

Case Study

Gerrards Cross and Headstone Lane

January 2022

Twinfix is a family run business. For more than 30 years they have supplied modular polycarbonate panels for use as rooflights in many railway stations and depots.

Replacing the old canopy glazing used at rail stations with products from Twinfix's range of polycarbonate glazing options floods the area with daylight while eliminating the common issues that occur with historic railway roof-glazing. Last year, Twinfix assisted with the refurbishment of two of the UK's historic stations, Gerrards Cross and Headstone Lane.

Gerrards Cross Station

Gerrards Cross Station is a fantastic example of one of the nation's historic stations. Built in 1906 as part of the Great Western and Great Central Joint Railway it has recently undergone a series of upgrades to improve the station for passengers.

As part of a £2.4m Railway Upgrade Plan investment by Network Rail, the following areas were refurbished:

- Full replacement of the platform's canopy – ensuring passengers are protected from the weather
- Installing lighting throughout – making the station safer and more secure
- Re-roofing of the main station's roof
- Windows repairs where necessary
- Applying fresh coats of paint to steelwork
- Refurbishment of the canopy roof

Headstone Lane Station

Travel eleven miles east of Gerrards Cross and you arrive at Headstone Lane station. Another of the UK's historic stations, this station opened in February 1913 and consists of a small single storey brick-built station building adjacent to the Headstone Lane road bridge, with two platforms.

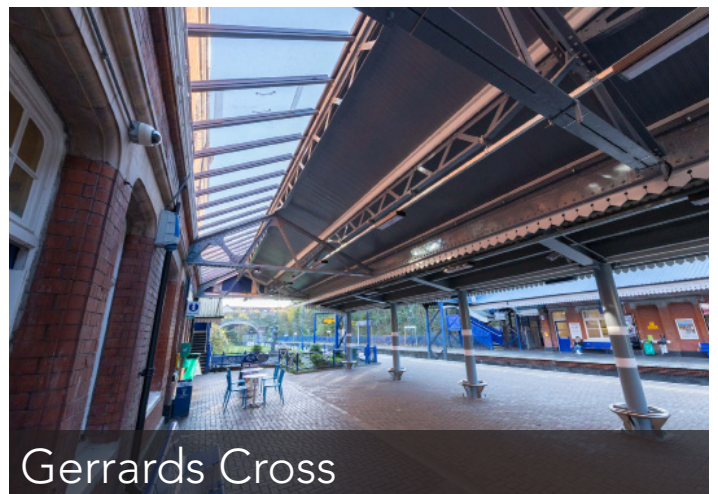
This station was also part of the Railway Upgrade Plan, with investment in the refurbishment of both platform canopies.



Gerrards Cross - Before



Gerrards Cross



Gerrards Cross



An innovative roof glazing system

A team comprising of Network Rail, Principal Contractor J. Murphy & Sons Limited, and specialist Design Consultant Arcadis Consulting (UK) Ltd were assigned to the job to ensure that the correct roof glazing was specified and installed over the platforms.

The product chosen for both stations was the innovative Twinfix modular non-fragile Multi-Link-Panel NF (Non-Fragile) system, glazed with 6mm clear solid polycarbonate. Approximately 225 square metres of these panels were required to re-glaze the five canopies across both stations, with panels delivered to site ready for quick installation.

Each panel of the innovative Multi-Link-Panel NF system comprises of a powder-coated aluminium frame and fitted with polycarbonate glazing. The panels are built completely off-site in a quality-controlled factory environment, reducing the risk, and cost, of site mistakes, and are delivered on-site fully glazed and ready for rapid installation. The system has a unique linking design feature that results in incredibly quick installation times, making the system very much suited to rail work due to its restricted possession times.

The Multi-Link-Panel NF system is an innovative roof glazing product that has been well utilised for many years on station canopy roofs, and it has been thoroughly tried and tested in that time.

It was the chosen system for this project for a number of reasons:

- **sustainability** – these panels are virtually unbreakable in manufacture, transit and in situ, meaning that, unlike glass, maintenance costs will be eliminated.
- **safety** – Twinfix Multi-Link-Panel NF (Non-Fragile) conforms to the HSE recommended test method ACR[M]001:2019 (as outlined in document HSG33) and achieves a 'B' Classification.
- **off-site construction** – The panels are pre-assembled in Twinfix's factory ensuring strict quality guidelines are adhered to, which is not always guaranteed when roofing products are assembled on site.
- **ease of access** – The Multi-Link-Panel NF system can be fitted with In-Line Access Hatches, to allow cleaning of gutters and roof. These hatches are hardly visible and allow safe access through the glazing without needing to get on the roof.
- **weight** – The Multi-Link-Panel NF is light in weight and due to its modular format, it is very quick to install which allows for short rail possession works.
- **appearance** – the clear polycarbonate panels have the appearance of glass and provide just the right level of light transmission onto the platforms below.



Twinfix Multi-Link-Panel NF

This project demanded a collaborative approach, requiring Twinfix to liaise closely with Principal Contractor J. Murphy & Sons Limited, installation company Orchard Roofing & Building, and design consultancy Arcadis, where early engagement with the team ensured that all aspects of the project ran smoothly from the onset.

Richard Nash, Contracts Manager at J. Murphy & Sons Limited commented: 'Throughout the design and implementation stages of our refurbishment works at Gerrards Cross and Headstone Lane Railway Stations, Twinfix have been a pleasure to work with. Working alongside both our designers and approved installers, they have provided a professional end to end service resulting in a quality finished product.'

Piotr Stencel, Senior Project Manager at Arcadis Consulting (UK) Ltd commented: "All the Twinfix team we have been in contact with have been very helpful to provide information, contact and help resolve issues. We were also invited to their offices in Warrington back in 2019 where we could see/touch Twinfix products and discuss design/constructability aspects which is always better than just seeing on the product data sheet."

The Twinfix team are proud to be part of this journey that will see the UK rail network revolutionised and sees exciting times ahead for the company.



Headstone Lane



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Registered in England. Company number: 2457221

