

## River Leri Footbridge



## **Details**

Description	Footbridge over river, alongside railway line.
Client	Network Rail
Date of project	2009
Where FRP composites are used and why	FRP was chosen for 2 reasons: the coastal nature of the site prohibited the use of some traditional materials due to corrosion; to minimise the increase in loading on the timber substructure of the existing bridge.  The prefabricated FRP units, which facilitated construction and allows easy access to the rail bridge for maintenance purposes.
Type of composite used	11 pultruded FRP structural shapes, gritted plate and interlocking decking system were used in the 80m pedestrian footbridge alongside an existing railway line over the River Leri in Wales. The design also used bonded connections instead of bolts in a Parsons Brinckerhoff-developed configuration, also diminishing maintenance requirements.
Design details	The footbridge was assembled and load tested at Pipex fabrication facility in Plymouth over an 18 week period. The largest unit was 12m long and weighed 2800kg facilitating installation by roadrailer from the railway track alongside.
Project partners	Parsons Brinckerhoff, Strongwell, Pipex, Carillion
Key publications	Minimum maintenance, in "Bridge Update", June 2009, n. 84