

## Premixed Floor Hardener

Guardian TOPHDM is a non-oxidizing floor hardener containing aggregates graded to produce tight interlocking particles.

### USES & ADVANTAGES

Use to produce hard tough wearing long-lasting surfaces. Metallic hardened floors are ductile under impact & will outwear standard toppings or chemical surface treatments by up to 8 times.

#### Advantages include:-

- Abrasion and high impact resistance.
- Long wearing low absorption floor is created.
- Easy to clean with minimal maintenance required.
- Non oxidizing.
- Decreased dust.
- Reduced maintenance cost.

### PROPERTIES

<b>Appearance:</b>	Dry mix. Various colours
<b>Bulk Density:</b>	2.6 kg/litre
<b>Moh Hardness:</b>	Aggregate 8-9
<b>Compressive Strength :</b>	> 100 N/m <sup>2</sup> <b>ASTM C109</b>
<b>Composition:</b>	Suitable for use with all Portland cement including S.R.C.
<b>Impact Resistance:</b>	> 200% of plain concrete
<b>Abrasion Resistance:</b>	Concrete improved by at least 225%. Tested to ASTM D4060 Taber Abrader & BS6431 Part 20.

### APPLICATION THICKNESS

Concrete should have as low a water cement ratio as possible consistent with placeability. Slump should be between 75-100 mm. Apply the **Guardian TOPHDM** in 2 separate shakes.

#### Shake One:

- Use half of total material required per m<sup>2</sup>.
- Apply to concrete as soon as bleed water has disappeared and the concrete stiffened to the point light foot traffic leaves minor prints.
- Sift from hands or shovel. Do not spread material as it will segregate.
- Allow first shake to become saturated with moisture from slab.
- Do not add water. Float the shake by hand or mechanical means.
- If necessary use a long handled bull-float

#### Shake Two:

- Apply second half of material as soon as first half floated. Float as first half.
- After sheen disappears, begin steel trowelling by mechanical or hand trowel.
- Once no additional water re-appears the floor is ready for final steel trowel. Use steel trowelling machines with blades raised at edge to produce a smooth dense finish.

### TIMING OF APPLICATION

**Guardian TOPHDM** if applied too early will absorb too much water and the surface will potentially dust. The dense aggregate may also sink from the surface. Too late and the material may not hydrate sufficiently and or delaminate.

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### CURING

Cure with **Guardian Cure-SW**.

### PACKAGING

25 kg. 4 Ply plastic lined bags.

### IMPORTANT NOTE

- Do not use in areas exposed to acids and their salts.
- Avoid areas where materials may come into contact with the product that attack Portland cement.
- Do not apply to concrete containing more than 3% air or containing calcium chloride.
- For coloured surfaces undertake site trials to determine any local colour variations and acceptability.
- All coloured floor hardeners to some extent will show some colour variation.

### COVERAGE RATES

Type of Floor	Light to moderate	Moderate	Heavy duty	Very heavy Concentrated
<b>Guardian TOPHDM (Kg/m<sup>2</sup>)</b>	3.0 - 5.0	5.0 - 7.5	7.5 - 9.0	9.0 - 11.0

### STORAGE & SHELF LIFE

Store in dry conditions in unopened bags.  
Shelf life 6 months minimum if stored correctly.

### HEALTH & SAFETY

**Guardian TOPHDM** is alkaline due to containing cement. Avoid inhalation, contact with skin and eyes, wear suitable gloves & eye protection. If in contact with skin wash off with water, if in contact with the eyes rinse with plenty of clean water & seek medical assistance.

**Guardian TOPHDM** is non-flammable.

### TECHNICAL SERVICE

**Guardian Coating Service Department** is available to assist you in the correct use of our products and its resources are at your disposal entirely without obligation.

### QUALITY ASSURANCE (OEM)

ISO 9001: 2015 verified by TUV Nord.  
ISO14001:2015 verified by Lloyd's Register International.

### DISCLAIMER

Performance data is achieved testing in accordance with International Standards. Testing by others may result in different results from those published as a result of external factors such as poor sampling, incorrect mixing, varying temperatures, curing, crushing procedures etc.

Guardian does not take responsibility nor need to defend others testing that does not achieve the published data.

The user must test the products suitability for the intended application and purpose. Guardian reserves the right to change the properties of the product.

Site conditions and differences in materials are such that no warranty or fitness for a particular purpose, nor liability can be inferred from the published data sheet, written recommendations or from other advice offered.

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Potential users of Guardian's materials are urged to conduct confirmatory trials to satisfy themselves as to the suitability of the selected product for their particular end use prior to purchase.