



X-Tech IntegraFloor S

Monolithic floor hardening compound

Product Description

X-Tech IntegraFloor S is a premixed highly abrasion resistant 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. The finished floor is conductive with a resistance to ground typically between 5×10^4 and 1×10^6 depending on the grounding condition and the host concrete mix design.

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
- Produces an extremely strong, dense, hard wearing abrasion and impact resistant floor.
- Conductive

Uses

X-Tech IntegraFloor S 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

BS 8204-2 (AR 0.5/WS)
 SCAQMD Rule 1113
 LEED NC2009 IEQ 4.2
 IEC/BS EN 61340
 ANSI/ESD S7.1 (Conductive)

Laboratory Test Data

Property	Typical Results
Compressive strength (ASTM C109)*	>70 MPa at 28 days
Abrasion resistance (BS 13892-4)**	<0.05mm
Abrasion resistance increase (ASTM C779)***	Up to 300%

*At W/P ratio of 0.12 and wet cured for 27d + 1d dry cure. 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.

** When applied to concrete as per BS8204-2.

*** Actual results will vary depending on the actual mix design used, coverage rate, cement content, water cement ratio and curing regime.

Volatile Organic Content

VOC = 0 g/L

Colors

Concrete grey RAL 7023, pale green RAL 6021 and coral red RAL 3016.

Color shades shown above are an approximate indication as the final color shade is dependent on a number of variables including but not limited to water content of host concrete, curing method, application rate and finishing method.

Packaging

25 Kg bags

Coverage

3 to 5 kg/m²

Shelf Life

12 months in sealed biodegradable plastic bags.
 6 months in paper bags.

Installation Guidelines

X-Calibur 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 3 to 6 mm. 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 1.5 to 2.5kg/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 labor, 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.

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%.

Health and Safety

This product is for industrial use only by trained operatives. It is potentially hazardous if not used correctly. Please refer to the Material Safety Data Sheet (MSDS) prior to the purchase and use of this product. The MSDS can be obtained via our website www.x-calibur.us

Authorized Technical Specialist

Please note that only X-Calibur Authorized Technical Specialists ('ATs') are permitted to change any of the information in this data sheet or to provide written recommendations concerning the use of this product. Visit www.x-calibur.us for a full list of X-Calibur ATs.

Datasheet Validity

X-Calibur makes modifications to its product datasheets on a continuous basis. Please check the datasheet update section on www.x-calibur.us to ensure you have the latest version.

Warranties

X-Calibur supplies products that comply with the properties shown on the current datasheets. In the unlikely event that products supplied are proved not to comply with these properties, then we will replace the non-compliant product or refund the purchase price. X-Calibur does not warrant or guarantee the installation of these products as it does not have control over the installation or end use of the products. Any suspected defects must be reported to X-Calibur in writing within five working days of being detected. X-Calibur Construction Chemistry Inc. **makes no warranty as to merchantability or fitness for a particular purpose and this warranty is in lieu of all other warranties express or implied.** X-Calibur Construction Chemistry Inc. shall not be liable for damages of any sort including remote or consequential damages, down time, or delay.