



Autostrada Poland

THORMAJOINT®



Key Details

Location:

Otwock, Poland

Date:

2019

Product:

Thormajoint®

BJ200 ST

Application details:

Aggregate

- 20 mm Basalt

Bridging Plates

- Various x 175 x 6 mm

Debonding Strip

- 240 mm wide

Substrate Type

- Stone Mastic Asphalt

The Challenge

The Autostrada Wolności, also known as the “Motorway of Freedom” is the largest motorway project in Poland, with reconstruction works ongoing since 2001. As a key transport corridor linking Poland with Western Europe, it stretches from the Polish-German border towards Warsaw, with extensions to the Polish-Belarusian border forecast for completion by 2028.

This critical infrastructure must withstand heavy daily traffic and harsh climate conditions, demanding durable joint solutions capable of resisting wear, deformation, and environmental stress.





Site Conditions

Ambient Temperature	11-14°C
Expansion gap	44 mm
Joint Width	500-510 mm
Joint Depth	85-120 mm
Joint Length	7-7.1 m
Skew Angle	0°

Solution

Thormajoint® BJ200 ST was installed across three joints on the eastbound carriageway. It was specifically chosen for its high flexibility in extreme climate conditions and its strong resistance to traffic-induced deformation. Installation involved thorough preparation, surfaces were grit-blasted and cleaned with compressed air to ensure maximum binder adhesion. Each joint was then constructed in 2-3 layers, fully filling voids with binder before applying a final surface dressing for added slip resistance and traffic safety. As the joint incorporated a 6 mm thick, 175 mm wide plate and exceeded 100 mm in depth, a 240 mm debonding strip was installed to reduce stress at the plate edges and allow greater joint movement during expansion and contraction.

Result

The new Thormajoint® system provided a durable, flexible, and watertight solution, significantly extending the lifespan of the joints under heavy motorway use. By choosing BJ200 ST, the project ensured reliable resistance against Poland's challenging climate and demanding traffic conditions, while delivering long-term performance and enhanced safety for road users.



About Thormajoint® BJ200 ST

Our high performance product with a vast temperature range.

- ✓ Suitable in climates with temperatures ranging from -10°C to +50°C.
- ✓ High-temperature flow resistance and low-temperature flexibility.
- ✓ Type-approved and registered with the UK Department of Transport.
- ✓ Low cost, low maintenance solution compared to other joint systems.