

Route 9G over Roeliff Jansen Kill (USA)



Description of the project

New York State's Route 9G is a state highway that branches off from and reconnects with US Highway 9 in the area of the Hudson Valley. It crosses the Roeliff Jansen Kill, a creek which drains most of the southern half of New York State's Columbia County before flowing into the Hudson River, near the towns of Germantown and Livingston. The bridge was determined to require rehabilitation as part of the state's Preventive Maintenance Initiative, and the works, including renewal of its expansion joint, were carried out during the summer of 2010.

Scope of products delivered

A mageba sliding finger joint of type TENSA®FLEX RC was selected by the owner, the New York State Department of Transportation, for its ease of installation

and replacement and due to the high maintenance cost of the alternative closed cell type joint. The limited movements of the bridge enabled a joint of size RC100 (i.e. accommodating 4 in (100 mm) of longitudinal bridge movement) to be used – the smallest version of this joint which has previously been used to facilitate movements of up to 31 in (800 mm). The finger plates of the joint are pre-tensioned downwards, ensuring constant contact of the tips of the fingers with a supporting sliding surface at the opposite side of the bridge gap. This pre-tensioning also enables the joint to accommodate small vertical movements or rotations. The joint is also quiet under traffic and comfortable to drive over. It has a modular construction and thus does not require a crane to install, with all pieces being liftable by two men.

Highlights & Facts

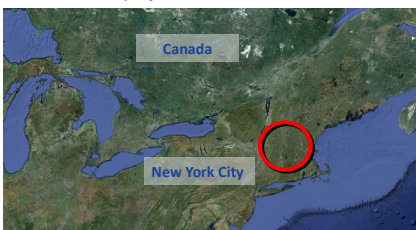
mageba products:

Type: TENSA®FLEX RC sliding finger joint
Installed: 2010

Bridge:

City: Germantown, New York
Country: USA
Builder: NY State DOT
Contractor: Bette & Cring

Location of the project in New York State



The bridge over the Roeliff Jansen Kill river



Installed sliding finger joint of type TENSA®FLEX RC

