

# MasterWeld<sup>®</sup> 948

High-strength, high-solids polyurethane adhesive

FORMERLY CHEMREX<sup>®</sup> CX - 948

## PACKAGING

- 313 ml cartridges
- 828 ml cartridges

## COLORS

Light brown

## YIELD

See page 3 for chart.

## STORAGE

Store in unopened containers in a cool, dry area away from direct sunlight. Storing at elevated temperatures will reduce shelf life. MasterWeld 948 remains flexible even when stored at freezing temperatures, but should be stored at room temperature for at least 24 hours before using.

## SHELF LIFE

1 year when properly stored

## VOC CONTENT

45 g/L or 0.38 lbs/gal, less water and exempt solvents.

## DESCRIPTION

MasterWeld 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.

## PRODUCT HIGHLIGHTS

- 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

## LOCATION

- 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

**Technical Data**

**Composition**

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

**Compliances**

- 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

**Typical Properties**

PROPERTY	VALUE
Viscosity, cps	Up to 1,000,000
Solids, %	90
Working or open time, hrs	Up to 1
Weight, lbs/gal (kg/L)	10.8 (1.30)
Flash point, °F (°C)	250 (121)
Freeze/thaw stability	Does not freeze
Shrinkage	None
Service temperature, °F (°C)	Up to 250 (121)

**Test Data**

**LAP SHEAR**

PROPERTY	RESULTS PSI (MPA)	COMMENTS
Chemlite to plywood	341 (2.35)	Plywood failure
Kynar to plywood	340 (2.34)	MasterSeal P 173 on Kynar
Texturuded polyurethane to plywood	240 (1.65)	32 minutes tack time

**Test Data**

**ADHESIVE STRENGTH CHART**

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

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.

**HOW TO APPLY**

**SURFACE 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 OR 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**

MasterWeld 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 Master Builders Solutions 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 MasterWeld 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 adhesive has fully cured.

## Yield

BEAD SIZE IN (MM)	LINEAL FT/GAL (M/L)
1/8 (3)	1,569 (126.2)
3/16 (5)	697 (56)
1/4 (6)	392 (31.5)
5/16 (8)	251 (20.2)
3/8 (10)	174 (14)

### CURING

MasterWeld 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.

### 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.

### 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; call Customer Service (1-800-433-9517) to verify the most current versions.
- Proper application is the responsibility of the user. Field visits by Master Builders Solutions personnel are for the purpose of making technical recommendations only and not for supervising or providing quality control on the jobsite.

### HEALTH, SAFETY AND ENVIRONMENTAL

Read, understand and follow all Safety Data Sheets and product label information for this product prior to use. The SDS can be obtained by visiting [www.master-builders-solutions.com/en-us](http://www.master-builders-solutions.com/en-us), e-mailing your request to [mbsbscst@mbcc-group.com](mailto:mbsbscst@mbcc-group.com) or calling 1(800)433-9517. Use only as directed.

**IN CASE OF EMERGENCY: Call CHEMTEL +1 (800) 255-3924 or if outside the US or Canada, +1 (813) 248-0585.**

### LIMITED WARRANTY NOTICE

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