



Planibond SBA SlowSet®

Slow-Setting, Segmental Bridge Adhesives



FOR PROFESSIONAL USE ONLY

DESCRIPTION

Planibond SBA SlowSet epoxy bonding adhesives are two-component, 100%-solids and moisture-insensitive. Each *Planibond SBA SlowSet* adhesive acts as a lubricant and sealer for match-cast precast segments used in span by span and cantilevered erection of segmented precast elements.

FEATURES AND BENEFITS

- Available for use in three temperature classes
- Create a water-resistant seal after curing
- Long working time
- Easy to apply

WHERE TO USE

- For the bonding of match-cast precast segments
- For bonding hardened concrete to hardened concrete
- As a lubricant, to aid in post-tensioning of match-cast precast segments
- For precast bridges, panels, etc.

INDUSTRY STANDARDS

- *Planibond SBA SlowSet 40-65* complies with ASTM C881/C881M-15 (AASHTO M235), Type VII, Class D, Grade 3 between 40°F and 65°F (4°C and 18°C).

- *Planibond SBA SlowSet 60-85* complies with ASTM C881/C881M-15 (AASHTO M235), Type VII, Class E, Grade 3 between 60°F and 85°F (16°C and 29°C).
- *Planibond SBA SlowSet 80-105* complies with ASTM C881/C881M-15 (AASHTO M235), Type VII, Class F, Grade 3 between 80°F and 105°F (26°C and 41°C).

SURFACE PREPARATION

- Match-cast sections must be clean and free of dirt, paint, laitance, form oil, free moisture, dust, debris and any foreign substance that may interfere with bonding. Free moisture is determined by wiping the application area with a new clean rag; if any visible moisture on the rag is present, then application should wait until no moisture transfers to the rag.
- Ensure that the substrate is mechanically profiled utilizing engineer-approved methods to obtain a surface profile as required within project specifications or an ICRI concrete surface profile (CSP) of #3 or higher. Take care to not alter the surface shape or profile of match-cast end sections.

MIXING

Before product use, take appropriate safety precautions. Refer to the Safety Data Sheet for details.

1. Ensure that the proper temperature class of *Planibond SBA SlowSet* adhesives is being utilized per the substrate and ambient temperature range at time of placement.
2. Each *Planibond SBA SlowSet* adhesive consists of epoxy resin (Part A) and curing agent (Part B). Each unit is proportioned to equal a yield of 3 U.S. gals. (11.4 L) when mixed.

3. Premix Part A and Part B separately with a low-speed drill and appropriate mixing paddle before adding them together.
4. Add Part A first and then Part B. Mix for 3 minutes with a low-speed drill and appropriate mixing paddle. The mixed epoxy should be a streak-free, homogenous color when properly mixed.

PRODUCT APPLICATION

Read all installation instructions thoroughly before installation.

1. Apply immediately after mixing.
2. Apply uniformly to a nominal thickness of 1/16" (1.5 mm) by gloved hand or with spatula to the adjoining ends of the prepared match-cast precast segments.
3. Apply the mixed *Planibond SBA SlowSet* adhesive to the entire area of the adjoining faces.
4. Do not exclude application around holes formed by ducts.
5. If shims are placed as a joint, apply additional epoxy thickness, equal to the shim thickness.
6. The amount of epoxy applied may be adjusted provided that a sufficient amount is applied to completely fill all interstitial space in the joint and to extrude a small bead from the joint after application of the compressive contact pressure.
7. Use a spatula or trowel to remove excess material that squeezes out after joining, before the material hardens.
8. Always comply with design specifications for application thickness, temperature class and contact pressure for joining match-cast segments.

CLEANUP

- Clean tools and mixing equipment with a suitable solvent, such as acetone, xylene or toluene, before the material hardens. Hardened material can only be removed by mechanical means.

LIMITATIONS

- Allow a minimum of 3 hours after application before adjoining precast segments. Post-tensioning should be completed within open time.
- Mix only full units.
- Do not thin *Planibond SBA SlowSet* adhesives with solvent or water.
- Only mix enough units as can be applied within the product's working time.
- Although the product is moisture-insensitive, do not apply it over free moisture or while it is raining (unless the application area is protected from the elements).
- Use the proper temperature class for the existing substrate and ambient temperatures.
- Ensure that each Part A and Part B is from the same class, whether Class D, E or F.

Product Performance Properties

Laboratory Test	Results		
	<i>Planibond SBA SlowSet 40-65</i>	<i>Planibond SBA SlowSet 60-85</i>	<i>Planibond SBA SlowSet 80-105</i>
Compressive strength – ASTM D695			
After 36 hours	> 1,000 psi (6.90 MPa)	> 1,000 psi (6.90 MPa)	> 1,000 psi (6.90 MPa)
After 72 hours	> 2,000 psi (13.8 MPa)	> 2,000 psi (13.8 MPa)	> 2,000 psi (13.8 MPa)
After 7 days	> 6,000 psi (41.4 MPa)	> 6,000 psi (41.4 MPa)	> 6,000 psi (41.4 MPa)
Sag resistance at high temperature	Non-sag < 0.0 in.	Non-sag < 0.0 in.	Non-sag < 0.0 in.
Gel time at high temperature	> 100 minutes	> 5 hours	> 4 hours
Heat deflection temperature – ASTM D648			
After 14 days	> 120°F (49°C)	> 120°F (49°C)	> 120°F (49°C)
Open contact time	8 hours	8 hours	8 hours
Bond strength – ASTM C882			
After 14 days	> 1,000 psi (6.90 MPa)	> 1,000 psi (6.90 MPa)	> 1,000 psi (6.90 MPa)
Contact strength – ASTM C882			
After 14 days	> 1,000 psi (6.90 MPa)	> 1,000 psi (6.90 MPa)	> 1,000 psi (6.90 MPa)

Shelf Life and Product Characteristics

Shelf life	2 years in original, unopened containers
Storage conditions	Must be stored in a dry place and kept at above 20°F (-6.7°C). Acclimate <i>Planibond SBA SlowSet</i> to the stated temperature range for at least 24 hours before use.
Colors (Part A / Part B / Mixed)	Dark Gray / White / Light Gray
Consistency	Non-sag

Application Properties

Application temperature range	
<i>Planibond SBA SlowSet 40-65</i>	40°F to 65°F (4°C to 18°C)
<i>Planibond SBA SlowSet 60-85</i>	60°F to 85°F (16°C to 29°C)
<i>Planibond SBA SlowSet 80-105</i>	80°F to 105°F (26°C to 41°C)

CSI Division Classification

Common Work Results for Concrete	03 05 00
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Packaging

Size
<i>Planibond SBA SlowSet 40-65</i> : Kit, 3 U.S. gals. (11.4 L)
<i>Planibond SBA SlowSet 60-85</i> : Kit, 3 U.S. gals. (11.4 L)
<i>Planibond SBA SlowSet 80-105</i> : Kit, 3 U.S. gals. (11.4 L)

Approximate Coverage*

Application Thickness	Coverage
1/8" (3 mm)	12.8 sq. ft. per U.S. gal. (1.19 m² per 3.79 L)
	38.5 sq. ft. per 3 U.S. gals. (3.58 m² per 11.4 L)
1/4" (6 mm)	6.4 sq. ft. per U.S. gal. (0.59 m² per 3.79 L)
	19.3 sq. ft. per 3 U.S. gals. (1.79 m² per 11.4 L)
Amount of Mixed Product	Yield
1 U.S. gal. (3.79 L)	231 cu. in. (3 785 cm³)
3 U.S. gals. (11.4 L)	693 cu. in. (11 356 cm³)

* Coverage shown is for estimating purposes only. Actual jobsite coverage may vary according to substrate conditions and setting practices.

**Planibond[®]
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Refer to the SDS for specific data related to health and safety as well as product handling.

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Before using, the user must determine the suitability of our products for the intended use,

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