

## Performance Base F24 - Specifications & Properties

<b>Product Number</b>	BF2455	
<b>Material Type</b>	ARPRO® Expanded Polypropylene	
<b>Material Thickness</b>	24mm	
<b>Material Density</b>	55g/litre	
<b>Part Format</b>	Interlocking panel	
<b>Part Size – net coverage</b>	1.60 m <sup>2</sup>	
<b>Part Dimensions</b>	1,47m x 1,15m	
<b>Part Weight</b>	1.87kg	
<b>Tensile Strength</b>	760 Kpa	ISO 1798
<b>Tensile Strength</b>	660 Kpa	EN12230
<b>Tensile Elongation</b>	40%	ISO 1798
<b>Vertical Permeability</b>	>20,000 mm/hr	EN 12616
<b>Lateral Conductivity</b> Vertical pressure on sample - 20kPa Gradient 0.6%	1.97E-04 m <sup>2</sup> /s	EN ISO 12958
<b>Lateral Drainage</b> Vertical pressure on sample - 20kPa Gradient 0.6%	711 l /hr /m	EN ISO 12958
<b>Shock Absorption</b>	63 %	EN 14808
<b>Vertical Deformation</b>	3.1 mm	EN 14809
<b>Energy Restitution</b>	39%	AAA
<b>Critical Fall Height - Head Injury Criterion (H.I.C.)</b>	1.3 m	EN 1177
<b>Thermal Expansion</b> per 1° C change per 20° C change	0.11mm/m 2.20 mm/m	ISO 4897
<b>Compression Strength</b> @25% strain @ 50% strain @75% strain	260 kPa 360 kPa 770 kPa	ISO 844
<b>Compression Set – static load</b> (25% strain, 22hrs, 23°C after 24 hrs)	9.5% (2.28mm)	ISO 1856C
<b>Compression Set – static vehicle simulation</b> (222kPa - 5000N, 2hrs, 23°C after 24hrs)	5.4% (1.3mm)	SYSTEM TEST based on ISO 1856C
<b>Compression Set – dynamic vehicle simulation</b> (222kPa -5,000N, 50 cycles, 23°C after 24hrs)	0.8% (0.19mm)	SYSTEM TEST based on ISO 1856C
<b>Compression Set – repeated impacts</b> 7.45kg/cm <sup>2</sup> or 106psi, repeated load, 10,000 cycles	0.54mm (2.25%)	SYSTEM TEST with 50mm synthetic turf
<b>Thermal Conductivity λ Value</b>	0.0377 W/m.K	EN 12667
<b>Thermal Resistance R Value</b>	0.64 °C m <sup>2</sup> / W	ISO 8301, EN 12664/7
<b>Friction Coefficient</b> movement of artificial turf over 50mm distance maximum force average force	9.41 N 8.04 N	ISO 8295
<b>Environmental Standards Testing</b> Germany/International Switzerland	Pass Pass	DIN V – 18035-7 ESSM 105-d/1997
<b>Microbiological / Chemical Analysis</b> bacteria resistance fungi resistance chemical resistance	no growth no growth no detrimental effects	
<b>Accelerated Aging</b> 20yr model – % tensile strength loss 20yr model – % elongation loss	- <10% after 120 days @ 85°C - <5% after 120days @ 85°C	