



5.03 XPERT FLOOR-HARD

Non-metallic, hard-wearing surface material for concrete/cement mortar floors

PRODUCT DESCRIPTION

XPERT Floor hard is an Integral floor hardener, based on hard-wearing quartz, silica and corundum. The high cement content and the low water cement ratio in the resulting topping provide a case-hardened finish to concrete slabs.

BENIFITS

- Integral bond with the base concrete
- High strength, Easy application
- Excellent abrasion resistance
- Durable, non-rusting
- Resistant to oil and grease
- Economical, Skid resistance
- Ready to use.
- Good wear resistance
- High impact resistance
- Cost effective surface hardener
- Makes floor dust proof
- Non-metallic and rust free
- Easy to clean
- Increased resistance to oils and grease
- Quality assured factory blending
- Suppresses superficial fibres in concrete.

USES

XPERT Floor hard is suitable for use in all cases where floors are subjected to severe mechanical wear and there is a need to apply special hard-wearing surface coverings, such as:

- Warehouses
- Factories
- Shopping malls
- Public areas
- Restaurants
- Museums
- Parking lots
- Garages and Service stations

TYPICAL PROPERTIES:

Hardness: Immediately after Moh's Scale Fused Alumina 9 use. Silicon Carbide 9+.

PACKAGING: XPERT Floor hard is supplied in 20 kg bags / 30 kg bags.

TECHNICAL DATA

CATEGORY		PARAMETERS
Abrasion Resistance		~ 1.70 mm wear loss (IS:1237)
Surface Hardness		B/w 8 & 9 (Moh's scale) (IS:13630 part 13)
Compressive Strength		≥ 70 N/mm ² (IS: 4031 Part 6)
Layer Thickness		2.5–3.0 mm at dosage of ~5.0 kg/m ²
Ambient Temperature	Air	+5 °C min. / +35 °C max.
Relative Humidity	Air	30% min. / 98% max
Substrate Temperature		+5 °C min. / +35 °C max.
Applied Product Ready for Use		Foot Traffic: ~ 72 hours Fully Serviceable: ~ 7 days
Consumption		
Light Duty		3.5–4.0 kg/m ²
Medium duty		4.5–5.0 kg/m ²
Heavy duty		5.5–6.0 kg/m ²

Layer Thickness: 2.5–3.0 mm at dosage of ~5.0 kg/m².

CLEAN UP: Clean all equipment with water immediately after use.



APPLICATION INSTRUCTION

Preparation: Prior to applying the floor hardener it is suggested that the product be laid out along either side of the pour to ensure the correct application rate.

Application: Apply the dry XPERT Floor hard to the freshly screeded concrete surface by dusting it on in two applications. The first application should be applied as soon as the surface water has disappeared. The product is dusted onto the surface to give an even appearance. The first application is allowed to soak up water from the base concrete before being floated into the surface. Immediately this operation is finished the second half of the application may proceed in the same manner as above.

Once the second application is floated into the surface the finishing operation is the same as for normal concrete to give the finish desired. The edges of slabs along formwork and areas near doorways will dry at a faster rate than the rest of the pour and must be watched to ensure that the surface gets the required dose of XPERT Floor hard and is floated up while there is still sufficient moisture available.

Periodical checking of the condition and development of the concrete will determine the correct period for each stage and sequence of application.

For mechanical application with automatic spreader and laser screed, the spreading can start almost immediately after the concrete has been levelled to allow for the hydration of the dry shake. Compaction with the trowel can start as soon as the weight of the power trowels is supported by the concrete.

For manual application, the dry shake must be spread once the concrete can be stepped on, without leaving a print deeper than 3–5 mm.

CURING TREATMENT

XPERT Floor Hard to be cured immediately after finishing using clean water. For chemical curing, use XPERT Cure W / W2 for better results.

LIMITATIONS

- The application of the dry shake powder must not be carried out in strong wind or in dry conditions.
- Variations in concrete characteristics such as water content and cement may lead to slight colour variations.
- Dry shake hardeners give a finish to concrete with some colour variation across the floor due to the natural variability of the concrete onto which they are applied.
- Colour variation during the drying out period is normal for this system and is to be expected.
- At low relative humidities, efflorescence can appear on the surface.
- At high relative humidities, bleeding, slower curing and hardening can occur and extended finishing operations be required.
- After application, do not expose such concrete surface to water and protect from rain or contaminants.

WARRANTY

This product is warranted to be free of defects in material and workmanship, and conform to XPERT Construction Chemicals ("XPERT") quality control standards. All recommendations, statements and technical data herein are based on tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty or guaranty of any kind, expressed or implied including but not limited to, an implied warranty of merchantability or an implied warranty of fitness for a particular purpose.

Satisfactory results depend upon many factors beyond XPERT's control. User shall rely on his or her own information and tests to determine suitability of the product for the intended use and user assumes all risk, loss, damage, expense and liability resulting from his or her direct use, indirect use or consequential to their use of the product.