

UCRETE[®] UD200

Heavy duty polyurethane concrete flooring system

DESCRIPTION

Ucrete UD200 is a single layer, seamless, solvent-free, polyurethane flooring system. It has a textured matt finish possessing a wide spectrum of chemical resistance; withstands abrasive wear; has high impact resistance and withstands direct steam impact.

RECOMMENDED FOR

Ucrete UD200 is recommended for conditions requiring the maximum of chemical resistance, health and safety and where thermal situations arise, from cool rooms to hot environments.

Specific applications include:

- meat, fish and poultry processing
- food and beverage production
- dairies, cheese and milk products
- cold rooms, chillers and freezers
- pharmaceutical production
- chemical plants

FEATURES AND BENEFITS

Expert application	Installed only by trained and approved specialist contractors.
Fast application/rapid access	Can be applied to 6-day-old concrete or 2 day old polymer screeds. Short curing time and 8 hours access to foot traffic; 20 hours for vehicles.
Hygienic/safe	Slip resistant, non-tainting, non-dusting, monolithic (minimum joints), easy to maintain, microbiologically inert.
Durable/long life	Wide chemical resistance, wear and impact resistant, resists temperatures from -40°C to 120°C at 9 mm thickness; 25 years of international use.
Prepacked	Preweighed/ prepacked for immediate use; batch to-batch colour matched for consistency.

TYPICAL PERFORMANCE DATA

(After 28 days @ 20°C)

Compressive Strength (BS6319:Part 2)	: 58 N/mm ²
Flexural Strength (ISO178)	: 14 N/mm ²
Dynamic E-Modulus (ASTM C597-83)	: 19500 N/mm ²
Tensile Strength (ISO R527)	: 6 N/mm ²
Concrete Adhesion (BS6319:Part 2)	: concrete fails
Abrasion Resistance (Taber H22)	: 1390mg
Coeff. Thermal Expansion (ASTM C531)	: $2.4 \times 10^{-5} \text{ } ^\circ\text{C}^{-1}$
Thermal Conductivity (BS874)	: 1.1W/m°C

Surface Resistivity (BS2050)	: 3×10^{-4} ohms
Density (BS6319:Part 5)	: 2090 kg/m ³
Water Adsorption (CP.BM 2/67/2)	: 0 ml
Surface Spread of Flame (BS476:Part 7)	: Class 2

PROPERTIES

Colours	: Yellow ~ RAL 1004
	: Cream ~ RAL 1014
	: Orange ~ RAL 2010
	: Red ~ RAL 3001
	: Green ~ RAL 6010
	: Grey ~ RAL 7037
Thickness	: 5 to 9 mm.
Service temperatures	: 120°C max. & -40°C
	: 70°C max. & -20°C

APPLICATION

Surface Preparation

Concrete shall be clean, structurally sound and free from foreign materials, contaminants, oily products and other debris. Concrete surfaces shall be 'visibly dry' with no standing water. The minimum tensile (pull-off) strength shall be 1.5N/mm² and concrete shall have cured for at least 5 days. Concrete substrates shall incorporate a continuous waterproofing membrane.

Concrete design shall allow provisions for movement joints, as required. In addition, provision shall be made for induced joints to allow any shrinkage of the concrete to occur along defined planes.

All laitance shall be removed. All imperfections such as holes and cracks shall be repaired and levelled with the mean level of the surface. For repairing surface unevenness, **EMACO**[®] concrete repair systems shall be used.

The whole surface shall be enclosed or impact shot blasted, surface planed, ground or high-pressure water jetted. All high spots shall be removed. Surfaces shall be rendered 'visibly dry' by heat or mechanical means.

Remove all loose material and dust by vacuum or mechanical means.

Priming

Ucrete UD200 shall be applied to a cured scratch coat of **Ucrete MF** of 1 mm nominal thickness.

Placing

Ucrete UD200 shall be mixed and applied only by specialist flooring contractors who have been trained in the correct application procedures.

CURING

At 30°C, foot traffic access in 8 hours; vehicular traffic in 16 hours. At 20°C, foot traffic access in 12 hours; vehicular traffic in 24 hours. Full cure at 28 days.

UCRETE[®] UD200

CLEANING

Regular cleaning, dry or wet mechanical scrubbing or hot flushing with detergents or detergent/sterilant product will enhance the floor's appearance and reduce soiling tendencies. Direct steam cleaning is suitable for floors applied at more than 8mm thickness.

ESTIMATING DATA

2.45 to 2.50 kg/m²/mm thickness

PACKAGING

Ucrete UD200 is supplied as complete units for immediate use, consisting of:

Ucrete UD200 Part 1 : 2.65 kg

Ucrete UD200 Part 2 : 2.64 kg

Ucrete UD200 Part 3 : 24 kg

SHELF LIFE

Ucrete UD 200 can be kept for 12 months from date of manufacture if stored above ground level in original unopened packing under cover, avoiding direct sunlight impingement and at 30°C or less.

PRECAUTIONS

Material Safety Data Sheets (MSDS) for each component of **Ucrete UD200** are available. Gloves and eye protection shall be worn during mixing and application.

For detailed Health, Safety and Environmental Recommendations, please consult and follow instructions on the product Material Safety Data Sheet.

REFERENCES

'Design and Preparation of substrates for Ucrete Flooring'

'BS8204: Part 1: 1987 - Insitu Flooring - code of practice for concrete bases and screed to receive insitu flooring'

'ICRI - Selection of Surface preparation methods for concrete substrates receiving resin flooring.'

MBT product data sheets for: **EMACO**[®] concrete repair products, **Ucrete MF**.

Ref No. U UD200/02/0301

STATEMENT OF RESPONSIBILITY

The technical information and application advice given in this **MBT** publication are based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. The user, is responsible for checking the suitability of products for their intended use.

NOTE

Field service where provided does not constitute supervisory responsibility. Suggestions made by **MBT** either orally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they, and not **MBT** are responsible for carrying out procedures appropriate to a specific application.

Degussa Construction Chemicals (Thailand) Ltd.

127/23 Panjathani Tower, 18th Floor, Nonsee Road,
Chongnonsee, Yannawa, Bangkok 10120 Thailand
T +66 2681 1020 F +66 2681 1034