

KINETICS

INSTALLATION GUIDELINES | ISOLayment QT-B (BUMPY)

ISOLayment QT-B sound control underlayment is a bumpy (dimpled), resilient base underlayment installed under gypsum or full weight concrete to produce some of the thinnest sound-rated systems in the industry. ISOLayment QT-B installs easily over concrete and wood framed construction. The improved noise control can be substantial, especially for noise resulting from footfall. ISOLayment QT-B is available in 48" wide rolls, and in four (4) standard thicknesses – 6mm to 25mm. ISOLayment QT-B is available with a waterproof membrane (identified by a "W"-suffix).

I GENERAL INFORMATION

The ISOLayment QT-B line of products for impact sound insulation is engineered to provide a high level of resilience based on its thickness and profile; it has been rigorously tested to achieve proven results. Made from at least 92% resilient recycled rubber; backed by over 400 independent laboratory and field tests, ISOLayment QT-B products have been selected and used in some of the best hotels and condominiums in the world. Seek finished flooring manufacturer's approval for *direct application* of any finished flooring system, e.g., laminate, engineered wood, stone. All floor covering assemblies shall have prior approval before installation.

II JOB SITE CONDITIONS

Areas to receive ISOLayment QT-B should be weather tight and maintained at a minimum constant room temperature of 65°F (10°C) for 48 hours before, during, and after installation.

III SUBFLOOR REQUIREMENTS & PREPARATION

NOTE: Please follow the subfloor requirements and preparation recommendations determined by the flooring manufacturer. Use the following subfloor requirements and preparation guidelines only when no such recommendations exist for the floor finishing product.

1. All subfloors/substrates must be inspected prior to installation.
2. Install ISOLayment QT-B over concrete, approved self-leveling materials, and wood.
3. Wood subfloors should be double construction with a minimum thickness of one inch. The floor must be rigid and free from movement with a minimum of 18-inches of well-ventilated air space below.
4. Wood subfloors (when installed with use of grouted floor coverings like tile) must be prepared according to ANSI L/360 standards, as required by the floor covering

manufacturer. **NOTE:** Particleboard, often called “chipboard,” Masonite, and Lauan are not suitable underlayments.

5. Concrete floors must be fully cured and permanently dry. Subfloor shall be dry, clean, smooth, level, and structurally sound. It should be free of dust, solvent, paint, wax, oil, grease, asphalt, sealers, curing and hardening compounds, alkaline salts, old adhesive residue, and other extraneous materials, according to ASTM F710.
6. Subfloor should be smooth to prevent irregularities, roughness, or other defects from telegraphing through the material. The surface should be flat to the equivalent of 3/16” (4-mm) in 10-feet (3.0-meters), as described in ACI 117R, or as recommended by the flooring manufacturer.
7. Mechanically remove all traces of old adhesives, paint, or other debris by scraping, sanding, or scarifying the substrate. DO NOT use solvents.
8. Grind all high spots until level and fill low spots with an approved patching/leveling compound.
9. All saw cuts (control joints), cracks, indentations, and other non-moving joints in the concrete must be filled with an approved patching/leveling compound. Allow patching material to dry thoroughly.
10. Any concrete subfloor can be a source of moisture-related flooring failures. It is the installer’s responsibility to test the concrete or other cement-like material for moisture.
11. Maximum moisture vapor emission of the concrete must not exceed 5.5 lbs/1,000 sq ft in a 24-hour period, as measured by the calcium chloride test method in accordance with the ASTM F1869 standard. If vapor emissions exceed acceptable limits, the installation should not proceed until the problem has been corrected.
12. Moisture can also be measured using the RH, Relative Humidity, test method per the ASTM F2170 standard. Moisture content should not exceed 85% RH. If levels are higher using either test method, a Kinetics recommended vapor retardant must be used prior to installation.

IV HAZARDS

A. SILICA WARNING

Concrete, floor patching compounds, toppings, and leveling compounds can contain free crystalline silica. Cutting, sawing, grinding, or drilling can produce respirable crystalline silica (particles 1-10 micrometers). Respirable silica is classified by OSHA as and IA carcinogen and is known to cause silicosis and other respiratory diseases. Avoid actions that cause dust to become airborne. Use local or general ventilation or protective equipment to reduce exposure below applicable exposure limits.

B. LEAD WARNING

Certain Paints may contain lead. Exposure to excessive amounts of lead dust presents a health hazard. Refer to applicable federal, state, and local laws, and the publication, *Lead Based Paint: Guidelines for Hazard Identification and Abatement in Public and Indian Housing*, available from the United States Department of Housing and Urban Development (HUD).

C. ASBESTOS WARNING

Resilient flooring, backing, lining felt, paint, or asphaltic “cutback” adhesives could contain asbestos fibers. Avoid actions that cause dust to become airborne. DO NOT sand, dry sweep, dry scrape, drill, saw, bead blast, mechanically chip, or pulverize. Regulations may require that the material be tested to determine asbestos content. Consult the documents titled, *Recommended Work Practices for Removal of Existing Resilient Floor Coverings*, available from the Resilient Floor Covering Institute.

V MATERIAL STORAGE AND HANDLING

1. Deliver the material to the jobsite in its original unopened packaging with all labels intact and stored appropriately to prevent damage.
2. Inspect all material for visual defects before beginning the installation. Kinetics will honor no labor claim on material installed with any visually apparent defects.
3. Verify the material delivered is the correct type, thickness, and amount. Report any discrepancies immediately.
4. The material and any adhesive must be acclimated at room temperature for a minimum of twenty-four (24) hours before starting the installation.
5. Roll material is stretched slightly when it is rolled at the factory. At the jobsite, the installer should allow all cuts to relax before gluing down. Shaking the material once it is unrolled can help it to relax more quickly.

VI INSTALLING /SOLayment QT-B

A. GENERAL

NOTE: Install /SOLayment QT Perimeter Isolation Strip **FIRST!** Do not place and trim /SOLayment QT-B before installing Perimeter Isolation Strip.

1. Attach /SOLayment QT Perimeter Isolation Strip to the wall using a spot adhesive. This is required to maintain resilient separation between the sound isolated floor and the walls or other structure attached directly to the subfloor.

2. Assume the walls you are butting up against are not square. Using a chalk line, create a starting point for an edge of the material to follow.
3. If you have not already done so, remove the shrink-wrap from the roll of *ISOLayment* QT-B and unroll it onto the floor. Shaking the material once it is unrolled can help it to relax.
4. Always lay *ISOLayment* QT-B so that the bumps (dimples) are down against the subfloor. Some variations of *ISOLayment* QT-B are available with a waterproof membrane laminated to the top surface. Install *ISOLayment* QT-B so that this membrane surface is on top.
5. Trim the ends of each section as necessary in order to fit the surface area to be covered. Maintain the required ambient conditions for any adhesive application and bonding.
6. Align the lengthwise edge of the material exactly with that of the neighboring section. Edges must contact but not overlap.
7. Dry lay the rolls onto the subfloor. Use high quality three-inch (3") wide duct tape to secure all joints and seams.

B. INSTALLATION OF GYPSUM TOPPING

1. Install gypsum flooring underlayment product to a minimum thickness of one-inch (1"). Install the gypsum layer according to the recommendations of the gypsum manufacturer. Thickness of the gypsum layer may depend on thickness of the *ISOLayment* QT-B layer.
2. Properly heat and ventilate the building interior before, during, and after the installation of the gypsum product at constant room temperature of 50°F (min.) and controlled humidity of 50% (max.). Under these conditions, a one-inch (1") thick gypsum floor underlayment should be dry in about seven (7) to ten (10) days.
3. Open windows daily a minimum of two-inches (2") to allow for the evaporation of moisture.

NOTE: A building without all of these conditions present will significantly increase the drying time of the gypsum product.

4. Before applying the sealer or installing the finished floor goods, be sure that the gypsum underlayment is sufficiently dry by testing it using the plastic sheet method per ASTM D4263 or a method recommended by the gypsum manufacturer.

5. Install the finished floor in accordance with the flooring manufacturer's directions. After installing the finished floor, trim the excess QT Perimeter Isolation Strip around the entire perimeter of the finished floor. You may consult with the floor covering installer to see if they would like the perimeter isolation strip to remain in place.

VII FLOOR FINISH

A. GENERAL

1. Do not mechanically fasten any material through *ISOLayment* QT-B. Any mechanical connection, such as nails, screws, staples, etc., will transmit noise through to the building structure, compromising the performance of *ISOLayment* QT-B.

B. INSTALLATION

1. Glue standard wood flooring directly to *ISOLayment* QT-B using the flooring manufacturer's recommended adhesive.
2. If a flooring manufacturer recommends the installation of a layer of plywood or cement board between the *ISOLayment* QT-B and the finished flooring, glue the recommended board using a suitable adhesive.
3. When the flooring installation is complete, trim any excess *ISOLayment* QT-B material so that it is flush with the surface of the finished floor.

VI. BASEBOARD

A. INSTALLATION OF BASEBOARD

1. After perimeter installation strip has been trimmed to finished floor height install the baseboard.
2. Fix the baseboard to the wall above the *ISOLayment* QT Perimeter Isolation Strip. The baseboard must not touch the finished floor.
3. Seal the entire perimeter with a permanently flexible acoustical caulk.

VII. RECOMMENDED MATERIALS

NOTE: All materials shall be delivered to the job site in the original containers with the manufacturer's identification on each package. Unauthorized modification to any product is not permitted. The following materials are listed because of their extensive testing and field experience with ISOLayment QT products.

A. URETHANE ADHESIVES

1. Bostik's Best® by Bostik® (800) 592-8858
2. DriTac 7500/7600 by DriTac (800) 394-9310
3. Henry #971 (800) 232-4832

B. THIN-SET MATERIALS

1. ARDEX FB9L (724) 203-5000
2. ARDEX X-9
3. ARDEX X7 Plus
4. ARDEX S16
5. Bostik® Hydroment® Single-Flex™ Mortar
6. Laticrete® 253 Gold
7. Laticrete® 254 Platinum
8. Laticrete® Sure Set

C. GROUT MATERIALS

1. ARDEX Flex Grout
2. Bostik® Hydroment® Joint Filler
3. Laticrete® PermaColor™ Grout
4. Laticrete® SpectraLOCK® Grout