

## SELECTION & SPECIFICATION DATA

<b>Type</b>	Polyamide Epoxy
<b>Description</b>	Tower Shield Self-Leveling Epoxy is an epoxy lining that cures underwater and forms a tight bond, even to marginally prepared surfaces and tightly adhered rust. Seal damp cooling tower pans with minimal downtime. Recycled tire rubber fillers and no VOCs give this environmentally friendly, economical alternative to coal tar epoxy superior impact resistance and range of use.
<b>Features</b>	<ul style="list-style-type: none"> <li>• 100% solids, no VOCs</li> <li>• Self-leveling on horizontal surfaces</li> <li>• Suitable for vertical surfaces</li> <li>• Excellent immersion resistance</li> <li>• Surface tolerant/adheres to tightly adhered surface rust</li> <li>• Long-term wear protection</li> <li>• Moisture tolerant/adheres to damp surfaces</li> <li>• Meets AWWA C210 performance requirements</li> </ul>
<b>Uses</b>	<ul style="list-style-type: none"> <li>• Primer</li> <li>• Wet wells, manholes, lift stations</li> <li>• Secondary containment</li> <li>• Multipurpose epoxy</li> <li>• Cooling tower basins</li> </ul>
<b>Color</b>	Light gray, dark gray, red
<b>Finish</b>	Gloss
<b>Dry Film Thickness (DFT)</b>	8 – 12 mils per coat vertical 18 – 24 mil flood coat on horizontals typical
<b>Solids Content</b>	99 – 100% by volume

## SUBSTRATES & SURFACE PREPARATION

<b>All</b>	Substrate must be clean, dry and free of contaminants.
<b>Steel</b>	<p>Immersion: SSPC-SP 10/NACE 2 Near White Metal Blast with angular profile of 2.5 – 3.5 mils.</p> <p>Non-immersion: SSPC-SP 6/NACE 3 Commercial Blast with angular profile of 1.5 – 3.0 mils, SSPC-SP 2 Hand Tool or SSPC-SP 3 Power Tool Cleaning are suitable for mild environments.</p> <p>Self-priming on steel.</p>
<b>Concrete or Concrete Masonry Unit (CMU)</b>	Concrete must be cured 28 days at 75°F (24°C) and 50% relative humidity or equivalent. Prepare surfaces in accordance with SSPC-SP 13/NACE 6. Required surface profile is CSP 3-5. Voids in concrete surfaces may require filling. Mortar joints should be cured a minimum of 15 days. Prime with Novocoat SC1100 Primer/Sealer.
<b>Previously Painted Surfaces</b>	Consult with Universal Tower Parts.

## MIXING & THINNING

<b>Mixing</b>	Power mix separately, then combine and power mix. Do not mix partial kits.
<b>Thinning</b>	Brush: Up to 16 oz/gal (12%) with Novocoat TH1710 Thinner Roller: Up to 16 oz/gal (12%) with Novocoat TH1710 Thinner
<b>Pot Life</b>	8 hours 20 minutes at 41°F (5°C) 2 hours at 77°F (25°C) 50 minutes at 92°F (33°C)
	Pot life is shorter at higher temperatures. A larger volume of mixed material will have a shorter pot life than a smaller volume.
<b>Cleanup</b>	MEK or Acetone

## APPLICATION GUIDANCE

<b>Spray Application</b>	Consult Universal Tower Parts for guidance.
<b>Brush</b>	Medium bristle brush
<b>Roller</b>	Short-nap synthetic roller cover with phenolic core
<b>Squeegee</b>	Single blade neoprene straight squeegee

## SAFETY

<b>Safety</b>	Mixes and applications of this product present a number of hazards. Read and follow the hazard information, precautions and first aid directions on the individual product labels and safety data sheets before using.
<b>Ventilation</b>	Provide thorough air circulation during and after application until the material has cured when used in enclosed areas.

## CURE SCHEDULE & RECOAT WINDOW

TEMPERATURE	MINIMUM RECOAT	MAXIMUM RECOAT	RETURN TO SERVICE (HYDROCARBON IMMERSION)
10°C (50°F)	8 hours	14 days	7 days
25°C (77°F)	4 hours	14 days	72 hours
60°C (140°F)	1 hour	Not recommended	4 hours

Return-to-service varies with chemical exposure. Consult Universal Tower Parts for guidance.



# Tower Shield Self-Leveling Epoxy

## PACKAGING, ESTIMATING & HANDLING

ITEM #	PRODUCT	PACKAGING
M-SP2010-1GLKT-01	Tower Shield Self-Leveling Epoxy, Light Gray Kit Each kit includes:	1 gal (3.7 L) Kit
	- Part A Resin, Light Gray	8.4 lbs (3.8 kg) Pail
	- Part B Hardener	2.2 lbs (0.98 kg) Bottle
M-SP2010-4GLKT-01	Tower Shield Self-Leveling Epoxy, Light Gray Kit Each kit includes:	2.9 gal (11 L) Kit
	- Part A Resin, Light Gray	34 lbs (15 kg) Pail
	- Part B Hardener	8.6 lbs (3.9 kg) Pail
M-SP2020-1GLKT-01	Tower Shield Self-Leveling Epoxy, Light Gray Kit Each kit includes:	1 gal (3.7 L) Kit
	- Part A Resin, Dark Gray	8.4 lbs (3.8 kg) Pail
	- Part B Hardener	2.2 lbs (0.98 kg) Bottle
M-SP2040-1GLKT-01	Tower Shield Self-Leveling Epoxy, Light Gray Kit Each kit includes:	1 gal (3.7 L) Kit
	- Part A Resin, Red	8.4 lbs (3.8 kg) Pail
	- Part B Hardener	2.2 lbs (0.98 kg) Bottle

### Theoretical Coverage

200 square feet per gallon at 8 mils  
66 square feet per gallon at 24 mils  
Allow for loss in mixing and application.

### Storage & Shelf Life

Maintain products in original packaging and sealed until ready for use. Estimated shelf life is 12 months when stored in a dry area at 70°F (21°C). Actual shelf life may vary with storage conditions.

If there is any question with respect to the quality of the components, check reactivity prior to use. For assistance consult with Universal Tower Parts.

## TYPICAL PHYSICAL PROPERTIES

PROPERTY	SYSTEM	VALUE
Dry adhesion ASTM D4541	Blasted steel 1 coat	>2,500 psi
Dry adhesion ASTM D4541	Scuffed FBE 1 coat	>2,000 psi
Wet adhesion ASTM D4541 5 days 158°F (70°C) water	Blasted steel 1 coat	>2,500 psi
Abrasion ASTM D4060 1000 cycles CS17 wheel 1000 gm load	Blasted steel 1 coat	80 mg loss 770 cycles per mil
Compressive strength ASTM C109	Blasted steel 1 coat	10,000 – 13,000 psi
Hardness ASTM D2240	Blasted steel 1 coat	83 – 90 Shore D
Meets the performance requirements of AWWA C210		

## SERVICE TEMPERATURE

SERVICE	MAXIMUM TEMPERATURE
Dry, continuous	220°F (104°C)
Dry, non-continuous	250°F (121°C)

Temperature limitations will vary with chemical exposure. Consult Universal Tower Parts for guidance.

Discoloration and loss of gloss occur above 200°F (93°C) but do not affect performance.

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