

# VERDEX<sup>®</sup> SPECIFICATION

## PART 1 - GENERAL REQUIREMENTS

### 1.1 SUMMARY

- A. Work Included: Furnish and install VERDEX<sup>®</sup> acoustical sound mat in accordance with applicable drawings and specifications.
- B. Related Sections and Materials: Other specification sections, which directly relate to the Work of the Section, include but are not limited to the following:
  - 1. Section 03001 - Concrete
  - 2. Section 09300 - Ceramic and Porcelain Tile
  - 3. Section 09550 - Wood Flooring
  - 4. Section 09640 - Plywood Substrate

### 1.2 REFERENCES

- A. American Society for Testing and Materials (ASTM)
  - 1. E492 Standard Test Method for Laboratory Measurement of Impact Sound Transmission Through Floor-Ceiling Assemblies Using the Tapping Machine.
  - 2. E1007 Field Measurement of Tapping Machine Impact Sound Transmission Through Floor-Ceiling Assemblies and Associated Support Structures.
  - 3. C627 Evaluating Ceramic Floor Tile Installation Systems using the Robinson-Type Floor Tester.
  - 4. E989 Standard Classification for Determination of Impact Insulation Class.
  - 5. E2179 Standard Test Method for Laboratory Measurement of the Effectiveness fo Floor Coverings in Reducing Impact Sound Transmission Through Concrete Floors.
- B. Tile Council of North America Inc.
  - 1. Handbook for Ceramic Tile Installation.
- C. National Wood Flooring Association
  - 1. Installation Guidelines Manual.

### 1.3 SYSTEM PERFORMANCE REQUIREMENTS

- A. Design, fabricate and install impact sound insulation to maintain performance criteria as stated by Manufacturer without defects, damage or failure.

### 1.4 SUBMITTALS

- A. General - Submit the following in accordance with Conditions of the Contract:
  - 1. Product Data: Submit manufacturer's technical information for all specified materials.

2. Installation Instructions for all specified materials.
3. Provide Sample of material for Architect's approval.

## 1.5 QUALITY ASSURANCE

- A. Manufacturer: Provide acoustical mat, adhesive and acoustical caulk from one source.
- B. Certifications:
  1. Furnish certification that product is fabricated by ISO 9001 quality certified manufacturer.

## 1.6 PROJECT CONDITIONS

- A. Determine dimensions and proceed with fabrication of products without field measurements. Allow for trimming and fitting.

## 1.7 DELIVERY, STORAGE AND HANDLING

- A. Deliver labeled materials on manufacturer's unopened, undamaged pallets to the job site in good condition with labels intact until time of use.
- B. Storage on Site: Store material in clean, dry environment with temperatures between 70°F and 90°F and protect against damage of any kind.

## 1.8 WARRANTY

- A. Provide manufacturer's standard warranty with minimum duration being the greater of Twenty (20) Years or the term provided by the original nationally recognized floor finish manufacturer. The warranty shall start from the original date of delivery to the original purchaser. ("Warranty Period") If there are any defects in material and workmanship during the Warranty Period, material will be replaced or repaired as described in manufacturer's written Warranty.

## PART 2 - PRODUCTS

### 2.1 MATERIALS

- A. Acceptable Manufacturer:
  1. Primary Acoustics LLC, 2801 Sisson Street, Baltimore, MD 21211-2902
- B. VERDEX® Acoustical Sound Mat: Available in 3mm - 20mm thickness in the following formats:
  1. 3mm - 6mm available as 48" x 48" panels or 4' x 25' rolls
    - 3mm (48" x 48" panel) (4' x 25' roll)
    - 4mm (48" x 48" panel) (4' x 25' roll)
    - 5mm (48" x 48" panel) (4' x 25' roll)
    - 6mm (48" x 48" panel) (4' x 25' roll)
  2. 7mm - 20mm available as 48" x 48" panels
    - 7mm (48" x 48" panel) (4' x 25' roll)
    - 8mm (48" x 48" panel) (4' x 25' roll)
    - 9mm (48" x 48" panel) (4' x 25' roll)
    - 10mm (48" x 48" panel) (4' x 25' roll)

- 11mm (48" x 48" panel)
  - 12mm (48" x 48" panel)
  - 13mm (48" x 48" panel)
  - 14mm (48" x 48" panel)
  - 15mm (48" x 48" panel)
  - 16mm (48" x 48" panel)
  - 17mm (48" x 48" panel)
  - 18mm (48" x 48" panel)
  - 19mm (48" x 48" panel)
  - 20mm (48" x 48" panel)
- C. Acoustical Mat Adhesive - **V-BOND™** pressure sensitive adhesive provided by Primary Acoustics LLC or choose from one of the following approved equivalents:
1. Parabond M4700 by Parachem
  2. Mapei Ultrabond 990
  3. Chemrex 941
  4. Taylor Adhesive #2055
  5. Dri-Tac 6200
- D. **V-SEAL™** - Acoustical sealant provided by Primary Acoustics LLC or equivalent.

## 2.2 PRODUCT SUBSTITUTION

- A. Adhesive or Acoustical sealant substitution must be submitted at least Fifteen (15) days prior to bid and approved by Primary Acoustics LLC.

## 2.3 SOURCE QUALITY

- A. Obtain acoustical sound barrier from a single manufacturer.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Before work commences, examine the areas to be covered and report any deficiency or adverse condition in writing to the general contractor and architect. Do not proceed with work until surfaces and conditions comply with the manufacturer's instructions and ANSI A 108.5 specification requirements. For more details, see "[TCNA Handbook for Ceramic Tile Installation](#)" and The National Wood Flooring Association's Installation Guidelines Manual.

### 3.2 SURFACE PREPARATION

- A. General: Clean and remove all dust, oil, grease, paint, tar, wax, curing agent, primer, sealer, form release agent and any deleterious substance and debris which may prevent or reduct adhesions.
- B. All structural floors shall be structurally sound, stable, level and true to a tolerance in plane of 6mm in 3m (1/4" in 10'). See TCNA Handbook and ANSI Guidelines for details.
- C. In all cases, the structural design of the floor shall not allow a deflection greater than 1/360 of the span under live and dead loads.

- D. Test floor for vapor drive in accordance with surface flooring manufacturer's recommended installation procedures. Generally, vapor drive should not exceed the industry standard of <3.0 lbs per 1,000 square feet in 24 hours. If moisture exceeds flooring manufacturer's specifications, follow their installation procedures for moisture control.

### **3.3 INSTALLATION**

- A. **VERDEX**<sup>®</sup> Acoustical Sound Mat: Engage an experienced installer to install in accordance with Manufacturer's Installation Instructions, procedures and techniques.
- B. On the properly cleaned substrate, apply enough **V-BOND**<sup>™</sup> or equivalent using a V-notch or square-notch trowel according to manufacturer's instructions located on bucket.
- C. Set the acoustical panels while adhesive is wet. Apply sufficient pressure to activate adhesive.
- D. Leave approximately 1mm (1/32") spacing between panels and 9.5mm (3/8") between **VERDEX**<sup>®</sup> and materials which they abut such as walls, drains, pipes, conduits, columns and posts.
- E. Install floor finish according to the manufacturer's installation instructions.
- F. Install **V-SEAL**<sup>™</sup> acoustical sealant in gap around perimeter of the work, around drainpipe and conduit openings and at the base of any columns.

### **3.4 FIELD TESTING AND CERTIFICATION REQUIREMENT**

- A. Testing: Manufacturer to provide two on-site acoustical tests to determine the Field Impact Insulation Class (FIIC) rating of the project. The first on the bare floor / ceiling assembly, and the second after the installation of **VERDEX**<sup>®</sup> acoustical underlayment on the finished floor.
- B. Certification: Manufacturer to provide one certified FIIC test report on the project's finished floor assembly. All certified test reports to be prepared by an independent certified acoustical consultant.

### **3.5 PROTECTION**

- A. Protect all installed products from any damage during construction.

### **END OF SECTION**