

X-Roc SlabPatch

Fast setting concrete slab reinstatement micro concrete

Product Description

X-Roc SlabPatch is a single component, fast setting, fluid micro concrete manufactured from selected cements, aggregates and additives and has extremely high durability. It can be used at a range of workabilities.

Advantages

- Rapid cure
- Fast return to service
- Can be extended with coarse aggregate
- Low permeability
- Excellent freeze/thaw resistance
- Single component

Uses

Rapid reinstatement of:

- Parking garages
- Decks and slabs
- Factory floors

Laboratory Test Data

| Property | Typical Results | | | |
|---|-----------------------|-------|--------|---------|
| | 3hrs | 24hrs | 7 days | 28 days |
| Compressive strength MPa (ASTM C309) | 19 | 29 | 47 | 53 |
| Flexural strength MPa (ASTM C580) | | | | 8 |
| Initial set (Vicat) | <20 minutes | | | |
| Final set (Vicat) | <30 minutes | | | |
| Freeze/thaw resistance (IHM) | >99% after 300 cycles | | | |

The above data was obtained under laboratory conditions using freshly manufactured material at a water/powder ratio of 0.14. 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.

BS EN 1504 - Part 3 Classification

Class R4 (Structural)

Volatile Organic Content

VOC = 0g/L

Packaging

25kg bags

Maximum water content: 3.8L per bag.

Yield

Approximately 12 liters per bag.

Shelf Life

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

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.

Surface Preparation

Concrete substrate must be structurally sound. Loose or unsound concrete should be removed. Surfaces must be entirely free of oil, grease, paint, corrosion deposits, dust, laitance or other surface deposits. Saw cut around the edge of the repair to a minimum depth of 10mm. Reinforcing steel should be fully exposed with enough room behind the steel to place the repair mortar.

Protection of reinforcement steel

Remove all corrosion from the exposed steel in accordance with ICRI Technical Guideline No 03730. For additional protection against corrosion and to protect the adjacent edges of the repair, coat the steel with X-Roc GalZinc. The steel may also be protected using X-Roc EpoxyBond or X-Roc Latex mixed with cement. Prior to using either of these products, please consult with an X-Calibur Authorized Technical Specialist.

Substrate Priming

After surface preparation has been completed, the substrate should be soaked with water for a minimum of 2 hours and not allowed to dry out. No priming is required if the substrate is in a saturated surface dry (SSD) condition at the time of placing the mortar.

If the prepared substrate cannot be soaked or be in an SSD condition, then the substrate should be primed using either of the following methods:

- Priming with X-Roc BondCure

X-Roc BondCure is an acrylic bonding agent that is used undiluted straight from the pack. It is particularly useful in conditions where the bonding agent may dry out. Brush X-Roc BondCure into the saturated surface dry substrate, taking care to avoid ponding or excessive application.

-Priming with X-Roc EpoxyBond

In immersed conditions; where the maximum possible bond strength is required, or where a saturated surface dry substrate is not possible, X-Roc EpoxyBond should be used. Mix the entire contents of Part A with the entire contents of Part B until a uniform color is achieved. Brush the mixed material into the surface of the substrate, taking care to avoid ponding or excessive application. The mortar must be applied while EpoxyBond is still tacky.

Mixing

Add X-Roc SlabPatch to water and mix for a maximum of three minutes until fully dispersed. Use an X-Calibur approved forced action mechanical mixer. When coarse aggregate is added to the product, drum mixers can be used for mixing.

Application

The mixed material should be applied immediately after mixing is completed. The material should be applied in such a way as to ensure thorough compaction around the reinforcement and against the edges of the reinstatement area. The repair is then finished by trowel.

Thickness

The application thickness should be between 10mm and 100mm. The product can be filled out with 20mm graded aggregate up to 1:1 by weight and the maximum horizontal thickness increased to 250mm. Trial mixes must be carried out to determine the exact amount of aggregate that can be added and the water content to be used. Do not apply less than 25mm thick when extended with aggregate.

Applications in excess of the thickness quoted above may be achieved by "keying" the compacted layer and then applying X-Roc BondCure. Once this layer has reached sufficient strength, apply a primer coat of X-Roc BondCure and proceed as before.

Curing

Cure immediately after finishing using X-Roc BondCure or X-Cure WB, or cure continuously in accordance with good concrete practice for seven days.

Limitations

Ensure the temperature of the mortar does not exceed 35C at the time of mixing.

Do not mix by hand.

Do not part mix; use only full bags.

Do not apply in rain or wet conditions or at temperatures below 4C.

Lower temperatures produce a slower set; higher temperatures produce a faster set.

Do not expose to running water until the product is cured fully.

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. E-mail taltech@norcrossa.com or call 0860 000 825 for a copy of the MSDS.

Authorized Technical Specialist

Please note that only TAL X-Calibur Authorized Technical Specialists are permitted to change any of the information in this data sheet or to provide written recommendations concerning the use of this product.

Datasheet Validity

TAL X-Calibur make modifications to its product datasheets on a continuous basis. To ensure you have the latest version, e-mail taltech@norcrossa.com or call 0860 000 825 to ensure you have the latest version.

Important Notice

TAL believes the information on this sheet to be correct - but does not guarantee its accuracy or completeness. Conduct your own tests of this product to determine its suitability for intended use. User assumes all risks and liability during testing and use of this product. The only obligation of TAL shall be to replace any of this product proved to be defective due to manufacturing defects. TAL shall not be liable for any injury, loss or damage, direct or consequential, relating to the use or inability to use this product. Except as expressly provided above, all products sold and samples furnished without any warranty of merchant ability or any other warranty, express or implied.

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