

Centaur

Floor Systems



SOUND REDUCER

TECHNICAL MANUAL

INSTALLATION • WARRANTY

Manufactured in the U.S.A. by

ecore™

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Supersedes all previous versions
Check website for updates

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GENERAL INFORMATION

The Sound Reducer product for impact sound insulation is engineered to provide better performance than any other sound control product available, and has been rigorously tested to achieve proven results. Sound Reducer can be installed under most types of grouted, glued, and floating floors, including ceramic tile, stone, marble, brick, pavers, hardwood, engineered wood, laminate, parquet, LVT, and carpet. All floor covering assemblies shall have prior approval before installation.

I JOB SITE CONDITIONS

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

II SUBFLOOR REQUIREMENTS & PREPARATION

A. GENERAL

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

1. All subfloors/substrates must be inspected prior to installation.
2. Install Sound Reducer over concrete, gypsum, approved self-leveling materials, and wood.
3. Wood subfloors should be double construction, rigid, and free from movement.
4. Wood subfloors (when installed with 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” (3.9mm) in 10’ 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 content must be measured using the RH, Relative Humidity test method, per the ASTM F2170 standard.
 - A. Moisture content (when using E-Grip III) should not exceed 85% RH.
 - B. Moisture content (when using Evolve) should not exceed 80% RH.If levels are higher, then the installation must not proceed until the problem is corrected..
12. In the event that a moisture mitigation system is required, it must conform to the ASTM F3010 Standard Practice for Two-Component Resin Based Membrane Forming Moisture Mitigation Systems for use Under Resilient Floor Coverings. In addition, the finished prepared surface on which the flooring is to be installed must conform to the ASTM F710 standards.

13. It is essential that pH tests be taken on all concrete floors. If the pH is greater than 9, it must be neutralized prior to beginning the installation.
14. If using other approved adhesives, please refer to manufacture's acceptable limits.

III HAZARDS

A. SILICA WARNING

1. Concrete, floor patching compounds, toppings, and leveling compounds can contain free crystalline silica. Cutting, sawing, grinding, or drilling concrete can produce respirable crystalline silica (particles 1-10 micrometers). Respirable silica is classified by OSHA as an 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

1. 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.

C. ASBESTOS WARNING

1. 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, beadblast, 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.

IV MATERIAL STORAGE AND HANDLING

A. GENERAL

1. Deliver the material to the job site 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. Centaur 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 24 hours before starting the installation.
Roll material is stretched slightly when it is rolled at the factory. At the job site, 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.

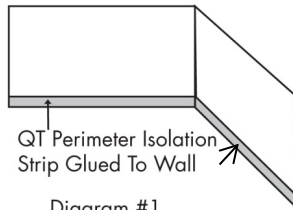
INSTALLATION

I PERIMETER ISOLATION STRIPS

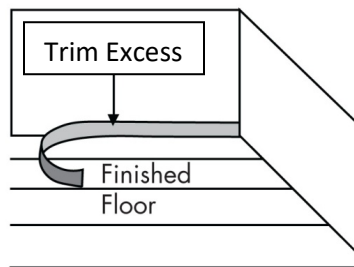
A. GENERAL

NOTE: It is essential to FIRST install the Perimeter Isolation Strip before placing and trimming the QT Impact Sound Insulation Material!

1. Temporarily fasten the Perimeter Isolation Strip to the perimeter wall of the entire subfloor, as well as around the perimeter of any protrusions, in order to isolate or break the vibration transmission path between the floor and the wall (see diagram #1).



2. Temporarily fasten the Perimeter Isolation Strip in place with masking tape, duct tape, carpet tape, or spot gluing. The Perimeter Isolation Strip should be secured at the bottom only as the top will later be trimmed flush with the new top layer of flooring. (see diagram #2)
3. Install the finished floor in accordance with the flooring manufacturer's directions. After installing the finished floor, trim the excess perimeter isolation strip around the entire perimeter of the finished floor (see diagram #2).



II Installation Sound Reducer Mat

Sound Reducer is a flat, resilient underlayment that is used directly under a variety of floor finishes, including ceramic tile, LVT, wood, laminate, and stone, yielding exceptional results over both concrete and wood joist constructions.

A. INSTALLING Sound Reducer

1. **FIRST** Attach the perimeter isolation strip to the wall as described above.
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 and unroll it onto the floor. Shaking the material once it is unrolled can help it to relax.
4. Place the Sound Reducer material so that it is perpendicular to the subsequent installation direction of the finished flooring (see diagram #3).

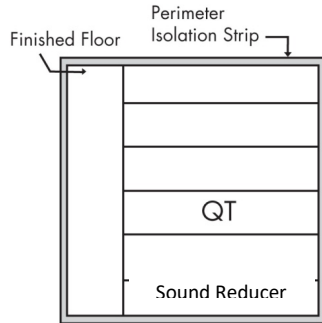


Diagram #3

5. Trim the ends of each section, as necessary, in order to fit the surface area to be covered. You may trim section ends to exact dimensions required (e.g. joints with walls, etc.).
6. Align the lengthwise edge of the material exactly with that of the neighboring section. Edges must contact but not overlap.

B. GLUING Sound Reducer

NOTE: When using grouted or fully adhered flooring materials, the Sound Reducer shall be fully adhered to the substrate with a suitable adhesive. No substitutions are permitted.

1. Fold the first drop lengthwise (half the width of the roll). Spread adhesive using the proper notch trowel below.
 - a. 2mm – Use a 1/16" x 1/32" x 5/64" U Notched trowel
 - b. 5mm-15mm – Use a 1/16" square notched trowel

NOTE: Temperature and humidity affect the open time of adhesive. The installer should monitor on-site conditions and adjust open time accordingly.

2. Carefully lay the material into the wet adhesive. DO NOT let the material fall, because this will trap air beneath the material.
3. Fold over second half of first sheet and first half of second sheet (see diagram #4).

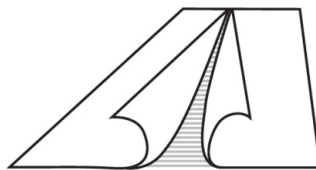


Diagram #4

4. Spread the adhesive. At seam area, spread adhesive at 90 degrees to seam to prevent excessive adhesive oozing up to the surface of the material.
5. Continue the process for each consecutive drop. Always work at a pace so you are always folding material back into wet adhesive.
6. Never leave adhesive ridges or puddles, as they may telegraph through the material.
7. Use a 35 to 75 lb roller to roll over the floor within 45 minutes to ensure proper transfer of adhesive. Overlap each pass of the roller by 50% of the previous pass to ensure that the floor is properly rolled.

IV ALTERNATIVE INSTALLATION METHODS

A. FLOATING FLOOR COVERING INSTALLATIONS

NOTE: Gluing down Sound Reducer is not required for floating floors.

1. Attach perimeter isolation strip (per above).
2. Dry lay the rolls onto the subfloor with duct or carpet tape to hold all seams together.

V FLOOR FINISH

A. GENERAL

1. Follow the flooring manufacturer's directions for installing the flooring. Use their recommended adhesives, procedures, and equipment.
2. **Do not mechanically fasten any material through the Sound Reducer. Any mechanical connection, such as nails, screws, staples, etc., will transmit noise through to the building structure, compromising the performance of Sound reducer.**
3. Sheet vinyl is ***not*** an approved installation method over the Sound Reducer. Please contact Centaur for factory laminated sheet vinyl products.
4. For LVT installation, please see appropriate Tech Manual at www.CentaurFloors.com

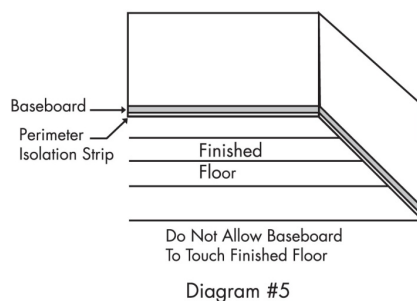
B. INSTALLATION

1. Install self-locking, "click" floors, etc. over approved Sound Reducer following the manufacturer's recommendations.
2. Install "glue down" wood flooring directly to QT per flooring manufacturer's recommended adhesive and instructions.
3. If a flooring manufacturer recommends the installation of a layer of plywood or cement board between the Sound Reducer and the finished flooring, glue the recommended board using a suitable adhesive.
4. Apply thin-set mortar directly onto the approved thickness of QTscu for grouted flooring materials.
5. Trim excess Perimeter Isolation Strip material flush with the surface of the finished floor after the flooring installation is complete.

VI BASEBOARD

A. INSTALLATION OF BASEBOARD

1. Only install baseboard after Perimeter Isolation Strip has been trimmed flush to floor height.
2. **The baseboard must not touch the finished floor (see diagram #5).**
3. Seal the entire perimeter with an ASTM C920 approved elastomeric joint sealant.



RECOMMENDED MATERIALS

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.

A. APPROVED ADHESIVES

1. E-Grip III by Ecore (800) 322-1923
2. E-Grip Evolve by Ecorel (800) 322-1923
3. Bostik's Best® by Bostik®
4. Mapei Ultrabond® ECO 980

B. THIN-SET MATERIALS

1. ANSI A118.4 Standard Modified Dry-Set Cement Mortar
2. ANSI A118.15 Improved Modified Dry-Set Cement Mortar

C. GROUT MATERIALS

1. ANSI A118.6 Standard Performance Grout
2. ANSI A118.7 High Performance Grout
3. ANSI A118.8 Modified Epoxy Grout

D. GYPSUM PRIMERS

1. Mapei – Primer T
2. Ardex – P51
3. Bostik – Universal Primer
4. Specco S-55

E. CEMENTITIOUS BACKERBOARDS

1. ANSI A118.9 Standard Cementitious Backer Board Unit (CBU)

F. ACOUSTICAL SEALANT

1. ASTM C920 Standard Specification for Non-hardening Elastomeric Joint Sealant

Warranty

Ecore offers a limited lifetime warranty on the Sound Reducer brand of Impact Sound Insulation products against defects in material and workmanship, and Sound Reducer shall meet all published specifications and perform effectively. Ecore warrants that during the warranty period, Sound Reducer shall not harden, become brittle, chip, crack, tear, or exhibit any signs of excessive deterioration except for normal wear and tear. All other warranties, including implied warranties for a particular purpose, wear due to ultraviolet degradation, and uses and installations that are contrary to Sound Reducer specifications, recommendations or instructions are expressly excluded. The sole remedy against the seller will be the replacement or repair of the defective goods; or, at seller's option, credit may be issued not exceeding the selling price of the defective good. Lifetime means for so long as the job installation remains unchanged by the original owner.

The recommendations for applications and installation contained within this document are based on our extensive experience and current technological practice. Ecore's liability and responsibility in the event of damages is limited to the extent defined in our General Terms and Conditions of Business and is not in any way increased by advice given by our sales representatives or applications engineering staff. Ecore is a corporation duly organized and validly existing under the laws of the Commonwealth of Pennsylvania.



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