

SECTION 09 68 16

SHEET CARPETING

PART 1 - GENERAL

1.01 DESCRIPTION

- A. This Section describes the requirements for installing sheet carpet and accessories.
- 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 Tile carpeting is specified in Section 09 68 13.

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. Layout and Seaming Diagrams: Show layout and seaming diagrams indicating carpet direction, types of edge strips, columns, doorways, enclosing walls or partitions, built-in cabinets, and locations of cutouts. Include installation details at special conditions.
- C. Samples for Verification Purposes: 18-inch x 18-inch samples of each carpet and 12-inch long samples of each type of exposed edge stripping.
- D. 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.

E. Warranty.

1.03 QUALITY ASSURANCE

A. Carpet Surface Burning Characteristics: Provide carpet identical to that tested for the following fire performance characteristics, per test method specified below, by UL or other testing and inspecting organizations acceptable to authorities having jurisdiction. Identify carpet with appropriate markings of applicable testing and inspecting organization.

1. Test Method: DOC FF 1-70.

a. Rating: Pass.

2. Test Method: ASTM E84.

a. Flame Spread: 25 or less.

b. Smoke Developed: 450 or less.

B. Installer's Qualifications: Minimum 2-years experience in installation of commercial carpeting of type, quantity and installation methods similar to work of this Section.

C. All materials shall comply with the requirements of Air Quality Management District (AQMD) Rule 1168 governing the emission of Volatile Organic Compounds.

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 carpeting materials in original factory protective wrapping and containers, labeled with identification of manufacturer, brand name, quality or grade, fire hazard classification, and lot number.

- B. Store inside, in well-ventilated area, protected from weather, moisture, soiling, extreme temperatures, and humidity.

1.06 COORDINATION

- A. Prior to construction of each type of new substrate which is to support carpet, furnish information on substrate texture and condition required for each type of carpet.
- B. Painting work in areas to be carpeted shall be completed prior to installation of carpet.
- C. Carpet materials shall be unpackaged, inspected, and rolled out backing side out in a well-ventilated area off site for a minimum of 72-hours prior to delivery to the Project site.

1.07 PROJECT CONDITIONS

- A. Substrate Conditions: As specified in Section 09 61 43.
- B. Use adhesives in strict accordance with manufacturer's recommendations and ventilate area with maximum outside air for a period of not less than 48-hours after completion.

1.08 WARRANTY

- A. Warrant the surface pile against abrasive wear of more than 10-percent within 10-years for carpet as properly installed and maintained. Misuse, damage, or improper cleaning methods shall not apply.
- B. Warrant installation against stretching, wrinkling, opening of joints, and other areas of poor materials and workmanship for a period of 2-years after final acceptance of Project. Provide materials and labor necessary for repair or replacement, without additional cost to the County.
- C. 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.

1.09 MAINTENANCE

- A. Maintenance Instructions: Furnish manufacturer's printed instructions for maintenance of installed carpet, including methods and frequency recommended for maintaining. Include precautions against materials and methods that may be detrimental to finishes and performance.
- B. Replacement Materials: Prior to installation of carpet, deliver in full roll widths not less than 5-square yards of each type, color, and pattern of carpeting, exclusive of material required to properly complete installation. Furnish accessory components as required. Replacement materials shall be from the same production run as materials installed. Package with protective covering, identified with appropriate labels. Installation scraps and trimmed pieces will not be acceptable.

PART 2 - PRODUCTS

2.01 SHEET CARPETING

- A. Carpet C-1: Tandus Flooring, Inc. "Full Volume" or approved equal, color to be selected by the County's Representative.
 - 1. Construction: Woven Textured Loop.
 - 2. Pitch: 135 5.0/inch.

3. Rows per inch: 8.8/ inch.
 4. Density: 6517.
 5. Finished Pile Height 0.237 inch.
 6. Total Finished Weight: 66.10 oz/sq yd.
 7. Woven Pile Weight: 40 oz. sq. yd. + - 5%.
 8. Fiber System: TDX NylonBCF Nylon with Static Control & Ensure.
 9. Dye Method: Solution Dyed.
 10. Width: 12'.
- B. Carpet C-2: Tandus Flooring, Inc. "Circlet" Powerbond Ethos Cushion 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 inch.
 4. Tuft Density: 130.6 tufts/sq. in.
 5. Pile Height Average: 0.187-inch.
 6. Pile Thickness: 0.083-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 Dyed and 30-percent Yarn Dyed.
 10. Primary Backing: Synthetic Non-Woven.
 11. Secondary Backing: ethos 76-percent recycled content closed cell cushion.
 12. Static Coefficient of Friction, :ASTM C1028: Passes ADA requirements.
 13. Static Propensity, AATCC 134: 2.0 kv or less.
 14. Flooring Radiant Panel, ASTM E648 or NFPA 253: Class 1.
 15. Acoustic Requirements: Noise Reduction Coefficient (NRC): 0.15 minimum.
 16. Cushion Type: Recycled Content Closed Cell Cushion.
 17. Cushion Backing Compression Set: Maximum 10-percent.
 18. Cushion Backing Compression Deflection (ASTM D1667): 29-lbs./sq. inch at 25-percent.
 19. Cushion Backing Density: 32-pcf.

- 20. Cushion Backing Thickness: 0.100-inch.
- 21. Cushion Backing Recycled Content: 61-percent recycled content secondary backing.
- 22. Total Product Post-Consumer Content (based on total weight): Minimum 10-percent.

2.03 ACCESSORY MATERIALS

- A. Seaming Cement: Hot-melt adhesive tape or similar product recommended by carpet manufacturer for taping seams and butting cut edges at backing to form secure seams and to prevent pile loss at seams.
- B. Carpet Adhesive: Water-resistant, non-staining type as recommended by carpet manufacturer, complying with flammability requirements for installed carpet, meeting the VOC limits specified by the South Coast Air Quality Management District Rule #1168.
- C. Miscellaneous: Provide tape, thread, and other items necessary for installation.

PART 3 - EXECUTION

3.01 PREPARATION

- A. Clear away debris and scrape up cementitious deposits from concrete surfaces to receive carpet; apply sealer to prevent dusting.
- B. Patch holes and level to a smooth surface. If previous finish was chemically stripped, reseal concrete. Seal powdery or porous surfaces with sealer recommended by carpet manufacturer.
- C. Patch holes and cracks. Sand to level. Remove wax. Seal surface with sealer recommended by carpet manufacturer.

3.02 INSTALLATION, GENERAL

- A. Comply with manufacturer's recommendations for seam locations and direction of carpet; maintain uniformity of carpet direction and lay of pile.
- B. At doorways, center seams under door in closed position; do not place seams perpendicular to door frame, in direction of traffic through doorway.
- C. Extend carpet under removable flanges of furnishings and into alcoves and closets of each space.
- D. Provide cutouts where required, and bind cut edges where not concealed by protective edge guards or overlapping flanges.
- E. Install carpet edge guard where edge of carpet is exposed; anchor guards to substrate.

3.03 GLUE-DOWN INSTALLATION

- A. Install sheet carpeting in accordance with manufacturer's instructions.
- B. Fit sections of carpet into each space prior to application of adhesive. Trim edges and butt cuts with seaming cement.
- C. Apply adhesive uniformly to substrate in accordance with manufacturer's instructions.
- D. Butt carpet edges tightly together to form seams without gaps.

E. Seal seams with manufacturer's recommended seam sealer. Seams shall be fully sealed.

F. Roll lightly to eliminate air pockets and ensure uniform bond.

3.04 CLEANING

A. Remove adhesive from carpet surface with manufacturer's recommended cleaning agent.

B. Remove and dispose of debris and unusable scraps.

C. Vacuum using commercial machine with face-beater element. Remove spots and replace carpet where spots cannot be removed. Remove protruding face yarn with sharp scissors.

3.05 PROTECTION

A. Provide protective methods and materials needed to ensure that carpeting is without deterioration or damage at time of Substantial Completion.

3.06 WASTE MANAGEMENT

A. General: As specified in 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 have been recycled into new flooring materials. No incineration of reclaimed materials is acceptable.

END OF SECTION