




DK_Vedbæk_WindowMaster Office		
Image 01: East view © Danish Building Research Institute	Image 02: Ventilation openings © Danish Building Research Institute	Image 03: Roof light in staircase © Danish Building Research Institute
		
Building Specifications		
Address	Skelstedet 13, 2950 Vedbæk, Denmark	
Building Category	Office	
Year of Construction	Renovated in 1995	
Special Qualities	n/a	
Location	56° northern latitude, 13° eastern longitude. Located in urban area surrounded by trees and other buildings	
Climate	Cfb (warm temperate climate, moist with adequate precipitation in all months and no dry season, warm summer with the warmest month below 22°C)	
Vent. Cooling Site Design Elements (Solar Site Design and Wind Exposure Design, Evaporative Effects from Plants or Water)		
The building is sheltered from the wind from south, east and northeast. The trees in south direction also provide shading from the sun		
Vent. Cooling Architectural Design Elements (Form, Morphology, Envelope, Construction & Material)		
<p>Form: Three storey rectangular building east west oriented</p> <p>Morphology: The basement, which is partly below ground, houses various storerooms, workshops and a canteen. There are offices on the ground and first floors. There is an electronics workshop located on the first floor. Except for the basement, the activity in the building is mainly administrative. The total floor area is about 2.000 m2.</p> <p>Envelope: Two different sizes of windows arranged above each other are placed on the façade. Skylights are located above the staircases.</p> <p>Construction: Medium mass construction</p>		
Vent. Cooling Technical Components (Airflow Guiding Components, Airflow Enhancing Components, Passive Cooling Components)		
Air is supplied partly through large openable windows and partly through smaller windows positioned above the large windows in office rooms. On the top (first) floor, two openable roof lights are installed to facilitate the air exhaust using natural forces. Internal blinds provide solar shading.		

IEA EBC Annex 62 Ventilative Cooling

Actuators, Sensors and Control Strategies
Chain actuators operate façade windows and roof openings. NV Advance™ control system is used for indoor climate control. The building is used as a test building, which means that the actuators, sensors and control strategies may vary over time.
Building Energy Systems (Heating, Ventilation, Cooling, Electricity)
Mechanical extract system is used for the canteen and the machinery in the workshop. Information about heating is not available.
Building Ownership and Building Facility Management Structures
The owner of the building is VKR, WindowMaster uses the building. Architect: KHR A/S (Renovation)
Acknowledgements
n/a
Datasheet Source: Building description is made based on information materials provided by NatVent Case Study Summary. Extensive building monitoring has been carried out. © 2/2 All images and copyrights belong to the original owners and are reproduced for the purpose of training and education only