

River's Edge Condominium Association #1
Hard Surface Specific Guidelines
Recommended Flooring Underlayment for different Flooring Types
Approved 7/21/2022

The purpose of the underlayment recommendations is to minimize complaints regarding impact noise by providing recommendations specific to the different types of hard surface flooring that owners may choose to install in their units. Secondly, to further reduce impact noise, the manufacturer's installation instructions must be strictly followed including perimeter isolation.

The following specific brand recommendations meet the criteria of minimum impact insulation (rating of IIC 55 / AII 52) based on the structural floor system at River's Edge.

The structural flooring system at River's Edge Condominium is 10" hollow core concrete plants with 2" concrete topping with no drop ceiling below. The Underlayment specifications have been developed for River's Edge by Shiner Acoustics, LLC. Should an owner desire a different underlayment system, an owner would be required to get an opinion from Shiner Acoustical as to the effectiveness of the chosen underlayment to minimize noise impact at River's Edge. River's Edge Management Company would then send the owner's application for flooring to Shiner Acoustical. The fee of \$500 would be charged back to the owner.

Ceramic and Stone Flooring

Ceramic and stone tile flooring require the highest degree of sound isolation. The manufacturer's instructions must be followed to reduce tile cracking. The unit owner may choose one of the following products, which can achieve an acoustical rating of IIC 55. Names and contact information of suppliers are listed at the end of this document. |

- **Regupol Sonus Core 12 (0.5" thick) recycled rubber underlayment** is recommended underneath ceramic and stone tile flooring. Perimeter isolation strips should be applied to the walls and columns. The Sonus Core mat is placed directly on the concrete slab. Ceramic or stone tile flooring is installed over the underlayment with a thinset mortar bed. Trim the perimeter isolation strip at the finish floor level. Contact John Grzeskowski with Imbert Construction Industries at 847-647-2393, johng@imbortcorp.com. Acceptable alternate manufacturers include Pliteq (RST 12) and Ecore (EcoSilence 12).
- **Maxxon Acousti-Mat 3/8" (0.375" thick) entangled mesh underlayment** is recommended underneath ceramic and stone tile flooring. Apply perimeter isolation to all walls and columns. The underlayment is placed directly on the concrete floor. The manufacturer recommends reinforced 1 1/2" Maxxon Underlayment (gypsum concrete) with crack suppression membrane (CSM) to provide mass, rigidity and to control cracking. Ceramic or stone tile flooring is installed over the gypsum concrete with a thinset mortar bed. The perimeter isolation strip can be trimmed at the finish floor level. Any substitution for the gypsum concrete must be approved by the underlayment manufacturer. Contact Scott Bergquist with The Maxxon Corporation at 763-478-9695, scott@maxxon.com.

- **Keene QuietQurl QQ 60 040 MC MT (0.4" thick) entangled mesh underlayment** is recommended underneath ceramic and stone tile flooring. Apply perimeter isolation to all walls and columns. The underlayment is placed directly on the concrete floor. On top of the underlayment, the manufacturer recommends two layers of 1/2" thick cementitious backer board oriented perpendicular to each other. Ceramic or stone tile flooring is installed over the backer board with a thinset mortar bed. The perimeter isolation strip can be trimmed at the finish floor level. Contact Kurt Moehlman with RPI at 847-382-1940, rpikurt@aol.com.

Hardwood Flooring/Engineered Hardwood including Bamboo (classified as 5/8" to 3/4" thick)

For hardwood flooring, adhere the underlayment to the slab with adhesive as recommended by the manufacturer. Apply perimeter isolation to all walls and columns. Install two layers of 1/2" OSB or plywood (nailing layer) over the underlayment that are adhesively bonded together. Orient the nailing layers perpendicular to each other. Install the hardwood flooring by nailing/stapling into the plywood layers. Select nail/staple length so that the underlayment is not penetrated (1-1/4" maximum nail/staple length). Note that in no case should nails/staples penetrate through the plywood into the underlayment. The perimeter isolation strip can be trimmed at the finish floor level.

The unit owner may choose one of the following products, which can achieve an acoustical rating of IIC 55. Names and contact information of suppliers are listed at the end of this document.

- **Fintech AcoustiTech 7000 (7 mm thick), felt type mat underlayment is adhered to the slab with adhesive Wakol TS102** or loose laid. The remaining installation is discussed above. Contact John Stefanski at the Bahr Company at 800-533-9460, jstefanski@thebahrco.com.
- **Pliteq genieMat DH765 (12 mm)** The installation is described above. Contact Mr. Wilson Byrick at Pliteq at 416-440-0044, wbyrick@pliteq.com.
- **Kinetics SR Floorboard (5/8" thick)** The installation is described above. Contact Mr. Todd Mitchell with The Huff Company, 847362-7440, t.mitchell@soundcontrol.com.

Laminate Wood Flooring (classified as 3/8" to 1/2" thick)

With laminate wood flooring, the underlayment is loose laid over the concrete slab. The flooring will then be installed directly over the underlayment (floated). The unit owner may choose one of the following products, which can achieve an acoustical rating of AIIC 52. Names and contact information of suppliers are listed at the end of this document.

- **BlackJack** A floating floor cushion is a dense foam underlayment that helps absorb room noise under laminate and engineered flooring. The closed cell foam design is moisture resistant and fights against mold and mildew. Available at Home Depot and Lowes.

- **Foam Products Eco Ultimate Silencer (2 mm/0.075” thick) recycled rubber and polyurethane foam underlayment** is laid directly over the concrete floor. Contact All Tile, Inc. at 847-979-2500.
- **Regupol Sonus Core 5 (5 mm thick)** The installation is described above. Contact John Grzeskowski with Imbert Construction Industries at 847-647-2393, johng@imbcorp.com. Similar recycled rubber mats of the same thickness from Pliteq and Ecore are also acceptable.
- **Quiet Walk (3mm thick)** Designed for floating floor materials, QuietWalk's recycled filaments are specially processed to cushion the floor, absorbing sound and reducing unwanted noise. Available at Home Depot and Lowes.
- **Sound Step XL** is a crosslink flooring underlayment that is an efficient and affordable flooring underlayment. Available at Home Depot and Lowes.

Vinyl Composition Flooring /Vinyl Plank Flooring (LVT)

Vinyl composition or vinyl plank flooring requires underlayment which must be installed per the manufacturer’s recommendations. Typically, the underlayment is loose laid over the concrete floor and run up the wall 1” to provide perimeter isolation. The LVT is floated on the underlayment and the perimeter isolation is trimmed at the finish floor. The unit owner may choose one of the following products, which can achieve an acoustical rating of AIIC 52. Names and contact information of suppliers are listed at the end of document. |

- **Floor Muffler LVT Encore (2 mm thick) polypropylene foam underlayment** is laid directly over the concrete floor. Contact Carpet Cushions and Supplies at 847-364-6760. An acceptable alternate includes Eco Ultimate Silencer.
- **Regupol Sonus Core 5 (5 mm thick)** The installation is described above. Contact John Grzeskowski with Imbert Construction Industries at 847-647-2393, johng@imbcorp.com. Similar recycled rubber mats of the same thickness from Pliteq and Ecore are also acceptable.
- **Eco Ultra Quiet Premium (2 mm thick) acoustical underlayment** a recycled rubber composition product which is radiant heat compatible and mildew and mold resistant. Available that Home Depot and Floor and Décor.

Perimeter Isolation

Perimeter isolation must be used for all flooring systems to avoid “short-circuiting” of the underlayment. When perimeter isolation is missing or not correctly installed, impact sounds from the finish flooring can be transferred into the building via vertical surfaces, thus greatly diminishing or negating the sound insulation properties of the installed underlayment.

Specifications and installation instructions for perimeter isolation vary by underlayment manufacturer. In general, the recommended perimeter isolation material (3/8" thick foam strips, isolation board or scrap underlayment) is placed at all vertical surfaces including walls, columns, plumbing, electrical junctions and cabinets prior to the installation of underlayment, gypsum concrete, plywood and finish flooring. The perimeter isolation (approximately 3" high) extends from the floor slab up the vertical surface above the anticipated finish floor height. It is also acceptable to extend the underlayment up the walls to fulfill this requirement. Manufacturers

have various means of attachment to vertical surfaces (spray adhesive, tape, compression, etc.) but in no case should nails or staples be used.

After installation of the finish floor, the perimeter isolation is trimmed below the finish flooring and the groove is filled with a bead of acoustical or elastomeric sealant. When molding is installed, it is shimmed above the finish flooring (using cardboard or similar materials) and caulked with acoustical sealant. This gap can be on the order of 1/8" to 1/4".

Notwithstanding the installation of perimeter isolation, in no case shall finish flooring, plywood, gypsum concrete, mortar bed, etc. be in direct contact with any vertical surfaces.

Recommended Underlayment Distributors and Representatives

Acousti-Mat - The Maxxon Corporation

P.O. Box 253, 920 Hamel Road
Hamel, MN 55340
Scott Bergquist 763-478-9695 or josh@maxxon.com

Quiet Qurl QQ 60 040 MC MT - Keene Building Products

657 New Bridge Ct. Barrington, IL 60010
Kurt Moehlman 847-382-1940 rpikurt@aol.com

Diversified Products Floor Muffler - Diversified Products Floor Muffler LVT - Carpet Cushions and Supplies

1520 Pratt Boulevard
Elk Grove Village, IL 60007
Pat O'Keefe 847-364-6760

Plitech GenieMat RST Mats

Mr. Ramy William 469-726-4280
rwilliam@pliteq.com

Regupol Sonus Core - The Imbert Corporation

7030 N. Austin Av.
Niles, IL 60714
John Grzeskowski 847-588-3170 JohnG@imbertycorp.com

Fintech AcoustiTech - The Bahr Company

4149 W. Montrose Av.
Chicago, IL 60641
John Stefanski 800-533-9460 jstefanski@thebahrcompany.com

AcoustiCork S130 - Foam Products Eco Ultimate Silencer All Tile, Inc.

1201 Chase Avenue
Elk Grove Village, IL 60007
847-979-2500 or contact April Abramowicz 708-510-1802