



**ArmorSeal**  
**Heavy Duty**  
**Floor**  
**Coatings**

**8.12**

**ARMORSEAL®**  
**TREAD-PLEX™**

**100% ACRYLIC WATER BASED FLOOR COATING**

**B90 SERIES**

**PRODUCT INFORMATION**

Revised 11/06

PRODUCT DESCRIPTION	RECOMMENDED USES																								
<p><b>ARMORSEAL TREAD-PLEX</b> is a general purpose, interior/ exterior, VOC compliant, 100% acrylic, low odor, waterborne floor coating. This dries rapidly to a tough, alkali resistant finish which will withstand hard wear, abrasion, grease, oils, and cleaning equipment.</p> <ul style="list-style-type: none"> <li>• One component</li> <li>• Fast dry</li> <li>• Slip resistant properties</li> <li>• Abrasion resistant</li> </ul> <ul style="list-style-type: none"> <li>• Water clean up</li> </ul>	<p>For use over prepared concrete and wood floors, steps, stairwells, aisleways, or previously painted floor surfaces in sound condition.</p> <ul style="list-style-type: none"> <li>• Laboratories</li> <li>• Light assembly and production areas</li> <li>• Hospitals</li> <li>• Industrial/commercial office areas</li> <li>• Helipads</li> <li>• Not recommended for areas subject to hot tire pickup</li> <li>• Meets ADA requirements for Slip Resistance for floors</li> <li>• Suitable for use in USDA inspected facilities</li> </ul>																								
PRODUCT CHARACTERISTICS	PERFORMANCE CHARACTERISTICS																								
<p><b>Finish:</b> Semi-Gloss</p> <p><b>Color:</b> Wide variety of colors available</p> <p><b>Volume Solids:</b> 43% ± 2%, may vary by color</p> <p><b>Weight Solids:</b> 55% ± 2%, may vary by color</p> <p><b>VOC (EPA Method 24):</b> &lt;100 g/L; .83 lb/gal</p> <p><b>Recommended Spreading Rate per coat:</b></p> <p>Wet mils: 3.5 - 4.5</p> <p>Dry mils: 1.5 - 2.0</p> <p>Coverage: 345 - 460 sq ft/gal approximately</p> <p>Apply by brush or roller only.</p> <p><b>Drying Schedule @ 4.0 mils wet @ 50% RH:</b></p> <table border="1" data-bbox="162 1428 779 1606"> <thead> <tr> <th></th> <th>@55°F</th> <th>@ 77°F</th> <th>@100°F</th> </tr> </thead> <tbody> <tr> <td>To touch:</td> <td>45 minutes</td> <td>30 minutes</td> <td>10 minutes</td> </tr> <tr> <td>To recoat:</td> <td>6 hours</td> <td>4 hours</td> <td>30 minutes</td> </tr> <tr> <td>Foot traffic:</td> <td>18 hours</td> <td>8 hours</td> <td>1 hour</td> </tr> <tr> <td>Heavy traffic:</td> <td>24 hours</td> <td>18 hours</td> <td>6 hours</td> </tr> <tr> <td>To cure:</td> <td>7 days</td> <td>7 days</td> <td>7 days</td> </tr> </tbody> </table> <p>Drying time is temperature, humidity, and film thickness dependent.</p> <p><b>Shelf Life:</b> 24 months, unopened Store indoors at 40°F to 100°F.</p> <p><b>Flash Point:</b> &gt;200°F PMCC</p> <p><b>Reducer/Clean Up:</b> Water</p>		@55°F	@ 77°F	@100°F	To touch:	45 minutes	30 minutes	10 minutes	To recoat:	6 hours	4 hours	30 minutes	Foot traffic:	18 hours	8 hours	1 hour	Heavy traffic:	24 hours	18 hours	6 hours	To cure:	7 days	7 days	7 days	<p><b>System Tested:</b> (unless otherwise indicated) Substrate: Concrete</p> <p>Surface Preparation: Clean, dry, sound 2 cts. ArmorSeal Tread-Plex @ 4.0 mils dft</p> <p><b>Abrasion Resistance:</b> Method: ASTM D4060, CS10 wheel, 1000 cycles, 1 kg load Result: No more than 37 mg loss</p> <p><b>Adhesion:</b> Method: ASTM D4541 Result: 702 psi Method: ASTM D3359 Result: 5A</p> <p><b>Direct Impact Resistance, on steel:</b> Method: ASTM D2794 Result: 30 in. lb.</p> <p><b>Dry Heat Resistance:</b> Method: ASTM D2485 Result: 150°F, intermittent 200°F</p> <p><b>Flexibility:</b> Method: ASTM D522, 180° bend, 1/8" mandrel Result: Passes</p> <p><b>Humidity Resistance:</b> Method: ASTM D4585, 500 hours Result: Rating 10 per ASTM D714 for blistering</p> <p><b>Pencil Hardness:</b> Method: ASTM D3363 Result: F</p> <p><b>Scrub Resistance:</b> (3 mils dft) Method: ASTM D2486, Section 8 Result: Passes 1000 cycles minimum</p> <p><b>Slip Resistance, Floors:</b> Method: ASTM C1028-96, .60 minimum Static Coefficient of Friction Result: Passes wet and dry, with and without SharkGrip Additive</p> <p><b>Wet Adhesion:</b> (one coat @ 2.0 mils dft) Method: TT-P-1511A, 6000 cycles Result: Passes</p>
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**PRODUCT INFORMATION**

RECOMMENDED SYSTEMS	SURFACE PREPARATION
<p><b>Concrete Floors:</b>            2 cts. ArmorSeal Tread-Plex @ 1.5 - 2.0 mils dft/ct</p> <p><b>Concrete Floors:</b>            1 ct. ArmorSeal Tread-Plex Primer @ 1.5 - 2.0 mils dft            1-2 cts. ArmorSeal Tread-Plex Finish @ 1.5 - 2.0 mils dft/ct</p> <p><b>Wood Floors:</b>            2 cts. ArmorSeal Tread-Plex @ 1.5 - 2.0 mils dft/ct</p> <p><b>Wood Floors:</b>            1 ct. ArmorSeal Tread-Plex Primer @ 1.5 - 2.0 mils dft            1-2 cts. ArmorSeal Tread-Plex Finish @ 1.5 - 2.0 mils dft/ct</p> <p><b>Previously Painted Floors in Sound Condition:</b>            1-2 cts. ArmorSeal Tread-Plex @ 1.5 - 2.0 mils dft/ct</p> <p>The systems listed above are representative of the product's use. Other systems may be appropriate.</p>	<p>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.</p> <p>Refer to product Application Bulletin for detailed surface preparation information.</p> <p>Minimum recommended surface preparation:            Concrete Floors: SSPC-SP13/NACE 6, or ICRI 03732, CSP 1-3            Wood Floors: Clean, smooth, dust free</p> <p><b>Do not use hydrocarbon solvents for cleaning</b></p> <p style="text-align: center;"><b>TINTING</b></p> <p>Do not tint package colors. Pastel and Ultradeep bases tint at 100% strength with EnviroToner or Blend-A-Color Toner. Better performance will be achieved with Envirotoners. Five minutes minimum mixing on a mechanical shaker is required for complete mixing of color.</p> <p style="text-align: center;"><b>APPLICATION CONDITIONS</b></p> <p>Temperature: 50°F minimum, 100°F maximum (air, surface, and material)            At least 5°F above dew point            Relative humidity: 85% maximum</p> <p>Refer to product Application Bulletin for detailed application information.</p> <p style="text-align: center;"><b>ORDERING INFORMATION</b></p> <p>Packaging: 1 gallon and 5 gallon containers            Weight per gallon: 10.7 ± 0.2 lb, may vary by color</p> <p style="text-align: center;"><b>SAFETY PRECAUTIONS</b></p> <p>Refer to the MSDS sheet before use.</p> <p>Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.</p>
DISCLAIMER	WARRANTY
<p>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.</p>	<p>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.</p>



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**APPLICATION BULLETIN**

Revised 11/06

SURFACE PREPARATION	APPLICATION CONDITIONS		
<p>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. <b>Do not use hydrocarbon solvent for cleaning.</b></p> <p><b>Poured Concrete</b> <b>New</b> For surface preparation, refer to SSPC-SP13/NACE 6, or ICRI 03732, CSP 1-3. Surfaces must be clean, dry, sound and offer sufficient profile to achieve adequate adhesion. Minimum substrate cure is 28 days at 75°F. Remove all form release agents, curing compounds, salts, efflorescence, laitance, and other foreign matter by sandblasting, shotblasting, mechanical scarification, or suitable chemical means. Refer to ASTM D4260. Rinse thoroughly to achieve a final pH between 8.0 and 11.0. Allow to dry thoroughly prior to coating.</p> <p><b>Old</b> Surface preparation is done in much the same manner as new concrete, however, if the concrete is contaminated with oils, grease, chemicals, etc., they must be removed by cleaning with a strong detergent. Refer to ASTM D4258. Form release agents, hardeners, etc. must be removed by sandblasting, shotblasting, mechanical scarification, or suitable chemical means. If surface deterioration presents an unacceptably rough surface, ArmorSeal 5020 Floor Resurfacer is recommended to patch and resurface damaged concrete. Fill all cracks, voids and bugholes with ArmorSeal Crack Filler.</p> <p><b>Always follow the standard methods listed below:</b> ASTM D4258 Standard Practice for Cleaning Concrete. ASTM D4259 Standard Practice for Abrading Concrete. ASTM D4260 Standard Practice for Etching Concrete. ASTM F1869 Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete. SSPC-SP 13/Nace 6 Surface Preparation of Concrete ICRI 03732, Concrete Surface Preparation No primer required.</p> <p><b>Wood</b> Surface must be clean, dry and sound. Remove any oils and dirt from the surface using a degreasing solvent or strong detergent. Sand to remove any loose or deteriorated surface wood and to obtain a proper surface profile. Prime with recommended primer and paint as soon as possible. No painting should be done immediately after a rain or during foggy weather. Knots and pitch streaks must be scraped, sanded and spot primed before full coat of primer is applied. All nail holes or small openings must be properly caulked.</p> <p><b>Previously Painted Surfaces</b> If in sound condition, clean the surface of all foreign material. Smooth, hard or glossy coatings and surfaces should be dulled by abrading the surface. Apply a test area, allowing paint to dry one week before testing adhesion. If adhesion is poor, additional abrasion of the surface and/or removal of the previous coating may be necessary. Retest surface for adhesion. If paint is peeling or badly weathered, clean surface to sound substrate and treat as a new surface as above.</p>	<p>Temperature: 50°F minimum, 100°F maximum (air, surface, and material) At least 5°F above dew point</p> <p>Relative humidity: 85% maximum</p> <tr> <th colspan="2" data-bbox="829 762 1510 804">APPLICATION EQUIPMENT</th> </tr> <p><b>Reducer/Clean Up</b> ..... Water</p> <p><b>Brush</b> Brush ..... Nylon/Polyester Reduction ..... As needed up to 6% by volume</p> <p><b>Roller</b> Cover ..... 1/4"-3/8" woven with phenolic core Reduction ..... As needed up to 6% by volume</p> <p>If specific application equipment is not listed above, equivalent equipment may be substituted.</p>	APPLICATION EQUIPMENT	
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APPLICATION PROCEDURES	PERFORMANCE TIPS																														
<p>Surface preparation must be completed as indicated.</p> <p><b>Mixing Instructions:</b> Mix paint thoroughly by boxing and stirring before use. Avoid vigorous agitation. Make certain no pigment remains on bottom of can.</p> <p>Apply paint at the recommended film thickness and spreading rate as indicated below:</p> <p><b>Recommended Spreading Rate:</b></p> <table border="0"> <tr> <td>Wet mils:</td> <td>3.5 - 4.5</td> </tr> <tr> <td>Dry mils:</td> <td>1.5 - 2.0</td> </tr> <tr> <td>Coverage:</td> <td>345 - 460 sq ft/gal approximate</td> </tr> </table> <p>Apply by brush or roller only.</p> <p><b>Drying Schedule @ 4.0 mils wet @ 50% RH:</b></p> <table border="0"> <tr> <td></td> <td><b>@55°F</b></td> <td><b>@ 77°F</b></td> <td><b>@100°F</b></td> </tr> <tr> <td>To touch:</td> <td>45 minutes</td> <td>30 minutes</td> <td>10 minutes</td> </tr> <tr> <td>To recoat:</td> <td>6 hours</td> <td>4 hours</td> <td>30 minutes</td> </tr> <tr> <td>Foot traffic:</td> <td>18 hours</td> <td>8 hours</td> <td>1 hour</td> </tr> <tr> <td>Heavy traffic:</td> <td>24 hours</td> <td>18 hours</td> <td>6 hours</td> </tr> <tr> <td>To cure:</td> <td>7 days</td> <td>7 days</td> <td>7 days</td> </tr> </table> <p>Drying time is temperature, humidity, and film thickness dependent.</p> <p>Application of coating above maximum or below minimum recommended spreading rate may adversely affect coating performance.</p>	Wet mils:	3.5 - 4.5	Dry mils:	1.5 - 2.0	Coverage:	345 - 460 sq ft/gal approximate		<b>@55°F</b>	<b>@ 77°F</b>	<b>@100°F</b>	To touch:	45 minutes	30 minutes	10 minutes	To recoat:	6 hours	4 hours	30 minutes	Foot traffic:	18 hours	8 hours	1 hour	Heavy traffic:	24 hours	18 hours	6 hours	To cure:	7 days	7 days	7 days	<p>During the early stages of drying, the coating is sensitive to rain, dew, high humidity, and moisture condensation. Plan painting schedules to avoid these influences during the first 16-24 hours of curing.</p> <p>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.</p> <p>Excessive reduction of material can affect film build, appearance, and adhesion.</p> <p>This product is not slip resistant where moisture, water, grease, or other liquids may be present.</p> <p>Anti-slip additives, such as H&amp;C SharkGrip®, may be added to the coating to provide some slip resistance. This product should not be used in place of a non-skid finish.</p> <p>Refer to Product Information sheet for additional performance characteristics and properties.</p>
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CLEAN UP INSTRUCTIONS	SAFETY PRECAUTIONS																														
<p>Clean spills and splatters immediately with soap and warm water. Clean hands and tools immediately after use with soap and warm water. After cleaning, flush spray equipment with mineral spirits to prevent rusting of the equipment. Follow manufacturer's safety recommendations when using mineral spirits.</p>	<p>Refer to the MSDS sheet before use.</p> <p>Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.</p>																														
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<p>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.</p>	<p>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.</p>																														