
SECTION 09682 - CARPET

PART 1 GENERAL

1.01 SUMMARY

- A. Section includes floor carpet and installation.
- B. Related Sections:
 - 1. 03300 – Cast-in-Place Concrete.
 - 2. 09660 – Resilient Base.

1.02 QUALITY ASSURANCE

- A. Qualifications:
 - 1. Manufacturer: Company specializing in the manufacture of carpeting, with 10 years minimum satisfactory experience.
 - 2. Applicator: Company specializing in the installation of carpeting, with 5 years minimum satisfactory experience, completing at least 5 projects of similar size and complexity, and approved and certified by the carpet manufacturer.
- B. Certificates: Manufacturer's certified statement stating the carpets and materials supplied meet or exceed these requirements.

1.03 REFERENCE STANDARDS

- A. Except as otherwise specified herein or shown on the Drawings, comply with the latest editions of all applicable codes and regulations including the applicable requirements of the following Reference Standards and Codes which are hereby made a part of this Section, as they relate to the carpet.
 - 1. BOCA Building Code, latest Edition.
 - 2. The Occupational Health and Safety Administration (OSHA) Code of Federal Regulations (CFR), Volume 29.
 - 3. National Fire Protection Association: NFPA 258.1994.
 - 4. Federal Flammability Standard CPSC FF I-70.
 - 5. American Society for Testing and Materials (ASTM):
 - a. D418-93 - Test Methods for Testing Pile Yarn Floor Covering Construction.
 - b. D1335-72 - Test Method for Tuft Bind of Pile Floor Coverings
 - c. D2859-96 - Test Method for Flammability of Finished Textile Floor Covering Materials.
 - d. E648-97 - Test Method for Critical Radiant Flux of Floor-Covering Systems

Using a Radiant Heat Energy Source.

- e. E662-95 - Test Method for Specific Optical Density of Smoke Generated by Solid Materials.
6. American Association of Textile Colorists and Chemists (AATCC).
 - a. 16E
 - b. 20
 - c. 30-89 Anti-Fungal Activity Assessment on Textile Materials; Mildew and Rot Resistance of Textile Materials.
 - d. 100-89 Assessment of Anti-Bacterial Finishes on Textile Materials.
 - e. 134-91 Electrostatic Propensity of Carpets.
 - f. 165-88 Colorfastness to Crocking: Carpets - AATCC Crockmeter Method.
7. Carpet Fire Hazard Classifications: NBS Radiant Panel (greater than .22 watt/cm²)
8. CRI: Carpet Specifiers Handbook.

1.04 SUBMITTALS

A. Samples:

1. Two sections 12 x 24 inch of each color and pattern to be furnished.
2. Identify each sample with the name of the manufacturer and full specification data.

B. Shop Drawings:

1. Dimensions of carpeted areas.
2. Pattern direction and layout, including borders, noting additional colors.
3. Location of edge strips and seams.

C. Manufacturers Literature:

1. Carpets: Provide installation, maintenance, and cleaning instructions as recommended by both carpet and fiber manufacturers.
2. Adhesives for Carpet and Base: Carpet and base manufacturer's recommended adhesive and application method for carpet and base. Provide Manufacturer's Safety Data Sheet (MSDS) for each item.
3. Accessories: Manufacturer's technical information for all carpet accessories, fillers, and other floor preparation materials. Describe physical and performance characteristics, sizes, patterns, color availability, and method of installation.
4. Maintenance and cleaning instructions as approved by both carpet and fiber manufacturers.

D. Test Reports:

1. Fire Hazard Classification (Radiant Panel).
2. Dimensional Stability (Aachen Method).

3. Static Electricity Control (AATC-134 and Ohm resistance).
 4. Smoke Density (ASTM E-662)
- E. Certificates: Manufacturer's certification that material supplied will meet or exceed these applications.
- F. Maintenance Material:
1. Provide overage of 5 percent of total carpet used, in each color.
 2. Deliver all unused carpet pieces, properly identified, to Port Maintenance Department.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Deliver products in manufacturer's unopened original dry containers, with all tags and labels intact and legible. Immediately inspect for and note any damage on the bill of lading, for indemnity and timely reordering of products as necessary.
- B. Provide equipment and personnel to handle materials and product assemblies to prevent damage from dropping, careless storage, and handling.
- C. Store materials above grade, on proper dunnage, fully protected from damage by other work and the elements until in place, within manufacturer's recommended temperature range.

1.06 PROJECT CONDITIONS

- A. Environmental Requirements: Comply with referenced standards and manufacturer's printed recommendations. Maintain environmental conditions and protect work during and after installation. Environmental conditions are:
 1. Store materials for 24 hours before installation in area of installation to achieve temperature stability.
 2. Maintain at least 70 degrees F. ambient temperature 3 days before, during, and for 24 hours after installation.
 3. Maintain at least 50 degrees F. ambient temperature after first 24-hour period.

1.07 WARRANTY

- A. Extend the guarantee required by General Conditions from one year to two, covered by a written warranty including the following:
 1. Wear: Guarantee that no part of the wearing surface will wear more than 10% in 10 years.
 2. Static Electricity: Life-of-the-product guarantee that carpet will maintain static below 3 kv @ 70°F and 20% RH.
 3. Adjustment: During guarantee period and within 15 days written notice, reset

and repair areas of faulty workmanship.

4. Color Fastness: In any area, normal exposure to light will not effect a significant change in color for a period of 10 years and exposure to normal atmospheric contaminants will not effect a significant change in color for a period of 5 years.
5. Construction: In any area, the backing structure will not delaminate from the face structure nor will there be any shrinkage affecting performance of the face and backing structure for a period of 10 years.

PART 2 PRODUCTS

2.01 CARPET

- A. Carpet Tile - as manufactured by Mannington Commercial Carpet, 200 Lexington Ave., New York, N.Y. 10016.
Tel.: (212) 251-0290.
 1. Style: To be selected by Resident
 2. Color: To be selected by Resident
 3. Pile: DuPont Type 6,6 Solutio Dyed Nylon with Antimicrobial processing, Soil resistant technology, permanent static control.

2.02 INSTALLATION MATERIALS

- A. Supply all materials, including those specified herein, required to install the carpet. Use adhesives per manufacturer's recommendations or Resident's authorization.
- B. Edge Trim: Stainless steel. Flat head countersunk stainless steel fasteners.
- C. Carpet Adhesive: Non-toxic, latex based, water resistant, in compliance with the overall requirements of the flammability rating for the carpeting installation, and specific recommendations by the manufacturer for the intended use.
- D. Sub floor Filler:
 1. Fill cracks, holes, and depressions with cementitious based or white premixed latex underlayment as recommended by the carpet manufacturer. Latex and powder shall be from the same manufacturer and as recommended by the manufacturer.
- E. Seaming Cement: For synthetic-backed carpet of type recommended by the carpet manufacturer for sealing seams and butting cut edges of carpet backing (and bottom of face pile) at seams, to secure chemically welded seams, and eliminate pile loss at seams.

PART 3 EXECUTION

3.01 INSPECTION:

- A. Examination: Examine surfaces scheduled to receive carpet for:
1. Holes, debris, or other defects that will adversely affect the execution and quality of work.
 2. Deviations beyond allowable tolerances for carpet.
 3. Verify concrete floors are dry to a maximum moisture content of 7 percent and exhibit negative alkalinity, carbonization, or dusting.
- B. Conditions and Surfaces:
1. The floor shall be smooth and flat with maximum variation not to exceed 1/8" in a 10 feet radius and that there are no surface deviations of more than 1/16" per linear foot in any direction. Projecting objects shall be removed and holes filled. Floor shall be clean, dry, and free of any deleterious material capable of preventing bond.
 2. Install carpet within allowable temperature range as stated by manufacturer in installation directive.
 3. Do not proceed with the work until unsatisfactory conditions are corrected. Notify Resident, in writing, of conditions detrimental to the proper completion of the work.

3.02 MEASUREMENTS

- A. Dimensions indicated on Drawings are approximate. Carefully check all dimensions and other conditions affecting this work in the field, and be responsible for proper installation of carpet in areas designated.

3.03 PREPARATION

- A. Verify the following before installation:
1. The floor (substrate) – for cleanliness, free from dust, grease, oil or other foreign matter.
 2. The floor (substrate) – for evenness, cracks 1/8 in. or more. Fill holes or unevenness with a latex based floor filler such as W.W. Henry Co. No. 335 Underlayment Powder mixed with No. 336 Latex Liquid Additive. Grind concrete to remove ridges, lumps and other deviations above the flat floor.
 3. The floor (substrate) for PH-using litmus paper.
 4. The floor (substrate) – for moisture using either watch glass method over three or four day period; by Anhydrous chloride crystals; or by Hygrometer (modified for floor reading).

5. The floor (substrate) – for compatibility of curing agents, where applied, with adhesives to be used. Allow a minimum of ninety days for conventional “damp mop” curing method.
6. The spaces (rooms, areas) – for temperature. Preheat all areas to receive carpet to 64 degrees F. for at least 72 hours prior to installation. Once the installation has begun, the above criteria is to be observed 24 hours a day, 7 days a week until completion of the installation, and for a minimum of 72 hours following completion. Maintain a minimum temperature of 50 degrees F. thereafter.
7. The materials – for temperature. Precondition all carpet and adhesive as above for a minimum of 72 hours prior to use.
8. Apply trowel and float filler to achieve smooth, flat, hard surface. Prohibit traffic until filler is cured.
9. Vacuum clean substrate:
 - a. Ensure that dust, loose material, grease, oil, bond breakers, and other foreign substances are removed from substrate.
 - b. Concrete floors shall have dust thoroughly removed by sweeping and wet mopping.

3.04 INSTALLATION

- A. Supply all materials, including those specified and required to properly install the carpeting. Use of adhesives shall be according to manufacturer's recommendations.
- B. Verify carpet match before cutting to ensure minimal variation between dye lots.
- C. Trim and scribe carpet to allow intended seam and pattern match. Make cuts straight, true, and unfrayed.
- D. Seams: Locate seams in areas of least traffic. Form seams straight, not overlapped or peaked, and free of gaps.
- E. Lay carpet tight and flat on sub floor and well secured at edges with uniform appearance. Provide monolithic color, pattern, and texture match within any one area.
- F. Do not change run of pile in any room where carpet is continuous through a wall opening into another room. Locate change of color or pattern between rooms under door centerline.
- G. Carpet Adhesive: According to manufacturer's instructions and installation directives. The free-lay method of installation is not allowed.
 1. Apply required adhesive according to adhesive manufacturer's instructions.
 2. Use notched trowels to achieve a spread of 10 square yards per gallon.
 3. Apply adhesive uniformly:
 - a. Provide full spread adhesion system.
 - b. Do not soil walls, bases, or adjacent areas.
 - c. Promptly remove spillage.
 - d. Clean applicators and rework patches to assure even spread.

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- e. Install edge strips, stair trim, and other moldings as per manufacturer's instructions.
 - H. Follow carpet, and accessories manufacturer's instructions unless otherwise instructed by Resident.
 - I. Install carpet according to pattern, and finish floor plan Drawings.
 - J. Install with pile inclination in one direction and pattern as indicated on approved shop drawings.
 - K. Cut and fit carpet neatly into breaks and recesses, against bases, permanent cabinets, equipment, and around interruptions.
 - L. Lay entire carpet installation tight and flat to the substrate, roll with a minimum 100 pound roller, with carpet well fastened at edges. Ensure monolithic color, pattern, and texture match within any one area.
 - M. Bind cut edges where not concealed by edge strips.
 - N. Fit carpet tight to intersection with vertical surfaces without gaps.
 - O. Where wall bases are scheduled, cut carpet tight to walls. Fit carpet tight to vertical interruptions, leaving no gaps.
 - P. Install carpet edge guard at every location where edge of carpet is exposed to traffic with an integral carpet binder bar, except where another device such as a threshold is shown.
 - Q. Install carpet thresholds, edge guards, or separators under doors in the closed position.
 - 1. Use appropriate concrete screws for anchoring saddle trim metal.
 - R. Install edging strips where carpet terminates at other floor coverings. Use full length pieces only. Butt tight to vertical surfaces.
 - S. Install:
 - 1. Carpet saddles.
 - 2. Joiners.
 - 3. Transitions.
 - 4. Electrical, mechanical, and other cover plates.
 - 5. Thresholds.
 - 6. Other flooring accessories according to the respective manufacturer's instructions.

3.05 ADJUSTING AND CLEANING

- A. Remove, as recommended by the carpet manufacturer, spots and smears of adhesive from carpet surface with cleaning agent without damage to floor, base, and wall surfaces.

- B. Remove rubbish, wrapping papers, and unnecessary cartons.
- C. Upon completion, vacuum with a commercial beater-bar or commercial pile-lifter type vacuum cleaner.
- D. After each area of carpet has been installed, protect from soiling and damage during construction period.
- E. Dispose of carpet remnants, adhesive containers, packaging materials, and other related refuse off site.

3.06 PROTECTION

- A. Fully protect the carpets until time of project completion, according to the manufacturer's published instructions.
- B. Cover areas to receive traffic with undyed, untreated building paper.
- C. Replace carpet damaged by traffic or other means at no additional cost to owner.

END OF SECTION