

# MOTO TECHNICAL DATA SHEET

## PHYSICAL PROPERTIES & PACKAGING

|                         |   |
|-------------------------|---|
| PLANK THICKNESS         | 3.0 mm                                      |
| CONSTRUCTION            | Multi-Layer                                 |
| CORE MATERIAL           | Polypropylene<br>Mineral Composite Core     |
| WEAR LAYER              | 0.50 mm (20 mil)<br>Polypropylene           |
| FINISH                  | UV Protective Coating                       |
| BEVEL                   | 4-Sided eased edge                          |
| INSTALLATION TECHNOLOGY | Glue Down                                   |
| PLANK DIMENSIONS        | 48" (1219 mm) x 7" (178 mm)                 |
| SURFACE TEXTURE         | Wood Grain                                  |
| SF/CARTON               | 32.66                                       |
| VOC CERTIFICATION       | FloorScore                                  |
| WARRANTY                | Lifetime Residential<br>/15 Year Commercial |
| COUNTRY OF MANUFACTURE  | Japan                                       |



POLYPROPYLENE, MCP COMPOSITE

## SAFETY SPECIFICATIONS

| TEST DESCRIPTION  | REQUIREMENTS  | RESULTS   | TEST METHOD   |
|---|---|---|---|
| <b>Critical Radiant Flux</b>  | ≥ 0.45 W/cm <sup>2</sup> or more<br>Class I   | Meets Requirements  | ASTM E648, also ref as<br>NFPA 253 and FTM<br>Std 372 |
| <b>Smoke Density</b>  | Flaming & Non-Flaming<br>≤450   | Meets Requirements  | ASTM E662 also ref as<br>NFPA 258                     |
| <b>Flammability</b>   | Not extend to within 1.0 in.  | Meets Requirements  | ASTM D2859  |
| <b>Resistance to Fungi</b>  | Refer to Standard   | Resistant to bacteria, fungi,<br>and micro-organism activity. | ASTM G21  |
| <b>Chemical Emissions (VOC's)<br/>Certification</b>                     | Refer to Standard   | FloorScore Certified  |   |
| <b>Heavy Metals Content Analysis<br/>Sb, As, Ba, Cd, Cr, Hg, Pb, Se</b> | Refer to Standard   | None detected   | 16 CFR 1303/CP-<br>SC-CH-E-1003-09                    |
| <b>Slip Resistance</b>  | > 0.6 SCOF Wet & Dry  | Exceeds Rqmts<br>(not recommended for<br>ramps)               | ASTM D2047  |
| <b>Protection of Electrostatic<br/>Discharge (Data Only)</b>            | Surface to Ground 50% Humidity 1.8 x 10 <sup>11</sup> Ohms at 12%<br>Humidity 5.4 x 10 <sup>11</sup> Ohm<br>Surface to Surface 50% Humidity 2.7 x 10 <sup>11</sup> Ohms at 12%<br>Humidity >10.0 x 10 <sup>11</sup> Ohm |   | ANSI/ESD S7.1   |



# MOTO TECHNICAL DATA SHEET

PERFORMANCE SPECIFICATIONS

| TEST DESCRIPTION                       | REQUIREMENTS   | RESULTS  | TEST METHOD   |
|--|--|--|---------------|
| <b>Product Specifications</b>          | Resilient Flooring in Modular Format with Rigid Polymeric Core | Commercial Class i, Type B, Backing Class A                                    | ASTM F3261-17 |
| <b>Chemical Resistance</b>             | No more than "Slight Change"                                   | Exceeds Requirements   | ASTM F925     |
| <b>Resistance to Heat</b>              | ≤ 8.0 Delta E Requirement                                      | Exceeds Requirements   | ASTM F1514    |
| <b>Resistance to Light</b>             | ≤ 8.0 Delta E Requirement                                      | Exceeds Requirements   | ASTM F1515    |
| <b>Geometrical Characteristics</b>     | Refer to Standard  | Exceeds Requirements   | ISO 24337     |
| <b>Flexibility</b>                     | 6 to 120 mm Mandrel  | Meets Requirements   | ASTM F137     |
| <b>Surface Bond</b>                    | ≥ 1.5 N/mm <sup>2</sup>  | Exceeds Requirements   | NALFA 3.10    |
| <b>Shore A Hardness</b>                | ≥ 70   | Exceeds Requirements   | ASTM D2240    |
| <b>Wear Resistance</b>                 | No more than "Slight Change"                                   | AC6 >8500 Cycles   | EN 13329      |
| <b>Residual Indentation at 140 lbs</b> | Average ≤ 8%; Any Sample ≤ 10%                                 | Exceeds Rqmts (2000 psi)   | ASTM F1914    |
| <b>R-Value/Thermal Conductivity</b>    | Refer to Standard  | 0.060 F ft <sup>2</sup> h/Btu  | ASTM C518     |
| <b>Dimensional Stability</b>           | 0.2 % / lineal ft (305 mm) max                                 | Exceeds  | ASTM F2199    |
| <b>Static Electrical Propensity</b>    | ≤ 3.5 kV   | Avg max 3.4 kV Negative Polarity   | AATCC 134     |
| <b>Thickness Swelling</b>              | ≤ 8 %  | Exceeds Requirements   | ISO 24336     |
| <b>Dynamic Rolling Load</b>            | 100 lbc (per wheel), 500 cycles                                | Exceeds Requirements   | ASTM D2047    |
| <b>Static Load</b>                     | ≤ 0.005", 250-Lbs. Load  | Exceeds rqmts, Static Load Limit 2,000 psi                                     | ASTM F970     |
| <b>Wear Resistance</b>                 | Refer to Standard  | Exceeds Rqmts, AC6>8500 cycles   | EN 13329      |
| <b>Abrasion Resistance</b>             | 500 grams @1,000 cycles  | Exceeds Rqmts, load applied 1,000 grams, at 20,000 cycles endpoint not reached | ASTM D4060    |
| <b>Castor Chair Resistance</b>         | No Damage ≥25,000 Cycles                                       | Exceeds, AATCC Rating 5  | ISO 4918      |

## APPROVED ADHESIVES

|       |                          |  |
|-------|--------------------------|--|
| MAPEI | <b>Ultrabond ECO 350</b> | Transitional Pressure Sensitive (Acrylic) Direct bond to porous substrates |
|       | <b>Ultrabond ECO 360</b> | Transitional Pressure Sensitive (Acrylic) Direct bond to porous substrates |
|       | <b>Ultrabond ECO 373</b> | Pressure Sensitive (Acrylic) 'Double Stick', nonporous substrates          |
| SIKA  | <b>Sika Bond® T-21</b>   | Polyurethane   |
|       | <b>Sika Bond® T-35</b>   | Polyurethane   |
|       | <b>Sika Bond® T-55</b>   | Polyurethane   |

|        |                       |   |
|--------|-----------------------|---|
| BOSTIX | <b>Stix 2230</b>      | Pressure Sensitive (Acrylic)                              |
|        | <b>HydraStix 95</b>   | Transitional (Acrylic)                                    |
| TAYLOR | <b>PINNACLE</b>       | Transitional Pressure Sensitive (Acrylic)                 |
|        | <b>DYNAMIC (2098)</b> | Transitional Pressure Sensitive (Acrylic)                 |
|        | <b>RESOLUTE</b>       | Modified urethane - STPE polymer-based (Hybrid Propel TM) |



# CHEMICAL & STAIN RESISTANCE

## ASTM F925 (Regular)

| Staining Agent                  | 5 MINUTES       |                |              | 24 HOURS        |                |              |
|---------------------------------|-----------------|----------------|--------------|-----------------|----------------|--------------|
|                                 | Surface Dulling | Surface Attack | Color Change | Surface Dulling | Surface Attack | Color Change |
| 5% Acetic Acid (White Vinegar)  | 0               | 0              | 0            | 0               | 0              | 0            |
| 70% Isopropyl (Rubbing) Alcohol | 0               | 0              | 0            | 0               | 0              | 0            |
| Mineral Oil                     | 0               | 0              | 0            | 0               | 0              | 0            |
| 5% Sodium Hydroxide             | 0               | 0              | 0            | 0               | 0              | 0            |
| 5% Hydrochloric Acid            | 0               | 0              | 0            | 0               | 0              | 0            |
| 5% Ammonia                      | 0               | 0              | 0            | 0               | 0              | 0            |
| Bleach                          | 0               | 0              | 0            | 0               | 0              | 0            |
| 5% Phenol                       | 1               | 0              | 0            | 1               | 0              | 0            |
| Gasoline                        | 0               | 0              | 0            | 0               | 0              | 0            |
| Sulfuric Acid                   | 0               | 0              | 0            | 0               | 0              | 0            |
| Kerosene                        | 0               | 0              | 0            | 0               | 0              | 0            |
| Olive Oil                       | 0               | 0              | 0            | 0               | 0              | 0            |

## ASTM F925 (Modified)

| Staining Agent                     | 5 MINUTES       |                |              | 24 HOURS        |                |              |
|------------------------------------|-----------------|----------------|--------------|-----------------|----------------|--------------|
|                                    | Surface Dulling | Surface Attack | Color Change | Surface Dulling | Surface Attack | Color Change |
| Cidex                              | 0               | 0              | 0            | 0               | 0              | 0            |
| Cidex OPA                          | 0               | 0              | 0            | 0               | 0              | 0            |
| Metricide                          | 0               | 0              | 0            | 0               | 0              | 0            |
| Kinyoun's Carbolfuchian            | 0               | 0              | 3            | 0               | 0              | 3            |
| Gram's Safranin                    | 0               | 0              | 0            | 0               | 0              | 0            |
| Crystal Violet                     | 0               | 0              | 0            | 0               | 0              | 0            |
| Gram's Iodine                      | 0               | 0              | 0            | 0               | 0              | 0            |
| Methylene Blue                     | 0               | 0              | 0            | 0               | 0              | 0            |
| Bouin's Solution                   | 0               | 0              | 2            | 0               | 0              | 2            |
| Betadine                           | 0               | 0              | 0            | 0               | 0              | 0            |
| A456 II Germicide                  | 0               | 0              | 0            | 0               | 0              | 0            |
| Blood                              | 0               | 0              | 0            | 0               | 0              | 0            |
| Mineral Spirits                    | 0               | 0              | 0            | 0               | 0              | 0            |
| Potassium Permanganate             | 0               | 0              | 3            | 0               | 0              | 3            |
| Aniline Blue                       | 0               | 0              | 0            | 0               | 0              | 0            |
| Hematoxylin                        | 0               | 0              | 0            | 0               | 0              | 0            |
| Bicarbonate                        | 0               | 0              | 0            | 0               | 0              | 0            |
| Purell                             | 0               | 0              | 0            | 0               | 0              | 0            |
| Hydrogen Peroxide                  | 0               | 0              | 0            | 0               | 0              | 0            |
| Disinfectants: Phenolic/Quaternary | 0               | 0              | 0            | 0               | 0              | 0            |

## ISO 26987 (Lonseal)

| Staining Agent                   | 2 HOURS                    |                | Staining Agent | 2 HOURS            |   |
|----------------------------------|----------------------------|----------------|----------------|--------------------|---|
|                                  | Citric Acid (10% Solution) | 0              |                | Ammonia (5% NH OH) | 0 |
| Red Wine                         | 0                          | Hand Sanitizer | 0              |                    |   |
| Celeste Sani-Pak Powder          | 0                          | Brake Fluid    | 0              |                    |   |
| SkyKem Toilet Deodorant (Liquid) | 0                          | De-icing Fluid | 0              |                    |   |
| Urea (20% Solution)              | 0                          | Hydraulic Oil  | 0              |                    |   |
| Coffee                           | 0                          | Jet Fuel       | 0              |                    |   |
| Mustard                          | 0                          | Motor Oil      | 0              |                    |   |
| Ketchup                          | 0                          | Skydrol        | 0              |                    |   |
| Bleach (5.25% NaOCL)             | 1                          |                |                |                    |   |

LEGEND 0=No Change 1 = Slight 2= Moderate Change 3=Severe Change