

**SOLIDBOND™
POLYURETHANE BONDING
ADHESIVE/SEALANT**

SOLIDBOND™ is a one component, high strength bonding adhesive with excellent sealant properties that provides a permanently elastic bond to most substrates. SOLIDBOND™ is a moisture cured, non sag system, specifically developed for the fabrication and repair of trailers, trucks, busses, trains, RV utility bodies, van conversions and specialty vehicles.

DESIGNED FOR:

1. Vehicle bodies and cab construction including panels, underbody components, roofing (metallic and FRP), front and rear spoilers, auto trim, moldings, body seams and welding joints.
2. Waterproof lap seams and molding in truck trailers, RV's and autobody repair.
3. Floor bonding, subfloor to metal crossmembers, butt joints & more
4. Bedding compound for exterior accessories as well as bonding trim and all kinds of stylings
5. A variety of general purpose joint sealing applications
6. Replacement of rivets and mechanical fasteners

FEATURES:

1. One component, ready to use, fast cure
2. Low VOC, odorless and particularly low volume shrinkage
3. Suitable for sidewall bonding applications.
4. Silicone free; sandable and paintable with most paints
5. UV stable, heat and moisture resistant
6. Broad adhesion spectrum to most substrates without a primer including: prepainted metals, plywood, glass, aluminum, steel, SMC, RIM FRP, Kemlite® and many plastics and composites
7. Non-staining

TYPICAL PROPERTIES:

(Specification ranges available upon request.)

Base:	Polyurethane
Colors:	White, Black & Gray
Viscosity:	Paste extrusion grade
Weight/gallon:	9.8 pounds
Specific Gravity:	1.17
Temperature Range:	-40° F to 200° F
Shelf Life:	12 months when stored in original unopened container under 80° F

TYPICAL PHYSICAL CHARACTERISTICS:

(Specification ranges available upon request.)

Tensile Strength after 30 days at room temperature:	475 psi
Ultimate Elongation after 30 days at room temperature:	350%
Shore A Hardness after 30 days at room temperature:	50
Tack-free time @77°F, 50% RH	40 Min
Lap Shear	400+ psi
UV Resistance:	Very Good
Ozone Resistance:	Excellent
Creep Resistance:	Excellent
Sag Resistance:	Excellent

PREPARATION OF SUBSTRATES:

Surfaces to be bonded should be cleaned of all dust, oils or other contaminants. A solvent wipe is often adequate. Use IPA, Toluene, or MEK depending on the contaminate being removed. Bonds to rigid surfaces are usually improved by a solvent wipe followed with light abrasion (80-grit wet/dry or a ScotchBrite® pad), and solvent wiping to remove abrasive residue. Dry surfaces thoroughly before applying adhesive.

METHOD OF APPLICATION:

SOLIDBOND™ can be applied by ordinary caulking guns (cartridge and sausage types) or pressure pumping equipment. Pumping equipment should be of the follower-plate type and have a pump ratio of at least 65:1. Aro, Binks, DeVilbiss, Graco and Lincoln all produce suitable equipment for handling this material consult Royal representative or equipment supplier to ensure installation of proper equipment start-up. (including moisture-lock hoses and accessories) are in place before

METHOD OF APPLICATION (Cont.):

Apply a bead of SOLIDBOND™ to one surface at temperatures above 40° F. A thin bead will accommodate more movement than a thick one. Joint depths should be no thicker than 1/2" and no less than 1/8". Surface skin formation will occur in 15 - 45 minutes, depending on ambient conditions. Initial set time is 4 hours, after which parts may be handled.

Light clamping, taping or use of a rivet or mechanical fastener in the corners to prevent downward creep until SOLIDBOND™ develops strength is recommended. This can also be accomplished by designing in a small lip or shelf at the bottom of the assembly. Strength build up is very fast in the early stages to give high holding power, with continued strength build up over time.

SPECIAL SIDEWALL BONDING (SKIN-TO-FRAME) APPLICATION INSTRUCTIONS

(Follow all general application procedures above in addition to these instructions.)

Surface must be clean and free of contamination to enable the Solidbond to work as designed. See preparation of substrates.

Because this product cures by atmospheric moisture, bondline width should be kept under 3/4" to allow for a quicker cure. Bondline thickness should be maintained as close to 1/8" as possible. A V-shaped nozzle opening is recommended and spacers may be used to help.

Affix the sidewall skin to the frame using moderate hand pressure, making sure that the skin makes contact with the SOLIDBOND™. Clamp or fasten as described above. If using coiled stock, this may require heavier clamping to prevent it from re-coiling. Under some conditions, lightly stressed structures may require bracing.

Allow sufficient cure to take place before removing clamps. At 73°F and 50% RH, this should occur after 3-4 hours

CLEANER:

Toluene or Methyl Ethyl Ketone while uncured. Cured material must be removed by mechanical means such as a razor knife.

PRECAUTIONARY DATA:

This product is not intended for use as a structural glazing adhesive or in architectural or construction applications requiring a structural grade adhesive. Store in dark and cool place. Avoid excessive heat. During storage, moisture and water should be avoided. Reaction with moisture or water will cause quality deterioration, but will not be hazardous. For industrial use only.

DISPOSAL INFORMATION:

Disposal should be made by incineration or in accordance with applicable governmental regulations.