

DECICOAT™ T35

This installation guide provides recommendations to maximise the service life in various applications. Decicoat™ T35 is a water-based thermal insulation compound that is simple to apply using a range of spray systems.



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 T35 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 T35 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 T35 range.

Trowel



Brush



Spray



Decicoat T35 is a water-based spray-on thermal coating specially formulated to provide an anti-condensation solution.

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 T35 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.
- The pail can be placed upside down for 24 hours before use or opening to make mixing easier.
- Apply above ambient temperatures of 10 °C (50 °F).
- If required, the viscosity of the product can be altered by a maximum of 2% addition of water. Application testing performed under end-use conditions is required for water additions greater than 2%.

APPLICATION RATE & COVERAGE

- The minimum dry film thickness (DFT) should be 0.5 mm (0.02 in).
- A DFT of 2 mm (0.08 in) is recommended when applied to a system.
- Each coating should be 0.5 mm (0.02 in) to 1 mm (0.04 in) thick.
- Installation on maritime vessel to be done at recommended nominal thickness of 2.5 mm (0.1 in) DFT. Approved for use as paint systems on a metallic substrate with thickness of at least 2.25 mm (0.09 in).
- Additional thickness can be applied to achieve the desired result. The final thickness of the application will vary based on your requirement.
- When applied, thicker applications (as a single coat) are possible but will require longer drying time.
- To achieve the desired dry film thickness, provision for material shrinkage of up to 10% on average should be included when applying the wet coating.
- Use of a tack coat is recommended for the first 0.5 mm (0.02 in) coating.
- It is important to apply evenly to ensure proper curing and to 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 (WFT) to accommodate poor application conditions.
- A 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 any additional coating is added.
- Lower WFT application will have a faster drying time and will allow for a quicker recoat time.



DRYING AND CURING

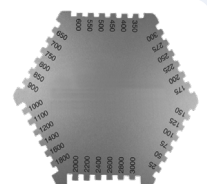
- For best results, allow the compound to dry naturally. Forced drying may result in cracking of the coat.
- In cold conditions, the substrate can be warmed to aid drying.
- Forced ventilation can be used to help coating dry. Air movement should be both in/out during drying process.
- It is recommended 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	
Initial drying 1 mm	1 hour
Initial drying 2 mm	4 to 6 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	Pneumatic piston pump	Bottom entry pressure pot	Graco RTX1500 electric pump
Gun type	XTR-7 airless spray guns	GNG/T3005 texture gun, bottom entry	GNG/T3005 texture gun, bottom entry	RTX1500 heavy duty trigger gun
Line pressure	Typically 138 to 207 bar (2000 to 3000 psi). Higher pressure required for longer hose lengths	Max. 30 bar (440 psi)	Max. 4 bar (60 psi)	Max. 7 bar (100 psi)
Length of hose from pump to gun	30 m (98.4 ft)	Up to 30 m (98.4 ft)	5 to 20 m (16.4 to 65.6 ft)	7.5 m (24.6 ft)
Diameter of hose	9.5 mm ID (3/8 in)	19 mm ID (3/4 in)	19 mm ID (3/4 in)	19 mm ID (3/4 in)
Diameter of nozzle	0.5 to 0.7 mm (0.019 to 0.029 in) (Reversible tip 419 to 429)	2 mm (0.08 in)	2 mm (0.08 in)	2 mm (0.08 in)
Pump type	Ratio 70:1 piston pump	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	Peristaltic
Air pressure requirement	2 to 5 bar (30 to 70 psi)	Up to 7 bar (100 psi)	Pressure in gun: up to 6 bar (85 psi) Pressure in pot: max 4 bar (60 psi)	Air compressor included in unit

PRODUCT INFORMATION

Product	Decicoat T35
Weight	0.39 kg/m ² /mm DFT
Consumption for 1 mm (0.04 in) DFT <i>Includes allowance for up to 20% material shrinkage</i>	1.1 L/m ²

Substrates: Can be used on steel and aluminium.

Shelf life and Storage:

- 24 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



RTX 1500

