

2016

Innovation in Composite Design | Winner: Dura Composites

Stair treads for quick installation at a busy railway station

Overview

In an industry where materials such as steel and concrete have long been king, the emergence of composites as a realistic long term alternative for such a wide range of applications has surprised many. Traditionally used for structures and flooring, composite materials offer unrivalled opportunities versus traditional materials and are now being used for a range of new build and refurbishment Rail projects to help bring an end to passenger disruption thanks to their quick installation and low maintenance requirements.

Dura Slab Structural Stair Treads are a brand new concept developed by Dura Composites in conjunction with Abellio Greater Anglia (AGA) for Wymondham Rail Station footbridge and are now in use across multiple station locations in the United Kingdom. Dura Slab Structural Stair Treads are made from FRP (Fibre Reinforced Plastic), and incorporate a number of ground-breaking features designed to reduce project costs and installation times, thereby limiting disruption to end users.

The products are formed by combining resin and glass fibres to produce 'thermoset' products which are renowned for their strength and durability. Where previous composite treads on the market have been limited in span capabilities, Dura Composites has the ability to span up to 2.1m clear open span, achieving the required 5kN/m2 at L/300 deflection and meaning that additional supports can be avoided in most scenarios. The design has built-in risers, speeding up the install process, and a slight fall to assist in the prevention of water pooling which can lead to problems with ice in winter.

Partners & collaborators

Abellio Greater Anglia Helped develop the initial specification.



"Our new Dura Slab Structural Stair Treads are more durable, safer and easier to install than anything previously on the market, and help save money through lower labour costs, fewer possessions and easier handling. We're delighted with this award win which recognises our commitment to bringing innovative products to market that are designed for the future."

Stuart Burns, Managing Director, Dura Composites

The Composites UK Industry Awards are presented at the black-tie dinner on the first Wednesday in November. The event is aligned with the Composites Engineering Show in Birmingham.

Keep an eye out for our annual nomination process each May for your chance to apply.

www.compositesuk.co.uk/awardsdinner

