

Complete™ Modified Silane

1. PRODUCT NAME

Metropolitan Systems Complete (MSC) Modified Silane Wood Flooring Adhesive (3124226)

2. MANUFACTURER

Metropolitan Hardwood Floors
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3. DESCRIPTION

MSC Modified Silane Wood Flooring Adhesive is a ground-breaking development in wood flooring adhesives that requires no pre-installation moisture testing*. MSC Modified Silane can bridge cracks up to 1/8" and it is an environmentally friendly formulation, is easy to trowel and suitable for all green building projects.

It can be used for all types of all types of engineered wood flooring designed to be installed using the glue down installation method. When used as an adhesive and moisture barrier, MSC Modified Silane reduces moisture to acceptable limits.

*No moisture testing is required when installed using the Moisture Control Method.

Key Features and Benefits

- Sound reduction properties – Exceeds building code requirements
- No moisture testing needed
- Easy to clean
- Greater bond strength and superior initial strength
- No width or length limitations – Ideal for large planks

Packaging

4 gallon plastic pail (15.13 L)

Coverage

Determine recommended trowel size based on flooring type. Coverage will vary with the absorption of substrate and trowel size. Figures below are presented only as guidelines.

Trowel Selection:



Glue Down Only Engineered plank 1/2" (12.7 mm) or less and less than 7" (178 mm) wide: 3/16" x 1/4" x 1/2" (4.8 x 6.4 x 3.2 mm) Flat V-notch; 60-70 ft²/gal (5.6-6.5 m²/3.78 L)



Engineered plank thicker than 1/2" (12.7 mm) or 7" (178 mm) or wider: 3/16" x 3/16" x 3/16" (4.8 x 4.8 x 4.8 mm) Square-notch; 35-45 ft²/gal (3.3-4.2 m²/3.78 L)



Moisture Control Method Engineered plank: 1/4" x 1/4" (6.4 x 6.4 mm) V-Notch; 30-35 ft²/gal (2.8-3.25 m²/3.78L)

Suitable Substrates

When properly prepared, suitable substrates include:

- Concrete slabs
- Cured leveling compounds
- OSB (underlayment grade)

- Radiant heated subfloors
- Plywood (underlayment grade)
- Ceramic tile
- Terrazzo
- Cement backer board

Substrate Preparation:

The subfloor must be checked according to NWFA guidelines. Ensure that the subfloor is structurally sound, cured, smooth, dry, clean and free from dust, dirt, grease, paint, old adhesive, curing agents, sealers, cutback** any other contaminants that could interfere with a good adhesive bond.

Concrete Slab: Must be cured at least 28 days. Do not use in areas subject to hydrostatic pressure or with pre-existing moisture conditions. pH should be between 7-10. The subfloor must be dry to the touch and not visibly damp. Slab must be prepared to receive flooring in compliance with ASTM F710 and NWFA guidelines. Slabs over a year old with high moisture readings indicate a moisture problem related to hydrostatic pressure, broken water pipes, or improper maintenance. These issues are not covered by our warranty.

Terrazzo: Surface should be sanded so that all polishes and glaze compounds are stripped. After sanding, thoroughly vacuum and clean the substrate with mineral spirits and allow to dry before installing the wood flooring.

APA approved Plywood and OSB Type Subfloors: Panels must be securely fastened. Eliminate movement with screws. Sand all high joints. Fill and patch low areas. Refer to flooring manufacturer for guidelines of moisture content difference between properly acclimated wood flooring and subfloor materials.

Radiant Heated Subfloors: Check flooring manufacturer's specifications to determine if the flooring is approved over radiant heated subfloors. MSC Modified Silane is approved for use on hydronic system radiant heated subfloors, provided the system is fully embedded in concrete. Lightweight toppings must be primed first. Turn off the heat 48 hours prior to the installation and leave the heat off until 48 hours after the installation is completed.

**Cutback Adhesive Residue (non-asbestos) – Application over asphalt-based cutback adhesive residue is acceptable provided the residue is well bonded. Subfloor preparation of the existing cutback adhesive requires only that the ridges or high spots be knocked off, typically with 1-3 passes of a mechanical scraper. NOTE: Mechanical removal of cutback by sanding, grinding or blasting can be hazardous since old cutback adhesive may contain asbestos. Harmful dust may result. Inhalation of asbestos dust may cause asbestosis or other serious bodily harm. Consult all applicable government agencies for rules and regulations concerning the removal of floorings and adhesives that contain asbestos. Tacky or pressure-sensitive adhesive must be mechanically removed by a method such as shot blasting.

Storage

Store at a moderate room temperature. Protect adhesive from freezing. Refer to the Technical Data section of this PDS, for more information.

Shelf Life

Maximum of 1 year from date of manufacture in unopened container.

Limitations

- Interior use only
- Do not use on wet, dusty or contaminated substrates
- Subfloor must be dry
- Do not use in areas subject to hydrostatic pressure
- Room temperature should be between 65°F (18°C) and 90°F (35°C) during application

Complete™ Modified Silane

Cautions

Read complete cautionary information printed on product container prior to use.

The information in this product data sheet is valid for 90 days from the date listed above. Please visit metrofloors.com to view or download the most current information.

This Product Data Sheet has been prepared in good faith on the basis of information available at the time of publication. It is intended to provide users with information about and guidelines for the proper use and application of the products under normal environmental and working conditions. Because each project is different, Metropolitan Hardwood Floors cannot be responsible for the consequences of variations in such conditions, or for unforeseen conditions.

4. TECHNICAL DATA

Physical Properties

Metropolitan Systems - Complete Modified Silane Universal Flooring Adhesive	
Description	
Tensile Strength	>100 psi
Elongation	125%
Open Time	65°F-75°F (18°C-24°C) 70-100 minutes
Application Room Temperature	Between 65°F (18°C) and 90°F (35°C)
Flash Point	>200°F (>93.3°C)
Color	White
Cure Time	Light foot traffic after 8-10 hours, heavy foot traffic after 24 hours.
Shelf Life	One year from date of manufacture; stored at 50-80°F (10-26°C).
Acoustical Data	IIC – 69 dB ASTM E 492-09 / ASTM E 9890-6
	STC – 67 dB ASTM E 90-04 / ASTM E 413-04
Open Time	Up to 12 hours depending on porosity and environmental conditions
Freeze/Thaw Stability	5 cycles at 20°F (-7°C)

5. INSTALLATION INSTRUCTIONS

Application

Installing Wood Flooring using the Moisture Control Method:

- Subfloor must be flat [3/16" (4.8 mm) in 10' (3 m) radius or 1/8" (3.2 mm) in 6' (1.8 m) radius].
- Follow all manufacturer's instructions and guidelines
- Use a 1/4" x 1/4" (6.4 mm x 6.4 mm) V-Notch trowel.
- Trowel the adhesive parallel to wood flooring in 2'-3' (.6-.9 m) sections and place wood immediately into adhesive. Spread

adhesive beyond where the last row of flooring stops to ensure there are no voids between stopping and starting points. 100% adhesive coverage is required for moisture protection.

- Repeat steps 3-4.
- Trowels will wear down over time and must be changed to achieve correct coverage.

Installing Wood Flooring using the Glue Down Only Method:

- Subfloor must be flat [3/16" (4.8 mm) in 10' (3 m) radius or 1/8" (3.2 mm) in 6' (1.8 m) radius]. Concrete moisture testing must be performed according to ASTM F1869 with levels not to exceed 3lbs/1000ft²/24 hrs (1.3kg/93m²/24hrs) and/or ASTM F2170 with levels not to exceed 75% RH. Subfloor moisture levels must not exceed wood flooring manufacturers guidelines. If it exceeds any of these, use the Moisture Control Method.
- Follow all manufacturer's instructions and guidelines.
- Reference trowel selection for correct trowel for your application.
- Do not spread more adhesive than can be covered within 30-45 minutes.
- Periodically check to ensure there is 90% adhesive transfer to the board.
- Trowels should be changed regularly.

Clean Up

Remove the adhesive from the wood floor surface as soon as possible before the adhesive dries. Use a soft cloth and Mineral Spirits carefully to not harm the finish. CAUTION: Mineral Spirits are flammable. Read and follow all precautions on container label.

6. AVAILABILITY

Metropolitan Hardwood Floors installation products (Metropolitan Systems - Complete) are available nationwide. To locate Metro Systems in your area, please visit us at; www.metrofloors.com

7. LIMITED WARRANTY

This product is sold subject to a Limited Warranty and related terms of use provided by Metropolitan Hardwood Floors (US). To the extent permitted by law, Metropolitan disclaims any implied warranties of merchantability and fitness for a particular purpose and all incidental and consequential damages arising out of the sale, purchase or use of this product. For Limited Warranty details or to view the SDS with information regarding health, safety and environmental requirements, visit metrofloors.com

8. MAINTENANCE

Not applicable

9. TECHNICAL SERVICES

Technical and safety literature. To acquire technical and safety literature, please visit our website at metrofloors.com.

10. FILING SYSTEM

