

White Cart Viaduct (UK)



Project description

The White Cart Viaduct is one of the principle structures on the M8 motorway, one of Scotland's busiest routes. The viaduct carries over 95,000 vehicles a day across the White Cart Water river, immediately to the south of Glasgow Airport.

In 2007, a major multi-phase refurbishment project commenced on the viaduct, primarily with the aim of strengthening it to enable it to carry the much increased traffic volumes of the previous years without the restrictions that had been introduced for safety reasons.

mageba scope

The viaduct refurbishment works included the renewal of the expansion joints at each end of the structure's deck. For this purpose, TENSA®MODULAR expansion joints were selected. Each joint was designed with 5 gaps, allowing 325 mm of movement, and had a length of approximately 28 m. The joints were delivered in sections, enabling joint replacement work to progress in stages while the viaduct remained mostly open to traffic. As a consequence, the joint sections had to be welded together on site, and the rubber seals that make the joint's surface watertight had to be partially inserted on site following welding.

Highlights & facts

mageba products:

Type: TENSA®MODULAR expansion joints (LR5)
Features: Many butt-welds on site due to phasing of work to maintain traffic flow
Installation: 2007 - 2012

Structure:

City: Paisley, Glasgow
Country: Scotland, UK
Type: RC highway viaduct
Renovated: 2007 - 2016
Contractor: BAM Nuttall

The viaduct crosses the White Cart Water river near Glasgow in Scotland.



Welding together on site of sections of joint, as required due to need to install in stages.



A TENSA®MODULAR expansion joint (type LR5) as installed at White Cart Viaduct.

