cemseal®

Technical Data Sheet

CEMSEAL EPOFLOR CT SERIES

SEAMLESS SOLVENT-FREE EPOXY COATING SYSTEM FOR INDUSTRIAL & COMMERCIAL FLOORS

SYSTEM DESCRIPTION

CEMSEAL EPOFLOR CT Series is a high-performance, seamless solvent-free epoxy coating system designed for industrial, manufacturing, logistics, and commercial floors requiring durable surface protection, chemical resistance, and aesthetic uniformity.

The system is available in three main finish types - Smooth (CT-SF), Broadcast (CT-BF), and Textured (CT-TX) - to meet different slip resistance, surface profile, and maintenance requirements.

Optional performance enhancements include:

- CT-HD : 4 mm epoxy mortar system for heavy-duty loading
- CT-UV : UV-resistant aliphatic topcoat system
- CT-MB : Moisture barrier system for substrates > 4% moisture content

KEY FEATURES AND BENEFITS

- Seamless and monolithic coating system
- Adjustable slip resistance (smooth, broadcast, textured)
- Excellent chemical, abrasion, and mechanical resistance
- Easy-to-clean and maintain
- Suitable for light to medium-duty industrial traffic
- Optional 4 mm epoxy mortar using CEMSEAL E500SL (3-component epoxy mortar)
- Optional UV-stable aliphatic topcoat using CEMSEAL E100PU-TOP 2K
- Optional moisture barrier system using CEMSEAL MB200BC
- Compatible with all CEMSEAL flooring primers, mortars, and topcoats

RECOMMENDED APPLICATION AREA

- Industrial production floors
- Manufacturing and assembly areas
- Warehouse and logistics centres
- Chemical and pharmaceutical processing zones
- General workshops and maintenance corridors
- Commercial and institutional service areas

SYSTEM BUILD-UP

Layer	Description	Products
1	Primer	CEMSEAL P100SLF
2	Body Coat	CEMSEAL E100SL

FINISH VARIANTS

CT-SF (Smooth Finish)

- Primer : CEMSEAL P100SLF
- Body Coat : CEMSEAL E100SL (smooth, no aggregate)

CT-BF (Broadcast Finish)

- Primer : CEMSEAL P100SLF, broadcast with 20/40 mesh quartz to rejection
- Seal Coat : CEMSEAL E100SL

CT-TX (Textured Finish)

- Primer : CEMSEAL P100SLF
- Body Coat : CEMSEAL E100SL mixed with 2% CEMSEAL HL200 + 10% 20/40 Mesh Quartz

OPTIONAL SYSTEM ENHANCEMENTS

CT-HD (Heavy-Duty 4 mm Thick Epoxy Mortar System)

- Underlay : CEMSEAL E500SL (3-Component Epoxy Mortar)
- For high-impact, heavy-load, forklift and pallet-truck traffic.
- When UV resistance or additional surface protection is required, this system can be overcoated with CEMSEAL E100PU-Top 2K, resulting in the enhanced version known as CT-HD (UV).

CT-UV (UV-Resistant Topcoat System)

- Topcoat : CEMSEAL E100PU-TOP 2K (aliphatic polyurethane)
- Provides enhanced UV stability, color retention, and gloss durability.

CT-MB (Moisture Barrier System)

- Base Layer : CEMSEAL MB200BC (Epoxy-Cementitious Moisture Barrier)
- Designed for use on slab-on-grade or suspended concrete slabs where substrate moisture exceeds 4% (Tramex CM method).
- When UV resistance or additional surface protection is required, this system can be overcoated with CEMSEAL E100PU-TOP 2K, resulting in the enhanced version known as CT-MB (UV).

TECHNICAL PROPERTIES

Properties	Test Method	Typical Value
Compressive Strength	ASTM C579	> 60 N/mm^2
Flexural Strength	BS EN 13892-2	> 30 N/mm^2
Abrasion Resistance	ASTM D4060	≤ 70mg loss (CS-17, 1000g, 1000 cycles)
Hardness (Shore D)	ASTM D2240	≥ 75
Slip Resistance	BS 7976-2	Dry ≥ 40, Wet depend on specification (in accordance with HSE and UKSRG guidelines)
Adhesion Strength (Pull-off)	ASTM D4541	≥ 1.5 N/mm^2

SUBSTRATE QUALITY & REQUIREMENTS

- Concrete substrate must be at least 28 days old
- Minimum compressive strength: 25 MPa
- Minimum pull-off strength: 1.5 MPa
- Moisture content ≤ 4% (by Tramex CM method)
- Surface must be sound, clean, free from oil, grease, curing agents, or other contaminants
- Mechanically prepared (e.g. grinding or shot blasting) to CSP 3-5 profile
- High spots grind off, and all dust removed via vacuum

APPLICATION CONDITIONS & LIMITATIONS

Parameter	Requirement
Ambient Temperature	+8°C to +35°C
Substrate Temperature	+8°C to +35°C ; ≥ 3°C above dew point
Relative Humidity	≤ 85%
Moisture Content	≤ 4.0% (Tramex CM method)

IMPORTANT NOTES

- Ensure the substrate is dry, sound, and properly prepared, and do not apply the system where rising moisture or hydrostatic pressure is present.
- Maintain substrate temperature at least 3 °C above the dew point and protect freshly applied coatings from moisture and condensation for a minimum of 24 hours.
- Treat all cracks appropriately before coating, ensuring static cracks are filled and dynamic cracks are detailed according to best practice.
- Use consistent material batch numbers within each application area to achieve uniform colour and appearance.
- Avoid application under extreme environmental conditions such as direct sunlight, very high substrate temperature, or strong wind.
- Ensure adequate ventilation when applying systems over moisture barrier layers to prevent moisture build-up and condensation issues.
- Respect the recommended overcoating intervals to avoid adhesion issues, trapped moisture, or surface defects.
- Do not expose the system to heavy loads or traffic until full curing has been achieved based on the specified curing schedule.

INSTALLATION SERVICE

Installation shall be carried out by CEMSEAL-approved and trained applicators in accordance with CEMSEAL's documented quality assurance procedures and surface preparation guidelines.

Disclaimer:
The information and any recommendations relating to the application and end-use of all CEMSEAL products are provided in good faith based on CEMSEAL's knowledge and experience of the products. In applications, the differences in materials, and variances of substrates and actual site conditions can vary such that no warranty in respect of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be taken as inferred either from this information, or from any written recommendations, or from any other advice offered by CEMSEAL. The proprietary rights of third parties must be observed. All orders are accepted subject to our sale terms and conditions. All users should always refer to the most recent and up to date issue of the Technical Data Sheet for the product concerned, which is available on request. It is recommended that products should always be properly stored, handled and applied under tested and recommended conditions.

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