



Product Benefits



Barkston decking boards can be cut, screwed, nailed and bolted just like timber but it has the following benefits over timber:

- Stronger and more durable
- Maintenance free
- Uniform dimensions
- Consistent quality - no knots, splits or shakes
- Less flammable
- UV and insect resistant
- Impervious to water
- Resistant to algae
- Will not crack, chip, split or break

Innovative Recycling Technology



Barkston products are produced entirely from mixed waste plastics that would have been destined for landfill.

- 100% recycled
- 100% recyclable
- Each tonne used saves 1.66 tonnes of CO₂



British technology using British plastic waste for British projects.

Specification

Description	Product is made up of 100% high quality recycled mixed waste plastics from post industrial and consumer use and where necessary selected process additives.	
Composition	It is composed of a proportion of LDPE (Low Density Polyethylene) HDPE (High Density Polyethylene), PP (Polypropylene), ABS (Acrylonitrile Butadiene Styrene Co-polymer), HIPS (High Impact Polystyrene) and other thermoplastic materials.	
Production Process	The polymers are ground, mixed and fused under high temperatures and pressures into pressed moulds.	
Finish	The surface is knot free, evenly coloured and shows a textured structure.	
Properties	<ul style="list-style-type: none"> ▪ Maintenance free ▪ Durable ▪ Can be worked as wood ▪ Splinter free ▪ Frost proof ▪ Insensitive to fungi and insects ▪ Does not leach toxic substances 	<ul style="list-style-type: none"> ▪ Wear resistant ▪ Non-rotting ▪ Environmentally friendly ▪ 100% recycled and recyclable ▪ Insulating ▪ Acoustic sound proofing ▪ Shock proof and flexible

Span Lengths

Size (mm)	Max. Centre to Centre Distance (mm)	Max Free Span Length (mm)	Max Overhang (mm)
150 x 38	600	550	125
150 x 50	750	700	150

These free spans of lengths of support have been calculated according to the following load conditions:

1. A distributed load of 2.5kN/m²
2. A point load of 1000N applied to the middle of the profile
3. A long term load applied by the mass of the decking profile

The maximum required deflection is determined at 1/250 of the free span length for calculating the maximum centre to centre distance and for the maximum free span length and at 1/600 for the maximum overhang length. We always consider and take into account a dynamic safety factor of 2.5 for permissible stresses in short term conditions. For longer term loading we must take into consideration creep of the material. For different loading conditions, Barkston can calculate the maximum permissible free span from first principles.

Construction

Decking can be constructed using countersunk chipboard screws with a 6mm diameter (80mm length) for the 38mm decking profiles and 6mm diameter (90mm length) for the 50mm decking profile. All holes will need to be pre-drilled. We recommend the use of an oversized hole to allow for movement associated with the thermal coefficient of expansion properties of the material.

Limitations

Our material is less rigid (modulus of elasticity) and greater thermal elongation than timber therefore this should be taken into consideration within the design stage of the project.