

Technical Data Sheet

Emer-Impact

A water based decorative and protective façade coating

USES

As a decorative protective coating Emer-Impact is suitable for application to most common facade substrates including concrete, render, flush jointed block and brickwork, fibre cement sheeting, tilt-up constructions and AAC blocks and panels after recommended primer/sealer application. It can also be used as a final finish coat over the Emer-Ultra Fine.

ADVANTAGES

- Safe to use, water borne formulation
- Resistant to long term weathering
- Range of decorative colours
- Good abrasion and impact resistance
- Provides protection from water, carbon dioxide and chloride ions to concrete
- Good opacity
- Excellent mould and fungi resistance
- Suitable for application to a wide range of surfaces
- Excellent resistance to embrittlement
- Allows water vapour to escape from structure



DESCRIPTION

Emer-Impact is a single component, water borne, high performance, acrylic coating which can be applied by roller or spray to achieve a range of finishes.

It has excellent weathering properties and is resistant to mould and fungal growth. Emer-Impact dries to a satin finish and has excellent weather proofing properties whilst allowing moisture in the substrate to escape.

TECHNICAL SUPPORT

Parchem offers a comprehensive range of high performance, high quality products suitable for use within all aspects of the concrete repair and protection industry. In addition, the company offers a technical support package to specifiers, end users and contractors, as well as on-site assistance.

DESIGN CRITERIA

Emer-Impact is designed to be applied by brush, roller or airless spray over a selected primer, to achieve a dry film thickness of not less than 180 microns in two coats on vertical surfaces. Refer to application instructions for details.

PROPERTIES

Colour:	White, plus special colours tinted to order
Form:	Single component liquid
Volume solids:	47% (Satin white)
Physical or chemical change:	Dries through loss of water
Drying (25°C, 50% RH)	
Tack free:	60 minutes
Recoat:	2 hours
Fully dried:	7 days
Application temperature: 10°C - 30°C	

Carbon dioxide diffusion resistance

(AS/NZS 4548.5-1999):

Equivalent Thickness of air (R), m, 214 m

(Note: To protect concrete from carbonation, R must be at least 50m - Klopfer criteria)

Equivalent thickness

of 30MPa concrete (S_c): 530 mm

CO² Diffusion Coefficient: 1.4 x 10⁻⁰⁷ cm²/sec

Water Vapour Transmission Resistance

(AS/NZS 4548.5-1999)

Vapour Transmission rate of Composite: 48g/m²/24hour

Equivalent Thickness of air (S_a): 1m

Vapour Diffusion Coefficient: 7.6 x 10⁻⁰⁵ cm²/sec

Chloride ion diffusion coefficient m², sec:

(AS/NZS 4548-5 1999)

@ 62 days 3.1 x 10⁻¹² m²/sec

Water transmission resistance

(AS/NZS 4548.5-1999):

@ 24 hrs 12 g/24h/m²/kPa

MAINTENANCE

No special requirements, any damage identified during normal inspections should be repaired or replaced as appropriate.

SPECIFICATION CLAUSES

DECORATIVE WATERPROOFING FACADE COATING

The decorative waterproofing coating shall comprise a suitable primer system overcoated with Emer-Impact, single-component elastomeric coating suitable for application by brush, roller or spray. The total dry film thickness of the coating shall be not less than 180 microns and shall be capable of providing carbon dioxide diffusion resistance equivalent to not less than 50 metres of air.

APPLICATION INSTRUCTIONS

SURFACE PREPARATION

All surfaces to be coated are to be clean, sound and dry, free of mould release agents, bond breaking coatings, curing compounds or any contamination that may affect the coating. New concrete and rendered surfaces to be allowed to cure thoroughly before application of materials.

Concrete surfaces should be smooth, any imperfections, pinholes etc. to be filled and surfaces made smooth with Emer-Patch (smooth) and trowelled to an even finish.

Moss or lichen should be removed physically, and the surface then treated with a solution of household bleach (1 part bleach to 2 - 3 parts water) to kill any spores. The bleach solution to be allowed to react for 10 - 15 minutes and then be completely removed with clean water and the surface allowed to dry.

PRIMING

Parchem manufacture a range of primer/sealer coatings for use with the Emer range of protective and decorative coatings.

CONCRETE, RENDER, BRICK, MASONRY, FIBRE CEMENT PANELS:

Thoroughly clean surfaces by stiff brush, scraper, etc., to remove all laitance, dirt, dust or other contamination to leave sound, clean, dry surfaces free from all residues.

Use Emer-Patch Smooth patching compound to fill minor cracks or level the surface. Fill cracks and joints with acrylic gap filler.

Prime: One coat of Emer-Acrylic Sealer or Emer-Coat Clear Sealer.

DAMP SURFACES - ENTRAPPED MOISTURE:

Seek technical advice from Parchem.

MOULD INFESTED SURFACES:

Scrape or clean thoroughly; all finishes lifting or badly infested should be removed. Wash down with a water-soluble fungicide or one part domestic bleach to eight parts water, scrubbed into the affected area, then rinsed clean of residues. Make good any defects and allow walls and repairs to completely dry.

Prime: One coat of appropriate primer depending on substrate.

IRON OR STEEL:

Grease or oil to be removed with degreasing solution. Wire brush/shot or sand blast metal. All dust/dirt to be removed.

Prime: One coat of Emer-Gard Primer Type 2.

Note: failure to properly coat the metal with primer will result in surface staining and/or significantly diminish the protection of the iron or steel.

RUSTY IRON OR STEEL:

Remove loose rust and paint particles with wire brushing. Sound areas of remaining paint should be roughened to obtain a good mechanical key. Loose flakes or corroded metal must be chipped away.

1st Coat: One coat of Emer-Tan rust converter

Prime: One coat of Emer-Gard Primer Type 2

ALUMINIUM/ZINC/COPPER/BRASS/GALVANISED IRON:

Oxidised surfaces and other contaminations should first be removed with Emer-Clean etch solution. Emer-Coat Special Primer may be used to further increase protection.

SOUND, PREVIOUSLY PAINTED OR PRIMED SURFACES:

Acrylic: On existing sound acrylic coatings, scrub with detergent and water, allow to dry. No primer required. If coatings are delaminating then remove all loose and flaky paint back to a sound firmly adhered edge then apply one coat of Emer-Coat Clear Sealer.

Enamel / Oil Based: Depends on underlying substrate. For steel, abrade and apply Emer-Gard Primer Type 2. Other substrates refer to your local Parchem sales office.

TIMBER SURFACES:

Treat previously painted surfaces as above.

Prime: One coat of Emer-Acrylic Sealer.

Note: do not apply Emer-Acrylic Sealer over old oil based paints.

POWDERY PAINTWORK OR ABSORBENT MASONRY SURFACES:

Should be sealed with one coat of Emer-Coat Clear Sealer.

OVERCOATING OLD EMER-CLAD / IMPACT:

Clean the surface with mild detergent, rinse with clean water, allow to dry. No primer required. If coatings are delaminating then remove all loose and flaky paint back to a sound firmly adhered edge then apply one coat of Emer-Coat Clear Sealer.

MOVEMENT JOINTS

All expansion and movement joints should be sealed with a suitable sealant.

Consult the local Parchem sales office for advice on the method best suited to your application.

APPLICATION

Emer-Impact may be applied by a variety of rollers to achieve a number of different texture finishes. It may also be applied by airless spray to achieve a smooth "orange peel" effect.

Application by Rolana or long nap roller at 5 m²/litre/coat.
Application by Roma or texture roller at 1.5 m²/litre/coat.

Note: these figures may slightly vary depending on the substrate.

Application on top of textured finishes including Emer-Impact Roma - 1 coat at 5 m²/litre.

To visually facilitate coverage and ensure adequate film build, different colours may be used for each coat of Emer-Clad.

Note: do not apply any materials during damp or rainy conditions or where there is likelihood of rain. Temperatures above 30°C reduce the wet edge time and, as with other water based coatings, may increase the risk of showing lapmarks and rollermarks after drying, especially with darker colours.

Dark colours may show slight oxidisation over time. This can be removed temporarily by cleaning, but will not affect the performance of the coating.

CLEANING

Tools and equipment should be cleaned with water immediately after use.

Note: As with all specialty coatings we recommend that the application be carried out by an applicator who is skilled in the procedures and techniques necessary to achieve the desired finish.

ESTIMATING

SUPPLY

Emer-Impact:	15 litre pail
Emer-Acrylic Sealer:	1, 4 & 20 litre pails
Emer-Aquashield:	2, 4, & 20 litre pails
Emer-Coat Clear Sealer:	1, 4 & 20 litre pails
Emer-Patch (smooth):	15 litre pail

COVERAGE

Emer-Impact:	Roma - 1.5 m ² / litre / coat Rolana - 5.0 m ² / litre / coat (DFT 180 microns / 2 coats)
Emer-Acrylic Sealer:	12 m ² / litre / coat
Emer-Aquashield:	6 m ² / litre / coat
Emer-Coat Clear Sealer:	7 m ² / litre / coat
Emer-Patch (smooth):	0.6 m ² / 1 mm deep / litre (D.F.T.)

The coverage figures are theoretical - due to wastage factors and the variety and nature of possible substrates, practical coverage figures may vary accordingly.

STORAGE

All products have a shelf life of 12 months if kept in a dry, cool storage area.

STORAGE CONDITIONS

Store in dry conditions at temperatures between 5°C and 30°C in the original, unopened containers. If stored at high temperatures, the shelf life may be reduced.

ADDITIONAL INFORMATION

Parchem provides a wide range of complementary products which include:

- concrete repair – cementitious and epoxy
- grouts and anchors – cementitious and epoxy
- waterproofing membranes – liquid applied, cementitious and bituminous sheet membranes
- waterstops – pvc and swellable
- joint sealants – building, civil and chemical resistant
- industrial flooring systems – cementitious and epoxy
- architectural coatings
- filler boards – swellable cork, bituminous and backing rod
- ancillary products

For further information on any of the above, please consult with your local Parchem sales office.

IMPORTANT NOTICE

A Material Safety Data Sheet (MSDS) and Technical Data Sheet (TDS) are available from the Parchem website or upon request from the nearest Parchem sales office. Read the MSDS and TDS carefully prior to use as application or performance data may change from time to time. In emergency, contact any Poisons Information Centre (phone 13 11 26 within Australia) or a doctor for advice.

PRODUCT DISCLAIMER

This Technical Data Sheet (TDS) summarises our best knowledge of the product, including how to use and apply the product based on the information available at the time. You should read this TDS carefully and consider the information in the context of how the product will be used, including in conjunction with any other product and the type of surfaces to, and the manner in which, the product will be applied. Our responsibility for products sold is subject to our standard terms and conditions of sale. Parchem does not accept any liability either directly or indirectly for any losses suffered in connection with the use or application of the product whether or not in accordance with any advice, specification, recommendation or information given by it.