V-420

Modular Refractory Pizza Oven Kit

Professional COMMERCIAL Wood Fired Oven

Made in USA Since 2005

INSTLATION MANUAL FOR VERONA 420 OVEN BY: CALIFORNO, THE BETTER PIZZA OVEN!



EXTREMELY IMPORTANT:

YOU MUST FOLLOW OUR OVEN CURING
INSTRUCTIONS TO AVOID CRACKS IN YOUR OVEN!!!

SEE NEXT PAGE AND ALSO LAST PAGE AS A REMINDER

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Follow these instructions to cure your pizza oven. Curing your oven is critical to your pizza oven's performance. Failure to follow these instructions can result in damage up to and including cracking the dome, severely impacting heat retention.

NOTE: For ovens with Gas burner, there are shortcuts to the curing process you can find in the Installation Manual. A Californo technician can be made available through our contact form to help walk you through some tricks to make this easier.

1. Why is proper curing so important?

Like with any concrete items there is always excess water that is evaporating overtime from product to the outside air. in a conventional concrete products its can take up to 360 days to get the very inside of the concrete 100 cure. curing your oven components will get it to the maximum strength when done properly. However, fast curing will cause the all amount of water to escape simultaneously and may result in cracking the dome. Also, after you've complete your oven installation, there is still a great deal of moisture in the mortars, hearth concrete, vermiculite, and the oven chamber and manifold. Each of these oven components was produced in our facility and got dry by air only. Simply letting the oven stand for a week or month will not cure the moisture out of the oven.

2. Can I cure the oven dome without installing the insulation and decorative facade?

Technically you can, but it is not recommended for a few reasons:

- Without insulation, it can present a fire and safety hazard;
- After curing, your oven will reach higher temperatures than before it was cured. It will reach 1000 deg F, that mean if you cure your oven at first and later do your stucco, there will be water that try to escape the stucco which will crack it.

3. When can I start my curing process?

Before you start the curing process, let the complete oven sit for 5 days. Regardless if it was raining or not during that time rain will help strengthening your oven. If you purchased a fully assembled pizza oven from Californo, you may start the curing process of your oven without waiting the 5 days, as naturally 5 days has passed from the day we completed the assembly until you received the oven so that mean you may start the curing of your assembled oven the day you received it.

4. How do we cure the oven? Important Note:

It is critical for proper curing and avoiding damage that you do not go above these temperatures shown below during the first two days.

It is important that you cure your pizza oven slowly over a 5 day period. You build a series of five increasingly larger fires, starting with a low temperature (see below). The first-day fire is no more than kindling and thin strips of wood.

1st Day: 300° F for 5 hours minimum.

Start and maintain the fire in the center of the dome, not on the perimeter of the oven. You don't want the fire to get too high and touch the dome. You should leave the door partly open allowing about 2" gap once the fire is lit that will help direct the smoke up the vent as temperature is relatively low and smoke is than heavier. You should look at the analog temperature gauge if you purchased and installed one. The temperature gauge reads the oven's air temperature. For a more accurate temperature reading of the oven refractory surfaces, which can be use for many types of cooking, you can use the optional Digital Infrared Thermometer, which can be purchased in the Californo Store. You want to measure the temperature at the dome of the oven, not the side wall or floor. This will be the hottest point of the oven. The temperature can vary slightly, but try not to exceed the temperature for that day's cure schedule by more than a few degrees, better to be 20 degrees cooler than hotter. Especially on day one and two.

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Important Notes:

- Use solid wood fuels only.
- DO NOT use charcoal, pressure treated lumber, chipped wood products, sappy wood such as pine, laminated wood or any material other than dry medium or hard firewood.
- DO NOT USE liquid fuel (firelighter fluid, gasoline, lantern oil, kerosene or similar liquids) to start or maintain a fire.
- You can start the fire with an acetylene torch if you have one handy.
- Food grade fire starters are considered acceptable aids when starting a fire.
- Do not use products not specified for use with this oven.
- Never use water to lower the temperature inside the oven, or to extinguish the fire. This will increase wear and tear on your oven and can lead to spalling, pitting and cracking your cooking surface.
- There must be a period of time between completing the masonry work and beginning the actual firing cure.
- Longer is better than shorter, particularly for the actual dome cement.
- The cement and mortar must cure first and this process is actually improved by keeping the cement moist and not letting it dry out.

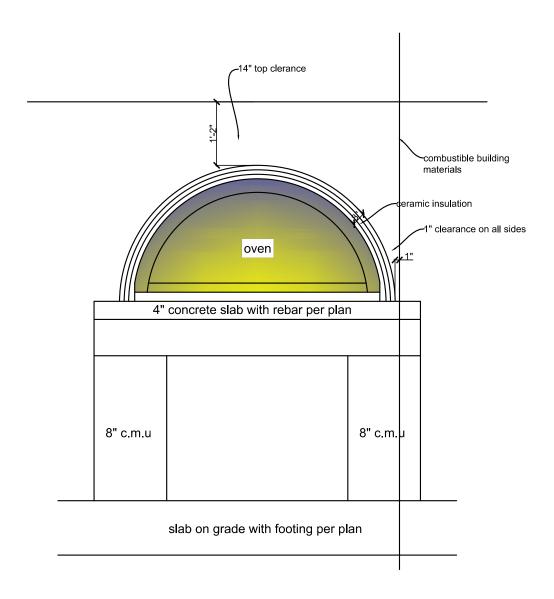
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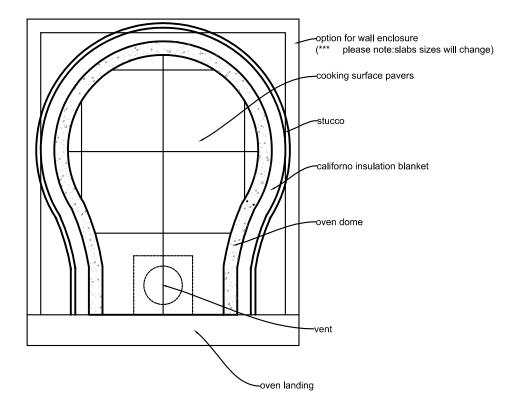
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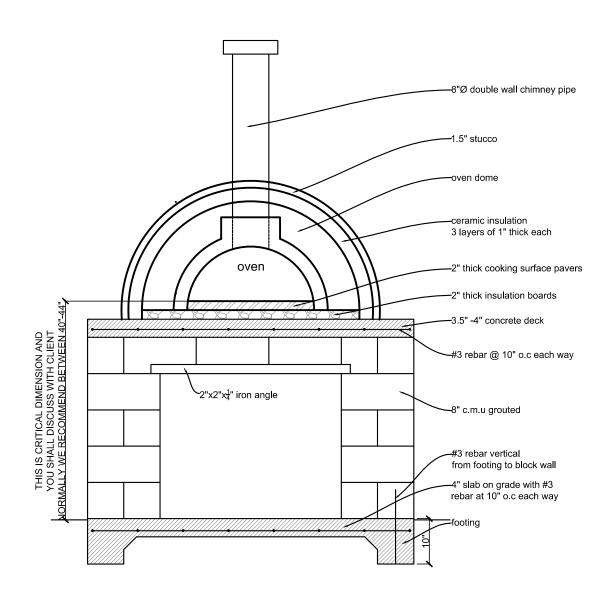
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STEP 1: POURING YOUR SLAB ON GRADE

CHOOSE INSTALLATION AREA AND POUR THE LOWER CONCRETE SLAB ON GRADE. PLEASE NOTE, SIZE OF SLAB ON GRADE IS DEPEND ON YOUR CLIENT DESIGN. CALIFORNO RECOMMEND A MINIMUM SLAB OF 60" WIDE X 72" FOR VERONA 420 MODEL AND IT IS VARY FROM MODEL TO MODEL AND FROM ONE TYPE OF INSTALLATION TO ANOTHER.

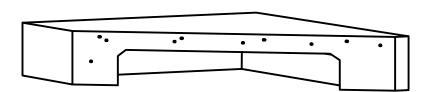
SO... PLEASE MAKE SOME SKETCHES AND DO SOME DRY FIT AND KEEP THIS FORMULA BELOW IN MIND:

SLAB WIDTH: RIGHT TO LEFT:

OVEN DOME EXTERIOR SIZE + ((OVEN INSULATION + OVEN FINISH (STUCCO OR WALLS))X2 = OVEN SLAB WIDTH! AT A MINIMUM.

SLAB DEPTH: FRONT TO BACK:

OVEN DOME EXTERIOR SIZE + ((OVEN INSULATION + OVEN FINISH (STUCCO OR WALLS))X1 = OVEN SLAB WIDTH! AT A MINIMUM.



MINIMUM SLAB ON GRADE DIMENSIONS FOR MODEL VERONA 420 REMEMBER TO LEAVE YOUR VERTICAL REBAR STICKING FROM THE SLAB TO TIE INTO YOUR FUTURE BLOCK WALLS.

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TIP 1:

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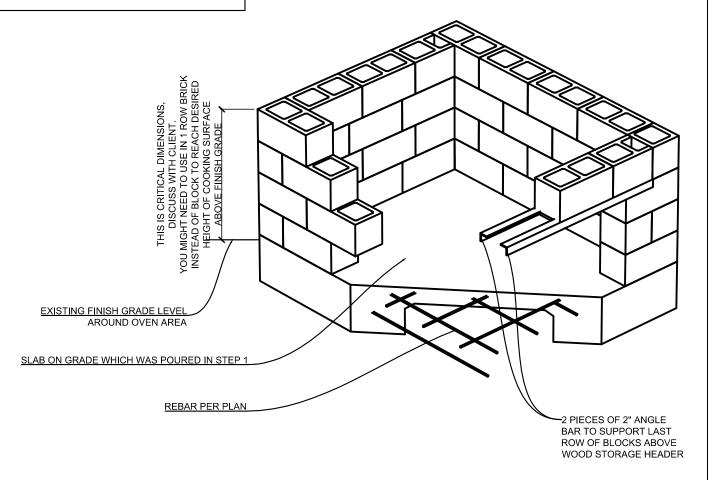
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STEP 2: BUILDING YOUR BLOCK WALLS

AFTER YOUR SLAB ON GRADE IS DRY, START BUILDING YOUR REAR AND 2-SIDES BLOCK WALLS TO THE PROPOSED FINISHED HEIGHT.

*** REMEMBER TO LEAVE THE WOOD STORAGE OPENING IN THE FRONT WALL.

PLACE YOUR 2 PIECES OF 2" ANGLE BAR TO SUPPORT YOUR WOOD STORAGE OPENING HEADER AND PLACE A CEMENT BOARD ABOVE IT TO SUPPORT YOUR LAST ROW OF BLOCKS ABOVE IT.



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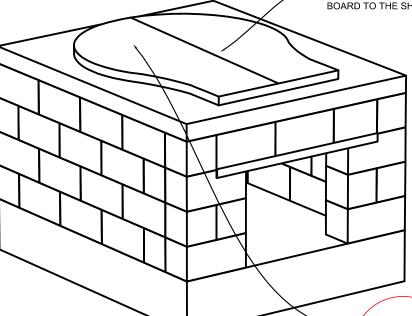
STEP 3: POURING YOUR UPPER SLAB

NOW IT'S THE TIME TO FORM AND POUR THE UPPER SLAB ABOVE THE BLOCK WALLS YOU BUILT IN PREVIOUS STEP.

YOU WILL NEED SOME 2"X8" FOR THE PERIMETER AND SOME 2"X4" AS VERTICAL SUPPORT FOR THE CEMENT BOARD THAT YOU WILL PLACE AS A BOTTOM SUPPORT FOR THE PROPOSED UPPER SLAB.

WE SHOW HERE THE UPPER SLAB FLUSH WITH THE BLOCK WALLS BUT IN MANY CASES AND DEPEND ON YOUR DESIGN YOU CAN FORM AND POUR THIS UPPER SLAB LARGER THAT THE WALLS PERIMETER TO HAVE LARGER "SHELVE" USABLE SPACE AROUND THE OVEN! POUR YOUR UPPER CONCRETE SLAB

2" THICK CALIFORNO INSULATION BOARD, TO BE CUT FROM THE GIVEN BOARD TO THE SHAPE OF YOUR OVEN. YOU WILL NEED CEMENT BOARD UNDER FOR SUPPORT AND SOME 2"X4"



STEP 4: PLACING THE UNDERCOOKING **INSULATION BOARDS**

NOW YOU WILL CUT TO THE SHAPE THE CALIFORNO INSULATION BOARD AND PLACE IT TO THE UPPER SLAB.

EXACT LOCATION OF THE INSULATION BOARD IS CRITIC AND BEING DETERMINED BY YOUR PROPOSED POSITIONING OF THE OVEN OVER THE UPPER SLAB!

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PRIOR TO CUTTING THE BOARDS, DO A DRY FIT OF THE OVEN COMPONENTS IN ORDER TO GET THE SHAPE OF INSULATION BOARD YOU WILL NEED.

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BETTER PIZZA THE **OVEN**

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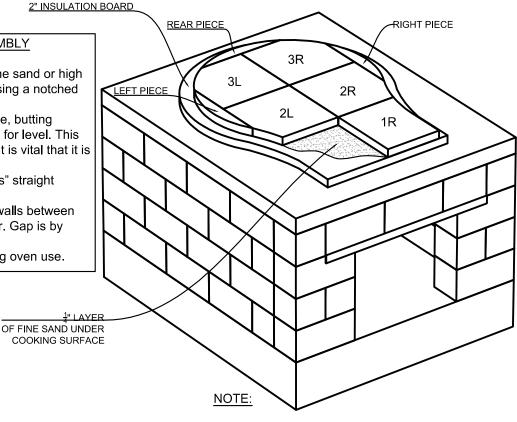
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STEP 5: COOKING SURFACE ASSEMBLY

- *** Spread a 1/4" (6 mm) layer of fine sand or high
- *** temperature refractory mortar using a notched
- *** trowel
- *** Lay your cooking surface in place, butting
- *** the joints tightly together. Check for level. This
- *** is your true cooking surface, so it is vital that it is
- *** completely level in all directions.
- *** Check again that the oven "faces" straight forward.
- *** IMPORTANT: do not fill in side walls between floor and inner dome with mortar. Gap is by design to allow for thermal
- *** expansion and contraction during oven use.



EACH ONE OF YOUR COOKING SURFACE PIECE IS UNIQUE AS YOU ARE AND IT'S LABELED ON THE BACK OF YOUR PIECES AND AS SHOWN IN DIAGRAM ABOVE:

1R, 2R, 3R, RIGHT REAR

1L, 2L, 3L, LEFT

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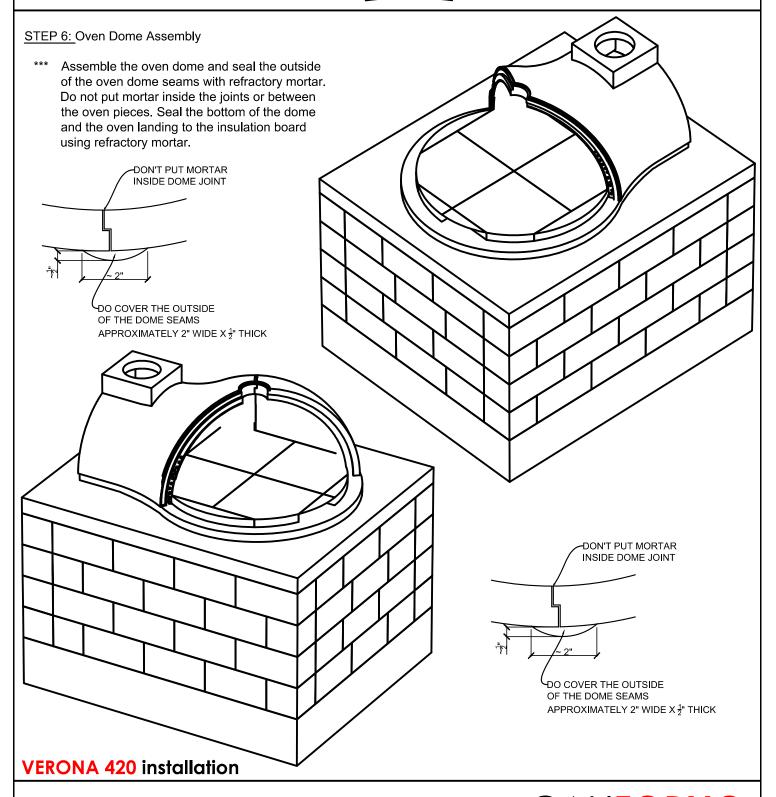
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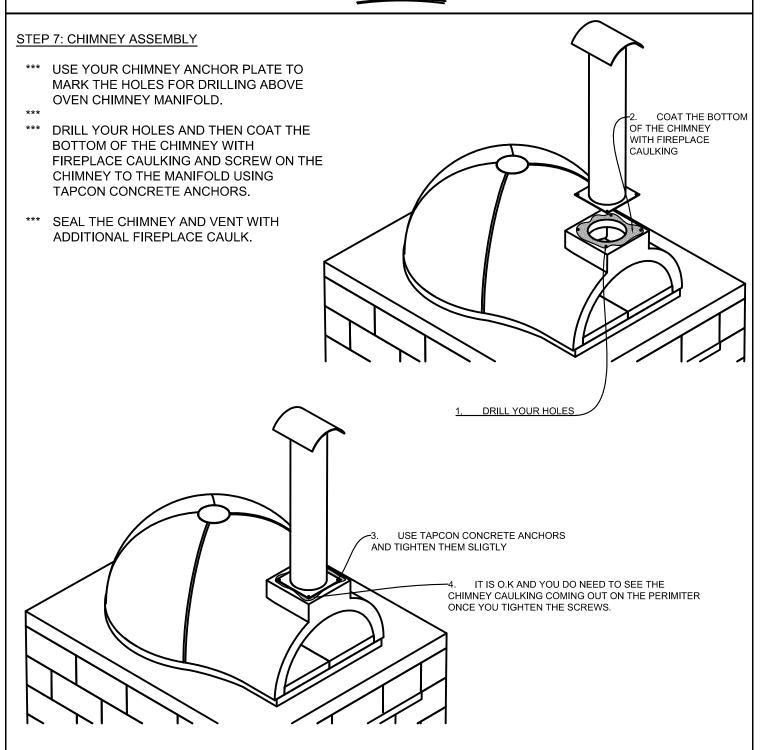
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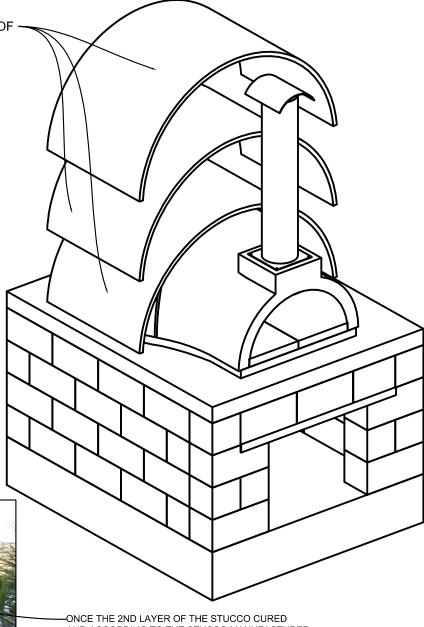
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STEP 8: DOME INSULATION

*** WRAP THE OVEN DOME WITH 3 LAYERS OF -1" CALIFORNO INSULATION BLANKET.

OVERLAP ALL JOINTS

SHAPE YOUR OVEN DOME WITH WIRE LATHE AND COVER IT WITH 2 COAT STUCCO SYSTEM.



AND ACCORDING TO THE STUCCO MANUFACTURER INSTRUCTIONS, ITS NOW TIME TO APPLY THE 3RD (COLOR COAT)

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