

TECHNICAL DATA

DESCRIPTION: HP Bondit III is a 3-component, solvent-free, moisture-tolerant, epoxy-modified, cementitious product specifically formulated as a bonding agent and an anti-corrosion coating.

USES: As an anti-corrosion coating for embedded steel, as protection for reinforcing steel, as a bonding agent for newly poured concrete and as a bonding agent to existing hardened concrete. Extra open time of HP Bondit III allows up to 24hrs @ 70°F in which to place fresh material over the coated surface.

- ADVANTAGES:**
- Superior adhesion to concrete and steel
 - Acts as an effective barrier against penetration of water and chlorides
 - Open-time up to 24 hours
 - Compatible with all cementitious materials
 - Can be used on interior, exterior, above, below and on-grade
 - Integral corrosion inhibitors
 - Spray, brush or roller application
 - Apply between 40-95°F

PROPERTY	RESULTS	TEST METHODS
Compressive Strength 28 days	6000 psi (41.4 MPa)	ASTM C 109
HDT	>240°F	ASTM D-648
Flexural Strength 28 days	1200 psi (6.9 MPa)	ASTM C 348
Pot Life, 1 gallon / Working Time/ Contact Time	90 minutes / within 2 hrs / 24hrs max	
Slant Shear bond, 14 days Open time: 0-24hrs	> 2000 psi (13.7 MPa)	ASTM C 882
Slitting Tensile	600 psi (4.1 MPa)	ASTM C 496

Test Results are averages obtained under laboratory conditions at 70°F (21°C) and 50% rh. Reasonable variances can be expected.

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SURFACE PREPARATION:

Concrete: Surface must be clean and sound. Remove deteriorated concrete around rusting rebar to expose sound concrete. Remove laitance and all foreign matter per ASTM D-4258/4259. Water blasting followed by shotblasting is recommended to achieve a minimum 1/8" profile (#4-#5 CSP ICRI). Acid etching is also suitable. Expansion joints, drains and termination joints require special attention. The surface should be saturated surface-dry (SSD) without any standing water. Steel: Blast steel to white metal. Follow with vacuuming or oil-free dry-air blast (refer to SSPC-SP-10 or NACE-2).

For additional information, refer to International Concrete Repair Institute Surface Preparation Guidelines for the Repair of Deteriorated Concrete Resulting from Reinforcing Steel Oxidation (No. 03730)

APPLICATION:

Concrete to Concrete: After following surface prep noted above, apply HP Bondit III to hardened concrete at 80ft² / gal. (20 mils) with a stiff bristled brush or sprayer. With any method, be sure to work the bonding agent thoroughly into the substrate. When HP Bondit III is used as a bonding agent, the appropriate thickness is 20 mils; when used for reinforcement protection, the minimum thickness is 40 mils (2 coats of 20 mils each). Keep bonding agent protected from direct sunlight and in temperatures above 95°F (35°C).

Pour concrete onto surfaces coated with HP Bondit III within 24 hours of application (@ 70°F). If HP Bondit III loses tackiness due to suction into substrate or high temps and wind, apply additional coat while first coat is slightly tacky. REINFORCEMENT PROTECTION: Apply two coats at 10 mils each.

MIXING:

Condition material to 65-80°F before use. Stir both liquid components completely and empty into mixing pail. Mix the two components with a low speed drill (400-600rpm) for at least 1 minute, then add the powder and mix for an additional 1-2 minutes. Mix entire unit, do not mix partial units.

PACKAGING/ YIELD:

3.5 gal. unit (Comp. A + Comp. B + 45 lb Comp C powder) Comp A + B in pails, Comp C in multi-wall bag.
Yield : 1.35 gal neat epoxy (A+B). Once powder added, yield approximately 280 ft²/ 3.5 gal. unit.

RECOMMENDATIONS:

- Substrate and ambient temperature must be from 40°F (4°C) to 95°F (35°C).
- When HP Bondit III is used as a bonding agent for overlays or toppings, best results are obtained by applying topping within 24 hours of application.
- Precondition HP Bondit III materials approximately 70°F (21°C) for 24 hours before use.
- Protect from direct sunlight, wind and other conditions that could cause rapid drying of material

WARNING!

WARNING! KEEP OUT OF REACH OF CHILDREN. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling. Keep container closed when not in use. DO NOT take internally. Use only with adequate ventilation. Use impervious gloves and eye protection.

In case of eye contact, flush thoroughly with clean water for at least 15 minutes. In case of skin contact, wash affected areas with soap and water. If irritation persists, SEEK MEDICAL ATTENTION. Remove and wash contaminated clothing. If inhalation causes physical discomfort, remove to fresh air. If discomfort persists or any breathing difficulty occurs, or if material swallowed, SEEK IMMEDIATE MEDICAL ATTENTION. Refer to Safety Data Sheet (SDS) for further information.