

Longdong Avenue (China)



Project description

Longdong Avenue, with its full length of 13.85 km, runs east-west in Pudong New Area. It was officially opened to traffic in 1993. In order to create a faster traffic flow for Pudong New Area the Longdong Avenue reconstruction project was initiated in 2017. The main route of the viaduct is a two-way six-lane expressway. There are several ramps onto the viaduct and 9 bridges on the ground road.

Longdong Avenue is an important part of the expressway system in Shanghai Central city. After completion, the time from the suburban ring to the inner ring of Pudong New Area will be reduced to about 10-minutes. Thus, it can meet the needs of the rapid development of the city and the development and construction of major projects, and make the backbone road network function of “ring line + ray” fully play.

mageba scope

The project required the installation of 250 m of small-movement expansion joints. The design of the expansion joints had to take into account the urban environment and the nearby vibration-sensitive production facilities of China's largest microchip manufacturer. The use of low-noise, plug-type expansion joints was specified, and the TENSA®POLYFLEX®Advanced flexible plug joint was selected. This joint type is developed based on elastic polymers, reaching a new standard in terms of quality and service life.

To further accelerate the installation process, in some locations the joints were installed by using mageba's new innovative precast installation method. This new technique enables the length of lane closures to be substantially shortened, to just 5 to 8 hours. The design and installation of the TENSA®POLYFLEX joints for the Longdong Avenue complies with the JT/T1039-2016 and ETA12-0260 standards.

Highlights & Facts

mageba products:

Type: TENSA®POLYFLEX®
Advanced PU flexible
plug expansion joints

Features: Precast plug joints

Installation: 2020

Structure:

City: Shanghai

Country: China

Type: Viaduct

Built: 2020

Designer: SMEDI

Contractor: SCG
Shanghai Puxing Road &
Bridge Construction
Engineering Co., Ltd

Owner: Shanghai Pudong Engi-
neering Construction
Management Co., Ltd.

Longdong Avenue is located in Shanghai, China



Installation of TENSA®POLYFLEX®Advanced PU expansion joint on Longdong Avenue



Flexible plug expansion joint after installation

