

FORBO SUSTAIN 1299 ADHESIVE TECHNICAL DATA

RECOMMENDED FOR USE WITH:

- Marmoleum® Sheet, Walton, Marmoleum® Composition Sheet (MCS), Marmoleum® Sport
- Corkment Underlayment
- Marmoleum® Modular, Marmoleum® Modular Striato, Marmoleum® Composition Tile (MCT)

IMPORTANT!! Forbo strongly recommends that prior to the placement of concrete on site that concrete professionals are consulted regarding the terms for performance of the adhesive system listed below. This will ensure that the necessary and appropriate admix design is specified to eliminate any unnecessary cost or loss once the concrete slab has been poured. If the concrete surface does NOT meet the required level of porosity, failure may occur and such use voids the warranty of this adhesive.



SPECIFICATIONS:

- SCS-Certified 25% Post-Consumer Recycled Content (PCC)
- Cradle to Cradle Certified™ at the Gold level.
Cradle to Cradle Certified™ products are evaluated for material health, material reutilization, renewable energy use and carbon management, water stewardship, and social fairness. For more information visit www.c2ccertified.org.
- Packaged in biodegradable plastic pails
- FloorScore Certified by SCS Global Services
- Dual Acrylic Polymer
- Non-flammable; 100% Solvent free
- Storage: Freeze-thaw stable: 1 cycle at 20° F (-6° C). If the pail is opened and found to be frozen, let it set closed and undisturbed at room temperature until thawed. **DO NOT** try to mix frozen adhesive.
- Shelf life: 2 years in unopened container
- Appearance and Odor: Yellow paste with little or no odor
- VOC Emissions: 0 grams per liter (calculated per CA South Coast Rule 1168)
- Spread Rate: Approximately 125 square feet per gallon
- Available in four gallon units

SUBSTRATE & TESTING REQUIREMENTS:

- Forbo Sustain 1299 can be used on all grade levels of concrete. All concrete substrates must be prepared in strict accordance with the conditions set forth in the latest version of ASTM F 710. The substrate must be dry, clean, smooth, and structurally sound.
IMPORTANT! The installation of a permanent, effective moisture vapor retarder is a requirement of ASTM F 710. Forbo Sustain 1299 is not intended for use on slabs where no moisture vapor retarder is in place. For additional information, contact Forbo's Product Support and Education Services.
- Concrete surfaces that are hard troweled or tight must be mechanically abraded in order to create the necessary level of porosity for adequate adhesive performance prior to installation.
- The concrete porosity should be determined by testing in strict accordance with the latest version of ASTM F 3191. Water should penetrate into the slab within 5 – 20 minutes to be considered acceptable. If water penetrates too rapidly or too slowly, adjustments to the concrete surface must be made to provide the proper surface profile. Concrete slabs determined to be overly porous, dusty or generally insufficient may need to be primed using a primer according to the manufacturer's recommendations to regulate the porosity level of the slab and to meet the porosity conditions noted above.
- The concrete surface must be dry and have a value of 5 or less when tested in strict accordance with the latest version of ASTM F 2659 using a surface moisture meter such as Tramex CME-4 or equivalent.
- The surface pH of the concrete must not exceed a pH of 12.0. Concrete surfaces with pH readings less than 8.0 or above 12.0 will require remediation prior to installation.
- The internal relative humidity must not exceed 99% as determined by testing conducted in strict accordance with the latest version of ASTM F 2170.
- Conduct adhesive mat bond testing before beginning the installation. Bond testing will aid in identifying both the working characteristics of the adhesive, such as the appropriate open and working times for the site conditions, and also any potential bonding problems to the substrate.

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INSTALLATION GUIDELINES:

1. Areas to receive material should be clean, fully enclosed and weather tight. The permanent HVAC should be fully operational and controlled and set at a minimum temperature 65° F (18.3° C). If this is not possible, the areas should be acclimated and controlled by means of temporary HVAC to the service level conditions expected during occupancy. The temperature and humidity should range from 75° F ± 10° F (23.9° C ± 5.5° C) with a 50% ± 10% ambient relative humidity. These conditions **MUST** be established at least seven days prior to beginning the installation, maintained during the installation, and continued for at least seven days following the installation.
2. The substrate must be free of all foreign materials including, but not limited to, dust, solvent, paint, wax, oil, grease, residual adhesive, adhesive removers, film-forming curing compounds, silicate penetrating curing compounds, sealing, hardening, or parting compounds, alkaline salts, excessive carbonation or laitance, mold, mildew, and other foreign materials that might affect the rate of moisture dissipation from the concrete, the adhesion of resilient flooring to the concrete or cause a discoloration of the flooring from below.
3. Before beginning the installation, all testing requirements should be conducted: concrete porosity, pH, internal relative humidity and bond testing. Refer to the Substrate Evaluation & Preparation section of the Forbo Installation Guide for additional information.
4. Trowel recommendation: 1/16" x 1/16" x 1/16" square notch trowel. Replace the trowel when proper coverage is no longer attainable.
5. The open time and working time of adhesives will vary depending on site conditions such as ambient temperature and humidity, the porosity of the substrate and air circulation. A general indication of proper open time is when a light touch produces transfer of adhesive to the finger, but a firm touch will flatten and "smear" the adhesive.
6. **MARMOLEUM® SHEET PRODUCTS:** Install one sheet at a time. The flooring material must remain in contact with the adhesive while the adhesive is drying and curing. In order to ensure continuous contact of the material and the adhesive, all material must be rolled repeatedly during installation. When installing Marmoleum® sheet, the natural "roll curl" at the end of each cut of Marmoleum® must be addressed by massaging to remove the tension caused by being rolled. Adequate massaging should enable the material to remain in contact with the adhesive but, if necessary, weight should be applied to ensure that the flooring material remains in full contact with the adhesive while the adhesive is drying. Proper placement and rolling will result in a complete "explosion" of the trowel ridges, creating a continuous flat film of adhesive on the substrate and on the material backing.
7. **MARMOLEUM® MODULAR & MCT PRODUCTS:** A short open time will be necessary. The flooring material must remain in contact with the adhesive while the adhesive is drying and curing. Proper placement and rolling will result in a complete "explosion" of the trowel ridges, creating a continuous flat film of adhesive on the substrate and on the material backing, with no trace of trowel marks or ridges. When dry, complete transfer of the tile backing will appear in the surface of the adhesive with no visible trowel marks.
8. Check for adhesive transfer frequently; there must be a **wet transfer** of adhesive to the material backing in order to achieve a secure bond.
9. Immediately roll the flooring in all directions using a 100 pound roller to ensure proper adhesive transfer. Additional rolling is required during adhesive setup to ensure that the material is flat and fully adhered.
10. Remove fresh adhesive residue immediately with a clean white cloth. Dried adhesive can be removed with a clean white cloth and a properly diluted solution of neutral pH cleaner or with Forbo Adhesive Remover. The area must then be rinsed with clean, cool water to remove all residue from the floor. Refer to the Forbo Commercial Floor Care Guide for further information.
11. Keep the lid on the pail when not in use.
12. Do not allow heavy traffic or rolling loads for a minimum of 72 hours following the installation. Additional time may be necessary if the installation is over a non-porous substrate.
13. In order to allow the adhesive to dry and cure properly, wait a minimum of five days following the installation before conducting wet cleaning procedures or initial maintenance. Additional time may be necessary if the installation is over a non-porous substrate.

For additional information, Forbo's Installation and Floor Care Guidelines are available for download at www.forboflooringNA.com, or contact Forbo's Product Support & Education Services at 1-800-842-7839.