ROOM FOR IMAGINATION

RAK CERAMICS
Light becomes a design tool in the hands of the designer and through elegant surfaces contributes to enrich special environments, making them magical. This is what makes the new Maximus Luce slabs a stunning centerpiece for your design concept and amaze when enhanced with backlighting technology. An absolute novelty that will inspire your creativity. 7 different graphics and colors in marble and onyx effect, that replicate the natural ability of the stones to filter the light. Hotels, restaurants, offices, shops and sophisticated residential environments. Light up your projects with Maximus Luce.
1. Create a niche in the wall in order to have an empty space to allocate the LED strip light or the light box.
2. We recommend to use a neutral LED COLOR (3600K-5500K) and to fix the LED strips vertically or horizontally, covering the full space of the niche, in order to avoid dark areas and to get a homogeneous light.
3. Deeply clean the back of the slabs before the installation in order to avoid seeing any shadow.

HOW TO FIX THE SLABS:

1. DIRECTLY ON LED
   We recommend this option only in the case of the installation of a single slab or a cut piece.
   • Fix the led strip lights on a white wall.
   • Keep a gap of 4-6 cm between the LED strips and the slab in order to avoid seeing the dots of the LED strip light through the slab.
   • Fix the slab on the perimeter of the frame of the niche.
   • Use a transparent adhesive according to the specifications indicated in the technical data sheet of the chosen adhesive.
   • Do not spread the adhesive in the central area of the slab.
   • Fix a frame or profile on the perimeter of the slab (top, down, left and right at your choice), in order to secure the slab and to cover the shadows of the adhesive if visible.

2. ON A TRANSPARENT HARD SURFACE (GLASS, THICK PLEXIGLASS OR LIGHT BOX)
   We recommend this option in case of the installation of multiple slabs or cut pieces in order to avoid bending or visible interruptions. We also recommend this option when you need to install a single slab in a more stable and secure way.
   • Fix the LED strip lights or the light box on a white wall.
   • If you chose the led strip option, fix the glass, or the Plexiglas surface at a minimum distance of 2-4 cm from the LED strip lights in order to avoid seeing the dots of the LED strip through the slab.
   • Deeply clean the glass, or the Plexiglas, or the light box surface before the application of the adhesive.
   • Use a transparent adhesive according to the specifications indicated in the technical data sheet of the chosen adhesive.
   • Evenly spread the adhesive on the back of the slab by using a spatula in order to get a homogeneous layer of adhesive. Do not use rolls or other tools in order not to have a visible layer of adhesive.
   • Fix a frame or profile on the perimeter of the slab (top, down, left and right at your choice), in order to secure the slabs.
Luce, A Superior Product:

The translucid body of Luce is made with a very high purity of raw materials containing special and high-quality clays and feldspars.

As the body is pure white, the ink development is more advanced than other products.

Luce has a lower kiln cycle and temperature than conventional porcelain products.

When illuminated, Luce's special body gives a soft glow and really transforms the design from a plain tile to a soft natural marble.
Porcelain Tiles
Full Lappato

**LUCE**

- **luce onyx white**
- **luce onyx harlequin**
- **luce onyx green jade**
- **luce spices ivory**
- **luce marble white**
- **luce onyx alabaster**
- **luce onyx arco red**
- **luce onyx ivory**

<table>
<thead>
<tr>
<th>Sizes (cm / inches)</th>
<th>Thickness (mm)</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>120x260 / 47.24&quot;x102.36&quot;</td>
<td>6</td>
<td>ATB62LUCEONYZHSC6P</td>
</tr>
<tr>
<td>120x260 / 47.24&quot;x102.36&quot;</td>
<td>6</td>
<td>ATB62LUCEOIVZHSC6P</td>
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<td>120x260 / 47.24&quot;x102.36&quot;</td>
<td>6</td>
<td>ATB62LUCEOARZHSC6P</td>
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<td>120x260 / 47.24&quot;x102.36&quot;</td>
<td>6</td>
<td>ATB62LUCEMARZHSC6P</td>
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</tbody>
</table>
**Technical specifications - Porcelain Tiles (natural)**

<table>
<thead>
<tr>
<th>TEST DESCRIPTION</th>
<th>STANDARD TEST METHOD</th>
<th>STANDARD REQUIREMENTS</th>
<th>RAJ CERAMICS SPECIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface Quality</td>
<td>BS EN ISO 10545-2</td>
<td>Minimum of 95% of the tiles are free from visible defects</td>
<td>Minimum of 95% of the tiles are free from visible defects</td>
</tr>
<tr>
<td>Length &amp; Width</td>
<td>BS EN ISO 10545-2</td>
<td>± 0.6mm</td>
<td>± 0.6mm</td>
</tr>
<tr>
<td>Thickness</td>
<td>BS EN ISO 10545-2</td>
<td>± 0.5mm</td>
<td>± 0.3mm</td>
</tr>
<tr>
<td>Straightness Of Sides</td>
<td>BS EN ISO 10545-2</td>
<td>± 0.8mm</td>
<td>± 0.8mm</td>
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<tr>
<td>Rectangularity</td>
<td>BS EN ISO 10545-2</td>
<td>± 1.2mm</td>
<td>± 1.2mm</td>
</tr>
<tr>
<td>Surface Flatness: Centre Curvature</td>
<td>BS EN ISO 10545-2</td>
<td>± 1.0mm</td>
<td>± 1.0mm</td>
</tr>
<tr>
<td>Surface Flatness: Edge Curvature</td>
<td>BS EN ISO 10545-2</td>
<td>± 1.0mm</td>
<td>± 1.0mm</td>
</tr>
<tr>
<td>Surface Flatness: Warpage</td>
<td>BS EN ISO 10545-2</td>
<td>± 1.0mm</td>
<td>± 1.0mm</td>
</tr>
<tr>
<td>Water Absorption</td>
<td>BS EN ISO 10545-4</td>
<td>≤ 0.5%</td>
<td>≤ 0.4%</td>
</tr>
<tr>
<td>Water Absorption</td>
<td>BS EN ISO 10545-4</td>
<td>≤ 0.4%</td>
<td>≤ 0.4%</td>
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<tr>
<td>Breaking Strength*</td>
<td>BS EN ISO 10545-8</td>
<td>≥ 700 N</td>
<td>≥ 700 N</td>
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<tr>
<td>Modulus Of Rupture*</td>
<td>BS EN ISO 10545-8</td>
<td>≥ 35.0 G/2m²</td>
<td>≥ 35.0 G/2m²</td>
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<tr>
<td>Resistance To Surface Abrasion</td>
<td>BS EN ISO 10545-7</td>
<td>Report abrasion class</td>
<td>Ra class 2-4</td>
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<tr>
<td>Coefficient Of Linear Thermal Expansion</td>
<td>BS EN ISO 10545-8</td>
<td>Test method available</td>
<td>± 7 X 10^-7°C</td>
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<tr>
<td>Resistance To Thermal Shock</td>
<td>BS EN ISO 10545-11</td>
<td>Test method available</td>
<td>No visible defect</td>
</tr>
<tr>
<td>Crazing Resistance</td>
<td>BS EN ISO 10545-11</td>
<td>Required</td>
<td>No crazing</td>
</tr>
<tr>
<td>Frost Resistance</td>
<td>BS EN ISO 10545-12</td>
<td>Required</td>
<td>No visible damage</td>
</tr>
<tr>
<td>Resistance To Household Chemicals &amp; Swimming Pool Salts</td>
<td>BS EN ISO 10545-13</td>
<td>Minimum class 6</td>
<td>No visible effect</td>
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<tr>
<td>Resistance To Low Concentrations Acids &amp; Alkalis</td>
<td>BS EN ISO 10545-14</td>
<td>Manufacturer to state classification</td>
<td>Class 1A</td>
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<tr>
<td>Resistance To Staining</td>
<td>BS EN ISO 10545-14</td>
<td>Maximum class 5</td>
<td>No visible effect</td>
</tr>
</tbody>
</table>

Note: The technical specifications are applicable only to tiles in choice A.

* Thickness is nominal

**Packaging details**

**TILE THICKNESS: 6MM**

<table>
<thead>
<tr>
<th>TILE SIZE (CM)</th>
<th>TILE AREA (sqm) per pc</th>
<th>KG per pc</th>
<th>pcs per pallet</th>
<th>TILE AREA (sqm) per pallet</th>
<th>WEIGHT per pallet (kg)</th>
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</thead>
<tbody>
<tr>
<td>120x260</td>
<td>3.12</td>
<td>44</td>
<td>20</td>
<td>62.4</td>
<td>960</td>
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</tbody>
</table>

**PALLETS DIMENSIONS (CM)**

<table>
<thead>
<tr>
<th>LENGTH</th>
<th>HEIGHT</th>
<th>WIDTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>1047</td>
<td>115</td>
<td>115</td>
</tr>
<tr>
<td>1097</td>
<td>115</td>
<td>115</td>
</tr>
</tbody>
</table>

**Suggested equipment**

**HANDLING EQUIPMENT**

- Aluminum Panel profile with suction pads and Suction Vacuum suction cups with vacuum gauge
- Double Suction Cups
- Moduar Work Bench BM180
- Moduar Work Bench BM90B BM90S Plus Perfect Workstation for large format tiles up to 160cm width

**CUTTING AND DRILLING EQUIPMENT**

- Compass device with suction cups for Circular Cuts
- Free Cut Guide with complete outfit Max. Cut Of length – 156 cm
- Cutting off pliers for tiles
- Diamond polishing pad
- Diamond for edge and side polishing

**INSTALLATION AND LEVELLING EQUIPMENT**

- Compact Vibrator or Tile Beater
- RLS 3D Clips for tiles
- Wedges (for Anti-Chipping / Anti-Scratching preventing platforms)
- Adjustable pliers for wall and floor covering
- Low-Speed mixer
- Rubber-Groove Floats
- Slat edge notched bower
- Diamond for edge and side polishing

**CLEANING AND MAINTENANCE**

- Brooms
- Floats with abrasive pads
Handling Maximus

- Maximus extra-large format slabs arrive in oversized crates, which require specific handling equipment to prevent damage occurring during forklift operation. Specific fork sizes must be used. For example, to handle a crate of 135cm x 305cm tiles from the side, 112cm/44" long forks are recommended.
- To handle the same crate from the narrow end requires forks that are at least 213cm/84" long. Lifting multiple crates with longer forks may require forklifts with a greater lift capacity.
- Specialized tools and equipment are currently available for the handling, installation and cutting of large porcelain surfaces. Innovative trowels with unique notch configurations can help increase the consistency of the mortar coverage on the back of the tile.
- To increase rigidity and limit twisting, use a system composed of parallel and transverse guides.
- For a perfect adhesion clean the slab and the suckers with a damp sponge.
- The suckers run along the guides and adhere to the slab. Make sure that a vacuum is created between the device and the surface.
- A single guide device can be used for sizes of maximum length.
- Use four operators at a time to carry out handling operations of large size slabs.
- Lift the slab along the long side and hang it vertically to the handles of the frame.
- For the large size slab a suitably reinforced trolley is recommended. Set the guides to the trolley for carrying the slab.
- Follow the same procedure for handling the 120x240cm and all other sub-sizes, where only two operators are sufficient.

Cut-to-pieces and drilling

- RAK Ceramics recommends the use of special designed devices for handling as well as cutting and laying of big slabs.
- Handle slab with a proper and professional trolley of aluminum parallel profile with crossbars and vacuum suction cups along with a vacuum gauge. Please use double suction cups for slabs above 300cm. This could make sure that appropriate vacuum is created between the device and the slab. Lift the slab and keep it vertically to the trolley frame.
- Keep the slab on a stable, flat and intractable surface. For successful cutting and drilling, RAK Ceramics recommend using a professional modular workbench with aluminum profiles and proper cutting tools for each type of cut.
- Set the cutting unit on the tile so that the references coincide with the marked lines and lock it with the appropriate suckers. Score the slab from one edge to the other, being carefully maintaining the same pressure while moving.
- When the cut has been made, move the slab until the slit line sticks out a 10 to 15 cm from the workbench. Start hewing from both sides using appropriate cutting-off pliers and follow the scoring line to complete the hewing.
- Smooth rough edges and sides with an appropriate diamond polishing pad.
- To drill internal cutouts from the slab, first you need to draw the guide lines. For circular cuts, use the compass device with suction cups. For rectangular cut, drill first a 5 - 7 mm hole at the corners of the rectangle shape, using a non-percussion drill. For a better drilling always, keep the surface and drill a little bit wet. Then follow the drilled lines using a diamond blade angle grinder and then finish off the edges with a diamond-polishing pad. Round holes (4) must be made in wet drilling, using diamond blades. Start engraving the surface with a 75 degrees point angle, then straighten out the drill avoiding excessive pressure on the slab. Also, in this case finish with a diamond-polishing pad.
- Manual traction devices are available, in order to make a finishing cut at 45° and thus enable special applications of the material.