emperor
The greatness of the most glorious leaders of the past. The sumptuousness of the most beautiful stones of the classical tradition. The strong attitude of the commanders.
An impressive collection that will soon be a classic. Warm tones, strong veining and subtle elegance.

A unique mix for the first collection of Lea made in the US. Thought to leave a mark.
napoleon: 45,2x45,2cm 17.8x17.8"
caesar 45,2x45,2cm 17.8x17.8"
casar mosaico 25 30x30cm 11.8x11.8"
SIZES AND COLORS
FORMATI E COLORI

caesar

alexander

napoleon

special pieces
pezzi speciali
## TECHNICAL CHARACTERISTICS

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Test Method ASTM</th>
<th>Values</th>
<th>Compliant</th>
<th>Required Values</th>
<th>Required Values (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water absorption</td>
<td>ASTM C373</td>
<td>≤ 0.5%</td>
<td>Compliant</td>
<td>≤ 8x10⁻⁶ °C⁻¹</td>
<td>≤ 4.4x10⁻⁶ °F⁻¹</td>
</tr>
<tr>
<td>Breaking strength</td>
<td>ASTM C646</td>
<td>≥ 250 pounds</td>
<td>Compliant</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resistance to abrasion wear</td>
<td>ASTM C1027</td>
<td>Not Required</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Linear thermal expansion</td>
<td>ASTM C372</td>
<td>Not Required</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thermal shock resistance</td>
<td>ASTM C484</td>
<td>No Sample Must Show Visible Signs</td>
<td>Resistant</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemical resistance</td>
<td>ASTM C650</td>
<td>Not Required</td>
<td>Resistant</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frost resistance</td>
<td>ASTM C1028</td>
<td>Not Required</td>
<td>Resistant</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bond resistance</td>
<td>ASTM C482</td>
<td>≥ 50 PSI</td>
<td>Compliant</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stain resistance</td>
<td>CTI 81 D</td>
<td>Not Required</td>
<td>Resistant</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slip resistance</td>
<td>ASTM C1028</td>
<td>COF &lt; 0.50 Questionable&lt;br&gt;0.50 ≤ COF ≤ 0.60 Conditionally Slip Resistant&lt;br&gt;COF &gt; 0.60 Slip Resistant</td>
<td>Compliant</td>
<td>COF ≤ 0.60&lt;br&gt;Wet-Moist&lt;br&gt;COF ≥ 0.66</td>
<td></td>
</tr>
</tbody>
</table>

### PACKING IMBALLAGGI

<table>
<thead>
<tr>
<th>Article</th>
<th>Carton</th>
<th>Pallet</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>pcs.</td>
<td>sf</td>
</tr>
<tr>
<td>filed tile</td>
<td>30x60.4</td>
<td>11.8x23.8”</td>
</tr>
<tr>
<td>filed tile</td>
<td>45.2x45.2</td>
<td>17.8x17.8”</td>
</tr>
<tr>
<td>filed tile</td>
<td>30x30</td>
<td>11.8x11.8”</td>
</tr>
<tr>
<td>mosaic 25</td>
<td>30x30</td>
<td>11.8x11.8”</td>
</tr>
<tr>
<td>bullnose</td>
<td>8x30</td>
<td>3.1x11.8”</td>
</tr>
</tbody>
</table>

**USES IMPIEGHI**

- Hotels alberghi
- Housing abitazioni
- Airports aeroporti
- Bar - restaurants bar - ristoranti
- Malls centri commerciali
- Shops negozi
- Train stations stazioni

**EMPEROR GLAZED (GL) PORCELAIN TILES (CLASS P1)**

- Dry Neolite COF ≥ 0.60<br>Wet Neolite COF ≥ 0.60<br>Slip Resistant
- COF < 0.50 Questionable<br>0.50 ≤ COF ≤ 0.60 Conditionally Slip Resistant<br>COF > 0.60 Slip Resistant
- Slip resistant

**USES**

- Hotels alberghi
- Housing abitazioni
- Airports aeroporti
- Bar - restaurants bar - ristoranti
- Malls centri commerciali
- Shops negozi
- Train stations stazioni
100% REUSE OF UNFIRED TILES
crude waste generated by the process is reintegrated in the production cycle with no costs for the environment. This contributes to the safeguard of natural resources.

100% RECYCLING OF THE FIRED TILES (used as inert supports)
all the waste-fired tiles generated by the process are recycled from the building industry as inert supports for road subsoils and foundations, reducing the use of new natural resources.

100% RECYCLING OF NON CERAMIC WASTE
is differentiated and recycled in other production cycles.

100% WATER RECYCLING
the water used in the production process is 100% recycled. The water demand is reduced by about 60% by this mean. No industrial water is discharged in the ecosystem.

LOW EMISSION IN THE ATMOSPHERE
the high quality of the technology used keeps low emissions in the atmosphere.

METHANE CONSUMPTION ARE HIGHLY REDUCED
by the use of up to date technologies and customized installations.

LEA CERAMICHE PACKING MATERIAL IS 100% RECYCLABLE
(carton boxes, plastic packaging materials, wooden pallets, straps, etc.).

- RECYCLED CONTENT, Sections MR Credit 4.1 and MR Credit 4.2 - (2 LEED points)
Emperor is produced with 40% of pre-consumer recycled materials.

- REGIONAL MATERIALS, MR Credit 5.2 - (2 LEED points) are granted if the use of local raw material is equal to 20% of the total value of the raw materials
These Credits are applicable for buildings constructed within 500 miles (804.5 km) from the production site of Lawrenceburg, Kentucky - USA.

- Leed: Regional materials credits.
As a product manufactured with regional raw materials, Emperor will contribute to get these credits on all job-sites located within 500 miles from the production plant (Lawrenceburg, KY U.S.A.)

- HEAT ISLAND EFFECT (Non roof), SS Credit 7.1 - (1 LEED point)
Emperor doesn’t contribute to change the energy balance of the environments where installed. It doesn’t produce any Urban Heat Island Effect, thanks to its very good physical properties Solar Reflectance Index SRI ≥ 29.

- OPTIMIZE ENERGY PERFORMANCE, EA Credit 1 - (1-10 LEED points)
Thermal conductivity $\lambda$ of Emperor (Porcelain tile) is 0.75 Btu/ft h °F (1.3 Watt/m°K or 1.1 Kcal/m h °C). For this reason it’s particularly indicated for heating floors systems and ventilated curtain walls.

- LOW EMITTING MATERIALS, EQ Credit 4.2 - (1 LEED point)
No traces of VOC (Volatile Organic Compounds) are present in Emperor tiles.

These environmental standards guarantee excellence in terms of:
- safeguard of the environment
- continuous improvement of the environmental performances of Emperor and of the manufacturing sites
- healthcare of Lea Ceramiche’s workers and customers

Lea Ceramiche
is a member of the U.S. Green Building Council:
this is an organisation that promotes buildings that are environmentally responsible, profitable and healthy places to live and work.
Lea Ceramiche, through Panariagroup Industrie Ceramiche S.p.A., is an ordinary member of the Green Building Council and the GBC Italia.

Emperor is produced with 40% of pre-consumer materials, as certified by a qualified external company (certificate available on the website www.ceramichelea.com).


Il contenuto di materiale riciclato “pre-consumo” della serie Emperor è del 40%, come certificato da ente esterno qualificato (certificato disponibile sul sito www.ceramichelea.com).


Emperor is produced with 40% of pre-consumer materials, as certified by a qualified external company (certificate available on the website www.ceramichelea.com).