WOOD FIRED OVEN

INSTRUCTIONS/DETAILS

SUPERIOR CLAY MASONRY OVENS ARE AVAILABLE IN 5 STYLES WITH COOKING SURFACE DIMENSIONS OF 24", 36", & 48"

Where the Appalachian Foothills meet the Tuscarawas River Valley lies a deposit of clay unlike anyplace else on earth. Superior Clay oven components are handcrafted from 100% pure Ohio fire clay. These ovens made from all natural materials provide the performance of high temperature professional grade wood fired ovens.

Superior Clay has developed components and a set of plans and instructions for the construction of these traditional ovens. Superior Clay wood fire ovens can be built alongside a Rumford Fireplace or as a standalone unit in your kitchen or in your backyard. The exterior of the oven can be finished with a variety of masonry materials including brick, stone, stucco or tile.

SUPERIOR CLAY CORP

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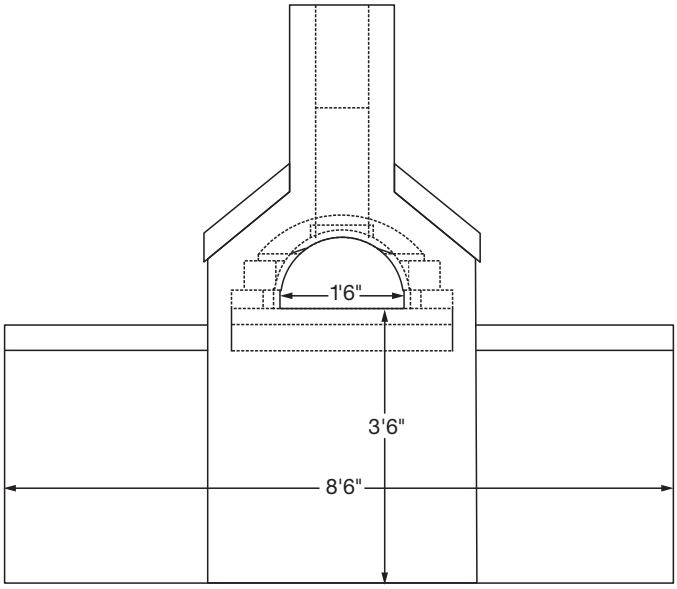
24" OLD STYLE

COMPONENTS

- 50 FIREBRICK FOR HEARTH (NOT INCLUDED)
- 27" DOME
- 18" ENTRANCE TUNNEL
- HEATSTOP II - TWO 10 LB. PAILS
- INSULATING CASTABLE - FOUR 50 LB. BAGS
- ENTRANCE COVER

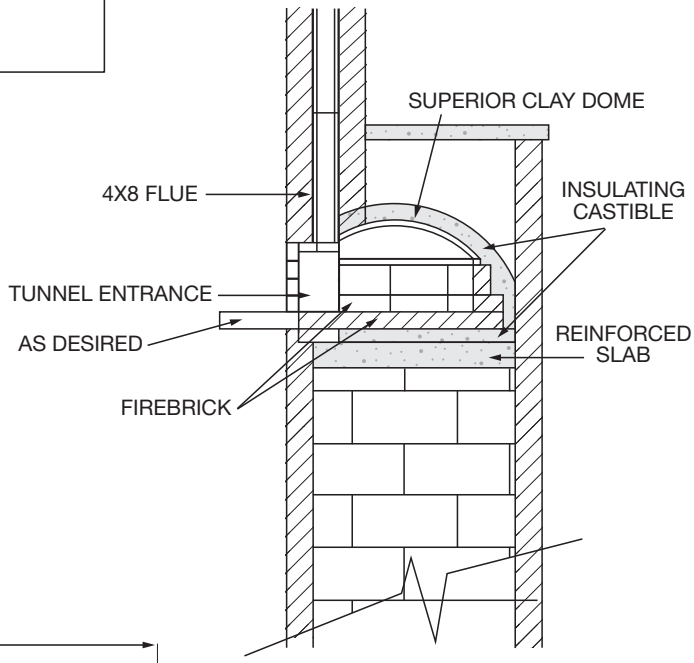
Additional materials such as brick, stone or block may be needed for base and surround.

24" OLD STYLE PLAN VIEW



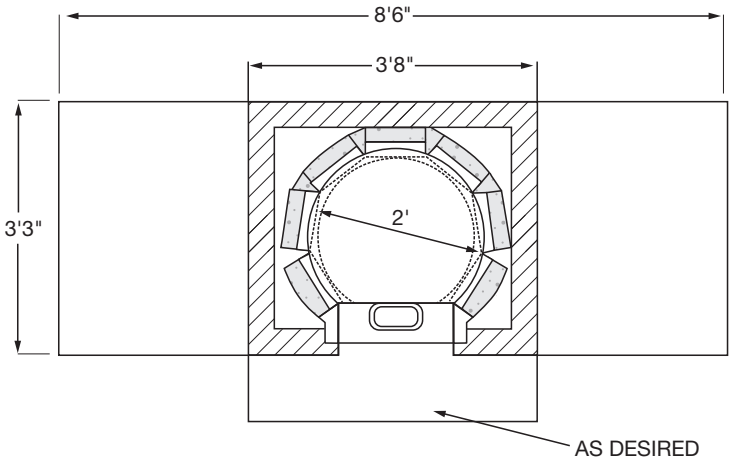
ELEVATION

FOUNDATION & FOOTING
TO MEET LOCAL CONDITIONS



SECTION/ELEVATION

FOUNDATION & FOOTING
TO MEET LOCAL CONDITIONS



STEP 1

Build masonry base at least 40" wide by 50" deep, and 38" high for a finished oven floor 42" above the kitchen floor or ground.

The inside of the oven is 24" in diameter and the walls will be about 8" thick so the base should be about 40" wide and 50" front-to-back to allow for a 12" counter or hearth extension in front of the oven entrance.

STEP 2

Cast a 2" thick layer of insulating refractory concrete on top of base and set the firebrick oven floor directly on the insulating refractory concrete.

STEP 3

Lay out a 24" circle on oven floor and set the entrance tunnel and 14 firebrick as shown using HeatStop II refractory mortar.

STEP 4

Set the 27" oven dome, the 18" entrance tunnel (with flue opening toward the dome) and the first flue tile all in HeatStop II refractory mortar.

Special note: The dome and sidewalls of the brick oven are likely to crack. Cracking of the dome is not structurally hazardous, and is necessary for natural expansion and contraction of the masonry dome, which will occur during extreme heat fluxuations.

STEP 5

Parge the sides and top of the oven with the insulating refractory concrete at least 2" thick.

STEP 6

If the oven is associated with a cooking fireplace or is part of a larger chimney mass, brick can be laid directly on the insulating concrete. If the oven is to stand alone, it can be stuccoed, plastered or finished with any non-combustible masonry material such as tile, brick or stone. Add more insulation over the 2" of insulating castable refractory. The more insulation, the faster the oven heats up and the longer it stays hot. This outer layer of insulation can be made with inexpensive perlite or expanded shale with a little Portland cement to bind it.

STEP 7

The 4" x 8" flue liner should be enclosed within a chimney with walls at least 4" thick of solid masonry. If the chimney is inside a house, it must conform to all applicable codes dealing with clearance to combustibles and height above the roof. If the oven is outside, the flue need only be enclosed in masonry as high as is desired and clear of combustibles.

A door without a hinge or entrance cover for the oven entrance is provided. It can be propped up slightly (to provide combustion air) at the outside of the entrance when a fire is burning in the oven and can be pushed in further to close off the flue to keep the oven warm longer after the fire has burned out.

24" NEW STYLE

COMPONENTS

- 36 FIREBRICK FOR HEARTH (NOT INCLUDED)
- 22" DOME
- 2 OVEN WALL SECTIONS
- 18" ENTRANCE TUNNEL (TWO PIECES)
- HEATSTOP II - TWO 10# PAILS
- INSULATING CASTABLE - FOUR 50# BAGS
- ENTRANCE COVER

Additional materials such as brick, stone or block may be needed for base and surround.

STEP 1

Build masonry base at least 40" wide by 52" deep, and 38" high for a finished oven floor 42" above the kitchen floor or ground.

The inside of the oven is 24" in diameter and the walls will be about 8" thick so the base should be about 40" wide and 52" front-to back-to allow for a 12" counter or hearth extension in front of the oven entrance.

STEP 2

Cast a 2" thick layer of insulating refractory concrete on top of the base and set the firebrick oven floor directly on the insulating refractory concrete. Oven outside diameter is 32"

STEP 3

Set the entrance tunnel (2 pcs) and wall sections (2 pcs) as shown using HeatStop II refractory mortar.

STEP 4

Set the 22" oven dome, and the first flue tile all in Heatstop II refractory mortar.

Special note: The dome and sidewalls of the brick oven are likely to crack. Cracking of the dome is not structurally hazardous, and is necessary for natural expansion and contraction of the masonry dome, which will occur during extreme heat fluxuations.

STEP 5

Parge dome with insulating refractory concrete at least 2" thick. Fill cores of side sections and entrance sections with insulating refractory concrete.

STEP 6

The oven can be stuccoed, plastered or finished with any non-combustible masonry material such as tile, brick or stone.

STEP 7

The 4"x8" flue liner should be enclosed within a chimney with walls at least 4" thick of solid masonry. If the chimney is inside a house it must conform to all applicable codes dealing with clearance to combustibles and height above the roof. If the oven is outside the flue need only be enclosed in masonry as high as is desired and clear of combustibles.

STEP 8

An entrance cover for the oven entrance is provided to help keep the oven warm. It can be propped up slightly (to provide combustion air) at the outside of the entrance when a fire is burning in the oven and can be pushed in farther to close off the flue to keep the oven warm longer after the fire has burned out.

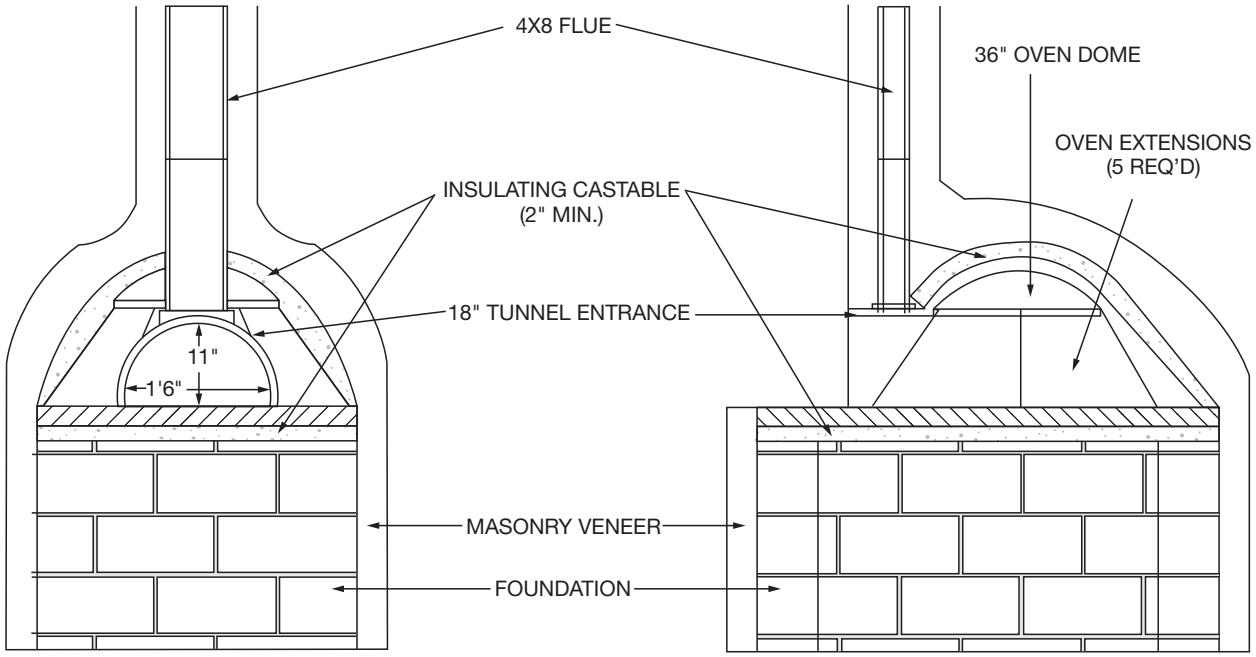
36" OLD STYLE

COMPONENTS

- 40 FIREBRICK FOR HEARTH (NOT INCLUDED)
- FIVE BASE SECTIONS
- 22" DOME
- 18" ENTRANCE TUNNEL
- HEATSTOP II - 50 LB. BAG
- INSULATING CASTABLE - SIX 50 LB. BAGS
- ENTRANCE COVER

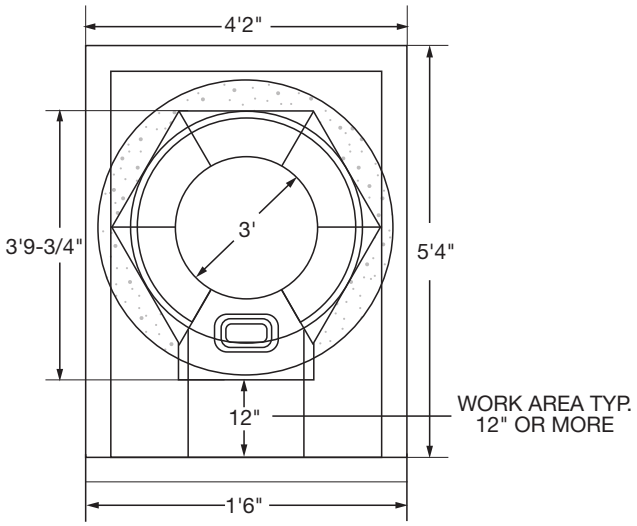
Additional materials such as brick, stone or block may be needed for base and surround.

36" OLD STYLE PLAN VIEW



ELEVATION

SECTION/ELEVATION



NOTE: OVEN DOOR IS PROVIDED FOR OPERATION OF OVEN.

STEP 1

Build masonry base at least 52" wide by 64" deep, and 38" high for a finished oven floor 42" above the kitchen floor or ground.

The inside of the oven is 36" in diameter and the walls will be at least 8" thick so the rectangular or rounded base should be at least 52" wide and 64" front-to-back to allow for a 12" counter or hearth extension in front of the oven entrance.

STEP 2

Cast a 2" thick layer of insulating refractory concrete on top of the base and set the firebrick oven floor directly on the insulating refractory concrete.

STEP 3

Lay out a 36" circle on oven floor and set the entrance tunnel and five base sections using HeatStop II refractory mortar.

STEP 4

Set the oven dome on top of the base sections in HeatStop II refractory mortar.

Special note: The dome and sidewalls of the brick oven are likely to crack. Cracking of the dome is not structurally hazardous, and is necessary for natural expansion and contraction of the masonry dome, which will occur during extreme heat fluxuations.

STEP 5

Parge the sides and top of the oven with the insulating refractory concrete at least 2" thick.

STEP 7

The 4" x 8" flue liner should be enclosed within a chimney with walls at least 4" thick of solid masonry. If the chimney is inside a house, it must conform to all applicable codes dealing with clearance to combustibles and height above the roof. If the oven is outside, the flue need only be enclosed in masonry as high as is desired and clear of combustibles.

STEP 6

If the oven is associated with a cooking fireplace or is part of a larger chimney mass, brick can be laid directly on the insulating concrete. If the oven is to stand alone, it can be stuccoed, plastered or finished with any non-combustible masonry material such as tile, brick or stone. Add more insulation over the 2" of insulating castable refractory. The more insulation, the faster the oven heats up and the longer it stays hot. This outer layer of insulation can be made with inexpensive perlite or expanded shale with a little Portland cement to bind it.

A door without a hinge or entrance cover for the oven entrance is provided. It can be propped up slightly (to provide combustion air) at the outside of the entrance when a fire is burning in the oven and can be pushed in further to close off the flue to keep the oven warm longer after the fire has burned out.

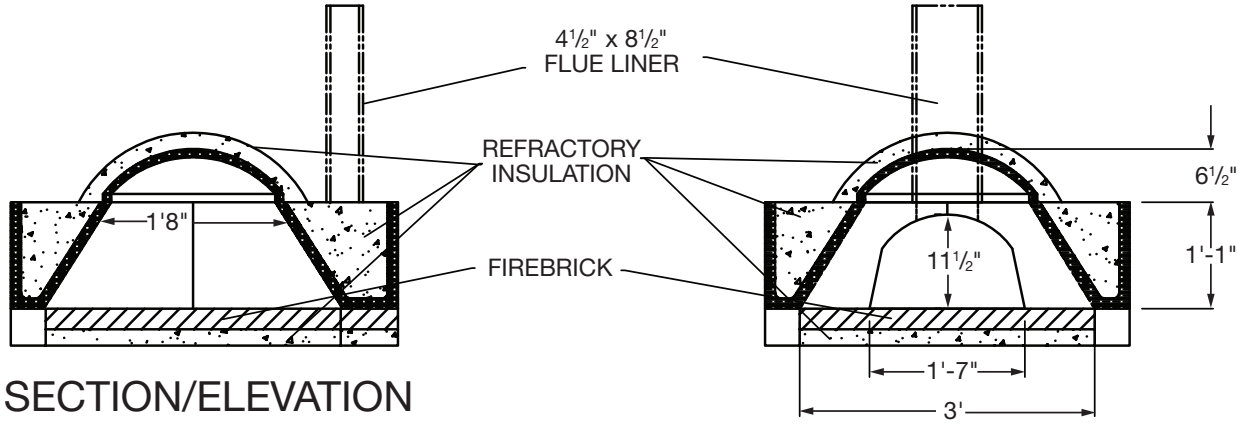
36" NEW STYLE

COMPONENTS

- 40 FIREBRICK FOR HEARTH (NOT INCLUDED)
- 2 SIDE WALLS
- 22" DOME
- 2- PIECE 18" ENTRANCE TUNNEL
- HEAT STOP 50 ONE 50 LBS BAG
- 10 BAGS OF 50# INSULATING CASTABLE
- ENTRANCE COVER

Additional materials such as brick, stone or block may be needed for base and surround.

36" NEW STYLE PLAN VIEW



SECTION/ELEVATION

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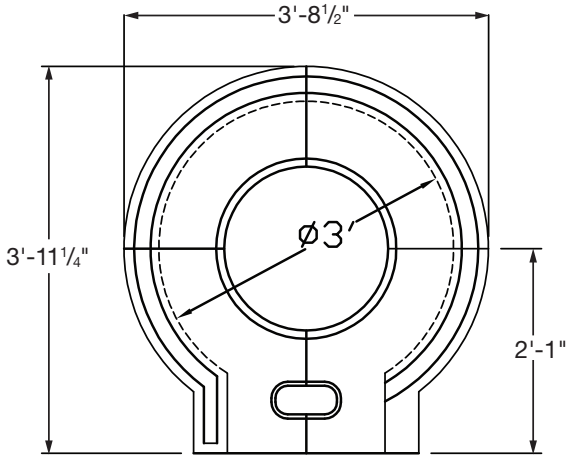


PLAIN VIEW

STEP 1

Build masonry base at least 52" wide by 64" deep, and 38" high for a finished oven floor 42" above the kitchen floor or ground.

The inside of the oven is 36" in diameter and the walls will be at least 8" thick so the rectangular or rounded base should be at least 52" wide and 64" front-to-back to allow for a 12" counter or hearth extension in front of the oven entrance.

STEP 2

Cast a 2" thick layer of insulating refractory concrete on top of the base and set the firebrick oven floor directly on the insulating refractory concrete.

STEP 3

Lay out a 36" circle on oven floor and set the 2-piece entrance tunnel and two sidewalls using HeatStop II refractory mortar.

STEP 4

Set the oven dome on top of the base sections in HeatStop II refractory mortar.

Special note: The dome and sidewalls of the brick oven are likely to crack. Cracking of the dome is not structurally hazardous, and is necessary for natural expansion and contraction of the masonry dome, which will occur during extreme heat fluxuations.

STEP 5

Parge dome with insulating refractory concrete at least 2" thick. Fill cores of side sections and entrance sections with insulating refractory concrete.

STEP 7

The 4" x 8" flue liner should be enclosed within a chimney with walls at least 4" thick of solid masonry. If the chimney is inside a house, it must conform to all applicable codes dealing with clearance to combustibles and height above the roof. If the oven is outside, the flue need only be enclosed in masonry as high as is desired and clear of combustibles.

STEP 6

If the oven is associated with a cooking fireplace or is part of a larger chimney mass, brick can be laid directly on the insulating concrete. If the oven is to stand alone, it can be stuccoed, plastered or finished with any non-combustible masonry material such as tile, brick or stone. Add more insulation over the 2" of insulating castable refractory. The more insulation, the faster the oven heats up and the longer it stays hot. This outer layer of insulation can be made with inexpensive perlite or expanded shale with a little Portland cement to bind it.

A door without a hinge or entrance cover for the oven entrance is provided. It can be propped up slightly (to provide combustion air) at the outside of the entrance when a fire is burning in the oven and can be pushed in further to close off the flue to keep the oven warm longer after the fire has burned out.

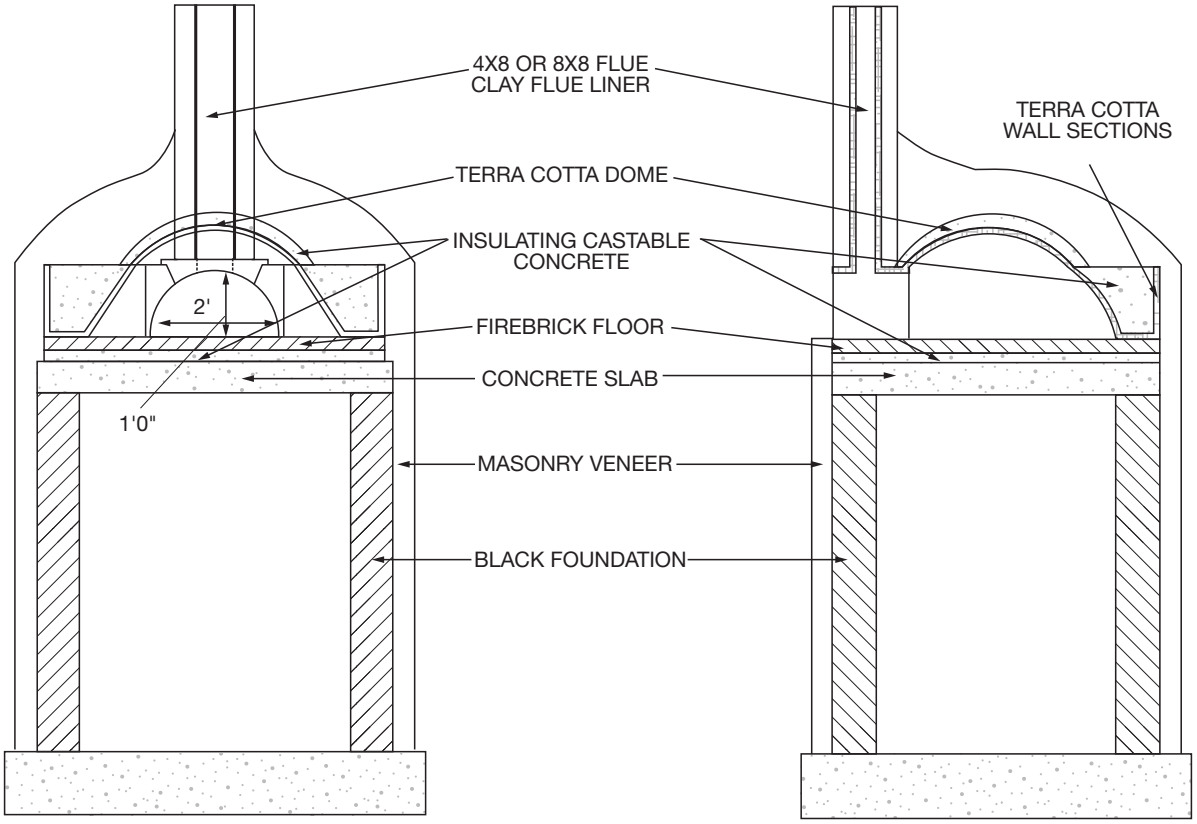
48" BRICK OVEN

COMPONENTS

- 85 FIREBRICK FOR HEARTH (NOT INCLUDED)
- 32" DOME
- OVEN WALL SECTIONS (EIGHT PIECES)
- 24" ENTRANCE TUNNEL (3 PIECES)
- HEAT STOP 50 TWO 50 LBS BAGS
- INSULATING CASTABLE - 20 50# BAGS
- ENTRANCE COVER

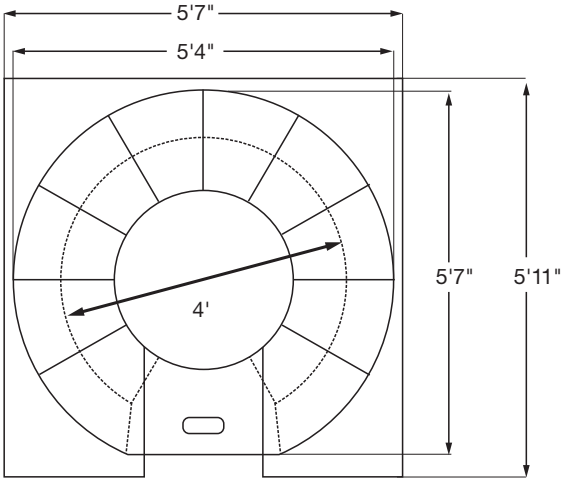
Additional materials such as brick, stone or block may be needed for base and surround.

48" BRICK OVEN PLAN VIEW



ELEVATION

SECTION/ELEVATION



STEP 1

Build masonry base at least 67" wide by 67" deep, and 38" high for a
finished oven floor 42" above the kitchen floor or ground.

The inside of the oven is 48" inside diameter. 67" depth will accommodate the oven. Allow additional depth as desired for counter in front of oven door.

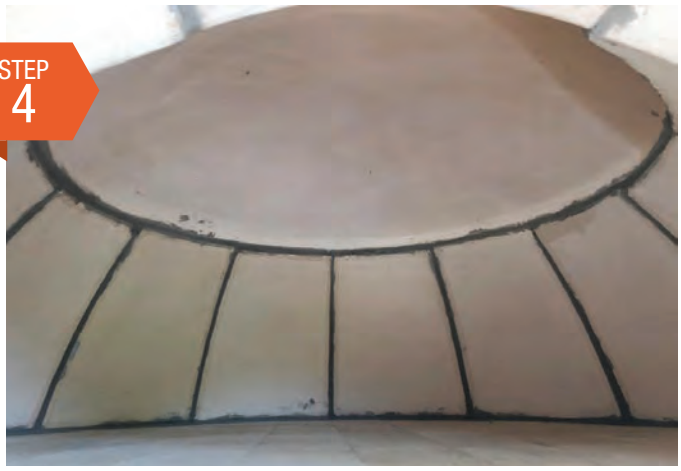
STEP 2

Cast a 2" thick layer of insulating refractory concrete on top of the base and set the firebrick oven floor directly on the insulating refractory concrete. Oven outside diameter is 65".

STEP 3

Set wall sections (8 pcs) and the entrance tunnel (3 pcs) as shown using HeatStop II refractory mortar.

STEP 4



Set the 32" oven dome, and the first flue tile all in Heatstop II refractory mortar.

Special note: The dome and sidewalls of the brick oven are likely to crack. Cracking of the dome is not structurally hazardous, and is necessary for natural expansion and contraction of the masonry dome, which will occur during extreme heat fluxuations.

STEP 5

Parge dome with insulating refractory concrete at least 2" thick. Fill cores of side sections and entrance sections with insulating concrete.

STEP 6

The oven can be stuccoed, plastered or finished with any non-combustible masonry material such as tile, brick or stone.

STEP 7

The 4"x8" flue liner should be enclosed within a chimney with walls at least 4" thick of solid masonry. If the chimney is inside a house it must conform to all applicable codes dealing with clearance to combustibles and height above the roof. If the oven is outside the flue need only be enclosed in masonry as high as is desired and clear of combustibles.

STEP 8

An entrance cover for the oven entrance is provided to help keep the oven warm. It can be propped up slightly (to provide combustion air) at the outside of the entrance when a fire is burning in the oven and can be pushed in farther to close off the flue to keep the oven warm longer after the fire has burned out.

BASIC FLATBREAD RECIPE

Using a bread machine, add the water and olive oil, then cover the liquid with flour Add the salt (half each in two corners), then make a small well in the middle of the flour and add the yeast. Start the dough cycle, which will last for roughly 90 minutes.

Divide the dough into four round balls and let rest for an hour.

Toss as you would a pizza dough, cover with olive oil, and toppings of your choosing (light tomato sauce, oregano and a sprinkling of salt is common).

Cook in your brick oven for 2 minutes. Enjoy!

INGREDIENTS

1.5 c water
4 tbsp olive oil
4 c bread flour
2 tsp salt
2 tsp dry active yeast

STEAKS

Burn a hot fire for 1.5 - 2 hours. Let a bed of coals burn down red, about 4" deep, and grill steaks, chops, fish and chuck roasts, right on the red bare coals. A few onions are put in 20 minutes prior to grilling, and green chiles or red bells about 5 minutes prior to steaks. Steak cooks in 3-5 minutes depending on size. Long tongs are needed to flip the meat. Spices, rubs, and marinades are not recommended. High heat will only char the outside. Instead, add flavor to the meat after it is cooked. Steaks are best done rare to medium in this operation.

PIZZA MARGHERITA

Tomato Topping

Slice the drained tomatoes open, and use your fingers to scrape away the seeds. Drop the pulp into a bowl and crush with a fork into bite-sized pieces. Stir in the garlic, basil, salt, pepper, and oil.

Spreading Your Sauce

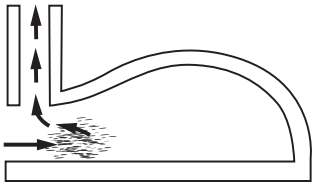
Leaving ½ inch of the circumference free all around, spread 2 to 3 tablespoons of the tomato topping over the pizza. It is not supposed to be a deep layer, just a covering. Scatter ⅓ to ½ cup of mozzarella over the surface, again, not a heaving coating, just a scattering. End with 2 tablespoons of parmesan sprinkled over all. Bake at once to avoid dough sticking to the peel.

Cooking times vary, depending on temperature of oven. Ovens that cook at 700 degrees can cook a pizza in as fast as 3 minutes. Watch your pizza, rotate it as it begins to bubble, remove when toppings look cooked, and crust begins to brown.

INGREDIENTS

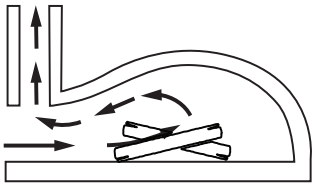
1.5 lbs peeled Italian plum tomatoes, drained
1 to 2 garlic cloves, peeled and finely chopped
8 Large fresh basil leaves, torn into ½ inch pieces
Salt to taste
½ tsp ground black pepper
8 oz fresh mozzarella, cut into 3/8 inch pieces
½ c grated parmesan
4 tbsp olive oil

COOKING IN A BRICK OVEN

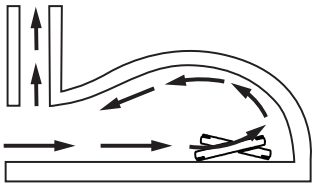


The Superior Clay Brick Oven is a "black oven," meaning that it is heated by building a fire in the oven itself.

Some foods, such as pizzas, cook fast in a hot oven (3 minutes at about 700˚F) and are cooked in the oven while the fire is still burning. When ready to cook, throw some corn meal on the oven floor and bake right on the hot firebrick. The oven door can be placed near the outside of the entrance to keep the oven hot and not so far in as to block the flue while the fire is still burning.



French bread is traditionally baked in a periodic oven with a moist atmosphere and declining temperature. Get the oven up to about 400˚F. Rake out the fire and mop the hearth with a wet towel. Load the oven with enough bread to fill the oven to keep the moisture high. Push the oven door all the way in past the flue entrance to seal in the moist heat until the bread is baked.



Meats and roasts can also be seared and roasted in a periodic oven with declining temperature after the fire has been raked out.

The oven can be used as a smoker by keeping the temperature low, using the right wood and maybe a pan of liquid, depending on the recipe. And, of course, the oven is a great place to warm plates as it continues to cool.

BUILDING FIRES

First, at least 24 hours after building the oven, build a small fire to break in the oven. Try to build up the temperature inside the oven at a rate of 50˚F per hour up to about 500˚F. The break-in fire will drive out any moisture, cure the refractory mortar and minimize the chance of damaging the oven. To build a fire, start with a small kindling fire in the front of the oven under the flue. Add wood when the fire is burning well, and gradually move the fire back into the oven. Use the oven door (where you are not adding wood) placed out near the front of the entrance tunnel to keep heat in the oven but not block the flue while the fire is burning.

Masonry ovens have been built in American homes since the first colonists landed here. Oven traditions date back much farther – to at least Roman times. Now you can have an authentic brick oven in your home or backyard. Superior Clay makes components and provides plans and instructions for building these traditional masonry ovens. Bread and Pizza baking purists know that there is no substitute for these ovens made of bricks.

SUPERIORCLAY.COM

SUPERIOR CLAY CORP

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Superior Clay occupies a 65-acre site in Tuscarawas Valley in Uhrichsville, Ohio. We have been manufacturing clay products for architects and builders for over 85 years. Superior Clay has the knowledge, the craftsmen and the facility to produce the highest quality architectural terra-cotta in any quantity.