wineo PURline®

General Information

wineo PURline® is a heterogeneous commercial resilient floor covering consisting of bio-polyurethane (ecuran), Fleece TEC® system backing glass fiber reinforcement, paper print layer, and clear PU top layer. wineo PURline is suitable for use in many different types of public buildings and healthcare environments, including sanitary areas with the use of welded seams. This product must be used for interior applications only and must be installed by professional installers that have sufficient professional liability insurance coverage (aka Errors and Omissions Insurance) for the project. Caution should be used in moving and lifting. Allow for appropriate equipment and manpower to safely move materials. Work safe and always follow the relevant safety procedures.

wineo PURline is a bio-polyurethane based flooring - a new category of floorcovering - which requires a substantially different type of simple but specific installation parameters than vinyl, rubber, linoleum, or other types of resilient floor coverings. All Installation, Maintenance and Warranty requirements must be read, understood and followed – contact Mats Inc. directly with any questions on compliance with any requirements.

Mats Inc. recommends installing and maintaining entrance matting at all outdoor entrances; this will improve air quality, reduce maintenance costs, and lengthen the life of your floors.

These instructions supersede any verbal or written instructions from Mats Inc. representatives and must be followed in order for the limited warranty to be in effect.

Technical Data

<table>
<thead>
<tr>
<th>ASTM Spec</th>
<th>Being developed by ASTM F06 Committee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roll</td>
<td>~ 6’ 7” x 65’ 7” (2m x 20m); (~ 430.56 ft² per roll)</td>
</tr>
<tr>
<td>Wood XS Plank</td>
<td>~ 4” x 24” (100mm x 600mm) w/ micro-bevel all 4 sides; (28 planks, ~18.08 ft² per case)</td>
</tr>
<tr>
<td>Wood L Plank</td>
<td>~ 8” x 48” (200mm x 1200mm) w/ micro-bevel all 4 sides; (20 planks, ~ 51.67 ft² per case)</td>
</tr>
<tr>
<td>Wood XL Plank</td>
<td>~ 10” x 59” (250mm x 1500mm) w/ micro-bevel all 4 sides; (12 planks, ~ 48.44 ft² per case)</td>
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<tr>
<td>Stone XL Tile</td>
<td>~ 19½” x 39” (500mm x1000 mm) w/ micro-bevel all 4 sides; (10 tiles, ~ 53.82 ft² per case)</td>
</tr>
<tr>
<td>Thickness</td>
<td>~ 1/8” (2.5 mm)</td>
</tr>
<tr>
<td>Composition</td>
<td>Heterogeneous commercial floor covering constructed of bio-polyurethane (ecuran), Fleece TEC® system backing, glass fiber reinforcement, décor paper print layer, and a clear PU top layer.</td>
</tr>
<tr>
<td>Weight</td>
<td>~ 0.74 lbs. per ft²</td>
</tr>
<tr>
<td>Backing</td>
<td>Fleece TEC® system</td>
</tr>
<tr>
<td>Limited warranty</td>
<td>10 years</td>
</tr>
</tbody>
</table>
### Performance Test Method Requirement Result

<table>
<thead>
<tr>
<th>Performance</th>
<th>Test Method</th>
<th>Requirement</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammability</td>
<td>ASTM E648</td>
<td>&gt;0.45 w/cm² for Class 1</td>
<td>Class 1</td>
</tr>
<tr>
<td>Smoke density</td>
<td>ASTM E662</td>
<td>≤450</td>
<td>≤450</td>
</tr>
<tr>
<td>Slip resistance</td>
<td>ASTM D2047</td>
<td>None</td>
<td>0.92</td>
</tr>
<tr>
<td>Fungi growth</td>
<td>ASTM G21</td>
<td>None</td>
<td>No growth</td>
</tr>
<tr>
<td>Static load</td>
<td>ASTM F970</td>
<td>None</td>
<td>0.002” (250 lbs.) &amp; 0.005” (1450 lbs.) residual indentation</td>
</tr>
<tr>
<td>Color stability – heat</td>
<td>ASTM F1514</td>
<td>None</td>
<td>Δ (Delta) E &lt; 0.1</td>
</tr>
<tr>
<td>Color stability – light</td>
<td>ASTM F1515</td>
<td>None</td>
<td>Δ (Delta) E &lt; 0.1</td>
</tr>
<tr>
<td>Sound transmission</td>
<td>ASTM E2179</td>
<td>None</td>
<td>Δ (Delta) IIC 7 &amp; IIC 35</td>
</tr>
<tr>
<td>Dimensional stability</td>
<td>ASTM F2199</td>
<td>None</td>
<td>&lt; 0.2%</td>
</tr>
<tr>
<td>Chemical resistance</td>
<td>ASTM 925</td>
<td>None</td>
<td>Exceeds standard specifications</td>
</tr>
<tr>
<td>Antistatic behavior</td>
<td>AATCC 134</td>
<td>None</td>
<td>Maximum Average of 3.1 kV negative</td>
</tr>
<tr>
<td>R Value</td>
<td>ASTM C518</td>
<td>None</td>
<td>0.07</td>
</tr>
<tr>
<td>UV Resistance</td>
<td>EN ISO 105 – B02</td>
<td>None</td>
<td>≥7</td>
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<tr>
<td>Squareness deviation</td>
<td>ASTM F2421</td>
<td>None</td>
<td>≤ 0.005” (planks and tiles)</td>
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</tbody>
</table>

### Adhesive Moisture Limits Application Method Coverage

<table>
<thead>
<tr>
<th>Adhesive</th>
<th>Moisture Limits</th>
<th>Application Method</th>
<th>Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>MI PURtape</td>
<td>≤ 99% RH **</td>
<td>Dry Tape Roll</td>
<td>Planks or Tiles: 115 ft² / can Roll Goods: 105 ft² / can</td>
</tr>
<tr>
<td>MI 2500 Spray</td>
<td>≤ 95% RH</td>
<td>Spray can</td>
<td>Planks or Tiles: 115 ft² / can Roll Goods: 105 ft² / can</td>
</tr>
<tr>
<td>MI 1500</td>
<td>≤ 90% RH existing slab ≤ 99% RH ** new slab</td>
<td>1/32” x 1/16” x 1/32” U-Notch (FFA)</td>
<td>~ 225 - 250 ft² / gallon</td>
</tr>
</tbody>
</table>

**with declining RH values and an intact moisture retarder**

Tested following the protocol of ASTM F2170, the results must not exceed the published limits. For MI 1500 trowelable adhesive, replace all worn trowels every 3.5 gallons to ensure proper spread rate; do not re-notch. Check the expiration date of the adhesive, if expired - do not use.

It may not be the flooring contractor’s responsibility to conduct moisture testing. It is, however, the flooring contractor’s responsibility to make sure these tests have been conducted and that the results are acceptable prior to installation. Testing should be performed by an International Concrete Repair Institute (ICRI) certified concrete slab moisture testing technician (CCSMTT); please visit [https://www.icri.org/page/ccsmtt_list](https://www.icri.org/page/ccsmtt_list).

All on or below grade concrete subfloors must also have a confirmed effective vapor retarder pre-installed underneath that meets the requirements of ASTM E1745. If not, then use a moisture mitigation system that conforms to ASTM F3010. This system must be applied following the manufacturer’s written instructions.

### Sustainability Certification

**wineo PURline® MI 2500 Spray Adhesive MI 1500**

- **Cradle to Cradle Silver Certified**
- **FloorScore®**
- **Blue Angel**
- **GreenGuard Gold**
- **M1 Certification**
- **EPD (Environmental Product Declaration)**
- **HPD (Health Product Declaration)**
- **TUV Profi Cert**
- **TVOC ≤ to 0.5 mg/m³**
- **CDPH / EHLB**
- **CA 01350**

**Green Label Plus™**

**TVOC < 1g/L**

*Also complies with the threshold of:*

- **MVV TB Annex 8 / ABG**
- **AgBB**
- **Belgian VOC Regulation**
- **BREEAM Exemplary Level**
- **Austrian Eco Label UZ 56**
LEED v4

Many finishing products have the potential to contribute points to LEED v4. However, the credits can only be gained when calculating the combined performance of all the products used on a particular LEED project; therefore no single product can guarantee you will obtain LEED v4 credits. wineo PURline® may contribute to the following LEED credits (points), the following is based on LEED NCv4:

v4 MRp2: Material and Resources – Construction & demolition waste management planning:
   The tiles or planks reduce waste from the installation process, reducing waste in landfills.
   Made from recyclable material and / or is a reusable product, reducing waste in landfills and is Cradle to Cradle Certified™.

v4 MRc1: Material and Resources – Building life-cycle impact reduction:
   Option 3. Building and material reuse. This product is Cradle to Cradle Certified™ and can be reused or salvaged from off-site or on-site as a percentage of the surface area. Note: Materials contributing toward this credit may not contribute toward MrC3.

v4 MRc2: Material and Resources – Building product disclosure and optimization, environmental product declarations:
   Option 1. Environmental product declaration (EPD) is available.

v4 MRc4: Material and Resources – Building product disclosure and optimization:

v4 EQc2: Indoor Environmental Quality – Low emitting materials:
   Option 1 (Flooring). General emissions evaluation. Verified third party Cradle to Cradle Certified™, GreenGuard™ Gold, FloorScore®, Blue Angel, TUV Profi Cert, and M1 certificate are available.
   Option 1 (Adhesives). Verified third-party FloorScore® certificate for MI 2500 Spray Adhesive and Green Label Plus™ certificate for MI 1500 Adhesive are available.
   Option 2. Budget Calculation Method.

Subfloor Preparation

Document every process of the testing, preparation and installation with video or photographs.

Proper glides must be used on all furniture that may slide directly across the floor, consult the furniture manufacturer for recommendations for use on resilient flooring. Heavy objects must not be moved directly across the floor; use protective boards.

Direct sunlight can cause UV damage (fading or bleaching) to most interior finishes, so Low E glass should be selected that will reduce the UV transmission to less than 1%. If not, applying 3M™ protection film (or similar) on the windows is recommended.

Do not install any material that has visible defects or damage. A contractor that installs any material that has visible defects or damage assumes responsibility for the damaged material.

Underfloor heating is suitable, providing the substrate does not exceed 85°F, and the system is not used for 72 hours after the installation. When it is used, the temperature must not be increased by more than 5°F per day, or thermal shock may cause bond failure.

Warning

The Occupational Safety and Health Administration (OSHA) has exposure limits for people exposed to respirable crystalline silica; these limits must be followed. All local, state and federal regulations must be followed; this includes but is not limited to the removal of in-place asbestos containing material. Do not install over a chemically abated subfloor, contact Technical Support in the Customer Care department (customercare@matsinc.com).

Concrete Subfloors

Unless stated otherwise, follow the requirements of ASTM F710. If the subfloor has standing water, hydrostatic pressure, ASR, or if a chemical adhesive remover has been used, do not install; contact Technical Support in the Customer Care department (customercare@matsinc.com).

The substrate must also be smooth (ridge-free) with a flatness tolerance of ≤ 3/16-inch over 10-foot maximum plane variation and if required, smooth using a commercial grade (≥ 3000 psi.) suitable leveling underlayment or skim coat with a suitable patching compound. Follow the manufacturer’s written instructions and limitations which must also meet the moisture requirements / test results for the project including allowing sufficient time to dry / cure.

Porosity

When using MI PURtape, MI 1500 or MI 2500 Adhesive, the substrate can be porous or non-porous. Test for porosity according to ASTM F3191, the water droplet test.
If the water is absorbed into the surface in less than 10 seconds, the substrate is considered “very porous” and will require the application of a primer. For more information and guidance, contact Technical Support in the Customer Care department (customercare@matsinc.com). Diamond grinding (or similar) to make the concrete surface porous is acceptable. Alternatively, any leveler or patch used must be at least 1/8” thick to be considered porous.

**On & Below Grade**

All on and below grade concrete slabs must have a confirmed and effective vapor retarder installed directly underneath the slab that meets the requirements of ASTM E1745. If this cannot be confirmed, then use an appropriate moisture mitigation system if installing with either MI 1500 or MI 2500.

**Moisture Mitigation System**

If the moisture test results are too high, making the surface porous and allowing it to dry to an acceptable level is recommended. If that is not possible, then we recommend only moisture mitigation systems that conform to ASTM F3010, which must be applied following the manufacturer’s written instructions.

Other products like floating or bonded membranes are available; these are not covered by our limited warranty. Only adhesives suitable for non-porous substrates must be used over such membranes and Mats Inc. will only provide a one-year product defect warranty unless it is a recommended Mats Inc. product.

**Joints & Cracks**

Do not install over any expansion or moving joints as any subfloor movement may cause installation failure. Use a suitable industry standard expansion joint assembly system, as required.

**Gypsum Subfloors**

Unless stated otherwise, all Gypsum subfloors must be prepared in accordance with ASTM F2678. The gypsum products must be installed following the manufacturer's written installation instructions including any requirements for priming. The substrate must be smooth (ridge-free) with a minimum flatness and gradient tolerance of ≤ 3/16-inch over 10-foot.

**Wooden Subfloors**

Unless stated otherwise all wooden subfloors must be prepared in accordance with ASTM F1482. The substrate must be clean (without contaminates), dry (≤ 8% moisture content).

Wood floors must be double layer construction with a minimum total thickness of 1”. The subfloor must be rigid, free from movement, and have at least 18” of well-ventilated air space below. Sleepers must not be directly in contact with concrete or earth, and the ground beneath the subfloor must be covered by a suitable vapor retarder. Do not install directly over Masonite™, Lauan, fire retardant, particle or chipboard. The substrate must also be smooth (ridge-free) with a minimum flatness and gradient tolerance of ≤ 3/16” over 10-foot.

**All Other Subfloors**

For all other subfloor/substrates, please contact Technical Support in the Customer Care department (customercare@matsinc.com) before proceeding.

**Storage, Conditions & Acclimation**

**Storage**

Rolls may be shipped horizontally. If shipped & received in this manner, place them in an upright position on a clean, flat, solid surface in an interior, climate controlled space. The area must be secure and fully enclosed from the weather. Never store the rolls laying down, outdoors or in shipping containers.

Planks and Tiles must be stored flat and neat (without overhanging). If appropriate, they can be left on the transport pallet. Never store outdoors or in shipping containers.

**Conditions**

The conditions of the project and on-site storage areas must both be at a constant (± 5°F) service temperature that is between 68°F and 80°F with ambient relative humidity between 35% - 65% for at least 48 hours before acclimatization begins and for 72 hours after installation. The substrate must also be at least 5°F above the dew point.

**Product Acclimation**

**Rolls:** All rolls must have been stored upright, and delivered to the jobsite location for acclimation. Total acclimation time is 48 hours on-site. Once delivered to the jobsite location, deliver individual rolls to jobsite installation location, remove transport materials from rolls and place in an upright position.

Remove all transit packaging and individual wrapping from each roll and loosen the roll to the core to: 1.) remove winding tension 2.) allow for temperature to normalize throughout the material and 3.) allow for RH to normalize throughout the material, to arrive at operating environment conditions. Allow the rolls to acclimate in this position & location for 48 hours.
Roll Goods may require further conditioning and relaxing prior to installation into adhesive bed. Make rough room cuts, allowing for 2” – 3” oversizing; allow rough-cut flooring to lay flat in place for 2 hours; installation may proceed at this point if the roll material has fully relaxed; if any residual roll curl memory remains after 2 hours of being flat-laid, back-roll rough-cut roll material into a loose coil (~ 1’ diameter) if necessary to relax any residual roll memory; non-marking blue or green painter’s tape can be used to secure loose coils. Stand upright for 24 hours prior to the installation of the sheets. If installing with MI PURtape, back-rolling is not generally required and installation may proceed without delay.

**Planks & Tiles:** All cases must be delivered to the jobsite location for acclimation. Total acclimation time is 48 hours on-site. Remove transport materials from skids, remove cases from skids and deliver individual cases to jobsite installation location. Lay out on a smooth, flat, dry surface. Do not stack more than 5 cases high. Open both ends of the cases and allow to acclimate 48 hours prior to the start of the installation. Following the preceding instructions, stable acclimation of all PURline floor coverings takes a minimum of 24 hours to accomplish, and my take up to 72 hours or longer depending on storage and jobsite environmental conditions. Windows etc. where sunlight may shine onto the subfloor, must be covered for 2 hours prior, during, and for 72 hours after installation using blinds, cardboard or similar.

**Installation Instructions**

**Required Tools**

- **Welding:** Hot air welding gun with a 5 mm round speed nozzle – automatic grooving machine with a new 3.5mm blade – Mozart trimming tool.

**Layout**

Follow the detailed layout drawings provided or agreed upon by the designer, architect or end user. Calculate and mark out your start lines using a string line, straight edge, and pencil. (Chalk lines may be used if all loose powdered chalk is removed by vacuum before applying adhesive). Any loose dust, debris, etc. left on the subfloor during layout marking will act as a contaminant and may cause bond failure.

**Roll Goods**

All ‘non-wood visual’ sheet installations must be installed in alternating roll directions as shown below. Pattern matching is not required for wineo PURline®; however, wood designs are installed with rolls running in the same direction, and must be lined up properly. Wood grain styles have a pattern repeat of 2 meters. Install all rolls in increasing roll number sequence.

**Roll Goods Acclimation**

To reinforce the ‘Product Acclimation’ section above: rolls must be stored standing up. Acclimation is a total of 48 hours. In the first 24 hours, remove the wrapping from the roll and loosen the roll to remove the tension. After that time, make rough cuts as detailed below, back roll and stand if necessary 24 hours prior to the installation of the sheets:

**Roll Goods Installation**

1. First, ensure the area is clean and dust free using a Hepa filtered vacuum.
2. Dry-lay (without adhesive) the flooring in the correct positions (alternating direction, if necessary) following your start lines while lapping up the wall at each end and overlapping the seams by at least 1”.
3. Allow minimum of 2 hours, up to 24 hours, for the rough-cut, flat-laid flooring rolls to acclimate, (back-roll and stand upright as discussed above if necessary), during this time we recommend to scribe or cut-in the sides to a snug fit.
4. For all final or finish cuts, first partially cut through the flooring (approximately halfway through) using a straight or concave bladed utility knife, then with a second pass finish the cut using a hook blade. This process will avoid fracturing the edge.
IMPORTANT NOTE: PURline is an entirely new category of floorcovering. It is a bio-polyurethane based product, and must not be handled with the same methods as you would vinyl, rubber, linoleum, etc. Failure to thoroughly follow these instructions, and any technical field training/instruction will result in damage to the material, and void any material warranty or claim.

5. For the seams, trim off the top edge at each seam (approx. ½”) using a “WOLFF GreenCut” edge trimmer (required) and then trace cut the lower sheet again using a “WOLFF GreenCut” edge trimmer, resulting in a snug fit - without compression fitting the seams.

6. Once the sheets are in position, trimmed and acclimated, remove all trash (offcuts) and carefully pull back at least half of each sheet (on top of itself) to expose the substrate. DO NOT fold the sheet the long way.

7. Tape off the substrate at the fold in the sheet to create a stop line for the adhesive.

8. Apply the selected adhesive as detailed below.

9. When placing the sheets into the adhesive make sure the seams are not compressed, they must be flush. Only if the seams are to be heat welded is a slight gap permitted (utility blade thickness).

**MI 1500 Adhesive - Roll Goods Installation**

90% RH is the maximum allowable moisture content for existing concrete subfloors. 99% RH for new slabs with declining RH values and an intact vapor retarder, when tested following the protocol of ASTM F2170.

The MI 1500 adhesive must be applied using a 1/32” x 1/16” x 1/32” U-notched trowel (FFA), holding the trowel at an angle of approximately 60° to the prepared substrate without voids or puddles. Do not make any sharp turns with the trowel to avoid an uneven application of the adhesive. Replace all trowels every 3.5 gallons to ensure proper spread rate; do not re-notch.

Allow approximately 10-20 minutes of open time (depending on site conditions). Installation can begin when the adhesive becomes clear and does not transfer to the finger tips when lightly touched. Open working time to place the wineo PURline® into the adhesive is 2 hours.

When placing the sheets into the adhesive make sure the seams are not compressed, they must be flush. Only if the seams are to be heat welded is a slight gap permitted (utility blade thickness).

After the sheets have been laid into the adhesive, use the Cork Rubbing Board to press the material into the adhesive. Rub each sheet down the length and out to each edge forcing the sheet into the adhesive bed initiating a tight bond to the substrate. Use a hand roller to roll the seam. Lay material consistently as each section of adhesive reaches its open time. After the sheet has been set with the cork rubbing board, use a 150-lb (70kg), three-section floor roller, slowly roll the sheet once in each direction, front to back and left to right. As you proceed across the floor, drop back to roll each sheet a total of 3 times. Once finished, roll the entire floor again, paying particular attention to roll edge seams for complete adhesion.

When complete, fold the opposite end of the sheet back, remove the tape and repeat the process. Do not overlap the adhesive at the breakpoint of the tape - a double layer of adhesive will flash through the surface of the material.

**MI 2500 Spray Adhesive - Roll Goods Installation**

95% RH is the maximum allowable moisture content for concrete subfloors when tested following the protocol of ASTM F2170.

In the use of spray adhesive it is essential that the substrate be free of debris and dust. After vacuuming, test the floor with the swipe of a hand; if dust is still present, it will be necessary to damp mop the floor with a well-wrung mop.

Grid out the substrate in increments of 105 square feet. Place a can of adhesive in each section. The entire can of adhesive must be used in each grid section. Insufficient adhesive will result in an installation failure and void the warranty.

1. Shake the aerosol cans well before use.
2. Protect from overspray by using a spray shield, cardboard or similar.
3. Spray the adhesive 20”-30” from the substrate while walking from right to left.
4. Distribute adhesive at a slow walking pace. DO NOT spray the adhesive like a spray paint, DO NOT apply spray adhesive by waving, or arcing – slow, steady, even application is required. The adhesive should spray out in a white mist and fall like snow, with the following spray pattern. SEE BELOW PHOTO:
5. Do not crouch when applying the adhesive.
6. For PURline roll goods flooring, the perimeter of the application MUST be sprayed twice with a 6” – 8” wide band of adhesive. At the seams between rolls, (either head seams or long runs) double spray an adhesive band 10” - 12” wide.

Contingent on environmental conditions, wait 10-20 minutes for adhesive to be dry-to-the-touch before installing the flooring. There should be no transfer of adhesive to finger when lightly touched. The flooring must be installed within 2 hours. Do not allow the adhesive to over-dry, become contaminated with dust or similar.

After the sheets have been laid into the adhesive use the Cork Rubbing Board to press the sheet into the adhesive. Rub each sheet down the length and out to each edge forcing the sheet into the adhesive bed initiating a tight bond to the substrate. Use a hand roller to roll the seam. Lay material consistently as each section of adhesive reaches its open time. After the sheet has been set with the cork rubbing board, use a 150-lb (70kg), three-section floor roller, roll the sheet once in each direction, front to back and left to right. As you proceed across the floor, drop back to roll each sheet a total of 3 times. Once finished, roll the entire floor again.

When complete, fold the opposite end of the sheet back, remove the tape and repeat the process.

Immediately remove any overspray of the adhesive using a clean damp cloth; if fully cured then use 70% Isopropyl alcohol.

Roll Goods Flash Coving
1. This product may be flash coved.
2. If proceeding with integral flash coving, Do not use the “Butterfly” method.
3. Pre-formed skirting lengths, pre-formed inside corners & pre-formed outside corners can be special ordered.
4. Please contact Technical Support in the Customer Care department (customercare@matsinc.com) prior to installation of any PURline Roll Goods flash coving.

Roll Goods Heat Welding Process
Only when required, (typically for sterile or wet areas), wineo PURline® sheet flooring seams must be heat welded using the heat weld method according to ASTM F1516. Practice on scrap material (bonded to a substrate) before welding the actual floor to become familiar with the products. Test the strength by tugging at the welding rod, which should break before pulling away from the flooring.

Heat welding is not permitted until the adhesive is cured sufficiently. MI 1500 and MI 2500 Spray Adhesive must have at least two (2) hours cure time, before heat welding. MI PURtape installations may proceed with heat welding immediately.
Mechanically groove the joint open with an electric groover to a depth of 2mm and a width of ~ 3.5mm. Ensure the groove is equal on both sides and the blade is not worn. All dust and debris must be removed from the prepared groove.

Weld using a hot air welding gun set to 842°F (450°C) and a 5 mm weld rod speed. Recommended steady speed is approximately 4 ft. – 6 ft. per minute; however, that may need adjusting by the installer. It is important to make sure that the “wash” is present on both sides of the applied welding rod. Make sure the nozzle is directly over the gap and not leaning over to one side.

Weld approximately 15-feet at a time, as the first trim needs to be completed while the welding rod is still warm using a Mozart trimming knife with the 0.7 mm spacer claw. Another option is to have a second person perform the first trimming before the welding rod cools.

**Trimming:** After another fifteen minutes to allow the welding rod to fully cool, use the Mozart without the spacer claw to finish trimming the remainder of the weld. The finished weld must be smooth, glazed and on the same plane as the flooring.

**Note:** Glazing must be performed on wineo PURline® heat weld after cooling and the final trim. This is achieved by using a hot weld gun and melting the surface of the trimmed weld rod (until glossy) and allowing it to cool. During this process do not touch the flooring or weld with the hot nozzle to avoid any damage.

**Roll Goods – Alternate PURseam (1K Polyurethane) Joint Sealing Process**

This alternate joint sealing process utilizes the Mats Inc. PURseam 1K polyurethane system. The system includes the PURseam joint sealer cartridge and the distribution round tip.

Practice on scrap material (bonded to a substrate) before seam sealing the actual floor to become familiar with the products. The PURseam compound is distributed with a conventional caulking gun.

When using the MI 1500, or MI 2500 Spray Adhesive, you must wait at least two (2) hours, before grooving and seam sealing. When using the MI PURtape, grooving and seam sealing may take place immediately.

1. Mechanically groove the seam joint with an electric groover to a depth of 2mm and a maximum width of 2.5mm. Ensure the groove is equal on both sides and the blade is not worn. All dust and debris must be removed from the prepared groove.
2. Tape off the grooved seam with blue painter’s tape to both outside edges of the groove.
3. Insert the nozzle of the cartridge into the seam and fill the groove, dispensing the seam sealer 8’ – 10’ at a time.
4. After 8’ – 10’ of the groove has been filled, run the rounded-tip putty knife finishing tool down the joint to smooth the PURseam material. Lift the majority of the “putty knife” 10° off the surface allowing the round tip to smooth the surface of the PURseam bead, making it level with the surface of the sheets being sealed.
5. As you run the rounded-tip putty knife finishing tool down the seam, you should feel the tip of the knife run on the surface of the wineo PURline®, not the tape.
6. After the PURseam has been applied and properly smoothed, remove the tape from both sides of the seam.

The PURseam joint will be ready for light traffic in 8 – 12 hours and heavy rolling loads in 24 hours.

**Finish Installation**

Clean up all debris, take photographs and if required, protect the flooring from traffic and have the end user or representative sign a “Job Completion Ticket”.

**Planks and Tiles**

**Planks & Tiles Acclimation**

To reinforce the ‘Acclimation’ section above: Remove cases from the skid. Lay out on a smooth, flat, dry surface. Do not stack more than 5 cases high. Open both ends of the cases and acclimate for 48 hours prior to the start of the installation.

**Planks & Tiles Installation**

1. As detailed above, ensure proper layout by marking your start lines using a straight edge and pencil.
2. Ensure the area is clean and dust free using a Hepa filtered vacuum.
3. Apply the adhesive only to a workable area of flooring at a time, planning for the distance of an outstretched arm.
IMPORTANT NOTE: PURline is an entirely new category of floorcovering. It is a bio-polyurethane based product, and must not be handled with the same methods as you would vinyl planks/tiles, rubber tiles, linoleum tiles, etc. Failure to thoroughly follow these instructions, as well as technical field training/instruction will result in damage to the material, & void material warranty/claim.

MI 1500 Adhesive - Plank & Tile Installation

90% RH is the maximum allowable moisture content for existing concrete subfloors. 99% RH for new slabs with declining RH values and an intact vapor retarder, when tested following the protocol of ASTM F2170.

The MI 1500 adhesive must be applied using a 1/32” x 1/16” x 1/32” U-notched trowel (FFA), holding the trowel at an angle of approximately 60° to the prepared substrate without voids or puddles. Do not make any sharp turns with the trowel to avoid an uneven application of the adhesive. Replace all trowels every 3.5 gallons to ensure proper spread rate; do not re-notch.

Allow approximately 10-20 minutes of open time (depending on site conditions). Installation can begin when the adhesive becomes clear and does not transfer to the finger tips when lightly touched. Open working time to place the wineo PURline® Planks and/or Tiles into the adhesive is 2 hours.

Continue the installation making all cuts as you go with either a guillotine cutter or utility knife. After each section has been laid (distance of outstretched arms) into the adhesive use the Cork Rubbing Board to press the material into the adhesive. Rub each section down the length and out to each edge forcing the planks or tiles into the adhesive bed initiating a tight bond to the substrate. Lay material consistently as each section of adhesive reaches its open time. After the plank and/or tile has been set with the cork rubbing board, use a 150-lb (70kg), three-section floor roller, roll the planks or tiles once in each direction. As you proceed across the floor, drop back to roll each installed section a total of 3 times. Once finished, roll the entire floor again.

MI 2500 Spray Adhesive - Plank & Tile Installation

95% RH is the maximum allowable moisture content for concrete subfloors when tested following the protocol of ASTM F2170.

In the use of spray adhesive it is essential that the substrate be free of debris and dust. After vacuuming, test the floor with the swipe of a hand; if dust is still present, it will be necessary to damp mop the floor with a well-wrung, damp mop.

Grid out the substrate in increments of 115 square feet. Place a can of adhesive in each section. The entire can of adhesive must be used in each grid section. Insufficient adhesive will result in an installation failure and void the warranty.

1. Shake the aerosol cans well before use.
2. Protect from overspray by using a spray shield, cardboard or similar.
3. Spray the adhesive 20”-30” from the substrate while walking from right to left.
4. Distribute adhesive at a slow walking pace. DO NOT spray the adhesive like a spray paint, DO NOT apply spray adhesive by waving, or arcing – slow, steady, even application is required. The adhesive should spray out in a white mist and fall like snow, with the following spray pattern. SEE PHOTO NEXT PAGE:
5. Do not crouch when applying the adhesive.

6. For PURline Plank & Tile flooring, the perimeter of the application MUST be sprayed twice with a 6” – 8” wide band of adhesive.

Contingent on environmental conditions, wait 10-20 minutes for adhesive to be dry-to-the-touch before installing the flooring. There should be no transfer of adhesive to finger when lightly touched. The flooring must be installed within 2 hours. Do not allow the adhesive to over-dry, become contaminated with dust or similar.

After the planks or tiles have been laid into the adhesive (the distance of outstretched arms) use the Cork Rubbing Board to press the material into the adhesive. Rub each installed section down the length and out to each edge forcing the planks or tiles into the adhesive bed initiating a tight bond to the substrate. Lay material consistently as each section of adhesive reaches its open time. After the planks or tiles have been set with the cork rubbing board, use a 150-lb (70kg), three-section floor roller, roll the installed section once in each direction, front to back and left to right. As you proceed across the floor, drop back to roll each section a total of 3 times.

Immediately remove any overspray of the adhesive using a clean damp cloth; if fully cured then use 70% Isopropyl alcohol.

**PURtape Dry Adhesive Tape Installation Instructions**

**Conditions:**
The conditions of the project and on-site storage areas must both be at a constant (± 5°F) service temperature that is between 68°F and 80°F with ambient relative humidity between 35% - 65% for at least 48 hours before acclimation begins and for 72 hours after installation. The substrate must also be at least 5°F above the dew point.

**Acclimation:**
All rolls must be stored upright, and delivered to the jobsite location for acclimation. Total acclimation time is 48 hours on-site. Once delivered to the jobsite location, deliver individual rolls to jobsite installation location, remove transport materials from rolls and place in an upright position. Once the outside packaging has been removed spin the rolls to relieve the tension in the roll all the way back to the cardboard core. (Please see “Product Acclimation” section above).

**Mats Inc. PURtape Installation (Roll Goods and Plank & Tile):**

Must take place over a clean, flat, dust-free surface.

Floor prep - All substrates must be structurally sound, dry, solid and stable. (See “Subfloor Preparation” section above).

The substrate must also be smooth (ridge-free) with a flatness tolerance of ≤ 3/16” over a 10-foot maximum plane variation. If required, attain the required flatness tolerance using a commercial grade (≥ 3000 psi) commercial grade cementitious underlayment.
Clean Substrate:

The substrate must be completely free of debris and contaminants which may impact bonding of the dry tape adhesive film.

1. Vacuum – with a brush attachment to remove any loose debris.

2. Tack mop – to remove any remaining fine particles or dust that could inhibit bonding. Tack-mopping with a dry system such as 3M Easy Trap Duster™ is a preferred method of fine particle removal. If a damp mop is used to assist in tack-mopping, allow the surface to dry completely before installing PURtape.

Mark the start lines on the substrate with pencil for the first cut, (If a chalk line is used make sure to remove the excess chalk with a vacuum). PURtape is clear once the release liner is removed, and start lines will be easily visible through the adhesive film when installation commences.

Install the Mats Inc. PURtape Tape 90 degrees (perpendicular) to the direction of the PURline roll installation.

Begin by placing the PURtape against the wall, (securing at the base of the wall) in the corner of the room. Peel back enough material, (approx. arm’s length) and using the cork board, (or flat edge of metal trowel or push broom) to remove air from beneath the tape, apply steady, even, downward pressure with the cork board to fix the tape to the substrate with no wrinkles or air pockets.

Carefully continue to roll out more PURtape, making sure NOT to trap any air during the placement of the tape. Apply the rest of the material to the opposite side wall, peel off an excess amount when you get to the opposite wall and secure it to the substrate.

Place the roll back to the starting position up against the first applied piece of PURtape, (butt tightly to the previous piece), no more than a 1/16” gap allowed between pieces of tape). DO NOT OVERLAP THIS MATERIAL. It will cause telegraphing or bubbling of the material.

Continue to apply PURtape to the entire substrate area of the installation.

Once the Mats Inc. PURtape System has been applied throughout the entire area, use the 100 lb. roller to slowly roll the entire floor in both directions. (This step assures a solid bond between the tape system and the substrate as well as acting as the final check for any debris trapped beneath the tape).

PURtape Installation - PURline Roll Goods

Measure your first cut along the outside wall. Make your rough cut, and place the cut in-place next to the wall.

Using a wall bar scribe, (Crain 372 - 18” Scribing Tool), scribe the rough cut along the long wall and then use a hook knife to remove the excess PURline material.

Using a wall bar scribe, scribe both ends to the wall and remove the excess with a hook knife.

Once the piece has been cut to fit on all 3 sides, trim the selvage edge on the heat welded seam side of the rough cut.

Pull ½ of the rough cut back over itself, thus exposing half of the PURtape adhesive film covering the substrate.

To place the backing of the first cut into the tape, remove 30” of the release liner at a time, when using 30” wide PURtape; or alternatively, remove 24” of the release liner (2 courses of 12” PURtape, when using 12” wide PURtape) at the fold of the PURline roll material, near the center of the room.

When pulling the release liner back to expose the adhesive - pull the liner back so that it is still attached beneath the last outside 2” of the heat welded seam of the first cut. Leaving this 2” of liner at the seam will allow for placement of the next roll drop for a flush fit at the seam joint.

Carefully push the material into the PURtape adhesive film, firmly and smoothly securing with the cork rubbing board as you go to avoid any air pockets being trapped beneath the PURline roll material.

Work your way down the cut, 30” at a time, continuing to use the cork rubbing board to fix the roll material into the adhesive film with no voids or air pockets beneath the material.
Remove most of the excess liner leaving a piece large enough to grab easily next to the heat welded seam for safety. Immediately following the corkboard application and once the PURline roll material has been fixed to the tape, use a 100 lb. three-part metal roller to set the PURline roll material into the tape, rolling in both directions, east to west and north to south. Using the roller in an overlapping pattern to cover 100% of the PURline roll material top surface.

After the 100 lb. roller is used, use a hand held vinyl seam roller and roll the full length of the heat welded seam area.

Pull the opposite end of the first cut back to expose the Mats Inc. PURtape on the other side and follow the same process to install the PURline roll backing into the adhesive film.

Make sure to remove only the one 30” wide protective release liner at a time to avoid trapping air beneath the cut as it is placed into the tape.

Make your next rough cut, and place next to the first installed cut - allowing for at least a ½” overlap of the bottom piece at the heat welded seam.

Using a wall bar scribe, scribe both ends to the wall and remove the excess with a hook knife.

Under scribe the top piece allowing for a 1 mm space between the two pieces to be heat welded. Cut thru the scribe mark with a hook knife.

Cut the opposite side with your selvage edge cutter.

Pull the piece back to expose half of the PURtape adhesive film.

Once all the material has been installed on one side of the room, repeat the same steps on the opposite side starting with the first piece.

After the area has been installed and the rolling process has been completed, you may continue with the heat welding application, as per the Mats Inc. PURline “Roll Goods Heat Welding Process” instructions above, or with the “Alternate PURseam” instructions above.

**Maintenance Instructions**

**Precautions**

Do not perform any wet maintenance procedures for 72 hours after the installation to allow the adhesive to fully cure. Always post “wet floor” signs and/or “caution tape” when wet maintenance is going to be performed. Prohibit foot traffic until the floor is completely dry. Remove all metal objects prior to wetting the flooring. Follow facility’s Standard Operating Procedures (SOP).

Do not use dust mops treated with oils or silicones, acetone, strong alkaline cleaning agents, scouring powder, strong solvents, or abrasive cleaning pads, as these can damage the product.

wineo PURline® does not require waxing, buffing, or stripping. There is no need to apply any type of floor finish.

**Initial Cleaning (after installation)**

Dust mop or vacuum the floor to remove dirt or grit. This is the single most important maintenance activity for preserving the appearance and performance of the floor and is typically the most overlooked and omitted.

Wet mop the entire floor using a suitable pH neutral cleaning solution. Allow the solution a dwell time of approximately 5 minutes. Scrub the flooring using a suitable auto-scrubbing machine or floor scrubber (~ 175 RPM) with a red pad. For small areas, a soft nylon broom and wet vacuum may also be used. Wet vacuum up the soiled solution. Rinse with clean water. Remove using a wet vacuum, and allow the floor to dry.

**Chewing Gum Removal**

Remove chewing gum with a gum removing spotter. If a solvent is used for removing gum, immediately rinse the floor with clean water and allow to dry.
**Routine Cleaning**

Dust mop or vacuum the floor to remove dirt or grit and follow one of the following options:

- **Damp mop** using a flat microfiber mop and a suitable pH neutral cleaning solution. Change the microfiber head as often as required (such as each patient room in healthcare), and allow the floor to dry prior to use.

- **Steam clean** the floor using a suitable steam cleaner and microfiber pads and distilled water (Daimer KleenJet Mega 1000CVP and Telescopic Vapor Steam Mop, or similar). This is an ideal method for patient and small rooms. Allow the floor to dry prior to use.

  Change the microfiber head as often as required (ex. each patient room) and do not allow the steam to stay stationary on the flooring for more than 5 seconds.

- **Large or heavily trafficked areas** should use a suitable auto-scrubbing machine or floor scrubber (~ 175 RPM) with a red pad and a suitable pH neutral cleaning solution. Scrub and wet vacuum up the soiled solution. Rinse with clean water. Remove using a wet vacuum, and allow the floor to dry prior to use.

**Deep Cleaning**

This may be required when your routine cleaning is not meeting your expectations of removing heavily trafficked soils.

Dust mop or vacuum the floor to remove dirt or grit.

Wet mop the entire floor using a suitable water soluble cleaning solution. Allow the solution a dwell time of approximately 5 minutes. Scrub the floor using a suitable auto-scrubbing machine or floor scrubber (~ 175 RPM) with a red pad. For small areas, a medium nylon broom and wet vacuum may also be used. Scrub and remove the soiled solution using a wet vacuum. Rinse with clean water. Remove using a wet vacuum, and allow the floor to dry prior to use.

**Sterile Areas (OR’s, etc.)**

Perform the following maintenance between surgeries and prior to using the OR:

- Remove all litter from the floor, and place into waste containers. Damp mop the floor using an EPA-registered disinfectant cleaner, and allow the floor to dry prior to use (check with SOP for required dwell times).

  Mopping with microfiber mops is preferred as it promotes better dirt removal.

  **Note:** Disinfectant cleaners leave a residue behind that can lead to stickiness, especially if over applied and must be removed to avoid it building up. “Routine Cleaning” is required at least weekly using a suitable auto-scrubbing machine or floor scrubber (~ 175 RPM) with a red pad and a suitable pH neutral cleaning solution. Scrub and wet vacuum up the soiled solution. Rinse with clean water. Remove using a wet vacuum, and allow the floor to dry prior to use.

**Limited Warranty**

Mats Inc. (“SELLER”) warrants that wineo PURline® (the “Product”) sold to the first end user (“END USER”) will be free of manufacturing defects in materials provided that Product is stored, installed, and maintained strictly in accordance with the SELLER’s instructions for a period as provided in Section IV of this Limited Warranty.

Receipt and installation of the Product constitutes acceptance of this Limited Warranty and all of its terms, conditions, limitations, and disclaimers.

This Limited Warranty applies only to installations sold to the first END USER of the Product and becomes void on the transfer or sale of the Product or the use of the Product by any party other than END USER.

I. **Installation and Maintenance Requirements**

This Limited Warranty applies only if:

- The Product is installed on a properly prepared subfloor as detailed within the product installation instructions and ASTM F710 Standard Practice for Preparing Concrete Subfloors to Receive Resilient Flooring; and
- The Product is installed properly following the published installation instructions by professional flooring installers experienced at installing commercial resilient floor covering products and having sufficient professional liability insurance coverage (aka Errors and Omissions Insurance) for the project; and
- The Product is maintained according to the SELLER’s instructions furnished to END USER at the time of purchase; and
- The Product is not misused or abused, and there is no evidence of mishandling, neglect, modification or repair without the approval of SELLER or damage done to the product by anyone other than SELLER.
II. Method for Obtaining Warranty Service
To obtain a replacement product under this Limited Warranty, END USER must: Provide SELLER with a written notice of any alleged defect within the warranty period stated in Section IV and ten (10) days of its discovery; and Ship the photographs of the defective product(s) to SELLER at 179 Campanelli Pkwy., Stoughton, MA 02072 with mailing or shipping charges prepaid ("Warranty Claim Procedures").

III. Warranty Service Period
(A) If the Product shall be proved to SELLER’s satisfaction to be defective, within the applicable warranty period described below, SELLER’s obligations under this Limited Warranty shall be limited to either repairing or replacing the Product, at SELLER’s sole discretion, if such defect was caused solely by defective materials. Such repair or replacement shall be the SELLER’s sole obligation and END USER’s exclusive remedy hereunder and shall be conditioned upon END USER fulfilling its obligations under SELLER’s Warranty Claim Procedures.
(B) Pursuant to Subsection (A), SELLER’s warranty services will specifically include providing END USER with alternative floor covering of comparable quality and/or carry out necessary repairs of the Product to cover the remainder of the warranty period. This includes material cost only and does not include labor.

IV. Warranty Period
This Limited Warranty of the Product, and any implied warranties provided to END USER by state law not otherwise excluded or disqualified in this Limited Warranty, apply for ten (10) years, starting from the date of shipment of the Product from SELLER’s manufacturing or distribution facilities, including motor drive or other means of transportation.

V. Exclusions from Warranty
This Limited Warranty does not apply to Product which has been discontinued or to a particular color or design which has been discontinued at the time of sale or to Product sold as seconds or B-grade.
The following is not included under this Limited Warranty:
1. Color deviations as compared to physical, printed, and/or electronic representations of the Product;
2. Damage caused by improper storage and handling of the Product;
3. Product delivered damaged unless the SELLER is notified as soon as the Product is received;
4. Damage resulting from inadequate protective matting at entryways including from sand and/or grit;
5. Damage or Product failure including adhesive and accessories as a result of either improper subfloor preparation, installation or maintenance;
6. Damage caused by the failure of any other product from either defect or workmanship including but not limited to moisture mitigation system, primer, leveling or patching compound;
7. Damaged caused by exposure to petroleum distillants (solvents, chlorine, acidic chemicals) or industrial oils;
8. Damage caused by excessive moisture and alkali in the subfloor (above the published adhesive moisture limit);
9. Damage caused by misuse, unreasonable use, abuse and/or negligence, including any indentation to the Product from spiked heels or any heavy point loading in excess of the published static load limit when tested in accordance with ASTM F970;
10. Damage caused by furniture, appliances, fixtures, and equipment that is not properly leveled with appropriate protective glides, casters and/or floor protectors;
   a. Glides must be a minimum of 1” in diameter.
   b. Glides must be flat, smooth and slightly rounded.
   c. Glides and casters should be regularly serviced.
11. Damage caused by extended direct exposure to sunlight (UV);
12. Labor costs for removing and/or re-installing replacement and associated freight costs are not covered under this warranty.

VI. Limitations on Warranty
This Limited Warranty is provided by SELLER, and it contains the only express warranty provided to END USER by SELLER. SELLER does not authorize any other person to give any other warranties on SELLER’s behalf. SELLER disclaims any express warranty not provided herein and any implied warranty, guarantee or representation as to performance, quality and absence of hidden defects, and any remedy for breach of contract, which but for this provision, might arise by implication, operation of law, custom of trade or course of dealing, including implied warranties of merchantability and fitness for a particular purpose. SELLER further disclaims any responsibility for losses, expenses, and inconveniences, special, indirect, secondary or consequential, incidental, and contingent damages whatsoever, including damages arising from ownership or use of the product. Implied warranties in jurisdictions where they may not be disclaimed shall be in effect only for the duration of the express warranty set forth herein. If END USER has a claim under this Limited Warranty or under any implied warranties provided to END USER by state law, END USER may not file a court action based on that claim any later than one (1) year after END USER’s right to file a court action accrues. In those states which do not allow this limitation on the time period for filing a court action, this provision is inapplicable.
VII. **Sellers Liability**
SELLER's liability with respect to the Product sold to END USER shall be limited to the warranty provided herein. SELLER shall not be subject to any other obligations or liabilities, whether arising out of breach of contract, warranty, tort (including negligence and strict liability) or other theories of law, with respect to products sold or services rendered by SELLER, or any undertaking, acts or omissions relating thereto.
Without limiting the foregoing, SELLER specifically disclaims any liability for property or personal injury damages, penalties, special or punitive damages, damages for lost profits or revenues, services, downtime, shut down or slow down costs, or for any other types of economic loss, and for claims of END USER's customers or any third party for any such damages. SELLER shall not be liable for and disclaims all consequential, incidental and contingent damages whatsoever.

VIII. **Miscellaneous**
Any description of the Product, whether in writing or made orally by SELLER or SELLER's agents, specifications, samples, models, bulletins, drawings, diagrams or similar materials used in connection with END USER's order, are for the sole purpose of identifying the Product and shall not be construed as an express warranty. Any suggestions by SELLER or SELLER's agents regarding use, application, or suitability of the Product shall not be construed as an express warranty unless confirmed in writing by SELLER to be such.

**Related Documents**
ASTM documents are available from www.astm.org