OPERATOR'S HANDBOOK
WOODBURNING DOMESTIC OVEN "FVR" AND "TOP"





VALORIANI®
fornace in Reggello dal 1890

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REV 1.3

First of all we wish to thank you for selecting a professional oven VALORIANI.

Our company has manufactured refractory items for over 100 years and PREFABRICATED ovens for over 60 years , that Mr. SILVIO VALORIANI had right after World Word II for bread baking.

The concept immediately met the favour of the Italian people and proved to be the winning card of the company. Thanks to their high quality raw materials, easy assembly, installation and use, these ovens are used to cook many traditional dishes, such as lasagne, roasts, baked pasta, besides of course bread and PIZZA

The special design of the vault in refractory *cotto* perfectly matches the cooking surface made up of elements in **REFRACTORY COTTO**.

This way our ovens offer the same – or even improved, we may add – features of old wood-fired ovens, which were built with refractory bricks laid down following a special design according to ancient building techniques, whose origins are lost in the mists of time.

We suppose to be the only Company producing directly all the oven's components both of the floor and of the crown and we are proud of the severela imitation's attempts of our ovens made by the competition

Massimo Valoriani

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Part A: **SUGGESTIONS FOR THE ARRANGEMENT OF THE SUPPORT FLOOR :**

- Build a solid base according to the size of the oven you've chosen. Concerning the sizes and shapes you can take a hint from the dates and drawings shown in the figure and schedule 1.1
- As building material we suggest to use hollow tiles, while we do not absolutely suggest the use of reinforced concrete which could take the heat away from the oven.
- We remind you to check with a level the perfect levelling of the floor you're building.
  Please find some examples of insulation's floors: :

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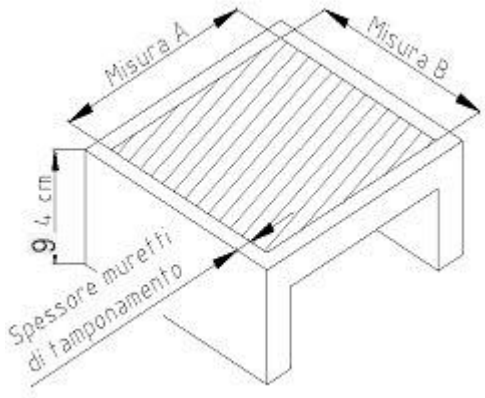
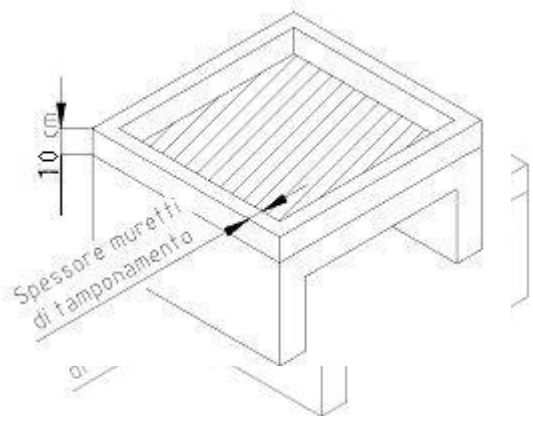


Figure 1.1

	A	B	Load of the floor- KG
OVEN FVR 80	110	110	300
OVEN FVR 100	130	130	350
OVEN FVR 110	140	140	400
OVEN FVR 120	150	150	400
OVEN FVR 100X160	140	190	500
OVEN TOP 100	130	130	350
OVEN TOP 120	150	150	400

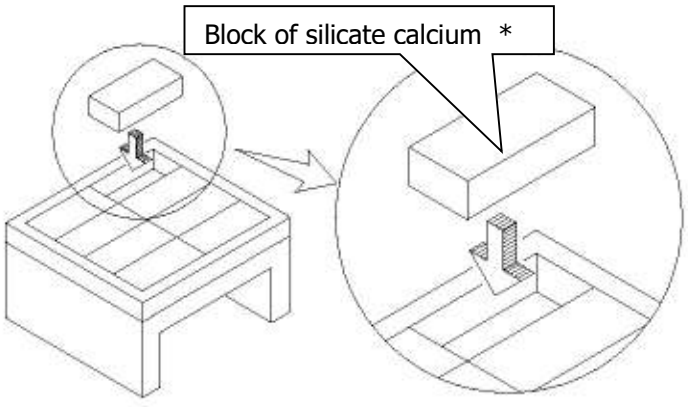
TO THE MEASURES INDICATED IN FIGURE AND SCHEDULE 1.1 ADD TO THICKNESS OF THE CURTAIN WALLS (NORMAL 8/10 CM)



- Once completed the building of the load bearing structure, build a tank with an height of cm. 10 by using hollow tiles or cellular silicate calcium. See figure
- Fill carefully the tank with blocks of cellular silicate calcium , by creating in this way a solid and uniform layer; pay attention not to leave empty spaces and check that the floor does not move. Do not mason the blocks but stuff them carefully , so that they result firmly fixed.

•We remind you that you can shape the silicate blocks by using a normal saw.

- Carefully check that the floor you've built is perfectly horizontal and does not present any disconnectedness. In case you should correct eventual unevenness you can use rasps to rasp carefully the floor.



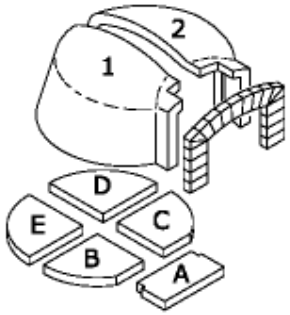
• Once completed the floor brush it carefully in order to remove dusts and residual products. Please always check not to dampen the insulation floor.

•NOTE: You can find the silicate calcium by our company or by the retailers of building materials and it's usually sold the name of GAS BETON, YTONG etc……

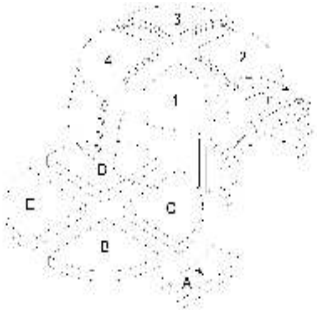
Part B: **ASSEMBLING OF THE OVEN'S BODY**

EXECUTE THE FOLLOWING OPERATIONS STEPS, BY FOLLOWING THE BELOW DESCRIBED ORDER AND REFERRING TO YOUR OVEN'S SIZE:

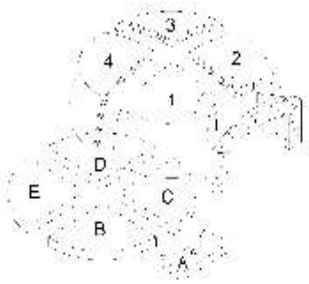
1. PLACE DRY REFRACTORY "COTTO" ELEMENTS OVER THE LOAD BEARING FLOOR BY FOLLOWING THE ALPHABETICAL ORDER.
2. IF THE FLOOR'S TILES DOES NOT FIT PERFECTLY ONE NEXT TO ANOTHER, LEVEL THEM AFTER THEIR INSTALLATION BY USING A RASP OR A GLASS-PAPER DISK MEDIUM GRAIN.
3. PLACE DRY THE CROWN'S ELEMENTS FOLLOWING THE SEQUENCE IN THE SCHEME
4. STUCCO ONLY EXTERNALLY THE JOINTS OF THE CROWN'S ELEMENTS WITH REFRACTORY MORTAR (SUPPLIED WITH THE INSULATION'S KIT)



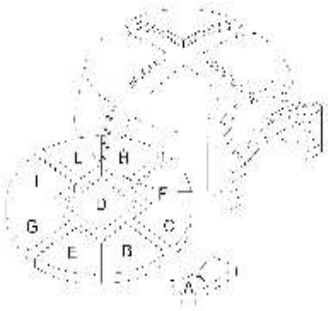
FVR 80



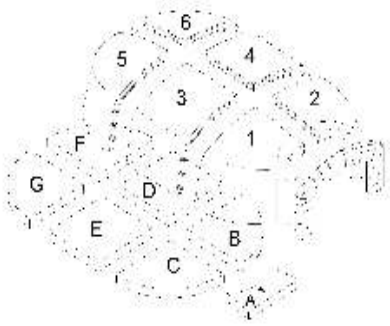
FVR 100



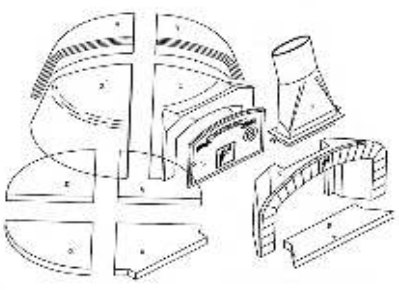
FVR 110



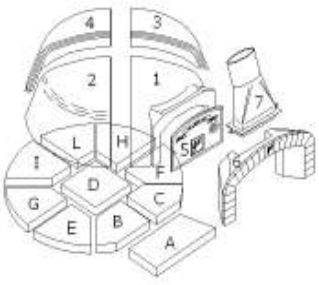
FVR 120



FVR 110x160



TOP 100



TOP 120

IMPORTANT

WITH REFERENCE TO THE CHIMNEY FLUE THIS ONE MUST BE INSTALLED FROM QUALIFIED PERSONNEL.

THE OUTLET DIAMETER OF THE FLUE MANIFOLD IS 20 CM

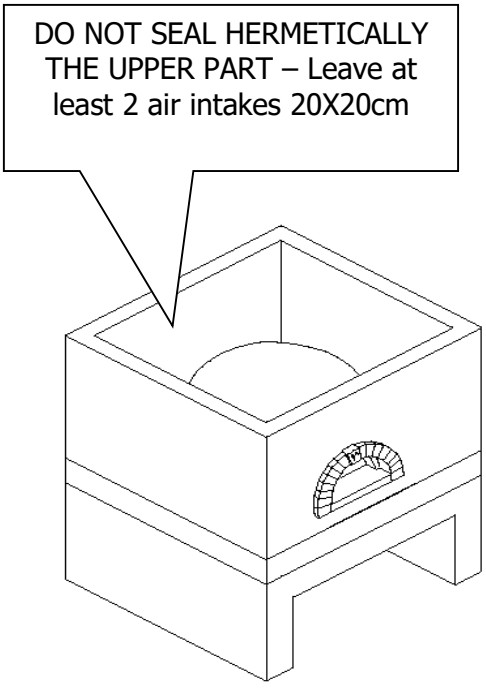
Part C: UPPER INSULATION OF THE OVEN

1) ONCE COMPLETED THE STUCCOING OF THE CROWN'S ELEMENTS, WRAP THE OVEN WITH A DOUBLE LAYER OF CERAMIC BLANKET (SUPPLIED WITH THE INSULATION'S KIT)

2) LIFE THE PERIMETER WALLS OF THE OVEN. WE SUGGEST TO USE HOLLOW TILES. WE REMIND YOU THAT ANY WEIGHT MUST BURDEN UPON THE ARCH OF THE OVEN.

3) FILL WITH VERMICULITE (SUPPLIED WITH KIT OF INSULATION)UNTIL REACHING AN HEIGHT OF 20 CM UPON THE OVEN'S TOP, COVERED WITH CERAMIC BLANKET. YOU SHOULD NOT FIND SUCH A MATERIAL, YOU CAN REPLACE IT WITH EXPANDED CLAY WITH MEDIUM GRAINS.

3) LEAVE IN THE UPPER PART OF THE WALLS SOME AIR INTAKES FOR TRANSPIRATION, SO THAT THE OVEN COULD DISCHARGE THE DAMPNESS.



PART D OVEN'S FIRING

The oven when it's new, has a big water's content, which during the drying must not turn into steam inside the handwork.

Therefore it's **NECESSARY** to start very carefully with the first firing in order to avoid the above mentioned effect, which could create cracks to the handwork.

For **THE FIRST FIRING**, which has to be carried out gradually and constantly for 1 week days, we suggest you to follow these instructions:

1)Light the fire in the central part of the oven.
2) Keep an even inside temperature to about 100 C° CONSTANTLY for the first day
3) Raise of 50 C° from the second day, for each day (**and keep it constant for all the day**); until the complete dehumidification of the handwork.

IMPORTANT

LITTLE AND EVENTUAL CRACKS INSIDE THE CROWN'S ELEMENTS ARE PERFECTLY NORMAL AND ARE DUE TO THE THERMAL EXPANSION OF THESE ONES TO THE HIGH TEMPERATURES . SUCH CRACKS DO NOT COMPROMISE IN ANY WAY THE WORKING OF THE OVEN, ON THE CONTARY, THEY ARE SYMPTONS OF A VERY GOOD DEHUMIDIFICATION OF THE HANDWORK. BETWEEN THE FLOOR'S TILE AND THE CROWN'S ELEMENTS, A LITTLE SPACE IS WILLINGLY LEFT WHICH WILL BE FILLED BY THE USER DURING THE WORKING, WITH THE COMMON ASH. THIS OPERATION ALLOWS A THERMAL EXPANSION TO THE FLOOR, IN ORDER FOR IT NOT TO BEAT AGAINST THE CROWN'S ELEMENTS.

IMPORTANT

IN CASE OF AN EXTENDED INACTIVITY OF THE OVEN, PROCEED WITH A SLOW RELIGHTING FOR ABOUT 6 HOURS

IMPORTANT

WE RECOMMEND TO FOLLOW CAREFULLY WHAT ABOVE INDICATED, SINCE THE ALMOST TOTALITY OF THE CRACKS ON THE CROWN'S ELEMENTS OCCUR DUE TO A TOO FAST DRYING.

PART E -**FIRE'S POSITION AND WOOD'S USE**

With a normal oven's utilisation the fire should be positioned sideways; as the part most exposed to the fire will suffer consequently the most thermal expansions and the most wear during the years.

We recommend to alternate the fire from the right side to the left side and vice-versa; in this way you will obtain a constant balance for the structure and surely a better yield in time.

We suggest to use thin, light and dry wood, to make easier the fire's lighting and a better initial heating.

Successively, in order to have an optimum yield with a low wood consumption, we suggest to **use heavier and thicker wood** (Oak - Beech – Oliva in trunks long cm 30-40), by observing the quantities shown in our brochure.

We don't suggest the use of resinous wood.

Do not use any other kind of fuel, such as coal, charcoal slak, petrols, an so on.

The wood put into the oven must NEVER be beaten against the crown because at high temperatures some damages to the structure may occur.

PART F **COOKING TIMES**

The cooking times are very variable; normally from 1,5 to 3,5 minutes for the traditional pizza, and are due to the kind of dough and to the inside temperature employed from each single pizzaman. One of the most important performance of our Vesuvio ovens is just the uniform backing capacity even in stressing working conditions.The perfect balance between the crown and the floor and the special refractory "cotto clay" contained in the floor enable an optimal backing, both slow at low temperature (250/300 C) and fast and high temperature (over 400 C without that the pizza dough sticks or burns.

PART G - INSIDE CLEANING AND MAINTENANCE

We suggest to use the suitable brass brushes for the inside cleaning of the oven, which you can easily find in commerce or at Refrattari Valoriani and **not to beat the shovel on the baking surface in order to avoid damages.**

D**ON'T USE** wet rags or other materials containing dampness. **NEVER THROW** water inside; IT'S IMPORTANT TO AVOID strong thermal rushes which could damage the oven.

DONT'S USE SALT INSIDE THE OVEN

The professional ovens FVR-TOP have been planned and designed for the cooking of pizza-bread-cookies etc... Refrattari Valoriani s.r.l. declines all responsibility in case of a different use, except for the above mentioned ones.


VALORIANI