

#### Installation Instructions

# **QQ Step Soft**™

Noise Control Mats

QQ STEP SOFT is a recycled rubber mat that is meant for installation directly under a hard surface flooring product such as engineered wood, laminate, stone, tile or vinyl. The QQ STEP SOFT is glued or thin-set down in certain applications in which the finished flooring is completely bonded to the subfloor. For floating floors such as engineered wood, use floating QQ Step Soft.

# QQ Step Soft™ Job Site Requirements

Before beginning the installation below, all areas to receive QQ Step Soft should be weather-tight and have a constant temperature of 50 degrees for 48 hours before, during, and after installation.

# **QQ** Step Soft<sup>™</sup> Subfloor Requirements

- 1. Follow all subfloor requirements and preparation recommendations by the flooring manufacturer.
- 2. All subfloors and substrates must be inspected to meet requirements below before installation of QQ Step Soft.
- 3. QQ Step Soft can be installed over concrete, approved self-leveling materials, OSB and plywood.
- 4. If you will be adhering Step Soft to gypsum concrete, use GSL® All Purpose Sealer to seal the gypsum before applying adhesive.
- 5. If QQ Step Soft will be installed with adhesive, use only recommended adhesives. For concrete installations (not gypsum concrete), test with calcium chloride test (ASTM F1869) to a maximum of 5.5 lbs. per sq. ft. in a 24-hour period. For gypsum subfloors, use manufacturer test methods to determine water content.
- 6. Floor should be completely dry and free of dust, paint, oil, wax, solvents, sealers, etc. according to ASTM F710. Any residues should be mechanically removed and not by use of solvents.
- 7. Subfloor should be smooth and free of defects and cracks. Non-moving joints should prevent transition to flooring. Surface should be flat to 4-mm (3/16") thick across any 300-mm (12") section. Grind all high spots and fill indentations with approved self-leveling compound to meet flatness requirements.
- 8. For tile or other grouted installations on wood subfloors, make sure the subfloor is prepared according to ANSI L/360 standards as required by the flooring and grout manufacturer.

## QQ Step Soft™ Material and Storage Requirements

- 1. Deliver and keep all material in original packaging until ready to use.
- All claims of damage must be reported to the freight company. Any defects in the material should be reported to Keene immediately.
- 3. Acclimate all material within required temperature for 24 hours prior to install.
- 4. Allow material to relax after rolled out and before adhering to subfloor to allow normal stretching in the roll process to release.

## **Perimeter Isolation Barrier Installation**

- 1. Perimeter Isolation is installed before the QQ Step Soft. The Perimeter Isolation should be installed around the entire perimeter of the room to have QQ Step Soft installed.
- QQ Perimeter Isolation is produced with a sticky side for adherence to the wall. Place the sticky side to the wall and cover all areas to receive QQ Step Soft.
- 3. Wrap Perimeter Isolation around all penetrations including plumbing, electrical, cabinetry and thresholds.
- 4. Place the Perimeter Isolation so that it is 1/16" above the subfloor to prevent wrinkling at wall/subfloor intersection.
- 5. Install QQ Step Soft flush with the Perimeter Isolation strip but not compressed or with a gap larger than 1/16".

## QQ Step Soft™ Adhesive Installation

- 1. Allow the QQ STEP SOFT to acclimate to the room for one day prior to installation.
- 2. Remove the packaging from the rolls.
- 3. Using a chalk line, snap a line perpendicular to the longest wall in the room and establish a straight point of reference for the installation of the QQ STEP SOFT.
- 4. Cut the QQ STEP SOFT to the proper length and trim it for any penetrations or wall angles.
- 5. Place the QQ STEP SOFT along the snap line, cut the adjacent piece, trim it and place it adjacent to the first piece.
- 6. Fold the two pieces in half and apply the mastic to the area under the QQ STEP SOFT using a 0.125," "V"-notched trowel. Apply adhesive perpendicular to the seams.
- 7. Place the material so that no bubbles or waves are seen in the area by unfolding the QQ STEP SOFT into the wet mastic. Ensure that no air is trapped below.
- 8. Repeat this installation for the second half of the QQ STEP SOFT by folding in the other half sheet; trowel the mastic under and place the second half into the wet adhesive mastic.
- 9. Repeat this process until the room is completely covered. Ensure that there is no greater than a 0.25" space between the wall and the QQ STEP SOFT.
- 10. Ensure that all mastic is installed to a uniform thickness, as puddles or differences in thickness can telegraph through the sound mat.
- 11. Wipe any excess mastic from the top side of seams while working.
- 12. Roll with 100-pound roller to remove any air bubbles or adhesive inconsistencies.
- 13. Allow install to cure for 24 hours.

#### **Adhesive Yield**

	Floor Type	Recommended Trowel	Approximate Coverage
•	QQ Step Soft to Approved Substrate	3/16" X 1/8" X 1/8" U-Notch	80 sq. ft. / U.S. gal
•	Engineered Wood 1/2" or Less to QQ Step Soft	3/16" X 3/16" X 3/16" Square Notch	50 sq. ft. / U.S. gal
•	Engineered Wood 1/2" or More to QQ Step Soft	1/4" X 1/4" X 1/4" Square Notch 1/4	35 sq. ft. / U.S. gal

## QQ Step Soft™ Thin Set Installation

- 1. Allow the QQ STEP SOFT to acclimate to the room for one day prior to installation.
- 2. Remove the packaging from the rolls.
- 3. Using a chalk line, snap a line perpendicular to the longest wall in the room and establish a straight point of reference for the installation of the QQ STEP SOFT.
- 4. Cut the QQ STEP SOFT to the proper length and trim it for any penetrations or wall angles.
- 5. Place the QQ STEP SOFT along the snap line, cut the adjacent piece, trim it and place it adjacent to the first piece.
- 6. Fold the two pieces in half and apply the mortar (Multipurpose Latex-Modified, High-Performance Mortar recommended) to the area under the QQ STEP SOFT using a 1/4" x 1/4" square notch trowel. Apply mortar perpendicular to the seams.
- 7. Place the material so that no bubbles or waves are seen in the area by unfolding the QQ STEP SOFT into the mortar. Ensure that no air is trapped below.
- 8. Repeat this installation for the second half of the QQ STEP SOFT by folding in the other half sheet; trowel the mortar under and place the second half into the mortar.
- 9. Repeat this process until the room is completely covered. Ensure that there is no greater than a 0.25" space between the wall and the QQ STEP SOFT.
- 10. Ensure that all mortar is installed to a uniform thickness, as puddles or differences in thickness can telegraph through the sound mat.
- 11. Wipe any excess mortar from the top side of seams while working.
- 12. Roll with 100-pound roller to remove any air bubbles or inconsistencies in the mortar.
- 13. Allow install to cure for 24 hours.

# QQ Step Soft™ Floating Installation

- 1. Allow the QQ STEP SOFT to acclimate to the room for one day prior to installation.
- 2. Remove the packaging from the rolls.
- 3. Using a chalk line, snap a line perpendicular to the longest wall in the room and establish a straight point of reference for the installation of the QQ STEP SOFT.
- 4. Cut the QQ STEP SOFT to the proper length and trim it for any penetrations or wall angles.
- 5. Place the QQ STEP SOFT along the snap line, cut the adjacent piece, trim it and place it adjacent to the first piece.
- 6. Roll with 100-pound roller to remove any air bubbles.
- 7. Tape all seams with high-quality, 3"-wide duct tape.

## QQ Step Soft™ Flooring Installation

For all flooring types: follow the manufacturer's installation instructions. Use their recommended materials. Do not use mechanical fasteners through the QQ Step Soft, as this will negate the acoustical performance of the system.

## **Finished Flooring Installation**

## TILE

- Follow all manufacturer and Tile Council of North America recommendations for procedures and installation, including adhesives and accessories.
- 2. Tile and grout should not be in contact with any wall or penetration, and no penetrations should be made through the QQ Step Soft to the subfloor, including for expansion joints.
- 3. If cement backer board is required, glue it to the QQ Step Soft with the recommended adhesive or mortar.
- 4. If crack suppression is required, glue it to the QQ Step Soft with the recommended adhesive.

## **ENGINEERED WOOD**

- 1. Engineered wood can be glued down or floating.
- 2. For engineered wood that is glued, follow all recommended installation instructions from the manufacturer and from the Hard Wood Flooring Association.
- 3. Finished wood or laminate should not come in contact with any walls or penetrations, and no penetrations should be made through the QQ Step Soft to the subfloor.

#### VINYL

- 1. Follow all manufacturer recommendations for procedures and installation including adhesives and accessories.
- 2. Apply a thin layer of moisture cure urethane to top of QQ Step Soft and allow to cure before applying vinyl manufacturers recommended adhesive.
- 3. Apply adhesive to cured thin layer of urethane. Can be moisture cure urethane with a 1/32" trowel or adhesive recommended by flooring manufacturer.
- 4. Follow vinyl flooring manufacturer's recommendations for installation over a resilient material such as QQ Step Soft.
- 5. Test all proposed installations to determine if vinyl flooring/QQ Step Soft assembly is strong enough to support appliances, furniture, etc. For installations using QQ Step Soft with a thickness greater than 2 mm, consult with vinyl manufacturer to determine if vinyl installation is permitted.

## **Baseboard Installation**

- 1. Trim perimeter isolation strip to top of finished flooring.
- Install baseboard to wall but do not allow it to contact flooring, as this will negate the acoustical performance of QQ Step Soft.
- 3. Seal perimeter with acoustical caulk that remains resilient.

#### **Material Recommendations**

All materials must be delivered to the job site in original containers with all of manufacturer's labeling intact. No modifications are allowed.

## **Gypsum Sealers**

GSL® All Purpose Sealer Specco S-55 Concentrate

#### **Adhesives**

Apac 440 (for vinyl tile)
BASF Chemrex CX-941
Bosticks Best
Chemque Fortane
Others can be evaluated by Keene Building Products Support

#### Thin Set

Bostik Hydroment Single Flex Mortar Others can be evaluated by Keene Building Products Support

#### **Perimeter Isolation Strips**

Keene Quiet Qurl® Perimeter Isolation with Quik Stick

#### **Substitutions and Modifications**

No substitutions/modifications permitted.

If substitutions or modifications are required, please contact Keene Building Products at 1-877-514-5336 for review. All substitutions/modifications approved by Keene Building Products must be documented from Keene Building Products to be valid.

QUIET QURL is a component in an overall floor/ceiling assembly. Its performance is affected by every other component and the likelihood of achieving code compliance is contingent upon many other trades including framers, plumbers, drywall contractors to name a few. Developers and general contractors are responsible for building properly and testing field performance as soon as possible in order to assure the reliability of the project.

WARNING: Laboratory tests are not a guarantee of field performance because of the issues noted above and many other design errors that may occur. Please consult a professional acoustical consultant to assure plans are proper and that the floor/ceiling assembly can perform to expectations.

