



PRODUCT DATA SHEET

SikaBond®-948

(formerly MWeld 948)

HIGH-STRENGTH, HIGH-SOLIDS POLYURETHANE ADHESIVE

PRODUCT DESCRIPTION

SikaBond®-948 is a high-strength, high-solids, low-VOC polyurethane adhesive that is stronger than conventional adhesives. It produces a permanent overnight bond to almost any substrate. It can be used in a wide range of climates and conditions.

WHERE TO USE

- Interior and exterior
- Above grade

Substrate

- Most rigid building materials
- Treated and untreated lumber
- Brick
- Metal
- Concrete
- Masonry
- Plywood / OSB
- Fiberboard
- Cement board
- Rigid insulation

CHARACTERISTICS / ADVANTAGES

- Low odor and low VOC formulation is safe to use in occupied indoor spaces
- Strong and versatile adhesion that permanently bonds together nearly any material
- High solids, nonshrinking formulation provides desired coverage without cracking or losing bond over time
- Provides a tenacious bond that is stronger than many substrates it joins together, up to 3 times the strength of conventional adhesives
- Provides permanent overnight bond for faster project completion
- Long open time offers flexibility in repositioning, user friendly
- Can be applied to frozen, frost-free lumber for on-site versatility
- Broad service temperature range is suitable for use in hot and cold environments

APPROVALS / CERTIFICATES

- Adhesive meets or exceeds all requirements of the American Plywood Association Specification AFG-01, Adhesive for Gluing Plywood to Wood Framing.
- FHA Bulletin UM-60
- ASTM D 3498

PRODUCT INFORMATION

Composition / Manufacturing

SikaBond®-948 is a high-solids polyurethane elastomer that cures by reaction with atmospheric moisture.

Weight:

1.30 kg/L (10.8 lbs/gal)

Packaging

- 313 ml cartridges
- 828 ml cartridges

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Shelf Life	1 year when properly stored
Storage Conditions	Store in unopened containers in a cool, dry area away from direct sunlight. Storing at elevated temperatures will reduce shelf life. SikaBond®-948 remains flexible even when stored at freezing temperatures, but should be stored at room temperature for at least 24 hours before using.
Colour	Light brown
Freezing Point	Does not freeze
Flash Point	121°C (250°F)
Solid content by volume	90%
Viscosity	Up to 1,000,000 cps

TECHNICAL INFORMATION

Pull-Off Strength	Adhesive Strength Chart		
	Substrate	24 hrs	7 days
	Plywood to Douglas fir	3.73 MPa (541 psi)	5.91 MPa (858 psi)
	Plywood to treated lumber	5.93 MPa (861 psi)	6.89 MPa (1,000 psi)
	Metal to Douglas fir	2.16 MPa (313 psi)	2.16 MPa (313 psi)
	Foam to foam*	0.25 MPa (37 psi)	0.25 MPa (37 psi)
	Oriented strandboard to Oriented strandboard (wet)	2.44 MPa (354 psi)	3.75 MPa (544 psi)
	Wet Douglas fir to metal	1.50 MPa (217 psi)	2.16 MPa (313 psi)
	Frozen Douglas fir to frozen Douglas fir	2.48 MPa (360 psi)	5.70 MPa (828 psi)
	Plywood to F.R.P.	0.69 MPa (100 psi)	1.53 MPa (222 psi)
<p>Note: Average data is from 10 specimens. Wet lumber is from overnight soak.</p> <p>*Foam tears apart at (0.25 MPa) 37 psi .</p> <p>Test results are typical values obtained under laboratory conditions. Reasonable variations can be expected.</p>			

Lap Shear Strength	Property	Results MPA (PSI)	Comments
	Chemlite to plywood	2.35 (341)	Plywood failure
	Kynar to plywood	2.34 (340)	Sika Primer 173 on Kynar
	Textured polyurethane to plywood	1.65 (240)	32 minutes tack time

Shrinkage None

APPLICATION INFORMATION

Yield	Bead Size	Lineal
	3 mm (1/8 inch)	126.2 m/l (1,569 ft/gal)
	5 mm (3/16 inch)	56 m/l (697 ft/gal)
	6 mm (1/4 inch)	31.5 m/l (392 ft/gal)
	8 mm (5/16 inch)	20.2 m/l (251 ft/gal)
	10 mm (3/8 inch)	14 m/l (174 ft/gal)

Product Temperature Service Temperature:
Up to 121°C (250°F)

Open Time	Up to 1 hour
Curing Rate	SikaBond®-948 forms a firm set in 1–2 hours and a tenacious bond overnight. Cure time varies with temperature, humidity, and the porosity of the materials joined.

BASIS OF PRODUCT DATA

Product properties are typically averages, obtained under laboratory conditions. Reasonable variations can be expected on-site due to local factors, including environment, preparation, application, curing and test methods.

LIMITATIONS

For Best Performance

- Wear gloves during application of adhesive; once cured, material cannot be removed.
- Not intended for applications with continuous submersion.
- If adhesion to a substrate is questionable, a test application must be conducted.
- Make certain the most current versions of product data sheet and SDS are being used; visit usa.sika.com to verify the most current versions.
- Proper application is the responsibility of the user. Field visits by Sika personnel are for the purpose of making technical recommendations only and not for supervising or providing quality control on the jobsite.

ENVIRONMENT, HEALTH & SAFETY

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety-related data.

APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION

1. Surfaces must be structurally sound, dry, clean, and free of dirt, moisture, loose particles, oil, grease, asphalt, tar, paint, wax, rust, waterproofing or curing and parting compounds, and membrane materials.

On Metal Surfaces

Remove scale, rust, or other coatings to expose a bright white surface.

On Concrete, Stone, or Other Masonry Surfaces:

Clean by grinding, sandblasting, or wirebrushing to expose a sound surface free of contamination and laitance.

On Wood Surfaces:

The surface must be clean and sound. Scrape away paint to bare wood.

Priming

SikaBond®-948 bonds well to most substrates; however, it is the user's responsibility to check the adhesion of the cured adhesive on specific substrates. For further information, contact Sika Technical Services.

APPLICATION

1. Apply by caulking gun or trowel.
2. Wearing gloves during application is highly recommended. Once material has cured it cannot be removed.
3. Because of the high strength provided by SikaBond®-948 adhesive, do not apply it as heavily as you would a conventional adhesive. Cut the smallest possible opening in the spout to render the appropriate-sized bead. Be certain to fill all gaps between materials.
4. Materials may be repositioned without loss of adhesive strength up to one hour after application.
5. When necessary, use mechanical fasteners to hold materials in place until the adhesive has fully cured.

CLEAN UP

Clean all tools and equipment immediately after use with a dry cloth; Xylene, mineral spirits, or acetone may also be used. Cured material must be mechanically removed.

LEGAL NOTES

The information, and in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any recommendations, or from any other advice offered. The information contained herein does not relieve the user of the products from testing them for the intended application and purpose. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request or may be downloaded from our website at: www.sika.ca

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