

# Expansion Joint Systems for **PERFORMANCE**

# **Ply-Bonder**

# Technical Bulletin

**Ply-Bonder** is a 100% solids, 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 C-881, Type I & II, Grade 2, Class B & C.

### **Key Features**

- Excellent adhesion to various substrates
- Excellent barrier against moisture
- Excellent barrier against Chloride ions
- Very good solvent and chemical resistance
- Resistant to UV and ozone exposure
- Resistant to freeze-thaw changes
- Useable to 45<sup>0</sup>F and rising
- Fast cure

#### Uses

- Bonding agent for, EVAZOTE<sup>®</sup>, Ply-Seal<sup>®</sup> Ply-Seal<sup>®</sup> XE, and 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 application of the **Ply-Bonder**. Brass, aluminum, galvanized steel and other specialty metals may require an acid etching primer. Please contact the supplier for directions in such applications.

#### Mixina

Stir individual components prior to mixing together. Mix according to 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.

# **Physical Data**

Appearance @ 25°C					
	Part "A"		Part "B"		Mixed
Color	Off white		Black		Gray
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"	Parts "A" 1 Part "B"			By Volume
	100 "A"	22 "B"			By Weight
Pot Life	Pot Life @ 25°C				20-40 Min
Initial Set	2-4 Hrs. @ 25°C				
Initial Cure	8-12 Hrs. @ 25°C				
Physical Properties					
Compressive Strength, psi		9	9000 ± 1000		ASTM D695
Percent Elongation			1-3		ASTM D638
Tensile Strength, psi		4	4000 ± 500		ASTM D638
<b>Bond Strength</b> psi min.			2600		ASTM C-882
Water absorption		0.25% by Weight Max.			
Shore D Hardness			80 Min. ASTM [		ASTM D2240

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

Packaging: 1 gal. A, 1 qt. B = 1 gal. unit

or in dual Cartridges (940 ml) with spray tips

**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 recommended. Direct contact with skin should be avoided as it may cause skin irritation. Fatal if taken internally. Keep from open flame.

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