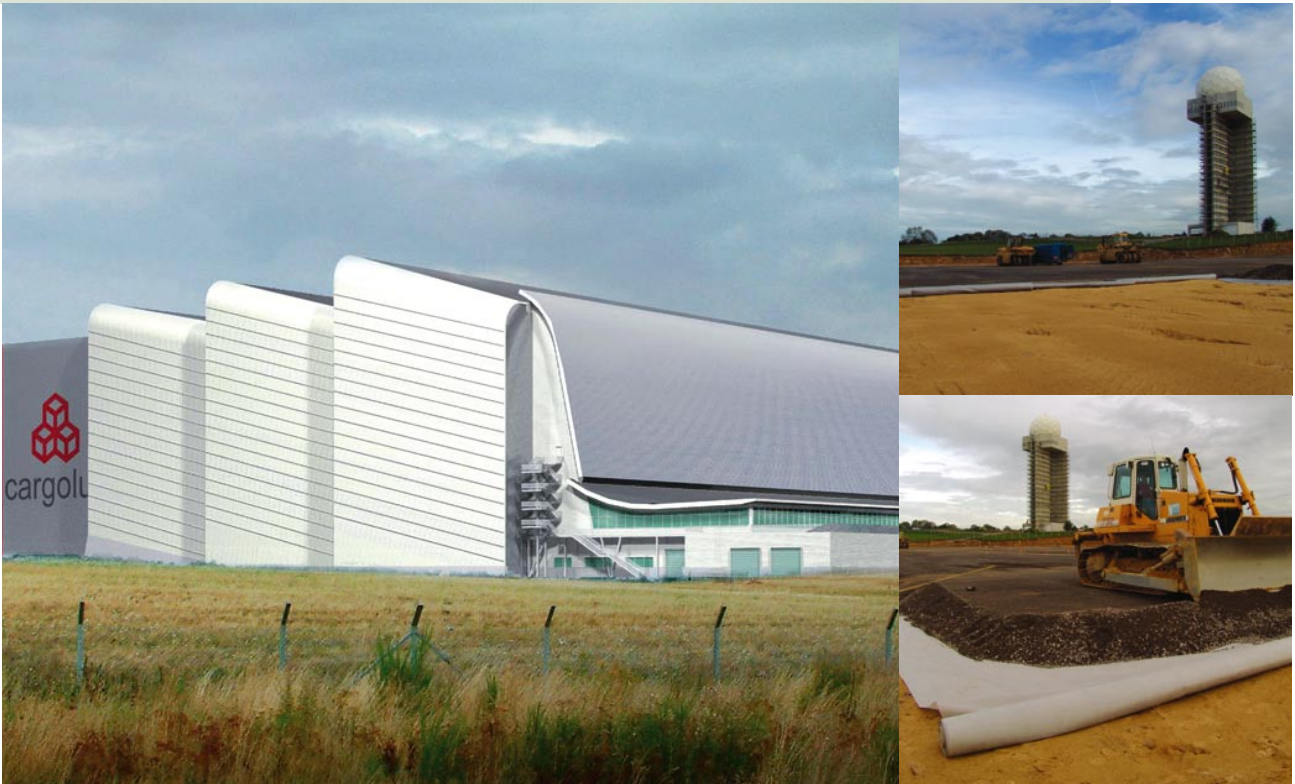


# DuPont™ Typar® SF GEOTEXTILE

## CASE STUDY: Maintenance Facility Hangar – Luxembourg airport



### Project title

DuPont™ Typar® SF chosen and installed under the basement of the new maintenance hangar and the office building to separate the sandstone layer from the aggregate layer.

### General information:

**Period:** September 2006 to January 2007.

**Location:** Luxembourg Airport.

**Sponsor/Owner:** Cargolux Airlines International S.A.

**Design:** Architecture et Ingénieries de Maintenance Aéronotique (AIMAe), Paris, France.

**Ground work contractor:** Baatz Constructions S.à r.l., Luxembourg.



**Supplier for the concrete, PVC pipes and geotextile:** Chaux de Contern.



**Style:** DuPont™ Typar® SF56.

**Surface:** 31,000 m<sup>2</sup>.

## Project background

Cargolux is the largest European cargo airline. This new maintenance hangar, which is scheduled to be inaugurated in mid-2008, will provide Cargolux with the necessary high-tech tools and environment to maintain its growing modern fleet.

The building, which is 200 meters wide, 90 meters deep and 42 meters high, will offer room for two B747-size wide-bodied aircrafts and will include space for all necessary workshops. Next to it, a separate building will house energy facilities and a canteen. The heavy loads related to the planes traffic require a strong and stabilized basement of the platform.

More than 150,000 m<sup>3</sup> of aggregates have been moved during the earthwork. The sandstone-made sub-grade used for levelling and covering the natural subsoil could be up to 2 m high. The aggregate base course was 30 cm high.

The separation between the base course and sandstone was crucial to stabilize the complete structure.

Even more crucial was the resistance to damage during installation as heavy construction equipment was required for moving the materials.

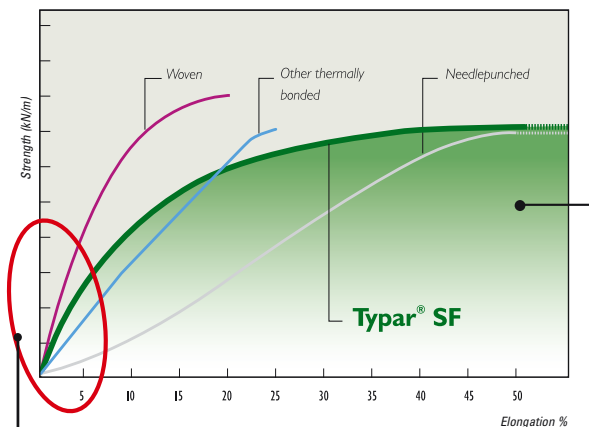
## DuPont™ Typar® SF Benefits:

In addition to its excellent separation and filtration performance, the high energy absorption potential of DuPont™ Typar® SF geotextile provided the required resistance during the installation process.

Thanks to its high initial modulus, DuPont™ Typar® SF will stabilize the hangar basement and reduce significantly rut formation even when exposed to regular heavy planes traffic.

## DuPont™ Typar® SF Signature:

DuPont™ Typar® SF: the high quality geotextile for separation, filtration and stabilization works.

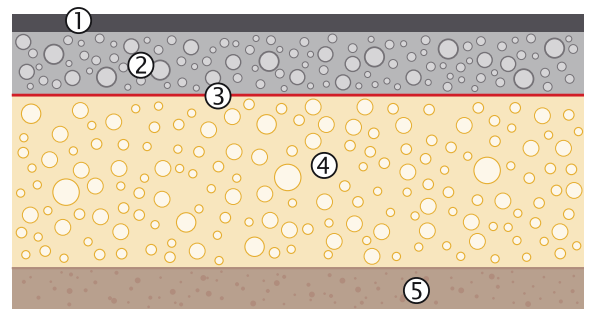


### ► High initial modulus

Low deformation at typical service life stresses  
 → **low rutting**

### ► Energy

A combination of initial modulus, strength and elongation  
 → **high resistance to damage during installation**



- ① Surface course
- ② Aggregate 0/50 base course 0,30 m
- ③ DuPont™ Typar® SF56
- ④ Sandstone subgrade 0/50 - 0 to 2 m  
Used for levelling
- ⑤ Natural subsoil

This information corresponds to our current knowledge on the subject. It is offered solely to provide possible suggestions for your own experimentations. It is not intended, however, to substitute for any testing you may need to conduct to determine for yourself the suitability of our products for your particular purposes. This information may be subject to revision as new knowledge and experience becomes available. Since we cannot anticipate all variations in actual end-use conditions, DuPont makes no warranties and assumes no liabilities in connection with any use of this information. Nothing in this publication is to be considered as a license to operate under or a recommendation to infringe any patent right.

DuPont de Nemours (Luxembourg) S.à.r.l.  
 Rue Général Patton  
 L-2984 Luxembourg  
 Tél: +352 3666 5779  
 Fax: +352 3666 5021  
[www.typargeo.com](http://www.typargeo.com)



*The miracles of science™*