



CX MT HARDTOP 331

Metallic Dry-shake for extra heavy duty Floor Hardner

Description :

- **CX MT HARDTOP 331** is a one part, pre-blended, coloured metallic dry shake hardener for concrete comprising of cement, hard metallic non corroding aggregates, special admixtures and pigments.

Uses:

- **CX MT HARDTOP 331** provides a non-staining, ultrahard wearing, metallic dry shake topping for monolithic floors. When sprinkled and trowelled into fresh wet concrete floors, it forms a coloured, extremely wear resistant smooth and dense surface
- Typical uses are in warehouses, heavy duty, prestige and high durability requirement distribution centres, factories, manufacturing facilities, transport terminals, power stations, etc.

Advantages:

- Highest wear resistance rating
- Excellent impact resistance
- Non staining, non-corroding
- Cost effective, long life floor Maintenance free. Regular cleaning is simply all that is required.
- Slip resistant surface possible
- Dust proof
- Available in a range of colours

SUBSTRATE QUALITY :

- The concrete deliveries must be of consistent quality and comply with local standards. A concrete slump in the range 75 to 110 mm will normally give best results (a slump of up to 150mm is possible with careful mix design).
- The slab must be of good quality concrete with a minimum water/cement ratio consistent with the production of a fully compacted slab. The compressive strength must be a minimum of 25 N/mm².
- Use of **CX SUPERCONCRETE 750 P+** super plasticisers is advised to ensure the optimum quality of concrete and where fibres are used, their optimum dispersion within the mix. Air Entrained Concrete is not a suitable substrate for the application of dry shake hardeners.

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Properties :

Appearance / Colours	Powder Natural (concrete grey) Other colours upon request.
Chemical Base	Industrial source of 100% crushed and graded metallic aggregates mixed with cement, pigments and admixtures
Density	~2750 kg/m ³ (after 28 days)
Abrasion Resistance	~1.70 mm thickness loss (average)
Substrate	Fresh concrete slab (See substrate quality below)
Dry shake	Manual or machine application of CX MT HARDTOP 331 Levelling of surface by means of power trowel or laser screed. Final smoothing with power trowel.
Curing compound	CX SUPERCURE W
Consumption	Light Duty ~ 3 kg/m ² Medium Duty ~ 5 kg/m ² Heavy Duty ~ 7 kg/m ²
Layer Thickness	~2.5–3.0 mm at the recommended coverage of ~7.0 kg/m ²
Ambient Air Temperature	+5 °C min. / +35 °C max.
Relative Air Humidity	30 % min. / 98 % max.
Substrate Temperature	+5 °C min. / +35 °C max.

APPLICATION :

- Mechanical Application - Automatic spreader in conjunction with a laser screed Spread **CX MT HARDTOP 331** evenly onto the concrete immediately after screeding at ~7 kg/m² in one application. Manual application Dependent on the conditions, remove the surface “bleed” water or allow it to evaporate.
- Sprinkle **CX MT HARDTOP 331** onto the screeded concrete evenly in 2 stages (first stage: 4 kg/m²; second stage: 3 kg/m²). Care must be taken to apply the product without creating ripples etc. in the concrete surface. Overall application rate 7 kg/m².
- Casting **CX MT HARDTOP 331** powder carelessly or further than 2 metres from point of casting will reduce the consistency of finish. Compaction: The first application must be worked into the slab followed immediately by the application of the second stage quantity of **CX MT HARDTOP 331**.
- Notes: Never add water to the surface where the dry shake has been applied.
- CX MT HARDTOP 331** results in the slab surface becoming “stiff” more quickly than usual. Careful trimming must take place along the edges where adjoining slabs are to be poured.
- Final finishing for closing pores and removing undulations can be achieved either by hand or powered trowels.



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CLEANING OF TOOLS :

- Clean all tools and application equipment with water immediately after use. Hardened / cured material can only be mechanically removed.

LIMITATIONS :

- Application of **CX MT HARDTOP 331** must not be carried out in strong wind or draughts.
- Do not use concrete where some cement has been replaced by fly ash, as this makes the mix sticky and less workable.
- Variations in concrete characteristics such as water content and cement quality may lead to slight colour variations.
- Dry shake hardeners give a finish to concrete with some colour variation across the floor due to the natural variability of the concrete onto which they are applied.
- To ensure optimum colour consistency, it is essential that the floor laying operation is as clean and protected from the environment as possible.
- Colour variation during the drying out period is normal for this system and is to be expected.
- Every effort must be made to ensure an even application of **CX MT HARDTOP 331**. Correct timing and trowelling techniques are essential.
- At low relative humidity (below 40 %), efflorescence can appear on the surface.
- At high relative humidity (above 80 %), bleeding, slower curing and hardening can occur and extended finishing operations be required.
- Shrinking joints are to be created within two days. Expansion joints are reflected in the surface of the floor.

HEALTH AND SAFETY :

- For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety-related data.