

Water

User and visitor will be aware of its use by precisely metering the water consumption, this encourage the water conservation.

In the building is a grey water system installed for flushing toilets, waterless urinals are also present.

Energy use building

The ambition of the client is: a building that is as sustainable as possible, within what is realistically feasible. The highest cost in a distribution centre in terms of use is primarily the lighting. In order to reduce this energy use as much as possible we have taken 2 measures. The first is a structural solution. By using translucent façade panels in strips in the façade that correspond with the gangways between the shelves. In this way we are able to ensure that more daylight enters the building, so that the lighting can even be turned off on light/sunny days. In view of the security of a distribution centre it is not desirable to use transparent (clear) glazing.

In addition, the artificial light is completely LED, which is the most energy efficient at this time.

For the office we continued searching for an optimal heating and cooling installation. The offices are fitted with a HAC system (heating and cooling). The production hall is fitted with heating only. This is done by means of radiant panels. No cooling will be fitted in the production hall. In order to be able to save as much as possible on heating and cooling, a high Rc value was opted for in walls, floors and roof.

In addition to the translucent façade cladding in the production halls, the offices are also fitted with as much daylight as possible. Beside the floor at the level of the office functions a continuous window frame strip has been designed, with a minimum parapet of approx. 40cm. Ceiling-high glass was designed afterwards.

Expected energy use in kWh/m ² GFA	= 15 Wh/m ² GFA/yr
Expected use fossil fuels in kWh/m ² GFA	= 2.5 m ³ /m ² GFA/yr
Expected use of sustainable energy sources in kWh/m ² GFA	= 0.28 kWh/m ² GFA/yr
Expected water use in m ³ /person/year	= 7.6 m ³ /person/yr.

(based on 200-260 working days a year)

Expected % of water use that is included via rainwater discharge or grey water = 11.8%