PUMICE SAND
POMICE FOR MASONRY MORTAR AND PLASTER

COMPOSITION:
Selected PUMICE (an alveolar product of remarkable lightness and great isolating properties resulting from natural extension of effusive magmatic mineral) with a grain size of 0-3 mm. for the realization of mortar for masonry and for transpiring plaster, sound absorbing and thermal insulating.

APPLICATION FIELDS
- THERMOINSULATING MORTAR
- TRANSPIRANT MORTAR
- SOUNDPROOF MORTAR
- FIRERESISTANT MORTAR
- BRICK OR STONE MASONRY
- INTERN OR EXTERN PLASTER
- STUCCATURE DOSAGE

Using the Pumice Sand a MORTAR having the following properties is obtained:

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>THERMAL INSULATION</td>
<td>$\lambda = 0.20$ W/(mK)</td>
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<tr>
<td>SOUND INSULATION</td>
<td>BETWEEN 40-50 dB and 400-3200 Hz</td>
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<tr>
<td>TRANSPIRABILITY</td>
<td>$\mu = 4$</td>
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<tr>
<td>EXCELLENT WORKABILITY</td>
<td></td>
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<tr>
<td>FIRE-RESISTANT</td>
<td></td>
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<tr>
<td>EXCELLENT VISUAL APPEARANCE OF THE SURFACE</td>
<td></td>
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<tr>
<td>DURABILITY</td>
<td></td>
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<tr>
<td>ECOLOGICAL</td>
<td></td>
</tr>
</tbody>
</table>

USE CONDITIONS

<table>
<thead>
<tr>
<th>PUMICE SAND + LIME</th>
<th>PUMICE SAND + CEMENT + LIME</th>
</tr>
</thead>
<tbody>
<tr>
<td>- One part of lime</td>
<td>- One part of lime</td>
</tr>
<tr>
<td>- Three parts of pumice sand</td>
<td>- One part of cement</td>
</tr>
<tr>
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</tr>
</tbody>
</table>

BATCHING OF WATER:
Such a batching has to be chosen according to the desired workability.

PREPARATION OF THE MIXTURE:
- With an automatic dough
- With a concrete mixer
- In a vessel with a bucket or a ladle
- On the ground with a bucket

Blend the mixture (2 - 3 minutes) until you get a homogeneous mass ready to use. The carrier, on which the product has to be applied, has to be prepared in relation to the type of work, enabling a suitable mooring spot at the end.

NECESSARY DOSES

- Approx. 1,10 MC o pumice sand or MC o mortar, mid gross-weight until reaching 820-880 Kg/MC.

AVAILABLE UNPACKED, IN BAGS (BIG-BAGS) 1,5MC SIZE AND IN 33LT BAGS PACKED ON PALLETS (50 bags on each pallet).

(1) Certificated by Politecnico of Torino n. 1488 from the 04/21/2004
(2) Certificated by Politecnico of Torino n. 1471 from the 06/08/2004
CONTRACTUAL CONDITIONS

NATURAL BIOPLASTER WITH PUMICE SAND

Bioplaster for grounding of internal and external applications, manually or automatically with a piston pump, ecological, lighter natural material (density 1.100 Kg/m³), with transpirability $\mu=4$, thermo insulating ($\lambda=0,20$ W/mK), fire-resistant, consisting of natural pumice with a size of 0-3 mm, bearing the CE marking, extracted in Pitigliano (GR) Pian di Valle-Nardeci quarry and consisting of natural hydraulic lime also bearing the CE marking.

The minimal thickness of application will be:
- generally not less than 1.5 cm;
- at least 3 cm for dehumidification purposes of masonry;
- resulting from the thermo-physical calculation based on a thermal conductivity of $\lambda=0.20$ W/mK during tempering.

Highest thickness at cm 1.5 will have to be performed in more layers.

The bioplaster is used like any other traditional base plaster and therefore all consolidated engineering practice has to be considered during application, (complete liming of the existing plasters, dampening on refusal of the carrier, the water of the mixture must be clean and free of salts, the work process has to be interrupted in case of wind or temperatures above 35°C and below 5°C, the surface must be kept humid during the first 5 days, etc.).

Should not be used on plasterboard and reinforced concrete.

This mineral is a natural raw material. All data indicated above are therefore approximate and do not provide any warranty.