

Specifications

Courtflex Arena Tiles

Part I – General

1.1 Description

A. Scope of work

Furnishing of materials for the flooring system as described below. The flooring is a modular interlocking suspended plastic system especially for indoor use, application of game lines and maintenance instructions for the flooring system.

B. Related work specified elsewhere

1. Installation of concrete, asphalt or other basis material and surfaces
2. Preparation of a base to provide a semi smooth surface finish with a tolerance of +/- 0,7 in any radius
3. Membrane waterproofing as determined by the project engineer

1.2 Quality assurance

A. Material Supplier

B. Installer:

The complete installation of the flooring system, as described in these specifications, shall be carried out by an experienced installer (Flooring Contractor), and the work shall be performed in accordance with current installation instructions of Courtflex. The installer (Flooring Contractor) shall be liable for all matters related to installation for a period of one year after the floor has been substantially installed and completed.

1.3 Delivery, storage and handling

- A. Materials must be delivered in Courtflex's original, unopened and undamaged packaging with identification labels intact.
- B. Store material protected from exposure to harmful weather conditions, on a clean, dry, flat surface protected from possible damage.
- C. Storage conditions shall be 55°F to 80°F.

1.4 Warranty

- A. Courtflex warrants that the materials it has supplied will be free from manufacturing defects for a period of ten (10) years. The foregoing warranty is in lieu of and excludes all other warranties not expressly set forth herein, whether expressed or implied in operation of law or otherwise, including, but not limited to, any implied warranties of merchantability or fitness. This warranty is expressly limited to the flooring materials (goods) supplied by Courtflex. This warranty does not cover floor damage caused (wholly or in part) by fire, winds, floods, moisture, other unfavorable atmospheric conditions or chemical action, nor does it apply to damage caused by ordinary wear, misuse, abuse, negligent or intentional misconduct, aging, faulty building construction, concrete slab separation, faulty or unsuitable subsurface or site preparation, settlement of the building walls or faulty or unprofessional installation of Courtflex flooring systems.

- B. Courtflex shall not be liable for incidental or consequential losses, damages or expenses directly or indirectly arising from the sale, handling or use of the materials (goods) or from any other cause relating thereto, and their liability hereunder in any case is expressly limited to the replacement of materials (goods) not complying with this agreement or, at their election, to the repayment of, or crediting buyer with, an amount equal to the purchase price of such materials (goods), whether such claims are for breach of warranty or negligence. Any claim shall be deemed waived by buyer unless submitted Courtflex in writing within 30 days from the date buyer discovered, or should have discovered, any claimed breach.
- C. Courtflex warrants that the colors will not fade out for a period of seven (7) years (international standard UV protection against color fading). This warranty can be void subject to the use of herbicide, pesticides or if installed in an area of extreme climatic conditions, such as areas with a extremely high UV radiation or areas with acidic rain.

Part II – Specifications

2.1 Materials: 25MFI block copolymer polypropylene

A. UV & antioxidant colorant package against color fading. Antistatic, moisture, fungal and anti-microbiological. Protective additives are included in the master batch, made to proprietary formula.

Part III – Product

3.1 Materials

1. Description: An injection molded, high impact plastic tile
2. Dimensions:
 1. Size: 25 cm X 25 cm, thickness 14 mm
 2. Weight: 310g
3. Material: Specially blended, high impact polypropylene block copolymer. UV protection, fungal & moisture, antibacterial and antistatic additives are molded into each tile to ensure protection against color fade and plastic deterioration
4. *Surface Texture*: Specially engineered and designed surface
5. *Tile Interlocking Mechanism*: The special strong inter looking system with 5 looking points on each side, remain the tiles flat and they will not cup up at the corners.
6. *Support structure*: For the best results its strongly recommended to layout a 2-3 mm rubber or foam- underlay under the tiles

3.2 Material test results

- A. Rockwell hardness (ASTM D 785): 74
- B. Heat deflection @ 66 psi (ASTM E 648): 195
- C. Flaming at 1000mm (ASTM E 648): 4min 45s
- D. Auto-ignition temperature (ASTM 1929): 980°F

E. Vicar 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): 63×10^{-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): 37kg

K. Elongation at yield (ASTM D 638): 18%

L. Notched izard (ASTM D 256): 15 ft-lb/in at 20°C

3.3 Product test results

A. Flame spread index (ASTM E 162): 4min 30s

B. Smoke development (ASTM E 162): 1min 46s

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. Rolling load (DIN 18032): Good

H. R-Value < 1.0

I. Flatness: +/- 0.5mm

J. Load bearing capacity: < 1000kg

Part IV – Execution

4.1 Installation

A. All tiles will be installed according to a pre-approved layout

B. The tiles will be installed and/or supervised according to the manufacturer's specifications by an authorized, factory trained dealer or approved representative.

C. Floor surface shall be clean and free of debris

D. Remove all excess and waste materials from the area of work. Dispose of empty containers in accordance with federal and local statutes.

4.2 Maintenance

A. It is recommended to clean once or twice a week the surface with a common industrial vacuum/scrubbing machine. Use a PH+ close to 7, neutral detergent to clean dust dirt and films on the surface. Dilution rate: 1:40 part warm water. Black scuffmarks, caused by skate-toes and black shoe soles are removed with lacquer thinner. Wipe off with cloth or buffer.

Part V – Recycling attributes

Courtflex uses a copolymer polypropylene plastic that – at the end of its service life – can be sold to plastic recyclers. The tiles can be granulated and reused back into the commodity plastics stream.

