

THERMOGRAPHIE – EXEMPLE COMPLEXE SPORTIF NEDER-OVER-HEEMBEEK

The Neder-Over-Heembeek swimming pool and sports complex building was chosen as an example because it is exemplary. Energy loss is very low, as shown by the thermography results. What's more, the roof's considerable potential for producing renewable energy has been exploited by installing a large number of photovoltaic panels.

On the median layer, we can see that the Neder-Over-Heembeek swimming pool and sports complex have a very low median heat loss value, despite the age of the building and the fact that it is more heavily heated (the set temperature of a swimming pool is higher than that of a tertiary or residential building).

> Very weak Medium Important

Excessive





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Not perceptible or null

Very weak

Medium

Important

Excessive

Very important

Looking at the overall layer, however, we can see that the levels of heat loss are not uniform.

Note the orange and red bands, which are linked in particular to the presence of large windows above the swimming pool and the multisports area, which may indicate losses (depending on the glazing) but also a

reflectance/transmittance phenomenon.

Note also the impact on radiation of the solar panels (identifiable on the satellite photo below) installed on all the roofs of the sports complex, which can be seen in green and blue on the overall layer.

The presence of these materials with high reflectance / transmittance can skew the heat loss data, making it impossible to analyse the quality of the roof insulation using thermography.

Another effect affecting the reading of the roof is the presence of trees on the left-hand edge of

the multi-sports area. Trees exude presence and warmth, like green roofs or wood, and therefore skew the results, which are not linked to poor roof insulation.

Finally, we can identify the locations of the ventilation outlets, which are visible by the presence of red and orange dots. This localised heat loss is normal, since the purpose of the ducts is to remove heat and ventilate the air. On the other hand, it can happen that a chimney is no longer used in a building. This type of infrastructure can then be a major and unwanted heat leak. In such cases, work can be carried out to close and insulate the chimney.



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