

FLOOR HARDENER- SYNTHETIC

PRODUCT

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TARGET® Synthetic Floor Hardener is a specially formulated product containing accurately weighed cementitious materials and a high quality synthetic aggregate which has been crushed and graded to particle sizes suitable for flooring work. The synthetic aggregate is an extremely hard, chemically fused material composed predominantly of magnesium oxide. It is free of organic impurities and provides high impact and abrasion resistance. TARGET Synthetic Floor Hardener is plasticized to assist in placing at higher coverage rates.

USES

TARGET Synthetic Floor Hardener is designed for use as a surface hardener for heavy duty concrete floors which are subject to wear due to abrasion or impact from heavy traffic. Using proper application procedures it is possible to obtain an easily cleaned surface with good slip resistance. Since the synthetic aggregates used in TARGET Synthetic Floor Hardener are non-metallic, it is non-rusting and suitable for both interior and exterior use.

COLOR

TARGET Synthetic Floor Hardener is similar in color to conventional Portland cement concrete. The precise color will, however, depend on the particular concrete used and curing procedures adopted.

PROCEDURES

1. Apply TARGET Synthetic Floor Hardener in two dry shake applications of equal weight.
2. Apply the first shake after sufficient floating has been carried out to bring enough moisture to the surface for combining with the dry material.
3. When the moisture from the concrete dampens the first application of dry shake, refloat the floor surface to obtain thorough mixing of the shake with mortar from the concrete.
4. Immediately following this floating, evenly distribute the remainder of the dry shake over the concrete surface.
5. Carry out a final floating to obtain thorough mixing with the previously applied surface treatment. Avoid excessive floating.
6. Where color uniformity is of importance use only stainless steel trowels for hard trowelling.



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COVERAGE

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Rates of application vary with the hardness required to suit the planned traffic conditions. Suitable application rates are:

TRAFFIC CONDITION	COVERAGE	
	lb/100 ft ²	kg/10m
Light	60-70	29-34
Medium	70-90	34-44
Heavy	90-120	44-59

TEMPERATURE

Concrete and air temperatures should be above 10 °C (50 °F) during the application of TARGET Synthetic Floor Hardener. If space heaters are used to increase air temperatures, care must be taken to avoid damage to the concrete surface due to carbonation.

CURING

- Adequate curing is extremely important. Curing should commence as soon as final set has occurred and before the surface starts to dry. Conventional moist curing procedures such as water spray, ponding, wet burlap or plastic covers may be used with TARGET Synthetic Floor Hardener if precise color uniformity is not required.
- Moist curing should be continued for at least 48 hours. If moist curing is not practicable, or if color uniformity is of importance, a membrane curing compound such as TARGET Cure & Seal should be applied to the concrete immediately after disappearance of bleed water after final finishing and before any surface drying occurs.

CAUTION

- For best results the air content of the concrete to which the floor hardener is applied should not exceed 3% for concrete that will not be exposed to freezing and thawing. If TARGET Synthetic Floor Hardener is to be applied to concrete which will be exposed to freezing and thawing, contact Target Products Ltd for advice on the air content and procedures required.
- While Target Synthetic Floor Hardener will provide improved resistance to many chemical substances, it is not recommended for use in floors exposed to acids and their salts.

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TYPICAL PROPERTIES OF TARGET SYNTHETIC FLOOR HARDENER

COMPRESSIVE STRENGTH at 28 days, 50.8 mm (2 inch) cube samples 0.45 water/cement ratio	55 MPa (8000 lb/in ²)
AGGREGATE HARDNESS	8, Moh scale
TABER ABRASION RESISTANCE weight loss with 1000 g load at 1000 cycles, using Calibrade H-22 abrasive wheels	2.1 g (6.0g for untreated concrete)

SPECIFICATION GUIDE

The floor hardener shall be Target Synthetic Floor Hardener or approved equivalent applied as two dryshakes to give a total hardener application rate of (insert required rate for service conditions) kg/10 m² (lb/100 ft²). The floor hardener shall be a premixed blend of Portland cement and a synthetic aggregate with a Moh Hardness of not less than 8 and shall produce a minimum compressive strength of 55 MPa (8,000 lb/in²) at 28 days.

PACKAGING

TARGET Synthetic Floor Hardener is available in 25 kg (55 lb) bag 56 bags per pallet.

