

X-Roc ResiCrete S

High strength epoxy mortar

Product Description

X-Roc ResiCrete S is a high strength epoxy mortar for the repair and grouting of concrete. It can also be used as a lining mortar.

Advantages

- High early strength
- Abrasion resistant
- Compatible with concrete
- Can be applied to steel
- Easy to finish
- Chemical resistant
- Impermeable

Laboratory Test Data

Property	Typical Results
Compressive strength (ASTM C309)	>70MPa at 28 days
Flexural strength (ASTM C580)	>25MPa at 28 days

Application Properties

Pot life- 20C	60mins
30C	30mins
Application temperature	5 to 35C
Thickness	5 to 50mm per layer (Horizontal) 5 to 12mm per layer (Vertical)

Volatile Organic Content

VOC = <10g/L

Yield

12 Liters per pack

Shelf Life

24 months when stored in cool dry conditions in unopened packs.

Chemical Resistance

17.5% hydrochloric acid	R(CC)
10% nitric acid	R(CC)
10% sulphuric acid	R(CC)
10% acetic acid	R
10% phosphoric acid	R
25% caustic soda	R
25% ammonium hydroxide	R
Hydraulic oil	R
Skydrol	R
Jet fuel	R
Gasoline	R
Diesel	R

R = Resistant CC = Colour change only

The above test results were obtained using 7 day old cured specimens immersed in the chemical agent for 10 days at 25C; those results coded R or R(CC) indicate long term resistance.

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

All substrates must be structurally sound, free from contaminants, such as oil, grease and traces of other coatings, and should be suitably textured to provide mechanical key; this may be achieved by scabbling or needle gunning. Corroded steel substrates should be grit blasted to BS 7079: Part A1 (equivalent to SA2^{1/2}) followed by degreasing with a suitable solvent (e.g. X-Shield Solvent S) immediately prior to priming. When corrosion is absent, wire brushing to a clean bright surface may be adequate but care must be taken to ensure the surface is sufficiently rough to receive the mortar after priming.

Steel

Surfaces should be thoroughly cleaned and degreased to SSPC-SP1 prior to blasting. All sharp edges, protuberances, welds, etc should be ground down to

remove any sharp edges. The degreased surface should now be grit blasted to a minimum SA 2½ in accordance with BS7079 Part A1 or equivalent. This means very thorough blast cleaning using chilled steel grit to provide near white metal 85% clean. The surface shall be free from all foreign matter. A surface profile of 100 microns is the recommended finish. All dust and abrasive residue must be removed from the surface prior to application of the first coat. Depending on the level of corrosion protection required, an anti-corrosion or holding primer may be necessary.

Priming

The prepared surface should be primed with X-Shield SF Primer. The contents of the hardener should be emptied into the base component and stirred with a spatula until the product appears uniform. The mixed primer should then be applied to the prepared substrate by a stiff brush at 10 to 15m² per liter. Allow the primer to become tack free prior to the application of mortar. If the primer appears to be absorbed into the surface easily, it will be necessary to apply a second coat once the initial coat is tack free.

If substrate is damp use X-Shield MT Primer (See separate datasheet).

Mixing

Mixing should only be carried out using a forced action mixer such as a Mixit 25 (available for hire or purchase from X-Calibur). Pre-mix the base component and then pour into the clean mixing vessel and, while stirring slowly, add the hardener component and mix for 1 minute. Once the base and hardener has been mixed, add the filler slowly and mix for a further 3 minutes.

Application

Apply to the tacky primed surface using a steel trowel or by gloved hand and press firmly into position. On vertical surfaces, build up in layers, scratching each layer and allowing it to cure before applying the next layer. Each new layer should be primed as described above. Trowel smooth finish with a steel float and a small amount of X-Shield Solvent S. Where a more textured finish is required use a plastic or wooden float.

Clean Up

Use X-Shield Solvent S to remove uncured primer and mortar and to clean tools and equipment. Cured primer and mortar can only be removed mechanically.

Limitations

Not resistant to sustained contact with phenols, cresols, formic acid, ethyl acetate and related solvent esters, acetone and other ketones, chloroform and other halogenated hydrocarbon solvents.

Do not hand mix.

Apply only to a primed tacky surface or

May change color when used in direct sunlight.

Do not dispose of into the water system.

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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