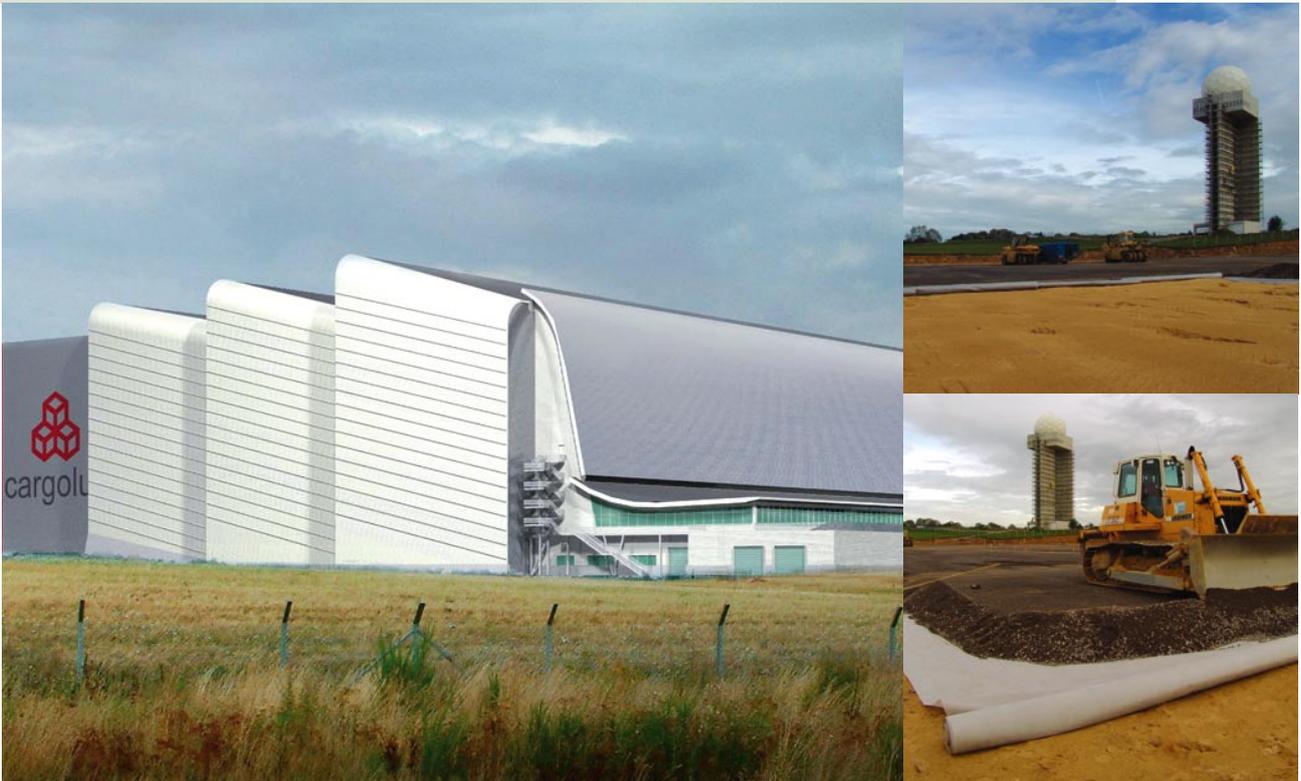


DuPont™ **Typar® SF** GEOTEXTILE

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 m².

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 m³ 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.

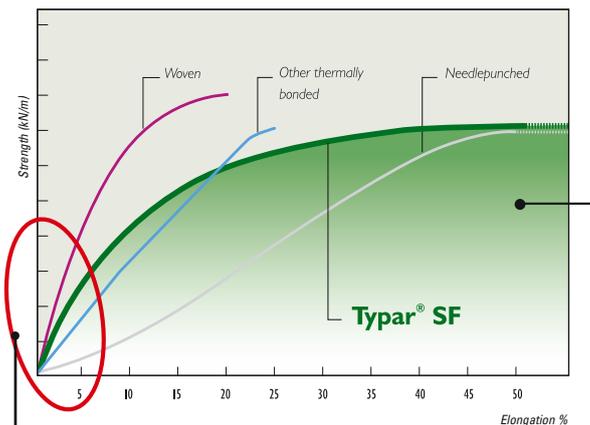
DuPont™ Typar® SF Benefits:

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.

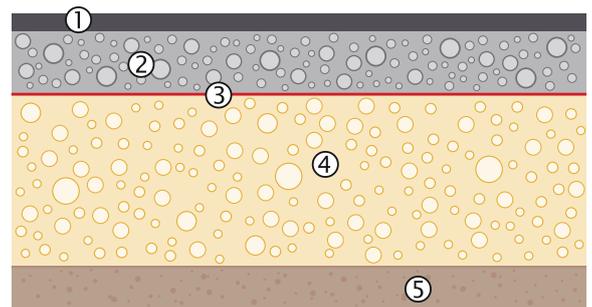


► High initial modulus

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

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