

<b>IE_Waterford_Genzyme</b>		
<b>Image 01:</b> Exterior View © PM Group	<b>Image 02:</b> Exterior View © PM Group	<b>Image 03:</b> Exterior View © Pharmafile
  		
<b>Building Specifications</b>		
<b>Address</b>	Cleaboy Rd, Waterford, Ireland	
<b>Building Category</b>	Office/ Laboratory	
<b>Year of Construction</b>	2013	
<b>Special Qualities</b>	First LEED 'Gold' New Construction Building in Ireland	
<b>Location</b>	52° Northern latitude, 7° Eastern longitude. Located on the outskirts of the town with grasslands to the west	
<b>Climate</b>	Cfb (warm temperate climate, moist with adequate precipitation in all months and no dry season, warm summer)	
<b>Vent. Cooling Site Design Elements</b> (Solar Site Design and Wind Exposure Design, Evaporative Effects from Plants or Water)		
Building is located in an industrial estate surrounded by similar buildings to the south, east, and north which have an effect on the wind exposure. There is no shelter from the sun.		
<b>Vent. Cooling Architectural Design Elements</b> (Form, Morphology, Envelope, Construction & Material)		
Envelope: Glazed elements of building achieved U-values of between 1.5-1.8W/m <sup>2</sup> K while opaque elements saw U-values of between 0.19 – 0.21W/m <sup>2</sup> K Construction & Material: Source materials for construction were extracted, processed and manufactured within a 500 mile radius. 50% of wood used was COC and FSC certified. In construction 95% of waste was diverted from Landfill.		
<b>Vent. Cooling Technical Components</b> (Airflow Guiding Components, Airflow Enhancing Components, Passive Cooling Components)		
n/a		
<b>Building Energy Systems</b> (Heating, Ventilation, Cooling, Electricity)		
Heating & Cooling: Active chilled beams are used for both heating and cooling. Ground water is used as a source for heating with a heat pump while cooling is provided with a combination of groundwater and chilled water. Free Cooling is also implemented. Ventilation: 100% fresh air supply with AHU's incorporating a thermal heat recovery and dehumidification wheel. Electricity: Electricity is grid supplied.		

## IEA EBC Annex 62 Ventilative Cooling

<b>Actuators, Sensors and Control Strategies</b>
Cafeteria area uses demand controlled natural ventilation for both temperature and CO <sub>2</sub> using automatic vents
<b>Building Ownership and Building Facility Management Structures</b>
The building is owned by Sanofi Genzyme. Architect: RKD Architects
<b>Acknowledgements</b>
n/a
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