

## ALTERNATIVE THINKING

Core to Keylite's strength is our ability to engage with the architect and builder to provide quality roof window solutions which meet each project's requirements for natural light and ventilation.

These case studies have been selected as examples where Keylite's direct input has led to enhanced performance in terms of solar control, thermal efficiency and of course the quality of the space in the home, school or workplace.

At Keylite we want to do things better so innovation is central to how our products meet the ever changing needs of today's building projects. We have some great ideas that will assist you to exceed your client's expectations.

Please contact us to find out more about our unique products. Our technical team is available now to engage in some alternative thinking for your next project.





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## Cranfield, Co. Down

### CONTRACTOR MCGAFFIN CONTRACTS LTD

#### PRODUCTS USED

- › White Finish Triple Flat Roof Apex System with electrically operated windows and electric integral blinds.
- › WF-TFRX-EI-CP04T with PEK2W



Ease of installation was a significant factor when the builder chose Keylite to supply this high specification Flat Roof Apex system.

Keylite supplied up-stands enabling the roof windows to be simply set into place in two parts while the bespoke flashings made the completion of the installation straightforward.

Keylite demonstrated a high degree of flexibility in the design and supply of the windows which featured electrically operated Integral Blinds throughout while the two central windows had a Premium Electrics Kit for full remote opening.



“KEYLITE’S DESIGN AND TECHNICAL SUPPORT SERVICE ENSURED THIS INSTALLATION WAS COMPLETELY STRESS FREE.”

## Torrens Social Housing, Belfast

**CONTRACTOR**  
**BRAIDWATER**

**ARCHITECT**  
**FOLD HOUSING ASSOCIATION**

**PRODUCTS USED**

- › 15 Triple vertical Bi lites, TVBL-CP06T (780x140mm) \*950mm deep\*(Middle windows tilt and turn, outer windows tilt only)
- › 30 no. CP04T (780x980mm).



Keylite provided an extremely cost effective solution to win this project while still matching the exacting details of an alternative specification leading to the architect specifying Keylite Vertical Bi Lites for this social housing project.

When awarded the project Keylite worked closely with the site management to provide solutions to specific on-site safety requirements.

Provision of locking handles on the central “means of escape” windows met the needs for child safety while the location of break glass key storage units ensured these conflicting safety needs were both efficiently dealt with.

“KEYLITE’S ON-SITE SUPPORT ENSURED THAT ALL REQUESTS WERE DEALT WITH QUICKLY AND EFFICIENTLY.”

## Ormeau Embankment Residential ECO Homes

**CONTRACTOR**  
**TAL LIMITED**

**ARCHITECT**  
**HARRY ROLSTON ARCHITECTS**

**PRODUCTS USED**

- › 55no. CP-08A-KTG  
(1140x780mm)
- › 20no. CP-04-KTG  
(780x980mm)
- › 13no. CP-07F-KTG with special  
flashing to suit Zinc roof
- › 10no. CP-03F-KTG with special  
flashing to suit Zinc roof



Keylite worked closely with the architect and contractor to meet the sustainability requirements of these low carbon Eco Homes.

The Keylite solution included the use of gas filled Krypton triple glazed units achieving a low U-value of 1.0w/m2K. The thermal performance of the overall window installation was then further improved through the use of Keylite's Thermal collar which helps to eliminate heat loss and reduces thermal bridging.

Special requirements for flashing onto a zinc roof were also met by Keylite through technical and on-site support.

“KEYLITE PROVIDED A HIGH PERFORMANCE SOLUTION TO MEET THE NEEDS OF THIS LOW CARBON DEVELOPMENT”

## Childsbridge Farm Seven Oaks, Kent

### CONTRACTOR TAYLOR WIMPEY SOUTH EAST

#### PRODUCTS USED

- › 33no. Top Hung 05 with Hi-Therm WFTH05HT (780x1180mm)
- › 33no. Centre Pivot 04 WFCP04T (780x980mm)
- › 11no. Quad-Lite flashing bank of 3 (WFCP04T on top & WFTH05HT on bottom).
- › 22no. Standard Electric Kits (SEK1W kits).
- › 10no. Triple Vertical Bi-Lite TVBL05HT\*600mm deep (780x1180mm)
- › 7no. Top Hung with Hi-Therm WFTH03HT (660x1180mm)
- › 10no WFCP05HT (780x1180mm)
- › 7no. Centre Pivot CP07BT fixed shut with self cleaning glass (940x980mm)
- › 9no. Top Hung WFTH06HT (780x1400mm)

“KEYLITE SUPPLIED A LARGE VARIETY OF WHITE FINISH ROOF WINDOWS IN A RANGE OF DIFFERENT LAYOUTS.”





The range and specification of products used on this premium housing development in Kent demonstrates Keylite's ability to meet every roof window requirement. The White Finish windows used throughout enhanced the bright airy feel of the properties.

Triple Vertical Bi-Lites with Top Hung upper windows and Quad-Lite sets with different sizes top and bottom plus single units were supplied with electric operation on selected windows.

## Ciarnhill Park, Airdrie

**CONTRACTOR**  
**DAVID WILSON HOMES**

**ARCHITECT**  
**BARRATT'S INTERNAL  
DESIGN TEAM**

**PRODUCTS USED**

- › Over 200 Centre Pivot and Top Hung Windows with Quad-lite Flashings



Keylite responded to a technical challenge from Barratt to design a multi roof window system that removed the need for horizontal plasterboard boxes between the window units.

The solution was a “Quad-Lite” with decorative timber inserts placed over the plaster groove of the frames to ensure a seamless blend between the windows. This layout allows much more light into an area and creates a more aesthetic internal appearance.

Keylite supply the two vertical frames already pre-joined together and this is made practical by the use of the pre-fitted Flick Fit fixing brackets which simplify the installation into the roof.

“KEYLITE PROVIDED AN ATTRACTIVE YET HIGHLY PRACTICAL SOLUTION TO THE CLIENT’S DESIGN CHALLENGE.”

## Thatched Roof Dwelling, Eindhoven, Holland

### CONTRACTOR MR VAN LIEMPT

#### PRODUCTS USED

- › 2 no WF- i-CP04T
- › 2no CP02T



This unusual installation in a prestigious thatched dwelling demonstrates the versatility of the Keylite Flick Fit system in conjunction with the DTRF flashing system.

A total of 4 roof windows were installed and provided high levels of natural daylight with ventilation provided through the effective ventilation handle with an integral insect filter which is particularly beneficial in this roof type.

The builder was complimentary regarding the ease of installation even though this was the first project he had completed using the Keylite Flick Fit brackets.

“KEYLITE HAVE DESIGNED THE PRODUCT TO BE FITTED EASILY REGARDLESS OF THE ROOF TYPE OR MATERIAL.”

## Maplefields School, Northamptonshire

**CONTRACTOR**  
**GRAHAM CONSTRUCTION**

**ARCHITECT**  
**GSS ARCHITECTURE**

### **PRODUCTS USED**

- › 80no. Keylite EICP02HT (550 x 980mm)
- › Electric Integral Blinds operating from a bespoke Roof Window electrical system.
- › Flashings to suit sedum roof.

“KEYLITE HAD THE ANSWER TO THE SOLAR CONTROL AND SAFETY NEEDS IN THIS BUSY SCHOOL.”





Keylite Roof Windows were specified to light up Maplefields School in Northamptonshire as an integral part of this building's design. The banks of roof windows are contained within light wells maximising the levels of natural daylight while minimising unwanted glare.

Effective solar control was provided by the use of Keylite's unique maintenance free, electrically operated Integral Blinds giving finger tip control of the windows located 5m above floor level.



As Pupil safety is always a key concern in a school environment Keylite recommended that the inner glazing pane be laminated.

## Dromintee Primary School

**CONTRACTOR**  
**TRACEY BROS.**

**ARCHITECT**  
**MCLEAN & FORTE**

**PRODUCTS USED**

- › 44no. EICP05T(780x1180mm)
- › 4no. CP02T (550x980mm)
- › 7 Sun Tunnels (350mm Dia.)
- › All roof windows electrically operated running in groups of 4, 8, & 10
- › Bespoke electrical systems monitored by both rain & CO2 sensors

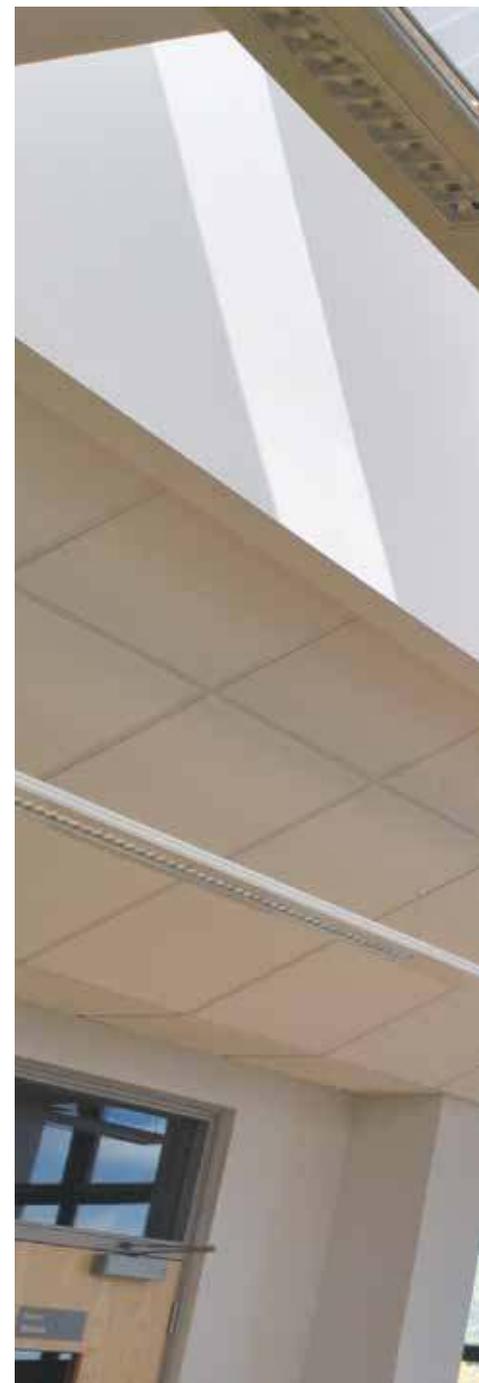


Designed to capitalize on the benefits of natural daylight and ventilation the architect in this new-build school project produced a striking roof design incorporating Keylite Roof Windows in both the classrooms and the public spaces.

Solar control was an important consideration along with the ability to moderate the ventilation in-line with both internal and external conditions.

In response Keylite supplied a solution with fully electric centre pivot windows featuring electrically operated Integral Blinds.

For ease of management the control system was linked to Rain and Co2. Sensors in banks of 4 and 8 roof windows.





“KEYLITE’S ABILITY TO UNDERSTAND THE CLIENT’S NEEDS WAS CENTRAL TO THE DELIVERY OF A PRACTICAL SOLUTION.”

## Cornafulla National School, Athlone

**CONTRACTOR**  
CORDIL CONSTRUCTION

**ARCHITECT**  
PROJECT ARCHITECTS, DUBLIN

### PRODUCTS USED

- › 11no. EICP05HT (780x1180mm) electrically operated.
- › 11no. EICP04HT (780x980mm) electrically operated.
- › 11no. Quad-Lite flashing combinations (CP05HT over CP04HT).
- › 7no. CP09GT (1340x1600mm) electrically operated
- › 2no. FRS-CP05HT (780x1180mm) Flat Roof Up-Stands



This project incorporated both single and quad configurations of roof windows in pitched roofs together with a requirement for roof windows in a flat roof.

Keylite successfully overturned the original specification by presenting the electric Integral Blind window to Project Architects who quickly adopted the window as the ideal low maintenance and hygienic solution for this school.

Bespoke electrical schematic diagrams and controls were designed and supplied by Keylite while working in conjunction with the on-site electrical contractor to ensure a trouble free installation process.



“THE TECHNICAL SUPPORT PROVIDED BY KEYLITE BOTH ON AND OFF SITE WAS EFFECTIVE THROUGHOUT THE PROJECT.”

## St Columba's Primary School, Draperstown

**CONTRACTOR**  
**FB MCKEE & CO**

**ARCHITECT**  
**GERRY LOUGHREY**  
**ARCHITECTS**

### PRODUCTS USED

- › 22no. EICP07T (940x1600mm)  
electrically operated,  
Co2 sensors
- › 4no. CP08T (1140x1180mm)
- › 3no. CP07BT (940x980mm)
- › 2no. CP01T (550x780mm)
- › 2no. CP05T (780x1180mm)



Architect, Gerry White from Gerry Loughrey Architects consulted with Keylite from the outset of this project to ensure that the roof window installation would deliver the required benefits to his client.

The scale and variety of roof types required a flexible approach from Keylite to provide appropriate levels of daylight and ventilation into various areas of the school which have different uses.

The ability to create a bespoke electrical control system, incorporating Co2 sensors was core to the success of this scheme and reflects Keylite's expertise as a supplier to the education sector.

Keylite provided full design support and on-site assistance throughout the process which was valued by the construction team and ultimately resulted in a satisfied client.

“KEYLITE SUPPLY PRACTICAL, INTELLIGENT SOLUTIONS FOR SCHOOLS BASED ON A DETAILED UNDERSTANDING OF THE NEEDS.”

## St Joseph's, Clonsilla, Nursing Home

**CONTRACTOR**  
**JJ RHATIGAN & CO**

**ARCHITECT**  
**MALONEY O'BRIEN**  
**ARCHITECTS**

### PRODUCTS USED

48 Triple Glazed Roof Windows

- › CP07T (940x1600mm)  
Electrically Operated,  
Rain Sensor
- › CP07FT (940x1400mm)  
Electrically Operated,  
Rain Sensor
- › CP07CT (940x1180mm)  
Electrically Operated,  
Rain Sensor



Moloney O'Brien Architects required a high performance, low u-value window to provide elevated levels of both comfort and safety within a nursing home environment.

The product chosen to meet this exacting specification was Keylite's Triple Glazed Roof Window with laminated inner panes for additional safety .

Maintaining the comfort of residents throughout the day was of paramount importance and Keylite supplied electrically operated solar control blinds capable of providing 100% black out.

As a further provision for comfort and safety, the windows were fitted with rain sensors to provide for automatic closing preventing any ingress of water. The control system operated the windows in banks of 3.

“KEYLITE RESPONDED WITH PRODUCT OPTIONS TO MEET THE DEMANDING SPECIFICATION OF THIS PROJECT”

## Bangor Health Centre

**CONTRACTOR**  
**BELL CONTRACTS**

**ARCHITECT**  
**WHITTAKER**  
**& WATT**

### PRODUCTS USED

- › 60no. 350 mm diameter Sun Lites with Bespoke RAL universal top flashings to match the roof colour.
- › 4no. FRSCP08BT (1140x980mm) Flat Roof Systems



Keylite provided Sun Lite tube style roof lights to meet the demand for natural daylighting within this project when the configuration of standing seam pitched roofing prevented the use of conventional roof windows.

The installation was enhanced by the provision of bespoke colour matched top flashings which reduced the visual impact on the roof externally.

Flat roof window systems were also supplied, bringing natural daylight and ventilation into single story areas of the health centre demonstrating Keylite's ability to provide effective solutions for all building styles.



“KEYLITE  
PROVED THEY  
COULD PROVIDE  
A SOLUTION TO  
VARYING DAYLIGHT  
AND VENTILATION  
NEEDS.”



## Dingwall, Scotland, Church Restoration

**CONTRACTOR**  
**ANDREW FRASER**

**PRODUCTS USED**

- › White Finish
- › 20 windows in total



Keylite assisted in the refurbishment of a historic church building where the builder wanted to introduce a large amount of light, creating a bright interior space which was being restyled with a modern twist.

The patented Flick Fit brackets simplified the installation of 20 large centre pivot windows combined in banks of 2 and 3 placed symmetrically on each side of the roof.

White Finish windows were selected to enhance the airy feel of the interior and Keylite produced bespoke decorative timber inserts which were placed between the banks of windows to enhance the overall appearance.

“KEYLITE’S FLICK FIT BRACKETS MAKE INSTALLATION SIMPLE IN BOTH NEW BUILD AND REFURBISHMENT PROJECTS”



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**UK**  
Ryder Close,  
Cadley Hill Industrial Est.  
Swadlincote, South Derbyshire,  
DE11 9EU

T: +44 (0) 1283 200 150  
F: +44 (0) 1283 223 352  
E: [info@keyliteuk.com](mailto:info@keyliteuk.com)

**NI & ROI**  
Derryloran Industrial Est.  
Sandholes Road, Cookstown,  
Co. Tyrone,  
BT80 9LU

T: +44 (0) 28 8675 8921  
F: +44 (0) 28 8675 8923  
E: [info@keylite.co.uk](mailto:info@keylite.co.uk)



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