TOWER-GUARD™ HS
ZINC FILLED TRANSMISSION TOWER COATING

B54AZ600
GALVANIZED GRAY

PRODUCT INFORMATION

PRODUCT DESCRIPTION

TOWER-GUARD HS is a heavy duty, VOC compliant, high build, long oil/alkyd coating developed specifically for coating transmission towers. Designed for a single coat application that prevents corrosion through the use of metallic zinc dust, excellent wetting properties, and high build properties.

- Corrosion resistant
- Excellent exterior durability
- Brush, roll, or mitt application

PRODUCT CHARACTERISTICS

Finish: Low Lustre
Color: Galvanized Gray
Volume Solids: 89% ± 2%
Weight Solids: 95% ± 2%
VOC (EPA Method 24): Unreduced: 70 g/L; 0.58 lb/gal
Reduced 6%: 112 g/L; 0.93 lb/gal

Recommended Spreading Rate per coat:

<table>
<thead>
<tr>
<th>Wet mils:</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6.75</td>
<td>11.25</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dry mils:</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6.0</td>
<td>10.0</td>
</tr>
</tbody>
</table>

| ~Coverage sq ft/gal: | 145 | 240 |

Recommended Spreading Rate per coat:

Drying Schedule @ 8.0 mils wet @ 50% RH:

<table>
<thead>
<tr>
<th>To touch:</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>@ 50°F</td>
<td>24 hours</td>
<td>12-24 hours</td>
</tr>
<tr>
<td>@ 77°F</td>
<td>48-72 hours</td>
<td>24 hours</td>
</tr>
<tr>
<td>@ 100°F</td>
<td>30 days</td>
<td>7 days</td>
</tr>
</tbody>
</table>

Drying time is temperature, humidity, and film thickness dependent.

Adhesion: ASTM D3359, Method A, 5A, 100% retention
Dry Heat Resistance: ASTM D2485, 200°F, 250°F intermittent
Flexibility: ASTM D1737, 180° bend, 1/8” mandrel, Passes
Salt Fog Resistance: ASTM B117, 700 hours, Passes, rating 9, per ASTM D610

Shelf Life: 12 months, unopened
Store indoors at 40°F to 100°F.
Flash Point: 154°F, Seta Flash
Reducer/Clean up: Mineral Spirits, R1K4

RECOMMENDED USES

For use on weathered galvanized surfaces such as:

- Electrical towers
- Substation towers
- Poles
- Fences
- Duct work
- Grain bin exteriors

PERFORMANCE CHARACTERISTICS

Substrate*: Steel
Surface Preparation*: SSPC-SP6
System Tested*:
- 1 ct. Tower-Guard HS @ 8.0 mils dft

*unless otherwise noted below

Test Name | Test Method | Results
---|---|---
Adhesion | ASTM D3359, Method A | 5A, 100% retention
Dry Heat Resistance | ASTM D2485 | 200°F, 250°F intermittent
Flexibility | ASTM D1737, 180° bend, 1/8” mandrel | Passes
Salt Fog Resistance | ASTM B117, 700 hours | Passes, rating 9, per ASTM D610
Revised: March 03, 2016

**PRODUCT INFORMATION**

**RECOMMENDED SYSTEMS**

<table>
<thead>
<tr>
<th>Surface</th>
<th>Steel:</th>
<th>Dry Film Thickness / ct.</th>
<th>Galvanizing:</th>
<th>1 ct.</th>
<th>Tower-Guard HS</th>
<th>6.0-10.0</th>
<th>1 ct.</th>
<th>Tower-Guard HS</th>
<th>6.0-10.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rust grade 2</td>
<td></td>
<td>2.0-5.0</td>
<td>(50-125)</td>
<td></td>
<td>Kem Bond HS</td>
<td>2.0-5.0</td>
<td></td>
<td>Kem Bond HS</td>
<td>2.0-5.0</td>
</tr>
<tr>
<td>Rust grade 3</td>
<td></td>
<td>6.0-10.0</td>
<td>(150-250)</td>
<td></td>
<td>Tower-Guard HS</td>
<td>6.0-10.0</td>
<td></td>
<td>Tower-Guard HS</td>
<td>6.0-10.0</td>
</tr>
<tr>
<td>Weathered galvanized structures:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transmission towers &amp; poles</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
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<td>Rust grade 2</td>
<td></td>
<td>2.0-5.0</td>
<td>(50-125)</td>
<td></td>
<td>Kem Bond HS (Spot Prime)</td>
<td>2.0-5.0</td>
<td></td>
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<td>2.0-5.0</td>
</tr>
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<td></td>
<td>Tower-Guard HS</td>
<td>6.0-10.0</td>
</tr>
<tr>
<td>Above grade transmission tower legs:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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**SURFACE PREPARATION**

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.

Refer to product Application Bulletin for detailed surface preparation information.

Minimum recommended surface preparation:
- Iron & Steel: SSPC-SP2 or SP3
- Galvanizing: SSPC-SP1

**Surface Preparation Standards**

<table>
<thead>
<tr>
<th>Condition of Surface</th>
<th>ISO 8501-1</th>
<th>Swedish Std.</th>
</tr>
</thead>
<tbody>
<tr>
<td>White Metal</td>
<td>Sa 3</td>
<td>Sa 3</td>
</tr>
<tr>
<td>Near White Metal</td>
<td>Sa 2.5</td>
<td>Sa 2</td>
</tr>
<tr>
<td>Commercial Blast</td>
<td>Sa 2</td>
<td>Sa 2</td>
</tr>
<tr>
<td>Brush-Off Blast</td>
<td>Sa 1</td>
<td>Sa 1</td>
</tr>
<tr>
<td>Hand Tool Cleaning</td>
<td>Rusted</td>
<td>D St 2</td>
</tr>
<tr>
<td></td>
<td>Pitted &amp; Rusted</td>
<td>C St 2</td>
</tr>
<tr>
<td>Power Tool Cleaning</td>
<td>Rusted</td>
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**TINTING**

Do not tint.

**APPLICATION CONDITIONS**

Temperature: 45°F minimum, 100°F maximum (air, surface, and material). At least 5°F above dew point.

Relative humidity: 85% maximum.

Refer to product Application Bulletin for detailed application information.

**ORDERING INFORMATION**

Packaging: 5 gallon containers

Weight per gallon: 16.1 ± 0.2 lb

**SAFETY PRECAUTIONS**

Refer to the MSDS sheet before use.

Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.

**WARRANTY**

The Sherwin-Williams Company warrants our products to be free of manufacturing defects in accord with applicable Sherwin-Williams quality control procedures. Liability for products proven defective, if any, is limited to replacement of the defective product or the refund of the purchase price paid for the defective product as determined by Sherwin-Williams. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY SHERWIN-WILLIAMS, EXPRESSED OR IMPLIED, STATUTORY, BY OPERATION OF LAW OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

**DISCLAIMER**

The information and recommendations set forth in this Product Data Sheet are based upon tests conducted by or on behalf of The Sherwin-Williams Company. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Consult your Sherwin-Williams representative to obtain the most recent Product Data Information and Application Bulletin.

The systems listed above are representative of the product's use, other systems may be appropriate.

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Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.

**Iron & Steel**
Minimum surface preparation is Hand Tool Clean per SSPC-SP2. Remove all oil and grease from surface by Solvent Cleaning per SSPC-SP1. For better performance, use Commercial Blast Cleaning per SSPC-SP6, blast clean all surfaces using a sharp, angular abrasive for optimum surface profile (2 mils). Prime any bare steel within 8 hours or before flash rusting occurs.

**Galvanized Steel**
Allow to weather a minimum of six months prior to coating. Solvent Clean per SSPC-SP1 (recommended solvent is VM&P Naphtha). When weathering is not possible, or the surface has been treated with chromates or silicates, first Solvent Clean per SSPC-SP1 and apply a test patch. Allow paint to dry at least one week before testing adhesion. If adhesion is poor, brush blasting per SSPC-SP7 is necessary to remove these treatments. Rusty galvanizing requires a minimum of Hand Tool Cleaning per SSPC-SP2, prime the area the same day as cleaned.

### Surface Preparation Standards

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<th>Condition of Surface</th>
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<th>SSPC</th>
<th>NACE</th>
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### Application Conditions

- **Temperature:** 45°F minimum, 100°F maximum (air, surface, and material) At least 5°F above dew point
- **Relative humidity:** 85% maximum

### Application Equipment

- **Reducer/Clean Up**: Mineral Spirits, R1K4
- **Spray Application**: Not recommended
- **Brush**: Natural Bristle
  - Reduction: As needed up to 6% by volume
- **Roller**: 3/8” woven with phenolic core
  - Reduction: As needed up to 6% by volume
- **Paint Mitt**: As needed up to 6% by volume

If specific application equipment is not listed above, equivalent equipment may be substituted.

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**APPLICATION PROCEDURES**

Surface preparation must be completed as indicated.

**Mixing Instructions:** Mix paint thoroughly by boxing and stirring before use. Make certain no pigment remains on bottom of can.

Apply paint at the recommended film thickness and spreading rate as indicated below:

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<th><strong>Recommended Spreading Rate per coat:</strong></th>
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<th>Maximum</th>
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<td>Wet mils:</td>
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<td>~Coverage sq ft/gal:</td>
<td>145</td>
<td>240</td>
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**Drying Schedule @ 8.0 mils wet @ 50% RH:**

- @ 50°F: 24 hours, 12-24 hours
- @ 77°F: 3 days, 48-72 hours
- @ 100°F: 30 days

*Drying time is temperature, humidity, and film thickness dependent.*

Application of coating above maximum or below minimum recommended spreading rate may adversely affect coating performance.

**PERFORMANCE TIPS**

Stripe coat all crevices, welds, and sharp angles to prevent early failure in these areas.

Spreading rates are calculated on volume solids and do not include an application loss factor due to surface profile, roughness or porosity of the surface, skill and technique of the applicator, method of application, various surface irregularities, material lost during mixing, spillage, overthinning, climatic conditions, and excessive film build.

Excessive reduction of material can affect film build, appearance, and adhesion.

Do not apply over moisture or at temperatures below 45°F.

Refer to Product Information sheet for additional performance characteristics and properties.

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