

Monolithic floor hardening compound

Product Description

TAL INTEGRAFLOOR QUARTZ is a premixed non rusting floor hardener used to form a monolithically hardened concrete floor. It produces an abrasion resistant and hard wearing surface and is applied by the "shake on" technique.

Advantages

- Meets SCAQMD Rule 1113 & LEED VOC Limits
- Formaldehyde free
- Forms a monolithic bond with concrete
- Resistant to oil and grease
- Does not rust
- Easy to apply
- Various colors available
- Produces an extremely strong, dense, hard wearing abrasion and impact resistant floor.

Uses

TAL INTEGRAFLOOR QUARTZ is used to provide a hard wearing abrasion resistant surface. For use in situations such as, car parks, warehouse floors and production areas.

Specification Compliance

SCAQMD Rule 1113
LEED NC2009 IEQ 4.2

Laboratory Test Data

Property	Typical Results
Compressive strength (ASTM C309)	70 MPa at 28 days
Abrasion resistance (IHM)	300% increase compared to 25MPa concrete
Mohs hardness	>7 (aggregate)

The above data was obtained under laboratory conditions using freshly manufactured material at a water/powder ratio of 0.12. Actual results in the field will vary as a result of different factors such as how long the product has been stored, storage conditions, temperature, actual water content, curing regime, quality of samples, compaction method and the type of equipment used for sample preparation & testing.

Volatile Organic Content

VOC = 0g/L

Packaging

25kg bags

Coverage

4 to 5kg/m²

Shelf Life

12 months when stored in cool dry conditions.

Installation Guidelines

TAL provides detailed method statements on all its products for use in various applications. These must be referred to prior to starting work. The information below is a summary intended for guidance only.

Application

It is recommended that the floor be marked off into bays of known area. Sufficient material should then be laid out to meet the recommended coverage rate.

Application should begin without delay when the base concrete has stiffened to the point when light foot traffic leaves an imprint of about 3mm-6mm. Any bleed water should now have evaporated, and the concrete should have a wet sheen.

On large floors it will be necessary to work immediately behind the laying team to ensure application at the correct time.

Apply as follows :

- The first application is broadcast at an even rate of 2 to 3kg/m² onto the concrete surface. When the material becomes uniformly dark by the absorption of moisture from the base concrete, this first application can be floated using wooden floats or, on large areas, a power float, should be used. It is important that the surface is not overworked.
- Immediately after floating, the remaining product is applied evenly over the surface at right angles to the first. When moisture has been fully absorbed the surface can be floated in the same way as before.
- Final finishing of the floor using a power float can be carried out when the floor has stiffened sufficiently so as not to cause any damage.
- Where bay edges are likely to suffer particularly heavy wear or impact, and where saw-cut transverse control joints are to be located, provide these areas with additional protection by immediately after leveling the freshly placed concrete, sprinkling additional product by hand at a rate of 0.5 kg/linear meter in a strip 100mm wide along the bay edge and hand-trowelling into the surface. These reinforced areas will be further strengthened when the subsequent full treatment is applied.

- Timing of the application is important and care should be taken to ensure adequate labour, machinery and material is available to complete the whole area while sufficient moisture is available to fully react with the powder to provide a good dense finish. Any addition of water to wet out the surface on either the first or second application will be detrimental to the overall quality of the floor.
- Coloured floors require extra care and need to be protected from damage and staining after completion. It is essential that the correct recommended rate of application is achieved over the entire floor area in order to avoid possible localized colour variations.

Curing

Cure the finished concrete floor for a minimum of 14 days using a high efficiency curing compound or with water soaked sand or hessian covered with sealed polyethylene sheet to retain moisture for the full curing time.

Limitations

Do not apply in direct sunlight
Do not apply in windy conditions
Do not apply until surface water has evaporated
Do not use water to finish
Do not use on vacuum de-watered concrete slabs
Cement content of the base concrete should be >300kg/m³.
Slump of the base concrete should be >75mm.
Air content of the base concrete should be <2%.