

Marsh Mills Viaduct (UK)



Project description

In the early 1990s, a viaduct was built on the important A38 highway near Plymouth in southwest England. The viaduct, with a length of 410 metres, was constructed to carry the highway, free-flowing, over an existing roundabout junction and to replace a viaduct over the adjacent Plym River.

The project, completed in 1996, involved the world's largest sideways bridge slide at the time for the 5,500 tonne bridge. This required the road to be closed for only 48 hours, which won it an AA National Motoring Award in 1996 for innovation and minimisation of traffic congestion.

mageba scope

In 1991, mageba supplied four TENSA®MODULAR expansion joints, each with a length of 12.5 m, for the construction of the viaduct's twin structures. The joints at one end of the viaduct were designed with 5 gaps, accommodating 400 mm of longitudinal movement, while those at the other end were designed with 6 gaps, facilitating 480 mm of movement. The joints also allow significant transverse and vertical movements, thanks to the TENSA®MODULAR joint's great flexibility.

Highlights & facts

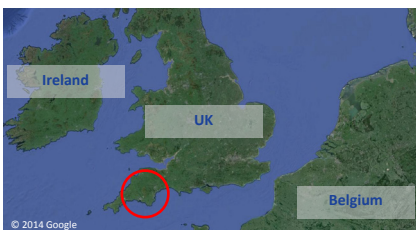
mageba products:

Type: TENSA®MODULAR expansion joints of types LR5 and LR6
Installation: 1991

Structure:

City: Plymouth
Country: UK
Type: Highway viaduct
Length: 410 m
Contractor: Hochtief
Owner: UK Highways Agency

The viaduct is located near the city of Plymouth in southwest England.



Section through a 6-gap TENSA®MODULAR expansion joint showing its construction.



View from below of a typical 5-gap TENSA®MODULAR expansion joint, as installed.

