

Construction of the Le Panyol Wood-Fired Oven





Second Edition 2008

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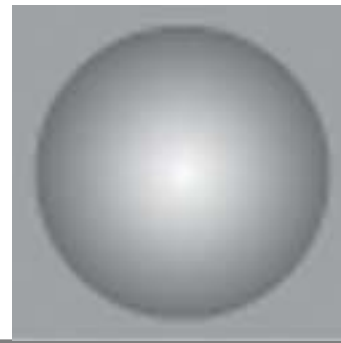


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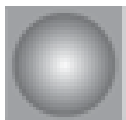
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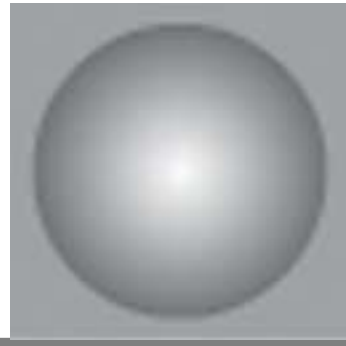
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Preface



Just south of Lyon, on the banks of the Rhone River, lies a storied deposit of “Terre Blanche”—the “White Earth” of Larnage. This special clay, exceptional in its purity and composition, bears two of France’s greatest treasures: the renown Hermitage wines and the revered wood fired ovens of the French baking tradition.

“Terre Blanche” consists of just two all natural, 100% organic ingredients: feldspar and kaolin. It is the result of rare geologic conditions in which a prehistoric Mediterranean flood slowly degraded an ancient deposit of granite over a period of thousands of years.

The pure “White Earth”—available from a single quarry in the entire world—yields both the distinctive earthy tones of the Hermitage wines and the unique thermal properties that make Le Panyol wood fired ovens so special.

Le Panyol harvests the material with care and consistency, removing it from the earth’s surface without the use of explosives or invasive mining techniques. Traditional production methods endure today, passed down from generation to generation throughout the company’s 150-year history.

The final product today, as it was in 1840, is always a beautiful, highly efficient, 100% organic wood fired oven core. No additives, chemicals or catalysts are involved in the creation of any of the individual all-natural earthenware oven elements. For as the French say, “Du feu sort le four, Du four sort le pain”—From the oven born of fire comes the bread born of fire.

When one travels in France, it is possible to

see and enjoy the products of many, many traditional wood fired ovens. From the smallest villages to the largest cities, in private homes, communal ovens and commercial bakeries, the name etched just inside the oven door will almost inevitably indicate that it is composed entirely of the famous “Terre Blanche de Larnage”—Now available exclusively from Le Panyol.

Terre Blanche is:

- **Pure-** You can bake the best breads, crispy, chewy pizza crusts, and delectable roasted meats right on the hearth tiles.
- **Efficient-** By balancing the stored and radiant energy of a fire, a Le Panyol comes online quickly (less than 45 minutes) and holds heat longer, consuming 1/2 to 1/4 of the fuel required by other ovens.
- **Durable-** With no mortar joints and a superior resistance to thermal shock, each oven is built for the enjoyment of generations to come. Many 100-year-old ovens are still in production today in traditional French bakeries.
- **Versatile-** It has been said that a bread oven is a pizza oven, but a pizza oven is not a bread oven. We say, “Why stop at pizza and bread?” The “White Earth” hearth is ideal for roasting meats and vegetables, too.
- **Tested and True-** “Terre Blanche” has been quarried for the production of earthenware cooking vessels since the days of the Roman Empire—over 1000 years!

As the exclusive North American Le Panyol importer, the Maine Wood Heat Company is proud to bring an authentic, artisan crafted, 100% organic wood fired oven core to the United States and Canada.



Introduction

LE PANYOL OVENS AND THE LEGACY OF THE ROMAN EMPIRE

Fire: The most primal element of the human experience. Universally compelling, it draws us near with light and warmth, offering comfort, safety and sustenance. Cooking with fire is the combination of sacred ritual and survival, and ensures our continued survival as a species.

When our ancient ancestors began to render their food more digestible and, of course, more palatable with fire, they took a giant step forward. The enduring artifacts of history, the spit, tripod, brazier and earliest of all simple ovens, bear testament to the primal need and desire to harness the energies of fire in ever-more sophisticated ways.

What we have left of the earliest ovens is just enough to learn about the social structure of the communities that used them. Vitruvius, a Roman historian, recorded the shape and proportions of the ovens in use during his time. Little has changed in the overall design of wood burning ovens since Roman times, mostly because little has changed in the way wood burns.

Any fire requires oxygen to burn, and in turn it must also be able to expel the products of combustion. Therefore, an oven must be designed to “respirate” evenly, efficiently feeding oxygen to the fire while simultaneously discharging exhaust.

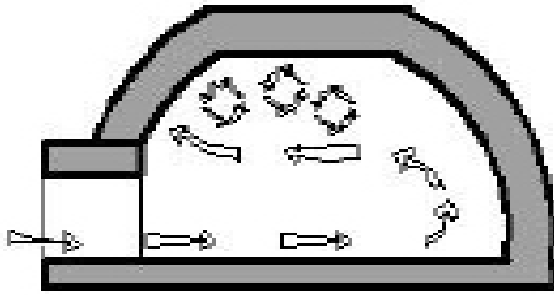
Every simple, unassuming Le Panyol wood fire oven core is actually the product of precise proportions and thermal mathematics. The size and height of the door relates directly to the oven chamber depth and height, which allows the fire to draw fresh air in over the hearth to the back of the oven. There, a happily fed fire expels flame

and hot exhaust gasses fully and evenly over the dome, warming it to provide reflective and radiant heat for cooking and baking. The heat then rushes along the ceiling, coming forward in order to vent through the throat at the front top edge of the oven entrance. The result of these carefully refined proportions is a fire that burns strong and clear, evenly warming the hearth and dome with radiant energy while simultaneously fostering perfect convection airflow within the oven chamber.

An oven with too low a ceiling will force the incoming oxygen against the outgoing exhaust, creating turbulence that inhibits both flows. The result is a fire that fails to burn vigorously and instead smolders weakly at the back of the oven. Conversely, a ceiling that is too high will not give the hot gasses enough downdraft to ensure even distribution and venting. In such cases, the fire will actually smother itself with its own exhaust.

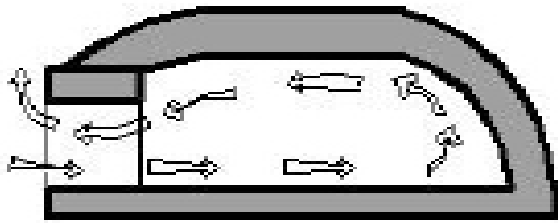
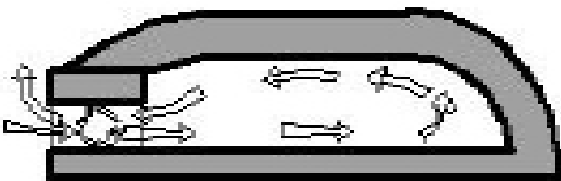
Over the course of 150 years, Le Panyol has adapted the original proportions devised by the Romans to modern culinary standards. In the process, Le Panyol has moved from creating ovens composed of individual “refractory” bricks made of the “Terre Blanche” to producing a modular core kit that is easy to assemble and outperforms its predecessors.

The new kits are a testament to the reputation of “Terre Blanche” de Larnage as the optimal material for any and every type of cooking and baking. For the better part of 1,000 years the clay drawn from the earth in this one special spot in one special corner of France has been dried and fired to create an earthenware product that is uniquely “semi-insulative.” This means that it is of balanced density and porosity, and has the capacity to store



and conduct thermal energy simultaneously. A modest fire in a Le Panyol initially warms the oven cavity while also charging the masonry mass surrounding it with stored energy for prolonged discharge. As a result, your Le Panyol comes to temperature quickly and delivers enough extended heat to cook multiple course dinners and bake several rounds of bread per firing.

Each and every Le Panyol brings together the best in experience and innovation, tradition and modern design to deliver an outstanding wood fired culinary experience time and time again.



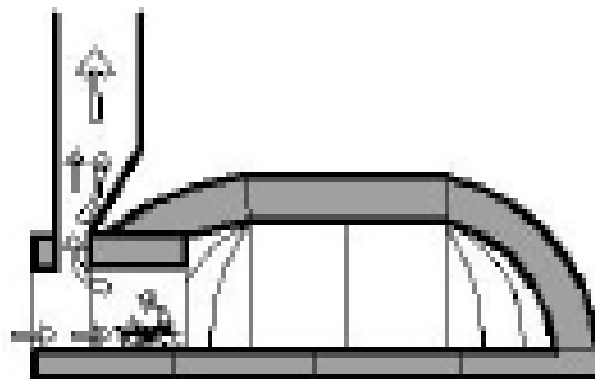
From top to bottom: too tall, too short, just right

Le Panyol “Core” Values

The Le Panyol wood fired oven is ideal for cooking truly exceptional pizzas, meats, vegetables, stews, and of course, baking the best artisan breads and pastries. Using the oven is easy!

The process is simple:

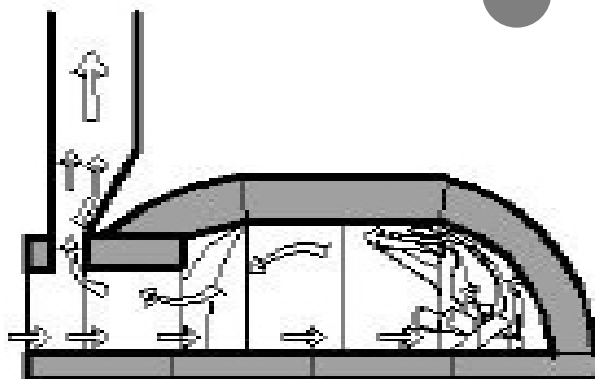
1. Fire your oven—Light a fire using the Official Le Panyol Instructions (available for download on the “Creating Your Oven” page at www.mainewoodheat.com). Once the fire has been established and pushed to the back of the oven, the oven comes up to temperature with minimal fuel. This is the perfect time to roast peppers and other vegetables right on the hearth.
2. Pizza—You’ll know the oven is ready to cook when the “Terre Blanche” returns to its original pure white. Now you can cook delicious pizzas in less than two minutes!
3. Baking—Remove the coals from the oven and allow the temperature to stabilize. You can begin baking many artisan breads at 550 degrees and the heat from a single fire in the evening will often provide enough “thermal charge” to bake bagels the next morning!



1



2



3

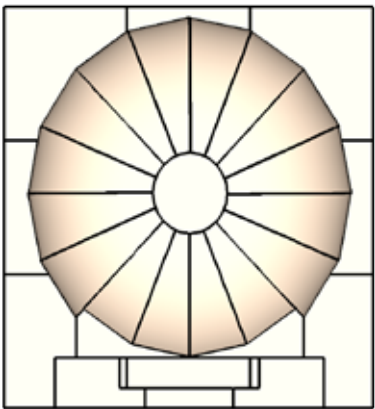
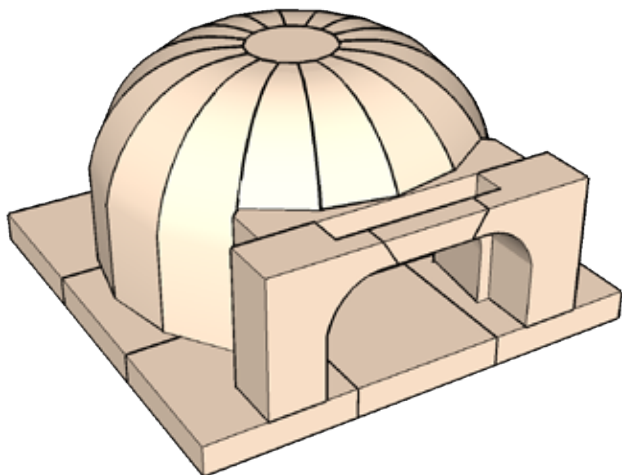
Start the fire near the oven door. Add wood gradually and push the embers towards the rear as the fire progresses to achieve even heating of the oven.



Le Panyol Ovens cores

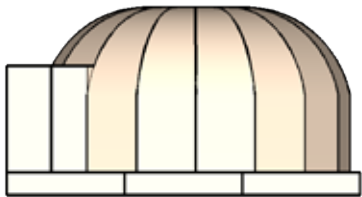
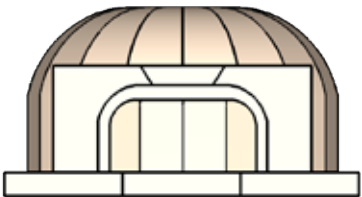
The domestic ovens are designed for passionate home bakers and gourmets. Models 66, 99, 83 and 100 offer the performance of professional grade ovens in a size that can be easily integrated into any kitchen or backyard.

Le Panyol® Model 66

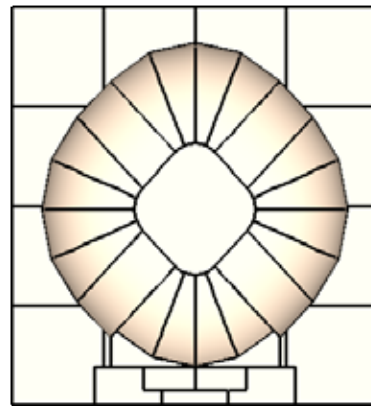
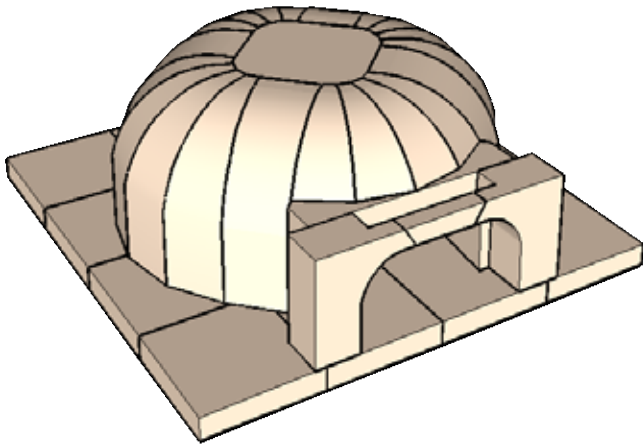


Specifications

Inside Diameter	26"
Weight	838 lbs
Hearth	39 3/8" x 39 3/8"
Total Height	19 5/8"
Inside Height	12 1/4"
Cooking Surface	3.68 ft2
Dome Thickness	4 1/8"
Door Opening	8 5/8" x 16 7/8"

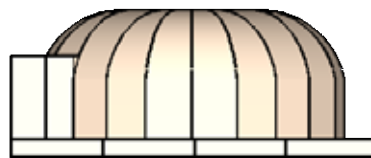


Le Panyol® Model 83

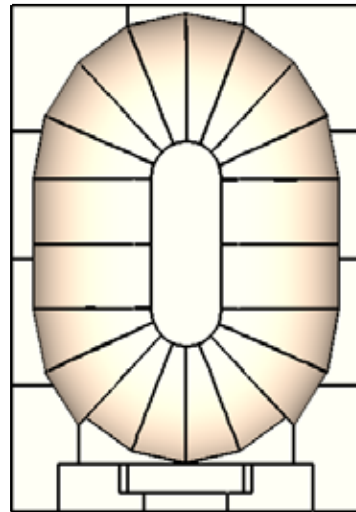
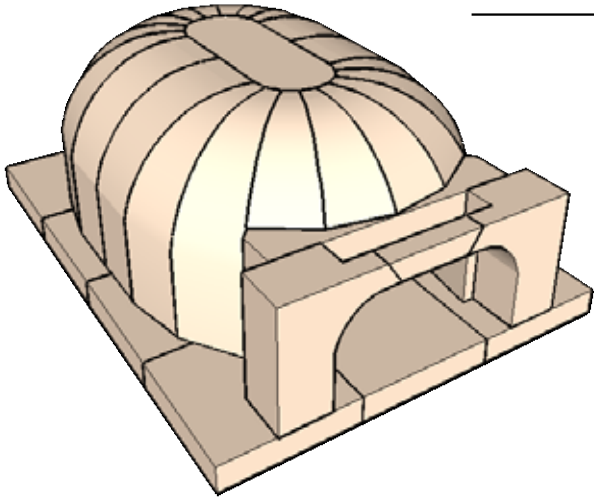


Specifications

Inside Diameter	32 5/8"
Weight	1234 lbs
Hearth	52" x 52"
Total Height	19 5/8"
Inside Height	12 1/4"
Cooking Surface	5.8 ft2
Dome Thickness	4 1/8"
Door Opening	8 5/8" x 16 7/8"

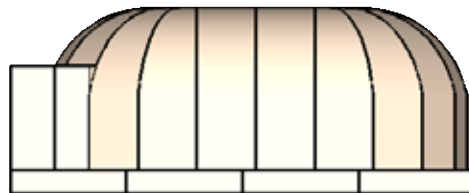


Le Panyol® Model 99

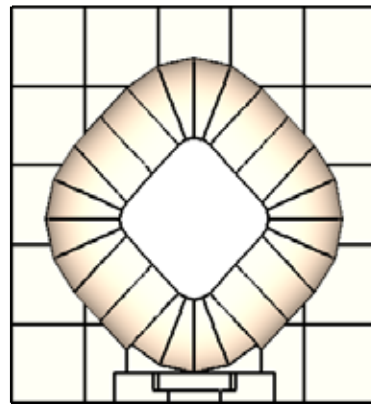
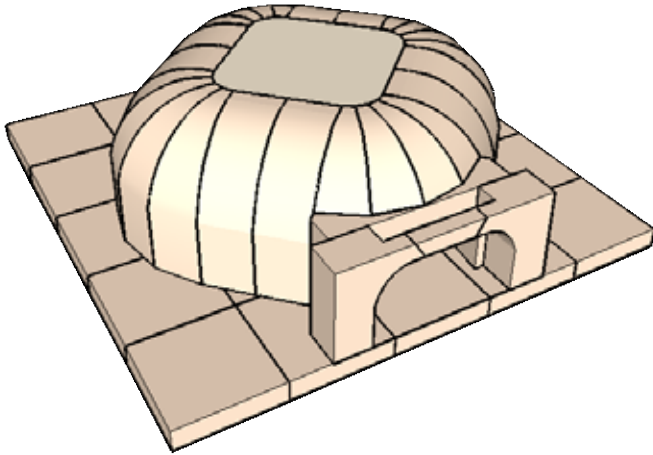


Specifications

Inside Diameter	26" x 39"
Weight	1124 lbs
Hearth	39 3/8" x 52"
Total Height	19 5/8"
Inside Height	12 1/4"
Cooking Surface	6.03 ft2
Dome Thickness	4 1/8"
Door Opening	8 5/8" x 16 7/8"



Le Panyol® Model 100



Specifications

Inside Diameter	39 3/8"
Weight	1805 lbs
Hearth	66" x 66"
Total Height	19 5/8"
Inside Height	12 1/4"
Cooking Surface	9.9 ft2
Dome Thickness	4 1/8"
Door Opening	8 5/8" x 16 7/8"



Notes

Design and construction

What your wood fired oven will look like is 100% up to your imagination. In this chapter you will learn the basics of oven design and how to get the most from your Le Panyol.

Square vs. Domed Facade:

It's best to first determine the basics of your oven's appearance. The two traditional designs are the square façade and the domed façade.



CONSTRUCTION: UNDERSTANDING THE FUNDAMENTALS

This section covers the construction of standard masonry foundations and oven stands (brick, block & mortar). Alternatives are available, such as structural steel stands and mobile oven trailers—please consult Maine Wood Heat Co. for customized construction options.

First, A Note on Thermal Mass

Assessing the appropriate amount of thermal mass is a very important part of constructing your oven. The walls of each Le Panyol oven core model (4 1/2" thick in domestic ovens) provide an initial thermal bank to absorb the energy of the fire. In casual use such as family pizza parties and home baking the thermal storage potential of the oven core components along with the standard 2 1/2" of added insulation (for insulation specifications see the core construction portion of this manual) is ample.

To achieve maximum efficiency for daily use, the addition of extra mass and insulation beneath the oven hearth tiles and on top of the oven walls is necessary. This is accomplished with "grog," a sand-like insulator that serves to enhance the "battery" of the oven, which when charged with heat extends baking and cooking time and productivity (available in our "Installation Accessories Package").

Le Panyol has determined that an oven is most efficient when the additional mass is equal to the mass of the core components (4 1/2" walls=4 1/2" thickness of additional mass). Using the official Le Panyol "Terre Blanche" grog—the same material used in the cores—also ensures consistent thermal properties throughout, resulting in 30% greater efficiency.

CALCULATING THE HEIGHT OF YOUR HEARTH

The first step in building the ideal oven is to determine the perfect hearth height for the chef or baker. The height of the oven hearth should be determined by the end user for his/her comfort and convenience. Traditional oven hearths are usually at a height of 40"-48" above the floor. When planning your oven, first determine the oven hearth height that you desire. For the casual user the total hearth thickness (hearth tiles + the Super Isol rigid insulation) measures 5 1/2". The slab supporting your Le Panyol oven will take up an additional 6". This 11 1/2" (hearth tiles + Super Isol + support slab) should then be subtracted from the total desired hearth height to determine height of the actual oven stand.

For the owner who plans to use his or her oven on a daily basis, the addition of 3" of grog must be accounted for in order to determine the oven stand height. In this case, the total hearth thickness (hearth tiles + grog + Super Isol rigid insulation) measures 8 1/2", which when added to the 6" support slab results in 14 1/2" to be subtracted from the total desired hearth height.

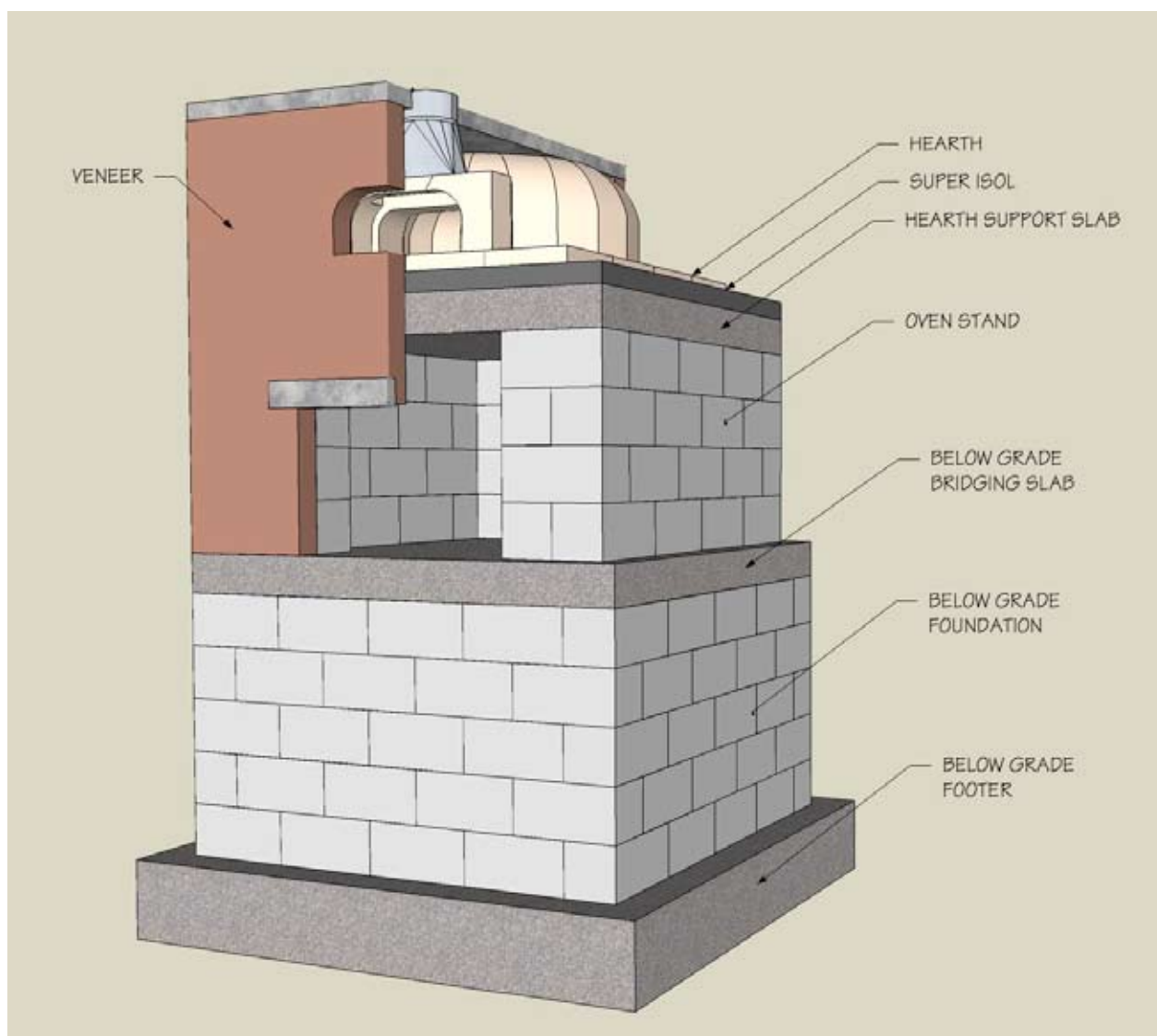


The proper hearth height makes for a happy baker.baker.

THE HEARTH SUPPORT SLAB

The dimensions of the oven core, hearth tiles, insulation, hearth support slab and veneer relate to the size of your oven footprint, stand, foundation and footing. When designing your oven, the hearth support slab is a good place to start. The support slab is the table top that will sit atop your oven stand, holding your oven core and a layer of insulation. You can find the recommended hearth support slab dimensions for your specific oven model in the schematic diagrams in the back of this manual.

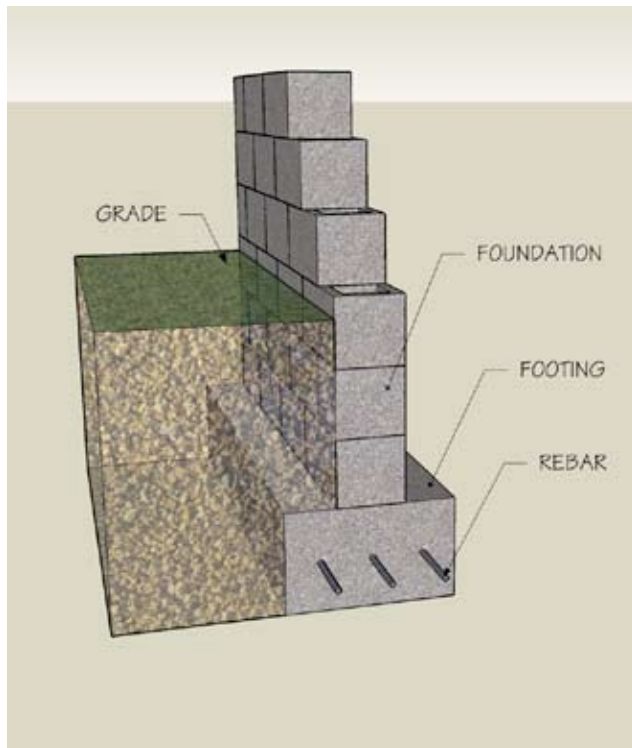
In almost all scenarios the length and width of the support slab are equal to the corresponding dimensions of the oven stand (the block portion, not including the veneer). Once the hearth support slab dimensions are established, veneer dimensions can be re-added to help determine the final oven stand dimensions (the oven footprint). The length and width of the footprint should be equal to the foundation dimensions, which will in turn be exceeded by the footing by 6" on all sides.



FOOTINGS AND FOUNDATION

Footing Options: Outdoors

All outdoor masonry constructions including walls, fireplaces, and ovens, require a properly reinforced concrete footing. Masonry footings consist of 12" of reinforced concrete placed on compacted or undisturbed soil. A foundation generally extends beyond the wall or construction they are intended to support by 6" on all sides. Depending on climate and/or site variables one of two footing options may best apply to your project.



Below Grade Footing:

Exterior oven installations in cold climates must take frost levels into account. Such footings should be constructed 1' below the maximum frost line (check with your local building inspector for the depth of your frost level). With the total layout of your oven in mind, your footing should extend 6" beyond the footprint of the oven in all directions (footprint values for each oven model are also available in the oven schematic section). Below grade footings should

measure 12" thick with 2 parallel layers of 1/2" rebar laid within the upper and lower third of the concrete mass. Corner junctions of rebar should be secured with tie wire. Additionally, L-shaped sections of 1/2" rebar should be centered and directly bedded in the pour every 8-16" and should protrude from the upper surface of the footing by a minimum of 6".

Floating Slab:

On high well-drained ground, a 12" thick floating slab may be substituted for a full footing and below grade foundation. A floating slab should be placed atop 2" of rigid foam insulation in addition to at least 1' of well drained, compacted and leveled crushed stone or gravel.

Additionally, a floating slab should be reinforced with (2) layers of 1/2" rebar placed in the upper and lower thirds of the pour and laid in a 6" grid pattern.

Footing Options: Indoors

Use the same thickness and width guidelines outlined in Below Grade and Floating Slab sections, understanding that frost precautions are usually unnecessary for interior installations. Please consult with your local contractor regarding structural aspects and code specifics relating to your oven project.

FOUNDATION:

The foundation is the structure below the oven stand and atop the footing. (While the portion of masonry that supports the oven above ground is technically a foundation, for simplicity sake we'll call it the oven stand.) It is generally constructed from concrete block.

The foundation layout should measure the same as the outer dimensions of the oven footprint. It should be securely fastened to the footing by filling each block cell where a vertical section of rebar protruds from the footing with mixed

concrete. Some jurisdictions may require that vertical and horizontal rebar be carried throughout the entire foundation structure-- please consult with your local contractor

Below grade foundation applications generally stop at grade or ground level. A concrete bridging slab of the same dimensions as the foundation may be poured to provide a floor for a wood storage area and a dry solid zone beneath the oven stand. Alternatively, gravel/stone can be used to fill in the void to ground level. The oven stand begins on top of the foundation.

THE OVEN STAND:

This is the portion of the structure below the support slab and above the foundation. In applications where a floating slab is used in place of a below grade footing and foundation, the stand grows directly from the slab.

The stand may be constructed from concrete block, brick, or steel. Stone is not a good structural material and should only be used in veneer applications.

In most stand installations where brick or stone is chosen as the veneer, the stand is first built from block and then surrounded later. It is important to remember that the block portion of the stand must be built undersized in order to accommodate the veneer.

POURING THE HEARTH SUPPORT SLAB

Once the oven stand is complete the hearth support slab will need to be formed, supported and poured to a finished thickness of 6". It is necessary to add a layer of 1/2" rebar tied on a 6" grid in the lower third of the pour. In some cases the addition of an ash dump may require additional forming

(please see below).

Allow 24 hours of cure time prior to continue work atop the support slab. Slabs spanning large distances may require intermediate support from underneath. Please consult your local contractor and codes for further information pertaining to structural concrete requirements.

A FEW LAST CONSIDERATIONS

ASH DUMPS:

Ash dumps are recommended for all indoor applications. Channels can be easily be formed into the support slab and notched into the front centered hearth tile and Super Isol of any model or placed in front of the hearth tiles to accommodate a dump. In ovens intended for daily use (with extra mass), a retainer equal to the grog layer thickness will need to be installed around the channel to prevent grog from spilling out from below the hearth. Non-combustibility and proper venting of such an ash pit is essential because live coals still emitting carbon monoxide may be raked into the ash pit.

STONE HEARTHS:

Aesthetics and stone hearth shelf extensions are also explored on www.mainewoodheat.com and are in the purview of the owner, baker, architect, mason and designer.

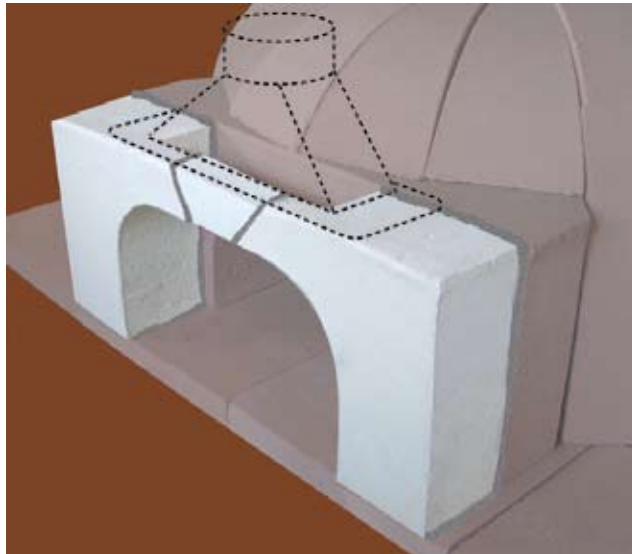
FINAL DIMENSIONS:

All dimensions described in this manual (aside from the oven dome and hearth specifications) can be modified somewhat in order to integrate an oven into almost any setting. All such modifications in design should be carried out by a certified professional. Maine Wood Heat Co. masons are available for specialized design work on a contract basis.

AFTER CONSTRUCTING THE CORE:

SMOKE THROAT ELEMENTS AND ADAPTORS

For the American market, Le Panyol has developed a second set of arched door elements, also made of Terre Blanche. When mounted, this new set of paired elements forms the smoke throat, a rectangular opening that measures 3 1/4" x 11". To complement these new elements, the Maine Wood Heat Co., has designed and developed a heavy gauge stainless steel adaptor to be mounted with tap con screws and high temp silicone or refractory mortar to the top of the door and throat elements. The adaptor makes the transition from 3 1/4" x 11" to an 8" round in 10" height. Using locally available elbows and stainless pipe, the exhaust can be vented in any direction, into either a masonry chimney or a pre-fab chimney.



CHIMNEY SUPPORT

It is not recommended that a heavy masonry mass be built resting on any part of the masonry core. Any masonry chimney built should be supported by the veneer walls, not by the oven core. If a short (2' to 6') masonry chimney is built directly above the throat and supported by angle iron and the veneer walls, a standard clay flue tile 8.5" x 12.5" can be centered

over the throat and then rest on the refractory elements.

Flue tiles should be set with refractory mortar and be free to move relative to the surrounding masonry.

CAPPING & WEATHERPROOFING

Outdoor ovens do not require a chimney damper but will benefit from a chimney cap.

THE TERRE BLANCHE OVEN CORE AND HEARTH ELEMENTS MUST BE PROTECTED AT ALL TIMES FROM MOISTURE (RAIN & SNOW). IF THE CORE GETS OVERLY WET IT CAN BE SUSCEPTIBLE TO CRACKING FROM FROST OR STEAM EXPANSION. PROTECT YOUR LE PANYOL BY CREATING A WATERPROOF ROOF OVER THE OVEN AND CAPPING YOUR CHIMNEY.

DAMPERS

Indoor ovens benefit greatly from a damper, which serves to assist in draft regulation and limit heat loss when the oven is not in use. A standard cast iron pivoting stove pipe damper or airtight spring loaded chimney top damper may be used. Custom dampers can also be fabricated.

FLUE INFORMATION

See model specific UL information at the end of this booklet.

Notes

Assembly of the Le Panyol oven core: Models 66 & 99

The Domestic family of
le Panyol oven cores are
exceptionally quick and easy
to assemble.

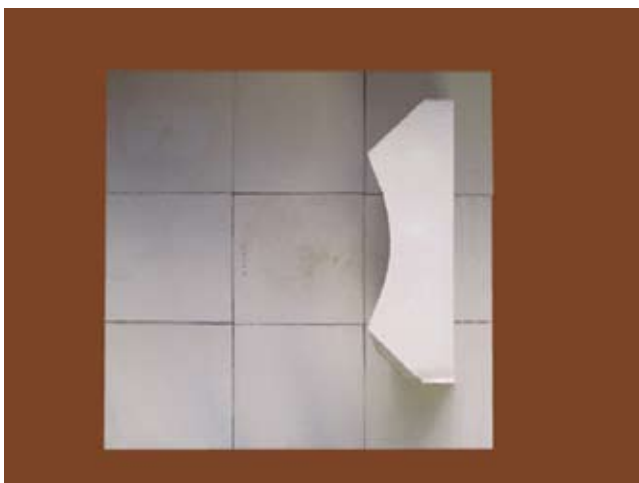
1

First, debur the pieces of the oven with a grinding stone. Then place the hearth tiles and ensure that they are level.



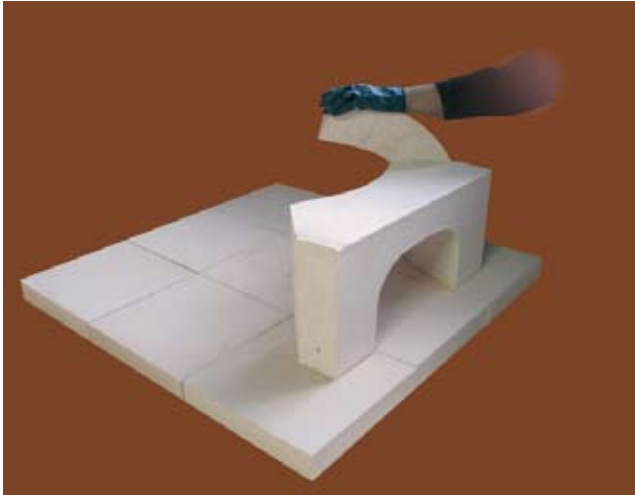
2

Center the oven entry $5 \frac{1}{8}$ inches from the front edge of the hearth (to accomodate the smoke throat elements and $\frac{1}{8}$ " mortar joint added later).



3

Starting on one side of the oven entry, place the voussoirs. Support each voussoir as necessary with a piece of wood.



4

Chock these two voussoirs with 12" pieces of wood first. The inside surface should be flush with the inside surface of the doorway piece.

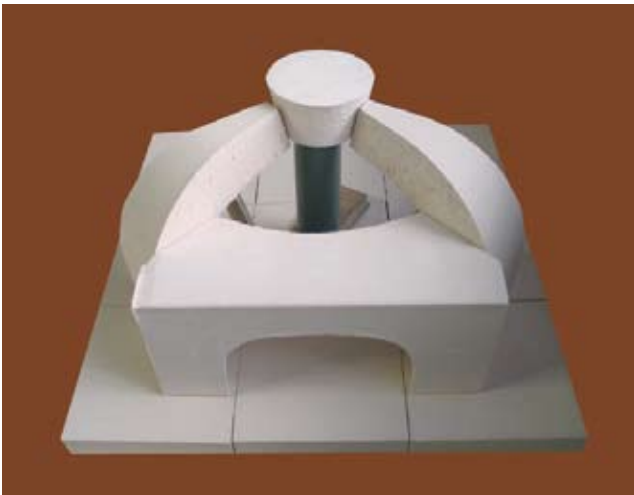


5



Put the key stone in place on top of a stable 12 1/2"-13" support. In order to ensure that the lower surface is at the same level as the inside of the roof, use a support of fixed length on top of a few removable pieces (shown here) to allow for keystone height adjustments.

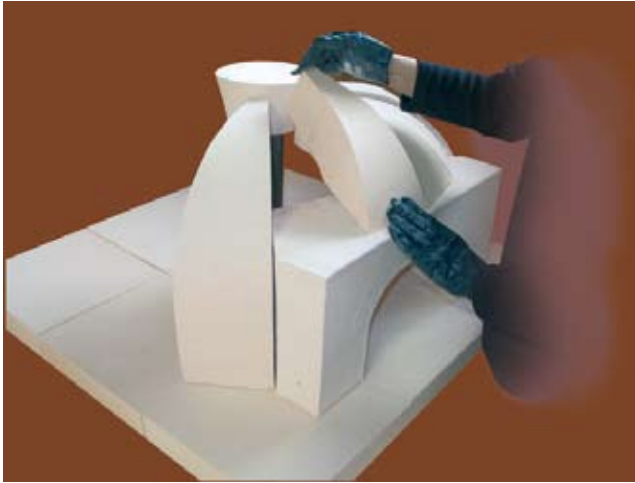
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The pieces of each Le Panyol oven core are handcrafted and thus vary slightly in size and orientation. When stacking the core, structural integrity is much more important than a perfect fit and “seamless” oven cavity. Each voussoir’s uniqueness enhances your oven’s performance. Joints between oven elements allow for minor expansion and contraction during the heating and cooling cycles.

7

Place the 4 half-voussoirs on the doorway piece.



8

Place two voussoirs opposite the full voussoirs already in place.



9



Place the other voussoirs. It may be necessary to shim the elements with pieces of masonry at the top and bottom in order to ensure proper fit at the keystone. Again, a sound structure is more important than a perfect fit.

10



The voussoir positioning can be adjusted from inside by gently tapping with a wood pole or stick.

11

A rubber mallet can be used to adjust the outside.



12

The dome structure.



13



Insert the two included metal screws into the doorway as shown. Circle the construction with wire (baling wire, etc.). The wire should be snug, not tight.

Layer the hearth with newspaper to protect it from the mortar. As an alternative, the vertical joints in the dome can be stuffed with paper towels, which will later burn away during the first fire.

14



Wet the dome with a sponge and clean water, making sure that all of the joints and dome surface are thoroughly wet.

15

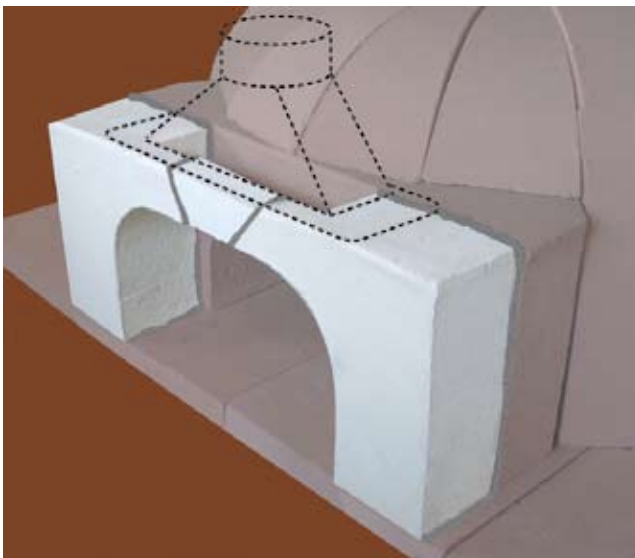


Take 1/4 of the refractory mortar from the bag provided with the oven kit and mix just enough water to create a thin paste. Pour this around the keystone and down along the joints make sure all opening have been sealed.

With the remaining portion of the refractory mortar, mix enough water to create a slightly thicker mixture than before and spread by rubber gloved hand or trowel, starting from the bottom, to complete the installation of the oven.

AVOID CONTACT WITH THE REFRACTORY MORTAR OR ANY CEMENT BASED PRODUCT AS THEY ARE CAUSTIC AND CAN CAUSE DAMAGE TO THE SKIN.

16



Add the smoke throat pieces to the doorway, flush with the edge of the hearth. Affix with a 1/8" mortar joint (Heat Stop 50 or other commonly available high-temp refractory mortar).

The smoke throat adapter will be installed above the rectangular opening (minor cutting of the (2) front 1/4 voussoirs may be required to accomodate the adaptor) .

Information on building the oven veneer and dimensions can be found starting on page 17.

VARIATIONS FOR THE MODEL 83

5



Put the key stone in place on top of a stable 13 1/2" support. In order to ensure that the lower part is at the same level as the inside of the roof, use a support of fixed length on top of a few removable pieces (shown here) to allow for keystone height adjustments.

8

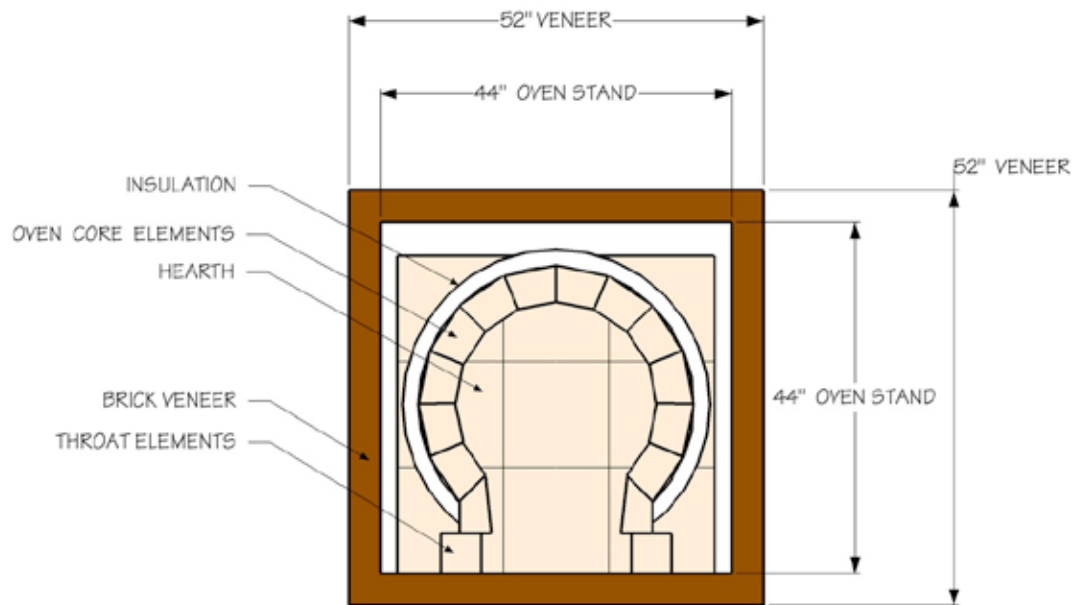


Place two voussoirs opposite the full voussoirs already in place.

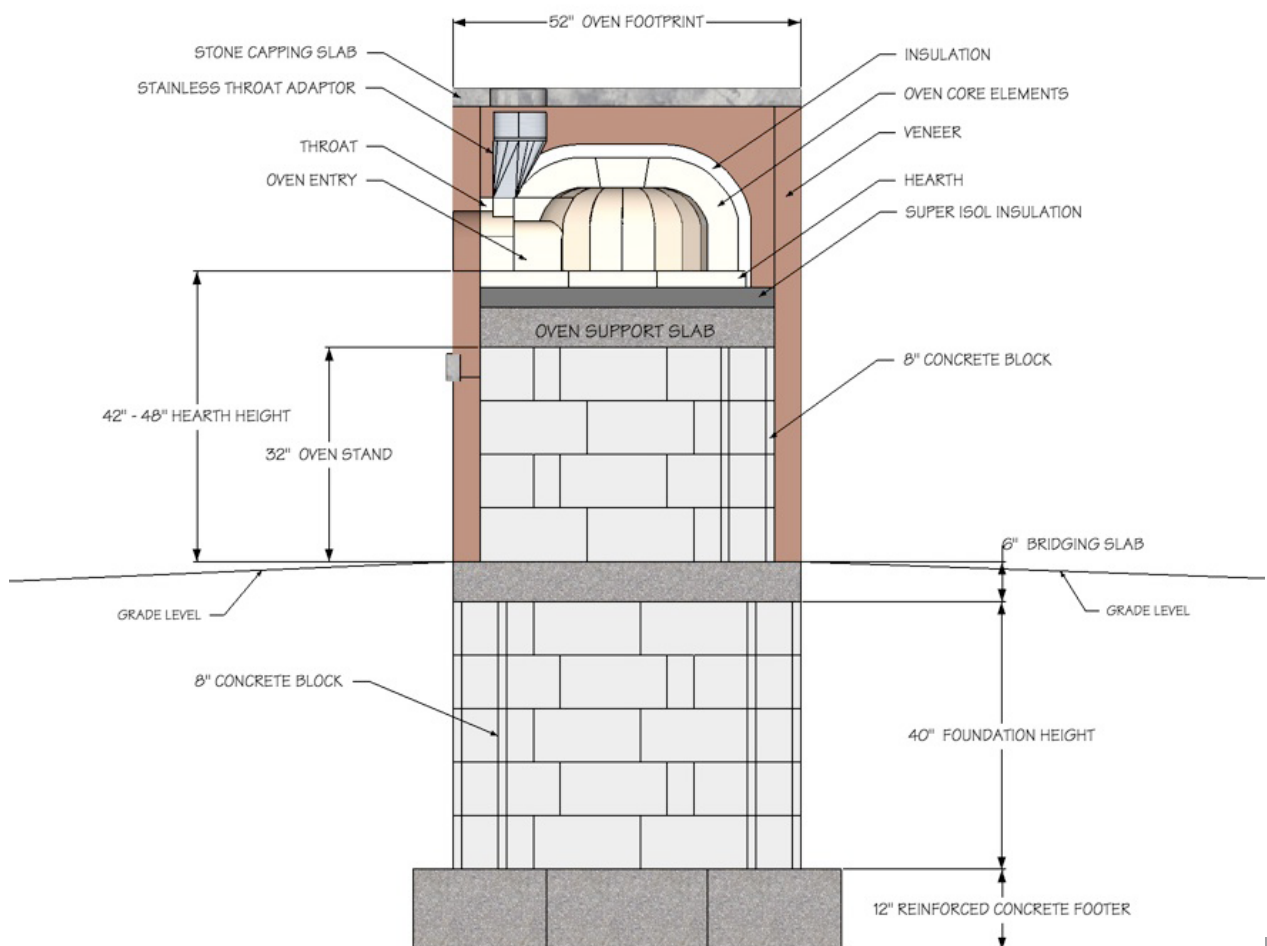
12



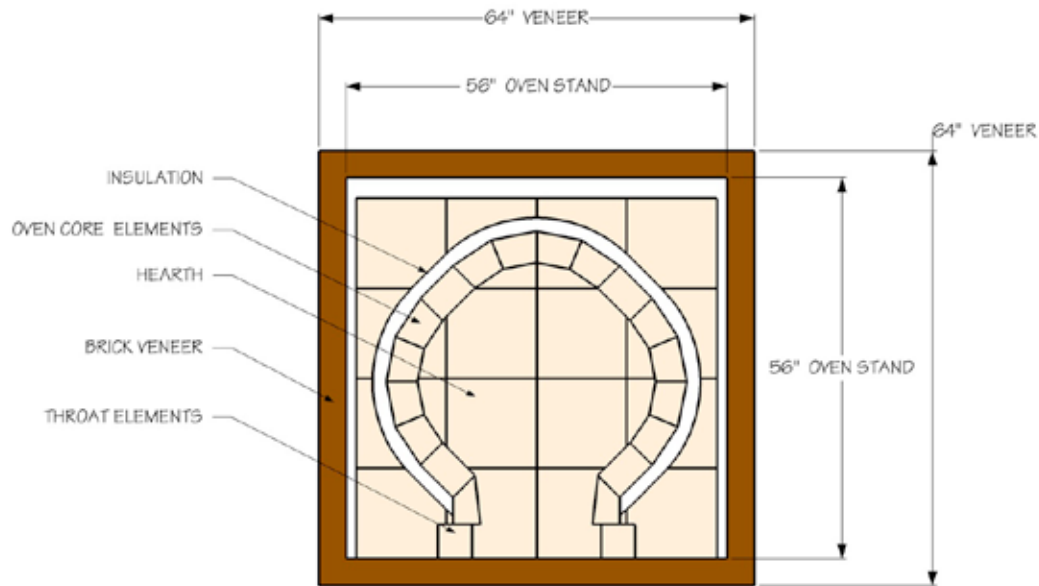
The dome constructed.



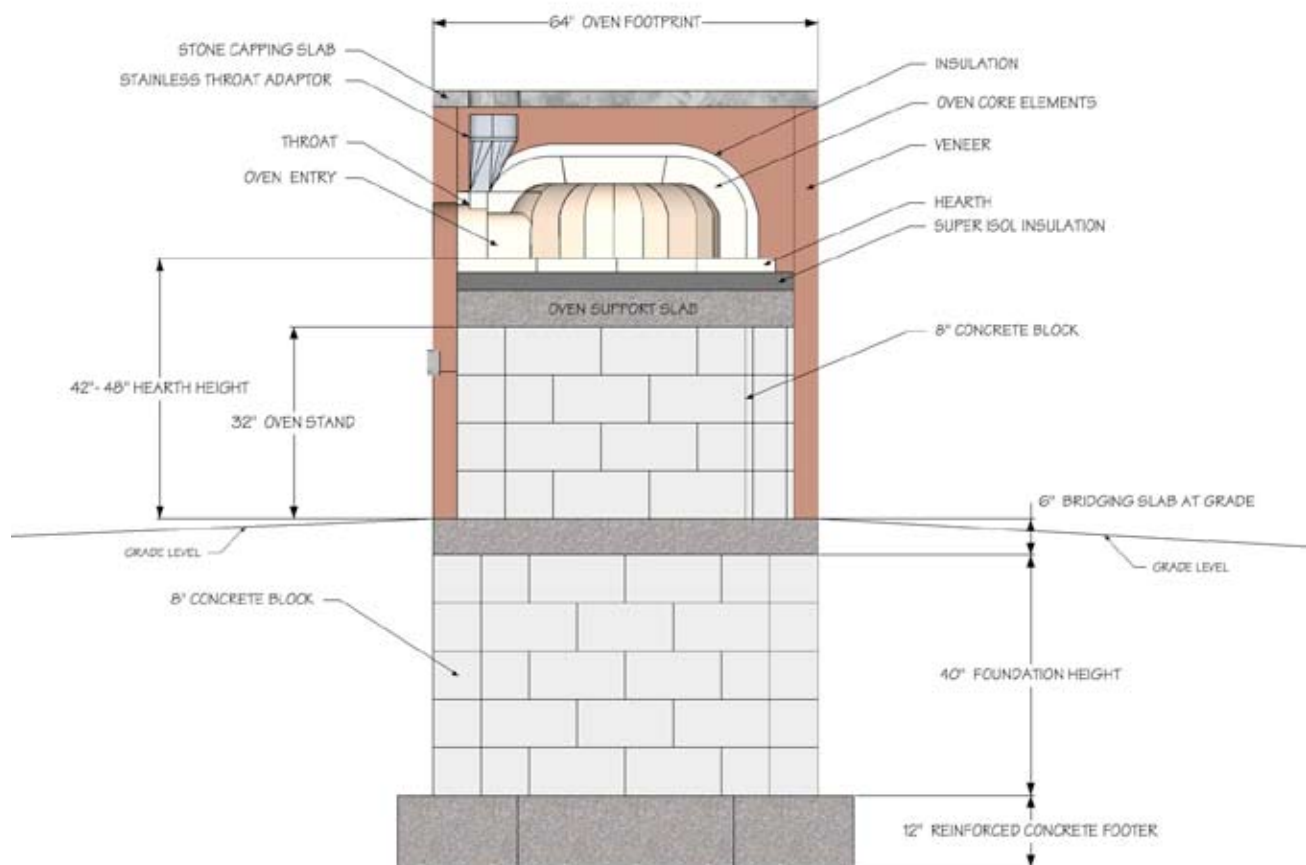
MODEL 66: SQUARE FACADE PLAN VIEW



MODEL 66: SQUARE FACADE SIDE SECTION



MODEL 83: SQUARE FACADE PLAN VIEW



MODEL 83: SQUARE FACADE SIDE SECTION

Notes

This image shows a full page of blank graph paper. The grid consists of small, uniform squares formed by thin, light gray lines. There are no margins, text, or other markings on the page.

Notes

Assembly of the Le Panyol Oven core: Models 99 & 100

5

1

First, debur the pieces of the oven with a grinding stone. Then place the hearth tiles and ensure they are level.



2

Center the oven entry $5 \frac{1}{8}$ inches from the front edge of the hearth (to accomodate the smoke throat elements and $\frac{1}{8}$ " mortar joint added later).



3

Starting on one side of the oven entry, place the voussoirs. Support each voussoir as necessary with a piece of wood.



4

Chock these two voussoirs with 12" pieces of wood first. The inside surface should be flush with the inside surface of the doorway piece.



5



Put the key stone in place on top of a stable 12 1/2"-13" support. In order to ensure that the lower surface is at the same level as the inside of the roof, use a support of fixed length on top of a few removable pieces (shown here) to allow for keystone height adjustments.

6



Place the 4 half-voussoirs on the doorway piece.

7

Place and center 2 straight voussoirs on each side of the keystone.



8

Place the other voussoirs. It may be necessary to shim the elements with pieces of masonry at the top and bottom in order to center the keystone. Again, a sound structure is more important than a perfect fit.



9

The voussoir positioning can be adjusted from inside by gently tapping with a wood pole or stick.



10

A rubber mallet can be used to adjust the outside.



12

The dome structure.



13

Insert the two included metal screws into the doorway as shown. Circle the construction with wire (baling wire, etc.). The wire should be snug, not tight.



Layer the hearth with newspaper to protect it from the mortar. As an alternative, the vertical joints in the dome can be stuffed with paper towels, which will later burn away during the first fire.

14



Wet the dome with a sponge and clean water, making sure that all of the joints and dome surface are thoroughly wet.

AVOID CONTACT WITH THE REFRACTORY MORTAR OR ANY CEMENT BASED PRODUCT AS THEY ARE CAUSTIC AND CAN CAUSE DAMAGE.

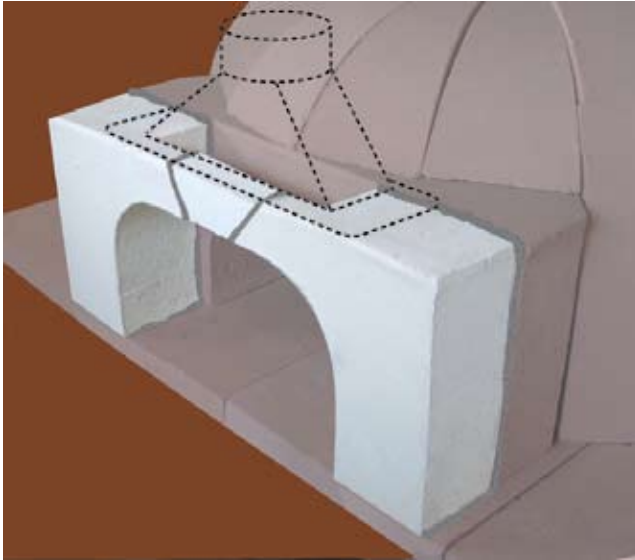
15



Take 1/4 of the refractory mortar from the bag provided with the oven kit and mix just enough water to create a thin paste. Pour this around the keystone and down along the joints make sure all opening have been sealed.

With the remaining portion of the refractory mortar, mix enough water to create a slightly thicker mixture than before and spread by rubber gloved hand or trowel, starting from the bottom, to complete the installation of the oven.

16



Add the smoke throat pieces to the doorway, flush with the edge of the hearth. Affix with a 1/8" mortar joint (Heat Stop 50 or other commonly available high-temp refractory mortar).

The smoke throat adapter will be installed above the rectangular opening.

VARIATIONS FOR THE MODEL 100

3/4



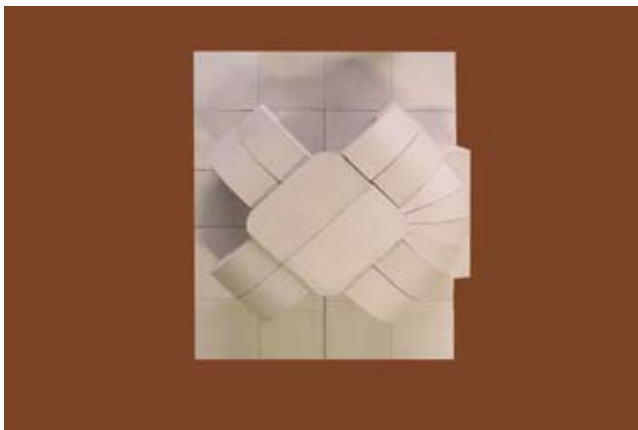
Place a straight voussoir on either side of the doorway, chocked with a 12" piece of wood. A 12 1/2"-13" table support should be used for the keystone, placed at an angle to meet the tops of the straight voussoirs. The two halves of the keystone fit together as shown.

6



Place the four half voussoirs on the doorway piece.

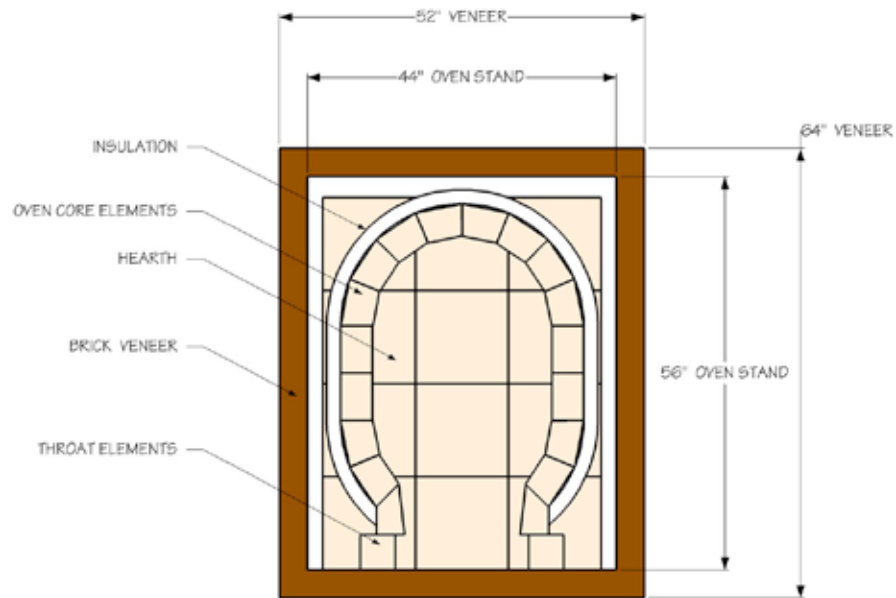
7



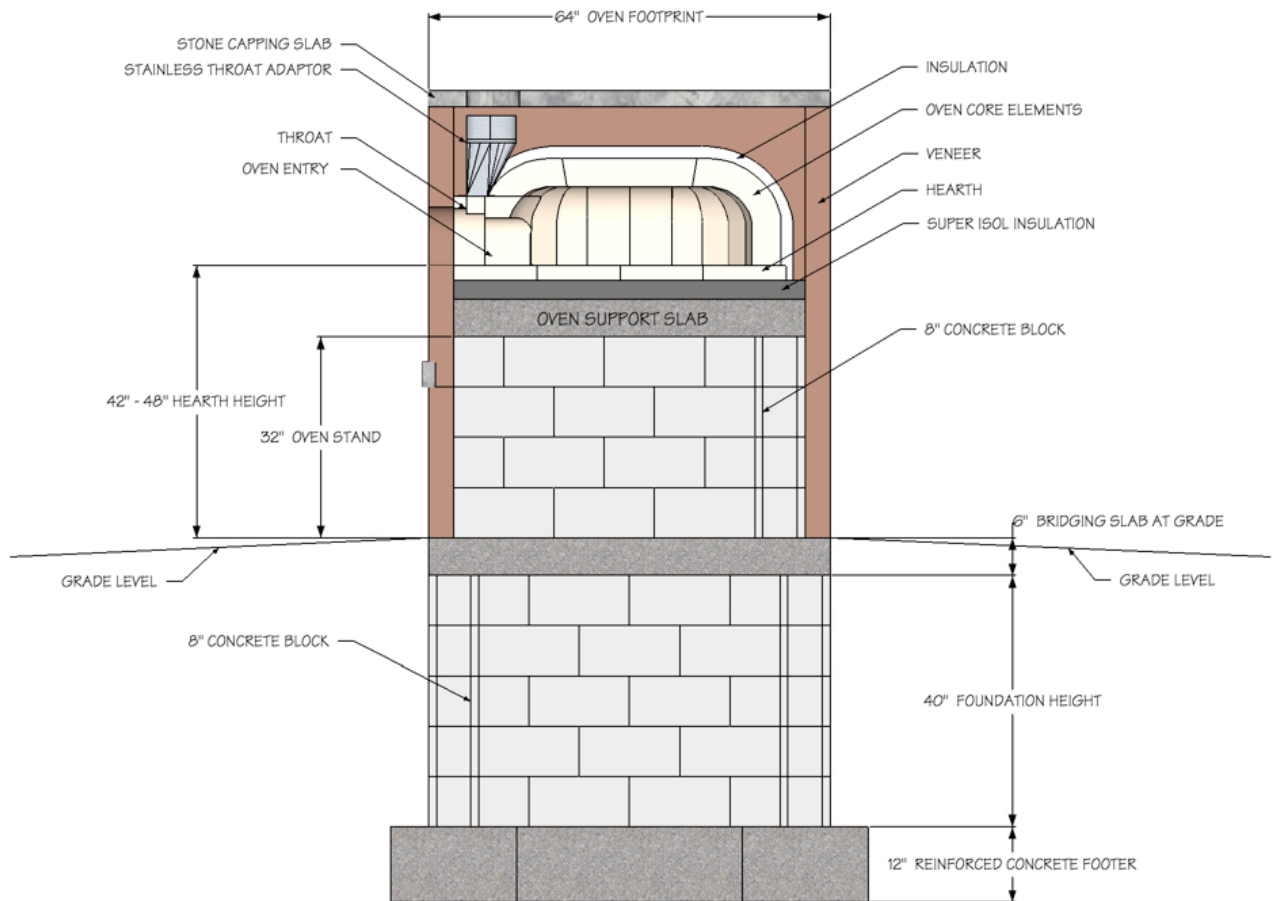
Place 8 straight voussoirs as shown in relation to the doorway.

Place the other voussoirs. It may be necessary to shim the elements with pieces of masonry at the top and bottom in order to center the keystone. Again, a sound structure is more important than a perfect fit.

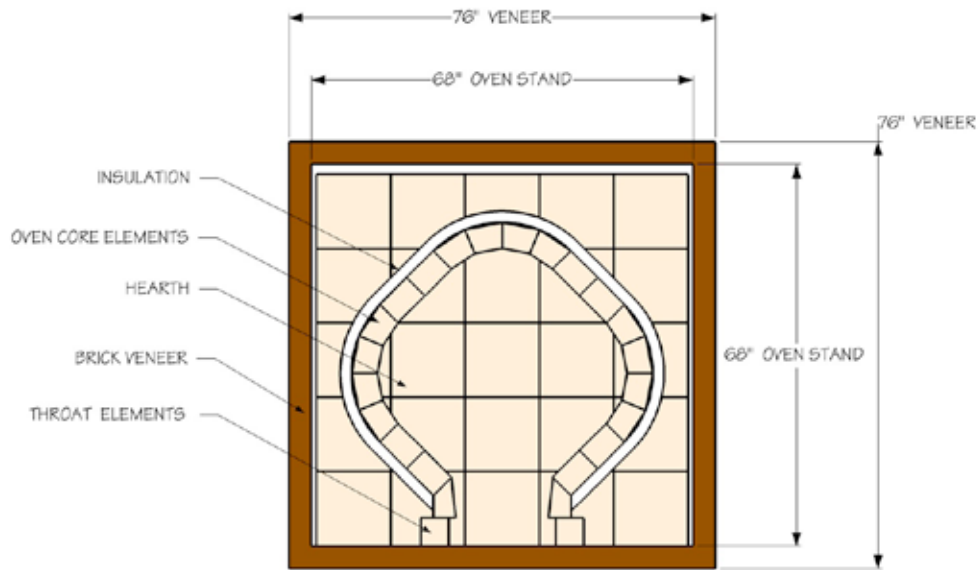
Although it is not shown in these images, the door elements on the Model 100 should be set 5 1/8" back from the edge of the hearth to accommodate the smoke throat elements.



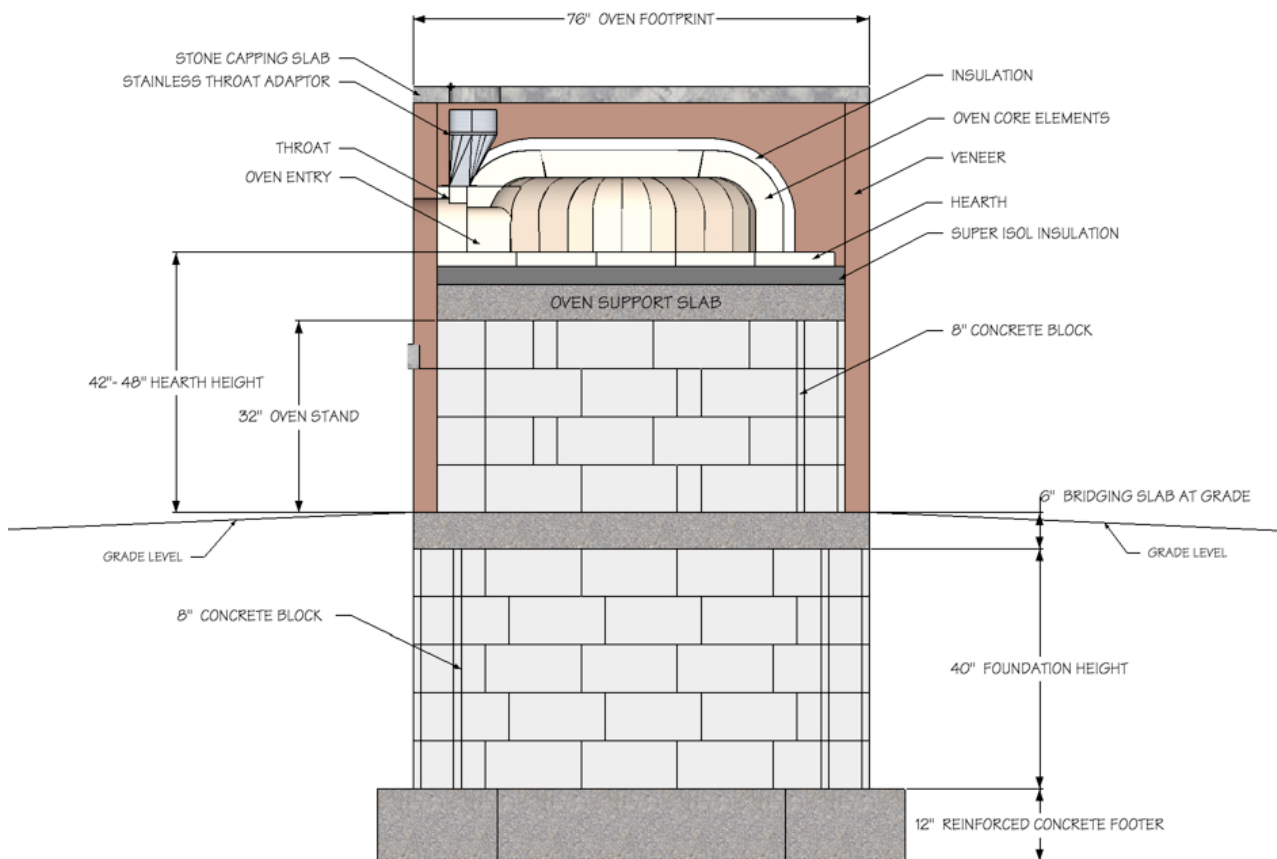
MODEL 99: SQUARE FACADE PLAN VIEW



MODEL 99: SQUARE FACADE SIDE SECTION



MODEL 100: SQUARE FACADE PLAN VIEW



MODEL 100: SQUARE FACADE SIDE SECTION

Notes

This image shows a full page of blank graph paper. The grid consists of thin, light gray horizontal and vertical lines that intersect to form a uniform pattern of small squares across the entire page. There are no margins, text, or other markings present.

Le Panyol Wood-Fired Oven

Models: 180 and 180 Stretch (with 10" (25.5 cm) diameter chimney)
 120 and 120 Stretch (with 8" (20 cm) diameter chimney)
 100 (with 8" (20 cm) diameter chimney)
 83, 66x99, and 66 (with 7" (18 cm) diameter chimney)
 75 – Outdoor Installation Only

READ ALL INSTRUCTIONS BEFORE INSTALLING AND USING THE OVEN

When this oven is not properly installed a fire may result. To reduce the risk of fire, follow the installation instructions.

Please read this entire manual before you install the oven. Failure to follow instructions may result in property damage, bodily injury, or even death.

DO NOT INSTALL IN A MOBILE HOME

DO NOT CONNECT OR USE IN CONJUNCTION WITH ANY AIR DISTRIBUTION DUCT-WORK

DO NOT USE CHEMICALS OR FLUIDS TO START THE FIRE

DO NOT POUR WATER ON THE OVEN HEARTH. EXCESS WATER PENETRATING THE TILES WILL TURN TO STEAM AND DAMAGE THE TILES.

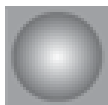
DO NOT BURN GARBAGE OR FLAMMABLE FLUIDS SUCH AS GASOLINE, NAPHTHA OR ENGINE OIL

HOT WHILE IN OPERATION. KEEP CHILDREN, CLOTHING AND FURNITURE AWAY. CONTACT MAY CAUSE SKIN BURNS

WARNING – OVENS EQUIPPED WITH DOORS SHOULD BE OPERATED ONLY WITH THE DOORS FULLY OPENED OR DOORS FULLY CLOSED. WHEN DOORS ARE LEFT PARTLY OPEN, GAS AND FLAME MAY BE DRAWN OUT OF THE OVEN OPENING, CREATING THE RISK OF BOTH FIRE AND SMOKE.

A MAJOR CAUSE OF OVEN-RELATED FIRES IS FAILURE TO MAINTAIN REQUIRED CLEARANCES (AIR SPACES) TO COMBUSTIBLE MATERIALS. IT IS OF UTMOST IMPORTANCE THAT THIS OVEN BE INSTALLED ONLY IN ACCORDANCE WITH THESE INSTRUCTIONS.

SAVE THE INSTRUCTION MANUALS



Oven is to be installed using the minimum diameter UL 103 HT (ULC S629 in Canada) listed chimney specified or a code approved masonry chimney with a flue liner. The oven is required to be installed with a vertical flue and without a hood. Contact local building or fire officials to determine if there are any installation restrictions or the need for inspection of the oven installation. Some jurisdictions may require UL 103 HT (ULC S629) chimney that is also listed to UL 1978 “Standard for grease vents.” (CAN/CSA B365 and NFPA 211 do not require grease vents for residential installation, NFPA 96 requires grease vent only if the installation is over three stories in height for commercial installations.)

Models: 180 and 180 Stretch (with 10” (25.5 cm) diameter chimney)
 120 and 120 Stretch (with 8” (20 cm) diameter chimney)
 100 (with 8” (20 cm) diameter chimney)
 83, 66x99, and 66 (with 7” (18 cm) diameter chimney)
 75 – Outdoor Installation Only, preassembled

Ensure that clearance to combustible materials requirements at all times are:

Back wall – 2” (5 cm)
Side wall – 2” (5 cm)
Floor – 24” (61 cm)
Ceiling – 1” (2.5 cm)
with a minimum thickness of 4” (10 cm) of sand or terre blanche grog.

Clearance in front of the oven to combustible materials is a minimum of 36” (91 cm).

WARNING – DO NOT PACK REQUIRED AIR SPACES WITH INSULATION OR OTHER MATERIALS

Clearances may only be reduced by means approved by the regulatory authority.

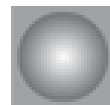
The oven must have a non-combustible floor shielding hearth extension covering at least - 30 inches (76 cm) to each side and 36 inches in front of the door opening”

Use clean and dry wood only. Chemical treated wood, painted, varnished etc. or saltwater driftwood will harm the stove over time. Pile and store wood outdoors under cover. Do not place or store wood within stove installation clearances or within the space required for charging and ash removal.

Do not use a grate, andiron, or other method to support the fuel.

Do not use products not specified for use with this oven.

Creosote – Formation and need for removal. When wood is burned slowly, it produces tar and other organic vapors that combine with expelled moisture to form creosote. The creosote vapors condense in a relatively cool oven flue and exhaust hood of a slow



UL & ULC Information

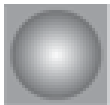
burning fire. As a result, creosote residue accumulates on the flue lining and exhaust hood. When ignited, this creosote makes an extremely hot fire.

The oven flue should be inspected at least twice a year to determine when creosote buildup has occurred.

When creosote has accumulated, it should be removed to reduce risk of fire.

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

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 noncombustible floor or on the ground, well away from all combustible materials, pending final disposal. When 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.



MODEL	66	99	83	120	180
WEIGHT	825 lbs. (375 kg.)	1100 lbs (500 kg.)	1188 lbs (540 kg.)	2420 lbs (1100 kg.)	4620 lbs (2100 kg.)
TILE LAYOUT	3 wide x 3 deep	3 wide x 4 deep	4 wide x 4 deep	5 wide x 5 deep	7 wide x 8 deep
HEARTH TILE DIMENSIONS	39 3/8" x 30 3/8" (1 m x 1m)	39 3/8" x 52 1/2" (1m x 1.30m)	52 1/2" x 52 1/2" (1.30m x 1.30m)	65" x 65" (1.65m x 1.65m)	90 1/2" x 90 1/2" (2.30m x 2.30m)
HEARTH TILE THICKNESS	2-1/2" (63 mm)	2-1/2" (63 mm)	2-1/2" (63 mm)	2-1/2" (63 mm)	2-1/2" (63 mm)
INSULATING SLAB DIMENSIONS	3" thick x same width and depth	3" thick x same width and depth	3" thick x same width and depth	3"-6" thick x same width and depth	3"-6" thick x same width and depth
TOTAL CORE HEIGHT	19 5/8" (50 cm)	19 5/8" (50 cm)	19 5/8" (50 cm)	26" (66 cm)	29-3/8" (74.8 cm)
INSIDE HEIGHT	12-3/4" (32.5 cm)	12-3/4" (32.5 cm)	12-3/4" (32.5 cm)	17 5/16" (44 cm)	20 7/8" (53 cm)
COOKING SURFACE	3.68 sq/ft (0.35 sq/m)	6.3 sq/ft (0.56 sq/m)	5.8 sq/ft (0.54 sq/m)	12.09 sq/ft (1.13 sq/m)	27.5 sq/ft (2.54 sq/m)
WALL THICKNESS	4 1/2" (11.5 cm)	4 1/2" (11.5 cm)	4 1/2" (11.5 cm)	6-1/8" (15.5 cm)	6-1/8" (15.5 cm)
DOOR OPENING	16 7/8" x 8 5/8" (43cm x 222cm)	16 7/8" x 8 5/8" (43cm x 22cm)	16 7/8" x 8 5/8" (43cm x 22cm)	21 1/4" x10 1/4" (54cm x 26cm)	21 1/4" x10 1/4" (54cm x 26cm)