



*Rely on it.*

# BRIGHT piece of art above the museum ...

RENOLIT ALKORBRIGHT



# The Royal Museum of Fine Arts Antwerp (KMSKA)

## The roof being part of the collection ...

### CHALLENGE

*The 19th-century neoclassical museum in the South district of Antwerp was in need of an entire refurbishment, including an ambitious extension. Therefore the decision was taken to transform the former inner courtyards into a new vertical museum area. A hidden modern museum showcasing contemporary art within the walls of the old historic one. Two different worlds within one building.*

*To protect the valuable art collection of paintings and drawings a solution was sought to bring as much indirect and northern light into the art rooms as possible.*

### SOLUTION

In this respect, Claus en Kaan architects created a fabulously ingenious design for the roof. The rooftop would be completed with no fewer than 198 triangular skylights. As well as presenting aesthetic value, the roof triangles are designed in such a way as to have northern light entering the museum. As north-facing windows would allow indirect light, an important feature to protect the valuable works of art inside. In addition, to provide **extra reflection of light**, the architects opted for a white roof.

### BRIGHT idea

White roof, reflection, flexibility! Three key words that obviously led the architects towards the PVC-P roofing membrane **RENOLIT ALKORBRIGHT**. The high solar reflectance of this membrane will enhance the amount of indirect daylight entering through the windows, **thus providing extra internal lighting**.

For the roof contractor, ADCO, in charge of the refurbishment of the roof for this new building, this was clearly a difficult and time-consuming task requiring considerable technical skills! All 198 skylights were prefabricated off-site piece by piece! The 198 triangular wooden constructions were covered with **RENOLIT ALKORPLUS<sub>81002</sub>** self-adhesive VCL. To assure a perfectly waterproof and neat finish **RENOLIT ALKORPLUS** metal sheet profiles were secured to the edges. And finally each triangle was made waterproof with the **RENOLIT ALKORBRIGHT** roofing membrane. A great many small pieces of membrane that all had to be cut to size.

A complex job, for sure! Additionally the skylights differed in size. "The reason is obvious", explains Herwig Van Peer (Operations Manager at ADCO). "A flat roof always has a slight fall to allow rain water to drain off. Even a minimal slope would disrupt the optical effect of a straight line formed by all the skylights' peaks. This meant three different dimensions of skylights were needed." While the roof lights were constructed off-site, the 1,665 m<sup>2</sup> timber roof construction was temporarily covered with a 4 mm thick bituminous layer.

A step the architects considered necessary to protect the white **RENOLIT ALKORBRIGHT** roofing membrane from damage and soiling during the installation of the roof lights.

Amazingly the 198 triangular skylight units were installed from within the museum. Openings were made through the ceiling of the upper room, the triangles were sealed with PUR foam, damp-proof silicone and were finally covered on the interior side with Gyproc plasterboard.

Ultimately when all the roof lights were installed, the 1.60 m wide **RENOLIT ALKORBRIGHT** roofing membrane was mechanically fixed around the skylights, cut into many triangular sections, and, as one can imagine, a very frustrating and onerous job!

### Designed to impress

The result is impressive. Most impressive! It may be said that today the museum roof is already a work of art in itself.

The museum's opening date is scheduled for 2019. Whenever you visit the museum don't forget to look up at the ceiling... or to try to get a glimpse of the artful roof above. It can definitely be considered part of the museum's collection.







**REFURBISHMENT MODERN MUSEUM OF FINE ARTS  
2011-2019**

- Antwerp, Belgium,
- Building owner : Fund for Cultural Infrastructure - Flemish Government
- Contractor: Artes Roegiers
- Architects: Claus Et Kaan Architecten (NL)
- Roofing Contractor: ADCO nv Herentals (B)
- Architecture Et Planning bureau: Bureau Bouwtechniek

**PRODUCTS**

- Timber deck
- PIR insulation
- **RENOLIT** ALKORPLUS 81002 self-adhesive vapour control layer
- **RENOLIT** ALKORBRIGHT metal sheet profiles
- **RENOLIT** ALKORBRIGHT 35276 - 1,5 mm - white 90300  
1,665 m<sup>2</sup>

