

# MasterProtect<sup>®</sup> H 400

## Water-based 40% silane penetrating sealer

### DESCRIPTION

**MasterProtect H 400** is a water-based, 40% active ingredient alkyl alkoxy silane penetrating sealer. It provides long-lasting protection against moisture intrusion, freeze/thaw cycles, and chloride intrusion.

### TYPICAL APPLICATIONS

- Interior or exterior
- Horizontal and vertical
- Above grade
- Parking garages
- Stadiums
- Bridge decks
- Concrete highway road surfaces
- Ramps and barrier rails
- Many other reinforced concrete structures

### ADVANTAGES

- Excellent penetration protecting against damage from moisture intrusion and chloride ion penetration
- 40% silane
- Ideal for traffic-bearing surfaces
- Breathable to allow interior moisture to escape without damaging sealer
- Does not alter surface appearance
- One component for ease of application

### PACKAGING

**MasterProtect H 400** is supplied in 18 kg and 194 kg.

### TYPICAL PROPERTIES\*

Density @ 25°C	0.95 ± 0.05 kg/L
Flash point	≥ 93°C
pH value	> 5
Solid content	> 4%
Viscosity @ 25°C Brookfield viscometer (2/100)	~ 35 cps

### APPLICATION GUIDELINES

For complete details of application rates and methods etc. please ensure the guidelines on the appropriate method statement are followed.

### SURFACE PREPARATION

1. Verify substrate has properly cured. Concrete should obtain 80% of design strength, typically achieved within 14-28 days.
2. Clean concrete surfaces of all sand, surface dust and dirt, oil, grease, chemical films and coatings and other contaminants prior to application.  
Power wash, sandblast, or shotblast as necessary to achieve the desired surface condition.
3. Surface, air, and material temperatures should be +4°C to 40°C during application.  
Do not apply **MasterProtect H 400** when temperatures are expected to fall below 4°C within 12 hours.
4. A dry surface is suggested for maximum penetration of sealer; however, surfaces to be treated can be slightly damp (<5% moisture content). Do not apply **MasterProtect H 400** if standing water is visible on the surface to be treated.
5. Crack control, caulking, patching, and expansion joint sealants can be installed before or after application of the sealer. Allow a minimum of 6-12 hours curing time for caulking and sealant materials (or until they have skinned over) before applying **MasterProtect H 400**. Following the application, remove excess product that might pond on a concave sealant joint.

### Substrates:

- Concrete substrates:
  - Architectural Elements
  - Glass Fibre Reinforced (GRC)
  - Precast Elements
  - Cast in place concrete

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## PLACING / APPLICATION

1. Test a small area of surface (generally a 1.5 by 1.5 m section) before starting general application of any clear penetrating sealer to ensure desired performance results, aesthetics and coverage rates are acceptable. Allow 5-7 days for the product to fully react before evaluating.
2. Stir material thoroughly before and during application.
3. Apply to saturation. Apply by low-pressure non-atomizing spray or, if desired on horizontal surfaces, by pouring, followed by a squeegee or a broom for even distribution.

### Drying time:

Typical drying time for **MasterProtect H 400** is 4 hours at 21°C and 50% relative humidity. Cooler temperatures or higher relative humidity can extend the drying time.

### For best performance

- Keep material from freezing.
- Do not dilute **MasterProtect H 400**.
- Water repellents perform best when applied to a dry substrate, when power washing is performed, allow for a proper dry time before applying the water repellent.
- Do not apply during inclement weather or when inclement weather is anticipated within 12 hours.
- To prevent damage to nearby shrubbery and landscaping, cover or protect with drop cloth.
- Protect asphalt-based products such as roofing materials or plastic products from overspray.
- **MasterProtect H 400** may leave a temporary slippery surface for up to several hours after application. Therefore, traffic-bearing surfaces should not be reopened until the treated surface is dry.
- Variations in the texture and porosity of the substrate will affect the coverage and performance of the product.
- **MasterProtect H 400** will not inhibit water penetration through unsound or cracked surfaces or surfaces with defective flashing, caulking, or structural waterproofing.  
Note: It is not to be used to replace / as an alternative to waterproofing.
- Line striping can be done after application of the sealer.
- Make certain the most current versions of product data sheet and SDS are being used;

visit [master-builders-solutions.com/en-ae](http://master-builders-solutions.com/en-ae) to verify the most current version.

- Proper application is the responsibility of the user. Site visits by Master Builders Solutions personnel are for the purpose of making technical recommendations only and are not for supervising or providing quality control on the jobsite.

## CLEANING

Clean equipment and tools with hot soapy water. Overspray can be cleaned immediately with hot soapy water. Dried residue can be cleaned with a mild citrus-based cleaner or very hot water, then scrubbed with a soft-bristle brush.

## COVERAGE / YIELD

Concrete:  
2.4-4.8 m<sup>2</sup>/L  
Brick:  
2.4-4.8 m<sup>2</sup>/L

Volatile organic compounds <350 g/L

Coverage for both horizontal and vertical application is between 2.4 – 4.8 m<sup>2</sup>/L depending upon surface porosity and any specification requirements.

## STORAGE AND SHELF LIFE

Shelf life is 12 months from date of manufacturing in unopened original containers. Product must be kept out of direct sunlight and in a dry, cool, preferably air-conditioned warehouse below 35°C temperature.

Store clear of the ground on pallets and do not stack pallets.

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## HEALTH AND SAFETY

As with all chemical products, care should be taken during use and storage to avoid contact with eyes, mouth, skin and foodstuffs. Treat splashes to eyes and skin immediately. If accidentally ingested, seek medical attention. Reseal containers after use. Use in well ventilated areas and avoid inhalation.

## QUALITY AND CARE

All products originating from Master Builders Solutions Dubai, UAE facility are manufactured under a management system independently certified to conform to the requirements of the quality, environmental and occupational health & safety standards ISO 9001 and ISO 14001.

\* Properties listed are based on laboratory controlled tests.

® = Registered trademark of the MBCC Group in many countries.

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### 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.

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**Disclaimer:** the TUV mark relates to certified management system and not to the product mentioned on this datasheet



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