

# Purple People Bridge Restoration

Lindapter Girder Clamps provided a solution for securing a maintenance walkway to the existing bridge.



## Project Background

**Location:** Newport, Kentucky, USA

**Product:** Type LR & Type B Girder Clamps

**Market:** Bridge

**Client:** Newport Southbank Bridge Co



The Newport Southbank Bridge – popularly known as The Purple People Bridge – opened in 1872 and was the first railroad bridge spanning the Ohio River between Cincinnati and Northern Kentucky. In 2001 the bridge was placed on the National Register of Historic Places and was closed permanently to automobiles.

The City of Newport and Southbank Partners received \$4 million in state funds to paint and restore the bridge. This project would revive the bridge as a pedestrian link between Cincinnati and Northern Kentucky and help regenerate areas on both sides of the river.

## Client Requirement

As part of the restoration project the 2,670 foot long bridge required a permanent maintenance walkway adding along the entire length. The walkway would allow a safe way for engineers to carry out ongoing repairs and maintenance after the restoration. The challenge was to find a suitable method of connecting the steel walkway to the existing bridge without damaging it. Drilling and bolting the original steel was not permitted and welding at height would have been difficult and costly.



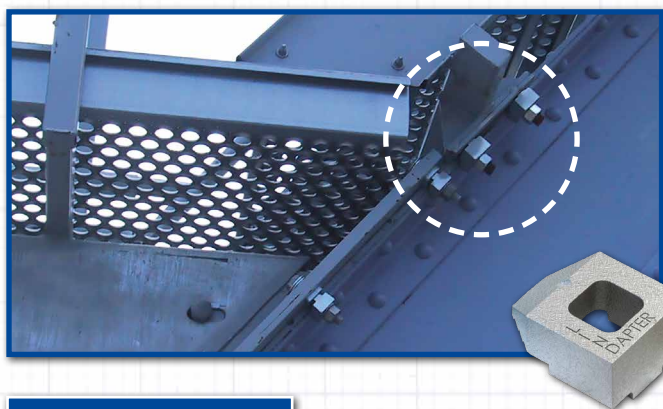
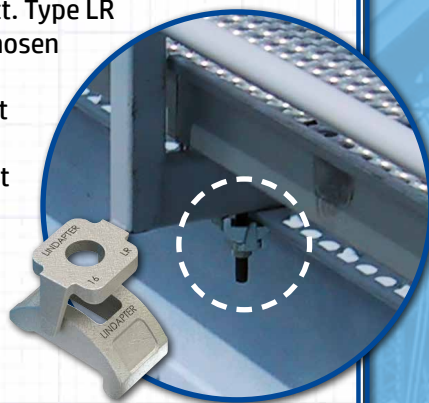
Maintenance walkway attached to bridge with Lindapter girder clamps

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## Design Solution

Lindapter designed a solution which included the specification of Type LR and Type B girder clamps on different areas of the project. Type LR clamps (*pictured right*) were chosen because of their self-adjusting feature that allowed them to fit a range of flange thicknesses and tapered beams on different parts of the bridge.

Type B clamps (*pictured below*) were specified in both 4 and 6 bolt configurations to connect the main walkway frames to the angled bridge structure. This allowed contractors to adjust both the height and lateral position of each connection point onto the existing steel and avoided drilling or welding as only hand tools are required to tighten.



## Installation

The contractor benefited from the lateral adjustability of the girder clamps, which allowed a quick alignment of the steel before the clamps were tightened with basic hand tools. The Type LR was particularly useful for this application because they adjusted to suit the various beam flange thicknesses found on the bridge.

## Result

Lindapter Girder Clamps provided a drilling and weld free connection that prevented any damage to the existing steel bridge. Contractors found the installation quick and easy due to the adjustability of the clamps, allowing the project to be completed on schedule.

Both the Type LR and Type B girder clamps have independent technical accreditations, including the CE mark (ETA-13/0300), TÜV and Lloyd's Register approvals, which verify the load and slip capacities that led to a safe and successful installation. The bridge re-opened in 2006 as a pedestrian only crossing and is marketed as a tourist attraction and event venue.



The fully restored bridge re-opened in 2006

## Approvals



Click here for **Type B** data



Click here for **Type LR** data

