

MasterTop[®] 410

High performance nonmetallic aggregate surface hardener

DESCRIPTION

MasterTop 410 is a non-metallic floor hardener, which contains specially graded nonmetallic hard wearing natural aggregates. It is applied as a dry shake over freshly floated concrete to provide a durable, non-slip monolithic floor.

RECOMMENDED USES

- Factories, workshops, showrooms, food, and beverage processing areas, where a durable, non-rusting, non-slip floor is required to withstand moderate to heavy traffic
- Providing a durable, non-slip surface on ramps, stairs, landings etc. under wet or dry conditions
- Freezers & chillers with forklift traffic
- **MasterTop 410** is not recommended for use in areas where floor surface will be exposed to acids, their salts or materials which seriously and rapidly attack concrete. For applications under these service conditions consult Master Builders Solutions about their range of chemical resistant flooring systems, such as **MasterTop 1200** series.

FEATURES AND BENEFITS

- **High abrasion and impact resistance** – Long service life
- **Better abrasion resistance than plain concrete** – Extended service life
- **Non rusting** – Suitable for wet environments
- **Non-slip** – Improved safety for personnel and forklifts in wet environments.
- **Dense surface** – Resists oil and grease penetration
- **Coloured surface** – Can create aesthetically pleasing environment
- **Easy application at time of placing concrete** – Floor available for full service once concrete is cured.
- **Able to applied at higher ambient temperatures** – Wide application range

PROPERTIES

Abrasion Resistance (ASTM C779)	0.34mm at 60 minutes (33MPa concrete more than 1.4mm at 60 minutes)
Impact resistance (LA Rattler)	40% weight Loss (33MPa concrete has 70% loss of weight)
Hardness	Mohs scale: 8- 9
Abrasion resistance 1Kg H22 Wheel (ASTM 4060- 1000 cycles)	<750mg

See Technical Sheet 22 for explanation of abrasion and impact tests and how they relate to long-term durability of the floor

APPLICATION

Preparation of the Concrete

Concrete for single course monolithic floors should be capable of achieving a 28 day compressive strength of 25MPa and with no more than 3% air. Concrete should not contain calcium chloride.

MasterTop 410 is applied as a dry shake over freshly wooden bullfloated concrete.

Installation Procedures

See the Application Guide (available from your local Master Builders Solutions Technical Representative) for details on all aspects of the successful application of **MasterTop 410**.

ESTIMATING DATA

The quantity of **MasterTop 410** required should be determined according to the anticipated service conditions.

Light Duty: 3 to 5kg per m²

Moderate Duty: 5 to 6kg per m²

Heavy Duty: 6 to 8kg per m²

The maximum recommended rate for Vacuum dewatered floors is 5 Kg/M²

PACKAGING

MasterTop 410 is available in 25kg moisture resistant bags.

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SHELF LIFE

MasterTop 410 has a shelf life of 6 months. Store out of direct sunlight, clear of the ground on pallets protected from rainfall.

PRECAUTIONS

- Application is strongly recommended to be done after roofing is completed. ONLY attempt modest size slabs without a roof.
- Do not apply over concrete containing added calcium chloride.
- Do not apply over concrete containing aggregate contaminated with salt or salt water.
- Do not apply over concrete containing more than 3% entrained air. Higher entrained air contents are often required for concrete slabs exposed to water saturation and freeze/thaw cycles. The high air content makes proper application of dry shakes difficult or impractical, depending on the dimensions of the placement and ambient conditions. Consult your local Master Builders Solutions technical representative for more information.

- Use only admixtures in the concrete that are approved by Master Builders Solutions.
- All moisture used to incorporate the dry shake should come from the concrete the addition of water to the surface will cause delamination and failure of the floor.
- Saw Joints as soon as possible without damaging the concrete.
- Do not use water, burlap or polyethylene covering for curing. Use only curing compounds approved by Master Builders Solutions.

For the full health and safety hazard information and how to safely handle and use this product, please make sure that you obtain a copy of the Master Builders Solutions Material Safety Data Sheet (MSDS) from our office or our website.

STATEMENT OF RESPONSIBILITY

The technical information and application advice given in this Master Builders Solutions 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 Master Builders Solutions either orally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they, and not Master Builders Solutions, are responsible for carrying out procedures appropriate to a specific application.