

Flexco Corporation  
1401 E. 6th St.  
Tuscumbia, AL 35674  
800.633.3151  
Fax: 800.346.9075  
Web URL [www.flexcofloors.com](http://www.flexcofloors.com)

## **PART 1 GENERAL**

### **1.01 SUMMARY**

Section Includes: RUBBER FLOOR TILE

### **1.02 REFERENCED DOCUMENTS**

#### **A. ASTM International**

1. C423, Standard Test Method for Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method.
2. D412, Standard Test Methods for Vulcanized Rubber and Thermoplastic Elastomers - Tension.
3. D395, Standard Test Methods for Rubber Property - Compression Set.
4. D471, Standard Test Method for Rubber Property-Effect of Liquids.
5. D624, Standard Test Method for Tear Strength of Conventional Vulcanized Rubber and Thermoplastic Elastomers.
6. D792, Standard Test Methods for Density and Specific Gravity (Relative Density) of Plastics by Displacement.
7. D2047, Standard Test Method for Static Coefficient of Friction as Measured by the James Machine.
8. D2199, Standard Test Method for Determining Dimensional Stability of Resilient Floor Tile after Exposure to Heat.
9. D2859, Standard Test Method for Ignition Characteristics of Finished Textile Floor Covering Materials.
10. D3389, Standard Test Method for Coated Fabrics Abrasion Resistance (Rotary Platform, Double-Head Abrader).
11. E84, Standard Test Method for Surface Burning Characteristics of Building Materials.
12. E90, Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements.
13. E492, Standard Test Method for Laboratory Measurement of Impact Sound Transmission through Floor-Ceiling Assemblies Using the Tapping Machine.
14. E595, Standard Test Method for Total Mass Loss and Collected Volatile Condensable Materials from Outgassing in a Vacuum Environment.
15. E648, Standard Test Method for Critical Radiant Flux of Flooring Systems Using a Radiant Energy Source.
16. E662, Standard Test Method for Specific Optical Density of Smoke Generated by Solid Materials.
17. F137, Standard Test Method for Flexibility of Resilient Flooring Materials with Cylindrical Mandrel Apparatus.
18. F373, Standard Test Method for Embossed Depth of Resilient Floor Coverings.
19. F386, Standard Test Method for Thickness of Resilient Flooring Materials Having Flat Surfaces.
20. F511, Standard Test Method for Quality of Cut (Joint Tightness) of Resilient Floor Tile.
21. F710, Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring.
22. F925, Standard Test Method for Resistance to Chemicals of Resilient Flooring.
23. F970, Standard Test Method for Static Load Limit.
24. F1344, Standard Specification for Rubber Floor Tile.

25. F1482, Standard Guide to Wood Underlayment Products Available for Use Under Resilient Flooring.
  26. F1514, Standard Test Method for Measuring Heat Stability of Resilient Flooring by Color Change.
  27. F1515, Standard Test Method for Measuring Light Stability of Resilient Flooring by Color Change.
  28. F1859, Standard Specification for Rubber Sheet Floor Covering Without Backing.
  29. F2055, Standard Test Method for Size and Squareness of Resilient Floor Tile by Dial Gage Method.
  30. F2240, Standard Test Method for Rubber Property - Durometer Hardness.
  31. G21, Standard Test Method for Determining Resistance of Synthetic Polymeric Materials to Fungi.
- B. Other Referenced Documents
1. National Fire Protection Association (NFPA) 255, Test Method for Critical Radiant Flux of Floor Covering Systems Using a Radiant Energy Source.
  2. National Fire Protection Association (NFPA) 258, Test Method for Specific Density of Smoke Generated by Solid Materials.
  3. FMVSS 302, Title 49, Part 571, Flammability of Interior Materials.
  4. IMO Resolution A.653 (16), Surface Flammability of Deck Finish (Shipboard use).
  5. Title 16, CFR Chapter II, Subchapter D, Part 1630, Standard for the Surface Flammability of Carpets and Rugs (FF 70).
  6. California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65).
  7. The Collaborative for High Performance Schools (CHPS).

### 1.03 SUBMITTALS

- A. Product Data: Submit product data, including manufacturer's specification summary sheet for specified products.
- B. Shop Drawings: Submit shop drawings showing layout, finish colors, patterns and textures.
- C. Samples: Submit selection and verification samples for finishes, colors, and textures.
- D. Quality Assurance Submittals: Submit the following
  1. Test Reports: Certified test reports showing compliance with specified performance characteristics and physical properties.
  2. Manufacturer's Instructions: Manufacturer's installation and maintenance instructions.
- E. Maintenance Information: Maintenance information for installed products in accordance with Division 1 sections.
  1. Methods for maintaining installed products.
  2. Precautions against cleaning materials and methods detrimental to finishes and performance.
- F. Warranty: Warranty documents specified herein.

### 1.04 QUALITY ASSURANCE

- A. Installer Qualifications: Installer experienced in performing work of this section who has specialized in installing work similar to that required for this project.
- B. Regulatory Requirements
  1. Fire Performance characteristics: Provide resilient rubber floor covering with the following Fire performance characteristics as determined by testing products in accordance with ASTM method (and NFPA method) indicated below by a certified testing laboratory or another testing and inspecting agency acceptable to authorities having jurisdiction.
    - a. ASTM E648 (NFPA 253), Critical Radiant Flux of Floor Covering Systems; Class 1, Greater than 0.45 W/cm<sup>2</sup>.
    - b. ASTM E662 (NFPA 258), Specific Optical Density of Smoke Generated by Solid Materials; < 450.

- C. Single-Source Responsibility: Obtain rubber floor tile and manufacturer's recommended adhesive from a single supplier.
- D. Pre-Installation Meetings: Conduct pre-installation meeting to verify project requirements, Manufacturer's conditions, recommended adhesive depending on product, substrate type and type of installation, manufacturer's installation instructions and manufacturer's warranty requirements. Comply with requirements in Division 1.

**1.05 DELIVERY, STORAGE AND HANDLING**

- A. General: Comply with requirements in Division 1.
- B. Ordering: Comply with manufacturer's ordering instructions and lead-time requirements to avoid construction delays.
- C. Delivery: Deliver materials in manufacturer's original, unopened, undamaged containers with Identification labels intact.
- D. Storage and Protection: Store materials protected from exposure to harmful weather conditions and acclimated to site conditions at temperature and humidity conditions recommended by manufacturer.

**1.06 PROJECT CONDITIONS**

- A. Environmental Requirements/Conditions: In accordance with manufacturer's recommendations, areas to receive rubber flooring shall be clean, fully enclosed, weather tight with the permanent HVAC set at a uniform temperature of 65° - 85° F for 48 hours prior to, during and thereafter installation of rubber flooring. Rubber flooring and adhesive shall be conditioned in the same manner. Rubber flooring/tile must be un-boxed at least 48 hours prior to installation in the areas in which it will be installed.
- B. Existing Conditions: (Specify existing conditions affecting product use and installation).

**1.07 SEQUENCING AND SCHEDULING**

- A. Finishing Operations: Install rubber flooring after finishing operations, including floor covering, painting and ceiling operations, have been completed.

**1.08 MAINTENANCE**

- A. Extra Materials: Deliver to Owner extra materials from same production run as products installed. Package products with protective covering and identify with descriptive labels. Comply with Division 1, Closeout Submittals Section.
- B. Quantity: Furnish quantity of Rubber flooring equal to 5% of amount to be installed.
- C. Delivery, Storage and Protection: Comply with Owner's requirements for delivery, storage and protection of extra materials.
- D. Maintenance of finished floor covering to be conducted per Manufacturer's Maintenance Guide.

**1.09 WARRANTY**

- A. Manufacturer's Materials Warranty: Submit, for Owner's acceptance, manufacturer's standard warranty document. Manufacturer's warranty is in addition to, and not a limitation of, other rights Owner may have under Contract Documents.
  - 1. Warranty: 1 year limited warranty commencing on Date of Substantial Completion. Notice of any defect must be made in writing to manufacturer within 30 days after buyer learns of the defect.
  - 2. Limited Wear Warranty: 10 year limited wear warranty available depending on product type/design & type of use.

## PART 2 PRODUCTS

Specifier Note: Retain article below for proprietary method specification. Add product qualities, performance characteristics, material standards and descriptions as applicable. Use of such phrases as "Or Equal" or "Or Approved Equal," or similar phrases may cause ambiguity in specifications. Such phrases require verification (procedural, legal and regulatory) and assignment of responsibility for determining "Or Equal" products.

### 2.01 RUBBER TILE FLOORING

- A. Manufacturer: Flexco Corporation, 1401 E. 6th Street, Tuscumbia, AL 35674. Phone: 800-633-3151, Fax: 800-346-9075, Web: [www.flexcofloors.com](http://www.flexcofloors.com)
- B. Test results
1. ASTM C423, Sound Absorption (Noise Reduction Coefficient); 0.05
  2. ASTM D2047, Static Coefficient of Friction (Slip Resistance); Passes, flat surface
  3. ASTM D2240, Hardness (Shore A Durometer); > 85
  4. ASTM D3389, Abrasion Resistance; Passes
  5. ASTM E84 (NFPA 255), Surface Burning Characteristics, Flamespread; Standard Formula is Class B (26-75), Class A Formula is Class A (0-25)
  6. ASTM E90, Airborne Sound Transmission (Sound Transmission Class); 51
  7. ASTM E492, Impact Sound Transmission (Impact Insulation Class); 37
  8. ASTM E595, Outgassing; Excellent, Test Results Available
  9. ASTM E648 (NFPA 253), Critical Radiant Flux; Class 1, > 1.00 W/cm<sup>2</sup>
  10. ASTM E662 (NFPA 258), Specific Optical Density of Smoke Generated by Solid Materials; Passes, < 450
  11. ASTM F137, Flexibility; Passes, bends around a 3/4" mandrel with no cracks or breaks
  12. ASTM F925, Resistance to Chemicals; Passes, List available
  13. ASTM F970, Static Load Limit; 250 psi,
  14. ASTM F1344, Specification for Rubber Floor Tile; Class I, Type A
  15. ASTM F1515, Light Stability; Passes, Delta E < 8.0
  16. ASTM G21, Determining Resistance of Synthetic Polymeric Materials to Fungi; 0, No Growth
  17. FMVSS 302, Title 49, Part 571, Flammability of Interior Materials; Passes
  18. IMO Resolution A.653(16), Surface Flammability of Deck Finish (Shipboard use); Passes
  19. Complies with California Proposition 65
  20. Approved for Collaborative for High Performance Schools 01350, Low-Emitting Material Criteria
- C. Product Warranty
1. Manufacturer's one year limited warranty for manufacturing defects.
  2. Manufacturer's ten year limited wear warranty.
- D. Proprietary Product(s): Flexco Rubber Floor Tile (select one)
1. **Radial® Texture (RBT & RLT)**
    - a. Formulation (select one):
      - 1) Standard Formulation
      - 2) "Repel" Oil & Grease Resistant Formulation
      - 3) IMO Certified Formulation
      - 4) Class A Formulation
    - b. Color (select one):
      - 1) "FlexTones" # [insert color number], complies with ASTM F1344; class 1A, Solid Color Homogeneous
      - 2) "Evolving Styles - Creative Elements / Wood Elements" # [insert color number], complies with ASTM F1344; class 1B, Through Mottled Homogeneous
      - 3) "SpexTones" # [insert color number], complies with ASTM F1344; class 1B, Through Mottled Homogeneous (Order prefix SRBT or SRLT)

- c. Size: 18" x 18" (457.2 mm x 457.2 mm)
  - d. Thickness: 1/8" (3.175 mm)
  - e. Disc size: 1" (25.4 mm) nominal
  - f. Disc Height (select one):
    - 1) Style RBT 0.035" (high profile) nominal
    - 2) Style RLT 0.020" (low profile) nominal
2. **Radial II® Texture (RGT)**
- a. Formulation (select one):
    - 1) Standard Formulation
    - 2) "Repel" Oil & Grease Resistant Formulation
    - 3) IMO Certified Formulation
    - 4) Class A Formulation
  - b. Color (select one):
    - 1) "FlexTones" # [insert color number], complies with ASTM F1344; class 1A, Solid Color Homogeneous
    - 2) "Evolving Styles - Creative Elements / Wood Elements" # [insert color number], complies with ASTM F1344; class 1B, Through Mottled Homogeneous
    - 3) "SpexTones" # [insert color number], complies with ASTM F1344; class 1B, Through Mottled Homogeneous (Order prefix SRGT)
  - c. Size: 18" x 18" (457.2 mm x 457.2 mm)
  - d. Thickness: 1/8" (3.175 mm)
  - e. Disc size: 1 1/4" (31.75 mm) nominal
  - f. Disc Height: 0.020" (low profile) nominal
3. **Radial III® Texture (RCT)**
- a. Formulation (select one):
    - 1) Standard Formulation
    - 2) "Repel" Oil & Grease Resistant Formulation
    - 3) IMO Certified Formulation
    - 4) Class A Formulation
  - b. Color (select one):
    - 1) "FlexTones" # [insert color number], complies with ASTM F1344; class 1A, Solid Color Homogeneous
    - 2) "Evolving Styles - Creative Elements / Wood Elements" # [insert color number], complies with ASTM F1344; class 1B, Through Mottled Homogeneous
    - 3) "SpexTones" # [insert color number], complies with ASTM F1344; class 1B, Through Mottled Homogeneous (Order prefix SRCT)
  - c. Size: 18" x 18" (457.2 mm x 457.2 mm)
  - d. Thickness: 1/8" (3.175 mm)
  - e. Disc size: 1 1/2" (38.1 mm) nominal
  - f. Disc Height: 0.020" (low profile) nominal
4. **Square<sup>2</sup> Texture (SQ)**
- a. Formulation (select one):
    - 1) Standard Formulation
    - 2) "Repel" Oil & Grease Resistant Formulation
    - 3) IMO Certified Formulation
    - 4) Class A Formulation
  - b. Color (select one):
    - 1) "FlexTones" # [insert color number], complies with ASTM F1344; class 1A, Solid Color Homogeneous
    - 2) "Evolving Styles - Creative Elements / Wood Elements" # [insert color number], complies with ASTM F1344; class 1B, Through Mottled Homogeneous

- 3) "SpexTones" # [insert color number], complies with ASTM F1344; class 1B, Through Mottled Homogeneous (Order prefix SSQ)
  - c. Size: 18" x 18" (457.2 mm x 457.2 mm)
  - d. Thickness: 1/8" (3.175 mm)
  - e. Disc size: 1 1/4" (31.75 mm) nominal
  - f. Disc Height: 0.025" (low profile) nominal
5. **Weave Texture (WV)**
- a. Formulation (select one):
    - 1) Standard Formulation
    - 2) "Repel" Oil & Grease Resistant Formulation
    - 3) IMO Certified Formulation
    - 4) Class A Formulation
  - b. Color (select one):
    - 1) "FlexTones" # [insert color number], complies with ASTM F1344; class 1A, Solid Color Homogeneous
    - 2) "Evolving Styles - Creative Elements / Wood Elements" # [insert color number], complies with ASTM F1344; class 1B, Through Mottled Homogeneous
    - 3) "SpexTones" # [insert color number], complies with ASTM F1344; class 1B, Through Mottled Homogeneous (Order prefix SWV)
  - c. Size: 18" x 18" (457.2 mm x 457.2 mm)
  - d. Thickness: 1/8" (3.175 mm)
  - e. Profile: .025" nominal
6. **Hammered Texture (SE)**
- a. Formulation (select one):
    - 1) Standard Formulation
    - 2) "Repel" Oil & Grease Resistant Formulation
    - 3) IMO Certified Formulation
    - 4) Class A Formulation
  - b. Color (select one):
    - 1) "FlexTones" # [insert color number], complies with ASTM F1344; class 1A, Solid Color Homogeneous
    - 2) "Evolving Styles - Creative Elements / Wood Elements" # [insert color number], complies with ASTM F1344; class 1B, Through Mottled Homogeneous
    - 3) "SpexTones" # [insert color number], complies with ASTM F1344; class 1B, Through Mottled Homogeneous (Order prefix SSE)
  - c. Size (select one):
    - 1) 12" x 12" (304.8 mm x 304.8 mm)
    - 2) 18" x 18" (457.2 mm x 457.2 mm)
    - 3) 36" x 36" (91.4 cm x 91.4 cm)
  - d. Thickness: 1/8" (3.175 mm)
7. **Smooth Finish Rubber Tile**
- a. Formulation (select one):
    - 1) Standard Formulation
    - 2) "Repel" Oil & Grease Resistant Formulation
    - 3) IMO Certified Formulation
    - 4) Class A Formulation
  - b. Color (select one):
    - 1) "FlexTones" # [insert color number], complies with ASTM F1344; class 1A, Solid Color Homogeneous
    - 2) "Evolving Styles - Creative Elements / Wood Elements" # [insert color number], complies with ASTM F1344; class 1B, Through Mottled Homogeneous

- 3) "SpexTones" # [insert color number], complies with ASTM F1344; class 1B, Through Mottled Homogeneous
- c. Size (select one):
  - 1) 12" x 12" (304.8 mm x 304.8 mm)
  - 2) 18" x 18" (457.2 mm x 457.2 mm)
  - 3) 36" x 36" (91.4 cm x 91.4 cm), square edge
  - 4) 36" x 36" (91.4 cm x 91.4 cm), beveled edge for heat welded seams
- d. Thickness (select one):
  - 1) .100" (2.45 mm)
  - 2) 1/8" (3.127 mm)

## 2.02 RUBBER SHEET FLOORING

- A. Manufacturer: Flexco Corporation, 1401 E. 6th Street, Tuscumbia, AL 35674. Phone: 800-633-3151, Fax: 800-346-9075, Web: [www.flexcofloors.com](http://www.flexcofloors.com)
- B. Test results
  1. ASTM C423, Sound Absorption (Noise Reduction Coefficient); 0.05
  2. ASTM D2047, Static Coefficient of Friction (Slip Resistance); Passes, flat surface
  3. ASTM D2240, Hardness (Shore A Durometer); > 85
  4. ASTM D3389, Abrasion Resistance; Passes
  5. ASTM E84 (NFPA 255), Surface Burning Characteristics, Flamespread; Standard Formula is Class B (26-75), Class A Formula is Class A (0-25)
  6. ASTM E90, Airborne Sound Transmission (Sound Transmission Class); 51
  7. ASTM E492, Impact Sound Transmission (Impact Insulation Class); 37
  8. ASTM E595, Outgassing; Excellent, Test Results Available
  9. ASTM E648 (NFPA 253), Critical Radiant Flux; Class 1, > 1.00 W/cm<sup>2</sup>
  10. ASTM E662 (NFPA 258), Specific Optical Density of Smoke Generated by Solid Materials; Passes, < 450
  11. ASTM F925, Resistance to Chemicals; Passes, List available
  12. ASTM F1859, Specification for Rubber Sheet Floor Covering without Backing; Type I, Homogeneous FMVSS 302, Title 49, Part 571, Flammability of Interior Materials; Passes
  13. IMO Resolution A.653(16), Surface Flammability of Deck Finish (Shipboard use); Passes
  14. ASTM F970, Static Load Limit; 250 psi,
  15. ASTM F1515, Light Stability; Passes, Delta E < 8.0
  16. ASTM F137, Flexibility; Passes, bends around a 3/4" mandrel with no cracks or breaks
  17. ASTM G21, Determining Resistance of Synthetic Polymeric Materials to Fungi; 0, No Growth
  18. Complies with California Proposition 65
  19. Approved for Collaborative for High Performance Schools 01350, Low-Emitting Material Criteria
- C. Product Warranty
  1. Manufacturer's one year limited warranty for manufacturing defects
  2. Manufacturer's ten year limited wear warranty
- D. Proprietary Product(s): **Flexco Rubber Sheet Flooring**
  1. Formulation (select one):
    - a. Standard Formulation
    - b. "Repel" Oil Resistant Formulation
    - c. Class A Formulation
  2. Color: "Evolving Styles - Creative Elements / Wood Elements" # [insert color number], complies with ASTM F1859; Type I Homogeneous
  3. Size (select one):
    - a. 36" x 25' (91.4 cm x 7.62 m)
    - b. 48" x 25' (121.92 cm x 7.62 m)

4. Thickness (select one):
  - a. .100" (2.54mm) nominal
  - b. 1/8" (3.175mm) nominal

### 2.03 TUFLEX FORCE RECYCLED RUBBER FLOORING

- A. Manufacturer: Flexco Corporation, 1401 E. 6th Street, Tuscumbia, AL 35674. Phone: 800-633-3151, Fax: 800-346-9075, Web: [www.flexcofloors.com](http://www.flexcofloors.com)
- B. Test results
  1. ASTM C423, Sound Absorption (Noise Reduction Coefficient); 0.60
  2. ASTM D395, Compression Set; Method B, 6% +/- 1%
  3. ASTM D412, Tensile Strength; 525 +/- 100 psi
  4. ASTM D412, Elongation; 130% +/- 25%
  5. ASTM D412, 100% Modulus; 390 +/- 50 psi
  6. ASTM D624, Tear Resistance; 93 +/- 15 lbs/in
  7. ASTM D1149, Ozone Resistance, 70 hrs @ 104° F, Bent Loop Method, 50 pphm; Passes
  8. ASTM D2047, Static Coefficient of Friction (Slip Resistance); 1.2 dry
  9. ASTM D2240, Hardness Shore A; 60 +/- 5
  10. ASTM D2632, Impact Resistance; 32% Rebound
  11. ASTM D3389, (H-18 Wheels, 500 g/load, 1000 cycles) Taber Abrasion; < 0.50 grams weight loss
  12. ASTM E648, Critical Radiant Flux, Class II; .25 W/cm<sup>2</sup>
- B. Product Warranty
  1. Manufacturer's five year limited warranty for manufacturing defects
  2. Manufacturer's five year limited wear warranty
- C. Proprietary Products
  1. **Flexco Tuflex Force Recycled Flooring**
    - a. Color (Select one):
      - 1) Black Dahlia with Medium Gray & Fjord, 01; Charcoal with Black Dahlia & Doe, 03; Light Gray with Delft Pansy & Medium Gray, 025; Doe with Milk Chocolate & Beige, 033; Delft Pansy with Winsor & Doe, 035; Vizcaya Palm with Polo Green & Cappuccino, 047; Berry with Black Dahlia & Medium Gray, 048; Winsor with Delft Pansy & Fjord, 049; Polo Green with Vizcaya Palm & Milk Chocolate, 052; Milk Chocolate with Bark & Doe, 056; Blue Shadow with Delft Pansy & Doe, 058; Plum Pudding with Delft Pansy & Medium Gray, 059.
    - b. Size (select one):
      - 1) Square edge tile: 27" x 27" (685.8 mm x 685.8 mm)
      - 2) Inter-locking tile (measured from outside tabs): 27" x 27" (685.8 mm x 685.8 mm) nominal
    - c. Thickness: 3/8" (9.00mm)

### 2.04 BONDED CRUMB RUBBER FLOORING

- E. Manufacturer: Flexco Corporation, 1401 E. 6th Street, Tuscumbia, AL 35674. Phone: 800-633-3151, Fax: 800-346-9075, Web: [www.flexcofloors.com](http://www.flexcofloors.com)
- A. Test results
  1. ASTM C1028, Static Coefficient of Friction (Slip Resistance); 0.88 dry
  2. ASTM D395, Compression Set; 12% or less
  3. ASTM D792, Density PCF; 65 lbs/cu/ft
  4. ASTM D2240, Hardness Shore A; 60 +/- 5
  5. ASTM D3389, (H-18 Wheels, 500 g/load, 1000 cycles) Taber Abrasion; < 0.50 grams weight loss
  6. ASTM D624, Die C, Tear Strength; 70 ppi



7. ASTM F137, Flexibility; bends around a 6 mm mandrel with no cracks or breaks
  8. ASTM F925, Resistance to Chemicals; Passes, List available
  9. ASTM F970, Static Load Limit; 250 psi
  10. ASTM F1514, Resistance to Heat; Delta E: 2.24 and AATCC Gray Scale: 3.85 average
- B. Product Warranty
1. Manufacturer's three year limited warranty for manufacturing defects
  2. Manufacturer's three year limited wear warranty
- C. Proprietary Products
1. **Flexco Prime Sports Flooring**, homogeneous rubber product manufactured from Vulcanized post-industrial rubber color chips (EPDM) and vulcanized post-consumer tires, bonded with urethane binder.
    - a. Color (Select one):
      - 1) Black Dahlia Solid, 001; Black Dahlia with Evergreen, 200; Black Dahlia with Ruby Red, 201; Black Dahlia with Dove, 202; Black Dahlia with Vanilla, 203; Black Dahlia with Starlight, 204; Black Dahlia with Blue Ice, 205; Black Dahlia with Daffodil, 206.
    - b. EPDM Chip Content Percentage (Select one):
      - 1) 10%, 15%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%
    - c. Size (select one):
      - 1) Square edge tile: 36" x 36" (914.4 mm x 914.4 mm) nominal
      - 2) Inter-locking tile (measured from outside tabs): 36" x 36" (914.4 mm x 914.4 mm) nominal
      - 3) Rolls: 48" (1.22 m) x 49.5 feet (15.09 m) nominal
    - d. Thickness (select one):
      - 1) 5/32" (4.00mm)
      - 2) 1/4" (6.00mm)
      - 3) 3/8" (9.00mm)
      - 4) 1/2" (12.00mm)
    - e. Roll Material Width Tolerance: +/- 1/4"

## 2.05 RECYCLED TIRE TILE FLOORING

- A. Manufacturer: Flexco Corporation, 1401 E. 6th Street, Tuscumbia, AL 35674. Phone: 800-633-3151, Fax: 800-346-9075, Web: [www.flexcofloors.com](http://www.flexcofloors.com)
- B. Test results
1. ASTM D1630, Taber Abrasion; Less than .003" at 5,000 cycles using H-10 wheels
  2. ASTM D2047, Static Coefficient of Friction (Slip Resistance); Passes
  3. ASTM D2859, Pill Test; Passes
  4. Title 16, CFR Chapter II, Subchapter D, Part 1630, Standard for the Surface Flammability of Carpets and Rugs (FF 70); Passes
- C. Product Warranty
1. Manufacturer's five year limited warranty for manufacturing defects
  2. Manufacturer's ten year limited wear warranty
  3. Manufacturer's lifetime delamination warranty
- D. Proprietary Products (select one):
1. **FlexTuft Vulcanized Recycled Tire Tile** - Manufactured with approximately 90% of the components from recycled truck and bus tires. Strips are vulcanized to a rubber backing and buffed to a non-glare tufted surface. Thickness: nominal 3/8" (9.52mm)
  2. **FlexTuft Non-Vulcanized Recycled Tire Tile** - Manufactured with approximately 90% of the components from recycled truck and bus tires. Strips are adhered to a Spun-Polyester backing and buffed to a non-glare tufted surface. Thickness: nominal 3/8" (9.52 mm)
    - a. Color (select one):

- 1) Tweed, 1; Delft & Gray, 3; Cranberry & Gray, 4; Spruce & Gray, 5.
- b. Size (select one):
  - 1) 12" x 12" (304.8 mm x 304.8 mm) nominal
  - 2) 12" x 30' (304.8 mm x 9.14 m) nominal (Non-Vulcanized Only, Special Order).

## **2.06 PRODUCT SUBSTITUTIONS**

- A. Substitutions: No substitutions permitted.

## **PART 3 EXECUTION**

### **3.01 MANUFACTURER'S INSTRUCTIONS**

- A. Compliance: Comply with manufacturer's requirements as published in Flexco installation instructions
- B. Adhesive: Flexco brand adhesives, as required, based on product specified, job site conditions, subfloor type, and planned use of finished floor (select one)
  1. Section 2.01 Rubber Tile Flooring
    - a. Flexco 16/86 Multi-Purpose Tile & Tread Adhesive
    - b. Flexco 77 Solvent Free Epoxy Adhesive (Should always be used for Repel Formulation, IMO Formulation, properly prepared non-porous substrates, below grade, rolling loads, lateral shear stress, non climate controlled areas and/or direct sunlight)
  2. Section 2.02 Rubber Sheet Flooring
    - a. Flexco 16/86 Multi-Purpose Tile & Tread Adhesive
    - b. Flexco 77 Solvent Free Epoxy Adhesive (Should always be used for Repel Formulation, IMO Formulation, properly prepared non-porous substrates, below grade, rolling loads, lateral shear stress, non climate controlled areas and/or direct sunlight)
  3. Section 2.03 Tuflex Force Recycled Rubber Flooring
    - a. Flexco 220 Sports Flooring Adhesive
    - b. Flexco 77 Solvent Free Epoxy Adhesive (Used within 6 feet of ice rinks)
  4. Section 2.04 Bonded Crumb Rubber Flooring
    - a. Flexco 220 Sports Flooring Adhesive
  5. Section 2.05 Recycled Tire Tile Flooring
    - a. Flexco FlexTuft Adhesive
    - b. Flexco 77 Solvent Free Epoxy Adhesive (Should always be used for Repel Formulation, IMO Formulation, properly prepared non-porous substrates, below grade, rolling loads, lateral shear stress, non climate controlled areas and/or direct sunlight)

### **3.02 EXAMINATION**

- A. Site Verification of Conditions: Confirm substrate conditions (which have been previously addressed under other sections) are acceptable for product installing in accordance with manufacturer's instructions.
- B. Material Inspection: In accordance with manufacturer's installing requirements, visually inspect materials prior to installing. Material with visual defects shall not be installed.

### **3.03 PREPARATION**

- A. Adjacent Surfaces Protection: Protect adjacent work areas and finish surfaces from damage while installing.
- B. Substrate Preparation: Prepare substrate to be free of paint, old adhesive, sealers, coatings, finishes, dirt, film-forming curing compounds, or other substances which may affect the adhesion of floor covering to the substrate.

1. Concrete Substrate: Reference Standard ASTM F710 Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring. If the following test results exceed the floor covering manufacturer's limits, installing shall not commence until results conform to limits.
  - a. Concrete Moisture Test: Per ASTM F1869 Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride
    - 1) Flexco 16/86 Multi-Performance Tile and Tread Adhesive, 4 lbs or less
    - 2) Flexco 77 Solvent Free Epoxy Adhesive, 5 lbs or less
    - 3) Flexco FlexTuft Adhesive, 4 lbs or less
    - 4) Flexco 220 Sports Flooring Adhesive, 5 lbs or less
  - b. Concrete Moisture Test: Per ASTM F2170 Determining Relative Humidity in Concrete Floor Slabs using *in situ* Probes
    - 1) Flexco 16/86 Multi-Performance Tile and Tread Adhesive, 70% RH or less
    - 2) Flexco 77 Solvent Free Epoxy Adhesive, 75% RH or less
    - 3) Flexco FlexTuft Adhesive, 70% RH or less
    - 4) Flexco 220 Sports Flooring Adhesive, 75% RH or less
  - c. Concrete pH Test: Perform pH tests on concrete regardless of its age or grade level or history of use. Readings below 7.0 and above 10.0 can adversely affect resilient flooring or adhesives, or both.
2. Wood Substrate: Per ASTM F1482, Wood subfloor/underlayment assemblies shall be double layer construction, with a total thickness of not less than 1".
  - a. There shall be minimum 18 inches of well-ventilated air space beneath all wood subfloors.
  - b. Crawl spaces shall be insulated and protected by a moisture vapor barrier.
  - c. Do not install over "sleeper" underlayment systems or wood underlayment installed over concrete.
  - d. Do not install over Lauan panels, CCA Plywood, Fire rated plywood, plywood with knots, underlayment made of pine or other soft woods, particle board, Oriented Strand Board (OSB) Masonite™ or other hardboard underlayment, hardwood flooring, textured or cushioned flooring, treated or otherwise coated wood material or other uneven or unstable substrates.
  - e. Unacceptable surfaces shall be covered using a 1/4-inch or thicker panel underlayment per section d.
  - f. Wood Underlayments: Use only plywood underlayment that is warranted by the underlayment manufacturer for use as an underlayment for sheet vinyl floor covering in commercial applications.
  - g. Refer to Division 6 Carpentry sections for wood subfloor construction.
3. Ceramic Tile, Cementitious Terrazzo and Metal: Refer to Flexco Conductive/Static Dissipative Product Data Sheet for installation over these substrates.
4. Do not install over existing floor covering or over substrates not approved by manufacturer.

### 3.04 INSTALLING

- A. Refer to Flexco installation instructions for specific Rubber Flooring detailed specifications on installing.
  1. Heat welded seams [insert this section if required] (select one)
    - a. The tile shall be pre-grooved for Flexco Unitized Installation. Flexco rubber welding beads, 0.160" in diameter, shall be installed according to manufacturer's instructions.
    - b. Seams shall be grooved to accept Flexco rubber welding beads, 0.160" in diameter, which shall be installed according to manufacturer's instructions.
    - c. Do not heat-weld for first 48 hours.
  2. Flash Cove Procedure
    - a. Follow manufacturer's recommended procedures for flash cove installation.
    - b. Install Flexco® #195 Cove Stick Filler at the wall and floor junction.
    - c. Install Flexco® #197 Resilient Cove Cap on the wall at (insert desired height).

- d. Install metal inside and outside corners, to same height as cove cap.
- e. Butterfly corners can also be installed based on installer expertise.
- 3. Finish Floor Covering Designs: As selected by Architect.
- 4. Accessories: Architect shall specify manufacturers' color coordinated accessories as required, including (but not limited to) resilient wall base, stair nosing, reducers or other edgings, welding rods for heat welded seams.

**3.05 FIELD QUALITY REQUIREMENTS**

- A. Manufacturer's Field Services: Upon Owner's request and with minimum 72 hours notice, provide manufacturer's field service consisting of product use recommendations and periodic site visits to confirm installing of product is in accordance with manufacturer's instructions.
- B. Site Visits: (Specify number and duration of periodic site visits).

**3.06 PROTECTION**

- A. Protection: Protect installed product and finish surfaces from damage during construction. Remove and legally dispose of protective covering at time of substantial completion.
- B. No heat welding for first 48 hours.
- C. Restrict foot traffic from new floor covering for first 48 hours.
- D. Restrict furniture, fixtures and rolling traffic for first 72 hours.
- E. Restrict cleaning/buffing for first 72 hours.

**3.07 INITIAL MAINTENANCE PROCEDURES**

- A. General: Include in contract sum cost for initial maintenance procedures and execution by professional maintenance personnel after floor covering has been installed for 72 hours as specified in the Flexco maintenance instructions.

**3.08 CLEANING**

- A. Cleaning: See Flexco maintenance instructions. Remove temporary coverings and protection of adjacent work areas. Repair or replace damaged installed products. Clean installed products in accordance with manufacturer's instructions prior to owner's acceptance. Remove construction debris from project site and legally dispose of.
- B. Floor finishes: See Flexco product data information for information on floor finishes to be used.