

Specifications & Properties

Product Number	BF2455	
Material Type	ARPRO™ Expanded Polypropylene	
Part Format	Interlocking panel	
Part Size – net coverage	1.60 m ²	
Material Density	55g/litre (+/- 8%)	
Part Thickness	24 mm (+/-1.5mm)	
Part Length	1,468mm (+/- 5.0mm)	
Part Width	1,155mm (+/- 4.0mm)	
Part Weight	1.88kg (+/- 8%)	
Tensile Strength	1,050 Kpa	EN12230
Tensile Elongation	32%	EN12230
Water Storage Capacity	3.3 l/m ²	
Vertical Permeability	>20,000 mm/hr	EN 12616
Lateral Conductivity Vertical pressure on sample - 20kPa Gradient 0.6% , head pressure 24mm Gradient 0.6% , head pressure 34mm	1.62E-04 m ² /s - 582.0 l/h/m 1.97E-04 m ² /s - 710.7 l/h/m	EN ISO 12958
Shock Absorption	63 %	EN 14808
Vertical Deformation	3.1 mm	EN 14809
Energy Restitution	39%	Advanced Artificial Athlete
Critical Fall Height (H.I.C.)	1.3 m	EN 1177
Thermal Expansion per 1° C change per 20° C change	0.11mm/m 2.20 mm/m	ISO 4897
Compression Strength @ 25% strain @ 50% strain @ 75% strain	260 kPa 360 kPa 770 kPa	ISO 844
Compression Set – static load (9.8kPa, 1,000kg/m ² , 240hrs at 23°C, after 24hrs)	1.17% (0.29mm)	EN ISO 25619
Compression Set – dynamic vehicle simulation (222kPa, repeated load, 50 cycles, 23°C after 24hrs)	0.8% (0.19mm)	ISO 1856C
Compression Set – repeated impacts (730kPa, repeated load, 10,000 cycles, after 24hrs)	2.25% (0.54mm)	SYSTEM TEST with 50mm artificial turf
Thermal Conductivity Lambda Value	0.0377 W/mK	EN 12667
Thermal Resistance R Value	0.64 °C m ² / W	ISO 8301, EN 12664/7
Friction Coefficient movement of artificial turf over 50mm distance maximum force average force	9.41 N 8.04 N	ISO 8295
Environmental Standards Testing Germany (DIN) Switzerland (ESSM)	Pass Pass	DIN V – 18035-7 ESSM 105-d/1997
Microbiological / Chemical Analysis bacteria resistance chemical resistance	no growth no detrimental effects	EN 12225 EN 14030
Accelerated Aging – Resistance to Oxidation 25yr model – % tensile strength loss 25yr model – % compressive strength loss Product is predicted to be durable for greater than 25yrs	0% after 14 days @ 110°C 0% after 14 days @ 110°C	EN 13438