OUTDOOR EARTH

MILESTONE
Italian tile Made in the USA
Drawing inspiration from the Dolomites in Northeastern Italy, Earth, one of the three lines in our Outdoor collection, offers the classic beauty and variation of natural stone and the unparalleled durability of porcelain. Earth is perfect for designers and consumers who admire the elegant look of naturally occurring stone like that of the Dolomites. The beautiful organic qualities of Earth were inspired by the mountains, rivers, and valleys of the Trentino region and create a natural effortless style in any outdoor setting. Calming earthy tones and textures make this line a versatile choice for a variety of outdoor installations. From clean whites to warm greys and browns, Earth embodies a natural warm feel that is unsurpassed. With the ability to mimic virtually any stone, our 2CM pavers provide essentially endless possibilities.
The functional, yet elegant, Outdoor 2CM collection ties together your indoor and outdoor spaces with ease. From the garden to the swimming pool; From stairways to driveways, our system offers a wide array of colors, surfaces and combinations.

1. SWIMMING POOL
2. SUNDECK
3. TERRACE
4. PATH
5. STAIRS
6. HANDRAIL
7. WALL
8. DRIVEWAY
EARTH / MANHATTAN
EARTH

24”x24” / MANHATTAN GREY
12”x24” / MANHATTAN GREY
EARTH / MULTICOLOR
EARTH

12"x24" / MULTICOLOR
EARTH / MOON WHITE
12"x24", 24"x24" / MOON WHITE
Moon White completes this pool area with a classic, sophisticated style that will leave a lasting impression.
12”x24”, 24”x24” / MIAMI WHITE
EARTH

12"x24" / LIGHT GREY
EARTH / DARK GREY
coping:

COPING 12"x24"
1100271 Manhattan Grey
1100268 Multicolor
1100273 Moon White
1100272 Miami White
1100270 Light Grey
1100269 Dark Grey

DRAIN COPING 12"x24"
1100282 Manhattan Grey
1100279 Multicolor
1100284 Moon White
1100283 Miami White
1100281 Light Grey
1100280 Dark Grey

DRAIN COPING \ STAIR TREAD 12"x24"
1100293 Manhattan Grey
1100290 Multicolor
1100295 Moon White
1100294 Miami White
1100292 Light Grey
1100291 Dark Grey

COPING \ STAIR TREAD 12"x24"
1100304 Manhattan Grey
1100301 Multicolor
1100306 Moon White
1100305 Miami White
1100303 Light Grey
1100302 Dark Grey
sizes:

24”x24”
Rectified

1096348 Manhattan Grey
1096342 Multicolor
1096350 Moon White
1096349 Miami White
1096344 Light Grey
1096343 Dark Grey

12”x24”
Rectified

1099600 Manhattan Grey
1099597 Multicolor
1099602 Moon White
1099601 Miami White
1099599 Light Grey
1099598 Dark Grey

Colors shown may vary from actual product.
Final selection should be made from actual product samples.

V1
UNIFORM APPEARANCE
Differences among pieces from the same production run are minimal.

V2
SLIGHT VARIATION
Clearly distinguishable differences in texture and/or pattern with similar colors.

V3
MODERATE VARIATION
While the colors present on a single piece of tile will be indicative of the colors to be expected on the other tiles, the amount of colors on each piece will vary significantly.

V4
SUBSTANTIAL VARIATION
Random color differences from tile to tile, so that one tile may have totally different colors from that on other tiles. Thus, the final installation will be unique.
Routine care instructions:

1. Wash with water to remove superficial dirt.
2. Application of Fila Cleaner® Fila (commercial product) diluted to an average of 1:200 to the surface.
3. Let the solution sit 5-7 minutes.
4. Remove the cleaner with a vigorous mechanical cleaning action using common hand cleaning equipment, or a suitable floor-cleaning appliance.
5. Dry the floor completely.

Note: For desired results, it is particularly important to combine the effect of the detergent with a vigorous mechanical cleaning action.

The products mentioned in these instructions do not officiate any official agreements with any floor cleaning product producers.
### Technical Specifications

<table>
<thead>
<tr>
<th>SPEC</th>
<th>TEST METHOD</th>
<th>REFERENCE VALUE</th>
<th>DECLARED VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Static coefficient of friction</td>
<td>ASTM - C 1028</td>
<td>&gt; 0.60 dry and wet</td>
<td>&gt; 0.60 dry and wet</td>
</tr>
<tr>
<td>Dynamic coefficient of friction (Section 9.6 ANSI A 137.1 2012)</td>
<td>DC OF Acoustic</td>
<td>&gt; 0.42 wet</td>
<td>&gt; 0.42 wet</td>
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<tr>
<td>Resistance to freeze</td>
<td>ASTM - C 1026</td>
<td>required</td>
<td>Resistant</td>
</tr>
<tr>
<td>Frost resistance</td>
<td>ISO - 10545-12</td>
<td>As reported</td>
<td>Resistant</td>
</tr>
<tr>
<td>Chemical resistance</td>
<td>ASTM - C 650</td>
<td>As reported</td>
<td>Not affected</td>
</tr>
<tr>
<td>Resistance to domestic chemicals and additives for swimming pools</td>
<td>ISO - 10545-13</td>
<td>UB minimum</td>
<td>UA</td>
</tr>
<tr>
<td>Resistance to low concentrations of acids and alkalis</td>
<td>ISO - 10545-14</td>
<td>See manufacturer's declaration</td>
<td>ULA</td>
</tr>
<tr>
<td>Resistance to high concentrations of acids and alkalis</td>
<td>ISO - 10545-15</td>
<td>See manufacturer's declaration</td>
<td>ULA</td>
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<tr>
<td>Resistance to staining</td>
<td>ASTM - C 1378</td>
<td>As reported</td>
<td>Not affected</td>
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<td>Maximum straightness deviation, in %, in relation to the corresponding production dimensions</td>
<td>ASTM - C 485</td>
<td>±0.75% (±1.8 mm)</td>
<td>±10%</td>
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<tr>
<td></td>
<td>ISO - 10545-2</td>
<td>±0.5% (±1.5 mm)</td>
<td>±10%</td>
</tr>
<tr>
<td>Admitted deviation, in %, of the average thickness of each tile from the production dimensions</td>
<td>ASTM - C 499</td>
<td>± 1.2 mm</td>
<td>±0.5%</td>
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<tr>
<td></td>
<td>ISO - 10545-2</td>
<td>±0.5% (±0.5 mm)</td>
<td>±0.5%</td>
</tr>
<tr>
<td>Length 7 width, admitted deviation, in % of the average size of each tile from the production dimensions</td>
<td>ASTM - C 499</td>
<td>± 0.5% (±2.0 mm)</td>
<td>± 0.15%</td>
</tr>
<tr>
<td></td>
<td>ISO - 10545-2</td>
<td>± 0.6% (±2 mm)</td>
<td>± 0.15%</td>
</tr>
<tr>
<td>Amount of water absorbed, in percentage</td>
<td>ASTM - C 373</td>
<td>≤ 0.5%</td>
<td>≤ 0.5%</td>
</tr>
<tr>
<td></td>
<td>ISO - 10545-3</td>
<td>≤ 0.5%</td>
<td>≤ 0.5%</td>
</tr>
<tr>
<td>Breaking strength in N (thickness &gt; 7.5 mm)</td>
<td>ASTM - C 648</td>
<td>≥ 2500 LBF Average</td>
<td>≥ 3000 LBF Individual</td>
</tr>
<tr>
<td></td>
<td>ISO - 10545-4</td>
<td>≥ 1300 Newton</td>
<td>&gt; 13000</td>
</tr>
<tr>
<td>Resistance to deep abrasion of unglazed tiles</td>
<td>ASTM - C 1243</td>
<td>&lt; 175 mm-3</td>
<td>&lt; 150</td>
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<tr>
<td></td>
<td>ISO - 10545-6</td>
<td>&lt; 175 mm-3</td>
<td>&lt; 150</td>
</tr>
<tr>
<td>Thermal shock resistance</td>
<td>ASTM - C 484</td>
<td>-</td>
<td>Meets the requirement</td>
</tr>
<tr>
<td></td>
<td>ISO - 10545-9</td>
<td>-</td>
<td>Resistant</td>
</tr>
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</table>

### Packaging

<table>
<thead>
<tr>
<th>SIZES</th>
<th>METRIC (CM)</th>
<th>THICKNESS (CM)</th>
<th>PIECES PER BOX</th>
<th>SQ. FT PER BOX</th>
<th>WEIGHT PER BOX</th>
<th>BOXES PER PALLET</th>
<th>UOM PER PALLET</th>
<th>WEIGHT PER PALLET*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field Tiles</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24&quot;x24&quot; Rectified</td>
<td>60x60</td>
<td>2 cm</td>
<td>2</td>
<td>8</td>
<td>76</td>
<td>36</td>
<td>288</td>
<td>2,736</td>
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<tr>
<td>12&quot;x24&quot; Rectified</td>
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<td>2 cm</td>
<td>4</td>
<td>8</td>
<td>73.6</td>
<td>40</td>
<td>320</td>
<td>2,944</td>
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<tr>
<td>Coping</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12&quot;x24&quot; Coping</td>
<td>30x60</td>
<td>2 cm</td>
<td>4</td>
<td>8</td>
<td>73.6</td>
<td>40</td>
<td>160 pcs</td>
<td>2,944</td>
</tr>
<tr>
<td>12&quot;x24&quot; Stair Tread Coping</td>
<td>30x60</td>
<td>2 cm</td>
<td>4</td>
<td>8</td>
<td>73.6</td>
<td>40</td>
<td>160 pcs</td>
<td>2,944</td>
</tr>
<tr>
<td>12&quot;x24&quot; Drain Coping</td>
<td>30x60</td>
<td>2 cm</td>
<td>4</td>
<td>8</td>
<td>73.6</td>
<td>40</td>
<td>160 pcs</td>
<td>2,944</td>
</tr>
<tr>
<td>12&quot;x24&quot; Drain Coping with Stair Tread</td>
<td>30x60</td>
<td>2 cm</td>
<td>4</td>
<td>8</td>
<td>73.6</td>
<td>40</td>
<td>160 pcs</td>
<td>2,944</td>
</tr>
</tbody>
</table>

* WEIGHT PER PALLET DOES NOT INCLUDE PALLET WEIGHT ITSELF. ALL OTHER SIZES WILL BE PACKAGED AS ORDERED. PLEASE CONTACT MILESTONE CUSTOMER SERVICE AT 1-877-356-7461 FOR PACKAGING INFORMATION.

MINIMUM GROUT SIZE RECOMMENDED = 5 MM (OR APPROX. 3/16") IF STAGGERED TILE PLACEMENT, WE RECOMMEND USING A 30% OFFSET. IF SPECIFIED BRICK PATTERN WITH 1/2 PATTERN MANDATORY, A BIGGER GROUT IS RECOMMENDED TO HIDE IMPERFECTIONS OF INSTALLATION (MINIMUM 1/4").
LAYING SYSTEMS

DIRECT INSTALLATION

The Milestone 2CM porcelain tile can be easily positioned on grass, removed and repositioned, allowing maximum flexibility in creating different configurations. Milestone 2CM porcelain tiles can be installed either with a minimum joint, or with a 1/2" joint or larger (called Japanese joint).

Installation steps
Remove 2" of soil in the area where you want to place the 2CM tiles;
Apply and compact evenly 1" of gravel into the area you have cleared;
Directly lay the Milestone porcelain tile on the gravel bed and tap it with a rubber hammer to eliminate any unevenness.

PLUS
- EASY TO INSTALL AND REMOVE
- QUICK WATER DRAINAGE KEEPING THE GROUND UNCHANGED
- IDEAL TO CREATE CONTINUITY BETWEEN INDOOR AND OUTDOOR FLOORING

LAYING ON GRAVEL AND SAND

Installation steps
Level and compact the surface (sand or gravel);
Position the Milestone 2CM porcelain tile on the gravel/sand bed;
Tap the tiles with a rubber hammer to eliminate any unevenness and fill the joints between the tiles with gravel/sand to add stability to the surface.

PLUS
- EASY TO INSTALL AND REMOVE
- QUICK WATER DRAINAGE KEEPING THE GROUND UNCHANGED
- IDEAL WHERE IT ISN’T POSSIBLE TO LAY PERMANENT FLOORING
- EXHIBITIONS AND EVENTS
ADHESIVE INSTALLATION

DRAINING SCREED
It is ideal for garden and courtyard flooring because it ensures that water is drained correctly, using the special glues.

VEHICLE TRANSIT PAVEMENT
It is ideal for parking lots and garage ramps, thanks to the extremely high resistance of ceramic surface to dynamic and concentrate loads.

PLUS
- HIGH RESISTANCE TO DYNAMIC AND CONCENTRATE LOADS
- IDEAL TO CREATE CONTINUITY BETWEEN PEDESTRIAN AREAS AND VEHICLE ACCESSIBLE AREAS, USING THE SAME MATERIAL.

INSTALLATION ON RAISED SYSTEMS

Mainly, there are three raised floor systems that the customers can adopt to install the Milestone 2CM porcelain tiles: fixed support, adjustable support, and self-leveling support.

Installation steps
Ensure that the area where the raised system will be installed is flat, compact, rigid, and make sure it can support the weight of the new floor;

Choose the raised floor system that best suits your use. Remember that the raised floor has to be installed to provide adequate drainage of rain water.

*Rectified tiles are required for pedestal installations

Warnings: these systems cannot be used when high dynamic loads transit in the area.

PLUS
- FROM THE AESTHETIC POINT OF VIEW, IT ENSURES FLOORING WITH A SINGLE GRADIENT, WITHOUT ANY VISIBLE WATER DRAINING ELEMENTS
- THE SMALL GAP BETWEEN ONE SLAB AND ANOTHER ALLOWS A QUICK WATER DRAINAGE, IT IS EASY TO CLEAN
- LOWER LOAD BEARING ON ATTICS AND BALCONIES AS THE LAST LAYER OF CONCRETE AND GLUE IS NOT NECESSARY
- FROST-PROOF, IT ABSORBS THE THERMAL EXPANSIONS OF THE CONCRETE SUBSTRATE, THE DIRECT CAUSE OF TRADITIONAL OUTDOOR FLOORING SUBSIDENCES
- THE GAP BETWEEN THE SLAB AND THE CONCRETE SUBSTRATE FOSTERS EXCELLENT THERMAL INSULATION
- BEST ACOUSTIC INSULATION
- HIDDEN BUT EASY TO INSPECT PIPES
- SPEED OF INSTALLATION
- RECYCLABLE
- VALUE FOR MONEY SOLUTION IN TERMS OF LAYING AND MAINTENANCE, LASTS VIRTUALLY FOREVER
LAYING ON GRAVEL AND SAND

GENERAL INDICATIONS

SUBSTRATE

Level the substrate and compact it with care before proceeding with installation consisting of resting the slabs on the substrate.

It is advisable to lay a separating cloth (geotextile) to stabilize the substrate in order to limit any washing away along the gaps/joints between the pavers and to minimize the growth of weeds.

SPACERS BETWEEN PAVERS

When laying porcelain pavers by resting them directly on the substrate, they must never be laid so that they touch each other, as this would drastically increase the risk of chipping caused by micro-movements while the pavers are setting into place. 1/6" joints are recommended for pressed material.

CUTS AND HOLES

- It is possible to cut the material in both damp or dry conditions.
- It is essential to use ONLY approved cutting wheels (continuous edge) for porcelain stoneware.
- To make holes in the slabs, use diamond drill bits for porcelain stoneware.

DO NOT USE A PLATE COMPACTOR AFTER LAYING

To avoid the risk of chipping the material, never use a plate compactor once the porcelain pavers slabs have been laid.

EDGE RESTRAINTS

When pavers are laid on draining sand or gravel, always prepare an edge restraint system to hold the substrate material used and prevent any washing away of sand or gravel, therefore keeping the paver slabs in place.

MATERIAL FOR FILLING THE JOINTS BETWEEN THE PAVERS

LAYING ON SAND

Fill the gaps with sand and eliminate the excess material. In time, wind, rain and cleaning activities may remove the sand, therefore calling for some occasional re-filling.

LAYING POLYMERIC SAND OR GRAVEL

It is a composition created specifically for outdoor paving installation. It is important to use specific sand for porcelain stoneware. This sand is available in several different colors and grain sizes. Once the polymeric sand has been compacted, it will prevent the growth of weeds. Once the gaps have been filled with polymeric sand eliminate with care all the excess material. Lastly, wet the gaps between the pavers with water to activate the reaction of the polymers that will transform the sand into a compact body.
WHY PORCELAIN?

There are many reasons to choose impervious porcelain tile over other floor coverings. It offers the largest array of design options and holds its value the longest. In a comparison between the many different flooring options, porcelain tile offers one of the most durable and least expensive options over the lifespan of the building.

Benefits of Porcelain Tile

• Impervious to water
• Easy to maintain
• Variety of design options
• Environmentally friendly
• Resistant to germs and bacteria
• Fade resistant
• Fire resistant
• Durable - best long-term value vs. other floor coverings
DON’T WORRY

SHOCK CONTROL® 2.0

SHOCK CONTROL® 2.0

THE ONLY PATENTED SYSTEM ABLE TO PASS THE DYNAMIC LOADING TEST FOR “HARD OBJECT IMPACT” WITH REFERENCE TO UNI EN 12825:2003 NORM.
**INSTALLATION**

Installation of protective layer **SHOCK CONTROL®** is quick and easy. It can be easily applied by a single person within seconds without any tool in 4 short passages.

1. Choose the proper size of **SHOCK CONTROL®** considering the size of the tile and apply it on the tile’s lower surface, avoiding folds and aligning the edges.

2. Starting from one side, peel the protective foil, ensuring perfect adhesion of **SHOCK CONTROL®** to porcelain’s surface.

3. Proceed smoothly until joining adhesion on the entire surface, avoiding wrinkles or air bubbles.

4. The tile is immediately ready to be applied on pedestals for the realization of the exterior elevated floor.

**TEST**

**SHOCK CONTROL®** is the only PATENTED system for porcelain tiles’ protection, that can guarantee with its application the overcoming of the dynamic loading test for “hard object impact” with reference to UNI EN 12825:2003 norm.

**SHOCK CONTROL®** is the only protective reinforcing system created to be coupled with porcelain, allowing 2 cm thick porcelain tiles for outdoor raised floors to pass the dynamic loading test for hard object impact in all the three tests:

<table>
<thead>
<tr>
<th>TEST PASSED</th>
<th>NO PORCELAIN FRAGMENT DETACHED FROM THE PANEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pic. 1,2</td>
<td>DROP TEST IN THE MIDDLE OF THE PANEL</td>
</tr>
<tr>
<td>Pic. 3</td>
<td>DROP TEST ON ONE SIDE OF THE PANEL</td>
</tr>
<tr>
<td>Pic. 4</td>
<td>DROP TEST AT 7 cm ON DIAGONAL</td>
</tr>
</tbody>
</table>

**PACKAGING**

<table>
<thead>
<tr>
<th></th>
<th>PCS/BOX</th>
<th>BOX/PALLET</th>
<th>PCS/PALLET</th>
<th>WEIGHT /PALLET</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SHOCK CONTROL®</strong> 24”x24”</td>
<td>32</td>
<td>30</td>
<td>960</td>
<td>10,265 LBS</td>
</tr>
</tbody>
</table>
Application

1) Position SHOCK CONTROL 2.0 on the application surface;
2) Remove the release film from the lower face, this is divided longitudinally in two sections, in one or two steps, making sure to also remove the side selvedge of the upper surface;
3) To use suitable roller by applying pressure over all of the SHOCK CONTROL 2.0 surface, particularly the side & head laps to further promote adhesion.

Recommendations

- The SHOCK CONTROL 2.0 is to applied on dry clean surfaces.
- Do not apply the SHOCK CONTROL 2.0 below the 0° C.
- During the cold season for the most simple and safe application it is to use hot air generated by a burner.
- The SHOCK CONTROL 2.0 has to be stocked preferably indoor in a dry and ventilated areas with temperatures higher than 15° C.
- For a perfect stuck of SHOCK CONTROL 2.0 on the back of the tile it doesn’t must be left any air bubble areas in order to avoid not adherent spaces and moisture buildup.
- Do not stack SHOCK CONTROL 2.0 pallets at the warehouse to prevent adhesions between the sheets.

For further information and news we recommend to consult technical literature; our technical service is always available to study particular problems, offering the necessary assistance for optimal use.

Technical Data

<table>
<thead>
<tr>
<th>Technical Characteristics</th>
<th>Measure Units</th>
<th>Reference Norm</th>
<th>P</th>
<th>PA</th>
<th>Tolerance</th>
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<tbody>
<tr>
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<td>Single strand polyester</td>
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<td>Upper face finish</td>
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<td>PE film</td>
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<td>Silicon release film</td>
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<tr>
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<td>10 ± 1%</td>
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<tr>
<td>Width</td>
<td>m</td>
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<tr>
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<td>4  ± 5%</td>
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<td>Mass for unit area</td>
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<td>4.5  ± 10%</td>
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<td>Cold flexibility</td>
<td>°C</td>
<td>EN 1109</td>
<td>- 15</td>
<td>- 20</td>
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<tr>
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<td>°C</td>
<td>EN 1110</td>
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<tr>
<td>Tensile strength L / T</td>
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<td>EN 12311-11</td>
<td>120/120</td>
<td>140/140</td>
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<td>Elongation at break L / T</td>
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<td>Tearing resistance</td>
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<td>Dimensional stability</td>
<td>%</td>
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<td>Fire resistance</td>
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<td>F ROOF</td>
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<tr>
<td>Fire resistance</td>
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<tr>
<td>Watertightness</td>
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<td>N/50 mm</td>
<td>50</td>
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<tr>
<td>Pelage resistance on (steel) support after aged</td>
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<td>-20N</td>
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</table>