

Guide Specifications for FLEX COURT® GYM FLEX™ Multi-Sport Flooring

Form No. 406

SECTION 09624 – MODULAR ATHLETIC FLOORING

PART I – GENERAL

1.01 DESCRIPTION

A. Scope

1. The complete installation of modular sports surfacing system including the interlocking high impact polypropylene tile, supportive acoustic underlayment and striping.

B. Related Work Specified under other sections

1. CONCRETE SUBFLOORS – SECTION 03_ _ _
2. The general contractor shall furnish and install the concrete subfloor
3. Preparation of existing or new subfloor to provide a medium dense finish with level tolerances of 1/8" in any 10' radius. Floor Flatness and Floor Levelness (FF and FL) numbers are not recognized. High spots shall be ground level and low spots filled with approved leveling compound.

1.02 REFERENCES

A. ASTM (American Society for Testing & Materials)

1. ASTM C 1028
2. ASTM D 256
3. ASTM D 638
4. ASTM D 648
5. ASTM D 696
6. ASTM D 785
7. ASTM D 1929
8. ASTM E 1745
9. ASTM G-21

1.03 SUBMITTALS

- A. Flex Court® Gym Flex™ specifications
- B. One sample of specified system, if requested by Architect or Engineering Firm
- C. Flex Court Care & Maintenance Guide
- D. Installation instructions as published by Flex Court

1.04 QUALITY ASSURANCE

A. Material Supplier: Shall be Flex Court

B. Installer:

1. 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 by Flex Court
2. Installer (Flooring Contractor) shall be liable for all matters related to installation for a period of one (1) year after floor has been substantially installed and completed.

1.05 DELIVERY, STORAGE AND HANDLING

A. Materials must be delivered in Flex Court's original, unopened and undamaged packaging with identification labels intact.

B. Store material in a secure, clean and dry location.

C. Storage conditions shall be 55° F to 80° F.

1.06 SITE CONDITIONS

A. Installation of modular materials shall not commence until all other finishes and overhead mechanical trades have completed their work in the modular flooring areas.

B. Permanent heat, light and ventilation shall be installed and operating during and after installation.

C. Subfloors shall be clean, dry, free from dirt, dust, oil, grease, paint, old adhesive residue, or other materials.

D. Moderate room temperature of 62° F to 80° F shall be maintained for 72 hours prior to, during and 72 hours after installation.

1.07 WARRANTY

A. Flex Court warrants that the materials it has supplied shall be free from manufacturing defects a period of ten (10) years. The foregoing warranty is in lieu of and excludes all other warranties not expressly set forth herein, whether express 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 Flex Court. This warranty does not cover floor damage caused by fire, winds, chemical action, nor does it apply to damages by ordinary wear, misuse, abuse, negligent or intentional misconduct, aging, faulty building construction, concrete slab separation, faulty subsurface or site preparation or unprofessional installation of Flex Court flooring systems.

B. Flex Court 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 to Flex Court in writing within 30 days from the date buyer discovered, or should have discovered, any claimed breach.

PART II – PRODUCTS

2.01 MATERIALS

A. Flex Court® Gym Flex™ Modular Sport Flooring – Imperial, solid-top design shall be, high-impact polypropylene, copolymer with a bridge-support structure as supplied by Flex Court. The tiles shall have patented positive locking system.

1. Size - 12" x 12" x ½" (31.4cm x 31.4cm x 12mm)

2. Weight – 14 oz (400 g)

B. Underlayment

1. A rubber underlayment is recommended

C. Line Striping

1. Tape

A special tape (3M-471 or equiv) shall be used.

2. Paint

a. Primer: As specified by Flex Court

b. Paint: Aliphatic Polyurethane Enamel by Flex Court

c. Logos: Special ink is recommended.

PART III – PHYSICAL PROPERTIES

3.01 MATERIAL TEST RESULTS

A. Rockwell hardness (ASTM D 785): 65 R

B. Heat deflection@ 66 psi (ASTM D 648): 180° F

C. Flaming at 1000mm (ASTM D 648): 4 min 55s

D. Auto-ignition temperature (ASTM D 1929): 1062° F

E. Vicat softening point (ASTM D 1525): 255° F

F. Low temperature brittleness (ASTM D 2137): -25° F

G. Flex-Modulus (ASTM D 790) 110,000 psi

H. Tensile Yield Strength (ASTM D 638) 3300 psi

I. Elongation at Yield at 51 mm/min(ASTM D 638): 6%

J. Impact Strength at -22° F (ASTM D 5420): 250 in-lb

K. Notched Izod (ASTM D 256): >3 (ft-lbs / in) at 73° F

3.02 PRODUCT TEST RESULTS

A. Friction Test (ASTM C 1028) Dry/Wet 0.60 / 0.61

B. Flatness 0.0mm +/- 0.25 mm

C. Load Bearing Capacity: 210 psi

D. Rolling Load (DIN 18032) Very Good

E. Noise Reduction Coefficient (ASTM C 423) 15%

F. R-Value < 1.0

3.03 UNDERLAYMENT

Multi-purpose recycled rubber underlayment having a thickness of two millimeters (2 mm), a density of 40-50 lbs per square foot, and Durometer of 55-75 on the Shore M or Shore A scales.

3.04 SANITARY INFORMATION

A. Resistance to fungi (in compliance with ASTM G-21). All basic organisms tested (ATCC #6205) were found to have zero growth.

B. Resistance to the following:

-Bacteria and mildew resistance

-Gram-positive bacterial Staphylococcus Aureus

-Gram-negative Klebsiella Pneumoniae

-Pink-staining organism

-STV Reticulum

-Surface fungi growth prior to and following leaching

PART IV – EXECUTION

4.01 INSPECTION

A. Inspect concrete slab for contamination, dryness and levelness. Report any discrepancies to the general contractor.

B. Substrates shall be broom cleaned and structural failures shall be prepared insofar as to prevent tiles from catching on sharp ridges.

C. Installer (Flooring Contractor) shall document all working conditions as specified in PART I – General prior to starting installation. Report any discrepancies to general contractor.

4.02 INSTALLATION

A. Underlayment – Two millimeter (2 mm) rubber underlayment will be unrolled and allowed to relax. All butt joints shall be properly trimmed, fitted and seamed together with an approved all-purpose tape.

B. Flex Court® Gym Flex™ Multi-Sport Flooring -

1. Floor shall be installed to pre-approved layout.

2. Proper expansion must be at all vertical obstructions minimum of ¾ Inch.

3. Floor surface shall be clean and free from debris.

C. Game Lines -

1. Use only high-quality masking tape recommended by Flex Court.

2. Lines shall be primed and painted using Flex Court recommended primer and aliphatic polyurethane paint.

3. Provide game lines as indicated on drawings.

4. Option for game lines is a special tape as recommended by Flex Court.

D. Wall Base – Install base recommended by Flex Court anchored to walls with base cement.

4.03 MAINTAINANCE

A. Maintenance Procedure

1. Flooring contractor shall provide detailed care and cleaning procedures.

2. Flooring contractor shall provide a list of materials needed for proper care and maintenance of floor.

3. Flooring contractor shall provide a recommended tool for disassembly and reassembly.