

SECTION 09680  
CARPET - MODULAR

PART 1 GENERAL

1.1 SECTION INCLUDES:

- A. Modular Carpet placement.
- B. Accessories

1.2 REFERENCES

- A. ASTM D418 – Test Methods for Testing Pile Yarn Floor Covering Construction
- B. ASTM D2859 - Test Method for Flammability of Finished Textile Floor Covering Materials
- C. ASTM E84 - Surface Burning Characteristics of Building Materials
- D. ASTM E648 - Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy Source
- E. AATCC – American Association of Textile Colorist and Chemists
- F. Florida Department of Agriculture and Consumer Services, Consumer Products Laboratory: Certified Carpet Products
- G. NFPA 253 - Test for Critical Radiant Flux of Floor Covering Systems.

1.3 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Shop Drawings: Indicate pattern direction and layout, dimension of carpet area, location of edge strips and seams, and thresholds.
- C. Product Data: Provide data on specified products, describing physical and performance characteristics sizes, patterns, colors available and method of installation.
- D. Samples: Submit two samples of each color and pattern.
- E. Submit two 12" long samples of edge strip and base gripper for each color specified.
- F. An approved independent testing laboratory shall test carpet, or carpet and pad as an assembly.
  - 1. Provide Owner a copy of test report certifying the class and flammability of carpet and backing.
  - 2. Manufacturer shall include certification the carpet/pad meet the results and the results shall be no more than two-years old at time of certification.
- G. Manufacturer's Installation Instructions: Indicate special procedures, perimeter conditions requiring special attention.

1.4 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing specified carpet with minimum 5-years documented experience.
- B. Installer: Company specializing in installing carpet with minimum 5-years documented experience.

1.5 REGULATORY REQUIREMENTS

- A. Conform to applicable code for flame/smoke rating requirements.
- B. Conform to ASTM E648 Class I for flooring radiant panel test.

- C. Conform to ASTM D2859 for surface flammability ignition test.

1.6 DELIVERLY, STORAGE, and HANDLING

- A. Deliver, store, and handle materials per the manufacturers requirements.
- B. Store materials for at least three-days prior to installation in area of installation to achieve temperature stability.
- C. Maintain minimum 70°F ambient temperature 1-day prior to, during, and 24 hours after installation of materials.

1.7 WARRANTY

- A. Provide written 15-year warranty from the carpet manufacturer against pile wear exceeding 10% in any given area.
- B. Static electricity will maintain static below 3.5 kv @ 70° and 20% relative humidity.
- C. A requirement that any adjustments during the warranty period be handled within 15 days of written notice.
- D. The backing structure will not delaminate from the face structure nor will there be any shrinkage affecting the performance of the face and backing structure for 15 years.

1.8 MAINTENANCE

- A. Submit under provisions of Section 01700.
- B. Maintenance Data: Include maintenance procedures, recommended maintenance materials and suggested schedule for cleaning.
- C. Provide 2% of each type, color, and pattern in addition to that required for proper installation.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Modular Carpet:
  - 1. Approved manufacturers: Shaw Contract Group; Bigelow Commercial; Lees Carpet; and Tandus.
 

Width	24" x 24"
Max. Electrostatic Charge	3.5 KV @ 70° and 20% R.H.
Pile Height	0.187" minimum
Gage	Minimum 1/10 as tested in ASTM D 418
Stitches per Inch	9.6 minimum
Pile Weight	20 oz/sq yd minimum
Average Density	Minimum 6,800 oz/CY
Face Fiber	Nylon Type 6 or 6.6
Finished Pile Thickness	.110 inch
Primary Backing	100% Polypropylene
Secondary Backing	Unitary, 100% synthetic resistance to mildew, decomposition, shrinkage, and supporting odors.
Dye Method	100% Solution Dyed or minimum 65% solution dyed and 35% space dyed
Color	As selected from manufacturer's standards.
  - B. Test and Standards: (Performance Requirements) Provide owner with certification of passing.

1. Flame Spread rating of 25 or less (class A per NFPA) by ASTM-E-84.
2. Smoke Density of 450 or less - by NFPA 258.
3. A peak electrostatic charge of 3.5 KV when tested at 70°F, 20% RH by AISC 135 for the life of the carpet.
4. Breaking Strength: 150 pounds minimum each direction - by ASTM D-682.
5. Shall meet or exceed 0.45 watts per square centimeter for ASTM E648 Class I.
6. Methylamine Tablet Test (DOC-FF-1-70) - pass.
7. Other characteristics:
  - a. Light Fastness per AATCC 16E, 4.0 after 60 hours
  - b. Gas Fade per AATCC 26, 4
  - c. Ozone per AATCC 109, 4
  - d. Anti-microbial per AATCC 174 pt II, greater than 95%
  - e. Fungicidal per AATCC 174 pt III, no growth

## 2.2 ACCESSORIES

- A. Sub-floor Filler: Portland cement-based latex underlayment; type recommended by the flooring manufacturer.
- B. Adhesive: Recommended by carpet manufacturer.
- C. Edge Strips: Color as selected.
- D. Base Gripper: Type, with special lipped edge, color as selected.

## PART 3 EXECUTION

### 3.1 EXAMINATION

- A. Verify that surfaces are smooth and flat with maximum variation of ¼" in 10' and no surface deviations of more than 1/16" per linear foot.
- B. Verify concrete floors are dry to maximum moisture content of 7%; and exhibit negative alkalinity, carbonization or dusting, follow manufacturer's instructions. Provide tests for calcium chloride and PH should be performed to verify that calcium chloride is less than 5 pounds/1,000 square feet and that the PH is greater than 5, but less than 9. Provide documentation of test results to the Florida Tech Project Representative.

### 3.2 PREPARATION

- A. Remove sub-floor ridges and bumps. Fill minor or local low spots, cracks, joints, holes, and other defects with sub-floor filler.
- B. Apply, trowel and float filler to leave smooth, flat, hard surface. Prohibit traffic until filler is cured.
- C. Installer is responsible to ensure the removal of dust, loose material, grease, oil, bond breakers and other foreign substances before installing carpet.
- D. Follow manufacturers requirements before installation.

### 3.3 INSTALLATION

- A. Apply carpet and adhesive in accordance with manufacturer's instructions.
- B. Verify carpet has no distinguishable dye lot variations.
- C. Carpet tile seams shall be free of gaps.
- D. Install carpet edge guards on exposed carpet edges subject to traffic or per the shop drawings. Except if plans indicate another device such as a threshold.

- E. Install thresholds as shown on the shop drawings.
- F. Install rubber base per manufactures requirements in areas show on plans.
- G. Cut and fit carpet around interruptions.
- H. Fit carpet tight to intersection with vertical surfaces without gaps.
- I. Where wall bases are scheduled, cut carpet tight to walls. Fit carpet tight to vertical interruptions, leaving no gaps.

### 3.4 CLEANING

- A. Clean work under provisions of 01700.
- B. Remove excess adhesive without damage, from floor, base and wall surfaces.
- C. Clean and vacuum carpet surfaces.

### 3.5 PROTECTION

- A. Installer shall advise the contractor of areas which shall be protected during the construction period, so the carpet shall be in undamaged and unsoiled condition at the time of acceptance.
  - 1. Installer shall recommend the type of non-staining paper cover material that shall be used for protective cover with taped joints.
- B. General Contractor shall be responsible for keeping carpet clean and undamaged following carpet installation and shall pay for removal and replacement (material and labor) for carpet that is soiled, stained, snagged or destroyed at the direction of the Architect and Owner.
  - 1. If dye lots cannot be matched with the replacement carpet, the carpet shall be replaced in the entire room, suite, floor or building that match replacement carpet at the option of the Architect and Owner to guarantee uniform color throughout installation.

END OF SECTION