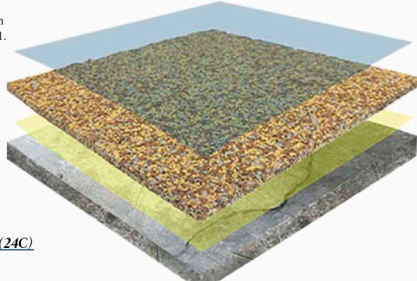


Complete System Properties

Property Tested	Value/Tolerance	Test method	Definition
Tensile Strength	60 psi (413 kPa)	ASTM D412	Standard Test Methods for Vulcanized Rubber and Thermoplastic Rubbers and Thermoplastic Elastomers—Tension.
Tear Resistance	140%	ASTM D624	Standard Test Method for Tear Strength of Conventional Vulcanized Rubber and Thermoplastic Elastomers
Dry Static Coefficient of Friction	0.68	ASTM D2047	Standard Test Method for Static Coefficient of Friction of Polish-Coated Floor Surfaces as Measured by the James Machine
Wet Static Coefficient of Friction	0.52		
Dry Skid Resistance	0.68	ASTM E303	Standard Test Method for Measuring Surface Frictional Properties Using the British Pendulum Tester
Wet Skid Resistance	0.52		
Hardness Recovery	94%	ASTM D2444-17	Standard Practice for Determination of the Impact Resistance of Thermoplastic Pipe and Fittings by Means of a Top/Falling Weight
Flammability	Pass	ASTM D2859	Standard Test Method for Flammability of Finished Textile Floor Covering Materials
Spread of Flame Resistance	Class A	ANSI/UL 790 (ULC-S107)	Standard Test Methods for Fire Tests of Roof Coverings (EPDM)
Shock Attenuation	Meets Requirement	ASTM F1292	Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment
Head Injury Criteria Accessibility	Meets Requirement Compliant	ASTM F1951	Standard Specification for Determination of Accessibility of Surface Systems Under and Around Playground Equipment
Viability	Compliant	ASTM F2479-12	Standard Specification for Purchase, Installation and Maintenance of Poured-In-Place Playground Surfacing
Safety Performance	Compliant	ASTM F1487	Standard Consumer Safety Performance Specification for Playground Equipment for Public Use
Component Comparisons	AVG 115	ASTM F1551-03	Standard Test for the Comprehensive Characterization of Synthetic Turf Playing Surfaces and Materials
Ultraviolet Resistance	Trace to no growth	ASTM D3137	Standard Test Method for Rubber Property—Hydrolytic Stability Standard
Fungal Resistance	Trace to no growth	ASTM G21	Practice for Determining Resistance of Synthetic Polymeric Materials to Fungi
Water Absorption	+6.5	ASTM D530	Methods of Testing Hard Rubber Products (Withdrawn 1987)
Water Permeability	0.4 gal/yd ² /second	ASTM F3191-16	Standard Practice for Field Determination of Substrate Water Absorption (Porosity) for Substrates to Receive Resilient Flooring
Accelerated Weathering	200hrs	ASTM D1148-13	Standard Test Method for Rubber Deterioration—Discoloration from Ultraviolet (UV) or UV/Visible Radiation and Heat Exposure of Light-Colored Surfaces

* Complete system cross section with optional coating enhancement RC-11.



Resins

GENERAL PHYSICAL PROPERTIES @ 75F (24C)

UV Stabil

Property Tested	Value/Tolerance	Test method	Definition
Density (at 23°C)	~1.08 g/cm ³	ASTM D4659-19	Standard Test Methods for Polyurethane Raw Materials: Determination of Specific Gravity of Isocyanates
Viscosity (at 23°C)	2,500 ± 500 mPas	ASTM D4878-98	Standard Test Methods for Polyurethane Raw Materials: Determination of Viscosity of Polyols
NCO Content	8.5 ± 0.5%	ASTM D2572-19	Standard Test Method for Isocyanate Groups in Urethane Materials or Prepolymers
VOC	0 g/L	ASTM D3960-05	Standard Practice for Determining Volatile Organic Compound (VOC) Content of Paints and Related Coatings Active Standard ASTM D3960 Developed by Subcommittee: D01.21
Solids by weight	100	ASTM D-2369	Standard Test Method for Volatile Content of Coatings
Solids by volume	100	ASTM D-2697	Standard Test Method for Volume Nonvolatile Matter in Clear or Pigmented Coatings
Pot Life 50% RH (1-gallon mass)	20-30 mins*	ASTM D2471-71	Standard Test Method for Gel Time and Peak Exothermic Temperature of Reacting Thermosetting Resins
Tack Free Time	8.0 hrs*	ASTM D5895-03 & ASTM D3924-80	Standard Test Methods for Evaluating Drying or Curing During Film Formation of Organic Coatings Using Mechanical Recorders
Light Traffic Time 50% RH	24-48 hrs.		Standard Specification for Standard Environment for Conditioning and Testing Paint, Varnish, Lacquer, and Related Materials
Recoat Time	8-24 hrs.		
Tensile Strength	3000-13900 psi	ASTM D412	Standard Test Methods for Vulcanized Rubber and Thermoplastic Elastomers—Tension
Tensile Elongation	10 - 86 %		
Gloss	93+	ASTM D523	Standard Test Method for Specular Gloss

Rubcorp Basic

Property Tested	Value/Tolerance	Test method	Definition
Density (at 23°C)	~1.09 g/cm ³	ASTM D4659-19	Standard Test Methods for Polyurethane Raw Materials: Determination of Specific Gravity of Isocyanates
Viscosity (at 23°C)	6500 mPas	ASTM D4878-98	Standard Test Methods for Polyurethane Raw Materials: Determination of Viscosity of Polyols
NCO Content	10.5 - 11.5%	ASTM D2572-19	Standard Test Method for Isocyanate Groups in Urethane Materials or Prepolymers
VOC	0 g/L	ASTM D3960-05	Standard Practice for Determining Volatile Organic Compound (VOC) Content of Paints and Related Coatings Active Standard ASTM D3960 Developed by Subcommittee: D01.21
Solids by weight	100%	ASTM D-2369	Standard Test Method for Volatile Content of Coatings
Solids by volume	100%	ASTM D-2697	Standard Test Method for Volume Nonvolatile Matter in Clear or Pigmented Coatings
Pot Life 50% RH (1-gallon mass)	20-30 mins*	ASTM D2471-71	Standard Test Method for Gel Time and Peak Exothermic Temperature of Reacting Thermosetting Resins
Tack Free Time	8.0 hrs*	ASTM D5895-03 & ASTM D3924-80	Standard Test Methods for Evaluating Drying or Curing During Film Formation of Organic Coatings Using Mechanical Recorders
Light Traffic Time 50% RH	24-48 hrs.		Standard Specification for Standard Environment for Conditioning and Testing Paint, Varnish, Lacquer, and Related Materials
Recoat Time	8-24 hrs.		
Tensile Strength	4,500 - 5,500 psi	ASTM D412	Standard Test Methods for Vulcanized Rubber and Thermoplastic Elastomers—Tension
Tensile Elongation	350 - 400%		
Tear Resistance	500 ± 100 pli		
Gloss	~95 GU	ASTM D523	Standard Test Method for Specular Gloss

Rubcorp Hard

Property Tested	Value/Tolerance	Test method	Definition
Density (at 23°C)	1.11 g/cm ³	ASTM D4659-19	Standard Test Methods for Polyurethane Raw Materials: Determination of Specific Gravity of Isocyanates
Viscosity (at 23°C)	2100 mPas	ASTM D4878-98	Standard Test Methods for Polyurethane Raw Materials: Determination of Viscosity of Polyols
NCO Content	13.5 - 14.5%	ASTM D2572-19	Standard Test Method for Isocyanate Groups in Urethane Materials or Prepolymers
VOC	0 g/L	ASTM D3960-05	Standard Practice for Determining Volatile Organic Compound (VOC) Content of Paints and Related Coatings Active Standard ASTM D3960 Developed by Subcommittee: D01.21
Solids by weight	100%	ASTM D-2369	Standard Test Method for Volatile Content of Coatings
Solids by volume	100%	ASTM D-2697	Standard Test Method for Volume Nonvolatile Matter in Clear or Pigmented Coatings
Pot Life 50% RH (1-gallon mass)	20-30 mins*	ASTM D2471-71	Standard Test Method for Gel Time and Peak Exothermic Temperature of Reacting Thermosetting Resins
Tack Free Time	8.0 hrs*	ASTM D5895-03 & ASTM D3924-80	Standard Test Methods for Evaluating Drying or Curing During Film Formation of Organic Coatings Using Mechanical Recorders
Light Traffic Time 50% RH	24-48 hrs.		Standard Specification for Standard Environment for Conditioning and Testing Paint, Varnish, Lacquer, and Related Materials
Recoat Time	8-24 hrs.		
Tensile Strength	5,500 - 6,500 psi	ASTM D412	Standard Test Methods for Vulcanized Rubber and Thermoplastic Elastomers—Tension
Tensile Elongation	300 - 350%		
Tear Resistance	500 ± 100 pli		
Gloss	~105 GU	ASTM D523	Standard Test Method for Specular Gloss



EPDM

Property Tested	Value/Tolerance	Test method	Definition
Density	1.6 +/- 0.03 g/cm ³	PN-EN ISO 1183-1:2019	Plastics - Methods for determining the density of non-cellular plastics - Part 1: Immersion method, liquid pycnometer method and titration method
Indentation Hardness	60 +/- 50°Sh A	PN-EN ISO 868:2005	Plastics - Determination of indentation hardness by means of a durometer (Shore hardness)
Tensile strength	> 5 MPa	PN-EN ISO 37:2007	Rubber, vulcanized or thermoplastic - Determination of tensile stress-strain properties (Tensile Strength)
Elongation at break	> 500 %		Rubber, vulcanized or thermoplastic - Determination of tensile stress-strain properties (Elongation at Break)
Bulk density 0.0 - 0.5 mm	450 g/l	PN-EN ISO 1097-3:2000	Tests for mechanical and physical properties of aggregates - Part 3: Determination of loose bulk density and voids
0.5 - 1.5 mm	450 g/l		
1.0 - 3.5 mm	670 g/l		
Polymer content	> 24		
Base polymer	EPDM		
Flammability class version standard:	Fulfills requirements	PN-EN ISO 13501-1+A1:2010	Fire Classification of Construction Products & Building Elements - Part 1: Classification Using Data From Reaction to Fire Tests
Flammability class version indoor:	Fulfills requirements	DIN EN 71-3:2013-05	Safety of Toys - Part 3: Migration of certain elements (if swallowed by child)
Migration of certain elements	Fulfills requirements		Testing and assessment of polycyclic aromatic hydrocarbons (PAHs) in the course of awarding the GS (Tested Safety) mark
Environmental Contaminants	Fulfills requirements	AFPS GS 2014:01	Sports Grounds - Part 7: Synthetic Turf Areas (Withdrawn)
DOC, FOX, heavy metals, other	Fulfills requirements	DIN 18035-7	
Sieve Analysis (Particle Size)		ASTM D - 5644	Standard Test Methods for Rubber Compounding Materials - Determination of Particle Size Distribution of Recycled Vulcanizate Particulate Rubber
Free Fiber Content	0.00%	ASTM D - 5603	Standard Classification for Rubber Compounding Materials - Determination of Fiber Content in Rubber Powder
ASTM E-11 & ISO 3310-1 (mm)		ASTM E-11 / ISO 3310-1 (mm)	Standard Specification for Woven Wire Test Sieve Cloth and Test Sieves

STANDARD GRAIN SIZE

Average values (%)	
0.0 - 0.25	33
0.25 - 0.5	65
0.5 - 1.0	3
0.0 - 0.5	5
0.5 - 1.0	34
1.0 - 1.6	58
1.6 - 2.0	2
0.0 - 1.0	0
1.0 - 1.6	15
1.6 - 2.0	18
2.0 - 2.5	36
2.5 - 3.15	29
3.15 - 3.55	7
3.55 - 4.00	1



RB-19

(Priming Product)

Property Tested	Value/Tolerance	Test method	Definition
VOC	0 mL	ASTM D3960-05	Standard Practice for Determining Volatile Organic Compound (VOC) Content of Paints and Related Coatings Active Standard ASTM D3960 Developed by Subcommittee: D01.21
Solids by volume	92% (+ or - 1%)	ASTM D2697	Standard Test Method for Volume Nonvolatile Matter in Clear or Pigmented Coatings
Pot Life	10 minutes	ASTM D2471-71	Standard Test Method for Gel Time and Peak Exothermic Temperature of Reacting Thermosetting Resins
Light Traffic Time	6 - 8 hrs	ASTM D5895-03 & ASTM D3924-80	Standard Test Methods for Evaluating Drying or Curing During Film Formation of Organic Coatings Using Mechanical Recorders
Full Cure	48-72hrs		Standard Specification for Standard Environment for Conditioning and Testing Paint, Varnish, Lacquer, and Related Materials
Compressive Strength	6,800 psi	ASTM C579	Standard Test Methods for Compressive Strength of Chemical-Resistant Mortars, Grouts, Monolithic Surfacings, and Polymer Concretes
Flexural Strength	2,700 psi	ASTM D790	Standard Test Methods for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials
Impact Resistance	PASS@ 125 mils	ASTM D2794	Standard Test Method for Resistance of Organic Coatings to the Effects of Rapid Deformation (Impact)
Hardness, Shore D	75	ASTM D2240	Standard Test Method for Rubber Property—Durometer Hardness
Microbial Resistant	Pass	ASTM G21	Standard Practice for Determining Resistance of Synthetic Polymeric Materials to Fungi
Flammability	Self-Extinguishing		
Flash Point	>200°F	ASTM D6577	Standard Guide for Testing Industrial Protective Coatings

RC-11

(Coating Enhancement)

Property Tested (at 23°C)	Value/Tolerance	Test method	Definition
Viscosity (mixed)	600cps	ASTM D445-83	Standard Test Methods for Polyurethane Raw Materials: Determination of Viscosity of Polyols
Solids by weight	91%	ASTM D-2369	Standard Test Method for Volatile Content of Coatings
Solids by volume	89%	ASTM D-2697	Standard Test Method for Volume Nonvolatile Matter in Clear or Pigmented Coatings
Surface Dry Time 50% RH	40 hrs	ASTM D5895-03	Standard Test Methods for Evaluating Drying or Curing During Film Formation of Organic Coatings Using Mechanical Recorders
Hard Dry Time 50% RH	6.0 hrs	ASTM D3924-80	Standard Specification for Standard Environment for Conditioning and Testing Paint, Varnish, Lacquer, and Related Materials
Tack Free	8.0 hrs		
Recoat Time	8-24 hrs		
Pot Life 50% RH	25 min	ASTM D2471-71	Standard Test Method for Gel Time and Peak Exothermic Temperature of Reacting Thermosetting Resins
Tear Strength	900 lbs/in	ASTM D624	Standard Test Method for Tear Strength of Conventional Vulcanized Rubber and Thermoplastic Elastomers
Flexibility	Pass	ASTM D1737	Standard Test Method for Elongation of Attached Organic Coatings with Cylindrical Mandrel Apparatus
Tensile Strength ASTM D412	2,400psi	ASTM D412	Standard Test Methods for Vulcanized Rubber and Thermoplastic Elastomers—Tension
Tensile Elongation ASTM D412	100%		
Gloss ASTM D523	99+	ASTM D4060	Standard Test Method for Abrasion Resistance of Organic Coatings by the Taber Abraser
Taber Abrasion	8 mg/loss	ASTM D2794	Standard Test Method for Resistance of Organic Coatings to the Effects of Rapid Deformation
Impact Resistance (Direct & Reverse)	160 in/lbs	ASTM D2240	Standard Test Method for Rubber Property—Durometer Hardness
Hardness	Shore A 85-90	ASTM D2240	Standard Test Method for Rubber Property—Durometer Hardness
Dry Static Coefficient of Friction	0.67	ASTM D-2047	Standard Test Method for Static Coefficient of Friction of Polish-Coated Floor Surfaces as Measured by the James Machine
Wet Static Coefficient of Friction	0.82		
Microbial Resistant	Pass	ASTM G21	Standard Practice for Determining Resistance of Synthetic Polymeric Materials to Fungi