



Heat Bake Compatible Structural Adhesives Transforms Manufacturing Processes

THE CHALLENGES

Most adhesives can't survive a paint-bake cycle:

- Reduced strength due to heat exposure.
- Manufacturers do not consider adhesives in high-temperature applications.

Welding creates process issues:

- High labor costs for welders and required certifications.
- Lengthy assembly process.
- Surface preparation is required.
- Secondary finishing often required. Rework difficult.
- Safety concerns from hazardous, fumes, sparks and light.

THE LOCTITE® SOLUTION

LOCTITE® AA H3405™ and AA H3410™ brings new innovations:

- E-coat/powder coat compatible.
- Can withstand temperatures over 400°F.

Structural Bonding transforms assembly:

- No deformation, clean neat assemblies.
- Minimal surface preparation.
- Fast room temperature process.
- No external training or certifications required for workers.

LOCTITE® AA H3405™ and AA H3410™ Series



1. Increased Process Efficiency

The AA H3405™ and AA H3410™ product series can withstand typical e-coat and powder coat processes. There is a speed to optimize your process, with fixture times of 10 minutes and 20 minutes, respectively. The adhesives are sag resistant and can withstand paint bake temperatures. These structural adhesives can be stored at room temperature, where other high-performance adhesives require refrigerated storage. They are compatible with a full range of manual, semi-automatic and fully automatic dispense systems.



2. Strong, Durable Bond:

This adhesive series delivers impressive strength, peel, impact in both hot and cold temperatures, as well as environmental resistance on many materials including aluminum, steel, plastics and composites.

LOCTITE® STRUCTURAL BONDRERS

Product	Item Number	Pack Size	Cure	Color	Mix Ratio [Part A: Part B]	Working Time [Aluminum]	Fixture Time [Aluminum]
AA H3405™	2624611	400 ml cartridge	Room Temperature	Part A: Amber Part B: Black Mixed: Gray	4:1	3 to 5 minutes	8 to 12 minutes
AA H3410™	2603982	400 ml cartridge		Part A: Amber Part B: Black Mixed: Gray		7 to 10 minutes	18 to 22 minutes
AA H3410™	Part A: 2607874	40 lb. pail		Part A: Amber		7 to 10 minutes	18 to 22 minutes
	Part B: 2607877	40 lb. pail		Part B: Black Mixed: Gray			

ADHESIVE PROPERTIES

Cure Method	LOCTITE® AA H3405™		LOCTITE® AA H3410™	
	Lap Shear Strength, ISO 4587 Aluminum (2024 T3 Bare)	Impact Strength Ground Steel	Lap Shear Strength, ISO 4587 Aluminum (2024 T3 Bare)	Impact Strength Ground Steel
24 hours at 22°C (72°F)	2,800 psi	12.2 kJ/m ² at 22°C (72°F)	2,600 psi	16.5 kJ/m ² at 22°C (72°F)
1 hour at 22°C (72°F), 5 minute water soak, 25 minutes at 200°C (392°F), 24 hours at 22°C (72°F)	3,600 psi	14.2 kJ/m ² at -20°C (-4°F)	3,800 psi	21.8 kJ/m ² at -20°C (-4°F)

DISPENSING EQUIPMENT

Item #	Description
1084092	Mix Nozzle, (10) pack
2693823	EQ HD14 400ml Manual Dispenser
2693825	EQ HD14 400ml Pneumatic Dispenser



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