

FEATURES

Advantages:

- Surface tolerant coating
- Fast cure at normal temperatures
- Rapid Dry-to-Recoat
- Excellent solvent and chemical resistance
- Low VOC/ High solids
- Versatile - can be applied directly to suitably prepared steel, Galvanised steel, aluminum or concrete
- Self priming
- Tintable to a wide range of colours
- Safe – does not contain heavy metals or silica
- Can be top coated with all E-Line® coatings and Chem~Bar™ 900

Performance Data:

- **Salt spray resistance**
(Cyclic Prohesion Testing) 2500 hours – Excellent
- **Immersion resistance**
(5% salt solution) – Excellent
- **Chemical resistance**
(ASTM 01308, 24 hr contact) – Excellent - Resists, 35% Sodium Hydroxide, 10%, Ammonia, 10% Hydrochloric acid, 10% Sulphuric Acid, 5% Sodium Hypochloride, Petrol, Ethanol, Motor Oil, Xylene, MEK, Ethylene Glycol

Approvals:

- MAF - Meat, Game and Seafood
- AS4020 - Potable Water

RECOMMENDED USES

Altra~Shield® 2000 is a high performance, multi-purpose, fully tintable high build epoxy coating.

Altra~Shield 2000® is recommended for use:

- On general structural steel where an economical and aesthetic high performance finish is required
- In industrial environments where good chemical resistance is required, such as:
Pulp and Paper Plants, Sewage and Waste Plants, Fertiliser Works, Power Generation Plants, Food Processing Plants
- As a tank lining:
Ballast tanks, bilge's and other water containment structures, Potable Water Tanks, Cargo, chemical and fuel tanks *Contact Resene Paints (Australia) for details*
- On concrete floors in service areas such as workshops and factories
- As a coloured intermediate coating under all E-Line® finishes

Limitations of Use:

- Tinted colours are not suitable for immersion and may have reduced resistance to some chemicals and solvents
- Will chalk on exposure to sunlight and some colours may also yellow. This will not impair protective qualities
- Cure is slowed down at temperatures below 4°C

Note: When used in potable water tanks use X-100 Thinner

SPECIFICATION DATA

Coating Type:	Polyamide Epoxy
Colour:	White, AS2700, 844 and BS5252 colours
Packaging:	1 litre, 5 litre and 10 litre
Mix Ratio:	4:1 by volume
Gloss:	Low Sheen
Flash Point:	27 °C Setaflash
Thinner:	½ Thinner
Pot Life:	4 hours at 25 °C
Induction Time:	Winter – 15 minutes
Storage:	Store under cool dry conditions

Density:	
VOC:	211 g per mixed litre
Temperature Resistance:	120 °C dry
Volume solids (mixed):	80 %
Theoretical Coverage Rate:	5.0 sq. metres per litre at 150 microns dry
Recommended Film Thickness Per Coat:	200-265 microns wet to obtain 150-200 microns dry
Application:	Spray, Brush or Roller
Dry Times (150µm DFT / 50% RH):	
Recoat – minimum:	5°C 15°C 25°C 30°C
Self	12 hrs 6 hrs 4 hrs 3 hrs
Epoxy	12 hrs 6 hrs 4 hrs 3 hrs
Recoat – maximum:	5°C 15°C 25°C 30°C
Self	720 hrs 720 hrs 720 hrs 360 hrs
Epoxy	720 hrs 720 hrs 720 hrs 360 hrs

Note: Ventilation, film thickness, humidity and other factors can influence the rate of dry

SURFACE PREPARATION

All surfaces to be coated should be clean, dry and free from contamination. Oil or grease should be removed in accordance with AS1627.1 solvent cleaning. Surface defects revealed by the preparation process, should be ground, filled, or treated in the appropriate manner. Clean to remove all grit dust and debris and ensure the surface is dry.

Steel Surfaces:

Abrasive blast to AS1627.4 Class 3 for immersion service and for non-immersion to AS1627.4 Class 2 ½ to achieve a uniform blast profile between 38 to 63 microns and be of a jagged nature as opposed to a peen pattern. A lesser degree of cleaning will reduce the service life of the coating. Apply primer coat to the cleaned surface to prevent re-rusting or contamination.

Galvanised Steel and Electrodepositing Zinc Surfaces:

All traces of dichromate passivation must be removed. Sweep abrasive blast with non-metallic media or thoroughly sand with synthetic scouring pad to provide a uniform roughened finish.

GRP and Wooden Surfaces:

Thoroughly sand with non-stearate paper with 80-120 grit paper.

Concrete surfaces:

Concrete must cure for at least 28 days and not be greater than 10 pH. Acid etch with dilute hydrochloric acid solution (1 part concentrated acid to 10 parts water) to produce a uniformly roughened surface profile, followed by washing off with copious amounts of clean fresh water until the cleaning water is neutral to litmus paper. DO NOT allow etch solution to dry on the surface. Check for excessive moisture using the ASTM D-4263 "Plastic Sheet Method" test. Grinding or sweep blasted to remove all laitence may also be carried out.

Previously Painted Surfaces:

Clean with Altex P40 Cleaner. Remove all unsound coatings. Prepare all corroded and damaged paint areas in accordance with the preparation required for the applicable primer. Feather back edges to a sound clean existing coating. Matt all existing coating to provide a fine matt finish. Clean to remove all grit dust and debris and ensure the surface is dry.

Apply a test patch to confirm compatibility with existing coating system. If lifting occurs remove to bare substrate.

DIRECTIONS FOR USE

Mixing:

Altra~Shield® 2000 is a two component product supplied in 1 litre, 5 litre and 20 litre kits which contain the correct ratio of ingredients.

Power mix the base portion first to obtain a smooth homogeneous condition. After mixing the base portion, slowly add the converter whilst continuing to agitate at slow speed. After addition of the converter is complete, continue to mix slowly until homogeneous.

Higher temperatures will reduce the working life of the coating; lower temperatures will increase it.

Thinning:

Thinning maybe required to assist application. Any solvent addition should be made after the two components are thoroughly mixed. Excessive thinning can cause low film thickness and coating defects.

Clean-up:

Use ½ thinner

Application:

Application by either conventional air spray or airless spray equipment is the preferred method. For touch-up and repair to small areas, Altra~Shield® 2000 can be applied by brush and roller.

Suggested spray equipment is:

Air Spray: Binks - type 2001 gun, 66SS Fluid Nozzle, 63P8 Air Nozzle
DeVilbiss - JGA Gun, D Fluid Nozzle
64 Air Nozzle
Airless Spray: Binks - 88-36 pump, Airless 1 0.021-0.027" tip
Graco - 45:1 pump, Contractor Gun, 0.021-0.027" RAC IV tip

Note: Other equipment equivalent to the above may be used.

Safety within enclosed areas:

It is very important for the safety of the applicator and to ensure correct performance of the coatings, good ventilation is provided to all portions of the enclosed area.

It is equally important to bring into the enclosed area, dry fresh air to remove all solvent vapours. As solvent vapours are heavier than air, ventilation ducts should reach to the lowest portions of the enclosed area as well as into any structural pockets.

Ventilation should be maintained throughout the cure period.

PRECAUTIONS

For industrial use only.
See the Altex Coatings Limited General Safety Data Sheet, product label and Material Safety Data Sheet (MSDS) for health and safety information prior to use.

Altra~Shield® 2000 is flammable. Keep away from heat, sparks and open flame. Use with adequate ventilation.

May cause eye and skin irritation.

Do not breathe vapour or spray.

Wear suitable protective clothing such as gloves and eye and face protection.

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