
INSTALLATION AND MATERIAL HANDLING TIPS

Expansion

The lower the temperature during installation, the more the boards may expand. British Recycled Plastic material has an average linear expansion of 0.109mm/m/°C. It is vital to calculate the maximum expansion/contraction of the boards in order to establish correct expansion/contraction gaps.

Calculation example:

Installation of 3.1m decking at a temp of 15°C
Max. Temperature expected 40°C
Temperature at Installation 15°C
Temperature difference 25°C
Interval = 0.109mm/m/°C.
Calculation: $0.109\text{mm} \times 3.1\text{m} \times 25^\circ\text{C} = 8.44\text{mm}$

Flexibility

Recycled plastic is more flexible than wood or metal. All product and structure designs facilitate this technical characteristic (e.g. maximum distance between fence posts), furthermore, all of our products are supplied with installation or fabrication recommendations.

Material Structure British Recycled Plastic

British Recycled Plastic profiles bear a non-porous surface resembling timber grain and a honeycomb core. The internal air pockets may be visible when the end of the profile is cut.

Bolts and Screws

We recommend that all fixings are made from stainless steel/brass or are plated, to retain the integrity, long life, rot free, maintenance free, quality of the final product.

When bolting or screwing profiles together, the pilot hole must be larger than the bolt. Elongated slots are recommended to facilitate temperature related expansion/contraction of the material.

Impact

Use of a ram or protective sleeve is recommended if profiles are hammered mechanically into the ground – it will prevent potential damage to the product.

Storage

Direct sunlight may affect profile alignment and cause profile distortion. To prevent profile bowing profiles should be stored on a flat surface, strapped in batches.



For further structural British Recycled Plastic advice and recommendations please visit britishrecycledplastic.co.uk or call 01422 419 555

TOOLING AND FIXING GUIDELINES



Sawing

Circular blades with crossed teeth have been found to be most suitable.

We suggest a saw speed between 2,000 and 4,000 rpm. Sawing is best done from the presentation face (the side that will be seen) and cut through to the back face of the profile.



Drilling

Twist drills are most efficient but standard spiral bits can also be used. Drills with speeds of 400 - 900 rpm are better than high-speed drills. Holes are best placed 10mm plus from the profile edge.

Remove waste material and pause occasionally to allow the bit to cool.



Jointing

A joint may incorporate more than one method of fixing. Finger type and mortice and tenon or birdsmouth type joints can be made using standard wood working machinery with the appropriate cutters.



Fixing

Twin flight, parallel thread, coarse pitch screws, similar to those used with wooden particle boards or hi-low screws, have been found to be more reliable than conventional taper thread wood screws.



Stapling

Due to compact surface it is more difficult to penetrate British Recycled Plastic than wood. Stapling has been found to be an effective method for applications such as wire mesh fencing fixing. We recommend pneumatically powered guns for use on these types of fixings.



Planing

Standard industrial timber planing tools can be used. The finish depends on the condition of the blade, feed rate, cutting speed, clearance and cutting angle.

