

'Steeling' the headlines at Coventry Station – Suj Kang, Structural Fabrications Ltd

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In March 2022, an £82 million transformation of Coventry Railway Station was completed, bringing vastly improved facilities for passengers and visitors.



Suj Kang

Structural Fabrications Ltd was proud to work on the project, where we delivered the new station's structural steel works for Principal Contractor Buckingham Group Contracting Ltd to support the delivery of a state of the art new-look Station, works involved glazed bridges and stairs, lift shafts giving access to all platforms, complete with a distinctive entrance that included public art displays.

The overall scheme was part of Coventry Station Masterplan for the Client Coventry City Council. The official opening took place on 16th May 2022 and coincided with the 60th anniversary of the Grade II listed building.

It was a privilege to work on this historic station and our team used its vast experience and expertise in steelwork fabrication, manufacturing and installation to help create this impressive Station with access for all, which will act as a gateway to the city of Coventry.

Installing the station's structural steelwork involved meticulous attention to detail, with the architect requiring a smooth connection with zero tolerance rather than the traditional flange to flange connection.

400 tonnes of steel

Due to the sheer size and complexity of the build, Coventry Station's bridges, stairs, lift shafts along with low- & high-level canopy steelwork requirements increased from the original scope to over 400 tonnes, meaning Structural Fabrication Ltd.'s project team was required to undertake various builds within the package of works.

Our team installed the main steelwork along with secondary steelwork, single ply membrane roofing, safety line installation, curtain walling, cladding and fascia, RWP and other miscellaneous items.

A heavy lift that required nerves of steel

The new station footbridge was installed in sections on-site using one of the biggest mobile cranes in the country. The works also involved lifting the main stair complex roof section by crane in a single 17-tonne lift, with the single heaviest section being 32-tonne.

We were tasked by Buckingham Group Contracting Ltd to install steelwork and ancillary items on the rail network which helped to reduce working times and the requirement for working during possessions and isolations. This helped minimise disruption to the rail network.

Our project team designed, manufactured and installed working platforms to each stair to ensure the platforms could be installed and dismantled within the stair framework. The bespoke designed platforms then remained in place until all the main stair structures were built including M&E. Handrail sections were produced so they could be removed and installed in sections as required, while still offering safe access.

No room for error

A connection detail was required that allowed the steelwork to have a smooth connection rather than the standard flange to flange connection, which would have looked unsightly and impossible to build/glaze within the current design concept.

A design was agreed and moved forward taking into consideration the nature of steelwork and tolerance of mill rolling. This required our project team to build the steelwork and ensure all connections were meticulously checked and built at one of Structural Fabrications Ltd.'s fabrication shops at our headquarters in Derby, also taking into account painting build up for the site installation.

Project Scope

Structural Fabrications Ltd delivered the following services at the new Coventry Station:

- Development of the new station
- Procurement of materials
- Cladding to all lift shafts
- Site surveying
- Steel fabrication of walkway, stairs and canopies
- Waterproofing to all roofs
- 2D drawing and 3D modelling production
- Steel fabrication of footbridges, staircases, lift shafts and main roofs
- Supply and installation of fascia panels to lift shaft roofs, upper & lower canopies

A gateway to the city of Coventry

Following the project's completion, the transformed station now includes:

- A second footbridge connecting all four platforms via stairs and lifts and extended platform canopies
- A second station entrance building, with entry points from Station Square and Warwick Road
- A new access tunnel via the transport interchange under Warwick Road providing step-free access to platforms
- A 633-space multi-storey car park on top of the new station building

A prestigious project for Structural Fabrication Ltd.'s growing rail portfolio

The Coventry Station redevelopment was a prestigious project for us to be involved and we're thrilled to have helped deliver such a transformational scheme.

We were involved in various builds through the project, working closely with our partners at Buckingham Group Contracting Ltd, Network Rail and other stakeholders to deliver a complete steelwork solution.

Despite the challenging nature of the works, our team delivered all aspects of the work meticulously and to programme, ensuring the station could be completed on time and within budget.

Buckingham Group Contracting Ltd has worked with Structural Fabrications Ltd for more than 10 years and chose to work with us on the Coventry Station redevelopment again for our vast knowledge and expertise of fabrication and installation of complex metalwork structures, following a competitive tender process. We are proud to have helped deliver this scheme and demonstrated our capabilities for works in the rail sector.

The project is another proud addition to Structural Fabrication Ltd.'s growing rail portfolio, which also includes a complete upgrade at West Hampstead Station, full steelwork build at Kidderminster Station and the design, fabrication and installation of a new access pipe bridge and canopy at Cadder Station, among others.

To read the full Coventry Station case study [download the case study here](#).