

PRODUCT DATA SHEET

SikaBond®-948

(formerly MasterWeld® 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.

USES

- 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 / STANDARDS

- 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

Chemical Base

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

Weight:

10.8 lbs/gal (1.30 kg/L)

Packaging

- 313 ml cartridges
- 828 ml cartridges

Product Data Sheet

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June 2024, Version 01.01

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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.
Color	Light brown
Freezing point	Does not freeze
Flash Point	250°F (121°C)
Solid content by volume	90%
Viscosity	Up to 1,000,000 cps

TECHNICAL INFORMATION

Tensile Adhesion Strength

Adhesive Strength Chart

Substrate	24 hrs	7 days
Plywood to Douglas fir	541 psi (3.73 MPa)	858 psi (5.91 MPa)
Plywood to treated lumber	861 psi (5.93 MPa)	1,000 psi (6.89 MPa)
Metal to Douglas fir	313 psi (2.16 MPa)	313 psi (2.16 MPa)
Foam to foam*	37 psi (0.25 MPa)	37 psi (0.25 MPa)
Oriented strandboard to Oriented strandboard (wet)	354 psi (2.44 MPa)	544 psi (3.75 MPa)
Wet Douglas fir to metal	217 psi (1.50 MPa)	313 psi (2.16 MPa)
Frozen Douglas fir to frozen Douglas fir	360 psi (2.48 MPa)	828 psi (5.70 MPa)
Plywood to F.R.P.	100 psi (0.69 MPa)	222 psi (1.53 MPa)

Note: Average data is from 10 specimens. Wet lumber is from overnight soak.

*Foam tears apart at 37 psi (0.25 MPa).

Test results are typical values obtained under laboratory conditions. Reasonable variations can be expected.

Lap Shear Strength

Property	Results PSI (MPA)	Comments
Chemlite to plywood	341 (2.35)	Plywood failure
Kynar to plywood	340 (2.34)	MasterSeal P 173 on Kynar
Textured polyurethane to plywood	240 (1.65)	32 minutes tack time

Shrinkage None

APPLICATION INFORMATION

Coverage

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

Product Temperature

Service Temperature:

Up to 250°F (121°C)

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

Results may differ based upon statistical variations depending upon mixing methods and equipment, temperature, application methods, test methods, actual site conditions and curing conditions.

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.

ENVIRONMENTAL, HEALTH AND SAFETY

For further information and advice regarding transportation, handling, storage and disposal of chemical products, user should refer to the actual Safety Data Sheets containing physical, environmental, toxicological and other safety related data. User must read the current actual Safety Data Sheets before using any products. In case of an emergency, call CHEMTREC at 1-800-424-9300, International 703-527-3887.

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.

CLEANING OF TOOLS

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 DISCLAIMER

- KEEP CONTAINER TIGHTLY CLOSED
- KEEP OUT OF REACH OF CHILDREN

- NOT FOR INTERNAL CONSUMPTION
- FOR INDUSTRIAL USE ONLY
- FOR PROFESSIONAL USE ONLY

Prior to each use of any product of Sika Corporation, its subsidiaries or affiliates ("SIKA"), the user must always read and follow the warnings and instructions on the product's most current product label, Product Data Sheet and Safety Data Sheet which are available at usa.sika.com or by calling SIKA's Technical Service Department at 1-800-933-7452. Nothing contained in any SIKA literature or materials relieves the user of the obligation to read and follow the warnings and instructions for each SIKA product as set forth in the current product label, Product Data Sheet and Safety Data Sheet prior to use of the SIKA product.

SIKA warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current Product Data Sheet if used as directed within the product's shelf life. User determines suitability of product for intended use and assumes all risks. User's and/or buyer's sole remedy shall be limited to the purchase price or replacement of this product exclusive of any labor costs. **NO OTHER WARRANTIES EXPRESS OR IMPLIED SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKA SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. SIKA SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS.**

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