



Rational ALDUS®

- The leading energy window for new build.

Cross section of Rational ALDUS®



Combining the benefits of a timber frame construction with the durability of an external cladding of aluminium, ALDUS is a popular choice of doors and windows from the Rational collection.

This makes ALDUS particularly suitable for harsh environments – such as coastal locations, or where exhaust fumes from vehicles are prevalent – or in high-rise applications to save on the costs involved with access for maintenance crews.

To preserve the timber against rot and degradation, all timber is coated with water-borne treatments prior to manufacture. Then, the timber can be either painted in a choice of RAL colours, or stained to show off the beauty of the timber – again, with water-borne coatings.

Used in several certified Passive Houses.



Passive House

To reach Passive House level the location, building design and energy concept needs to be carefully thought through. Designing a kindergarden highlights demands on daylight and safety - alongside the energy consumption.

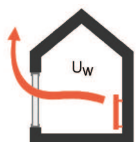
Energy Performance

The leading energy window for new build.



Energy balance

$WER_1 = -0,8 \text{ kWh/m}^2$ with triple glazing and argon.
 $WER_{\text{north}} = -2,7 \text{ kWh/m}^2$ with triple glazing and krypton.
 $WER_{\text{south}} = 23,9 \text{ kWh/m}^2$ with triple glazing and krypton.



Uw value

$U_{w1} = 1,01 \text{ W/m}^2\text{K}$ with triple glazing and argon.
 $U_{w_{\text{north}}} = 0,79 \text{ W/m}^2\text{K}$ with triple glazing and krypton.
 $U_{w_{\text{south}}} = 0,86 \text{ W/m}^2\text{K}$ with triple glazing and krypton.



Green commitment - FSC® certified.
The mark of responsible forestry.



Rational is part of the Wood Window Alliance.



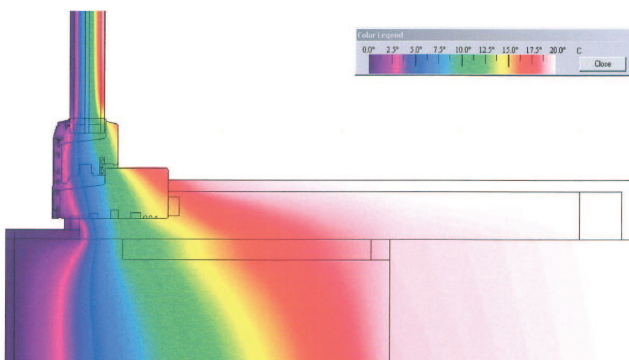
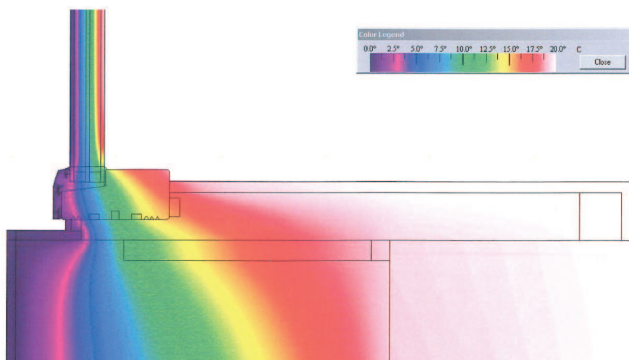
Rational windows and doors can be made to SBD specification.



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Installation detail used
in low energy building



Installation

When all building components is energy optimised to meet for instance Passive House level, the linear heat loss through joints suddenly stands for a notable heat loss in the overall energy calculation - unless they as the rest of the building are careful detailed with energy consumption in mind.

An energy optimised solution can save up to 25% on the heating bill when compared with a regular installation.

Continuous insulation and window placement in the wall opening has a substantial influence on potential heat gain and heat loss.

Glazing

Double- and triple-glazed sealed units with argon or krypton gas can be supplied. The windows as a full unit can meet Secured by Design - if specified.



Sustainability

The timber, aluminium and glass all have the potential of being recycled – making ALDUS one of the most environmentally friendly, sustainable products in the market today.



Suitable for low energy buildings

Project: Wenlock Street



WINDOWS WITH VISION