



# SIKA AT WORK

## Karela Office Park, Paenia, Attica

ROOFING: Sarnafil® TG 66-20

WATERPROOFING: Sikaplan® WT 4220-15C

# KARELA OFFICE PARK, PAENIA, ATTICA



## PROJECT DESCRIPTION

Karela Office Park is a 35.670 m<sup>2</sup> office complex, including three underground parking, restaurants, cafe, gym and auxiliary space, with a green roof garden, using high technology materials and an innovative moving shading system on all building elevations to control outdoor lighting. The building is visible from the highway as well as from the air, forming twisted zigzag. The above ground built area is 29.900m<sup>2</sup> and the below ground built area is 30.000m<sup>2</sup>.

The design goal was the creation of a unique ecological office park, which would incorporate all the benefits of “green” architecture in the workplace. The central idea was to unite workfoce with nature, respecting the environment. With the completion of a full-year operation it was proven that a 75% saving in the annual energy consumption per m<sup>2</sup> was accomplished in comparison to a conventional construction, while the additional construction expenditure was 7% on the total budget. This achievement was made possible with the incorporation of a full range of technologies and systems. The green roof is an additional reference, due to the fact that is occupyes 11 acres and is the largest green roof of its king in the Balkans and one of the largest in Europe.

Karela Office Park sets the market benchmark as is the first LEED® Gold certified building in Greece.

## APPLICATION DEMANDS

For the construction of the semi-intensive type of green roof, it was necessary to use an anti-root membrane. Furthermore, due to the certification requirement for a LEED® certification, the systems and products used should be environmentally friendly and in line with the requirements of the US Green Building Council.

## SIKA SOLUTION

For the green roof waterproofing **Sarnafil® TG 66-20** FPO membrane was used due to its outstanding resistance against weathering and microorganisms and its design characteristics. **Sarnafil® TG 66-20** is tested according to the German FLL-Green Roof Guidelines (root penetration resistance). **Sarnafil® TG 66-20** combined waterproofing and anti-root protection in one product, offering thus low height system increase.

The two potable water tanks were waterproofed using the sheet membrane **Sikaplan® WT 4220-15C**, which carries national approvals (Germany, Switzerland, WRAS). An important role in the selection of both membrane types was their composition (FPO – flexible, high quality polyolefin without plasticizers harmful to the environment) and the safety in application (application without naked flame, using thermal welding).

**PROJECT PARTICIPANTS**

Owner: **KARELA S.A. (50% subsidiary of DIMAND)**

Contractor: **AKTOR S.A.**

Architectural Design: **M.Kokkinou – A.Kourkoulas & Partners**

Investor: **NBG Pangea REIC**

Investor Consultant: **Dimand S.A.**

Roof contractor: **Teca Monotiki**

Tenant: **COSMOTE**



© Sika Hellas ABEE / Roofing / Waterproofing

Our most recent General Sales Terms shall apply.

Please consult the most recent Product Data Sheets prior to any use and processing.



**Sika Hellas ABEE**  
15 Protomagias Str.  
145 68, Kryoneri  
Athens-Greece

**Contact**

Tel: +30 210 8160600

Fax: +30 210 8160606

[www.sika.gr](http://www.sika.gr) / [sika@gr.sika.com](mailto:sika@gr.sika.com)

**BUILDING TRUST**

