



TECHNICAL DATA SHEET

BOND 45



CONCRETE SLAB REPAIR

UV Bond is a rapid curing heavy duty concrete repair product designed to fill pin holes and imperfections on slabs before polishing, repair and renew cracks and spalls on commercial, retail and industrial concrete floors, repair damaged control joints, fill anchor bolt holes and repair defects on garage floors before coating. Bond 45 is typically polishable in 45 minutes or less, 100% solids and zero VOC's. Traffic ready in less than an hour. The open pores of cracks and spalls in concrete are easily penetrated due to the very low viscosity and excellent bonding properties of Bond 45.

APPLICATIONS

- Rebuilding control joints
- Traffic area spalls & crack repairs
- Grade matching
- Floor repair
- Fill & repair spall before coating
- Used to "knit" cracked slabs
- Fill voids under concrete or tile

ADVANTAGES

- 100% Solids
- Meets USDA and FDA Requirements
- Cures From -20°F to 130°F
- Drive-Over in 45 minutes
- Produces High Strength Quickly
- Optimal shore D hardness range for strength, wear and tear
- Self-priming and self-leveling
- Can be mixed with dry aggregate

PHYSICAL PROPERTIES

Viscosity (ASTM 4016)	
A Side	110 cps
B Side	160 cps
VOC Content	0%
Mix Ratio (by volume)	1:1
Tack Free (74°F)	5 minutes
Shore "D" Hardness (ASTM D-2240)	70 to 73D
Tensile Strength (ASTM D417 7 days)	6150 psi
Elongation % (ASTM D-412)	1-1.5%
Compressive Strength (ASTM D-695)	11968 psi
With Aggregate	8070-9340 psi
Adhesion (ASTM D7234)	890 psi/Concrete Failure

Available in

22 oz Cartridges
2-gallon Kits
10-gallon Kits

Shelf Life

6 months in original
unopened container.

Storage Conditions

Recommended storage
temperature is between 60°F
to 85°F. Do not store below
55°F or above 85°F. Do not
freeze.

Consistency

Pourable, self-leveling liquid.

Pot Life

Approx. 30 seconds
(100 gram mass)

Appearance

Semi Clear, Custom Color
Matching Available

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TECHNICAL DATA

Test data shown are typical values obtained under laboratory conditions. Some variations could be found under varied conditions in the field such as temperature, humidity, and type of substrate. Foot traffic is generally acceptable within 2 minutes. MAS Certified Green for LEED v4.1 credits. Once cured, this product is inert (chemically inactive) so it is safe to discard and is safe to use in areas subject to inspection for food safety.

COVERAGE RATES

1 Gallon = 128 ounces or 231 cubic inches. Also equivalent to 5.8 (22 oz.) cartridges. Completely fill larger spalls and voids with aggregate when possible to be visible when polished to best blend with the existing concrete finish. Aggregate will result in a higher yield. Add enough to be visible at the surface but never too much that the mix is dry as it may degrade the bond.

PREPARATION

All areas must be clean and dry exposing open pores of concrete. Use dustless concrete grinders/saws and HEPA filtered vacuums, or hand prep mechanically to adequately clean cracks and surfaces of all material not allowing a good bond. Remove loose areas solid concrete exposing clean open pores. Narrow deep cracks need to be blown and scraped out as best as possible and filled without aggregate unless the width will accept it.

BULK MIXING

Pre-mix B side for 1 minute in 5-gallon containers, using a paddle mixer set on low rpm's, adding pigment if necessary. In 1 gallon containers, shake B side vigorously for 1 minute after adding pigment. Mix equal parts A & B into separate container, mix for 30 seconds. Add aggregate and additional colorants as necessary and place. Keep caps and lids on buckets and jugs at all times when not mixing to protect from humidity.

CARTRIDGES

Bond 45 cures extremely fast and is best dispensed from cartridges. Shake cartridges for 1 minute. Remove cap, install flow restrictor, secure nozzle, place cartridge in tool, hold upright, slowly dispense material to end of nozzle, direct nozzle down into waste container and dispense small amount out to equalize sides and ensure color is consistent. Proceed to fill cracks, etc. Material may cure within the nozzle if dispensing is stopped for too long. When transferring locations, dispense small amounts into a waste container to avoid curing within the nozzle.

INSTALLATION

Completely fill cracks and spalls by slightly overfilling. Add aggregate and colorants as necessary before Bond 45 has reacted. Work in small batches due to extremely fast curing times. More volume creates more heat and a faster cure. High ambient temps cause a faster cure. Adding aggregate will act as a heat sink and slow cure times. Cold temps and product will slow cure time. Once cured, grind flush to the surface causing the least amount of scratching on surrounding areas. Spall and crack repairs may be ready to grind in 10 minutes. Test areas should always be performed in inconspicuous areas.

LIMITATIONS

Bond 45 is designed for interior use only and it may discolor when exposed to UV rays. Store warm and dry. Gassing will occur in the presence of moisture on the surface, in aggregate mix, and local humidity. Ensure all areas and aggregate are as dry as possible. Do not allow Bond 45 to freeze. Best temperature range for storage is 60°F to 85°F. This very rigid material has minimal elongation properties so movement of the concrete may cause cracks to the sides of the repairs. Six (6) month shelf life in unopened original packaging.

CLEAN UP

Cured material is inert and may be disposed of as normal. Unmixed product should be mixed and fully cured before disposal. Residual fluids and soiled items should be disposed of per local hazmat regulations. Use all chemical products in well ventilated areas. Handle and wear proper safety attire for protection per SDS documents for this product.

WARRANTY

HTS warrants its products to be free of manufacturing defects will meet current published physical properties when applied in accordance with HTS directions and tested in accordance with ASTM and HTS standards. There are no other warranties by HTS of any nature whatsoever, expressed or implied, including any warranty of merchantability or fitness for a particular purpose in connection with this product. HTS shall not be liable for damages of any sort, including remote or consequential damages, resulting from any claimed breach of any warranty, whether expressed or implied, including any warranty of merchantability or fitness for a particular purpose or from any other cause whatsoever.

SAFETY DATA

