

IE_Dublin_Eircom Network Management Centre, Citywest	
Image 01: Northwest view © Scott Tallon Walker Architects	Image 02: West view © Scott Tallon Walker Architects
 	
Image 03: Interior view © Scott Tallon Walker Architects	
Building Specifications	
Address	Citywest Business Park, Dublin 24, Ireland
Building Category	Offices (8244m ² over 3 floors)
Year of Construction	1999
Special Qualities	Mixed Mode Stack Ventilation Solution, Exposed Concrete Soffit Design
Location	53° Northern latitude, 6° Eastern longitude. Located in a commercial business park in a suburban area with some buildings of similar size around it.
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)	
The building is situated along a north-south axis. This maximizes natural daylight to the open plan office spaces during period of low angle winter sun. To offset increased cooling demand from the solar gains along the south façade during summer seasons a curved external brise soleil system is utilized allowing low angle sunlight to penetrate while obstructing high intensity high angle summer sun.	
Vent. Cooling Architectural Design Elements (Form, Morphology, Envelope, Construction & Material)	
The open plan office spaces rely on passive cooling provided by the thermal mass of exposed concrete ceiling avoiding the need for air conditioning. High level ventilation and daylight shafts along the central spine of the building are used to capture sunlight for internal deep plan offices and acts as a heat removal sink in summer months. Mechanical ventilation within the exhaust stacks assists flow through the building from the external openable windows through the offices.	
Vent. Cooling Technical Components (Airflow Guiding Components, Airflow Enhancing Components, Passive Cooling Components)	
Openable windows	
Building Energy Systems (Heating, Ventilation, Cooling, Electricity)	
Ventilation: mixed-mode displacement ventilation supported by a heat exchanger and stack effect ventilation via internal winter gardens. The running cost of the building is 25% less than a similar air-conditioned building, achieving a three year payback on the cost of the sustainable design features and demonstrating their viability even in this densely occupied call centre environment.	

IEA EBC Annex 62 Ventilative Cooling

Actuators, Sensors and Control Strategies
No information available.
Building Ownership and Building Facility Management Structures
Owned and operated by the Eircom. Architect: Scott Tallon Walker Architects
Acknowledgements
n/a
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