

# TECHNICAL DATA SHEET - LEVEL 0220

#### **Product Overview**

**RENOSCREED LEVEL 0220** is a high-performance, rapid-setting, cement-based levelling compound designed for use over solid substrates such as concrete or sand/cement screeds. It is formulated for thin applications ranging from 2mm to 20mm in one pass.

It is shrinkage-compensated, protein-free, and walkable in 2–3 hours. It delivers a smooth, durable surface ready to receive tiles within 3 hours and resilient floor finishes after 24 hours.

## **Applications**

- Sand/cement screeds
- Concrete
- · Calcium sulphate screeds
- Asphalt
- Ceramic, quarry, and stone tiles
- Covering screeds containing Underfloor heating systems

Property	Value
Packaging	20kg lined paper sacks
Water addition	4.6–4.8 litres per 20kg
Application thickness	2mm to 20mm in one application
Working time	20–30 minutes at 20°C
Foot traffic	After 3-4 hours
Time to tile	After 24 hours
Time to receive resilient finishes	After 48 hours (thickness dependant)
Compressive strength (EN 13892-2)	1 day: >10 MPa 7 days: >20 MPa 28 days: >25 MPa
Flexural strength (EN 13892-2)	1 day: >2MPa 7 days: >4 MPa 28 days: >6 MPa
Consumption	Approx. 1.75kg/m²/mm
Coverage per 20kg bag	~3.6m² at 3mm

#### Renoscreed

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# **Key Benefits**

- Apply from 2mm to 20mm in one pass
- Ready for tiling after 24 hours
- Pumpable and protein-free
- High early strength and surface finish
- Shrinkage compensated
- Compatible with underfloor heating (solid floor systems only)

## **Substrate Preparation**

Substrates must be structurally sound, clean, and dry with a surface tensile strength of at least 1 N/mm<sup>2</sup>.

- Mechanically remove all laitance, grease, dust, or surface contaminants.
- Moisture content should be below 75% RH or <0.5% CM.
- Porous substrates should be primed with Renoscreed Primer RTU (or equivalent) to avoid pinholing and dewatering.
- Calcium sulphate substrates must be appropriately sealed prior to application.
- Ensure ambient and substrate temperatures are between +10°C and +25°C.

Renoscreed Level should not be applied over timber, insulation, or flexible subfloors.

**Perimeter isolation** should be installed using 5mmx 100mm or 8mm x 100mm foam around all walls, columns, and fixed upstands to prevent stress transfer.

Large deviations or hollows in the substrate exceeding 50mm should be filled using **Renoscreed Fibre 0350 before overcoating**. Once this has hardened, the area should be re-primed before applying Renoscreed Fibre topping.

All holes, cracks, and joints in the substrate should be properly sealed. Vacuum the area thoroughly and apply **Renoscreed Primer RTU** in accordance with its data sheet. Multiple coats may be required on highly porous substrates (e.g. cast in-situ concrete). If multiple layers of screed are to be applied, each layer must be re-primed before applying the next.

Priming ensures optimum adhesion, prevents air release and dewatering of the screed, and improves flow characteristics.



## **Mixing**

Renoscreed Level 0220 should be mixed using an approved automated screed mixing pump. The recommended water addition is 18%, equating to 3.4-3.6 litres per 20kg bag. Do not exceed the specified water content, as excess water will reduce strength, increase shrinkage and may cause segregation.

Mixing water content should be continuously verified using a **flow ring test**. A correct mix will provide a flow of **220–235mm**. Reduced water will increase viscosity and make the product more difficult to apply.

For **manual mixing**, use a slow-speed electric mixer (~500 rpm) for at least 2 minutes, ensuring a lump-free consistency. Allow the mixed product to stand for 2 minutes before application.

The mixed material should be used within its working time and should be protected from draughts and rapid drying.

# **Application**

Ensure **light ventilation** but avoid strong air movement. All doors and windows must remain closed during application and for at least 72 hours afterward to avoid rapid drying and potential cracking.

Ambient and substrate temperatures must remain between **+10°C** and **+25°C** for at least 7 days post-application.

#### For best results:

- Divide large floor areas into bays of 6-8 metres, depending on application thickness and pump output.
- Use Renoscreed Perimeter Foam or equivalent to form bays and stop-ends.
- Apply continuously, maintaining a wet edge between sections.
- Use a **trowel or dapple bar** to aid levelling and ensure a smooth finish. Finish where possible with a Spiked roller

Renoscreed Level is suitable for bonded applications and may also be applied over:

- Screeds containing Underfloor heating systems (pipes must be securely fixed and pressure tested)
- Stable and established calcium Sulphate / bitumen surfaces ensure a suitable primer is used: Calcium Sulphate - Renoscreed CS Primer, Bitumen – Renoscreed Grit Prime

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For technical advice, please contact Renoscreed support (details below).

# **Overlaying and Floor Finishes**

**Renoscreed Level 0220** is compatible with most floor coverings and adhesives. The screed surface must be dry and free of laitance before application of any floor finish.

The screed must not be left exposed or painted without a suitable covering.

# **Drying & Covering Times**

- Foot traffic: 2-4 hours at +20°C
- Light grinding (if required): After 48 hours
- Floor coverings: As early as 3 days, depending on layer thickness and site conditions

At **2mm thickness** in controlled conditions (23°C, 50% RH), Tile coverings may be applied after 24 hours and other finishes applied after 48hours.

Actual drying times may vary depending on substrate porosity, thickness, temperature, and humidity. High humidity or low temperatures will extend curing and covering times.

#### Limitations

- Do not apply below 5°C or above 30°C.
- Not suitable for permanent water immersion.
- Ensure substrate moisture content is within acceptable limits before application.

## Storage & Shelf Life

Store unopened in a cool, dry place. Use within **9 months** of manufacture.

### **Health & Safety**

This product is not classified as hazardous. A full Material Safety Data Sheet (MSDS) is available upon request.



# Bag Calculator

Area (m²)									2)					
			1	2	5	10	15	15	20	25	50	75	100	200
\$24	Thickness (mm)	0	1		0	0	Salar S	373	0	1	1.4	01	07	<b>54</b>
		3	1	1	2	3	4	5	6	7	14	21	27	54
		5	1	1	3	5	7	7	9	12	23	34	45	90
(5)	nes	10	1	2	5	9	14	14	18	23	45	68	90	180
	ick	15	2	3	7	14	20	21	27	34	68	102	135	270
		13		3	/	14	20	× 1	4 (48)	34	184	102	133	2/0
		20	2	4	9	18	27	27	36	45	90	135	180	360

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