

SECTION 09690  
CARPET TILE

PART 1 – GENERAL

1.01 SUMMARY

A. Section Includes

1. Carpet Tile
2. Installation

B. Related Documents: Drawings and general provisions of the Contract, including:

1. General and Supplementary Conditions
2. Division 1 Specification Sections

1.02 SUBMITTALS

A. Shop Drawing showing columns, doorways, enclosing walls or partitions, built-in cabinets, and locations where cutouts are required as well as direction of carpet pile and pattern, location of edge moldings and edge bindings shall be submitted to the Architect for approval prior to installation.

B. Carpet schedule using same room designations indicated on drawings.

C. Product Data: Provide data on specified products, describing physical and performance characteristics, sizes, patterns, colors available, and method of installation.

D. Selection Samples: Submit manufacturer's complete set of color samples for Architect's initial color selection.

E. Verification Samples: Submit two 18" x 18" samples illustrating color and pattern for each carpet material specified.

F. Manufacturer's Installation Instructions: Indicate special procedures and perimeter conditions requiring special attention.

G. Maintenance Data: Include maintenance procedures, recommendations for maintenance materials and equipment, and suggested schedule for cleaning.

H. Manufacturer's Carpet Warranty.

I. Certification of Recycled Content and verification of reclamation and recycling program.

J. Certifications: Manufacturer to submit copies of the following independent laboratory reports showing compliance with requirements per these methods outlined in Part 2 of this document. Submitted results shall represent average results for production goods of the specified style.

1. ASTM E-648 Flooring Radiant Panel
2. ASTM E-662: Smoke Density
3. AATCC 134: Electrostatic Propensity
4. CRI TM-102: Fluorine Analysis
5. ASTM D-3936: Delamination
6. Other from methods specified in Part 2

### 1.03 QUALITY ASSURANCE

#### A. Manufacturer Qualifications

1. Company specializing in manufacturing specified carpet with minimum 6 years documented experience.
2. Upon request, manufacturer to provide representative to assist in project start-up and to inspect installation while in process and upon completion. Representative will notify designated contact if any installation instructions are not followed.
3. Single Source Responsibility: Obtain each type of carpet from one source and by a single manufacturer.

#### B. Installer Qualifications

1. Flooring contractor must be certified by the carpet manufacturer prior to bid.
2. Flooring contractor to be a specialty contractor normally engaged in this type of work and shall have prior experience in the installation of these types of materials.
3. Not Used
4. Flooring contractor possessing Contract for the carpet installation shall not subcontract the labor without written approval of the Project Manager.
5. Flooring contractor will be responsible for proper product installation, including floor testing and preparation as specified by the carpet manufacturer and JOB CONDITIONS herein.
6. Flooring contractor to provide Owner a written installation warranty that guarantees the completed installation to be free from defects in materials and workmanship for a period of one year after job completion.

### 1.04 DELIVERY, STORAGE, & HANDLING

A. Deliver materials to the site in manufacturer's original packaging listing manufacturer's name, product name, identification number, and related information.

B. Store in a dry location, between 60 degrees F and 80 degrees F and a relative humidity below 65%. Protect from damage and soiling. Store in pallet form as supplied by Manufacturer. Do not stack pallets.

C. Make stored materials available for inspection by the Owner's representative.

D. Store materials in area of installation for minimum period of 48 hours prior to installation.

### 1.05 PROJECT CONDITIONS

A. Sub-floor preparation is to include all required work to prepare the existing floor for installation of the product as specified in this document and Manufacturer's installation instructions.

B. The maximum amount of moisture evacuation from the floor is 3.0 pounds per 1,000 square feet in 24 hours. The acceptable pH level of the substrate is between 7.0 and 9.0. The flooring subcontractor is responsible for floor testing.

C. All material used in sub-floor preparation and repair shall be recommended by the carpet manufacturer and shall be chemically and physically compatible with the carpet system being bid.

D. Maintain minimum 65 degrees F ambient temperature and 65% Relative Humidity for 72 hours prior to, during, and 48 hours after installation.

E. Do not install carpet until space is enclosed and weatherproof, wet-work in space is

completed and nominally dry, work above ceilings is complete, and ambient temperature and humidity conditions are and will be continuously maintained at values near those indicated for final occupancy.

#### 1.06 EXTRA MATERIALS

A. Provide additional 5% of each type, color, and pattern furnished; product to be boxed and, when necessary, palletized. Coordinate storage location with owner.

B. Deliver all unused carpet and large scraps to Owner for "attic stock."

### PART 2 – PRODUCTS

#### 2.01 RECYCLED CONTENT

A. Product must contain a minimum of 30% recycled content by weight. This percentage is calculated by dividing the weight of recycled content in one square yard of finished carpet by the total weight of one square yard of finished carpet and multiplying by 100. [(Recycle Content Weight) / (Total Product Weight) x 100] per FTC Marketing Guides 16 C.F.R. § 260.7 (e)1. Additionally, product must contain a minimum of 20% recycled carpet by weight.

B. Recycled content must be certified by a neutral, independent, third party organization such as Scientific Certification Systems. Product must carry product label certifying overall recycled content (including post-industrial and post-consumer content). Report percentage of postindustrial and post-consumer recycled content as a percentage of total product weight and the source(s) of recycled content.

C. Product must have a minimum 10% post-consumer recycled content by weight from recycled post consumer carpet. This ensures that carpet is diverted from landfills for the production of the product and that virgin resource use in the product is reduced.

D. Product must be available inclusive of 100% recycled content secondary backing with no upcharge. The secondary backing must contain at least 75% recycled carpet of which a minimum of 25% shall be post consumer carpet.

1. Recycled content and post consumer content must not be subject to availability. Post industrial and post consumer recycled content of product installed must be the same as those required by Project requirements.

2. Also, Recycled content must be expressed as an exact percentage or a range. Statements such as "up to 60%" recycled content are not acceptable.

3. Recycled content products provided must have equal or better performance and cost no more than comparable virgin products.

4. Product's recycled content must comply with FTC Guides 16 CFR Part 260.7 (e) in that normal by-products in product manufacturing which are normally reused within the original manufacturing process, or waste by-products that would not normally enter the waste stream do not constitute as either post consumer or post industrial recycled content.

5. Manufacturer must fully comply with FTC Part 260 "Guides for the Use of Environmental Marketing Claims," with respect to advertising, labeling, and product inserts, catalogs and sales presentations of all its carpet products submitted and sold. Certification signed by an officer of the manufacturer stating the manufacturer complies with these guides maybe required for submittal upon request.

## 2.02 PRODUCT RECYCLABILITY

A. Product must meet FTC guides for recyclability and must be one hundred percent (100%) closed-loop recyclable back into carpet. Products containing both recyclable and nonrecyclable components, manufacturer must adequately report which portions of the product are recyclable per FTC guides 16 CFR section 260.7(d). Note: A manufacturer cannot claim that a product or any portion of a product that is incinerated is recyclable, even if incineration is used to produce heat and power (i.e. waste-to-energy) per FTC guides 16 CFR section 260.7 (d) example 3.

B. Recyclability of product installed must be the same as those required by Project requirements.

## 2.03 RECYCLING PROGRAM

A. Manufacturer must have a collection and recovery system for product and a fully established, currently operational recycling program at time of bid per FTC guides Section 260.7 (d).

1. Manufacturer must have product a take back program and be able to reclaim and recycle 100% of installed product back into carpet at time of bid. Manufacturer should be able to recover and recycle similarly constructed carpet. Recycling process must be available for viewing. Claiming a product is recyclable based on future expectation of technology, equipment, process or availability of that product, as feedstock is not acceptable.
2. Collection and recycling program must be verified by an independent, neutral third party organization, such as Scientific Certification Systems.
3. Manufacturer must have written guarantee that 100% of the recovered product will be recycled and that no portion of the product will be land filled or incinerated (including waste-to-energy).

## 2.04 ENVIRONMENTALLY PREFERABLE PRODUCT

A. Carpet must be certified as an Environmentally Preferable Product (EPP) by a neutral, independent, third party organization such as Scientific Certification Systems. Carpets must carry an EPP carpet label certifying the its Environmental Preferability. Products carrying EPP carpet labels will be given higher preference than those carrying only an EPP fiber label.

## 2.05 INDOOR AIR QUALITY

A. Product must have low VOC, factory applied, "dry" adhesive.

B. Product, inclusive of floor covering adhesive, must meet CRI's Green Label Plus (GLP) Indoor Air Quality requirements for carpet only. Environmental chamber testing per ASTM D-5116.

C. Product, inclusive of pre-applied adhesive must off gas less than:

0.5 mg/sq. meter per hour of Total Volatile Organic Compound (TVOC);

0.05 mg/sq. meter per hour of formaldehyde;

0.4 mg/sq. meter per hour of styrene; and

0.05 mg/sq. meter per hour of 4-Phenyl Cyclohexene (4-PC)

1. Submit documentation showing CRI Green Label Plus (GLP) Certification Number for carpet (inclusive of adhesive). [If results for carpet testing are not inclusive of adhesive, submit Green Label Plus documentation for carpet and Green Label Plus documentation for adhesive].
2. Indoor air quality results of the product installed must be same as those specified by the Project requirements.
3. Product as installed to be securely attached to the floor in compliance with Americans with Disabilities Act (ADA), Section 4.5.3.

## 2.06 MANUFACTURER'S ENVIRONMENTAL COMMITMENT

A. A manufacturer's environmental commitment will be reflected by its corporate culture and measured by the goals, policies and programs that have been instituted to improve the environmental performance of its operations. Evidence of this commitment must include:

1. All products produced by the manufacturer must meet FTC guides for recyclability and be 100% recyclable in a fully established, currently operational recycling program 16 CFR section 260.7 (d).
2. All products produced by the manufacturer, including recycled content products, must be 100% closed-loop recyclable back into carpet.
3. Manufacturer must show evidence of a positive and continuing improvement in source reduction and the reduction of energy, water, and waste and air emissions.
4. Manufacturer to provide a statement from the U.S. EPA that carpet tile meets the Guidelines of Presidential Executive Order 13101 for recycled content.

## 2.07 CARPET WARRANTY

A. Warranty to be sole source responsibility of the Manufacturer. Second source warranties and warranties that involve parties other than the carpet manufacturer are unacceptable.

B. If the product fails to perform as warranted when properly installed and maintained, the affected area will be repaired or replaced at the discretion of the Manufacturer.

C. Chair pads are not required, but are recommended for optimum textural performance. Absent the use of chair pads, more intensive maintenance will be required for areas in direct contact with chair caster traffic, and some degree of appearance change is to be expected.

D. Warranty shall be for a specifically defined non-prorated period of fifteen years. Lifetime warranties are not acceptable.

A. The non-prorated fifteen-year warranty shall specifically warrant against:

1. Excessive Surface Wear: More than 15% loss of pile fiber weight
2. Excessive Static Electricity: More than 3.0 kV per AATCC 134
3. Resiliency Loss of the Backing: More than 10% loss of backing resiliency
4. Delamination
5. Edge Ravel
6. Zippering

B. Tuft Bind warranty in lieu of edge ravel and zippering is not acceptable.

C. Manufacturer to provide a written warranty that 100% of carpeting returned to manufacturer for recycling will be recycled and that no portion of the carpet will be land filled or incinerated.

## 2.08 FIBER

A. See Section 2.11

## 2.09 BACKING CHARACTERISTICS

A. Primary Backing: Synthetic Non-Woven.

B. Secondary Backing: ER3 – 100% Recycled Content

1. Density (ASTM D-1667): Min. 65 lbs/cu ft +/- 5%
2. Standard Size: 18" x 18"; 24" x 24"; or 36" x 36"
3. Fiberglass Reinforced
4. Fully fused secondary backing system that will not delaminate

C. Adhesive System: RS

1. Low VOC, factory applied "dry" adhesive applied to backing and cured during manufacturing

2.10 PERFORMANCE CHARACTERISTICS

A. Test reports for the following performance assurance testing to be submitted upon request. Submitted results shall represent average results for production goods of the referenced style.

All products must meet requirements listed below.

1. Palm Toyota 09690-71. Flooring Radiant Panel  
ASTM E-648 / NFPA 253: Class 1 (CRF: 0.45 watts/sq cm or greater)
2. Federal Flammability  
CPSC FF 1-70: Passes
3. Smoke Density  
ASTM E-662 / NFPA 258: < 450 Flaming Mode
4. Electrostatic Propensity  
AATCC 134 (Step & Scuff): 3.0 kV or less
5. Static Coefficient of Friction  
ASTM C-1028: Passes ADA Requirements for Accessible Routes (minimum 0.60)
6. Delamination of Secondary Backing of Pile Floor Coverings  
ASTM D-3936: No Delamination
7. Lightfastness  
AATCC 16E: > 4 @ 100 hours
8. Vetterman Drum  
ASTM D-5417: Minimum 3 @ 22,000 cycles
9. Dimensional Stability  
Aachen / ISO 2551: Maximum Change +/- 0.149%

2.11 MANUFACTURING SPECIFICATIONS

A. Manufactured by Collins & Aikman Floorcoverings

1. Toyota 2 ER3 Tile RS  
Color: Toyota 2 – 62007
- A. Construction: Stratatec® Patterned Loop
- B. Gauge: 5/64
- C. Stitch Rate: 9.8 pile units / inch
- D. Tuft Density: 127.4 tufts/sq inch
- E. Pile Height Average: 0.187 inch
- F. Fiber System: Antron® Legacy Nylon with Static Control & Ensure
- G. Dye Method: Yarn Dyed
- H. Total Weight: 132.5 oz/sq yd +/- 5%
- I. Total Product Recycled Content (based on Total Weight) 34.7%
- J. Total Product Post-Consumer Content (based on Total Weight) Min 10%

B. Substitutes/Alternates

Subject to compliance with all requirements, "or equal" must match the selected colors, have similar aesthetic appearance and tuft density, factory-applied "dry" adhesive, equivalent EPP and recycled content certification labels and recyclability. Substitution sample and submittals must be submitted for written approval of quality and color at least ten days prior to bid to be considered. Sample of proposed substitute must be inclusive of both the face and proposed backing (color-only sample not acceptable).

## 2.05 ACCESSORIES

- A. Materials recommended by Manufacturer for patching, leveling, priming, etc.
- B. Adhesives: Products to be supplied with a low VOC, factory applied, "dry" adhesive for "peel and stick" installation.
- C. Base, Carpet Edge, and Transition Strips: As specified in applicable sections.
  - 1. Base:       Manufacturer: Johnsonite 1/8" Rubber  
                  Style:           Cove at VCT, Straight at Carpet  
                  Color:           See Drawing A421
  - 2. Transitions: Provide Schluter Systems in Satin Anodized Aluminum finish. Flooring subcontractor to submit recommendations for each transition on a case by case basis.

## PART 3 EXECUTION

### 3.01 EXAMINATION / PREPARATION

- A. Prepare sub-floor to comply with criteria established in Manufacturer's installation instructions. Use only preparation materials that are acceptable to the Manufacturer.
  - 1. Remove all deleterious substances from substrate(s) that would interfere with or be harmful to the installation.
  - 2. Remove sub-floor ridges and bumps. Fill cracks, joints, holes, and other defects.
  - 3. "Ramp up" sub-floor as required to allow flush transition to non-carpet surfaces. Ramp to be extended as required (in excess of 2'-0") to make ramp as inconspicuous as possible.
- B. Verify that sub-floor is smooth and flat within specified tolerances and ready to receive carpet.
- C. Verify that substrate surface is dust-free and free of substances that would impair bonding of product to the floor.
- D. Verify that concrete surfaces are ready for installation by conducting moisture and pH testing. Results must be within limits recommended by Manufacturer.
- E. There will be no exceptions to the provisions stated in the Manufacturer's installation instructions.

### 3.02 INSTALLATION - GENERAL

- A. Install product in accordance with Manufacturer's installation instructions.
- B. Where demountable partitions or other items are indicated for installation on top of finished carpet tile floor, install carpet tile before installation of these items.
- C. Cut and fit carpet tile to butt tightly to vertical surfaces, permanent fixtures, and built-in furniture including cabinets, pipes, outlets, edgings, thresholds, and nosings.
- D. Extend carpet tile into toe spaces, door reveals, closets, open-bottomed obstructions, removable flanges, alcoves, and similar openings.
- E. Install borders parallel to walls.

F. Roll with appropriate roller for complete contact of carpet with mill-applied adhesive to sub-floor. Carpet to be securely adhered in accordance with ADA requirements (Section 4.5.3).

G. Trim carpet neatly at walls and around interruptions.

H. Completed carpet is to be smooth and free of bubbles, puckers, and other defects.

### 3.03 PROTECTION & CLEANING

A. Remove excess adhesive and/or other from floor and wall surfaces without damage.

B. All rubbish, wrappings, debris, trimmings, etc. to be removed from site and disposed of properly.

C. Clean and vacuum carpet surfaces using a beater brush/bar commercial vacuum.

D. After each area of carpet is installed, protect from soiling and damage by other trades.

END OF SECTION 09690