

RSC

Rapid Setting Cement

ULTRA CRETE

Construction Chemicals



When mixed with aggregates, it produces a fast setting, early high strength mortar or concrete.

- High strength
- Open to traffic: 1 hour
- Cost effective
- 20N/mm² compressive strength in 1 hour

Applications

The exceptional high performance gained from using design mixes based on UltraCrete RSC means the product is suitable for a whole range of concrete and mortar applications where early opening to traffic is essential. RSC is ideal for use on cable box floors, road crossings, sign and camera bases.

Technical

RSC is supplied in 20kg bags or tubs and contains approved chemical additives, which accelerate the process of hardening once the product is placed. When incorporated with sand or sand/aggregates, RSC can be laid from 10mm-250mm in one pass. It does not contain chloride, metallic aluminium, iron or carbon, which eliminates the problems of corrosion and/or staining.

Preparation

The preparation for RSC will vary greatly, depending on the application. However, good concrete practice should be observed at all times to enable the mix to be placed into position within 4 minutes. Remove all loose debris, oil, grease and any other contaminants and work on a sound substrate. Pre-soak the area with water prior to product application.

Mixing

RSC should be mixed by hand or with a freefall mixer. The mixing proportions can vary depending on the design mix, strength and speed of set required. As a guide, the maximum size of the aggregate should not exceed one third of the thickness of the repair at its thinnest point. If the product

is bulked out with sand, this needs to be well graded, clean and sharp. If bulking with a coarse aggregate, ensure that it is clean and well graded down from maximum. Siliceous stone, granite or basalt chippings may be used for all applications. Hard limestone should not be used in areas subject to acid attack.

Typical concrete design mix:

20kg RSC; 60kg clean 20mm concrete ballast; 8 litres of water (approximately)

Note: Sand aggregates contain moisture. Do not add the entire measured amount of water in one go, add 50% initially then gradually add the remaining 4 litres if required.

Placing

Apply RSC over a pre-soaked area immediately after mixing, firm well into position by tamping or using a float. Clean any mixing machine with water immediately after mixing. For thick section placements, the concrete can be compacted by tamping, vibrating or by use of a vibrating poker.

Curing

When RSC is used as a surface repair, we recommend curing with Ultra Floor Prime IT Multi-surface Primer. Visit ultra-floor.co.uk for further information.

Storage

Store in closed original packaging at temperatures between 5°C and 30°C. Avoid frost.

Shelf Life

Shelf life from date of manufacture in correct conditions for sealed packaging is 8 months. Note: The use of this product after the end of the declared storage period may increase the risk of an allergic reaction. High temperatures and high humidity will lead to a reduced shelf life.

Health, Safety and Environmental

Please ensure that appropriate PPE is used when preparing, mixing and applying products. Always wash your hands before consuming food and make sure that materials are kept safely out of reach of children and animals. Please dispose of packaging and waste responsibly and in accordance with local authority requirements. A full material datasheet relating to this product is available from instarmac.co.uk

Quality assurance

All products are manufactured in a plant whose quality management system is certified / registered as being in conformity with BS EN ISO 9001, 14001, and OHSAS 18001. Our products are guaranteed against defective materials and manufacture, and will be replaced or money refunded if the goods do not comply with our promotional literature. We cannot however accept any liability arising from the application or use of our products because we have no direct or continuous control over where and how our products are used. All products are sold subject to our conditions of sale, copies of which may be obtained on request.

Technical data

Compressive strength (N/mm ²)	
1 hour	20.00
24 hours	27.00
7 days	40.00
28 days	50.00
Workability*	10-15 minutes
Set time*	20-30 minutes
Colour	dark grey <i>As with all raw materials, colour variation may occur. Please note that this does not affect the consistency or characteristics of the product.</i>
Coverage	approx 1m ² @ 40mm=3 bags /buckets of pre-blended concrete or mortar
Yield	One 20kg bag/bucket of RSC with mix design overleaf will give approx 38 litres yield
Density	will depend on the aggregate used
Unit/packaging	20kg paper bag (56 units per pallet) 20kg bucket (40 units per pallet)

*Depending on temperatures – tests carried out at 20°C. Cool temperatures retard, warm temperatures accelerate product performance.

Contact Us

Instarmac® Group plc, Birch Coppice Business Park, Danny Morson Way, Dordon, Tamworth, Staffordshire, B78 1SE, United Kingdom

Tel: +44 (0) 1827 254400 Fax: +44 (0) 1827 285386

Email: email@instarmac.co.uk Order: orders@instarmac.co.uk Website: instarmac.co.uk

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