



# CIKOcem Screed SL

# **Cementitious Self-Levelling Screed**

# **Description**

CIKOcem Screed SL is single component cement based self-levelling screed for floor and underlayment topping system recommended for concrete and other suitable substrates.

CIKOcem Screed SL is a blend of specially selected cement, graded aggregate, polymer and other additives to provide a self-levelling topping on suitable substrates. It offers seamless floor having thickness from 5mm to 40mm.

# **Properties**

- Single component cement based system.
- Seamless floor having thickness from 5mm up to 40 mm.
- Self-levelling consistency and easy to apply.
- **Exhibits** excellent adhesion to substrates.
- Fast laying, up to 500m<sup>2</sup> per day.
- High early strength for early turnaround
- Suitable on wide range of substrates such as wood, concrete, mortar and steel.

# **Application area**

CIKOcem Screed SL as floor topping and underlayment system is suitable for,

- Underlayment to fix tiles, carpets, vinyl sheeting, linoleum and other epoxypolyurethane flooring systems.
- Levelling of indoor concrete slabs and floors as a finished surface
- Repair of surface defects on concrete floors

# Physical properties @ 25°C

Form	Single component powder system
Colour	Grey in general
Mixing ratio	Pre-weighed packs
W/P	0.18-0.19
Workability @ 25 °C	30-35 minutes
Fresh Density	2.21±0.01 Kg/L
Compressive Strength ASTM C109	1 day >15 Mpa 7 days >20 Mpa 28 days >30 Mpa
VOC EPA 24	<10g/l

\*Note: Dry cure for compressive Strength

## Coverage

CIKOcem Screed SL will have a consumption of 9.35kg of Powder (11 kg fresh Material) for 1 m<sup>2</sup> at 5mm thickness.

The above coverage is calculated at W/P=0.18

Note: The coverage depends on the floor condition and finish.

## **Application instructions**

## Surface preparation

The concrete surface should be fully cured achieving a minimum compressive strength and pull off strength of 25 MPa and 1.5 MPa respectively.

The concrete surface should be free from dust and loose particles. In case of traces of oil and grease, the surface shall be treated by acid etching or sand blasting. Curing compounds and sealers, if present, must be removed by mechanical means. The final step in cleaning should be complete removal of all residues with a vacuum cleaner or pressure washing.

All cracks and holes must be repaired with CIKO repair materials made to mortar consistency.



Concrete surfaces are to be mechanically prepared to remove laitance and achieve a flat surface, grit blasting or surface profiling equipment are preferred.

CIKOetch Acid should be used by experienced contractors for further surface etching only when all mechanical preparation are impracticable Once etching is finished, salts from the reaction must be thoroughly pressure washed and allow the concrete to completely dry. Any undue residue will affect the bond strength.

## **Application**

## **Priming with CIKObond AC**

Wet the surface with clean water just before application of first coat of primer.

The cleaned surface must be sealed with an initial coat of CIKObond AC. Application should be carried out using brush or roller uniformly over the cleaned surface. Allow the first coat of primer to dry. Apply the second coat and allow to be tacky. Inspect the status of the primed surface prior proceed with the application of CIKOcem Screed SL to required thickness.

## **Priming with CIKObond EPL**

For non-porous and impervious surfaces, apply CIKObond EPL and whilst still tacky, spread CIKOASG (0.1-0.3MM) or CIKOASG (0.3-0.5 MM) at a rate of 1.5 to 3 kg per 1 m² depending on the final application thickness. Allow to fully dry for at least 12 to 24 hours. Remove access of aggregate and clean well the surface by vacuum before the application of CIKOcem Screed SL.

# Mixing

CIKOcem Screed SL is a ready to use material and require only 4.5 L to a maximum of 4.75 L of potable water per 25 kg bag for mixing. Measure required amount of potable water for each batch mix and dispense into mixer. Slowly add CIKOcem Screed SL powder into the mixer while the mixer is in running mode. Mix the compound for 3 minutes to get a homogenous and lump free material.

#### Note:

 In hot weather application, use chilled water (<20°C for mixing to extend the open time of the mixed material).

- Mixed Fresh CIKOcem Screed SL shall have a temperature less than 25 °C
- Continuous mixing and pouring is recommended. (sufficient manpower is required, or continuous mixer pump machine is more preferable in large applications)
- Pour CIKOcem Screed SL within 2 minutes from mixing.

#### **Placing**

Pour the screed mix in the desired thickness over the primed substrate and rake to the desired thickness. Make sure there are no bond breaking substances on the primer. Immediately after pouring, use gauge rake to achieve thickness and force the entrapped air to the surface.

Agitate to remove air .Alternatively spiked roller can be used to release air in case of larger application thickness. Finishing should be done with a smooth steel rake.

Note: Never Apply CIKOcem Screed SL over joints or untreated cracks as this will most likely result in surface cracks!

# Curing

Curing for the finished is not required in normal condition. In case of harsh condition like direct sunlight, high temperature, flow of wind, etc; freshly hardened concrete to be covered with polyethylene sheet.

#### Cleaning

Used tools must be well cleaned with water directly after usage.

## **Packaging**

CIKOcem Screed SL is available in 25 kg bags.

## Shelf life

CIKOcem Screed SL has a shelf life of 9 months if stored in accordance with CIKO instructions.

## Storage

CIKOcem Screed SL should be stored under enclosed shaded area at temperatures ranging from 5 to 40 °C

# **Precautions**

- Fresh CIKOcem Screed SL to be protected from direct sunlight and wind until it has set.
- CIKOcem Screed SL is not recommended for external use or situation where water may come into direct contact with cured materials.
- If the mixed materials stiffen do not remix with water; the batch should be discarded.



- Do not exceed the recommended water content and only use cool potable water.
- Better to have the mixed material temperature <30°C</li>
- The ambient temperature is between 5 & 35°C.
- The substrate temperature is between 5 & 35°C.

## Health & safety

Use standard dust mask to avoid inhalation of dust. Powder when wet or moist can cause burns to skin and eyes which should be protected during use. If comes in contact with skin/eyes, flush with plenty of fresh water and seek medical advice.

Refer Material Safety Data Sheet for further details.

# **Technical Support**

For further technical support, do not hesitate to contact CIKO team at any time as CIKO offers on and off site services to end users, specifier and contractors.

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A wide range of construction chemical products are manufactured by CIKO Middle East which includes:

- Concrete admixtures and additives
- Waterproofing and damp proof coatings
- Surface treatments
- Flooring and toppings
- Grouts and anchors
- Tile adhesives and grout
- Concrete repair materials
- Adhesives and bonding agent
- Protective coating
- Joint Sealants and Moulding compounds
- Ancillaries

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