TEXTURED (ORANGE-PEEL FINISH)

EPOXY FLOOR COATING
TECHNICAL SPECIFICATION**

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1. Surface Preparation

Concrete surfaces to be coated with **2.5–3 mm Textured (Orange-Peel Finish) Epoxy Flooring** must be completely free from any contaminants such as oil, dust, dirt, or any substances that may reduce or prevent adhesion.
Loose particles, laitance layers, and all adhesion-preventing components must be removed.
Concrete must have sufficient strength:

- Minimum **25 N/mm² compressive strength**,
- Minimum **1.5–2 N/mm² tensile (pull-off) strength**.

The surface must be clean, smooth, dry, and moisture content must not exceed **5%**.
If the moisture level is above the acceptable limit, **PRIMER SC 220 – 100% Epoxy Primer for Damp Surfaces** must be used.
Surface preparation must be performed using mechanical methods (shot-blasting, diamond grinding, or similar). All dust must be removed using an industrial vacuum cleaner.
No weak or loose laitance should remain on the surface.

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2. Surface Repair

Cracks on the prepared substrate are roughened using mechanical tools.
Panel-cut joints are opened into a V-shape with a demolition hammer.
Dust and debris are removed using an industrial vacuum cleaner.
PRIMER SC 215 Solvent-Free Epoxy Primer is mixed to putty consistency and applied to the surface using a trowel or spatula to finalize the repair.

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3. Epoxy Primer Application

Before applying the textured epoxy system, capillary pores must be sealed, surface strength improved, and adhesion ensured.
Apply **0.400 kg/m² PRIMER SC 215 Solvent-Free Epoxy Primer** mixed with **0.400 kg/m² 0.1–0.3 mm quartz filler sand**.

Mixing Procedure:

1. Pre-mix Component A (epoxy resin) using a low-speed mixer.
2. While mixing continues, slowly add Component B (epoxy hardener) and the specified amount of quartz filler sand.
3. Mix for 3–4 minutes until a completely homogeneous mixture is obtained.

Apply the prepared mixture to the surface using a steel trowel.
While the surface is still wet, broadcast **0.3–0.7 mm quartz sand at 2 kg/m²**.
After approximately **12 hours**, depending on ambient temperature:

- Remove excess sand,
- Sand the surface to the desired profile,
- Clean the surface using an industrial vacuum.

The surface is now ready for intermediate coat application.

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4. Intermediate Coat Application

Primed surfaces must be protected from dust, moisture, and air movement.
No pedestrian or vehicle traffic is permitted.

After approximately **12 hours**, apply **SC 650 Intermediate Coat** at **0.700 kg/m²**, mixed with **0.300 kg/m² of 0.1–0.3 mm quartz filler sand**, using a trowel.

Mixing Procedure:

1. Premix Component A (epoxy resin) using a low-speed mixer.
2. Add the 0.1–0.3 mm quartz filler sand while mixing continues.
3. Slowly add Component B (epoxy hardener).
4. Mix for 3–4 minutes until the mixture becomes fully homogeneous.

The intermediate coat must again be protected from dust, moisture, and airflow until curing is complete.

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5. Textured (Orange-Peel Finish) Epoxy Topcoat Application

Surfaces with completed intermediate coat must be kept free from dust, moisture, and drafts.
No traffic is allowed.
After approximately **12 hours**, apply **SC 645 Textured (Orange-Peel Finish) Epoxy Floor Coating** at **0.600 kg/m²** using a notched trowel or leveling rake.
While the product is still wet, roll the surface with a **coral (texture) roller** in a uniform direction to achieve the required **orange-peel appearance**.

Mixing Procedure:

1. Pre-mix Component A (epoxy resin) using a low-speed mixer.
2. While mixing continues, slowly add Component B (epoxy hardener).
3. Mix for 3–4 minutes until the mixture becomes completely homogeneous.

After application, a **textured, glossy, orange-peel finish** is achieved.
Surfaces must be protected from dust, moisture, and airflow.
No pedestrian or vehicle traffic is allowed until curing is complete.
The final coated surface may be opened to pedestrian traffic after **48 hours**.