Centaur Floor Systems

Sound Reducer Technical Manual

Installation & Warranty

Manufactured in the U.S.A by

ecore

Revised 09Aug2022
Supersedes all previous versions
Check website for updates

General

Job Site Conditions	2
Subfloor Preparation	2
Hazards	3
Storage & Handling	3

Installation

Perimeter Isolation Strip	3
Installation of Sound Reducer	4
Alternative Installation Methods	5
Baseboard	6
Recommended Materials	7

Warranty

Warranty	8

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. It 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. Sheet vinyl is not approved for installation over Sound Reducer. 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 a minimum, 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 subfloor requirements and preparation recommendations as specified by the flooring manufacturer.

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 LF 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 a patching/leveling compound.
9. All saw cuts (control joints), cracks, indentations, and other non-moving joints in the concrete must be filled with a Portland-based patching/leveling compound and dried 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. The maximum concrete moisture content or RH (Relative Humidity) must be measured using the ASTM F2170 standard test method.
    A. Concrete substrates and any thickness of Sound Reducer
       1. E-Grip **III** – RH limit of **85%**
    B. Gypsum, concrete substrates, and up to 5mm Sound Reducer
       A. E-TAK 99 – RH limit of **90%** (wet) and **99%** (pressure sensitive)

    If levels are higher, then the installation must not proceed until the problem is corrected.

    Note: The selected Portland-based patching and self-leveling materials must be moisture resistant and rated to withstand the RH moisture levels on the project.

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. Perform pH tests on all concrete floors. If greater than the allowable limit of the selected Ecore adhesive, neutralize prior to 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 inside and appropriately to prevent damage.
2. Inspect all material for visual defects before beginning the installation.
3. Verify the material delivered is the correct type, thickness, and amount. Report any discrepancies immediately. **Centaur will honor no labor claim on material installed with any visually apparent defects.**
4. The material and any adhesive must be acclimated at room temperature for a minimum of 24 hours before starting the installation.
5. 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.

V INSTALLATION OF PERIMETER ISOLATION STRIP

NOTE: The Perimeter Isolation isolates the floor from the wall and breaks the vibration transmission path – **it is essential to FIRST install the Perimeter Isolation Strip before placing and trimming the Sound Reducer material!**

1. Temporarily attach the Perimeter Isolation Strip to the perimeter wall of the entire subfloor, as well as around the perimeter of any protrusions, with tape, spray adhesive, etc.

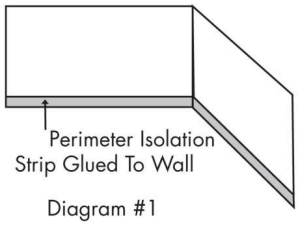


Diagram #1

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.

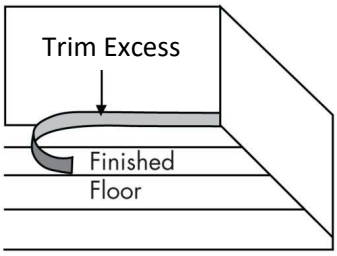


Diagram #2

VI INSTALLATION OF 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. Remove the shrink-wrap from the roll and unroll onto floor. Allow to relax 2 hours. Shaking the material once it is unrolled can help it to relax. It is OK to flip the QTscu in case of curling.
4. Place the Sound Reducer material so that it is perpendicular to the subsequent installation direction of the finished flooring (see diagram #3).

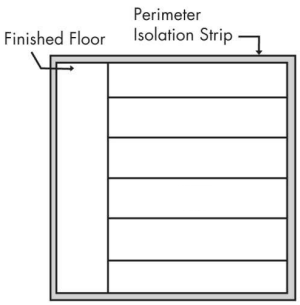


Diagram #3

5. Trim as necessary to fit surface area to be covered.
6. Align the roll edges with each other. Edges must contact but not overlap.

VII GLUING the 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. Sound Reducer may be loose laid for floating floors.

1. After Sound Reducer is rolled out and allowed to relax, fold material halfway back (half the width of the roll) to expose substrate. Spread adhesive on exposed substrate using proper trowel:

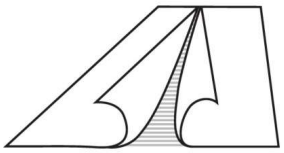
    a. E-Grip III and E-TAK 99
        i. Less than 4mm Sound Reducer – Use a 1/16" x 1/32" x 1/32" U notched trowel.
        ii. 4mm and thicker – Use a 1/16" square notched trowel

PLEASE NOTE:

- **Ecore recommends using E-Grip III when installing grouted materials.**
- **Only use E-TAK 99 for Sound Reducer thicknesses of UP TO 5mm, no thicker.**
- **E-Grip III can be used for ANY thickness Sound Reducer.**

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 "flop" into place, as this will trap air under the material.
3. Fold over second half of first sheet and first half of second sheet.



4. Spread the adhesive. At seams, spread adhesive at 90 degrees to prevent excessive adhesive from oozing up to the surface of the material. Never leave adhesive ridges or puddles, which can telegraph up through the material.
5. Continue the process for each consecutive drop, always folding material back into wet adhesive.
6. Use a 75 lb roller, within 45 minutes, to roll the floor to ensure proper transfer of adhesive. Overlap each pass of the roller by 50% of the previous pass. It may be necessary to weight material to keep it flat when adhering.
7. Repeat procedure for all sections of material until room is finished.

VIII ALTERNATIVE INSTALLATION METHODS

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 Sound Reducer. Any mechanical connection, such as nails, screws, staples, etc., will transmit noise through to the building structure, compromising the performance of the Sound Reducer.**

B. **FLOATING FLOORING**
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 seams together.

C. **PLYWOOD OR CEMENT BOARD**
1. The plywood or cement board should be glued down using an approved adhesive.
2. Apply adhesive to the Sound Reducer using the manufacturer's recommended trowel size.
3. **Do not mechanically fasten any material through Sound Reducer. Any mechanical connection, such as nails, screws, staples, etc., will transmit noise through to the building structure, compromising the performance of the Sound Reducer.**

D. **SHEET VINYL OR LUXURY VINYL TILE AND PLANK**
1. **Sheet vinyl is not an approved installation method over the Sound Reducer material. Please contact Centaur for factory laminated sheet vinyl products.**
2. For LVT installation, refer to the LVT manufacturer's instructions.

E. **CERAMIC AND PORCELAIN TILE**
1. Apply approved thinset mortar directly onto Sound Reducer as directed by mortar manufacturer.
2. Follow mortar and tile manufacturers' installation procedures.

F. **GLUE DOWN WOOD FLOORING**
1. Follow the flooring manufacturer's directions to install flooring over the Sound Reducer. Use their recommended adhesives, procedures, and equipment.
2. **Do not mechanically fasten any material through 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.**

G. **NAILED DOWN WOOD FLOORING**
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 Sound Reducer. Any mechanical connection, such as nails, screws, staples, etc., will transmit noise through to the building structure, compromising the performance of the Sound Reducer.**

IX BASEBOARD

A. INSTALLATION OF BASEBOARD
1. Only install baseboard **after Perimeter Isolation Strip has been trimmed flush to floor height.** See diagram #5.
2. **In order to isolate the floor from the wall and break the vibration transmission path, the baseboard must not touch the finished floor.**
3. Seal between baseboard and floor surface with an ASTM C920 elastomeric joint sealant.

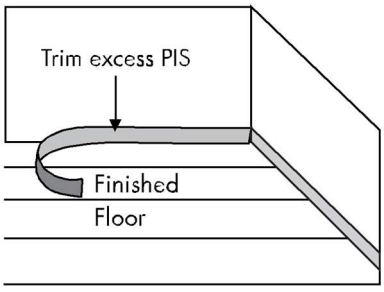


Diagram #5

X RECOMMENDED MATERIALS

NOTE: All materials shall be delivered to the job site in the original containers with all manufacturers' identification and labels intact. Unauthorized modification to any product is not permitted.

A. APPROVED URETHANE ADHESIVES

Please note: The following urethane adhesives are ONLY suitable for Concrete and Portland-based patches and self-levelers. They are not suitable for gypsum.

1. E-Grip III by Ecore (800) 536-9007
2. Bostik's Best
3. Bostik Green Fusion
4. Mapei Ultrabond ECO 980
5. Chemrex 941

B. APPROVED ACRYLIC ADHESIVE
1. E-TAK 99 by Ecore (866) 326-5712
   a. Ecore's E-TAK 99 is approved for use over concrete **and gypsum substrates**.
   b. Gypsum substrates **must first be primed** with one of the recommended primers listed below **prior to application** of the E-TAK 99 adhesive.
   c. Ecore's E-TAK 99 is also approved for Sound Reducer thickness **up to 5mm, no thicker**. A **urethane from the above list** can be used for ANY thickness Sound Reducer.

C. APPROVED THIN-SET MORTAR MATERIALS

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

D. APPROVED GROUT MATERIALS

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

D. APPROVED GYPSUM PRIMERS

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

E. APPROVED CEMENTITIOUS BACKERBOARD

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

F. APPROVED ACOUSTICAL SEALANT

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

Warranty

Ecore offers a limited 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, any job installation that does not remain unchanged as installed by the original owner, 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. Warranty only applies to the original owner.

Please see the Centaur Warranty Guide for length specifics.

These warranties are in lieu of any other warranty expressed or implied. Centaur shall not be liable for any incidental or consequential damages which may result from a defect. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. These warranties give you specific rights, and you may also have rights which may vary from state to state. To know what your legal rights are in your state, consult your local or state Consumer Affairs Office or your State Attorney General. For complete and latest warranty information, please visit www.centaurfloors.com

Centaur Floor Systems

(800) 536-9007
www.centaurfloors.com

Manufactured in the U.S.A by
ecore

© 2022 All designs and colors are copyrighted by Centaur