

Performance Base F20 - Specifications & Properties

Product Number	BF2055	
Material Type	ARPRO® Expanded Polypropylene	
Material Thickness	20mm	
Material Density	55g/litre	
Part Format	Interlocking panel	
Part Size – net coverage	1.60 m ²	
Part Dimensions	1,47m x 1,15m	
Part Weight	1.5kg	
Tensile Strength	760 Kpa	ISO 1798
Tensile Strength	660 Kpa	EN12230
Tensile Elongation	40%	ISO 1798
Vertical Permeability	>20,000 mm/hr	EN 12616
Lateral Conductivity Vertical pressure on sample - 20kPa Gradient 0.6%	1.78E-04 m ² /s	EN ISO 12958
Lateral Drainage Gradient @ 0.6%	641 l / hr / m	EN ISO 12958
Shock Absorption	62 %	EN 14808
Vertical Deformation	2.7 mm	EN 14809
Energy Restitution	39%	AAA
Critical Fall Height - Head Injury Criterion (H.I.C.)	1.2m	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 (25% strain, 22hrs, 23°C after 24 hrs)	9.5% (1.9mm)	ISO 1856C
Compression Set – static vehicle simulation (222kPa - 5000N, 2hrs, 23°C after 24hrs)	5.4% (1.08mm)	SYSTEM TEST based on ISO 1856C
Compression Set – dynamic vehicle simulation (222kPa -5,000N, 50 cycles, 23°C after 24hrs)	0.8% (0.16mm)	SYSTEM TEST based on ISO 1856C
Compression Set – repeated impacts 7.45kg/cm ² or 106psi, repeated load, 10,000 cycles	0.54mm (2.7%)	SYSTEM TEST with 50mm artificial turf
Thermal Conductivity λ Value	0.0377 W/m.K	EN 12667
Thermal Resistance R Value	0.53 °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/International Switzerland	Pass Pass	DIN V – 18035-7 ESSM 105-d/1997
Microbiological / Chemical Analysis bacteria resistance fungi resistance chemical resistance	no growth no growth no detrimental effects	
Accelerated Aging (ARPRO®) 20yr model – % tensile strength loss 20yr model – % elongation loss	- <10% after 120 days @ 85°C - <5% after 120days @ 85°C	