

Installation and Operating Instructions

Stone Age Square Fire Pits



1.0 Introduction

The purpose of this manual is to provide instructions for the assembly, operation and maintenance of Stone Age Square Fire Pits, manufactured by Stone Age Manufacturing, Collinsville, Oklahoma.

Three generations of fireplace knowledge and experience have gone into the design and construction of the square fire pit. Designed for a patio or back yard installation, it will bring years of pleasure to you provided it is used and maintained properly. A square fire pit, finished out in a veneer rock facing, is shown in Figure 1.



Figure 1. Square Fire Pit

1.1 Description

Outside dimensions of the square fire pit are 42" x 42". It is 15 inches tall without feet, or 17.5 inches with feet. Extension kits are available to extend the size by 12 inches in one direction if the feet are not used. The fire pit weighs approximately 650 pounds. Use of the extension kit will add another 100 pounds.

The fire pit consists of 5 sections which are assembled together, or 8 sections if an extension kit is used.

The fire pit is delivered on a pallet as shown in Figure 2.



Figure 2. Fire Pit Kit on a Delivery Pallet

2.0 Preparations

The first thing to do is to review local codes (city/county ordinances, homeowner association regulations, etc.) to make sure that open fires are permitted.

2.1 Select Location

In selecting a location, first decide whether you want to make that location permanent or not. If you want the fire pit to be movable, you will want to use the feet, thus requiring a firm, level surface.

- A. Select a location at least 8 feet away horizontally from any combustible materials, i.e., outside wall, trellis, etc. If the fire pit will be wood burning, do not place under a combustible covered area or structure. If the fire pit will be burning natural gas or lp gas, it may be placed under a covered area that is open on at least 3 sides, with a minimum of 6' clearance to combustibles overhead, and 8' clearance horizontally. Check local building codes for minimum clearances, follow the applicable local codes.
- B. Check the prevailing wind (breezes). You won't want a location where smoke is always blowing into the house.
- C. If it is to be plumbed for natural gas, select an area where the gas line can be buried.

- D. Select a location where it is a safe distance from any vertical vegetation (plants, flowers, bushes).
- E. It is recommended that it not be installed on a patio where there is a roof overhead.

3.0 Installation

The Do-It-Yourselfer can easily install the Stone Age fire pit. He will need some assistance in handling the weights of the components as they are in excess of 100 pound each.

It is recommended, however, that you contract with a stone mason to apply the decorative finish.

The fire pit is installed in components, as shown in Figure 3 or Figure 4.

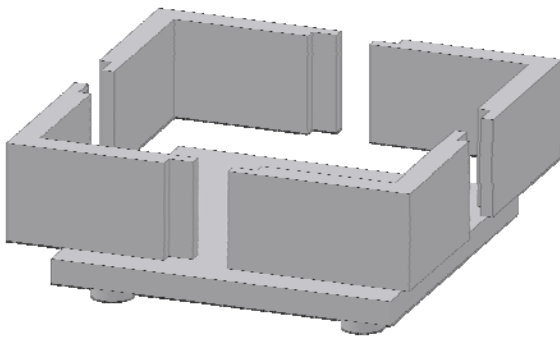


Figure 3. Construction Diagram for Square Fire Pit

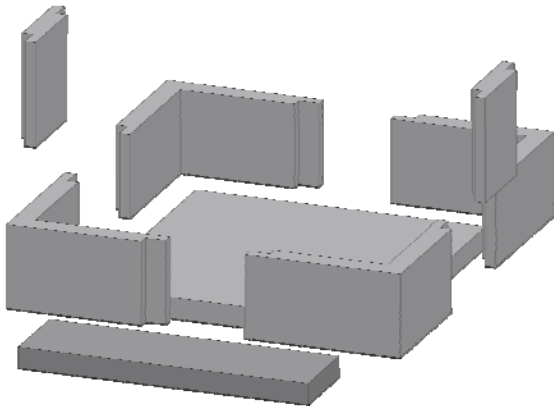


Figure 4. Construction Diagram for Fire Pit with Extension Kit

- A. Remove the sidewalls (item 2) from the base.
- B. Orient the base (item 1) with the feet either up or down, depending on your choice. If installing on the ground (feet up), consider just a slight slope to permit drainage. Shown in Figure 5 is one of the feet on the base plate.



Figure 5. Fire Pit Foot

- C. If using an extension kit, install the base with the feet up and position the base extension (1A) along the desired side of the base.
- D. If using gas, plumb the gas line underneath the base and up through the hole in the middle,

Note: If using a canned gas such as propane, a special conversion kit will be required to connect to a Stone Age burner kit.

- E. Once the base is positioned, apply a 2-inch bead of refractory tolerant cement, or Stone Age Multi-Purpose Ready-Mix around the flat edge of the base.
- F. Position the walls (2) in place around the edge of the base. Apply cement to join the sections together. It is recommended that a slight opening be left at the bottom of each joint to permit moisture drainage.
- G. When the primary use of the fire pit will be for burning wood, it is recommended that the inside of the fire pit be lined with firebrick, because a wood fire is much

hotter than a gas fire. If a gas ring is to be used, there is not need to line it with brick, except for appearance.

- H. Select desired finish materials. The exterior finish may be either fabricated stone, thin veneer, natural stone, stain, tile, brick or stucco. Surface area to be covered is 20 square feet and 14 linear feet of coping. An extension kit adds 3 square feet of surface and 2 linear feet of coping.
- I. Contract with a stone mason to finish the exterior. Make sure that refractory cement is used.
- J. The most common use of gas is with a burner ring and gas logs. If using natural gas, install Stone Age burner kit and connect to the gas line. Sample burner kits are shown in Figure 6.
- K. For an attractive fire, the burner ring can be covered with lava rock or decorative glass. Or, gas logs may be installed on a grate. In this case, it is not necessary to install fire brick

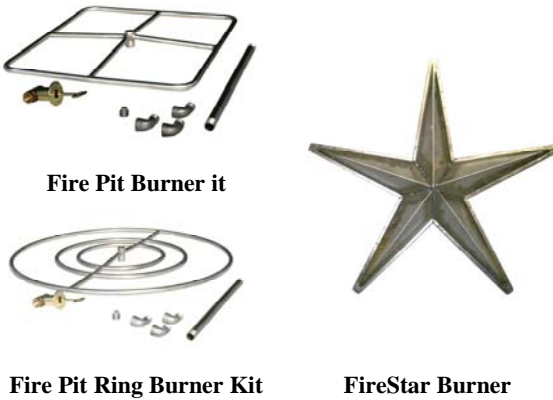


Figure 6. Fire Pit Burner Kits

4.0 Use

Once the fire pit is completed, wait at least 28 days before building a fire to give the cement adequate time to cure. This will provide ample time for any water residue to evaporate, eliminating the adverse reaction of the combination of water and fire. During this time, keep a cover over the fire pit to prevent collection of additional moisture.

Recommend using a grate in the fire pit when burning wood. This will permit air to circulate under the fire, resulting in complete burning.

WARNING: 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.

4.1 Selection of Wood

- A. Use of cured or seasoned wood is preferred.
- B. Most any kind of scrap wood can be used. However, scrap wood will produce sparks so use of a spark arrestor screen is recommended.
- C. Treated or painted wood, coal, or woods dipped in pine tar should not be used because they will leave a combustible residue.

4.2 Starting a Fire

A fire pit can bring many hours of enjoyment, comfort and warmth if operated and maintained properly. Certain safety precautions must be observed to eliminate the dangers associated with fire and provide a satisfactory, smoke free fire.

- A. Keep combustible furniture/pillows at least four feet from the fire pit.
- B. Never leave the fire unattended.
- C. Be extremely careful when adding wood and handling fireplace tools.
- D. Remove any excess ash from the fireplace. Excessive ash may reduce airflow. Some owners prefer to leave a small layer to insulate the cold refractory below the grate, helping fire starting.
- E. Crumble several newspapers across the fire area underneath the grate. Criss-cross kindling wood on top of the grate, above the newspaper.
- F. Lay three logs on the grate; two side by side and the third in pyramid fashion on top. Split logs will start faster. Make sure there is space between the logs for air circulation. As the air is heated, it is drawn upwards through the space between the logs, creating more combustion.

- G. As much as possible burn fire in the center of the fire pit and not directly against the walls. This will allow better airflow for the fire and help prevent over firing the unit.

CAUTION: Be extremely careful when adding wood to the fire. Do not permit wood to be higher than the edge of the fire pit. Use proper fireplace tools and wear gloves.

5.0 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 pleasure.

- A. Disposal of ashes - Do not let ash build up in the fire pit. Remove it at least after every other fire. Ashes should be placed in a metal container with a tight-fitting lid. The closed container of ashes should be placed on a noncombustible floor or on the ground, well away from all combustible materials, pending final disposal. If the ashes are disposed of by burial in soil or otherwise locally dispersed, they should be retained in the closed container until all cinders have thoroughly cooled.
- B. If the fire pit has been lined with firebrick, 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"; or when any piece of refractory larger than 2 inches in diameter becomes dislodged.

- C. Make sure the fire is extinguished before leaving the area. NEVER extinguish fire with water or any other liquid. Let the fire die out naturally or cover opening before leaving the firepit unattended directly after use until the fire and coals have completely went out and have been extinguished.
- D. Keep a cover over the fire pit when not in use to prevent collection of moisture. If the firepit has been exposed to excessive moisture or cold temperatures burn a small fire long enough to slowly dry the moisture absorbed into the concrete and masonry and slowly heat the unit up to normal operating temperatures. Sample Fire pit with cover is shown in Figure 7.



Figure 7. Fire Pit Cover
(Round Fire Pit Shown in This Example)

- E. It's recommended to water seal the exterior of the fire pit once construction is complete to protect the unit from absorbing 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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