DECICOAT™ P60

Decicoat P60 range is a high-performance, fast drying, water-based intumescent coating specially formulated for application on metal structures to provide fire protection.

WORK HEALTH AND SAFETY

Gloves, protective goggles, respiratory protective equipment, protective clothing and any other appropriate safety equipment based on local health & safety requirements and safe work practice must be worn by the applicator.

KEY INSTALLATION REQUIREMENTS

Surface Preparation

This product is specially formulated to provide high adhesion to difficult substrates such as uncoated aluminium, however adequate surface preparation is essential.

- Remove any dust, dirt, oil, grease, rust, mould-release agent, etc. from the surface using a suitable solvent.
- Abrading the surface by wire brushing, sandblasting or abrasive paper is recommended for highly polished surfaces.
- On steel substrates, surface priming is recommended to prevent flash rusting.

METHODS OF APPLICATION

Decicoat P60 can be applied using the following methods:

- **Trowel:** Simply apply and smooth as required.
- **Brush:** For brush applications, we recommend adding 0.3% of water by weight per kg of product. This will assist in easier and smoother application. Use a wide 100 mm (3.9 in) thick nylon bristle brush. Keep brush well loaded with Decicoat P60 and use short strokes, applying a thick coat of approximately 2 mm (0.08 in). Avoid "painting" back and forth as this will cause the coat to become too thin.
- **Air-assisted and airless spray systems:** Please see page 3 for the recommended spray system for the application of Decicoat P60 range.

Trowel Brush Spray

Decicoat P60 is a water-based, spray-on intumescent coating engineered to prolong the structural integrity of substrates.

The product is designed to be installed in industries such as rail, offshore, marine, and automotive.

applications

- Rail: locomotive and passenger rolling stock (interiors, floors, cabin)
- Industrial: underside of metal deck roofing and metal wall cladding
- Offshore platforms: interior structures of habitable areas
- Automotive: heavy vehicles, buses, trailers, and tractors
- In conjunction with traditional fibrous insulation

Ensure proper preparation, mixing and application for best results. Decicoat P60 range should always be applied to surfaces that are clean, dry and free of contaminants.

MIXING & APPLICATION

- Mix thoroughly before application using a ribbon or paddle mixer as shown. The product should be mixed until it is a smooth, creamy consistency.
- If required, the viscosity of the product can be altered by the addition of 0.3% of water by weight per kg of product.
- Apply above ambient temperatures of 10 °C (50 °F).

APPLICATION RATE & COVERAGE

- Application of 1.9 mm (0.07 in) will dry to 1.5 mm (0.06 in) DFT, which will provide >120 minutes of fire protection to aluminium of 4 mm (0.16 in) minimum thickness.
- Can be applied up to 3 mm (0.12 in) wet film, to achieve approximately 2.4 mm (0.1 in) dry film thickness (DFT) per coating session without slumping.
- To achieve a desired dry film thickness, provision for material shrinkage of up to 20% on average should be included when applying wet coating.
- Use of a tack coat is recommended (0.5 mm (0.02 in) first coat).
- It is important to apply evenly to ensure proper curing and reduce waste.
- Use of thermometer, hygrometer or humidity meter is recommended for monitoring application conditions. High-temperature or low humidity conditions may lead to crack formation.
- Surface defects can be avoided by reducing applied wet film thickness to accommodate poor application conditions.
- Cracked coating can be remedied by application of an additional coat applied to the affected area.
- Excessively cold or high humidity conditions may lead to sagging. Assisted drying may be required.
- Ensure application is adequately dry before additional coating is added.
- Lower WFT application will have a faster drying time and will allow for a quicker re-coat time.
- The final thickness of the application will vary based on your requirement.

Refer to specifications of the particular installation to ensure the correct DFT is installed:

- Verification testing with specific parameters such as the thickness of other insulation used, specific structural load requirements, installed thickness, substrates thickness or impact of the end-user environment is recommended.

DRYING AND CURING

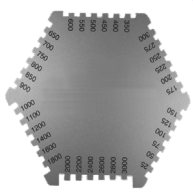
- For best results, allow the compound to dry naturally. Forced drying may result in cracking of the coat.
- In cold conditions, the substrate can be warmed to aid drying.
- Forced ventilation can be used to help coating dry. Air movement should be both in/out during drying process.
- It is recommended before install that a small section of the area is applied with the product to test and determine the adequacy of drying conditions.

Drying time of 2 mm (0.079 in) coating	
Initial drying	3 to 4 hours
Completely dry	24 to 72 hours

Please note: drying and curing times are only general guides. Testing should be performed by the end user, as end-use conditions (thickness of application, substrate type, temperature and humidity) will affect drying times.

WET GAUGE FILM THICKNESS CHECK

To ensure the correct film build is achieved, a wet film gauge can be used (as shown on the right).



RECOMMENDED SPRAYING SETUPS

Below displays typical configurations - other configurations and settings can also be suitable

	Airless Spray System		Air-Assisted Spray System	
	Graco Xtreme 70:1 pneumatic pump	Wagner ProSpray 3.39	Pneumatic piston pump	Bottom entry pressure pot
Gun type	XTR-7 airless spray guns	Wagner Vector Pro or Grip airless gun	GNG/T3005 texture gun, bottom entry	GNG/T3005 texture gun, bottom entry
Operating line pressure *"Hose pressure rating to match requirement of pump"*	Typically 155 bar (2250 psi). Higher pressure required for longer hose lengths	Up to 230 bar (3335 psi)	Max. 30 bar (440 psi)	Max. 4 bar (60 psi)
Length of hose from pump to gun	15 m (49.2 ft)	15m (50 ft)	Up to 30 m (98.4 ft)	5 to 20 m (16.4 to 65.6 ft)
Diameter of hose	9.5 mm ID (3/8 in)	12.5 mm (½ in)	19 mm ID (3/4 in)	19 mm ID (3/4 in)
Whip	0.5 m (1.6 ft) whip 6 mm (0.24 in) hose *Higher pressure required when whip used*	1 m x 9.5 mm (3.3 ft x 3⁄8 in.)	-	-
Diameter of nozzle	0.6 to 0.7 mm (0.023 to 0.029 in) (Reversible tip 423 to 429)	Reversible tip: 0.43 to 0.74 mm (0.017 to 0.029 in.)	2 mm (0.08 in)	2 mm (0.08 in)
Pump type	Ratio 70:1 piston pump	2.68 kW rated brushless DC motor	Ratio: 4:1 or greater Flow: 3 L/min (0.8 gal/min) 2-ball piston pump	20 litre (5.3 gal) bottom entry pressure pot
Air pressure requirement	2 to 5 bar (30 to 70 psi)	Site-air not required	Up to 7 bar (100 psi)	Pressure in gun: up to 6 bar (85 psi) Pressure in pot: max 4 bar (60 psi)

PRODUCT INFORMATION

Product	Decicoat P60
Weight kg/m²/mm	1 kg/m²/mm DFT
Consumption for 1 mm (0.04 in) DFT *Includes allowance for up to 20% material shrinkage*	1.4 kg/m²
1mm DFT (dry film thickness) coverage using 20kg pail	14 m²

Substrates: Can be used on steel and aluminium.

Shelf life and Storage:

- 12 months from receiving goods (when stored under recommended conditions).
- Product to be stored and transported between 10 and 45 °C (50 to 113 °F). **Do not allow to freeze.**
- Partially used pails of the product can be reused if sealed firmly after first use.
- The opened product should be resealed and used within 2 months. Frequent opening of the seal must be avoided.

Clean up and Safety:

- Equipment easily cleaned with water
- Personal Protection Equipment (PPE) including eye protection, gloves and safety clothing are highly recommended.

Please contact Pyrotek® for further information or detailed advice on your specific application.

GRACO XTREME 70:1 PNEUMATIC PUMP

XTR-7 Airless Spray Gun

GNG/T3005 Texture Gun Bottom Entry

Bottom Entry Pressure Pot

ProSpray 3.39