

X-Shield BugFill

High build epoxy bug hole filler, skim coat and general purpose adhesive

Product Description

X-Shield BugFill is a high build thixotropic epoxy resin for filling bug holes (blow holes) in concrete, and surface imperfections in steel, prior to the application of epoxy, polyurethane and polyurea coatings. It is also used as a general purpose adhesive, liner and bedding compound.

Advantages

- Meets SCAQMD Rule 1113 & LEED VOC Limits
- Formaldehyde free
- Non slump
- Long Pot life
- Easy to apply
- Can be used in contact with potable water
- Resistant to wide range of chemicals
- Solvent Free
- Good abrasion resistance

Typical Uses

- Bug (blow) hole filling
- Skim coat
- Tank lining
- Repair of imperfections in coatings
- Bonding of slip bricks
- Bedding mortar
- Installation of anchor bolts

Specification Compliance

SCAQMD Rule 1113
LEED NC2009 IEQ 4.2

Laboratory Test Data

Property	Typical Results
Compressive strength (BS 6319 Part 2)	≥50MPa
Specific gravity	1.6 ± 0.05
Tensile Strength (BS 6319 Part 7)	>19MPa
Slant Shear (ASTM C882)	12MPa (Failure on concrete)
Mixing Ratio	9:1
Solid Content	100%

Application Properties

	25C	35C
Pot life	40 mins	45 mins
Recoat time*	16 to 24 hours	8 to 16 hours

* Material must be kept free from contamination

Volatile Organic Content

VOC = <50 g/L

Theoretical Coverage

1.6 kg/m² at 1mm thickness.

Actual coverage will depend on wastage and surface profile.

Packaging

5kg packs.

Shelf Life

18 months when stored below 35C under shade in a dry environment.

Installation Guidelines

X-Shield BugFill should be applied by experienced paint crews. NCC 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.

Surface Preparation Concrete

The substrate must be structurally sound. Loose or unsound concrete should be removed and made good. Surfaces must be entirely free of oil, grease, paint, corrosion deposits, dust, laitance or other surface deposits. The surface should be prepared by light grit blasting or high pressure water blasting to produce a lightly exposed aggregate surface and reveal all bug (blow) holes and imperfections.

Steel

Any damaged steel should be removed and replaced. The substrate should then be grit blasted to minimum SA 2½. Depending on the level of corrosion protection required, an anti-corrosion or holding primer may be

necessary. X-Shield BugFill must be applied immediately after the grit blasting has been completed.

Mixing

Thoroughly mix the base prior to adding the hardener using a slow speed drill (500rpm) fitted with an approved NCC X-Calibur mixing paddle. After mixing the base, add all of the hardener to the base and mix for 3 minutes until both components have fully dispersed and are uniform in color. Be sure to rotate the mixer throughout the drum. Mix only full packs.

Application

Apply using trowel, scraper or filling knife, using a 'scrape on, scrape off' technique to completely fill bug (blow) holes and imperfections. Bug holes or imperfections greater than 10mm will require to be filled in two or more layers, with the first layer being allowed to harden before application of the subsequent layer. Recoat after 16 to 24 hours at 25C or 8 to 16 hours at 35C. Clean uncured material from equipment using X-Shield Solvent S. Cured material can only be removed by mechanical means.

Limitations

Will change color when exposed to direct sunlight.
Will not accommodate movement cracks.
Do not apply below 4C
Do not discard into the water system.
Protect from chemical and water spillage until fully cured.

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.ncc.com.eg.

Authorized Technical Specialist

Please note that only NCC 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.ncc.com.eg for a full list of NCC X-Calibur ATs.

Datasheet Validity

NCC X-Calibur makes modifications to its product datasheets on a continuous basis. Check the current datasheet section on www.ncc.com.eg to ensure you have the latest version.

Warranties

NCC 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. NCC X-Calibur does not warrant or guarantee the installation of the products as it does not have control over the installation or end use of the products. Any suspected defects must be reported to NCC X-Calibur in writing within five working days of being detected. NCC X-Calibur Construction Chemicals. **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.** NCC X-Calibur Construction Chemicals shall not be liable for damages of any sort including remote or consequential damages, down time, or delay.