

DUCHATEAU

3 in 1 UltraTech MS

TECHNICAL DATA SHEET (TDS)



PRODUCT DESCRIPTION:

Designed exclusively for DuChateau flooring, UltraTech MS Wood Flooring Adhesive is a unique one-component wood flooring hybrid-polymer adhesive. It is specifically formulated to be used as an adhesive or as a sound dampening, moisture vapor membrane. NO PRE-INSTALLATION MOISTURE TESTING REQUIRED FOR ENGINEERED WOOD FLOORING. UltraTech MS can bridge cracks up to 1/8" and will provide a powerful adhesive bond. It is easy to trowel, easy to clean, and suitable for all green building projects.

FEATURES:

- No pre-installation moisture testing required for engineered flooring
- Passes code requirements for sound reduction
- Low VOCs
- May contribute to LEED® credits
- Easy to trowel
- Easy to clean
- Protects wood flooring against moisture vapor

TYPICAL APPLICATIONS:

UltraTech MS is ideal for glue-down installations for all types of engineered, solid or acrylic impregnated wood flooring, bamboo and wood flooring, designed to be installed using the glue down installation method, that may require protection from damage due to subfloor moisture transmissions. When used as an adhesive and moisture membrane, UltraTech MS reduces moisture to acceptable limits.

SUBFLOOR PREPARATION:

DUltraTech MS can be used over the following subfloors: concrete, Portland cement patch, terrazzo, ceramic tile, APA- approved wood panels, radiant heat flooring, and cement backer board. Ensure that the subfloor is structurally sound, smooth, dry, properly cured, clean and free from dust, dirt, grease, oil, plaster, paint, old adhesive, wax, curing agents, sealers, cutback or other asphaltic-based residue and any other contaminants that could interfere with a good adhesive bond. For applications of over ceramic tiles, it is necessary to grind the tile surfaces and clean thoroughly with an industrial vacuum cleaner. Before starting the installation, carefully check that the subfloor is flat. Eliminate dips and crowns that exceed 3/16" (4.8 mm) in a 10 feet (3 m) radius by patching or sanding/grinding. Do not use UltraTech MS as a leveling agent. Where needed, use only Portland cement based patching and leveling compound. Always follow manufacturer's recommendations for subfloor moisture, subfloor levelness, expansion space and acclimation requirements. Repair all cracks in the subfloor greater than 1/8" (3 mm) before applying UltraTech MS.

When the "Moisture and Sound Control" installation method is not used, moisture tests must be performed on all concrete subfloors regardless of grade level or age. Moisture testing must be performed in accordance to ASTM F-1869 – Calcium Chloride Test, or ASTM F-2170 – in situ RH Probe Test. Always refer to the manufacturer's installation instructions for subfloor moisture requirements and testing procedures before beginning installation.

Concrete Subfloors: Concrete must be cured a minimum of 28 days. Pre-install moisture testing is not required when using the “Moisture Control” installation method. Subfloor must have no pre-existing moisture conditions or failures from conditions of hydrostatic pressure. The subfloor must be dry to the touch with no standing water or visible dampness, and must be prepared to receive flooring in compliance with ASTM F710. Concrete subfloors over a year old with high moisture readings are indicative of a chronic underlying moisture source problem resulting from hydrostatic pressure or other moisture related exclusions such as broken pipes, leaky plumbing, sink overflow, flooding, weather conditions or improper maintenance.

Terrazzo: All polishes and glaze compounds must be completely stripped and surface must be abraded by sanding. After sanding, thoroughly vacuum (NO sweeping) to remove all loose dust particles. After vacuuming, clean the entire substrate with mineral spirits and allow drying before installing the wood flooring.

Plywood and OSB Type Subfloors: All panels must be APA-approved and securely fastened. Eliminate all squeaks and movement with SCREWS (not nails). Sand all high joints. Fill and patch low areas. Refer to manufacturer for guidelines of moisture content difference between properly acclimated wood flooring and subflooring materials. (Typically this should not exceed 4%).

Radiant Heated Subfloors: UltraTech MS is approved for use on hydronic system radiant heated subfloors, provided the wood flooring is approved over radiant heated subfloors. The system must be fully embedded in concrete. Lightweight or gypsum based topping must be dry and above grade, and the surface must NOT be primed prior to glue down installation. Turn off the heat 48 hours prior to the installation and leave the heat off until 48 hours after the installation is completed.

INSTALLING WOOD FLOORING FOR “MOISTURE CONTROL” APPLICATION

1. Subfloor must be in compliance with “Subfloor Preparation” above before starting the installation.
2. Follow manufacturer’s instructions for acclimation, floor layout and expansion space requirements. It is imperative the subfloor be flat, without dips, birdbaths or sudden rises (3/16” in 10’ radius or 1/8” in 6’ radius).
3. Use the trowel chart below to determine which trowel to use. The use of any other applicator or trowel size will void all warranties and yield unsatisfactory results.
4. TROWEL THE ADHESIVE PARALLEL TO THE WOOD FLOORING IN 24”-36” SECTIONS THEN IMMEDIATELY LAY WOOD INTO WET ADHESIVE BEFORE MOVING TO NEXT SECTION. ALWAYS SPREAD ADHESIVE BEYOND WHERE THE LAST ROW OF FLOORING STOPS TO ENSURE THERE ARE NO VOIDS BETWEEN STOPPING AND STARTING POINTS WHEN SPREADING THE ADHESIVE. 100% ADHESIVE TRANSFER IS REQUIRED FOR MOISTURE PROTECTION.
5. Repeat steps 3–4 until the job is complete.
6. It is the sole responsibility of the installer to determine the suitability and compatibility of the adhesive for the user’s intended use.

INSTALLING WOOD FLOORING FOR GLUE DOWN ONLY APPLICATION

Concrete subfloors must be cured a minimum of 28 days. Subfloor must be properly prepared to receive flooring in compliance with ASTM F710. Subfloor moisture levels must not exceed manufacturer’s guidelines. When subfloor moisture levels exceed wood manufacturer’s limit, use the “Moisture and Sound Control” installation method.

Read and understand all Technical Data and Safety Data Sheets prior to installation.

2. Follow all requirements provided by DuChateau including those related to wood flooring acclimation, room temperature and humidity levels, environmental controls, expansion space and layout.
3. Follow the instructions for “Subfloor Preparation” above.
4. Follow the instructions for “Trowel Selection” on right panel and select the appropriate notched trowel for the type of wood you are installing. For proper adhesive bond, 90% transfer of adhesive to the flooring is required.
5. Select the correct trowel for the wood you are installing from the trowel chart. Using the incorrect trowel will void this adhesive warranty.
6. Apply UltraTech MS to the subfloor with recommended trowel and lay the wood floor onto the “wet” adhesive.

NOTE: Do not set flooring into adhesive that has a dry skin. The “open time” of the adhesive will vary according to the temperature and humidity level, the higher the temperature and humidity, the shorter the open time.

7. Good transfer of the adhesive to the wood is critical. Periodically pull back a board that has just been installed and make sure there is 90% adhesive transfer to the board.
8. Trowel tips will become worn down over time and must be changed to achieve correct coverage.
9. It is the sole responsibility of the Installer to determine the suitability and compatibility of the adhesive for the user’s intended use.

CLEAN UP:

Using a non-abrasive towel wipe the surface of the wood floor. If the adhesive has cured, use a plastic scraper and buff with a dry, non-abrasive towel. Immediately clean all tools and equipment before materials cure. Always test an inconspicuous area to ensure the flooring finish will not be damaged.

TROWEL SELECTION:

The proper notch trowel is very important in achieving satisfactory results with DUCHATEAU's UltraTech MS Adhesive. Use of an incorrect trowel will void all warranties.

FLOORING	MVER OR RH%	TROWEL	COVERAGE
5/16" Fingerblock parquet	<3 lbs/1000 ft ² per 24 hours or 75%RH	1/8" x 1/8" x 1/8" square-notch	55-65 ft ² / U.S. gal
Engineered plank or bamboo < 1/2" and less than 7" wide	<3 lbs/1000 ft ² per 24 hours or 75%RH	1/4" x 1/2" x 3/16" v-notch	60-70 ft ² / U.S. gal
Engineered plank or bamboo >1/2" or wider than 7"	<3 lbs/1000 ft ² per 24 hours or 75%RH	3/16" x 3/16" x 3/16" square-notch	35-45 ft ² / U.S. gal
Solid wood plank, shorts or plywood	<3 lbs/1000 ft ² per 24 hours or 75%RH	1/4" x 1/4" x 1/4" square-notch	25-30 ft ² / U.S. gal
Parquet, engineered plank, bamboo or solid plank	Adhesive, moisture & sound control	1/4" x 1/4" v-notch	30-35 ft ² / U.S. gal

SOUND CONTROL

STC (6" concrete, NO ceiling) = 53

IIC (6" concrete, NO ceiling) = 50

STC (6" concrete, WITH ceiling) = 61

IIC (6" concrete, WITH ceiling) = 64

Delta IIC = 22

*3/8 Engineered Flooring with 1/4" x 1/4" V-Notch Trowel

TECHNICAL DATA:

Elongation: >100%

Maximum Subfloor Moisture: Engineered Flooring with "Adhesive and Moisture Control" method – NONE.

All other flooring or installation methods – 3 lbs. / 1000 ft² or 75% RH

Color: Brown

Application Temperature: 65°F - 90°F (18°C - 32°C)

Cure Time: Light foot traffic: after 8 - 10 hours, Heavy foot traffic: after 24 hours

Open Time: 45 - 120 minutes at 65°F - 75°F (18°C - 24°C):

Note: Open times will vary with temperature and humidity.

VOC: <30 g/L (as calculated per SCAQMD 1168)

Flash Point: >200°F (>93.3°C)

Shelf Life: One year from date of manufacture, when stored at 50 - 80°F (10 - 26°C)