Product Specification

Section 096519

Eco-Shell™ with Cork Rubber Tiles

1. PROPRIETARY PRODUCT/MANUFACTURER

1.1. Proprietary Product: Resilient Rubber Floor Tiles - A.D.A. Compliant

1.2. Manufacturer:

Johnsonite, Inc.	Phone	(800) 899-8916
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Chagrin Falls, Ohio 44023	Tech:	Ext 9297
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1.3. Proprietary Product Description:

1.3.1. Construction: Johnsonite Eco-Shell Rubber Floor Tiles are manufactured from a homogeneous composition of synthetic rubber, cork, walnut shells, high quality additives, and colorants to meet the performance requirements of ASTM F 1344 Standard Specification for Rubber Floor Tile.

Johnsonite Eco-Shell Rubber Floor Tiles are designed for interior applications only and not recommended for environments where the product will be exposed to animal fats, vegetable oils, or petroleum based materials (e.g.: commercial kitchens). Johnsonite rubber floor tiles require the use of chair pads or chairs with casters designed for resilient flooring in work stations or similar environments. Johnsonite rubber floor tiles are not warranted against cuts or lack of protection under caster wheels designed for carpeting or other types of flooring.

1.3.2. Styles:

HRTEC-XXX - Hammered Surface Eco-Shell Rubber Tile, .125" (3.17 mm)

1.3.3. Physical Characteristics:

Tile Size and Packaging:

- 24" x 24" (61 cm x 61 cm), .125" thick – 8 tiles per carton, 32 ft² (3.0 m²), 32 lbs/carton

2. PRODUCT PERFORMANCE AND TECHNICAL DATA

- Hardness (ASTM D 2240): Not less than 85 Shore A
- Abrasion Resistance (ASTM D 3389): <1.0 gm weight loss
- Slip Resistance (ASTM D 2047): Meets or Exceeds a static coefficient of friction of 0.8
- Color Heat Stability (ASTM F 1514): < 8.0 ΔE
- Static Load Limit (ASTM F 970): Passes at 250 PSI
- Fire Resistance:
  - o ASTM E 648/NFPA 253 (Critical Radiant Flux), Class 1
  - o ASTM E 662/NFPA 258 (Smoke Density), less than 450
- Chemical Resistance (ASTM F 925): Passes - 5% Acetic acid, 70% Isopropyl alcohol, Sodium hydroxide solution (5% NaOH), Hydrochloric acid solution (5% HCl), Sulfuric acid solution (5% H_2SO_4), Household ammonia solution (5% NH_4OH), Household bleach (5.25% NaOCl), Disinfectant cleaner (5% active phenol)

3. INSTALLATION

Johnsonite flooring and adhesives must be site conditioned at room temperature for 48 hours prior to, during, and after installation. Room temperature must be maintained between 65° and 85°F (18° and 30°C) with HVAC system operating. A minimum temperature of 55°F (13°C) must be maintained afterwards. The ambient relative humidity should be between 40% and 60%.

Concrete shall be prepared utilizing ASTM F 710, Practice for Preparing Concrete Floors and Other Monolithic Floors to Receive Resilient Flooring. Floors shall be smooth, flat, permanently dry, clean, and free of all foreign material such as dust, paint, grease, oils, solvents, curing and hardening compounds, sealers, asphalt, and old adhesive residue. Floor covering shall not be installed over expansion joints.

All concrete subfloors must be tested for moisture, pH (alkalinity), and proper adhesive bond: Moisture tests shall be conducted in accordance with ASTM F 2170 "Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs using *in situ* Probes". Three tests should be conducted for areas up to 1,000 sq. ft. and one additional test should be conducted for each additional 1,000 sq. ft. of flooring or fraction thereof.

RH test results must not exceed 80%.

If the tests results exceed the limitations, the installation must not proceed until the problem has been corrected.

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.

An adhesive bond test should be performed using the actual flooring materials and adhesive to be installed. The test areas should be a minimum of 36" x 36" and remain in place for at least 72 hours and then evaluated for bond strength to the concrete.

Concrete floors equipped with a radiant heating system: Turn the heat down to 65°F (18°C) for at least 48 hours before installation. Heat may be gradually returned to operating temperature 48 hours after installation. Temperature should not exceed 85°F (30°C).

Wood subfloors must have a minimum 18" (47 cm) of cross-ventilated space between the bottom of the joist and ground. Exposed earth crawl spaces should be sealed with a polyethylene moisture barrier.

Subfloors should meet local and national building codes.

Trade associations, such as the APA -"The Engineered Wood Association", offer structural guidelines for meeting various code requirements.

Single Wood and Tongue and Groove subfloors should be covered with 1/4" (6.4 mm) or 1/2" (13 mm) APA approved underlayment plywood. Use 1/4" (6.4 mm) thick underlayment panels for boards with a face width of 3" (76 mm) or less. For boards wider than 3" (76 mm) face width use 1/2" (13 mm) underlayment panels.

Countersink nail heads and fill depressions, joints, cracks, gouges, and chipped edges with a good quality Portland cement based patching compound.

Do not install over OSB (Oriented Strand Board), particle board, chipboard, lauan or composite type underlayments.

Terrazzo and Ceramic floor surface must be thoroughly sanded to remove all glaze and waxes. Remove or replace all loose tiles and clean the grout lines. Use a Portland cement based leveling compound to fill all grout lines and other depressions.

Steel floor surface must be mechanically abraded to assist with the adhesive bond. The floor must be cleaned to remove all dirt, rust and other contaminants. When applying adhesive the non-porous installation instructions must be followed.

3.1. Adhesives:

- Johnsonite #965 Flooring & Tread Adhesive:

  Porous Substrates: 1/16" X 1/16" X 1/16" square-notched trowel (Approximately 125 - 150 sq ft /gal)

  Non-Porous Substrates: 1/16" X 1/16" X 1/16" V-notched trowel (Approximately 150 - 175 sq ft /gal)

  Important: This adhesive is substrate porosity sensitive. Determine if the substrate is porous or non-porous prior to application of the adhesive and installation of the flooring products and follow the appropriate instructions.

- Johnsonite #996 Two-Part Epoxy Adhesive: 1/16" X 1/16" X 1/16" square-notched trowel (Approximately 125 - 150 sq. ft/gal)
- Johnsonite #975 Two-Part Urethane Adhesive: 1/16" X 1/16" X 1/16" square-notched trowel (Approximately 125 - 150 sq. ft/gal)
- Johnsonite SpraySmart 140 – Approximately 100 -125 sq. ft. per 22 oz. can
- Installation Manual: Refer to Johnsonite rubber floor tiles Installation Instructions for complete installation details.

4. AVAILABILITY AND COST

Available through authorized Johnsonite distributors nationwide.

5. WARRANTY

Limited 5 year warranty. For complete details, contact Johnsonite or an authorized Johnsonite distributor.

6. MAINTENANCE

72 hours after installation is completed, initial maintenance procedures must be implemented in accordance with manufacturer's requirements. Refer to Johnsonite Rubber Tile Maintenance Instructions for complete maintenance details.

7. TECHNICAL SERVICES

Samples: Submittal samples for verification and approval available upon request from Johnsonite. Samples shall be submitted in compliance with the requirements of the Contract Documents. Accepted and approved samples shall constitute the standard materials which represent materials installed on the project.

For current Installation and Maintenance Instructions, Product Specifications, and other technical data, visit us on the web at www.johnsonite.com or contact Johnsonite at 1-800-899-8916.