

# MasterWeld<sup>®</sup> 941

## Trowel-grade polyurethane construction adhesive

FORMERLY CHEMREX<sup>®</sup> CX-941

### PACKAGING

- 2 gallon (7.6 L) pails
- 5 gallon (18.95 L) pails

### COLORS

Light brown

### YIELD

See page 3 for chart.

### STORAGE

Store at 75 °F (24 °C) and 50% relative humidity. Protect unopened containers from heat and direct sunshine. In cool weather, store containers at room temperature for at least 24 hours before using.

### SHELF LIFE

12 months when properly stored

### VOC CONTENT

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

### DESCRIPTION

MasterWeld 941 is a one-component, polyurethane based trowel-grade, waterproof adhesive. Its elastomeric properties enable it to move with wood and other materials as they expand and contract. It contains no solvents or water, so it will not cause wood to expand. MasterWeld 941 provides excellent initial green strength and outstanding bond strength. It is formulated for indoor and outdoor applications.

### PRODUCT HIGHLIGHTS

- Contains no solvents or water that can cause wood surfaces to expand
- Extremely low odor formulation enables use in occupied buildings
- Is nonflammable and contains no chlorinated solvents to improve worker safety
- Freeze/thaw stable formulation for indoor and outdoor applications
- Can be used in a variety of applications and environments to reduce job complexity

### APPLICATIONS

- Rubber tiles and rolled rubber goods (including recycled rubber)
- Laminated and solid hardwood flooring
- Cork flooring and underlayment
- Stair treads, transitions, and stair nosings
- Underlayment grade OSB
- Door panels
- Sidewalls
- Solid hardwood planks
- Parquet flooring
- Code approved subfloor

### LOCATION

- Interior and exterior

### SUBSTRATE

- Concrete
- Plywood
- Particle or chip board or scarify
- Cement and gypsum underlayment
- Radiant heat flooring
- Asphalt cutback adhesive residue

**Technical Data**

**Composition**

MasterWeld 941 is a one-component, polyurethane-based, waterproof structural adhesive.

**Compliances**

- ASTM e 84-95B; NFPN, class a and UBC, Class 1
- USDA compliant for use in meat and poultry areas

**Typical Properties**

PROPERTY	VALUE
<b>Polymer type</b>	Polyurethane
<b>Viscosity</b>	Creamy, trowelable
<b>Working time, min</b>	45–60
<b>Freeze-thaw stability</b>	Unlimited cycles
<b>Service temp, °F (°C)</b>	-40–150 (-40–66)
<b>Slab temp, °F (°C)</b>	50–100 (10–38)

**Test Data**

PROPERTY	RESULTS	TEST METHOD
<b>Solids, %</b>	95 ±2	ASTM D 1259
<b>Specific gravity</b>	1.25 ±0.10	ASTM D 1475
<b>Tensile strength, psi</b>		
Hardwood/concrete	300	ASTM D 412
Plywood/concrete	120	ASTM D 412
<b>Elongation, %</b>	50 ±5	ASTM D 412
<b>Flame spread*</b>		
1/8 x 1/8" trowel-applied thickness	5 flame spread	15 smoke density
1/4 x 1/4" trowel-applied thickness	10 flame spread	30 smoke density
<b>Perm Ratings and Water Vapor Transmission (WVT)</b>		
	<b>WVT (per 24 hours)</b>	<b>US Perms</b>
1/4 x 1/4" trowel at 35 ft <sup>2</sup> /gallon	2.67 lbs/1,000 ft <sup>2</sup>	1.88
1/8 x 1/8" trowel at 90 ft <sup>2</sup> /gallon	3.05 lbs/1,000 ft <sup>2</sup>	2.15

\*Meets flame spread requirement at both NFPA, Class A, and UBC, Class 1.

**HOW TO APPLY**

**SURFACE PREPARATION FOR FLOORING INSTALLATIONS**

- 1.Ensure that floors are structurally sound and fully cured a minimum of 28 days. Test floor for vapor drive in accordance with anhydrous calcium chloride test. Vapor drive should not exceed the industry standard of less than 3.0 lbs per 1,000 ft<sup>2</sup> in 24 hours, or 75% relative humidity per ASTM F2170 or F2170.
- 2.Repair concrete and install joint sealants and fillers as necessary. Use patching materials as appropriate.
- 3.Low spots must be filled with MasterTop® 116 FC or MasterTop 115 FC.
- 4.Substrate must be sound, smooth, level, clean and dry. It must be free of dust, dirt, wax, loose paint, incompatible curing compounds or fire retardant chemicals, fungicides, release agents, sealers, or any other foreign substances that might interfere with a good bond.

**SURFACE PREPARATION FOR ALL INSTALLATIONS:**

- 1.Clean substrate of oil, grease, and other bond-inhibiting materials not removed by shotblasting or other mechanical means with a commercial degreaser.

**FLOORING INSTALLATION APPLICATION**

- 1.Ensure that starter rows are firmly in place by wedging or face nailing. Once initial rows are secure, use MasterWeld 941 in a wet-lay or walk-on-work method of installation.
- 2.Wet-lay method: Apply adhesive to substrate with an appropriate trowel. Immediately place flooring into the wet adhesive. No flashing required.  
NOTE: Do not apply more adhesive than can be covered in 30 minutes or the adhesive transfer could be jeopardized.
- 3.A 100 lb (45 kg) roller must be used in the wet-lay method during all installations. It must be rolled again within 30 minutes. Uneven flooring should be tacked, weighted or rolled to ensure good contact between the flooring and the substrate.
- 4.Clean up tip: Before troweling MasterWeld 941, cover the unused portions of the trowel with duct tape. After troweling, tear off the tape before the material cures.

**SPECIAL INSTALLATION REQUIREMENTS RADIANT HEAT INSTALLATIONS**

- 1.Check for subfloor moisture
- 2.The heating system must be turned off 24 hours before installation to prevent accelerated curing
- 3.Maximum surface temperature is 85 °F (29 °C)
- 4.Expect some heating season shrinkage

**SOUND CONTROL PRODUCTS**

- 1.Cork underlayment use 1/8" by 1/8" (3 by 3 mm) v-notched trowel

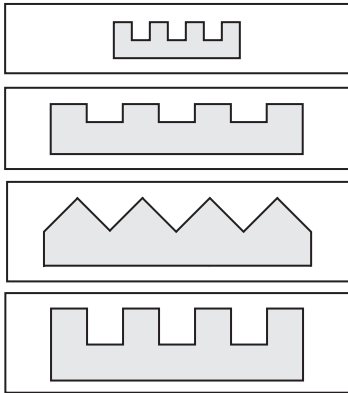
**STAIR TREADS AND NOSINGS**

- 1.Lightly water mist the MasterWeld 941 to accelerate cure
- 2.Depending on manufacturer, treads and nosings may require solvent wipe to remove residual mold release

**APPLICATION FOR OTHER INSTALLATIONS:**

- 1.Apply by roll coater, bead coater, or appropriate trowel.
- 2.Do not apply more adhesive than can be covered in 30 minutes or the adhesive transfer could be jeopardized.
- 3.Clean up immediately after use. Clean spills and tools with appropriate solvent or adhesive remover. Equipment may be cleaned with diabasic ester or polypropylene carbonate.

Note: Follow the current NWFA installation guide for specialty flooring installation instructions



## Yield

TROWEL SIZE (INCHES)	YIELD (FT <sup>2</sup> /GALLON)	TYPICAL USES
1/8 by 1/8 square notch	80–90 ft <sup>2</sup> (7.4 m <sup>2</sup> –8.4 m <sup>2</sup> )	Smooth surface tiles, finger block parquet or cork
1/4 by 1/8 square notch	40–50 ft <sup>2</sup> (3.7 m <sup>2</sup> –4.6 m <sup>2</sup> )	Rough surface tiles, laminated planks greater than 1/2" and 3/4" parquet
3/16 by 5/32 V-notch	60–70 ft <sup>2</sup> (5.6 m <sup>2</sup> –6.5 m <sup>2</sup> )	Semi-smooth tiles, 3- and 5-ply laminated planks and 3/4" parquet
1/4 by 1/4 square notch	35–40 ft <sup>2</sup> (3.3 m <sup>2</sup> –3.7 m <sup>2</sup> )	Plywood to concrete, solid planks, flat milled solids and shorts
1/16 V-notch	75 ft <sup>2</sup> (7.0 m <sup>2</sup> )	Recycled rubber tile or rolled goods
1/8 V-notch	60 ft <sup>2</sup> (5.6 m <sup>2</sup> )	Recycled rubber exterior
1/32 V-notch	120–150 ft <sup>2</sup> (11 m <sup>2</sup> –14 m <sup>2</sup> )	Recycled 4 mm rubber underlayment

The trowel sizes suggested will maximize adhesive coverage. The coverage required for laminated plank is 80%; for solid woods, 95%. Check periodically during installation. If subflooring is uneven, use a leveling or patching material beforehand or use a large notched trowel to provide the appropriate coverage. If insufficient transfer occurs, additional MasterWeld 941 will need to be applied.

## CURING

Cure time is dependent on temperature and humidity. Times are based on 75 °F (57 °C) and 50% relative humidity.

Firm set: 1–2 hours

Light foot traffic: 8–10 hours

Normal traffic: 24 hours

Higher temperatures and humidity shorten the cure rate, while lower temperatures and humidity lengthen the time.

## CLEAN UP

Clean all tools and excess MasterWeld 941 immediately after use with mineral spirits.

Use proper precautions when handling solvents. Cured adhesive can be removed by cutting with a mechanical tool.

NOTE: Do not clean up with water. It will accelerate the cure of the adhesive.

## FOR BEST PERFORMANCE

- Wear gloves during application; MasterWeld 941 is difficult to remove from skin and clothing. If adhesive gets on skin, immediately wipe it off with a dry cloth.
- Do not apply on frozen surfaces or standing water.
- Avoid contact with water or alcohol before use and before complete cure.
- Do not use in areas subject to hydrostatic head pressure.
- Do not use on wet, contaminated, or friable substrates.
- The maximum acceptable floor variation is 3/16" (4.76 mm) in 10 feet (3 m) or 1/8" (3.75 mm) in 6 feet (1.8 m).
- Do not use as a leveling agent.
- Do not set flooring into an adhesive that has a dry skin.
- 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 version.
- 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 are not for supervising or providing quality control on the jobsite.

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**CAUTION**

MasterWeld 941 contains methylene bisphenyl diisocyanate; Talc; Hydrotreated light petroleum distillate; Polymethylene polyphenol isocyanate; Silica and crystalline quartz.

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**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.**

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**LIMITED WARRANTY NOTICE**

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