

SECTION 09680

CARPET

PART 1 - GENERAL

1.01 Summary

- A. This Section includes carpet, carpet adhesive, and carpet accessories.

1.02 Submittals

- A. **Product Data:** Provide complete product data for each type of carpet material, adhesive and installation accessory required. Submit written data, and test results as required below, on physical characteristics, durability, appearance retention characteristics, and fire performance characteristics.
- B. **Samples:** Provide samples for verification purposes in manufacturer's standard size, showing full range of color, texture, and pattern variations expected. Provide six (6) additional larger 12" x 12" samples for testing purposes. Prepare samples from same material to be supplied to the Owner.
- C. **Warranties:** The carpet manufacturer shall supply copies of all warranties required below with their bids.

1.03 Quality Assurance

- A. **General:** Provide carpet identical to that tested as required below, by independent, approved testing agencies. All carpet supplied to each project under this contract shall be clearly identified with appropriate markings of the applicable testing and inspecting organization for each test required below.
- B. **Fire Performance Characteristics:** Provide carpet meeting or exceeding the following fire performance characteristics or the current requirements of Code authorities, whichever is more restrictive.
 - 1. Carpet Surface Burning Characteristics – small scale ignition test (Pill Test):
 - a) Test Method: DOC FF 1-70.
 - b) Rating: Pass.
 - 2. Critical Radiant Flux:
 - a) Test Method: ASTM E-648; NFPA 253.
 - b) Rating: Class I.
 - 3. Smoke Generation Characteristics:
 - a) Test Method: ASTM E-662.
 - b) Rating: 0 - 450.
- C. **Appearance Retention Characteristics** – Provide carpet meeting or exceeding the following:

1. Appearance Retention Rating (ARR):
 - a) Test Method: Carpet and Rug Institute (CRI) test TM101 graded in accordance with ASTM D-5252(hexapod).
 - b) Rating: Severe Use
2. Colorfastness to Light:
 - a) Test Method: AATCC-16, option E.
 - b) Rating: 4 minimum, 4.5 for heavy light exposure locations, after 40 AATCC fading units using AATCC gray scale for color change.
3. Soiling Resistance:
 - a) Test Method: AATCC 189
 - b) Rating: An average of 3 fluorine analyses of a single composite sample to be a minimum of 300 ppm fluorine by weight when new and 200 ppm fluorine by weight after 2 AATCC 171 (HWE) cleanings.

D. **Durability Characteristics** – Provide carpet meeting or exceeding the following:

1. Tuft Bind / Edge Ravel:
 - a) Test Method: ASTM D-1335.
 - b) Rating: 10 lbs. Of force or higher, wet.
2. Delamination Strength of Secondary Backing:
 - a) Test Method: ASTM D-3936.
 - b) Rating: 2.5 lbs. of force per inch width.
3. Dimensional Stability of Modular Carpet:
 - a) Test Method: Physical measurement.
 - b) Rating: within 1/32” of specifications.

E. The Carpet Manufacturer and/or their authorized representative, will be required to coordinate all installation and material approvals, inspections, and certifications required to support the specified warranties with the Contractor and Owner’s Representative prior to the start of work.

1.04 **Warranties**

- A. **General:** The manufacturer shall supply unrestricted, full replacement non-prorated warranties as listed below.
- B. **Wear:** No more than 10% yarn loss by weight for a minimum of 15 years of carpet under normal use.
- C. **Edge Ravel:** Guaranteed no edge ravel in normal use for a minimum of 15 years of normal carpet use.
- D. **Tuft Bind:** Guaranteed not to zipper for a minimum of 15 years of normal carpet use.
- E. **Delamination:** Primary and secondary backings guaranteed not to delaminate for a minimum of 15 years of normal carpet use.

PART 2 - PRODUCTS

Note: All Invista products shall be “Antron Certified” prior to installation to certify fiber content and fiber weight.

2.01 Broadloom Carpet

A. Carpet:

1. Construction: tufted level or multi-level loop pile.
2. Yarn: Invista Antron Legacy, or Invista Antron Lumena type 6,6 nylon. No substitutions.
3. Dye Method: 100% yarn dyed or a combination of yarn dyed and solution dyed.
4. Pile Weight: 26 oz per square yard or higher measured according to ASTM D-5848.
5. Stitches: 8.3 per inch minimum measured according to ASTM D-5793.
6. Pile Height: 0.145” minimum measured according to ASTM D-6859.
7. Primary Backing: Woven polypropylene or equal.
8. Secondary Backing: Woven polypropylene or equal.
9. Stain Resistant Treatment: Duratech.
10. Moisture Penetration: Impermeable.

B. Carpet Adhesive: Provide highest quality adhesive recommended by the carpet manufacturer for intended use condition. No substitutions.

2.02 Hard Backed and Modular Carpet

A. Carpet Materials – recommend use: general use where additional cleanability, acoustical dampening and durability is desired. Available in modular and 6’ roll goods. Modular carpet is recommended in areas where frequent carpet replacement is anticipated and where replacement of roll goods is impractical due to obstructions in the space.

1. Primary Backing: Reinforced synthetic.
2. Yarn: Invista Antron Legacy, or Invista Antron Lumena type 6,6 nylon. No substitutions
3. Secondary Backing: Fiberglass reinforced thermoplastic composite.
4. Pile Weight: 20 oz per square yard or higher measured according to ASTM D-5848.

5. Stitches: 10.0 per inch minimum measured according to ASTM D-5793.

- B. **Carpet Adhesive:** Provide highest quality adhesive recommended by the carpet manufacturer for intended use condition. All adhesive used for modular carpet tile shall be a **releasable** adhesive. No substitutions.
- C. All other requirements of 2.01 above.

2.03 **Cushion Backed Modular Carpet**

- A. **Carpet Materials** – recommend use: general use where additional clean ability, acoustical dampening and durability are desired. Modular carpet is recommended in areas where frequent carpet replacement is anticipated and where replacement of roll goods is impractical due to obstructions in the space.
 - 1. Primary Backing: Reinforced synthetic.
 - 2. Secondary Backing: PVC Free polyurethane cushion.
 - 3. Pile Weight: 20 oz per square yard or higher measured according to ASTM D-5848.
 - 4. Stitches: 10.0 per inch minimum measured according to ASTM D-5793.
- B. **Carpet Adhesive:** Adhered, Pre-adhered or Adhesiveless backing system. No substitutions.

2.04 **Solution Dyed Carpet**

- A. **Carpet Materials** – recommended use: areas with high sunlight exposure and/or potential exposure to bleaching agents in use or in cleaning adjacent areas.
 - 1. Yarn – Antron Lumena/Legacy, type 6,6 nylon. No substitutions.
 - 2. Dye Method – 100% solution dyed.
- B. All other requirements of 2.01 or 2.02 above.

2.05 **Acceptable Carpet Manufacturers**

- A. Subject to the requirements of this specifications, provide carpet manufacturers as follows:
 - 1. Mohawk
 - 2. Mannington
 - 3. Milliken---Cushion Backed Modular Products Only
 - 4. Tandus

5. Interface

6. Other, if approved in advance

PART 3 – EXECUTION (NOT USED)

END OF SECTION 09680