

## British Recycled Plastic Technical Datasheet

British Recycled Plastic products are the no maintenance, sustainable and cost-effective alternative to using traditional materials such as concrete, metal and wood.

### Fire rating - UL94

As per the criteria of UL94 horizontal burn test the material has been classified as HB, which is an equivalent of BS EN 60695-11-10:- Part 11-10: Test flames – 50 W horizontal and vertical flame test methods.

Fire inhibitors otherwise known as fire retardants are not added to the material blend. Use of such additives would prevent it from melting when exposed to high temperatures\* therefore making it a nonrecyclable material. All British Recycled Plastic products are made from recycled materials and are fully recyclable.

\*Industrial melt temperature is 220°C or higher depending on blend

### Pendulum Test (Antislip test BS7976)

Din 51130 classification of antislip test carried out in accordance to BS7976 yields a rating of R11.

Information below represents typical properties for British Recycled Plastic:

Property	Material type	Value	Units	Test method
Compressive Strength (ultimate)	Material	46.0	MPa	BS EN ISO 604:2003
Compressive Modulus	Material	1.2	GPa	BS EN ISO 604:2003
Tensile Strength	Material	11.1	MPa	BS EN ISO 527:1996
Tensile Modulus	Material	950.9	MPa	BS EN ISO 527:1996
Flexural Strength (23°C)	Material	19.9	MPa	BS EN ISO 178:2010
Flexural Modulus	Material	780	MPa	BS EN ISO 178:2010
Flexural Stress at 5% strain **	Material	14	MPa	BS EN ISO 178
Thermal Expansion	Product	0.109	mm/m/1°C	BS EN ISO 12856
Thermal Conductivity	Material	145	10-6K-1	
Impact Resistance (Charpy Notched)	Material	12.1	kJ/m <sup>2</sup>	BS EN ISO 179-1
Elongation at Break *	Material	150	%	EN ISO 527 - 2
Water Absorption	Product	0.2	Wt%	BS EN ISO 62:1999
Density	Product	0.95 typical	g/cm <sup>3</sup>	BS EN ISO 1183-1:2004
Screw Pull Out	Product	4.2	kN	BS EN ISO 1383:1999
Bolt Pull Out	Product	>28	kN	BS EN ISO 527:1996
Slip Resistance	Dry	90	(Low slip risk)	BS 7976-2
Slip Resistance	Wet	58	(Low slip risk)	BS 7976-2

Test results have been obtained using a typical production sample tested at an independent test laboratory. Please note that recycled plastics are, by their nature, variable. The values shown above should be regarded as indicative of the material.

\* Tested with type 1b geometry at cross-head speed of 10mm/min at 23°C

\*\* Tested using a span of 32x thickness at a flexural strain rate of 1% at 23°C



**British Recycled Plastic - Using ultra-tough recycled plastic to slash maintenance costs and increase sustainability for organisations like yours**

Low Carbon Products Ltd, trading as British Recycled Plastic, is a company registered in England and Wales with the company number 06903105 and the registered address of 8C Top Land Country Business Park, Cragg Road, Mytholmroyd, West Yorkshire, HX7 5RW

