

Part 1 General

1.1 SECTION INCLUDES

- .1 Resilient tile flooring (RF)
- .2 Entrance matting (EM)
- .3 Rubber base
- .4 Transition strip

1.2 REFERENCES

- .1 ASTM International (ASTM)
 - .1 ASTM F1861-08(2012)e1 - Standard Specification for Resilient Wall Base
 - .2 ASTM F1344-15 - Standard Specification for Rubber Floor Tile
- .2 ECD Energy & Environment Canada
 - .1 Green Globes Canada, Design for New Construction and Major Retrofits v.2 2014
- .3 South Coast Air Quality Management District (SCAQMD)
 - .1 SCAQMD Rule 1168, Adhesives and Sealants Applications Amended January 7, 2005; Rules in affect July 1 2005

1.3 SUBMITTALS FOR REVIEW

- .1 Section 01 33 00: Submission procedures.
- .2 Product Data: Provide data on specified products, describing physical, characteristics; patterns and colours available.
- .3 Samples:
 - .1 Duplicate 300 mm long sample of transition strips.
 - .2 In manufacturer's standard size, but not less than 150-by-230-mm sections, duplicate samples of each different colour and pattern of floor covering required.

1.4 SUBMITTALS FOR INFORMATION

- .1 Section 01 33 00: Submission procedures.
- .2 Qualification Data: for installer.

1.5 CLOSEOUT SUBMITTALS

- .1 Section 01 78 10: Submission procedures.
- .2 Operation and Maintenance Data: Include recommended maintenance procedures, maintenance materials and suggested schedule for cleaning. Include detailed information regarding properties of stain resistance and procedures recommended for removal of spills and stains.

1.6 MAINTENANCE MATERIAL SUBMITTALS

- .1 Section 01 78 10: Maintenance and extra material requirements.
- .2 Extra Stock Materials: Provide 2% of installed areas of each colour and pattern selected in full size tiles.

1.7 QUALITY ASSURANCE

- .1 Project who are competent in techniques required by manufacturer for floor covering installation and seaming method indicated.

1.8 DELIVERY, STORAGE, AND PROTECTION

- .1 Section 01 61 00: Transport, handle, store, and protect products.
- .2 Store resilient products and installation materials in dry spaces protected from the weather, with ambient temperatures maintained within range recommended by manufacturer.

1.9 WASTE MANAGEMENT AND DISPOSAL

- .1 Separate waste materials for recycling in accordance with Section 01 74 20 – Waste Management and Disposal.

1.10 AMBIENT CONDITIONS

- .1 Store materials for three days prior to installation in area of installation to achieve temperature stability.
- .2 Maintain ambient temperature required by adhesive manufacturer three days prior to, during, and 24 hours after installation of materials.

Part 2 Products

2.1 SUSTAINABILITY REQUIREMENTS

- .1 Comply with prescribed limits of VOCs in accordance with the Reference Exposure Levels (REL) developed by the California Office of Environmental Health and Hazard Assessment (OEHHA) for volatile organic compounds, or have third-party certifications showing compliance to predetermined indoor air quality standards, in accordance with Green Globes Canada, Design for New Construction and Major Retrofits, and Section 01 35 63 - Sustainability Certification Project Requirements.

2.2 MATERIALS - SHEET FLOORING

- .1 Rubber Tile Flooring (RF): to ASTM F1344, Class 1 – B, homogeneous, 100% synthetic rubber.
 - .1 Thickness: 3.17 mm.
 - .2 Size: 610 by 610 mm.
 - .3 Surface Texture: Rice Paper.
 - .4 Slip Resistance: Static coefficient of friction ≥ 0.8 to ASTM D2047.
 - .5 Hardness: Shore type A, ≥ 85 to ASTM D2240.
 - .6 Fire Performance: Class 1 to ASTM E648 or 0.45 W/sq. cm to NFPA 253.
 - .7 Allow for one colour selected by Contract Administrator from manufacturer's standard colour range.
 - .8 Manufacturers/Products: Johnsonite; Speckled MicroTone FRPASP.
- .2 Entrance Matting (EM): Cut pile clean-off mat constructed from 100% polyamide BCF yarn and Everfort® vinyl backing. Colour selected by Contract Administrator from manufacturer's full colour range. Fire Performance: Class 1 to ASTM E648 or 0.45 W/sq. cm to NFPA 253.
 - .1 Thickness: 10mm.
 - .2 Tile Size: 500 by 500 mm
 - .3 Manufacturer/Product: Forbo Coral Brush Activ.

2.3 MATERIALS - BASE

- .1 Base (RUB): ASTM F1861, Type TS vulcanized rubber or Type TP thermoplastic rubber; rectangular profile with 45 deg chamfered top edge. Allow for one colour selected by Contract Administrator from manufacturer's full colour range.
 - .1 Height: 114 to 117 mm.
 - .2 Thickness: 8 to 9.5 mm thick.
 - .3 Length: 2400 mm long minimum.
- .2 Manufacturers/Products:
 - .1 Johnsonite: Baseworks.
Roppe: Pinnacle.
Mannington: Optimum Edge.

2.4 ACCESSORIES

- .1 Transition Strip: Resilient, PVC reducer strip.
 - .1 Johnsonite: SSR-XX-B.
- .2 Sub-floor Filler and Leveler: trowelable, non-shrinking, water-resistant, alkali mould-resistant, cementitious underlayment, two component compound consisting of liquid latex and Portland cement base, both supplied by same manufacturer.
- .3 Primers and Adhesives: water-resistant type recommended by resilient flooring manufacturer for specific material on applicable substrate, above, on or below grade.
 - .1 VOC Content: Maximum 60 g/L (less water) to SCAQMD Rule 1168.
- .4 Adhesive for Rubber Base: Water-resistant type recommended by rubber base manufacturer for specific material on applicable substrate.
 - .1 VOC Content: Maximum 50 g/L (less water) to SCAQMD Rule 1168.

Part 3 Execution

3.1 EXAMINATION

- .1 Section 01 70 00: Verify existing conditions before starting work.
- .2 Verify concrete floors are dry to a maximum moisture content of 7%, and exhibit negative alkalinity, carbonization, or dusting.
- .3 Verify floor and lower wall surfaces are free of substances that may impair adhesion of new adhesive and finish materials.

3.2 PREPARATION

- .1 Concrete Substrates: Prepare according to ASTM F710.
 - .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 Alkalinity and Adhesion Testing: Perform tests recommended by manufacturer. Proceed with installation only after substrates pass testing.
 - .4 Moisture Testing: Perform tests recommended by manufacturer. Proceed with installation only after substrates pass testing.

- .2 Remove sub-floor ridges and bumps. Fill low spots, cracks, joints, holes and other defects with sub-floor filler.
- .3 Thoroughly clean surfaces of dust, dirt, grease, paint, other foreign material before installing flooring and base.
- .4 Fill cracks, other openings, depressions in substrate with sub-floor filler mix featheredged. Level uneven joints, rough areas. Apply filler; trowel and float to leave smooth, flat hard surface. Prohibit traffic until filler cured and dry.
- .5 Sweep, vacuum floors clean.
- .6 Neutralize surface of concrete in accordance with manufacturer's printed instructions.
- .7 Prime concrete slab to resilient flooring manufacturer's printed instructions.

3.3 INSTALLATION - TILE FLOORING

- .1 Install tile flooring to manufacturer's written instructions.
- .2 Mix tile from container to ensure shade variations are consistent when tile is placed.
- .3 Spread only enough adhesive to permit installation of materials before initial set.
- .4 Set flooring in place, press with heavy roller to attain full adhesion.
- .5 Lay flooring with joints and seams parallel to building lines to produce symmetrical tile pattern.
- .6 Install tile in square pattern with edges aligned. Allow minimum 1/2 full size tile width at room or area perimeter.
- .7 Terminate flooring at centreline of door openings where adjacent floor finish is dissimilar.
- .8 Install resilient edge strips at unprotected or exposed edges, and where flooring terminates. .
- .9 Scribe flooring to walls, columns, cabinets, floor outlets, and other appurtenances to produce tight joints.

3.4 INSTALLATION - BASE

- .1 Lay out base to keep number of joints at minimum. Base joints at maximum length available or at corners.
- .2 Clean substrate and prime with one coat of adhesive.
- .3 Apply adhesive to back of base.
- .4 Set base against wall and floor surfaces tightly by using 3 kg hand roller.
- .5 Install straight and level to variation of 1:1000.
- .6 Scribe and fit to door frames and other obstructions.
- .7 Job-Formed Corners: Mitred. Apply contact adhesive to both mitred edges.

3.5 CLEANING

- .1 Section 01 74 00: Cleaning installed work.
- .2 Comply with manufacturer's written instructions for cleaning and protection of floor coverings.
- .3 Rubber Tile: Perform the following operations 72 hours after completing installation:
 - .1 Remove excess adhesive from floor, base and wall surfaces without damage.
 - .2 Sweep and vacuum floor coverings thoroughly.
 - .3 Damp-mop floor coverings to remove marks and soil.

- .4 Entrance Matting: Perform the following operations five days after completing installation:
 - .1 Vacuum floor coverings thoroughly.
 - .2 Spot clean as required in accordance with manufacturer's "scrape, scrub and rinse" procedures.

3.6 PROTECTION OF FINISHED WORK

- .1 Prohibit traffic on floor finish for manufacturers' minimum time limits to allow adhesive to cure.
Prohibit rolling traffic on floor for minimum 72 hours after installation.

END OF SECTION