



Thank you for choosing Rationel windows for your project.

Please read this information carefully. It will assist you with the delivery, handling, fixing and maintenance of our windows and doors.

Contents

Order confirmation	4
Delivery	6
Pallets	8
Unloading.....	10
Storage	11
Understanding the window and door labels ..	12
Installation	15
Glass	18
External sealing	20
Maintenance	21
Contacts	22

Order Confirmation

The order confirmation is an essential document that contains details and advises you of your order number, dispatch week and the exact types and quantities of windows and doors on your order.

The following example explains how to read the order confirmation.

NOTE!

Always quote the acknowledgement and position number.

Rationel order no.
Also shown on window labels and pallets.
On larger projects there may be a different order number for each plot, block, floor, etc.

Project no.

Your internal order no.

Customer reference:
Identifies the block, floor, plot, etc. relating to this order number

Dispatch week
planned week your order leaves the factory

Contractor

Site delivery contact

Method of delivery and type of vehicle

Corrections:
The last date on which any changes can be accepted

Rationel's sales contact

Order confirmation
Acknowledgement: **355035**

Dispatch week ...: 18

Delivery address:
Primary School
Honeysuckle Close
Hutton
Oxford
OX13 2RG
Phone : : 07787 244 419

Build Ltd
Norfolk
Norwich
NR26 6SZ

Customer requisition
Reference
Contact person
E-mail
Payment
Mode of delivery
Project name

Contractor
Peter Grant
pgrant@build.co.uk

Site delivery contact

Method of delivery and type of vehicle
Rigid

Corrections:
The last date on which any changes can be accepted

Rationel's sales contact
07974 XXXXXXX

Last correction date: 30-03-2011
ALDUS Timber/Aluminium Composite range
Following receipt of your purchase order, please find attached our order confirmation.
Any amendments need to be advised before the above mentioned date. After this date or following receipt of sign off, the order will be processed and sent to manufacture.
Please ensure the details shown suit your requirements as it is not possible to make further amendments once the order is in manufacture. When checking the specification please pay special attention to dimensions, glass, details, handings, ventilation and escape requirements etc. It is the responsibility of the purchaser to check ALL details are correct.
Please note; the order is binding and cannot be cancelled after the last date for corrections.
Rationel Windows are not CWCT certified.

Yours sincerely
Rationel Windows (UK) Ltd

Office Contact
Xx Smith
Direct :
Email: Xx@rationel.co.uk

Sales rep
Xx Jones
07974 XXXXXXX

Orders: 355035 Version: 782756 Our ref: 341 Page: 1 Date: 10-07-2011

Position No.
- also on window label

Dimensions

Quantity

Pos.	Type	Draws from outside	Width	Height	Qty	Unit price	Total
5	uk-b1100-a	S-Fixedlight Reference: Glass & fillings: Profile & Bead: Colour: Weight in kg: Notes:	543 X	793	2	133,58	267,16
Total excl. VAT							

All Rationel's products are FSC certified with the exception of panelled doors, elements with timber fillings and timber accessories.
FSC-mix 70 %, FSC® SW-COC-005151

rationel
Windows & Doors

Window ref.
- also on window label

Specification
- including information about glass, opening function, colour and weight of the specific unit

Order No. Version No.
if order is revised
this number is
updated

Orderno.315035 Version 792756 Our ref. JMJ Page 4 Date 18-07-2011



Delivery

All deliveries are made on articulated curtain-sided vehicles, unless specific arrangements are made when placing your order.

The windows and doors are secured to pallets for transportation. These Vehicles require unloading by you (normally with a fork-lift or a tele-handling).

The alternative means of transport (subject to additional costs) are as follows:

Full-size trailer with sliding roof

This enables the goods to be off loaded vertically (e.g. tower crane). Any additional bracing / lifting equipment is not provided by the haulier.



7.5 tonne curtain-sided rigid body (Additional cost)

Unloading by fork-lift or pallet truck and tail lift if feasible.

6,0 m x 2,45 m x 2,30 m



Flat bed with HIAB facility (Additional cost)

6,0 m x 2,45 m x 2,30 m



Consignments are usually dispatched from our production facility in Europe on a Friday and delivered to customers the following week. Delivery will be made by **DSV**. They will contact you by Friday the week before delivery is due to arrange a convenient time / date of delivery, once they have received the consignment for dispatch.

Delivery paperwork

- a) DSV delivery note
The haulier will ask the recipient to sign his dispatch to confirm delivery has been received.
- b) Rational delivery note
There will be one Rational delivery note for each acknowledgement number. The delivery note will be attached to the outer packaging of one of the pallets.

You must check the items delivered against the delivery note attached to the pallet. If the consignment is not complete, please notify Rational immediately quoting the acknowledgement and position number of the missing parts. It is advisable to check the delivery note against the whole order detailed in your Order Confirmation (See page 4).

Please detach and retain the delivery notes for future reference.

IMPORTANT!

Please check all deliveries within three days of delivery. The delivery note will advise of any shortfalls in quantities.

Our conditions of sale state that no claim for shortage or breakage can be allowed unless advised in writing within three working days after delivery.

When contacting Rational to advise or query shortfalls please have your order confirmation and position numbers ready.

Pallets



The windows will be packed and secured onto pallets. The pallets vary in length, and windows and doors will not be more than 300mm wider / narrower than the pallet.

Each pallet of windows / doors will not exceed 800Kg.

Each window will have cardboard corner protectors stapled to the backs of the frames. These should be kept in place until installation. Do not get the protectors wet or they may mark the paintwork.

The windows are stacked vertically on the pallets and secured in an upright position with 6mm plywood braces and timber battens at the end of each item.

The outer four corners of the pallet (windows) will also have cardboard corner protectors applied and the whole pallet is then covered in shrink-wrap.

Information contained on each pallet will be:

- The delivery address label with order confirmation number
- A hand-written acknowledgement number and 'position' numbers contained on that pallet.

Door handles and cylinders are supplied loose for site fitting. Please ensure that these are checked and then kept in a safe place until required.

IMPORTANT

- Check the quantities immediately!

To break down pallets you will need the following basic tools:

- 'Stanley' knife
- Hammer / nail bar
- Cordless drill with Philips P2 bit
- Pincers (for removing staples)

When removing shrink-wrap be careful not to cut the face of the windows with the knife.

As you remove individual windows from the pallets always ensure the remaining windows are secured in a safe upright position. Be careful not to discard link beads.

Unloading

All the vehicles / trailers are loaded by either pallet truck or fork-lift, so we would recommend unloading by the same method.



Fork-lift

We would recommend that the pallets should be unloaded by fork-lift. Care should be taken not to damage the underside or faces of the windows. We strongly suggest that you also place protection on the forks to avoid damage to the frames.

Crane-lift

Due to site restrictions off-loading by crane may be the only option. Although your pallets will not have been packed specifically for crane off-loading with additional bracing, crane off-loading is possible. If you require crane off-loading please remember to select a sliding roof artic or HIAB / Flat-bed when placing your order.

By hand

To unload by hand, pallets will need to be 'broken down' on the lorry and manually off-loaded. The windows and doors are heavy and great care should be taken when off-loading manually. We recommend you undertake a risk assessment before proceeding, and ensure you take account of the current regulations for working at heights. There are time limits for unloading so please ensure you have the equipment or manpower available when organising your delivery time.

By Pallet Truck

When delivery is arranged by rigid vehicle, it has a tail lift. A pallet truck (provided by the haulier) can manoeuvre most pallets on to a hard standing area.



Storage

Pallets should be stored on a dry, level surface. Ideally the windows should be kept on the pallets until ready for installation.

The windows should be covered during wet weather. Failure to do this during storage may invalidate the warranty.

The windows should be covered to protect from dampness and sunlight so maintaining the level of moisture content. It is important that water does not ingress into areas such as the frame/sash mortice joints, pre-drilled fixing holes and door locks etc.

NB:

Failure to observe Rational site storage recommendations will impair the performance of the window both structurally and aesthetically and may lead to any product warranties being invalid.

Handling

Pre-glazed windows and doors are heavy!

Wherever possible the windows should be moved around site while still on the pallets by means of a pallet truck or a fork-lift.

When moving loose windows always ensure you have adequate labour to handle the weight and size of frame.

Heavier units should be moved by trolley or 'bogies'.

Door leaves can be lifted off for handling purposes, but we would recommend they are re-hung immediately to prevent warping / bowing.

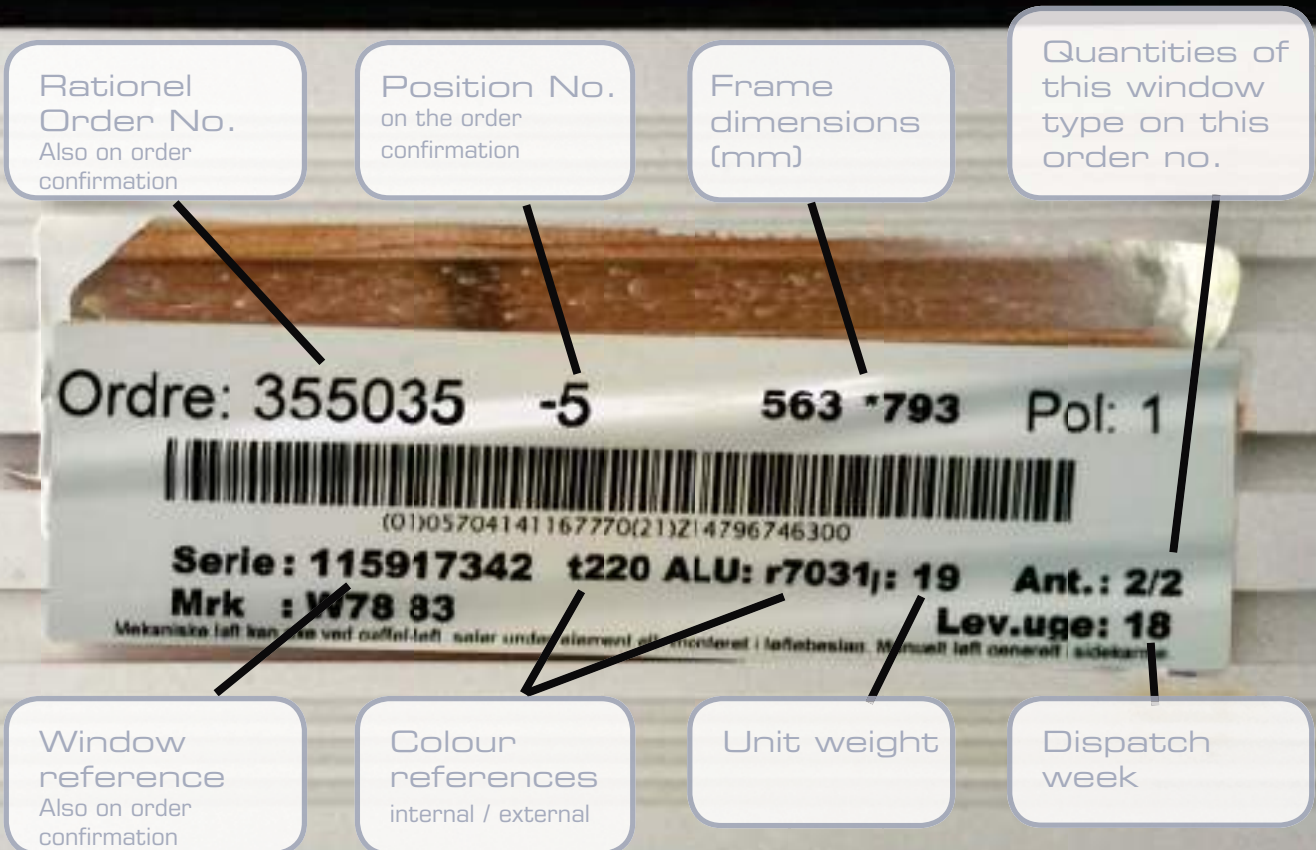
On outward opening terrace doors, you will also have to remove the 'brake' connection from the frame head. To do this, use a T10 Torx bit.

Understanding of the window / door labels and the spacer data

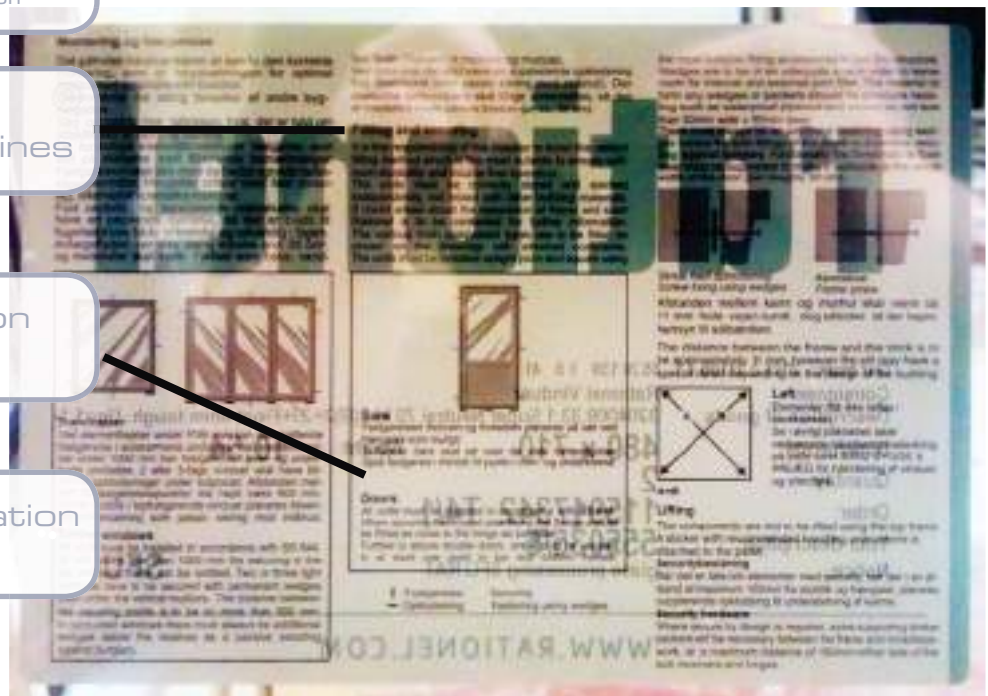
This label is printed in Danish and stapled to the outside edge of the frame of each item.

The label is translated and explained as follows:

Example of window / door label:



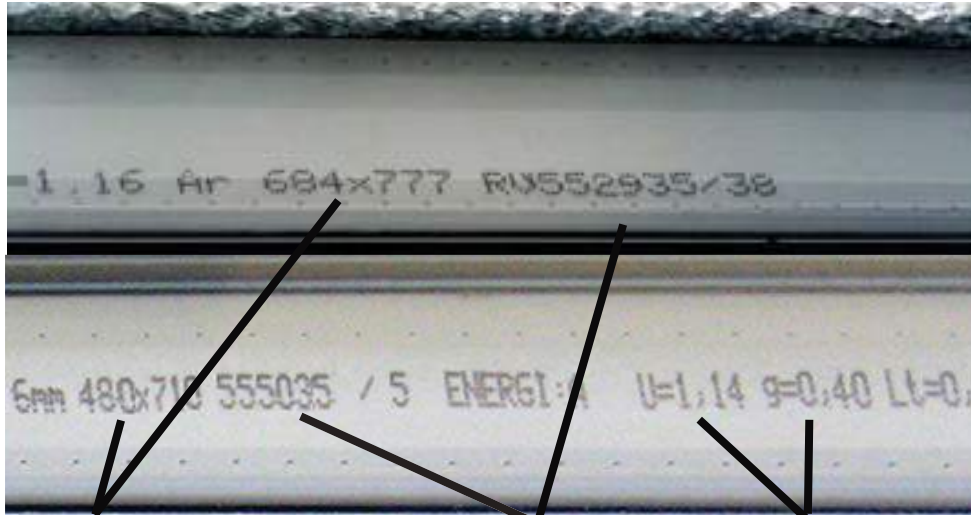
Example of glazing label:



NOTE

weight and size on the glass label refers to the glass only and *not* to the whole window or door unit


Example of data printed on the spacer bar:



Glass dimensions

Rational order and position no.
Also on order confirmation

Energy data for the specific window pane
U-value, g-value and LT-value for the glass. Also stated in the order confirmation on the 'Energy valuations - Dataview' table



Energy calculations - Dataview

Pos.	Type	N/A	Uw	Gw	LTw	Gg	Ff	Ug	WER	Ew N	Ew S	Ew E/W
5	uk-b1100-s		1,54	0,27	0,47	0,40	0,68	1,14				
Average			1,54	0,27	0,47	0,40	0,68	1,14				

Energy Values

- N/A Data not available
- Uw Whole unit U-value, expressing the amount of heat loss through the unit and measured in Watt/m2K.
- gw An expression of total solar energy, that passes through the whole unit and into the building.
- LTw An expression of light transmission. The percentage of light passing through the element.
- Gg An expression of total solar energy that passes through the glass and into the building.
- Ff Percentage of glass. The visible glass compared to the size of the element.
- Ug The u-value of the glass.
- WER Window Energy Rating takes both solar gain, heat loss and heat lost through air infiltration into account and is calculated in kWh/m2/year.

Rationel's push vent is not part of the Uw-value calculation.

Rationel's push vent achieves an equivalent area of 2163 mm² through jambs and 2290 mm² through heads.



Installation

Rational recommend the use of an Approved Installer

See contact details for Rational Approved Installers on our website www.rational.co.uk

The screenshot shows the Rational website interface. At the top, there are two tabs: 'Home owners' and 'Professionals', with 'Professionals' selected and circled in red. To the right of the tabs is the text 'About Rational | Brochure downloads | Search'. Below the tabs is the Rational logo and a navigation menu with items: 'Windows & Doors', 'Information', 'Energy', 'Inspiration', 'Advice and guidance' (circled in red), 'Drawings', and 'Contact'. On the left side, there is a list of links: 'Frequently asked questions', 'Choice of windows and doors', 'Indoor climate', 'The Order Process', 'Technical Guidance', 'Approved Installers' (circled in red), 'Installation Details', and 'Maintenance'. The main content area is titled 'Approved Installers' and contains text explaining that Rational does not offer an installation service but recommends using approved installers. It also states that approved installers operate throughout the UK and can be contracted for various projects.

Installation should be in accordance with BS8213 Windows, Doors and Roof lights: Part 4. Code of practice for the installation of replacement windows and door sets and all current Building Regulations.

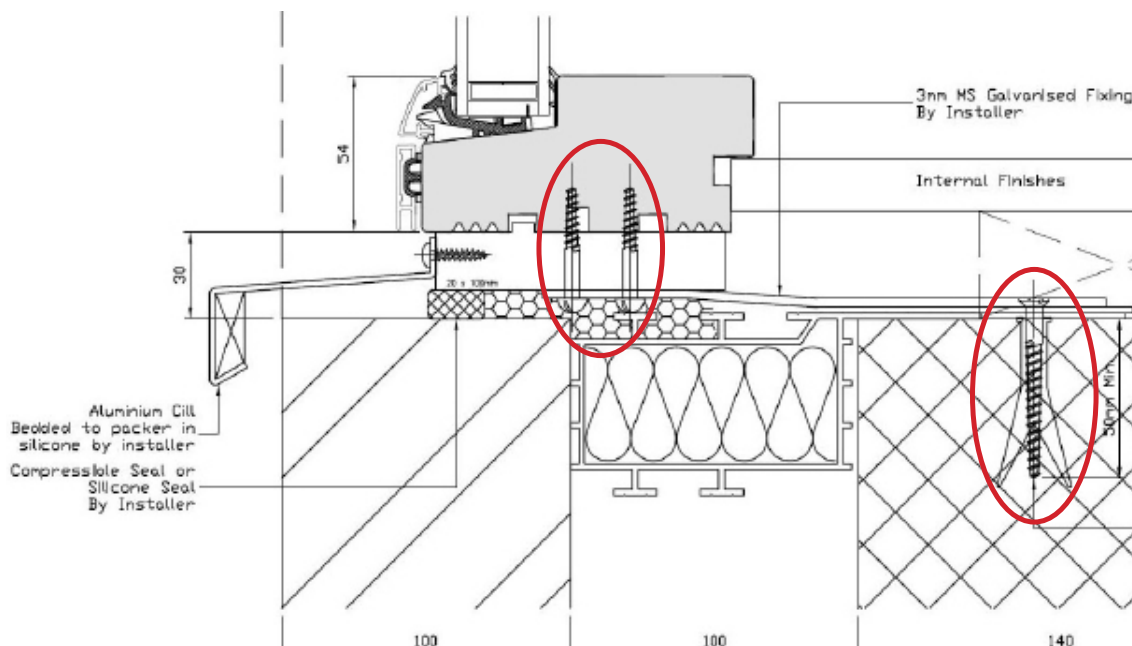
The frames should be placed in the opening level, plumb, true and square, in order to enable their correct operation. They should be wedged into position with either treated folding wedges or plastic shims prior to fixing the straps.

The fitter should ensure that the casements and doors are adjusted to work properly prior to handing over the window. See Rational Maintenance Manual, which is available for download on www.rational.co.uk

Fixing straps should be secured perpendicular to the timber mainframe. Suitable fixing shims should be placed between the bracket face and the structure.

Additional items required for installation

- Restraint brackets
Typically a minimum 3mm galvanised steel bracket must be used (type shown is a VIMO bracket, but equivalents are also acceptable).
- Arbosil 1090 silicon sealant (externally) and Arbosil LM (internally) or a similar quality silicone.
- Appropriate fixings
(2 x 40mm screws in the frame and 50mm into the structure)

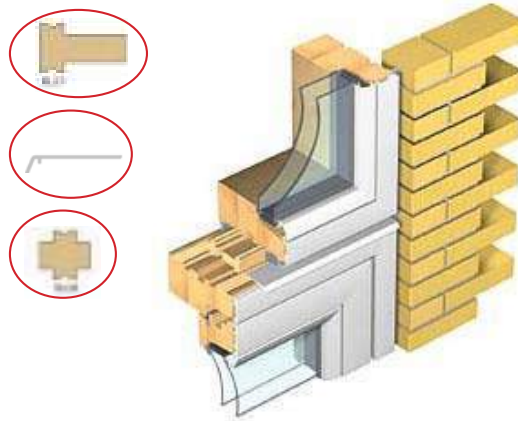
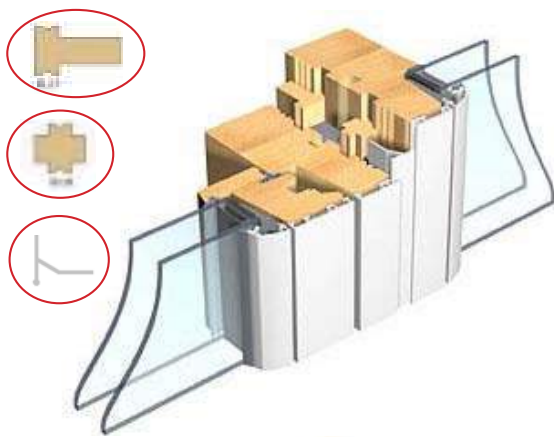


- Fixing cover caps (direct fixed).
- Insulation and vapour barriers.
- Hot dipped galvanised mild steel reinforcing bars, i.e. flitch plates and supporting brackets where required (you may need to seek advice from a structural engineer).

Loose items supplied by Rationel

The following items can be supplied to customers by Rationel if required:

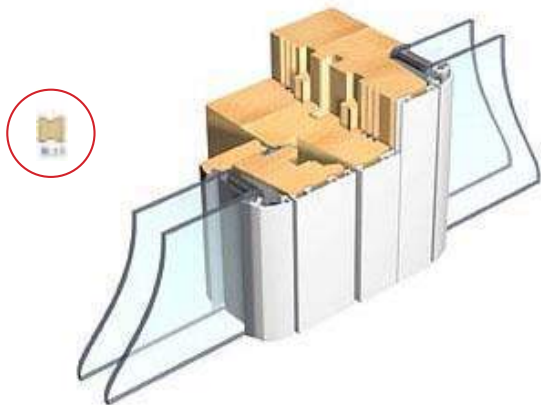
- Terrace door cylinders
- Entrance door handles, back plates and cylinders
- Sliding door cylinders
- Non-standard handles supplied from the UK
- Internal backboards to ventilated panels
- Securistay security stays, Fix elbow restrictor and Wink Haus restrictor
- Linking beads, corner posts, linking posts including aluminium pressings for Aldus, extended drip cills for Domus (coupled units)



Approved linking strips

– 12 mm seal

BL08 and BL27 are to be used as shown above



Approved linking strips

– close coupled

BL13 is to be used as shown to the left.

Tolerances

Frames should be 22mm smaller than the structural opening.

This dimension is subject to the interfacing materials and details and will be increased accordingly for the particular circumstances of the project.

An additional 20mm (42mm O/A) will be allowed where a timber cill packer is required (to receive an aluminium ppc cill - not inc.)

Glass

To maintain your warranty and ensure the use of the correct materials we recommend that glass replacement is undertaken by either Rational directly or by one of our approved installers. Please refer to our webpage for an updated list.

<http://www.rational.co.uk/professionals/advice-and-guidance/approved-installers>

Remove labels

Do not use a blade, it may scratch the glass and damage the gaskets.

If a sticker stays on the glass too long there may be glue residue on the glass. This can easily be removed with toothpaste, lamp oil or cleansing cream for ceramic hobs. Please take care when removing to avoid scratching the glass.

For changing glass please see next page.

Glazing manual



Remove glazing beads, gaskets and glazing packers.



Clean the internal rebate and fit the internal gasket. Note that the horizontal gasket must overlap the vertical by 3mm.



To secure optimal tightness and better break in resistance, mastic the corners with MS55 or similar. Mastic is required in the middle of the frame rebate for units > 1188mm. SBD units should have the corners mass filled 50mm each way.



Place the glazing blocks in the rebate approximately 30mm from each corner.



Clean the edges of the window pane. Remove any cork pads, mastic and dirt.



Place the glass on the glazing blocks. Make sure that all four sides have an equal gap. Fit blocks to all sides and head.



Fix the top glazing bead first. Then fix the glazing clips in the bottom rebate. It is very important that the glass is sealed to the gasket before fixing the clips. The clips are to be fixed approximately 120mm from the side rebate and with a distance no more than 250mm between each.



Offer up the glazing bead and gently tap onto the glazing clips ensuring the bead is firmly pressed against the glass.

NOTE

If the system is to Secured by Design compliant you will need to mass fill each corner with MS55 approximately 50mm each way. Should the unit be over 1,000mm a 50mm seal will be required in the centre.

Please contact Rationel for further details on

01 869 248 181

External sealing



Mastic



Polyethylene foam backing

It is recommended that a polyethylene foam backing strip is used prior to pointing.

Domus range

Mastic pointing should be applied flush with the face of the frame.

Aldus range

The fitting tolerance should be at least 10mm. The mastic should be applied flush with the face of the timber and not the aluminium. There is a sticker on the glass illustrating the mastic position.

The aluminium facing is a 'Drained and Ventilated' system and must not be sealed in. If you have any queries please contact the Rational office.

Maintenance

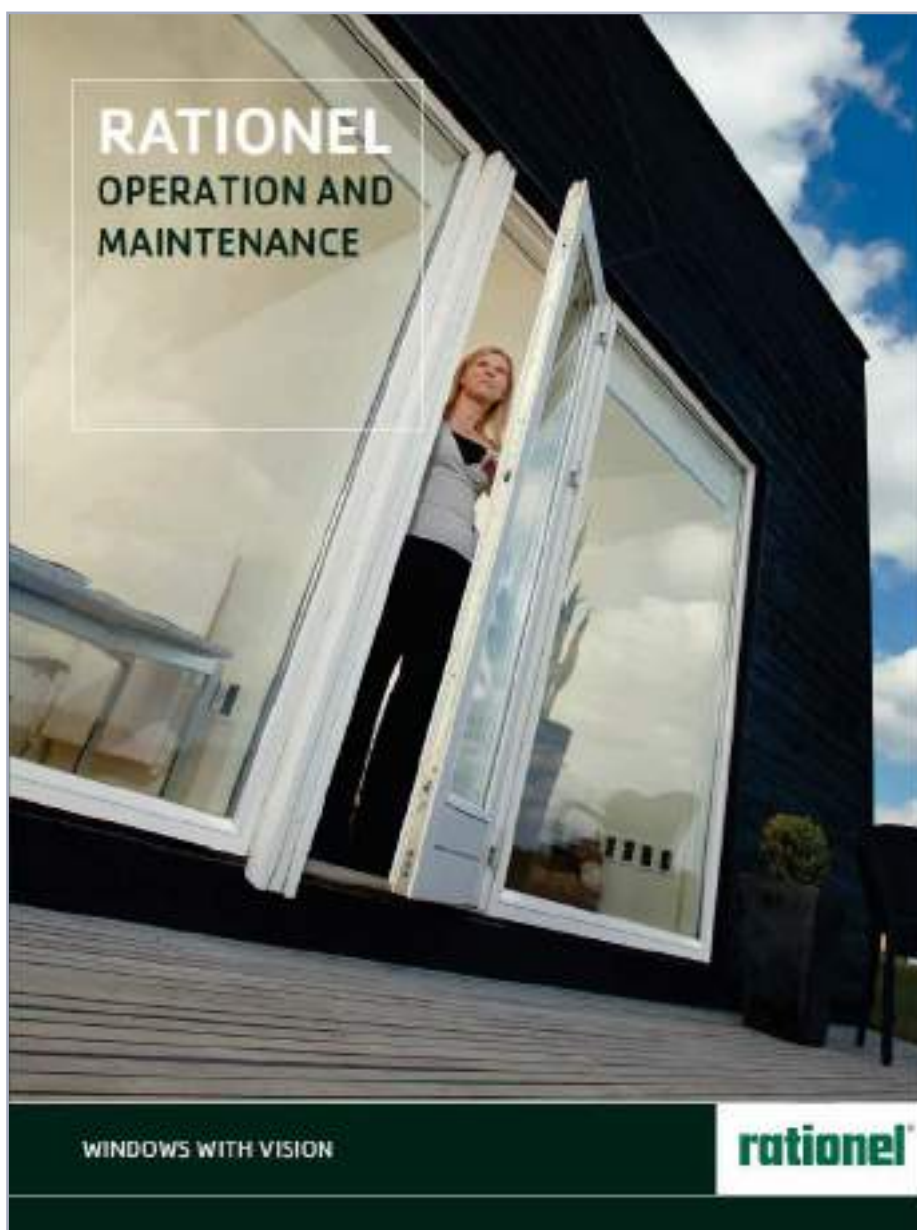
Rational provides an Operations and Maintenance Manual. The manual explains how to adjust and maintain our windows and doors. This can be downloaded from our website:

<http://www.rational.co.uk/top-menu/brochure-downloads>

Should you require further information please look at the FAQ section on our website:

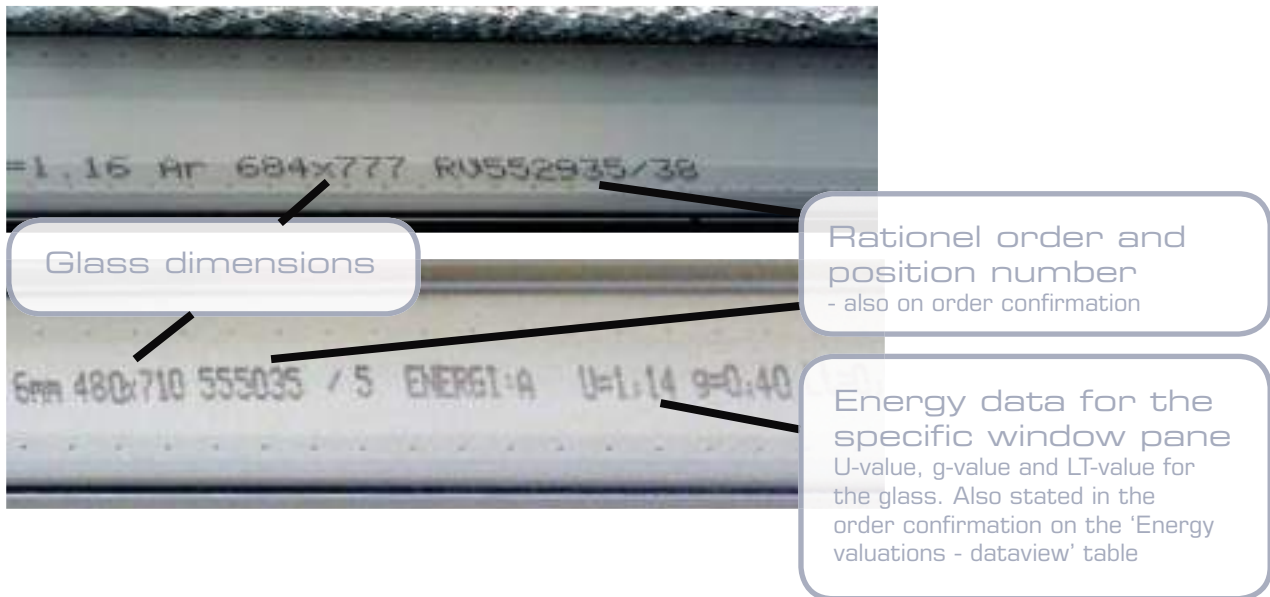
www.rational.co.uk/professionals/advice-and-guidance/frequently-asked-questions

Touch-up paint or spare parts are available from the Service Department or your local Rational approved Distributor.



After sales service

In case of an after sales service issue, please find the Rational acknowledgement and position number, both written on the spacer bar between the glass as shown below.



We need the numbers before any appointment can be booked. Although the number is fairly long please supply everything you can see, as we will need it in order to pick out the correct parts to fit your specific window or door.

Please send the above information alongside a short description of the issue to:

aftersaleservice@rational.co.uk

Contact details:

Rational Windows (UK) Ltd.
7 Avonbury Business Park
Howes Lane
Bicester
Oxon OX26 2UA

Tel: 01869 248181
Fax: 01869 249693

IMPORTANT

- Any unauthorised work carried out by other personnel will not be covered by Rational