

# General

## Summary

### Section includes:

#### Types of mixed-cell polyurethane vibration isolation elastomer to be applied under gypsum or full-weight concrete

#### Types of non-laminated, single-ply re-bonded rubber Perimeter Isolation Strip to be applied around the perimeter of full-weight concrete or gypsum

### Related Sections:

**\*\* NOTE TO SPECIFIER \*\* Delete any sections below not relevant to this project; add others as required.**

#### 03 00 00 Concrete

##### 03 10 00 Concrete Forming and Accessories

##### 03 20 00 Concrete Reinforcing

##### 03 30 00 Cast-in-Place Concrete

##### 03 40 00 Precast Concrete

#### 06 25 13 Prefinished Hardboard Paneling

#### 06 25 16 Prefinished Plywood Paneling Tile

#### 09 80 00 Acoustic Treatment

#### 13 48 13 Manufactured Sound and Vibration Control Components

#### 13 48 23 Fabricated Sound and Vibration Control Assemblies

## References

**\*\* NOTE TO SPECIFIER \*\* Delete references from the list below that are not actually required by the text of the edited section.**

### Standards listed by reference, including revisions by issuing authority, form a part of this specification section to extent indicated. Standards listed are identified by issuing authority, authority abbreviation, designation number, title, or other designation established by issuing authority. Standards subsequently referenced herein are referred to by issuing authority and standard designation.

### International Organization for Standardization (ISO)

#### ISO 1856 – Compression Set

#### ISO 1798 – Tensile Strength

#### ISO 1798 – Elongation at Break

#### ISO 34-1 – Tear Resistance

#### ISO 3386-2 – Compression Hardness

#### ISO 8307 – Rebound Elasticity

#### ISO 17025 – Ozone Resistance

### European Standardization Organizations CEN, CENELEC, ETSI (EN)

#### EN 826 – Static Modulus of Elasticity

#### EN 14904 – Force Reduction

### German Institute for Standardization (DIN)

#### DIN 53513 – Dynamic Modulus of Elasticity

#### DIN 53513 – Mechanical Loss Factor

### Leadership in Energy and Environmental Design – LEED®

#### ISO 14021 - Environmental Labels and Declarations

## System Description

**\*\*\*\*\*\*\*\*\*\*\*This product may contribute to USGBC LEED Credits\*\*\*\*\*\*\*\*\*\*\***

### Performance Requirements: Provide recycled re-bonded underlayment, which has been manufactured and installed to maintain performance criteria stated by manufacturer without defects, damage, or failure.

## Submittals

### General: Submit listed submittals in accordance with Conditions of the Contract and Division 1 Submittal Procedures Section.

### Product Data: Submit product data, including manufacturer’s guide specifications product sheet, for specified products.

### Shop Drawings: Manufacturer’s specifications, catalog cuts, and other items needed to demonstrate compliance with the specified requirements. Also the manufacturer’s recommended installation procedures, which, when approved by the architect, will become the basis for accepting or rejecting actual installation procedures used on the work.

### Samples: Submit selection and verification samples for finishes, colors, and textures.

### Quality Assurance Submittals: Submit the following:

#### Certificates: If required, certification of performance characteristics specified in this document shall be provided by the manufacturer.

#### Manufacturer’s Instructions: Manufacturer’s installation instructions.

### Closeout Submittals: Submit the following:

#### Warranty: Warranty documents specified herein.

## Quality Assurance

### Qualifications

#### Installer Qualifications: Installer experienced in performing work of this section who has specialized in installation of work similar to that required for this project.

##### Certificate: When requested, submit certificate indicating qualification.

#### Manufacturers’ Qualifications: Manufacturer capable of approving application method.

### Regulatory Requirements: [specify applicable requirements of regulatory agencies].

### Mock-Ups: Install at project site a job mock-up using acceptable products and manufacturer-approved installation methods. Comply with workmanship standard. Comply with Division 1 Quality Control (Mock-Up Requirements) Section.

#### Mock-Up Size: As determined by acoustical consultant.

#### Maintenance: Maintain mock-up during construction for workmanship comparison; remove and legally dispose of mock-up when no longer required.

#### Incorporation: Mock-up may be incorporated into final construction upon Owner’s approval.

### Pre-installation Meetings: Conduct pre-installation meeting to verify project requirements, substrate conditions, manufacturer’s instructions, and manufacturer’s warranty requirements. Comply with Division 1 Project Management and Coordination (Project Meetings) Section.

### Pre-installation Testing: Conduct pre-installation testing as follows: [specify substrate testing; consult with flooring manufacturer].

## Delivery, Storage, and Handling

### General: Comply with Division 1 Product Requirements Sections.

### Ordering: Comply with manufacturer’s ordering instructions and lead time requirements to avoid construction delays.

### Delivery: Deliver materials in manufacturer’s original, unopened, and undamaged containers with identification labels intact.

### Storage and Protection: Store materials at temperature and humidity conditions recommended by manufacturer and protect from exposure to harmful weather conditions.

## Project Conditions

### Temperature Requirements: Maintain air temperature in spaces where products will be installed for time period before, during, and after installation as recommended by manufacturer.

### Field Measurements: Verify actual measurements/openings by field measurements before fabrication; show recorded measurements on shop drawings. Coordinate field measurements and fabrication schedule with construction progress to avoid construction delays.

## Maintenance

### Extra Materials: Deliver to Owner extra materials from same production run as products installed. Package products with protective covering and identify with descriptive labels. Comply with Division 1 Closeout Submittals (Maintenance Materials) Section.

#### Quantity: Furnish quantity of re-bonded recycled Floating Floor Underlayment units as requested on purchase order.

#### Delivery, Storage and Protection: Comply with Owner’s requirements for delivery, storage, and protection of extra materials.

# Proprietary Manufacturer/Products

## Acceptable Manufacturer: REGUPOL America LLC

### Address: 11 Ritter Way, Lebanon, PA 17042; telephone: 717-675-2191; fax: 717-675-2199; email: vibration@regupol.com; website: www.regupol-acoustics.com

### Substitutions: Not permitted.

## Proprietary Product(s)

### REGUFOAM vibration 990plus manufactured by REGUPOL America LLC

### REGUPOL Perimeter Isolation Strip manufactured by REGUPOL America LLC

## REGUFOAM vibration 990

### Product Name: The mixed-cell polyurethane foam vibration isolation elastomer shall be REGUFOAM vibration 990plus.

### Material: Made from 100% virgin polyurethane

### Roll Dimension:

#### REGUFOAM vibration 990plus: 59” x 39-1/4”

### Roll Weight (approx.):

#### REGUFOAM vibration 990plus, 12 mm: 2.61 lbs/ft2 (12.66 kg/m2)

#### REGUFOAM vibration 990plus, 25 mm: 5.21 lbs/ft2 (23.32 kg/m2)

### Standard Tolerances:

#### Roll Width +1/2” -1/2”

#### Roll Length +1% -1/2”

#### Thickness +0.5 mm -0.5 mm

### Allowable Continuous Static Load: Max 363.0 psi (2.5 N/mm2)

### Allowable Peak Load: Max. 1,160 psi (8.0 N/mm2)

### Static Modulus of Elasticity: 2,901 - 11,313 psi (20.0 - 78.0 N/mm2), based on EN 826

### Dynamic Modulus of Elasticity: 5,947 - 23,206 psi (41.0 - 160.0 N/mm2), based on DIN 53513

### Mechanical Loss Factor: 0.09, based on DIN 53513

### Compression Set: 8.6%, based on ISO 1856

### Tensile Strength: 1,000.8 psi (6.9 N/mm2), based on EN ISO 1798

### Elongation at Break: 190%, based on EN ISO 1798

### Tear Resistance: 197.0 lbs/in (34.5 N/mm), based on ISO 34-1

### Compression Hardness: 3,640 kPa, based on EN ISO 3386-2

### Rebound Elasticity: 55%, based on EN ISO 8307

### Force Reduction: 20%, based on EN 14904

### USGBC LEED Credit Contribution

### **\*\*\* NOTE TO SPECIFIER\*\*\* Delete if not applicable or required for project.**

#### MR Credit 3: Building Product Disclosure and Optimization - Sourcing Raw Materials.

#### EQ Credit 9: Acoustic Performance.

#### Contact REGUPOL America for specific details.

## REGUPOL Perimeter Isolation Strip

### Product Name: The non-laminated, single-ply re-bonded rubber perimeter isolation strip under this specification shall be REGUPOL Perimeter Isolation Strip.

### Material: Made from 92% recycled rubber content, REGUPOL Perimeter Isolation Strip is a flat, resilient strip that is used to build a tub around the floor so that no hard surface (floor covering) touches any hard vertical surface protrusion or wall.

### Roll Dimension: A. 4” wide by 5’ long by ¼” (6 mm) thick

### Sheet Weight: approx. 0.8 lb/ft² (3.9 kg/m²)

### USGBC LEED Credit Contribution

### **\*\*\* NOTE TO SPECIFIER\*\*\* Delete if not applicable or required for project.**

#### MR Credit 3: Building Product Disclosure and Optimization - Sourcing Raw Materials.

#### EQ Credit 9: Acoustic Performance.

#### Contact REGUPOL America for specific details.

## Floating Floor Drains

### Shall be of type and size suitable for project and floating slab construction, isolated so as to have no rigid connection between the floating floor and building structure.

## Polyethylene Sheeting

### Minimum 8 mil thickness.

## Product Substitutions

### Substitutions: No substitutions permitted.

## Related Materials

### Related Materials: Refer to other sections listed in Related Sections paragraph herein for related materials.

## Source Quality

### Source Quality: Obtain re-bonded recycled sound and vibration isolation materials from a single manufacturer.

# Execution

## Manufacturers’ Instructions

### Compliance: Comply with manufacturer’s product data, including product technical bulletins, product catalog installation instructions, and product carton instructions for installation.

## Examination

### Site Verification of Conditions: Verify substrate conditions, which have been previously installed under other sections, are acceptable for product installation in accordance with manufacturer’s instructions.

### Do not begin installation until substrates have been properly prepared.

### If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding

## Preparation

### Surface Preparation: Surfaces shall be prepared in accordance with ANSI standards.

### Clean surfaces thoroughly prior to installation.

### Concrete shall be structurally sound and free of mud, oil, grease, water and other contaminating factors. Shot-blast or scarify as required by manufacturer.

### Fill cracks and voids with a quick setting patching or caulking material where leakage of topping could occur.

## Erection/Installation/Application/Construction

### Install in accordance with manufacturer's instructions.

### Related Products Installation: Refer to other sections listed in Related Sections paragraph herein for related products installation.

### Installation should not begin until all other trades are finished in the area.

### Areas to receive REGUFOAM vibration 990plus should be weather tight and maintained at a minimum uniform temperature of 65°F (18°C) for 48 hours before, during, and after the installation.

## Field Quality Requirements

### Manufacturer's Field Services: Upon Owner's request, provide manufacturer's field service consisting of product use recommendations in accordance with manufacturer's instructions.

### Field Tests should be performed by an independent acoustical laboratory accredited by the U.S. Department of Commerce, National Institute of Standards and Technology under the National Voluntary Laboratory Accreditation Program for the specified test procedure.

### The cost for all field acoustical testing, corrective work associated with the installation of REGUFOAM vibration 990plus and flooring to meet the minimum requirements, shall be borne by the flooring contractor(s).

## Cleaning2

### Remove temporary coverings and protection of adjacent work areas. Repair or replace damaged installed products. Clean installed products in accordance with manufacturer’s instructions prior to Owner’s acceptance. Remove construction debris from project site and legally dispose of debris.

## Protection

### Protection: Protect installed product and finish surfaces from damage, wetness and humidity (>50%) and oils during construction.

### Touch-up, repair or replace damaged products before substantial completion

## Schedules

### Schedules: [Specify reference to applicable schedules].

END OF SECTION