

SECTION 12 48 00
ENTRANCE MATS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Buffalo-Tile
- B. Colored Buffalo-Tile

1.2 RELATED SECTIONS

- A. Section 03 30 00 - Cast-in-Place Concrete.
- B. Section 03 54 13 - Gypsum Cement Underlayment.
- C. Section 05 55 00 - Metal Stair Treads and Nosings.
- D. Section 06 10 00 - Rough Carpentry.
- E. Section 07 26 00 - Vapor Retarders
- F. Section 07 90 00 - Joint Protection.
- G. Section 09 30 00 - Tiling.
- H. Section 22 40 00 - Plumbing Fixtures.

1.3 REFERENCES

- A. ASTM E 648 - Standard Test Method for Critical Radiant Flux of Flooring Systems Using a Radiant Energy Source
- B. ASTM E 662 - Test Method for Specific Optical Density of Smoke Generated by Solid Materials.
- C. ASTM F 2240 - Standard Test Method for Rubber Property Durometer Hardness
- D. ASTM D 2859 - Standard Test Method for Ignition Characteristics of Finished Textile Floor Covering Materials 18.
- E. ASTM D 1630 - Standard Test Method for Rubber Property-Abrasion Resistance (Footwear Abrader)
- F. ASTM D 3936 - Standard Test Method for Resistance to Delamination of the Secondary Backing of Pile Yarn Floor Covering.
- G. ASTM F 710 - Preparation of Concrete Slabs to Receive Resilient Flooring.
- H. ASTM F 1482 - Standard Practice for Installation and Preparation of Panel Type Underlayments to Receive Resilient Flooring.
- I. NFPA 253 - Standard Method Of Test For Critical Radiant Flux Of Floor Covering Systems Using A Radiant Heat Energy Source.

- J. NFPA 258 - Test Method for Specific Density of Smoke Generated by Solid Materials.

1.4 DESIGN / PERFORMANCE REQUIREMENTS

- A. Regulatory Requirements:
 - 1. Fire Performance characteristics: Provide 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 E 648 (NFPA 253), Critical Radiant Flux of Floor Covering Systems:
 - b. Class 1, Greater than 0.45 w/cm²
 - c. ASTM E 662 (NFPA 258), Specific Optical Density of Smoke Generated by Solid Materials: Passes, (< 450)

1.5 SUBMITTALS

- A. Submit under provisions of Section 01 30 00 - Administrative Requirements.
- B. Product Data: Manufacturer's data sheets on each product to be used, including:
 - 1. Preparation instructions and recommendations.
 - 2. Storage and handling requirements and recommendations.
 - 3. Installation methods.
- C. Shop Drawings: Submit shop drawings showing layout, finish colors, patterns and textures.
- D. LEED Submittals: Provide documentation of how the requirements of Credit will be met:
 - 1. List of proposed materials with recycled content. Indicate post-consumer recycled content and pre-consumer recycled content for each product having recycled content.
 - 2. Product data and certification letter indicating percentages by weight of post-consumer and pre-consumer recycled content for products having recycled content.
- E. Selection Samples: For each finish product specified, two complete sets of color chips representing manufacturer's full range of available colors and patterns.
- F. Verification Samples: For each finish product specified, two samples, minimum size 12 inches (300 mm) square, representing actual product, color, and patterns.
- G. Manufacturer's Certificates: Certify products meet or exceed specified requirements.
- H. Closeout Submittals: Provide manufacturer's maintenance instructions that include recommendations for periodic cleaning and maintenance of all components.

1.6 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. Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application workmanship.
 - 1. Finish areas designated by Architect.
 - 2. Do not proceed with remaining work until workmanship, color, and sheen are approved by Architect.
 - 3. Refinish mock-up area as required to produce acceptable work.

- C. 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.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Store products in manufacturer's unopened undamaged packaging with labels intact until ready for installation.
- B. Store materials protected from exposure to harmful weather conditions and acclimated to site conditions at temperature and humidity conditions recommended by manufacturer.
- C. Store and dispose of solvent-based materials, and materials used with solvent-based materials, in accordance with requirements of local authorities having jurisdiction.

1.8 SEQUENCING

- A. Install rubber floor tile after finishing operations, including painting and ceiling and other similar work, has been completed.

1.9 PROJECT CONDITIONS

- A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

1.10 WARRANTY

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturer: Amarco Products, which is located at: 5 Powder Horn Dr. Warren, NJ 07059; Toll Free Tel: 866-688-6287; Tel: 732-302-1122; Fax: 732-302-1120; Email: info@amarcomats.com; Web: www.amarcomats.com
- B. Substitutions: Not permitted.
- C. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00 - Product Requirements.

2.2 ENTRANCE MATS

- A. Buffalo-Tile:
 - 1. Rubberized fabric strips with chenille- like surface cut from recycled tires bonded to a non- flammable base.
 - 2. Thickness: 3/8 inch (9.52 mm) plus or minus 1/8 inch.
 - 3. Recycled Content: 95 percent.
 - 4. Color:
 - a. Earthtone.
 - 5. Flammability: Meets or exceeds Federal flammability regulations CPSC-FF 1-70, 16 CFR, and ASTM D 2859.
 - 6. Delamination Test of Backing: Meets or exceeds ASTM D 3936.
 - 7. Size:

- a. One Tile: 12 inches by 12 inches.
 - b. Roll: 12 inches by 25 inches.
 - c. Roll: 12 inches by up to 25 feet.
- B. Colored Buffalo-Tile:
1. Rubberized fabric strips with chenille- like surface cut from recycled tires bonded to a non- flammable base.
 2. Thickness: 3/8 inch (9.52 mm) plus or minus 1/8 inch.
 3. Recycled Content: 95 percent.
 4. Color:
 - a. Blue
 - b. Red
 - c. Green
 - d. Brown
 - e. Charcoal
 5. Flammability: Meets or exceeds Federal flammability regulations CPSC-FF 1-70, 16 CFR, and ASTM D 2859.
 6. Delamination Test of Backing: Meets or exceeds ASTM D 3936.
 7. Size:
 - a. One Tile: 12 inches by 12 inches.
 - b. Roll: 12 inches by 25 inches.
 - c. Roll: 12 inches by up to 25 feet.
- C. Accessories:
1. Adhesive: Contact adhesive as recommended by the manufacturer for the exposure and substrate.
 2. Nosing: Black beveled vinyl nosing.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Do not begin installation until substrates have been properly prepared.
- B. Substrate to be clean and free of paint, old adhesive, sealers, coatings, finishes, dirt, film-forming curing compounds and other substances that may affect the adhesion of the mat flooring.
- C. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

3.2 PREPARATION

- A. Clean surfaces thoroughly prior to installation.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
- C. Substrate: Prepare substrate to be free of paint, old adhesive, sealers, coatings, finishes, dirt, film-forming curing compounds, and all other substances which may affect the adhesion of floor covering to the substrate.
 1. Concrete Substrate: Reference Standard ASTM F 710 Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring.
 - a. Concrete Moisture Test: Per ASTM F 710 section 5, persons or testing agencies with experience in concrete moisture testing shall perform moisture tests on concrete regardless of its age or grade level or history of use, with a

- minimum of three tests for the first 1000 square feet and one additional test for each 1000 square feet or fraction thereof, per grade level. A diagram of the area showing the location and results of each test shall be dated and submitted to the Architect. If the test results exceed the floor covering manufacturer's limits, installing shall not commence until results conform to limits.
- b. 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. If the test results exceed the floor covering manufacturer's limits, installing shall not commence until results conform to limits.
2. Wood Substrate: Per ASTM F 1482, Wood subfloor/underlayment assemblies shall be double layer construction, with a total thickness of not less than 1".
 - a. Verify that there is minimum 18 inches of well-ventilated air space beneath all wood subfloors. Insulate crawl spaces and protect by a moisture vapor barrier.
 - b. Do not install over "sleeper" underlayment systems or wood underlayment installed over concrete.
 - c. Do not install over Luan 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. Unacceptable surfaces shall be covered using a 1/4-inch or thicker panel underlayment specified.
 - d. Wood Underlayments: Use only plywood underlayment warranted by the underlayment manufacturer for use as an underlayment for sheet vinyl floor covering in commercial applications.
 3. Refer to manufacturer's installation instructions for installations over existing ceramic tile, cementitious terrazzo and metal.
 4. Do not install over existing floor covering or over substrates not approved by manufacturer.

3.3 INSTALLATION

- A. Install in accordance with manufacturer's instructions.

3.4 CLEANING

- A. 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

3.5 PROTECTION

- A. Protect installed product and finish surfaces from damage until completion of project.
- B. Keep foot traffic off new floor covering for first 48 hours.
- C. Keep furniture, fixtures and rolling traffic off for first 72 hours.
- D. No maintenance for first 72 hours.
- E. Repair or replace damaged products before Substantial Completion.

END OF SECTION