

**SOFTEC PRODUCTS INSTALLATION AND**  
**MAINTENANCE GUIDE**

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## **SOFTEC PRODUCTS INSTALLATION GUIDE**

SoftTec tiles can be installed over concrete, existing tiles, exposed aggregate, and most any subfloor that is stable. Though the tiles can be installed over wood, the fact that wood may rot, expand or contract as a result of changes in the relative humidity, may render it a less desirable subfloor for our tiles, unless CBU board underlayment is installed (see Appendix).

### **What Is Needed To Install SoftTec Tiles?**

1. SoftTec tiles sufficient to cover the area to be covered;
2. SoftTec Approved Adhesive (contact your SoftTec representative for details);
3. A 3/32" to 1/8" V-notched Trowel;
4. A 100 Pound Roller;
5. Carpet Cutting Tool for Trimming and Cutting (perhaps a carpet cutting tool);
6. Urethane Caulk (optional: speak with your SoftTec representative for details)
7. A Clean, Stable Subfloor.

### **Subfloor Preparation**

1. Having a sturdy base on which to install your tiles is one of the most critical aspects of any tile installation. Installing tile on an unstable subfloor can result in the tiles becoming unstable.
2. Examples of suitable subfloors are: Concrete Slabs, Existing Tiles, Existing Vinyl (sheets or tiles), Metal Surfaces, etc.
3. Clean subfloor thoroughly. It is important to have a clean subfloor on which to install the tiles to insure that the adhesive bonds properly. Fill any cracks in the subfloor, with a suitable patching compound, cement, acrylic or caulking, etc. Level the subfloor if required to insure proper drainage of any collected moisture.
4. All surfaces must be free from sealers, curing compounds, dust, paint, varnish, grease, old adhesives and other foreign substances.
5. As mentioned above, SoftTec tiles can be installed over wood; however, wood can deteriorate with the result that the entire installation fails. If wood forms the subfloor, it may be desirable to install a cement backer unit (CBU) board underlayment for support and as a moisture barrier. SoftTec does not recommend installing SoftTec tiles over particle board under any circumstances.
6. For best results, concrete subfloors should cure for 30-days prior to installing tiles or any other surfacing material.

### **Planning Your Installation**

Planning is essential to a successful installation of SoftTec tiles. During the planning phase:

- Determine The Floor Layout;
- Allow For Expansion And Movement;
- Factor In Waste;
- Estimate Installation Time.

### **Determine The Floor Layout**

The layout of the tile must be determined prior to applying the adhesive. Lay out the tiles on the subfloor before applying adhesive to get a picture of the job. Tiles can be laid “square with the room,” or in a “diagonal pattern.” An additional benefit of taking the time to perform this step is you will have an idea of the nature and amount of “trimming” that will be required before the job begins and the adhesive is laid. You may decide to leave ¼” or less space around the perimeter of the installation and caulk the space between walls and the tiles as an added protection against moisture.

### **Allowing For Expansion And Movement**

In a controlled environment, in which the temperature and relative humidity are relatively stable, no expansion, contraction or movement of the SoftTec tiles should occur, once the tiles are adhered to the subfloor. However, a wood subfloor can be affected by changes in temperature or relative humidity so consider this when making the decision to install the product over a wood subfloor.

### **Factoring In Waste**

Waste is a part of every tiling job. Waste can be due to:

- Odd Shapes In The Room That Require Cutting The Tile
- Installation Mistakes
- Installation Design Decisions (Horizontal vs. Diagonal Layout)

Non-professional installers should expect a waste factor of approximately 10% to 15%. This is standard but can increase to 20% or more for diagonal or other complex designs. This increase is due to the various types of cuts that the complex design may require. Waste should be factored into the original purchase decision since your tile supplier may not have additional matching tiles in stock “after-the-fact.” And remember, it is a good thing to have some extra tiles at the end of the job. These will come in handy in the future if repairs are required.

### **Estimating Installation Time**

There is no sure way to determine beforehand how long the job will take. But here are a few factors that can affect installation time:

- Experience Level of the Installer: if this is your first time, count on it taking longer than it would for a professional.
- Complexity of the Room: simple rooms and patterns usually take less time than complex designs.
- Available Assistance: if you are doing the job alone, count on a slower pace than if you have help.
- Pre-Planning: the more planning you do, the less time your project will take. Planning helps identify where problems may occur so you can have a solution in mind before facing the problem during the actual installation.
- Add Extra Time: projects can take longer than you think; plus, adhesive set-up time can vary with the environment, so allow plenty of time.
- Mistakes Happen: factor in mistakes because they do happen. If you cut a tile incorrectly, save it; it may work somewhere else later in the project.

### Applying The SoftTec Approved Adhesive

1. IT IS IMPERTIVE THAT SOFTTEC TILES BE INSTALLED USING A SOFTTEC CERTIFIED ADHESIVE. DUE TO THE TECHNOLOGY BUILT INTO EACH SOFTTEC SOFTTILE, NOT ALL ADHESIVES WILL ADHERE TO THE TILES. FAILURE TO USE A SOFTTEC CERTIFIED ADHESIVE WILL RESULT IN THE VOIDING OF THE 5-YEAR MANUFACTURER'S LIMITED WARRANTY AND MAY RESULT IN A LESS THAN ACCEPTIBLE INSTALLATION.
2. At this time, there is one SoftTec certified adhesive: **Single-Set 176** made by Henkel. SoftTec Products recommends this single component urethane adhesive as ideally suited for applications requiring a lower viscosity material suitable for large surface area applications. This adhesive is available from your SoftTec Products representative or directly from Henkel. The benefits of this adhesive include:
  - 100% Solids
  - High Shear Strength
  - High Tensile Strength
  - Excellent Moisture Resistance
  - Excellent Heat Resistance
3. Use a 3/32" to 1/8" V-notched Trowel to apply the SoftTec Approved Adhesive to the subfloor. Be careful not to apply excess adhesive as it may seep between the seams of the tiles. Adhesive should yield from 70 to 120 square feet per gallon depending on porosity of subfloor and material to be bonded. Proper adhesive transfer to the subfloor should be confirmed periodically by lifting the material.
4. CAUTION: OPEN TIME, by which we mean the maximum allowable time the adhesive should be exposed to the air after the can is opened, will vary according to air and surface temperature, relative humidity and porosity of the substrate.
5. SET-UP TIME: Set-up time is directly related to ambient air temperature and humidity. The ideal temperature and humidity for installation are 70-degrees Fahrenheit, and 70-percent relative humidity. Typical open-time is 3-hours at 75-degrees, 50-percent relative humidity. For every 10-degree reduction in temperature, there will be an increase in the time required for the adhesive to set, and vice versa. Colder installation environments will require substantially more time for the adhesive to set. For maximum adhesion, subfloor, substrates and adhesive should be at least 50-degrees Fahrenheit at the time of installation. The relative humidity also affects the set up time of the adhesive but in an inverse relationship to temperature. As the relative humidity decreases and the air becomes dryer, there also will be an increase in the time it takes the adhesive to set up. For example, at 85-degrees Fahrenheit, 50% relative humidity, the open-

- time is 2 hours but at 85-degrees Fahrenheit, 80% relative humidity, the open-time could be reduced to 1-hour. (A catalyst can be added to the adhesive to decrease set-up time. Speak with your SoftTec Products contact for more details.)
6. If OPEN TIME is exceeded so that a film appears on the top of the adhesive, do not “mix” this over-exposed adhesive back into the can. Instead, scrape off the film and dispose of it.
  7. Let the adhesive set until the tiles can be placed on the surface without “floating” on top of the adhesive.
  8. The adhesive requires a minimum of 24-hours to cure but if possible, limit heavy traffic and rolling loads during the first 72-hours following application of the adhesive.
  9. The Henkel Product Data Sheet for Single-Set 176 and 177 indicates that the shelf life of the adhesive is 1-year from the date of manufacture. Please refer to the product data sheet for more details.

### **Laying The Tiles**

1. Be careful not to lay the tiles in such a way that there is a “side-load” against any adjacent tiles. This “side-load” can inhibit proper seating of the tile to the subfloor. Lay the tiles side-by-side so that the tiles touch one another but not so that there is any side force against the adjacent tiles.
2. To prevent glue from seeping through the seams, one could use a device such as a flat head screw driver along the substrate to scrape up any excess glue.
3. To ensure seams are aligned properly after curing, one can tape the adjoining edges for minimal movement.
4. Roll over the top of the installed tiles with a 100 pound roller within 1-hour of installing the tiles to insure proper contact of tile with the adhesive.
5. If you made the decision during the design phase to leave a space between the walls and the tiles, use a SoftTec certified urethane caulking to seal the space between the tiles and the walls. SoftTec prefers masking tape to line the seams on each side of the tiles. This ensures to guide your caulk for an even finish. (See your SoftTec representative for more information on the urethane caulking product.)
6. Restrict heavy traffic and rolling loads for at least 24-hours following installation.
7. If any adhesive seeps up between the tiles and needs to be removed, do so before the adhesive dries. It will not be possible to remove the adhesive from the tiles once the adhesive has dried. Before the excess adhesive dries, use a mineral spirit, such as Turpentine, to remove the excess adhesive. Clean tools or spills as described above while adhesive is still wet.

*Failure to follow the recommendations outlined in this guide could result in the voiding of the Manufacturer’s 5-Year Limited Warranty.*

## APPENDIX

1. Using Cement Backer Unit Board: If you are installing tile over a wood subfloor or existing vinyl, it is recommended that an additional substrate be installed above the subfloor to help support the tile floor and provide protection against moisture. The most common substrate is cement backer unit CBU boards. CBU boards are composed of a concrete core surrounded by fiberglass sheets on either side. These light-weight boards are used above wood subfloors to help stabilize and support the floor once the tiles are installed. Since CBU boards are able to withstand prolonged exposure to moisture, installing them around pool decks and in bathrooms is a good decision. Be sure to stagger the CBU joints so that they overlap wood subfloor joints for added stability and moisture protection.

CBU Board comes in ¼", ½" and ¾" depending on how much height you want to add to your floor. Boards typically come in a couple of different sizes to minimize the amount of cutting that has to be done. Additionally, each side of the CBU board has different texture. One side is smooth while the other side is rough. When installing CBU board over a subfloor, install with the smooth side up. CBU board is installed, then nailed or screwed down every 8-10 inches. Use galvanized CBU board screws that are threaded to the top of the screw or galvanized roofing nails.

2. When installing SoftTec tiles over a concrete subfloor, insure that the concrete slab adheres to ASTM F1869 for water vapor admissions.

## **SOFTEC PRODUCTS MAINTENANCE GUIDE**

All flooring needs to be maintained and cared for in order to preserve its new appearance. SoftTec tiles are easy to maintain and with a little attention, will remain an attractive addition to your home or business for many years.

There is no single, preferred method for cleaning SoftTec tiles. Here are some examples of cleaning procedures that can be utilized to keep your floor clean and attractive.

### **Light Power Washing**

For indoor or outdoor installations, all that may be needed to keep your tiles clean and attractive is a regular power washing of the surface. Once per week, mix a small amount of bleach with water and use a standard, light power washing wand to wash away dirt and grime. In between power washings, use a regular vacuum cleaner to remove loose dirt before it becomes affixed to the tile surface.

### **Don't Forget Old Fashioned Soap And Water**

Soap, water and a soft brush will not hurt SoftTec tiles. It may require a little more effort to brush the tiles with soap and water but it works! Some SoftTec customers use a commercial floor cleaning machine that uses soap, water and a soft brush to clean the tiles automatically. These floor cleaning machines typically come in two versions: one version uses “pads” and the other uses “brushes.” SoftTec Products recommends the brush-version over the pad-version because the brushes are less abrasive.

### **Controlling Bacteria, Mold and Algae**

One advantage of SoftTec tiles is they are designed using closed-cell technology. They may look simple but there is a great deal of technology built into every SoftTec tile. The benefit of this high-tech design is that SoftTec tiles do not absorb moisture – they can't. This means that bacteria, mold and algae simply cannot multiply and grow on SoftTec tiles. Mixing bleach or a household disinfectant with water when cleaning your tiles is all that is required to control these undesirable elements.

### **Caring For Your New Tile Floor or Deck**

Keeping your new floor or deck clean is an important first-step in assuring the continued beautiful appearance of your new floor. In addition to maintaining a clean surface, care should be given to prevent puncturing or tearing your new tiles. When used under normal conditions, your tiles will provide a durable, attractive surface for many years to come. SoftTec tiles are made from foam and as such, they can be damaged under certain circumstances. Here are some common-sense precautions you can take:

- Do not damage your tiles with shoes containing spike- or stiletto-heels, cleats or any other shoes where the body weight is distributed over a small area. Make sure shoe soles do not contain rocks or protruding sharp objects.
- Furniture should be equipped with floor protector pads; avoid furniture with sharp points on the furniture legs. A larger diameter “leg” is preferable to a narrow one as it distributed the weight across a larger surface.

- Do not push or slide furniture or appliances across the surface of the tiles. If the furniture or appliance is too heavy to lift, place a plywood panel across the tiles and “walk” the furniture or appliance across the plywood.
- Clean spills and tracked-in dirt promptly.

**Repairing Your New Tile Floor or Deck**

Gently find a proper corner and peel up the tile. Scrape up all residues from the glue. Fit your new tiles properly and install as directed above.