



# NETWORK RAIL                      Specification

## Maintenance Work                M24

### PROTECTIVE TREATMENT M24/014: Surface Tolerant Epoxy Protective System

#### FOR THIS ENVIRONMENT:

<i>Surface Tolerant Epoxy Paint System:</i>	C2, C3, C4, C5-I, C5-M (BS EN ISO 12944-2)
<i>Life to First Major Maintenance:</i>	Up to 25 years (Sa2½) Up to 15 years (St3)

#### SPECIFICATION:

<i>Surface Preparation:</i>	<b>Prepare any areas of breakdown by abrasive blast-cleaning to Sa2½ surface standard or by mechanical methods to St3 surface standard (BS EN ISO 8501-1). Wash down and abrade sound existing paintwork.</b>		
<i>Coat</i>	<i>Material</i>	<i>mdft (µm)</i>	<i>Applied</i>
<b>Primer</b>	<b>Macropoxy™ M902 Winterfast Hi-Build Brushing Aluminium</b>	<b>100</b>	<b>Site</b>
<b>Intermediate</b>	<b>Macropoxy™ M905 Winterfast Hi-Build Undercoat</b>	<b>100</b>	<b>Site</b>
<b>Finish</b>	<b>Acrolon™ C137V2 Special Finish</b>	<b>50</b>	<b>Site</b>

#### PADS Reference: 028/980097

#### Notes on this Specification:

Grit abrasives to be used unless otherwise specified.

Soluble salts on the surface to be painted must be less than 4.0 µg/cm<sup>2</sup>.

All film thicknesses shown are minimums.

Where a stripe coat is specified a coat of Macropoxy™ M905 should be applied at 75µm mdft between coats 1 and 2.

This protective system is suitable for steelwork in sub-surface locations. It satisfies London Underground's fire performance in terms of smoke and toxic fume emission, surface spread of flame and fire propagation.

It may be necessary to apply more than one coat of finish for certain colour shades (e.g. some pastel shades and bright strong colours). All materials should be obtained from Sherwin-Williams and must be applied in accordance with the relevant Technical Data Sheet.

This Specification is specifically subject to the disclaimer which can be found at <http://protectiveemea.sherwin-williams.com/Home/Disclaimer>



### Repair Work to Damaged Areas and those Masked by Scaffold:

All points of damage incurred at any stage of the work, including any site welding and areas masked by scaffold, should receive remedial preparation and painting equivalent to the specified protective system.

Damaged paintwork should be prepared back to a feathered edge of sound paint. This area, together with a further 50mm into the adjacent areas of sound paintwork, should be appropriately prepared and cleaned down. All paint coats should be applied such that the edges of the sound protective system are enveloped.

NATURE OF DAMAGE	REMEDIAL TREATMENT
Damage to top coat only	Lightly abrade and clean down all areas to receive paint. Carefully touch in with one coat of Acrolon™ C137V2 Special Finish to give a minimum dry film thickness of 50µm.
Damage to top coat, undercoat or existing alkyd paint	Prepare as above and carefully touch in with one coat of Macropoxy™ M905 Winterfast Hi-Build Undercoat to give a minimum dry film thickness of 100µm and one coat of Acrolon™ C137V2 Special Finish to give a minimum dry film thickness of 50µm.
Damage back to bare metal	Areas of exposed metal should either be abrasive blast-cleaned to an Sa2½ surface standard (BS EN ISO 8501-1) or hand/power tool cleaned to an St3 surface standard (BS EN ISO 8501-1). Touch in bare metal areas with one coat of Macropoxy™ M902 Hi-Build Brushing Aluminium to give a minimum dry film thickness of 100µm. Apply one coat of Macropoxy™ M905 Winterfast Hi-Build Undercoat to give a minimum dry film thickness of 100µm and one coat of Acrolon™ C137V2 Special Finish to give a minimum dry film thickness of 50µm.

### Product Information:

The following products are components of Network Rail Protective System M24, and are relevant to Sherwin-Williams Registration Certificate Reference M24/014. These should be used in accordance with the appropriate Product Data Sheets and Network Rail Guidance Note NR/GN/CIV/002: The Use of Protective Coatings and Sealants.

Item No.	Product Description	Volume Solids (%)	WFT (microns)	DFT (microns)	Theoretical Coverage (m²/ltr)	Minimum Overcoating Time (20°C)
7.1.5	Macropoxy™ M902 Winterfast Hi-Build Brushing Aluminium	75	133	100	7.5	4½ hrs
7.1.7	Macropoxy™ M905 Winterfast Hi-Build Undercoat	75	133	100	7.5	4 hrs
7.3.1	Acrolon™ C137V2 Special Finish	54	93	50	10.8	7 hrs

N.B The above table is for guidance only. Refer to the appropriate technical data sheet for more detail.