

TECHNICAL

Polycarbonate (Solid Sheet)

UV protected polycarbonate offers high impact resistance as well as a variety of glazing options; clear, diffused, bronze and opal.

U-Values

Double Skin	2.6 W/m ² K	As installed
Triple Skin	1.8 W/m ² K	As installed
Quad Skin	1.4 W/m ² K	As installed

(additional laylight options available on request for increased thermal values)



Light Transmissions

Clear 87% - a high light transmission
- allows full vision of views & objects
- minimum privacy

Diffused 84% - a high light transmission
- increased privacy
- reduced glare and shadows

Opal 50% - a low light transmission
- maximum privacy
- reduced glare and shadows
- prevents vision of views & objects

Bronze 50% - a low light transmission
- reduced solar heat gain
- cuts down the brightness of sunlight

Solar Gain

The solar gain ('G' value) can be improved to a more manageable level by way of introducing varying tint interlayers to the polycarbonate rooflight construction thus reducing the heat build up occurring from transmittance through the rooflight glazed area.

Acoustic

Typical airborne sound reduction for a Triple skin rooflight is 30-35dB.

Fire Rating

Products comply with current UK Building Regulations covered under BS 476 and European Standards covered under BS EN 13501.

Glass

As an alternative to polycarbonate, safety glass is very popular in the commercial and retail environment. Toughened glass is manufactured using a heat tempering process, which in turn produces a very versatile material in contemporary architecture. Laminated glass provides benefits such as sound reduction, added security and additional safety. Various glass options are available on request.

Fixings

Security fixings with seals caps and washers are supplied with all polycarbonate rooflights. NaturalLight do not supply fixings to secure to a builders upstand/roof deck.

UPVC Kerbs

L2 Standard Kerb* - 1.9 W/m²K U-value. 290mm high kerb with 80mm splay and 70mm base fixing flange to allow fixing to flat or inclined roof structures, with a profiled outer face to improve roof membrane adhesion.

L2 Splayed Adaptor Kerb** - 1.7 W/m²K U-value. 90mm high kerb with 50mm splay and 71.5mm base fixing flange

to allow fixing to a raised builders upstand on flat or inclined roof structures.

L2 Security Adaptor Kerb - Exceptional U-value. 80mm high vertical kerb with a 100mm internal fixing flange to secure kerb internally to a raised builders upstand on flat or inclined roof structures where additional security may be required.

L2 Advanced Vertical Kerb* - 0.76 W/m²K U-value. This is the premier model of the range with 300mm high vertical kerb and 85mm base fixing flange to allow fixing to flat or inclined roof structures, with profiled outer face to improve roof membrane adhesion.

L2 Trade Range Kerb* - 2.05 W/m²K U-value. 168mm high kerb with 100mm splay and 80mm fixing flange to allow fixing to flat or inclined roof structures, with profiled outer face to improve membrane adhesion.

* Hot Box Tested by the BBA

** Calculated by the BRE as average weighted U-value



Ventilation

Building Regulations Part F requires background ventilation not less than 8000mm² of controllable and secure ventilation. If rapid ventilation is necessary then this should equate to 5% of the total floor area of the room. On a standard kerb 1200 x 1200mm the free air space is:

Vented 2 sides Hit and Miss Vent 55.5cm² (5550mm²)

Vented 2 sides Rotary Vent 15.6cm² (1560mm²)

Vented 4 sides Hit and Miss Vent 111.1cm² (11100mm²)

Vented 4 sides Rotary Vent 31.2cm² (3120mm²)

Maintenance

NaturalLight rooflights can be cleaned if needed by using mild detergent and warm water, using a soft cloth or sponge. Do not use an abrasive cloth or strong detergents. It is advised when cleaning any rooflight that you should always assume that they may be fragile and you should never walk, stand or lay across them. Additional H&S equipment may be required.

Non-Fragility

The 'red book' ACR(M) defines a test for non-fragility which can be applied to any roof assembly to indicate whether the roof can support the loads imposed by a person falling or stumbling upon it. NaturalLight have had their rooflights independently tested by the BRE to ensure they meet at very least a class 'B' rating.

Handling and Storage

Rooflights must be stored and handled with care. Even with the protective wrapping still in place, rooflights should never be stacked on top of each other, but always in a dry place away from direct sunlight, on their edge with a separator between.

Design

Full technical drawing facilities are available from NaturalLight. Any queries regarding our systems should be addressed to our technical staff at the address below. Drawingoffice@naturalight.co.uk

Specification

NaturalLight have a continuous research and development programme and reserve the right to improve or modify products without notice.

Building Regulations

NaturalLight's range of rooflights and kerbs optimise performance to ensure Part L of the Building Regulations can be met with confidence, together with the requirements of the Construction Products Regulation 2011 (CPR) meeting not only the British Regulations but also adhere to European Standards.

CE

NaturalLight rooflights and kerbs are manufactured in accordance with the harmonised standard BS EN 1873:2005 under the (CPR). All rooflights and kerbs manufactured and distributed from NaturalLight's premises covered under the regulatory standard will carry the CE mark giving greater confidence that the product being supplied is of the best possible quality and most importantly compliant to current legislation.

BBA

NaturalLight hold a BBA certificate for products sold into the market place and are proud in the knowledge that the products supplied meet the required quality standard to achieve such status giving our customers further confidence that the products are of the highest quality.



NaturalLight Systems LTD

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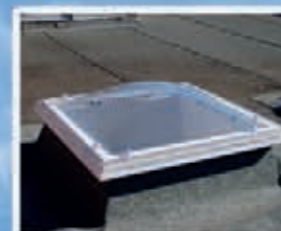
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NaturalLight Systems LTD



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Natural Light By Design



Tel: 01670 530 333
Fax: 01670 824 540



Combined U-Value as low as



"As one of the market leading manufacturers, NaturaLight have one of the largest product ranges in the rooflight industry. Our team can design, manufacture and install rooflights suitable for all applications."

NaturaLight Systems Limited are the natural choice for rooflights, kerbs and structural glazing for the construction industry and here's why...

In this brochure you will find what we believe to be the most comprehensive range of quality products, competitively priced and manufactured at our 'state of the art' factories in Bedlington, Northumberland.

From its establishment in 2001 NaturaLight has gone from strength to strength. Due to increased customer demand, our head office and manufacturing plant has now expanded its premises from one factory to three giving NaturaLight approximately 80,000sq ft of manufacturing, production, storage and distribution capacity to cope with the demands of our client base.

We have a passion for what we do – we pride ourselves on our manufacturing of quality rooflight products, our services and our team. We are very competitive but at the same time realistic to the market place. We only use the finest materials and this is our guarantee of excellence.

We aim to offer a perfect solution for any project no matter how complex it may be and are always dedicated to working to agreed timescales, suiting individual needs. Whatever you may require, we can produce cost effectively, quickly and with an unsurpassed quality service.

Each product is designed and manufactured individually to make sure that your requests are fulfilled first time. Every product that leaves our factory is approved by quality control and ready to deliver on time, using our own fleet of transport for distribution throughout the UK.

From an enquiry stage through to delivery/installation, customer satisfaction is paramount to us, our wealth of experience in the construction industry ensures this, from the initial contact to completion you are in good hands.

We have a wide range of clientele including Main Contractors, MoD, MoJ, Local Authorities, Schools, Colleges, Universities along with Building & Roofing Contractors, and more.

Our company is headed by a board of Directors; who are assisted by our national technical sales personnel, design team, office staff, a skilled team of professional production workforce and our specialist installation teams (who are certified in Asbestos Awareness, IPAF, PASMA, CPCS, CSCS, Harness Awareness, SSSTS, SMSTS and First Aid). Our staff are dedicated professionals with years of experience and are on hand to answer any questions you may have regarding your individual needs. Simply call us on 01670 530 333 we are only too happy to help, or visit our website at www.naturalight.co.uk where you can find information on our extensive range of products.



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U-Values Explained

This table indicates the level of thermal efficiency (Ud value) and consequently its suitability for particular applications.

Products	L2 Standard	L2 Advanced	L2 Security Adaptor	L2 Splayed Adaptor	L2 Trade Range	L2 SecuriGlaze
U-values* (2.1 Required For Part L)	1.10	0.95	1.20	1.50	1.70	0.90
Shape Rectangle / Square	*	*	*	*	*	*
All Glazing Colours	*	*	*	*	*	*
Glazing Material**						
Polycarbonate Double	*	*	*	*	*	*
Triple	*	*	*	*	*	*
Quadruple	*	*	*	*	*	*
Glass Double	*	*	*	*	*	*
Triple	*	*	*	*	*	*
Ventilation	*	*	*	*	*	*
Security						
Security Screws	*	*	*	*	*	*
Security Frame	*	*	*	*	*	*
Intruder Grid	*	*	*	*	*	*
Kerbs						
UPVC	*	*	*	*	*	*
Flexible Base Adaptor	*	*	*	*	*	*

* Glazing options are only those that we recommend to achieve the U-value Figures shown. Other options are available on request.

The Ud value (or area-weighted average) of a rooflight is defined as total heat loss through the entire product assembly i.e. allowing for the rooflight and kerb and any associated parts thereof, divided by the surface area (or developed area) of the rooflight. Effectively this is understood as the true U-value dependant on application rather than being the property of a singular product.

Using a rooflight assembly with an improved thermal performance will allow greater areas of glazed roof space to be considered by the end user.

A U-value is a measure of heat loss in a building element such as a wall, floor or roof. It can also be referred to as an 'overall heat transfer coefficient' and measures how well part of a building transfers heat. U-values are important because they form the basis of any energy or carbon reduction standard. In practice, nearly every external building element has to comply with thermal standards that are expressed as a maximum U-value.

Knowledge of how to simply calculate U-values at an early stage in the design process avoids expensive re-working later on in a project. It also allows the designer to test the feasibility of their project to ensure it is fit for purpose and will comply with regulatory frameworks.

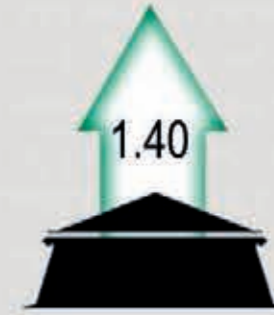


...naturally

INTRODUCTION



Quadruple Skin
U-Value as low as



NaturaLight Polycarbonate Rooflights are manufactured to the highest standards and have been specifically developed for the flat roofing market. We offer one of the widest ranges of rooflights in the UK, and can accommodate bespoke designs to suit any structure.

Our rooflights are manufactured from solid polycarbonate sheets with proprietary UV protection on both sides offering excellent weathering properties and light transmission. Polycarbonate offers a long service life, high impact resistance as well as a variety of glazing options such as clear, diffused, opal and bronze.

Our rooflights are available in a choice of two profiles, the NLS200 Pyramid and the NLS220 Dome in either a Double, Triple or Quadruple skin construction. These can be either combined with UPVC, aluminium or galvanised steel kerbs. Circular dome rooflights are available as a stand alone item or together with aluminium or GRP kerbs.

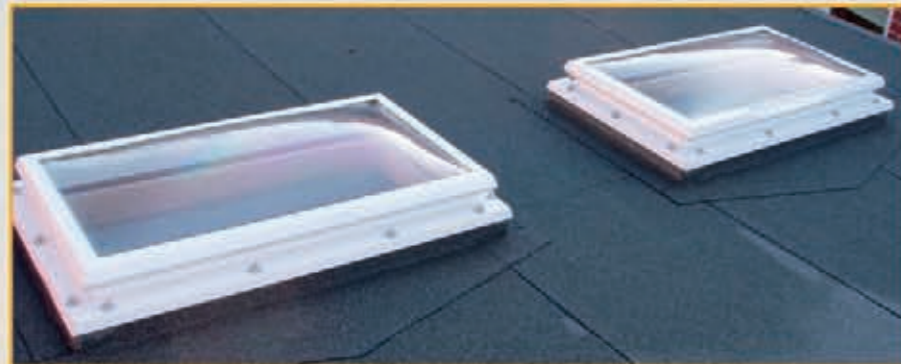
The introduction of additional skins to the manufacturing process helps to improve both thermal and acoustic insulation as well as reducing the possibility of condensation; ultimately providing designers, architects and contractors with a wider range of options.

The benefit of using rooflights go further than just reducing energy consumption; research has shown that increased levels of daylight can aid health, learning and also increase productivity.

Our polycarbonate rooflights are all manufactured at NaturaLight's premises using a thermoforming process which has close similarities with vacuum forming except that greater use is made of air pressure. Each skin of the rooflight is manufactured individually and then combined to make the required rooflight. Each adjacent pair of skins are separated by a 20mm air gap to achieve the best possible thermal efficiency.

All rooflights are manufactured in accordance with harmonised European Standard BS EN 1873:2005 and carry the CE mark. Our range has been tested for fragility by BRE and attains a class B non-fragile assembly classification.

Our polycarbonate rooflights can comply with L1 and L2 of the Building Regulations. All the materials used in the construction of our rooflights and kerbs can be fully recycled.



Rooflights used as a complement to artificial lighting can considerably reduce the annual energy consumption of a building, thereby reducing CO₂ emissions. Increasing the number of rooflights creates a greater potential energy saving.

NaturaLight Glass Rooflights are an alternative glazing to polycarbonate, they are manufactured and designed to the highest standards and can be incorporated into the full kerb range.

To follow the correct procedure for overhead glazing we ensure the use of a safety glass comprising of a toughened outer pane and laminated inner pane. The laminated inner prevents any shards of glass falling back into the building in the event of the glass being broken.

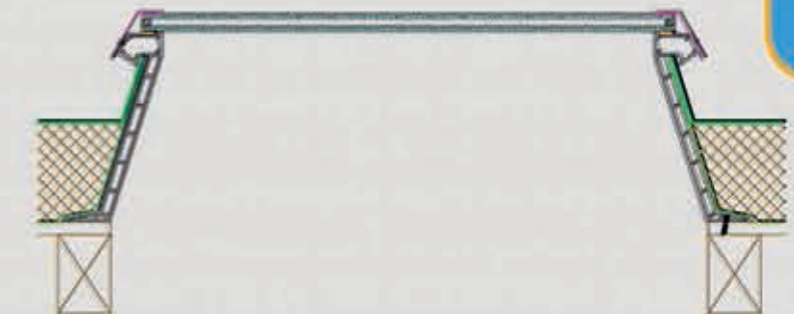
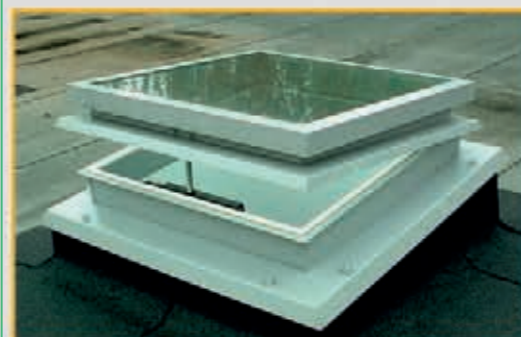
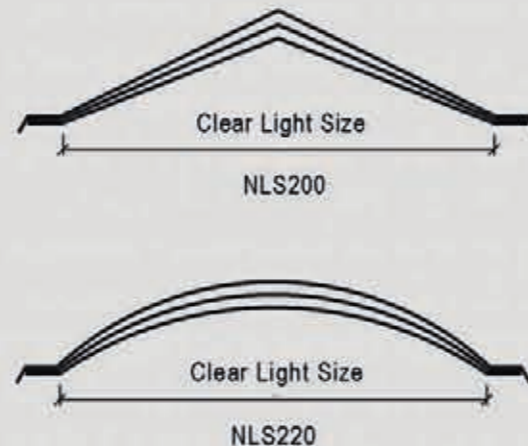
Glass specifications vary widely, from standard clear, self-cleaning or high performance solar controlled glazing, we can accommodate most if not all requirements.

Exceptional U-values can be achieved by using glass rooflights and also offers greater flexibility in achieving a variety of acoustic and solar factors.

The table below shows our standard size range, but we are only too happy to discuss, design and manufacture bespoke sizes

Square	Rectangle	Circular
450 x 450	600 x 900 1000 x 1500	600
600 x 600	600 x 1200 1000 x 2000	750
750 x 750	600 x 1500 1200 x 1500	900
900 x 900	600 x 1800 1200 x 1800	1050
1000 x 1000	600 x 2400 1200 x 2400	1200
1050 x 1050	900 x 1200 1500 x 2400	1350
1200 x 1200	900 x 1350 1800 x 2400	1500
1350 x 1350	900 x 1500	1650
1500 x 1500	900 x 1800	1800
1650 x 1650	900 x 2400	
1800 x 1800		

A dome can be made up to 2.4 metres in diameter using a central roll joint.



...naturally

ROOFLIGHTS



Combined
U-Value as low as



L2
STANDARD
RANGE

NaturaLight's L2 Standard Range is our best-selling UPVC kerb. The range offers a sleek modern design which is Part 'L' compliant. Extruded from high quality UPVC this range offers an integrated water management system to shed water to the outside of the rooflight. Internally the white UPVC provides a clean, smart self-finish.

The L2 Standard range boasts exceptional weld strength due to the UPVC wall thickness. The upper section of the external wall offers a ribbed section to give improved adhesion to a variety of waterproofing systems. The kerb has a high resistance to heat which allows the careful application of 'torch on' roof membranes.

This product range is manufactured using a 'state of the art' CNC manufacturing process which guarantees accuracy and consistency of each unit produced. The range can be used with a Double, Triple or Quadruple skin polycarbonate rooflight. It can also be supplied with a factory fitted, argon filled double glazed glass rooflight to further improve U-values.

The range can be installed into warm roof applications with up to 140mm thick insulation (if Unvented) and still comply with Building Regulations. This range offers a variety of different options, you can choose from Unvented, Hit and Miss Ventilation, Rotary Ventilation, Wormgear opening for maximum ventilation and Access Hatch units should roof level access be required.

The L2 Standard range is 290mm high and it splays in from the base section by 80mm per side. The 70mm base fixing flange allows fixing to flat or inclined roof structures. The U-value for this profile is 1.9 W/m²K.

Unvented (NLS300) – Fixed rooflight and kerb with no ventilation, used for areas that require natural light only.

Hit and Miss Titon Vents (NLS320) – Offer manually operated ventilation via a sliding mechanism mounted internally to the kerb. The vents are opened and closed as required by hand or by pole. The vents can be installed on 2 or 4 sides of the kerb. Ideally used for areas that do not require a high volume of ventilation.

Rotary Vents (NLS330) – Offer manually operated ventilation, with a rotating internal vent which allows the user to open and close the vent as required by hand or by pole. The vents can be installed on 2 or 4 sides of the kerb. Ideally used for areas that do not require a high volume of ventilation.

SecuriLight (NLS600) - To fulfil the requirements of security conscious rooflight applications the 'SecuriLight' offers additional defence against intrusion. The 'SecuriLight' resists likely methods of intrusion when tested to PAS24:2012, annex C.4.3 by way of installing a continuous polyester powder coated perimeter clip to the external flange of the rooflight thus having no fixings apparent to secure the rooflight to the kerb. The clip is installed in such a way that it cannot be removed even by the use of hand tools by a potential opportunist intruder.

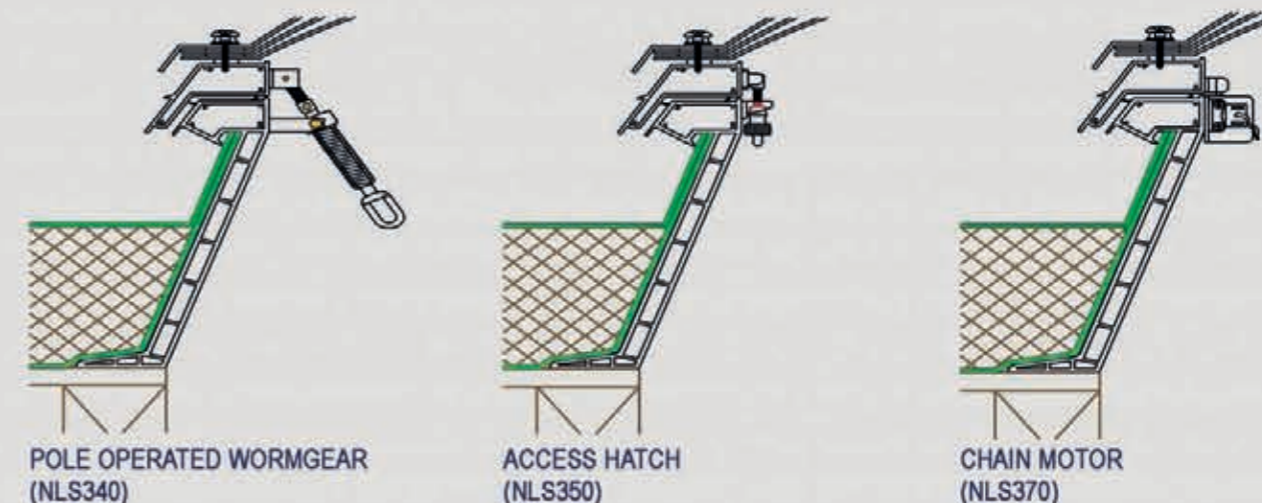
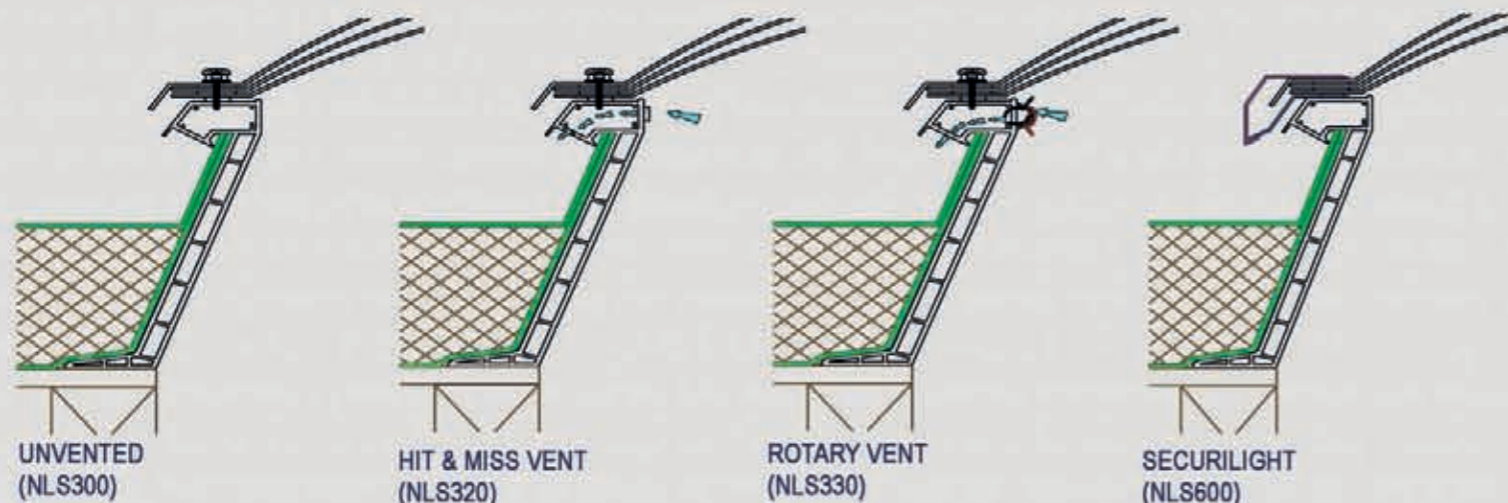
An additional option of a high tensile burglar bar grid is available and can be integrated into the kerb assembly under the rooflight if required.

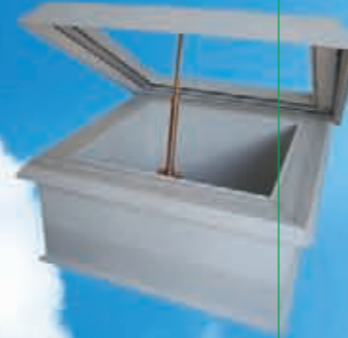
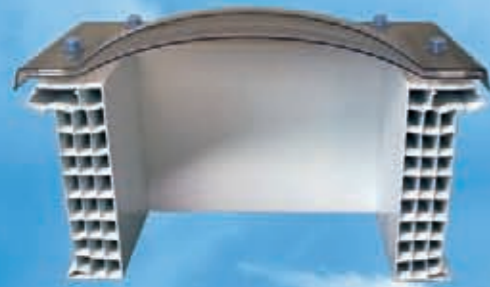
Wormgear (NLS340) - A brass telescopic winding mechanism is mounted internally to a 40mm high UPVC lifting frame which is fitted with galvanised steel reinforcement bars. This mechanism allows the user to remain at ground level and operate the unit with a winding rod. Wormgear rooflights offer a higher level of ventilation and can be opened up to approximately 300mm.



Access Hatch (NLS350) – An opening hatch that utilises 2no gas rams to assist opening, mounted internally to a 40mm high UPVC lifting frame which is fitted with galvanised steel reinforcement bars. The hatch will open to between 80-90 degrees to give ease of access to roof level. The Access Hatch is available with Brighton Catch, Hasp and Staple or key operated locking mechanism.

Chain Motor (NLS370) – Utilises an electrically operated chain motor that is mounted to a 40mm high UPVC lifting frame fitted with galvanised steel reinforcement bars. The motor is available in 24V or 230V options and has the capacity to either be wired to an open/close switch or to a control panel (please note the rooflight will be supplied as standard with the motor only, controls are available at an extra cost). Chain actuated rooflights offer a higher level of ventilation and can be opened to approximately 300mm.





Combined U-Value as low as



L2
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NaturaLight's L2 Advanced Range is one of the most thermally efficient UPVC products on the market. The range offers a sleek modern design which is Part 'L' compliant. Extruded from high quality UPVC this range offers an integrated water management system to shed water to the outside of the rooflight, internally the white UPVC provides a clean, smart self-finish.

The L2 Advanced range boasts exceptional weld strength due to the UPVC wall thickness, the upper section of the external wall offers a ribbed section to give improved adhesion to a variety of waterproofing systems. The kerb has a high resistance to heat which allows the careful application of 'torch on' roof membranes.

This product range is manufactured using a 'state of the art' CNC manufacturing process, this guarantees accuracy and consistency of each unit produced. The range can be used with a Double, Triple or Quadruple skin polycarbonate rooflight, it can also be supplied with a factory fitted, argon filled double glazed glass rooflight to achieve the lowest U-values in the UPVC range.

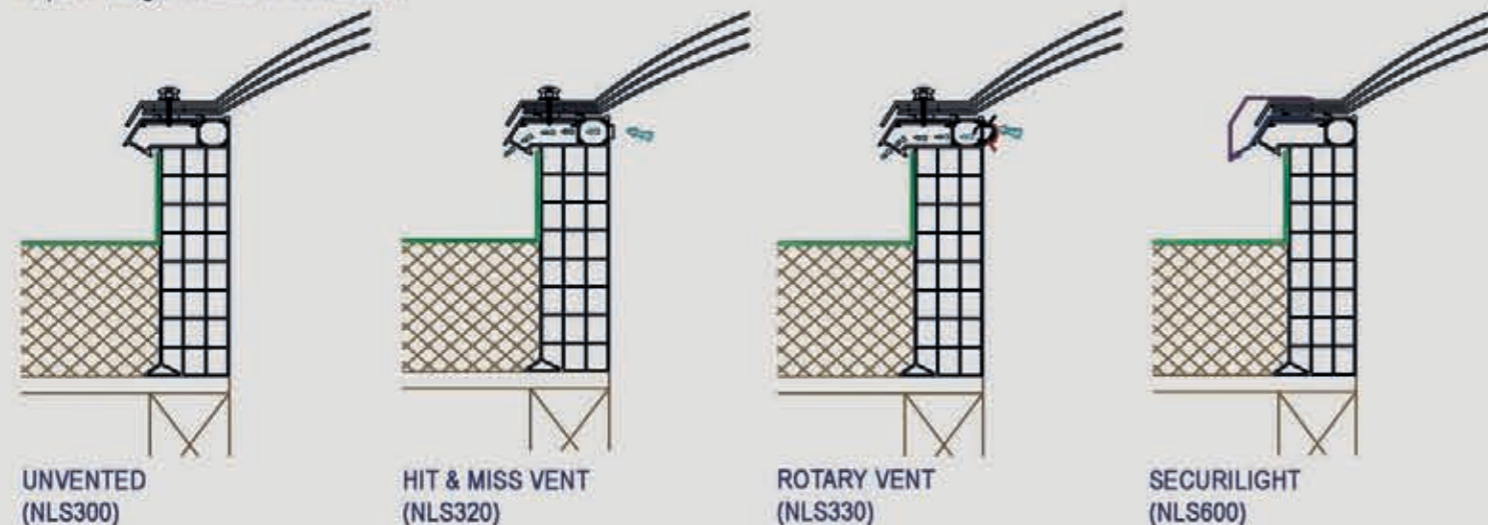
This range can be installed into warm roof applications with up to 150mm thick insulation (if Unvented) and still comply with Building Regulations. It also offers a variety of different options, you can choose from Unvented, Hit and Miss Ventilation, Rotary Ventilation, Wormgear opening for maximum ventilation and Access Hatch units should roof level access be required.

L2 Advanced range is the premier model of the UPVC kerb range it is 300mm high and has an 85mm base section which allows fixing to flat or inclined roof structures. The U-value for this profile is 0.76 W/m²K.

Unvented (NLS300) – Fixed rooflight and kerb with no ventilation, used for areas that require natural light only.

Hit and Miss Titon Vents (NLS320) – Offer manually operated ventilation via a sliding mechanism mounted internally to the kerb. The vents are opened and closed as required by hand or by pole. The vents can be installed on 2 or 4 sides of the kerb. Ideally used for areas that do not require a high volume of ventilation.

Rotary Vents (NLS330) – Offer manually operated ventilation, with a rotating internal vent which allows the user to open and close the vent as required by hand or by pole. The vents can be installed on 2 or 4 sides of the kerb. Ideally used for areas that do not require a high volume of ventilation.



SecuriLight (NLS600) - To fulfil the requirements of security conscious rooflight applications the 'SecuriLight' offers additional defence against intrusion. The 'SecuriLight' resists likely methods of intrusion when tested to PAS24:2012, annex C.4.3 by way of installing a continuous polyester powder coated perimeter clip to the external flange of the rooflight thus having no fixings apparent to secure the rooflight to the kerb. The clip is installed in such a way that it cannot be removed even by the use of hand tools by a potential opportunist intruder.

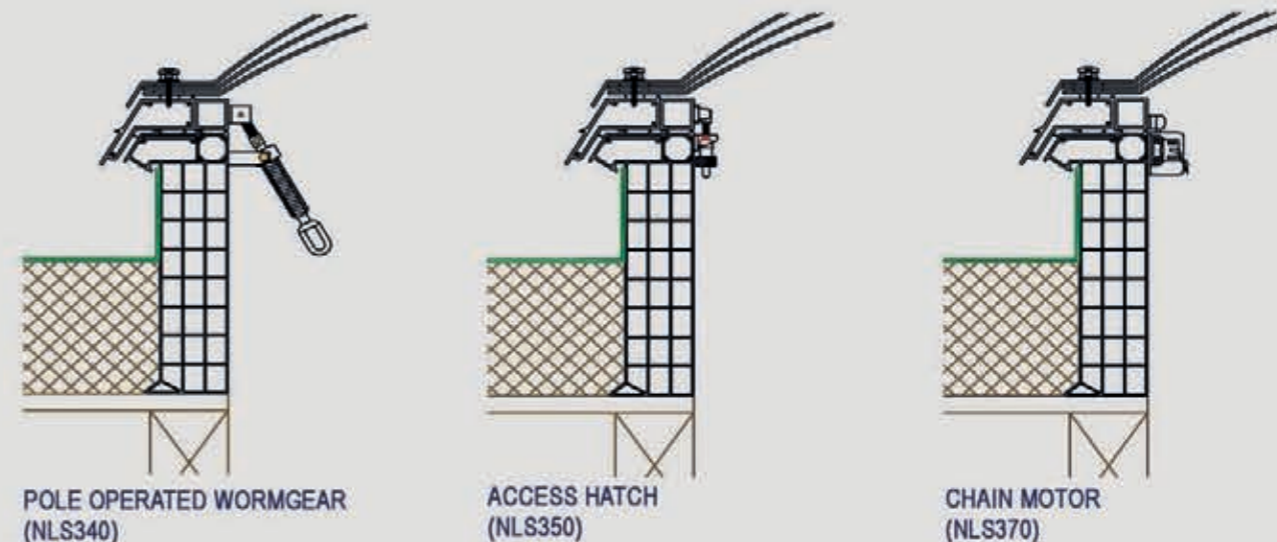
An additional option of a high tensile burglar bar grid is available and can be integrated into the kerb assembly under the rooflight if required.

Wormgear (NLS340) - A brass telescopic winding mechanism is mounted internally to a 40mm high UPVC lifting frame which is fitted with galvanised steel reinforcement bars. This mechanism allows the user to remain at ground level and operate the unit with a winding rod. Wormgear rooflights offer a higher level of ventilation and can be opened up to approximately 300mm.



Access Hatch (NLS350) – An opening hatch that utilises 2no gas rams to assist opening, mounted internally to a 40mm high UPVC lifting frame which is fitted with galvanised steel reinforcement bars. The hatch will open to between 80-90 degrees to give ease of access to roof level. The Access Hatch is available with Brighton Catch, Hasp and Staple or key operated locking mechanism.

Chain Motor (NLS370) – Utilises an electrically operated chain motor that is mounted to a 40mm high UPVC lifting frame fitted with galvanised steel reinforcement bars. The motor is available in 24V or 230V options and has the capacity to either be wired to an open/close switch or to a control panel (please note the rooflight will be supplied as standard with the motor only, controls are available at an extra cost). Chain actuated rooflights offer a higher level of ventilation and can be opened to approximately 300mm.





Combined U-Value as low as



L2

SECURITY

ADAPTOR

NaturaLight's UPVC L2 Security Adaptor Range is one of the most secure UPVC products on the market. The range offers a sleek modern design which is Part 'L' compliant. Extruded from high quality enhanced UPVC this range offers an integrated water management system to shed water to the outside of the rooflight.

The L2 Security Adaptor has been designed to meet the needs of 'security conscious' projects and boasts a method of internally fixing the rooflight kerb to the structure, as a result of this, when it is installed no fixings are visible or accessible from the external of the kerb.

This product range is manufactured using a 'state of the art' CNC manufacturing process which guarantees accuracy and consistency of each unit produced. The range can be used with a Double, Triple or Quadruple skin polycarbonate rooflight. It can also be supplied with a factory fitted, argon filled double glazed glass rooflight to further improve U-values.

The range is to be used for direct fixing to a roof upstand structure and has been specifically designed to give the end user a Building Regulation compliant product with maximum ease of installation it also offers a variety of different options, you can choose from Unvented, Ventilation, Rotary Ventilation, Wormgear opening for maximum ventilation and Access Hatch units should roof level access be required.

The L2 Security Adapter range is 80mm high and has a 100mm internal fixing flange which secures the kerb internally to flat or inclined roof structures where additional security may be required. The U-value for this profile is exceptional.

Unvented (NLS300) – Fixed rooflight and kerb with no ventilation, used for areas that require natural light only.

Hit and Miss Titon Vents (NLS320) – Offer manually operated ventilation via a sliding mechanism mounted internally to the kerb. The vents are opened and closed as required by hand or by pole. The vents can be installed on 2 or 4 sides of the kerb. Ideally used for areas that do not require a high volume of ventilation.

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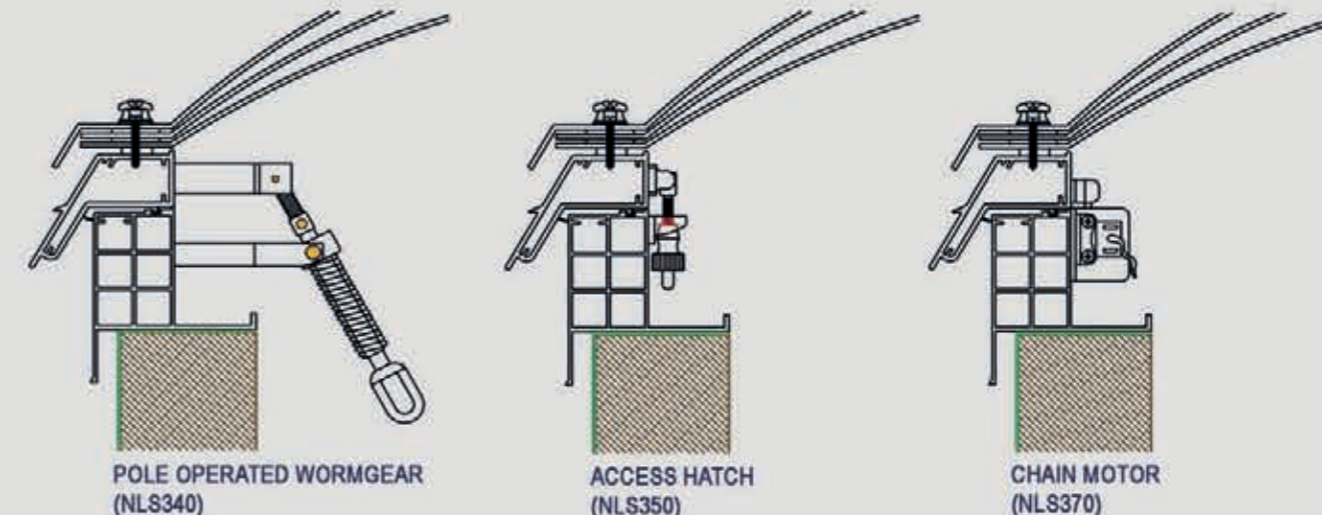
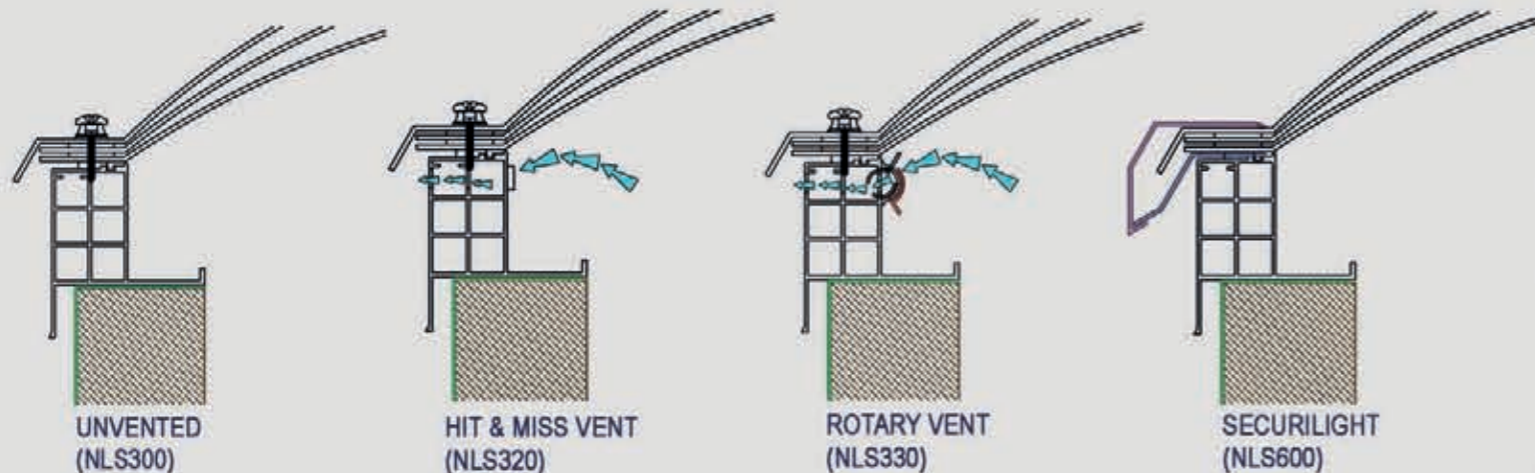
An additional option of a high tensile burglar bar grid is available and can be integrated into the kerb assembly under the rooflight if required.

Wormgear (NLS340) - A brass telescopic winding mechanism is mounted internally to a 40mm high UPVC lifting frame which is fitted with galvanised steel reinforcement bars. This mechanism allows the user to remain at ground level and operate the unit with a winding rod. Wormgear rooflights offer a higher level of ventilation and can be opened up to approximately 300mm.



Access Hatch (NLS350) – An opening hatch that utilises 2no gas rams to assist opening, mounted internally to a 40mm high UPVC lifting frame which is fitted with galvanised steel reinforcement bars. The hatch will open to between 80-90 degrees to give ease of access to roof level. The Access Hatch is available with Brighton Catch, Hasp and Staple or key operated locking mechanism.

Chain Motor (NLS370) – Utilises an electrically operated chain motor that is mounted to a 40mm high UPVC lifting frame fitted with galvanised steel reinforcement bars. The motor is available in 24V or 230V options and has the capacity to either be wired to an open/close switch or to a control panel (please note the rooflight will be supplied as standard with the motor only, controls are available at an extra cost). Chain actuated rooflights offer a higher level of ventilation and can be opened to approximately 300mm.





Combined
U-Value as low as



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NaturalLight's L2 Splayed Adaptor Range is one of the most versatile UPVC products on the market. The range offers a sleek modern design which is Part 'L' compliant. Extruded from high quality UPVC this range offers an integrated water management system to shed water to the outside of the rooflight. Internally the white UPVC provides a clean, smart self-finish.

The L2 Splayed Adaptor range can be used on any existing upstand and is an ideal product to use where an existing rooflight needs to be changed to allow increased ventilation or access to the roof, as it can be easily retro fitted without the need for additional waterproofing.

This product range is manufactured using a 'state of the art' CNC manufacturing process which guarantees accuracy and consistency of each unit produced. This range can be used with a Double, Triple or Quadruple skin polycarbonate rooflight. It can also be supplied with a factory fitted, argon filled double glazed glass rooflight to achieve improved U-values.

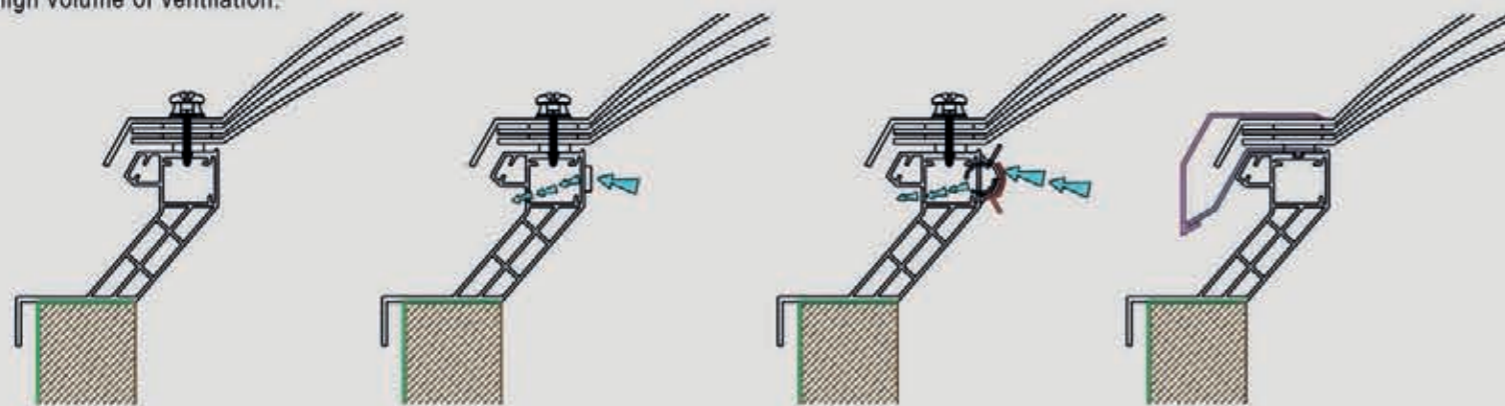
The L2 Splayed Adaptor range is to be used for direct fixing to a roof upstand structure and has been specifically designed to give the end user a Building Regulation compliant product with maximum ease of installation. It also offers a variety of different options, you can choose from Unvented, Hit and Miss Ventilation, Rotary Ventilation, Wormgear opening for maximum ventilation and Access Hatch units should roof level access be required.

The L2 Splayed Adaptor range is 90mm high and splays from the base section by 50mm per side and has a base fixing flange of 71.5mm, which allows it to be fitted onto existing structures such as timber or concrete upstands on flat or inclined roofs. The U-value for this profile is 1.7 W/m²K

Unvented (NLS300) – Fixed rooflight and kerb with no ventilation, used for areas that require natural light only.

Hit and Miss Titon Vents (NLS320) – Offer manually operated ventilation via a sliding mechanism mounted internally to the kerb. The vents are opened and closed as required by hand or by pole. The vents can be installed on 2 or 4 sides of the kerb. Ideally used for areas that do not require a high volume of ventilation.

Rotary Vents (NLS330) – Offer manually operated ventilation, with a rotating internal vent which allows the user to open and close the vent as required by hand or by pole. The vents can be installed on 2 or 4 sides of the kerb. Ideally used for areas that do not require a high volume of ventilation.



UNVENTED
(NLS300)

HIT & MISS VENT
(NLS320)

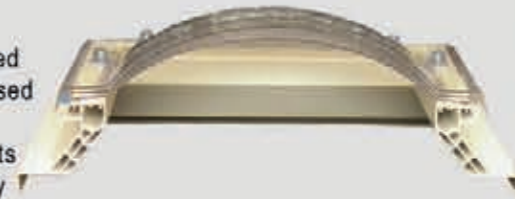
ROTARY VENT
(NLS330)

SECURILIGHT
(NLS600)

SecuriLight (NLS600) - To fulfil the requirements of security conscious rooflight applications the 'SecuriLight' offers additional defence against intrusion. The 'SecuriLight' resists likely methods of intrusion when tested to PAS24:2012, annex C.4.3 by way of installing a continuous polyester powder coated perimeter clip to the external flange of the rooflight thus having no fixings apparent to secure the rooflight to the kerb. The clip is installed in such a way that it cannot be removed even by the use of hand tools by a potential opportunist intruder.

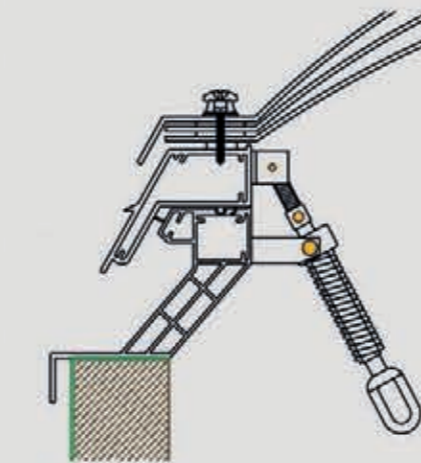
An additional option of a high tensile burglar bar grid is available and can be integrated into the kerb assembly under the rooflight if required.

Wormgear (NLS340) - A brass telescopic winding mechanism is mounted internally to a 40mm high UPVC lifting frame which is fitted with galvanised steel reinforcement bars. This mechanism allows the user to remain at ground level and operate the unit with a winding rod. Wormgear rooflights offer a higher level of ventilation and can be opened up to approximately 300mm.

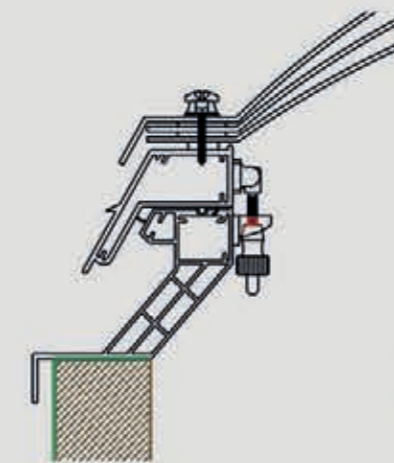


Access Hatch (NLS350) – An opening hatch that utilises 2no gas rams to assist opening, mounted internally to a 40mm high UPVC lifting frame which is fitted with galvanised steel reinforcement bars. The hatch will open to between 80-90 degrees to give ease of access to roof level. The Access Hatch is available with Brighton Catch, Hasp and Staple or key operated locking mechanism.

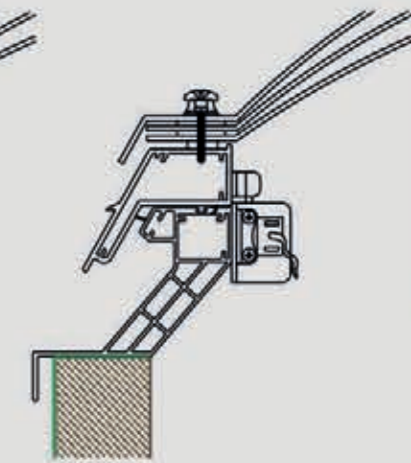
Chain Motor (NLS370) – Utilises an electrically operated chain motor that is mounted to a 40mm high UPVC lifting frame fitted with galvanised steel reinforcement bars. The motor is available in 24V or 230V options and has the capacity to either be wired to an open/close switch or to a control panel (please note the rooflight will be supplied as standard with the motor only, controls are available at an extra cost). Chain actuated rooflights offer a higher level of ventilation and can be opened to approximately 300mm.



POLE OPERATED WORMGEAR
(NLS340)



ACCESS HATCH
(NLS350)



CHAIN MOTOR
(NLS370)



Combined U-Value as low as



L2
TRADE
RANGE

NaturaLight's L2 Trade Range is one of the most competitive UPVC products on the market. The range offers a sleek modern design which is Part 'L' compliant. Extruded from high quality UPVC this range offers an integrated water management system to shed water to the outside of the rooflight. Internally the white UPVC provides a clean, smart self-finish.

The L2 Trade Range offers a ribbed section to the upper section of the external wall to give improved adhesion to a variety of waterproofing systems, it is manufactured using a 'state of the art' CNC manufacturing process, which guarantees accuracy and consistency of each unit produced.

This range can be used with a Double, Triple or Quadruple skin polycarbonate rooflight. It can also be supplied with a factory fitted, argon filled double glazed glass rooflight to further improve U-values.

Designed to be installed at the finished roof level it is therefore the ideal choice for retro fitting to an existing flat roof. The range offers a variety of different options. You can choose from Unvented, Hit and Miss Ventilation, Rotary Ventilation, Wormgear opening for maximum ventilation and Access Hatch units should roof level access be required.

The Trade Range is 168mm high. It splays in from the base section by 100mm per side. The 60mm base fixing flange allows fixing to flat or inclined roof structures. The U-value for this profile is 2.05 W/m²K.

Unvented (NLS300) – Fixed rooflight and kerb with no ventilation, used for areas that require natural light only.

Hit and Miss Titon Vents (NLS320) – Offer manually operated ventilation via a sliding mechanism mounted internally to the kerb. The vents are opened and closed as required by hand or by pole. The vents can be installed on 2 or 4 sides of the kerb. Ideally used for areas that do not require a high volume of ventilation.

Rotary Vents (NLS330) – Offer manually operated ventilation, with a rotating internal vent which allows the user to open and close the vent as required by hand or by pole. The vents can be installed on 2 or 4 sides of the kerb. Ideally used for areas that do not require a high volume of ventilation.

SecuriLight (NLS600) - To fulfil the requirements of security conscious rooflight applications the 'SecuriLight' offers additional defence against intrusion. The 'SecuriLight' resists likely methods of intrusion when tested to PAS24:2012, annex C.4.3 by way of installing a continuous polyester powder coated perimeter clip to the external flange of the rooflight thus having no fixings apparent to secure the rooflight to the kerb. The clip is installed in such a way that it cannot be removed even by the use of hand tools by a potential opportunist intruder.

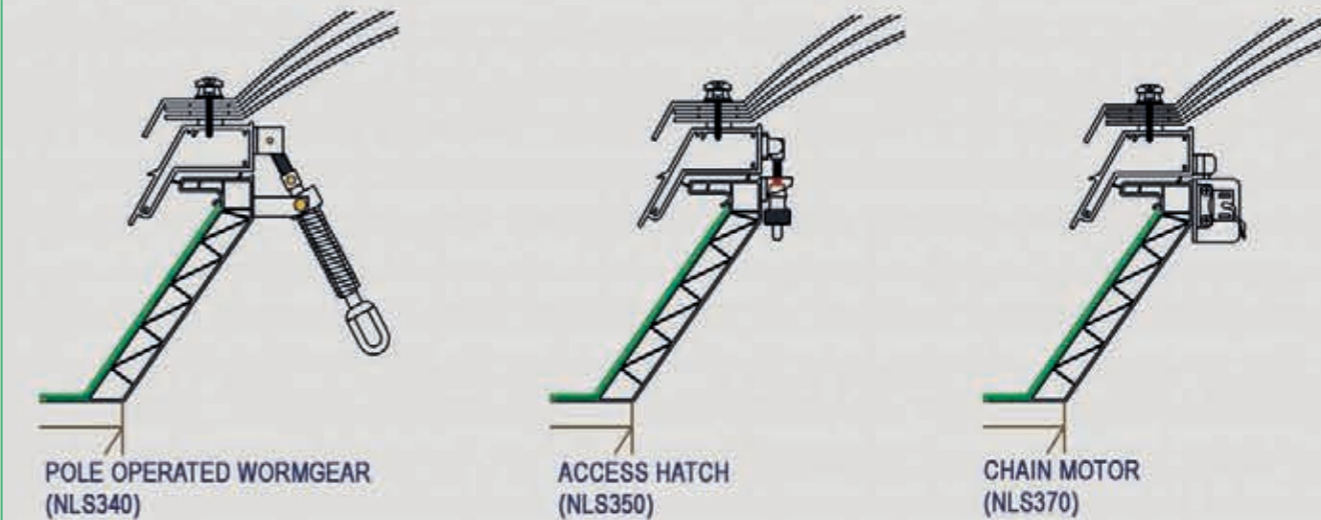
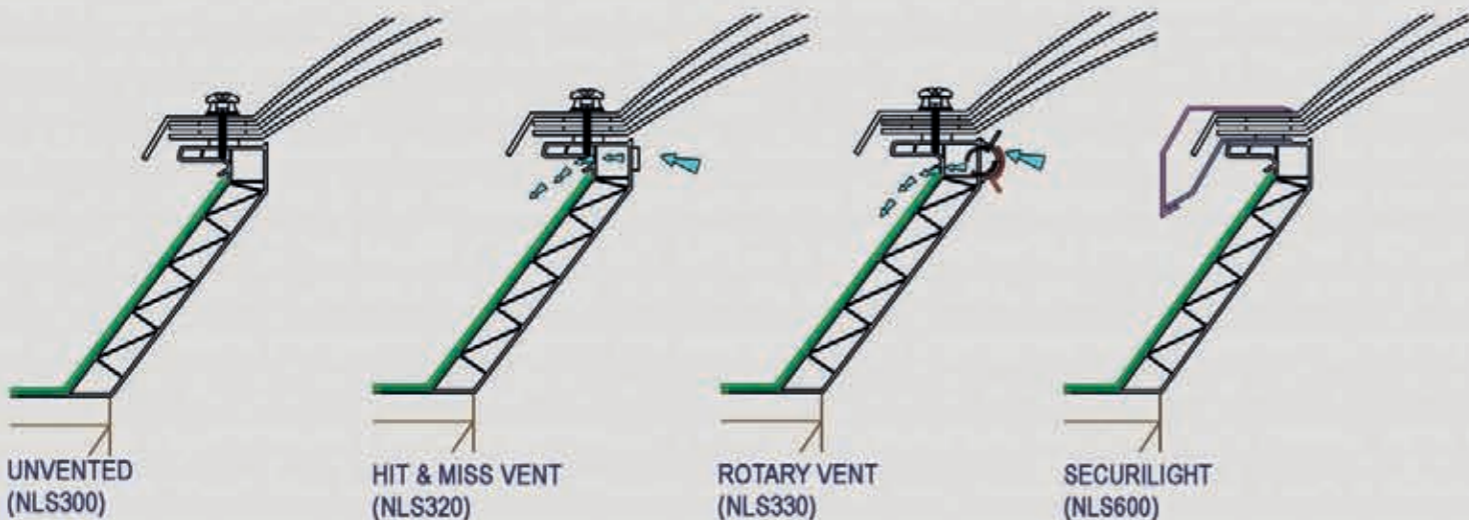
An additional option of a high tensile burglar bar grid is available and can be integrated into the kerb assembly under the rooflight if required.

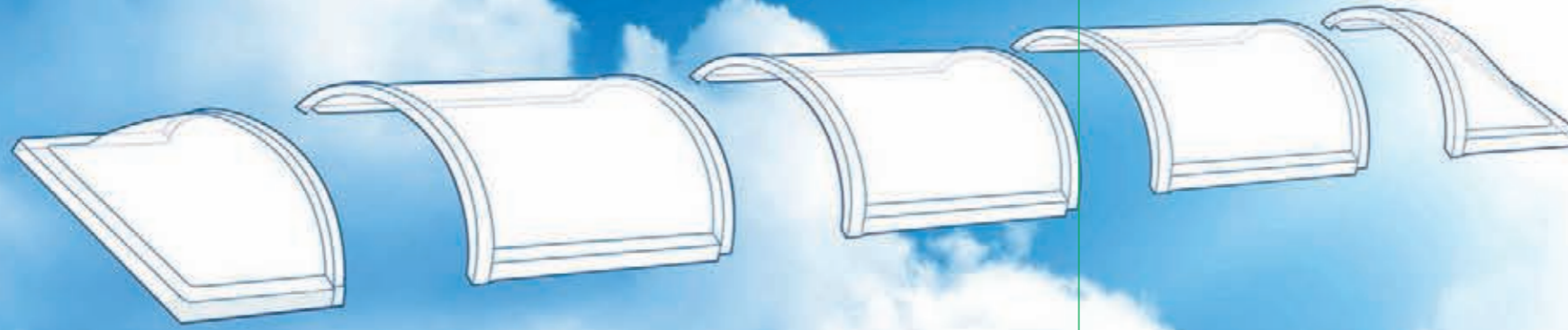
Wormgear (NLS340) - A brass telescopic winding mechanism is mounted internally to a 40mm high UPVC lifting frame which is fitted with galvanised steel reinforcement bars. This mechanism allows the user to remain at ground level and operate the unit with a winding rod. Wormgear rooflights offer a higher level of ventilation and can be opened up to approximately 300mm.



Access Hatch (NLS350) – An opening hatch that utilises 2no gas rams to assist opening, mounted internally to a 40mm high UPVC lifting frame which is fitted with galvanised steel reinforcement bars. The hatch will open to between 80-90 degrees to give ease of access to roof level. The Access Hatch is available with Brighton Catch, Hasp and Staple or key operated locking mechanism.

Chain Motor (NLS370) – Utilises an electrically operated chain motor that is mounted to a 40mm high UPVC lifting frame fitted with galvanised steel reinforcement bars. The motor is available in 24V or 230V options and has the capacity to either be wired to an open/close switch or to a control panel (please note the rooflight will be supplied as standard with the motor only, controls are available at an extra cost). Chain actuated rooflights offer a higher level of ventilation and can be opened to approximately 300mm.





Quadruple Skin
U-Value as low as



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NaturaLight's Thermoformed Barrel Vault Rooflight (NLS210) is unique in its ability to glaze an infinite length. It is manufactured to the same exacting standards as our standard rooflight range using UV protected polycarbonate which has an extremely high impact strength and optical clarity, making it the ideal material for this product.

As with the standard range of rooflights it can be manufactured in clear, bronze, opal or diffused polycarbonate or in any permutation of the various polycarbonate tints.

A Thermoformed Barrel Vault rooflight is very easy to assemble and is designed to give maximum light and weather protection. It is made to measure in various widths up to 2400mm. Available as one of our standard products, it is typically manufactured in 1000mm modules with custom end sections designed to provide the required overall length. All sections are interlocking and therefore can be used to glaze a variety of expanses.

The modular design of this rooflight facilitates ease of delivery to site, distribution to roof level and installation. The thermoforming process produces a very cost effective product as no material other than the polycarbonate is needed during the manufacturing process.

Available in a Double, Triple or Quadruple skin construction it can be fitted to any of our UPVC kerb ranges in addition to being installed directly onto a timber or concrete builders upstand.

Constructed from a light weight but robust material it is designed to be user friendly and aesthetically pleasing with its low profile design, the Thermoformed Barrel Vault is the natural choice to give maximum daylight on large projects.

The introduction of additional skins helps to improve both thermal and acoustic insulation as well as reducing the possibility of condensation.

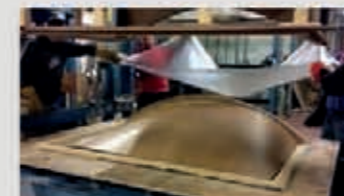
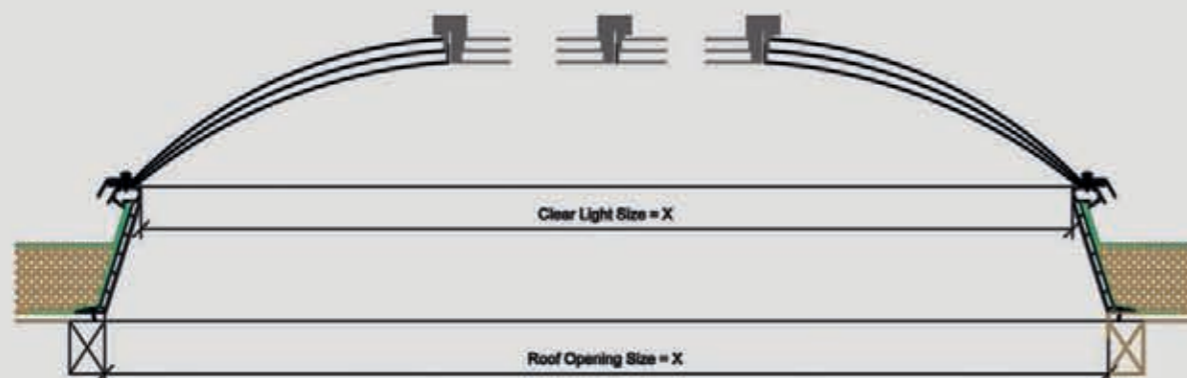
Our polycarbonate rooflights are all manufactured at NaturaLight premises using a thermoforming process which has close similarities with vacuum forming except that greater use is made of air pressure. Each skin of the rooflight is manufactured individually and then combined to make the required rooflight. Each adjacent pair of skins are separated by a 20mm air gap to achieve the best possible thermal efficiency.

Our Thermoformed polycarbonate Barrel Vaults can comply with both Part L1 and L2 of the Building Regulations. It has exceptional impact resistance and has been vigorously tested by the Building Research Establishment (BRE) for non-fragility.



Standard CLS widths by any length you require

450	1500
600	1650
750	1800
900	1950
1000	2000
1050	2100
1200	2250
1350	2400





Combined
U-Value as low as

0.90



L2
SECURIGLAZE

NaturaLight's L2 SecuriGlaze Range is new to the market place and offers a new modern design to glass rooflight solutions.

Extruded from high quality UPVC this range offers an integrated water management system to shed water to the outside of the rooflight. The framework is fully gasketed with Thermo-Plastic Elastomer (TPE) gasket seals. Outstanding weather tightness is achieved by using flexible (TPE) gasket seals to both internal and external profiles.

The L2 SecuriGlaze range has been specifically designed to be utilised as a security conscious glass rooflight assembly. It is internally fixed to either an upstand structure in its own right or integrated into any of the L2 UPVC rooflight kerb ranges to give flexibility to suit most flat or inclined roofing applications.

Although primarily adopting a security conscious method of installation, no fixings are visible from the external of the rooflight or from the internal of the building bringing a new dimension to rooflight aesthetic design.

The 112mm high UPVC SecuriGlaze range utilises a bead clip arrangement to secure the glazing and can accept a Double or Triple glazed glass from 22.4mm to 32.8mm thickness. With the flexibility to use a variety of glass thicknesses and specifications the SecuriGlaze range can offer exceptionally low U-values.

For ventilation purposes the SecuriGlaze can be incorporated into any of the L2 kerb systems utilising Hit and Miss or Rotary Ventilation options.

Unvented (NLS 300) – Fixed glass rooflight in SecuriGlaze frame with no ventilation, used for areas that require natural light only.

Hit and Miss Titon Vents (NLS320) – Offer manually operated ventilation via a sliding mechanism mounted internally to the kerb. The vents are opened and closed as required by hand or by pole. The vents can be installed on 2 or 4 sides of the kerb. Ideally used for areas that do not require a high volume of ventilation.

Rotary Vents (NLS330) – Offer manually operated ventilation, with a rotating internal vent which allows the user to open and close the vent as required by hand or by pole. The vents can be installed on 2 or 4 sides of the kerb. Ideally used for areas that do not require a high volume of ventilation.

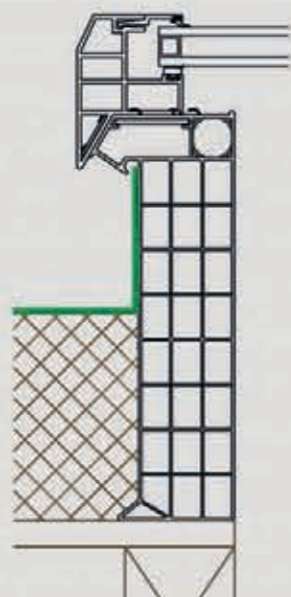


Wormgear (NLS340) - Utilises a brass telescopic winding mechanism is mounted to the SecuriGlaze frame above the base kerb. This mechanism allows the user to remain at ground level and operate the unit with a winding rod. Wormgear rooflights offer a higher level of ventilation and can be opened up to approximately 300mm.

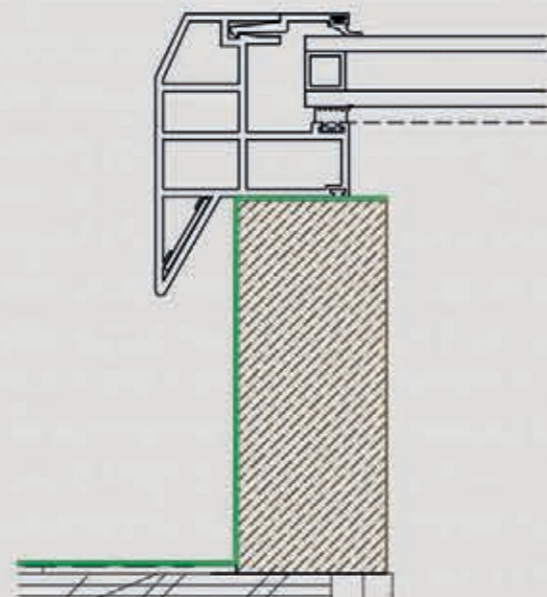
Chain Motor (NLS370) – Utilises an electrically operated chain motor that is mounted to the SecuriGlaze frame. The motor is available in 24V or 230V options and has the capacity to either be wired to an open/close switch or to a control panel (please note the rooflight will be supplied as standard with the motor only, controls are available at an extra cost). Chain actuated rooflights offer a higher level of ventilation and can be opened to approximately 300mm.



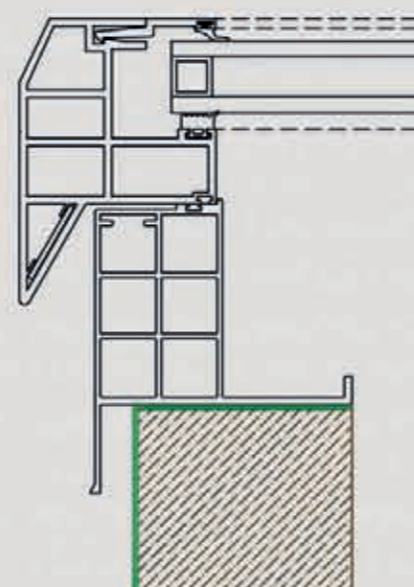
NLS L2 STANDARD



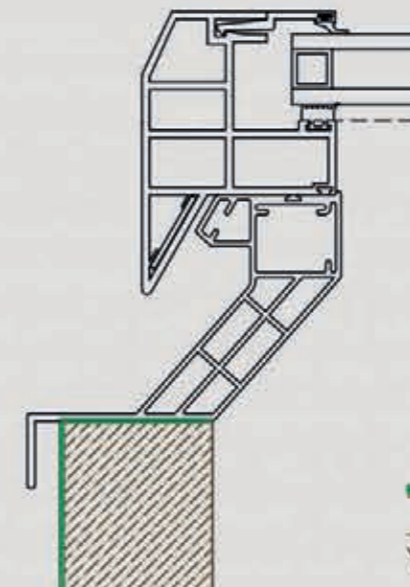
NLS L2 ADVANCED



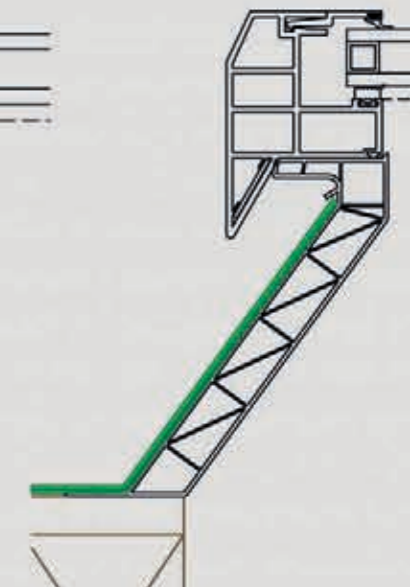
DIRECT BUILDERS UPSTAND



NLS L2 VERTICAL ADAPTOR



NLS L2 ADAPTOR



NLS L2 TRADE RANGE