

## Installation Instructions

**dB4 CERAMIC IS FOR RESIDENTIAL INSTALLATIONS ONLY. DB4 CERAMIC IS NOT A MOISTURE BARRIER.**

### Preparation:

- o **NOTE:** Acoustic sealant shall be used at base of stud track of demising walls prior to installation of underlayment, where necessary
- o When to install:
  - After 100% “dried in” (all windows and doors installed)
  - Preferably, after drywall installation
  - Finish floor shall be installed within 2 weeks, if possible
  - Underlayment shall be protected from heavy wear, including use of stilts, hand-trucks, heavy equipment, etc.

### Concrete Subfloor

1. The slab must be of good quality, standard density concrete with low water to cement ratios consistent with placing and finishing requirements.
2. It shall have a maximum slump of 4”, a minimum compressive strength of 3500 psi, and following the recommendations of ACI Standard 302.1R for Class 2 or Class 4 floors and the Portland Cement Association’s recommendations for slabs on ground.
3. The concrete slab must be dry, clean, smooth, structurally sound, and free of foreign materials that might prevent an adhesive bond as described in ASTM F710 “Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring.
4. For grade- or below-grade concrete, refer to detailed instructions for vapor retarder.

**NOTE:** Do not use spray-on curing compounds because they reduce the drying rate of concrete and can interfere with the adhesive bond.

5. Before installation of the finished flooring, moisture, alkali, and bond testing must be conducted.
6. Moisture testing must be performed in accordance with ASTM F2170 “Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using in situ Probes” (preferred method) or in accordance with ASTM F1869 “Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride.”
7. The concrete must be dry with moisture emission rates that do not exceed 3 lbs. per 1000sf in 24 hours.
8. The surface of the concrete must have a pH of 9 or less.
9. Bond testing must be completed to determine compatibility of the adhesives to the concrete slab.
10. Above-grade concrete is usually protected from most sources of moisture except the moisture initially in the

mix and water vapor in the atmosphere. As with concrete placed on and below grade, above-grade concrete must be kept damp during the curing process to permit hydration to occur.

11. Floors on metal decks or above-grade structural concrete floors must be dried and must meet the same requirements as slabs on grade.

### Gypsum concrete surface preparation

1. Surfaces to receive dB4 Ceramic shall be clean and cured per the gypsum concrete manufacturers curing instructions

### Wood subfloor surface preparation (or Cement Board)

1. Surfaces to receive dB4 Ceramic shall be broom clean and smooth with no protruding fasteners.
2. If not adequately smooth, all protrusions greater than 1/16” shall be scraped from surface, as they will telegraph through underlayment

**IMPORTANT NOTE:** Planks should be installed perpendicular (90 degrees) to the dB4 Ceramic underlayment pattern;

1. Starting in one corner of the room, unroll dB4 Ceramic flush with the existing wall and cut to required length. Use a straight edge and cut with a utility knife.
2.
  - a. dB4 Ceramic shall run in the gap under the drywall (BEYOND the baseboard) and can butt against the baseplate and/or stud track. dB4 Ceramic underlayment does not expand/contract with thermal changes.
3. Roll out additional dB4 Ceramic rolls, tightly butting the side edges to one another. Do not overlap seams. Butt joints shall not have openings exceeding 1/16” (this will allow additional sound to pass through)
4. dB4 Ceramic is to be secured to the subfloor using the following approved adhesives. Follow manufacturer’s instructions for application of adhesive. Allow adhesive to cure for 24 hours before tile mortar is applied.
  - a. Roberts 2310 pressure sensitive Resilient Flooring adhesive is recommended and is to be troweled on as per the manufacturer’s instructions.
  - b. Other acceptable trowel on adhesives:
    - i. XL Stix 5300, Armstrong S235, or other Premium Vinyl Floor Adhesives (must be polyurethane based)
    - ii. Commercial Alternative: Stick N Stay (from large retailers)
  - c. Mortar may also be used to secure mat to subfloor, but acoustic performance will be slightly reduced.
  - d. To assure ideal level-floor finish, weighted roller is suggested. Curling and bubbling edges may require re-application adhesive. Wood sub-floors may use mechanical fasteners.

5. dB4 Ceramic is easily cut to fit around irregular objects and columns.

**Installation of Ceramic Tile**

1. Using pressure sensitive vinyl floor adhesive, glue the dB4 Ceramic to the subfloor. Adhesive is to cure for 24 hours before mortar is to be applied.
2. Install mortar to dB4 Ceramic. Follow adhesive manufacturer's instructions
3. United Plastics recommends a 1/2" x 1/2" square notch trowel for 12"x12" tile. For tile sizes greater than 12" x 12", see tile manufacturer's recommendations.
4. Install tiles per tile manufacturer's instructions.
5. Mortar joints should be no greater than 1/8" in width.
6. Allow mortar to dry 24 hours before grouting. This is important for mortar curing;
7. Grouted floors are to have no foot traffic for the first 24 hours after grouting and only light foot traffic for the next 48 hours. Grout cracking may occur if these instructions are not followed.
8. Mortar and grout continue to cure for up to 30 days.
9. Required mortar & grout listed below:
  - a. Mortar: Mapei Ultraflex 2 or Mapei Porcelain Tile Mortar.
  - b. Grout: Mapei Flex Color CQ is required due to its high polymer content for crack resistance.
  - c. NO mortar or grout substitutions are permitted

**Storage Requirements**

dB4 Ceramic should be stored in a dry environment. May be stored in temperatures ranging from 0oF to +110oF.