

**Product Guide Specification  
Commercial Carpet**

**SECTION 09680**

**MODULAR Carpet**

**PART 1: GENERAL**

**1.1 SECTION INCLUDES:**

- A. Manufacturers
- B. Testing Protocols
- C. Performance Requirements
- D. Product Specifications
- E. Environmental Requirements
- F. Warranties
- G. Exclusions
- H. Installation
- I. Maintenance
- J. Accessories

**1.2 REFERENCES**

American Association of Textile Chemists and Colorists (AATCC):

- AATCC 16 – Test Method for Colorfastness to Light
- AATCC 107 – Test Method for Colorfastness to Water
- AATCC 129 Test Method for Colorfastness to Ozone in the Atmosphere under High Humidity.
- AATCC 134 – Test Method for Electrostatic Propensity of Carpets.
- AATCC 165 –(93) Test Method for Colorfastness to Crocking: Carpets – AATCC Crock Meter Method
- AATCC 175-(98) Test Method for stain Resistance: Pile Floor Coverings

American Society for Testing and Materials (ASTM):

- ASTM D418-(12), Methods for Testing Pile Yarn Floor Covering Construction (Finished Pile Thickness only)
- ASTM E648 – Test Method for Critical Radiant Flux of Floor Covering Systems using a Radiant Heat Energy Source.
- ASTM E662 – Test Method for Specific Optical Density of Smoke Generated by Solid Materials.
- ASTM D3676 – Test Method for Thickness
- ASTM D3676 – Test Method for Compression Resistance
- ASTM D3676 – Test Method for Volume Density.
- ASTM D3676 – Test Method for Compression Set.
  
- International Standards Organization (ISO):
  
- ISO 2551 – Test Method for Dimensional Stability (Aachen Test)

- Carpet and Rug Institute (CRI):
- CRI Indoor Air Quality Testing and Labeling Program
- U.S. Department of Housing and Urban Development (HUD):
- HUD UM 44D-(93), HUD Building Product Standards and Certification Program for Carpet.

**1.3 PERFORMANCE REQUIREMENTS**

<b>Section 1.3 Complies</b>	
<b>Yes</b>	<b>No</b>
Initial	

Comply with the following performance requirements:

- Radiant Panel: ASTM E648: >.45 watts/sq. cm: Class 1
- Smoke Density: ASTM E662: 450 Flaming Mode - Maximum
- Static Generation: AATCC 134: 3.5 KV - Maximum
- Lightfastness: AATCC 16E: Min 4.0 at 40 hrs.
- Crocking: AATCC 165: 4.0 – Wet/Dry
- Cold Water Bleed: AATCC 107: 3.0 - Minimum
- Ozone Fade: AATCC 129: 3.0 - Minimum
- CRI Green Label Air Quality Certification: Pass
- Aachen Test: ISO 2551 Less than .15% shrinkage or growth
- Stain protection: AATCC 175: Equal to or greater than 8.0 on Red 40 stain test.

Comply with the following Construction performance requirements:

- Delamination: Pass 50,000 cycles roll stool test
- Cushion Density: 18 lb. Per Cubic Foot Minimum
- Compression Resistance Test: 7.5 lb/sq. in. minimum
- Compression Set: 10% Maximum
- Elongation: 60% Minimum
- Tensile Strength: 50 lb/ sq. in. minimum
- Moisture Barrier-non seam area: Passes British Spill Test

**1.4 SUBMITTALS**

- Manufacturer's Data  
Submit two (2) copies of manufacturer's specifications and installation instructions for modular carpet and related items specified.
- Fiber Requirements  
Submit certification from the fiber producer verifying the following:
  - Use of the specified fiber in the submitted carpet product.
- Warranties  
Submit warranties as described in Section 1.13
- Maintenance
  - Maintenance Manual – submit manual of carpet manufacturer's recommendations for the general care, cleaning and maintenance of modular carpet products.

- Certificate of Compliance  
Submit certified test reports that modular carpet meets all the performance requirements stated above in section 1.3 Performance requirements. Submit certified test reports from a NVLAP Certified Lab that carpet meets all performance criteria.
- Shop Drawings  
For carpeted areas submit shop drawings showing installation of carpeting, pattern direction, necessary installation accessories, and provisions for work of other trades. Show location of different patterns or styles of modular carpet. Also show locations of any threshold conditions
  - The contractor will supply reproducible prints on request, to facilitate shop drawing preparation.
- Samples  
Submit standard-size modular carpet samples of each type of carpet, in each specified pattern, color and construction.

Any alternates to specified products must be submitted for approval by a representative of the end user or architect/design firm at least ten (10) working days prior to bid or proposal.

- Final Sample Submittal  
Submit two (2) sets of samples for each carpet type.
- No carpet shipments are permitted until acceptance of final samples is given by representative of the end user or architect/design firm, certifying that samples are the approved color, pattern and texture.
- Custom Color only  
A representative of the end user or architect/design firm, certifying that the samples are the approved color, pattern and texture, shall sign high quality color samples.
- Samples submitted are assumed to be the manufacturer's best obtainable match to the color described under Materials Section.

## 1.5 CLOSEOUT SUBMITTALS

- Maintenance Data  
Include maintenance procedures, recommended cleaning and stain removal materials, and recommended cleaning schedule. Include product data and Material Safety data Sheets (MSDS) for cleaning and stain-removal materials.
- Installation Instructions  
Include detailed installation procedures. Include modular installation procedures, adhesive types, trowel sizes, spread rates, open times, and Material Safety data sheets (MSDS) for all modular adhesives.

- Warranties and Performance Certifications  
Submit written warranties for all products as well as Performance testing results on all items included in Warranty section and Performance section of this specification.

**1.6 QUALITY ASSURANCE**

- Single Source Responsibility: Provide products from a single manufacturer.
  - Warranties must be standard and not job specific.
  - All styles must come from the same manufacturer.
  - Must be single source fiber extrusion and yarn manufacturing.

<b>Section 1.6 Complies</b>	
<b>Yes</b>	<b>No</b>
Initial	

**1.7 QUALIFICATIONS**

- Installer/Flooring Contractor Qualifications
  - Carpet contractor must provide all the necessary licenses, performance bonds, and insurance certificates that comply with all local, state, and federal laws, ordinances, or codes prior to the start of the installation.
  - Carpet contractor shall be a firm established not less than five (5) years and, if requested, shall submit evidence of having furnished and installed commercial carpet on commercial carpet projects of similar size and scope for at least give (5) years.
  - Flooring Contractor to provide references at the request of the owner.
  - Carpet Contractors must also be mill certified for installing products.
  - Carpet Contractor will be responsible for the proper product installation, including floor preparation, in those areas indicated in the Drawings.
  - Carpet Contractor to provide owner a written warranty that guarantees the completed installation be free from defects in materials and workmanship for a period of two (2) years after job completion.

<b>Section 1.7 Complies</b>	
<b>Yes</b>	<b>No</b>
Initial	

**1.8 PRE-INSTALLATION MEETINGS**

- Convene one (1) week prior to commencing work of this section.
- Require attendance of (manufacturer), (installer), (contractor), (owner), (architect) and other parties directly affecting the work of this section.

## **1.9 DELIVERY, STORAGE AND HANDLING**

- Deliver modular carpet in sealed protective boxes and accessories in sealed containers. Segregate each modular product (if several product styles are involved), according to style, color, pattern, dye lot, run number, and quantity.
- Store products in an enclosed and dry area protected from damage and soiling.
- Delivery shall be phased according to the Project Schedule. Products shall not be stored more than 30 days. Contractor shall not store products at Harbor Department facilities prior to installation.

## **1.10 SITE ENVIRONMENTAL REQUIREMENTS**

- Do not install modular carpet until all areas have been fully enclosed and the environmental conditions have reached the levels desired for occupancy of the space.
- Maintain ambient temperature and humidity conditions during and after installation of modular carpet at occupancy levels.
- Allow modular carpet to reach room temperature, or minimum temperature recommended by manufacturer prior to the start of the installation.
- Protect adhesives from freezing. Follow manufacturer's recommendations for minimum temperatures to which adhesives are exposed.
- IAQ Requirements: All adhesive products must be CRI Green Label Certified.
- Must have 95% recycled content in backing.

## **1.11 FIELD MEASUREMENTS**

- Verify that field measurements are as indicated on drawings.

## **1.12 SEQUENCING**

- Sequence installation so as to minimize possibility of damage and soiling of carpet.
- Do not commence installation until painting and finishing work are complete, and ceiling and overhead work have been tested, approved and completed.
- Remove and replace existing carpet (renovations) in accordance with pre-approved architectural plan.

**1.13 WARRANTY**

Warranty Performance Requirements

- Warranties must be for a minimum of 15 years on all items.
- Warranties must cover face components and backing components.
- Carpet manufacturer must warrant both product and adhesive systems.
  - Provide manufacturer’s warranties as outlined below
    - Wear
    - Static
    - Edge Ravel
    - Zippering
    - Dimensional Stability
    - Cushion Resilience
    - Impervious to Liquids

**1.14 EXTRA MATERIALS**

- Provide percent 5% overage of calculated yardage for each type of carpet (include carpet needed for complete installation plus waste and usable scraps in calculated yardage) as specified by the Engineer. Recycle waste, unusable scrap and any modular carpet damaged during installation through a qualified industry recycling or manufacturer environmental program.
- Deliver specified attic stock requirements to Owner’s designated storage space, properly packaged and identified.

**PART 2: PRODUCTS**

**2.1 MANUFACTURERS**

- Atlas Contract 716 Bill Myles Dr. Saraland, AL 36571 Web Site: [www.atlascarpetmills.com](http://www.atlascarpetmills.com) .
- Substitutions:
  - Substitutions or variations in the backing system composites are to be approved by LA Harbor Dept. Any substitutions must be submitted 30 days prior to bid to be considered.
  - Substitutions or variations in any part of this specification for fiber is not allowed.

<b>Section 2.1 Complies</b>	
<b>Yes</b>	<b>No</b>
Initial	

## **MODULAR CARPET TILE CONSTRUCTION**

- All yarn and other carpet materials shall be manufacturer's first quality.
- Modular backing composite shall be constructed in the following manner:
- Backing Material/Composition  
Primary – Reinforced, non-woven synthetic  
Bonding Agent – EVA Precoat  
Cushion layer – Polyester fiber Non-woven Cushion with 95% Post consumer  
Total Backing Weight: 15 ounces per sy

## **DETAILED PRODUCT CONSTRUCTION SPECIFICATIONS**

### **Carpet 1**

Style Name:	Moss
Color:	Splash 13MS
Product Type:	Modular
Tile Size:	12"x36"
Construction:	Tufted - Interloop
Surface Appearance:	Multi level Loop
Pitch/Gauge:	1/12
Pile Weight:	24.0 Oz. per sq. yd.
Total Pile Thickness:	.31" (3.20 mm)
Dye Method:	Solution Dyed
Nylon Type:	Antron Lumena DNA SD 6,6 Nylon
Protective Treatment:	Not applicable – Built in
Primary Backing:	Non - Woven
Backing Foundation:	EVA
Secondary Backing:	Perma Tile – 33% recycled content
Tile Size:	12" x 36"
IAQ Green Label:	GLP5300

### **Carpet 2**

Style Name:	Pebble
Color:	Splash 13PB
Product Type:	Modular
Tile Size:	12"x36"
Construction:	Tufted - Interloop
Surface Appearance:	Multi level Loop
Pitch/Gauge:	1/12
Pile Weight:	24.0 Oz. per sq. yd.
Total Pile Thickness:	.31" (3.20 mm)
Dye Method:	Solution Dyed
Nylon Type:	Antron Lumena DNA SD 6,6 Nylon
Protective Treatment:	Not applicable – Built in
Primary Backing:	Non - Woven
Backing Foundation:	EVA
Secondary Backing:	Perma Tile – 33% recycled content
Tile Size:	12" x 36"
IAQ Green Label:	GLP5300

**Carpet 3 – Conference Rooms**

Style Name: Sumatra  
 Color: Bratan Lake 02UM  
 Product Type: Modular  
 Tile Size: 12"x36"  
 Construction: Tufted - Interloop  
 Surface Appearance: Multi level Loop  
 Pitch/Gauge: 1/12  
 Pile Weight: 22.0 Oz. per sq. yd.  
 Total Pile Thickness: .188"  
 Dye Method: Piece Dyed  
 Nylon Type: Antron Legacy 6,6 Nylon  
 Protective Treatment: Dura Tech  
 Primary Backing: Non - Woven  
 Backing Foundation: EVA  
 Secondary Backing: Perma Tile – 33% recycled content  
 Tile Size: 12" x 36"  
 IAQ Green Label: GLP5300

**2.2 ACCESSORIES**

- Leveling Compound: Latex type as recommended by carpet manufacturer; compatible with carpet adhesive and curling/sealing compound used on concrete.
- Releasable Adhesive: Masland Low VOC™ modular adhesive TVOC < 0.5 mg./m3 or Sustaina99 as recommended by carpet manufacturer for direct glue down of modular tiles and/or as site conditions warrant; comply with CRI Green Label Certification Program for adhesives.
- Non-Metallic Carpet edge Guard: Extruded or molded heavy-duty vinyl or rubber carpet edge guard of size and profile indicated; minimum two (2) inch wide anchorage flange; colors selected by (Architect) (Designer) from manufacturer's standard range of colors. Available through Versatrim.
- Miscellaneous Materials: As recommended by manufacturer of carpet, cushion, and other carpet products; as required to complete installation.

<b>Section 2.2 Complies</b>	
<b>Yes</b>	<b>No</b>
Initial	

**PART 3 EXECUTION**

**3.1 EXAMINATION**

- Examine substrates for conditions under which modular carpet tiles are to be installed.
- Verify that floor surfaces are smooth and flat within tolerances specified in Section 3.2 and are ready to receive work.
- Beginning of installation means installer accepts existing substrate conditions.



### 3.2 PREPARATION

- Allow new concrete to cure for 90 days before carpet installation starts.
- Perform moisture content testing as required by manufacturer's instructions to ensure pH readings of no more than nine (9). Moisture transmission of 5.0-lbs/sq. ft per 24 hours is acceptable. If values exceed this level, use Sustaina99 Adhesive. This adhesive will work up to 12PH & 99 Relative Humidity when utilizing Sustaina Carpet Tile backing. Do not proceed until unsatisfactory conditions have been corrected.
- Remove sub-floor ridges and bumps. Fill minor or local low spots, cracks, joints, holes and other defects with sub-floor filler.
- Fill, level and make smooth cracks 1/16 inch or more, holes, unevenness, and roughness with compatible latex floor patching compounds. Feather floor filling or leveling compound a minimum of four (4) ft. Sweep floor of loose granular debris prior to filling. After filling, allow filler to dry. Damp mop floor with warm water and allow to dry. Vacuum after mopping to ensure that loose granular debris is removed and to provide a proper substrate to install modular carpet. Prohibit traffic until filler is cured.
- Vacuum floor again immediately before installation of carpeting.
- Confirm compatibility of Masland premium releasable carpet tile adhesive with curing compounds on concrete floors.
- Preheat areas to receive modular carpet to a minimum temperature of 68° F for 72 hours prior to installation, with a relative humidity of not more than 65 percent. Maintain minimum temperature of 50° F thereafter. Modular carpet and adhesive must be stored at a minimum temperature of 68° F, for 72 hours prior to installation.
- Store Masland carpet tile adhesive and other liquid materials in same atmospheric conditions as carpet, 68° F for at least 72 hours.

### 3.3 INSTALLATION

- Install modular carpet in accordance with the Technical Bulletins provided by the manufacturer. These technical bulletins will offer the proper instructions to install modular carpet including: (1) conducting site testing and conditioning, (2) floor preparation, (3) installation of the modular carpet, including modular carpet layout (if more than one pattern or color) and approved adhesives, systems, etc. As a supplement, the CRI 104, section 8 will supply additional installation support guidance for your installation.
- Install modular carpet under open-bottom obstructions and under removable flanges and furnishings, and into alcoves and closets in each space.
- Conceal cut edges with protective edge guards or flanges. Trim options available from Versatrim.

- Install modular carpet under open-bottom items and cut tiles tight against walls, columns, and cabinets so that the entire floor area is covered with modular carpet. Cover over floor-type door closers.
- Install edging guards at openings and doors wherever modular carpet terminates, unless indicated otherwise.
- Perform cutting in accordance with manufacturer's recommendation using tools designed for modular carpet being installed. Verify modular carpet patterns and colors before cutting to insure minimal variation between dye lots.
- Install modular carpet according to manufacturer's instructions. Depending on the product specification, install either monolithically, quarter turned, Ashlar, or random or as per the enduser's direction. Installation requirements will be spelled out in the architectural drawings for the recommended method to be employed.
- Use leveling compound where necessary. Feather floor leveling compounds minimum of 4 ft.
- Trim modular carpet neatly at walls, and around interruptions
- Complete installation of edge strips, concealing exposed edges.
- Cut modular carpet at fixtures, architectural elements, and perimeters.
- Install carpet on stairs using acceptable permanent adhesive. Furnish and use compatible edge strip and nosing products as required.

### **3.4 FIELD QUALITY CONTROL**

- Inspect completed modular carpet installation on each floor
- Verify that installation is complete; work is properly done and acceptable
- Remove and replace, at no additional cost to owner, any work found not to be acceptable.

### **3.5 CLEANING**

- On completion of installation in each area, remove dirt and scraps from surface of finished modular carpet. Clean soiling, spots, or excess adhesive on carpet with cleaning materials recommended by carpet manufacturer.
- Remove debris; sort pieces from carpet scraps
- At completion of work, vacuum carpet using commercial vacuuming equipment as recommended by manufacturer. Remove spots and replace modular carpet where spots cannot be removed. Remove rejected modular carpet pieces and replace with new modules. Remove any protruding yarns with shears or sharp scissors.

### **3.6 PROTECTION**

- Do not permit traffic over unprotected carpet surface.
- Protect modular carpet against damage during construction. Cover with Floor Protection paper during construction period so that carpet will be without soiling, deterioration, wear, or damage at time of completion. Do not use adhesive backed plastic – this may null and void manufacturer's warranty.
- Prior to furniture move in, heavy traffic areas will be protected with additional masonite sheets to protect the carpet from damage
- Damaged modular carpet will be rejected. As modular carpet is installed, remove trimmings, scraps of carpet and installation materials.
- Maintain protection of carpeting on each floor or area until work is accepted.

END OF SECTION