**DESCRIPTION**

**DANOFLOOR UL-CEM** is a flowable, self-levelling polymer modified pre-mix cementitious flooring compound, designed for quick application over concrete floors as a floor leveling compound and underlay for subsequent placement of floor coverings.

It is suitable for use as repair and leveling course and applied at thickness from 2mm to 25 mm.

**DANOFLOOR UL-CEM** is a single component system requiring only addition of prescribed quantity of clean water at job site.

**ADVANTAGES**

- Exceptional flowing characteristic for self-levelling use.
- Minimises trowelling operation.
- Generates smooth, flat & levelled surface for subsequent floor coverings.
- Negligible shrinkage for outstanding resistance to cracking.
- High early strength development for early turn around.
- Excellent bond strength for a composite floor section.
- Rapid installation and curing.
- Thin and thick bed application.

**USES**

- As an underlayment to repair and level old, worn out concrete floor before laying carpet, laminate floor, ceramic tiles, marble, granite, vinyl, epoxies, polyurethane and other flooring systems.
- Ideal levelling compound in damp areas where epoxy & PU cannot be laid directly.
- Filling and levelling the surfaces in new construction.

**PROPERTIES***

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compressive Strength @ 22°C, ASTM C109</td>
<td></td>
</tr>
<tr>
<td>1 Day</td>
<td>10 mPa</td>
</tr>
<tr>
<td>3 Days</td>
<td>15 mPa</td>
</tr>
<tr>
<td>7 Days</td>
<td>20 mPa</td>
</tr>
<tr>
<td>28 Days</td>
<td>25 mPa</td>
</tr>
<tr>
<td>Bond Strength, ASTM C1042</td>
<td></td>
</tr>
<tr>
<td>1 Day</td>
<td>1.5 mPa</td>
</tr>
<tr>
<td>7 Days</td>
<td>3.5 mPa</td>
</tr>
<tr>
<td>Coverage per 25 Kg. Bag</td>
<td>≈ 5 m²@ for 3mm average thickness</td>
</tr>
<tr>
<td>Water / Powder Ratio</td>
<td>0.26 to 0.28</td>
</tr>
<tr>
<td>Water Required</td>
<td>6.50 to 7 Liters / 25Kg</td>
</tr>
<tr>
<td></td>
<td>7.80 to 8.40 Liters/30Kg</td>
</tr>
</tbody>
</table>

*The data shown above reflects typical results based on laboratory testing under controlled conditions. Reasonable variations from the data shown may result from field trials.

**PLACEMENT GUIDELINES**

**SURFACE PREPARATION**

The surface must be sound, free of all dirt, dust, debris, laitance, oil, grease, left over traces of curing compounds, paints, asphalt & other contaminants, which may compromise the bonding of self-levelling underlay with the substrate.

Remove all loose material using water and oil free compressed air or vacuum system.

Application over textured surfaces will give the best bond.

Non-porous concrete floor surfaces (powered trowelled or steel floated concretes) can be mechanically abraded by using sand-blasting, shot-blasting or scarification methods to provide a suitable open pore textured surface.
Acid etching of non-porous concrete surface is generally not recommended, as left over traces of acid would compromise the bond development with the substrate.

The construction / expansion joint in the underlying floor should be carried through the self-levelling underlay to the top floor covering to prevent cracking.

Concrete surface should be pre-wetted to prevent rapid moisture loss from the underlay mix. Normally 1 to 2 hours saturation period is sufficient. Before product application, remove all free standing water from the surface.

SURFACE PRIMING
Never apply DANOFLOOR UL-CEM on un-primed surface. Priming is recommended to protect underlay from rising dampness or high moisture content in the surface. Use of DANOPRIME UL-CEM primer is recommended.

Extremely porous substrates such as weather damaged slabs, aerated lightweight concrete etc., may require a second coat of primer to avoid bubble formation in the levelling compound.

MIXING
DANOFLOOR UL-CEM is most easily mixed using mechanical drill attached with agitator blade or mortar mixer to achieve smooth consistency.

Concrete mixer / hand mixing should be avoided as it does not effectively produce smooth consistency.

Add recommended water while maintaining w/p ratio in to the mixer and then gradually add DANOFLOOR UL-CEM powder under continuous stirring till a lump free, smooth, and flowable homogeneous mix is obtained.

Do not use excess water to the mix. It would result in bleeding and segregation in mix.

Use the mix within 10 minutes of mixing.

METHOD OF PLACEMENT
DANOFLOOR UL-CEM may be poured and spread onto the surface with a squeegee, steel trowel or an adjustable trowel at required thickness. The laid material spreads evenly by self-levelling effect.

Pouring and subsequent spreading should commence from one corner in an uninterrupted continuous stream. Fine adjustments of level may be made immediately after spreading using suitable tool and immediately spike rolled to release entrapped air from the mixed material.

Avoid working with material that has been spread for more than 3 minutes.

DANOFLOOR UL-CEM can be applied in layers of 3mm to 5mm to build-up required thickness. Subsequent layers may be laid directly over the first application as soon as it supports the foot traffic. In case of gap of more than 24 hours between the layers, DANOPRIME UL-CEM primer must be applied and allowed to dry before the new layer is applied.

For application over 25 mm thickness, up to 11 kg of 3.2 mm to 9.5 mm aggregate may be added as an extended filler.

POST-PLACEMENT CURING
DANOFLOOR UL-CEM generally does not require special curing. It should be allowed to stand and air cure for at least 24 hours before proceeding for floor coverings.
LIMITATIONS
Do not use **DANOFLOOR UL-CEM** as a wearing surface. Protect the laid surface with hardwearing compatible floor topping, flooring or coating.

Do not use for exterior applications or in areas continuously subjected to water or where back water pressure build-up is likely.

Do not use as scratch coat to other systems or as waterproofing layer.

**DANOFLOOR UL-CEM** does not stop underlying substrate cracks from reflecting on top.

**DANOFLOOR UL-CEM** is not recommended for use on surfaces subjected to high movement stresses, vibrations, settlements, or heating.

Do not apply when the weather conditions are critical, such as in extremely hot, cold or high humid conditions.

Do not use water or liquid membrane curing compounds as it may affect the surface texture of the underlay and prevent effective bonding with subsequent layers.

It is always recommended to carry trial on a small test area to ensure the suitability of the product for the intended use. This should also include the product compatibility with floor finishing/covering.

CLEANING
The tools and equipment use for mixing and placing the cementitious underlay should be immediately cleaned with clean water. Cured material can be removed mechanically or by using acid-etching process.

SUPPLY
**DANOFLOOR UL-CEM** is supplied in 25 Kg. and 30 Kg., pack size.

STORAGE
**DANOFLOOR UL-CEM** must be stored above 5°C. Store under the shed & protect from extremes of temperature, heat, direct sunlight. The shelf life is 6 months in sealed unopened packing.

SAFETY PRECAUTIONS
As with all chemical products, care should be taken during use and storage. This product becomes alkaline when mixed with water, avoid contact with skin, eyes, mouth and food. For further detail, refer to Material Safety Data Sheet.