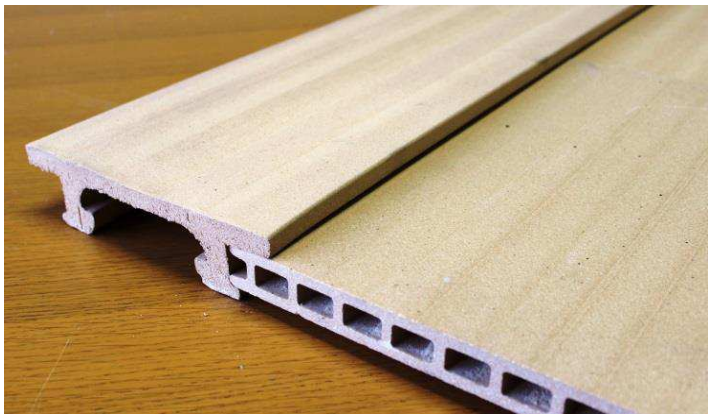
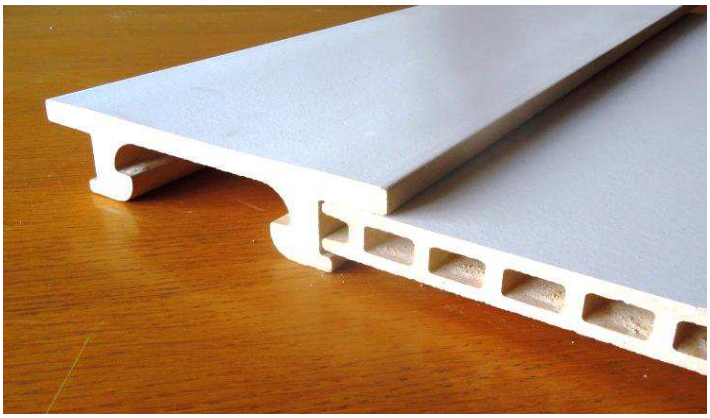
ENGOBED KILN ROOF

New technical solutions to improve kiln chemical resistance



STANDARD KILN ROOF



ENGOBED KILN ROOF

Customizable engobe solutions:

R.K.B. - ROOF KILN BASIC

Engobe coated roof resistant to Basic chemical attack (PH > 7)

R.K.A. - ROOF KILN ACID

Engobe coated roof resistant to Acid chemical attack (PH < 7)

PRODUCT DESCRIPTION

1) The combination of the higher chemical resistance of the ceramic engobe with its extremely low porosity gives an enhanced resistance to the kiln roof.

2) The application of the engobe is realized on dried pieces in order to create a solid bonding with the refractory support during firing process.

3) Refractory cordierite-mullite ($2MgO{\cdot}2Al_2O_3{\cdot}5SiO_2$ / $3Al_2O_3{\cdot}2SiO_2$) products have been modified with an higher content of silica, which generates a different microstructure from the standard one.

4) Engobe chemical composition and thickness are selected depending on the type of chemical attack, in particular the addition of zirconia gives improved resistance to aggressive environments.

5) Laboratory tests on the engobes showed an improvement of the chemical resistance with high alkali or acid concentrations. Products treated by means of this special engobes increased up to 4 times their working life.

6) These coated refractories are really suitable for brick tunnel kilns especially in the preheating zone where kiln is subjected to a huge and various chemical attack by alkali such as sodium/ potassium/lime or acids like sulphur/fluorine which can be commonly found in clays used for this kind of products. Moreover this solution is appropriate in production plants where raw materials preparation (clays) is still done with traditional processes while the current are mostly dry grinding ones.

7) These products can surely be employed also in tiles kilns in the preheating zone to simply improve their working life, which for instance means less maintenance costs as well as less kiln stops.

"When we propose new solutions .. trust on us. Our work is the result of a serious and deep research.
Our women and men are always ready to solve your problems."

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