



ALBUQUERQUE PUBLIC SCHOOLS

Department of Facility Design & Construction
Department of Maintenance & Operations

MODULAR CARPET TILE STANDARDS

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SECTION 09680 – CARPET

Mannington Evidence Carpet Tile

PART 1 - GENERAL

1.01 SUMMARY

- A. Section Includes: carpet tile and accessories.
- B. General: The following publications of the issues listed below, but referred to hereinafter by basic designation, form a part of this specification to the extent as if bound herein:

American Society for Testing and Materials (ASTM):

1. E648 – Test Method for Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy Source.
2. E662 – Test Method for Smoke Density
3. AATCC 16E- Color Fastness to Light
4. AATCC 129- Color Fastness to Ozone and Gas
5. AATCC 134- Static Generation of Fiber
6. AATCC 175- Red 40 Stain Test
7. DOC-FF-1-70- Pill Test
8. AATCC174 – Antimicrobial Treatment
9. Moisture Penetration by Impact

1.02 SUBMITTALS

- A. Layout Drawings: Show layout of each carpet type installation, at 1/8" scale.
- B. Samples: Submit for verification purposes, 1 full tile of each carpet required. Samples shall be accompanied by manufacturer's technical specification for each carpet required using terminology characteristics as listed in this specification. Also include a complete representation in sample form of all available colorations.
- C. Maintenance Data: Submit manufacturer's printed maintenance recommendations for the care, cleaning, and maintenance of the carpet, including detailed instructions pertaining to hot water extraction methods.

1.03 QUALITY ASSURANCE

- A. Flooring Contractor's Qualifications: Firm with not less than 5 consecutive years of experience in installation of commercial carpeting of type, quantity and installation methods similar to work of this section. FLOORING CONTRACTOR SHALL SUBMIT WITH BID PROPOSAL WRITTEN CERTIFICATION FROM CARPET MANUFACTURER THAT CERTIFIES FIRM AS AN AUTHORIZED DEALER.
- B. Measurement Verification: Dimensions shown on drawings are approximate. It is the Flooring Contractor's responsibility to verify all dimensions and job site conditions; order sufficient yardage to fully carpet areas as indicated and to fill overage requirements as specified. No substitutions shall be permitted to make up for any shortage of material in overage or in carpet to be installed.
- C. Flooring Contractor shall be totally responsible for the accuracy of his measurements of total yardage, individual floor yardage, and dye lot yardage requirements; no additional compensation shall be allowed for shortage of materials.
- D. Dye Lots: All carpet of the same type in continuous areas shall be from the same dye lots.
- E. Owner reserves the right to test carpet at their expense to verify that the delivered carpet is as specified. If carpet does not meet specifications, manufacturer will reimburse owner the testing expense and the carpet

may be rejected.

1.04 PRODUCT DELIVERY, STORAGE & HANDLING

- A. Deliver carpeting materials in original mill protective wrapping with mill register numbers and tags attached. Maintain wrappers and protective covers in place until carpet is ready for installation. Store inside, in well-ventilated area, protected from weather, moisture and soiling.
- B. Deliver all required overages and maintenance stock to owner's specified location prior to beginning installation.

1.05 JOB CONDITIONS

- A. Environmental Conditions: Maintain temperatures in space in accordance with carpet or adhesive manufacturer's recommendations, but in no case less than 65 degrees F for 24 hours prior to, during and after installation. Subfloor temperature should be a minimum 65 degrees F for 24 hours prior to and after installation.
- B. Precondition: All of the carpet shall be stored in a room on site 24 hours prior to actual installation with the room preconditioned at a minimum of 65 degrees F with humidity between 10% and 65%.
- C. Moisture: A calcium chloride test should be performed on the concrete to detect the presence of moisture. Acceptable results require that moisture content does not exceed 3 lbs. per 1,000 square feet per 24 hours. One calcium chloride test should be performed for every 300 yards of carpet. Relative Humidity ASTM-F-2170 test method may be used in place of calcium chloride test. Acceptable moisture levels are 75% maximum relative humidity. Alkalinity tests must also be performed. PH should register between 5 and 9. All tests should be documented and results saved.

1.06 SEAMING REQUIREMENT

- A. General: In addition to the requirements and recommendations of the Carpet Manufacturer, the following criteria shall be adhered to:
 - 1. Installation layout shall enable future replacement, especially in large open areas and traffic paths, unless specifically indicated in writing by owner or owner's representative.
 - 2. No carpet tile pieces smaller than 6" in width or length shall be used.
 - 3. Seams occurring at doors of different types of carpet shall be parallel to closed door, and be centered directly under the closed door.
 - 4. Flooring Contractor is responsible for trimming all loose yarn and fuzzy edges of carpet tiles.
 - 5. All cutting of carpet for telephone and electrical outlets shall be the responsibility of the Flooring Contractor.

1.07 WARRANTY

- A. General: Provide special warranty, signed by Flooring Contractor, agreeing to repair or replace defective workmanship during a 10 year warranty period following date of Substantial Completion. Attached copies of product warranties as required in Part 2, item 2.01 of this specification section for warranties required.

1.08 EXTRA STOCK

- A. General: Furnish 5% additional yardage of each carpet type required; extra yardage is over and above any overage provided by manufacturer. Normal manufacturing overage not to exceed 10% for under 1000 yards, not to exceed 5% for over 1000 yards. Deliver to the Owner uncut in clearly marked dust-proof packages **prior to commencement of work**; store where directed.

PART 2 - PRODUCTS

2.01 CARPET

- A. Carpet: Mannington Evidence Carpet Tile
Construction: Tufted pattern loop
Face Fiber: Invista Antron Legacy Type 6, 6 Four Hole, Hollow Filament Nylon, with Permanent Stain Protection, Static Control, and Duratech Soil Resistant Treatment, and a Fiber Modification Ratio of < 1.5
- Dye Method: Solution/Yarn
Gauge: 1/12
Stitches per Inch: 9.8
Pile Thickness: .120 inch
Yarn Weight: 21 ounces per square yard
Primary Backing: 100% Woven Synthetic
Primary Precoat: 100% Vinyl Non-Aqueous Closed Cell Polymer, Providing Lifetime Warranty against Stain Wick-Back
Secondary Backing: Infinity™ RE Reinforced Vinyl Composite Closed Cell Polymer with 24% recycled content by total product weight. With minimum 14% post-consumer recycled content by total product weight
Soil Retardant: DuraTech by Invista
Stain Resistance: XGuard
Bleach Resistance: ColorSafe
Size: 24 x 24
Fiber Modification Ratio: < 1.5; to estimate the Modification Ratio of a fiber shape, the size of the outer circle's circumference of the fiber is compared to the size of the inner circle's circumference. The smaller the number, the less likely the fiber shape will trap and hold soil and be subject to premature crushing and matting.
Static Control: < 3.0 KV when tested under AATCC 134
Flammability:
 a. DOC-FF-1-70 Pill Test: Passes
 b. Floor Radiant Panel: Meets NFPA Class 1 when tested per ASTM-E-648 glue down
 c. NBS Smoke Chamber: Less than 450 Flaming Mode. Per ASTM-E-662
Colorfastness:
 a. Lightfastness - AATCC 16E-1982 - Dark color: Gray scale rating of 4 or better after 160 standard fading hours as compared to AATCC Gray Scale for evaluation change in color.
 b. Ozone and Gas - AATCC 129-1981 - Rating 3 or better per color AATCC transference scale.
Moisture Barrier: Passes Moisture Impact at 10,000 cycles.
Passes British Spill Test
Indoor Air Quality: Carpet is certified under the CRI Green Label Plus Program.
NSF/ANSI 140: SCS Sustainable Choice Platinum Certification
Antimicrobial: Passes AATCC174
Carpet Manufacturer: Mannington Commercial
Contact: Rod Eaves (505)259-4667

B. WARRANTIES

1. Definition of Lifetime: Lifetime is defined as the period from which materials are installed until the date in which the owner removes them from service.
2. Manufacturer's Lifetime Warranty, non-prorated, against product failure covering all costs including freight, labor, and material for the following:
 - Edge Ravel
 - Back delamination
 - Superior tuft bind in high traffic environments, wet or dry
 - Static protection as stated above.

- Moisture Barrier-Pre-Coat and Backing
- Wear - No more than 10% Face Yarn Loss
- Wick-back of stains

C. STAIN RESISTANCE

1. Stain resistant properties must be permanent and not removable by commercial cleanings or abrasive wear. Under GSA requirements stain resistant carpets must score no less than 8.0 (10.0 is the best) on the AATCC Red 40 Stain Scale. Test sample must first be exposed to 100 revolutions on the Taber Abrader (1,000-gram weight per H-18 wheel) and then abraded area must be stain tested using AATCC test method 175. Topical stain resistant treatments will not be acceptable. Stain resistant properties must be inherent.

D. BLEACH RESISTANT

1. Will resist color loss from diluted bleach applications for a period of fifteen years from the date of original installation. Diluted bleach applications means spills or splashes on the carpet of diluted bleach solutions (10% or less) of the type normally used for cleaning or disinfecting purposes.

E. ENVIRONMENTAL ATTRIBUTES – LEED Criteria

1. Materials Credit 2: Construction Waste Management
2. Materials Credit 4: Carpet tile must be 100% recyclable.
3. IEQ Credit 4: Low Emitting Materials
4. NSF/ANSI- 140 standards: SCS Sustainable Choice-Platinum/EPP, California Platinum.
5. Environmentally Preferred Product – Carpet tile must have third party certification (such as Scientific Certification Systems) in accordance with Executive Order 13101 as an Environmentally Preferred Product (EPP)
6. Recycled Content: 24% minimum recycled content by total product weight. With 14% post-consumer recycled content based on total product weight.
7. 100% recyclable
8. Carpet mill must be ISO 14001 certified.
9. Carpet Face Yarn: In accordance with Executive Order 13101, carpet face yarn must be third party certified as an Environmentally Preferred Product (EPP).
10. Low Emitting Materials: Carpet and adhesive must meet the *Low Emitting Materials* standards as outlined in U.S. Green Building Council LEED criteria.
11. Environmental claims by manufacturer comply with FTC Guidelines
12. End of Life Reclamation: existing methodology actively in place to achieve landfill diversion.

2.02 ACCESSORIES

- A. Miscellaneous Materials: As recommended and approved in writing by manufacturer of carpet, and selected by Flooring Contractor to meet project circumstance and requirements.
- B. Protection Paper: Fortifiber Corporation "Seekure 892", or approved heavy, reinforced, non-staining kraft laminated paper.

PART 3 - EXECUTION

3.01 INSPECTION

- A. General: Do not start work until works of other trades are substantially completed. Inspect surfaces to receive carpet and verify that all such work is complete to the point where this installation may properly commence. In the event of discrepancy, notify Construction Manager. Do not proceed with installation in areas of discrepancy until all such discrepancies have been fully resolved. Start of carpet installation indicates acceptance of subfloor conditions and full responsibility for completed work.

3.02 INSTALLATION GENERAL

- A. General: Comply with manufacturer's instructions and recommendations for installation of this type of carpet by the Frellock fully releasable no spread method.
- B. Prepare the subfloor to insure a successful installation.
- C. Carpeting shall be installed with pile lying in the same direction unless another specified method is recommended by the manufacture or at owner's approval. Cut carpet tile evenly and accurately to fit neatly at walls, columns, and projections. Extend carpet under open-bottomed and raised-bottom obstructions, and under removable flanges of obstructions.
- D. Installed carpet tiles shall be free from ripples, ravel, frays, and puckers. All loop pile carpets will demonstrate some fuzzy edges due to normal manufacturing conditions. It is the installer's responsibility to trim edges to eliminate fuzzy seams.
- E. Expansion Joints: Do not bridge building expansion joints with continuous carpeting, provide for movement.

3.03 CLEANING AND PROTECTION

- A. Remove and dispose of debris and unusable scraps.
- B. Vacuum carpet using two motor, top loading, upright commercial machine with brush-only element, utilizing a high filtration dust bag. Remove spots in accordance with carpet manufacturer's guidelines and replace carpet where spots cannot be removed. Remove any protruding face yarn using sharp scissors. Be certain to trim any loose yarns or fibers at all seams.
- C. Following cleaning and vacuum carefully protect the carpeting from soiling and damage until final acceptance. Protection shall be accomplished by using approved protection paper. Edges shall be lapped 6 inches and secured with non-asphaltic tape. Covering shall be kept in repair and damaged portions replaced during the construction and move-in period.
- D. Maintenance Materials: Deliver usable scraps to Owner's designated storage space, properly packaged and identified. Dispose of smaller pieces as construction waste.