

Composite Running Track System

System & Installation Guide

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

Composite Running Track System

1. Overview

Composite Running Track System (also known as a sandwich-type system) adopts a structural design combining a dense elastic base layer with a sprayed wear-resistant and slip-resistant surface layer. It provides a balanced combination of elasticity, wear resistance, and stable athletic performance, making it suitable for school athletics tracks, sports training facilities, and professional venues with higher performance requirements.

2. Key Features

Stable Performance

The dense elastic base layer provides controlled thickness and consistent performance, helping maintain a stable running feel across the track.

Elastic Cushioning

Balanced impact absorption and rebound provide comfortable cushioning performance, making it suitable for high-frequency training.

Wear Resistance & Reliable Grip

The sprayed surface layer features uniform texture distribution, providing stable grip and reliable traction.

Suitable for Spiked Shoes

Provides good resistance to cutting and tearing, depending on the selected surface layer system.

Weather & Aging Resistance

Provides strong resistance to UV exposure, temperature changes, and long-term outdoor aging, depending on the material system.

Note

Composite Running Track System is generally an impermeable structure. Drainage mainly relies on the Subbase slope and drainage system.

3. Typical System Structure

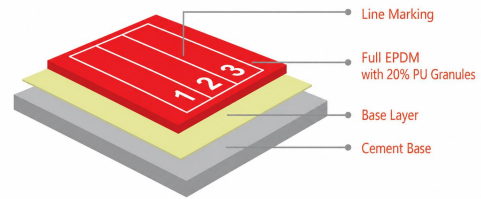
Subbase (Asphalt / Concrete)

Primer Sealing

Elastic Base Layer (One-Component PU Binder + Rubber Granules, Compacted by Paving)

Sprayed Surface Layer (One-Component PU Binder / Topcoat + Fine EPDM Granules)

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 or when the Subbase is wet. Temperature and humidity should be controlled according to the material specifications. During spray application, protection against wind and dust should be ensured.

Installation Process

1. Subbase Preparation

Clean and remove dust from the Subbase. Level and repair cracks and depressions. Grinding or shot blasting may be performed when necessary to improve adhesion.

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.

3. Elastic Base Layer Installation

Mix rubber granules with one-component PU binder according to the specified ratio. The mixture is then machine-paved or manually installed and compacted to the designed thickness, while controlling surface evenness and joint quality.

4. Curing and Surface Adjustment

After curing, grind surface high points and repair depressions and joints to ensure a smooth and uniform surface.

5. Sprayed Surface Layer Application

Apply multiple cross-direction spray coats of PU surface compound/topcoat with fine EPDM

granules to create a wear-resistant and slip-resistant texture with consistent color.

6. Surveying, Setting Out and Track Marking

Set out according to the drawings and apply dedicated track marking paint. Line width and positions shall comply with relevant requirements.

7. Site Closure and Curing

After completion, close the area for curing. The surface can be opened for use after full curing, subject to material specifications and site conditions.

