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Resene ArmourX IF 503

acrylic epoxy gloss/ metallics

Resene ArmourX IF 503 is a high performance finish for use when an isocyanate-free topcoat is required. Two-component finish for a wide variety of suitably prepared substrates in all but the most demanding environments. Quick dry properties allow early handling of coated items.

Available in solid and metallic pigmented colours.

exterior/interior

Typical uses

- Aluminium
- Concrete/plaster
- Fibre cement
- G.R.C. panels
- GRP
- Repaints
- Splashbacks
- Structural steel

Vehicle type
Hardener
Pigmentation
Solvent
Pot life
Mix ratio

Finish

Colour

Dry time (minimum)

Recoat time (minimum)
Primer required
Theoretical coverage
Recommended DFT

Usual no. of coats Abrasion resistance Chemical resistance

Solvent resistance Durability Thinning and clean up

Physical properties

Epoxy reactive acrylic Epoxy co-polymer

Titanium dioxide; micaceous iron oxide

Solvent Aromatic/esters
Pot life 8 hours at 18°C
Mix ratio 4:1 (by volume)

Gloss – solid colours, semi-gloss - silver aluminium White, selected BS2660, BS5252 and Resene Total Colour System, The Range and Metallic Effects

Tack free: 15 minutes at 18°C

Touch dry: 30-60 minutes at 18°C

2 hours at 18°C

Yes, dependent upon substrate.

9 sq. metres per litre at 50 microns DFT

50 microns per coat (can vary according to application method and specification)

1, varies with application method

Very good

Acids - good

Alkalis – suitable for splash areas only.

Poor - metallics.

Very good (when fully cured)

Very good

Resene Thinner No.6 (Pressure pot/airless spray), Resene Thinner No.10 (electrostatic spray)

Performance and limitations

Performance

- 1. Isocvanate free
- When used as the finish over Resene Armourcote 220 (see Data Sheet RA34), same day turnaround of the total system can be achieved.
- 3. Exterior weathering properties are similar to a high quality pure acrylic topcoat
- 4. Overcoat with Resene Uracryl 400 Series UVS clears for improved colour fastness (all metallic finishes), durability, and chemical resistance. Allow Resene ArmourX IF 503 base colour to cure for a minimum of 48 hours with good ventilation before applying the Resene Uracryl 400 Series UVS clear.

Limitations

- 1. In environments where maximum chemical and solvent resistance is required the use of two-component epoxies or polyurethanes is recommended.
- 2. Not recommended for prolonged immersion in fresh or saltwater or solvents.
- 3. Full cure may take up to seven days depending upon environmental conditions. In early stages or curing, film may be susceptible to mechanical damage.
- Suitable for brush or roller application on small areas only.
- Not recommended for direct application to Resene ArmourX Adhesion Primer (see Data Sheet RA31), Resene Armourcote 210 (see Data Sheet RA35) or inorganic zinc rich primers.
- 6. Discolouration of the paint may occur if localised heating of the glass face exceeds 90 degrees Celsius.

Please ensure the current Data Sheet and Safety Data Sheet are consulted prior to specification or application of Resene products. View Data Sheets online at www.resene.com/datasheets. If in doubt contact Resene.

ArmourX IF 503 acrylic epoxy gloss/metallics

Surface preparation

All surfaces

Coating performance is, in general, proportional to the degree of surface preparation. Refer to relevant Technical Data Sheet for the specific primer being used. Prior to coating, primed surface must be clean, dry, undamaged, and free from all contaminants including salt deposits

Aluminium

Remove oil or grease film with neutral detergent wash or emulsifiable solvent cleaner. Rinse well with freshwater and allow to dry. Apply Resene Armourcote 220 (see Data Sheet RA34).

Cementitious surfaces

Ensure substrate is cured and free from dust, oil, grease and mould, release agents, and dust. Fill bug holes, voids, and other surface imperfections with Resene Epox-O-Bond Epoxy Filler (see Data Sheet D808) prior to application of priming/basecoat systems.

Fibreglass

Remove mould/release agents by appropriate means. Sand carefully with fine abrasive paper to a dull flat finish and dust off. Fair with Resene Epox-O-Bond Epoxy Filler (see Data Sheet D808) if necessary.

Repaints

All surfaces must be clean, sound, free from chalking, flaking paint, dirt, mould or grease. Feather back damaged coatings to a sound edge. Spot prime bare areas with the recommended substrate primer. All corrosion on metals should be treated to suit the primer selected. Apply a test patch to confirm

Steel

Degrease according to SSPC SP1 solvent cleaning. Round off all rough welds and sharp edges and remove all weld spatter and fluxes. Abrasive blast clean to SSPC SP10 (Sa 2.5). Blast to achieve a 25-50 micron anchor profile and apply appropriate Resene Zincilate (see Data Sheets RA20 and RA22) or Resene Armourcote priming/basecoat system (see Data Sheets RA34, RA35, RA36).

Residues and dust from old paint systems containing lead or chromate may be dangerous to the health of the operator and the environment. Ensure approved procedures are put in place to safeguard against this.

Application

Mixing: Stir base container using an explosion-proof mixer. Add total contents of the hardener container to the total contents of the base container. Power mix using an explosion-proof mixer and continue stirring until uniformly blended. Allow mixed product to stand for 15-20 minutes before using.

Thinning: Not normally required for airless spray application. If required thin judiciously to improve workability with Resene Thinner No.6. For pressure pot application thinning with up to 10% Resene Thinner No.6 may be required. Any addition of thinner should only be made after the two components are thoroughly mixed. Excess thinning will reduce wet film thicknesses and result in settling of metallic pigments in metallic colours. Settling of metallic pigments will result in colour differences during application.

Application – airless spray: Standard equipment with a minimum flow rate of 3 litres per minute, 3/8" hisolid hose and 60 mesh filters and a 17-19 thou tip. Application using airless spray equipment is not recommended for Resene ArmourX IF 503 Metallic colours.

Application – electrostatic: Apply using a Graco 233-7477 spray pump of similar equipment with hopper. Thin mixed product with a maximum of 10-15% Resene Thinner No.10 (excess thinning will reduce wet film thickness and cause runs). Spray pressure at the pump should be between 275-380 kPa (40-55 psi). Ensure items to be sprayed are earthed correctly and allow a minimum distance of 2 metres between items being painted to avoid dry spray on finished items.

Application - pressure pot: Apply using a quality pressure pot and gun with a hi-solid fluid hose and a 1.7-2.2mm needle. Agitate the pot when spraying metallic colours to maintain colour consistency. Apply the coating with a 65-70% overlap to achieve an even wet film thickness at the spreading rate required to achieve the specified dry film thickness.

Safety precautions

Consult Safety Data Sheet for this product prior to use. Users should ensure that they are familiar with all aspects concerning safe application of this product. IF IN DOUBT, DO NOT USE THIS PRODUCT.

Please ensure the current Data Sheet is consulted prior to specification or application of Resene products. View Data Sheets online at www.resene.com/datasheets. If the surface you propose to coat is not referred to by this Data Sheet, please contact Resene for clarification.