MPUCOATINGS®

SPORT SURFACE

OFFICIAL PLAYING SURFACE OF...

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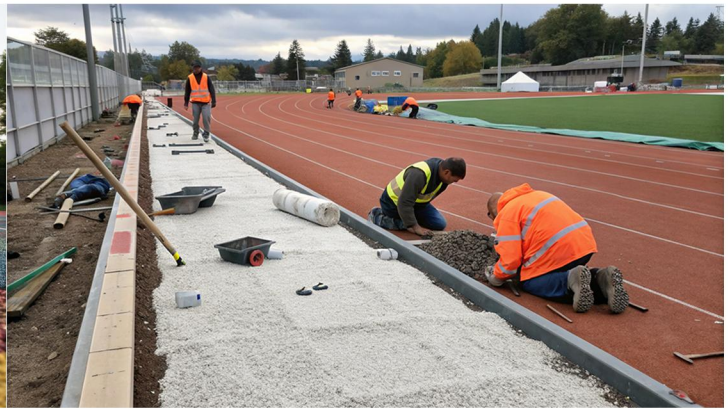
TOURNAMENT-QUALTY SPORT SURFACING PRODUCTS

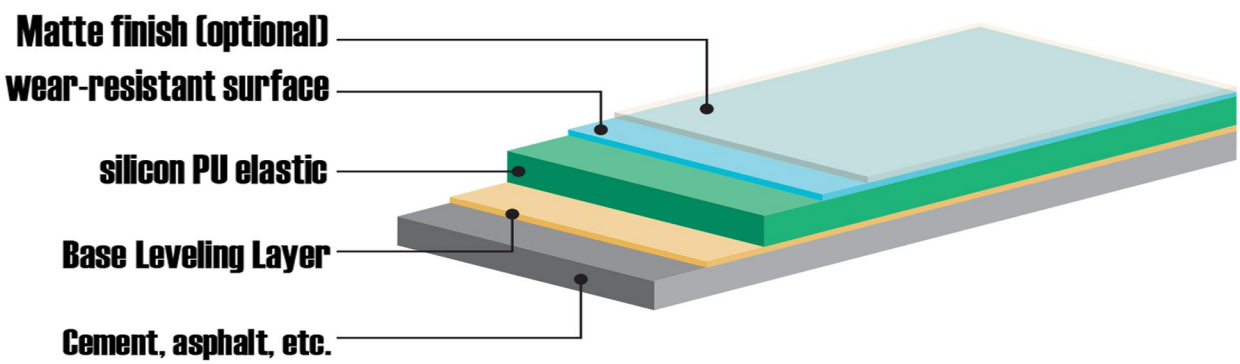
SPORT SURFACING

MPU TRACK SYSTEM

Primary raw materials in synthetic track products:EPDM granules; Polyurethane adhesive;Track base primer;Track surface coatings (granule-top coating & self-texturing resin);Line marking paint.



Silicon Pu Track Structure

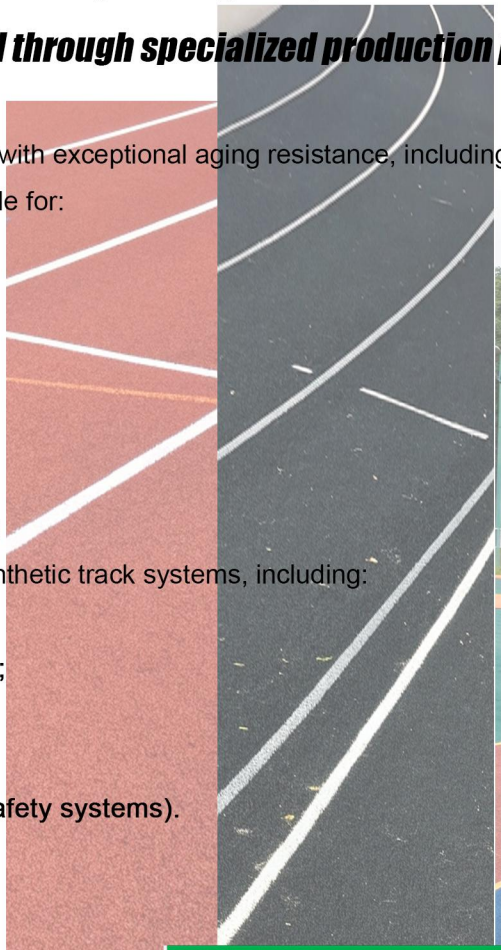


EPDM

EPDM(Ethylene Propylene Diene Monomer) are primarily composed of EPDM rubber and supplementary materials, manufactured through specialized production processes.

EPDM rubber's stable chemical properties endow it with exceptional aging resistance, including ozone resistance, heat resistance, and weather resistance, making it suitable for:

Automotive components;
Waterproof building materials;
Cable and wire sheathing;
Heat-resistant hoses and belts;
Automotive seals.



Applications of EPDM Granules in Synthetic Tracks:
EPDM granules are integral to nearly all types of synthetic track systems, including:
Porous Tracks (water-drainage structure);
Composite Tracks (hybrid base + EPDM surface);
Full PU Tracks (pure polyurethane structure);
Hybrid Tracks (PU binder + layered granules);
EPDM Playground Surfaces (impact-absorbing safety systems).

MODEL#
EPDM Underlayment Pellets
EPDM underlay pellets/grass-filled pellets (2-4)
EPDM top layer red/green granules (1-3) -10% gum content
EPDM top layer red/green granules (1-3)-13% rubber content
EPDM top layer red/green granules (1-3) - 15% gum content

RED BLUE WHITE MORE

OUR POLYURETHANE ADHESIVE

Polyurethane adhesive is primarily employed to bond EPDM granules in applications such as porous tracks, composite tracks, and EPDM playground surfaces.

POLYURETHANE ADHESIVE

Universal Bonding: Exceptional adhesion to metals, rubber, glass, ceramics, plastics, wood, fabrics, and leather.

Rapid Room-Temperature Curing: High reactivity ensures efficient bonding without specialized equipment.

Superior Flexibility & Durability: Outstanding resistance to impact, vibration, bending fatigue, and extreme low temperatures.

Industry-Leading Performance: Unmatched peel strength and flexibility outperform conventional adhesives.

- **Ultra-polar molecular structure enhances bonding stability.**
- **Ideal for dynamic applications requiring shock absorption (e.g., sports surfaces, industrial assemblies).**

MODEL#
Single-Component Polyurethane Adhesive (Model X)1:7
Single-Component High-Strength Polyurethane Adhesive 1:9
Yellowing-Resistant Polyurethane Adhesive

OUR SUGGESTION
Standard Polyurethane Adhesive : EPDM granules = 1:7
High-Strength Polyurethane Adhesive : EPDM granules = 1:9

POLYURETHANE ELASTIC CUSHION LAYER

POLYURETHANE (PU) MATERIAL IS WIDELY APPLIED I N VARIOUS SYNTHETIC TRACK SYSTEMS, INCLUDING:

Composite PU tracks

Full-pour PU tracks

Self-textured PU tracks

Polyurethane materials have good abrasion, weather and ageing resistance. This means that the elastomeric cushioning layer is able to withstand long-term, high-intensity use, as well as various weather conditions (e.g. sun, rain, temperature changes), and maintain stable performance.

The polyurethane elastomeric cushion layer also protects the asphalt or concrete base layer underneath the runway, maintaining the base layer at the integrity performance.

Shock Absorption: This is the core function. The polyurethane material has excellent elasticity, and when an athlete's foot hits the track, the elastic cushion layer deforms and absorbs most of the impact, reducing the reaction forces on the athlete's knees, ankles and other joints. This greatly reduces the risk of sports injuries, especially chronic injuries caused by long-term running training.

MODEL#
CP02-X Polyurethane Primer Adhesive (1:5 Mix Ratio)
CP02 High-Performance Elastic Base Binder (Two-Component 1:5 Ratio)

TRACK SURFACE COATING

There are two main types of runway finishes on the market today: granular and self-texured, the main difference being the construction process.

Granular runway is a kind of surface layer formed by mixing two-component runway topcoat and EPDM granules together and then spraying; we have two kinds of runway top coat by mixing component A and component B at weight ratio 1:1.2 or 1:2. , the dosage is 1.1kg per square meter.

Self-knotted surface is a kind of surface layer formed by self-knotted surface paint sprayed by special spraying process. Our company is a two-component material.

The dosage is 1.5kg per square.

***Track Coating Checklist: Ensure dry base (≤3mm flatness), 5-35°C temp, mix resin:hardener 1:0.25, spray via airless (2000-2500psi/0.8m/s) for 1.5mm layers, cure 72h, test friction BPN≥65 (EN 14877).

RED BLUE WHITE MORE

MODEL#
CP04 Runway Top Coat (1:1.2)
CP04X Runway Top Coat (1:2)
CP05 Self-Caking Top Coat

AUXILIARY INGREDIENTS

Waterproofing Primer

Seal the air holes in the concrete foundation to prevent water vapor from escaping

Sealant Emulsion

Seal foundation pores and increase the adhesion of the granular layer to the foundation.

Interfacial Agent

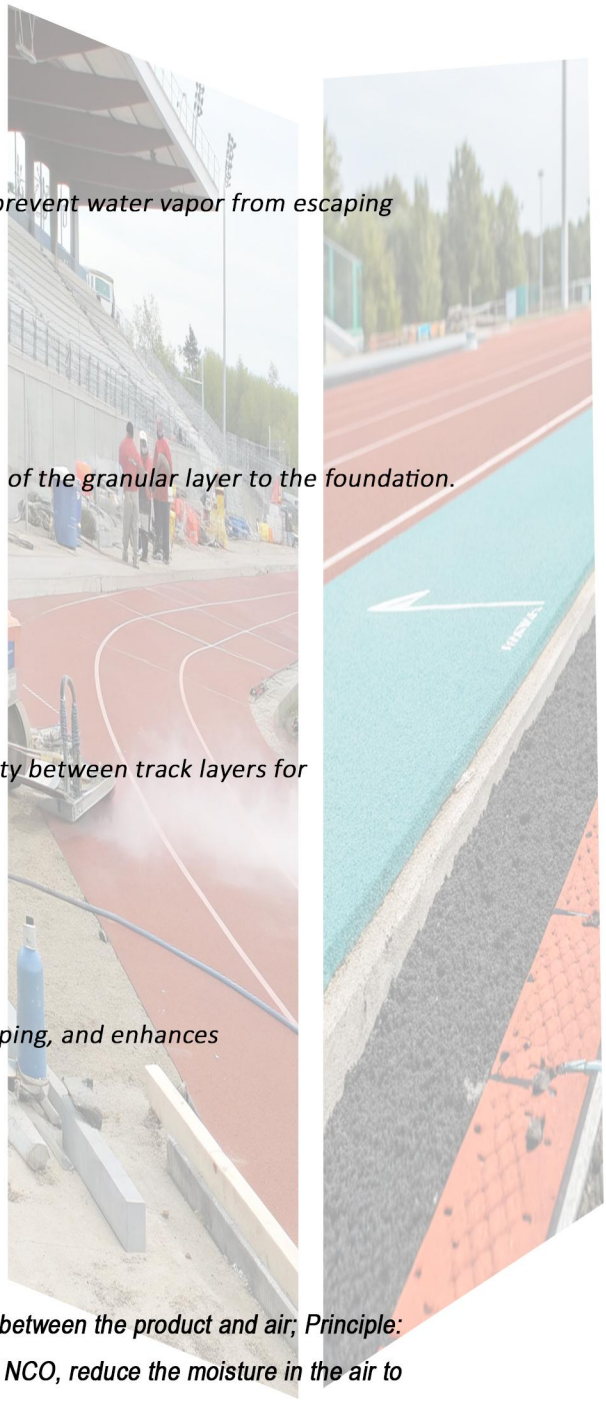
Enhances adhesion, waterproofing, and durability between track layers for weather-resistant sports surfaces.

Dispersant

Ensures even particle dispersion, prevents clumping, and enhances

Drying Agent

Accelerate the curing time, shorten the contact time between the product and air; Principle: accelerate the reaction speed between hydroxyl and NCO, reduce the moisture in the air to consume NCO, increase the strength.



MPU® COATINGS

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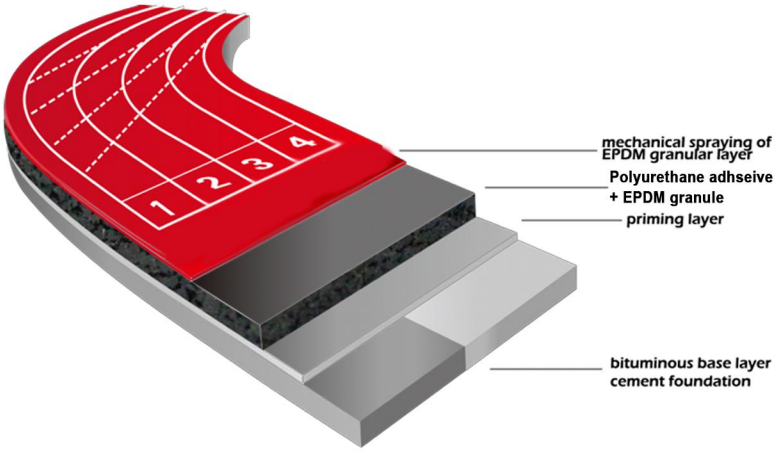
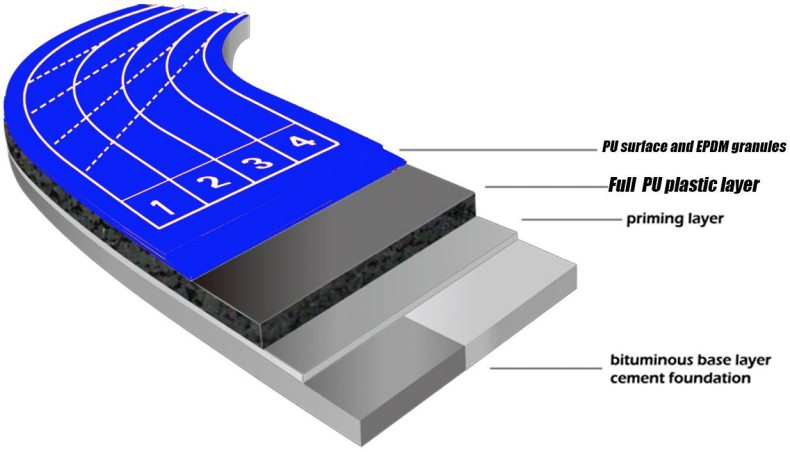
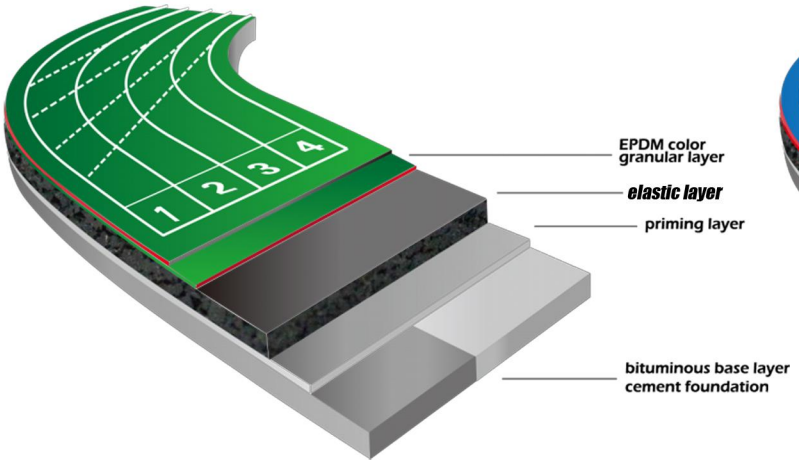
TRACK SYSTEM



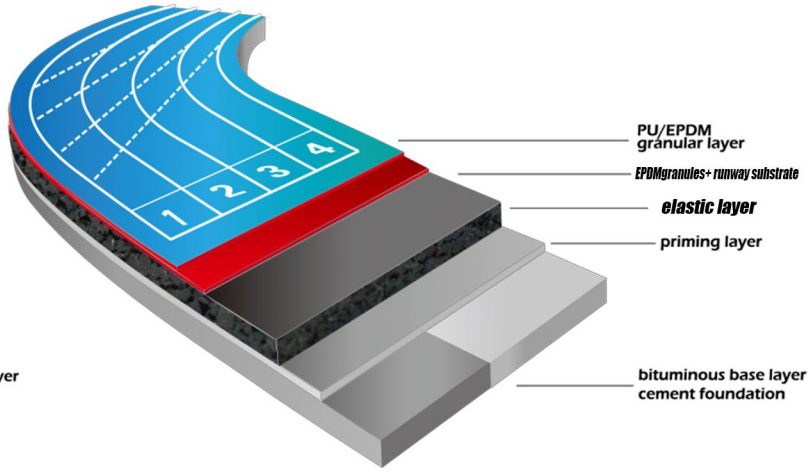
EPDM Breathable Plastic Runway



Full PU System Synthetic Running Track



EPDM Plastic Sports Ground



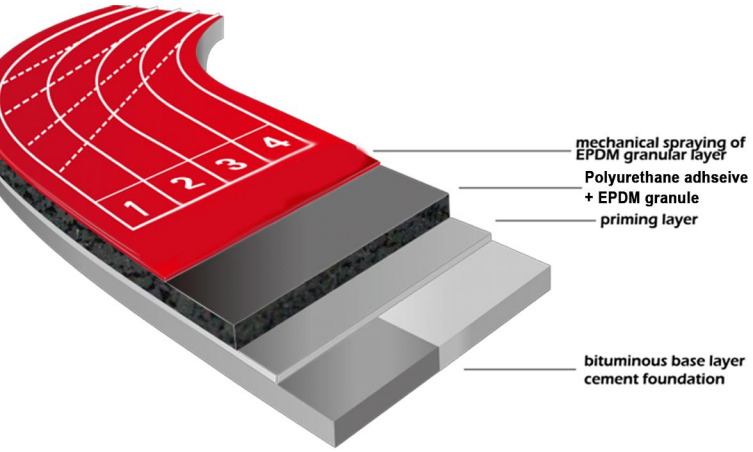
EPDM Mixed Plastic Runway

While these are the most widely used track types on the market, our company offers advanced systems with superior materials and performance. Contact us for customized all-in-one track construction solutions tailored to your needs and budget.

MPU SPORT SYSTEM™

MPUCOATINGS

EPDM BREATHABLE PLASTIC RUNWAY



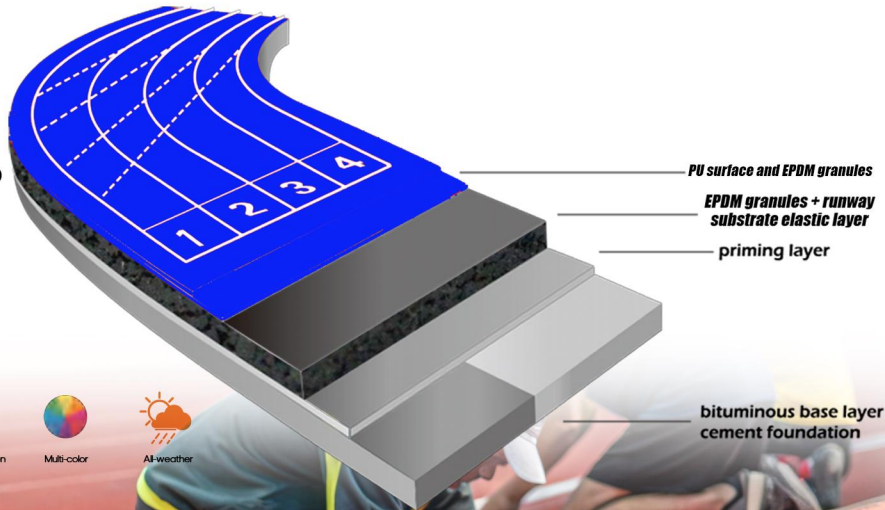
The bottom of EPDM breathable plastic runway is the rubber particles mix single-component glue with mechanical spreading method.The surface uses the special coating machine to mix single glue and tiny EPDM particles on paved bottom surface.

This site is characterized by good flatness, good elasticity, high safety, low cost, small construction difficulty, easy to popularize, suitable for non-professional training, competition and school use.

Anti-slip | Wear-resistant | Durable | UV protection | Stable color | Excellent breathability | Rapid water QK | Cost-effective

FULL PU SYSTEM SYNTHETIC RUNNING TRACK

Full PU system synthetic running track is the EPDM particles mixing two component with mechanical spreading method. The bottom layer is totally two component PU. It has outstanding anti-UV, excellent anti-aging property, and wear-resistance performance.

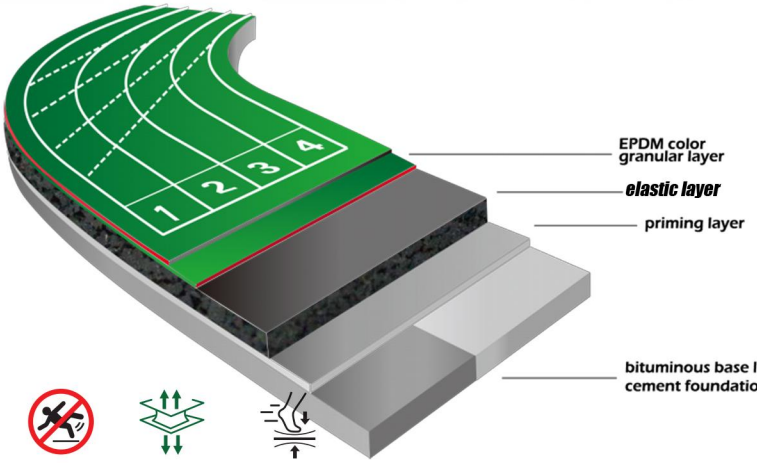


Environmentally friendly | Durable | Wear-resistant | UV resistant | Stable color | Good comfort | Shock absorption | Multi-color | All-weather

MPU SPORT SYSTEM™

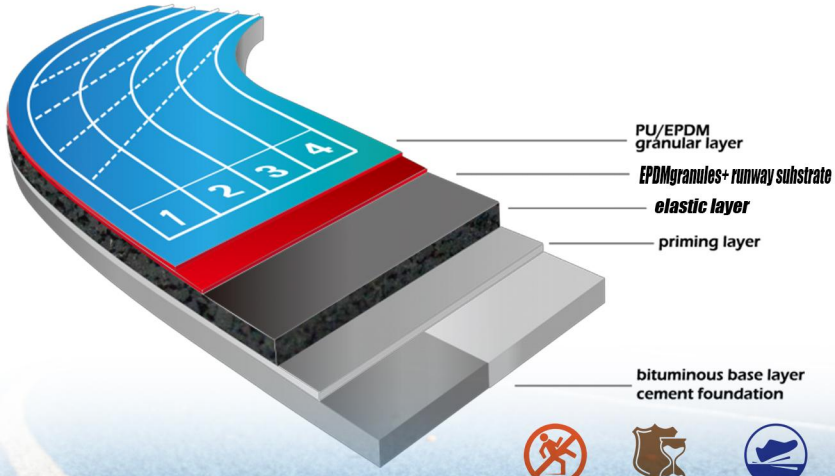
EPDM Plastic Sports Ground

EPDM Plastic Sports Ground the rubber particles mix adhesive with mechanica spreading method,and the surface is the anti-skid layer of EPDM particles.



Eco-safe · UV-resistant · Colorfast · Multi-hue · Permeable · Ergonomic · All-weather · Slip-proof · High-adhesion · High-resilience

EPDM Mixed Plastic Runway



Using the mixed structure approved by IAAF, the surface layer is the weather-resistant EPDM and environment-friendly color granule and the bottom layer is full PU mixed with some rubber particles. The construction process is simple and conforms to the

Slip-resistant · Durable · Abrasion-resistant · UV-resistant · Colorfast · Ergonomic · All-weather · Noise-reducing · Cost-efficient

MPU SPORT SYSTEM™

EPDM EVENT VENUE

The environmental-friendly EPDM activity surface at our company is constructed using EPDM eco-friendly granules bonded with single-component environmentally safe adhesive. Its standout features are: a smooth and even surface texture paired with vibrant color options.

Material Characteristics

The environmental-friendly EPDM activity surface at our company is constructed using EPDM eco-friendly granules bonded with single-component environmentally safe adhesive. Its standout features are: a smooth and even surface texture paired with vibrant color options.

＊＊Suitable for kindergarten play areas, fitness trails in sports parks, community activity zones in residential complexes, playground surfaces, and other recreational spaces.

UV protection | Color stability | Multiple colors | Rapid water permeability | Excellent breathability | Smooth surface | Slip-resistant | No particle shedding

MODEL#
EPDM Base Granules
EPDM Base Layer Granules / Infill Granules (2-4mm)
EPDM Surface Layer Red/Green Granules (1-3mm) - 10% Rubber Content
EPDM Surface Layer Red/Green Granules (1-3mm) - 13% Rubber Content
EPDM Surface Layer Red/Green Granules (1-3mm) - 15% Rubber Content

MPU SPORT SYSTEM™

MPU COURT SYSTEM

Silicone PU courts and acrylic courts can deliver an all-weather ball sports experience, which are constructed through on-site application of silicone PU materials and acrylic materials.

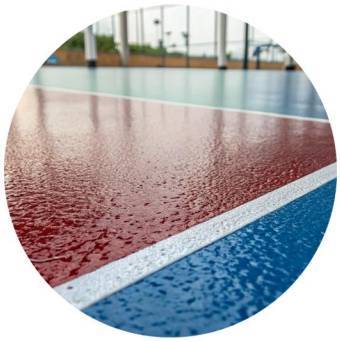
●Synthetic polymer athletic surfaces constitute all-weather sports facilities fabricated through on-site application of materials including silicone PU, acrylic composites, and related compounds. Typical installations encompass basketball facilities, badminton arenas, tennis courts, volleyball grounds, and table tennis complexes.

●Polymer-based sports surfacing systems demonstrate superior surface regularity, exceptional compressive strength, optimized hardness-elasticity ratio, and stabilized physico-mechanical properties. These engineered characteristics enhance athletes' kinematic execution and technical precision, leading to measurable performance enhancement (6.8-12.3% in sprint efficiency based on ITF testing protocols) and 34-41% reduction in court-related trauma incidence. Recognized by FIBA, BWF, and FIVB as the premier all-weather pavement solution for both encapsulized arenas and open-air facilities, these systems feature ITF-certified acrylic formulations for tennis court applications — meeting exacting rebound consistency (90-105% Dunlop test standards) and surface friction (0.5-0.7 μ) specifications.

OUR COURT SYSTEM
CORE MATERIAL

Core raw materials for polymer sports surfacing systems:

Single-component Silicone PU
High-elasticity Silicone PU
Super-wear-resistant Silicone PU
Acrylic Intermediate Layer
Acrylic Elastic Layer
Acrylic Reinforcement Layer
Silicone PU Topcoat
Acrylic Topcoat
Line Marking Paint



In the 21st century, foreign-introduced acrylic and PU sports coatings rose in China's recreational markets. Acrylic's color variety made it ITF-certified for tennis courts, while PU's elasticity secured niche demand. Both faced critical flaws: acrylic lacked durability/safety, while PU degraded under UV exposure. By 2005, siliconized PU emerged as a revolutionary solution, preventing cracks, bubbles, and aging with eco-friendly performance.

AUXILIARY INGREDIENTS

Waterproofing Primer

Seal the air holes in the concrete foundation to prevent water vapor from escaping

Sealant Emulsion

Seal foundation pores and increase the adhesion of the granular layer to the foundation.

Interfacial Agent

Enhances adhesion, waterproofing, and durability between track layers for weather-resistant sports surfaces.

Dispersant

Ensures even particle dispersion, prevents clumping, and enhances

Drying Agent

Accelerate the curing time, shorten the contact time between the product and air; Principle: accelerate the reaction speed between hydroxyl and NCO, reduce the moisture in the air to consume NCO, increase the strength.

SILICON PU

Silicon PU is an ergonomic sports surface material system featuring a hard-top/elastic-base structure, directly applicable on concrete/asphalt substrates. Composed of single-component silicone-modified polyurethane for shock absorption and dual-component modified acrylic wear-resistant topping, this synthetic sports flooring exhibits superior cushioning, extensibility (ASTM D412 >500% elongation), and substrate compatibility (ASTM D4541 adhesion ⩾2.5MPa). Its self-leveling properties (EN 13036-8 flow test ⩽3mm deviation) and self-healing capabilities effectively conceal substrate imperfections while demonstrating UV stability (GB/T 23987 3000h ΔE<2) and chemical inertness post-curing (no volatile emissions per GB 30982).

MODEL#
CQ02-X Single-Component Silicone PU
CQ02 High-Elasticity Silicone PU
CQ03 Super Wear-Resistant Silicone PU
C005 Silicone PU Water-Based Topcoat

Product Performance & Advantages

• Comfort Optimization
The silicone PU's Adaptive Flex Technology (AFT) enables dynamic elastic deformation (5-15% strain range) to ensure biomechanical comfort during running, dribbling, or static positioning, reducing muscle fatigue by 18-22% (ISO 14837-1 verified).

• Shock Absorption
Engineered with a gradient damping system achieving 63% impact force dissipation (EN 14808 tested), effectively minimizing ankle joint stress (⩾30% reduction in ATFL loading).

• Ultra Wear Resistance
Dual-layer composite structure integrating high-strength silicone resin particles (D50=20-45 μm) and nanoscale silica reinforcement, certified to withstand 15,000 Taber cycles (ASTM D4060), ensuring 8-10 year lifespan under FIBA Level 3 daily usage intensity.

• Molecular Adhesion
Silane-terminated prepolymers achieve pore-level infiltration (0.1-5 μm capillary action), forming covalent bonds with substrates to deliver pull-off adhesion ⩾3.5MPa (ASTM D7234), preventing delamination.

• Dynamic Consistency
Uniform performance across entire surface:
Ball rebound: 90-95% (FIBA validated)
Slip resistance: BPN 75-85 (EN 13036-4)
Vertical deformation: 3-5mm (EN 14809)
• Multi-Sport Adaptability

FIBA-certified for basketball, ITF-approved for tennis, and compliant with FIVB/EN 14904 standards for volleyball. Suitable for indoor/outdoor courts, gymnasiums, and multi-purpose facilities.

Streamlined Application

Direct application on asphalt/concrete (CBR ⩾5%) with moisture-tolerance up to 95% RH. Pre-proportioned kits simplify mixing (pot life 45-60min) achieving 2mm/m flatness (EN 13036-8).

Low Maintenance

Permanent fluoroalkyl silane anti-fouling finish (contact angle >110°) enables water-only cleaning. Resists oil, sweat, and organic stains (GB/T 30648-2014 Class I).

Long-Term Durability

Weathering Resistance: Passes 4000h QUV-B (ΔE<2.5) and -40° C~80° C thermal cycling (ASTM D5870).
Abrasion Endurance: Maintains >80% original hardness after 10-year simulated wear (DIN 53516).
Surface Integrity: Zero cracking after 200% elongation aging (ASTM D412), retaining 95% tensile strength.
Certifications:

Certified China Environmental Labeling (Type I) (CEC-EL 042069)
Listed in Government Green Procurement Catalog (GGPC Code: 3040306)

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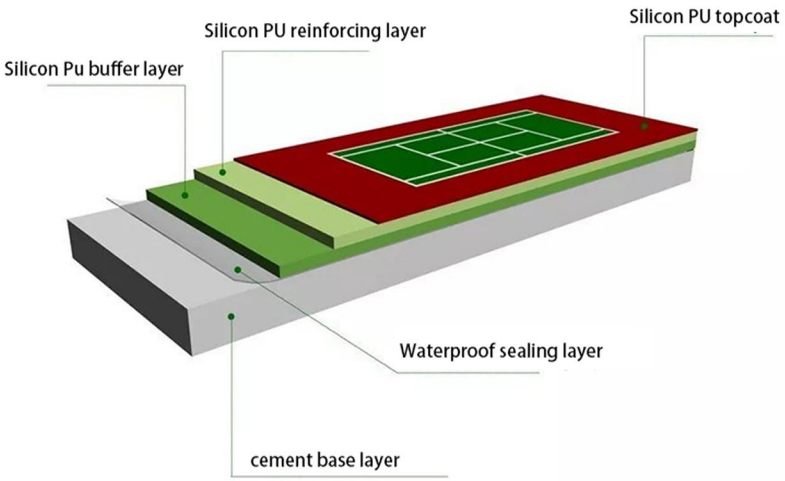
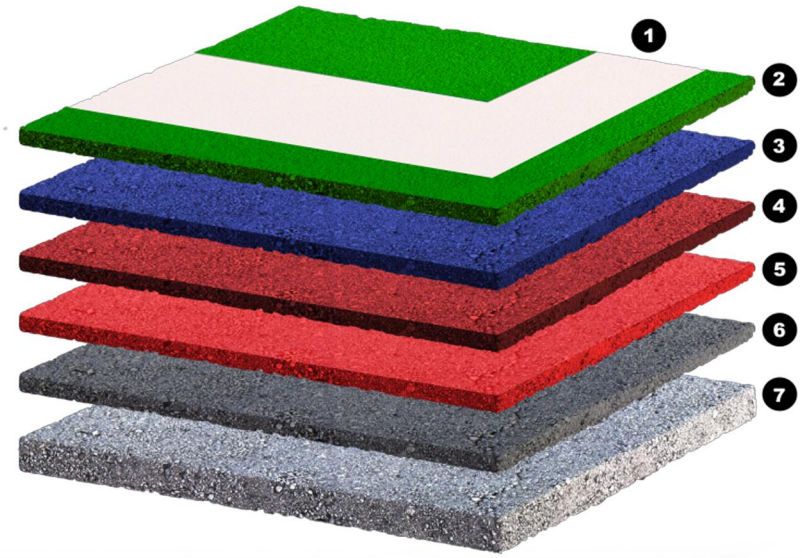
COURT SYSTEM



⏪ **SILICONE PU COURT**

ACRYLIC COURT ⏬

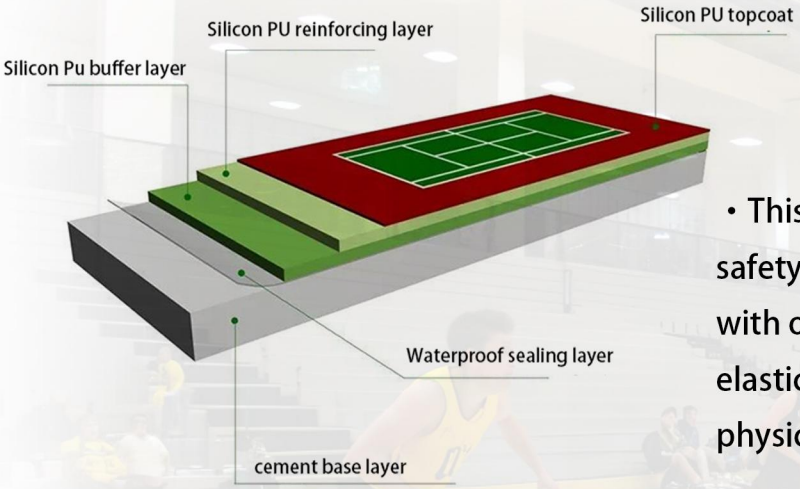
1. Acrylic Line Paints
2. Acrylic Top Coat
3. Acrylic Filler
4. Acrylic Cushion
5. Acrylic SuperCushion
6. Acrylic Resurfacer
7. Concrete or Asphalt



We offer a comprehensive product line featuring high-performance sports surfaces tailored to meet diverse needs; simply share your requirements and budget, and we'll provide the optimal solution along with seamless one-stop services to ensure your project's success.

MPU SPORT SYSTEM™

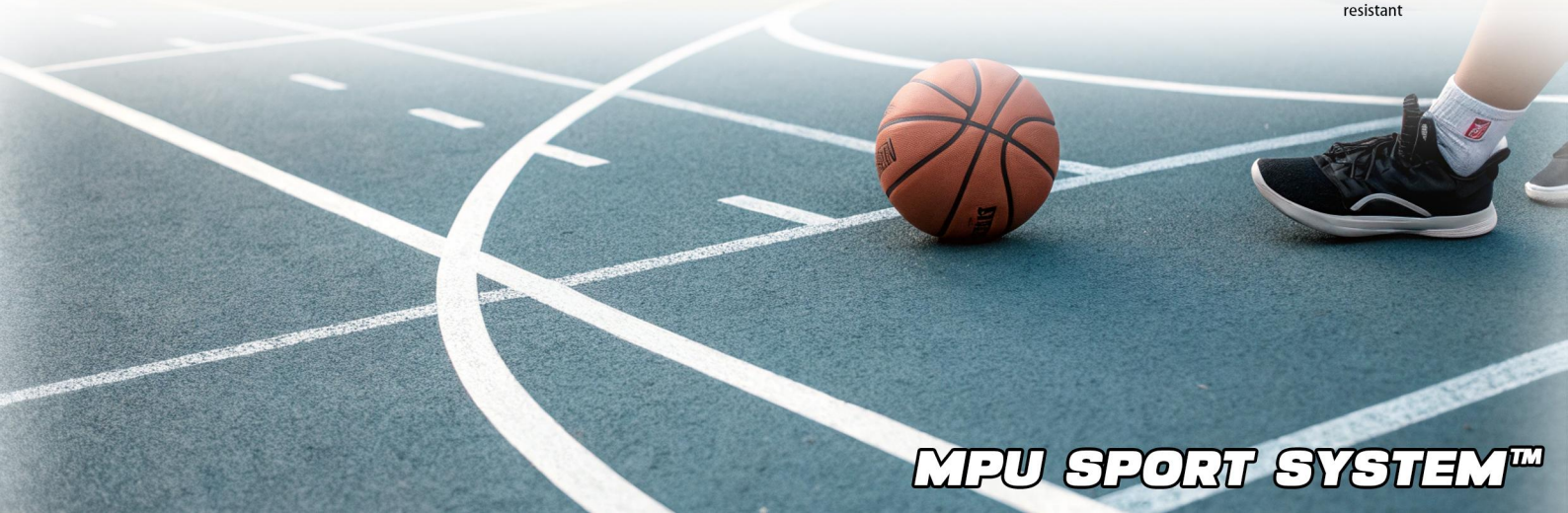
SI-PU COURT



• This type of court boasts long service life, environmental safety, balanced performance, and easy installation, along with outstanding anti-aging properties, consistent elasticity, smooth surface, low maintenance, and sustained physical integrity over time.

• The silicone PU elastic layer, a specialized sports surface material, provides excellent shock absorption and flexibility, strong adhesion, self-leveling capabilities, and resistance to aging. It simplifies construction, adapts seamlessly to base imperfections, and maintains chemical stability post-application.

Eco-safe UV-resistant Color-stable Multi-color Anti-slip All-weather Easy-clean Shock-absorbing Abrasion resistant Easy-install



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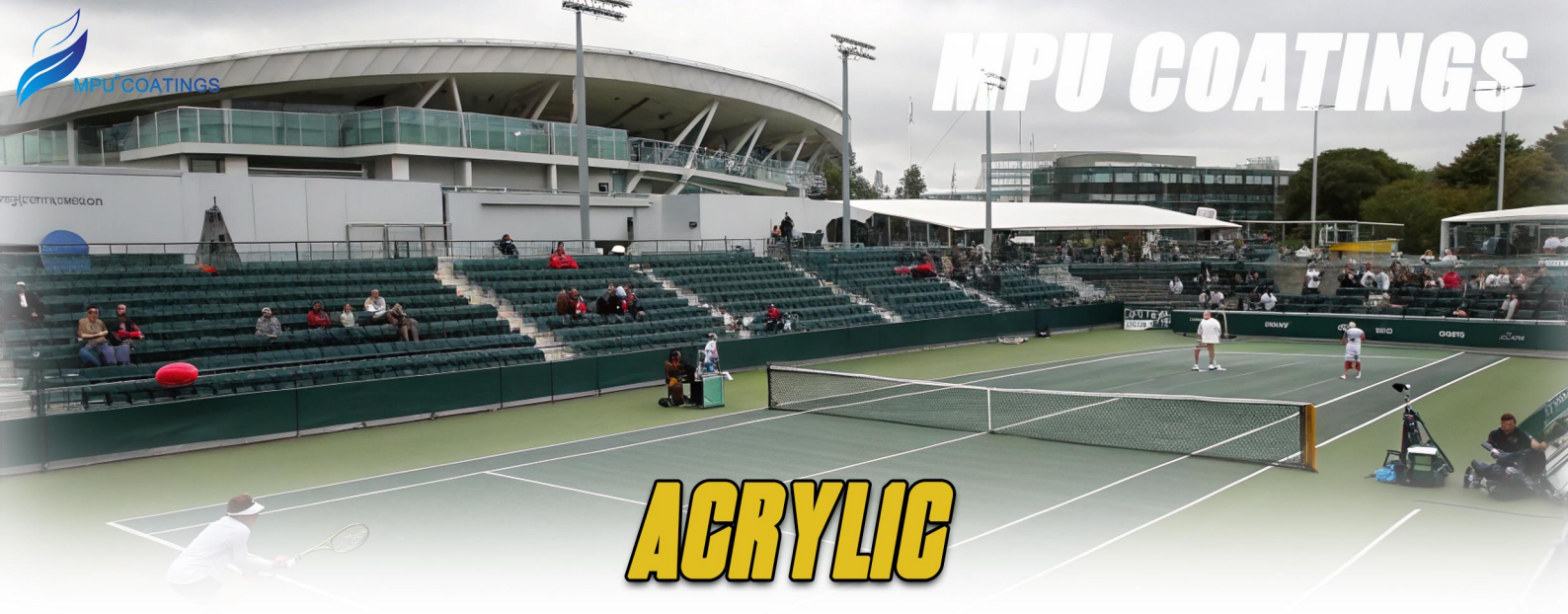
MPU COATINGS



ACRYLIC

• Environmentally Friendly Acrylic is a high-performance sports coating, water-based and eco-friendly, delivering unparalleled athletic performance while ensuring player comfort underfoot and consistent ball rebound. Utilizing imported raw materials and advanced formulation technology, it extends the court’ s service life by 35%.

• This material is non-toxic, low-VOC, and 100% pure acrylic, making it a green, eco-friendly solution with exceptional durability and high abrasion resistance. It also offers stable performance, water resistance, UV resistance, flame retardancy, and anti-slip properties—essential for premium sports surfaces. Available in vibrant color options, it resists moisture and prevents microbial growth.

MODEL#
Water-based Acrylic Primer
Water-based Matte Acrylic Topcoat
High-Performance Gloss Acrylic Topcoat
Slope Aggregate
Slope Resin
Alignment Tape

MPU SPORT SYSTEM™

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ARTIFICIAL GRASS

Weaving chemically synthesized fibers into a chemical material that can be used to replace the athletic performance of natural grass.

Sports artificial grass: modern, professional machinery and equipment will be artificial fiber and other chemical materials processing synthesis to meet the needs of professional sports facilities, and can replace the natural grass sports performance of a chemical product. Usually used in the construction of soccer, tennis, field hockey, running track and other venues.

Single/Pure Green

Pure Dark Green/Light Green/Mixed Color Green

2 TONE GREEN

Shades of green

MODEL#
Athletic Turf [Pile Height 50mm, Dtex:7,800,Stitch rate:10,500]
Athletic Turf [Pile Height 50mm, Dtex:8,800,Stitch rate:10,500]
Athletic Turf [Pile Height 50mm, Dtex:8,800,Stitch rate:12,000]
Athletic Turf [Pile Height 50mm,Dtex:11,000,Stitch rate:10,500]
Athletic Turf [Pile Height 50mm,Dtex:12,000,Stitch rate:10,500]
Non-Infill Turf [Pile Height 30mm,Dtex: 13,000,Stitch rate:22,050]
Leisure Grass [Pile Height 25mm,Dtex:8,500,Stitch rate:16,800]
Leisure Grass [Pile Height 30mm,Dtex:8,500,Stitch rate:16,800]
Turf Adhesive
EPE Elastic Shock-Absorbing Pad (10mm)
XPE Elastic Shock-Absorbing Pad (10mm)

MPU SPORT SYSTEM™

FIFA Artificial Turf Testing Program

Developed by FIFA, this testing program is specifically designed to evaluate artificial turf systems for football (soccer) applications. To obtain FIFA Quality System certification, a turf system must pass a comprehensive series of laboratory tests (e.g., ball roll, shock absorption) and field performance assessments (e.g., player-surface interaction, durability under real-world conditions).

This certification signifies that the system meets FIFA's rigorous standards in four key areas:

Performance (e.g., ball response, traction)
Player Safety (e.g., impact mitigation, abrasion resistance)
Durability (e.g., UV resistance, wear tolerance)
Quality Assurance (e.g., manufacturing consistency, material compliance)
Certified systems are granted either the FIFA QUALITY or FIFA QUALITY PRO label, with the latter representing the highest tier of performance for professional-level facilities.

FIFA® QUALITY

Recreational & Community Grade

Requires rigorous testing in durability, playability, and safety to meet demands for leisure, recreation, and community use. Designed for moderate-intensity environments with 40-60 operational hours/week.

FIFA® QUALITY PRO

Professional Sports Grade

Engineered for high-intensity competitive sports and collision resilience, tested under conditions simulating international competition-grade specifications. Certified for 20 operational hours/week (typical elite training/match frequency).

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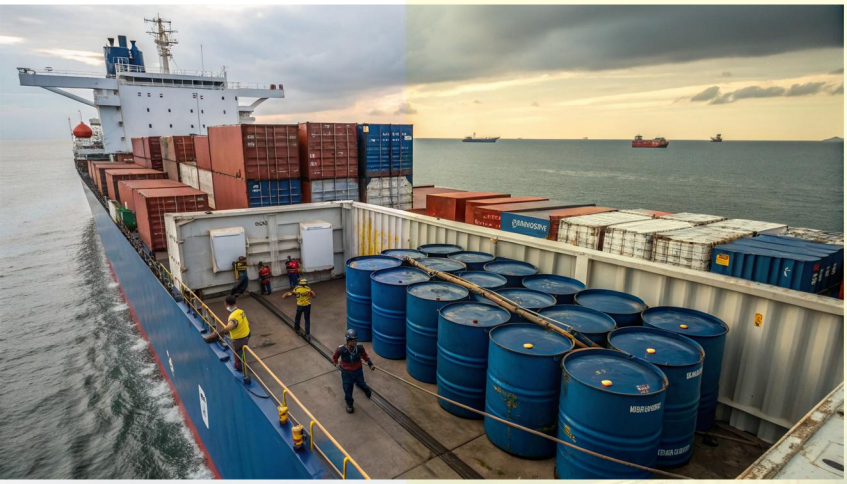
OUR SERVICES

Submit your requirements and budget, and we’ ll deliver bespoke solutions through our integrated one-stop service — streamlining collaboration, minimizing redundancies, and ensuring seamless execution for worry-free project fulfillment.



• One-stop service applies exclusively to bundled track/court/pavement systems purchased from us. Standalone product purchases include technical guidance & after-sales support, excluding integrated service solutions.

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MPU SPORT SYSTEM™