

SECTION 09 68 13

TILE CARPETING

PART 1 - GENERAL

1.01 DESCRIPTION

- A. This Section describes the requirements for furnishing and installing tile carpeting.
- B. Related Sections:
 - 1. Water vapor emission control systems are specified in Section 09 61 43.
 - 2. Resilient base and accessories are specified in Section 09 65 13.
 - 3. Sheet carpeting is specified in Section 09 68 16.

1.02 SUBMITTALS

- A. Product Data: Include the following:
 - 1. Reports documenting the results of tests by a NVLAP approved laboratory for electrostatic propensity and flooring radiant panel test.
 - 2. Catalog data and product physical characteristics.
 - 3. Manufacturer's printed installation instructions, surface preparation, seaming techniques, recommended adhesives and other installation accessories.
 - 4. Statement verifying environmental requirements.
 - 5. Maintenance instructions including recommended cleaning equipment and materials, spot removal information, and cleaning methods.
- B. Samples:
 - 1. For verification purposes, two full size tiles of each color and pattern selected.
 - 2. 12-inch long sample of carpet accessories.
- C. Layout Drawings: Show layout of each area to be covered for approval of pattern, and any pertinent installation details.
- D. Maintenance Materials:
 - 1. Furnish the County with a minimum of 5-percent of each different material and color used in this Project from same dye lot or production run for compatibility with the installed materials.
 - 2. Furnish materials in securely wrapped packages or factory sealed packing with the manufacturer's standard labels and the material and color designation used in these specifications.
 - 3. Deliver material to the County's on site designated storage place, unloaded and positioned in place per County's instructions.
 - 4. Furnish a signed receipt indicating materials and quantities upon delivery.

E. LEED Submittals:

1. Credit IEQ 4.3: Product data for flooring. Indicate carpet compliance with Carpet and Rug Institute's Green Label Plus program, carpet cushion compliance with Carpet and Rug Institute Green Label program, hard surface flooring compliance with FloorScore, VOC content of carpet adhesive in g/L calculated according to 40 CFR 59, Subpart D.
 - a. Furnish the LEED Online Credit Template listing all carpet systems used in the building, stating that they comply with the VOC limits of the Carpet and Rug Institute's Green Label Indoor Air Quality Test Program.
 - b. Required Audit Documentation:
 - 1) Product data showing that carpet meets the requirements of the Carpet and Rug Institute Green Label Plus program.
 - 2) Product data showing that carpet adhesives complies with IEQ Credit 4.1.

F. Warranty.

1.03 QUALITY ASSURANCE

- A. Requirements of Regulatory Agencies: Carpet tiles shall be approved by applicable jurisdictions.
- B. Fire Hazard Classification: Class I floor finish. Minimum critical flux limit of 0.45-watts/square centimeter when tested in accordance with NFPA 253.
- C. Static electricity generation of installed carpet shall not exceed 3.5 KV at 70-deg. F and 20-percent R.H. for life of carpet tile.
- D. Installer's Qualifications: Installer shall be approved by carpet tile manufacturer, and shall have regularly been providing installations of the types required for no less than five years..
- E. Visually perceptible deviations in color at sides and end seams shall not be acceptable.
- F. Indoor Air Quality: Carpet tile shall meet or exceed the minimum standards contained in the Carpet and Rug Industry (CRI) Institute consumer information label.
- G. Comply with CRI – Carpet and Rug Institute Indoor Air Quality Green Label Testing Program.
 1. All carpet tile products shall comply with the VOC limit established by the Carpet and Rug Institute (CRI) Green Label Indoor Air Quality Test Program.

1.04 ENVIRONMENTAL QUALITY ASSURANCE

A. Credit IEQ 4.3:

1. Option 1: All flooring shall comply with the following as applicable to the Project scope:
 - a. All carpet installed in the building interior shall meet the testing and product requirements of the Carpet and Rug Institute Green Label Plus program.
 - b. All carpet adhesive shall have less than 50 g/L VOC.

2. Option 2: Flooring elements installed in the building interior shall meet 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, including 2004 Addenda.

B. Applicable LEED Credits:

1. Credit IEQ 4.3 – Low-Emitting Materials - Carpet Systems.

1.05 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Deliver and store packaged materials in original containers labels intact until time for use, with seals unbroken and store rolls in a flat position. Protect from damage, dirt, stains and moisture.
- B. Do not store carpet tile near products that can off gas harmful substances.

1.06 PROJECT CONDITIONS

- A. Sequencing Schedule: Do not install carpet tiles until building is entirely closed in, wet work and painting is completed, and heating system is in operation.
- B. Use adhesives in strict compliance with manufacturer's recommendations, and ventilate area with maximum outside air for a minimum of 48-hours after installation.
- C. Test substrates to ensure that no dusting will occur through installed carpet tile. Apply sealer on porous concrete surfaces where required to prevent dusting.

1.07 INDOOR AIR QUALITY

- A. Pre-ventilate carpet tile in well ventilated, uninhabited space for a few days prior to installation.
- B. Provide maximum ventilation during installation.
- C. Isolate area of installation from remainder of building.
- D. Clean new carpet tile thoroughly with a high-efficiency particulate air (HEPA) filtration vacuum.

1.08 WARRANTY

- A. Warrant the carpet tile to be free of defects for a period of 5-years from date of Substantial Completion. This warranty shall be in addition to and not a limitation of other rights the County may have against the Developer Design/Builder under the Contract Documents.

PART 2 - PRODUCTS

2.01 CARPET TILE

- A. General: Carpet substitutions shall match all characteristics of the specified carpet.
- B. Carpet Tile – C3: Tandus Flooring, Inc. "Circlet" ER3RS Modular 24-inch x 24-inch tile or approved equal, color to be selected by the County's Representative.
 1. Construction: Stratatec Patterned Loop.
 2. Gauge: 5/64.

3. Stitch Rate: 10.2 pile units/inch.
4. Tuft Density: 130.6 tufts/sq. inch.
5. Pile Height Average: 0.187-inch.
6. Pile Thickness: .083-inch.
7. Density Factor (UM44D): 7,807-oz/cu.yd.
8. Fiber System: Dynex SD BCF Nylon with Static Control & Ensure.
9. Dye Method: 70-percent Solution Dye and 30-percent Yarn Dye.
10. Primary Backing: Synthetic Non-Woven.
11. Secondary Backing: ER3 100-percent recycled content.
12. Static Coefficient of Friction, ASTM C1028: Passes ADA requirements.
13. Static Propensity, AATCC 134: 3.5 kv or less.
14. Flooring Radiant Panel, ASTM E648 or NFPA 253: Class 1.
15. Acoustic Requirements: Noise Reduction Coefficient (NRC): 0.10 minimum.
16. Secondary Backing Density: Min. 65-lbs/cu. ft. +/- 5-percent.
17. Secondary Backing Recycled Content: 100-percent.
18. Third Party Certification: NSF 140 Platinum rating.
19. Total Product Recycled Content (based on Total Weight): Minimum 44-percent.
20. Total Product Post-Consumer Content (based on Total Weight): 10-percent.
21. Environmental Impact: No antimicrobials added to product.

2.02 ACCESSORIES

- A. Carpet Adhesive: Acrylic emulsion, solvent-free, meeting or exceeding CRI "Green Label" requirements, as recommended by carpet tile manufacturer.
- B. Crack Filler: Latex base type.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Examine areas to receive carpet tiles and verify that surfaces are suitable for installation.
- B. Test concrete floors for moisture with suitable moisture meter. Moisture shall not exceed adhesive manufacturer's recommendations, as specified in Section 09 61 43.
- C. Do not begin installation until unsatisfactory conditions have been corrected.

3.02 PREPARATION

- A. Subfloor:
 - 1. Prior to installation, repair minor floor irregularities and thoroughly clean floor, leaving no dirt or grit.
 - 2. Fill cracks exceeding 1/16-inch in width with crack filler and sand smooth.
 - 3. Confirm compatibility of adhesive with sealers or curing agents on concrete floors.

3.03 INSTALLATION

- A. Apply carpet tiles in strict accordance with manufacturer's instructions.
- B. Cement carpet tiles directly to floor. Remove excess cement with approved solvent.
- C. Cut evenly along walls, cut and fit evenly around projections, corners, pipes, electrical outlets, floor air or heating elements, and trim strips.
- D. Securely fasten carpet edging strips to floor wherever carpet tiles meet different floor material and no threshold or other divider is noted.
- E. Extend carpet tile materials under all open-bottomed and raised-bottom obstructions, and under removable flanges of obstructions. Extend carpet tiles into closets and alcoves of rooms to receive carpeting, unless another material is specifically identified to be used in that space. Carpet tile shall be installed under all movable furniture and equipment.
- F. Finish installation shall be free from visual defects.
- G. The County's Representative may review carpet tile scraps and retain any they choose. Remove remainder of scraps from site.
- H. Leave carpet base and walls clean and free from stains, blemishes and other foreign material. Remove loose threads and vacuum clean.
- I. Installation shall not receive furniture or heavy traffic for 48-hours after installation.

3.04 CLEAN UP

- A. After completion of the carpet tile installation, remove all waste and excess materials, tools and equipment. The complete installation shall be thoroughly vacuumed, using an upright, commercial grade, beater type cleaner, and left in a clean condition. Provide all necessary temporary protection required.

3.05 WASTE MANAGEMENT

- A. General: Comply with Section 01 74 19.
- B. All scraps of unused material shall be reclaimed and recycled by the carpet tile manufacturer. Include a detailed confirmation of the material received by the manufacturer and documentation that these materials haven recycled into new flooring materials. No incineration of reclaimed materials is acceptable.

END OF SECTION