

DK_Slagelse_Psykiatrisygehus (GASP)

Image 01:
 Exterior view
 © Jens Lindhe



Image 02:
 View of atrium
 © Jens Lindhe

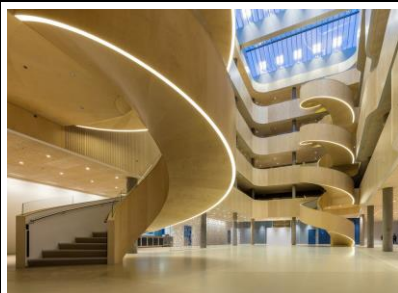


Image 03:
 Exterior view of garden
 © Jens Lindhe



Building Specifications

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| Address | Stadionvej, 4200 Slagelse, Denmark |
| Building Category | Hospital |
| Year of Construction | 2014 |
| Special Qualities | DGNB certified |
| Location | 56° northern latitude, 13° eastern longitude. Located in urban area with surrounding buildings from north, south and west. A motorway is located to the east |
| 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)

Small hills, open areas, trees and bushes influence wind and sun near the buildings.

Vent. Cooling Architectural Design Elements (Form, Morphology, Envelope, Construction & Material)

Morphology: Most of the buildings, which consist of wards for the patients, have one floor. Building #2, which contains the main entrance and Building #3, which contains staff areas, have two and five floors respectively. The total floor area is 44,000 m².

Envelope: Large window sections are used in all buildings. Large number of roof windows.

Construction: Heavy mass construction

Vent. Cooling Technical Components (Airflow Guiding Components, Airflow Enhancing Components, Passive Cooling Components)

Single sided, cross and stack ventilation. Openings in the façades and ceiling are used as inlets and outlets for the natural ventilation. A special foil on the windows and manually controlled curtains protect from overheating.

Actuators, Sensors and Control Strategies

All ventilation openings (windows) are controlled by chain actuators, except the atrium, where louvre dampers are installed in the lower façade.

Room sensors for temperature and CO₂

Weather station measuring outdoor temperature, humidity, CO₂ and wind was set on the rooftop

NV Advance™ ventilation control system.

IEA EBC Annex 62 Ventilative Cooling

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| Building Energy Systems (Heating, Ventilation, Cooling, Electricity) |
| Hybrid ventilation Heating is done through radiators and floor heating, which is connected to district heating Geothermal cooling is used Information about electrical systems is not available |
| Building Ownership and Building Facility Management Structures |
| Region Sjælland owns the building. Architect: Karlsson architects / VLA |
| Acknowledgements |
| n/a |
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