

TE50

Temacoat RM 40

The epoxy systems TE50 are recommended for steel, aluminium, zinc and concrete surfaces exposed to abrasion, chemicals, high humidity and climate in indoor and outdoor applications, also for submerged and underground constructions. TEMACOAT RM 40 is available in many colours, also light ones, which makes it easier to follow up the condition of the coating. The systems are suitable for application both in the field and in painting shops.

Corrosivity categories/durability according to ISO 12944	Tikkurila code	Treatment
Steel surfaces		
Corrosivity categories C1, C2 Steel constructions exposed to mild condensation in cold indoor spaces and outdoors in clean rural environment. According to SFS 5873, system F20.04.	TE50 TEMACOAT RM 40	EP100/1-FeSa$\frac{1}{2}$ DFT <u>100 μm</u> 100 μ m
Corrosivity categories/durability C2-M, C3-L Steel constructions exposed to mild condensation in cold indoor spaces and outdoors in clean rural environment.	TE50 TEMACOAT RM 40 TEMACOAT RM 40	EP120/2-FeSa$\frac{2}{2}$ 80 μ m <u>40 μm</u> DFT 120 μ m
Corrosivity categories/durability C2-H, C3-M Steel constructions exposed to mild condensation in cold indoor spaces and outdoors in clean rural environment.	TE50 TEMACOAT RM 40 TEMACOAT RM 40	EP160/2-FeSa$\frac{2}{2}$ 80 μ m <u>80 μm</u> DFT 160 μ m
Corrosivity categories/durability C3-H, C4-M Steel structures in damp environment.	TE50 TEMACOAT RM 40	EP240/3-FeSa$\frac{2}{2}$ DFT <u>3 x 80 μm</u> 240 μ m
Corrosivity categories/durability C4-H Steel structures in damp environment, e.g. inside of pontoons, ballast water tanks.	TE50 TEMACOAT RM 40 TEMACOAT RM 40	EP280/3-FeSa$\frac{2}{2}$ 80 μ m <u>2 x 100 μm</u> DFT 280 μ m
Corrosivity categories/durability Im1-M, Im2-M, Im3-M Steel constructions in underground and underwater applications and surfaces exposed to severe splashing.	TE50 TEMACOAT RM 40 TEMACOAT RM 40	EP380/3-FeSa$\frac{2}{2}$ 80 μ m <u>2 x 150 μm</u> DFT 380 μ m
Marking of paint systems: TE50-SFS 5873/ F20.04 (EP100/1-FeSa$\frac{2}{2}$)		

Aluminium surfaces

Corrosivity categories C2, C3, C4, Im1, Im2, Im3 Aluminium surfaces exposed to water immersion and splashing. E.g. bottoms of aluminium vessels.	TE50 TEMACOAT RM 40	EP250/2-AISaS DFT <u>2 x 125 μm</u> 250 μ m
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Zinc surfaces

A7.11 Corrosivity categories/durability C4-H, C5-I-M, C5-M-M Zinc surfaces indoors exposed to mechanical abrasion and outdoors exposed to moderate climatic conditions.	TE50 TEMACOAT RM 40	EP160/2-ZnSaS DFT <u>2 x 80 μm</u> 160 μ m
Corrosivity categories C2, C3, C4, Im1, Im2, Im3 Zinc surfaces in underwater and underground applications.	TE50 TEMACOAT RM 40	EP250/2-ZnSaS DFT <u>2 x 125 μm</u> 250 μ m
A7.13 Corrosivity categories/durability C4-H, C5-I-H, C5-M-H Zinc surfaces outdoors in urban, maritime and industrial environment with high demands on aesthetics and resistance.	TE50 Temacoat RM 40 Temacoat RM 40	EP320/3-ZnSaS 1 x 80 μ m <u>2 x 120 μm</u> DFT 320 μ m

COLOURS

The product is tintable with TEMASPEED colorants, thus ensuring the possibility to get shades from RAL-, BS-, NCS- and other colour cards.

SUITABLE SHOP PRIMERS

TEMABLAST EV 110, epoxy shop primer.
TEMAWELD ZSM, zinc silicate

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.

Hot dip galvanized surfaces are recommended to be painted with a misty coat (paint thinned 25-30%) before the actual priming.

Damages in the zinc coating have to be repaired with TEMAZINC 99, a zinc rich epoxy paint. Before painting, clean the surfaces thoroughly (Sa2½/St3) and level off the edges around the cleaned areas.

Aluminium surfaces:

Sweep blast-clean with none-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.

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 CONDITIONS

The surface must be clean and dry and the surface temperature should remain at least 3°C above the dew point. During application and drying the temperature of the air, paint and surface should be a minimum of +10°C. The relative humidity should not exceed 80 %.

Note! There is a natural tendency of epoxy coatings to chalk and discolor on exterior exposure

APPLICATION

The paint should be mixed thoroughly before application and then applied in an even coat on the dry and clean surface. Application with airless or conventional spray, brush or roller. Stripe coating of sharp edges, welding seams etc. should be done by brush or roller.

MAINTENANCE PAINTING**Maintenance**

Touch-up painting is sufficient for maintenance when the rust grade is Ri1–Ri3. (ISO 4628-3)

Damages caused by transport or installation may also be repaired by touch-up painting. Remove all loose paint, clean rusty areas according to system demands. On steel surfaces small areas can be grinded or wire brushed to preparation grade St2. (SFS-ISO 8501-1)

Level off the edges between the old paint film and the cleaned up areas. When using blast cleaning, be sure that there are no cracks in the remaining paint film. If the entire surface has to be overcoated, abrade the old topcoat to a rough finish. Remove all dust and other cleaning residues. Apply primers and finish according to the original paint system, qualities and film thicknesses.

Repainting

When the rust grade is Ri4 or Ri5, the entire coating must be renewed. Remove the old paint film and clean the surfaces to preparation grade Sa2½. Recoat in accordance with the original paint system.

PRODUCT INFORMATION

More detailed product information is available in respective data sheets.

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