

TECHNICAL DATA SHEET: SIGNATURE 3200

DESCRIPTION:

Signature 3200 is a very aggressive, pressure-sensitive adhesive that is designed for the installation of a wide variety of resilient flooring types. Signature 3200 has been specifically formulated to provide extended working time, develop strength quickly, performs well under rolling loads, and has good moisture-resistance.

FEATURES AND BENEFITS:

- Dries quickly with very aggressive tack properties
- Up to 2+ hours of working time
- Excellent indentation and shrinkage resistance
- Low VOC content

WHERE TO USE:

- Approved for use with luxury vinyl tile and luxury vinyl plank; vinyl-enhanced tile; bio-based tile; fiberglass-reinforced vinyl sheet flooring; solid vinyl sheet flooring and reground rubber underlayment.
- Interior residential (rental apartments, condominiums, and homes)
- Interior commercial (office buildings, hotel rooms and hallways, and restaurant dining areas)
- Interior heavy commercial (hotel lobbies, convention centers, airports, and department stores)
- Interior institutional (hospitals, schools, universities, libraries, and government buildings)

LIMITATIONS:

- For interior installations only
- Do not install over substrates containing asbestos
- Do not apply directly over any adhesive residues, including cutback adhesive.
- Install flooring only in areas that are recommended by the flooring manufacturer.
- Do not install into wet adhesive over nonporous substrates.
- Do not use to install luxury vinyl tile or luxury vinyl plank with known dimensional stability issues.
- Do not install in areas with known hydrostatic moisture, osmotic blistering, or alkali silica reaction conditions.
- Do not use when the substrate temperature is below 50°F (10°C) or above 90°F (32°C), or when the ambient relative humidity is less than 30% or greater than 80%.

- Do not install when the moisture vapor emission rate (MVER) using the anhydrous calcium chloride test (ASTM F1869), when the relative humidity (RH) of the concrete slab (ASTMF2170), or the pH exceeds the limits listed in the table below.

Floor Covering	MVER	RH%	pH
Luxury Vinyl Tile/Plank	15	99%	12
Solid vinyl sheet, fiberglass-reinforced sheet vinyl, and rubber flooring	12	95%	11

*See attached Disclaimer for Adhesive with 99% RH Limit

SUITABLE SUBSTRATES:

- Fully cured concrete at least 28 days old (see “Limitations” section)
- Exterior-grade plywood (Group1, CC type), and other approved wood underlays (per flooring manufacturer recommendations)
- Properly prepared, and fully bonded VCT or vinyl floor covering (single layer) that is over a year old and adhered with a full spread application of adhesive
- Embossing levelers applied over existing, properly prepared, and fully bonded ceramic, or porcelain tile
- Properly prepared cement terrazzo
- Cement-based self-leveling underlays and patching compounds (per manufacturer recommendations)
- Properly prepared, primed gypsum underlays that meet the requirements for compressive strength according to ASTM F2419
- Properly prepared and installed MAPEI epoxy moisture mitigation systems
- Radiant-heat systems that have been properly installed and that are maintained at a maximum of 85°F (29°C) surface temperature

Consult Signature’s Technical Services Department for installation recommendations regarding substrates and conditions not listed.

SURFACE PREPARATION:

- All substrates must be structurally sound, dry, solid, and stable.
- Substrate should be clean and free of dust, dirt, oil, grease, paint, curing agents, concrete sealers, loosely bonded toppings, loose particles, old adhesive residues, and any other substance or condition that may prevent or reduce adhesion. If the surface contains these substances, they must be mechanically removed. Do not use chemical means.
- All surfaces must be level to 3/16" in a 10-foot span (4.8 mm in a 3.0-m span), even, flat and smooth. Level any high spots and fill all holes or cracks using a high moisture rated cement-based self-leveling underlayment or patching compound.

MIXING:

- Ready to use, no mixing necessary

Note: Choose all appropriate safety equipment before use. Refer to Safety Data Sheet (SDS) for more information

APPLICATION:

Read to the flooring manufacturer's guidelines for acclimation requirements and complete installation instructions. Read all installation instructions thoroughly before installation. Install flooring in strict accordance with the flooring manufacturer's written instructions.

1. Select the appropriately notched trowel (see the "Approximate Coverage" chart) and spread the adhesive evenly over the subfloor, keeping the trowel at a 45-degree angle to the subfloor.
2. Determine the flash and working time (see "Application Properties" section). Only apply as much adhesive as can be installed within the working time. For releasable installations, allow the adhesive to become clear and tacky with no transfer. For permanent bond installations, install carpet tile into semi-wet adhesive.
3. Protect the open adhesive from dust and debris, which will inhibit proper bond and decrease tack.
4. Once the flooring is installed, immediately roll flooring with the recommended-weight roller across the width and length of the flooring surface.

CLEANUP:

- Promptly clean any adhesive smudges from the flooring material's surface with water while the adhesive is still fresh/wet.
- Clean tools with water while the adhesive is still fresh/ wet. Clean with mineral spirits once dried. Use caution with mineral spirits, which may be harmful to some materials.

Note: Refer to technical and safety data sheets for complete information regarding uses, application, limitations, and safety

PROTECTION:

- Protect the finished installation from light traffic for at least 12 hours and from heavy traffic for at least 24 hours.
- Building owners should become aware of the flooring manufacturer's guidelines for climate-control settings (temperature and humidity). These conditions must be monitored and kept constant to ensure the overall performance and long-term success of the installation

PRODUCT PERFORMANCE PROPERTIES:

Laboratory Tests	Results
Percent Solids	45% to 65%
VOC's (Rule #1168 of California's SCAQMD)	<20 per L
pH	8 to 10
Density	7.5 to 9.2 lbs per US gal. (0.9 to 1.1 per mL)
Flash point (ASTM D56)	> 212°F (100°C)

SHELF LIFE AND PRODUCT CHARACTERISTICS:

Shelf Life	12 months when stores in original, unopened packaging at 73°F (23°C)
Storage Conditions	Store at 65°F to 80°F (18°C to 26°C)
Polymer Type	Acrylic
Consistency	Paste
Color	Off-White

PROTECT FROM FREEZING:

Protect containers from freezing in transit and storage. Provide for heated storage on site and deliver all materials at least 48 hours before work begins.

APPLICATION PROPERTIES AT 73°F (23°C) AND 50% RELATIVE HUMIDITY:

	Flash Time*	Working Time**
Porous Substrates	0 to 30 minutes	30 to 60 minutes
Non-Porous Substrates	30 to 60 minutes	Up to 2 hours

*Flash time is the recommended amount of time for a freshly applied adhesive to remain exposed to the air before the installation of a floor covering.

**Working time is the maximum amount of time that an adhesive can remain exposed to the air and still effectively bond to the floor covering.

Note: Flash time and working time vary based on temperature, humidity, substrate porosity, product application, and jobsite conditions.

PACKAGING:

Size
1 Gallon (3.79 L)
4 Gallon (15.1 L)

APPROXIMATE COVERAGE*:

Recommended Trowel	Coverage
1/32" x 1/16" x 1/32" U-Notch Trowel (0.8 x 1.6 x 0.8 mm)	1/32" x 1/16" x 1/32" U-Notch Trowel (0.8 x 1.6 x 0.8 mm)

**Trowel dimensions are depth/width/space. Coverage shown is for estimating purposes only. Actual jobsite coverage may vary according to site conditions, product application, and setting practices.*

RELATED DOCUMENTS:

Surface Preparation Requirements" reference guide for floor-covering installation system at www.signatureflooring.com

Refer to the SDS for specific data related to health and safety as well as product handling.

LEGAL NOTICE

The contents of this Technical Data Sheet ("TDS") may be copied into another project-related document, but the resulting document shall not supplement or replace requirements per the TDS in effect at the time of the MAPEI product installation. ANY ALTERATIONS TO THE WORDING OR REQUIREMENTS CONTAINED IN OR DERIVED FROM THIS TDS SHALL VOID ALL RELATED MAPEI WARRANTIES. Before using, the user must determine the suitability of our products for the intended use, and the user alone assumes all risks and liability. ANY CLAIM SHALL BE DEEMED WAIVED UNLESS MADE IN WRITING TO US WITHIN THIRTY (30) DAYS FROM DATE IT WAS, OR REASONABLY SHOULD HAVE BEEN, DISCOVERED.

Disclaimer for Signature 3200 with 99% RH Limit on Resilient Flooring

Signature 3200 has been formulated for the installation of resilient flooring in elevated Relative Humidity concrete substrate conditions up to 99% (ASTM F2170). For a full warranty it is essential to allow the adhesive to completely dry to a pressure-sensitive state before flooring installation occurs. It must be noted that while the adhesive is warranted to maintain a bond to the flooring and substrate in these elevated RH conditions it is not and must never be considered a substitute for a moisture mitigation system. This adhesive is designed to be used only on concrete substrates that meet ASTM F710 (Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring) and ACI 302.2R-06 (Guide for Concrete Slabs that Receive Moisture Sensitive Flooring Materials) both of which require the placement of an impervious vapor retarder/barrier beneath the concrete substrate. The vapor retarder/barrier shall be intact and meets ASTM E1745 standard. Note that if the presence of an intact vapor retarder/barrier underneath the concrete substrate cannot be confirmed then moisture mitigation or continued slab drying is required prior to installation. The use of this adhesive as a corrective measure for an existing moisture related flooring failure will void the warranty. When using Signature 3200 in elevated moisture conditions, the use of an exterior rated patch or self-leveler is required to maintain the bond warranty. The concrete substrate surface must be porous, free of dust, debris, paint, chemical contaminants, adhesive residue, concrete sealers or topical curing agents. The pH of the concrete substrate surface must be below 12.0 when using Signature 3200 to install Resilient flooring.

Further Warranty Restrictions include but not limited to the following:

- Concrete substrate with moisture vapor emission rate (MVER) that exceeds 15 lbs. per 1,000 sq. ft. (6.80 kg per 92.9 m²) per 24 hours, when using the anhydrous Calcium Chloride test (ASTM F1869).
- Concrete substrate must be at least 28 days old
- Concrete substrate with highly polished or burnished non-porous surfaces.
- Concrete substrate that is visibly wet or has been flooded.
- Concrete substrate without a functioning vapor barrier system that meets ASTM E1745.
- Concrete substrate with known hydrostatic moisture, visible presence of water or water droplets, osmotic blistering or alkali-silica reaction problems.
- The floor covering manufacturer limitations regarding concrete substrate moisture conditions (RH, ASTM 2170 & MVER, ASTM 1869), pH and others supersede OEM RESILIENT ADHESIVE RAM 13 recommendations.
- Not recommended for use with non – breathable floorings such as sheet and large format tile made of vinyl or rubber when the concrete substrate Relative Humidity is above 95% (ASTM F2170), the moisture vapor emission rate (MVER) exceeds 10 lbs. per 1,000 sq. ft. (4.54 kg per 92.9 m²) per 24 hours, when using the anhydrous Calcium Chloride test (ASTM F1869), or the pH is great or equal to 11.0.
- High moisture-related issues such as mold, mildew, and air quality