

Full Polyurethane Running Track System

System & Installation Guide

Structural guidance for the full polyurethane running track system, including design, installation conditions and construction steps.

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1. Overview

Full Polyurethane Running Track System uses polyurethane elastic materials as the primary structural component, without relying on rubber granules as the main aggregate layer. The system consists of a troweled or paved elastic layer and a wear-resistant, slip-resistant surface layer, forming an integrated polyurethane structure. Its dense structure and strong overall integrity provide stable athletic performance and long-term durability, making it suitable for school athletics tracks, professional training facilities, and projects with higher requirements for durability, appearance, and environmental performance.

2. Key Features

Integrated Structure & Uniform Performance

The continuous polyurethane layer forms an integrated structure with more consistent surface response and uniform hardness across the track.

Dense Structure & Easy Maintenance

The dense surface structure helps reduce dirt accumulation and dust retention, making daily cleaning and maintenance easier.

Wear Resistance & Reliable Grip

The surface texture can be precisely controlled to provide stable grip and reliable traction for high-frequency use.

Weather & Aging Resistance

Provides strong resistance to UV exposure, temperature variations, and long-term outdoor aging.

Refined Surface Appearance

Provides uniform color and a more refined surface texture, making it suitable for projects with higher visual requirements.

3. Typical System Structure

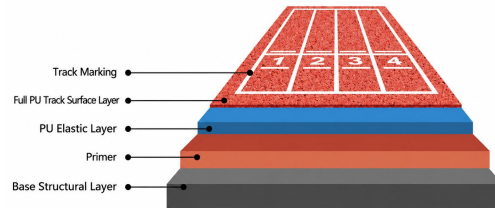
Subbase (Asphalt / Concrete)

Primer Sealing

Full-PU Elastic Layer (PU Trowel Application / Paving)

Wear-Resistant and Slip-Resistant Surface Layer (PU Surface System)

Track Markings



3. Installation Guidelines

Installation Conditions

The Subbase should be solid, level, dry, and clean, with the slope meeting the drainage design requirements. The surface should be free from oil contamination, dusting, loose areas, and hollow sections.

Installation should be avoided during rainy conditions, when the subbase is wet, or when condensation is present. Temperature and humidity should be controlled according to the material specifications. During spray or trowel application, protection against dust and wind should be ensured.

Installation Process

1. Subbase Preparation

Clean and remove dust from the subbase. Repair and level cracks and depressions. Grinding or shot blasting may be carried out when necessary to improve adhesion and ensure the required surface evenness.

2. Primer / Sealing

Apply primer evenly by roller to seal surface pores and improve bonding performance. Additional coating may be applied in areas with high absorption to reduce the risk of blistering or delamination during later stages.

3. Full-PU Elastic Layer Application

Mix PU materials according to the specified ratio and apply the elastic layer in multiple trowel or paving coats to the designed thickness. After each coat has cured, inspect and adjust the surface to ensure consistent overall thickness and uniformity.

4. Leveling and Surface Adjustment

Grind local pinholes, uneven areas, and joints, and apply putty repair where necessary to create a smooth and refined base surface for the surface layer application.

5. Wear-Resistant and Slip-Resistant Surface Layer

Apply the surface layer in multiple coats according to the selected system, using processes such as roller coating, spraying, or sand broadcasting depending on product requirements. The finished surface provides uniform texture and stable friction performance.

6. Surveying, Setting Out and Track Marking

Set out according to drawings and relevant specifications. Apply dedicated track marking paint to achieve clear lines and accurate positioning.

7. Site Closure and Curing

After completion, close the area for curing. The surface can be opened for use after full curing.

