

# Feda Fjord Bridge (Norway)



## Project description

The Feda Fjord Bridge is the longest of eight bridges on a stretch of road that was constructed in southern Norway in the early years of this century. The road, with a length of 18 kilometres, also features seven tunnels. The structure is a suspension bridge, a common bridge type in Norway. It crosses the Feda Fjord, one of the many glacially-formed fjords on Norway's coast. It has a total length of 556 m and a main span of 335 m, and leads into tunnels at both sides of the fjord.

The steel structure weighs 1,400 tonnes, and 350 tonnes of cables were used in its construction.

## mageba scope

The bridge was designed with deck discontinuities (movement gaps) at its two towers, for which expansion joints were required. Due to the bridge's asymmetrical design, resulting from the challenging terrain with cliffs at both ends, the movement requirements of the joints are very different. TENSA®MODULAR expansion joints of type LR8 (with 8 individual movement gaps allowing 640 mm of longitudinal movement) were selected for one tower, and LR2 joints, allowing just 160 mm of movement, were selected for the other.

## Highlights & facts

### mageba products:

Type: TENSA®MODULAR expansion joints (types LR8 and LR2)

Installation: 2006

### Structure:

Country: Norway

Type: Suspension bridge

Crosses: Feda Fjord

Completed: 2006

Length: 566m (main span 335m)

Construction: VKR / HSM

Engineer: Rambøll

The bridge is on Norwegian route E39, crossing the Feda Fjord in southern Norway



Transport of the expansion joints to site, with the smaller LR2 joint on top of the LR8 joint



Installation of the 8-gap TENSA®MODULAR expansion joint at one of the bridge's towers

