1. PRODUCT

E.MIX FLOWMENT 550 is a machine or hand applied self-levelling floor surfacing system formulated from special cement, aggregates, supplementary binders and chemical additives.

E.MIX FLOWMENT 550 is designed as an smooth underlayment for use on for epoxy coating. Under normal conditions access onto the floor is available after 2 – 3 hours and the final flooring can be laid after one day (for a 10 mm layer) providing that the substrate is suitably dry. The product is supplied as a pre-blended, dry powder designed for application at thickness of 4 – 10 mm in one operation. Normal application thickness is 6 – 10 mm.

E.MIX FLOWMENT 550 does not contain casein and other protein bearing additives, making it particularly suitable for use in hospitals and food preparation or storage areas.

1.1 Uses

- Residential and commercial flooring
- Hospitals, schools, sports stadium, theatres, etc.
- Smooth underlayment to receive vinyl sheet, carpet and other finishing

1.2 Features and Benefits

High-quality product
- Formulated to comply with European Norm and Chinese Standard
- Available for foot traffic after 2 hours
- Good abrasion resistance
- Very low shrinkage to prevent cracking
- High compressive strength
- Water resistance: can be exposed to water spillage without damage
- Chemical resistance: similar to dense concrete

Easy application
- Single component: fixed mixing proportion, ensure the quality of work
- Suitable for both hand and machine application
- Fast application: up to 300 m² per hour
- Can apply vinyl sheet, carpet and tiling directly

Environmental friendly
- Low pH and less aggressive to floor finishing
- Casein free: environmental friendly

Should be applied on primed floor (with E.MIX PRIMER)
2. TECHNICAL DATA

<table>
<thead>
<tr>
<th>Colour</th>
<th>Light grey</th>
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</thead>
<tbody>
<tr>
<td>Component</td>
<td>Portland cement, fast setting cement, non-reactive aggregate, graded sand and other chemical additives</td>
</tr>
<tr>
<td>Max. aggregate size</td>
<td>0.5 mm</td>
</tr>
<tr>
<td>Water demand</td>
<td>Approx. 20 – 22% or 5 – 5.5 L/25 kg bag for both hand and machine application</td>
</tr>
<tr>
<td>Density</td>
<td>1.3 kg/L (dry)</td>
</tr>
<tr>
<td></td>
<td>2.0 kg/L (wet) for 21% water demand</td>
</tr>
<tr>
<td>pH value</td>
<td>Approx. 11</td>
</tr>
<tr>
<td>Thickness</td>
<td>4 – 10 mm</td>
</tr>
<tr>
<td>Time for foot traffic</td>
<td>2 hours</td>
</tr>
<tr>
<td>Coverage</td>
<td>Approx. 1.7 kg/m²/mm</td>
</tr>
<tr>
<td>Theoretical Consumption</td>
<td>Approx. 10.2 kg/m² for thickness of 6 mm</td>
</tr>
<tr>
<td></td>
<td>Approx. 2.5 m² / 25 kg bag for thickness of 6 mm</td>
</tr>
</tbody>
</table>

3. PHYSICAL PROPERTIES

<table>
<thead>
<tr>
<th>Adhesion to concrete</th>
<th>EN 13892-8</th>
<th>1.3 N/mm²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compressive strength</td>
<td>EN 13892-2, JC/T 985 : 2005</td>
<td>1 day: &gt;13 N/mm²</td>
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<tr>
<td></td>
<td></td>
<td>3 days: &gt;16 N/mm²</td>
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<tr>
<td></td>
<td></td>
<td>7 days: &gt;20 N/mm²</td>
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<tr>
<td></td>
<td></td>
<td>28 days: &gt;30 N/mm²</td>
</tr>
<tr>
<td>Flexural strength</td>
<td>EN 13892-2, JC/T 985 : 2006</td>
<td>7 N/mm²</td>
</tr>
<tr>
<td>Abrasion resistance</td>
<td>Rolling Wheel Abrasion: EN 13892-7 (In-house)</td>
<td>RWFC 350</td>
</tr>
<tr>
<td>Flow ring test</td>
<td>EN 13813, SS 92 35 19</td>
<td>&gt; 130 mm</td>
</tr>
<tr>
<td>Free shrinkage</td>
<td>EN 13454-2</td>
<td>0.025%</td>
</tr>
</tbody>
</table>

Unless specified, all technical data are average values and refer to 28 days curing time.

3.1 Complied Standard

European Norm : EN 13813: 2002
4. **PROCEDURE**

4.1 **Substrate Preparations**

The concrete substrate must be hard, sound and free from surface contamination.

All dust and contaminants should be vacuum-cleaned prior to installation.

Contraction joints, construction joints and cracks in the substrate which may be subject to movement after installation of **E.MIX FLOWMENT 550** must be maintained as joints in the new surface.

4.2 **Mixing and Installation**

Substrate should be firstly primed by brushing diluted **E.MIX PRIMER**. For the first coat, **E.MIX PRIMER** diluted with clean water at a ratio of 1:5 should be applied. Allow the first coat to become tacky and dry before applying the second coat. For the second coat, **E.MIX PRIMER** diluted with clean water at a ratio of 1:3 should be applied. Wait for the second coat to become tacky and dry before applying **E.MIX FLOWMENT 550**.

**Hand application:** Mix a bag of dry mix powder (25 kg) with 5 – 5.5 L (20 – 22%) water by using an electric mixer for 3 – 4 minutes.

Apply **E.MIX FLOWMENT 550** on primed substrate and under working condition over 10°C. For continuous application, adequate mixing of material is necessary. **E.MIX FLOWMENT 550** can be finished by using a trowel or a steel spatula.

**Machine application:** Adjust the flow rate of the machine until a smooth and homogenous mixture is obtained without segregation. A flow ring with volume of 35 cm³ can be applied to check the spreading of the mixture, whose diameter should be equal or greater than 130 mm.

**E.MIX FLOWMENT 550** is pumped onto the surface through the discharge hose, which is moved across the substrate surface at a constant pace for screed with uniform thickness. The required thickness must be achieved in one operation. The best performance can be achieved when pouring and levelling are done in a continuous process.

The freshly applied material can be gently trowelled with a steel spatula to dissipate lines left by the hose. The semi-hardened material may be formed easily or cut for any necessary adjustments.

**E.MIX FLOWMENT 550** must be applied to substrates under working condition over 10°C, and must be protected from frost for 48 hours after application.

Finishings such as epoxy coating, vinyl sheets and carpet can be applied 24 hours after curing.

(Details of the procedure please refer to our Method Statement.)
4.3 Curing

Relative humidity at the working site should be below 70%. Light ventilation during and after laying is recommended, but dehumidifiers should not be used for the first two days. Curing membranes are not required.

5. STORAGE AND PACKING

E.MIXFLOWMENT 550 is delivered in 25 kg bag. Storage life is 6 months if the product is kept in a dry place.

E.MIXPRIMER is delivered in 20 liters drum, and the consumption is about 3 – 5 m²/L for 2 priming coats.

6. HEALTH AND SAFETY

Recommend to wear NIOSH approved or equivalent particulate face mask when mixing the material.

Material contains cement, which may produce an allergic effect.

Keep out of reach of children.

Material may cause irritation to eyes and skin. In case of contact with eyes, rinse immediately with plenty of water and seek medical assistance. After contact with skin, wash immediately with plenty of soap and water.

*Note: Because it is not possible to give specific instructions for various site conditions or to control the applications, the information on this Technical Data Sheet is for general guidance only and we reserve the right to modify the information detailed in this Technical Data Sheet.