

SECTION 09 65 00 – RESILIENT FLOORING EPDM RUBBER & CORK GENERAL

1.1 SUMMARY

A. SECTION INCLUDES:

1. Recycled rubber cork
2. Recycled rubber cork / Recycled rubber square-edge tile
3. Adhesives
4. Finishes

B. RELATED SECTIONS

1. Section 03300 - Cast-In-Place Concrete Floor substrate requirements.
2. Section 06200 - Rough Carpentry: Floor substrate requirements.

1.2 REFERENCES

A. American Concrete Institute (ACI):

1. ACI 302.2R - Guide for Concrete Slabs that Receive Moisture-Sensitive Flooring Materials

B. American Society for Testing and Materials (ASTM):

1. ASTM D883 – Standard Terminology Relating to Plastics.
2. ASTM D1566 - Standard Terminology Relating to Rubber.
3. ASTM D2047 - Standard Test Method for Static Coefficient of Friction of Polish-Coated Flooring Surfaces as Measured by the James Machine.
4. ASTM D2240 - Standard Test Method for Rubber Property Durometer Hardness.
5. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials.
6. ASTM E90 – Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements.
7. ASTM E413 - Classification for Rating Sound Insulation (STC).
8. ASTM E492 – Standard Test Method for Laboratory Measurement of Impact Sound Transmission Through Floor-Ceiling Assemblies Using the Tapping Machine
9. ASTM E648 - Standard Test Method for Critical Radiant Flux of Floor-Covering Systems Using a Radiant Heat Energy Source.
10. ASTM E662 - Standard Test Method for Specific Optical Density of Smoke Generated by Solid Materials.
11. ASTM E989 - Standard Classification for Determination of Impact Insulation Class (IIC).
12. ASTM F137 - Standard Test Method for Flexibility of Resilient Flooring Materials with Cylindrical Mandrel Apparatus.
13. ASTM F141 - Standard Terminology Relating to Resilient Floor Coverings.
14. ASTM F376 – Standard Test Method for Thickness of Resilient Flooring Materials Having Flat Surfaces.
15. ASTM F710 - Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring.
16. ASTM F925 - Standard Test Method for Resistance to Chemicals of Resilient Flooring.
17. ASTM F970 - Standard Test Method for Static Load Limit.
18. ASTM F1514 - Standard Test Method for Measuring Heat Stability of Resilient Flooring by Color Change.

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19. ASTM F1869 - Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride.
 20. ASTM F1914 - Standard Test Methods for Short-Term Indentation and Residual Indentation of Resilient Floor Covering.
 21. ASTM F2055 – Standard Test Method for Size and Squareness of Resilient Floor Tile.
 22. ASTM F2199 - Standard Test Method for Determining Dimensional Stability of Resilient Floor Tile after Exposure to Heat.
 23. ASTM F2419 – Standard Practice for Installation of Thick Poured Concrete Underlayments and Preparation of the Surface to Receive Resilient Flooring.
 24. ASTM F2471 – Standard Practice for Installation of Thick Poured Lightweight Cellular Concrete Underlayments and Preparation of the Surface to Receive Resilient Flooring.
 - C. State of California (CA)
 1. CA Section 01350 – Special Environmental Requirements (Indoor Air Quality)
 - D. California Department of Public Health (CDPH)
 1. CDPH Standard Method v 1.2 - Standard Method for Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers
 - E. California High Performance Schools (CHPS)
 1. CHPS Section 01350 - Low-Emitting Materials Criteria for Use in Classrooms.
 - F. Declare™
 1. Product material disclosure labeling program.
 - G. FloorScore®
 1. Indoor Air Quality (IAQ) certification for flooring materials, adhesives and underlayments.
 - H. Living Building Challenge (LBC)
 1. LBC Chemical Red List Version 3.0.
 - I. National Fire Protection Association (NFPA)
 1. NFPA 80 – Fire Safety Code.
 2. NFPA 253 - Standard Test Method for Critical Radiant Flux of Floor-Covering Systems Using a Radiant Heat Energy Source.
 3. NFPA 255 - Standard Test Method for Surface Burning Characteristics of Building Materials.
 4. NFPA 286 - Standard Methods of Fire Tests for Evaluating Contribution of Wall and Ceiling Interior Finish to Room Fire Growth.
 - J. Resilient Floor Covering Institute (RFCI)
 1. Recommended Work Practices for Removal of Resilient Floor Coverings
- 1.3 SUBMITTALS
- A. General: Submittals must be submitted the under provisions of Section 01300.
 - B. Product Data: Manufacturer's published documents on each product to be used, including:
 1. Storage and handling requirements.
 2. Installation instructions and initial maintenance instructions per Technical Data Sheets.

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- 3. Maintenance and initial finish application instructions per Care & Maintenance documents.
- C. Selection Samples: For each finish product specified, two complete sets of color chips representing manufacturer's full range of available colors and patterns.
- D. Verification Samples: For each finish product specified, two samples, minimum size 6 inches (150 mm) square or one full tile, representing actual product, color, and patterns.

1.4 SUSTAINABILITY REQUIREMENTS

- A. CA Section 01350 / CHPS Section 01350
 - a. Provide building materials that comply with CA Section 01350 and CHPS Section 01350 when tested in accordance with CDPH Standard Method v 1.2.
 - b. Provide test data or third party certification that confirms compliance, such as FloorScore certification.
- B. LBC Chemical Red List 3.0
 - a. Provide building materials that are Red List Free in accordance the LBC Chemical Red List 3.0.
 - b. Provide full material disclosure or third party certification that confirms compliance, such as Declare labeling.

1.5 QUALITY ASSURANCE

- A. Qualifications:
 - 1. Installer Qualifications: Installer must be a professional, licensed and experienced installer. Installer must have familiarity with both the type, size and format of the product.
 - 2. Manufacturer's Qualifications: Manufacturer must provide remote and field technical support and service prior to, during and following installation, as necessary.
- B. Mock-Up:
 - a. Provide a mock-up for evaluation of product, surface preparation techniques and installation workmanship.
 - b. Do not proceed with remaining work until size, color, thickness, sheen and workmanship are approved by Architect, End-User and/or other stakeholders.
 - c. Maintain mock-up area as required in accordance with Care & Maintenance documents to produce acceptable work.

1.6 DELIVERY HANDLING & STORAGE

- A. Ordering: Comply with manufacturer's ordering and lead time requirements to avoid construction delays.
- B. Storage: Store products in climate controlled space (65° F (19° C) - 85° F (30° C)) for at least 48 hours prior to installation. Keep products in manufacturer's unopened packaging until ready for installation (except for rolled goods).
- C. Acclimation: Rolled goods must be unrolled and allowed to relax and acclimate for 24 hours prior to installation.

1.7 PROJECT CONDITIONS

- 1. Environmental Conditions: Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer in accordance with

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product technical data sheets. Do not install products under environmental conditions outside manufacturer's absolute limits.

B. WARRANTY

1. Project Warranty: Refer to Conditions of Contract for project warranty provisions.
2. Manufacturer's Commercial Warranty: AND/OR 2.0 Rubber Cork shall be warranted for ten years for material or manufacture defects.

PART 2 PRODUCTS

2.1 PRODUCT MANUFACTURERS

A. Acceptable Manufacturer:

1. Capri Collections
215 Bucky Drive
Lititz, PA 17543
P: 800.492.2613
E: sales@capricollections.com
Web: www.capricollections.com

2.2 SUBSTITUTIONS

**** NOTE TO SPECIFIER ** Delete one of the following two paragraphs; coordinate with requirements of Division 01 section on product options and substitutions.**

- A. Substitutions: Not permitted.
- B. Requests for substitutions will be considered in accordance with provisions of Division 01.

2.3 PRODUCT DIMENSIONS

- A. Product: Capri AND/OR 2.0 Rubber Cork rolled goods, square-edge tile as manufactured by Capri Collections.

B. Square-Edge Tile Sizes (all sizes nominal):

C. ** NOTE TO SPECIFIER ** Delete sizes not required.

1. 24 inches by 24 inches by 1/8 inches (610 mm by 610 mm by 3.2 mm) Incremental minimums will apply.
2. 24 inches by 24 inches by 5/16 inches (610 mm by 610 mm by 8 mm) Incremental minimums will apply.

D. Rolled goods sizes (all sizes nominal):

**** NOTE TO SPECIFIER ** Delete sizes not required. Adjust length based on desired cut, no less than 25 feet.**

1. 4 feet by 25' feet by 1/8 inches (1 m by 24 m by 3.2 mm)
2. 4 feet by 25' feet by 5/16 inches (1 m by 10.5 m by 8 mm) Incremental minimums will apply.

2.4 PRODUCT COLOR

**** NOTE TO SPECIFIER ** Delete colors not required.**

A. AND/OR Rubber Cork

1. Alabaster AD4000
2. Limestone AD4001
3. Nickel AD4002
4. Linen AD4003
5. Rye AD4004
6. Reed AD4005
7. Canvas AD4006

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8. Straw AD4007
9. Flax AD4008
10. Raffia AD4009
11. Carob AD4010
12. Onyx AD4011
13. Goldenrod AD4012
14. Persimmon AD4013
15. Pomegranate AD4014
16. Amethyst AD4015
17. Lapis AD4016
18. Sapphire AD4017
19. Malachite AD4018

2.5 PHYSICAL CHARACTERISTICS

- A. ASTM F137 – Flexibility: Passes
- B. ASTM F970 – Static Load Limit: Passes, 250 lbs.
- C. ASTM F2199 – Dimensional Stability: Passes, <0.05 in. change
- D. ASTM F1514 – Color Heat Stability: Passes, $\Delta E < 8$
- E. ASTM F925 – Chemical Resistance:
 1. White vinegar (5% Acetic Acid) - Passes.
 2. Rubbing Alcohol (70% Isopropyl Alcohol) - Passes.
 3. Lye (5% Sodium Hydroxide) - Passes.
 4. Disinfectant Cleaner (5% Active Phenol) - Passes.
 5. White Mineral Oil (medicinal grade) - Passes.
 6. Household Bleach (5.25% NaOCl) - Passes.
 7. Unleaded Gasoline - Passes.
 8. Kerosene – Passes.
- F. ASTM D2240 – Hardness: 85, Shore A
- G. ASTM E648 (NFPA 253) – Critical Radiant Flux: Class I, $> 0.45 \text{ W/cm}^2$
- H. ASTM E662 (NFPA 258) – Smoke Density: Passes, < 450
- I. ASTM E84 (NFPA 286) – Flammability: Class C, 76 - 200
- J. ASTM D2047 – Slip Resistance: > 0.8 (wet), > 0.8 (dry)
- K. ASTM E492/E989 – Impact Sound Transmission – 6" Concrete, Drop Ceiling: IIC 56
- L. ASTM E90/E413 – Airborne Sound Transmission – 6" Concrete, Drop Ceiling: STC 54

2.6 PRODUCT FINISH

**** NOTE TO SPECIFIER ** Finish is not optional when installed horizontally / as a floor.**

- A. Only Capri Collections approved floor finishes shall be used when installing AND/OR 2.0 Rubber Cork.
 1. Site-Applied Urethane Finish: Loba 2K InvisibleProtect.
 2. Site-Applied Urethane Finish: Loba Supra AT Satin.
- B. Only Capri Collections approved floor finishes shall be used when installing AND/OR 2.0 Rubber Cork.
 1. Site-Applied Acrylic Finish: Hilway Direct Plus Matte. Vertical only.
 2. Site-Applied Acrylic Finish: Hilway Direct Plus Satin. Vertical only.

2.7 PRODUCT ADHESIVE

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**** NOTE TO SPECIFIER ** Delete adhesive not required.**

- A. Only Capri Collections approved adhesives shall be used when installing AND/OR 2.0 Rubber Cork.
 - 1. Gold Series MA 2000 Modified Acrylic Spray Adhesive
 - 2. Gold Series AA 2010 Acrylic Vertical Spray Adhesive
 - 3. Gold Series AW 3000 Acrylic Resilient Flooring Adhesive
 - 4. Gold Series MW 3012 Modified Silane Resilient Flooring Adhesive

PART 3 EXECUTION

**** NOTE TO SPECIFIER ** Revise articles below to suit specific project requirements.**

3.1 MANUFACTURERS INSTRUCTIONS

- A. Compliance: Review and comply with manufacturer's technical data sheets, care & maintenance documents, warranty information, technical bulletins and written specifications.

3.2 EXAMINATION

- A. Site Verification of Conditions:
 - 1. Verify substrate conditions, which have been previously installed under other sections, are acceptable for product installation in accordance with manufacturer's technical data.
 - 2. Do not begin installation until all substrates have been properly tested and prepared in accordance with Capri AND/OR 2.0 Rubber Cork technical data sheets and applicable ASTM, ACI, NWFA and RFCI standards.
 - 3. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

3.3 PREPARATION

- A. Cleaning: Clean surfaces thoroughly prior to installation.
- B. Substrate Preparation: Prepare surfaces in accordance with substrate preparation requirements published in Capri AND/OR 2.0 Rubber Cork technical data sheets.

3.4 INSTALLATION

- A. Flooring Installation: Install materials in accordance with installation instructions published in Capri AND/OR 2.0 Rubber technical data sheets.
- B. Traffic Limits: Light foot traffic is allowed on the floor upon completion. No cleaning, finishing or placement of furniture should not occur in accordance with traffic limits published in Capri AND/OR 2.0 Rubber Cork technical data sheets.
- C. Initial Maintenance: Once adhesive has cured, perform initial maintenance in accordance with initial maintenance instructions published in Capri AND/OR 2.0 technical data sheets and care & maintenance documents.

3.5 FINISH APPLICATION

- A. Initial Maintenance: Ensure surfaces have had initial maintenance performed in accordance with initial maintenance instructions published in Capri AND/OR 2.0 Rubber Cork technical data sheets and care & maintenance documents.
- B. Cleaning: Clean surfaces thoroughly prior to installation.
- C. Finish Application: Install finish in accordance with initial finish application instructions published in Capri AND/OR 2.0 Rubber Cork technical data sheets and care & maintenance documents.

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3.6 MAINTENANCE

- A. Daily Maintenance: Long-term care and maintenance must be performed in accordance with daily and routine maintenance instructions published in Capri AND/OR 2.0 Rubber Cork care & maintenance documents.
- B. Finish Reapplication: Site-applied finish that is improperly applied or damaged may require finish re-application in accordance with finish removal and reapplication instructions published in Capri AND/OR 2.0 Rubber Cork care & maintenance documents.

3.7 PROTECTION

- A. Temporary Floor Protection: Protect installed products until completion of project in accordance with flooring or material protection requirements published in Capri AND/OR 2.0 Rubber Cork technical data sheets and care & maintenance documents.
- B. Repair: Touch-up, repair or replace damaged products prior to Substantial Completion.
- C. Permanent Floor Protection: Ensure furniture feet/bottom, glides and chair casters dimensions and materials are in accordance with floor protection requirements published in Capri AND/OR 2.0 Rubber Cork care & maintenance documents prior to Substantial Completion.

END OF SECTION