

VersaCourt® Compete Flooring Specification

PART I– GENERAL 1.01 DESCRIPTION

A. Scope of Work

Furnishing of materials of the flooring system described herein, including the interlocking suspended synthetic (polypropylene high impact copolymer of proprietary formulation) modular tile system and complete installation thereof, and application of game lines, as well as maintenance instructions for the system.

B. Related Work Specified Elsewhere

- a. Installation of concrete, bituminous, or wood substrate.
- b. Preparation of substrate to provide a medium dense finish with level tolerances of + or 1/8" (3.2mm) in any 10' (3.04m) radius.
- c. Membrane waterproofing as determined by project engineer.

1.02 QUALITY ASSURANCE

- A. Acceptable Installer
 - a. VersaCourt® shall supervise the flooring installation as per the installation instructions of the manufacturer.
 - b. Successful bidder must submit a minimum of (3) three completed projects of similar magnitude and complexity within the last (2) two years. List of projects shall include name, address, phone number, and contact person.

1.03 STORAGE

- A. Storage of Material
 - The general contractor shall provide a secure, clean and dry location for storage of material.

1.04 JOB CONDITIONS

- A. Schedule of Installation
 - a. VersaCourt® flooring shall preferably not be installed until all other trades are completely finished in the area
 - b. Substrate shall be level to specified tolerances, free of debris and materials, and broom-clean.

1.05 WARRANTY

- A. Manufacturer's Limited Warranty
 - a. VersaCourt® flooring is warranted by the manufacturer for any defects in materials and workmanship for a period of 17 years from the date of purchase as set forth in the manufacturer's standard limited warranty.

PART II – PRODUCTS 2.01 MATERIALS

- A. VersaCourt Suspended Flooring
 - a. Description: Floor tiles shall consist of no break, high impact polypropylene copolymer with suspended open support structures for drainage. Each tile shall measure 9.825" x 9.825" x .5" (25cm x 25cm x 12.7mm). The tiles shall tightly interlock and utilize a spring tensioning system within the locking mechanism allowing for .05" (1.27mm) of expansion between tiles if necessary, but maintain



- a minimal visible gap between tiles in normal conditions. Tiles shall utilize a single injection point utilizing NO2 for optimal plastic distribution and maximum surface flatness during manufacturing.
- b. Surface: The smooth tile surface shall have a tiny profile to reduce slipping and hide scuff marks. The surface shall have small, uniform perforation slits which will dampen the sound effect and allow cleaning or spilled fluids to evaporate from underneath the tile, preventing mildew growth.

B. Underlayment

 A rubber underlayment shall not be required if the floor being used for roller skating, however it may be stipulated as an option for use as multi-sport game floor.

C. Line Striping

- a. Tape Lines shall preferably be taped using 3M-471 tape, and can be re-taped every 18-24 months.
- b. Paint A proprietary adhesion promoter and 2-Part polyurethane based, marine grade paint is required.

PART III – PHYSICAL PROPERTIES

3.01 MATERIAL TEST RESUTLS

- A. Rockwell hardness (ASTM D 785): 74
- B. Heat deflection@ 66 psi (ASTM E 648): 195
- C. Flaming at 1000mm (ASTM E648-97): 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. Co-efficient of Linear Thermal Expansion, (ASTM D-696, E-831): 63 x10-6 (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) 3300 psi
- K. Elongation at Yield (ASTMD-638) 18%
- L. Notched Izod (ASTM D-256) 15 (ft-lbs / in) at 20° C

3.02 PRODUCT TEST RESULTS

- A. Flame spread Index (ASTM E648-97): 4m 55s
- B. Smoke Development (ASTM E-162): 2m 23s
- C. Radiant Panel (ASTM E-84, 162, 648) 0.12 Watts/cmC
- D. Friction Test (ASTM C-1028) dry < .82 wet < .58
- E. Compression vs. crush (ASTM D-3998): no break
- F. Noise Reduction Coefficient (ASTM C-423) 20%
- G. Rolling Load (DIN 18032) Very Good
- H. R-Value < 1.0
- I. Flatness +/- 0.02 mm
- J. Vertical Rebound Characteristics (ASTM F2117-10) 95.2%
- K. Load Bearing Capacity: >185 pounds per sq.in.
- L. Resistance of Synthetic Polymeric Materials to Fungi (ASTM G21-15): Rating 0 of 4

3.03 EN14904 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 ofs 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

3.04 SANITARY INFORMATION

- A. Resistance to fungi (in compliance with ASTM G-21).
 - a. Basic organisms test (ATCC #6205) indicates zero growth.
- B. Resistance to the following:
 - a. Bacteria and mildew resistance
 - b. Gram-positive bacterial Staphylococcus Aureus
 - c. Gram-negative Klebsiella Pneumoniae
 - d. Pink-staining organism
 - e. STV Reticulum
 - f. Surface fungi growth prior to and following leaching

PART IV - EXECUTION

4.01 INSPECTION

A. Substrate

a. Substrate shall be free of contamination, dry and level. Substrates with structural failures shall be prepared insofar as to prevent tiles from catching on sharp ridges. To prevent dust, concrete substrates shall be sealed.

4.02 INSTALLATION

- A. VersaCourt Suspended Tile Flooring
 - a. Floor shall be installed to pre-approved layout.
 - b. Floor shall be installed and/or supervised to manufacturers specifications by an authorized, factory trained dealer or representative.

B. Game Striping / Lining

- a. Floor surface shall be clean and free of debris.
- b. Lines shall preferably be taped using 3M-471 tape. If necessary, paint should consist of proprietary adhesion promoter and 2-part polyurethane based, marine grade paint system.

4.03 MAINTAINANCE

- A. Maintenance Procedure
 - a. Flooring contractor shall provide detailed care and cleaning procedures.
 - b. Flooring contractor shall provide a list of materials needed for proper care and maintenance of floor.
 - c. Flooring contractor shall provide a recommended tool for disassembly and reassembly.



