Installation guide: ceramic installation
AcoustiTECH™ Ceramic membrane

FOR INDOOR USE ONLY
Can be installed under ceramic tiles or natural stones and on structural or surfacing concrete products, plywood or OSB (Oriented Strand Board) used according to manufacturer’s recommendations and meeting the standards and codes in place. Compatible with heating floor systems (see Guide for preparing a subfloor equipped with a radiant heating system, p. 66).
DO NOT INSTALL DIRECTLY ON GYPSUM SUPPORT.

Surface preparation
1. Correct the imperfections or problems of the excessive moisture in the subfloor according to the recognized standards of preparation. Note: The membrane does not fix a problem of an inadequate substrate.
2. Ensure that the concrete is dry (emission rate of water vapor from the concrete not exceeding 1.36 kg per 92.9 m² (3 lbs per 1 000 sq.ft.) per 24 hours, according to the calcium chloride anhydrous test (ASTM F1869) or 75 % according to the ASTM F2170 test. If the moisture exceeds these recommendations, use a vapor barrier protection before installing the AcoustiTECH™ Ceramic membrane.
3. Thoroughly clean the subfloor: remove all grease, dust, wood particles, adhesive residue and/or black glue. In case of doubt, proceed to an adhesion test (figure 1).
Note: Never install a wet or damp membrane. If so, let it dry before the installation. Make sure that the temperature of the subfloor is between 10°C and 32°C (50°F and 90°F).

Membrane preparation
1. In order to complete the installation quickly, we recommend cutting and floating the membrane across the whole surface, the aluminized side up.
2. The membrane strips should be touching without overlapping. Cut the membrane strips with a utility knife and cover the whole surface, including the wardrobes (figure 2).
3. Allow an extra 2 inches (5 centimeters) of the membrane to run up the sides of the wall and trim the excess membrane after the flooring is installed (figure 3) and before reinstalling the baseboards (figure 7).

Membrane and adhesive installation
Note: Use only with the AcoustiTECH™ AD-280 adhesive (AD-316, AD-532+, AD-844 MS also suitable).
1. Begin the application of the adhesive along one wall. Proceed by section.
2. Fold a strip of membrane on itself (lengthwise) to apply the adhesive on the uncovered portion of the subfloor. By doing so, the application will be clean, fast and more comfortable for the knees (figure 4).
3. Apply the adhesive with the 1/8” x 1/8” x 1/8” (3 x 3 x 3 mm) “V” notched trowel included in the box by holding it at an angle of 45°. Maintain pressure on the trowel in order not to apply too much adhesive (figure 5). The trowel should be in contact with the subfloor and the latter should be lightly coated with adhesive, but visible between the trowel-ridges. If necessary, immediately pass the trowel again in order to recover the surplus of adhesive (see pictures below).
4. Unfold the acoustical membrane on the section of applied adhesive and fold the other half of the strip of membrane on the glued part. Apply the adhesive on the exposed subfloor. Do this for the entire room.
5. At regular intervals, check the transfer of the adhesive by lifting a corner of the glued membrane (required minimum of 95 % transfer).
6. After gluing the membrane, pass a 75-100 lbs roller (35-45 Kg) to ensure a perfect transfer of the adhesive.

Proper application
Subfloor is visible between each adhesive trowel-ridge.

Improper application
Too much adhesive, creamy appearance and subfloor is not visible.

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Ceramic or natural stone installation

IMPORTANT: The following products should be used with the AcoustiTECH™ Ceramic membrane. It is not recommended to install the AcoustiTECH™ Ceramic membrane under ceramic tiles of less than 10” x 10” (25 cm x 25 cm) in size.

**MORTAR**

**What to use:**
- Polymer-modified mortar exceeding the requirements of ANSI A118.4 (i.e. Mapei Keraflex RS or equivalent).

**Why:**
- This product ensures the necessary flexibility to the assembly to avoid the ceramic to crack.

**Recommendations:**
- Follow the manufacturer’s mortar recommendations attentively.
- Before creating mortar trowel-ridges using the recommended trowel, apply a thin layer of uniform mortar to the membrane with the non-notched side of the trowel.
- Verify the transfer of mortar every 8 to 10 tiles according to the method recognized by the industry.
- Respect the minimum drying time recommended by the manufacturer of mortar.
- Install ceramic or natural stone as specified by the floor covering manufacturer (figure 6).
- Provide a space between the wall and the floor covering to avoid transfer of noise vibration.
- It is recommended to apply a flexible latex sealant in the space between the flooring and the wall if the surface is subject to come into contact with water or prone to moisture.

**GROUT**

**What to use:**
- Polymer-modified sanded grout (i.e. Mapei Ultracolor Plus FA or equivalent).

**Why:**
- This product ensures the necessary flexibility to the assembly to avoid the ceramic joints to crack.

**Recommendations:**
- Follow the manufacturer’s grout recommendations attentively.
- Do not allow heavy traffic before 72 hours or use planks or panels in case of absolute necessity.
- Respect the minimum drying time recommended by the grout manufacturer.