

RESILIENT ECO NATURALS, DEFIANT, AND PHOTOLUMINESCENT STAIR TREADS

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 Eco Naturals and Photoluminescent Stair Tread.

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, including printed statement of VOC content and chemical components.
- C. Samples for Initial Selection: For each type of product indicated.

RESILIENT ECO NATURALS, DEFIANT, AND PHOTOLUMINESCENT STAIR TREADS

- 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. 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).

RESILIENT ECO NATURALS, DEFIANT, AND PHOTOLUMINESCENT STAIR TREADS

PART 2 - PRODUCTS

2.1 RESILIENT ECO NATURALS, DEFIANT, AND PHOTOLUMINESCENT STAIR TREADS

Manufacturer:

 Johnsonite, Inc.
 Phone
 (800) 899-8916

 16910 Munn Road
 (440) 543-8916

 Chagrin Falls, Ohio 44023
 Tech:
 Ext 9297

 Web: www.johnsonite.com
 Samples:
 Ext 9299

 E-mail: info@johnsonite.com
 Fax:
 (440) 543-8920

ENVIRONMENTAL SUSTAINABILITY NOTES:

Johnsonite Resilient Eco Naturals, Defiant, and Photoluminescent Stair Treads

- Johnsonite offers a RESTART reclamation program for returning unused jobsite scrap
- Eco Naturals Eco-Shell contains 7% rapidly renewable cork and walnut shell
- Eco Naturals Corktones contains 2.5% rapidly renewable cork
- Defiant specially formulated for areas exposed to oils and greases
- 100% Recyclable
- SCS FloorScore® Certified and meets California Specifications Section 01350
- Johnsonite facilities are ISO 9001 and ISO 14001 Certified
- For all environmental sustainability information visit ecoScorecard on Johnsonite home page at www.johnsonite.com

RESILIENT ECO NATURALS, DEFIANT, AND PHOTOLUMINESCENT STAIR TREADS

- A. Resilient Eco Naturals Eco-Shell with Cork Stair Tread:
 JOHNSONITE ECO-SHELL WITH CORK STAIR TREAD with INTEGRATED RISER
 specify –Eco-Shell with Cork Stair Tread with Integrated Riser with the following physical characteristics:
 - a. Manufactured from a homogeneous composition of 100% synthetic rubber, cork, and walnut shells.
 - b. Contains 7% rapidly renewable cork and walnut shell.
 - c. Complies with requirements for ASTM F 2169 Standard Specification for Resilient Stair Treads, Type TS, Class 2, Group 1 and 2.
 - d. Hardness: ASTM D 2240 Not less than 85 Shore A.
 - e. Abrasion Resistance: ASTM D 3389 less than 1 gram weight loss.
 - f. ASTM D 2047, Standard Test Method for Static Coefficient of Friction of Polish-Coated Flooring of 0.8 or greater.
 - g. ASTM E 648, Standard Test Method for Critical Radiant Flux of 0.45 watts/cm² or greater, Class I.
 - h. Integrated tread and riser.
 - i. Visually Impaired treads meet ADA and are California Title 24 Accessibility requirements.
 - j. Visually Impaired treads will have 2" wide contrasting color grit tape insert.
 - 1. Eco-Shell with Cork and Integrated Stair Tread and Riser
 - For Eco-Shell Hammered surface with Cork Speckles, integrated stair tread and riser, 2" height hinged Square Nose, tapering .210" to .153", 20" overall width including 13" tread depth with 7" integrated riser, tread length 3', 3.5', 4', 4.5', 5', 6', 7', 8' or 9'
 - o Specify (HTREC –
 - Specify color by number and name
 - o Specify length [3', 3.5', 4', 4.5', 5', 6', 7', 8' or 9'] ____)
 - 2. Visually Impaired Eco-Shell with Cork and Integrated Stair Tread and Riser
 - For Eco-Shell Hammered surface with Cork Speckles, integrated stair tread and riser, 2" height hinged Square Nose, tapering .210" to .153", 20" overall width including 13" tread depth with 7" integrated riser, with 2" contrasting color grit tape insert, tread length 3', 3.5', 4', 4.5', 5', 6', 7', 8' or 9'
 - Specify (VIHTREC –
 - Specify color by number and name
 - o Specify length [3', 3.5', 4', 4.5', 5', 6', 7', 8' or 9'] ____)

RESILIENT ECO NATURALS, DEFIANT, AND PHOTOLUMINESCENT STAIR TREADS

- B. Resilient Eco Naturals – CorkTones Stair Tread:
 - JOHNSONITE CORK SPECKLED CORKTONES STAIR TREAD with INTEGRATED **RISER** specify - Cork Speckled CorkTones Stair Tread with Integrated Riser with the following physical characteristics:
 - a. Manufactured from a homogeneous composition of 100% synthetic rubber and cork.
 - b. Contains 2.5% rapidly renewable cork.
 - c. Complies with requirements for ASTM F 2169 Standard Specification for Resilient Stair Treads, Type TS, Class 2, Group 1 and 2.
 - d. Hardness: ASTM D 2240 Not less than 85 Shore A.
 - e. Abrasion Resistance: ASTM D 3389 less than 1 gram weight loss.
 - f. ASTM D 2047, Standard Test Method for Static Coefficient of Friction of Polish-Coated Flooring of 0.8 or greater.
 - g. ASTM E 648, Standard Test Method for Critical Radiant Flux of 0.45 watts/cm² or greater, Class I.
 - h. Integrated tread and riser.
 - Visually Impaired treads meet ADA and are California Title 24 Accessibility requirements.
 - Visually Impaired treads will have 2" wide contrasting color grit tape insert.
 - 1. CorkTones with Cork Speckles and Integrated Stair Tread and Riser
 - For CorkTones Hammered surface with Cork Speckles, integrated stair tread and riser, 2" height hinged Square Nose, tapering .210" to .153", 20" overall width including 13" tread depth with 7" integrated riser, tread length 3', 3.5', 4', 4.5', 5', 6', 7', 8' or 9'
 - o Specify (HTRCT -
 - Specify color by number and name
 - o Specify length [3', 3.5', 4', 4.5', 5', 6', 7', 8' or 9'] ____)
 - 2. Visually Impaired CorkTones with Cork Speckles and Integrated Stair Tread and Riser
 - For CorkTones Hammered surface with Cork Speckles, integrated stair tread and riser, 2" height hinged Square Nose, tapering .210" to .153", 20" overall width including 13" tread depth with 7" integrated riser, with 2" contrasting color grit tape insert, tread length 3', 3.5', 4', 4.5', 5', 6', 7', 8' or 9'
 - Specify (VIHTRCT –
 - Specify color by number and name _
 - Specify length [3', 3.5', 4', 4.5', 5', 6', 7', 8' or 9'] ____)

RESILIENT ECO NATURALS, DEFIANT, AND PHOTOLUMINESCENT STAIR TREADS

C. Resilient Defiant Stair Tread:

JOHNSONITE DEFIANT OIL AND GREASE RESTIANT STAIR TREAD with INTEGRATED RISER specify – Defiant Oil and Grease Resistant Rubber Stair Tread with Integrated Riser with the following physical characteristics:

- a. Manufactured from a homogeneous composition of 100% synthetic rubber specifically formulated for areas exposed to oils and greases.
- b. Complies with requirements for ASTM F 2169 Standard Specification for Resilient Stair Treads, Type TS, Class 2.
- c. Hardness: ASTM D 2240 Not less than 85 Shore A.
- d. Abrasion Resistance: ASTM D 3389 less than 1 gram weight loss.
- e. ASTM D 2047, Standard Test Method for Static Coefficient of Friction of Polish-Coated Flooring of 0.8 or greater.
- f. ASTM E 648, Standard Test Method for Critical Radiant Flux of 0.45 watts/cm² or greater, Class I.
- g. Integrated tread and riser.
- 1. Defiant Oil and Grease Resistant with Integrated Stair Tread and Riser
 - For Defiant Oil and Grease Resistant Raised Square surface, integrated stair tread and riser, Square Nose, 20" overall width including 13" tread depth with 7" integrated riser, tread length 3', 3.5', 4', 4.5', 5', 6', 7', 8' or 9'
 - Specify ([GRRTR for solid color] or [GRRTRP for Marbleized color] or [GRRTRSP for speckled color] –
 - o Specify color by number and name _____ –
 - o Specify length [3', 3.5', 4', 4.5', 5', 6', 7', 8' or 9']

RESILIENT ECO NATURALS, DEFIANT, AND PHOTOLUMINESCENT STAIR TREADS

A. Resilient Photoluminescent Rubber Stair Tread:

JOHNSONITE PHOTOLUMINESCENT RUBBER STAIR TREAD WITH OR WITHOUT RISER specify – Photoluminescent Rubber Stair Tread with or without Riser with the following physical characteristics:

- a. Manufactured from a homogeneous composition of 100% synthetic rubber.
- b. Complies with requirements for ASTM F 2169 Standard Specification for Resilient Stair Treads, Type TS, Class 2, Group 2.
- c. Tensile Strength: ASTM D 412 1200 PSI.
- d. Hardness: ASTM D 2240 Not less than 85 Shore A.
- e. Abrasion Resistance: ASTM D 3389 less than 1 gram weight loss.
- f. ASTM D 2047, Standard Test Method for Static Coefficient of Friction of Polish-Coated Flooring of 0.6 or greater.
- g. ASTM E 648, Standard Test Method for Critical Radiant Flux of 0.45 watts/cm² or greater, Class I.
- h. Tread without riser.
- i. Visually Impaired treads meet ADA and are California Title 24 Accessibility requirements.
- j. Visually Impaired treads will have 2" wide contrasting Photoluminescent color tape insert.
- 1. Visually Impaired Solid Color Standard Rubber Stair Treads without Riser with Contrasting Photoluminescent Color Insert
 - For Raised Round surface, visually impaired, solid color without riser, 2" height hinged Square Nose, tapering .210" to .113", 12 1/4" tread depth with 2" contrasting Photoluminescent color grit tape insert, tread length 3', 3.5', 4', 4.5', 5', 6', 7', or 8'
 - Specify (PVIRH –
 - o Specify color by number and name _______
 - o Specify length [3', 3.5', 4', 4.5', 5', 6', 7', or 8'] _____
 - o Specify 'Round Pattern')
 - For Raised Square surface, visually impaired, solid color without riser, 2" height hinged Square Nose, tapering .210" to .113", 12 1/4" tread depth with 2" contrasting Photoluminescent color tape insert, tread length 3', 3.5', 4', 4.5', 5', 6', 7', or 8'
 - Specify (PVIRH –
 - Specify color by number and name ______
 - o Specify length [3', 3.5', 4', 4.5', 5', 6', 7', or 8'] _____
 - Specify 'Square Pattern')

RESILIENT ECO NATURALS, DEFIANT, AND PHOTOLUMINESCENT STAIR TREADS

- 2. Visually Impaired Solid Color Standard Rubber Integrated Stair Treads and Riser with Contrasting Photoluminescent Color Insert
 - For Raised Round surface, solid color integrated stair tread and riser, 2" height hinged Square Nose, tapering .210" to .153", 20" overall width including 13" tread depth with 7" integrated riser, with 2" contrasting Photoluminescent color tape insert, tread length 3', 3.5', 4', 4.5', 5', 6', 7', 8' or 9'
 - Specify (PVIRTR –
 - Specify color by number and name ______ –
 - o Specify length [3', 3.5', 4', 4.5', 5', 6', 7', 8' or 9'] _____
 - o Specify 'Round Pattern')
 - For Raised Square surface, solid color integrated stair tread and riser, 2" height hinged Square Nose, tapering .210" to .153", 20" overall width including 13" tread depth with 7" integrated riser, with 2" contrasting Photoluminescent color tape insert, tread length 3', 3.5', 4', 4.5', 5', 6', 7', 8' or 9'
 - o Specify (PVIRTR -
 - Specify color by number and name ______
 - o Specify length [3', 3.5', 4', 4.5', 5', 6', 7', 8' or 9'] ______
 - o Specify 'Square Pattern')
 - For Hammered surface, solid color integrated stair tread and riser, 2" height hinged Square Nose, tapering .210" to .153", 20" overall width including 13" tread depth with 7" integrated riser, with 2" contrasting Photoluminescent color tape insert, tread length 3', 3.5', 4', 4.5', 5', 6', 7', 8' or 9'
 - o Specify (PVIHTR –
 - o Specify color by number and name _____ -
 - o Specify length [3', 3.5', 4', 4.5', 5', 6', 7', 8' or 9'] ____)

2.2 INSTALLATION MATERIALS

- A. Trowelable Leveling and Patching Compounds: Latex-modified, portland cement based formulation manufactured and warranted by a reputable manufacturer.
- B. Adhesives: as recommended by Johnsonite to meet site conditions.
 - 1. Johnsonite #965 Flooring and Tread Adhesive.
 - 2. Johnsonite #945 Contact Bond Adhesive.
 - 3. Johnsonite #975 Two-Part Urethane Adhesive.
 - 4. Johnsonite #996 Two-Part Epoxy.
- C. Stair Tread and Nose Filler: Johnsonite #930 Two-Part Epoxy Caulking Compound to fill nosing substrates that do not conform to tread contours.

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.

RESILIENT ECO NATURALS, DEFIANT, AND PHOTOLUMINESCENT STAIR TREADS

- 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 manufacturer's written instructions to ensure adhesion of resilient products.
 - 1. Verify that substrates are dry and free of curing compounds, sealers, and hardeners.
 - 2. 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.
 - 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 –

- 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 steps/substrates
 - a. The substrate must be rigid, free of movement.
 - b. Single wood and tongue and groove substrate should be covered with 1/4" (6.4 mm) or 1/2" (13 mm) APA approved underlayment plywood.
 - 1) Use 1/4" (6.4 mm) thick underlayment panels for boards with a face width of 3" (76 mm) or less.
 - 2) Use 1/2" (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.

RESILIENT ECO NATURALS, DEFIANT, AND PHOTOLUMINESCENT STAIR TREADS

- 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 STAIR TREAD AND RISER INSTALLATION

- A. Comply with manufacturer's written instructions for installing resilient accessories.
- B. Resilient Stair Tread and Nosing:
 - 1. Use Johnsonite #930 Epoxy Caulking Compound to strengthen nosing and fill irregularities in substrates to conform to tread nosing.
 - 2. Tightly adhere to substrates throughout length of each piece.
 - 3. For treads installed as separate, equal-length units, install to produce a flush joint between units.

3.4 CLEANING AND PROTECTION

- A. Comply with manufacturer's written instructions for cleaning and protection of resilient products.
- 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. Cover resilient products until Substantial Completion.

END OF SECTION 09.65.13.23