

# FORBO MARMOLEUM® MODULAR TECHNICAL DATA

### 1. PRODUCT NAME & MANUFACTURER

### 1.1 Product:

Forbo Marmoleum® Modular linoleum tile resilient floor covering

### 1.2 Manufacturer:

Forbo Flooring Systems Humboldt Industrial Park Hazleton, PA 18202

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# 1.3 Product Description:

Construction: Marmoleum® Modular is a homogeneous floor covering made from natural ingredients including flax seed oil, rosin binders, wood flour, limestone and dry pigments which are mixed and then calendared onto a polyester backing to ensure optimum dimensional stability.

Topshield2™ is a high performance finish. Its double UV cured double layer technology delivers extraordinary performance and clear and vibrant colors that remain over time. Topshield2™ creates a 'ready to use' Marmoleum® that requires no initial maintenance or polymer application. The surface can be repaired or refreshed in cases of accidents or after years of intensive use.

#### 1.4 Physical Characteristics:

### (dimensions are approximate)

Size 9.8" x 9.8" (25 cm x 25 cm)
9.8" x 19.69" (25 cm x 50 cm)
19.69" x 19.69" (50 cm x 50 cm)
Gauge 1/10" (2.5 mm)
Backing Polyester
Packaging 9.8" x 9.8": 40 tiles (26.91 ft <sup>2</sup> or 2.5 m <sup>2</sup> )
9.8" x 19.69": 40 tiles (53.82 ft <sup>2</sup> or 5 m <sup>2</sup> )
19.69" x 19.69": 20 tiles (53.82 ft <sup>2</sup> or 5 m <sup>2</sup> )

### 2. PRODUCT PERFORMANCE & TECHNICAL DATA

## 2.1 Reference Specification:

Meets or exceeds all technical requirements as set forth in ASTM F 2195 Standard Specification for Linoleum Tile Flooring

Type I

#### 2.2 Environmental:

100% USDA Certified BioBased Product.
Compliant with CDPH 01350 requirements for VOC emissions and indoor air quality.
Forbo Marmoleum® Modular contributes to LEED® v4

Forbo Marmoleum® Modular contributes to LEED® v4 credits. For additional information, contact Forbo Flooring Systems.

### 2.3 Static Load Limit:

Residual compression of 0.002" with 250 pounds per square inch when tested in accordance with ASTM F 970-17, Standard Test Method for Static Load Limit.

### 2.4 Slip Resistance:

Meets or exceeds the industry recommendation of >0.5 for flat surfaces when tested in accordance with ASTM D 2047, Standard Test Method for Static Coefficient of Friction.

#### 2.5 Castor Resistance:

Suitable for office chairs with castors when tested in accordance with EN 425, Castor Chair Test.

#### 2.6 Impact Sound Reduction:

6dB when tested in accordance with ISO 717-2, Impact Sound Insulation Test.

#### 2.7 Resistance to Bacteria:

Provides a self-sanitizing quality in the form of a bactericidal effect. Independent testing has shown that a sterile zone around the material inhibits the growth of organisms such as staphylococcus aureus and Clostridium difficile.

### 2.8 Anti-Static Properties:

Naturally anti-static. This property makes cleaning easier because dirt and dust does not cling to the surface as it may with other materials.

### 2.9 Fire Testing:

Class 1 when tested in accordance with ASTM E 648/ NFPA 253, Standard Test Method for Critical Radiant Flux. Meets 450 or less when tested in accordance with ASTM E 662/ NFPA 258, Standard Test Method for Smoke Density.

FSR – 115; SDC – 205 when tested in accordance to CAN/ULC S102.2, Standard Test Method for Flame Spread Rating and Smoke Development of Flooring Materials. Class C when tested in accordance to ASTM E 84/ NFPA 255, Standard Test Method for Surface Burning Characteristics.

#### 2.10 Cigarette Resistance:

Resists cigarette burns. Burning cigarettes will leave only a brown mark, which can be rubbed out using steel wool or a scouring pad.





### 2.11 Chemical Resistance:

### (Exposure Time - 1h)\*

Diluted Acids - Sulfuric, Nitric, Hydrochloric, Acetic, Lactic, Citric -----No Change Isopropyl Alcohol (70%) ------No Change Sodium Hydroxide (5%) ------Softening Ammonia (5%), Acetone ----- Possible Softening/Staining Soda Solution, Soap Solution (Slightly Alkaline) -----No Change Gasoline, Kerosene, White Spirit, Paraffin ------No Change Benzene, Toluene, Methyl Alcohol, Ethyl Acetate-----No Change Methyl Ethyl Ketone, Ether, Phenol (5%)-----No Change Mineral Oil, Olive Oil, Vegetable Oil, Animal Fat -----No Change Blood, Urine, Excrement----- No Change Formaldehyde, Hydrogen Peroxide 3%-----No Change Hot Chili Paste, Iodine, Betadine, Hair Dye -----No Change Shoe Polish, Lipstick -----Staining Silver Nitrate ----- Staining/Possible Softening Bitumen, Salt Water-----No Change Methylene Blue -----Staining Gel-Based Hand Sanitizer, Bleach -----No Change Tested in accordance with ASTM F 925, Standard Test Method Resistance to Chemicals of Resilient Flooring. \*Marmoleum® is NOT resistant to prolonged exposure to high alkalis.

### 3. INSTALLATION

### 3.1 Adhesive:

Use Forbo T 940, Forbo Sustain 1195, Forbo Sustain 1299, Forbo EZ-ON 100 or Forbo 660 adhesive.

#### 3.2 Heat Welding:

Heat welding is not necessary for all installations, however it is optional. For seamless, hygienic watertight installation requirements, use Forbo Marmoweld welding rod

Welding rod dimensions: 4 mm; 165 linear feet per spool.

#### 3.3 Heat Welding Is Not Required:

Forbo Marmoweld... EZ to use is a color-matched sealant used to complete the installation of Forbo Marmoleum® in place of heat welding. To use, sparingly apply Forbo Marmoweld... EZ to use to all seams on the floor with a 1" (2.54cm) putty knife or plastic applicator. Ensure there are no sharp or damaged edges on the applicator that might scratch or damage the Forbo Marmoleum®. Wipe all excess Forbo Marmoweld... EZ to use off the surface of the Forbo Marmoleum® with a clean, damp white cloth.

#### 3.4 Installation Guidelines:

Refer to Forbo's Installation Guidelines for complete installation recommendations.

#### 4. WARRANTY

Limited 30-year warranty. For complete details, contact Forbo Flooring.

#### 5. CARE & CLEANING

Refer to Forbo's Floor Care Guidelines for complete care recommendations.

