

# Shanghai Beiheng Passage Tianmu Road (China)



## **Project description**

Beiheng Expressway, a 19-kilometer long east-west road, which forms an important part of the city's infrastructure development plan to build three east-west and three north-south thoroughfares across the city.

Tianmu Road, opened to traffic in June 2021, was the most complex section of this new piece of infrastructure. The overpass constructed over the Tianmu Road Roundabout can be described as a "bypass heart surgery" due to the delicate operations required in the downtown to ensure uninterrupted traffic flow.

During the construction engineers had to overcome difficulties such as the dense overhead cables, limited space and managing the busy traffic of the area.

# mageba scope

To meet the strict requirements of the client, mageba TENSA®POLYFLEX®ADVANCED PU expansion joints were selected for use and supplied to Tianmu Road.

In total, 350 m of flexible plug expansion joints with a maximum movement capacity of 120 mm was installed.

This type of expansion joint was partly selected due to its low noise emission, as the project is situated in a noise-sensitive location of Shanghai.

Other special properties of the product such as its watertightness and exceptional driving comfort were also important aspects in selecting the most suitable solution.

Due to the tight deadlines the installation of the expansion joints were done within a month, and during the installation period, mageba adopted two construction technologies; cast-in-place and prefabrication.

## **Highlights & Facts**

## mageba products:

Type: TENSA®POLYFLEX®

ADVANCED PU expansion joints

Installation: 2021

Structure:

City: Shanghai Country: China

Type: Elevated road

Built: 2020

Designer: Shanghai Tunnel Design

Institute

Contractor: Shanghai Construction

Group

Owner: Shanghai Highway Invest-

ment Group Co., Ltd

Tianmu Road is located in Shanghai, China



Casting of a TENSA®POLYFLEX®ADVANCED PU expansion joint on Tianmu Road



One of the installed TENSA®POLYFLEX®ADVANCED PU joints

