

South Baddesley C of E Primary School, Hampshire, UK

Case Study



CLIENT:

South Baddesley C of E Primary School, Hampshire, UK

CHALLENGE:

To introduce high-quality natural daylight into the school's new Ecological Discovery Centre while maintaining strong sustainability credentials. The solution needed to complement responsible building materials and technologies while creating a bright, engaging learning space for pupils.

The challenge was introducing natural daylight into flat-roof classroom spaces without significant structural disruption, while maintaining flexibility for teaching activities requiring controlled lighting.

RESULTS:

The installation delivered strong natural performance within the Eco Discovery Centre, creating a bright and inspiring environment for pupils while supporting the building's sustainability objectives and energy efficiency targets.

PRODUCT:

Solatube® Brighten Up Series
7 290 DS (350mm diameter system)

SOLATUBE DISTRIBUTOR:

Solalighting Limited

ARCHITECT OF RECORD:

John Pardey Architects, Lymington

GENERAL CONTRACTOR:

Solalighting Limited

BACKGROUND: South Baddesley Church of England Primary School in Hampshire developed an ambitious Ecological Discovery Centre designed to integrate sustainability, environmental education and innovative construction methods. The project aimed to create a facility that would both support modern learning and demonstrate environmentally responsible building practices to pupils.

The building incorporates a wide range of sustainable technologies, including a sedum green roof, air source heat pump, mechanical ventilation with heat recovery, solar power generation and extensive use of recycled construction materials. The result is a highly energy-efficient building awarded an A-rated Energy Performance Certificate.

CHALLENGE: A key objective was maximising natural daylight within the building while maintaining its ecological credentials. The school and the sustainability team's daylighting project could be confidently specified based on proven performance and certification.

Providing consistent natural daylight while integrating with the green roof construction and other environmental technologies required a solution that balanced technical performance, environmental responsibility and architectural integration.



SOLUTION: Solatube Daylighting Systems were specified due to their proven daylight performance, environmental benefits and BBA certification, providing the technical assurance required for the project. The installation incorporated seven Solatube 290 DS Daylighting Systems with OptiView® diffusers, integrated directly into the sedum green roof structure.

These systems efficiently capture and distribute natural daylight into the interior learning space, complementing the building's broader sustainability strategy while maintaining architectural harmony with the ecological design of the facility.

RESULTS: The Eco Discovery Centre now benefits from strong levels of natural daylight, creating a bright, welcoming learning environment that enhances pupil engagement and comfort. The daylighting solution contributes to reduced reliance on artificial lighting while supporting the building's overall environmental performance.

Feedback from both staff and pupils has been positive, with comments highlighting the brightness, sense of openness and connection to natural light within the learning space.

CONCLUSION: This project demonstrates how daylighting solutions can play an important role in environmentally focused educational buildings. By integrating natural daylight with wider sustainable technologies, the installation supports both energy efficiency and enhanced learning environments.

The Ecological Discovery Centre stands as an example of how innovative daylighting design can contribute to sustainability education while creating inspiring, comfortable spaces for young learners.

