



Angel Ventlock™
**Window Opening
Control Devices**



Child window safety is no accident





Angel Ventlock™

Window fall prevention

It's an unfortunate fact that every year over 4,000 children fall through open windows. Of those, 15-20 are killed and at least 80% are under the age of four. (Source: Home Safety Facts and Figures, RoSPA).

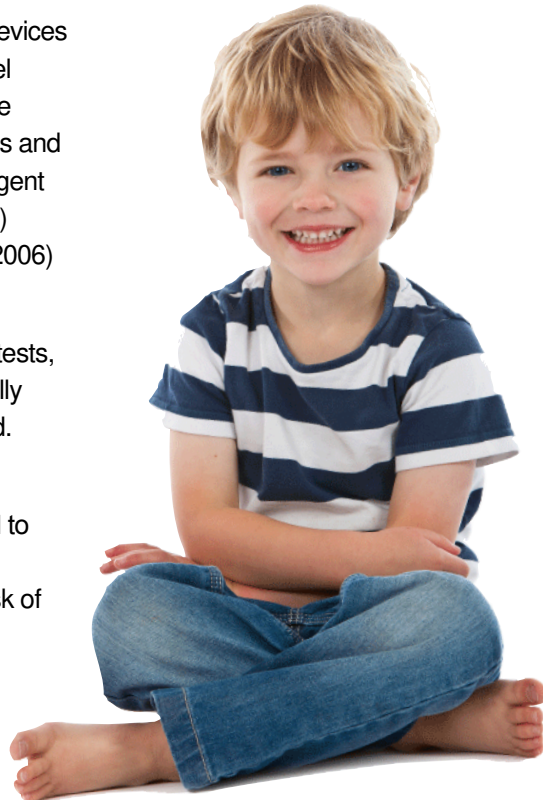
An accessible window is defined as one where any part of it is 1500mm or less above floor level.

Angel Ventlocks™ are available for both Sash and Casement windows.

Fitting Window opening control devices will reduce this statistic. The Angel Ventlock™ is used by some of the world's largest window companies and has been tested to the most stringent International (ASTM F2090-2010) and European (BS EN 14351-1:2006) Standards.

Angel surpasses all forced entry tests, allows for egress and automatically resets when the window is closed.

The British Standard states 'Safety restrictors should be fitted to any accessible opening window where children or adults are at risk of falling out'.



The legislation

Where do Safety restrictors need to be fitted?

BS 8213 Part 1 States:

a) Safety restrictors should be fitted to any accessible opening window where children or adults are at risk of falling out.

'An accessible window is defined as one where any part of it is 1500mm or less above floor level. This means that any accessible window with a sill height of less than 1500mm should be fitted with compliant safety restrictors.'

b) If safety restrictors are to be fitted to fire escape windows, then the positioning of the device should be such that the occupant does not have to spend time searching for the release. The release can be achieved without prior instruction and cannot be confused with other operations.

What type of Safety restrictors should I fit?

BS EN 14351-1:2006 States:

Safety restrictors should operate so that they:

a) Limit the initial window opening to less than 100 mm.

b) Cannot normally be released by a child under 5 years old (ASTM F2090 defines that the release mechanism must be operated by either 2 single actions or 1 dual action).

c) Are readily identifiable and capable of being released by an adult (without prior instruction) on windows suitable as a means of escape in case of fire.

d) Re-engage automatically when an opening sash is returned to the initial restricted opening position, or to a closed position. Using the sash to set the device is not permissible (ASTM F2090).

e) Are not lockable on windows suitable as a means of escape in case of fire.

Clear written information on the operation of the fitted safety restrictors, and any potential risks or limitations in use, should be provided to owners and occupiers by window installers.

When it is necessary to open the window fully, return the window to a position where the restrictor automatically re-engages as soon as possible.

Safety restrictors should be tested in accordance with DD CEN/TS 13126-5:2004 and should be:

a) Durability tested under DD CEN/TS 13126-5:2004 7.3, grade 5,

b) Strength tested under DD CEN/TS 13126-5:2004 7.4,

c) Corrosion resistance tested under DD CEN/TS 13126-5:2004 7.5, and conform to BS EN 1670 Class 3 (96 hours) or better.

Note: Restrictors can be either an integral part of the window operating gear or a separate item of hardware which can be fitted to a window at the time of manufacture or later.

Restrictors should meet the requirements of BS 6375-2. EN 14351-1 clause 4.8 "load bearing capacity of safety devices" specifies testing in accordance with EN 14609 or EN 948 at a load of 350 N.

Always reference ASTM F2090-2010 when specifying Window Opening Control Devices.





Our top ten window safety tips

We have compiled a list of our top ten window safety tips to guide you and your family:

- 1 Never leave young children unattended near open windows
- 2 Teach your children not to play near windows
- 3 Close and lock your windows when children are around
- 4 Only open windows that children cannot reach or windows that are secured with compliant locks
- 5 Keep beds, furniture and anything a child can climb on away from windows
- 6 Do not depend on insect screens to prevent falls, they are not designed for this purpose
- 7 Repair broken windows or nonworking parts as soon as possible
- 8 Open windows from the top, not from the bottom
- 9 Install child safety devices that comply with ASTM F2090 - 08/10 and BS EN 14351-1:2006 standards
- 10 Supervise your children as they play





Angel Ventlock™ Sash Windows

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Casement Angel™ Casement Windows

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Sash Window Restrictors

Timber Windows

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PVCu Windows

Retrofit	16
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Factory Clip Fix	20



Side Fix



Clip Fix



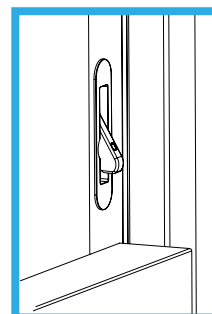
Face Fix



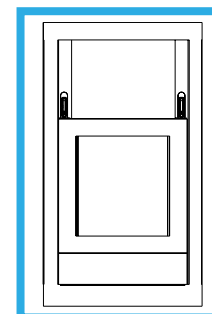
Retrofit



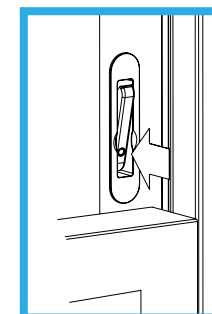
How Angel Ventlock™ keeps your child safe



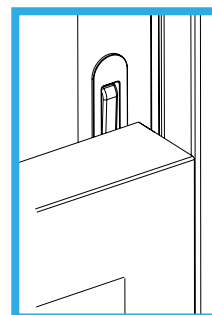
Angel Ventlock™ set



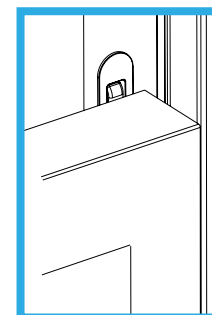
Sash is stopped when opened to 100mm



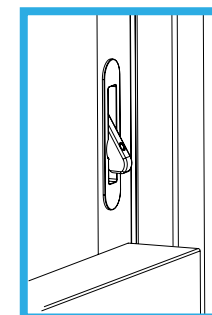
Push arm in (repeat on opposite side)



Sash can be raised



The arm unlatches as the sash is raised



The arm resets as the sash is lowered

There are various forms of the Angel Ventlock™. The face-mounted, side-mounted and clip fix versions are designed to be installed by the window manufacturer. They can be used with PVCu, timber and aluminium windows. They are all aesthetically pleasing. Additionally, there is a range of aftermarket versions of the Angel Ventlock™ designed to fit timber, aluminium and PVCu windows.

If you are unsure if Angel Ventlock™ will fit your window, please contact us for advice.





Timber Windows

Retrofit Version

The Retrofit version is for aftermarket use on timber and aluminium sash windows.



In detail ...

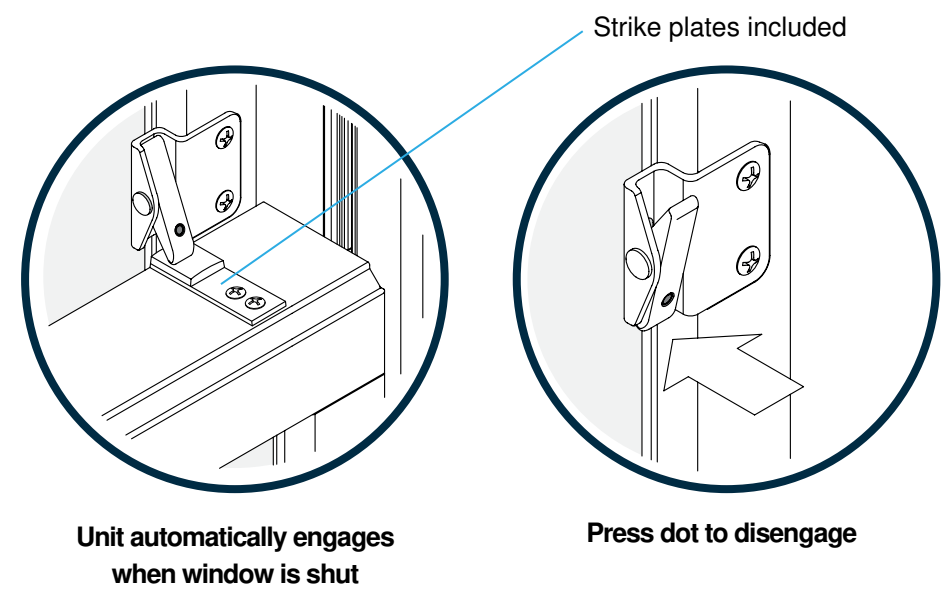
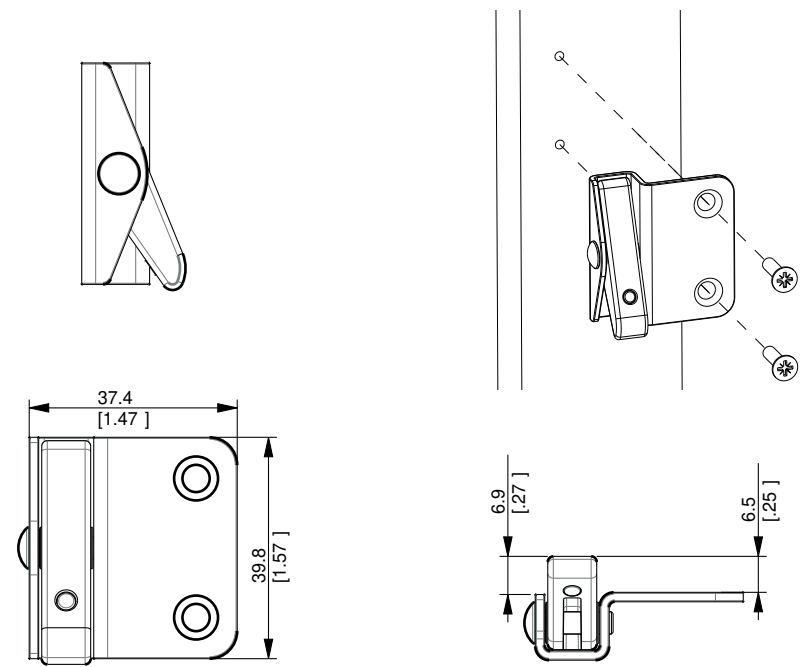
Primarily fitted as an aftermarket device where removal of the sash is difficult.

The Retrofit version is fitted onto the stiles of the top sash – one on either side. The units are single action, so fitting two ensures compliance with ASTM F2090 and BS EN 14351-1:2006.

This type can also be installed as a factory-fitted device to avoid interruption of assembly lines.

Specifications & installation instructions are supplied and also available as a download from our website.

Supplied as a handed pair. Quote stock code: ANGELR



Unit automatically engages when window is shut

Press dot to disengage

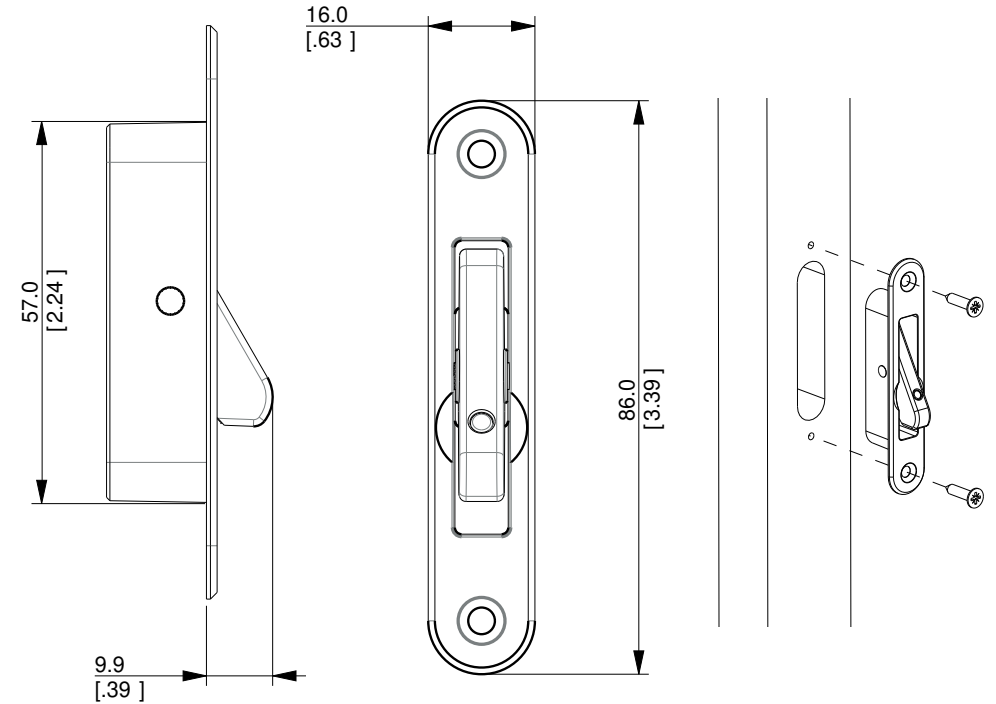




Timber Windows

Face Fix

The Face Fix version is for use on timber and aluminium sash windows.



In detail ...

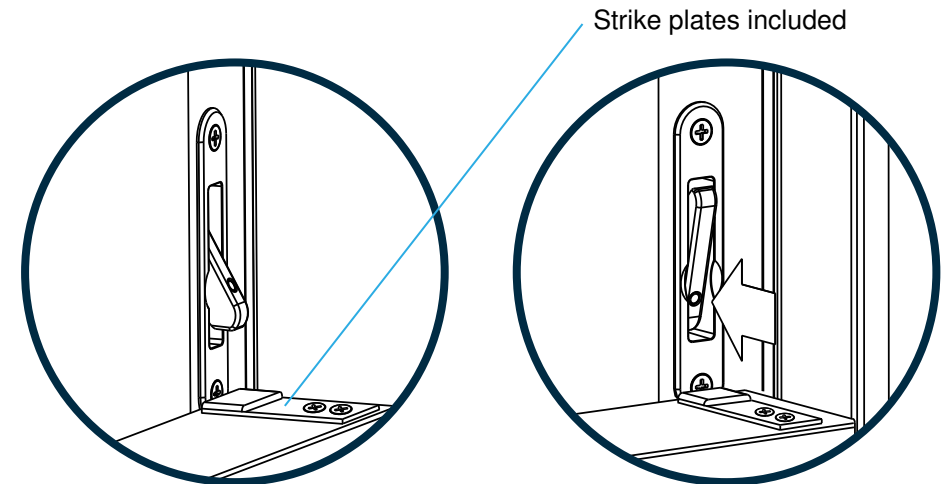
The unit is primarily factory-fitted as removal of the sash is required. However, provided the sashes can be removed easily, the Face Fix version is also suitable for use where the sashes have already been installed.

The Face Fix version is fitted into the stiles of the top sash – one on each side. The units are single action, so fitting two ensures compliance with ASTM F2090 and BS EN 14351-1:2006.

Fixing is through the front of the unit and into the sash.

Specifications & installation instructions are supplied and also available as a download from our website.

Supplied as a pair. Quote stock code: ANGELF

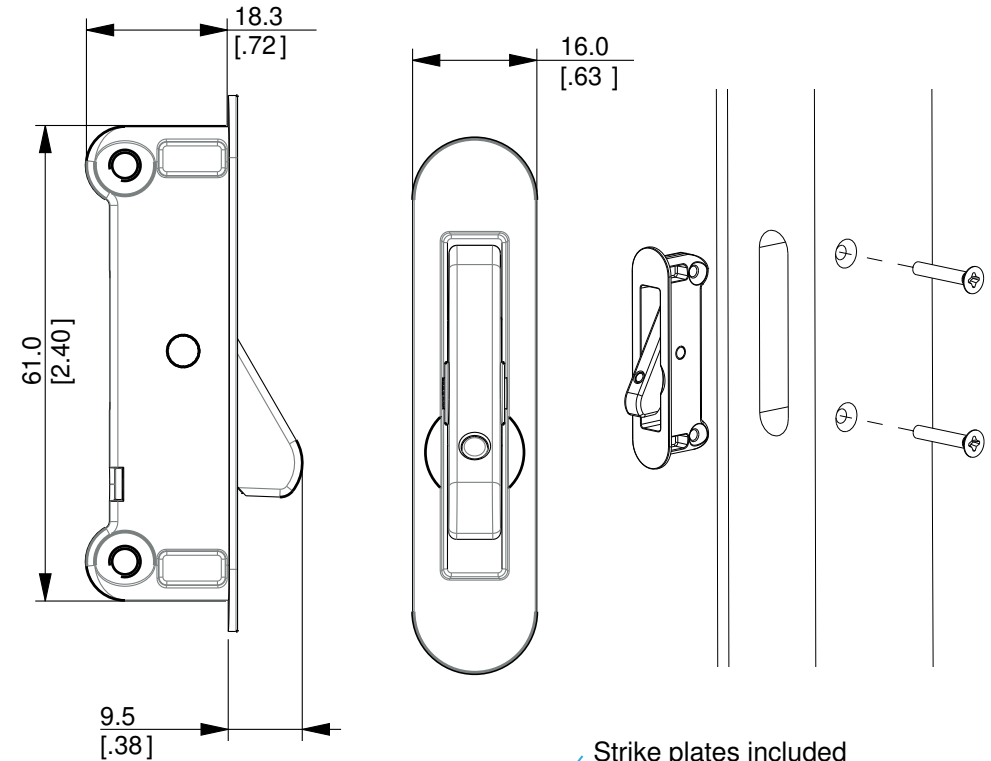




Timber Windows

Side Fix

The Side Fix version is for use on timber, aluminium and PVCu sash windows.



In detail ...

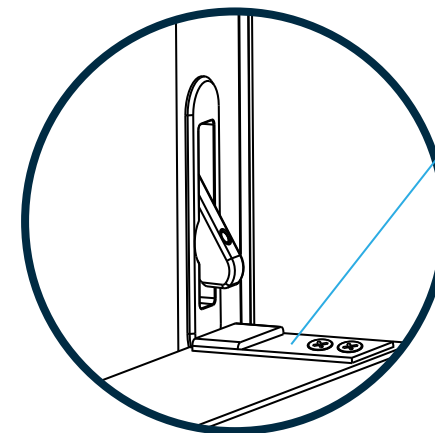
The unit is primarily factory-fitted as removal of the sash is required. However, provided the sashes can be removed easily, the Side Fix version is also suitable for use where the sashes have already been installed.

The Side Fix version is fitted into the stiles of the top sash – one on each side. The units are single action, so fitting two ensures compliance with ASTM F2090 and BS EN 14351-1:2006.

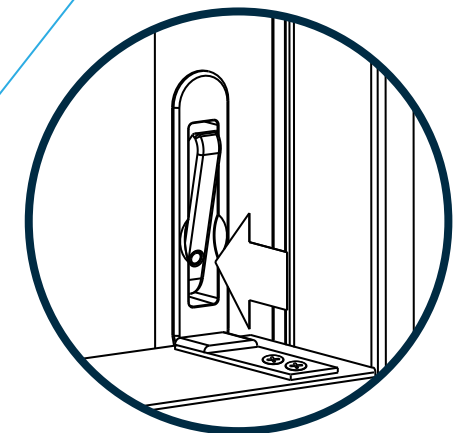
Fixing is through the side of the sash and into the unit. Screw holes are not visible and the units are therefore tamper-proof.

Specifications & installation instructions are supplied and also available as a download from our website.

Supplied as a pair. Quote stock code: ANGELS



Unit automatically engages when window is shut



Press dot to disengage

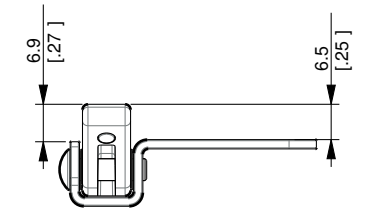
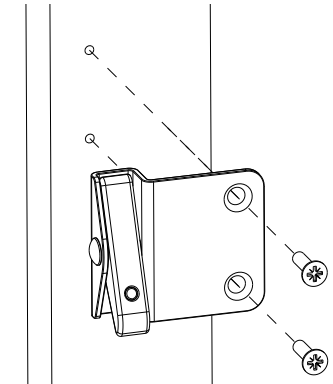
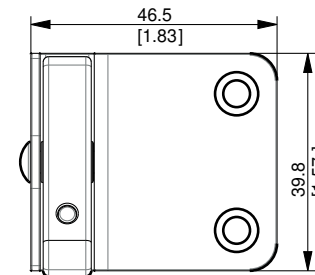
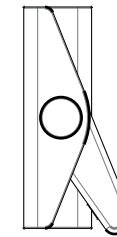
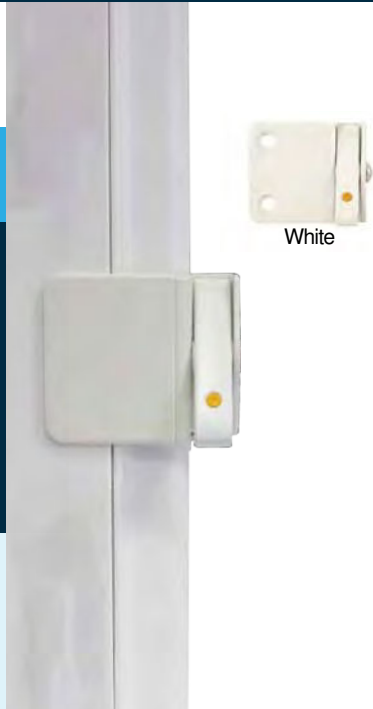




PVCu Windows

Retrofit Version

The Retrofit version is for aftermarket use on PVCu sash windows.



In detail ...

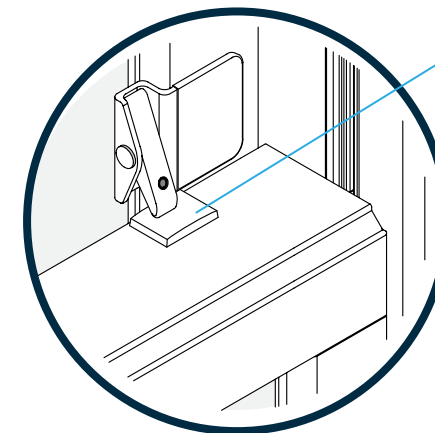
Primarily fitted as an aftermarket device where removal of the sash is difficult.

The Retrofit version is fitted onto the stiles of the top sash – one on either side. The units are single action, so fitting two ensures compliance with ASTM F2090 and BS EN 14351-1:2006.

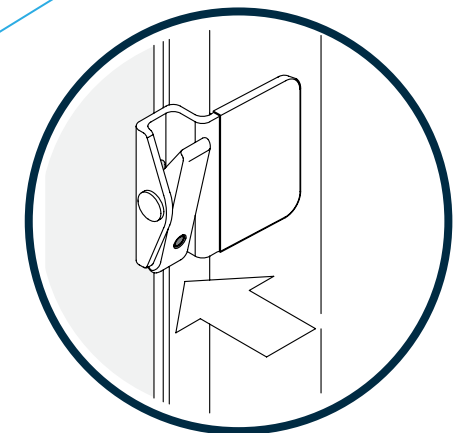
This type can also be installed as a factory-fitted device to avoid interruption of assembly lines.

Specifications & installation instructions are supplied and also available as a download from our website.

Supplied as a handed pair. Quote stock code: ANGELRPVCWHT



Unit automatically engages when window is shut



Press dot to disengage

Bumpers included

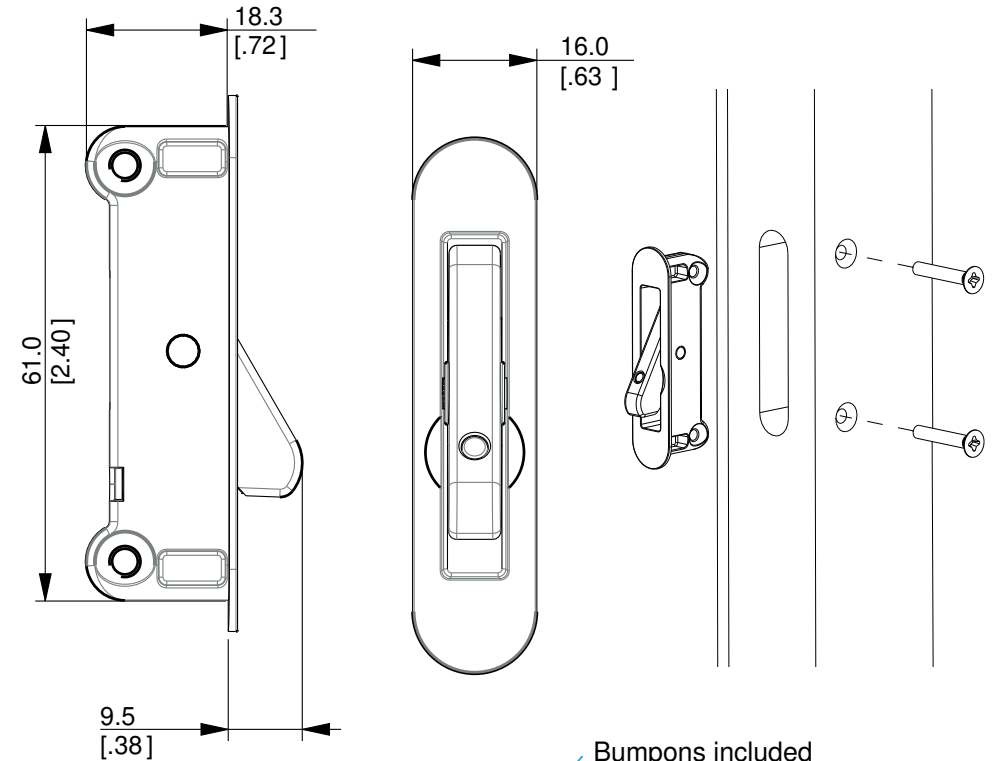




PVCu Windows

Side Fix

The Side Fix version is for use on PVCu sash windows.



In detail ...

The unit is primarily factory-fitted as removal of the sash is required.

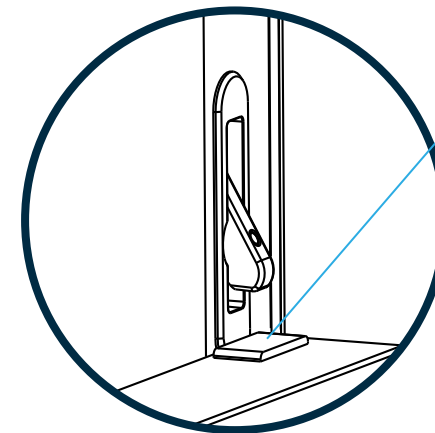
However, provided the sashes can be removed easily, the Side Fix version is also suitable for use where the sashes have already been installed.

The Side Fix version is fitted into the stiles of the top sash – one on each side. The units are single action, so fitting two ensures compliance with ASTM F2090 and BS EN 14351-1:2006.

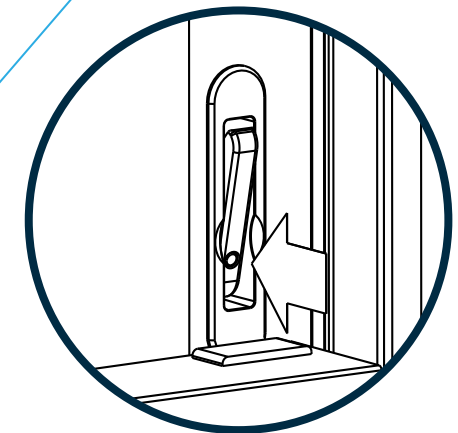
Fixing is through the side of the sash and into the unit. Screw holes are not visible and the units are therefore tamper-proof.

Specifications & installation instructions are supplied and also available as a download from our website.

Supplied as a pair. Quote stock code: ANGELS



Unit automatically engages when window is shut



Press dot to disengage

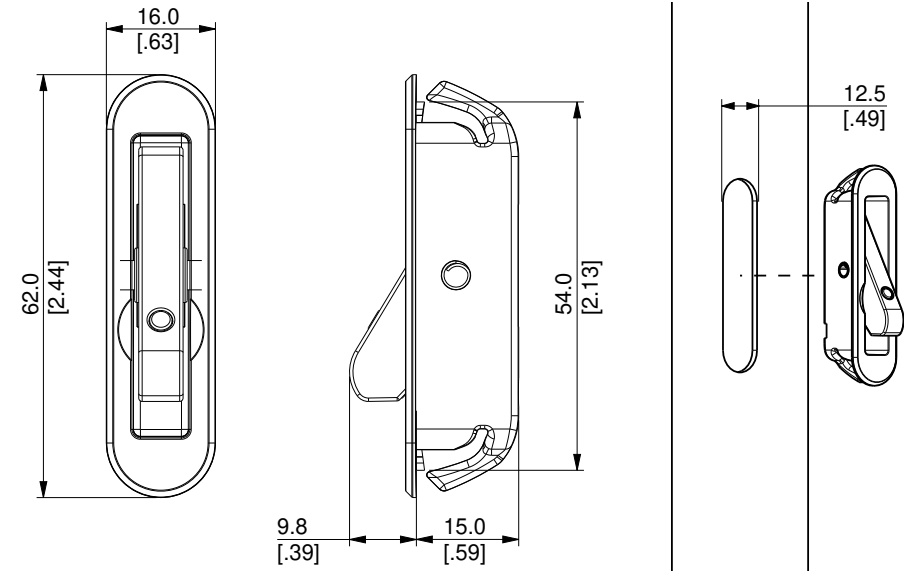




PVCu Windows

Clip Fix

The Clip Fix version is for use on PVCu sash windows weighing up to 20kg*



In detail ...

The unit is primarily factory-fitted as removal of the sash is required. However, provided the sashes can be removed easily, the Clip Fix version is also suitable for use where the sashes have already been installed.

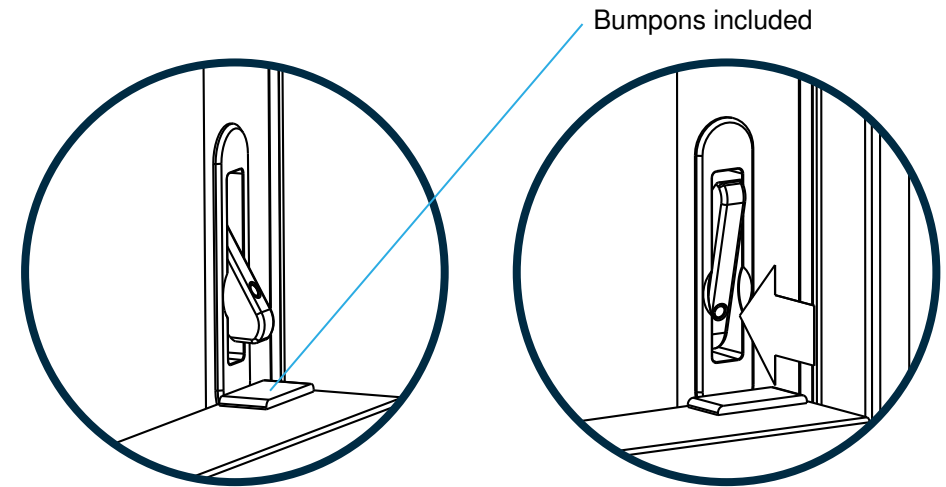
The Clip Fix version is fitted into the stiles of the top sash – one on each side. The units are single action, so fitting two ensures compliance with ASTM F2090 and BS EN 14351-1:2006.

The unit is clipped into a slot in the face of the top sash. The units are therefore tamper-proof.

*Clip Fix is suitable for sashes weighing up to 20kg and will work with wall-thicknesses from 1.5mm (0.06") to 3.0mm (0.12").

Specifications & installation instructions are supplied and also available as a download from our website.

Supplied as a pair. Quote stock code: ANGELCLIP



Unit automatically engages when window is shut

Press dot to disengage





Casement Window Restrictors

PVCu & Timber Windows

Retrofit or Factory Fit 24

Restrictor Hinges Factory Fit 26



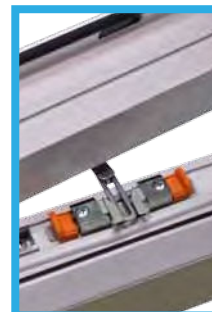
Restrictor Hinge



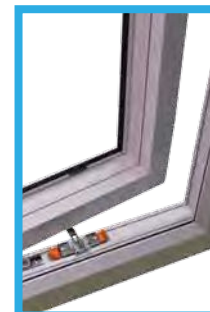
Casement Angel™



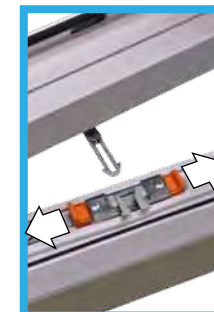
How Casement Angel™ keeps your child safe



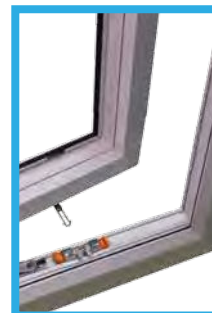
Casement Angel™ set



Window is stopped when opened to 100mm



Pull orange tabs away from each other to disengage



Window can be opened



The arm retracts as the window is closed



Device automatically resets as the window is closed

Casement Angel™ is designed to be fitted by a competent window installer or by a window manufacturer. It can be used with PVCu, timber or aluminium windows that use friction stays. It will not work traditionally hinged windows as the device fits into a eurogroove. Its discrete and can't be seen when the window is closed. The device resets itself when the window is closed and requires minimum maintenance.

If you are unsure if Casement Angel™ will fit your window, please contact us for advice.





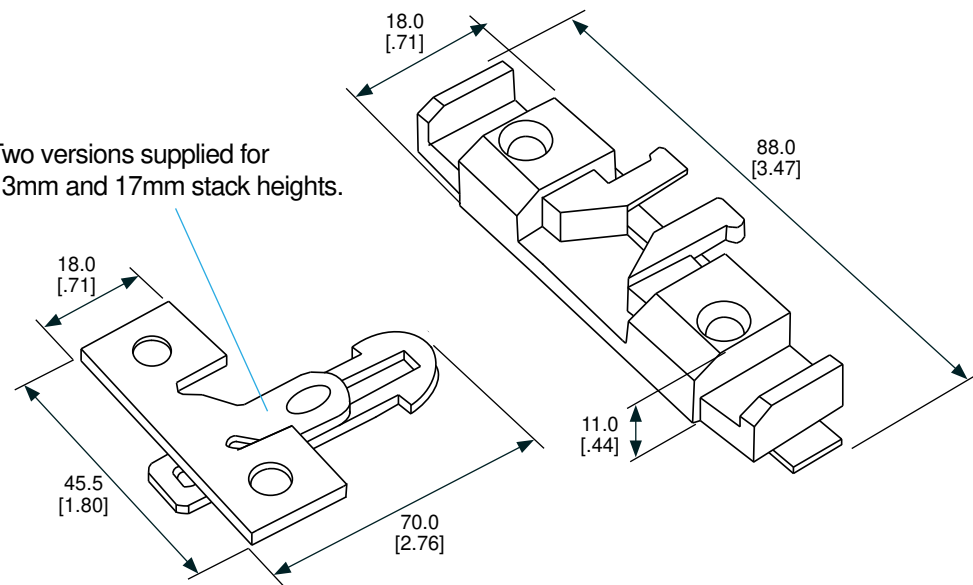
PVCu & Timber Windows

Casement Angel™

The Casement Angel™ is for use on PVCu and timber casement windows.



Two versions supplied for 13mm and 17mm stack heights.



In detail ...

Casement Angel™ is a dual action auto resetting device that is for factory fit or fitting by a Professional Installer.

It can be used with PVCu, timber or aluminium windows that use friction stays. It will not work with traditionally hinged windows as the device fits into a eurogroove.

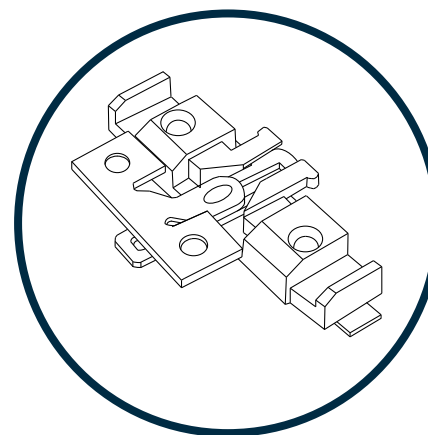
The Casement Angel™ is fitted in the friction stay groove of the window frame and the latch is fitted in the eurogroove of the sash.

The unit is supplied with fixings to fit both 13mm and 17mm stack heights.

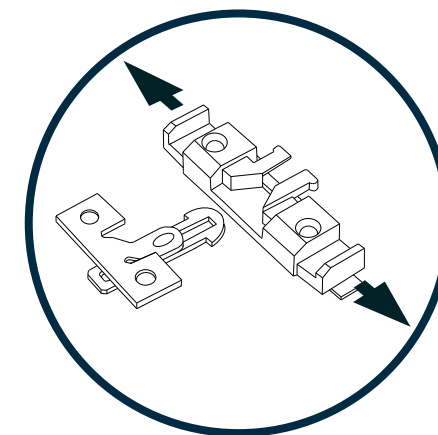
The unit is compliant with BS EN 14351-1:2006.

Specifications & installation instructions are supplied and also available as a download from our website.

Quote stock code: ANGELCASEF



Device automatically engages when window is shut



Pull orange tabs away from each other to disengage





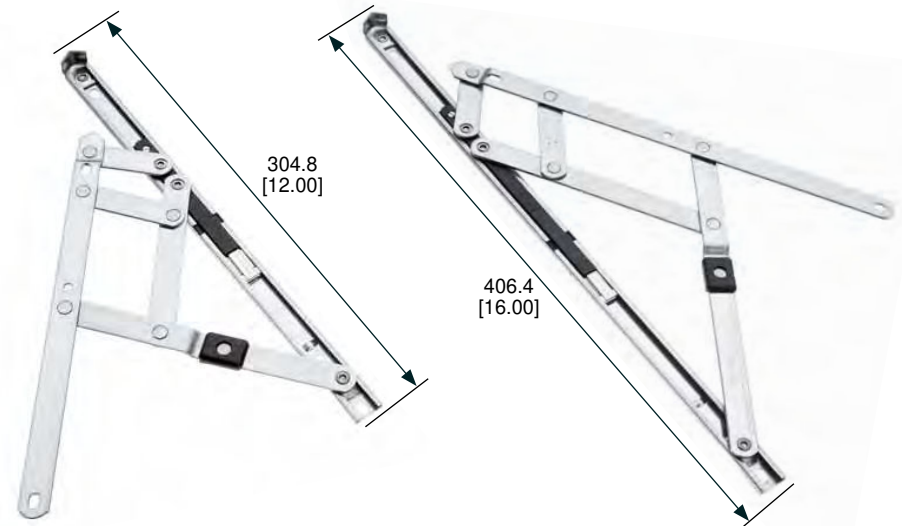
PVCu & Timber Windows

Restrictor Hinges

The Restrictor Hinge is for use on PVCu and timber casement windows.



Available as a 12" or 16" hinge for both 13mm and 17mm stack heights.



In detail ...

Restrictor Hinges are a factory-fitted dual action auto resetting device.

They have a unique smooth operating mechanism that restricts the initial window opening to 100mm in compliance with BS 8213, Part 1: 2004 'Code of Practice for Safety in Use and in Cleaning' and BS EN 14351-1:2006 'Load bearing capacity of safety devices'.

The Restrictor Hinges are available as a 12" or 16" hinge, to fit both 13mm and 17mm stack heights.

Specifications & installation instructions are supplied and also available as a download from our website.

Quote stock code: RES1213, RES1217, RES1613 or RES1617



Device automatically engages when window is shut



Press both hinge release buttons to disengage





CableVentlock™

CableVentlock™ is easily fitted and key lockable.

It can be used on most windows and doors where increased security is required.

Available Finishes: White. Other colours available on request.



MiniLock

MiniLock allows the sash to be left open a few inches without compromising security or safety. Easy to fit.

The MiniLock projects 9mm when fully engaged.

Available Finishes: Brass, Chrome or Satin Chrome.



MigStop

MigStop allows the sash to be left open a few inches without compromising security or safety. Easy to fit.

The MigStop barrel is 20mm long & 16mm in Diameter.

Available Finishes: Brass, Chrome or Satin Chrome.



Locking Ventlock™

Locking Ventlock™ allows the sash to be left open a few inches without compromising security or safety. Easy installation.

The Locking Ventlock™ projects 9mm when fully engaged.

Available Finishes: Brass, Chrome or Satin Chrome.



Push Ventlock™

Push Ventlock™ is easily fitted and keyless operated.

Use where fire egress may be of concern or above ground floor level. Push Ventlock™ projects 9mm when engaged.

Available Finishes: Brass, Chrome or Satin Chrome.



UniStop

UniStop™ is available for use on Timber and PVCu Sash Windows. No routing out is required for installation.

Heavy duty Vent restrictor for large sashes.

Available Finishes: Brass or Chrome.



For more information visit:
www.mightonproducts.com
or call our sales team on 0800 056 0471





child window safety is no accident



Visit our website to download our complete catalogue
or call our sales team on 0800 056 0471

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Patent no. PCT/GB09/1526. Ventlock. is a trademark of Mighton Products Ltd.



“Make It Once...Make It Mighton...”