FLOORING SYSTEMS

Forbo V 1190 Adhesive Technical Data

Recommended for Use With

- Flotex Modular
- Sphera SD | EC (in combination with Forbo C 930 Adhesive)
 NOTE: Installation of Sphera SD | EC requires the use of both Forbo C 930 and V 1190 adhesives. Refer to Forbo's Forbo Sphera SD | EC Installation Guidelines for complete installation recommendations.
- Sphera (non-ESD applications)
- Eternal
- Allura Decibel
- Coral Tile

Specifications

- FloorScore Certified by SCS Global Services
- 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: White 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 when using a $1/16" \times 1/16" \times 1/16"$ square notch trowel; Approximately 175 square feet per gallon when using a $1/32" \times 1/16" \times 1/32"$ fine notch trowel; OR Approximately 300 square feet per gallon when using a 3/8" nap roller.
- Available in one gallon and four gallon units.

Substrate & Testing Requirements

- Forbo V 1190 Adhesive can be used on all grade levels of concrete, approved suspended wood floors and approved existing resilient floors. 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.
- 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 10 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 surface pH of the concrete must not exceed a pH of 11.0. Concrete surfaces with pH readings less than 7.0 or above 11.0 will require remediation prior to installation.
- The internal relative humidity must not exceed 90% as determined by testing conducted in strict accordance with the latest version of ASTM F 2170.
- The moisture vapor emission rate must not exceed 8.0 lbs. per 1,000 square feet in 24 hours as determined by testing conducted in strict accordance with the latest version of ASTM F 1869.
- 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.

General 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 \pm 10° F (23.9° C \pm 5.5° C) with a 50% \pm 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.





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3. Before beginning the installation, all testing requirements should be conducted: concrete porosity, pH, internal relative humidity, moisture vapor emissions and bond testing. Refer to *Forbo's Substrate Evaluation and Preparation Guidelines* for additional information.

Installation Recommendations for Permanent Applications

- For permanent installations of Flotex Modular, Sphera Sheet, Eternal Sheet, or Coral Tile products, use a 1/16" x 1/16" x 1/16" square notch trowel. Replace the trowel when proper coverage is no longer attainable.
 NOTE: When installing Sphera SD | EC, use Forbo C 930 adhesive to install the grounding strap and use Forbo V 1190 adhesive for the remainder of the installation. Refer to Forbo's Sphera SD | EC Installation Guidelines for additional information
- 2. 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.
- 3. For Modular 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.
- 4. Check for adhesive transfer frequently; there must be a <u>100% wet transfer</u> of adhesive to the material backing in order to achieve a secure bond.
- 5. 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.
- 6. 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 *Forbo's Floor Care Guidelines* for further information.
- 7. Keep the lid on the pail when not in use.
- 8. 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.
- 9. When heat welding Sheet Vinyl products, allow a minimum of 24 hours for proper adhesive curing before welding floors.
- 10. 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.

Installation Recommendations for Releasable Applications

- 1. For Flotex Modular, Allura Decibel or Coral Tile products, use a 3/8" nap roller. Replace the roller when proper coverage is no longer attainable.
- 2. Roll the adhesive onto the substrate. Allow the adhesive to turn clear and dry to the touch before installing. After turning clear, the flooring <u>MUST</u> be placed into the adhesive within four (4) hours.
- 3. Immediately roll the flooring in all directions using a 100 pound roller to ensure the material is in full contact with the adhesive.
- 4. Remove fresh adhesive residue from all surfaces 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 *Forbo's Floor Care Guidelines* for further information.
- 5. Keep the lid on the pail when not in use.
- 6. 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.
- 7. 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.