SECTION 09 65 19.19 RESILIENT TILE FLOORING

CSI 3-PART SHORT-FORM GUIDE SPECIFICATION USE FOR OUTLINE OR DD SPECIFICATION ISSUES. EDIT TO SUIT PROJECT

PART 1 - GENERAL

1.1 SUMMARY

- A. Work of this Section consists of resilient through-pattern homogeneous vinyl tile flooring and accessories including, but not limited to:
 - 1. TOLI Linotesta
 - 2. TOLI FasoIPlus
 - TOLI Viale
 - 4. TOLI Piesta
 - 5. TOLI Terraline
 - 6. TOLI Strataline
 - 7. TOLI Kolurpath
 - 8. TOLI Arborpath
 - Accessories
 - a. Adhesives
 - b. Cleaning solutions
 - c. Finish top coatings

RED NOTE: Specifier to closely coordinate applicable sections between concrete and other subfloor substrate finishes with floor covering.

1.2 SUBMITTALS

- A. Product Data per SECTION 013000 or 013300 and as follows: Submit manufacturer's printed descriptions of materials, components and systems, performance criteria, use limitations, recommendations, and installation information.
- B. Shop Drawings per SECTION 013000 or 013300 and as follows: Submit keyed location plans, plans indicating resilient sheet flooring type, layout, pattern direction, edge transitions, columns, doorways, enclosing partitions, built-in furniture, cabinets, cutouts, expansion and control joints, and attachment requirements.
- C. Samples per SECTION 013000 or 013300.
 - 1. Initial for Selection: Submit printed color charts, sample chains or Architectural Binder indicating manufacturer's complete range to determine color, texture, shape, and/or composition for each type of material finish.
 - 2. Final Selection: Submit two (2) 9" x 9" samples of each different type, color and pattern selected for acceptance.
- D. Quality Assurance Submittals per SECTION 014000: Test and Evaluation Reports, and Qualification Statements.

NOTE: Edit LEED Requirements below to suit project.

- E. Sustainable Design (USGBC LEED®) Submittals: Submit the following in accordance with the requirements of SECTION 018113, LEED REQUIREMENTS:
 - 1. LEED Credit MR, Materials & Resources. Submit completed LEED Submittal Templates, and other required paperwork as follows:
 - a. MR 4.1: Recycled Content: 10 Percent (post-consumer + 1/2 pre-consumer)
 - 1). Submit product data indicating percentage by weight of recycled content.

- b. MR 6: Rapidly Renewable Materials: 2.5 percent of the total value of the building materials in the project.
 - 1). Submit the product name, material manufacturer, total product cost for each tracked material, total product cost for each tracked material, percentage of product by weight, for each material that meets the rapidly renewable criteria.
- 2. LEED Credit EQ, Indoor Environmental Quality. Submit completed LEED Submittal Templates and required paperwork as follows:
 - a. EQ 4.1: Low Emitting Materials, Adhesives & Sealants, VOC Data
 - 1). Submit manufacturers' product data for construction adhesives and sealants, including printed statement of VOC content and MSDS Sheets.
 - b. EQ 4.3: Low Emitting Materials, Carpet and Resilient Flooring Systems
 - Submit manufacturers product data for systems that includes printed statement of VOC content.
- F. Closeout Submittals per SECTION 017000 or 017800.
 - 1. Sustainable Design Closeout Documentation: Submit completed USGBC LEED® worksheet templates for the following credits:
 - a. MR 4.1m MR 6
 - b. EQ 4.1, EQ 4.3.

NOTE: Edit percentage below to suit scope of project.

- G. Maintenance Material Submittals Extra Materials: Submit no less than five (5) percent additional full and unopened cartons of each type and pattern of tile used.
- 1.3 QUALITY ASSURANCE
 - A. Regulatory Requirements
 - 1. Fire-Test-Response Characteristics: As determined by testing identical products as follows by a qualified testing agency.
 - a. ASTM E648: Critical Radiant Flux Classification: Class I
 - b. ASTM E662: Smoke Density: 450 or less
 - B. Qualifications:
 - 1. Manufacturer: A company with a minimum ten (10) years' experience in manufacturing products or systems similar to those indicated for this Project and with a record of successful in-service performance. A single source manufacturer supplying both product and adhesive.
 - a. Company shall be ISO 9001 Certified
 - b. Company shall be ISO 14001 Certified.
 - 2. Installer / Applicator: Perform installation with skilled, experienced, and trained workmen with demonstrated ability to install TOLI products, supervised by trained personnel who shall have a minimum three (3) years successful experience in installations of similar size and scope.
 - 3. Testing Agency: An independent testing agency with the experience and capability to conduct the testing indicated, meeting requirements of ISO/IEC (International Organization for Standardization / International Electrotechnical Commission) Standard 17025 or ASTM E699 and ASTM E329.
 - C. Source Limitations: Obtain primary flooring materials and adhesive through a single source from a single manufacturer.
 - 1. Provide secondary materials, including patching and fill material, joint sealant, and repair materials, of type and from source recommended by manufacturer of primary materials.

- D. Field Samples per SECTION 014000: Provide field samples, dry laid, to demonstrate aesthetic effects of materials in situ, assisting the Architect and Owner in making final selections.
- 1.4 DELIVERY, STORAGE, AND HANDLING
 - A. Delivery, Storage and Handling per industry and manufacturer guidelines, and SECTION 016000 requirements.
- 1.5 WARRANTY
 - A. Manufacturer Warranty. Provide manufacturer's ten (10) year limited warranty to be free from defects in material and workmanship, under normal commercial use and service, to repair or replace all effected tiles including reasonable labor.

PART 2 - PRODUCTS

- 2.1 MANUFACTURER
 - A. Manufacturers List: Subject to compliance with requirements, provide products by one of the following:
 - TOLI Corporation, a flooring manufacturer represented by CBC AMERICA LLC, 2000 Regency Parkway, Cary, NC 27518; Telephone: 919.230.8700; E-mail: technical@cbcflooring.com; website: www.cbcflooring.com
 - B. Substitution Limitations: No substitutions permitted because of the specific attributes listed in sections 2.2, 2.3, and 2.4.
 - C. Product Options
 - 1. Flooring Type:
 - a. TOLI Linotesta: Class 1 per ASTM E 648
 - 1). Size: 17.7 x 17.7 x 0.120 inches (450mm x 450mm x 3.0mm)
 - 2). Color and Pattern: The Collection
 - b. TOLI FasolPlus: Class 1 per ASTM E 648
 - 1). Size: 17.7 x 17.7 x 0.120 inches (450mm x 450mm x 3.0mm)
 - 2). Color and Pattern: The Collection
 - c. TOLI Viale: Class 1 per ASTM E 648
 - 1). Size: 17.7 x 17.7 x 0.120 inches (450mm x 450mm x 3.0mm)
 - 2). Color and Pattern: The Collection
 - d. TOLI Piesta: Class 1 per ASTM E 648
 - 1). Sizes: 17.7 x 17.7 x 0.120 inches (450mm x 450mm x 3.0mm) 17.7 x 12 x 0.120 inches (450 mm x 300 mm x 3.0 mm) 17.7 x 4 x 0.120 inches (450 mm x 100 mm x 3.0 mm)
 - 2). Color and Pattern: The Collection
 - e. TOLI Terraline: Class 1 per ASTM E 648
 - 1). Size: 17.7 x 17.7 x 0.120 inches (450mm x 450mm x 3.0mm)
 - 2). Color and Pattern: The Collection
 - f. TOLI Strataline: Class 1 per ASTM E 648
 - 1). Size: 17.7 x 17.7 x 0.120 inches (450mm x 450mm x 3.0mm)
 - 2). Color and Pattern: The Collection
 - g. TOLI Kolurpath: Class 1 per ASTM E 648
 - 1). Size: 17.7 x 17.7 x 0.120 inches (450mm x 450mm x 3.0mm)
 - 2). Color and Pattern: The Collection
 - h. TOLI Arborpath: Class 1 per ASTM E 648
 - 1). Size: 35.4 x 5.9 x 0.120 inches (900mm x 150mm x 3.0mm)

2). Color and Pattern: The Collection

NOTE: Custom colors, custom marbling, and solid color tiles available by Special Order.

- 2. Maintenance System Options:
 - a. Cleaner / Maintainer maintenance system
 - b. Conventional acrylic finish maintenance system
- 3. Accessories
 - a. Underlayment leveling compound per Section 035416
 - b. Expansion joints per SECTIONS 079200 and 079513
 - c. CBC 5001 Acrylic Adhesive
 - d. CBC 951 Epoxy Adhesive
 - f. Cleaning solutions

2.2 DESCRIPTION

NOTE: Select one of the following descriptions, deleting the ones not chosen.

- A. TOLI **Linotesta** is a Class II, through-pattern vinyl tile made from polyvinyl esters and inorganic fillers materials formed under heat and pressure and cut to create resilient tile flooring in a variety of colors and patterns. The color and pattern detail are dispersed uniformly throughout the thickness of the product. Product to include a removable factory finish and a calculated recycled content of 26%.
- B. TOLI **FasolPlus** is a Class II, through-pattern vinyl tile made from polyvinyl esters and inorganic fillers materials formed under heat and pressure and cut to create resilient tile flooring in a variety of colors and patterns. The color and pattern detail are dispersed uniformly throughout the thickness of the product. Product to include a removable factory finish and a calculated recycled content of 26%.
- C. TOLI **Viale** is a Class II, through-pattern vinyl tile made from polyvinyl esters and inorganic fillers materials formed under heat and pressure and cut to create resilient tile flooring in a variety of colors and patterns. The color and pattern detail are dispersed uniformly throughout the thickness of the product. Product to include a removable factory finish and a calculated recycled content of 26%.
- D. TOLI **Piesta** is a Class II, through-pattern vinyl tile made from polyvinyl esters and inorganic fillers materials formed under heat and pressure and cut to create resilient tile flooring in a variety of sizes, colors, and patterns. The color and pattern detail are dispersed uniformly throughout the thickness of the product. Product to include a removable factory finish and a calculated recycled content of 18%.
- E. TOLI **Terraline** is a Class II, through-pattern vinyl tile made from polyvinyl esters and inorganic fillers materials formed under heat and pressure and cut to create resilient tile flooring in a variety of colors and patterns. The color and pattern detail are dispersed uniformly throughout the thickness of the product. Product to include a removable factory finish and a calculated recycled content of 18.5%.
- F. TOLI **Strataline** is a Class II, through-pattern vinyl tile made from polyvinyl esters and inorganic fillers materials formed under heat and pressure and cut to create resilient tile flooring in a variety of colors and patterns. The color and pattern detail are dispersed uniformly throughout the thickness of the product. Product to include a removable factory finish and a calculated recycled content of 18%.
- G. TOLI **Kolurpath** is a Class II, through-pattern vinyl tile made from polyvinyl esters and inorganic fillers materials formed under heat and pressure and cut to create resilient tile flooring in a variety of colors and patterns. The color and pattern detail are dispersed uniformly throughout the thickness of the product. Product to include a removable factory finish and a calculated recycled content of 18.5%.

- H. TOLI **Arborpath** is a Class II, through-pattern vinyl tile made from polyvinyl esters and inorganic fillers materials formed under heat and pressure and cut to create resilient tile flooring in a variety of sizes, colors, and patterns. The color and pattern detail are dispersed uniformly throughout the thickness of the product. Product to include a removable factory finish and a calculated recycled content of 18%.
- I. Sustainability Characteristics
 - USGBC LEED Rating: Comply with project requirements intended to achieve the following Rating, as measured and documented according to the USGBC LEED® Green Building Rating System, Version indicated:

NOTE: Each LEED Version requires a different credit total to achieve the desired LEED Rating.

Note: Select one of the following Ratings:

- a. Rating: Certified
- b. Rating: Silver
- c. Rating: Gold
- d. Rating: Platinum
- 2. Applicable LEED Credits: Performance requirements of the following LEED Categories and Credits apply to this Section and are met as follows:
 - a. Materials & Resources (MR):
 - 1). MR Credit 4.1:
 - a). TOLI Linotesta homogeneous vinyl tile contains 0-2% post-consumer + 1/2 >50% pre-consumer, or 26% recycled content.
 - b). TOLI FasolPlus homogeneous vinyl tile contains 0-2% post-consumer + 1/2 >50% pre-consumer, or 26% recycled content.
 - c). TOLI Viale homogeneous vinyl tile contains 0-2% post-consumer + 1/2 >50% pre-consumer, or 26% recycled content.
 - d). TOLI Piesta homogeneous vinyl tile contains >4% post-consumer + 1/2 >28% pre-consumer, or 18% recycled content.
 - e). TOLI Terraline homogeneous vinyl tile contains 0-2% post-consumer + 1/2 >35% pre-consumer, for 18.5% recycled content.
 - f). TOLI Strataline homogeneous vinyl tile contains >4% post-consumer + 1/2 >28% pre-consumer, or 18% recycled content.
 - g). TOLI Kolurpath homogeneous vinyl tile contains 0-2% post-consumer + 1/2 >35% pre-consumer, or 18.5% recycled content.
 - h). TOLI Arborpath homogeneous vinyl tile contains >4% post-consumer + 1/2 >28% pre-consumer, or 18% recycled content.
 - 2). MR Credit 6, Rapidly Renewable Materials
 - a). TOLI HVT products are made with greater than 70 percent limestone.
 - b. Indoor Environmental Quality (EQ):
 - 1). EQ Credit 4.1:
 - a). Acrylic Adhesive CBC 5001 VOC: 0 g/L
 - b). Epoxy Adhesive CBC 951 VOC: 0 g/L
 - 2). EQ Credit 4.4:
 - a). TOLI Linotesta FloorScore Certified Low Emitting. Floor Score Certificate.
 - b). TOLI FasolPlus FloorScore Certified Low Emitting. Floor Score Certificate.
 - c). TOLI Viale FloorScore Certified Low Emitting. Floor Score Certificate.
 - d). TOLI Piesta FloorScore Certified Low Emitting. Floor Score Certificate.

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- e). TOLI Terraline FloorScore Certified Low Emitting. Floor Score Certificate.
- f). TOLI Strataline FloorScore Certified Low Emitting. Floor Score Certificate.
- g). TOLI Kolurpath FloorScore Certified Low Emitting. Floor Score Certificate.
- h). TOLI Arborpath FloorScore Certified Low Emitting. Floor Score Certificate.

2.3 MATERIALS

- A. Floor Tile per ASTM F1066: Class: II, through pattern homogeneous vinyl tiles
 - 1. Composition: Vinyl tile formulated from 20% 30% PVC and binder with the color and pattern detail dispersed uniformly throughout the thickness of the product. Product to include a removable factory finish and a calculated recycled content of approximately 20%
 - 2. Surface: Type A, Smooth
 - 3. Thickness: 0.120 inch (3.0mm)

NOTE: Select sizes and material chosen.

4. Edge:

a. Piesta: Beveled

b. Arborpath: Micro-Beveled

c. All Others: Square

5. Size:

Arborpath:

Piesta: Square 17.7 x 17.7 x 0.120 inches (450mm x 450mm x 3.0mm)

Rectangle 17.7 x 12 x 0.120 inches (450 mm x 300mm x 3.0 mm)
Plank 17.7 x 4 x 0.120 inches (450 mm x 100 mm x 3.0 mm)
Plank 35.4 x 5.9 x 0.120 inches (900mm x 150mm x 3.0mm)

All Others: Square 17.7 x 17.7 x 0.120 inches (450mm x 450mm x 3.0mm)

6. Color: As selected by Architect from Manufacturer's standard colors.

2.4 ACCESSORIES

NOTE: Select one of the following leveling methods, deleting the one not chosen.

- A. Leveling and Patching Compound: Trowelable latex-modified, Portland cement-based formulation provided or approved by manufacturer for applications indicated.
- B. Self-Leveling Underlayment: Pourable latex-modified, Portland cement-based formulation provided or approved by manufacturer for applications indicated.

NOTE: Select one of the following adhesive types, deleting that not chosen.

NOTE: Select CBC 951 when expecting floors to be frequently washed or wet, or floors installed in extremely hot, cold or wet spaces, such as near outside entrances or freezer cases, or floors subject to heavy loads, including hospital beds, heavy carts, pallet jacks, rolling chairs, etc.

CBC 5001 is suitable for most other applications.

- C. Acrylic Adhesive: CBC 5001, solvent-free, low odor, acrylic based, high tack type adhesive acceptable to floor tile manufacturer to suit floor tile product and substrate conditions indicated.
- D. Epoxy Adhesive: CBC 951, solvent-free, water-resistant, hard-setting, reactive, epoxy type adhesive acceptable to homogeneous vinyl tile manufacturer to suit floor tile product and substrate conditions indicated.

RED NOTE: CBC/TOLI does not warrant the compatibility and performance of TOLI HVT with non-CBC adhesives.

- E. Adhesive Equipment: Professional U-notched trowel (1/32 x 1/16 x 1/32 inch).
- F. Floor Finish Systems: Provide protective liquid maintenance product system as recommended by flooring manufacturer's most recent published Maintenance Product Guide.

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PART 3 - EXECUTION

3.1 FIELD CONDITIONS

- Conditions and Measurements: Visit jobsite to verify installation conditions and floor measurements.
 - 1. Ambient Conditions per manufacturer's most recent published written recommendations, SECTION 017000 or 017100 or 017116.
- 3.2 EXAMINATION, PREPARATION, AND INSTALLATION
 - A. Proceed with installation only after unsatisfactory conditions have been corrected.
 - 1. Verify conditions and test substrates as recommended to meet requirements.
 - B. Properly prepare manufacturer acceptable substrates to accept flooring.
 - C. Install tiles per manufacturer's most recent published Installation Guide.
 - D. Expansion Joints: Locate movement joints where indicated prior to installation of adhesive and tile.
 - E. Protect flooring from traffic for 48 hours after installation or per adhesive manufacturer's most recent published instructions to allow proper set up time.
- 3.3 CLEANING, MAINTENANCE AND PROTECTION
 - A. Provide Progress Cleaning and Provide Final Cleaning per DIVISION 01 requirements.
 - 1. Waste management per DIVISION 01 requirements.
 - 2. Provide maintenance for installed product per manufacturer's most recent published Maintenance Guide.

RED NOTE: Do NOT wet mop until adhesive has set.

3. Provide protection for installed product per manufacturer's written recommendations.

3.4 CLOSEOUT ACTIVITIES

A. Substantial Completion Requirements per DIVISION 01 requirements: Closeout procedures, demonstration and training, and sustainable design closeout documentation.

END OF SECTION

RED NOTE: Be sure to obtain the latest version of this Guide Specification.

This Guide Specification is not a completed document ready for use. It must be edited (deleting, adding, or modifying text) as required to suit project requirements.

The professional stamping and the contracting parties of the Contract Documents are responsible for the contract Documents.

The professional stamping and the contracting parties of the Contract Documents are responsible for the accuracy of issued project specifications, including any use of this TOLI floor tile Guide Specification.

TOLI AND CBC AMERICA LLC SHALL NOT BE LIABLE FOR DAMAGES ARISING OUT OF THE USE OF THIS GUIDE SPECIFICATION.

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