Section 09.65.19

RESILIENT TILE FLOORING INCLUDING RUBBER FLOOR TILE

THIS DOCUMENT IS INTENDED AS A SUGGESTED GUIDE FOR CREATING, MODIFYING, OR EDITING YOUR CSI FORMATTED 3-PART ARCHITECTURAL GUIDE SPECIFICATIONS.

JOHNSONITE WILL NOT BE LIABLE FOR ANY DAMAGES ARISING OUT OF THE USE OF ANY INFORMATION OR SPECIFICATIONS FOUND IN THIS DOCUMENT.

ENSURE THAT YOU HAVE THE LATEST PUBLICATION FOR THIS SPECIFICATION.

THE SPECIFIER OR DESIGNER IS RESPONSIBLE FOR PRODUCT SELECTION AND ACCURACY OF ALL PROJECT SPECIFICATIONS, INCLUDING ANY JOHNSONITE INFORMATION OR SPECIFICATIONS USED.

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:
   1. Resilient Rubber Tile Flooring.

1.3 SUBMITTALS

A. Product Data: For each type of product indicated.

B. LEED Submittals:
   1. Product Data for Credit EQ 4.1: For adhesives, include printed statement of VOC content and chemical components.

C. Samples for Initial Selection: For each type of product indicated.
Section 09.65.19

RESILIENT TILE FLOORING INCLUDING RUBBER FLOOR TILE

D. Samples for Verification: For each type of product indicated, in manufacturer's standard-size samples of each resilient product color, texture, and pattern required.

E. Product Schedule: For resilient products. Use same designations indicated on Drawings.

1.4 QUALITY ASSURANCE

A. Fire-Test-Response Characteristics: As determined by testing identical products according to ASTM E 648 or NFPA 253 by a qualified testing agency.

1. Critical Radiant Flux Classification: Class I, not less than 0.45 watts per square centimeter.

B. Mockups: Provide resilient products with mockups specified in other Sections.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Store resilient products and installation materials in dry spaces protected from the weather, with ambient temperatures maintained within range recommended by Johnsonite, but not less than 55 deg F (13 deg C) or more than 85 deg F (29 deg C).

1.6 PROJECT CONDITIONS

A. Install resilient products after other finishing operations, including painting, have been completed.

B. Maintain ambient temperatures within range recommended by Johnsonite, but not less than 65 deg F (18 deg C) or more than 85 deg F (29 deg C) in spaces to receive resilient products during the following time periods:
   1. 48 hours before installation.
   2. During installation.
   3. 48 hours after installation.

C. Maintain the ambient relative humidity between 40% and 60% during installation.

D. Until Substantial Completion, maintain ambient temperatures within range recommended by Johnsonite, but not less than 55 deg F (13 deg C) or more than 85 deg F (29 deg C).
Section 09.65.19

RESILIENT TILE FLOORING INCLUDING RUBBER FLOOR TILE

PART 2 - PRODUCTS

2.1 RESILIENT TILE FLOORING

Manufacturer:
Johnsonite, Inc.
16910 Munn Road
Chagrin Falls, Ohio 44023
Phone: (800) 899-8916
(440) 543-8916
Tech: Ext 9297
Web: www.johnsonite.com
Samples: Ext 9299
E-mail: info@johnsonite.com
Fax: (440) 543-8920

ENVIRONMENTAL SUSTAINABILITY NOTES:

Johnsonite Rubber Tile

- Johnsonite offers a RESTART reclamation program for returning unused jobsite scrap
- 100% Recyclable
- SCS FloorScore® Certified and meets California Specifications Section 01250
- Johnsonite facilities are ISO 9001 and ISO 14001 Certified
- For all environmental sustainability information visit ecoScorecard on Johnsonite home page at www.johnsonite.com

A. Resilient Rubber Tile Flooring

1. MESTO and MESTO CONFIGURATIONS Rubber Tile specify – Resilient Rubber Tile Flooring with the following physical characteristics:
   a. Complies with requirements for ASTM F 1344 Standard Specification for Rubber Floor Tile, Class 1-A and 1-B.
   b. Manufactured from a homogeneous composition of 100% synthetic rubber
   c. Overall thickness: .080” (2.0 mm).
   d. Hammered texture tile tones:
      1) Mesto.
      2) Mesto (Light Version).
      3) Mesto (Dark Version).
   e. Hammered texture tile size:
      1) Mesto.
         a) 12” x 12” (30.5 cm x 30.5 cm).
      2) Mesto Configurations
         a) 6” x 6” (15.2 cm x 15.2 cm).
         b) 12” x 12” (30.5 cm x 30.5 cm).
         c) 6” x 24” 15.2 cm x 61 cm).
         d) 12” x 24” (30.5 cm x 61 cm).
Section 09.65.19

RESILIENT TILE FLOORING INCLUDING RUBBER FLOOR TILE

g. ASTM D 3389 Standard Test Method for Coated Fabrics Abrasion Resistance: < 1.00 gram weight loss.
i. ASTM F 970, Standard Test Method for Static Load Limit – passes at 250 PSI.
j. ASTM E 648, Standard Test method for Critical Radiant Flux of Floor-Covering Systems Using a Radiant Heat Energy Source – equal to or greater than 0.45 watts/cm2.

- For MESTO specify (MHO ___ [specify color by number and name] ____ [specify 12" x 12" size])
- For MESTO CONFIGURATIONS specify (MHO ____ [specify color by number and name(specify L for light tone or D for darker tone)] ____ [specify size])

2. CITYSCAPE Hammered Texture Speckled Rubber Tile specify – Resilient Rubber Tile Flooring with the following physical characteristics:
   a. Complies with requirements for ASTM F 1344 Standard Specification for Rubber Floor Tile, Class 1-B.
   b. Manufactured from a homogeneous composition of 100% synthetic rubber.
   c. Overall thickness:.080" (2.0 mm).
   d. Tile size: 24" x 24" (61 cm x 61 cm).
   h. ASTM F 970, Standard Test Method for Static Load Limit – passes at 250 PSI.
   i. ASTM E 648, Standard Test method for Critical Radiant Flux of Floor-Covering Systems Using a Radiant Heat Energy Source – equal to or greater than 0.45 watts/cm2.

- For CITYSCAPE specify (CSH ____ [specify color by number and name])

3. ROUNDEL SMOOTH or RAISED SURFACE Rubber Tile specify – Resilient Rubber Tile Flooring with the following physical characteristics:
   a. Complies with requirements for ASTM F 1344 Standard Specification for Rubber Floor Tile, Class 1-A and 1-B.
   b. Manufactured from a homogeneous composition of 100% synthetic rubber.
   c. Disk Height for Raised Round or Raised Square specify: .025".
   d. Overall thickness:
      1) For Smooth Surface specify: .100" (2.54 mm) or .130" (3.30 mm).
Section 09.65.19

RESILIENT TILE FLOORING INCLUDING RUBBER FLOOR TILE

2) For Raised Round or Raised Square Surface specify: 1/8" [.125" (3.17 mm)] or .155 (4.0 mm).

e. Tile size: 24" x 24" (61 cm x 61 cm).


g. ASTM D 3389 Standard Test Method for Coated Fabrics Abrasion Resistance: < 1.00 gram weight loss.


i. ASTM F 970, Standard Test Method for Static Load Limit – passes at 250 PSI.


k. ASTM E 648, Standard Test method for Critical Radiant Flux of Floor-Covering Systems Using a Radiant Heat Energy Source – equal to or greater than 0.45 watts/cm2.

• For SMOOTH ACCENT SOLID COLOR Tile specify (RET _____ [specify color by name and number] ___ [specify thickness])

• For RAISED ROUND SOLID COLOR Tile specify (RT _____ [specify color by number and name] ___ [specify thickness] – RD)

• For RAISED ROUND SPECKLED COLOR Tile specify (RTSP _____ [specify color by number and name] ___ [specify thickness] – RD)

• For RAISED SQUARE SOLID COLOR Tile specify (RT _____  [specify color by number and name] ___ [specify thickness] – SQ)

• For RAISED SQUARE SPECKLED COLOR Tile specify (RTSP ____  [specify color by number and name] ___ [specify thickness] – SQ)

4. ROUNDEL TEXTURED SURFACE Rubber Tile specify – Resilient Rubber Tile Flooring with the following physical characteristics:

a. Complies with requirements for ASTM F 1344 Standard Specification for Rubber Floor Tile, Class 1-A and 1-B.

b. Manufactured from a homogeneous composition of 100% synthetic rubber.

c. Overall thickness: 1/8" [.125" (3.17 mm)].

d. Tile Size:
   1) For Solid Color or Speckled Color Tile specify 24" x 24" (61 cm x 61 cm).
   2) For Marbleized Prima Custom and Olio Color Tile specify 12" x 12" (30.5 cm x 30.5 cm).

e. Tile Textures:
   1) Artistic Square.
   2) Bamboo.
   3) Chopped Bamboo.
   4) Cubis.
   5) Flagstone.
   6) Hammered.
Section 09.65.19

RESILIENT TILE FLOORING INCLUDING RUBBER FLOOR TILE

7) Pebbles.
8) Rice Paper.
9) Weathered.
10) Circulinity:
    a) Effervescent.
    b) Fast Lane.
    c) Round-A-Bout.
    d) Tic-Tac-Toe.
    e) Tricycle.
11) Folio:
    a) Arbor.
    b) Bamboo Leaf.
    c) Botany.
    d) Branches.
    e) River Cane.
    f) Seasons.

g. ASTM D 3389 Standard Test Method for Coated Fabrics Abrasion Resistance: < 1.00 gram weight loss.
i. ASTM F 970, Standard Test Method for Static Load Limit – passes at 250 PSI.
k. ASTM E 648, Standard Test method for Critical Radiant Flux of Floor-Covering Systems Using a Radiant Heat Energy Source – equal to or greater than 0.45 watts/cm².

• For ARTISTIC SQUARE SOLID COLOR specify (ARTS ____ [specify color by number and name] ____ [specify size] ___ [specify thickness])
• For ARTISTIC SQUARE SPECKLED COLOR specify (ARTSP ____ [specify color by number and name] ____ [specify size] ___ [specify thickness])

• For BAMBOO SOLID COLOR specify (BMRTS ____ [specify color by number and name] ____ [specify size] ___ [specify thickness])
• For BAMBOO SPECKLED COLOR specify (BMRTSP ____ [specify color by number and name] ____ [specify size] ___ [specify thickness])

• For CHOPPED BAMBOO SOLID COLOR specify [CBMRTS ____ (specify color by number and name] ____ [specify size] ___ [specify thickness])
• For CHOPPED BAMBOO SPECKLED COLOR specify [CBMRTSP ____ (specify color by number and name] ____ [specify size] ___ [specify thickness])
Section 09.65.19

RESILIENT TILE FLOORING INCLUDING RUBBER FLOOR TILE

- For CUBIS SOLID COLOR specify (CRTS ____ [specify color by number and name] ____ [specify size] ____ [specify thickness])
- For CUBIS SPECKLED COLOR specify (CRTSP ____ [specify color by number and name] ____ [specify size] ____ [specify thickness])
- For FLAGSTONE SOLID COLOR specify (FRTS ____ [specify color by number and name] ____ [specify size] ____ [specify thickness])
- For FLAGSTONE SPECKLED COLOR specify (FRTSP ____ [specify color by number and name] ____ [specify size] ____ [specify thickness])
- For HAMMERED SOLID COLOR specify (HRTS ____ [specify color by number and name] ____ [specify size] ____ [specify thickness])
- For HAMMERED SPECKLED COLOR specify (HRTSP ____ [specify color by number and name] ____ [specify size] ____ [specify thickness])
- For PEBBLES SOLID COLOR specify (PRTS ____ [specify color by number and name] ____ [specify size] ____ [specify thickness])
- For PEBBLES SPECKLED COLOR specify (PRTSP ____ [specify color by number and name] ____ [specify size] ____ [specify thickness])
- For RICE PAPER SOLID COLOR specify (FRPA ____ [specify color by number and name])
- For WEATHERED SOLID COLOR specify (WRTS ____ [specify color by number and name] ____ [specify size] ____ [specify thickness])
- For WEATHERED SPECKLED COLOR specify (WRTSP ____ [specify color by number and name] ____ [specify size] ____ [specify thickness])
- For CIRCULINITY EFFERVESCENT SOLID COLOR specify (CEF ____ [specify color by number and name])
- For CIRCULINITY FAST LANE SOLID COLOR specify (CFL ____ [specify color by number and name])
- For CIRCULINITY ROUND-A-ABOUT SOLID COLOR specify (CRB ____ [specify color by number and name])
- For CIRCULINITY TIC-TAC-TOE SOLID COLOR specify (CTT ____ [specify color by number and name])
- For CIRCULINITY TRICYCLE SOLID COLOR specify (CTR ____ [specify color by number and name])
- For FOLIO ARBOR SOLID COLOR specify (FARB ____ [specify color by number and name])
- For FOLIO BAMBOO LEAF SOLID COLOR specify (FBLF ____ [specify color by number and name])
- For FOLIO BOTANY SOLID COLOR specify (FBOT ____ [specify color by number and name])
Section 09.65.19

RESILIENT TILE FLOORING INCLUDING RUBBER FLOOR TILE

- For FOLIO BRANCHES SOLID COLOR specify (FBRN ____ [specify color by number and name]
- For FOLIO RIVER CANE SOLID COLOR specify (FRCN ____ [specify color by number and name]
- For FOLIO SEASONS SOLID COLOR specify (FSEA ____ [specify color by number and name]

5. ROUNDDEL PRIMA OLIO and PRIMA MARBLEIZED Tile specify – Resilient Rubber Tile Flooring with the following physical characteristics:
   a. Complies with requirements for ASTM F 1344 Standard Specification for Rubber Floor Tile, Class 1-A and 1-B.
   b. Manufactured from a homogeneous composition of 100% synthetic rubber.
   c. Overall thickness: 1/8" [.125" (3.17 mm)].
   d. Tile size: 12" x 12" (30.5 cm x 30.5 cm).
   e. Tile Textures:
      1) Smooth.
      2) Flagstone.
      3) Hammered.
      4) Weathered.
   g. ASTM D 3389 Standard Test Method for Coated Fabrics Abrasion Resistance: < 1.00 gram weight loss.
   i. ASTM F 970, Standard Test Method for Static Load Limit – passes at 250 PSI.
   k. ASTM E 648, Standard Test method for Critical Radiant Flux of Floor-Covering Systems Using a Radiant Heat Energy Source – equal to or greater than 0.45 watts/cm2.

- For SMOOTH PRIMA COLOR specify (PRIMA ____ [specify by color number and name])
- For SMOOTH OLIO COLOR specify (OLIO SMOOTH ____ [specify by color number and name])
- For FLAGSTONE PRIMA COLOR specify (FRTP ____ [specify by color number and name])
- For FLAGSTONE OLIO COLOR specify (FRTPO ____ [specify by color number and name])
- For HAMMERED PRIMA COLOR specify (HRTP ____ [specify by color number and name])
Section 09.65.19

RESILIENT TILE FLOORING INCLUDING RUBBER FLOOR TILE

- For HAMMERED OLIO COLOR specify (HRTPO ____ [specify by color number and name])
- For WEATHERED PRIMA COLOR specify (WRTP ____ [specify by color number and name])
- For WEATHERED OLIO COLOR specify (WRTPO ____ [specify by color number and name])

6. ECO-NATURALS (ECO-SHELL or CORKTONES) specify – Resilient Rubber Tile Flooring with the following physical characteristics:
   b. Manufactured from a homogeneous composition of synthetic rubber and:
      1) Walnut Shells and Cork for Eco-Shell Tile.
      2) Cork for Corktones Tile.
   c. Overall thickness: 1/8" (.125" (3.17 mm)).
   d. Tile size: 24" x 24" (61 cm x 61 cm).
   h. ASTM F 970, Standard Test Method for Static Load Limit – passes at 250 PSI.
   i. ASTM E 648, Standard Test method for Critical Radiant Flux of Floor-Covering Systems Using a Radiant Heat Energy Source – equal to or greater than 0.45 watts/cm2.

- For ECO-SHELL HAMMERED Surface, specify (HRTEC ____ [specify by color number and name])
- For CORKTONES HAMMERED Surface, specify (HRTCT ____ [specify by color number and name])

7. METALLURGY Rubber Tile specify – Metallurgy Resilient Rubber Tile Flooring with the following physical characteristics:
   a. Complies with requirements for ASTM F 1344 Standard Specification for Rubber Floor Tile, Class 1-A and 1-B.
   b. Manufactured from a homogeneous composition of 100% synthetic rubber.
   c. Overall thickness: 1/8" (.125" (3.17 mm)).
   d. Tile size: 24" x 24" (61 cm x 61 cm).
   e. Tile Textures: Hammered.
Section 09.65.19

RESILIENT TILE FLOORING INCLUDING RUBBER FLOOR TILE

8. DEFIANT OIL AND GREASE RESISTANT Tile specify – Defiant Resilient Rubber Tile Flooring with the following physical characteristics:
   a. Complies with requirements for ASTM F 1344 Standard Specification for Rubber Floor Tile, Class 1-A and 1-B.
   b. Manufactured from a homogeneous composition of 100% synthetic rubber.
   c. Specially formulated for areas exposed to oil and grease.
   d. Overall thickness: 1/8" [.125" (3.17 mm)].
   e. Tile size specify:
      1) Solid Color Raised Round 24" x 24" (61 cm x 61 cm).
      2) Solid Color Hammered textured 24" x 24" (61 cm x 61 cm).
      3) Prima Marbleized Hammered textured 12" x 12" (30.5 cm x 30.5 cm).
      4) Speckled Color Raised Round 24" x 24" (61 cm x 61 cm).
      5) Speckled Color Hammered textured 24" x 24" (61 cm x 61 cm).
   g. ASTM D 2240 Standard Test Method for Rubber Property—Durometer Hardness: 65 Shore A.
   j. ASTM F 970, Standard Test Method for Static Load Limit – passes at 250 PSI.
   k. ASTM E 648, Standard Test method for Critical Radiant Flux of Floor-Covering Systems Using a Radiant Heat Energy Source – equal to or greater than 0.45 watts/cm2.

- For DEFIENT SOLID COLOR RAISED ROUND specify (GRRT ____ [specify color by number and name])
- For DEFIENT SOLID COLOR HAMMERED specify (GRHRT ____ [specify color by number and name])
- For DEFIENT MARBLEIZED COLOR HAMMERED specify (GRHRTP ____ [specify color by number and name])
- For DEFIENT SPECKLED COLOR HAMMERED specify (GRHRTSP ____ [specify color by number and name])
2.2 INSTALLATION MATERIALS

A. Trowelable Leveling and Patching Compounds: Latex-modified, portland cement based or blended hydraulic-cement-based formulation.

B. Adhesives: As recommended by Johnsonite to meet site conditions.
   1. Rubber Floor Tile.
      a. Johnsonite #965 Flooring and Tread Adhesive.
      b. Johnsonite #975 Two-Part Urethane Adhesive.
      c. Johnsonite #996 Two-Part Epoxy Adhesive.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates, with Installer present, for compliance with requirements for maximum moisture content and other conditions affecting performance of the work.

B. Verify that finishes of substrates comply with tolerances and other requirements specified in other Sections and that substrates are free of cracks, ridges, depressions, scale, and foreign deposits that might interfere with adhesion of resilient products.

C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Prepare substrates according to Johnsonite written instructions to ensure adhesion of Resilient Tile Flooring.
   1. Verify that substrates are dry and free of curing compounds, sealers, and hardeners.
   2. Remove substrate paint, coatings and other substances that are incompatible with adhesives or contain soap, wax, oil, solvents, or silicone, using mechanical methods recommended by manufacturer. Do not use solvents.
   3. Mechanically remove contamination on the substrate that may cause damage to the resilient flooring material. Permanent and non-permanent markers, pens, crayons, paint, etc., must not be used to write on the back of the flooring material or used to mark the substrate as they could bleed through and stain the flooring material.
   4. Prepare Substrates according to ASTM F 710 including the following:
      a. Moisture Testing: Perform tests recommended by manufacturer. Proceed with installation only after substrates pass testing.
         1) Perform anhydrous calcium chloride test, ASTM F 1869. Results must not exceed 5 lbs. Moisture Vapor Emission Rate per 1,000 sq. ft. in 24 hours.
            – or –

For DEFIANT SPECKLED COLOR RAISED ROUND specify (GRRTSP ___ [specify color by number and name])
Section 09.65.19

RESILIENT TILE FLOORING INCLUDING RUBBER FLOOR TILE

2) Perform relative humidity test using in situ probes, ASTM F 2170. Must not exceed 80%.
   b. A pH test for alkalinity must be conducted. Results should range between 7 and 9. If the test results are not within the acceptable range of 7 to 9, the installation must not proceed until the problem has been corrected.
   c. Alkalinity and Adhesion Testing: Perform tests recommended by manufacturer.

5. Wood subfloors must have a minimum 19" (47 cm) of cross-ventilated space beneath the bottom of the joist.
   a. The floor must be rigid, free of movement.
   b. Single wood and tongue and groove subfloors should be covered with ¼" (6.4 mm) or ½" (13 mm) APA approved underlayment plywood.
      1) Use ¼" (6.4 mm) thick underlayment panels for boards with a face width of 3" (76 mm) or less.
      2) Use ½" (76 mm) thick underlayment panels for boards with a face width wider than 3" (76 mm).
   c. Do not install over OSB (Oriented Strand Board), particle board, chipboard, lauan or composite type underlayments.

B. Fill cracks, holes, depressions and irregularities in the substrate with good quality Portland cement based underlayment leveling and patching compound and remove bumps and ridges to produce a uniform and smooth substrate.

C. Floor covering shall not be installed over expansion joints.

D. Do not install resilient products until they are same temperature as the space where they are to be installed.
   1. Move resilient products and installation materials into spaces where they will be installed at least 48 hours in advance of installation.

E. Sweep and vacuum clean substrates to be covered by resilient products immediately before installation.

3.3 RESILIENT TILE FLOORING INSTALLATION

A. Comply with manufacturer's written instructions for installing resilient tile flooring.

B. Resilient Rubber Floor Tile:
   1. Install with Johnsonite adhesive specified for the site conditions and follow adhesive label for proper use.
   2. Do not Quarter Turn tile.
   3. Roll the flooring in both directions using a 100 pound three-section roller.

3.4 CLEANING AND PROTECTION

A. Comply with manufacturer's written instructions for cleaning and protection of resilient products.
Section 09.65.19

RESILIENT TILE FLOORING INCLUDING RUBBER FLOOR TILE

B. Perform the following operations immediately after completing resilient product installation:
   1. Remove adhesive and other blemishes from exposed surfaces.
   2. Sweep and vacuum surfaces thoroughly.
   3. Damp-mop surfaces to remove marks and soil.

C. Protect resilient products from mars, marks, indentations, and other damage from construction operations and placement of equipment and fixtures during remainder of construction period.

D. No traffic for 24 hours after installation.

E. No heavy traffic, rolling loads, or furniture placement for 72 hours after installation.

F. Cover resilient products until Substantial Completion.

G. Wait 72 hours after installation before performing initial cleaning.

H. A regular maintenance program must be started after the initial cleaning.

END OF SECTION 09.65.19