

All Saints Academy

Case Study



CLIENT:
All Saints Academy, Dunstable, UK

CHALLENGE:
To extend natural daylight from the central atrium into internal classrooms located up to two storeys below roof level.

The solution required transporting daylight over long distances through complex ceiling voids and wall cavities, working around ventilation, cabling and other building services, all while maintaining the architects' sustainability and design objectives.

RESULTS:
Natural daylight was successfully delivered deep into interior teaching spaces, creating brighter, more comfortable classrooms while supporting energy efficiency goals and reducing reliance on artificial lighting during daytime hours.

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

SOLATUBE DISTRIBUTOR:
Solalighting Limited

ARCHITECT OF RECORD:
Lyster Grillet & Harding (LGH)

GENERAL CONTRACTOR:
Solalighting Limited

BACKGROUND: All Saints Academy in Dunstable was designed as a modern educational facility focused on creating a bright, comfortable and inspiring learning environment. The architects, Lyster Grillet & Harding, placed strong emphasis on maximising natural daylight throughout the building to support student wellbeing, improve concentration and reduce reliance on artificial lighting.

While the central atrium provided a strong daylight focal point, maintaining that same sense of openness and brightness within internal teaching spaces presented a design challenge. Many classrooms were positioned away from direct roof access, meaning an alternative daylighting strategy was required to achieve consistent lighting quality throughout the facility.

CHALLENGE: Extending natural daylight into the internal classrooms required light to be transported from roof level down to teaching areas located up to two storeys below. The routing was complex, with ceiling voids and wall cavities already accommodating ventilation ductwork, electrical services and other building infrastructure.

Space constraints limited system size while multiple bends and long runs were unavoidable. Despite these challenges, the daylighting solution still needed to achieve the performance levels specified by the architects while preserving the building's design intent and supporting its sustainability objectives.



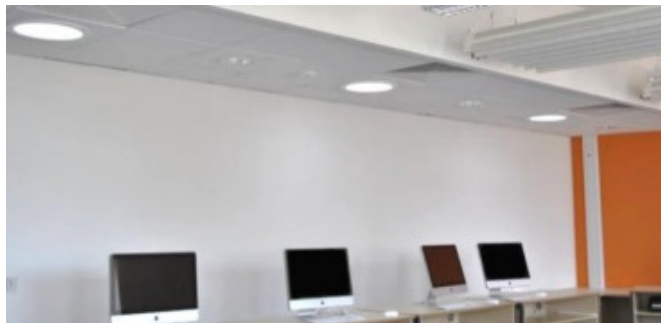
SOLUTION: Solatube Daylighting Systems were selected due to their proven ability to efficiently transfer natural daylight over extended distances while maintaining excellent light quality. The project incorporated the Solatube 290DS Brighten Up series, a 350mm diameter system specifically designed to channel daylight from roof level into internal classrooms located up to two storeys below.

The systems were carefully routed through ceiling voids alongside existing building services, requiring multiple bends and extended tubing runs. Thanks to the advanced highly reflective tubing technology, daylight could be delivered effectively despite these constraints, enabling the architects to achieve their daylighting goals without compromising architectural design or energy performance targets.



RESULTS: The installation successfully introduced natural daylight into interior teaching spaces that would otherwise have relied heavily on artificial lighting. Classrooms now benefit from a brighter, more comfortable learning environment, supporting student wellbeing while contributing to reduced daytime energy consumption.

The daylighting solution also helped maintain the open, welcoming atmosphere originally envisioned by the architects, reinforcing the Academy's commitment to sustainability and high-quality educational spaces.



CONCLUSION: The All Saints Academy project demonstrates how Solatube daylighting solutions can overcome complex architectural and structural constraints to deliver natural light deep into buildings. By combining performance, flexibility and energy efficiency, the systems helped create a more engaging learning environment while supporting long-term sustainability objectives.

This project highlights the value of integrating daylighting early in the design process, ensuring both aesthetic and environmental goals can be achieved without compromise.

