

matting / athletics / flooring

CONSTELLATION ATHLETIC TILE FLOORING

SECTION 09 65 19 RESILIENT TILE FLOORING

SECTION 09 62 00 ATHLETIC TILE FLOORING

This product has been certified by SCS to meet the rigorous indoor air quality requirements of the FloorScore® certification program.



FloorScore® <u>SCS-FS-04063</u> | 2017.04.01 - 2018.01.31

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Resilient tile flooring and accessories.

1.2 RELATED SECTIONS

- Section 03 30 00 Cast-in-Place Concrete.
- Section o6 10 00 Rough Carpentry.
- Section 07 26 00 Vapor Retarders.
- Section 09 62 00 Athletic Flooring
- Section 09 65 16 Resilient Sheet Rubber Flooring.
- Section 09 65 13 Resilient Base and Accessories:

1.3 REFERENCES

- A. ASTM International (ASTM) and others as noted:
 - 1. AATTC 134-06 Standard for Electrostatic Propensity of Carpets

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- 2. ASTM C423 Standard Test Method for Sound Absorption, Noise Reduction Coefficient
- ASTM D2047 Standard Test Method for Coefficient of Friction of Polish-Coated Floor Surfaces as Measured by the James Machine
- 4. ASTM D3676 Standard Specification for Density Rubber Cellular Cushion Used for Carpet or Rug Underlay
- 5. ASTM D395B Standard Test Methods for Rubber Property-Compression Set
- 6. ASTM D412 Standard Test Methods for Vulcanized Rubber and Thermoplastic Rubbers and Thermoplastic Eastover's –Tension
- 7. ASTM D5116 Standard Guide for Small-Scale Environmental Chamber Determinations of Organic Emissions from Indoor Materials/Products. (V.O.C.)
- 8. ASTM E492 Standard Test Method for Impact Sound Transmission
- ASTM E648-97 Standard Test Method for Critical Radiant Flux of Floor-Covering Systems Using a Radiant Heat Energy Source
- 10. ASTM F137-03 Standard Test Method for Flexibility of Resilient Flooring Materials with Cylindrical Mandrel Apparatus
- 11. ASTM F150 Standard Test Method for Electrical Resistance of Conductive and Static Dissipative Resilient Flooring
- ASTM F1914-98 Standard Test Method for Short-Term Indentation and Residual Indentation of Resilient Floor Covering
- 13. ASTM F925-97 Standard Test Method for Resistance to Chemicals of Resilient Flooring
- 14. ASTM F970-87 Standard Test Method for Static Load Limit
- 15. ASTM G21 Standard Practice for Determining Resistance of Synthetic Polymeric Materials to Fungi
- 16. Federal Standard 101B/NFPA 99 12-4.1.3.8 -Static Decay Test Method 4046
- 17. California Specification 01350 (CHPS Compliant for VOC Emissions) -Emission tests are performed following California Dept. of Health Services Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers, CA/DHS/EHLRB/R-174, 07/15/04 (http://www.cal- iaq.org/VOC/Section01350_7_15_2004_FINAL_PLUS_ADDENDUM-2004-01.pdf)

1.4 SUBMITTALS

- A. Submit under provisions of Section 01 30 00 Administrative Requirements
- B. Product Data: Provide detailed data on each product to be used including but not limited to the following information as applicable:
 - 1. Preparation instructions and recommendations.
 - 2. Storage and handling requirements and recommendations.
 - 3. Installation methods.
 - 4. Maintenance recommendations.

- C. Selection Samples: For each color specified two sets of each type and color of Constellation flooring indicating full range of color and pattern variation.
- D. Verification Samples: For each finish product specified, two 6" x 6" sets of each type and colors Constellation flooring, indicating color and pattern of actual product, including variations, as proof of application compliance.
- E. Closeout Submittals: Submit three copies of the following:
 - Maintenance and operation data includes methods for maintaining installed products, and precautions against cleaning materials and methods detrimental to finishes and performance.
 - 2. Documentation of warranty specified herein.
- F. SDS: Submit manufacturer's Safety Data Sheets for specified adhesives/sealers.

1.5 QUALITY ASSURANCE

- Installer Qualifications: Minimum two years' experience and completed at least three projects of similar magnitude, material and complexity. Upon request, provide project references including contact names and telephone numbers for three projects.
- Edgewood has over 35 years' experience in the flooring industry and is proud to provide Constellation flooring products manufactured in Canada.
- Provide Constellation flooring products that are FloorScore® certified under the criteria developed by the Resilient Floor Covering Institute (RFCI) and certified by Scientific Certification Systems (SCS), Inc.
- Provide products with a minimum of 5 Year Limited Manufacturer's Warranty

1.6 DELIVERY, STORAGE & PROTECTION

- A. Delivery: Deliver materials in manufacturer's original, unopened, undamaged wrapping and/or containers with identification labels intact clearly marking edge type, thickness, and shade of color(s).
- B. Inspection: Inspect all deliveries to ensure undamaged goods, and for accurate product type for thickness, edge type, color and speckle. Contact Edgewood immediately if product is damaged or inconsistent with order specifications.
- C. Storage and Protection: Carefully handle all materials and store protected from exposure to harmful weather and at temperature conditions recommended by the manufacturer. Remove pallet banding if long term storage is required, leaving other packaging intact until acclimation is to be started.
- D. Flooring material and adhesive (if required) shall be acclimated to the installation area for a minimum of 24 hours prior to installation. See manufacturer's installation guidelines for details on proper acclimation procedures. Longer acclimation may be required if product has been stored for extended time periods.

1.7 PROJECT CONDITIONS

• Environmental Requirements/Conditions: In accordance with manufacturer's recommendations. Areas to receive flooring shall be clean, level, dry, fully enclosed, weather tight with the permanent HVAC set at a uniform temperature of at least Maintain 68F/2oC degrees and less than 85F/3oC continuously prior to, during and

after installation, but for not less than 48 hours prior to and during, and for not less than 48 hours after installation. The flooring material shall be conditioned in the same manner prior to installation.

- Close spaces to traffic during flooring installation and for a period of time after installation as recommended in writing by the manufacturer.
- Install flooring materials and accessories after all other finishing operations, including painting, have been completed.
- Where demountable partitions and other items are indicated for installation on top of sheet resilient flooring material, install flooring material before these items are to be installed.
- Concrete substrates should not exceed 80 percent RH and/or 5 lbs. X 24 hrs. X 1000 sf. moisture vapor emissions rate tested in accordance to ASTM F 2170 and ASTM F 1869.

1.8 WARRANTY

Warranty Period: Manufacturer's standard 5 Year Warranty against manufacturing defects.

1.9 EXTRA MATERIALS

Deliver to owner extra material of each tile type and color in the same manufactured lot, in quantities not less than 2% of total area installed for each product. Delivery, storage and protection of extra materials shall comply with manufacturers standard requirements.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- Acceptable Manufacturer: Edgewood Matting Ltd which is located at 18120 109 Avenue, Edmonton AB Canada;
 Toll Free Tel: 1-800-668-1776; Fax: 780.4689104. Email: inquires@edgewoodgroup.ca; Web:
 www.edgewoodgroup.ca
- Substitutions not permitted.
- Requests for equals will be considered in accordance with provisions of Section o1 60 00 Product Requirements

2.2 RESILIENT/RECYCLED RUBBER FLOORING TILES

A. Material shall be a dual-layer tile product with homogeneous color top layer, composed of a two-part high-pressure applied polyurethane coating. Backing layer composed of non-vulcanized post-consumer recycled SBR (styrene butadiene rubber) combined with manufacturer's pre and post-consumer recycled regrind bound with a proprietary slow-cured MDI water-based polymer. Color top layer to be directly sprayed to backing layer.

- B. All tiles shall be produced in block form (not cut from rolled material) sliced, sprayed with polyurethane top layer and precision cut using computerized numerically controlled (CNC) water-based equipment. Constellation tiles will be sanded on the underside to create a thickness tolerance of +/-.25mm. Thickness tolerance is a maximum of +/- 0.25mm.
- C. All Constellation Tiles shall be FloorScore(R) certified under the criteria developed by the Resilient Floor Covering Institute (RFCI) and certified by Scientific Certification Systems (SCS), Inc. Registration # SCS-FS-04063. (Edgewood)
- D. Edge finish and product size shall be (Enter specified selection)
 - 1. Square (38" x 38")
 - 2. Interlocking (36" x 36")
 - 3. Custom Cut size to be specified
- E. Thickness shall be (Enter specified selection)
 - 1. Choose from: 8mm (2+6), 10mm (2+8), and 12mm (2+10)
- F. Color(s) of topping shall be (Enter specified selection)
 - 1. Choose from manufacturers list of colors
- G. Physical properties shall conform to the requirements of the following minimum criteria:

TEST PROCEDURE	DESCRIPTION	ACHIEVED VALUES (Subject to nominal variation)
ASTM D2047	Static Coefficient of Friction (James Machine method)	Dry 0.96, Wet 0.84
ASTM D3676	Density Foam Test Summary	53.8 lbs/cu. ft.
ASTM D395B	Compression Set Under Force	92.4% recovered
ASTM D412	Tensile Strength	302.5 lbs/sq. in.
ASTM E492	Impact Sound Transmission	8mm IIC 60
ASTM E648	Critical Radiant Flux	Call Edgewood for results
ASTM F137	Flexibility	6mm Mandrel PASSES
ASTM F150 (NFPA 99)	Electrical Resistance – Burroughs	
	Surface to SurfaceSurface to Ground	1.9 x 1010 ohms average 5.3 x 109 ohms average
ASTM F970-87	Static Load	.001 inch
ASTM G21	Mold Growth on Surface	No Mildew after 28 days
CA 01350	VOC Emissions – Section 01350	Pass

Copies of test reports and additional product information are available upon request

2.3 ACCESSORIES

A. ADHESIVES (Use this section for square cut edge finish)

Provide adhesives according to manufacturer' recommendations and installation guidelines for specific substrate, and use only the following adhesives approved by the manufacturer:

- RF Bond IT 2P, two-component urethane, volatile organic compound (VOC) compliant.
- B. Portland based cementitious base leveler. Gypsum based not acceptable

PART 3 EXECUTION

3.1 EXAMINATION

- A. Inspect floor to be installed immediately upon arriving at job site; perform a moisture test.
- B. Do not begin installation until substrates have been properly prepared.
- C. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.
- D. The installation of Constellation flooring shall not begin until the work of all other trades has been completed, particularly wet and overhead trades; sheet rock work, sanding and painting.
- E. Areas to receive flooring shall be adequately lighted during all phases of the installation process.

3.2 PREPARATION

- A. Ensure that substrate is dry and clean, and shall be free of depressions, raised areas or other defects that might telegraph through installed flooring.
- B. Ensure that concrete or plywood substrate is flat and uniformly sloped. Allowable variations in substrate levels are +/-1/8" in 10'-0" and 1/4" total maximum variation from levels shown.
- C. Concrete Substrates: The Contractor shall verify to the Owner and installer a minimum of 30 days prior to the scheduled resilient flooring installation the following substrate conditions. All substrate testing shall be documented and submitted to the Architect and Owner before commencement of the flooring installation.
 - Verify that substrates are dry, free of debris, and that all curing compounds, sealers, and hardeners have properly cured.
 - Remove substrate coatings and other substances that are incompatible with adhesives and that contain soap, wax, oil, or silicone, using mechanical methods recommended by manufacturer. Do not use solvents.
 - Alkalinity and Adhesion Testing: Perform tests recommended by manufacturer. Proceed with installation only after substrates pass testing.
 - 4. Moisture Testing: Perform tests recommended by manufacturer and as follows. Proceed with installation only after substrates pass testing

3.3 INSTALLATION OF CONSTELLATION FLOORING TILES

- A. Do not proceed with floor surfacing installation until all applicable site work, including substrate preparation, painting, equipment installation and other relevant work by trades affecting the installation area, has been completed.
- B. Install all products in accordance with the manufacturer's Installation Guidelines.

3.4 CLEANING

- A. If installers have left any adhesive residue on the Constellation flooring, contact Edgewood to determine possible solutions for removal. Do not use mineral spirits to clean adhesive off the tiles.
- B. Initial Cleaning: After completion of installation and before acceptance by Owner, perform the cleaning operations as prescribed in the manufacturer's Installation/Maintenance Guidelines.

3.5 PROTECTION

- A. Protect the installed surface from damage resulting from subsequent construction activity on the site using craft paper, plastic sheet or other appropriate means.
- B. Touch-Up: Repair any minor damage to eliminate all evidence of repair. Remove and replace work which cannot be satisfactorily repaired.

3.6 MAINTENANCE

A. Comply with manufacturer's instructions for proper cleaning and maintenance of the products.

END OF SECTION

These Architectural Specification Guidelines are intended for use by design and specification professionals as a template aid to specify and describe Edgewood products as part of the written Specifications component of Construction Contract Documents.

The data contained in this document is accurate as of the date of publication. Updates and revisions may have been made since this date. If verification is needed that this data is still current, please contact Edgewood at (780) 466-2084.

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