

SEALERS FOR THERMAL SPRAY METALIZING

THERMAL SPRAY METALIZING is a process where metallic particles are thermally sprayed onto an abrasive-blast cleaned steel surface to enhance corrosion protection. The resulting surface is coarse, uneven and exhibits a high profile. Owners will often require the application of a sealer to protect the metalized surfaces for long-term atmospheric protection.

The seal coat is designed to penetrate and cover the peaks and valleys of the coarse metalized surface while maintaining some degree of profile. This promotes adhesion of subsequent topcoats and helps minimize outgassing, ensuring a more durable and uniform finish system.

RECOMMENDED SEALERS

METHOD	MACROPOXY® 920/5000	ARMORSEAL REXTHANE	MACROPOXY® 646 FAST CURE EPOXY	ACROLON METALIZING SEALER
REX	B58T101/B58V10	B65C60	B58-600/B58V600	B65C670/B65V670
TECHNOLOGY	100% Solids Epoxy	Moisture Cured Urethane	Epoxy	Aliphatic Urethane
COMPLIANCE*	OTC I, II, SCAQMD Rule 1113	OTC I	OTC I, II	OTC I, II, SCAQMD/Rule 1113
COLOR	Clear/Amber	Clear	Pigmented	Clear
RECOMMENDED SPREADING RATE				
WFT	1.5-2.0 mils 35-50 microns	1st Coat: mist with 20 min Flash 2nd coat: 3.0-4.5 mils 75-115 microns	1st Coat: mist with 30 Min Flash 2nd coat: 2.8-4.0 70-100 microns	1st Coat : mist coat with 20 min flash 2nd Coat: 2.0-6.0 mils 51-153 microns
DFT	1.5-2.0 mils 35-50 microns	2.0-3.0 + mist coat 50-75 microns	2.0-3.0 + mist coat 50-75 microns	1.8-5.5 DFT 46-140 microns
COVERAGE	800-1050 sq ft/gal 19.6-25.2 m ² /L	350-537 sq ft/gal 8.6-13.1 m ² /L	385-575 sq ft/gal 9.4-14.1 m ² /L	267-802 sq ft/gal 6.55-19.68 m ² /L
REDUCTION	Not recommended	Mist coat: 30% with R7K100 Seal coat: 10% with R7K100	Mist coat: 20% with R7K15, R7K111 Seal coat: not required	Mist coat: Up to 15% with R7K111, R7K58 Seal coat: Up to 10% with R7K111, R7K58
DRY SCHEDULE	@ 77°F (25°C) 50% RH – OTHER TEMPERATURES AS LISTED ON PRODUCT DATA SHEET			
WFT	2 mils wet	3 mils wet	4 mils wet	4 mils wet
TO TOUCH	9.5 hours	2 hours	1 hour	2 hours
TACK-FREE	17 hours	24 hours	4 hours	6.5 hours
RECOAT MIN	12 hours	9 hours	4 hours	4 hours
RECOAT MAX	30 days	14 days	1 year	Up to 24 hours

*State compliance rules:
 OTC I - <420 g/L VOC
 OTC II - <250 g/L VOC
 SCAQMD Rule 1113 - <100 g/L VOC

ADDITIONAL ACCEPTABLE FINISH COATS

Consult with your Sherwin-Williams representative for additional information on compliant systems.

Macropoxy 646 Fast Cure Epoxy	Acrolon™ 218 HS	Hi-Solids Polyurethane	Sher-Loxane™ 800
Steel-Spec Epoxy Intermediate	Acrolon™ Ultra	Hi-Solids Polyurethane 250	EnviroLastic™ 940LV

The products listed above meet the requirements of SSPC-CS23.00/AWSC2.23 NACE No. 12

When used as sealers, these thin layers of coating penetrate and are absorbed into the pores of the thermal spray metalizing. Thermal spray metalizing has porosities ranging up to 15%. “Interconnected” porosities may extend from the surface to the substrate. Sealing the metalizing extends the service life. The seal coat shall be thin enough to penetrate into the body of the metalizing and seal the interconnected surface porosity. Typically, the seal coat is applied at a spreading rate resulting in a theoretical 1.5-2.0 mils dry film thickness.

A job reference “standard” is recommended to be completed utilizing the entire coating system (thermal spray metalizing + sealer + finish coat). The “standard” should be used throughout the project as a comparator to evaluate the suitability of the application process. Consult SSPC-CS23.00 for job reference standard completion instructions.

Other Sherwin-Williams products may be suitable for use as sealers for thermal spray metalizing. Please consult a Sherwin-Williams Representative should other materials be specified.

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Sherwin-Williams Protective & Marine delivers world-class industry subject matter expertise, unparalleled technical and specification service, and unmatched regional commercial team support to our customers around the globe.