Temacoat RM 40

DESCRIPTION

A two-component, resin modified epoxy paint.

PRODUCT FEATURES AND RECOMMENDED USES

- A universal primer, a single-coat paint and a topcoat. The product has good adhesion to steel, zinc and aluminium surfaces exposed to severe abrasion or chemical stress
- Suitable for concrete surfaces and has a CE marking. CE marking is not valid when Hardener 008 5602 is used
- Can be used on steel structures in wet environment, e.g. inside pontoons, ballast-water tanks and ship hulls. Other usage areas are steel constructions in underground and underwater applications and surfaces exposed to severe splashing. Not suitable for swimming pools
- Resistant to grey/waste water when applied 2x125µm
- Recommended for building frameworks, tubular bridges, conveyors, ship hulls and other steelwork and equipment

TECHNICAL DATA

Volume solids

65±2% (ISO 3233)

Weight solids

77±2%

Specific gravity

1.2–1.3 kg / l (mixed)

Mixing ratio

Base	4 parts by volume	Temacoat RM 40
Hardener	1 part by volume	008 5600, 008 5602* or 008 5605 (fast)

*sold only in China

Pot life (+23°C)

8 hours with Hardener 008 5600 or 008 5602
4 hours with Hardener 008 5605

Recommended film thicknesses and theoretical coverage

Recommended film thicknesses		Theoretical coverage
wet	dry	
125µm	80µm	8.1 m²/l
195µm	125µm	5.2 m²/l

Practical coverage depends on the application method, painting conditions and the shape and roughness of the surface to be coated.

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Drying time

DFT 100µm		+5ºC	+10ºC	+23ºC	+35ºC
Dust dry, after	with Hardener 008 5600 or 008 5602	12h	7h	3½h	1h
	with Hardener 008 5605	6h	4h	2½h	45min
Touch dry, after	with Hardener 008 5600 or 008 5602	18h	12h	5h	3h
	with Hardener 008 5605	10h	7h	4h	2½h
Recoatable, min. after	with Hardener 008 5600 or 008 5602	18h	12h	4h	2h
	with Hardener 008 5605	10h	7h	3h	1½h
Recoatable, surfaces to be submerged, min. after	with Hardener 008 5600 or 008 5602	2d	36h	16h	8h
	with Hardener 008 5605	1½d	18h	12h	6h
Recoatable with polyurethane paints, min. after	with Hardener 008 5600 or 008 5602	3d	48h	24h	12h
	with Hardener 008 5605	1½d	24h	16h	8h

Drying and recoating times are related to the film thickness, temperature, the relative humidity of the air and ventilation.

Gloss

Semi-gloss.

Color shades

RAL, NCS, SSG, BS, MONICOLOR NOVA and SYMPHONY colour cards. Temaspeed Premium tinting.

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APPLICATION INSTRUCTIONS

Surface preparation

Oil, grease, salts and dirt are removed by appropriate means. (ISO 12944-4)

Steel surfaces: Blast clean to grade Sa2½. (ISO 8501-1) If blast cleaning is not possible, phosphating is recommended for cold rolled steel to improve adhesion.

Zinc surfaces: Sweep blast clean with mineral abrasives, e.g. quartz sand, to an even roughness. (SaS, SFS 5873) If sweep blasting is not possible, the surface should be roughened by hand abrading or washed with Panssaripesu detergent. For hot dip galvanized surfaces see separate application instructions or contact Tikkurila Technical Service.

Aluminium surfaces: Sweep blast clean with non-metallic abrasives to an even roughness. (SaS, SFS 5873) If sweep blasting is not possible, the surface should be roughened by hand abrading or washed with Maalipesu detergent.

Primed surfaces: Oil, grease, salt and dirt are removed from the surface by appropriate means. Repair any damage to the primer coat. Note the overcoating time of primer. (ISO 12944-4)

Concrete surfaces: The surface must dry and at least 4 weeks old. The relative humidity of the concrete should not exceed 97%. Remove any splashes and unevennesses by grinding. Remove laitance and form oil from concrete castings by sanding or blast cleaning. Any cracks, crevices and voids must be repaired with a mixture of Temafloor 200 and fine dry quartz sand.

Application: 2–3 x Temacoat RM 40

Recommended primers

Temacoat RM 40, Temacoat GPL-S Primer, Temacoat GPL-S MIO, Temabond ST 200, Temabond ST 300, Temasil 90, Temazinc 77, Temazinc 99.

Recommended topcoats

Temacoat RM 40, Temadur 10, Temadur 20, Temadur 50, Temadur 90, Temadur HB 50, Temadur HB 80, Temadur HS 90, Temadur SC 20, Temadur SC 50, Temadur SC 80, Temadur SC-F 20, Temadur SC-F 50, Temadur SC-F 80, Temathane 50, Temathane 90, Temathane PC 50, Temathane PC 80.

Application conditions

All surfaces must be clean, dry and free from contamination. The temperature of the ambient air and surface should not fall below +5ºC during application and drying. Relative humidity of the air should not exceed 80% during application and drying. The surface temperature of steel should remain at least 3°C above the dew point.

For proper application the temperature of the product itself should be above +15°C during mixing and application. Good ventilation and sufficient air movement is required in confined areas during application and drying.

Note! There is a natural tendency of this coating to chalk, discolor or yellow unevenly. It is recommended to use polyurethane topcoat when there are high aesthetical requirements on color appearance.

Mixing components

First stir base and hardener separately. The correct proportions of base and hardener must be mixed thoroughly before use. Use power mixer for mixing. Insufficient mixing or incorrect mixing ratio will result in uneven drying of the surface and weaken the properties of the coating.

Application

For airless spraying, the product is thinned approximately 0–20%. Recommended nozzle tip is 0.015"–0.021" and pressure 120–180 bar. Spray angle shall be chosen according to the shape of the object.

For brush application (small areas) the product should be thinned according to the circumstances.

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Thinners	Thinner 1031
Cleaning of equipment	Thinner 1031
VOC	The Volatile Organic Compounds amount is 330 g/litre of paint mixture. VOC content of the paint mixture (thinned 20% by) volume is 430 g/l.
HEALTH AND SAFETY	Containers are provided with safety labels, which should be observed. Further information about hazardous influences and protection are detailed in individual health and safety data sheets. A health and safety data sheet is available on request from Tikkurila Oyj. **For industrial and professional use only.**

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EN 1504-2:2004

The European harmonized productstandard EN 1504-2:2004 defines the requirements for surface protection systems for concrete.

This product is tested and CE-labelled in accordance with the tables 1d, 1f and 1g in the appendix ZA.

CE	
0809	
Tikkurila Oyj Heidehofintie 2 FI-01300 Vantaa	
14	
0809-CPD-0773	
TIK-0161-5001	
EN 1504-2:2004	
Product for protection and repair of concrete structures – Coating.	
Permeability to CO2	s_D > 50 m
Impact resistance	Class I: ≥ 4 Nm
Capillary absorption and permeability to water	w < 0,1 kg/m² · $h^{0,5}$
Abrasion resistance	< 3000 mg
Reaction to fire	F(NPD)
Adhesion strength by pull off test	≥ 2,0 N/mm²
Release of dangerous substances	NPD
Permeability to water vapour	Class II, 5 m< s_D < 50 m
Resistance to severe chemical attack	Class II