

EPDM Rubber Surfacing System

System & Installation Guide

Wet-pour surfacing guidance for system structure,
installation conditions and process steps.

EPDM Rubber Surfacing System

1. Overview

EPDM Rubber Surfacing System is an elastic safety surfacing system installed on site using colored EPDM rubber granules mixed with a polyurethane (PU) binder. It provides impact attenuation, wear resistance, slip resistance, and a wide range of color options. It is commonly used in kindergarten activity areas, school sports areas, fitness trails, community recreation areas, and other recreational spaces.

2. Key Features

Impact Attenuation

The resilient surface helps reduce the impact of falls. Different system thicknesses can be designed to meet specific project requirements.

Slip and Wear Resistance

The textured granular surface provides reliable traction and is suitable for high-traffic outdoor areas.

Weather and Aging Resistance:

EPDM granules offer good resistance to UV exposure, weathering, and aging. Actual performance depends on the material grade and the complete surfacing system used.

Wide Range of Colors

Multiple color combinations and customized designs are available, including logos, functional zones, and playground graphics.

Water-Permeable and Breathable Option

When installed with an open-pore structure, the system allows rainwater to drain quickly and helps reduce surface water accumulation.

Easy Maintenance

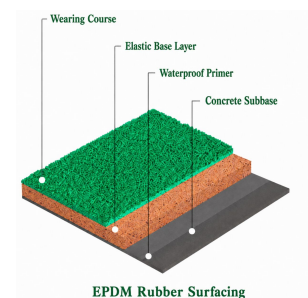
Routine maintenance mainly involves regular cleaning. Localized damage can usually be repaired with patching.

3. Typical System Structure

Subbase (Concrete or Asphalt)

Primer / Sealer Coat

Elastic Base Layer (EPDM Rubber Granules + Polyurethane Binder)



Colored EPDM Wearing Course (EPDM Rubber Granules + Polyurethane Binder)

Edge Finishing / Separation Joints

Curing

4. Installation Guidelines

Installation Conditions

•Subbase Requirements

The subbase must be sound, level, dry, and clean. It must be free from oil contamination, surface dusting, loose material, delamination, and hollow areas.

•Drainage

Provide the specified gradients and drainage system in accordance with the project design. For outdoor applications, an appropriate surface drainage gradient is recommended to prevent water accumulation.

•Environmental Conditions

Do not install during rain or when the subbase is damp or affected by condensation. Control the ambient temperature and relative humidity in accordance with the polyurethane binder manufacturer's instructions. Protect spraying and paving areas from dust and strong winds.

Installation Process

1. Subbase Preparation

Sweep and remove all dust. Repair cracks, depressions, and other surface defects, and level the subbase. Where necessary, grind or shot-blast the surface to improve adhesion.

2. Primer / Sealer Coat

Apply the primer or bonding agent by roller to seal surface pores and improve adhesion. Apply an additional coat to highly absorbent areas if required.

3. Installation of the Elastic Base Layer (Optional)

Thoroughly mix the rubber granules with the PU binder at the specified mixing ratio. Spread and compact the mixture to the specified thickness, ensuring a surface flatness and properly finished joints between adjacent sections.

4. Installation of the EPDM Wearing Course

Mix the colored EPDM rubber granules thoroughly with the PU binder. Spread, level, and compact the mixture, ensuring uniform granule distribution and consistent color throughout the surface.

5. Detailing and Edge Finishing

Reinforce and carefully finish edges, corners, column bases, drainage channels, and other critical areas. Provide and seal expansion joints in accordance with the project design.

6. Patterns and Functional Zones (If Applicable)

Set out the design and install each color section separately. Trim and finish the edges after installation to achieve clean, well-defined lines.

7. Curing and Opening to Use

Close off the installation area and allow the surfacing system to cure fully. Open the area for use only after it has fully cured.

