



Bohumín

ČD DDC, optimization of railway station

country: Czech Republic

realization: 2003 – 2004

material: Kortex® GTPP 60/60

..... 10.000 m²



KORTEX® GTPP

woven geotextile from PP tapes or strings for soil reinforcement, separation and filtration

purpose of usage:
for improvement bearing-capacity of earth structure, separation



The project optimises the railway station Bohumín in a passenger station from the view of the superstructure construction (km 275,198.447 to 277,090.000 of the Přerov – Petrovice u Karviné route). It concerns a railway station where all categories of passenger trains stop. Concerning the freight transport, the station is used for transport needs of all freight trains including loading and unloading of freight cars. The geotechnical condition at the Bohumín station are rather complicated or very complicated. Under the railway gravel, there are, with some exceptions, non-cohesive soils with layers of gravel-sand, sandy gravels, cinders and sandy soils. The design of the sleeper subsoil was realized in compliance with ČD S4 regulation.

Reinforcement with geosynthetics material

The increase of the bearing-capacity of the formation with the modulus of elasticity of the existing plane in the range of 8-30 MPa is provided by means of construction type with the base course with reinforcement geosynthetics material. The ground plane will be pre-compacted according to the nature of the soil to values pursuant to ČD S 4 (track substructure) and reinforcement geotextile will be placed on the plane. The strength of reinforcement geosynthetics material prescribed for the tension in the longitudinal direction amounts to min. 40 kNm⁻¹. The reinforcement geosynthetics material is designed in such width so that the load effects of the railway traffic are broken down on the level of the ground plane.

In order to meet these requirements and to provide a sufficient degree of reinforcement, **Kortex® GTPP 60/60** woven polypropylene geotextile was used. This geotextile besides attaining the required degree of reinforcement, also utterly complies with the separation requirements separating and preventing two structural layers from mixing in the embankment structure.



Kordárna, a.s.

696 74 Velká nad Veličkou 890

Czech Republic

tel.: +420 518 312 400

+420 518 312 407

+420 518 312 433

fax: +420 518 329 240

email: sales@kordarna.cz

internet: www.kordarna.cz

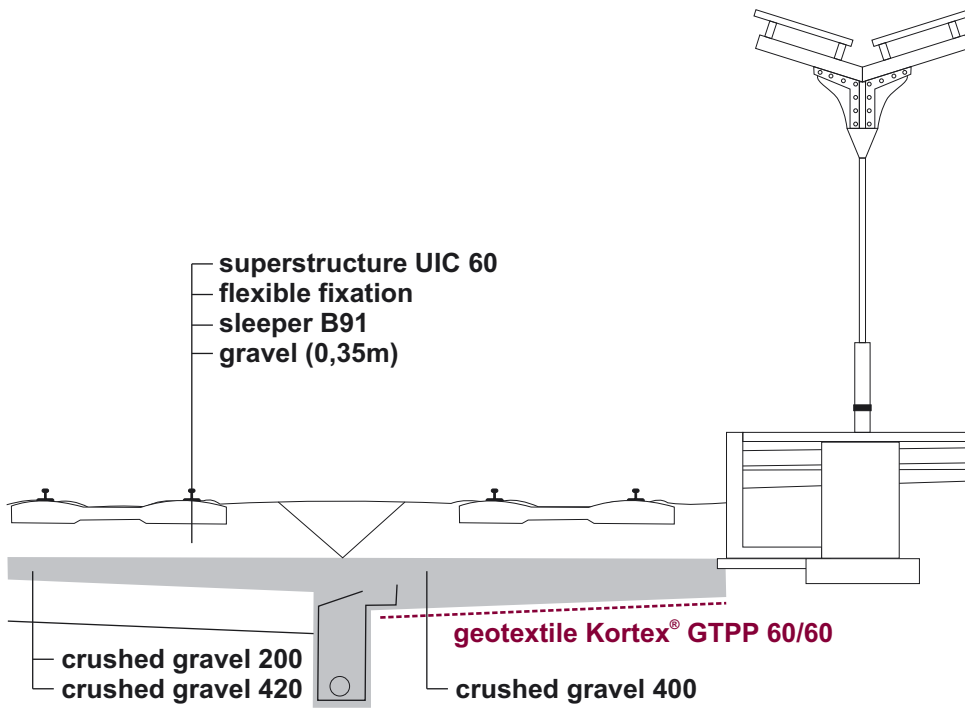


Factory Production Control
Certificate 0799-CPD-19



KORDARNA

A MEMBER OF THE KORD GROUP



investor:

ČD, a.s.

designer:

Sudop Brno, spol. s r.o., Brno

constructor:

ŽS Brno, a.s., Brno

Tchas, spol. s r.o., Ostrava

realization:

2003 – 2005

