

**SECTION 09680 - CARPET****PART 1 - GENERAL**

## 1.1 RELATED DOCUMENTS

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

## 1.2 SUMMARY

- A. This Section includes the following:
  - 1. Woven carpet.
- B. Related Sections include the following:
  - 1. Division 9 Section "Resilient Wall Base and Accessories" for resilient wall base and accessories installed with carpet.

## 1.3 SUBMITTALS

- A. Product Data: For each type of product indicated. Include manufacturer's written data and required test results on physical characteristics, backing makeup and materials, durability, and fade resistance. Include installation recommendations for each type of substrate required.
- B. 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: 12-inch- square Sample.
  - 2. Exposed Edge Stripping and Accessory: 12-inch- long Samples.
  - 3. Carpet Cushion: 6-inch- square Sample.
  - 4. Carpet Seam: 6-inch Sample.
  - 5. Mitered Carpet Border Seam: 12-inch- square Sample. Show carpet pattern alignment.
- C. Maintenance Data: For carpet to include in maintenance manuals specified in Division 1.
  - 1. Include the following:
    - a. Methods for maintaining carpet, including cleaning and stain-removal products and procedures and manufacturer's recommended maintenance schedule.
    - b. Precautions for cleaning materials and methods that could be detrimental to carpet.

## 1.4 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 with the critical radiant flux classification indicated in Part2, as determined by testing identical products per ASTM E648 by an independent testing and inspecting agency acceptable to authorities having jurisdiction.

## 1.5 DELIVERY, STORAGE, AND HANDLING

- A. General: Comply with CRI104, Section5, "Storage and Handling."

**1.6 PROJECT CONDITIONS**

- A. General: Comply with CRI104, Section 6.1, "Site Conditions; Temperature and Humidity."
- B. Environmental Limitations: Do not install carpet until wet work in spaces is complete and dry, and ambient temperature and humidity conditions are maintained at the levels indicated for Project when occupied for its intended use.
- C. Do not install carpet over concrete slabs until slabs have cured and are sufficiently dry to bond with adhesive and concrete slabs have pH range recommended by carpet manufacturer.
- D. Where demountable partitions or other items are indicated for installation on top of carpet, install carpet before installing these items.

**1.7 WARRANTY**

- A. General Warranty: Special warranty specified in this Article shall not deprive Owner of other rights Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by Contractor under requirements of the Contract Documents.
- B. Special Carpet Warranty: Written warranty, signed by carpet manufacturer on manufacturer's letterhead, agreeing to replace or repair carpet that does not comply with requirements or that fails within specified warranty period. Warranties shall not be written only for this purchase or purchaser, all shall be standard national issue. The carpet manufacturer will provide standard published written performance warranties for the following:
  - 1. Warranty:
    - a. Lifetime against delamination.
    - b. Lifetime against tuft bind, edge unravel, yarn pulls, zippering.
    - c. Backing to have a lifetime warranty against moisture penetration.
    - d. Lifetime against excessive surface wear, no more than 10% loss of pile fiber weight measured before and after use (ASTM D-3936).
    - e. Lifetime against static protection, built in protection below 3.0 kv (AATCC-134).
    - f. Lifetime stain removal, carpet will resist permanent staining caused by spots and spills for the life of the carpet.
    - g. Lifetime colorfastness, will not undergo a significant change in color due to exposure to light or atmospheric contaminants as tested under (AATCC-16E) at 400 hours and (AATCC-129).
    - h. Adhesive, provide a lifetime product performance warranty.

**PART 2 - PRODUCTS****2.1 INSTALLATION ACCESSORIES**

- A. Trowelable Leveling and Patching Compounds: Latex-modified, hydraulic-cement-based formulation provided by or recommended by the following:
  - 1. Carpet manufacturer.
- B. Adhesives: Low VOC, water-resistant, mildew-resistant, nonstaining type to suit products and subfloor conditions indicated, that complies with flammability requirements for installed carpet and that is recommended by the following:
  - 1. Carpet manufacturer.
- C. 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.

## 2.2 COLORS AND PATTERNS

- A. Provide up to 3 different colors of carpet throughout the project.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine substrates, areas, and conditions for compliance with requirements for maximum moisture content, alkalinity range, installation tolerances, and other conditions affecting carpet performance. Verify that substrates and conditions are satisfactory for carpet installation and comply with requirements specified.
- B. Concrete Subfloors: Verify that concrete slabs comply with ASTM F710 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 the following:
    - a. Carpet manufacturer.
  - 2. Subfloors are free of cracks, ridges, depressions, scale, and foreign deposits.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.2 PREPARATION

- A. General: Comply with CRI104, Section 6.2, "Site Conditions; Floor Preparation," and carpet manufacturer's written installation instructions for preparing substrates indicated to receive carpet installation.
- B. Use trowelable leveling and patching compounds, according to manufacturer's written instructions, to fill cracks, holes, and depressions in substrates.
- 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 the following:
  - 1. Carpet manufacturer.
- D. Broom and vacuum clean substrates to be covered immediately before installing carpet. After cleaning, examine substrates for moisture, alkaline salts, carbonation, or dust. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.3 INSTALLATION

- A. Direct-Glue-Down Installation: Comply with CRI104, Section 8, "Direct Glue-Down Installation."
- B. Comply with carpet manufacturer's written recommendations for seam locations and direction of carpet; maintain uniformity of carpet direction and lay of pile. At doorways, center seams under the door in closed position.
  - 1. Bevel adjoining border edges at seams with hand shears.
- C. Do not bridge building expansion joints with carpet.
- D. Cut and fit carpet 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 manufacturer.
- E. Extend carpet 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.

## 3.4 CLEANING AND PROTECTION

- A. Perform the following operations immediately after installing carpet:
  - 1. Remove excess adhesive, seam sealer, and other surface blemishes using cleaner recommended by carpet manufacturer.
  - 2. Remove yarns that protrude from carpet surface.
  - 3. Vacuum carpet using commercial machine with face-beater element.
- B. Protect installed carpet to comply with CRI104, Section15, "Protection of Indoor Installations."
- C. Protect carpet 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 manufacturer.

## 3.5 CARPET SCHEDULE

- A. CARPET CPT-1, 2+3
  - 1. Yarn: 100% Nylon
  - 2. Dye Method: Solution dyed
  - 3. Surface Texture: Dense patterned loop
  - 4. Gauge: \18
  - 5. Stitches per inch: 10
  - 6. Weight: 28 oz/yd<sup>2</sup>
  - 7. Finished Pile thickness: 0.10 minimum
  - 8. Flammability: Class 1
  - 9. Smoke Development: less than 450
  - 10. Width: 6 or 12 feet, manufacturer's standard maximum
  - 11. Antimicrobial,
  - 12. ADA compliant
  - 13. Backing: manufacturer's advanced highest performance system meeting the required tests below. Backing to be 100% free of natural latex.
  - 14. Meeting the following required test reports.
    - a. Pill Test: DOC-FF-1-70 (ASTM D-2589), Requirement - pass
    - b. Flooring Radiant Panel: ASTM E-648, Requirement - Class I
    - c. Optical Smoke Density Test: NFPA-258 NBS Smoke Chamber, Requirement - Less than 450, flaming mode.
    - d. Moisture Penetration Test: backing passes the British Spill Test Method E Vapor Transmission and exhibits Moisture Vapor Transmission per ASTM E96.
    - e. Roller Chair Caster Test: DIN Test Standard 54324
    - f. CRI VOC Chamber Test/Indoor Air Quality test (CRI-IAQ) Green label test
    - g. Lightfastness: rating of not less than 5 on International Grey Schole after 400 hours SFU's (AATCC Test Method 16E)
    - h. Crockfastness: minimum stain rating on International Grey Scale of not less than 5 wet or dry ( AATCC Test Method 165)
    - i. Atmospheric fading: Burned gas shall not be less than 5 on International Grey Scale after two cycles of each test (AATCC Test Method 129 Ozone/AATCC Test Method 23)

**END OF SECTION 09680**