

SECTION 096800 - 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. Carpet tile.
- B. Related Sections include the following:
 - 1. Division 9 Section "Resilient Tile Flooring" 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 on physical characteristics, durability, and fade resistance. Include installation recommendations for each type of substrate required.
- B. Shop Drawings: Show the following:
 - 1. Columns, doorways, enclosing walls or partitions, built-in cabinets, and locations where cutouts are required in carpet.
 - 2. Carpet type, color, and dye lot.
 - 3. Locations where dye lot changes occur.
 - 4. Seam locations, types, and methods.
 - 5. Type of subfloor.
 - 6. Type of installation.
 - 7. Pattern type, repeat size, location, direction, and starting point.
 - 8. Pile direction.
 - 9. Type, color, and location of insets and borders.
 - 10. Type, color, and location of edge, transition, and other accessory strips.
 - 11. Transition details to other flooring materials.
 - 12. Stair nosing detail.
- C. 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- (300-mm-) square Sample.
 2. Exposed Edge Stripping and Accessory: 12-inch- (300-mm-) long Samples.
- D. Maintenance Data: For carpet to include in maintenance manuals specified in Division 1. Include the following:
1. Methods for maintaining carpet, 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.

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 Part 2, as determined by testing identical products per ASTM E 648 by an independent testing and inspecting agency acceptable to authorities having jurisdiction.
- C. Product Options: Products and manufacturers named in Part 2 establish requirements for product quality in terms of appearance, construction, and performance. Other manufacturers' products comparable in quality to named products and complying with requirements may be considered. Refer to Division 1 Section "Substitutions."
- D. Carpet shall comply with requirements of the CRI's "Green Label Plus" Indoor Air Quality Testing Program.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. General: Comply with CRI 104, Section 5, "Storage and Handling."

1.6 PROJECT CONDITIONS

- A. General: Comply with CRI 104, 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. Concrete subfloors must meet the following requirements before carpet may be installed:
1. pH range of 5 to 9
 2. Moisture-emission rate of 3 lb/1000 sq.ft. per 24 hours or less.

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 agreeing to replace carpet that does not comply with requirements or that fails within specified warranty period. Warranty does not include deterioration or failure of carpet due to unusual traffic, failure of substrate, vandalism, or abuse. Failures include, but are not limited to, more than 10 percent loss of face fiber, edge raveling, snags, runs, and delamination.
 - 1. Warranty Period: 10 years from date of Contract Completion.

1.8 EXTRA MATERIALS

- 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: Full-width rolls equal to 5 percent of amount installed for each type indicated, but not less than 10 sq. yd. (8.3 sq. m).

PART 2 - PRODUCTS

2.1 Carpet Tile

- A. CPT-1, as indicated on Finish Schedule
 - 1. Basis of design: Shaw Contract: Saturate Tile. Other acceptable manufacturers are:
 - a. Interface Flor
 - 1) Color as selected by Architect from manufacturers complete line.
 - b. Lees
 - 1) Color as selected by Architect from manufacturers complete line.
 - 2. Collection: Color At Work II
 - 3. Style Number: 5T109
 - 4. Construction: Multi-Level Pattern Loop
 - 5. Fiber: Ecosolution Q100™ Nylon
 - 6. Dye Method: 100% Solution Dyed
 - 7. Primary Backing: Synthetic
 - 8. Secondary Backing Ecoworx® Tile
 - 9. Protective Treatments: SSP® Shaw Soil Protection
 - 10. Adhesive:
 - a. LokWorx+ Carpet Tile Adhesive, Shaw 5100,
 - b. Shaw 4151, LokDots, LokWorx Adhesive Tabs,
 - c. Shaw 3800 or LokWorx Carpet Tile Adhesive

11. Product Size: 9 in x 36 in 23
12. Gauge: 1/12 in
13. Stitches: 10.0 per in
14. Finished Pile Thickness: 0.093 in
15. Average Density 6968 oz/yd³
16. Total Thickness: 0.222 in
17. Tufted Weight: 18 oz/yd²
18. Leveling compounds and adhesives shall be low VOC.

B. CPT-2 as indicated on Finish Schedule.

1. Basis of design: Shaw Contract: Chromatone Tile.
 - a. Installation: Quarter Turned
2. Other acceptable manufacturers are:
 - a. Interface Flor
 - 1) Color as selected by Architect from manufacturers complete line.
 - b. Lees
 - 1) Color as selected by Architect from manufacturers complete line.
3. Collection: Color At Work II
4. Style Number: 5T444
5. Construction: Multi-Level Pattern Loop
6. Fiber: Ecosolution Q100™ Nylon
7. Dye Method: 100% Solution Dyed
8. Primary Backing: Synthetic
9. Secondary Backing: Ecoworx® Tile
10. Protective Treatments: SSP® Shaw Soil Protection
11. Adhesive
 - a. LokWorx+ Carpet Tile Adhesive, Shaw 5100,
 - b. Shaw 4151, LokDots, LokWorx Adhesive Tabs,
 - c. Shaw 3800 or LokWorx Carpet Tile Adhesive
12. Product Size: 18 in x 36 in
13. Gauge: 1/12 in
14. Stitches: 9.5 per in
15. Finished Pile Thickness: 0.105 in
16. Average Density: 6171 oz/yd³
17. Total Thickness: 0.236 in
18. Tufted Weight: 18 oz/yd²
19. Leveling compounds and adhesives shall be low VOC.

C. CPT-3 as indicated on Finish Schedule

1. Basis of design: Shaw Contract: Chromatone Tile.
 - a. Installation: Quarter Turned
2. Other acceptable manufacturers are:
 - a. Interface Flor
 - 1) Color as selected by Architect from manufacturers complete line.
 - b. Lees
 - 1) Color as selected by Architect from manufacturers complete line.

3. Collection: Color At Work II
 4. Style Number: 5T444
 5. Construction: Multi-Level Pattern Loop
 6. Fiber: Ecosolution Q100™ Nylon
 7. Dye Method: 100% Solution Dyed
 8. Primary Backing: Synthetic
 9. Secondary Backing: Ecoworx® Tile
 10. Protective Treatments: SSP® Shaw Soil Protection
 11. Adhesive
 - a. LokWorx+ Carpet Tile Adhesive, Shaw 5100,
 - b. Shaw 4151, LokDots, LokWorx Adhesive Tabs,
 - c. Shaw 3800 or LokWorx Carpet Tile Adhesive
 12. Product Size: 18 in x 36 in
 13. Gauge: 1/12 in
 14. Stitches: 9.5 per in
 15. Finished Pile Thickness: 0.105 in
 16. Average Density: 6171 oz/yd³
 17. Total Thickness: 0.236 in
 18. Tufted Weight: 18 oz/yd²
 19. Leveling compounds and adhesives shall be low VOC.
- D. CPT-4 as indicated on Finish Schedule
1. Basis of design: Shaw Contract: Engage Tile.
 2. Installation: Quarter Turned
 3. Other acceptable manufacturers are:
 - a. Interface Flor
 - 1) Color as selected by Architect from manufacturers complete line.
 - b. Lees
 - 1) Color as selected by Architect from manufacturers complete line.
 4. Collection: Mindful Play
 5. Style Number: 5T187
 6. Construction: Multi-Level Pattern Loop
 7. Fiber: Solution Q Extreme Nylon
 8. Dye Method: 100% Solution Dyed
 9. Primary Backing: Synthetic
 10. Secondary Backing: Ecoworx® Tile
 11. Protective Treatments: Inherent Stain Resistance
 12. Adhesive
 - a. LokWorx+ Carpet Tile Adhesive, Shaw 5100,
 - b. Shaw 4151, LokDots, LokWorx Adhesive Tabs,
 - c. Shaw 3800 or LokWorx Carpet Tile Adhesive
 13. Product Size: 24 in x 24 in
 14. Gauge: 1/10 in
 15. Stitches: 10.0 per in
 16. Finished Pile Thickness: 0.095 in
 17. Average Density: 6063 oz/yd³
 18. Total Thickness: 0.226 in
 19. Tufted Weight: 16 oz/yd²
 20. Leveling compounds and adhesives shall be low VOC.

E. CPT-5 as indicated on Finish Schedule

1. Basis of design: Shaw Contract: Shaw Pace Tile Other acceptable manufacturers are:
 - a. Interface Flor
 - 1) Color as selected by Architect from manufacturers complete line.
 - b. Lees
 - 1) Color as selected by Architect from manufacturers complete line.
2. Product Type Entryway Carpet Tile
3. Collection: All Access
4. Style Number: 5T413
5. Construction: Multi-Level Pattern Loop
6. Fiber: Ecosolution Q® Nylon
7. Dye Method: 100% Solution Dyed
8. Primary Backing: Synthetic
9. Secondary Backing: Ecworx® Tile
10. Protective Treatments: SSP® Shaw Soil Protection
11. Adhesive:
 - a. LokWorx+ Carpet Tile Adhesive, Shaw 5100,
 - b. Shaw 4151, LokDots, LokWorx Adhesive Tabs,
 - c. Shaw 3800 or LokWorx Carpet Tile Adhesive
12. Product Size: 24 in x 24 in
13. Gauge: 1/12 in
14. Stitches: 9.0 per in
15. Finished Pile Thickness: 0.127 in
16. Average Density: 7937 oz/yd³
17. Total Thickness: 0.275 in
18. Tufted Weight: 28 oz/yd²
19. Leveling compounds and adhesives shall be low VOC.

2.2 PERFORMANCE WARRANTIES

- A. Warranties must be the standard, printed warranties on the carpet manufacturer's letterhead. All warranty items to be full term, not pro-rated for the indicated period. All warranties must be issued by the manufacturer as standard published warranties on all types of carpet within this document. If the product fails to perform as warranted when properly installed and maintained according to procedures, the affected area will be repaired or replaced at the expense of the manufacturer. The carpet manufacturer will provide standard published written performance warranties for the following:
 1. Lifetime against excessive surface wear. Excessive wear means no more than 10% loss of pile fiber weight measured before and after use as tested under (ASTM D-3936).
 2. Lifetime static protection, meaning built-in protection below 3.5 kv as tested under (AATCC-134)
 3. Lifetime stain removal, carpet will resist permanent staining caused by spots and spills (for the useful life of the carpet).

4. Lifetime colorfastness, carpet 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).
5. Lifetime tuft bind, (edge ravel, yarn pulls, zippering)
6. Lifetime delamination, without the use of chair pads.
7. Lifetime moisture penetration (per the British Spill Test Method E)

2.3 PERFORMANCE CHARACTERISTICS

- A. Test reports for the following performance assurance testing to be submitted upon request. Submitted results shall represent average results for production goods of the referenced style.
- B. Requirements listed below must be met by all products.
 1. Flooring Radiant Panel: ASTM E-648 / NFPA 253: Class 1 (CRF: 0.45 watts/sq cm or greater)
 2. Federal Flammability: CPSC FF 1-70: Passes
 3. Smoke Density: ASTM E-662 / NFPA 258: ≤ 450 Flaming Mode
 4. Electrostatic Propensity: AATCC 134 (Step & Scuff): 3.5 kV or less
 5. Static Coefficient of Friction: ASTM C-1028: Passes ADA Requirements for Accessible Routes (minimum 0.60)
 6. Lightfastness: AATCC 16E: ≥ 4 @ 100 hours
 7. Indoor Air Quality: CRI IAQ Certification "Green Label Plus", CRI Test Program ASTM D-5116.

2.4 INSTALLATION ACCESSORIES

- A. Trowelable Leveling and Patching Compounds: Latex-modified, hydraulic-cement-based formulation provided by or recommended by the manufacturer.
- B. Adhesives: 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 carpet manufacturer.
- C. Metal Edge Strips: Extruded aluminum receiver type edge guard, minimum 1-1/2" wide punched anchorage flange and receiver type face flange. Provide hammer in type extruded vinyl cap strip mating and locking with receiver. Colors selected by Architect from among standard colors available within the industry (any manufacturer).

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 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 the carpet manufacturer.
 - 2. Subfloor finishes comply with requirements specified in Division 3 Section "Cast-in-Place Concrete" for slabs receiving carpet.
 - 3. 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 CRI 104, 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 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. Install in accordance with CRI 104, 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. Level adjoining border edges.
- 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. Chemically weld all seams with manufacturer's recommended seam sealer.
 - F. Extend carpet into toe spaces, door reveals, closets, open-bottomed obstructions, removable flanges, alcoves, and similar openings.
 - G. 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.
 - H. Roll with appropriate roller for complete contact with mill-applied adhesive to sub-floor.

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 CRI 104, Section 15, "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.

END OF SECTION 096800

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