

PRODUCT DESCRIPTION

BondTite 1101 is a 100% solids, low modulus, two-component, AHC (Advanced Hybrid Cycloaliphatic) epoxy primer which exhibits excellent adhesion and sealing properties on ferrous, non-ferrous, composite, and concrete substrates. In addition to the standard cure formulation, BondTite 1101 is also available in an extended pot life formulation (BondTite 1101 – EP)

Advanced Hybrid Cycloaliphatic (AHC): AHC technology offers increased physical characteristics (strength, chemical resistance, durability), with those properties remaining stable over time. Standard polymer technologies use degradable additives to achieve industry standard characteristics that may diminish rapidly over time.

PERFORMANCE FEATURES

- 100% solids epoxy primer.
- Meets LEED EQ 4.2 (Independent Laboratory Validation).
- Meets requirements for FDA & USDA inspected facilities.
- Fast, but wide (6 hrs - 14 days) re-coat window between coats.
- Low viscosity and low surface tension allow deeper penetration into concrete.
- Unique chemistry allows BondTite 1101 to chemically bond to concrete.
- Excellent stress relieving properties allow it to dissipate stresses and remain intact, preventing cracking or disbondment.
- Displaces some contaminants such as oil while resisting fisheye defects.

* Consult with your Wolverine Coatings representative before applying on vertical surfaces or over a damp surface.

RECOMMENDED USE

- High Build Epoxy Primer for ferrous, non-ferrous, composite, and concrete
- Can be applied over damp surfaces, just not wet.

LIQUID PHASE TYPICAL PHYSICAL PROPERTIES

Property	Value	Test Method
Mix Ratio (By Volume):	2 Parts Resin (Part A) : 1 Part Hardener (Part B)	-
Solids By Volume:	100%	ASTM D3960
Theoretical Flash Point:	Part A > 200°F Part B > 200°F	-
Mixed Density: (@ 77°F / 50% RH)	8.9 lbs/gallon	ASTM D1475
Mixed Viscosity: (@ 77°F / 50% RH)	~400 cps (Slightly Thixotropic)	ASTM D2196

SOLID PHASE PHYSICAL PROPERTIES

All testing conducted at 77°F / 50% RH unless otherwise stated

Property	Value	Test Method
Color:	Clear	ASTM D1544
Finish:	Gloss	ASTM D523
Hardness (7 Days @ 77°F ambient):	62 (Shore D)	ASTM D2240
Bond Strength (Concrete):	>1,000 PSI (Concrete Fails, no disbonding)	ASTM D4541
Bond Strength (Ferrous Metal, Blasted Profile):	750-900 PSI	ASTM D4541
Abrasion Resistance:	59mg loss (CS-17, 1,000 gm, 1,000 cycles)	ASTM D4060
Elongation:	165%	ASTM D638
Coefficient of Friction:	1.51 Dry / 1.24 Wet	ASTM D2047
Impact Resistance (in./ lbs/):	>320 (Direct & Indirect., Zero Failure)	ASTM D4541
Compression Strength:	7,000 psi	ASTM D695

BOND TITE 1101 COLORS

BondTite 1101 is provided in Clear (CL1A)

CURE SCHEDULE

BondTite 1101 - Standard Cure

Temp./Humid.	Pot Life (110 mL) ASTM D3056	Gel Time (110 mL) ASTM D2471	Re-Coat Time ASTM D4541	Light Foot Traffic ASTM D5895	Full Foot Traffic ASTM D5895	Return to Service ASTM D5895
50°F/50% RH	-	170-210 min.	15-336 hours	15-20 hours	25-48 hours	168-240 hours
77°F/50% RH	30 min.	35-45 min.	6-336 hours	6-8 hours	8-12 hours	20-24 hours
95°F/50% RH	-	13-17 min.	3-120 hours	3-5 hours	4-6 hours	12-18 hours

BondTite 1101 - Extended Cure

Temp./Humid.	Pot Life (110 mL) ASTM D3056	Gel Time (110 mL) ASTM D2471	Re-Coat Time ASTM D4541	Light Foot Traffic ASTM D5895	Full Foot Traffic ASTM D5895	Return to Service ASTM D5895
50°F/50% RH	-	350-450 min.	42-336 hours	42-66 hours	72 hours	15 days
77°F/50% RH	45 min.	50-70 min.	8-336 hours	8-12 hours	12 hours	48 hours
95°F/50% RH	-	15-20 min.	5-168 hours	5-8 min.	6-10 hours	18-24 hours

GENERAL APPLICATION PARAMETERS

Please contact a Wolverine Coatings Corporation representative before specifying or applying BondTite 1101.

BondTite 1101 is most commonly applied in one 5-10 mil coat in most applications. However, some extreme environments may require higher product thickness and/or additional coats.

Application under the recommended thickness may affect surface appearance. Please consult your Wolverine Coatings Corporation representative for situations that may fall outside of the standard applications.

Applied Substrate	Minimum (dft)	Maximum (dft)	Typical (dft)
Horizontal Concrete or Metal ¹	8.0 mils (200 SqFt/Gal)	12.0 mils (133 SqFt/Gal)	10.0 mils (160 SqFt/Gal)

¹For horizontal surfaces only

CONDITIONS DURING APPLICATION & SURFACE PREPARATION

The temperature of the substrate should be minimum 50°F and rising during the cure and at least 5°F above the dew point of the air temperature and relative humidity measure in the vicinity of the substrate. The coating should not be exposed to water, oil, chemicals or mechanical stress until fully cured.

Concrete:

All surfaces should be cured, clean, dry, and free from contamination. The surface shall be cleaned in accordance with industry standard AMPP SSPC-13/NACE No. 6 Surface Preparation of Concrete to achieve an ICRI Concrete Surface Profile Number of:

Coating System Film Thickness:	ICRI Concrete Surface Profile Numbers
0 - 3 mils	CSP 1 - 3
4 - 10 mils	CSP 1 - 3
10 - 40 mils	CSP 3 - 5
50 mils - 1/8 in	CSP 4 - 6
1/8 in - 1 in	CSP 5 - 9

Ferrous Metal:

Immersion / Splash & Spills

All surfaces should be cured, clean, dry, and free from contamination. The surface shall be cleaned in accordance with industry standard AMPP SSPC-5/NACE No. 1 White Metal Abrasive Blast Clean to achieve a profile of 2.5 – 4.0 mils.

Non-Immersion (Dry Environment)

All surfaces should be cured, clean, dry, and free from contamination. The surface shall be cleaned in accordance with industry standard AMPP SSPC-6/NACE No. 3 Commercial Metal Abrasive Blast Clean to achieve a profile of 2.5 – 4.0 mils.

Non-Ferrous Metal - Non-Immersion:

All surfaces should be cured, clean, dry, and free from contamination. The surface shall be cleaned in accordance with industry standard AMPP SSPC-7/NACE No. 4 Brush-Off Abrasive Blast Clean to abrade uncoated and ensure removal of all existing coating if previously coated and to achieve a profile of 2.5 – 4.0 mils.

Composite Materials - Fiberglass, Carbon Fiber:

All surfaces should be cured, clean, dry, and free from contamination. The surface shall be cleaned in accordance with either industry standard AMPP SSPC-7/NACE No. 4 Brush-Off Abrasive Blast Clean or SSPC-3 Mechanical Power Cleaning to achieve a profile of 2.5 – 4.0 mils.

* Contact your WCC representative for other substrates such as ductile iron, ceramic matrixes, etc.

APPLICATION METHOD

Spray Application

Vertical or above horizontal concrete surfaces can be coated via airless spray application and back rolled to ensure uniformity.

Squeegee, Brush, and Roll Application

Horizontal concrete floor surfaces can be coated via squeegee, roller, or brush applications. Large areas are best coated with a squeegee and brush application of edges. Smaller and vertical areas can be coated via roller and brush application of edges. Always use a high quality, lint free, solvent resistant roller cover. See Technical Information Bulletin: "[Guide for Applying Polymer Coatings or Linings with a Squeegee, Roller, and Brush](#)".

Note: Avoid puddles and missed spots.

APPLICATION DATA

Mixing Ratio By Volume:	
BondTite 1101 CL1A	2 Parts Resin (Part A) : 1 Part Hardener (Part B)

Airless Spray Guide		
<i>The information below are suggested theoretical starting points. Consult with your Wolverine Coatings Representative and spray equipment manufacturer prior to airless spray applications.</i>		
Product Version	Tip Size	Hose Length
1101-000	21 - 25	1/4 - 1/2 inch hose <200 ft.
<i>Ensure to remove spray pump manifold filter prior to spraying BondTite 1101</i>		

Contact your spray equipment manufacturer to ensure that all hoses are rated for the desired pressure in use. The recommended cleaner to be used is Acetone or MEK (Methyl Ethyl Ketone).

MIXING INSTRUCTIONS

Consult WCC Technical Information Bulletin: "[Mixing Guide](#)" before installation.
Refer to WCC Video: "[Mixing Tutorial - Resinous Material](#)" for in depth, step-by-step mixing instructions.

For 3-Quart Kits and 3-Gallon Kits, Premix Part "A" and Part "B" immediately before use. Pour Part "B" into the Part "A" container and slowly begin mixing with a low-speed drill and steel or polyethylene spiral mixing paddle. Slowly increase speed and mix for 2 minutes. Take caution to avoid whipping air into the material. Scrape the sides, bottom, and corners of the mixing container with a solvent-resistant spatula to incorporate material on container walls and corners, then mix for one minute. Once mixed, pour material into a transfer container and scrape the remaining material out of the mixing container into the transfer container, then mix for one minute. Apply mixed material as soon as possible.

For 15-Gallon kits & 157.5-Gallon kits, Premix Part "A" and Part "B" immediately before use. Measure Part "A" into a clean container that will accommodate the mix. Next, pour Part "B" into the container while avoiding spillage on the sides of the container. Begin slowly mixing with a low-speed mixer and steel or polyethylene spiral mixing paddle. Slowly increase speed and mix for 3 to 4 minutes. Take caution to avoid whipping air into the material. Apply mixed material as soon as possible.

PACKAGING SIZE

3-Quart Kit (3Q):	Resin (A): 2 Quarts in a slack filled 1-Gallon Can <i>Net Weight: 4.33 lbs.</i>	Hardener (B): 1 Quart in a 1-Quart Can <i>Net Weight: 1.98 lbs.</i>
3-Gallon Kit (3G):	Resin (A): 2 Gallons in a slack filled 3.5-Gallon Pail <i>Net Weight: 17.33 lbs.</i>	Hardener (B): 1 Gallon in a 1-Gallon Can <i>Net Weight: 7.92 lbs.</i>
15-Gallon Kit (15G):	Resin (A): 10 Gallons in two 5-Gallon Pails <i>Net Weight: 43.43 lbs. per container</i>	Hardener (B): 5 Gallons in a 5-Gallon Pail <i>Net Weight: 39.59 lbs.</i>
157.5-Gallon Kit (157.5G):	Resin (A): 105 Gallons in two 52.5-Gallon Drums <i>Net Weight: 454.84 lbs. per container</i>	Hardener (B): 52.5 Gallons in a 52.5-Gallon Drum <i>Net Weight: 415.64 lbs.</i>

WOLVERINE COATINGS COMPANION PRODUCTS

BondTite 1101 when used as a primer sealer or primer can be overcoated with a majority of the referenced Wolverine Coating lines. Consult with your Wolverine Coatings Representative to confirm product compatibility.

- [BondTite](#) Primers, Binders, Sealers, and Clear Coats.
- [ChemShield](#) Chemical Resistant Liners.
- [CoveEase](#) Polymer Mortar Coves, Curbing, and Dikes.
- [EnduraShield](#) Polyester & Acrylic Polyurethanes.
- [FlashPatch](#) Polymer repair coating, mortar, and putties Super-Fast.
- [IntegraFlex](#) Highly flexible coatings for joint filling, cracks, and spalls.
- [LineGevity](#) Specialty formulated line stripping coating.
- [LiquaTile](#) Epoxy floor coatings.
- [LiquaTex](#) Grout coat for epoxy mortars.
- [TrowelEase](#) Trowelable epoxy mortars.

LIMITATIONS

- Area subject to high moisture vapor transmission. Contact WCC
- Not recommended as a top coat when in contact with harsh chemicals.
- Has good chemical resistance but is not designed for extreme resistance.

STORAGE

This product must be stored in accordance with local, state, and federal regulations. Storage conditions are to keep the containers in a dry, cool, well-ventilated space and away from sources of heat and ignition. Containers should be stored at 50° F to 95° F. Containers must be kept tightly closed. Shelf life under these conditions is one (1) year.

SHIPPING

Part A: DOT Non-Regulated, Class 55

Part B: DOT UN3066, Paint Related Material, Corrosive, 8, PGIII, Class 55

HANDLING

Consult WCC TIB: "[Epoxy Resin Systems Safe Handling Guide](#)" before use.
Handle with care. Stir well before use.

HEALTH & SAFETY

Prior to commencing work, carefully read and follow all SDS Technical Data Sheets along with any instruction manuals for product and equipment used for the application of material. Ensure all jobsite, local, state, and federal safety regulations are followed as they are the responsibility of the installation company, general contractor, engineering, EPC firm and/or facility owner. Reference industry standard AMPP Paint Application Guide No. 10 Guide to Safety and Health Requirements for Industrial Painting Projects.

REFERENCES

WCC Color Chart "Industrial Color Chart-PCC" | AMPP SSPC-13/NACE No. 6 Surface Preparation of Concrete | AMPP SSPC SP 5/NACE 1 White Metal Abrasive Blast Clean | AMPP SSPC-6/NACE No. 3 Commercial Metal Abrasive Blast Clean | AMPP SSPC-7/NACE No. 4 Brush-Off Abrasive Blast Clean | SSPC-3 Mechanical Power Cleaning | WCC Technical Information Bulletin "[Guide for Applying Polymer Coatings or Linings with a Squeegee, Roller, and Brush](#)" | WCC Technical Information Bulletin "[Mixing Guide](#)" | WCC Video: "[Mixing Tutorial - Resinous Material](#)" | WCC Technical Information Bulletin "[Epoxy Resin Systems Safe Handling Guide](#)".

SAFETY

For your safety, all required personal protection equipment should be used when operating machinery or handling chemicals. Concrete dust is a source of silica particles and other hazardous materials that can cause silicosis and other illnesses. Proper safety equipment and methods are the responsibility of the installation company, general contractor, and/or facility owner. Prior to commencing work, carefully read and follow all SDS (formerly MSDS), Technical Data Sheets, and any instruction manuals for products and equipment used during installation. Following the safety regulations of job site, local, state, and federal authorities is the responsibility of the installation company, general contractor, and/or facility owner. This document does not purport to address all applicability and safety concerns, if any, associated with its use. It is the responsibility of the user to determine applicability of the information and products, and to establish appropriate safety practices.

WARRANTY

Wolverine Coatings Corporation warrants its products to be free from defects in material and workmanship. Wolverine Coatings Corporation's sole obligation and Buyer's exclusive remedy in connection with the products shall be limited, at Wolverine Coatings option, to either replacement of products not conforming to this Warranty or credit to the Buyer's account in the invoiced amount of the nonconforming products. Any claim under this warranty must be made by the Buyer to Wolverine Coatings in writing within five (5) days of Buyer's discovery of the claimed defect, but in no event later than the expiration of the applicable shelf life, or one year from the ship date, whichever is earlier. Buyer's failure to notify Wolverine Coatings of such nonconformance as required herein shall bar Buyer from recovery under this warranty.

Wolverine Coatings makes no other warranties about the product. No other warranties, whether expressed, implied, or statutory, such as warranties of merchantability or fitness for a particular purpose, shall apply.

Any recommendation or suggestion relating to the use of the products made by Wolverine Coatings, whether in its technical literature, or in response to specific inquiry or otherwise, is based on data believed to be reliable; however, the products and information are intended for use by Buyers having requisite skill and know-how in the industry, and therefore it is for the Buyer to satisfy itself of the suitability of the products for its own particular use and it shall be deemed that Buyer has done so, at its sole discretion and risk. Variation in environment, changes in procedure of use, or extrapolation of data may cause unsatisfactory results.

LIMITATION OF LIABILITY

Wolverine Coatings Corporation's liability on any claims based upon Wolverine Coatings Corporation's negligence or strict liability, for any loss or damage arising out of, connected with, or resulting from the use of the products, shall in no case exceed the purchase price allocable to the products or parts thereof which give rise to the claim. In no event shall Wolverine Coatings Corporation be liable for consequential or incidental damages.

LITERATURE REVISION - TDS: BondTite 1101 - Rev. 250327

Published literature is subject to change without notice. Wolverine Coatings Corporation is constantly engaged in the testing of existing formulations, the development of new innovative technologies, and the evaluation of the latest practices. The latest literature should always be consulted at www.wolverinecoatings.com.



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