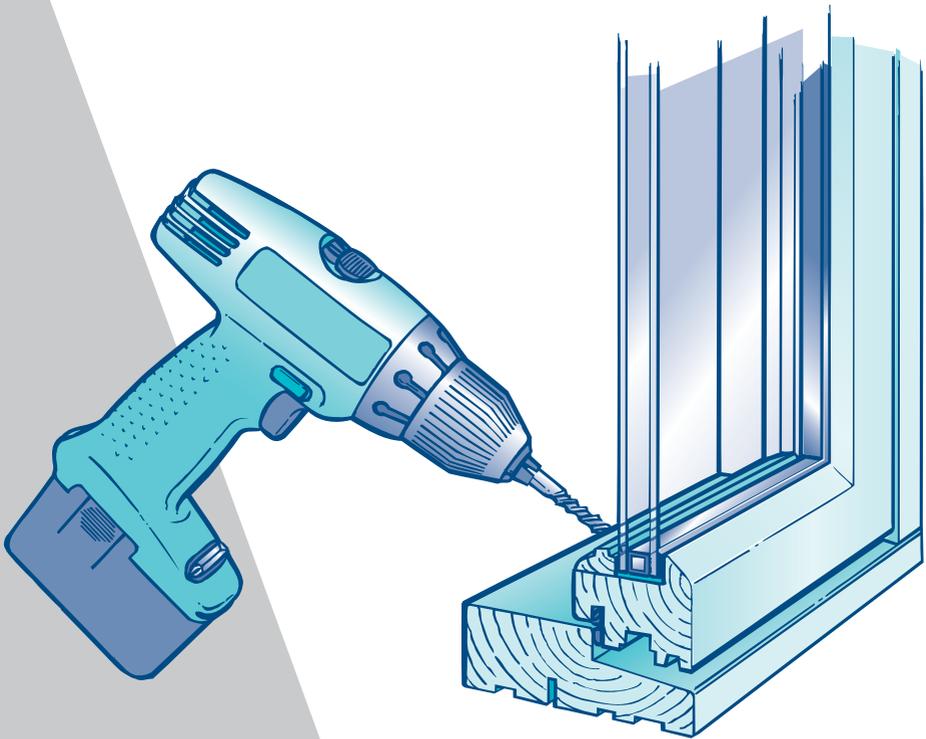


I

nformation



Requirements for
fitting of wooden
windows and
front doors

For craftsmen
and end users

Receipt and storage

Unload and handle windows/doors with care and in a considerate way. Upon receipt, inspect units for faults, and ensure that they are in accordance with the order confirmation.

Contact the distributor, if you locate faults or flaws. Report any faults, flaws or damages from transit upon receipt with no undue delay and prior to fitting. Store windows/doors on a solid base and protect from moisture and dirt. Cover properly to protect from wind and weather.

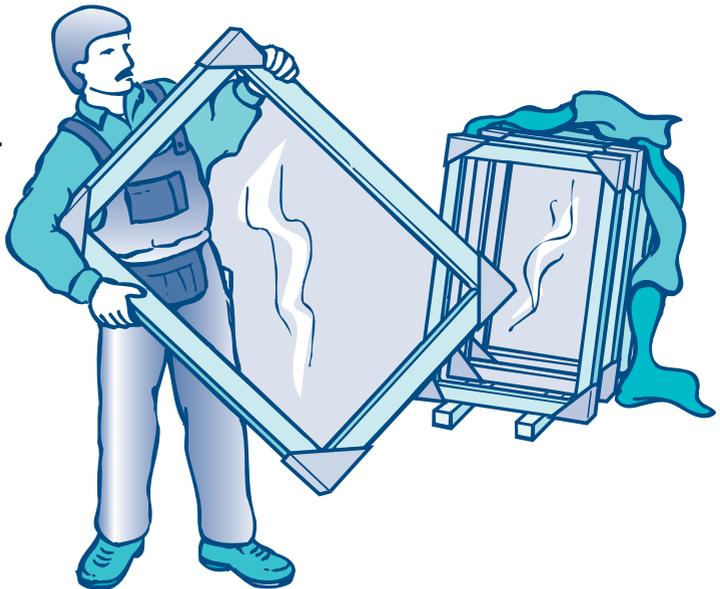
Fitting and fixing

Fitter is obliged to be familiar with the correct installation as described on the following pages, and which are a pre-requisite for optimum life and problem-free functionality.

Windows/doors must never carry loads of other building parts. They are to be attached with frame plugs, special screws or fitting hardware, so that they are solidly fixed in the desired position.

When in doubt, consult the distributor.

The different principal types of units are fitted as indicated on the following pages.

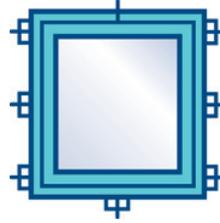


Windows

Centre attachment may be omitted with widths and heights less than 1200 mm.

Shimming below bottom mullions is required with multi section windows.

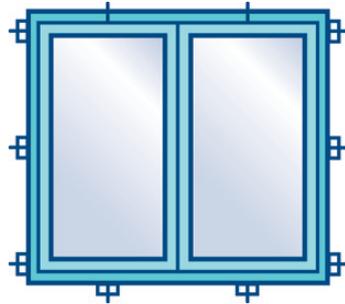
Ensure that the distance between two attachment point is less than 900 mm.



Doors

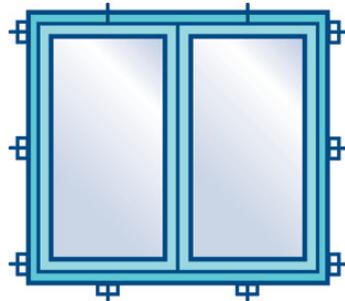
Bottom and top attachments are positioned as close to hinges as possible.

With 2 leaf doors with or without mullion, at least one attachment in upper and lower frames is required in addition to illustrated attachments.



French doors

With consideration to any sagging of overhead building parts, a gap of at least 10 mm is required between upper frame and building part. Ensure that no solid surface is used at attachment points in upper frame or filled with mortar or other solid material.



Signature



Solid surface attachment



Attachment without solid surface

Shimming

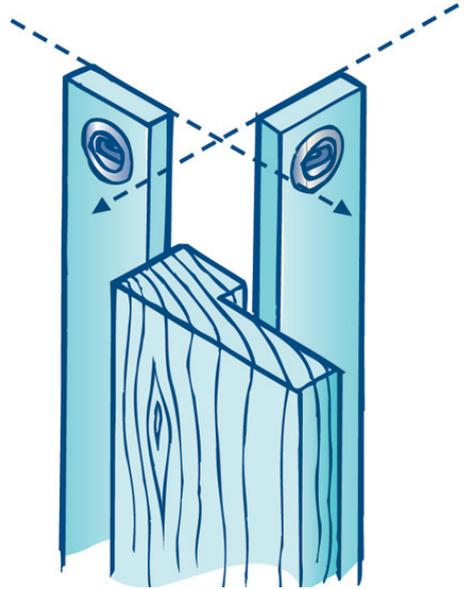
Solid surfaces and supplemental shimming must be of sufficient size, allowing for filler both on the inside and outside of joints.

Contact surfaces should be no less than 25 cm² and material pressure-proof such as e.g. waterproof ply wood, oil hardened Masonite or similar.

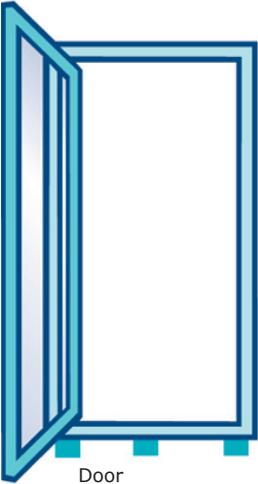
As passive insurance against break-in, insert additional shims to all doors behind lock fitting. In addition, we recommend supporting thresholds at centre stepping line.

A consistent distance of 12-15 mm between frame and brick opening is required with considerations for any window ledge.

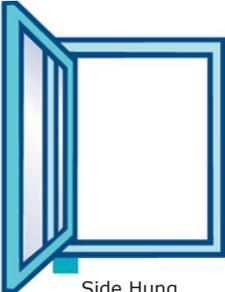
Separate frame and sash. Attach frame hinge side square and plumb on both sides. Correct any frame bow. Attach sash/door leaf and adjust frame, ensuring uniform free motion (air). Adjust frame at lock side, ensuring full impact against frame. It is important that frames do not bow. Check that all parts are level on both sides.



Supplemental shimming



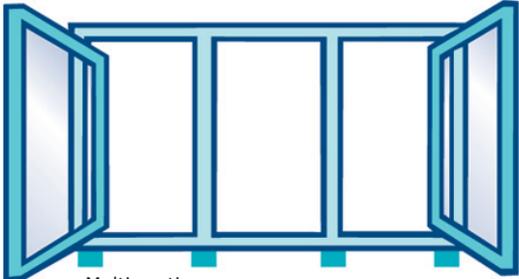
Door



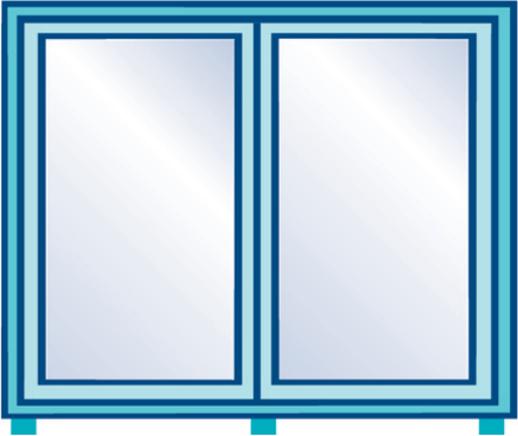
Side Hung window



Tilt and turn window



Multi section window



French doors

Signature

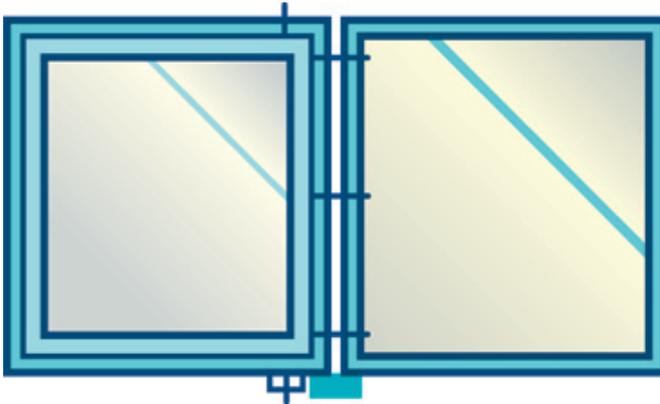


Supplemental shimming

Joining multiple windows

Using a 9.5 by 9.5 jointing strip, windows are attached side by side and fastened at a number of spots corresponding to the side fastening.

Additional shims may be necessary under connecting frames. Attach upper and lower frames close to fastening points.



Joining

Signature



Supplemental
shimming

Fitting of special units

You may ask the *Vrogum* distributor for fitting instructions for special units or download it from www.vrogum.dk

Surface treatment

From factory, untreated windows and doors are primed against rot and dry rot with the Vrogum Coat System. If not delivered fully factory finished, at least one coat of water-repellent, pigmented surface treatment must be applied to windows/doors before and after fitting. This ensures that the products are efficiently protected against water penetration and erosive UV rays.

Avoid exposing untreated windows/doors to rain or direct sun light, and ensure that first treatment is applied no less than 2 weeks after delivery.

Requirements for correct surface treatment:

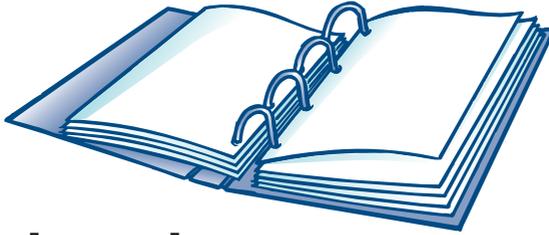
- all surfaces free from dirt and dust.
- no painting of weather strips.
- keep all moveable parts (hinge and lock) clear from surface treatment.
- no closing of any sashes that open until the treatment has dried completely.
- scrape/sand any silicone remnants from glass seal.
- no painting over the *Vrogum* label.

Important:

Remember to apply diffusi-ontight surface treatment to internal side of window!

Your distributor is always available with good advice and assistance with the choice of surface treatment.





Finished products

Please fit fully factory finished windows and doors immediately upon delivery and as described in this manual. Ensure that any damages are repaired straight away using the supplied paint.

Regularly rinse fully factory finished products with water on the outside, if possible in connection with normal window cleaning. This rinse is protective, especially in areas with high levels of pollution.

Maintenance

Windows should be maintained as per *Vrogum's* Maintenance Instructions.

Should the Maintenance Instructions not be supplied, you may ask the *Vrogum* distributor for it, or download it from www.vrogum.dk.

Airing

It is important to air rooms throughout the build and following moving in/completion to the extent that no condensation builds up on window panes. This is of great importance to the inside climate and window life in general.

Too much moisture may permanently damage windows, and such damage is not an entitled complaint.

Covering of elements with tape

If covering the elements only use tape suitable for acrylic paint (e.g. Tesa 4438). It is important that the tape is removed as quickly as possible and at the latest 14 days after attachment. If the correct tape is not used or it is removed too quickly you risk damaging the coating when it is removed.

Delivery

Before delivery to the builder or house owner, the person responsible for the fitting must ensure the following:

- all weather strips, hardware and rebates are clean from dust and dirt.
- all opening sashes are adjusted to a correct free fit.
- all hinges and locks are adjusted to correct friction and ease of movement.
- all moveable parts aside from frictional parts are lubricated with a suitable lubricant (consult the distributor for advice).
- all surface treatment damages on fully factory finished windows and doors have been repaired.
- users have been properly instructed on how to operate windows and doors correctly.



Guarantee

Vrogum grants a 5 years Guarantee on all delivered *Vrogum*-products according to the Danish law of building materials.

1. The present Guarantee is valid for a period of 5 years with effect from date of invoice and covers defects in manufacturing and/or material.
2. On findings of defects and shortcomings your complaint must be in writing and promptly forwarded to *Vrogum*.
3. By defects, damages and shortcomings you have to send photos of the goods in question, and *Vrogum* will then estimate to what extent removal of defects can take place by means of repairs/partial replacement or by delivery of other goods.
4. If defects in manufacturing and material can be set right by means of repairs/partial replacement, the defect must be remedied by your company. However, *Vrogum* pays the costs in full, provided that you forward an offer for the repair/replacement before commencement.
5. In case that faults, damages or defects in material cannot be remedied on the spot by your company, *Vrogum* is obliged to deliver other parts or goods without cost of materials/products on your part. Other parts/products will be send by post or together with a subsequent order/delivery. This does not apply to the costs as stated under item 8.
6. Should *Vrogum* have ceased production of an article at the time of complaint, *Vrogum* shall be entitled to supply you with a similar product.
7. A condition for this guarantee is that the product currently is in good repair according to the *Vrogum* Fitting and Maintenance Guide.
8. The present Guarantee does not cover the expenses by fitting of another product including the expenses of dismantling the defective and faulty product.
9. The guarantee does not meet defects and shortcomings that are due to:
 - Defective fitting or incorrect operation
 - Improper maintenance
 - Wrong keeping, transportation etc.
 - Unauthorised effort to make repairs.



This guarantee only applies to products that are fitted in Great Britain and Ireland at the time the claim is forwarded.

GLAS WARRANTY

for double-glazed windows delivered by *Vrogum A/S*.

Vrogum A/S only uses double-glazing of very high quality. All our suppliers are members of "Glasindustriens Samarbejdsorganisation" (the Danish Glass Manufacturers' Confederation) and thus subject to the organisation's high quality control standards.

For a period of 5 years from the time of delivery, which is always printed in the aluminium edge of our double-glazed windows, *Vrogum A/S* warrants that our double-glazed windows delivered for builds shall remain free from dust and condensation between the panes. This warranty shall cover delivery of a replacement window and related replacement costs.

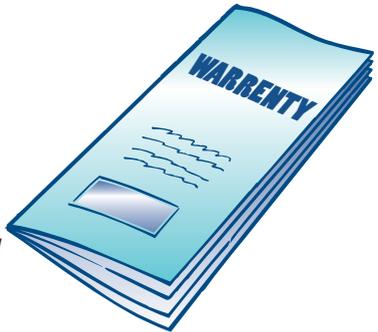
This warranty shall not cover any costs for:

1. Cranes, scaffolding and other equipment used when the window cannot be fitted via normal access roads.
2. Structural work or disassembly of adjacent building parts.
3. Any work carried out by bricklayers, carpenters, painters etc. following the fitting.

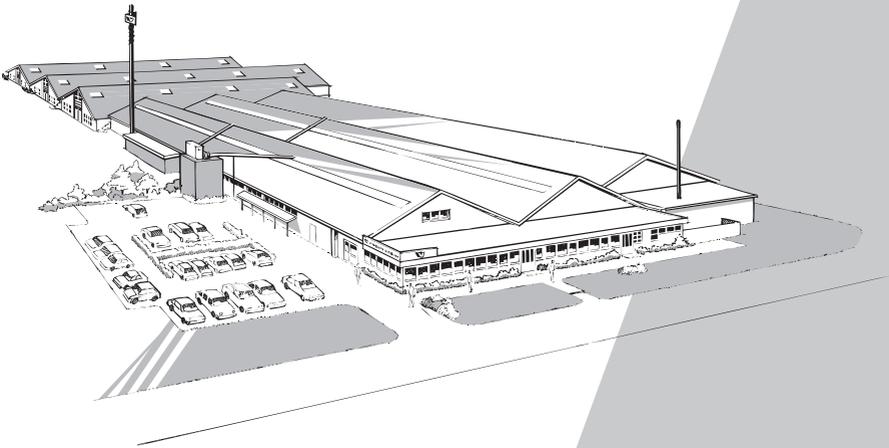
This warranty is conditioned by:

1. the window being fitted in accordance with the Fitting instructions of *Vrogum A/S*.
2. the window not being damaged by outside influence such as stress, knocks, movement in adjacent constructions and similar.
3. no damage being caused by frost burst, thermal stress or chemical attack of the glass or scumming or wrong storage
4. the window not having been submitted to processing such as for example cutting, sand blasting, corrosion, paint or other surface treatment.
5. necessary and continuous maintenance of casement/frame and fitting materials being carried out.

Please refer to Vrogum A/S Maintenance Instructions as well as folder from the Danish Glass Manufacturers' Confederation "Visual quality of insulating Glass Units" criteria for assessing deviations of the visual quality in insulation glass dated July 2009.



At *Vrogum* craftsmen's traditions and high-tech production principles are emphasized - with a constant further development of the existing product range.



Vrogum was founded over 50 years ago and today employs app. 70 people with the aim of manufacturing first class products, 40% of which are sold domestically and 60% exported.

Vrøgum A/S ♦ Industrivej 1 ♦ DK-6840 Oksbøl
Tlf. +45 7654 1111 ♦ Fax +45 7654 1100 ♦ info@vrogum.dk