

Ply-Bonder (Beige)

Technical Bulletin

Ply-Bonder is a 100% solid, moisture insensitive, two-component, modified epoxy adhesive, developed for the construction industry for bonding various construction materials to cured concrete in high-stress applications. The material has excellent adhesion to steel, concrete, wood, and other construction materials. Meets ASTM C881, Type I & II, Grade 2, Class B & C.

Key Features

- Excellent adhesion to various substrates
- Excellent barrier against moisture and Chloride ions
- Very good solvent and chemical resistance
- Resistant to UV and ozone exposure
- Safe for potable water applications
- Resistant to freeze-thaw changes
- Useable to 45°F and rising
- Fast cure

Uses

- Bonding agent for **Ply-Seal® XE Beige** and many other **Ply-Seal®** brand products, as well as other cellular plastic glands to concrete, elastomeric concrete, steel, and other construction materials.
- Adhering anti-skid grit to hardened surfaces
- Bonding cured concrete to cured concrete

Surface Prep

For best results, sandblast all surfaces to receive the **Ply-Bonder**. New concrete should cure 80% of designed strength prior to application. Steel surfaces should be sandblasted to SSPC-10, near white finish, immediately before the **Ply-Bonder** application. Brass, aluminum, galvanized steel, and other specialty metals may require an acid etching primer. Please contact the supplier in such applications.

Mixing

Stir individual components prior to mixing together. Mix according to the specified mixing ratio with low-speed drill for 1-2 minutes or until color is uniform.

Application

Ply-Bonder may be applied by suitable spray equipment roller, trowel, or by gloved hands. Apply at a rate of approximately 40 square feet per gallon.

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Physical Data

Appearance @ 25°C			
	Part "A"	Part "B"	Mixed
Color	Off White	Tan	Beige
Viscosity	Thixotropic	Thixotropic	Thixotropic
Wt./gal., lb	12.25 ± 0.1	10.6 ± 0.1	12.0 ± 0.1
Ratio & Cure			
Mix Ratio	4 Parts "A"	1 Part "B"	By Volume
	100 "A"	22 "B"	By Weight
Gel Time	Gel Time @ 25°C		20-40 Min
Initial Set	2-4 Hrs. @ 25°C		
Initial Cure	8-12 Hrs. @ 25°C		
Physical Properties			
Compressive, psi	9000,± 1000	ASTM C579	
Percent Elongation	1-3	ASTM D638	
Tensile Strength, psi	4000 ± 500	ASTM D638	
Bond Strength, psi min.	2600	ASTM C882	
Water Absorption	0.25% by Weight Max.		
Shore D Hardness	80 Min.	ASTM D2240	

These are typical cured properties and should not be used for specifications

Packaging: 1 gal. A , 1 qt. B = 1 gal. unit; 4 units/case

Shelf Life: 2 years in the original, unopened containers

Storage: Store between 60-95°F; keep from freezing

FOR PROFESSIONAL USE ONLY

Protective gloves, clothes, and splash-resistant glasses are recommended. Avoid direct contact with skin as it may cause skin irritation. Fatal if taken internally. Keep from open flame.

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