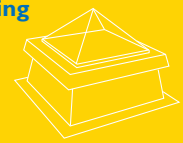
PART L 2006 COMPLIANCE?
No problem when using Cox Rooflights.

COX NATURAL LIGHT SOLUTIONS

If you're serious about surpassing building regulations, saving energy and reducing CO_2 Emissions, then you should be installing Cox Rooflights.



- Over 70 years of experience in Manufacturing Rooflights
- We offer the widest and best performing range of Part L Compliant products that have been "Hot Box" tested
- Quality without compromise – at a very competitive price
- First class service and after sales support
- 15 **& 20** year guarantees available

Here at Cox NLS we take the environment very seriously and have been working hard to provide our customers with products that not only meet the current Building Regulations **but** surpass them. By using Cox Rooflights in your building project not only will you easily be able to meet Part L requirements you will also be helping the environment.

Rooflights cut energy use in the building.
Rooflights improve the internal environment of the building.

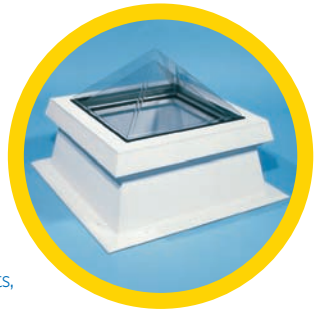
PART L

What is the object of the Government with Part L 2006? Simply put it is to reduce CO_2 emissions from both new and refurbished buildings. The reductions that the Government are looking for are substantial and it is not likely to end there. It is more than likely that future revisions to Part L will be even more stringent forcing the need for Intelligent Lighting Systems to help achieve the requirements. As you would expect from Cox NLS we are already talking to Lighting System Engineers and Control System Manufacturers to provide the next generation of lighting solutions (Natural and Artificial).

However, currently the reductions required compared to the notional building built under the 2002 regulations are substantial:

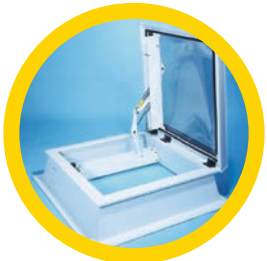
- 28% reduction for mechanically ventilated or air conditioned buildings
- 23.5% reduction for naturally ventilated buildings

To achieve this reduction the regulations take into account the energy use and resulting CO_2 emissions for the **whole building, including its lighting and heating,** and compare this to what would have been achieved if the building had been built under the Part L Regulations of 2002.



Architects, Building Designers and Building Control Officers now have to demonstrate compliance by the use of the **Simplified Building Energy Model (SBEM)** or any other approved software which can perform the calculation.

Finally, in addition to meeting the above requirements, a minimum acceptable performance standard for specific building elements has been set. These for example include the roof, wall, floor and rooflights. These standards apply even if the building could achieve the required CO_2 emission reductions thus removing the possibility of using "trade offs" with other elements of the building.



What does Part L mean for Rooflights?

The effects of Part L 2006 on rooflights are great but can be summarised below:

Part L2A & L2B – New and Existing Buildings, Other than Dwellings.

a) The % of the roof area that must contain rooflights is stated at a ***minimum of 10% under the Part L Regulations changes of 2006 and could be as high as 20%.***

b) The 20% level is allowable provided consideration is given to Solar Gain and steps are taken to avoid overheating. This can be achieved by Solar Control Glazing (Cool & Clear) or the orientation of the unit.

c) The 10% figure assumes a light transmittance of 70%. If however this is lower then the area of rooflights must be increased.

d) Rooflights will be required to have a ***'U' value of 2.2W/m²/K or better, including the upstand.*** These were previously excluded in the previous Part L regulations. It is therefore vital that the Whole ***Unit achieves the 'U' value.*** If a rooflight is to be placed on an existing builders kerb then the builder's kerb must be insulated to the same values as the roof.

e) There will be ***no "Trade off"*** against other elements of the roof unless under special circumstances.

Part L1A & L1B – New and Existing Dwellings.

a) Rooflights will be required to have a 'U' value of 2.2W/m²/K or better, including the upstand. These were previously excluded in the previous Part L regulations. It is therefore vital that the Whole Unit achieves the 'U' value. If a rooflight is to be placed on an existing builders kerb then the builders kerb must be insulated to the same values as the roof.

b) New Build Rooflights must have a 'U' value of 2.2W/m²/K or better.

c) Refurbishment Projects – New Rooflights are considered to be controlled fittings and as such must have a 'U' value of 1.8W/m²/K for Glass and 2.2W/m²/K for Plastic glazing.

d) Replacement rooflights on refurbishment projects must have a 'U' value of 2.0W/m²/K or better.

e) Adequate levels of daylight must be provided as detailed in BS8206.

WHY USE COX NATURAL LIGHT SOLUTIONS ?

Cox Natural Light Solutions (NLS) has been established now for 70 years and is a leading supplier of Rooflights to the UK market. Our portfolio of leading brands: Coxdome, Coxspan, Cox Suntube and Cox Windows, are recognised as ***industry benchmark standards in product, quality and service.***

At Cox NLS we have a passion for what we do – and we believe you will see this in our products, our service and our team. Our market leading position is sustained by our commitment to our 5 driving principles:

Specialist among Specialists

A developer of Natural Light Solutions is who we are, and what we do. We strive to meet the expectations of today's market, and are committed to working in partnership with experts in the fields of R&D and Production.

Partnership is the mechanism for mutual progress and satisfaction

We recognise that the relationship we have with our customers is everything. It's our understanding of their needs that drives new product innovations and the inspiration to achieve advances in production techniques.

Quality without Compromise – at a fair price

The foundation stone of Cox NLS – you deserve the best!

Sustainability & Environment

We are actively engaged in helping to reduce our carbon footprint and preserve our natural environment by improving our products to ensure they meet the highest standards, such as Part L of the Building Regs. 2006

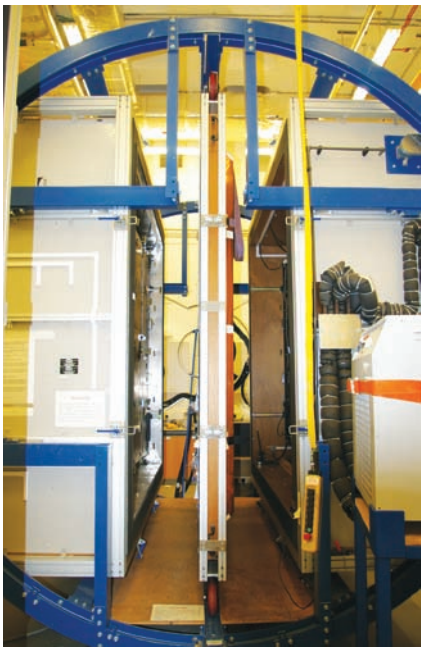
Innovation

Innovation lies at our heart. Through fresh thinking we are continually first with new product ideas and more effective production techniques – ensuring you are offered solutions borne out of the latest design/technical advances available in today's market.

The Cox NLS Range of Part L Compliant Products

Cox NLS knew that the developments that we had undertaken on our product range ensured that we could meet Part L 2006. We had undertaken all the necessary calculations to back this up. We felt that this was not good enough for our customers and we wanted to prove it in the test environment. During 2007 Cox NLS undertook a ***major testing programme*** of its products in conjunction with the ***National Physical Laboratory*** to ensure that its products not only met the requirements of Part L 2006 but surpassed them.

Our aim was to ensure that not only did the individual elements of our Rooflights comply (i.e. the kerb and the Dome top) but also a whole Rooflight unit. This was vital for our customers to be able to demonstrate that our Rooflights comply with Part L 2006 which states the 'U' value for the ***whole unit and not just the individual elements*** of the Rooflight. To rely on results for individual elements not tested together in a "Hot Box", or even worse just on theoretical calculations was not acceptable to us, or our customers.



To help our customers in selecting the right product from our extensive range we have produced a guidance table which quotes our "Hot Box" tested 'U' values.

'U' value Guidance Table

	Product	Upstand	Single Skin	Double Skin	Triple Skin
GLAZING	Galaxy Dome Glazing only	×	5.3	2.85	1.26
GLAZING	Cool & Clear Glazing only Coxdome 2000	×	n/a	n/a	1.51*
GLAZING	Coxdome 2000 Glazing only	×	n/a	2.77	1.88
GLAZING	TPX Glazing only	×	n/a	2.85	1.94
UPSTAND	Trade 150mm PVC-U upstand	1.0*	×	×	×
UPSTAND	235mm PVC-U upstand (2000 range)	1.81*	×	×	×
UPSTAND	Trade 300mm PVC-U upstand	1.1*	×	×	×
SYSTEM	Trade Range System triple skin on 150mm upstand	×	n/a	n/a	1.31*
SYSTEM	Coxdome 2000 System triple skin on 235mm upstand	×	n/a	n/a	1.37*

All of the above figures are quoted in W/m².K and are designed as a guide only.
Those marked with * are "Hot Box" test results (certificate numbers available on request) and have been adjusted for SBEM.
All other figures quoted are based on calculation methods.
= Part L 2006 compliant product or better.
= Non Part L 2006 compliant.

Note: In general all rooflights will be required to attain a required air tightness value of 10m2/h/m² and be designed to avoid cold bridging.

COX NATURAL LIGHT SOLUTIONS

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