

PRODUCT DESCRIPTION:

DUR-A-HARD EM is a 100% solids two-component epoxy coating designed for application to damp or moist surfaces. Because it contains 100% solids it can be applied in closed areas without the fire and explosion hazard usually associated with coatings.

USES:

DUR-A-HARD EM provides a tough, impact resistant film for concrete. It is particularly useful for application in areas which are impossible to dry or where water vapour is condensing. It is used as a protective coating in water towers and other containment areas. It has approval by Agriculture Canada as a food contact surface.

CURING SCHEDULE:

Pot life 200g. @ 25°C	60-65 mins.
Tack-free time @ 10°C/25°C	6/8 hrs.
Through cure @ 10°C/25°C	36 to 16 hrs.

Cure time is considerably longer at colder temperatures.

COVERAGE RATES:

Primer: 8 mils	5 m ² /litre (205 ft ² /gal.) on normal surfaces
Topcoat: 8 mils	5 m ² /litre (205 ft ² /gal.) on normal surfaces

ACTUAL COVERAGE WILL VARY DEPENDING ON THE POROSITY AND COMPOSITION OF THE SUBSTRATE(S). A TEST SAMPLE SHOULD BE APPLIED TO ESTABLISH PRACTICAL COVERAGE ON THE ACTUAL SUBSTRATE.

SURFACE PREPARATION:

CONCRETE SURFACES - Concrete must be cleaned free of old existing coatings. New concrete should cure a minimum of 28 days. Best results are achieved on clean, dry substrates.

Remove all debris from working surfaces. Remove all oils, greases, dirt and wax solutions from surface. Use suitable means to remove contaminants, heavy laitance, or curing compounds, which will interfere with proper adhesion.

Special consideration must be given to oil or other

TECHNICAL DATA

Physical Properties (unmixed) @ °C:

Component 'A' (resin)

Specific gravity: 1.11
Viscosity (cps): 600-800
Colour: Clear

Component 'B' (hardener)

Specific gravity: .984 ± .1
Viscosity (cps): 300
Colour: Light yellow

Physical Properties (mixed) @ °C:

Specific gravity: 1.076
Viscosity (cps): 720 ± 50
Colour: Amber, grey

Chemical resistance: Resistant to mineral acids and to strong alkalis. If improved chemical resistance is required, it is recommended that full details of chemicals, temperature and concentration are submitted to Durabond to enable specific recommendations to be made.

Performance Characteristics:

Physical Testing (7 days cure @ 25°C):

TEST	STANDARD	RESULTS
Compressive strength:	ASTM C109-90	97 MPa
Tensile strength:	ASTM C190-85	35 MPa
DURAHARD EM mortar mix (5:1 mix by wt.):		
Compressive strength:	ASTM C190-90	72 MPa

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PROTECTIVE COATINGS
MARINE HIGH PERFORMANCE COATING

foreign materials which may have penetrated into the concrete. Pull tests must always be used to verify adequacy of preparation. Repair all cracks with appropriate Durabond resin.

Prime and use **DUR-A-HARD EM** mortar mix as a leveling course for spalled or uneven surfaces. Allow to cure for 16 to 24 hours at 20°C prior to application of topping.

Joints should be repaired or replaced as required. Surfaces must be clean and sound.

STEEL SURFACES - Surfaces must be sandblasted to white metal immediately before application of the coating.

MIXING & APPLICATION:

DUR-A-HARD EM is supplied as a two package system. Open component 'A' and agitate resin until evenly blended. Open component 'B' and pour entire contents into component 'A' container. Agitate with low speed power mixer (200-300 rpm) until one even colour develops.

Although **DUR-A-HARD EM** is designed for application to moist, damp concrete, every effort should be made to get the surface as dry as possible. The coating has the ability to displace water in the surface of the concrete to provide a strong adhesive bond. Care must be taken not to apply it to a slab with a high moisture content unless the slab can vent from a different surface to the one being coated. Rising moisture vapour during curing of the coating can destroy its bond.

Prime the area with **DUR-A-HARD EM**. Within 24 hours apply a second coat of **DUR-A-HARD EM**. The product is best applied using airless spray to ensure pinhole free films. Rollers tend to trap air during application. Re-rolling with a porcupine roller will release these air bubbles.

CLEAN UP:

Use **Durex "Cleaning Solvent" CS101**. This solvent is flammable so there must be no open lights, flames, sparking motors or pilot lights in the vicinity. Smoking near the solvent is to be forbidden. All equipment must be cleaned immediately after use.

SAFETY AND TOXICITY:

Two-component epoxy systems are capable of producing severe injury to, or destruction of, skin and eye tissues. They are classified as corrosive for shipping purposes. Precautions must be taken to prevent prolonged or repeated skin contact and it is essential to protect eyes from splashes. Protective clothing, rubber gloves and chemical goggles should be worn when working with these products.

Some people become sensitized when working with epoxy resin systems. The sensitization may appear in the form of skin or respiratory reactions. Avoid breathing vapours, particularly if these products are used in a confined area. Face mask with #1224 is usually adequate. Air supplied mask is suitable for use in confined areas.

STORAGE:

Store in heated area and on pallets. Do not allow product to freeze. Shelf life in unopened containers is two years.

PACKAGING:

4 litre units, 4 units per carton. Each container is clearly marked with product name, component designation ('A' or 'B'), manufacturers name, batch number and ratio of component mixtures. Both containers of 'A' and 'B' are colour coded the same.

WARRANTY:

Durabond Products Limited fully warrants their products when used and applied in strict accordance with the printed instruction on product mixing and product application. In any case **Durabond's** responsibility shall not exceed the refund purchase price, or the replacement of the purchased product.

TECHNICAL SERVICES:

Technical assistance for unique application and design is available upon request from **Durabond Products Limited**.

DURabond

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