

**GEOTEXTILE** 

# **CASE STUDY: Municipal Theatre Place in Luxembourg**



### **Project title**

DuPont™ Typar® SF chosen and installed under the new pavement of the Municipal Theatre Place in Luxembourg City after successful testing phase.

#### **General information:**

Period: May 2002 - September 2004.

Location: Municipal Theatre Place in Luxembourg City.

**Sponsor/Owner:** City of Luxembourg.

Design: Hermann & Valentiny et Ass. Architectes s.àr.l., Remerschen, G-D de Luxembourg.

**Ground work contractor:** SLCP - Société Luxembourgeoise Chanzy-Pardoux s.àr.l., with sub-contractor for laying the floor slabs: Entreprise de Construction Delli Zotti s.a.

Supplier for the floor slabs and geotextiles: Chaux de Contern.

**Style:** DuPont™ Typar® SF40.

Surface: 3,500 m<sup>2</sup>.



## **Project background**

The architectural design of the Municipal Theatre in Luxembourg dates back to the 1960's. Although the original design of the theatre has remained unaltered, major changes have been implemented regarding the stage technology.

Part of the renovation works undertaken related to the new design of the theatre place was realised by Hermann & Valentiny. The road construction office organised a test site in order to determine the ideal pavement system. The system comprised of a drainage concrete layer,  $DuPont^{TM}$  Typar® SF 40, bedding sands and specially manufactured paving slabs of large dimensions (2 m x 1 m in concrete and 1.0 m x 0.8 m in natural stone) and 140 mm thickness.

It was crucial that the surface of the drainage concrete be as smooth as possible to allow the bedding of the paving slabs on only 3 cm of bedding sand. DuPont<sup>TM</sup> Typar<sup>®</sup> SF40 was installed between the drainage concrete and the bedding sand to prevent the loss of sand into the cavities of the concrete. This would have eventually led to the dislocation of the paving slabs.

The dimensional stability that DuPont<sup>TM</sup> Typar® SF offers proved its worth. The stiff structure of DuPont<sup>TM</sup> Typar® SF prevents it folding, thus simplifying the installation process.

DuPont<sup>™</sup> Typar<sup>®</sup> SF was judged on its performance and was selected as the ideal pavement system. DuPont<sup>™</sup> Typar<sup>®</sup> SF was also chosen for various other projects in Luxembourg, in particular Esplanade in Remich, Beim Schlass Place in Bertrange and St Augustus Place in Leipzig.

## **DuPont™ Typar® SF Benefits:**

It was imperative that the sand and slabs were laid on an even surface therefore concrete and natural stone paving slabs were installed on a 3 cm thick layer of sand. Due to its rigid structure, DuPont<sup>TM</sup> Typar<sup>®</sup> SF does not fold thus ensuring a smooth installation process.

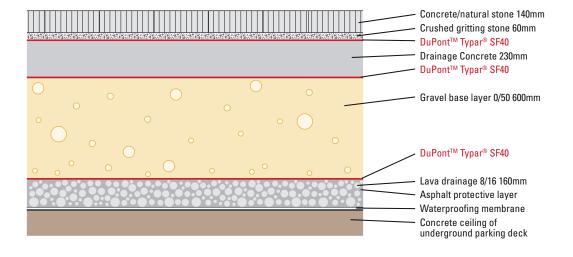
Furthermore DuPont™ Typar® SF has a proven long-term filtration performance to enable the life long functioning of the filtration system.

#### Other references:

Esplanade in Remich (L). Beim Schlass Place in Bertrange (L). St. Augustus Place in Leipzig (D).

#### **DuPont™ Typar® SF Signature:**

 $DuPont^{TM}$  Typar® SF: the quality geotextile for all separation, filtration and stabilization works.



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