brix-E-HCR 1.0 mm - 2.0 mm



brix-E-HCR is a pigmented, solvent- free, high chemical resistance, easily applied self smoothing epoxy floor coating system, designed to protect concrete substrates.

brix-E-HCR is typically applied in one layer for a smooth finish, however can be broadcast with graded quartz aggregate while wet and sealed to provide a slip-resistant textured finish.

brix-E-HCR provides an impervious, easy-to-clean, hygienic and seamless surface with excellent wear and chemical resistance as well as high mechanical strength.

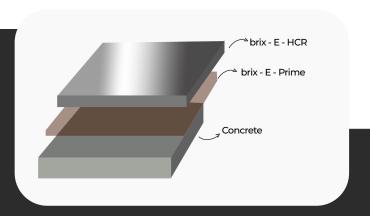
brix-E-HCR is designed for use in aggressive industrial areas subject to frequent foot traffic and frequent or prolonged exposure to petroleum, oils, solvents, acids and alkalis.

Specific Gravity

1.65 g/cm³ @ 25°C

Working Time

~20 – 25 minutes @ 25°C (usable working life of material following mixing and immediate spreading as per the application instructions).



Coverage

The recommended coverage of brix-E-HCR is 1.65 kg/m² per mm thickness. A double prime of brix-E-Prime is recommended.

Abrasion Resistance

Taber Abrader: 90 mg Loss per 1000 cycles

Compressive Strength

>50 N/mm²

Flexural Strength

>30 N/mm²

Bond Strength

25 N/mm²

Overcoating Time

~24 hours @ 25°C (some mechanical preparation may be required).

Speed of Cure

Light Foot Traffic – 18 hours Light Wheeled Traffic – 24 hours Heavy Duty Traffic – 72 hours Full Chemical Cure – 7 days





Chemical Resistance

Please refer to the Chemical Resistance Chart

Application Temperature Range

~10 – 30°C is recommended. Outside of this range, heating or cooling equipment should be used to achieve ambient conditions. The substrate, before priming, should be at least 3°C above the dew point to reduce the risk of condensation or blooming. This should be maintained for 48 hours after application.

Substrate Requirements

brix-E-HCR is suitable for application on cementitious substrates and suitable polymer modified screeds.

All substrates should be capable of bearing loads, free of cracks and voids as well as free from laitance, dust and other contamination including dirt, oil, grease, coatings, and surface treatments. The substrate should be sound with a minimum compressive strength of 25 N/mm² and a minimum tensile strength (pull-off) of 1.5 N/mm² The concrete substrate must be a minimum of 28 days old and the residual moisture content must be a maximum of 4% CM.

Where the concrete substrate is in contact with the ground, an effective damp proof membrane should have been incorporated into the slab design.

Substrate Preparation

Substrates should be mechanically prepared using captive vacuum enclosed shot blasting or diamond grinding, to remove surface cement based laitance and previous surface treatments leaving an open textured mechanically prepared surface.

Weak concrete / polymer modified screed must be removed and repaired using recommended products. Imperfections in the concrete (holes and cracks) should be filled using epoxy patching compound.

Application Instructions

Priming

If the slab requires priming, brix-E-Prime is recommended. See brix-E-Prime datasheet for more details. Allow to cure before applying the brix-E-HCR. To improve inter-coat adhesion, broadcast Natural Quartz (0.2 – 0.5 mm) while the primer is still wet. For details of other specialist primers contact our Technical Department.

brix-E-HCR $1.0 \, \text{mm} - 2.0 \, \text{mm}$



Mixing

The contents of the brix-E-HCR (Part A) should be mixed with the epoxy pigment for approximately 2 - 3 minutes. The contents of brix-E-HCR (Part B) should drained into the pigmented brix-E-HCR (Part A) component and the two materials are to be thoroughly mixed at speed of 350 rpm for two minutes. The mixed liquid should then be poured into a clean suitably sized separate mixing container and mixed for a further 1 - 2 minutes. Add the contents of the Filler C to the mixed resin and mix for a further three minutes or until homogenous.

Application

brix-E-HCR should be poured onto the surface and spread over the entire area using a serrated spatula or notched trowel at a rate of 1.80 kg/m² per mm thickness before being back-rolled with a spike roller to a self-smoothing gloss finish. Broadcast with Natural Quartz (0.7 -1.2 mm) while the brix-E-HCR coating is still wet if seeking a slip-resistant textured finish. Once cured, seal the anti-slip profile with to two coats of brix-E one (Universal).

Overcoating

Overcoating should be carried out within 24 hours of application. If longer than 24 hours it will be lightly grind the necessary to surface by mechanical before overcoating is carried out.

Further Information

Information relating to the safe handling of this product can be found in the Material Safety Data Sheet. Local regulations concerning the safe handling of resin based coating materials must observed. Suitable protective clothing including suitable protection must be worn at all times.

All consumptions listed are for recommendation purposes only. Detailed application instructions and system build-up advice can be provided on request through our Technical Services team.

Products are guaranteed against defective material and manufacture and are sold subject standard Terms Conditions of Sale, copies of which can be obtained on request.