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The logo for 'ritchlightultra' features the brand name in a bold, lowercase sans-serif font. Above the 'i' in 'light' is a small, stylized blue and white graphic element resembling a light beam or a cloud fragment.

ritchlightultra



The natural choice for natural light



- XX Our company, our passion
- XX The Ritchlight Ultra difference
- XX Passionate about service
 - X Benefits of daylight:
 - At work
 - Shopping
 - Brighter students
 - Living
- XX Meeting Part L
- XX Configurations
- XX Glazing bar systems
- XX Upstand specifications
- XX Ventilation
- XX Glazing options
- XX The next stage



Our company, our passion

Ritchlight Ultra is the latest example of blue sky thinking from Brett Martin Daylight Systems. We are the UK's biggest, most innovative skylight manufacturer, supplying the most comprehensive range of skylights available from a single source, and supporting this with expert advice on design specification and installation. All the service you'd expect from the industry specialists. All the know-how you need to make the most of Earth's most abundant, life-enhancing, energy saving natural resource: daylight. Established in 1953 we have built our reputation on superbly engineered products (ISO9001:2000) and environmental responsibility (ISO14001).

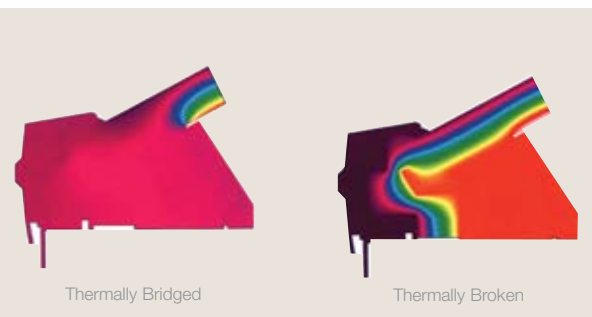
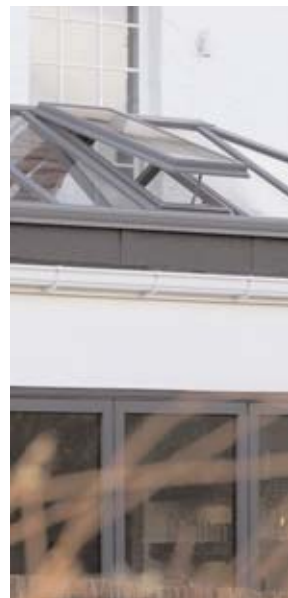
We are passionate about our products, Managing Director Tom Oglvie, insists that we must be equally passionate about how they improve the environment



The Richlight Ultra difference

Ritchlight Ultra is the latest development of Brett Martin's popular and versatile glazing system: the ideal way to create **architecturally stunning pitched skylights** in a variety of shapes, sizes, frame colours and glazing options. In line with today's increasing emphasis on sustainability, we have added a **unique thermal break** to Ritchlight's already **outstanding engineering**. This splits the internal and external components to prevent thermal bridging, and results in a skylight system that's ultra effective at keeping heat in as well as bringing in natural light. Improved insulation means **minimal condensation** too.

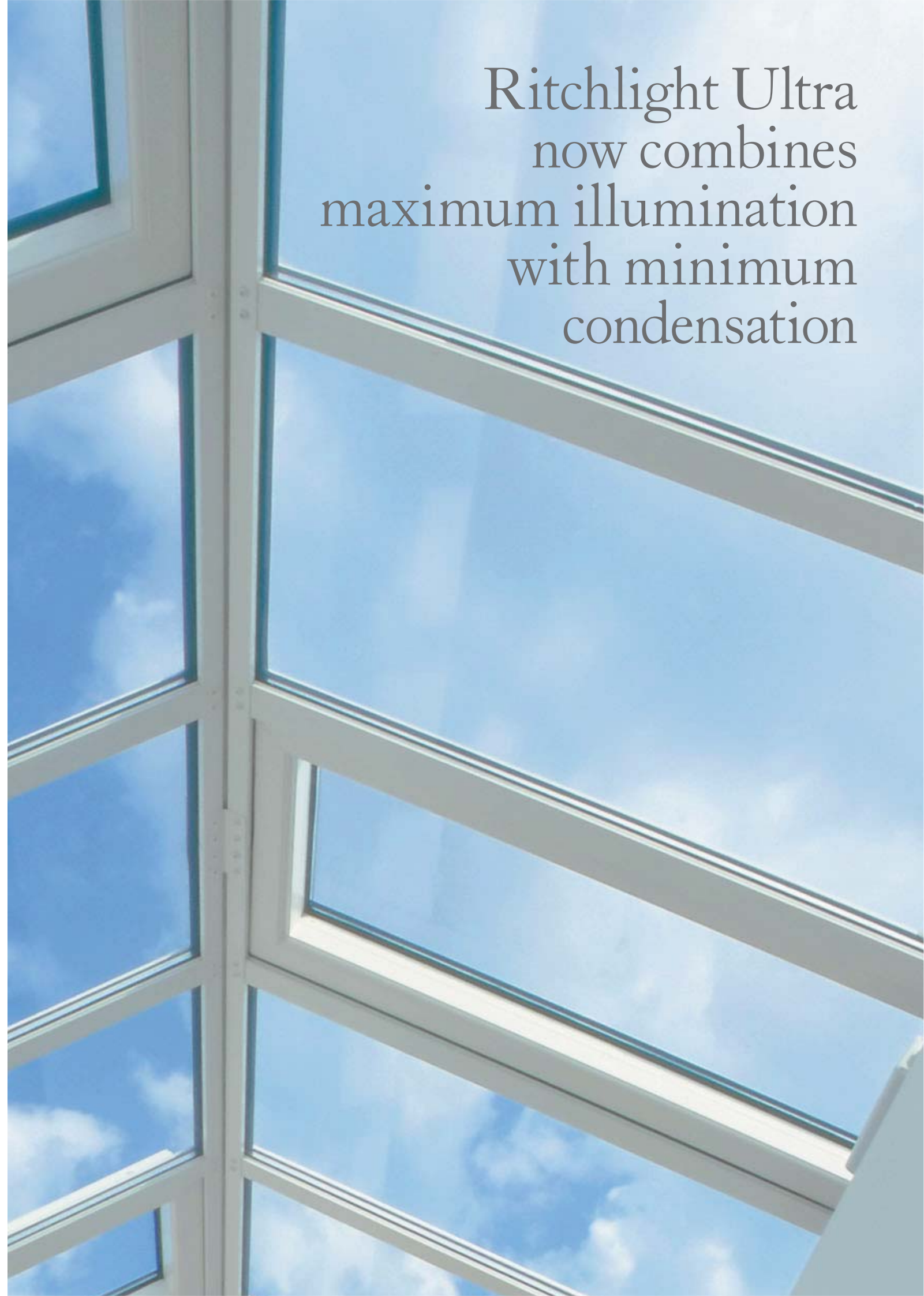
Each precision-engineered Ritchlight Ultra system is **custom built**. Able to span up to 5 metres (or more with a subframe) and any run length, the possibilities are limitless. Ritchlight Ultra skylights are widely specified for **schools, public buildings, retail developments and homes** both newbuild and refurbishment – ideal for flat roofs and ridge glazing and perfect, too, for creating covered courtyards. Once installed, Ritchlight Ultra skylights combine their spectacular aesthetics with **outstanding weather resistance**, durability, reliability and the reassurance of a **20-year warranty**.



The innovation that makes Ritchlight Ultra so special is the addition of the thermal break. This splits the aluminium structure into internal and external components with no thermal bridging in between. As a result, heat on the inside of the skylight can't cross the divide and disappear into the outside world.

The result is a skylight with greatly enhanced thermal insulation properties. Condensation occurs when warm moist air meets a cold surface, and the thermal break helps keep the interior side of the skylight warm. So, as well helping the roof to achieve optimum U-values, Ritchlight Ultra's design means minimal condensation.

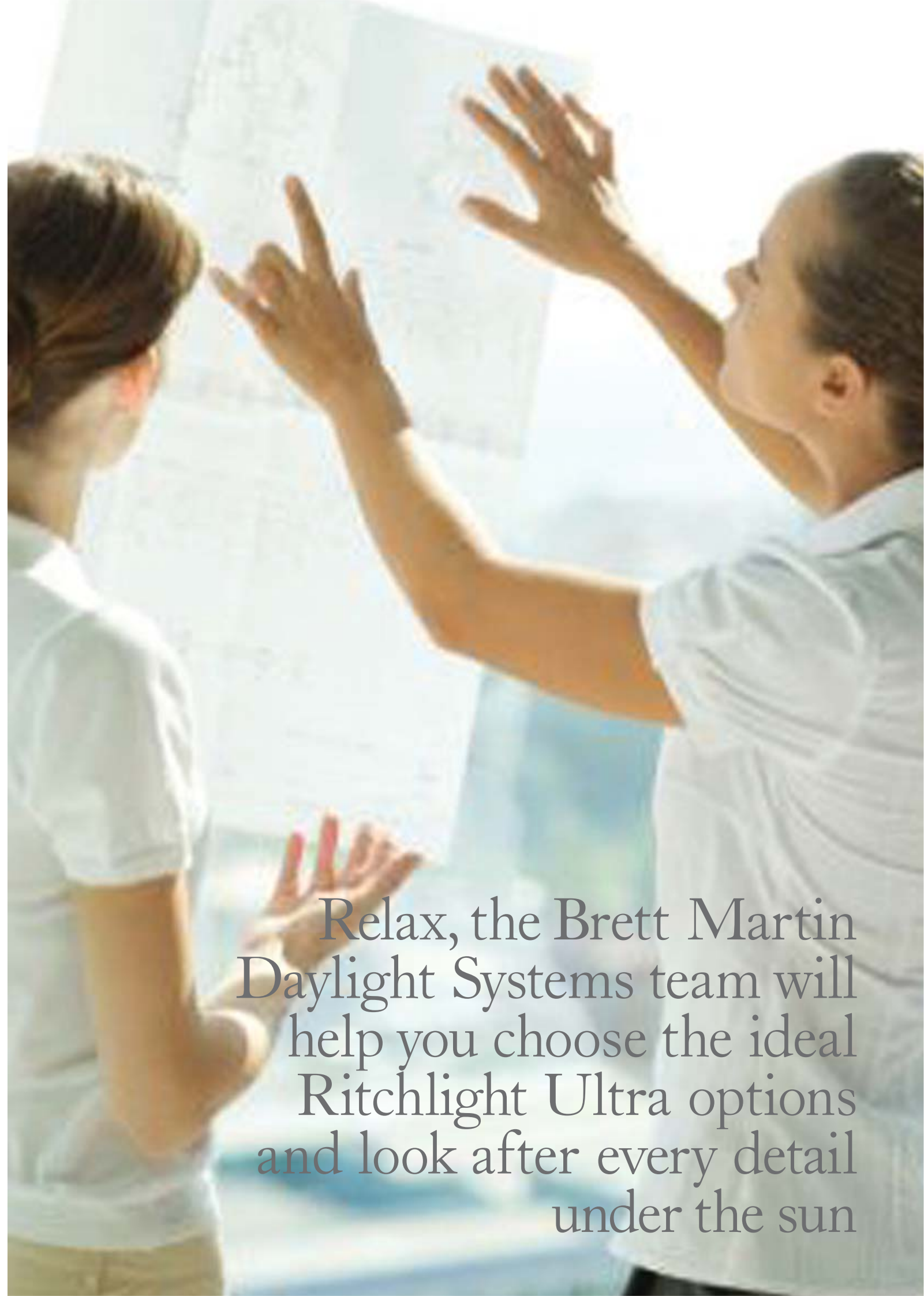
Ritchlight Ultra
now combines
maximum illumination
with minimum
condensation



Passionate about service

The key is to involve the Brett Martin Daylight Systems team as early as possible. We'll help you specify the most appropriate skylights with expert impartial advice. Then we'll come to your site and measure up, look at your plans and discuss, **design options, positioning of skylights** and all the **technical issues** involved, including the tougher than ever Building Regulations and other legislation.

We'll provide **full drawings** and **technical calculations** if required. Every skylight is manufactured in our state of the art, BS EN ISO9001:2000 - approved factory with meticulous **quality control** and attention to detail, backed by long **comprehensive guarantees**, and delivered promptly to site. You can opt to install your Ritchlight Ultra skylight yourself, or leave it to Brett Martin Daylight Systems' **trained and approved craftsmen**. In either case, our friendly, flexible **customer service team** will be available at all times - supervising the project **every step** of the way.



Relax, the Brett Martin Daylight Systems team will help you choose the ideal Ritchlight Ultra options and look after every detail under the sun

Brighter students

Natural light is proven to make students brighter as well as classrooms. Research clearly shows that daylight **reduces stress**, improves **attention spans** and **promotes learning**. The most illuminating evidence for including Ritchlight Ultra skylights in educational projects is a widely reported California Board for Energy Efficiency study, which found that, in classrooms with the most daylighting, **learning progressed 20% faster in maths** and **25% faster in reading**. Ritchlight Ultra's flexibility makes it child's play to create a **covered all-weather play area** (as recommended for every primary school in The Department for Education's Building Bulletin BB82) or turn a neglected courtyard into an **extra classroom**. The work can be completed with **minimal disturbance** by Brett Martin Daylight Systems fully trained and **employed installers**.

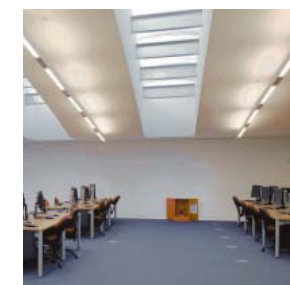


Designing schools?
The Department
of Education
urges you to make
daylight the primary
means of lighting
whenever possible

At work

Again research proves what common sense suggests anyway: that natural light in the workplace **increases productivity, reduces absenteeism** and improves the **speed and accuracy with which people perform everyday tasks**. Many government regulations and guides have been written to take account of these findings. In fact the educational, retail and **productivity** benefits of installing **Ritchlight Ultra** skylights are all based upon the same profound and indisputable physiological facts: natural light stimulates and regulates the release of the mood-enhancing neurotransmitter, serotonin by the body. Ultraviolet light from the sun also **promotes Vitamin D** production, which helps to build healthy teeth and bones by producing calcium.

Government regulations insist that every workplace must have suitable and sufficient lighting. People work better when it's natural light

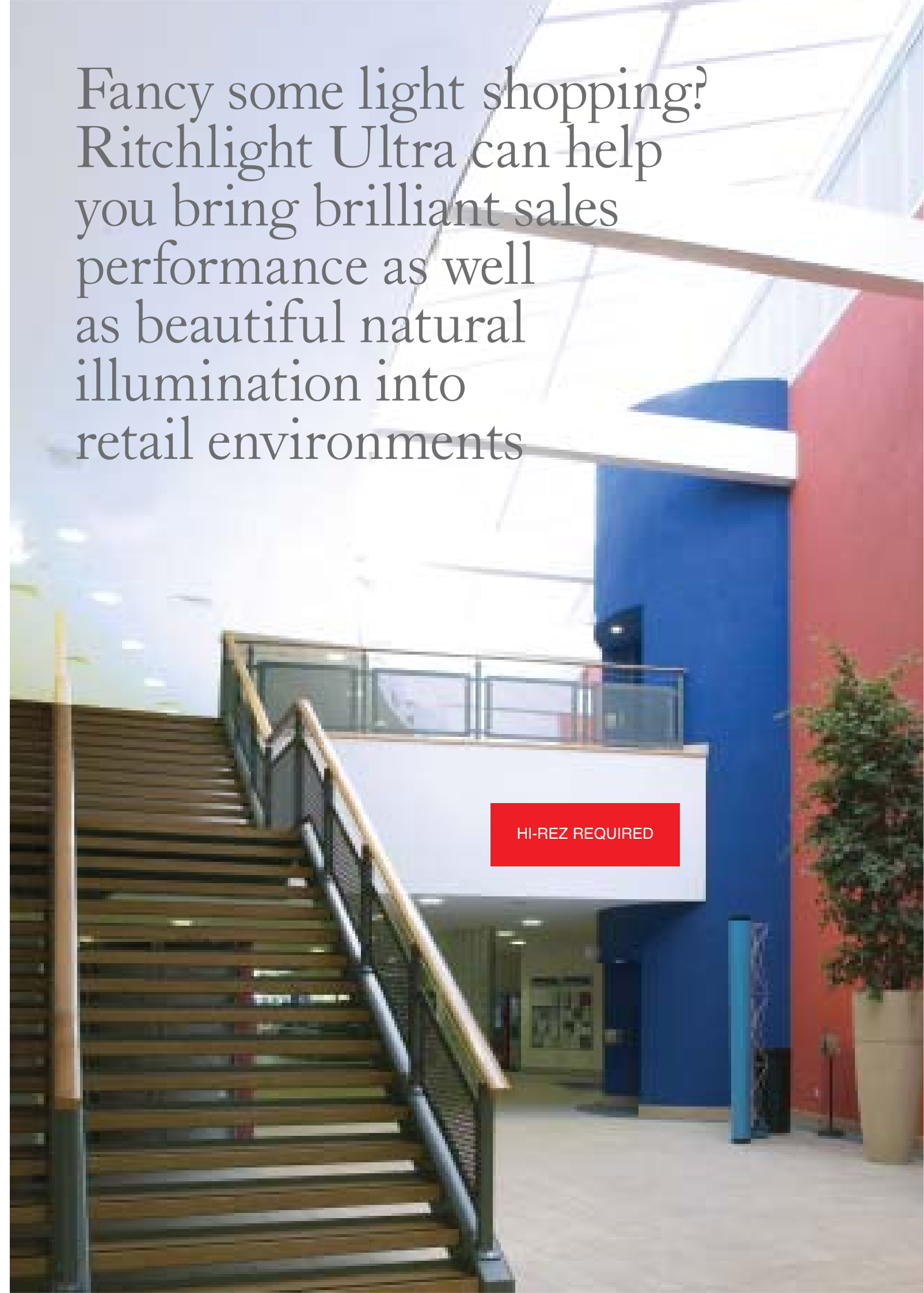


Shopping

The serotonin produced in the human body by optimum levels of natural light doesn't only have a positive effect on stress levels and attention span. It puts people in the mood to shop as well. A companion study to the California student survey researched 108 stores in a large retail chain - and found that the outlets with skylights sold on average 40% more merchandise than those without. It's simple really - stylish surroundings with lots of natural light encourage shoppers to linger longer and therefore spend more. Installing Ritchlight Ultra can make stores more profitable by keeping energy costs to a minimum as well.



Fancy some light shopping?
Ritchlight Ultra can help
you bring brilliant sales
performance as well
as beautiful natural
illumination into
retail environments





Whether you're building a minimalist new eco-home or renovating a period cottage, Ritchlight Ultra makes lightwork of creating your very own grand design

Living

Make your home stunning and your neighbours jealous by adding a superbly engineered, outstandingly versatile Ritchlight Ultra skylight. Bathroom, kitchen or lounge, you'll create a spectacular new architectural feature, and transform your interior into a light, airy living space that's cool and comfortable in summer, cosy and condensation-free in winter, and energy efficient all year round. The possibilities are endless.





Need illumination?
Our technical
department is
always on hand to
offer free, expert
design and
specification advice

- XX Meeting Part L
- XX Configurations
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Meeting Part L

The new Part L demands much higher standards of thermal efficiency and lower CO₂ emissions than ever before. Because Ritchlight Ultra floods the interior with daylight, it reduces the need for artificial lighting and this can make a major contribution to lowering overall energy consumption. Result: the reduced carbon emissions you need. With its innovative thermal break, Ritchlight Ultra also provides more efficient insulation – further reducing energy consumption, shrinking fuel bills and helping you achieve the minimum U-value of 2.2W/m²K required by Part L. Independent research conducted by De Montfort University demonstrates that the greater the area of skylight on a building, the lower its CO₂ emissions will be, especially if automatic lighting controls are included. In fact carbon emissions increase dramatically if the skylight area falls below 15%. Part L itself assumes a 20% skylight area. So it makes sense to install between 15% and 20% of the roof area as skylights.

Installing
Ritchlight Ultra is a
brilliant way to reduce
your carbon footprint.
And that doesn't just save
you money these days;
it's essential to comply
with Part L 2006 of the
Building Regulations



Richlight Ultra configurations

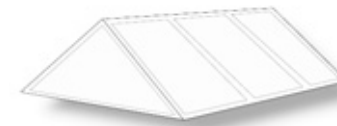
The Richlight Ultra can be configured as a **Pyramid, Gable or Hip** with the addition of a lantern to the base if required. Depending on the size of your skylight the bar **configuration will change to cater for the increased span** and we have laid out a variety of these configurations for you below.

Additional details to be aware of include:

- 25mm & 32mm multiwall polycarbonate as well as glass for your skylight
- Greater bay widths can be achieved between glazing bars with polycarbonate (average width 1m) compared to glass. The width on glass ranges from 650mm up to 1250mm but is dependant on the height of the unit
- The same casting centre plate is used for all skylight configurations and therefore may look larger on small sized units. (275mm x 275mm)
- Skylights over 2.5m span use the Major glazing bar. The Major glazing bar has an additional box section to increase the depth from 11.5mm to 51mm. Thickness of glass changes from 4mm to 6mm
- For spans over 3.5m you will also require stainless steel wires retention
- The glazing bar configurations will suit most UK locations, for extreme loading conditions and/or non-standard layouts please consult our Technical Service Team on 01363 773301
- NB: The maximum size for each configuration is different for glass and polycarbonate



Gable (TE21)



Gable with Lantern (TE21/24)



Pyramid (TE23)



Hip (TE22)



Pyramid with Lantern (TE23/24)

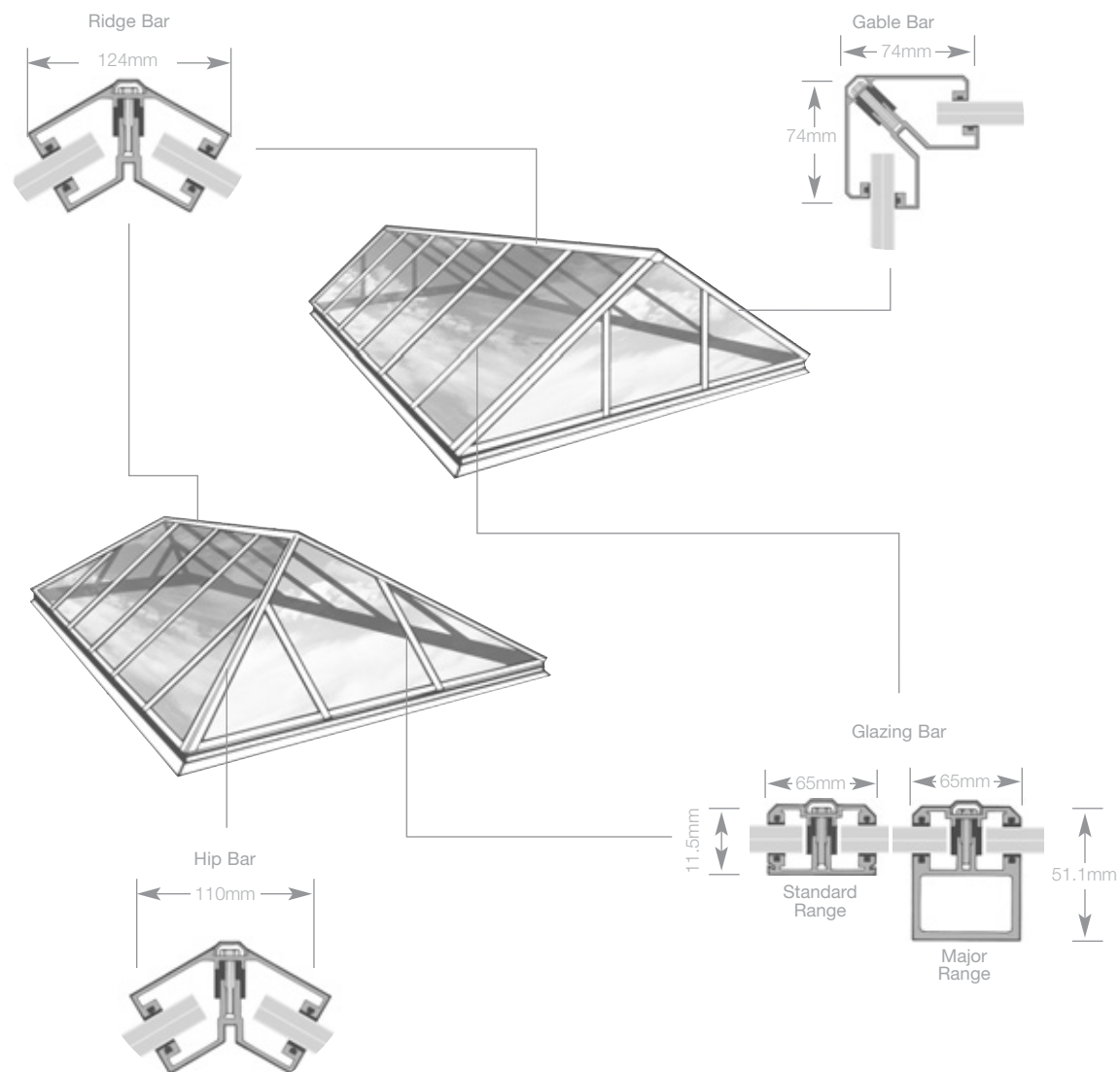


Hip with Lantern (TE22/24)



Glazing bar systems

The Ritchlight Ultra glazing bar system consists of superbly engineered aluminium profiles, polyester powder coated to match any RAL colour. Ridge bars, gable bars and hip bars are combined with either standard or major glazing bars, depending on the configuration and span of the proposed skylight and the chosen glazing option.



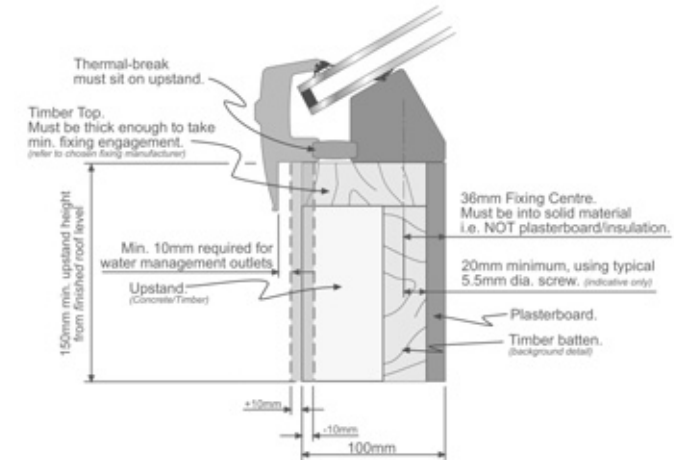
• NB: Major range bars will be used on units with a span greater than 2.5m

Upstand specifications

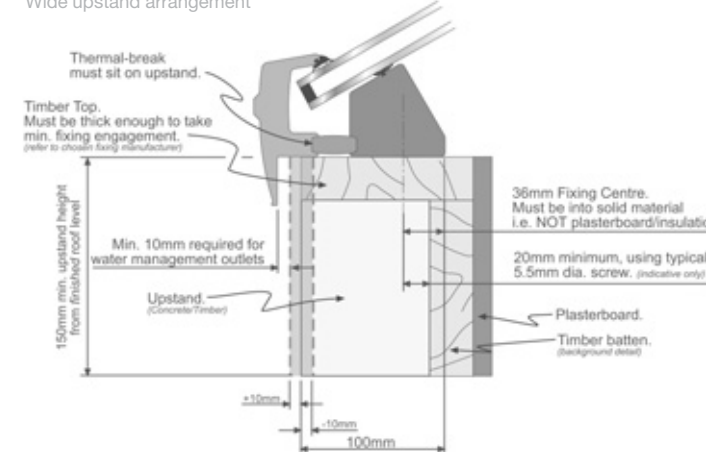
The support upstand must be constructed to the overall external sizes as agreed with Bred Martin Daylight Systems and it is to be fully weathered. The upstand should be a minimum of 150mm high from the finished roof level. It should also be a minimum of 100mm wide including all finishes with the top surface flat, level and free from any protrusions or projections. It is important that there be no build up of waterproofing layers, particularly at the corners to cause undulating surfaces.

A dimensional check should be made that the overall external sizes of the weathered upstand are correct to the agreed dimensions; a check also is needed at intermediate positions across the span together with diagonals ensuring that the structure is square. When the Skylight unit is placed on the upstand there will normally be an even 20mm overhand all round to act as a weather drip.

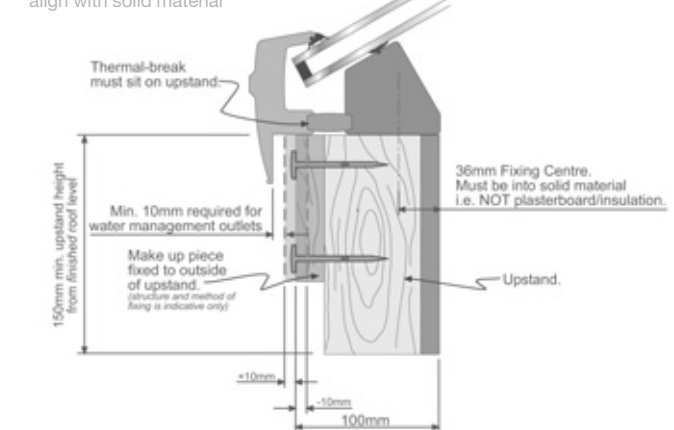
Standard upstand arrangement



Wide upstand arrangement

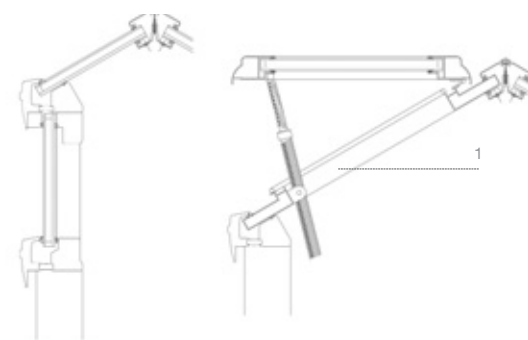


Arrangement where fixing do not align with solid material



Ventilation

Ventilation is crucial – to comply with the Building Regulations and make the most of Ritchlight Ultra's ability to create a light, airy, welcoming internal environment. Top hung vents can be specified for the Ritchlight Ultra skylight as both the manual and electrical option. The electric venting can also be specified with rain and heat sensors.



Top hung vent
1 Opening mechanism opened manually or electrically

The superbly engineered Ritchlight Ultra glazing bar system is so versatile the creative possibilities are endless. Our ventilation options are another breath of fresh air

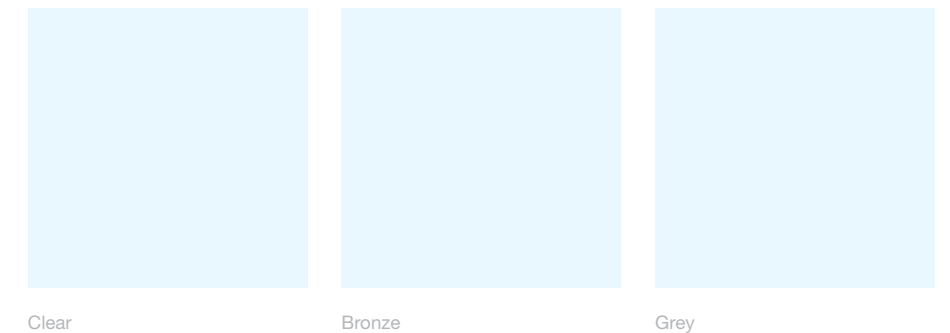


Glazing options

Material	U value W/m ² K	Light transmission bs 0000
Glass		
12mm Argon filled cavity 4mm clear toughened outer, 6.4mm clear 'Low E' laminated inner	1.6	75%
4mm clear toughened outer, 6.4mm clear 'Low E' laminated inner (soft coat)	1.1	76%
6mm clear toughened outer, 6.4mm clear 'Low E' laminated inner	1.6	73%
6mm clear toughened outer, 6.4mm clear 'Low E' laminated inner (soft coat)	1.1	76%
12mm Argon filled cavity ('Antisun')		
4mm bronze or grey 'Antisun' toughened outer, 6.4mm clear 'Low E' laminated inner	1.6	Bronze 52%, Grey 46%
4mm bronze or grey 'Antisun' toughened outer, 6.4mm clear 'Low E' laminated inner (soft coat)	1.1	Bronze 52%, Grey 48%
6mm bronze or grey 'Antisun' toughened outer, 6.4mm clear 'Low E' laminated inner	1.6	Bronze 42%, Grey 35%
6mm bronze or grey 'Antisun' toughened outer, 6.4mm clear 'Low E' laminated inner (soft coat)	1.1	Bronze 42%, Grey 38%
NB: Green and Blue tints are also available, but need a price and availability check at the time of enquiry. Please contact our Technical Department for details.		
Multiwall polycarbonate		
25mm Fivewall		
Clear S	1.6	68%
Opal V	1.6	30%
Bronze B	1.6	15%
25mm Solar Control		
Solar metallic (Clear)	1.7	25%
Solar ice (Opal)	1.7	20%
32mm Sevenwall		
Clear S	1.2	64%
Opal V	1.2	33%
Bronze B	1.2	6%

Glass

Richlight Ultra can be specified with glass to cater for a number of different requirements. Clear toughened outer, 12mm argon filled cavity and 6.4mm thick clear "Low E" laminated inner can be specified as standard in 4mm and 6mm, with bronze or grey 'Antisun'. Antisun works to control the amount of sun/heat coming in through the glass and "Low E" low emissivity coating is to reflect heat energy back into the building making sure no heat is lost through the glass.



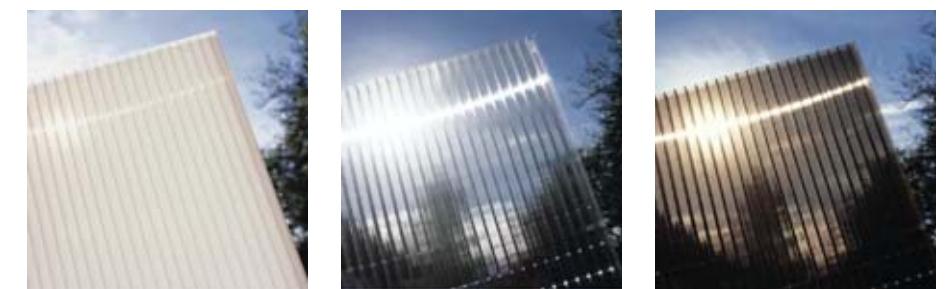
Clear

Bronze

Grey

Multiwall polycarbonate

Marlon ST Longlife is characterised by high optical clarity, light transmission, impact resistance and durability. It is available in a range of standard sizes, clear and tinted. Marlon ST Longlife has a co-extruded UV protection layer on one side.



Opal V

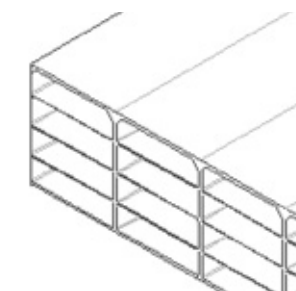
Clear S

Bronze B

25mm Fivewall



32mm Sevenwall



Service temperature

- Marlon ST can be installed in a diversity of applications, with varying temperatures. The material's mechanical performance is known to remain stable in prolonged service in temperatures ranging from -40°C to +100°C.

Fire performance

- The fire performance of Marlon ST 25mm Fivewall has been independently tested and the following classification obtained:

UK	BS476: Part 7: CLASS 1Y
France	NF P 92-507: M2
Holland	NEN 6065 & 6066: Class 2
Italy	CSE RF2/75/A & RF3/77 Class 1

Checklist

- ✓ Brett Martin Daylight Systems can help you to design, specify and install Richlight Ultra
- ✓ 50 years experience
- ✓ Market leading global company
- ✓ UK's leading rooflight manufacturer
- ✓ Installed by qualified employees
- ✓ Fully insured
- ✓ Fully Part L compliant
- ✓ Fully thermally broken
- ✓ NBS specified
- ✓ ISO14001
- ✓ ISO9001
- ✓ British made products

The next stage

Talk to the Brett Martin Daylight Systems team as soon as possible for optimum results on your next project.

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