

Cantilevered Access Staircase Manchester Piccadilly Station



Overview

A glass-fibre reinforced polymer composite cantilevered access staircase.

Details

Location	Manchester Piccadilly Station.
Description	GFRP cantilevered access staircase.
Client	Siemens Rail Automation.
Date of project	March 2013.
Where FRP composites are used and why	The original access staircase to the viaduct was steel, highly corroded and life expired. Network Rail engaged with iLECSYS Rail to develop a GFRP staircase that could be carried up scaffolding. GFRP was considered the most cost effective and safest solution to install due to there being no access for large plant.
	All sections were carried up the temporary scaffolding and installed by hand. All fixings to the existing viaduct were of marine grade stainless steel, also manufactured by iLECSYS Rail
Specific design details	2No Landing areas, 1.20mx1.20m connect to a staircase 1.00m wide by 6.00m long.
Type of composite used	Fiberline Pultruded GFRP – E23 – BS EN: 13706 Parts 1/2/3.
Performance in service	Only recently installed but have been approved and signed off by Network Rail and handed over to the RAM Team, Route Asset Manager.
Project partners	iLECSYS Rail Fiberline Composites
Further information	iLECSYS Rail, Unit 4, Tring Industrial Estate, Upper Icknield Way, Tring, Herts, HP23 4JX Tel: 01442 828387 enquiry@ilecsysrail.co.uk www.ilecsysrail.co.uk