

**ARCHITECTURAL SPECIFICATIONS FOR  
SUSPENDED MODULAR TILE SPORTS FLOOR SYSTEM**

**SECTION 09771- ATHLETIC SURFACING – INDOOR/OUTDOOR -  
SUSPENDED**

**PART 1 – GENERAL**

**1.01 DESCRIPTION**

**A) Scope**

1. The furnishing of interlocking suspended synthetic (high impact polypropylene copolymer proprietary formulation) modular tile system.
2. Game lining.

**1.02 RELATED WORK SPECIFIED ELSEWHERE**

- A) Installation of concrete, bituminous or wood substrate.
- B) Preparation of substrate to provide a medium, dense finish with level tolerance of (+) or (-) 1/8 inch in any ten-foot radius.
- C) Substrate shall be free of any debris before modular tiles are installed.

**1.03 QUALITY ASSURANCE**

**A) Acceptable Manufacturer:**

1. The manufacturer shall be a firm experienced in the manufacturing of interlocking suspended synthetic floor systems for over 20 years.

**B) Acceptable Installer:**

1. Flooring contractor shall be a firm experienced in the flooring field and approved by the manufacturer.

**C) Warranty:**

1. Manufacturer's 15 year limited warranty on materials.

**1.04 SUBMITTALS**

- A) Submit samples of the actual sports surface in the standard color and manufacturers literature.

**1.05 DELIVERY AND STORAGE**

- A) Material shall not be installed until all masonry; painting, plastering tile work, marble, and terrazzo are complete to ensure cleanliness.

## **PART 2 - PRODUCTS**

### **2.01 SUSPENDED SYNTHETIC MODULAR TILE SYSTEM**

- A) Prefabricated modular tile system. TopCourt, as manufactured by Matéflex Corp., Utica, NY.
- B) Dimensions: 12" x 12" x 5/8"
- C) Weight: .72 lb.
- D) Open grid design, square rib pattern.
- E) Rib width: .085" maximum.
- F) Each module shall incorporate 3 horizontal and 3 vertical leaf spring type flex joints, integral to the design.
- F) Support: Surface supported by 481 cruciform gusseted posts.
- G) Loading: 16,000-lb./sq. ft.
- H) Locks: 32 latch locks. 2 sides with 8 male parts each. 2 sides with 8 female parts each.
- I) Flammability: Meets UL94-HB standard.
- J) Material: All modules shall be made from a proprietary, engineering grade virgin copolymer Polypropylene with incorporated stabilizers, ultraviolet absorbers, anti-oxidants and color pigments. The material shall be designed to provide high color integrity, excellent weatherability and good traction, resiliency and durability for normal play. Material to be fungus and mildew resistant.
- K) Service range: -50 to 275 degrees F.

### **2.02 LINE MARKING**

- A) Line marking (paint) to be supplied by sport surface manufacturer and be specifically formulated for application to the flooring material.

## **PART 3 – EXECUTION**

### **3.01 SUBSTRATE**

- A) The substrate shall be reviewed by the contractor for contamination, dryness and level. Any deviation from specification should be reported in writing to the architect for correction.
- B) Architect will implement corrections to substrate and notify installer upon completion of corrections.

### **3.02 INSTALLATION**

- A) Install suspended modular tile sports surface in accordance with the latest manufacturer's recommendations.

(3.02 cont'd)

- B) Outdoor installations in excess of 100' in length: The periphery of the court surface to be mechanically fastened to the base per manufacturer's recommendations. Final trim to be within ½" of any backstop or sidestop under all conditions.
- C) No gaps, spaces or openings between modules are permitted.
- D) Game lines to be installed per manufacturer's recommendations.

3.03 EXTRA STOCK

- A) Supply twenty (20) pieces of tile for each color installed for use by the Owner for implementing flooring repairs.

## TopCourt

### ENGINEERING SPECIFICATIONS

DESCRIPTION	TEST	VALUE/RESULT	UNITS
Tile Size		12 x 12 x 5/8	In.
Top Wear Surface		0.320	In.
Weight		0.71	Lb.
Material		PP Copolymer	
Locking System		Snap Latch	
Number of Locks		32	
Horizontal Lock Tolerance		X axis = .045 Y axis = .030	In.
Tensile on Connector		1008	Lb./Tile
Top Support Posts		441	
Vertical Loading		16,000	Lbs.
Drop Weight Impact @-23C	Himont method	18	Ft-Lbs.
Flatness Test		0 -/-.13 (.005)	Mm In.
Ball Rebound		99%	
Anti-Microbacterial		Yes	
Agency Rating/Spec.		FDA food contact approved	
UV Stabilized		Yes	
Chemical Resistance		Excellent	
Flame Class	UL94HB	Pass	
Flame Spread	Index 70	(Class B/II)	
CLTE		$6 \times 10^{-5}$	In/in °F
Rockwell Hardness	D785A	82	
Low Temperature Brittleness		-30 -34.4	Deg. F Deg. C
E-Modulus	D638	125,000	Psi
Flex-Modulus	D980B	120,000	Psi
Tensile Strength at Yield	D638	3,100	Psi
Elongation at Yield	D638	10	%
Notched IZOD	D256A	No Break	Ft.Lbs/In.
Deflection Temp.	D648	190	Deg. F
Vicat Softening Point		323	Deg. F
Electrical resistance	Basel	$1 \times 10^{14} - 1 \times 10^{17}$	ohm/cm
Warranty		15 year limited	