

ACO Surface Water Management

BH Air Logistics, July 2012



BH Air Logistics, Sofia Airport Drainage, Separation and Infiltration System in one solution

The project BH Air Logistics involves the construction of new logistic center located near Sofia Airport, consisting of loading terminal and aircraft hangar. ACO is engaged together with the designer to provide complete surface water management solution, including hydraulic calculations, selection of products and installation details.

The biggest challenge for the project design came from the fact that the closest existing sewage system was located about 2 km away from the property and it was important to find a way to safely release the collected surface waters from the catchment area as large as 18.000 sq.m. The innovative infiltration system ACO Stormbrix provided cost-effective and at the same time environmental solution – as it supports the natural water cycle by bringing rainwaters back to the earth. Moreover, the guaranteed structural stability of the system allowed installation at 2.5 m below the ground level for easy connection of the drainage and waste water treatment equipment.

Initially specified by the designers to solve project design issues, ACO Stormbrix provi-

ded additional benefits that impressed both the investor and the construction company. The unique open cell structure permits completely free access for video inspection and jetting equipment to the whole system, including all the extremities. That guarantees long operation life and reduces running costs. For the construction company, the first surprise came with the delivery of the ACO products on site – all elements for infiltration blocks, drainage channels and a huge oil separator arrived in just one truck. ACO StormBrix simplifies logistics, delivery and site storage as a result of its stackable design. Second, the lightweight of the elements (about 10 kg per piece) allowed easy handling and fast installation. The ACO Service team representative at the project site enjoyed observing the transformation in the installers attitude. At first they were suspicious and skeptical about the system. Soon they enjoyed the ease of work with the elements and commented on the special brick-bonding connection as a “game for grown-up boys”. The satisfaction from the final result was visible later the same they, as 4 instal-

ACO Stormbrix - infiltration system

lers completed 75 m³ within 6 working hours.

In contrast to the lightweight infiltration blocks, the drainage of the area is planned with heavy-duty channels Monoblock RD300, load class F900 to effectively drain the large area and at the same time guarantee optimal stability in the area of aircraft maneuvers.

ACO provides complete Surface Water Management solution for BH Air Logistics project – storm water is collected by the drainage channels, treated in the oil separator and released in the infiltration system.





Stackable design and lightweight of the elements optimise logistics and handling



Prefabricated openings and accessories for easy connections



Final result: 4 installers x 6 working hours = 75 m³
ACO Stormbrixx



ACO Design and Service team supported each step of the design and installation



Heavy-duty channels ACO Monoblock during the installation

Reference at a glance

Project: BH Air Logistics
Location: Sofia Airport
Client: BH Air
Designer: Mityu Genev / RUTEX
Builder: Balkanstroy

Year of construction: 2012

ACO Products:
75 m³ ACO Stormbrixx - infiltration system
110 m ACO DRAIN® Monoblock RD 300 -
drainage channels, load class F900
1 pcs. Oleopass 20/160 - by-pass oil separator

ACO Building Elements Ltd.

Bulgaria
1582 Sofia
319 Tsarigradsko shose Blvd.
Tel. 00359 2445 6701
Fax 00359 2445 6700

www.aco.bg