

MEXPHALTE C JOINT P3J

France – Strasbourg

2007

Light Rail



BENEFICIARY City Hall of Strasbourg (Sémaly, Gétas,CUS)
INVOLVED PARTIES Otto Alte Teigeler and Gartiser (contractors) and Shell Bitumen (solutions provider)

PROJECT DESCRIPTION / REQUIREMENTS Shell Mexphalte C Joint P3J was developed at the request of CUS in order to:

- Adhere perfectly on steel rail structures and on modular materials (natural stone) without a primer.
- Resist light-rail vibrations and shear stresses caused by passage of delivery trucks and buses.
- Ensure waterproof sealing of joints.
- Resist weather-related deterioration due to the continental climate in Strasbourg.

PROJECT FIGURES In all, the Strasbourg light rail network includes 33.7 km of rails sealed with Shell Mexphalte C Joint P3J.

Extension of line C in 2007: 5,500 linear metres of additional light-rail tracks and 7,200 m² of paving stones from India were sealed with 56 tonnes of Shell Mexphalte C Joint P3J.

SCOPE Shell Mexphalte C Joint P3J is an alternative to the polyurethane-type resin joint sealant traditionally used on light rail tracks, since it can be used without primer, and owing to its bituminous nature, it accommodates slight structural deformations without deteriorating the structure.

The mastic is applied around the rails in the following manner:

- Cleaning of the rails with a rotating brush
- Cleaning with water
- Hot application of Shell Mexphalte C Joint P3J

OUTCOMES In general, within an hour after joint application, the road can be opened to traffic without any problems.

Shell Mexphalte C Joint P3J has demonstrated its capacity to age very well in urban environments, including when exposed to bus or HGV traffic. It also contributes effectively to sealing of the road surface, even more than 15 years after application. Thanks to its outstanding qualities and its durability, road maintenance operations are both simpler and easier.

