#### **SECTION 09 65 16**

## RESILIENT SHEET VINYL 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 film print patterned resilient sheet vinyl flooring and accessories including, but not limited to:
    - 1. TOLI Mature® AdVantage™ Sheet Vinyl Flooring
    - 2. Accessories
      - a. Adhesives
      - b. Cleaning solutions
      - c. Finish top coatings

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

#### 1.2 SUBMITTALS

- A. Product Data per SECTION 013000 or 013300: Submit manufacturer's printed descriptions for each specified product.
- B. Shop Drawings per SECTION 013000 or 013300: 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 as follows:
  - 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) cut 9 x 9-inch 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 4.2: Recycled Content: 20 Percent (post-consumer + 1/2 pre-consumer)
      - 1). Submit product data indicating percentage by weight of recycled content with a statement indicating costs for each.

- MR 6: Rapidly Renewable Materials: 2.5 percent of the total value of the building materials in the project.
  - 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
    - 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 manufacturer's product data for systems that includes printed statement of VOC content.

NOTE: Coordinate and edit to the correct Section number below.

- F. Closeout Submittals per SECTION 017000 or 017800, unless noted otherwise.
  - Operation and Maintenance Data: Including, but not limited to, methods for maintaining installed products and precautions against cleaning materials with methods detrimental to finishes and performance.
  - 2. Warranty Documentation: Manufacturers' material warranties and installers workmanship warranty.
  - 3. Record Documents: Drawings, Specifications, and Product Data.
  - 4. Sustainable Design Closeout Documentation: Submit completed USGBC LEED® Submittal Worksheet Templates for the following credits:
    - a. MR 4.2. MR 6
    - b. EQ 4.1. EQ4.3

## 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 rolls of each type and pattern of sheet good used.
- 1.3 QUALITY ASSURANCE
  - A. Regulatory Requirements
    - 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.

- Testing Agency: An independent testing agency with the experience and capability to conduct the testing indicated, meeting requirements of ISO/IEC Standard 17025 or ASTM E699 and ASTM E329.
- C. Source Limitations: Obtain primary resilient tile flooring materials through one source from a single manufacturer, and secondary materials from source recommended by manufacturer of primary materials.
- 1.4 DELIVERY, STORAGE, AND HANDLING
  - A. Delivery, Storage and Handling per industry guidelines, product manufacturer guidelines, and Section 016000.
- 1.5 WARRANTY
  - A. Manufacturer Warranty. Provide manufacturer's limited warranty to be free from defects in material and workmanship, under normal use and service, to repair or replace all defective sheet flooring.
    - 1. Warranty Period: Fifteen (15) year limited warranty from the date of CBC invoice. Warranty to include reasonable labor. Product Warranty

#### PART 2 PRODUCTS

- 2.1 MANUFACTURER
  - A. Manufacturer List: Subject to compliance with requirements, provide products by 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
    - 2. Substitution Limitations: No substitutions permitted because of the specific attributes listed in sections 2.2, 2.3, and 2.4.
  - B. Product Options
    - 1. Flooring Type: TOLI Mature AdVantage
      - a. TOLI Mature AdVantage:
        - 1). Size: 6 x 66 feet by 0.080 inches (1.8m x 20m x 2.0mm)
        - 2). Color and Pattern: The Collection
    - 2. Accessories:
      - a. Underlayment leveling compound per SECTION 035416
      - b. Expansion joints per SECTIONS 079200 and 079513
      - c. CBC 5001 High Performance Resilient Flooring Adhesive
      - d. CBC 951 Epoxy Adhesive
      - f. Cleaning products
      - g. TOLI Welding Rod to match

## 2.2 DESCRIPTION

- A. TOLI **Mature AdVantage** has a Type I, Grade 1, commercial 20-mil patent-pending ClearGuard anti-viral wear layer, polyurethane wear layer with embossed, clear, semi-rigid PVC over a photographic print film design with a Class B, 3-ply, fused backing system containing a fiberglass inner layer.
- B. Sustainability Characteristics

NOTE: Coordinate and edit below to the correct LEED Version and Rating selected.

# TOLI® – MATURE® ADVANTAGE GUIDE SPECIFICATION – SHORT-FORM

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 4.2: Recycled Content: 20 Percent (post-consumer + 1/2 pre-consumer)
      - a). TOLI Mature AdVantage contains >14% post-consumer + 1/2 >14.5% preconsumer, for a 21.25% calculated recycled content.
  - b. Indoor Environmental Quality (EQ):
    - 1). EQ Credit 4.1, Low-Emitting Materials: Adhesives and Sealants: as applied to CBC 5001 acrylic and CBC 951 Epoxy adhesives.
      - a). Acrylic Adhesive CBC 5001 VOC: 0 g/L
      - b). Epoxy Adhesive CBC 951 VOC: 0 g/L
    - 2). EQ Credit 4.4, Low-Emitting Materials.
      - a). TOLI Mature AdVantage is FloorScore certified low-emitting. See <u>TOLI</u>

        <u>Mature AdVantage Floor Score Certificate</u>.

## 2.3 MATERIALS

- A. TOLI Mature AdVantage Sheet per ASTM F1303: Type I, Grade I, printed film sheet vinyl.
  - Composition: Sheet vinyl formed under heat and pressure from a PVC layer formulated from
    polyvinyl esters and inorganic filler materials, with a backing material of a fiberglass inner
    layer, a PVC layer, with the top layer overlaid with a printed film 20 mil patent pending
    ClearGuard anti-viral wear layer with polyurethane.
  - 2. Roll Size: 6 x 66 feet (1.8m x 20m) by 0.080 inches (2.0mm) thick
  - 3. Color and Pattern TOLI **Mature AdVantage** Sheet: As selected by Architect from Manufacturer's Standard Collection.

## 2.4 ACCESSORIES

- 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.
- C. Expansion Joints: Refer to SECTION 079200 and SECTION 079500 or 079513.
- D. Adhesive Acrylic: Solvent-free, low odor, acrylic based, high tack type adhesive acceptable to resilient sheet flooring manufacturer to suit flooring product and substrate conditions indicated.
  - Manufacturer / Product: CBC 5001 High Performance Resilient Floor Adhesive
- E. Adhesive Heavy Duty: CBC 951 solvent-free, hard-setting, reactive, epoxy-type adhesive acceptable to sheet vinyl manufacturer to suit substrate and in-use requirements.

RED NOTE: CBC/TOLI does not warrant the compatibility and performance of TOLI Products with

#### non-CBC adhesives.

- F. Adhesive Equipment: Professional adhesive application trowel for interior applications.
  - 1. V-notch 1/16 x 1/16 x 1/16 inch for porous substrates.
  - U-notch 1/32 x 1/16 x 1/32 inch for non-porous substrates or use with CBC 951 2-Part Epoxy
- G. Seam Sealing:
  - 1. Heat Welding
    - a. Welding Rod: 3.5mm diameter TOLI weld rod as recommended for the product(s) specified.
    - b. Color: As selected by Architect from manufacturer's full range.
- H. Floor Maintenance Systems: Provide maintenance process system as recommended by flooring manufacturer's most recent published written <u>Maintenance Product Guide</u>.

#### PART 3 - EXECUTION

#### 3.1 FIELD CONDITIONS

A. Conditions and Measurements: Visit jobsite to verify installation conditions and floor measurements.

## WARNING: Use of portable heaters may cause failure.

## 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. Prepare substrates to ensure proper adhesion of resilient flooring system per adhesive manufacturer's written instructions.
- C. Install resilient flooring per manufacturer's most recent published written installation instructions. Installation Guide.
- D. Expansion Joints: Locate movement joints where indicated prior to installation of adhesive and resilient flooring and use appropriate expansion joint cover.
- E. Protect flooring from foot traffic for time specified for adhesive before and after installation per adhesive manufacturer's instructions to allow proper set up time.
- F. Protect flooring from traffic, point or rolling loads for 48 hours or longer after installation per manufacturer's most recent published written instructions to allow proper set up time.
- G. Wait 48 hours before wet cleaning.

# 3.3 CLEANING, MAINTENANCE AND PROTECTION

- A. Provide Progress Cleaning, Final Cleaning and Initial Maintenance in accordance with manufacturer's most recent published written instructions. <u>Maintenance Guide</u>, 017000 or 017400 or 017413 requirements, and the following:
  - 1. Protect newly installed flooring from traffic for specified time on adhesive label.
  - Traffic can be permitted after:
    - a. 48 hours if installed with CBC 5001 acrylic adhesive.
    - b. 72 hours if installed with CBC 951 epoxy adhesive.
    - Provide surface protection for installed product and use plywood or rigid panels to roll or move all heavy objects across the flooring before and after owner's acceptance.
  - 3. Permit only light damp mopping with well wrung mop during the first 2-4 days after installation.

RED NOTE: Do NOT wet mop until adhesive has properly set per adhesive manufacturer's most recent

## published written instructions.

## 3.4 CLOSEOUT ACTIVITIES

A. Substantial Completion Requirements per SECTION 017000 or 017700 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 accuracy of issued project specifications, including any use of this TOLI sheet flooring Guide Specification.

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