## SECTION 09 65 13 - RESILIENT BASE AND ACCESSORIES

### PART 1 - GENERAL

## 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

## 1.2 SUMMARY

- A. Section Includes:
  - 1. Resilient base.
  - 2. Resilient stair accessories.
  - 3. Resilient molding accessories.
- B. Related Sections:
  - 1. Section 09 65 16 "Resilient Sheet Flooring" for resilient sheet floor coverings.
  - 2.
  - 3. Section 09 65 19 "Resilient Tile Flooring" for resilient floor tile.

# 1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. LEED Submittals (projects authorized for LEED certification only):
  - 1. Product Data for Credit IEQ 4.1: For adhesives, documentation including printed statement of VOC content.
  - 2. Laboratory Test Reports for Credit IEQ 4: For adhesives, documentation indicating that products comply with the testing and product requirements of the California Department of Health Services' "Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers."
- C. Samples for Initial Selection: For each type of product indicated.
- D. Samples for Verification: For each type of product indicated, in manufacturer's standard-size Samples but not less than 12 inches (300 mm) long, of each resilient product color, texture, and pattern required.
- E. Product Schedule: For resilient products.[ Use same designations indicated on Drawings.]

Revision Date: 01/29/2018

### 1.4 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
  - Furnish not less than [10 linear feet (3 linear m)] <Insert length> for every [500 linear feet (150 linear m)] <Insert length> or fraction thereof, of each type, color, pattern, and size of resilient product installed.

# 1.5 QUALITY ASSURANCE

- A. Fire-Test-Response Characteristics: As determined by testing identical products according to ASTM E 648 or NFPA 253 by a qualified testing agency.
  - 1. Critical Radiant Flux Classification: Class I, not less than 0.45 W/sq. cm.
- B. Mockups: Provide resilient products with mockups specified in other Sections.

## 1.6 DELIVERY, STORAGE, AND HANDLING

A. Store resilient products and installation materials in dry spaces protected from the weather, with ambient temperatures maintained within range recommended by manufacturer, but not less than 50 deg F (10 deg C) or more than 90 deg F (32 deg C).

## 1.7 PROJECT CONDITIONS

- A. Maintain ambient temperatures within range recommended by manufacturer, but not less than [70 deg F (21 deg C)] <Insert temperature> or more than [95 deg F (35 deg C)] <Insert temperature>, in spaces to receive resilient products during the following time periods:
  - 1. 48 hours before installation.
  - 2. During installation.
  - 3. 48 hours after installation.
- B. Until Substantial Completion, maintain ambient temperatures within range recommended by manufacturer, but not less than [55 deg F (13 deg C)] <Insert temperature> or more than [95 deg F (35 deg C)] <Insert temperature>.
- C. Install resilient products after other finishing operations, including painting, have been completed.

Revision Date: 01/29/2018

### **PART 2 - PRODUCTS**

# 2.1 RESILIENT BASE < Insert drawing designation>

### A. Resilient Base:

- 1. <u>Manufacturers</u>: Subject to compliance with requirements, provide products by one of the following :
  - a. Armstrong World Industries, Inc.
  - b. Johnsonite.
  - c. Roppe Corporation, USA.
  - d. Substitute: see section 01 25 00 Substitution Procedures.
- B. Resilient Base Standard: ASTM F 1861.
  - 1. Material Requirement: [Type TS (rubber, vulcanized thermoset)] [Type TP (rubber, thermoplastic)] [Type TS (rubber, vulcanized thermoset) or Type TP (rubber, thermoplastic)].
  - 2. Manufacturing Method: [Group I (solid, homogeneous)] [Group II (layered)] [Group I (solid, homogeneous) or Group II (layered)].
  - 3. Style: [Cove (base with toe)] [Straight (flat or toeless)] [Butt to (fit-to-floor)] < Insert special style>.
- C. Minimum Thickness: [0.125 inch (3.2 mm)] [0.080 inch (2.0 mm)] < Insert thickness >.
- D. Height: [2-1/2 inches (64 mm)] [4 inches (102 mm)] [6 inches (152 mm)] [As indicated on Drawings].
- E. Lengths: [Cut lengths, 48 inches (1219 mm) long] [Coils in manufacturer's standard length] [Cut lengths 48 inches (1219 mm) long or coils in manufacturer's standard length].
- F. Outside Corners: [Job formed] [Preformed] [Job formed or preformed].
- G. Inside Corners: [Job formed] [Preformed] [Job formed or preformed].
- H. Finish: [Satin] [Matte] [Low luster] [As selected by Architect from manufacturer's full range].
- I. Colors and Patterns: [As indicated by manufacturer's designations] [Match Architect's sample] [As selected by Architect from full range of industry colors].

# 2.2 RESILIENT STAIR ACCESSORIES < Insert drawing designation>

- A. Resilient Stair Treads:
  - 1. <u>Manufacturers</u>: Subject to compliance with requirements, provide products by one of the following :
    - a. Burke Flooring Products; Division of Burke Industries, Inc.

Revision Date: 01/29/2018

University of Houston Master Construction Specifications <%Insert Project Name%>

- b. Johnsonite.
- c. Roppe Corporation, USA.
- d. Substitute: see section 01 25 00 Substitution Procedures.
- B. Resilient Stair Treads Standard: ASTM F 2169.
  - 1. Material Requirement: [Type TV (vinyl, thermoplastic)] [Type TS (rubber, vulcanized thermoset)] [Type TP (rubber, thermoplastic)] [Type TS (rubber, vulcanized thermoset) or Type TP (rubber, thermoplastic)].
  - 2. Surface Design:
    - a. Class 1, Smooth (flat).
    - b. Class 2, Pattern: [Raised-disc design] [Raised-square design] [Raised-chevron design] [Raised-diamond design] [Raised-rib design] [Raised-rib design with abrasive strips] < Insert pattern >.
  - 3. Manufacturing Method: [Group 1, tread with embedded abrasive strips] [Group 2, tread with contrasting color for the visually impaired].
- C. Nosing Style: [Square, adjustable to cover angles between 60 and 90 degrees] [Square] [Round].
- D. Nosing Height: [1-1/2 inches (38 mm)] [2 inches (51 mm)] [2-3/16 inches (56 mm)] <Insert dimension>.
- E. Thickness: [1/4 inch (6 mm) and tapered to back edge] < Insert thickness >.
- F. Size: Lengths and depths to fit each stair tread in [one piece] [one piece or, for treads exceeding maximum lengths manufactured, in equal-length units].
- G. Risers: Smooth, flat, [coved-toe, 7 inches (178 mm) high by length matching treads] [toeless, height and length to cover risers]; produced by same manufacturer as treads and recommended by manufacturer for installation with treads.
  - 1. Thickness: [0.125 inch (3.2 mm)] [0.080 inch (2.0 mm)] < Insert thickness>.
- H. Stringers: Of same thickness as risers, height and length after cutting to fit risers and treads and to cover stair stringers; produced by same manufacturer as treads and recommended by manufacturer for installation with treads.
- I. Colors and Patterns: [As indicated by manufacturer's designations] [Match Architect's sample] [As selected by Architect from full range of industry colors].
- 2.3 RESILIENT MOLDING ACCESSORY < Insert drawing designation >
  - A. Resilient Molding Accessory:

Revision Date: 01/29/2018

- 1. <u>Manufacturers</u>: Subject to compliance with requirements, provide products by one of the following:
  - a. <u>Burke Flooring Products; Division of Burke Industries, Inc.</u>
  - b. Johnsonite.
  - c. Roppe Corporation, USA.
  - d. Substitute: see section 01 25 00 Substitution Procedures.
- B. Description: [Cap for cove carpet] [Cap for cove resilient floor covering] [Carpet bar for tackless installations] [Carpet edge for glue-down applications] [Nosing for carpet] [Nosing for resilient floor covering] [Reducer strip for resilient floor covering] [Joiner for tile and carpet] [Transition strips] < Insert description >.
- C. Material: [Vinyl] [Rubber].
- D. Profile and Dimensions: [As indicated] < Insert profile and dimensions >.
- E. Colors and Patterns: [As indicated by manufacturer's designations] [Match Architect's sample] [As selected by Architect from full range of industry colors].

### 2.4 INSTALLATION MATERIALS

- A. Trowelable Leveling and Patching Compounds: Latex-modified, portland cement based or blended hydraulic-cement-based formulation provided or approved by manufacturer for applications indicated.
- B. Adhesives: Water-resistant type recommended by manufacturer to suit resilient products and substrate conditions indicated.
  - 1. Adhesives shall have a VOC content of 50 g/L or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24)[, except that adhesive for rubber stair treads shall have a VOC content of 60 g/L or less].
  - 2. Adhesives shall comply with the testing and product requirements of the California Department of Health Services' "Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers."
- C. Stair-Tread-Nose Filler: Two-part epoxy compound recommended by resilient tread manufacturer to fill nosing substrates that do not conform to tread contours.
- D. Metal Edge Strips: Extruded aluminum with mill finish of width shown, of height required to protect exposed edges of tiles, and in maximum available lengths to minimize running joints.
- E. Floor Polish: Provide protective liquid floor polish products as recommended by resilient stair tread manufacturer.

Revision Date: 01/29/2018

#### PART 3 - EXECUTION

## 3.1 EXAMINATION

- A. Examine substrates, with Installer present, for compliance with requirements for maximum moisture content and other conditions affecting performance of the Work.
- B. Verify that finishes of substrates comply with tolerances and other requirements specified in other Sections and that substrates are free of cracks, ridges, depressions, scale, and foreign deposits that might interfere with adhesion of resilient products.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

## 3.2 PREPARATION

- A. Prepare substrates according to manufacturer's written instructions to ensure adhesion of resilient products.
- B. Concrete Substrates for Resilient Stair Treads and Accessories: Prepare according to ASTM F 710.
  - 1. Verify that substrates are dry and free of curing compounds, sealers, and hardeners.
  - 2. Remove substrate coatings and other substances that are incompatible with adhesives and that contain soap, wax, oil, or silicone, using mechanical methods recommended by manufacturer. Do not use solvents.
  - 3. Alkalinity and Adhesion Testing: Perform tests recommended by manufacturer.
  - 4. Moisture Testing: Perform tests recommended by manufacturer[ and as follows]. Proceed with installation only after substrates pass testing.
    - a. Perform anhydrous calcium chloride test, ASTM F 1869. Proceed with installation only after substrates have maximum moisture-vapor-emission rate of [3 lb of water/1000 sq. ft. (1.36 kg of water/92.9 sq. m)] < Insert emission > in 24 hours.
    - b. Perform relative humidity test using in situ probes, ASTM F 2170. Proceed with installation only after substrates have maximum [75 percent] <Insert acceptable percentage> relative humidity level measurement.
- C. Fill cracks, holes, and depressions in substrates with trowelable leveling and patching compound and remove bumps and ridges to produce a uniform and smooth substrate.
- D. Do not install resilient products until they are same temperature as the space where they are to be installed.
  - 1. Move resilient products and installation materials into spaces where they will be installed at least 48 hours in advance of installation.
- E. Sweep and vacuum clean substrates to be covered by resilient products immediately before installation.

AE Project #: <%Project Number%> Revision Date: 01/29/2018

### 3.3 RESILIENT BASE INSTALLATION

- A. Comply with manufacturer's written instructions for installing resilient base.
- B. Apply resilient base to walls, columns, pilasters, casework and cabinets in toe spaces, and other permanent fixtures in rooms and areas where base is required.
- C. Install resilient base in lengths as long as practicable without gaps at seams and with tops of adjacent pieces aligned.
- D. Tightly adhere resilient base to substrate throughout length of each piece, with base in continuous contact with horizontal and vertical substrates.
- E. Do not stretch resilient base during installation.
- F. On masonry surfaces or other similar irregular substrates, fill voids along top edge of resilient base with manufacturer's recommended adhesive filler material.
- G. Preformed Corners: Install preformed corners before installing straight pieces.
- H. Job-Formed Corners:
  - 1. Outside Corners: Use straight pieces of maximum lengths possible. Form without producing discoloration (whitening) at bends.
  - 2. Inside Corners: Use straight pieces of maximum lengths possible.

## 3.4 RESILIENT ACCESSORY INSTALLATION

- A. Comply with manufacturer's written instructions for installing resilient accessories.
- B. Resilient Stair Accessories:
  - 1. Use stair-tread-nose filler to fill nosing substrates that do not conform to tread contours.
  - 2. Tightly adhere to substrates throughout length of each piece.
  - 3. For treads installed as separate, equal-length units, install to produce a flush joint between units.
- C. Resilient Molding Accessories: Butt to adjacent materials and tightly adhere to substrates throughout length of each piece. Install reducer strips at edges of [carpet] [resilient floor covering] that would otherwise be exposed.

## 3.5 CLEANING AND PROTECTION

- A. Comply with manufacturer's written instructions for cleaning and protection of resilient products.
- B. Perform the following operations immediately after completing resilient product installation:

Revision Date: 01/29/2018

University of Houston Master Construction Specifications <%Insert Project Name%>

- 1. Remove adhesive and other blemishes from exposed surfaces.
- 2. Sweep and vacuum surfaces thoroughly.
- 3. Damp-mop surfaces to remove marks and soil.
- C. Protect resilient products from mars, marks, indentations, and other damage from construction operations and placement of equipment and fixtures during remainder of construction period.
- D. Floor Polish: Remove soil, visible adhesive, and surface blemishes from resilient stair treads before applying liquid floor polish.
  - 1. Apply [one] [two] [three] <Insert requirement> coat(s).
- E. Cover resilient products until Substantial Completion.

END OF SECTION 09 65 13

AE Project #: <%Project Number%> Revision Date: 01/29/2018