

# UltraRep CR

Fine grade single component cementitious mortar for filling blow holes and minor surface defects and cosmetic repairs to new construction

# **COVERAGE AND YIELD**

A 25 kg bag of **UltraRep CR** will yield approximately 17.30 L of mortar. One bag of **UltraRep CR** will cover 17.30 m<sup>2</sup> at thickness of 1 mm. This coverage is theoretical and depends upon the surface

## STORAGE AND SHELFLIFE

UltraRep CR should be stored in dry conditions out of direct sunlight. The shelf life is 12 months when stored as above.

profile of the substrate and the wastage.

## HEALTH AND SAFETY

Avoid contact with eyes and prolonged contact with skin. In case of contact with eyes immediately flush for at least 15 minutes with fresh clean water. Call a physician.

In case of contact with skin wash skin thoroughly.

# DESCRIPTION

**UltraRep CR** is a combination of Portland cement, well graded sands and additives which is fully compatible with precast and in-situ concrete.

When mixed with water **UltraRep CR** produces a smooth cementitious paste ideally suited to filling of small surface defects and blowholes when applied in thin layers of up to 3 mm maximum.

# TYPICAL APPLICATIONS

Blowhole filling and minor surface defects repairs for all concrete elements such as

- Precast and in-situ concrete
- Beams, columns, and walls
- Columns, Piers and cross beams on highway structures

# **ADVANTAGES**

- Pre-packaged material simply requires mixing with clean water on-site.
- Improved bond to substrate
- Excellent workability for easy mixing, and fast application
- Fully compatible with precast and in-situ concrete
- Compatible with protective coatings

# **TYPICAL PROPERTIES**

Working time @ 25°C Setting time @ 25°C	60 min 90 min
Density	~1850 kg/m³
Compressive strength @ 28 days ASTM C109-98	>15 N/mm²
Pull off strength ASTM D4541	>1 N/mm <sup>2</sup>

# **APPLICATION GUIDELINES**

#### Surface preparation

The areas to be treated must be free from all unsound material, i.e., dust, oil, grease, organic growth which would impair adhesion.

# Priming

The prepared surface should be thoroughly soaked with clean water until uniformly saturated without any standing water prior to application of the **UltraRep CR**.

# MIXING

It is recommended that only full bags of 25 kg are mixed. **UltraRep CR** should be mixed by mechanical means with a slow speed drill and spiral paddle.

The required amount of gauging water should be placed in the mixing bucket and the **UltraRep CR** powder added and mixed for approximately 3 minutes until a smooth, creamy

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and lump free consistency is achieved. The water additions shall be a maximum of 7 L per 25 kg bag. A freefall concrete mixer is NOT suitable

## PLACING / APPLICATION

Following mixing the **UltraRep CR** can be applied by brush or the edge of a steel float and scraped into substrate to fill all blowholes and minor surface defects. A fine mist spray of clean water should be applied to the finished surface. The hardened **UltraRep CR** can then be smoothed using sandpaper.

Alternatively, **UltraRep CR** can be applied as a levelling mortar by steel float up to 3 mm thick. The final finishing shall be by steel float or with a damp sponge depending upon the finish required. **UltraRep CR** can be overcoated 24 hours after application.

#### CURING

Generally curing is not necessary for cosmetic repair mortars however particular care is required in hot and/or windy conditions. Where a curing membrane is specified, this can be using a curing membrane from the **UltraKure** range.

## WATCH POINTS

During the summer months or where elevated ambient temperatures are encountered the **UltraRep CR** should be mixed using chilled water to ensure that the mixed temperature does not exceed 32°C. Do not add cement sand, or which may affect its properties. Do not add water or fresh mortar to material which has begun to set.

## QUALITY AND CARE

All products originating from the Gulf additive Factory facility in Qatar are manufactured under a management system independently certified to conform to the requirements of the quality, environmental and safety standards ISO 9001.

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