

# HATCRETE Industrial Quartz

A heavy duty, quartz dry-shake for colouring and surface hardening freshly placed concrete.

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TD9

## COLOUR TECHNOLOGY FOR CONCRETE

## DESCRIPTION

HATCRETE® Industrial Quartz is a non-metallic, dry-shake topping for commercial and industrial flooring applications. It produces an attractive, uniformly coloured, dense, wear-resistant surface and is available in 20 colours and natural. The product is chloride-free and contains pigments that are stable and colourfast in the presence of lime and have maximum resistance to weathering and sunlight (UV).

#### MAIN FEATURES

- Ready to use dry-shake application.
- Available in 20 standard colours and natural.
- Custom made colour options available.
- Installed at concrete placing stage.
- Exceptional wear-resistance.
- Dense, fade-resistant, permanent coloured surface.
- Packaged in 25 kg water-resistant sacks.
- Quality assured to BS EN ISO 9002 certification.
- Pigments used conform to BS EN 128 78: 1999.

#### SPECIAL PROPERTIES AND USES

Freshly placed concrete treated with HATCRETE® Industrial Quartz and trowelled to a smooth finish provides an extremely hardwearing, non-dusting, low maintenance surface with increased resistance to penetration of oils and many other materials.

Where a metallic, coloured or natural topping is specified HATCRETE® Industrial Metallic should be used. More detailed information is available in Technical Data Sheet TD11.

The product is ready to use straight from the bag and colour consistency is guaranteed. HATCRETE® Industrial Quartz has been rigorously tested at Aston University and achieved excellent results in impact and abrasion resistance.

Sample Product	Depth of Wear BS 8204 Abrasion	Measured Indentation BRE Impact Test
HATCRETE® Industrial Quartz	0.02 mm	0.25 mm
Power trowelled concrete	0.49 mm	0.50 mm

The full investigative report is available on request.

HATCRETE® Industrial Quartz is ideal for producing high quality, extremely hardwearing, natural and coloured floors in industrial and production situations, or areas where an aesthetically pleasing, non-dusting, uniform coloured appearance is of paramount importance.

# COVERAGE

HATCRETE® Industrial Quartz is supplied in 25 kg water-resistant bags. One bag of product is sufficient for an area of approximately 8 square metres based on the standard coverage of 3 kg per square metre.

## HAND APPLICATION

HATCRETE® Industrial Quartz must be applied at a minimum rate of 3 kg per square metre and up to 5 kg per square metre for lighter colours or heavily trafficked areas.

## MACHINE APPLICATION

HATCRETE® Industrial Quartz may be applied by mechanical spreader at a minimum rate of 5 kg per square metre. If insufficient material is applied by either method, the abrasion resistance may be reduced and the concrete substrate may show through.

## AVAILABILITY

HATCRETE® Industrial Quartz is normally available ex-stock in the 20 standard colours and natural, although large quantity orders will be manufactured specifically. Custom made colour options can normally be manufactured within one week of approved colour match.

## STORAGE

Sacks should be stored off the floor, unopened, in a dry, frost-free environment. Shelf life for this product when stored correctly is approximately 6 months.

## SUB-BASE

The sub-base should be graded to ensure a uniform thickness of concrete. It should be compacted, well-drained but moist, and completely free from standing water or frost.

## CONCRETE

In accordance with good concrete laying practice, the placing and curing of concrete in temperatures below  $5^{\circ}$ C should be avoided at all costs.

For most applications, the concrete should contain a minimum cement content of 325 kg per cubic metre. All aggregates must be non-reactive and if admixtures are incorporated they must not contain chlorides or any other ingredient that will cause "blooming" or affect the colour. The mix water should be kept to the minimum required for satisfactory placement and finishing of the concrete.

The concrete must be protected from the elements at all stages of construction. Tents should be employed to deflect heat or rain. In windy conditions it is important to provide shelter to minimise the possibility of surface cracks.





MANUFACTURED BY: PATTERN IMPRINTED CONCRETE SUPPLIES LIMITED Unit 2, Red Shute Hill Ind. Est. Hermitage, Nr Newbury, Berkshire RG18 9QL Tel: +44 (0) 1635 202224 Fax: +44 (0) 1635 202230 e-mail: info@picsuk.com Web: www.picsuk.com After placing, compacting and screeding level, the concrete should be brought to an even surface by means of a power float, preferably fitted with a disc or with the blades flat to ensure that the surface stays "open".

#### APPLICATION

It is advisable to prepare an on-site sample panel of the required finish prior to installation, which should be assessed for final appearance, chemical resistance and wet and dry slip properties. Ideally, this should be a minimum of 5 square metres and must utilise the same raw materials as the final project.

HATCRETE® Industrial Quartz should be applied to newly placed concrete when all excess bleed water has disappeared or been dispelled from the concrete, but the surface remains 'plastic'.

## HAND APPLICATION

The industrial hardener must be applied in two separate "shakes" at a total rate of between 3 and 5 kg per square metre, depending on colour and application. Prior to commencement, it is helpful if the bags are placed at equal intervals around the job, equivalent to the relevant coverage rate.

The first application of two-thirds of the material should be broadcast by gloved hand in the "dry-shake" method over the surface of the concrete from a height of not more than half a metre. Do not broadcast over distances of more than 1 metre and the use of bridging is recommended for larger areas. Draughts and windy conditions will adversely affect efficient application. Float the industrial hardener into the surface of the concrete using a power float with the blades almost flat or fitted with a disc. The edges and any details will need to be hand floated using a wooden or plastic float. Hard trowelling should be avoided at this stage.

Follow immediately with the remaining industrial hardener, which should be applied by the same method but at right angles to the first application, taking particular care to cover any weak toned areas first until the slab gives a complete uniform appearance throughout.

When the second application of industrial hardener has been floated, the surface can be trowelled to a "closed" and "tight" finish. Care must be taken to avoid over-trowelling as this may cause darkening or "burning" of the surface. Over-trowelling may also cause a reduced slip resistance to the finished floor.

The industrial hardener absorbs moisture from the concrete matrix. To ensure that maximum strength and monolithic bonding occur, no additional water should be added at any stage.

#### MACHINE APPLICATION

HATCRETE® Industrial Quartz is suitable for use with an approved mechanical spreader in conjunction with a laser screed. It should be placed on the concrete in one application of 5 kg per square metre immediately after screeding.

Where a flat interior floor is specified, consideration should be given to achieving a surface with reduced slip characteristics. It is advisable to prepare an on-site sample panel of the required finish prior to installation, which should be assessed for final appearance, chemical resistance and wet and dry slip properties.

## CURING AND SEALING

The colour hardened concrete must not be cured with plastic sheeting, hessian, curing membranes, waxes or similar products, as these may have an adverse effect on the colour.

TD11v2.5 January 2016 Copyright PICS Ltd. Curing and sealing should be carried out using HATCRETE® Cureseal in a matching colour or HATCRETE® Clear Sealer, in two coats at a rate of 6-10 square metres per litre, per coat. The relevant Technical Data Sheets must be referred to before using these products. In climates where a water based system is more appropriate or if the specification demands, HATCRETE® Hycure should be considered. Please refer to Technical Data Sheet TD16 for further details.

## MAINTENANCE

Colour hardened concrete surfaces finished with HATCRETE® sealers require minimal maintenance, depending on the nature and specific use of the floor. Spills should be removed as they occur and the floor may be scrubbed and hosed down with an approved proprietary detergent.

For further information on maintenance, please refer to the Technical Data Sheet for HATCRETE® Cureseal and the separate maintenance sheet.

## SPECIFICATION CLAUSE

'The designated surface shall be coloured and hardened with HATCRETE® Industrial Quartz, manufactured and supplied by PICS Ltd Unit 2, Red Shute Hill Ind. Est. Hermitage, Nr Newbury, Berkshire RG18 9QL Tel: +44 (0) 1635 202224 Fax: +44 (0) 1635 202230 in ...... (colour), applied at a minimum rate of ..... kg per square metre. The hardener shall have been tested to BS 8204 and show at least a 24 fold improvement on high quality power trowelled concrete. HATCRETE® Industrial Quartz shall be applied in accordance with the manufacturer's current Technical Data Sheet TD9. The manufacturer shall be a BSI registered company with accreditation to BS EN ISO 9002'.

#### **CURING & SEALING SPECIFICATION**

For curing and sealing single coloured surfaces, please refer to the specification in Technical Data Sheet TD14 HATCRETE® Cureseal for solvent based systems, or Technical Data Sheet TD16 HATCRETE® Hycure for water based systems. For concrete surfaces requiring a clear protective coating, please refer to the specification in TD13 HATCRETE® Clear Sealer for solvent based systems, or TD17 HATCRETE® Hyseal for water based systems.

#### HEALTH AND SAFETY

As with all cementitious products, care must be taken when handling and in use.

Before using HATCRETE® Industrial Quartz read Safety Data Sheet SD9 available from PICS Ltd.

Keep away from children and animals.

PICS quality system is approved by the BSI and conforms to BS EN ISO 9002. This applies to the manufacture and supply of all PICS Ltd products.

All goods are sold subject to our standard terms and conditions.

Information and advice, whether verbal or in writing, are compiled with all reasonable care and given in good faith but without warranty. PICS Ltd cannot accept any liability, either directly or indirectly, arising from the use of its products as it has no control over where or how the products are used. It is the customer's responsibility to determine that the product is suitable for the intended use.