook at 600°F or hotter for 3-6 minutes.
- For thicker pizzas with heavier toppings, lower temperatures are required to thoroughly cook without burning.
- A medium pizza with heavy toppings may cook best at 400°F-500°F and will require a longer cooking times, perhaps 15-25 minutes.

Cook the pizza directly on the floor of the oven. Place it in the oven using a long-handled paddle called a peel, using hot mitts or hot pads. Slide the pizza from the preparation surface to the peel, and then onto the cooking surface using a slight jerking technique.

WARNING: Be mindful of the hot surfaces of your pizza oven. Because of the high temperatures, extra caution should be used when cooking with a wood-fired oven. Use proper, long-handled tools and protective mitts when working around the opening or reaching into the hot oven.

Tools required for cooking pizza are shown in Figure 15 and are available from Stone Age Manufacturing.



Figure 15. Cooking Tools

6.0 Cleaning, Inspection and Maintenance

As is the case with most other equipment, cleanliness is the best maintenance practice and will contribute to many hours of use.

WARNING: Do not clean the oven when it is hot.

Let the fire and coals completely burn out and cool before cleaning. It is best to wait until the next day before removing ashes. Ashes should be placed in a metal container with a tight-fitting lid, and removed 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.

Spot check the refractory bricks and mortar for small cracks. It will expand slightly with the heat, then contract as it cools. Replace refractory bricks when the cracks open more than 1/4"; or when pits become extensive and deeper than 3/16" when oven is at ambient temperature and not in use; or when any piece of refractory larger than 2 inches in diameter becomes dislodged.

If creosote has accumulated, it should be removed to reduce the risk fire. Remove creosote using a wire brush and/or a creosote liquid detergent designed for this purpose. Also there are manufactured logs available that are designed for the removal of creosote. These products will be available at most local hardware stores, home improvement stores, specialty fireplace retailers or on the internet

Keep the door in place and a cap on the chimney when not in use to protect the interior of the oven from moisture.

LIMITED WARRANTY

The products of Stone Age Manufacturing, Inc. (“Stone Age”) have been carefully manufactured and the components assembled to give the customer a quality product. Stone Age warrants to the original purchaser the materials that it provides to the customer against defects in manufacture for a period of twenty-five (25) years from the date of purchase on UL-127 listed fireplaces, for a period of five (5) years from the date of purchase on all unlisted fireplaces, fire pits, and other masonry components. Other accessory items or components offered, but not produced by Stone Age Manufacturing, Inc., shall be covered by their manufacturer’s warranties. This Limited Warranty covers only actual manufacturing defects in the Stone Age product and does not cover defects or faulty workmanship in the installation of the product or the masonry or other structure in which it is installed. Also this warranty does not cover items that have been damaged due to over-heating, modification, improper storage or maintenance. Stone Age shall repair or replace, at its option, any defective Stone Age product component upon receipt of written notice addressed to Stone Age. This Limited Warranty covers only replacement of any defective components within the product itself occurring during the warranty period and does not cover the cost of installation or removal from a fixed location. **NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE MADE, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSES WHICH ARE SPECIFICALLY DISCLAIMED.** Stone Age is not liable for damages or injury to persons or property or other incidental or consequential damages.

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