TECHNICAL INSTRUCTION MANUAL

APPARENTE - COLONNA - CORTEX - DUNA - DYAMANTE - ECLYPSE
ECOBRIX GREZZO - ECOBRICK SOFT - ECOBRICK STONE - INFINITY
MATRICE - ORIGAMI - POLYGON - PRISMA - RIGATTO - SCALENO
SEGMENTOS - SHOU SUGI BAN - SQUADRI - THEO - TRIBU
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CONGRATULATIONS!

You have acquired a high quality differentiated product. To keep its characteristics it is necessary to have special precautions in its installation. We recommend the installation of the material being accompanied by qualified professionals: architects, engineers and building technicians, and laid by professionals specialized in laying marble, granite and concrete slabs. To hire a professional in laying the product that guarantees the success of his service is as important as purchasing a quality product. Please read these instructions carefully before laying the material, so that you can fully enjoy the durability, beauty and innovation of our products. If you have any questions or want more information, please visit our website www.castelatto.com, or send an email to sac@castelatto.com.br or contact us by phone 55 11 4416-6900.

2. PRODUCT

The floors and coverings Castelatto are crafted, so they may vary slightly in dimensions and colors, besides small marks in its edges. They are pieces of concrete of high performance and present as advantages of this material, high mechanic resistance and high durability, once installed correctly.

3. INFORMATION

Castelatto has a YouTube channel with video lessons of laying our products. We also have a Frequently Asked Questions page on our website, go to www.castelatto.com.br and check all the information.

4. RECEPTION

- Choose someone you trust to be responsible for receiving and checking the material.
- Check the material as requested. If you notice any irregularities, follow the procedures described in item - DELIVERY AND CUSTOMER SERVICE.
5. STORAGE

- The product is sensitive to stains before applying the protection therefore it requires special care in transportation and handling.
- Those responsible for the unloading and storing of the product must have their hands clean or wear gloves to keep the pieces unstained.
- The material must be stored in a clean area, preferably covered, and the floor should be lined with plastic (do not use cardboard).
- Store the pieces vertically in order to keep them undamaged.
- Cover the pieces with plastic.

CAUTION

- We recommend not storing the pieces for a long time because they tend to create stains. This is a natural process of the concrete, and they are not considered a product defect.
- It is very important to have someone qualified to supervise the moment of storing to avoid irreparable damage to the product.
6. PLANNING THE INSTALLATION AREA

- Do the cleaning of the plaster by removing all types of waste.

- Perform inspection of the base. If necessary, make regularizations.

- Proof the plaster.
- Check the moisture conditions of the plaster. If there are signs of moisture and efflorescence, review the conditions of drainage and waterproofing performed.
- In case of laying on heated coatings, check carefully all the requirements of the supplier of this system.

6.1. JOINTS DEFINITION

- **Joint of laying**: from 2 to 5 mm depending on the size of the piece.
• **Isolation joint**: these are spaces left at the intersection of the wall covered with floors, ceilings, columns, joists or with other type of covering. These spaces begin in the encounter between two pieces and cross the layer of plaster. Joints must be at least 5 mm.

• **Joints of movement**: on large areas, the joint of movement ensures that if the slab moves due to temperature variations, the laid floor remains intact. This space extends from the base (subfloor and plaster) to the covering. The joint must be at least 10 mm and should limit the coverings in which one dimension is bigger than 8 m.

*Check out our YouTube channel and watch the video lessons of settlement Castelatto products.*

**7. PAGING**

The Origami covering has a correct form of laying, as provided in paging highlighted below:
8. LAYING

- The laying of Castelatto covering has to be, preferentially, the last stage of the construction (even after the execution of the garden). It prevents the covering to get damage.
- The product allows the loss of humidity of the installation (mortar and joint).
- After laying and cleaning the product, it is important to protect the floor with a waterproof coating.
- The floors and coverings must be laid on a subfloor/plaster properly waterproofed, with a minimum of 21 days of cure and exempt of any dirt or dust.
- It is important to eliminate any remaining dirt, dust or cement on the face of the laid piece.
- Use steel-bristled brush and remove dust with a damp sponge.
• Use flexible gluing mortar specified for large formats (follow instructions of the manufacturer and pay attention to the time suggested for the post-laying traffic). For light colors, always prefer mortar in white.

• Due to its handmade process, the inner face of the covering shows some irregularity, which should be compensated in the mortar, thus ensuring its correct leveling.

• Moisten the plaster.

• For the application of the mortar already prepared in the plastering, a 10 mm notched trowel should be used. Apply the mortar with the flat side with an approximate angle of 30°. After this, form ridges on the surface with the notched side with an angle of approximately 60°.

• On the backside of the pieces, repeat the procedure in opposite direction, thus forming crossed ridges in order to get compensation in the crush of the ridges.
• Do not spread mortar in areas of more than 1,5 m² at a time, in order not to exceed the open time indicated by the manufacturer.
• Place the piece on the mortar applied on the floor, at about 5 cm from its final position. Then, press the piece by dragging it until it reaches its final position.
• Check the mortar every 10 laid pieces, removing the piece to verify the correct crushing of the ridges and the percentage of filling on the backside of the pieces.
• If the ridges are not totally crushed, remove all the pieces and start the laying again.
• **For laying that exceeds 3 meters in height, please contact the factory about the use of metal inserts.**
• In case of any doubts contact CSC department of Castelatto.
9. GROUTING

- Castelatto produces appropriate grout for its products, which makes it more harmonious.
- The average yield of grout is 18 m².
- The width of the joint may be from 2 to 5 mm, depending on the size of the piece.
- The grout should be applied after curing time of mortar.
- We warn that for a good performance of the grouting, the technique of preparation, dosing, mixing, time of resting and application must be observed.
- Wet the joints before grouting.
- It is recommended to apply the grout with a tube to ensure the cleanliness of the piece without clogging the pores and shafts.
- Use masking tape, preferably Norton (trademark), for the protection of the piece. You should remove it as soon as the grout is applied.
- Grouting does not apply to Ecobrick Grezzo, Ecobrick Soft, Ecobrick Stone, Origami, Scaleno, Squadri, Theo, Segmentos, Infinity, Tribu, Polygon, Apparente and Shou Sugi Ban lines, which should be laid with dry joint.

- It is recommended to avoid direct sunlight on the floor while applying the joining material.
- 4 hours later spray some water on the applied product to keep the joints humid.
- Do not use any kind of acid to clean the grout.
10. CLEANING

CLEANING IN THE BUILDING SITE

- It is very important, after laying the covering, to keep it covered with plastic until the construction work is completed to avoid any dirt (do not use cardboard or colored materials for floor protection).
- Clean with alkaline detergent.
- Do not use acids, not even those cleaning products of acid base recommended for cleaning stones and others.
- If any area has spots or is very dirty, consult Castelatto about procedures.
- The post-construction cleaning should be performed, at least, 72 hours after grouting.

ALKALINE DETERGENT

- Indicated for post-construction cleaning and maintenance
  - Apply the product.
  - Rub with brush or broom with nylon bristles.
  - Wash with abundant water (never leave the detergent dry on the piece).
11. PROTECTION

- It is essential to use products that protect the floor and facilitate the maintenance cleaning.
- Before applying any protection, the floor must be completely dry and free of moisture of laying, grouting and cleaning.

- External areas: the time required for the floor to be completely dry depends on weather conditions, with a minimum of 24 hours.
- Internal areas: wait at least 48 hours.

<table>
<thead>
<tr>
<th>DILUTION</th>
<th>TYPE OF CLEANING</th>
<th>YIELD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:0</td>
<td>POST-CONSTRUCTION CLEANING</td>
<td>5 M²</td>
</tr>
<tr>
<td>1:5</td>
<td>HEAVY CLEANING</td>
<td>30 M²</td>
</tr>
<tr>
<td>1:10</td>
<td>AVERAGE CLEANING</td>
<td>60 M²</td>
</tr>
<tr>
<td>1:20</td>
<td>LIGHT CLEANING</td>
<td>120 M²</td>
</tr>
</tbody>
</table>
WATER-OIL PROOFING

- Fungicide and algaecide.
- The floor does not suffer any esthetic change after application.
- Does not create a film on the covering.

Yield per liter (2 coats)

<table>
<thead>
<tr>
<th>MATRICE</th>
<th>SQUADRI PARIS</th>
<th>SQUADRI GREZZO</th>
<th>SCALENO</th>
<th>PRISMA</th>
<th>ECOBRICK SOFT (BRANCO E MARFIM)</th>
<th>ECOBRICK STONE (MARFIM)</th>
<th>ECOBRICK GREZZO</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 m²</td>
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<td>8 m²</td>
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<td>8 m²</td>
<td>8 m²</td>
<td>7 m²</td>
</tr>
<tr>
<td>DUNA</td>
<td>CRISTALI FINO</td>
<td>PACIFIC</td>
<td>ECLYPSE</td>
<td>DYAMANTE</td>
<td>ORIGAMI PARIS</td>
<td>ORIGAMI GREZZO</td>
<td>RIGATTO</td>
</tr>
<tr>
<td>8 m²</td>
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<td>8 m²</td>
<td>8 m²</td>
</tr>
<tr>
<td>THEO</td>
<td>SEGMENTOS PARIS</td>
<td>SEGMENTOS GREZZO</td>
<td>INFINITY</td>
<td>TRIBU</td>
<td>POLYGON</td>
<td>COLONN A</td>
<td>APPARENTE</td>
</tr>
<tr>
<td>8 m²</td>
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<td>8 m²</td>
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</tbody>
</table>

- It must be applied on clean and dry covering.
- Apply with sprayer (applicator for garden).
- Apply two coats, waiting two hours between each application.
- Final Drying: 12 hours.

LINES WHICH ARE WATERPROOFED AT THE FACTORY.

ECOBRICK GREZZO (CAPUCCINO, GRIGIO, MERCURE, SAUVIGNON E NERO)
CORTEN
**SOLVENT BASE SEALING**

- Intensifies the color and form protective film.
- Increases resistance to scratches and fats.

**SOLVENT BASE SEALING**

- Must be applied on completely dry covering (minimum of 72 hours after laying).
- Before starting the protection of the pieces, apply the product on the roll without soaking it and remove excess in the paint tray. It is important not to let the product drip during its application to avoid damaging the final look of the piece.
- Final drying after application: **8hs**

Yield per liter (1 coat)

<table>
<thead>
<tr>
<th>Product</th>
<th>Yield (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECOBRICK STONE</td>
<td>4.5</td>
</tr>
<tr>
<td>ECOBRICK SOFT</td>
<td>7</td>
</tr>
<tr>
<td>SHOU SUGI BAN</td>
<td>6</td>
</tr>
</tbody>
</table>

**12. DELIVERY AND CUSTOMER SERVICE**

**ORIENTATION FOR THE CONSUMER WHEN RECEIVING THE PRODUCT**

Check whether the product is according to the request. If you notice any irregularities, follow the procedure bellow:

- Record the occurrence on knowledge of the delivery.
- Report immediately to the resale.
- You should never install the product if you find any visible defects. According to the Law of the Consumer when a product is installed it is considered accepted.
- You should always keep your receipt in case of future technical assistance.
We clarify that the phenomenon of efflorescence is not a defect, as it does not change the structural characteristics of the product.