AFITEX

Down-to-earth intelligence

HIGH SPEED RAILWAY TANGER – KENITRA (200 km) MOROCCO

Product **:**

PROTECTERRE PF 1800

Date :

2014-2016

Project management :

SYSTRA

EGIS

Contracting authority:

Office National des Chemins de Fer du Maroc (ONCF)

Assistant English contracting authority:

SNCF

Contractors :

COVEC (China)

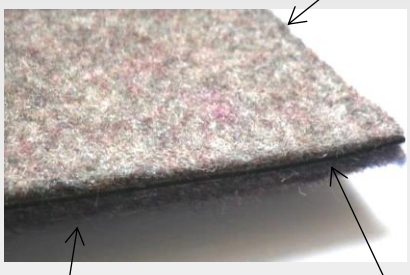
SYNTRAM (Morocco)

HOUARD (Morocco)

SGTM (Morocco)

Area :

228 000 sqm



Technical hub
technique@afitex.com
Mobile : 06 10 75 11 20

PROTECTERRE PF 's Function :

Waterproofing and protection of the railway platform in areas of evolving materials. (pelitics rocks)

Project history :

Contracting authority wanted to establish a new concept to replace the bituminous membrane, more costly and doesn't meet all technicals and environnementals requirements (carbon footprint).
AFITEX, with its strong experience on the french high speed railway, suggested this blended product, chemically inert and that incorporates the two geotextiles.
The installation is done in one time.

Product's description :

The Protecterre PF 1800 is an association by glue sprinkling of a HDPE geomembrane core (1 mm) and two geotextiles (500 g/sqm for the upper part and 300 g/sqm for the lower part)
This product match with the technicals requirements of SNCF :
The norm IN 0261 which including the resistance to the perforation ballast as well as the geotextile's friction angle.

Product's application :

The product has been installed in the transversal direction to limit the infiltration risks. Moreover, the roll's length has been calculated according to a cross section width to limit the losses. Thus, the layers have been welded or simply overlapped together for strong profiles.
The geotextiles aren't pasted along the seals to assure a waterproofing continuity of the Protecterre PF 1800.

Manufacturing method :

The advantages of the sprinkling glue process are :

- Good distribution of glue and flexibility of the product
- The geotextiles don't suffered from thermic stress : So, no fibers modifications.
- No long term creeping thanks to homogenous repartition of the glue on all the area.

WORK SITE EVOLUTION IN PICTURES

1. Production of the PROTECTERRE PF, in Champhol, France

2. The rollers are ready to go to Morocco.

3. Laying of PROTECTERRE PF ont he work site.

4. Over lapping of the PROTECTERRE PG

5. Global vue of the work site : Great Speed Line Tanger - Kenitra