



Rely on it.

Sport at the highest level.

RENOLIT ALKORPLAN



RENOLIT ALKORPLAN scores high on Deltion College!

CHALLENGE

A sports field on top of the roof. A surprising and exceptional RENOLIT achievement that absolutely draws the attention...

Deltion College in Zwolle (NL) really is an exceptional case. This college offers amongst others education courses to prepare for service in the Armed Forces - Navy, Army as well as the Air Forces. No doubt sports are an important part of life on the campus.

Then came the inspiration to install an artificial grass sports field on top of the roof of the newly constructed multifunctional building. Space-saving and functional! The choice to specify RENOLIT ALKORPLAN as roofing material was a shrewd decision, as RENOLIT ALKORPLAN offers a solution not only for mechanically fixed roofs but also for ballasted roof systems...

SOLUTION

The highest rooftop, a steel frame construction, has been installed with a PES-reinforced mechanically fixed RENOLIT ALKORPLAN F roofing membrane.

For the lower concrete roof – the sports field to be – a different product was required: RENOLIT ALKORPLAN L! A glass fleece reinforced membrane with an excellent resistance to micro-organisms, **specifically conceived for ballasted roofs.**

Before installing the insulation, a bituminous vapour barrier was placed on top of the concrete. Next came a first layer of 70 mm thick aluminium-faced PIR insulation, followed by a second layer of 100 mm thick unfaced polystyrene insulation.

To avoid direct contact between the roofing membrane and the PS insulation a glass fleece separation layer was added. Afterwards the RENOLIT ALKORPLAN membrane was loose laid and hot air welded. In accordance with the RENOLIT installation instructions the seams were sealed with RENOLIT ALKORPLAN seam sealer. A little bit of effort for extra security!

Rooftop pitch

Some extra details about the sports field. First, interlocking foam panels were placed and adhered to the membrane with RENOLIT ALKORPLUS₈₁₀₄₀ adhesive. These panels are specifically designed as a technical layer for artificial turf sports fields. Apart from serving as a fall protection, they also have excellent drainage properties which ensure an adequate drainage of rainwater in case the artificial turf system is built on a watertight non-porous base. Not the least important for a sports field that has to be functional throughout the year. Finally, as the crowning final touch, the artificial turf was installed. The grass comes in 4 metre widths, joined together with adhesive. The layer of sand fill on top of it provides extra stability, protects the turf and extends its life span especially in the case of intensive use.

Finally finished, the sports field is keenly waiting for the 2017-2018 school year kick off in September.

This RENOLIT project effectively shows how a useless roof space can be transformed into an **exceptional and accessible, but above all functional roof.**





DELTION COLLEGE

- Zwolle, The Netherlands
- Contractor Kormelink – Rietmolen
- Distributor Altena – Kampen
- Roofing contractor Linels – Enschede
- Architects Ares Architecten – Apeldoorn
- Artificial turf KSP Kunstgras – Lelystad

PRODUCTS

- RENOLIT ALKORPLAN F₃₅₁₇₆ roofing membrane, 1.2 mm, light grey – 1,660 sqm
- RENOLIT ALKORPLAN L₃₅₁₇₇ 1.2 mm, light grey
- Schmitzfoam ProPlay Sport 23D
- RENOLIT ALKORPLAN₈₁₀₄₀ Contact Glue
- Artificial Turf Edelgras Edel Eliste LSR24

