SECTION 09 68 16 - SHEET CARPETING

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes
   1. Tufted carpet
   2. Carpet cushion.

1.2 SUBMITTALS

A. Product Data: For each product indicated.

B. Shop Drawings: Show the following:
   1. Seam locations.
   2. Pattern type, repeat size, location, direction, and starting point.
   3. Pile direction.

C. Samples: For each color and texture required.

   1. Carpet: 12-inch- square Sample.
   2. Exposed Edge, Transition, and other Accessory Stripping: 12-inch- long Samples.
   3. Carpet Cushion: 6-inch- square Sample.

D. LEED Submittals:

   1. Credit EQ 4.3: Manufacturers' product data for carpet, carpet cushion, and installation adhesive, including printed statement of VOC content.

E. Product Schedule: For carpet and carpet cushion. Use same designations indicated on Drawings.

F. Maintenance data.

G. Attic stock: minimum 10% of roll goods

1.3 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. Mockups: Before installing carpet, build mockups to verify selections made under sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution.

1. Approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

1.4 DELIVERY, STORAGE, AND HANDLING

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

1.5 PROJECT CONDITIONS

A. Comply with CRI 104, Section 7.2, "Site Conditions; Temperature and Humidity" and Section 7.12, "Ventilation."

1.6 WARRANTY

A. Special Warranty for Carpet: Manufacturer's standard form in which manufacturer agrees to repair or replace components of carpet installation that fail in materials or workmanship within specified warranty period. Failures include, but are not limited to, more than 10 percent loss of face fiber, edge raveling, snags, runs, loss of tuft bind strength, excess static discharge, and delamination.

1. Warranty Period: 10 years from date of Substantial Completion.

B. Special Warranty for Carpet Cushion: Manufacturer's standard form in which manufacturer agrees to repair or replace components of carpet cushion installation that fail in materials or workmanship within specified warranty period. Failure includes, but is not limited to, permanent indentation or compression.

1. Warranty Period: 10 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 TUFTED CARPET

A. Products: Subject to compliance with requirements, provide one of the following:

1. <**Insert manufacturer's name; product name or designation.**>

a. Color: As selected by Owner from manufacturer's full range.
b. Pattern: <**Insert pattern**>.

B. Fiber Content: 100 percent nylon 6

C. Pile Characteristic: [**Level-loop**] [**Cut**] [**Cut-and-loop**] pile.

D. Gage: 1/8 to 1/10

E. Stitches per inch: 8 to 12

F. Density: minimum 6200 oz. per cubic yard

G. Face Weight: minimum 20 ounce

H. Total Weight: <**Insert oz./sq. yd.** > for finished carpet.

I. Primary Backing: Manufacturer's standard material.

J. Secondary Backing: Manufacturer's standard material.

K. Backcoating: Manufacturer's standard material.

L. Width: 12 feet.

M. Applied Soil-Resistance Treatment: Manufacturer's standard material.

N. Antimicrobial Treatment: Manufacturer's standard material.

O. Performance Characteristics: As follows:

1. Critical Radiant Flux Classification: Not less than 0.45 W/sq. cm.
2. Dry Breaking Strength: Not less than 100 lbf per ASTM D 2646.
3. Tuft Bind: Not less than 5 lbf per ASTM D 1335.
4. Delamination: Not less than 3.5 lbf/in. per ASTM D 3936.
5. Resistance to Insects: Comply with AATCC 24.
6. Colorfastness to Crocking: Not less than 4, wet and dry, per AATCC 165.
7. Colorfastness to Light: Not less than 4 after 40 AFU (AATCC fading units) per AATCC 16, Option E.
8. Antimicrobial Activity: Not less than 2-mm halo of inhibition for gram-positive bacteria; not less than 1-mm halo of inhibition for gram-negative bacteria; no fungal growth; per AATCC 174.
9. Electrostatic Propensity: Less than 3.0 kV per AATCC 134.
10. VOC Limits: Provide carpet that complies with the following limits for VOC content when tested according to ASTM D 5116:

    a. Total VOCs: 0.5 mg/sq. m x h.
    b. 4-PC (4-Phenylcyclohexene): 0.05 mg/sq. m x h.
    c. Formaldehyde: 0.05 mg/sq. m x h.
    d. Styrene: 0.4 mg/sq. m x h.

2.2 CARPET CUSHION

A. Products: Subject to compliance with requirements, provide one of the following:

1. <**Insert manufacturer's name; product name or designation.**>

B. Traffic Classification: CCC Class I, moderate traffic.

C. Polyurethane-Foam Cushion: Bonded.

1. Compression Force Deflection at 65 Percent: per ASTM D 3574.
2. Thickness: <**Insert inches.**>
3. Density: <**Insert lb/cu. ft..**>

D. Performance Characteristics: As follows:

1. Critical Radiant Flux Classification: Not less than 0.45 W/sq. cm.
2. VOC Limits: Provide carpet cushion that complies with the following limits for VOC content when tested according to ASTM D 5116:

   a. Total VOCs: 1.00 mg/sq. m x h.
   b. BHT (Butylated Hydroxytoluene): 0.30 mg/sq. m x h.
   c. 4-PC (4-Phenylcyclohexene): 0.05 mg/sq. m x h.
   d. Formaldehyde: 0.05 mg/sq. m x h.

2.3 INSTALLATION ACCESSORIES

A. Trowelable Leveling and Patching Compounds: Latex-modified, hydraulic-cement-based formulation provided or recommended by carpet cushion 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 is recommended or provided by carpet and carpet cushion manufacturers.

1. VOC Limits: Provide adhesives that comply with the following limits for VOC content when tested according to ASTM D 5116:

   a. Total VOCs: 10.00 mg/sq. m x h.
   b. Formaldehyde: 0.05 mg/sq. m x h.
   c. 2-Ethyl-1-Hexanol: 3.00 mg/sq. m x h.

C. Tackless Carpet Stripping: Water-resistant plywood, in strips as required to match cushion thickness and that comply with CRI 104, Section 12.2.

D. Seam Adhesive: Hot-melt adhesive tape or similar product recommended by carpet manufacturer for sealing and taping seams and butting cut edges at backing to form secure seams and to prevent pile loss at seams.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Comply with CRI 104 and carpet and carpet cushion manufacturers' written installation instructions for the following:

1. Direct-Glue-Down Installation: Comply with CRI 104, Section 9, "Direct Glue-Down Installation."
2. Double-Glue-Down Installation: Comply with CRI 104, Section 10, "Double Glue-Down Installation."
3. Stretch-in Installation: Comply with CRI 104, Section 12, "Stretch-in Installation."
4. Stair Installation: Comply with CRI 104, Section 13, "Carpet on Stairs" for glue-down installation.

B. Comply with carpet manufacturer's written recommendations and Shop Drawings 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.

C. Extend carpet into toe spaces, door reveals, closets, open-bottomed obstructions, removable flanges, alcoves, and similar openings.

D. Install pattern parallel to walls and borders.

END OF SECTION 09 68 16