Quiet Qurl®: Raising the Bar
Noise Control Products from Keene Building Products

Keene Building Products manufactures and markets 3-dimensional “entangled net” products for noise control.

These products work in construction projects such as multi-family apartments and condominiums to dramatically reduce impact and airborne noise transfer.

The Quiet Qurl systems are available from 0.125” to 0.75” with options.
Vibrations travel through connections. By limiting direct connections (such as between the finished floor and the joist assembly) we can effectively disrupt the path for noise to pass through our floors and walls. **Quiet Qurl is the perfect solution** to this troublesome issue.

Keene Building Products’ is raising the bar with Quiet Qurl’s product line by offering solutions in different thicknesses and with enhanced fabric options for your code-driven performance needs.

**Quiet Qurl systems are available from 0.125” to 0.75” with fabric options, including:**

- Moisture Control (MC)
- Muffling Technology Enhancement (MT)
- Reinforced Fabric (RF)

All products are designed for use with underlayments such as gypsum concrete and lightweight concrete.
Quiet Qurl MT is the most exciting technology we’ve developed. This “Muffling Technology” is available on any Quiet Qurl product and adds a conformable bottom side muffler to the sound control mat.

Quiet Qurl MT uses a high loft fabric that is lightweight and compressible with very little pressure. When loaded with an underlayment such as gypsum concrete in a sound control application, the performance is dramatically enhanced.

The “MT” product addition can make 1/4” sound mats perform like 3/4” sound mats by lowering the decibel level in the critical lower frequencies. The MT product enhancement has been used extensively in mill building rehab applications.

Benefits
- Performance like 0.75” Quiet Qurl in a 0.25” mat
- Cotton like layer acts to “Muffle” noise
- Performs from 125 Hz to 3150 Hz
- Up to 5 IIC point enhancement

Applications
- Multi-family wood frame and concrete construction
- For high-end results in a nominal 0.25” sound mat
- Works with gypsum underlayment from 0.75” thickness and greater
Quiet Qurl RF is an alternative for all four versions of the standard product. It is designed for use when the gypsum concrete pour is not to standard thickness (or when additional reinforcement is needed).

The product matches a reinforced fabric and scrim, which are adhered together, in combination with the standard “entangled net” core material.

A reinforced fabric is laminated to the surface so that gypsum concrete or concrete can be placed to create a floating floor.

**Benefits**

- Best performance product in wood frame construction when compared to solid mats
- Provides the thinnest underlayment thickness available on the market for wood frame
- A Class A fire-rated product and passes a Robinson Wheel Test with the following minimum thicknesses: 0.75” with QQ 025, 1.0” with QQ 040, and 1.5” with QQ 075.

**Applications**

- Multi-family construction: apartments and condominiums
- When a resilient ceiling is installed
- Radiant-heated flooring when pumped with lightweight concrete or gypsum
- With hard surfaces: concrete, stone, tile, vinyl and hardwood
- With topping layers, such as gypsum concretes, lightweight concrete, mortar beds and plywood. At greatly reduced thicknesses
Quiet Qurl Perimeter Isolation is an accessory to the Quiet Qurl sound control system designed to limit flanking sound. Flanking paths from the floor to the wall are limited by this simple material. The void space is filled so that airborne sound cannot flank either.

4 versions of Quiet Qurl Perimeter Isolation are available:

1. Quiet Qurl Perimeter Isolation 025, non-sticky
2. Quiet Qurl Perimeter Isolation with Quik Stick 2”, Sticky
3. Quiet Qurl Perimeter Isolation with Quik Stick 3”, Sticky
4. Quiet Qurl Perimeter Isolation with Quik Stick 3.5”, Sticky and has EASY-FOLD

Applications

- Must be used with all Quiet Qurl installations
- When a resilient ceiling is installed
- With hard surfaces: concrete, stone, tile and vinyl
- With structural layers, such as gypsum concrete, lightweight concrete, and mortar beds
- For applications in which sound system is between 0.25” to 4.0” in depth
- Acts as a barrier to help prevent damage of the drywall
- With hard surfaces: concrete, stone, tile and vinyl
- With structural layers, such as gypsum concrete, lightweight concrete and mortar beds
Quiet Qurl® Tape

Quiet Qurl Tape is an accessory to the Quiet Qurl sound control system.

Quiet Qurl Tape is an acrylic based pressure-sensitive adhesive combined with the conformability/flexibility of biaxially-oriented polypropylene (BOPP) film. It provides excellent sealing, protective benefits, and it’s easy to handle.

For use on Class 1 flexible duct for permanent seaming and sealing to enhance appearance and provide moisture barrier protection. All temperature rates, flame retardant, high shear, aggressive, and UV resistant. Superior bonding at sub-zero or at elevated temperatures. UV/temperature resistant acrylic adhesive combined with inorganic polypropylene film provides the longest lasting closure method.

Benefits
- Moisture barrier
- Cost effective
- Easy to handle
- Resistant to mold growth and high humidity
- UL Listed: 181B-FX

Applications
- Used with all Quiet Qurl seaming applications

Total Thickness (PSTC-133): 3 mils (0.076 mm)
Color: White
Roll Size: 3” x 148’
Packaging: 16 Rolls per Box. 48 Boxes per Pallet. 768 Rolls per Pallet. Weight: 13 lb. per box, 675 lb. per pallet.
Dependable provides a one source gypsum underlayment and sound control system providing durability, luxury and comfort in new multi-family construction.

- **GSL® K2.6**  A standard gypsum underlayment for wood frame and precast concrete construction
- **GSL® M3.4**  A premium high strength gypsum for renovations and high traffic projects
- **GSL® CSD**  A gypsum and portland based cement designed for fire-rated corrugated steel deck construction applications
- **GSL® RH**  A quick-setting gypsum cement formulated for radiant floor heating applications
- **GSL® ALL PURPOSE SEALER**  Use with GSL products to enhance the bond between the underlayment and finished floor covering
- **GSL® PRIMER**  Use with GSL products to enhance the bond between the underlayment and various substrates
- **CONSOLICRETE™**  A two-part epoxy designed to repair damaged substrates

Please contact us at 877-514-5336 or info@dependable.us so our technical team can help determine which product most adequately fits your projects needs.
GSL gypsum underlayments provide a variety of advantages. In addition to speed, GSL gypsum underlayments also provide fire protection; gypsum does not burn. GSL gypsum underlayment also offers numerous acoustical advantages.

**GSL K2.6**

Dependable’s standard gypsum underlayment provides contractors with an economical solution to meeting UL fire ratings and noise ratings.

Pumpable, GSL K2.6 delivers high strength, good water resistance and outstanding performance when placed after drywall in typical multi-family projects. GSL K2.6 can be poured anywhere from 0.375’’ to 3’’ thick.

**APPLICATIONS**

Multi-family, light commercial, commercial/retail/office, hotel/motel, assisted living/senior care and for sound and fire control applications.

**GSL M3.4**

When higher compressive strengths are required, Dependable’s GSL M3.4 offers a high strength underlayment for renovations and high traffic projects.

GSL M3.4 sets within 90-minutes and can handle foot traffic in two hours, making construction quick and easy. Near featheredge pours can be achieved, along along with pours up to 3” thick in one lift. This product offers high density, yet less finished weight and more flexibility than Portland cement self-levelers.

**APPLICATIONS**

Multi-family, renovations, floor leveling, light commercial, commercial/retail/office, hotel/motel, assisted living/senior care and for sound and fire control applications.
QQ Step Soft™

QQ Step Soft™ is a 100% recycled product that can be used directly under tile, engineered wood and traditional hardwood. The 2 mm to 10 mm product is full adhered when the finished flooring is fully adhered, and loose laid when the finish flooring is floating.

In most high-rise concrete construction, impact noise can be controlled with a one layer system on the top side of the construction. QQ Step Soft has been tested to provide excellent noise control when used directly under tile applications or engineered wood.

**Benefits**
- Effective impact noise reduction
- Thinner material required vs. other resilient underlayments
- Environmentally friendly
- Low odor
- Long life
- Delta IIC of 21 at 5 mm
- Reliable tile installations
- Lower unit cost

**Applications**
- With fully adhered finished hard surfaces, such as ceramic tile and glued-down wood
- Loose-laid with floating engineered wood systems
- In high-rise concrete applications
- In conjunction with wood frame construction and gypsum concrete
- Achieves an industry standard IIC of 50 in previously tested assemblies
- For LEED credit for utilizing 100% recycled tire rubber

QQ Step Soft passes a Robinson Wheel Test (ASTM C627) at a residential rating. The Delta IIC value of a 5-mm, 100% recycled rubber mat has been tested under ASTM E2179-03, and shown to provide 21 dB.
Being one of the most diverse cities in Canada, Vancouver, British Columbia, has quickly become an extremely popular tourist destination. With the scenic views, mild climate, and urban atmosphere who wouldn’t want to plan a trip? When tourists come flooding the city, there is one important question that comes to mind: where will you stay? One luxurious urban hotel in Downtown Vancouver is your answer!

Located on West Georgia Street in Downtown Vancouver, you’re in the center of it all! Walk a few blocks for miles of shopping, fine dining, and unlimited entertainment.

Or stay in the hotel and enjoy the luxury spa, heated indoor pool, outdoor relaxing jacuzzi, state of the art fitness center, award winning restaurant, and much more!

Taking care of the guests of the hotel and meeting all of their wants and needs is always the main concern. With the hotel standing 616 feet tall, with 69 stories there is one very important amenity that needed to be taken care of: Noise Control.

When staying at a hotel, the last thing you want is to hear your neighbor stomping around upstairs or music blasting through the floor, you want to enjoy peace and quiet. Which is why a decision was made to incorporate Keene Building Products’ QQ Step Soft 4 mm into the floors of each room. Using this product will provide a noise free environment for all guests.

QQ Step Soft is a recycled rubber flooring underlayment for sound isolation and impact noise control, which ranges in 2 mm to 10 mm. The rubber material provides a resilient layer within the flooring assembly for reducing vibration noise. QQ Step Soft is a critical component in meeting International Building Code requirements for ceiling/floor noise reduction performance. In this case, the QQ Step Soft was installed under wood flooring offering many benefits such as: effective impact noise reduction, low odor, long lasting, and is environmentally friendly!
Raising the Bar  
Ceiling Acoustics

Ceiling isolation is as important to noise control as the floor isolation system. Unfortunately, the bottom side remains a weak link. Acousticians and architects design ceiling systems properly, but many problems occur during installation. RC Assurance™ and Space Assurance™ are cost-effective products that take the difficulty out of ceiling isolation.

RC Assurance™

RC Assurance is a clip designed for resilient channels. The product acts as an impenetrable washer that puts extra space between the channel and the joist. The snap on clip works with any resilient channel but is specifically designed for use with RC Deluxe from Dietrich.

Developed a number of decades ago, resilient channels are a staple in the multi-family industry. There are some issues with Resilient Channel installation. The resilient channel needs another 0.375” to assure that connections are limited between the gypsum board and the joist assembly. RC Assurance™ provides that space and assures against “Channel Ride.”

- Floor assemblies and wall assemblies
- With every joist type: metal, open web, “I” joist design and nominal 2” lumber
- UL listed and approved
- Ease in installation, snap on design and no laser alignment like the other clips

Please refer to complete Installation Instructions for RC Assurance
Space Assurance™

Space Assurance is a ceiling perimeter isolation that is made up of a flexible, flame resistant polyester fabric. It is used as a fastener line, virtually assuring the proper detail between the wall and ceiling and eliminating one of the most common paths for noise flanking in multi-family construction.

Short circuits and flanking noise are often caused by improper detailing of the gypsum wall and ceiling. The proper detail is to leave a 0.25” space and then caulk the joint. This installation detail is difficult to install and difficult to assure. Space Assurance provides a better Solution.

The first step in ceiling installation is to install Space Assurance around the ceiling of every room. Ceiling elements butt against the Space Assurance with the bottom half used to separate the ceiling drywall from the wall board. The excess is cut off.

- Assures the proper space between gypsum ceiling and walls
- Quick installation that saves time and money
- Only UL listed joint assembly with a gap
- Eliminates flanking paths for noise
- Eliminates caulking and shimming

Please refer to Complete Installation Instructions for RC and Space Assurance
Cylent Assurance™ Clip

A new clip for enhancing the acoustic performance of ceilings + walls.

- Patent pending
- Only clip designed for RC-1 channel
- Most cost-effective option on the market
- Systems performance of 60+ IIC & STC
- Low profile
- Easy installation

Contact us today for pricing & availability
info@keenebuilding.com or 877 | 514 | 5336

Additional test reports available upon request
The KEENE Complete Acoustic System

- 3/4” GSL® K2.6
- Quiet Qurl® 013 MT
- Cylent Assurance™ Clip
- Space Assurance™

<table>
<thead>
<tr>
<th>Floor Finish</th>
<th>STC</th>
<th>IIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vinyl Plank</td>
<td>60</td>
<td>62</td>
</tr>
<tr>
<td>Engineereed Wood</td>
<td>60</td>
<td>64</td>
</tr>
</tbody>
</table>

*18” Open Web Truss
Roll out Quiet Qurl mat on the floor with edge of black core touching the adjacent black core, and the fabric flap overlapping the adjacent piece. Edge must be placed adjacent to other pieces without gaps between black core of adjacent pieces.

Remove plastic backing from the Zip-Strip. Firmly press down on the adhesive edge so that the mat remains snug to the fabric on the adjoining Quiet Qurl strip. Adjoin all seams to prevent penetration into the core material during pour.

*If necessary, cover seams with tape (duct tape or cellophane tape) or spray adhesive (3M Super 77).*

Place Quiet Qurl Perimeter Isolation on all walls at the junction of the Quiet Qurl mat and the wall. Use the spray adhesive on the mat to bond the perimeter isolation permanently at that point. Do not spray on the wall. Place the Perimeter Isolation around all penetrations in a similar manner.

When the adhesive and taping is complete, pump gypsum concrete over top of mat.

*See page 7 for gypsum concrete minimum depths.*

**PRECAUTIONS:**
1. Consult gypsum manufacturer for proper water content. Over watering can cause a breech of the Quiet Qurl fabric.
2. Inspect Quiet Qurl mat installation before pumping, and review all details.
3. Retrofit of old wood construction requires a roofing felt, mastic, asphalt emulsion or poly sheeting on the subfloor for moisture leak prevention.
4. After Quiet Qurl mat is rolled out on floor try to minimize traffic before pouring gypsum concrete on top.

*For Complete instructions please refer to Keene Building Product’s Quiet Qurl Installation Instruction information sheets.*
### Keene Building Products

#### Noise Control Products

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Minimum Gypsum Thickness</th>
<th>Roll Length</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mat Thickness 0.125 Inches / 3.0 mm</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quiet Qurl 013</td>
<td>0.75 inch</td>
<td>100 ft.</td>
<td>400 sq. ft.</td>
</tr>
<tr>
<td>Quiet Qurl 013 MT</td>
<td>0.75 inch</td>
<td>100 ft.</td>
<td>400 sq. ft.</td>
</tr>
<tr>
<td>Quiet Qurl 013 RF</td>
<td>0.75 inch</td>
<td>100 ft.</td>
<td>400 sq. ft.</td>
</tr>
<tr>
<td>Quiet Qurl 013 RF MT</td>
<td>0.75 inch</td>
<td>100 ft.</td>
<td>400 sq. ft.</td>
</tr>
<tr>
<td><strong>Mat Thickness 0.25 Inches / 6.0 mm</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quiet Qurl 025 FT</td>
<td>1.0 inch</td>
<td>100 ft.</td>
<td>400 sq. ft.</td>
</tr>
<tr>
<td>Quiet Qurl 025</td>
<td>1.0 inch</td>
<td>100 ft.</td>
<td>400 sq. ft.</td>
</tr>
<tr>
<td>Quiet Qurl 025 MT</td>
<td>1.0 inch</td>
<td>50 ft.</td>
<td>200 sq. ft.</td>
</tr>
<tr>
<td>Quiet Qurl 025 RF</td>
<td>0.75 inch</td>
<td>100 ft.</td>
<td>400 sq. ft.</td>
</tr>
<tr>
<td>Quiet Qurl 025 RF MT</td>
<td>1.0 inch</td>
<td>50 ft.</td>
<td>200 sq. ft.</td>
</tr>
<tr>
<td><strong>Mat Thickness 0.40 Inches / 10.0 mm</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quiet Qurl 040</td>
<td>1.0 inch</td>
<td>100 ft.</td>
<td>400 sq. ft.</td>
</tr>
<tr>
<td>Quiet Qurl 040 MT</td>
<td>1.25 inch</td>
<td>50 ft.</td>
<td>200 sq. ft.</td>
</tr>
<tr>
<td>Quiet Qurl 040 RF</td>
<td>1.0 inch</td>
<td>100 ft.</td>
<td>400 sq. ft.</td>
</tr>
<tr>
<td>Quiet Qurl 040 RF MT</td>
<td>1.0 inch</td>
<td>50 ft.</td>
<td>200 sq. ft.</td>
</tr>
<tr>
<td><strong>Mat Thickness 0.75 Inches / 19.0 mm</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quiet Qurl 075</td>
<td>1.5 inch</td>
<td>50 ft.</td>
<td>200 sq. ft.</td>
</tr>
<tr>
<td>Quiet Qurl 075 N MT</td>
<td>1.5 inch</td>
<td>50 ft.</td>
<td>200 sq. ft.</td>
</tr>
<tr>
<td>Quiet Qurl 075 N RF</td>
<td>1.5 inch</td>
<td>50 ft.</td>
<td>200 sq. ft.</td>
</tr>
<tr>
<td>Quiet Qurl 075 RF MT</td>
<td>1.5 inch</td>
<td>50 ft.</td>
<td>200 sq. ft.</td>
</tr>
<tr>
<td><strong>Additional Products</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quiet Qurl Reinforcement RWT</td>
<td>0.375 in./9.0 mm</td>
<td>75 ft.</td>
<td>300 sq. ft.</td>
</tr>
<tr>
<td>Quiet Qurl Perimeter Isolation</td>
<td>0.125 in./3.0 mm</td>
<td>550 ft.</td>
<td>183.3 sq. ft.</td>
</tr>
<tr>
<td>QQ Step Soft 2 mm</td>
<td>2.0 mm</td>
<td>50 ft.</td>
<td>200 sq. ft.</td>
</tr>
<tr>
<td>QQ Step Soft 5 mm</td>
<td>5.0 mm</td>
<td>25 ft.</td>
<td>100 sq. ft.</td>
</tr>
<tr>
<td>QQ Step Soft 6 mm</td>
<td>6.0 mm</td>
<td>25 ft.</td>
<td>100 sq. ft.</td>
</tr>
<tr>
<td>QQ Step Soft 8 mm</td>
<td>8.0 mm</td>
<td>20 ft.</td>
<td>80 sq. ft.</td>
</tr>
<tr>
<td>QQ Step Soft 10 mm</td>
<td>10.0 mm</td>
<td>20 ft.</td>
<td>80 sq. ft.</td>
</tr>
<tr>
<td>RC Assurance</td>
<td>0.3125 in./8.0 mm</td>
<td>(500 clips per box)</td>
<td></td>
</tr>
<tr>
<td>Space Assurance</td>
<td>0.25 in./6.0 mm</td>
<td>100 ft.</td>
<td>25 sq. ft.</td>
</tr>
</tbody>
</table>
### Quiet Qurl® Assembly Results

<table>
<thead>
<tr>
<th>Quiet Qurl</th>
<th>Gypsum Floor Underlayment</th>
<th>Insulation</th>
<th>Truss Depth</th>
<th>GWB/RC-1 Channel</th>
<th>RC+</th>
<th>Base Gypsum</th>
<th>Ceramic Tile</th>
<th>Engineered Wood</th>
<th>Vinyl</th>
<th>STC / ASTC</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPEN WEB JOIST</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>013</td>
<td>3/4&quot;</td>
<td>3 1/2&quot; batt</td>
<td>16&quot;</td>
<td>1 layer/16&quot; o.c.</td>
<td>56</td>
<td>56</td>
<td>53</td>
<td>53</td>
<td></td>
<td></td>
</tr>
<tr>
<td>025</td>
<td>1&quot;</td>
<td>3 1/2&quot; batt</td>
<td>18&quot;</td>
<td>1 layer/24&quot; o.c.</td>
<td>51</td>
<td>53</td>
<td>54</td>
<td>53</td>
<td></td>
<td></td>
</tr>
<tr>
<td>040</td>
<td>1&quot;</td>
<td>3 1/2&quot; batt</td>
<td>18&quot;</td>
<td>1 layer/16&quot; o.c.</td>
<td>Yes</td>
<td>56</td>
<td>56</td>
<td>62</td>
<td>64</td>
<td>60</td>
</tr>
<tr>
<td>075</td>
<td>1 1/2&quot;</td>
<td>6&quot; batt</td>
<td>18&quot;</td>
<td>1 layer/16&quot; o.c.</td>
<td>59</td>
<td>60</td>
<td>61</td>
<td>60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>013 MT</td>
<td>3/4&quot;</td>
<td>3 1/2&quot; batt</td>
<td>18&quot;</td>
<td>1 layer/16&quot; o.c.</td>
<td>Yes</td>
<td>57</td>
<td>64</td>
<td>62</td>
<td>60</td>
<td></td>
</tr>
<tr>
<td>075 MT</td>
<td>1 1/2&quot;</td>
<td>6&quot; batt</td>
<td>18&quot;</td>
<td>1 layer/16&quot; o.c.</td>
<td>59</td>
<td>60</td>
<td>61</td>
<td>60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>025 MT</td>
<td>1&quot;</td>
<td>6&quot; batt</td>
<td>18&quot;</td>
<td>1 layer/16&quot; o.c.</td>
<td>58</td>
<td>62</td>
<td>61</td>
<td>60</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| WOOD JOIST | | | | | | | | | | |
| 013 | 3/4" | 3 1/2" batt | 10" | 1 layer/16" o.c. | 50 | 55 | 51 | 57 |
| 025 | 1" | 3 1/2" batt | 10" | 1 layer/16" o.c. | 52 | 55 | 53 | 54 |
| 040 | 1 1/4" | 3 1/2" batt | 10" | 1 layer/16" o.c. | 50 | 53 | 54 | 50 | 54 |
| 075 | 1 1/2" | 3 1/2" batt | 10" | 1 layer/16" o.c. | 52 | 52 | 52 | 55 |
| 025 MT | 1" | 3 1/2" batt | 10" | 1 layer/16" o.c. | 55 | 74 | 57 | 57 | 52 |
| 040 MT | 1 1/4" | 3 1/2" batt | 10" | 1 layer/16" o.c. | 53 | 68 | 55 | 54 | 53 |

| I JOIST | | | | | | | | | | |
| 013 | 3/4" | 3 1/2" batt | 11 7/8" | 2 layers/16" o.c. | 56 | 58 | 52 | 58 |
| 025 | 1" | 3 1/2" batt | 11 7/8" | 1 layer/16" o.c. | 54 | 57 | 53 | 53 |
| 040 | 1 1/2" | 5 1/2" batt | 14" | 2 layers/24" o.c. | 53 | 54 | 56 | 54 | 53 |
| 025 MT | 1" | 3 1/2" batt | 11 7/8" | 2 layers/16" o.c. | 54 | 56 | 56 | 56 |
| 040 MT | 1 1/4" | 3 1/2" batt | 11 7/8" | 2 layers/16" o.c. | 60 | 78 | 59 | 61 | 57 |

| STEEL JOIST | | | | | | | | | | |
| 025 MT | 1" | 3 1/2" batt | 9 1/4" | 1 layer/12" o.c. | 54 | 57 | 56 | 55 | 54 |

| CONCRETE | | | | | | | | | | |
| 013 | 3/4" | NONE | 9" | NONE | 28 | | | | | |
| 025 | 1" | NONE | 6" | NONE | 48 | | | | | |
| 040 | 1" | YES | 6" | with ceiling | 68 | 63 | | | | |

| WOOD TIMBER RETROFIT | | | | | | | | | | |
| 025 | 1" | NONE | App 14" | NONE | | | | | |
| 075 N | 2" | NONE | App 12" | NONE | 52 | 52 | 55 | 55 | 58 |
| 025 MT | 2" | NONE | App 12" | NONE | 47 | 47 | 50 | 50 | 58 |
| 075 N MT | 2" | NONE | App 12" | NONE | 56 | 58 | 59 | 59 | 60 |

Resources & Education page 17
KEENE IDEAS® - Transition Details

Quiet Qurl Doorway and Floor Transition Detail with Reinforcement

Transition to Gypsum Concrete without mat Quiet Qurl Installation in Hard Surface Areas

For Complete Transition Details please refer to Keene Building Product’s KEENE IDEAS information sheets.
Chandler, AZ, a suburb outside of Phoenix is attracting more and more people each year. Families moving from the east to escape the cold winters, or locals looking to move away from the city and into the suburbs. The appeal of Chandler is very prominent.

In describing the ideal apartment, most renters agree that having a quiet environment in their home is at the top of their list. That isn’t always easy to come by in multi-family buildings though. Whether you have the guy upstairs stomping around in the middle of the night, or music blasting through the walls, the noise can get old very fast.

There has been a high demand for better floor/ceiling acoustics in multi-family construction in recent years, which is why the noise control market is booming.

This was an easy decision for the developer. Keene Building Products’ Quiet Qurl 040 MT was chosen to solve the problem.

Vibrations travel through connections. By limiting direct connections (such as between the finished floor and the joist assembly) we can effectively disrupt the path for noise to pass through our floors and walls. Quiet Qurl is the perfect solution to this troublesome issue.

Quiet Qurl 040 MT is a noise control insulation mat designed to limit impact noise between floors. Quiet Qurl 040 series of products are slightly thicker than your traditional 1/4” entangled net sound mats for added performance. The thicker spacing provided between the finish floor and the joist assembly add several points in IIC (impact noise transfer such as footfall) with minimal difference to the total height of the assembly.

When equipped with our powerful MT technology this performance is enhanced even further. MT stands for Muffling Technology which results in added performance for the overall floor/ceiling assembly. It achieves this by attacking the low frequency variety of sound (example: stomping sounds) by the addition of a high loft polyester fabric to the bottom. Quiet Qurl 040 MC MT is typically the highest performing option of its class that is being used in these multifamily applications.

With the extra thickness of the Quiet Qurl Mat as well as the added muffling technology fabric installed in the floor/ceiling assembly, this apartment complex is guaranteed to satisfy the needs of all future residents.
KEENE BUILDING PRODUCTS has recently introduced a thin-profile mat to offer luxury performance. **Quiet Qurl 013 MT** is a nominal 0.125-inch, random-filament, sound control mat designed to limit impact noise between floors.

The core is a polymer matrix of tangled polypropylene monofilaments laminated to a point-bonded, moisture-resistant fabric so that gypsum concrete and other materials can be placed to create a floating floor.

On the bottom side our Muffling Technology (MT for short), a highly compressible polyester fabric is bonded. This muffling fabric almost completely compresses when installed with a 0.75" gypsum concrete floor underlayment. The MT addition will create up to an additional 5 IIC points for the assembly verses the standard version. In laboratory tests, Quiet Qurl 013 MT performs better then thicker sounds mats in a thinner application.

Better performance in a thinner overall system. Quiet Qurl 013 MT is truly the best of both worlds!

### Benefits
- Excellent performance at reducing sound in mid and high frequencies
- Performance in wood frame construction and concrete structures
- Minimal deflection, and no creep or long term degradation
- Provides a thin profile for tight construction assemblies
- Lightweight and easy to handle
- High recycled polymer content for LEED credit

### Applications
- Multi-family construction: apartments and condominiums
- Thin-pour applications for less transition.
- When a resilient ceiling is installed
- With gypsum concrete
- For all hard surface applications in wood frame construction
- Provides an overall system thickness of under 1.0”
Receive AIA Continuing Education Credits from Keene Building Products

Multi-Family Sound Control

There are many ways of solving the sound dilemma in multi-family. This presentation will help architects learn and understand how noise is measured, types of noise, and how to build and design with noise control on your mind. You will learn the different elements involved in an entangled net sound system and how any multi-family construction can benefit from it.

Learning Objectives

- Review how noise results are measured and types of noise in building design
- Discuss and identify the most common acoustical systems for quiet living in multi-family, and understanding that one component is not the solution in controlling noise
- Compare the performance of various building materials needed to reach certain classification standards, as well as establish the benefits of living in noise-free environments
- Establish the best practices for healthy living with the use of an entangled net sound system

Call or Email TODAY to set up a lunch presentation
877-514-5336
info@keenebuilding.com

Keene Building Products is a registered provider with The American Institute of Architects Continuing Education Systems. Credit earned upon completion of this program will be reported to CES Records for AIA members. Credit includes Health, Safety, and Welfare (HSW) (1 Credit Hour).

Certificates of Completion for non-AIA members are available upon request. This program is registered with the AIA/CES for continuing professional education. As such, it does not include content that may be deemed or construed to be an approval or endorsement by the AIA of any material of construction or any method or manner of handling, using, distributing, or dealing in any material or product. Questions related to specific material, methods and services will be addressed at the conclusion of this presentation.
Keene can Help You Achieve LEED® Credits

LEED, or Leadership in Energy & Environmental Design, is a green building certification program that provides a national rating system for developing sustainable building designs and construction.

LEED v4 BD+C (Building Design + Construction)

MR Credit 3: 1-2 points
(Material & Resources)
Building Product Disclosure & Optimization - Sourcing of Raw Materials
Locally sourced materials and recycled content are now combined in 2 options:
1. Raw Material Source and Extraction Reporting (1 point)
2. Leadership Extraction Practices (1 point)

<table>
<thead>
<tr>
<th>Product</th>
<th>Thickness</th>
<th>Recycled Content</th>
<th>Pre-Consumer Content</th>
<th>Post-Consumer Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quiet Qurl®</td>
<td>0.13 in. / 3.0 mm</td>
<td>up to 40%</td>
<td>35%</td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td>0.25 in. / 6.0 mm</td>
<td>up to 40%</td>
<td>35%</td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td>0.40 in. / 10.0 mm</td>
<td>up to 40%</td>
<td>35%</td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td>0.75 in. / 19.0 mm</td>
<td>up to 40%</td>
<td>35%</td>
<td>5%</td>
</tr>
<tr>
<td>QQ Step Soft™</td>
<td>2.0 mm – 10.0 mm</td>
<td>up to 90%</td>
<td>–</td>
<td>90%</td>
</tr>
</tbody>
</table>

EQ Credit 9: 1-2 points
(Indoor Environmental Quality)
Acoustic Performance
Acoustic Performance has its own credit that requires a specific STC value based upon what type of room is being built, or your local building code, whichever is more stringent.

Please refer to this chart for the list of Sound Transmission Class (STC) ratings for adjacent spaces.

| Maximum Composite Sound Transmission Class Ratings for Adjacent Spaces |
|--------------------------|--------------------------|
| Adjacency Combinations   | STC                      |
| Residence (within a multifamily residence) | Residence, hotel or motel room | 55 |
| hotel or motel room       | Common hallway, stairway  | 50 |
| Residence, hotel or motel room | Retail                  | 60 |
| Residence, hotel or motel room | Retail                  | 50 |
| Standard office           | Standard office          | 45 |
| Executive office          | Executive office         | 50 |
| Conference room           | Conference room          | 50 |
| Office, conference room   | Hallway, stairway        | 50 |
| Mechanical equipment room | Occupied area            | 60 |
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.