



INSTALLATION, USE AND MAINTENANCE HANDBOOK

PROFESSIONAL OVEN “VALORIANI VERACE” RHS® System



VALORIANI
WORLD FAMOUS



INSTALLATION, USE AND MAINTENANCE HANDBOOK



INSTALLATION, USE AND MAINTENANCE HANDBOOK

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INSTALLATION, USE AND MAINTENANCE HANDBOOK

GENERAL WARNINGS

Attention:

- The present handbook is an integral and substantial part of the oven and must be kept available to the operators for any eventual consultation.
- Before carrying out any operation, read carefully the information contained in the handbook, with reference to safety , installation, use and maintenance.
- The oven must be used only for the use for which it has been conceived (baking of pizza, bread, cakes, roasts and so on...)
- The installation of the chimney flue must be conforms to the regulations in force in that country and carried out by authorized personnel.
- All the local regulations , included the ones referred to the National, European and International norms, must be respected during the oven's installation.
- In case of repair, it's necessary to use always original spare parts.
- The Manufacturer declines any responsibility for direct and indirect damages caused by a wrong installation , bad maintenance ,infringement, improper use and non-observance of the norms and indications contained in the present handbook.



INSTALLATION, USE AND MAINTENANCE HANDBOOK

REFRATTARI VALORIANI S.R.L.

Declares that the oven, according to its design, construction and execution has proven to be conform to **D.P.R. 23 August 1982 n° 777 (implementation of the directive CEE n° 76/893 concerning the materials and objects designed to be in contact with alimentary products).**

This declaration loses its validity if the oven is modified without the explicit authorization of the producer.

Comparative schedule –technical data Series “VALORIANI VERACE”

Model	120	140
Weight Kg. ~	1300	1550
Chimney flue Ø cm.	20	20
Chimney flue Minimum height ml.	3	3
Rated thermal power (Kcal/h)* ~	18.000	23.000
Rated thermal power (KW)* ~	20,9	26,7
Standard mouth - dimensions cm.	45 x 23	45 x 23

*** If the operating conditions are the following:**

1. Operative temperature about 400°C degrees.
2. Use of medium/high hardness wood - wood of reference : BEECH with medium moisture of about 25% or use of equipped gas burner LPG or Methane gas.
3. Measure calculated during the use of the oven already at its operative temperature.

Obviously the above mentioned data may change if the conditions of use, operative temperature, type of wood, insulation and oven's size are different than what above described.

Harmonized Norms EN-UNI : **EN13229** Open inserts and fireplaces fed with solid fuel-
Requirements and test methods.
UNI 10474 Baking ovens fed with solid fuels.
Classification, features and thermal test.

Data/Date: 30 June 2009

NB: Weights and sizes are approximate and are subject to changes without any prior notice by Refrattari Valoriani s.r.l.



INSTALLATION, USE AND MAINTENANCE HANDBOOK

1.0 INTRODUCTION

This handbook contains all the information for the installation, use and maintenance of the oven.

The original text of this publication , written in Italian language , constitutes a unique reference for the resolution of eventual interpretative disputes bound to the translation in the European languages.

This publication is also to be considered integral part of the oven and must be therefore kept for eventual, future references until the final demolition of the oven.

1.1 PURPOSE OF THE HANDBOOK

The purpose of this manual is the one to allow the designed people to understand the working of the oven , to install and to use it in a safe manner.

For the use and installation the operators shall also follow the specific legislation, related to employment, in force in the country where the oven is installed.

1.2 WARRANTY OF THE PRODUCER

The warranty has a duration of 12 months and its course starts from the date indicated in the invoice. The user , in order to benefit of the warranty supplied by the producer , must strictly observe the warnings indicated in this manual.

1.3 WARRANTY TERMS

In case of verified fault of the handwork, the warranty of the producer is limited to the single free delivery of a new and equivalent component.

The producer declines any responsibility , direct and indirect, caused by:

- ✓ Failure to observe the instructions and use different than the one indicated in this manual.
- ✓ Use which does not comply with the specific regulations in force in the country of installation.
- ✓ Removal or tampering of the plate showing the serial number of the oven.
- ✓ Changes carried out on the oven without authorization.
- ✓ Repairs carried out by unauthorized personnel.

Note: the sale of the oven to a second user involves also the delivery of this manual, the failure to deliver this manual automatically invalidates the responsibility of the producer with reference to its correct use . In case of sale of the oven to a second user in a country of a different language , it will be responsibility of the primary user to provide for a faithful translation of this manual in the language of the country where the oven will be operating.



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*Factory VALORIANI
in 1900*



2.0 DESCRIPTION

2.1 CREDITS

First of all we wish to thank you for selecting a professional oven VALORIANI and we congratulate you on your choice.

Our company has been manufacturing refractory items and prefabricated ovens for over 50 years in our premises located in Reggello, close to Florence. All items produced spring from an idea that Mr. SILVIO VALORIANI had right after World Word II for bread baking. The concept immediately met the favor of the Italian people and proved to be the winning card of the company. Thanks to their 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 believe to be the only factory directly producing all the oven's components , both of the floor and of the dome and we're proud of the several imitation's attempts by the competition all over the world.

Massimo Valoriani



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2.2 VALORIANI VERACE,

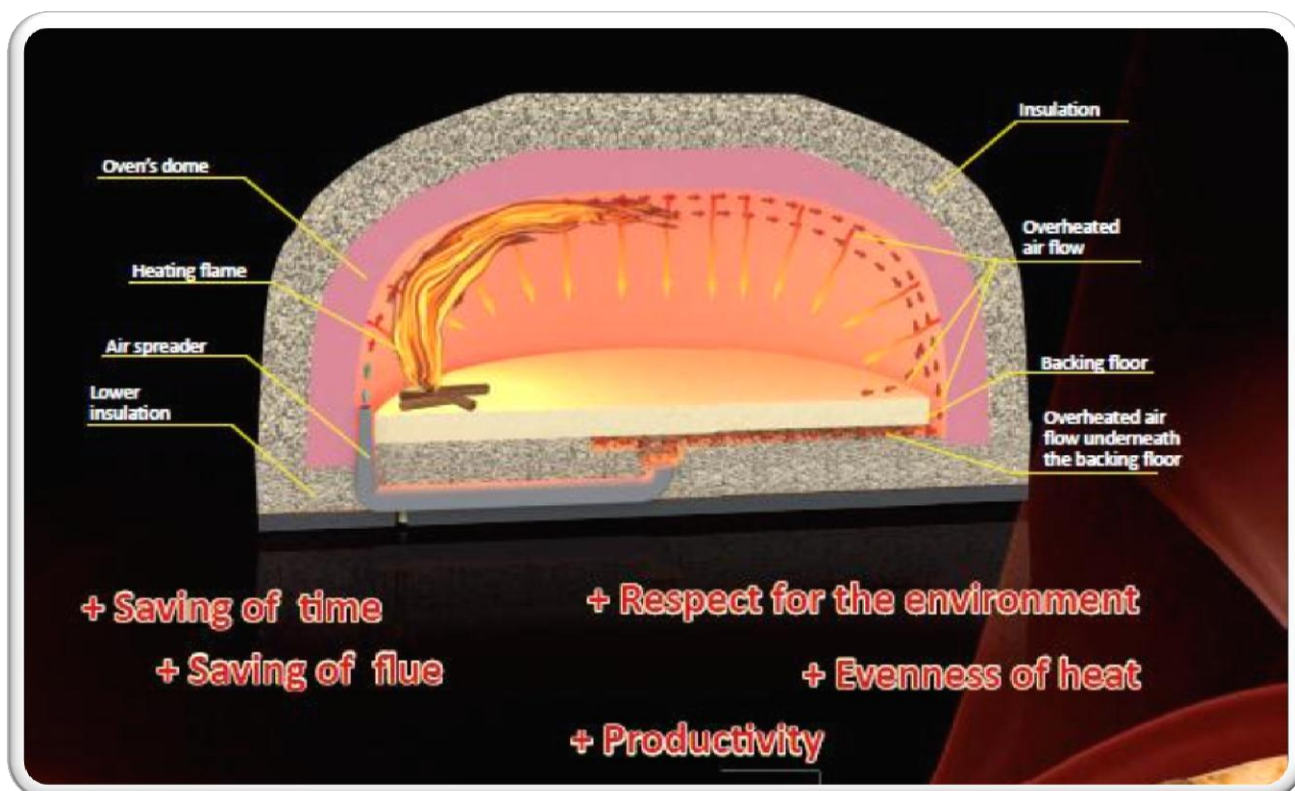
an oven technologically advanced, result of the centuries-old experience of Refrattari Valoriani, of his engineers supported by the **ASSOCIATION OF TRUE NEAPOLITAN PIZZA**.

2.3 R.H.S.® (RECYCLING HEATING SYSTEM)

it's the patented system which allows the heat's recover and utilization, making it flow at high temperature under the oven's floor and inside the oven.

Thanks to the **R.H.S.® system**, the floor's temperature is uniform and steady also in those areas far from the heat source, the combustion is adjustable and the consumptions are very low. Moreover, the quality of the emissions into the atmosphere results to be better compared to the one of the standard ovens present on the market, being in this way more conforms to the strict laws on this matter.

VALORIANI VERACE does not want and cannot replace the skill and creativity of the pizza-maker but it allows him to maximize his skills.





INSTALLATION, USE AND MAINTENANCE HANDBOOK

2.4 INTENDED USE

The professional ovens VALORIANI VERACE have been purposely planned and designed for the baking of NEAPOLITAN PIZZA. Of course you can bake other types of pizza but we mistrust by a different use which is not the baking of pizza , cakes , bread or similar products.

2.5 IDENTIFICATION PLATE

The identification plate with serial number is integral part of the oven and it shall not be removed for any reason, penalty the warranty loss.

3.0 INSTALLATION SAFETY WARNINGS

- ✓ The minimum suggested safety distance from inflammable materials is of about 2 meters from the oven's mouth.
- ✓ The oven must be installed upon a floor of proper load capacity.
If the existing building does not meet this requirement , you must take appropriate actions to make the support floor structurally suitable.
- ✓ The oven's installation must allow an easy access for its cleaning , the cleaning of the air ducts and of the chimney flue.
- ✓ Keep the children far from the heat sources.
- ✓ The oven must be used only by skilled or correctly instructed people with its operation.

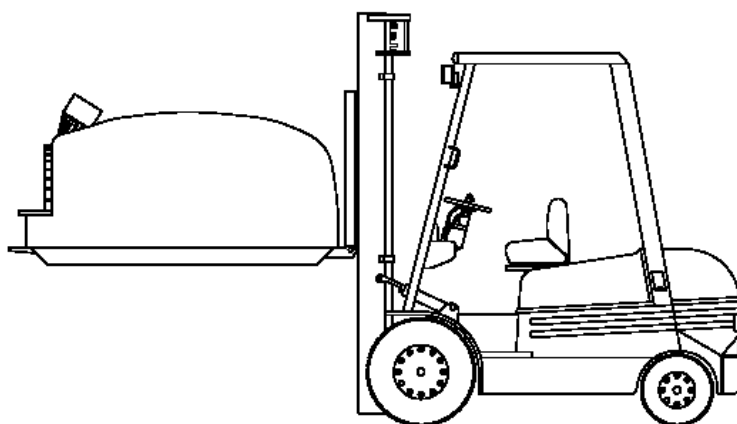


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4.0 HANDLING

4.1 HANDLING WITH FORK-LIFT

For the handling of the oven by using a fork-lift , take care of the following steps :



Use a fork lift of a suitable load capacity with lifting forks of adequate length so that all the oven's base is supported during its handling.

**USE A FORK LIFT OF SUITABLE
LOAD CAPACITY WITH LIFTING
FORKS OF ADEQUATE LENGTH SO
THAT ALL THE OVEN'S BASE IS
SUPPORTED DURING ITS
HANDLING.**

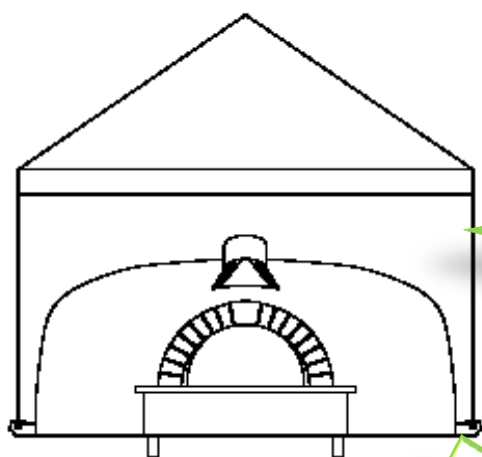
**To avoid damages to the oven and carry out
the handling operations in safety , do not
use fork lift of inadequate load capacity or
with lifting forks of inadequate length which
cannot bear all the oven's base.**



4.2 HANDLING BY LIFTING MEANS

For the handling of the oven by lifting means , please observe the following steps :

Lift the oven so that the lifting cables never tighten against the oven's structure



**ALWAYS MAINTAIN
THE CABLES SPACED
SO THAT THEY DO
NOT TIGHTEN
AGAINST THE OVEN**

**POSITION IN THE LOWER PART OF THE METAL COVERING
2 RIGID BARS ON WHICH TO HOOK THE LIFTING CABLES
.THE CABLES MUST REMAIN OUTSIDE THE OVEN , IN ORDER
NOT TO PRESS IT.**

PS : all the described operations must be carried out in the maximum safety and totally respecting all the laws in force in the country of operation.



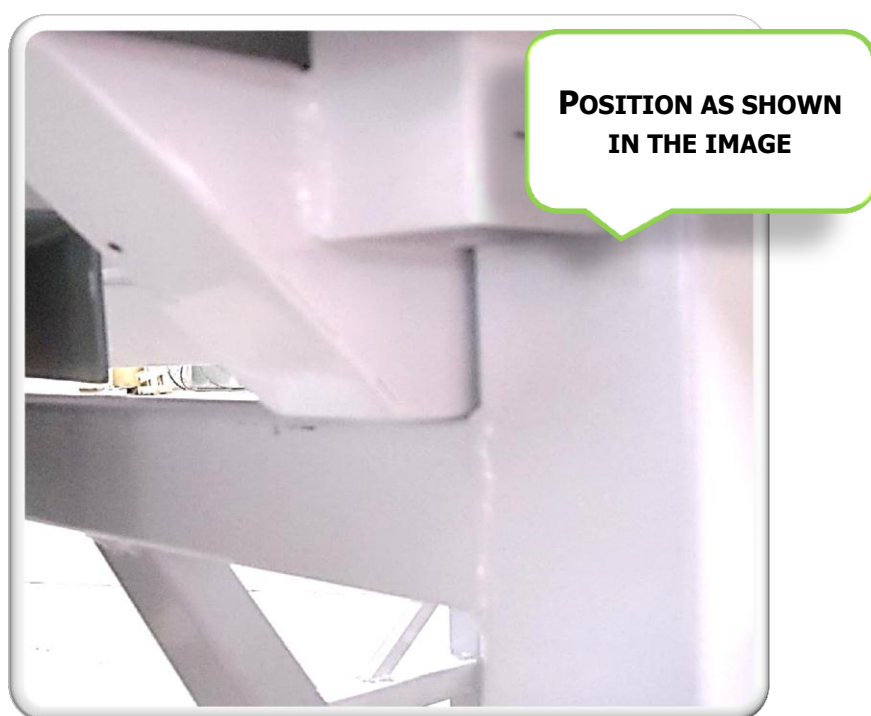
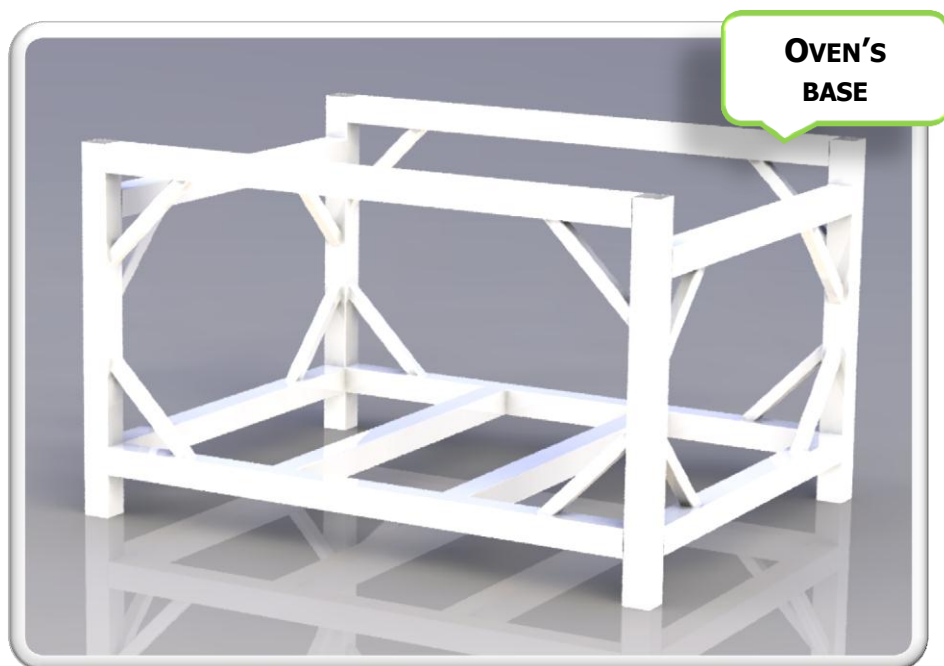
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5.0 POSITIONING

Position the oven on its metal base as shown in the picture

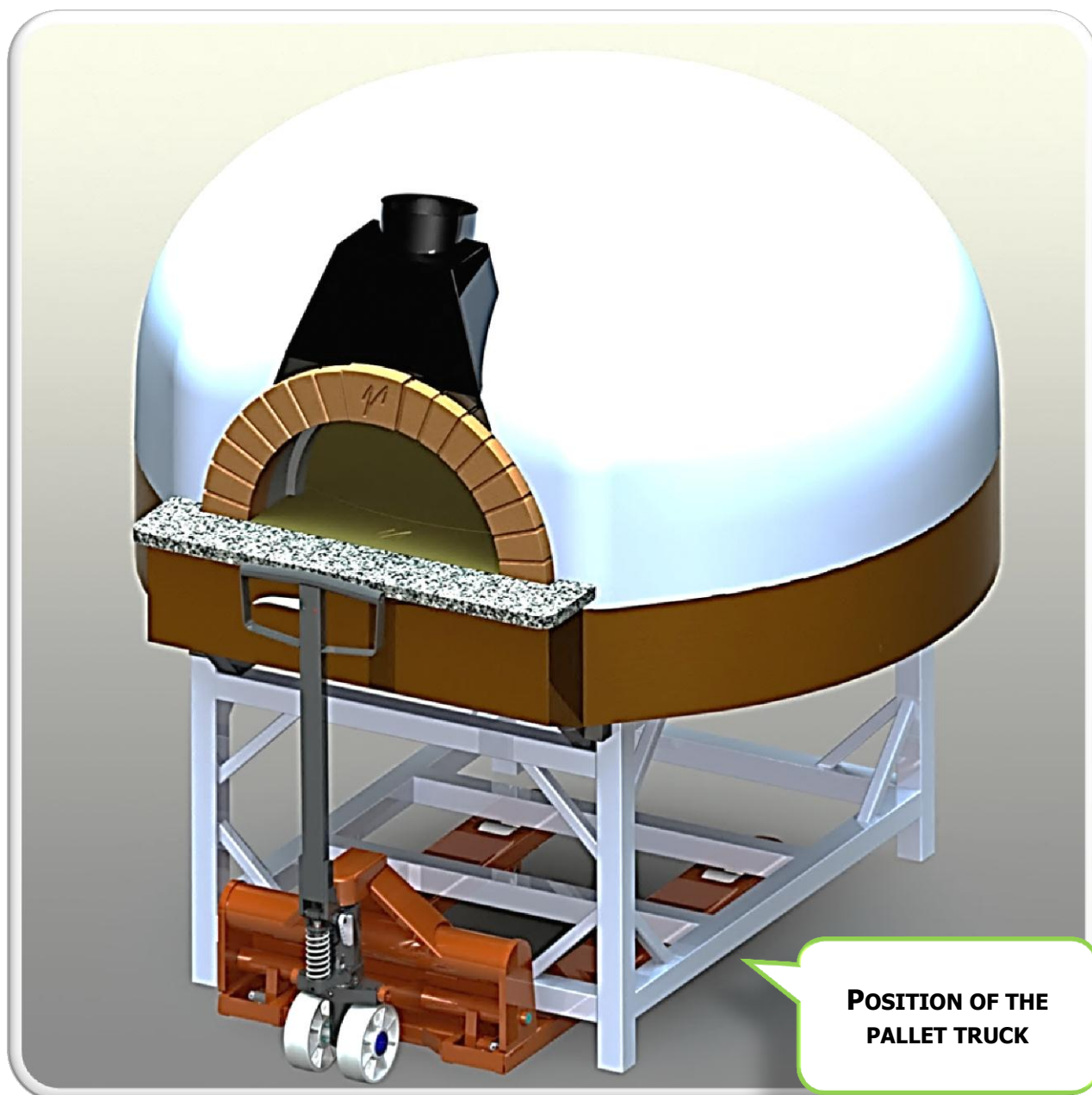
The oven must be installed upon a floor of proper load capacity.

If the existing building does not meet this requirement , you must take appropriate actions to make the support floor structurally suitable



5.1 POSITIONING BY PALLET TRUCK

After positioning the oven on its metal base it is still possible to move it by using a pallet truck positioned under the crossbars of the base as shown in the below image.





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6.0 INSTALLATION OF THE RHS® SYSTEM CONTROL BOARD

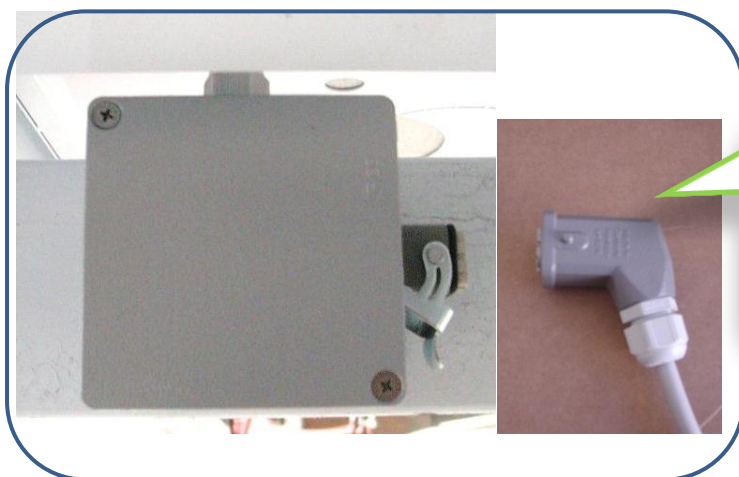
After positioning definitively the oven , then fix the fan's control board in a place at your choice but at a distance from the oven which allows the control wire's connection to the relevant electric connection positioned under the oven .

Connect the supply cable to you electric system by respecting all the norms in force in your country.



**CONTROL BOARD OF
THE RHS® SYSTEM**

Connect the cable of the control board of the RHS® system to the relevant connection positioned under the oven



**CONNECT THE CABLE OF THE
CONTROL BOARD OF THE RHS
SYSTEM TO THE RELEVANT
CONNECTION POSITIONED UNDER
THE OVEN**

For the assembly of the gas burner please consult the relevant instructions



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IMPORTANT

WITH REFERENCE TO THE CHIMNEY FLUE, THIS ONE MUST BE INSTALLED BY QUALIFIED PERSONNEL IN CONFORMITY WITH THE NORMS **UNI 9615** OR LEGISLATION IN FORCE IN THE OWN COUNTRY

ALWAYS PROVIDE FOR THE AIR REINSTATEMENT NECESSARY TO THE COMBUSTION AND TO THE SMOKES EVACUATION , AS PROVIDED BY THE REGULATIONS IN FORCE ON THIS MATTER , THROUGH OPENINGS TO THE OUTSIDE (VENTILATION GRILLS), ESPECIALLY WHEN THE OVEN IS INSTALLED IN ROOMS WHERE THERE IS THE PRESENCE OF FORCED SUCTION SYSTEMS (SUCKED HOODS OF THE KITCHENS)

THE MANIFOLD'S OUTLET IS DIAMETER 20 CM.

7.0 USE AND SAFETY INSTRUCTIONS

7.1 WARNINGS

- ✓ All the local regulations, included the ones referred to the National Norms, European Norms and International Norms must be observed during the installation.
- ✓ Do not use the oven as incinerator or in any other way different than the one for which it has been conceived.
- ✓ Do not use fuel different than the ones suggested
- ✓ Do not use liquid fuels.
- ✓ The oven and in particular way some outside surfaces , when it's operating it reaches high temperatures to the touch , handle with care to avoid burns.
- ✓ Do not carry out any not authorized changes.
- ✓ Use only original spare parts recommended by the producer.



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7.2 OVEN'S FIRING

The oven when it's new, contains residual moisture , 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 **MUST** proceed as follows:

7.3 FIRST FIRING VALORIANI VERACE RHS® GAS

- ✓ Switch the burner on and set the minimum flame mode
- ✓ Switch the system RHS® on by selecting speed 4.
- ✓ Keep CONSTANT the previous settings for the first two days
- ✓ From the third day set the burner on automatic mode increasing the set point of 50°C a day

PS: The initial set point of the third day shall be the same of the temperature reached on the second day

- ✓ From the fifth day you can use the oven at the operating temperature and carry out the first baking tests.
- ✓ Set the system RHS® on speed 2 or 3.

7.4 FIRST FIRING VALORIANI VERACE RHS® WOOD

- ✓ Light a small fire in the central part of the oven.
- ✓ Do not switch the RHS® system on
- ✓ Keep the inside temperature at **about 100/150° c constantly** for the first two days.
- ✓ From the third day increase the temperature of 50 ° C a day (and keep it constant for all the day) only on the 5th and 6th day the oven's dome turns into white and you can make the first baking tests.
- ✓ Switch the system RHS® on selecting speed 2 or 3.



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8.0 OVEN'S USE

- ✓ 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 –Ash Olive in trunks long cm 30-40), by observing the quantities shown in our brochure.
- ✓ We don't suggest the use of resinous wood. (PINE-SPRUCE) because it transmits a characteristic and inappropriate aroma and also the use of POPLAR and BIRCH for its high residual un burnt particles.
- ✓ Do not use any other kind of fuel, such as coal, charcoal slack, petrol's, and 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.

IMPORTANT

LITTLE AND EVENTUAL CRACKS INSIDE THE CROWN'S ELEMENTS , OF THE BAKING FLOOR OR OF THE OUTSIDE DOME ARE PERFECTLY NORMAL AND ARE DUE TO THE THERMAL EXPANSION OF THESE ONES TO HIGH TEMPERATURES . SUCH CRACKS DO NOT COMPROMISE IN ANY WAY THE WORKING OF THE OVEN, THEY ARE SYMPTOMS OF A DEHUMIDIFICATION OF THE HANDWORK.

IMPORTANT

IN CASE OF AN EXTENDED INACTIVITY OF THE OVEN, PROCEED WITH A SLOW RELIGHTING FOR ALMOST 24/36 HOURS

IMPORTANT

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

IMPORTANT

DO NOT KEEP IN THE HEAT RADIATING AREA OR IN FIRE HAZARD AREAS, FLAMMABLE MATERIALS OR POTENTIALLY LIKE THAT. OBSERVE ALL THE NORMS IN FORCE ON THIS MATTER IN ORDER TO STOCK CORRECTLY THE OVEN'S FUEL

8.1 CONTROL BOX-COMMANDS DESCRIPTION

Figure A : Control box

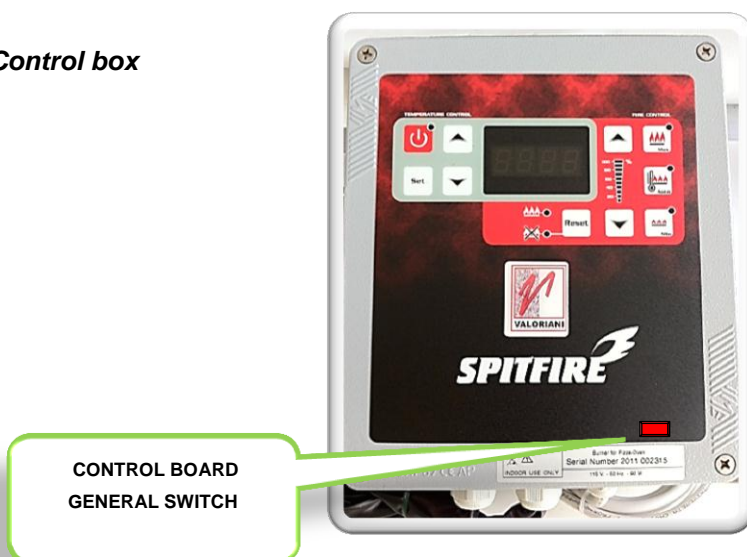
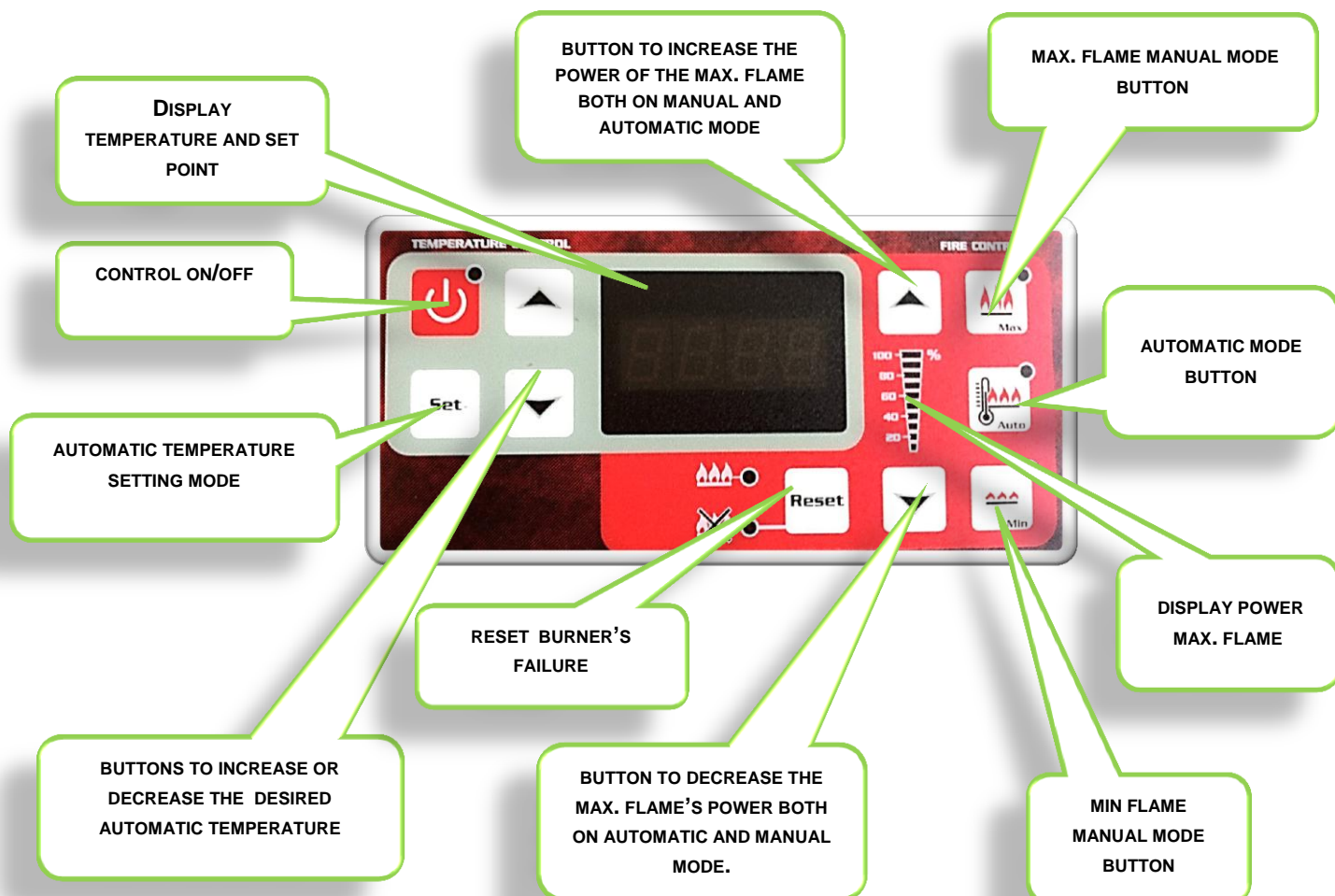


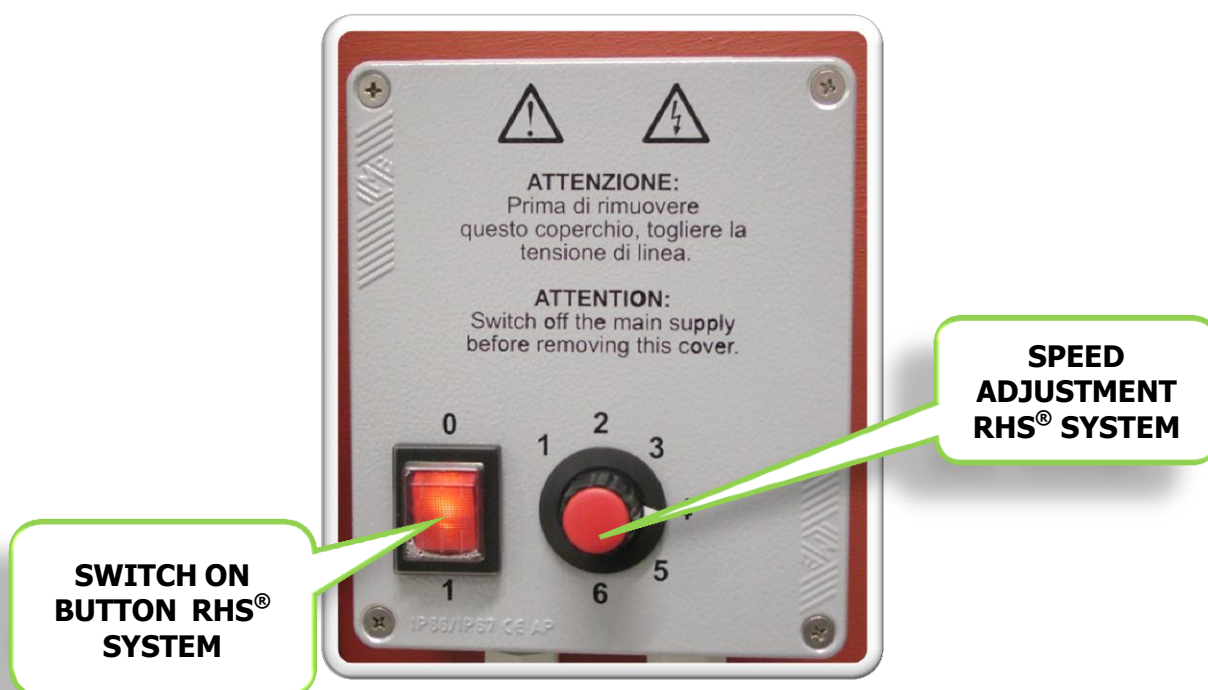
Figure B : burner's controls view





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8.2 COMAMNDS DESCRIPTION-RHS[®] SYSTEM





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8.3 SUGGESTIONS FOR THE REGULATION OF VALORIANI VERACE RHS® GAS

The best result reached after several setting tests of the RHS® system, is the following :

NB: the given data are for indicative purpose since many may be the variations (kind and moisture of the ingredients , moisture and kind of pizza dough , baking temperature normally used by the pizza maker , experience and method of the pizza maker) therefore an optimal setting of the regulation parameters could be made solely by the pizza maker during the initial phases of the utilization.

Heating of the oven gas operating after the first firing phase (curing) :

- Temperature set point for the baking of the pizza VERACE = 400/450°C
- Burner's power = 100 %
- Fan's speed = position 3 or 4

Operative oven's utilization

- Temperature set point for the baking of pizza Verace = 400/450°C
- Reduce the burner's power = 60/70 %
- Fan's speed = position 2 or 3

Notes – burner's power RHS® gas operating

- ✓ A burner's power higher than 70% will have the effect of an higher thermal radiation on the pizza's surface and consequently an over- baking on the pizza's surface.
- ✓ A burner's power lower than 50% will not allow the even keeping of the oven's temperature.

Notes fan's speed RHS® gas operating

- ✓ A fan's speed higher than pos. 4 will give the effect of an higher heating of the zone of the baking floor opposite to the burner's flame and consequently an unbalance of the temperature evenness of the baking surface.
- ✓ A fan's speed lower than pos. 2 will not allow to exploit the benefits given by the RHS system.

However the correct setting of the burner's power and of the fan's speed will be given by the experience of the end user.



Image with flame at the maximum with power 70% and temperature 420°C



Image of the flame at minimum and temperature 420°C

8.4 SUGGESTIONS FOR THE REGULATION OF VALORIANI VERACE RHS® WOOD

The best result reached after several setting tests of the RHS system, is the following :

For a correct working of the oven “Valoriani Verace” it’s necessary the use of the firedog and of the ash separator.

PS : the reported data are for indicative purpose since many may be the variations (kind and moisture of the ingredients , moisture and kind of pizza dough , baking temperature normally used by the pizza maker , experience and method of the pizza maker, kind quality and moisture of the wood) therefore an optimal setting of the regulation parameters could be made solely by the pizza maker during the initial phases of the utilization.



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Heating of the oven wood operating after the phase of first firing (curing) :

- Heating temperature = 400/450°C
- Fan's speed = off

Operative oven's utilization

- Temperature for the baking of the pizza VERACE = 400/450°C
- Fan's speed = position 2 or 3

Notes fan's speed RHS® wood operating

- ✓ A fan's speed higher than the position 2 or 3 will produce an higher heating of the backing floor's zone, opposite to the flame .
- ✓ A fan's speed lower than position 2 or 3 will not allow to exploit the benefits of the RHS system.

However the correct setting of the burner's power and of the fan's speed will be given by the experience of the end user.



Correct wood combustion

9.0 BAKING TIMES OF PIZZA

The baking times are very variable; normally from 1 to 1,5 minutes for the VERACE pizza, and are due to the kind of dough and to the inside temperature employed by each single pizza -maker. One of the most important performance of the VALORIANI VERACE is just the uniform baking capacity with every working conditions.

The perfect balance between dome and floor and the special refractory “COTTO” which constitutes the same, together with the RHS system, allows an optimal baking at high temperature (over 400 degrees) without that the pizza sticks or burns in the lower part.



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10.0 CLEANING AND MAINTENANCE

10.1 CLEANING

We suggest to use the suitable brass brushes for the inside cleaning of the oven, which you can easily find in commerce or by Refrattari Valoriani ..

- ✓ Do not beat the shovel on the baking surface in order to avoid damages.
- ✓ Do not use wet rags or other materials containing moisture.
- ✓ Never throw water inside the structure, it's important to avoid strong thermal shocks which can damage the handwork.
- ✓ Do not use salt inside the oven.

10.2 MAINTENANCE

Every extraordinary maintenance operation must be carried out by qualified personnel.



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THE SMOKE SYSTEMS IGNITES IF “ ABUSED ” AND DUE TO :

- ✓ Overheating of the smoke system (for wrong oven's use , use of inappropriate fuels, fire of the soot not removed , wrong or failed insulation.
- ✓ Heat transmission to the wooden surfaces (roof's structure wooden coverings).
- ✓ Over ventilation which encourages the spread of fire (ventilated roofs, insulations under the pan tiles, trusses and wainscots).

PS: New technologies of smoke systems have been projected to be used inside buildings build according bio architectural principles (wooden structures closet o steel chimney flues)

HOW TO AVOID THE FIRE INSIDE THE CHIMNEY FLUE ?

With common sense and paying attention to the following factors

- ✓ Use of the fuel indicated by the oven's producer.
- ✓ Periodical maintenance of the chimney flue by qualified personnel.
- ✓ Building of the system by qualified and specialized companies.
- ✓ Use suitable and certified building materials for the smoke system.
- ✓ Laying carried out by specialized companies.
- ✓ Observation of all the technical norms and of all the norms in force in the country of operation.

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11.0 TROUBLESHOOTING AND FAULTS

The most common failures are :

PROBLEM	CAUSE
The oven does not heat properly	Insufficient or not suitable fuel (ex. wet wood or not dried enough) -Excessive draft -Lack of combustion air
Smoke coming out the oven's mouth	-insufficient draft -Lack of air reinstatement into the room - Insufficient or inadequate chimney

In case of other failures please contact the retailer.

THE PROFESSIONAL OVENS VALORIANI VERACE HAVE BEEN DESIGNED FOR THE BAKING OF THE PIZZA VERACE, .THEREFORE REFRATTARI VALORIANI S.R.L. DECLINES ANY RESPONSIBILITY FOR UTILIZATIONS AND MODES OF APPLICATION DIFFERENT THAN THE ABOVE DESCRIBED ONES.

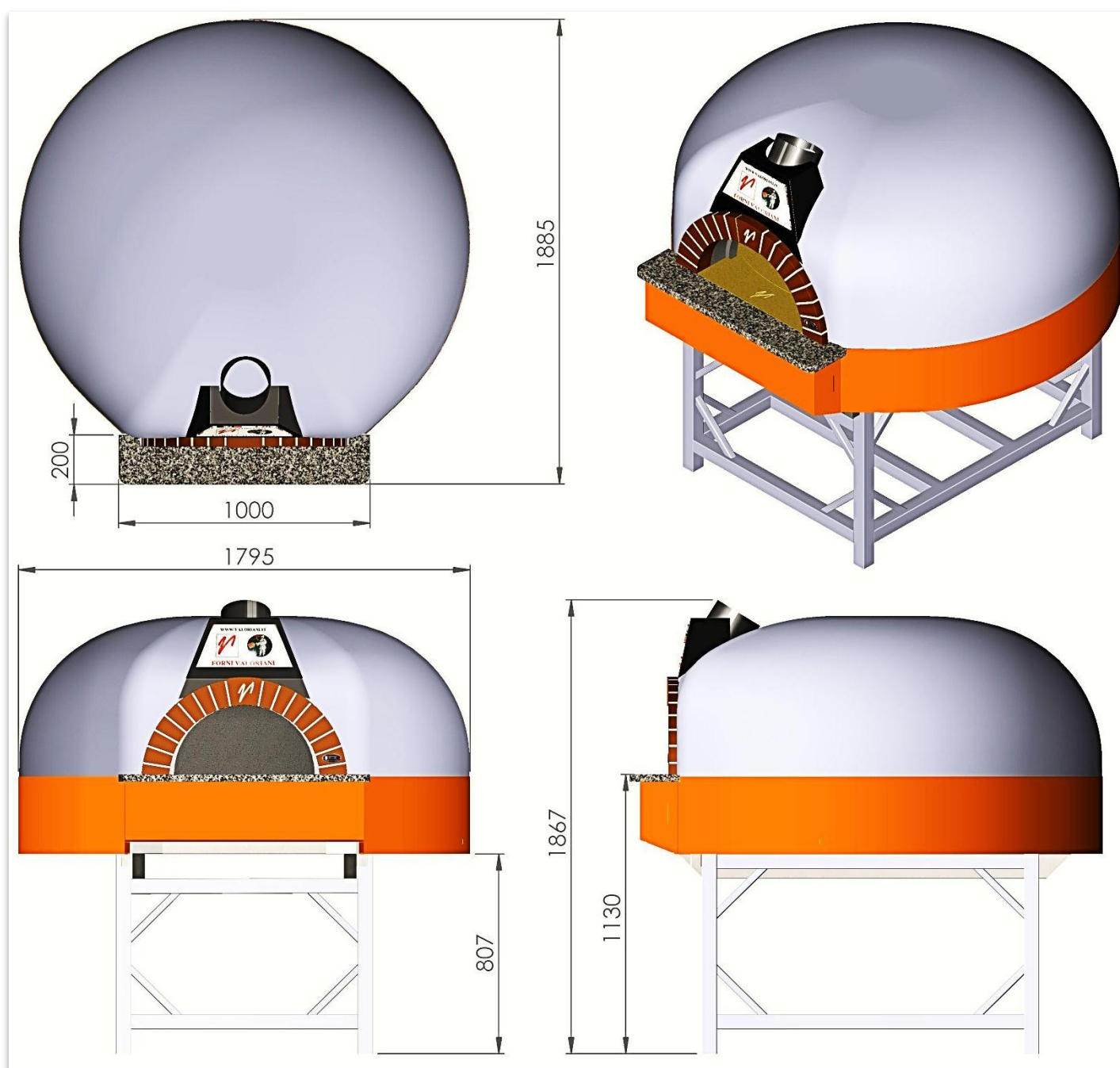
IT IS NOTED THAT EVENTUAL BUILDING WORKS AND CONSTRUCTION WORKS IN GENERAL , SHOULD BE EVENTUALLY CARRIED OUT BY THE CUSTOMER AND AT HIS CHARGES , UNDER HIS FULL AND EXCLUSIVE RESPONSIBILITY , BY AN ADMINISTRATIVE , CIVIL AND PENAL ASPECT . THE CLIENTS UNDERTAKES AND WARRANTS STARTING FROM NOW TO DETECT REFRATTARI VALORIANI S.R.L FREE FROM ANY AND ALL NEGATIVE CONSEQUENCES SHOULD ARISE TO THIS ONE AND CAUSED BY EVENTUAL ADMINISTRATIVE , URBAN PLANNING AND PENAL BREACHES , BY WARRANTING TO FACE ALL THE EVENTUAL EXPENSES, PENALTIES INCURRED AS A RESULT TO THE BREACHES COMMITTED BY THE CUSTOMER.



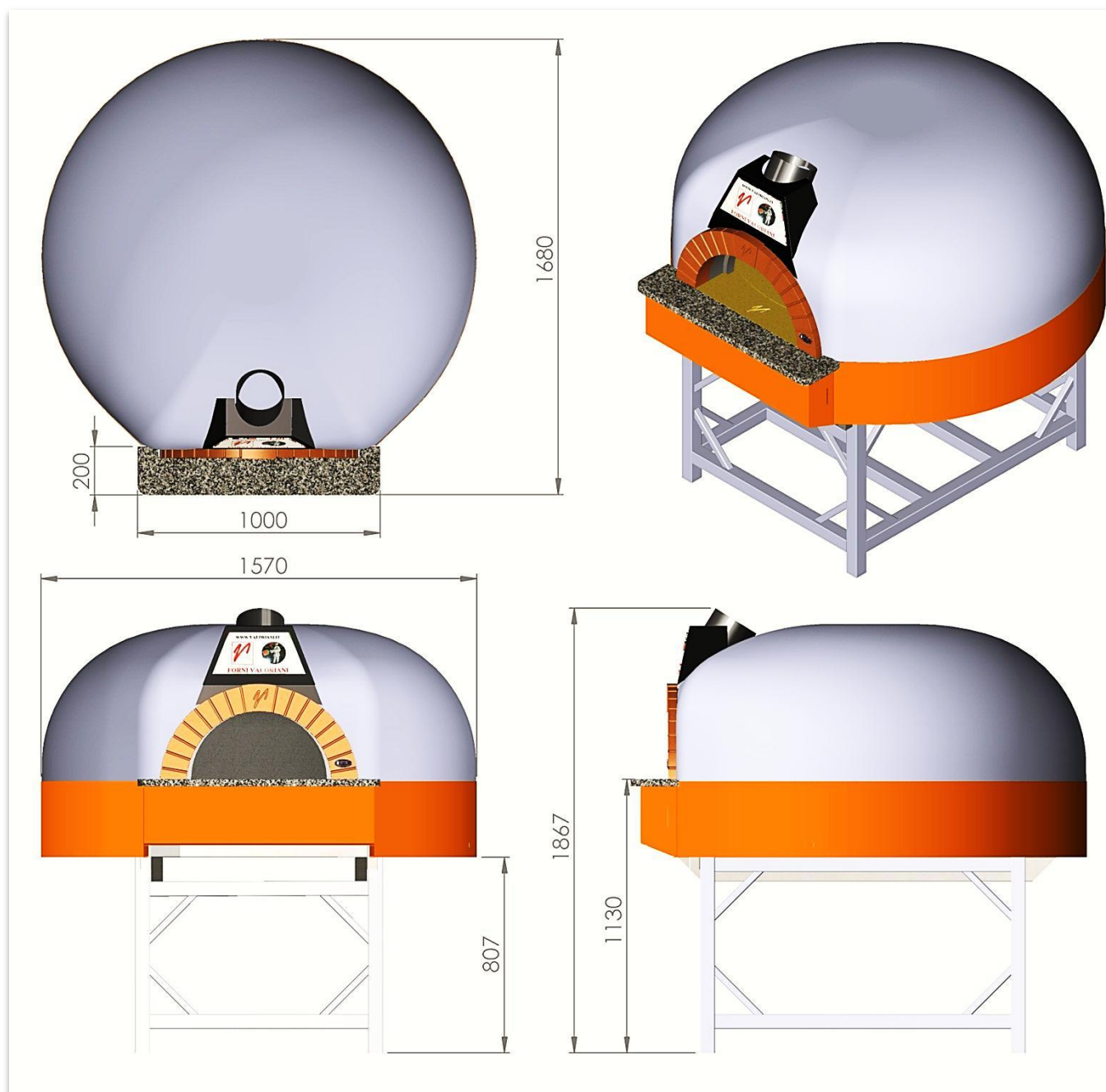
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12.0 DIMENSIONS

12.1 DIMENSIONS VALORIANI VERACE 140



12.2 DIMENSIONS VALORIANI VERACE 120





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