




IE_Dublin_Commissioners of Irish Lights Headquarters		
Image 01: Southeast view © Scott Tallon Walker Architects	Image 02: Energy systems incorporated © Scott Tallon Walker Architects	Image 03: Interior view © Scott Tallon Walker Architects
		
Building Specifications		
Address	Dun Laoghaire Harbour, Dublin , Ireland	
Building Category	Offices and workshop (5,500m ²)	
Year of Construction	2008	
Special Qualities	BIPV system acting as a shading solution	
Location	53° Northern latitude, 6° Eastern longitude. Located next a harbor area with little or no obstructions in most orientations, some residences are to the south of the building.	
Climate	Cfb (warm temperate climate, moist with adequate precipitation in all months and no dry season, warm summer)	
Vent. Cooling Site Design Elements (Solar Site Design and Wind Exposure Design, Evaporative Effects from Plants or Water)		
External solar shading was integrated into the glass of the building. This provided a dual function of generating solar power and acting as a shading mechanism to reduce solar gains during summer months. Manual internal cedar blinds were also incorporated.		
Vent. Cooling Architectural Design Elements (Form, Morphology, Envelope, Construction & Material)		
The building has 360 degree panoramic full height glazing which provided a challenge for the minimization of cooling loads.		
Vent. Cooling Technical Components (Airflow Guiding Components, Airflow Enhancing Components, Passive Cooling Components)		
A lantern in the centre of the building houses vents which provide natural ventilation for the building.		
Building Energy Systems (Heating, Ventilation, Cooling, Electricity)		
Cooling: A seawater heat exchanger circulates cooling water to chill the thermal mass of the building to regulate internal conditions. Ventilation: Fan assisted centralised natural ventilation is used which is powered by PV brise soleil. This draws air through the building from all facades		
Actuators, Sensors and Control Strategies		
No information available.		

IEA EBC Annex 62 Ventilative Cooling

Building Ownership and Building Facility Management Structures
Owned and operated by the Commissioners of Irish Lights. Architect: Scott Tallon Walker Architects
Acknowledgements
n/a
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