

SECTION 09622

RUBBER RECREATIONAL AND ATHLETIC FLOORING

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Rubber Recreational and Athletic Flooring.

1.2 RELATED SECTIONS

- A. Section 03300 - Cast-In-Place Concrete.
- B. Section 06100 - Rough Carpentry.

1.3 REFERENCES

- A. ASTM D 412 - Standard Test Methods for Vulcanized Rubber and Thermoplastic Rubbers and Thermoplastic Elastomers--Tension.
- B. ASTM D 624 - Standard Test Method for Tear Strength of Conventional Vulcanized Rubber and Thermoplastic Elastomers.
- C. ASTM D 746 - Standard Test Method for Brittleness Temperature of Plastics and Elastomers by Impact.
- D. ASTM D 2047 - Standard Test Method for Static Coefficient of Friction of Polish-Coated Floor Surfaces as Measured by the James Machine.
- E. ASTM D 2240 - Standard Test Method for Rubber Property--Durometer Hardness.
- F. ASTM E 648 - Standard Test Method for Critical Radiant Flux of Floor-Covering Systems Using a Radiant Heat Energy Source.
- G. MIL-M-15562 - Dielectric Strength.
- H. NFPA 253 - Standard Method of Test for Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy Source.

1.4 SUBMITTALS

- A. Submit under provisions of Section 01300.

- B. Product Data: Manufacturer's descriptive literature for specified flooring tiles; include documentation of conformance to specified requirements.
- C. Shop Drawings: Dimensioned plans, to scale, indicating layout of flooring tiles in areas to receive them.
- D. Selection Samples: Two sets of color chips representing manufacturer's full range of available flooring tile colors.
- E. Verification Samples: Two samples, minimum size 6 inches (152 mm) square, representing actual color and finish of flooring tiles to be installed.
- F. Quality Assurance Submittals: Manufacturer's printed installation instructions; include product storage requirements.
- G. Closeout Submittals:
  - 1. Manufacturer's recommendations for cleaning and maintaining flooring.
  - 2. Warranty documents specified in WARRANTY Article of PART 1 of this section.

#### 1.5 QUALITY ASSURANCE

- A. Qualifications:
  - 1. Manufacturer: Minimum five (5) years documented experience producing flooring similar to those specified in this section.
  - 2. Installer: Minimum three (3) years documented experience installing flooring similar to those specified in this section.

#### 1.6 DELIVERY, STORAGE, AND HANDLING

- A. Store flooring tile in manufacturer's unopened packaging until installation.
- B. Maintain storage area conditions for flooring tile in accordance with manufacturer's instructions until installation.
- C. Do not store flooring tile outside.

- D. Do not store unprotected flooring tile under fluorescent lighting for period longer than 30 calendar days; cover flooring tile with dark color polyethylene sheeting, or other light-protective covering.

## 1.7 PROJECT CONDITIONS

- A. Field Measurements: When project conditions permit, take field measurements of areas to receive flooring tile; note discrepancies on submitted shop drawings.

## 1.8 WARRANTY

- A. Manufacturer's Warranty: Manufacturer's standard warranty against defects in products.

## 1.9 MAINTENANCE

- A. Extra Materials: Supply extra floor tiles, in quantities to equal 5 percent of installed tile for each type tile specified, for Owner's maintenance stock.

## PART 2 PRODUCTS

### 2.1 MANUFACTURERS

- A. Acceptable Manufacturer: Pawling Corporation, Standard Products Division; Borden Lane, P.O. Box 200, Wassaic NY 12592; ASD. Tel. (800) 431-3456 (U.S. and Canada) or (914) 373-9300; Fax. (800) 451-2200 (U.S. and Canada) or (914) 373-8712; E-mail address sales@pawling.com
- B. Substitutions: Not permitted.

### 2.2 RUBBER RECREATIONAL AND ATHLETIC FLOORING

- A. Characteristics:
  1. Specific gravity: 1.47 +/-0.03.
  2. Tensile strength, when tested in accordance with ASTM D 412: 650 pounds per square inch (4.48 Mpa).
  3. Hardness, when tested in accordance with ASTM D 2240: Durometer Shore A 55 +/-5.
  4. Elongation, when tested in accordance with ASTM D 412: 550 percent.
  5. Tear resistance, when tested in accordance with ASTM D 624: 75 pounds per square inch (0.51 Mpa).

6. Temperature stability range, when tested in accordance with ASTM D 746: -30 degrees F (-34.4 degrees C) to 120 degrees F (48.8 degrees C).
  7. Shrinkage, after 7 days at 212 degrees F (100 degrees C): 2 percent.
  8. Dielectric strength, in accordance with MIL-M-15562: 37,000 volts.
  9. Conductivity: Non-conductive.
- B. Flooring: Pro-Tek Hid-N-Lok(R) II, Style HL-150.
1. Composition: Virgin SBR rubber; compositions using reclaimed or reprocessed rubber not permitted.
  2. Size: 24 inches (609.6 mm) square.
  3. Thickness: 3/8 inches (9.5 mm).
  4. Weight: 11 pounds (4.9 kg), each tile.
  5. Flammability, when tested in accordance with NFPA 253 and ASTM E 648: Critical Radiant Flux 0.44 watts/cm<sup>2</sup>, Class II.
  6. Tile-to-tile interlock: Hidden interlock feature, which hides interlocks beneath tile surface; five (5) interlocks per side.
  7. Surface: Polished top surface; (4) 12-inch (304.8 mm) squares per tile.
  8. Color: \_\_\_\_\_; solid color throughout full tile thickness.
  9. Color: Custom color matching Architect's sample; solid color throughout full tile thickness.
- C. Flooring: Pro-Tek Hid-N-Lok(R) II, Style HL-100.
1. Composition: Virgin SBR rubber; compositions using reclaimed or reprocessed rubber not permitted.
  2. Size: 24 inches (609.6 mm) square.
  3. Thickness: 9/16 inches (14.2 mm).
  4. Weight: 16 pounds (7.2 kg), each tile.
  5. Static coefficient of friction, when tested in accordance with ASTM D 2047: Dry 0.84; Wet 0.90.
  6. Flammability, when tested in accordance with NFPA 253 and ASTM E 648: Critical Radiant Flux 0.44 watts/cm<sup>2</sup>, Class II.
  7. Tile-to-tile interlock: Hidden interlock feature, which hides interlocks beneath tile surface; five (5) interlocks per side.
  8. Surface: Sand-blasted soft-etch textured surface; (16) 5 1/2-inch (39.7 mm) raised squares per tile.
  9. Color: \_\_\_\_\_; solid color throughout full tile thickness.
  10. Color: Custom color matching Architect's sample; solid color throughout full tile thickness.

- D. Flooring: Pro-Tek Gymtile(TM)/Flip-It(TM), Style FL-100.
1. Composition: Virgin SBR rubber; compositions using reclaimed or reprocessed rubber not permitted.
  2. Size: 24 inches (609.6 mm) square.
  3. Thickness: 9/16 inches (14.2 mm).
  4. Weight: 16 pounds (7.2 kg), each tile.
  5. Static coefficient of friction, when tested in accordance with ASTM D 2047: Dry 0.84; Wet 0.90.
  6. Flammability, when tested in accordance with NFPA 253 and ASTM E 648: Critical Radiant Flux 0.44 watts/cm<sup>2</sup>, Class II.
  7. Tile-to-tile interlock: Hidden interlock feature, which hides interlocks beneath tile surface; five (5) interlocks per side.
  8. Surface: Etched surface.
  9. Color: \_\_\_\_\_; solid color throughout full tile thickness.
  10. Color: Custom color matching Architect's sample; solid color throughout full tile thickness.
- E. Flooring: Pro-Lok I(TM), Style PL-100.
1. Composition: Virgin SBR rubber; compositions using reclaimed or reprocessed rubber not permitted.
  2. Size: 24 inches (609.6 mm) square.
  3. Thickness: 7/16 inches (11.1 mm).
  4. Weight: 10 pounds (4.5 kg), each tile.
  5. Flammability, when tested in accordance with NFPA 253 and ASTM E 648: Critical Radiant Flux 0.44 watts/cm<sup>2</sup>, Class II.
  6. Tile-to-tile interlock: Hidden interlock feature, which hides interlocks beneath tile surface; five (5) interlocks per side.
  7. Top surface: Textured raised discs of alternating sizes.
  8. Bottom surface: Knob and groove design with air flow slots for increased air movement, speeding evaporation.
  9. Color: \_\_\_\_\_; solid color throughout full tile thickness.
  10. Color: Custom color matching Architect's sample; solid color throughout full tile thickness.
- F. Flooring: Aerobic Tile - Traction Top, Style PL-200.
1. Composition: Virgin SBR rubber; compositions using reclaimed or reprocessed rubber not permitted.
  2. Size: 24 inches (609.6 mm) square.

3. Thickness: 9/16 inches (14.2 mm).
  4. Weight: 14 pounds (6.3 kg), each tile.
  5. Flammability, when tested in accordance with NFPA 253 and ASTM E 648: Critical Radiant Flux 0.44 watts/cm<sup>2</sup>, Class II.
  6. Tile-to-tile interlock: Hidden interlock feature, which hides interlocks beneath tile surface; five (5) interlocks per side.
  7. Top surface: Raised-nub traction surface, slip-resistant.
  8. Bottom surface: Knob design, aerating and impact-cushioning.
  9. Color: \_\_\_\_\_; solid color throughout full tile thickness.
  10. Color: Custom color matching Architect's sample; solid color throughout full tile thickness.
- G. Flooring: Aerobic Tile - Polish Top, Style PL-300.
1. Composition: Virgin SBR rubber; compositions using reclaimed or reprocessed rubber not permitted.
  2. Size: 24 inches (609.6 mm) square.
  3. Thickness: 3/8 inches (9.5 mm).
  4. Weight: 10 pounds (4.5 kg), each tile.
  5. Flammability, when tested in accordance with NFPA 253 and ASTM E 648: Critical Radiant Flux 0.44 watts/cm<sup>2</sup>, Class II.
  6. Tile-to-tile interlock: Hidden interlock feature, which hides interlocks beneath tile surface; five (5) interlocks per side.
  7. Top surface: Polished top; four (4) 12-inch (304.8 mm) squares per tile.
  8. Bottom surface: Knob design, aerating and impact-cushioning.
  9. Color: \_\_\_\_\_; solid color throughout full tile thickness.
  10. Color: Custom color matching Architect's sample; solid color throughout full tile thickness.

## PART 3 EXECUTION

### 3.1 EXAMINATION

- A. Verify that sub-floors to receive flooring are level to within flooring manufacturer's requirements, and without large cracks, depressions, or indentations.

- B. Installer's Examination:
  - 1. Have installer of this section examine conditions under which construction activities of this section are to be performed, then submit written notification if such conditions are unacceptable.
  - 2. Transmit two copies of installer's report to Architect within 24 hours of receipt.
  - 3. Beginning construction activities of this section before unacceptable conditions have been corrected is prohibited.
  - 4. Beginning construction activities of this section indicates installer's acceptance of conditions.

### 3.2 PREPARATION

- A. Remove dust, debris, moisture, and powder accumulations from surfaces to receive flooring.

### 3.3 INSTALLATION

- A. Install flooring, without adhesives, in accordance with shop drawings and manufacturer's instructions.

### 3.4 PROTECTION

- A. Protect installed products of this section from damage to function or finish by subsequent construction activities.
- B. Repair minor damage to finishes in accordance with manufacturer' recommendations.
- C. Replace products having damage to function, and products having damage to finishes which cannot be repaired to Architect's acceptance.

END OF SECTION