

VersaCourt Game Tile System Specification

PART I - GENERAL

1.01 DESCRIPTION

A. Scope of work

Furnishing of materials for the flooring system described below. The flooring is a modular interlocking suspended plastic tile system. Includes installation, application of game lines, and maintenance instructions for the flooring system.

- B. Related Work Specified Elsewhere
 - 1. Installation of concrete, asphalt, or other base material.
 - 2. Preparation of base to provide a medium broom surface finish with tolerances of (+) or (-) ¼" in any 10' radius.
 - 3. Membrane waterproofing as determined by the project engineer.

PART II – WARRANTIES

2.01 MANUFACTURER'S LIMITED WARRANTY

A. VersaCourt® outdoor flooring is covered under a scaled lifetime warranty by the manufacturer for any defects in materials and workmanship

2.02 INSTALLERS

A. Installer shall provide a one (1) year warranty on his workmanship as it pertains to the installation of the modular flooring and accessories.

PART III – PRODUCT

3.01 MATERIALS

- A. VersaCourt court tiles
 - Description An injection molded, high impact plastic tile supplied in pre-assembled 16-tile sheets.
 - 2. Size -10.13" x 10.13" x 3/4" (25.73cm x 25.73cm x 19.05mm)
 - 3. Material Specially blended high impact polypropylene copolymer. UV stabilizer and anti-oxidant additives are molded into each tile to insure protection against color fade and plastic deterioration & oxidations.
 - 4. Surface Texture Specially designed open grid that provides a high grip surface in all weather conditions. NOTE: Plastic game tiles can become slippery when moisture is present on the surface.
 - 5. Tile Interlocking Mechanism The tile interlocking system is designed to allow for thermal expansion and contraction without causing the surface to buckle. It also provides the player with lateral forgiveness.
 - 6. Colors Standard colors and custom options available
 - 7. Support Structure Each tile is supported by 155 cross posts. This provides a stable base while at the same time vertical flex.
 - 8. Weight 7 oz.
- B. VersaCourt court ramp tiles
 - 1. Description An injection molded, high impact plastic ramp tile. Used around the edge of court as ramp from ground to tile level.
 - 2. Size 10.13" x 2" x 3/4" thick
 - 3. Material Same as tile



- 4. Surface texture Smooth
- 5. Tile Interlocking Mechanism Same as tile
- 6. Colors Same as tile
- 7. Support Structure Same as tile
- 8. Weight 1.6 oz.

C. Line Stripe Painting

- Primer/Paint A proprietary adhesion promoter and 2-Part polyurethane based, marine grade paint is required.
- 2. Logos Custom logos may also be painted onto the surface of the tile.

PART IV – PHYSICAL PROPERTIES 4.01 MATERIAL TEST RESULTS

- A. Rockwell hardness (ASTM D 785): 74
- B. Heat Deflection @ .455 MPa (ASTM E 648): 195
- C. Flaming at 1000mm (ASTM E 648): 4 min 45s
- D. Auto-ignition temperature (ASTM D-1929): 980°F
- E. Vicat softening point (ASTM D-1525): 260°F
- F. Low Temperature Brittleness (ASTM D-2137): -25°F
- G. Coefficient of Linear Thermal Expansion, (ASTM D-696, E-831): 63 x 10-6 (in/in)/°F
- H. E-Modulus (ASTM D-5418) 126,000 psi (850MPa)
- I. Flex Modulus (ASTM D-790) 122,000 psi
- J. Tensile Yield Strength (ASTM D-638) 3,300 psi
- K. Elongation at Yield (ASTM D-638) 18%
- L. Notched Izod (ASTM D-256) 15 ft-lb / in at 20°C

4.02 PRODUCT TEST RESULTS

- A. Flame Spread Index (ASTM E-162): 4 min. 30 sec.
- B. Smoke Development (ASTM E-162): 1 min. 46 sec.
- C. Radiant Panel (ASTM E-84,162,648): .12 Watts/cm²
- D. Friction Test (ASTM C-1028): Dry<.71, wet<.52
- E. Compression vs. Crush (ASTM D-3998): No Break
- F. Noise Reduction Coefficient (ASTM C-423): 25%
- G. R-Value: < 1.0
- H. Flatness: ± 1.5mm
- I. Load Bearing Capacity: 180 psi
- J. Vertical Rebound Characteristics (ASTM F2117-10) 97.1%
- K. Resistance of Synthetic Polymeric Materials to Fungi (ASTM G21-15): Rating 0 of 4

4.03 EN 14904 TEST

- A. Fire Test: EN 13501-1
- B. Emission of formaldehyde: EN 717-1
- C. Emission of pentachlorophenol: Annex D
- D. Release of other dangerous substances: National Standards
- E. Linear Friction: EN 13036-4 using CEN rubber
- F. Shock Absorption: EN 14808
- G. Resistance to a rolling road: EN 1569
- H. Resistance to wear: EN 5470-1 using taber abrader with H18 wheels with load of 1kg (on lacquer: CS10 wheels with 0.5 kg load)



- I. Vertical ball rebound: EN 12235 using basketball
- J. Vertical deformation: EN 14809
- K. Resistance to indentation: EN 1516

4.04 EN 14877 TEST

- A. Linear friction: EN 13036-4 using CEN number
- B. Shock Absorption: EN 14808: original and after ageing in hot air according to EN 13817 followed by immersion in hot water according to EN 13744
- C. Vertical deformation: EN 14809
- D. Vertical ball rebound: EN 12235 using basketball
- E. Resistance to a rolling road: EN 1569
- F. Water permeability: EN 12616
- G: Specular reflectance: EN 13745
- H: Resistance to wear: EN 5470-1 using taber abrader with H18 wheels with load of 1kg and after EN 14836
- I: Colour loss: EN ISO 20105-A02 after artificial weathering according to EN 14836
- J: Maximum tensile strength: EN 12230: original and after ageing in hot air according to EN 13817 followed by immersion in hot water according to EN 13744
- K: Absolute thickness EN 1969: method A

PART V – EXECTION 5.01 INSTALLATION

- A. VersaCourt court tile
 - 1. Court tiles will be installed according to pre-approved layout.
 - 2. Court tiles will be installed and/or supervised according to manufacturers specifications by an authorized, factory trained dealer or representative.
- B. Game line painting
 - 1. Floor surface shall be clean, dry and free of debris.
 - 2. Game lines shall be painted using a proprietary adhesion promoter and 2-Part polyurethane based, marine grade paint is required.

5.02 MAINTENANCE

- A. Maintenance Procedure
 - It is recommended to keep the surface free of leaves, limbs and grass clippings by using a leaf blower. Every 2-3 years it may be necessary to pull the tile up and sweep out any dirt or debris that may have accumulated under the tile.



