

MasterProtect[®] 1860

Single component fiber and glass flake reinforced high build acrylic coating

DESCRIPTION

MasterProtect 1860 is a single component solvent-based Acrylic polymer coating with modified resins, fibre and glass flake reinforcement. It is a protective high build coating for use on new and existing concrete surfaces within marine environments (Splash / Tidal Zone Coating).

MasterProtect 1860 requires only on site mixing with a suitable mechanical mixer to produce an easily applied protective and decorative finish using airless spray unit or brush.

TYPICAL APPLICATIONS

MasterProtect 1860 is primarily recommended for use in the following applications:

- Splash zone / Tidal zone coating for concrete structures
- Protection against marine environment
- Jetties
- Under-deck areas
- Bridge Piers in Tidal Zones

The above examples do not constitute a full and comprehensive list. For further information on application possibilities contact Master Builders Solutions Construction Chemicals LLC.

ADVANTAGES

- One component and easy to apply
- Primerless for most applications
- Good abrasion resistance
- UV & weather resistant
- Rapid surface drying allowing intertidal coating.
- Reduction of Marine Organism Growth within the tidal zone
- Can be applied over damp surfaces
- Reduces Chloride Ion Penetration Slows potential corrosion rate.
- Waterproof
- Smooth surface is easy to clean.

PACKAGING AND COLORS

MasterProtect 1860 is supplied in 20 L units and available in Black and Grey.

TYPICAL PROPERTIES*

Surface touch dry @ 40°C	30 min
Re-Coat time @ 40°C	60 min
Surface Hard Dry	Over night
Density ASTM D1475	1.42 – 1.52 kg/L
Volume Solids ASTM D2697-03	60%
Salt Spray ASTM B117	1000 h
Rapid Chloride Permeability ASTM C1202	Nil
Concrete Pull-Off ASTM D4541	>1.5 MPa
Water Permeability BS EN12390 Part 8: 2009 @ 5 bars	Nil
VOC EN ISO 11890 Part 2	376 g/L
Flash Point ASTM D93A	24°C

APPLICATION GUIDELINES

MasterProtect 1860 can be applied by brush or airless spray units. Due to the glass flake content roller application is NOT recommended.

Spray with a tip size of 21-25 thou and a line pressure of approx. 85 bar. Remove all filters in the spray gun and lines prior to application. Suitable spray equipment - Graco X90DH3 or similar.

Prior to application, the temperature of the material should be in the range of 15-25°C. **MasterProtect 1860** should be well stirred before use.

Surface temperature of the element being coated should be in the region of 15-40°C MAX.

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THEORETICAL COVERAGE RATE

Two coats are recommended to be applied to achieve a total dry film thickness (DFT) of 400 microns. This equates to an application rate of 0.335 L / m² per coat with a wet film thickness (WFT) of 335 microns per coat.

Thicker system build-ups can be achieved by using multiple coats but always following the necessary re-coat periods and interim cleaning as necessary.

Please refer to the Master Builders Solutions Method Statement for system specific coverage rates.

The curing time of the material is influenced by humidity, wind speed, ambient and substrate temperatures. At high temperatures the chemical reaction is accelerated thus the time required for the coating to be surface dry is shortened accordingly. The application should be completed at least 30 minutes prior to areas coated being inundated with water. If two coats cannot be completed within the tidal zone timing, the second coat can be applied at the next low tide with only minor surface cleaning being required (See Master Builders Solutions method Statement for full details).

SUBSTRATE PRE-TREATMENT

The surface to which **MasterProtect 1860** is applied should be clean and free from shutter release oil, salt, grease, algae, marine crustaceans and any other substances which may impair adhesion. For concrete surface preparation, mechanically profile the substrate to CSP 3 as described by International Concrete Repair Institute. This is roughly equivalent to 80 grit sandpaper in texture. See method statement for full requirements.

Old, porous or weathered concrete may require the use of a primer to reduce the occurrence of blow holes. If required, prime with **MasterProtect 1860** diluted with 5 -10% (max) with a suitable thinner (Xylene / MEK / Acetone) blended in and apply at a rate of approx. 0.25 L / m². Allow primer to become touch dry (10-20 minutes) before carrying out any minor surface blemish repairs (if necessary)

Surface defects such as blow holes and minor texturing can be filled after priming using **MasterProtect 1860TIX**, a single component ready to use paste. Simply apply by flexible scrapper / putty knife, allow to dry and then sand back to a smooth finish (remove all dust) prior to application of the main coating.

PLACING / APPLICATION

Two coats to be applied as per coverage rates indicated and in conjunction with the **MasterProtect 1860** method statement.

If for any reason the re-coat interval is missed, then the coated surface should be allowed to dry thoroughly and then lightly abraded and solvent wiped again prior to recoating.

CHEMICAL RESISTANCE

MasterProtect 1860 is manufactured to be used as a protective coating against mildly corrosive marine environments and atmospheric pollutants. It is not suitable to be used as a high chemical resistant coating against strong acids and alkalis. Contact your local Master Builders Solutions office for specific details.

STORAGE AND SHELF LIFE

Store in original containers, tightly sealed, under dry conditions and at temperatures between 15-25°C. Do not expose to direct sun-light or external source of heat.

The shelf life is 12 months in unopened drums when stored in cool and dry conditions and at temperatures between 15-25°C.

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HEALTH AND SAFETY

Avoid any inhalation of vapour and contact with skin. Wear protective gloves, goggles, breathing apparatus and clothing. In case of skin contact, rinse immediately with soap and water! In case of eye contact, bathe eyes with water at once, then consult a doctor.

DO NOT USE IN CONFINED SPACES WITHOUT ADEQUATE FORCED VENTILATION AND BREATHING APPARATUS

DO NOT EAT, DO NOT SMOKE AND DO NOT USE AN OPEN FLAME WHEN HANDLING THE PRODUCT.

NOTE

Field service, where provided, does not constitute supervisory responsibility. For additional information contact your local Master Builders Solutions representative.

DO NOT THIN MasterProtect 1860 WITH SOLVENTS PRIOR TO USE OTHER THAN WHEN BEING USED AS A PRIME COAT.

Master Builders Solutions reserves the right to have the true cause of any difficulty determined by accepted test methods.

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.

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STATEMENT OF RESPONSIBILITY

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NOTE

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