

mageba optional expansion joint features – optimising benefits



ROBO®STATIFLEX – Reinforcing joint beam

durable, comfort-increasing, noise-reducing







Product characteristics & benefits

Principle

The ROBO®STATIFLEX reinforcing beam is made of a special polymer concrete known under trade name ROBO®FLEX.

With a combination of high resistance to deformation and simultaneous elasticity, this reinforcing beam reliably prevents the formation of track grooves directly in front of and after expansion joint structures and their emerging from the road surface.

Thanks to its quick curing time, this support and reinforcing system may be driven on again already after 6 hours. This ensures considerable reduction in total construction time particularly in case of renovation.

Design characteristics

- Connects bridge sealing and surface layer
- Prevents formation of track grooves and increases the service life of expansion joints
- Increases the passing comfort of road users
- Reduces passing noise
- Short total installation time
- Suitable for new and already existing joints

Properties

The ROBO®STATIFLEX reinforcing beam is made of special ROBO®FLEX polymer concrete. The reinforcing strip offers sufficient load-bearing capacity for the vertical forces from passing traffic and shearing forces of brake applications.

Noise reduction & driving comfort

Through the possibility of installation of the road surface level with the steel profile, passing noise is considerably reduced and the driving comfort of the passing traffic increased. Additionally, the prevention of track groove formation eliminates impacts on expansion joints (no "jump effect") and considerably extends their durability.

A significant increase in service life of the expansion joint structure reduces maintenance costs and this solution offers the positive results in steadily low passing noise.

ROBO®FLEX installation

ROBO[®]FLEX polymer concrete is professionally mixed and moulded into the prepared recess. Thanks to its favourable flow characteristics, all cavities are filled and no additional compression is required. With their very quick curing time, ROBO[®]STATIFLEX reinforcing beams can be driven on after approx. 4 to 6 hours.



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- 1 Top view on a modular expansion joint with sinus plates
- 2 Readily prepared recess for installation of the reinforcing beam
- 3 The completed road is released for traffic

Technical data

Compression strength at 20 °C	min. 16 N/mm²
Elastic modulus (pressure)	min. 170 N/mm²
Adhesive tensile strength to sandblasted steel	min. 3.0 N/mm ²
Adhesive tensile strength to concrete	min. 1.5 N/mm²
Pot life	approx. 10 minutes

mageba expansion joint types





Cantilever finger joints





Sliding finger joints

Modular expansion joints



engineering connections®

Single gap joints

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