

Gateway Bridge (Australia)



Project description

To increase road capacity in the state of Queensland in Australia, the iconic Brisbane Gateway Bridge is being expanded by building a near duplicate alongside. The New Gateway Bridge duplicates the original, matching its pier locations, approach structures and the main span of 260 m.

It has the largest cross section concrete box girder in the world. The two bridges have to provide a substantial vertical clearance of some 57 m.

Although the new bridge will add six lanes to the crossing, which is currently a dual three lane highway, it will be 28 m wide rather than the 25 m of the original.

The extra space will accommodate a combined pedestrian and bicycle path with viewing platforms.

mageba scope

The bridges are equipped with seven TENSA®MODULAR expansion joints: 2xLR8 (640 mm movement), 1xLR6 (480 mm movement) and 2xLR4 (320 mm movement) with length of 27.5 m each on the New Gateway Bridge, and 1xLR8 (640 mm movement) and 1xLR6 (480 mm movement) with length of 22 m each on the existing Gateway Bridge.

All expansion joints are designed and produced to meet the utmost demanding requirements by the project specifications and Australian standards.

Requirements on quality control are very strict and comprehensive. To verify the ability of the modular expansion joints to withstand extraordinary fatigue loading, OMV and SPO Tests (as defined in the NCRHP Report 467) were conducted by mageba.

Highlights & facts

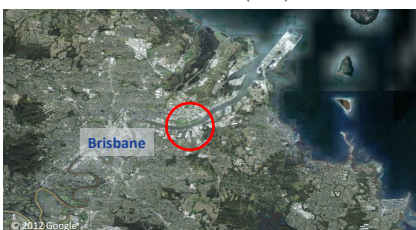
mageba products:

Type:	7 TENSA®MODULAR expansion joint of types 3x LR8, 2x LR6 and 2x LR4
Features:	Movement between 320 and 640 mm
Installed:	2010

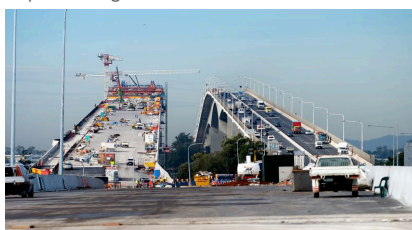
Structure:

City:	Brisbane
Country:	Australia
Type:	Box girder bridge
Length:	260 m

The Gateway Bridge is an important link between North and South Queensland (AUS)



New Gateway Bridge under construction (left) 5% slope on bridge decks



TENSA®MODULAR expansion joints type LR4 ready for shipment

