

INFORMATION PACK





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	04
DELIVERY	06
UNLOADING	07
PALLETS & PACKAGING	08
STORAGE	11
UNDERSTANDING THE WINDOW AND DOOR LABELS	12
INSTALLATION	14
GLASS	18
EXTERNAL SEALING	18
MAINTENANCE	20
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.

Order confirmation

Acknowledgement: 355035 **Dispatch week ...: 18**

<p>Build Ltd Norfolk Norwich NR26 8SZ</p>	<p>Delivery address: Primary School Honeysuckle Close Hutton Xx Josephson Oxford CM13 2RG Phone ...: 07787 264 429</p>	<p>Rational Windows Ltd 7 Aubrey Business Park Bromley, OX26 2UA Tel: 01865 248 181 Fax: 01865 249 692 www.rational.co.uk</p> <p><small>Registered in England No. 3228457 Registered office: Stratford Road, Stratford, OX5 1EP</small></p>
--	---	--

<p>Retail No Order date 21-03-2011 Modification date 25-03-2011 Telephone 01603 429830 Fax 01603 429000 Project No. Customer ref. Primary School</p>	<p>Customer requisition Reference Contact person Peter Grant E-mail pgrant@build.co.uk Payment To be agreed Mode of delivery Rigid Project name</p>
---	---

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.

Rational Windows are not CWCT certified.

Yours sincerely
Rational Windows (UK) Ltd

<p>Office Contact Xx Smith Direct . Email: Xx@rational.co.uk</p>	<p>Sales rep Xx Jones 07974 XXXXXX</p>
---	---

Order no. 355035 Version: 792756 Our ref: JM1 Page: 1 Date: 18-07-2011

- 1 Rational order no. Also shown on window labels and pallets.
 - 2 Project no.
 - 3 Your internal order no.
 - 4 Customer reference Identifies the block, floor, plot, etc. relating to this order number.
 - 5 Dispatch week planned week your order leaves the factory.
 - 6 Contractor
 - 7 Site delivery contact
 - 8 Method of delivery and type of vehicle
 - 9 Corrections The last date on which any changes can be accepted
 - 10 Rational's sales contact
- On larger projects there may be a different order number for each plot, block, floor, etc.

1	Pos.	Type	Drawn from outside	Width	2	3	Height	Qty	Sales price	Total
5	uk-b1100-s	S-Fixedlight	Reference Glass & fillings Profile & Bead Colour Weight in kg: Notes	W78 83 Solar 70 lam./Clear tgh. 6.38-20-6 w.argon With groove for window board Aldus glazing bead fixed frame - security sealing (1) T220 Golden Oak stain Inside Blue grey Ral 7031 Outside	563 X	793	2	133,58	267,16	
<hr/>									Total excl. VAT	267,16

All Rational'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

- 1 Position No. also on window label
- 2 Dimensions
- 3 Quantity
- 4 Window ref. also on window label
- 5 Specification including information about glass, opening function, colour and weight of the specific unit
- 6 Version No. if order is revised this number is updated
- 7 Order No.

DELIVERY

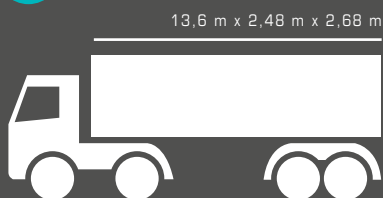
All deliveries are made on articulated curtain-sided vehicles, unless specific arrangements are made when placing your order.

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

Please consider access restrictions when selecting your mode of delivery.

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

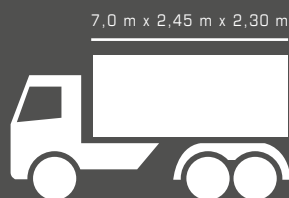
1



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.

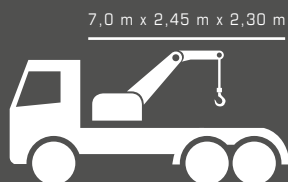
2



RIGID CURTAIN- SIDED (ADDITIONAL COST)

Unloading by fork-lift or pallet truck and tail lift if feasible for items up to 2.1m long.

3



FLAT BED WITH HIAB FACILITY (ADDITIONAL COST)

Consignments are usually dispatched from our warehouse facility in Europe on a thursday or 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

2 documents accompany your delivery.

1

DSV delivery note

The haulier will ask the recipient to sign his dispatch to confirm delivery has been received.

2

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.

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

1. Any damage reported on the DSV delivery note should be reported to Rational within 24 hours.

2. Any damage non-visible on delivery must be reported within 7 days with photos.



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.

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 1000Kg.

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.

All pallets and packaging is non-returnable.



- 1 DSV Barcode reference label
- 2 Rational unique unit reference
- 3 Pallet Label-This label lists the position numbers & quantities on the pallet.
- 4 Delivery note- This documents lists all of the items on the order. This document should be used as a checklist for checking your order.
- 5 This is the customer delivery address label.
- 6 Rational guidelines for storing the pallets on site.

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.

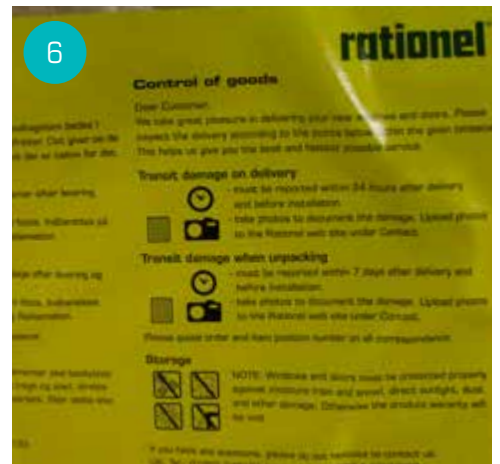
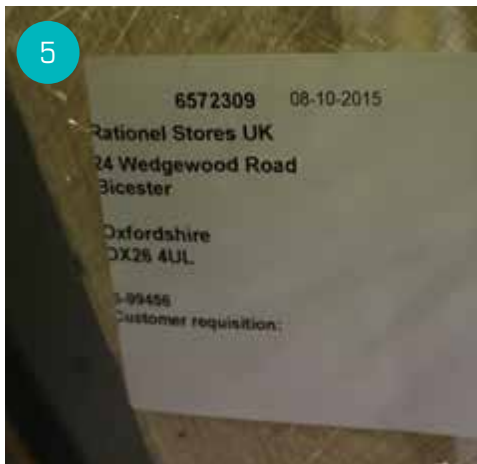
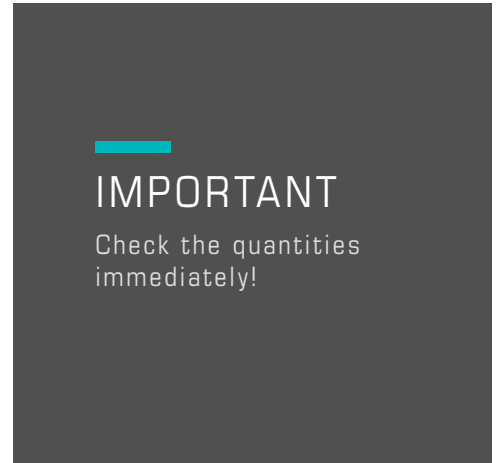
Door handles and cylinders are supplied loose for site fitting. Please ensure that these are checked and then kept in a safe place until required.

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 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 and manual handling. 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 'bogie'.

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

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:



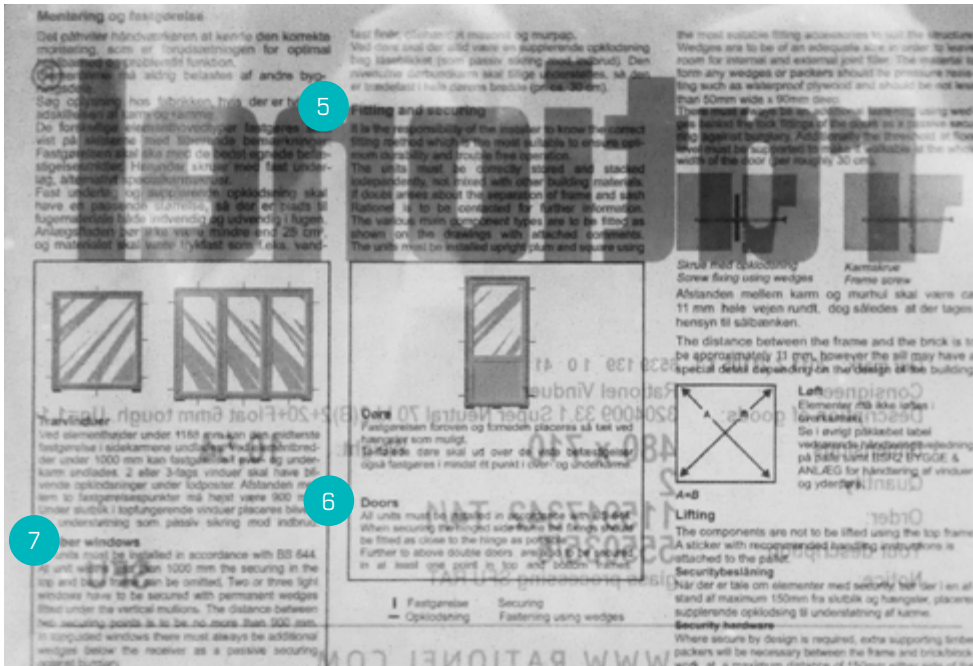
EXAMPLE OF WINDOW /DOOR LABEL

- 1 Rational Order No.
Also on order confirmation
- 2 Position No.
on the order confirmation
- 3 Frame dimensions (mm)
- 4 Quantities of this window type on this order no.
- 5 Window reference
Also on order confirmation
- 6 Colour references
internal / external
- 7 Unit weight
- 8 Dispatch week



EXAMPLE OF GLAZING LABEL

- 1 Glass description
- 2 Glass dimensions
- 3 Glass weight
- 4 Rationel order and position no. Also on order confirmation
- 5 Fitting and securing guidelines
- 6 Door installation guidelines
- 7 Window installation guidelines



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

- 1 Glass dimensions
- 2 Rationel order and position no. Also on order confirmation
- 3 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.
ggw	An expression of total solar energy, that passes through the whole unit and



INSTALLATION

Rationel recommend the use of an Approved Installer

See contact details for Rationel Approved Installers on our website
www.rationel.co.uk

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 Rationel Maintenance Manual, which is available for download on www.rationel.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.

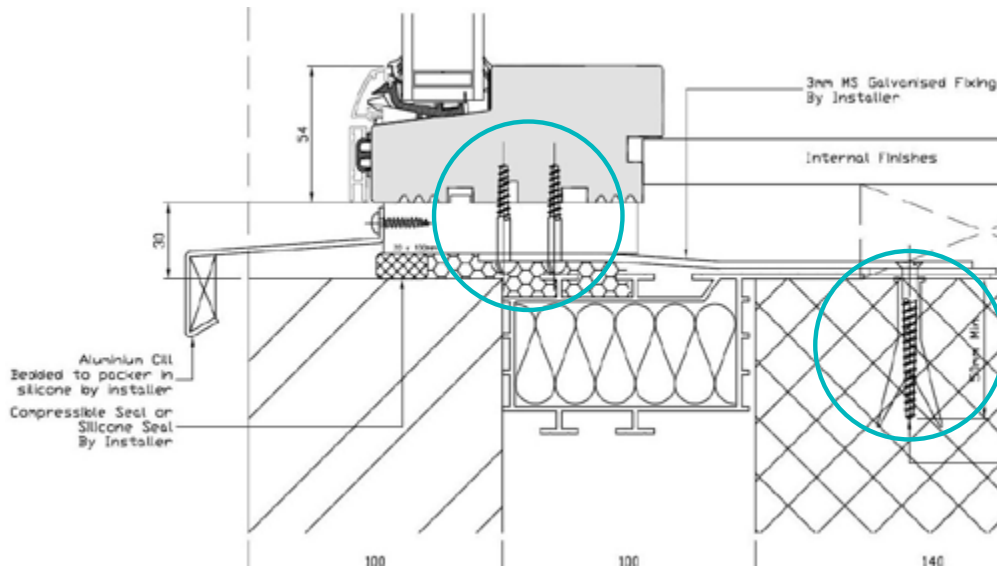
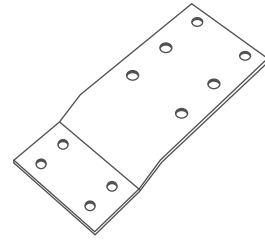
Appropriate fixings

(2 x 40mm screws in the frame and 50mm into the structure)

Fixing cover caps (direct fixed).

Insulation and vapour barriers.

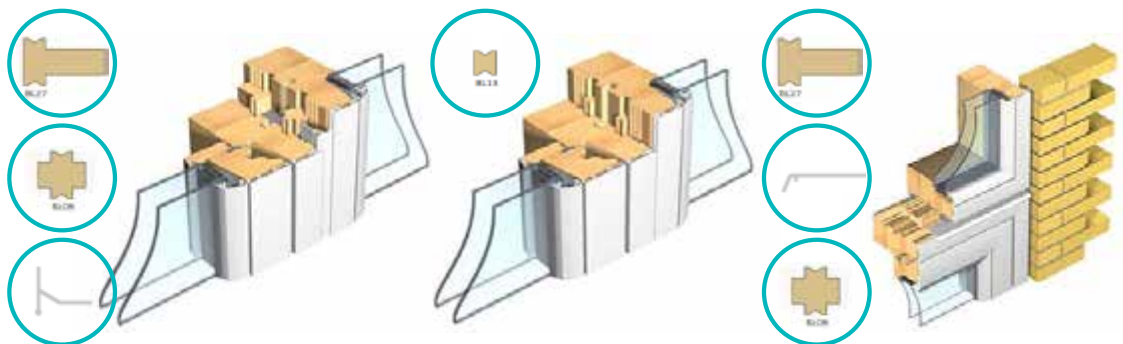
Hot dipped galvanised mild steel reinforcing bars, i.e. flitch plates and supporting brackets where required (you may need to seek advice from a structural engineer).



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.

EXTERNAL SEALING

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.



MASTIC



POLYETHYLENE FOAM BACKING

1



Remove glazing beads, gaskets and glazing packers.

2



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

3



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.

4



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

5



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

6



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

7



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.

8



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 Rational for further details on

01 869 248 181

OPERATION & MAINTENANCE





MAINTENANCE

Rationel 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.rationel.co.uk/top-menu/brochure-downloads>

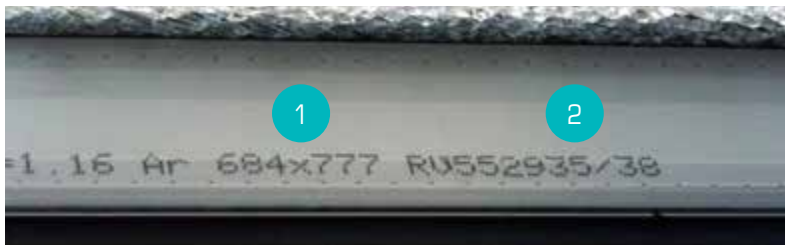
Should you require further information please look at the FAQ section on our website:

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

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

AFTER SALES SERVICE

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



- 1 Glass dimensions
- 2 Rationel order and position number - also on order confirmation
- 3 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

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:

aftersalesservice@rationel.co.uk


CONTACT DETAILS:

Rationel 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 Rationel



Rational first manufactured windows and doors in Sdr. Felding in 1954, and ever since the products have characterised quality and excellent workmanship. Based on this solid foundation, Rational has developed into an international company with sales activities in Denmark, Great Britain and Ireland.

As the market has developed, regulations and expectations changed, Rational has continuously sought to improve and expand its product range including efficient and energy saving products that exceed the statutory requirements of the future, whilst not compromising security, comfort or functionality.

For further information about our wide range of windows and doors, please visit www.rational.co.uk.

Rational is part of the DOVISTA Group which consists of ten leading door and window companies in Europe.