# PART 1 - GENERAL

## 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 and 01 Specification Sections, apply to this Section.

## 1.2 SUMMARY

A. Section includes modular carpet tile.

B. Related Requirements:
1. Section 018113 “Sustainable Design Requirements.”
2. Section 096513 "Resilient Base and Accessories" for resilient wall base and accessories installed with carpet tile.

## 1.3 PREINSTALLATION MEETINGS

A. Preinstallation Conference: Conduct conference at Project site.
1. Review methods and procedures related to carpet tile installation including, but not limited to, the following:
   a. Review delivery, storage, and handling procedures.
   b. Review ambient conditions and ventilation procedures.
   c. Review subfloor preparation procedures.

## 1.4 ACTION SUBMITTALS

A. Product Data: For each type of product indicated. Include manufacturer's written data on physical characteristics, durability, and fade resistance. Include installation recommendations for each type of substrate.

B. LEED Submittals: Credits MRc4, EQc4.1, and EQc4.3. Refer to Section 018113 “Sustainable Design Requirements” for additional submittal requirements.

C. Shop Drawings: Show the following:
1. Columns, doorways, enclosing walls or partitions, built-in cabinets, and locations where cutouts are required in carpet tiles.
2. Carpet tile type, color, and dye lot.
3. Type of installation.
4. Pattern type, location, and direction.
5. Transition details to other flooring materials.
6. Product Schedule: Use same room and product designations indicated on Drawings and in schedules.

D. Samples: For each of the following products and for each color and texture required. Label each Sample with manufacturer's name, material description, color, pattern, and designation indicated on Drawings and in schedules.
1. Carpet Tile: Full-size Sample.

1.5 INFORMATIONAL SUBMITTALS

A. Qualification Data: For Installer.

B. Sample Warranty: For special warranty.

1.6 CLOSEOUT SUBMITTALS

A. Maintenance Data: For carpet tiles to include in maintenance manuals. Include the following:
   1. Methods for maintaining carpet tile, including cleaning and stain-removal products and procedures and manufacturer's recommended maintenance schedule.
   2. Precautions for cleaning materials and methods that could be detrimental to carpet tile.

1.7 MAINTENANCE MATERIAL SUBMITTALS

A. Furnish extra materials described below, before installation begins, that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
   1. Carpet Tile: Full-size units equal to 5 percent of amount installed for each type indicated, but not less than 10 sq. yd. and not greater than 40 sq. yd., unless noted otherwise.
      a. Carpet Tile at Corridors: Full-size units equal to 5 percent of amount installed for each color indicated, but not less than 50 sq. yd.

1.8 QUALITY ASSURANCE

A. Installer Qualifications: An experienced installer who is certified by the Floor Covering Installation Board or who can demonstrate compliance with its certification program requirements.

B. Fire-Test-Response Characteristics: Provide products complying with Interior Floor Finish requirements per the 2013 CBC. Products shall comply with ASTM E 648 as tested by an independent testing and inspecting agency acceptable to authorities having jurisdiction and having a smoke density rating of less than 450 per ASTM E 84.
   1. Flooring products shall be classified in compliance with NFPA 253, class II materials.

C. All carpet installed in the building interior shall meeting the testing and product requirements of one of the following:
   1. CRI Green Label Plus Program.
   2. California Department of Public Health Standard Practices for the testing of VOC's.
   3. NSF/ ANSI 140 at the Gold level.
   4. Scientific Certifications Systems Sustainable Choice.

D. VOC Content in carpet system, including adhesives, shall comply with, South Coast Air Quality Management District and CalGreen requirements.

1.9 DELIVERY, STORAGE, AND HANDLING

A. Comply with CRI 104.

1.10 FIELD CONDITIONS

A. Comply with CRI 104 for temperature, humidity, and ventilation limitations.

B. Environmental Limitations: Do not deliver or install carpet tiles until spaces are enclosed and weathertight, wet work in spaces is complete and dry, and ambient temperature and humidity conditions are maintained at occupancy levels during the remainder of the construction period.

C. Do not install carpet tiles over concrete slabs until slabs have cured and are sufficiently dry to bond with adhesive and concrete slabs have pH range recommended by carpet tile manufacturer.

D. Where demountable partitions or other items are indicated for installation on top of carpet tiles, install carpet tiles before installing these items.

1.11 WARRANTY

A. Special Warranty for Carpet Tiles: Manufacturer's standard form in which manufacturer agrees to repair or replace components of carpet tile installation that fail in materials or workmanship within specified warranty period.
   1. Warranty does not include deterioration or failure of carpet tile due to unusual traffic, failure of substrate, vandalism, or abuse.
   2. Failures include, but are not limited to, more than 10 percent loss of face fiber, edge raveling, snags, runs, loss of tuft bind strength, dimensional stability, excess static discharge, and delamination.
   3. Warranty Period: 10 years from date of Completion.

PART 2 - PRODUCTS

2.1 CARPET TILE

A. Products: Subject to compliance with requirements, provide one of the following:
   1. Carpet tile as indicating on Material Finish Schedule on Drawings (Basis-of-Design)
   2. Or equal.

B. Backing System: As recommended by manufacturer for installation type.

C. Carpet shall have a level loop, level-cut, or level-cut/uncut pile texture and maximum pile height of 1/2-inch complying with 2013 CBC section 11B-302.2.

D. Carpet edges shall comply with 2013 CBC section 11B-303.

E. Carpet adhesive shall meet CRI Green Label Plus requirements for low emitting materials.

F. Coefficient of Friction (COF): Carpet shall meet static COF value of 0.6, or 0.8 at ramps, for both wet and dry conditions, when measured per the ASTM C 1028.

G. LEED Materials: Credits MRc4, EQc4.1, and EQc4.3. Refer to Section 018113 “Sustainable Design Requirements” for additional material requirements.

2.2 INSTALLATION ACCESSORIES

A. Trowelable Leveling and Patching Compounds: Latex-modified, hydraulic-cement-based formulation provided or recommended by carpet tile manufacturer.

B. Adhesives: Water-resistant, mildew-resistant, nonstaining, pressure-sensitive type to suit products and subfloor conditions indicated, that complies with flammability requirements for installed carpet tile and is recommended by carpet tile manufacturer for releasable installation.

C. Commercial Floor Sealer/Vapor Barrier: Barrier recommended by flooring manufacturer to assure compatibility with carpet tile and related adhesive materials for use to reduce the moisture-vapor-emissions, relative humidity, and alkalinity rates to maximum allowed by flooring manufacturer.

D. Metal Edge/Transition Strips: Extruded aluminum with stainless steel finish of profile and width shown, where indicated, of height required to protect exposed edge of carpet, and of maximum lengths to minimize running joints.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for maximum moisture content, alkalinity range, installation tolerances, and other conditions affecting carpet tile performance. Examine carpet tile for type, color, pattern, and potential defects.

B. Concrete Subfloors: Verify that concrete slabs comply with ASTM F 710 and the following:
   1. Slab substrates are dry and free of curing compounds, sealers, hardeners, and other materials that may interfere with adhesive bond. Determine adhesion and dryness characteristics by performing bond and moisture tests recommended by carpet tile manufacturer.
   2. Subfloor finishes comply with requirements specified in Section 033000 "Cast-in-Place Concrete" for slabs receiving carpet tile.
   3. Subfloors shall be free of cracks, ridges, depressions, scale, and foreign deposits.
   4. Perform concrete floor testing at a rate of one (1) test for each 1,000 square feet of flooring in accordance with the below methods:
      a. ASTM F1869 water vapor emission: Not greater than 5.0 lbs.
      b. ASTM F710 digital alkalinity-pH test: Not greater than 9.0pH
      c. ASTM F2170 relative humidity test: Not greater than 75%RH
   5. Apply floor sealer as recommended by flooring manufacturer if concrete substrate does not meet moisture vapor emissions and alkalinity rates complying with flooring manufacturer’s written recommendations.

C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. General: Comply with CRI 104, Section 6.2, "Site Conditions; Floor Preparation," and with carpet tile manufacturer's written installation instructions for preparing substrates indicated to receive carpet tile installation.

B. Use trowelable leveling and patching compounds, according to manufacturer's written instructions, to fill cracks, holes, depressions, and protrusions in substrates. Fill or level cracks, holes and depressions 1/8 inch wide or wider and protrusions more than 1/32 inch, unless more stringent requirements are required by manufacturer's written instructions.

C. Remove coatings, including curing compounds, and other substances that are incompatible with adhesives and that contain soap, wax, oil, or silicone, without using solvents. Use mechanical methods recommended in writing by carpet tile manufacturer.

D. Broom and vacuum clean substrates to be covered immediately before installing carpet tile.

3.3 INSTALLATION

A. General: Comply with CRI 104, Section 14, "Carpet Modules," and with carpet tile manufacturer's written installation instructions.

B. Installation Method:
1. Glue down; install every tile with full-spread, releasable, pressure-sensitive adhesive.
2. Installation shall comply with 2013 CBC section 11B-302.2.

C. Maintain dye lot integrity. Do not mix dye lots in same area.

D. Cut and fit carpet tile to butt tightly to vertical surfaces, permanent fixtures, and built-in furniture including cabinets, pipes, outlets, edgings, thresholds, and nosings. Bind or seal cut edges as recommended by carpet tile manufacturer.

E. Extend carpet tile into toe spaces, door reveals, closets, open-bottomed obstructions, removable flanges, alcoves, and similar openings.

F. Maintain reference markers, holes, and openings that are in place or marked for future cutting by repeating on finish flooring as marked on subfloor. Use nonpermanent, nonstaining marking device.

G. Install pattern parallel to walls and borders, unless noted otherwise.

3.4 CLEANING AND PROTECTION

A. Perform the following operations immediately after installing carpet tile:
1. Remove excess seam sealer, and other surface blemishes using cleaner recommended by carpet tile manufacturer.
2. Remove yarns that protrude from carpet tile surface.
3. Vacuum carpet tile using commercial machine with face-beater element.

B. Protect installed carpet tile to comply with CRI 104, Section 16, "Protection of Indoor Installations."

C. Protect carpet tile against damage from construction operations and placement of equipment and fixtures during the remainder of construction period. Use protection methods indicated or recommended in writing by carpet tile manufacturer.

END OF SECTION