



ArmorSeal
Heavy Duty
Floor
Coatings

8.50
ARMORSEAL®
ARMOR-PLEX™

WATERBASED URETHANE FINISH
PART A B65-750
PART B B65V750
SERIES HARDENER

PRODUCT INFORMATION

Revised 8/05

PRODUCT DESCRIPTION	RECOMMENDED USES																																
<p>ARMOR-PLEX WATERBASED URETHANE FINISH is a high solids, water based, two-component, urethane industrial floor finish. The polyester/urethane finish cures to a highly flexible, high gloss, chemical and abrasion resistant film. Use on interior and exterior floors. Provides excellent color and gloss retention.</p> <ul style="list-style-type: none"> • Low odor • Nonflammable • Water cleanup • Performance comparable to high quality, solvent-borne, urethane floor finishes 	<ul style="list-style-type: none"> • For industrial, commercial, or marine use where a heavy duty, water based, polyurethane floor finish is required • For use over concrete and wood floor surfaces in: <ul style="list-style-type: none"> Hospitals Clean Rooms Boiler Rooms Helipads Walkways Aisle Striping Assembly and Production Areas Food processing facilities Aircraft hangers • Urethane floor coatings may exhibit tire tracking • Meets ADA requirements for slip resistance for floors • Suitable for use in USDA inspected facilities 																																
PRODUCT CHARACTERISTICS	PERFORMANCE CHARACTERISTICS																																
<p>Finish: High Gloss</p> <p>Color: White, Haze Gray, Deck Gray, Sandstone, Tile Red, Clear</p> <p>Volume Solids: 58% ± 2% (mixed)</p> <p>Weight Solids: 61% ± 2% (mixed)</p> <p>VOC (EPA Method 24): Unreduced: <50 g/L; 0.41 lb/gal (mixed)</p> <p>Mix Ratio: 3:1</p> <p>Recommended Spreading Rate per coat: Wet mils: 3.5 - 5.0 Dry mils: 2.0 - 3.0 Coverage: 309 - 464 sq ft/gal approximate</p> <p>NOTE: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance.</p> <p>Drying Schedule @ 4.0 mils wet @ 50% RH:</p> <table border="1"> <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>4 hours</td> <td>1-1/2 hours</td> <td>1 hour</td> </tr> <tr> <td>To recoat:</td> <td></td> <td></td> <td></td> </tr> <tr> <td> minimum</td> <td>28 hours</td> <td>6 hours</td> <td>3 hours</td> </tr> <tr> <td> maximum</td> <td>14 days</td> <td>14 days</td> <td>7 days</td> </tr> <tr> <td>Foot Traffic:</td> <td>48 hours</td> <td>16 hours</td> <td>8 hours</td> </tr> <tr> <td>Heavy Traffic:</td> <td>3-4 days</td> <td>48 hours</td> <td>24 hours</td> </tr> <tr> <td>Pot Life:</td> <td>2 hours</td> <td>2 hours</td> <td>30 minutes</td> </tr> </tbody> </table> <p>If maximum recoat time is exceeded, abrade surface before recoating. Drying time is temperature, humidity and film thickness dependent.</p> <p>Sweat-in-time: None required</p> <p>Shelf Life: 12 months, unopened Store indoors at 40°F to 100°F.</p> <p>Flash Point: >230°F PMCC (mixed)</p> <p>Reducer: Water, 10% minimum reduction required</p> <p>Clean Up: Water</p>		@ 55°F	@ 77°F	@ 100°F	To touch:	4 hours	1-1/2 hours	1 hour	To recoat:				minimum	28 hours	6 hours	3 hours	maximum	14 days	14 days	7 days	Foot Traffic:	48 hours	16 hours	8 hours	Heavy Traffic:	3-4 days	48 hours	24 hours	Pot Life:	2 hours	2 hours	30 minutes	<p>System Tested: (unless otherwise indicated)</p> <p>Substrate: Concrete</p> <p>Surface Preparation: Clean, dry, sound</p> <p>1 ct. ArmorSeal Floor-Plex 7100 Primer @ 2.0 mils dft</p> <p>1 ct.: ArmorSeal Armor-Plex WB Urethane @ 2.5 mils dft</p> <p>Abrasion Resistance: Method: ASTM D4060, CS17 wheel, 1000 cycles, 1 kg load Result: 45 mg loss</p> <p>Adhesion: Method: ASTM D4541 Result: 350 psi, 100% Concrete Failure</p> <p>Coefficient of Friction: Method: ASTM D4518 Result: .90 with SharkGrip® Additive</p> <p>Direct Impact Resistance: Method: ASTM G14 Result: 160 in lb (1/8" steel substrate)</p> <p>Dry Heat Resistance: Method: ASTM D2485 Result: 200°F</p> <p>Flexibility: Method: ASTM D522, 180° bend, 1/8" mandrel Result: Passes</p> <p>Hot Tire Pick-Up: Method: ITM @ 140°F Result: Passes</p> <p>Pencil Hardness: Method: ASTM D3363 Result: 2H</p> <p>Slip Resistance, Floors: Method: ASTM C1028-96, .60 minimum Static Coefficient of Friction Result: Passes wet and dry, with and without SharkGrip Additive</p>
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RECOMMENDED SYSTEMS	SURFACE PREPARATION																				
<p>Concrete/Wood: 1 ct. ArmorSeal Floor-Plex 7100 Primer @ 1.5 - 2.0 mils dft 2 cts. ArmorSeal Armor-Plex WB Urethane @ 2.0 - 3.0 mils dft/ct</p> <p>Concrete/Wood: 1 ct. ArmorSeal WB Epoxy Primer/Sealer @ 5.0 - 7.0 mils dft 2 cts. ArmorSeal Armor-Plex WB Urethane @ 2.0 - 3.0 mils dft/ct</p> <p>Concrete/Wood: 1 ct. ArmorSeal 33 Epoxy Primer/Sealer @ 8.0 mils dft 2 cts. ArmorSeal Armor-Plex WB Urethane @ 2.0 - 3.0 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 good adhesion.</p> <p>Refer to product Application Bulletin for detailed surface preparation information.</p> <p>Do not use hydrocarbon solvents for cleaning.</p> <p>Minimum recommended surface preparation: * Concrete & Masonry: SSPC-SP13/NACE 6, or ICRI 03732, CSP 1-3 * Wood: Clean, smooth, dust free * Requires primer</p> <tr> <th colspan="2" data-bbox="789 915 1485 961">TINTING</th> </tr> <tr> <td colspan="2" data-bbox="789 961 1485 1050"> <p>Tint Extra White with part A EnviroToners only. Use the 150% tint strength formula pages.</p> </td> </tr> <tr> <th colspan="2" data-bbox="789 1050 1485 1096">APPLICATION CONDITIONS</th> </tr> <tr> <td colspan="2" data-bbox="789 1096 1485 1314"> <p>Temperature: 55°F minimum, 120°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> </td> </tr> <tr> <th colspan="2" data-bbox="789 1314 1485 1360">ORDERING INFORMATION</th> </tr> <tr> <td colspan="2" data-bbox="789 1360 1485 1507"> <p>Packaging: 1 and 4 gallon premeasured components (color Specific) Weight per gallon: 10.6 ± 0.2 lb (mixed) (may vary with color)</p> </td> </tr> <tr> <th colspan="2" data-bbox="789 1507 1485 1554">SAFETY PRECAUTIONS</th> </tr> <tr> <td colspan="2" data-bbox="789 1554 1485 1724"> <p>Refer to the MSDS sheet before use.</p> <p>Published technical data and instructions are subject to change without notice. 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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> </td> </tr>	TINTING		<p>Tint Extra White with part A EnviroToners only. 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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. Do not use hydrocarbon solvents for cleaning. Poured Concrete New 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 10.0. Allow to dry thoroughly prior to coating. Primer is required. Old 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. Primer is required.</p> <p>Always follow the industry standards listed below: 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-SP13/NACE 6 Surface Preparation of Concrete. ICRI 03732 Concrete Surface Preparation</p> <p>Wood Surface must be clean, dry and sound. 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 or burned, sanded and spot primed before full coat of primer is applied. All nail holes or small openings must be properly caulked. 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.</p> <p>Previously Painted Surfaces 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, or if this product attacks the previous finish, removal of the previous coating may be necessary. If paint is peeling or badly weathered, clean surface to sound substrate and treat as a new surface as above.</p>	<p>Temperature: 55°F minimum, 120°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="829 764 1521 806">APPLICATION EQUIPMENT</th> </tr> <p>The following is a guide. Changes in pressures and tip sizes may be needed for proper spray characteristics. Always purge spray equipment before use with listed reducer. Any reduction must be compliant with existing VOC regulations and compatible with the existing environmental and application conditions.</p> <p>Reducer/Clean Up Water, 10% minimum reduction required, up to 25% maximum</p> <p>Brush Brush Nylon/Polyester Reduction As needed up to 25% by volume, 10% minimum reduction required</p> <p>Roller Cover 3/8" woven with phenolic core Reduction As needed up to 25% by volume, 10% minimum reduction required</p> <p>If specific application equipment is not listed above, equivalent equipment may be substituted.</p>	APPLICATION EQUIPMENT	
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<p>Surface preparation must be completed as indicated.</p> <p>Mix Component "A" thoroughly by boxing and stirring before use. Make certain no pigment remains on the bottom of the can. Then combine 3 parts by volume of Part A with 1 part by volume of Part B. Mix thoroughly. Reduce 10% minimum by volume with water (required) AFTER both components have been mixed together. Maximum reduction is 25%.</p> <p>Apply paint to the recommended film thickness and spreading rate as indicated below:</p> <p>Recommended Spreading Rate per coat:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 30%;">Wet mils:</td> <td style="width: 35%;">3.5 - 5.0</td> <td style="width: 35%;"></td> </tr> <tr> <td>Dry mils:</td> <td>2.0 - 3.0</td> <td></td> </tr> <tr> <td>Coverage:</td> <td colspan="2">309 - 464 sq ft/gal approximate</td> </tr> </table> <p>NOTE: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance.</p> <p>Drying Schedule @ 4.0 mils wet @ 50% RH:</p> <table style="width: 100%; border: none;"> <thead> <tr> <th></th> <th style="text-align: center;">@ 55°F</th> <th style="text-align: center;">@ 77°F</th> <th style="text-align: center;">@ 100°F</th> </tr> </thead> <tbody> <tr> <td>To touch:</td> <td style="text-align: center;">4 hours</td> <td style="text-align: center;">1-1/2 hours</td> <td style="text-align: center;">1 hour</td> </tr> <tr> <td>To recoat</td> <td></td> <td></td> <td></td> </tr> <tr> <td> minimum:</td> <td style="text-align: center;">28 hours</td> <td style="text-align: center;">6 hours</td> <td style="text-align: center;">3 hours</td> </tr> <tr> <td> maximum:</td> <td style="text-align: center;">14 days</td> <td style="text-align: center;">14 days</td> <td style="text-align: center;">7 days</td> </tr> <tr> <td>Foot Traffic:</td> <td style="text-align: center;">48 hours</td> <td style="text-align: center;">16 hours</td> <td style="text-align: center;">8 hours</td> </tr> <tr> <td>Heavy Traffic:</td> <td style="text-align: center;">3-4 days</td> <td style="text-align: center;">48 hours</td> <td style="text-align: center;">24 hours</td> </tr> <tr> <td>Pot Life:</td> <td style="text-align: center;">2 hours</td> <td style="text-align: center;">2 hours</td> <td style="text-align: center;">30 minutes</td> </tr> </tbody> </table> <p>If maximum recoat time is exceeded, abrade surface before recoating. Drying time is temperature, humidity and film thickness dependent.</p> <p>Sweat-in-time: None required</p> <p>Application of coating above maximum or below minimum recommended spreading rate may adversely affect coating performance.</p>	Wet mils:	3.5 - 5.0		Dry mils:	2.0 - 3.0		Coverage:	309 - 464 sq ft/gal approximate			@ 55°F	@ 77°F	@ 100°F	To touch:	4 hours	1-1/2 hours	1 hour	To recoat				minimum:	28 hours	6 hours	3 hours	maximum:	14 days	14 days	7 days	Foot Traffic:	48 hours	16 hours	8 hours	Heavy Traffic:	3-4 days	48 hours	24 hours	Pot Life:	2 hours	2 hours	30 minutes	<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>Do not mix previously catalyzed material with new.</p> <p>Do not apply the material beyond recommended pot life.</p> <p>In order to avoid blockage of spray equipment, clean equipment before use or before periods of extended downtime with water.</p> <p>Anti-slip additives, such as H&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>Do not apply directly to concrete surfaces, a primer is required.</p> <p>Do not use hydrocarbon solvents for cleaning.</p> <p>Urethane floor coatings may exhibit tire tracking</p> <p>Anti-slip additives, such as H&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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<p>Clean spills and spatters immediately with water. Clean tools immediately after use with water. Follow manufacturer's safety recommendations when using any solvent.</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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