

WE OPEN SPACE



Espagnolettes

Outward opening hardware

Parts brochure

Espagnolettes

Product Liability & Warranty

1. Product information and appropriate use

According to this definition, fastening systems are fittings for windows made of wood or PVC-U or, and corresponding combinations of materials, the principal function of which is to lock windows.

Locking is understood to mean holding a window closed in such a way that it cannot be opened by being pulled or pushed, but can be opened in a straightforward manner, such as by the operation of a handle.

All locking elements engage into corresponding recesses in the window frame, or in locking plates, etc.

All locking elements are moved by the operation of the handle for locking and unlocking.

The fastening systems are not designed to tolerate variations in form and variations in the seal, arising from temperature differences or modifications to the construction.

The overall fitting (fastening system) in each case must be assembled from original ROTO components only. Using components which are not part of the system may result in damage which excludes liability.

In order to ensure appropriate use, correct combination with permissible fittings and means of locking (such as keys, cylinders) and accessories (such as locking plates) during assembly, fitting must be made in accordance with installation instructions or with accepted DIN standards, including those for maintenance.

Special fittings are required for windows in humid rooms and for use in environments with aggressive, corrosive air content.

Binding legal provisions must be observed.

2. Misuse

The following cases in particular constitute misuse of fastening systems - i.e. inappropriate use of the product:

- if normal use is prevented by the introduction of other and/or unsuitable objects into the fastening system or into the locking plate.
- if obstructions are introduced into the opening area and thus prevent normal use.
- if the fastening system or locking plate are interfered or tampered with, with a resultant change to the construction, to the mode of operation or to the function.
- if the exposed locking elements are assembled or worked at a later stage, e.g. repainted, in a manner which has an adverse effect on their operation.
- if inappropriate loads, exceeding the normal force of a hand, are brought to bear upon the handle linkage.
- if non-associated locking means, such as locking equipment with different dimensions or which is inserted incorrectly, are used.
- if tools or aids which have a leverage effect are used to operate the fastening system.
- if additional loads are imposed upon the window.

3. Product performance

Where product performance is not set down in concrete terms in our catalogues and promotional literature, the requirements to be imposed upon the individual fastening systems must be agreed with us.

The suitability of fastening systems for use is dependent upon, amongst other things, the frequency of operation, the mode of operation, environmental influences and maintenance.

Assembly of window fittings.

The manufacturer's specifications pertaining to the assembly of window fittings (such as the arrangement of handles or additional elements of the fitting) are binding.

4. Product maintenance

Security-relevant elements of fittings should be tested for stability and checked for wear on a regular basis. If required, the fixing screws should be tightened or components should be replaced.

Furthermore, the following maintenance should be carried out at least once a year - or more frequently, depending upon the demands imposed upon the equipment:

- all moving parts and all locking points of the fastening system should be greased and tested to ensure that they are functioning properly.
- only cleaning materials which do not have an adverse effect upon the anti-corrosion treatment on the components of the fitting should be used.

Work on the fastening systems and on the associated components of the fitting, or replacement of components, should be carried out by specialist enterprises only.

5. Obligations to provide information and instruction

The following documentation is available to designers, to specialist suppliers, to processing enterprises, to clients and to users for compliance with the obligations to provide information and instruction and for maintenance work in accordance with the "Product Liability Act":

- design documentation
- catalogues
- works drawings
- maintenance and servicing instructions

In order to ensure that fastening systems for windows operate effectively:

- designers are obliged to request product information from the manufacturer and to observe that information.
- specialist suppliers are obliged to observe product information and, in particular, to request works drawings, maintenance and servicing instructions from the manufacturer and to supply these to the processing enterprises.
- processing enterprises are obliged to observe the product information and in particular to request maintenance and servicing instructions as well as operating instructions from the manufacturer and to pass these on to clients and users.

6. Use of related fittings

In terms of product information and proper use, misuse, product performance, product maintenance and obligations to provide information and instruction, the variants possible within the individual fastening systems should be treated as appropriate, depending upon the features in question.

General Design Description

ROTO standard espagnolettes are ideal for either top or side hung, outward opening casement windows. Capable of catering for sash rebates between 300mm and 1400mm, they are available in 20mm or 22mm backsets. Each espagnolette features cams which vary in height (8mm, 9.5mm or 10.5mm) and are adjustable by +/-1mm.

The drive rod is made from 3mm gauge steel and has 18mm of travel. Tests confirm that the cams resist a pull out force of 3kN. This represents the perpendicular loading applied when testing to BS 7950. However it must be borne in mind that the espagnolette and its strikers are only as strong as the strength of their fixings into the sash.

With profile related strikers available from Roto Frank's TSL range, there is compatibility with all the leading profile extruders.

Coating specification

RotoSil surface protection procedure has been developed by Roto for the hardware product range, based upon galvanising, chromating and an additional sealing. **RotoSil** enables the hardware components to appear in a smooth silver tone. The quality requirements of RAL-RG 607/3 are exceeded, also the protection effect against acids has been decisively improved. The surface protection regulations of the RAL quality assurance association in Velbert, Germany, are more than fulfilled.

Surface protection with **RotoSil** exceed the requirements of the following standards:

BS 7479 96 hours

DIN 50 021

RAL 607/3 (72 hours protection from white rust and 240 hours protection against red rust).

BS 6375 pt. 2 "Performance of Windows."

A plastic "infoclip" is available to order for these products, which allows fabricators to include their contact details on the hardware.

RotoSil

Smooth silver-matt finish on visible hardware components.



Espagnolettes

22mm backset with 8, 9.5 or 10.5mm cam heights

Order details

22mm backset espagnolette with adjustable cam



150 mm espagnolette



22mm backset, 8mm cam

Application range (mm)	Faceplate length (mm)	Packing quantity	Part number
150 - 240	150	1800	387 868
240 - 400	240	1000	387 869
400 - 600	400	700	387 870
600 - 800	600	720	387 871
800 - 1000	800	720	387 872
1000 - 1200	1000	720	387 873
1200 - 1800	1200	720	387 874

22mm backset, 9.5mm cam

150 - 240	150	1800	387 895
240 - 400	240	1000	387 896
400 - 600	400	700	387 897
600 - 800	600	720	387 898
800 - 1000	800	720	387 899
1000 - 1200	1000	720	387 900
1200 - 1800	1200	720	387 901

22mm backset, 10.5mm cam

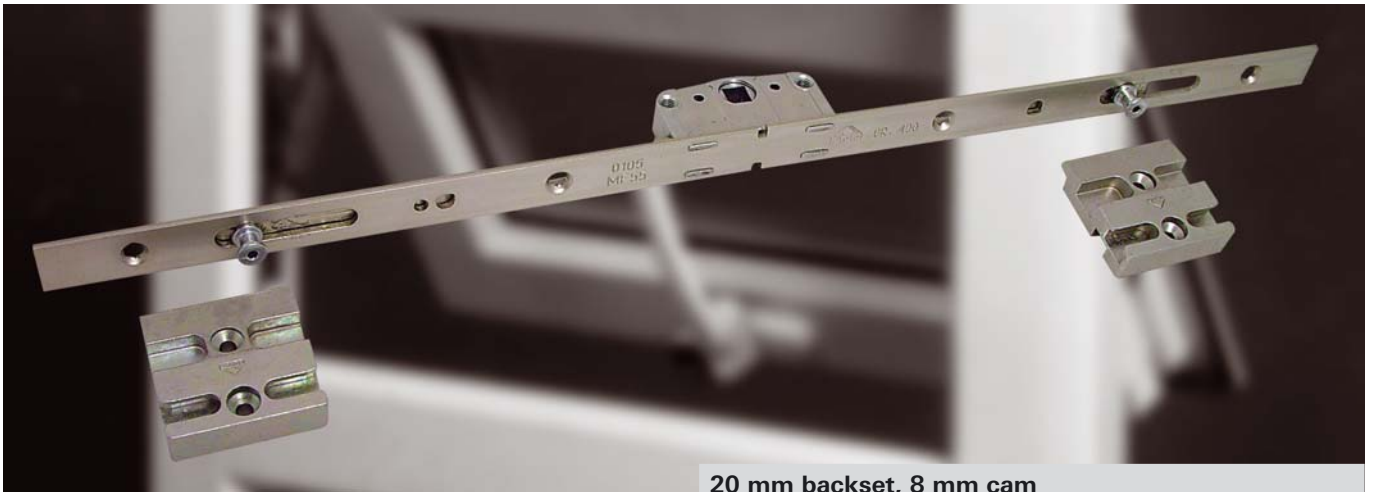
240 - 400	240	1000	392 069
400 - 600	400	700	392 070
600 - 800	600	720	392 071
800 - 1000	800	720	392 072
1000 - 1200	1000	720	392 073
1200 - 1800	1200	720	392 074

20mm backset with 8 or 9.5mm cam heights

Order details



20 mm backset espagnolette with adjustable cam



20 mm backset, 8 mm cam

Application range (mm)	Faceplate length (mm)	Packing quantity	Part number
240 - 400	240	1000	387 902
400 - 600	400	700	387 903
600 - 800	600	720	387 904
800 - 1000	800	720	387 905
1000 - 1200	1000	720	387 906
1200 - 1800	1200	720	387 907

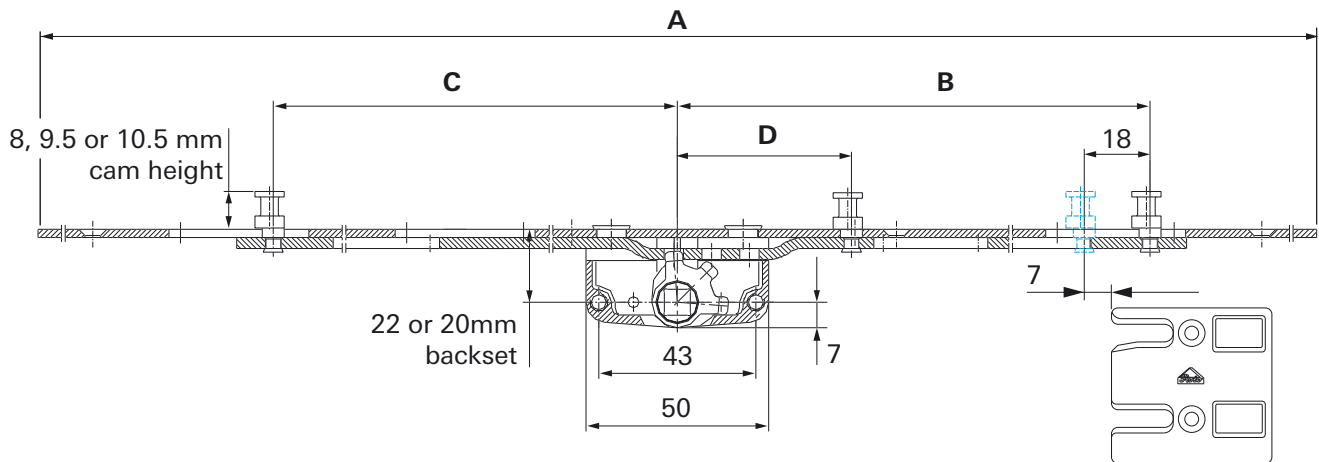
20 mm backset, 9.5 mm cam

240 - 400	240	1000	387 908
400 - 600	400	700	387 909
600 - 800	600	720	387 910
800 - 1000	800	720	387 911
1000 - 1200	1000	720	387 912
1200 - 1800	1200	720	387 913

Espagnolettes

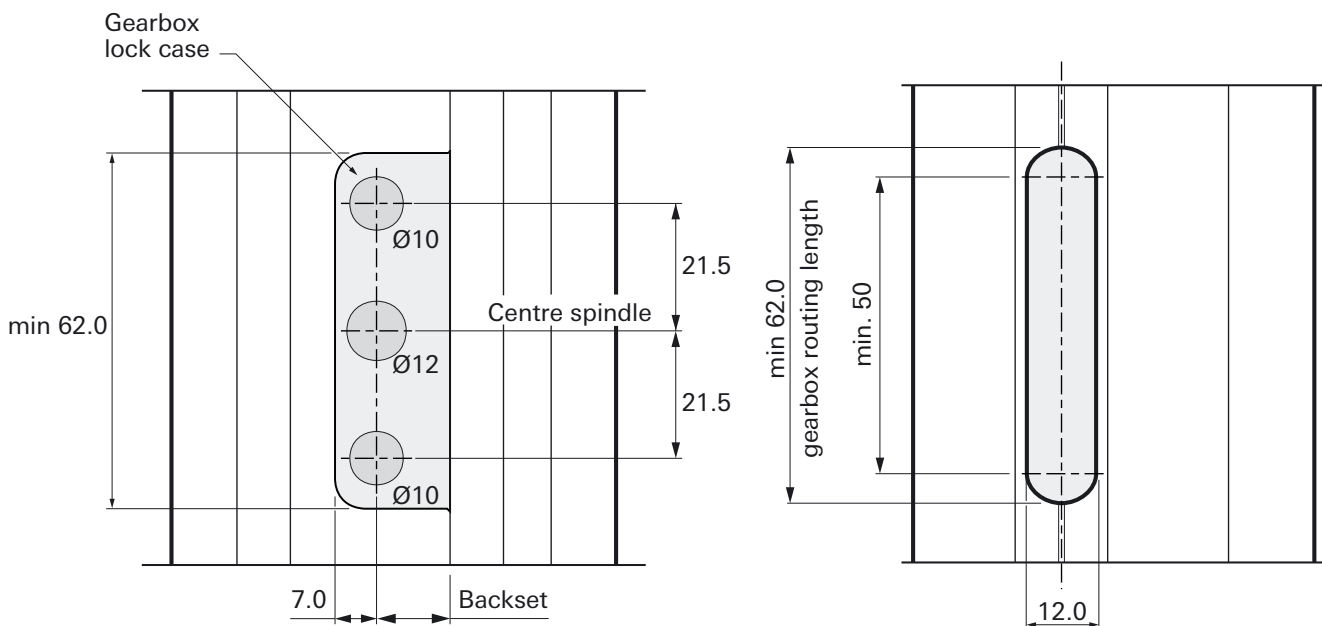
Technical details

Espagnolette with adjustable cam



Description	Dim. A	Dim. B	Dim. C	Dim. D
150 mm espag	150 mm	65 mm	N/A	N/A
240 mm espag	240 mm	88 mm	72 mm	N/A
400 mm espag	400 mm	143 mm	127 mm	N/A
600 mm espag	600 mm	243 mm	227 mm	N/A
800 mm espag	800 mm	343 mm	327 mm	N/A
1000 mm espag	1000 mm	443 mm	427 mm	128 mm
1200 mm espag	1200 mm	543 mm	527 mm	128 mm

Gearbox Routing Details



Information on additional parts for top swing and timber windows



Plastic Block for Top Swing Windows

Most top swing windows share common characteristics as far as their outer frames are concerned. They feature a deep channel into which the top swing hardware and strikers are located. A plastic block can be ordered onto which the striker is situated.

Order Details

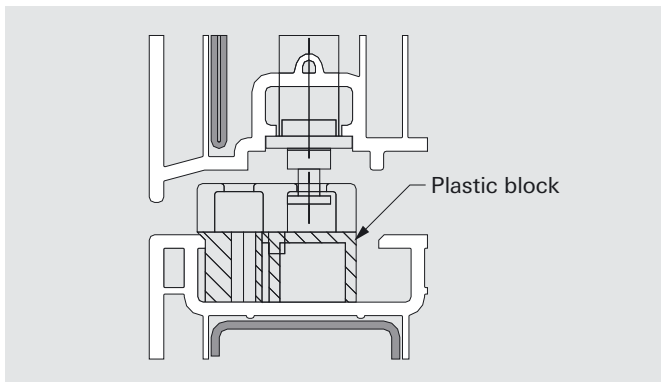
Part number	Description	Packing Unit
297 221	Block	10

Wedge for Timber, Casement Windows

Many casement windows feature a frame with a sloping rebate. Roto has produced a 5° wedge for such rebates. The **387 956** striker, when mounted onto the frame with the wedge beneath, is ensured to sit on a horizontal plane.

Order Details

Part number	Description	Packing Unit
297 822	Wedge	10





Roto Roof Windows and Hardware Ltd.

Swift Point • Rugby • CV21 1QH • United Kingdom
Telephone +44 (0)1788 55 86 00 • Facsimile +44 (0)1788 55 86 05
info.west@roto-frank.com • www.roto-frank.co.uk

