

The Flush Fitting Casement has been designed as a modern PVC equivalent of the traditional 95mm wide, flush fitting hardwood timber casement window, enabling you to replace wooden windows with authentic designs in authentic colours but using maintenance free PVC.



Close up of a Mullion/transom in Irish Oak laminated profile. You can see the laminate goes all the way across the profile giving an authentic timber appearance.

## General specification

- Internally glazed, 28mm double glazed or 44mm triple glazed units (open in doors are externally beaded).
- Mechanically joined outer frame with welded sashes (mechanically joined sashes option)
- Dummy sashes throughout so no reverse butt welds
- Only 3 main profiles, outer frame, sash and mullion/transom
- The sashes are the same on windows and doors
- There is an external reinforcing bar (*as seen in the image above*) that is supplied loose on all windows over 1650mm and is fitted on site to give strength. It also replicates the authentic look of an old timber weather bar and can be ordered on any window with a transom or mullion, if required order the frames as fully reinforced
- There is a feature 18mm Georgian bar which is applied on both sides of the glass, the bars have a different internal and external detail
- The profiles are available in a choice of 12 grained laminated colours, 1 smooth laminated colour (Eclectic Grey) as well as 1 plain through colour options (pls see *the colour chart*)
- On the laminated frames the foil covers all of the rebate on the mullions, transoms and the outer frames (*as can be seen in the above image*), giving an authentic wood look.
- The run up blocks and end caps match the base profile colour (*see colour chart*)
- The weather seals are black Qlon
- Profiles are guaranteed for 10 years
- **Head vents are available in either the frame or the sashes – please note that there are no add-ons so having them in the head will leave plaster lines tight!**

## General specification

- The standard lead time is 4 weeks from receipt of survey
- Angles and arched frames are available but on an extra 2-3 week lead time
  - Angled frames are fully welded (outer frame and sash and can go to a point)
- The smallest arched frame is 592mm
- Double glazed (28mm) with overall U-value of 1.2
- Triple glazed (44mm) with overall U-value of 0.8

## Casement windows

- **Outer frames and sashes are mechanically joined as standard** although these can be specified as welded if required.
- Available as standard with friction hinges and in line handles, optional upgrades:-
  - Addition of dummy butt hinges and/or dummy peg stays
  - Upgrade of handles to tear drop or monkey tail styles
  - Upgrade to mega egress friction hinge
  - Change to working butt hinges and working peg stays
- Standard lock is a Maco shootbolt espagnolette
- Claw locks can be fitted to the back of the sashes
- French Fire Escape Windows
- There are no tilt and turns, pivot, vertical sliding windows or dummy mullions/transoms

## Doors – Residential/French and Composite

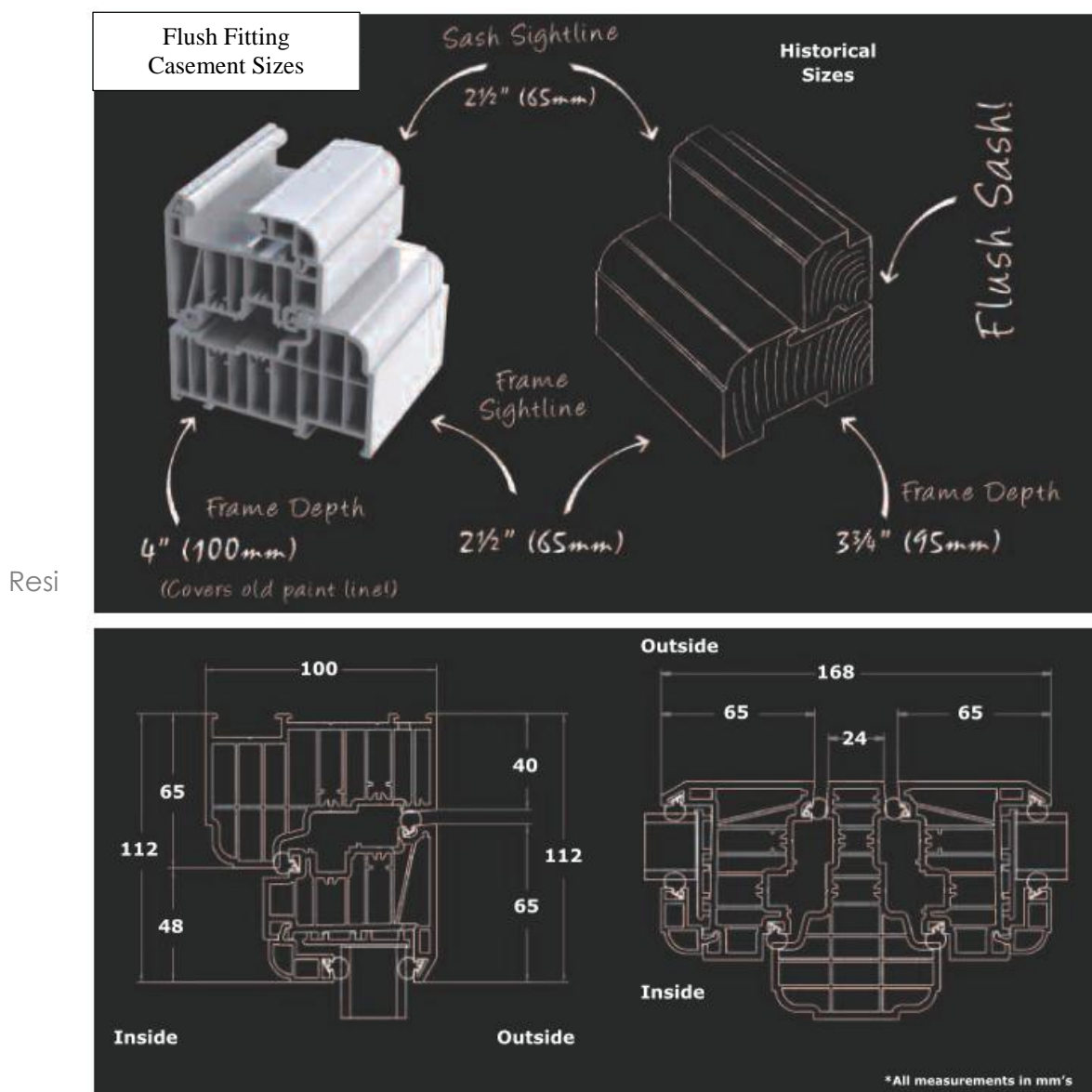
- Residential doors are available open out with a standard PVC threshold or open in with an aluminium low threshold (open in doors are externally beaded).
- Residential doors are available with a three piece lock/keep set incorporating hook bolts top and bottom and a central soft latch and dead latch
- The handles are from our standard Fab'n'Fix range
- French doors are available open out with a standard PVC threshold or open in with an aluminium low threshold
- French doors are available with a three piece lock/keep set incorporating hook bolts top and bottom and a central soft latch and dead latch on the master door and finger bolts on the slave door.
- There are no midrails for the Flush Fitting doors so they have to be either full height glass or panels
- The door sash profile is the same on all four sides, there is currently not an option for a deeper bottom rail.
- Composite doors are available, unlike standard composite doors the slab is actually built around the sash of the Flush Fitting door, please see the separate datasheet which details the full range. It is worth noting that not all colours are available for the composite colours so it may be advisable to go for a contrasting colour.
- There is no patio door for the Flush Fitting range
- You cannot have an open in door without a low aluminium threshold
- You cannot have an open out door with a low aluminium threshold

## Extras

- There is a straight coupler (12mm deduction off each frame)
- There is a 90 degree square bay post (35.5mm deduction off each frame)
- There is a variable angle bay post (see the table further on for the deductions)

The routine work of replacing windows does not normally require consent from a local authority, especially if it is within the properties permitted development rights. However there are currently 9000 conservation areas and growing, within England, where local planners have stipulated that replacement windows come under Article 4 directives, which basically means that although the use of modern materials are ok the design must be similar to the original window.

With the overall dimensions of the window system being based on the timber (see below), this new window means it is possible to satisfy the requirements of local authorities and provide a modern window with a traditional look.



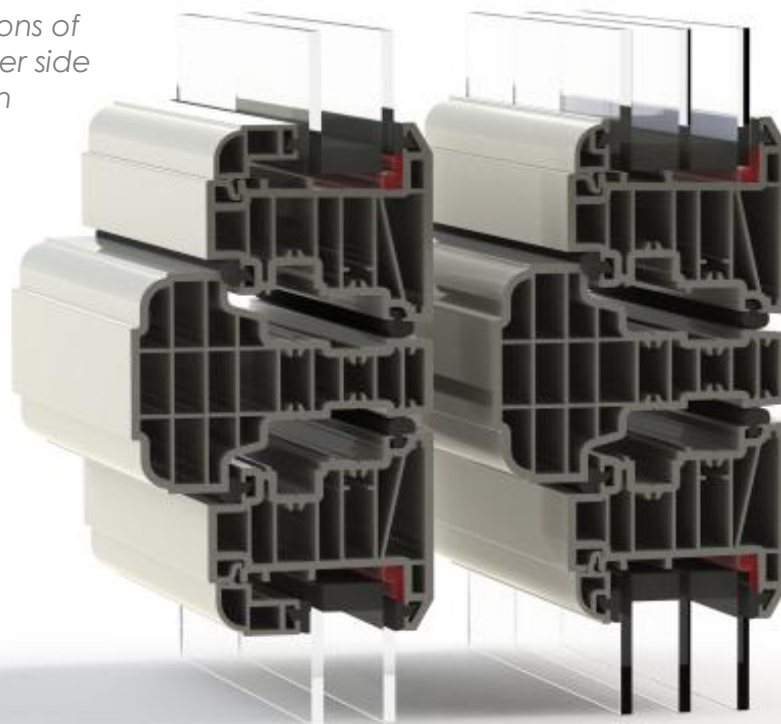
Due to the size of the profile the system has been able to incorporate multiple chambers which ensure that it is one of the best thermally performing windows on the market and with the use of triple glazing able to meet passive house standards.



## Glazing

- All internally glazed with dummy sashes throughout and black Qlon weather seals (please note that open in doors are externally beaded).
- Available with 28mm double glazed units giving an overall U-value of 1.2W/m<sup>2</sup>K (Planitherm, super spacer bar, argon and Planilux with a centre pane U-value 1.219W/m<sup>2</sup>K)
- Also available with 44mm triple glazed units with an overall frame U-value of 0.8W/m<sup>2</sup>K (Planitherm, super spacer bar, argon and two panes of Planilux with a centre pane U-value of 0.976W/m<sup>2</sup>K)
- At 0.8W/m<sup>2</sup>K U-value this meets the latest passive house standards and makes it one of the most thermally efficient windows on the market

Cross sections of  
sashes either side  
of a mullion



28mm double glazing

44mm triple glazing

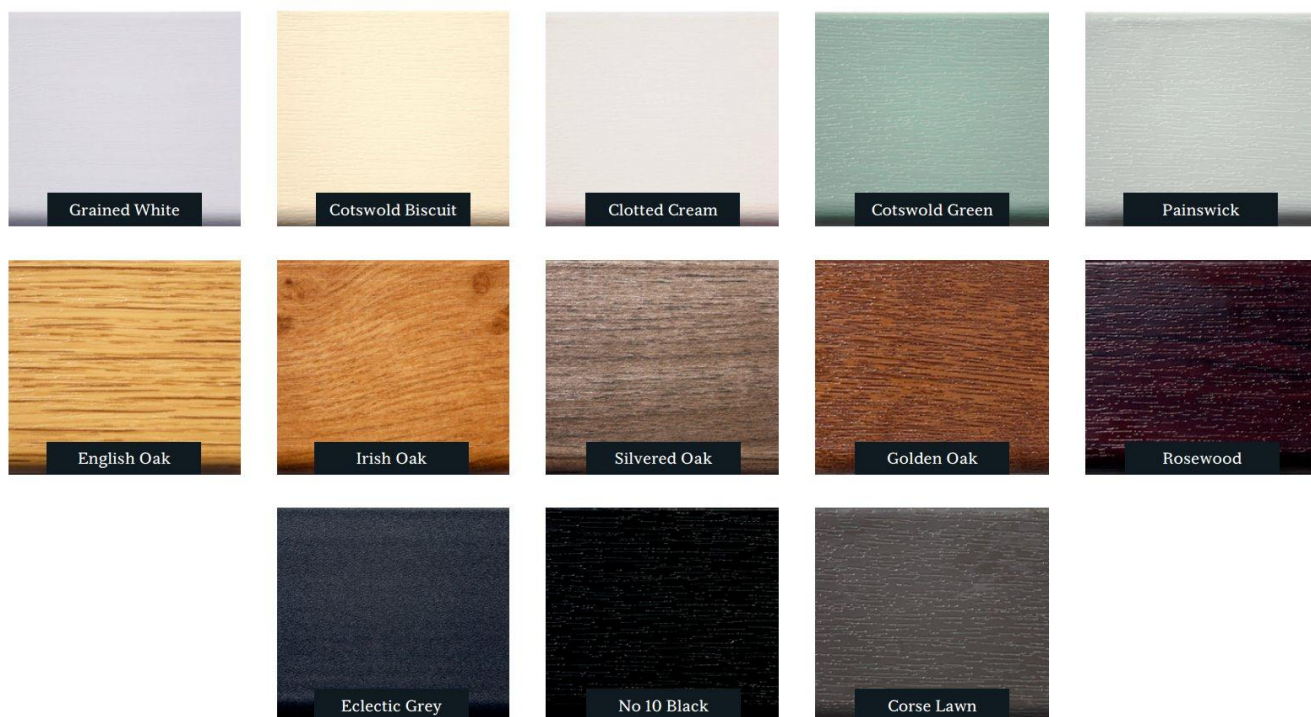


## Glazing options

- 18mm wide feature Georgian bar, deep internal bar with smaller external feature bar.
- Any lead designs, stained units or bevelled glass
- Standard range of patterned glass
- All glass is supplied bonded into the sashes, this gives the mechanical joints extra strength and means that all units are factory glazed.

### Profile Colours

The Flush Fitting Casement is available with 12 different grained foiled finishes on both sides and in a combination of dual colours with different laminated foils inside and out. There is also one solid through colour, Vintage Cream, which is RAL9001 and one smooth laminated finish, Eclectic Grey.



## Profile Colours

The below table represents the available options for the dual foiled colours: -

		Inside Colour										
		Grained White	Cotswold Biscuit	Clotted Cream	Cotswold Green	Painswick	English Oak	Irish Oak	Silvered Oak	Golden Oak	Rosewood	Eclectic Grey
Outside Colour	Grained White											
	Cotswold Biscuit											
	Clotted Cream											
	Cotswold Green											
	Painswick											
	English Oak											
	Irish Oak											
	Silvered Oak											
	Golden Oak											
	Rosewood											
	Eclectic Grey											
	No 10 Black											
	Corse Lawn											

It is possible to offer other colour combinations, but you should bear in mind: -

- There is a minimum order quantity of 10 lengths of each required profile (which would normally be outer frame, sash, mullion/transom), this will be reflected in the contract price
- As these special profiles they are only extruded to order and are therefore on a longer lead time, you should allow 8-10 weeks from order to delivery
- Once an order for special colours is placed it cannot be cancelled
- Special one off colours carry a surcharge of 10% over the standard price of the Flush Fitting products

The print process may not give 100% accurate colour representation of the actual finish. Furthermore the laminated profiles have extra textural grains. We therefore recommend that you request an actual profile sample or swatch prior to making any decisions.

**Range of colours with closest available RAL colours**

- Grained White – RAL 9010 – on white substrate
- Cotswold Biscuit – RAL 1015 – on a cream substrate
- Clotted Cream – RAL 9001 – on a cream substrate
- Eclectic Grey – RAL 7016 – on a dark grey substrate
- Painswick – RAL 7038 – on a cement grey substrate
- Corse Lawn – RAL 7039 – on a dark grey substrate
- Cotswold Green – RAL 6021 – on a cement grey substrate
- Vintage Cream – RAL 9001 (Solid through colour so not laminated)
- Silvered Oak – **RAL 7006\*** - on a cement grey substrate
- English Oak – **RAL1001\*** - on a caramel substrate
- Irish Oak – **RAL1011\*** - on a caramel substrate
- Nos. 10 Black – RAL 8022– on a cement grey substrate

\* nearest colour match as these are multi grain/coloured laminates, you are free to pick your own match if you would prefer!

The print process may not give 100% accurate colour representation of the actual finish. Furthermore the laminated profiles have extra textural grains. We therefore recommend that you request an actual profile sample or swatch prior to making any decisions.

**Silvered Oak and  
RAL 7006 sample**

**English Oak and  
RAL1001 sample**

**Irish Oak and  
RAL1011 sample**







Detailed view  
showing a dummy  
butt hinge on a side  
hung casement  
window

## Product Information

As the frames are all mechanically joined there are no reverse bar welds so you will never get any issues with burn off/sprues or poorly cleaned corners.

The corners are all cleated and glued before having the glass bonded in to the sashes. This basically entails us applying adhesive to the sashes before factory glazing the units. This process which is common on the continent provides additional structural integrity for the mechanical joins. It also means that all the glass units will have to be checked and correctly toe and heeled which will reduce the chance of any catching or dropping sashes once installed.

As all the sashes are factory glazed, depending on the style and size of the frame the sashes will be supplied loose ready for you to simply fix the frame and then push in the sashes into specially designed dummy sash fixing blocks.

## Weather bar

Old timber windows often had a raised moulding that ran horizontally across the transom. This bar was to shed dripping water away from the flush fitting sash but also gave the window depth and a distinctive window character. This feature has been recreated for the Flush Fitting Casement and is also used to provide external and internal reinforcing to the frame and should be applied on site on all frames wider than 1650mm.

You simply screw on an aluminium reinforcing bar and then attached the laminated capping over the top of it to give you the authentic appearance, (see coupler section for details).



## Bays and Corner posts

Period houses often had bay windows or grand entrances to the front and rear gardens. We offer a full range of decorative corner posts and couplers with clip in sections in order for these to be recreated.

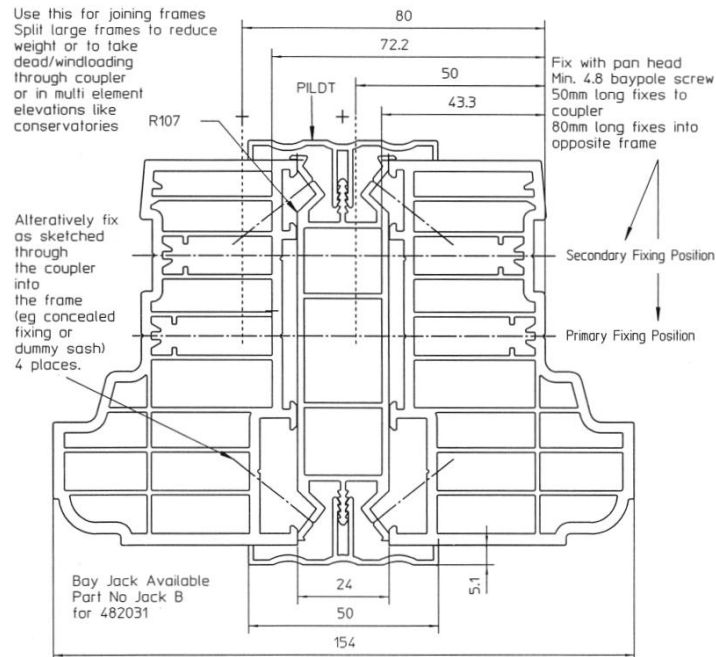
The range includes a square corner post, a variable angle adapter, and a straight coupler; *please refer to the coupling deduction sheets overleaf.*



## Couplers and Bay deduction details

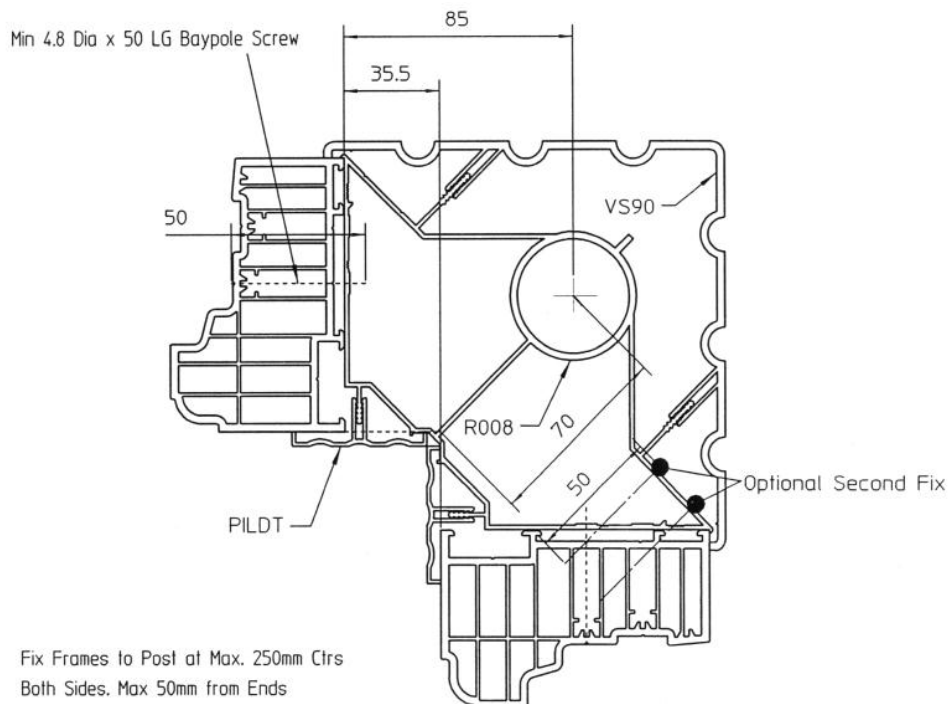
### 180° Straight Coupler

24mm frame deduction – 12mm off each frame



### 90° Corner Coupler

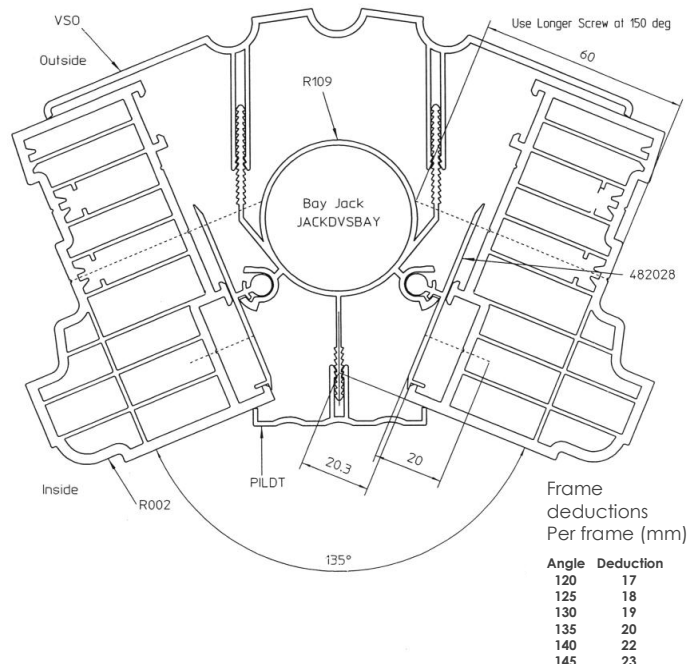
35.5mm frame deduction off frame



## Couplers and Bay deduction details

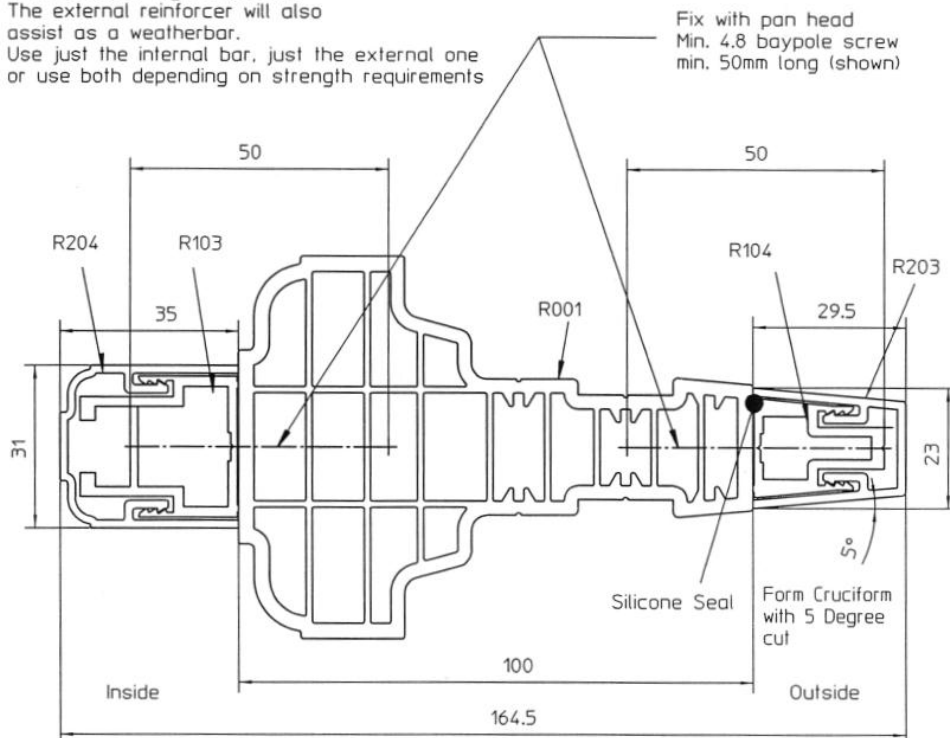
### Variable angle coupler

See table for deduction which vary depending on the angle



### Transom/mullion reinforce

Use the transom/mullion reinforcement to strengthen the section on larger windows or in areas of high windloads. The external reinforcer will also assist as a weatherbar. Use just the internal bar, just the external one or use both depending on strength requirements



## Handles

We are able to offer a range of handles from our standard inline range through to the monkey tail and tear drop designs seen in these images. The monkey tail and tear drop handles are available in Antique black, chrome, gold and Graphite.

Door handles are as per our normal standard range as there are currently no matching (monkey tail or tear drop) equivalents.



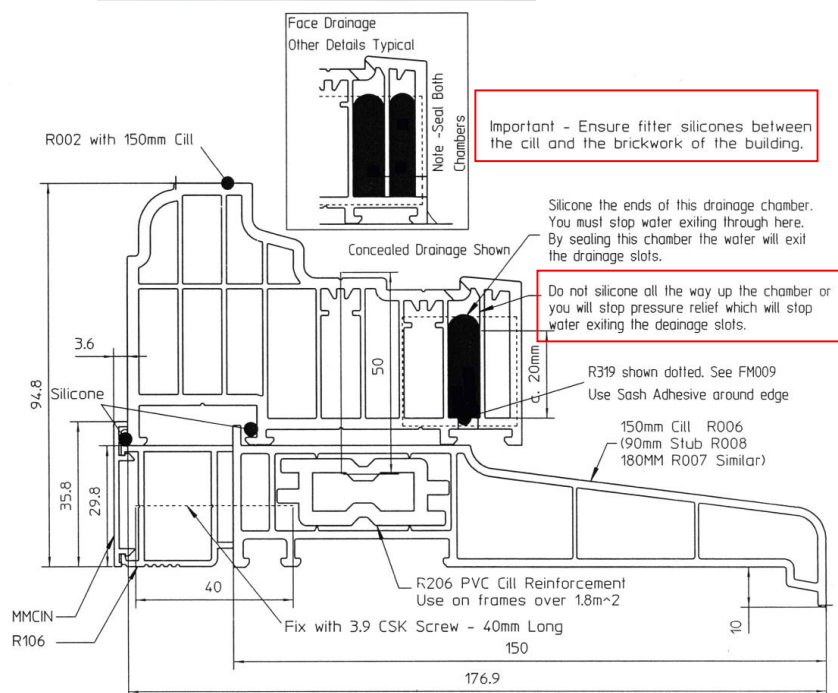
## Drainage

The frames will already be drained and we will have also sealed up the ends of the drainage chamber with silicon and a plastic bung, **it is vital that the small pressure holes that are left (see below) are not blocked during installation.**

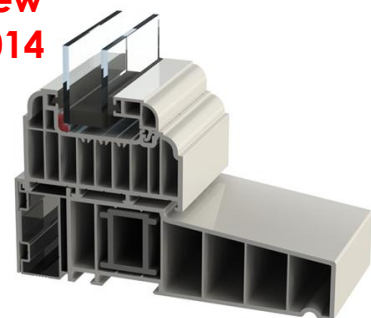
## Cills

The system has been designed to utilise the existing range of Deceuninck cills (obviously foiled in the specific colour ordered). In order to make the cills fit the 100mm frame width there is an aluminium fill in section that fits behind the cill (part R106); see the diagram on the previous page. If required there is also a flat PVC trim (part MMCIN) which clips into the aluminium cill fill in to close off the rear of the cill.

We can also offer the Radlington cill which is a new deeper cill (again foiled in the specific colour ordered). At 55mm it replicates the deep timber cills from 19th Century installations, its traditional appearance looks great!



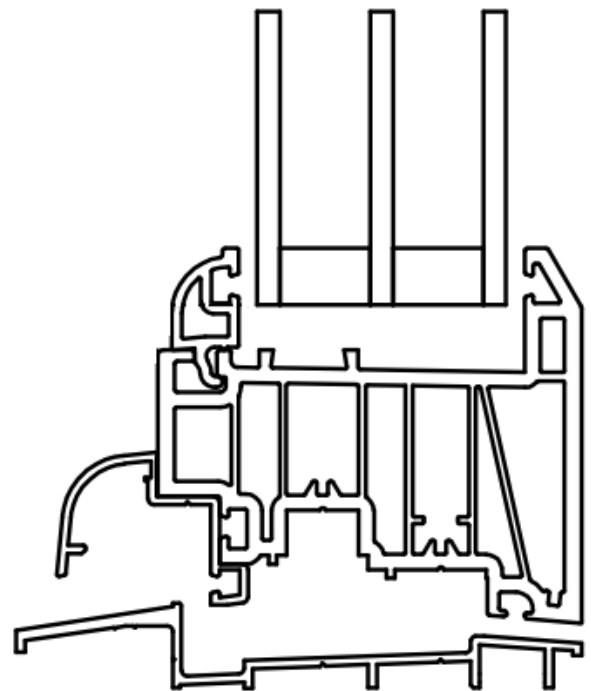
**New  
2014**



## Cross section of the low aluminium threshold

- Due to the design of the profiles there are certain restrictions for the doors within the **Flush Fitting suite**.
- Doors are available open out with a standard PVC threshold, in order to have an open in door you have to have an aluminium low threshold, it is not possible to have an open out door with a low aluminium threshold.
- The threshold is currently only available in a maximum length of 1.8m so this is the maximum width of a set of French doors\* with an aluminium threshold.
- The threshold is available in two colours, silver or gold BUT is not thermally broken.
- The threshold is Part M compliant

*Cross section - open in only with low aluminium threshold*



\*We do not recommend you use the low aluminium threshold on French Doors due to the lack of a proper shootbolt keep. If specified we will supply it but the keeps will be loose for you to fit once the doors have been installed.

## PVC coloured trims

We are able to supply the following coloured trims (*please note that the Eclectic grey trims have a grained finished whilst the Eclectic grey profile is smooth*). All the items below come in pack quantities of two, all lengths are 5m.

- 18mm Quad
- 28mm x 6mm D mould
- 45mm, 65mm & 95mm x 5.5mm architrave
- 150mm, 200mm x 9mm flat board
- 235mm, 405mm x 9mm fascia board (double)
- 300mm x 45mm corner
- 300mm x 45mm joiner
- 300mm x 9mm hollow push fit soffit

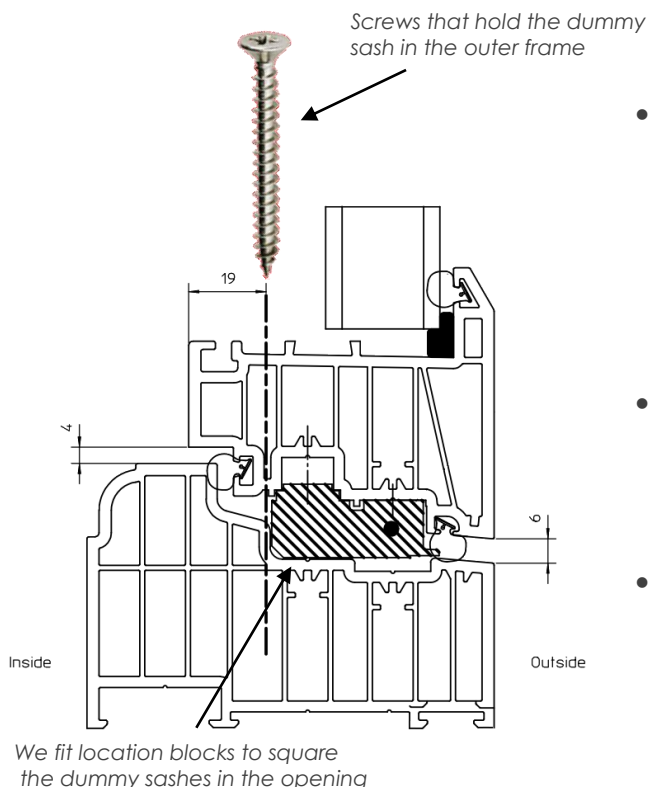




## Method for fixing mechanically joined frames with dummy sashes

Mechanically jointed sashes have the units bonded in place in order to give increased strength to the sash, we have detailed below an explanation of how to install the frames.

- All small to medium sized frames will be delivered with the sashes/dummy sashes pre-glazed and fitted in position; large frame will be delivered with the sashes/dummy sashes supplied loose due to weight restrictions.
- All the sashes/dummy sashes are fitted in the frames on hinges, this will allow you to open all sashes/dummy sashes to fix through the frame. You should use the industry standard position for all fixings.
- Opening sashes are fully beaded, dummy sashes are fitted with temporary sections of bead on the longest jambs (as per the image below) and full beads on the shortest jambs. On the sides with the temporary bead sections in you will be able to see the location of the screws that are holding the dummy sash in place. These will need to be removed in order to open the sash and fix the frame.

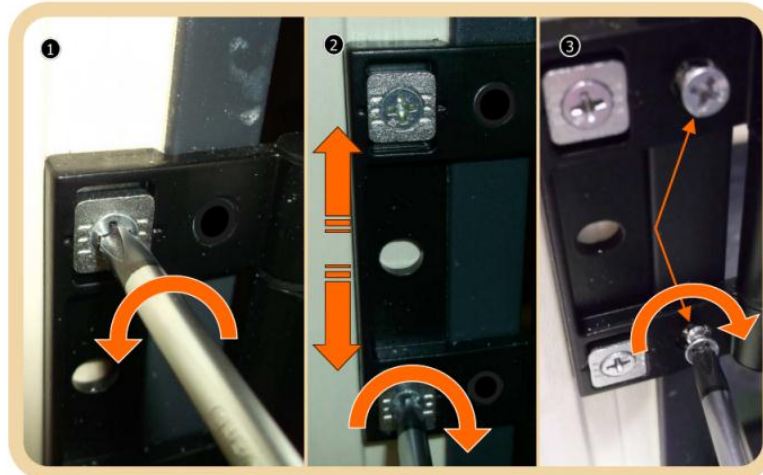


- Remove the location screws on the longest jambs, leaving the temporary glazing beads in place. Remove the beads on the short sides and remove the remaining screws. All dummy sashes are fitted with hinges so you can know open the sash up and fix through the outer frame in to the substrate.
- Once fixed in position close the dummy sash and reposition the location screws through the sash into the frame to secure it shut, replace the short sections of bead.
- You can then remove the temporary sections of bead and replace them with the pre-cut beads that will be strapped to the head of the window. It is important to protect the corners of the beads when you are moving them as they are scribed and vulnerable to damage at the ends.

## Adjustable Butt hinges

**Tools Required:** Cross Head Screw Driver/3mm A/C Allen Key

**Height Adjustment:**



Slacken top and bottom frame screws on all hinges

Move window sash up or down as required and tighten frame screw up

Insert fixed hole frame screws to all hinges

**Lateral Adjustment:**

**To increase the gap on hinge side: (1 full thread showing = maximum gap)**



Turn Grub Screw anti clockwise to turn out

Tighten inner screws  
Then check outer screws are tight

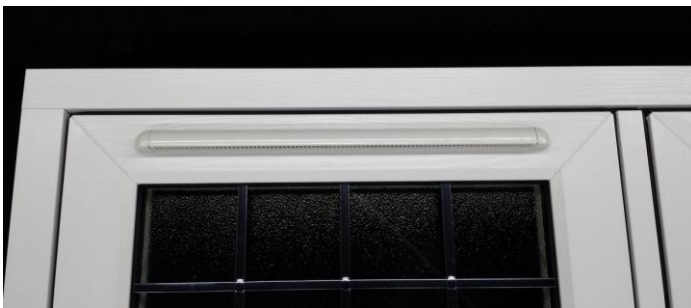
**To decrease the gap on hinge side: (3 full turns in from flush = minimum gap)**



Slacken off inner screws

Turn Grub Screw clockwise to turn in  
Then tighten inner screws back up  
Then check outer screws are tight

## Head Vents



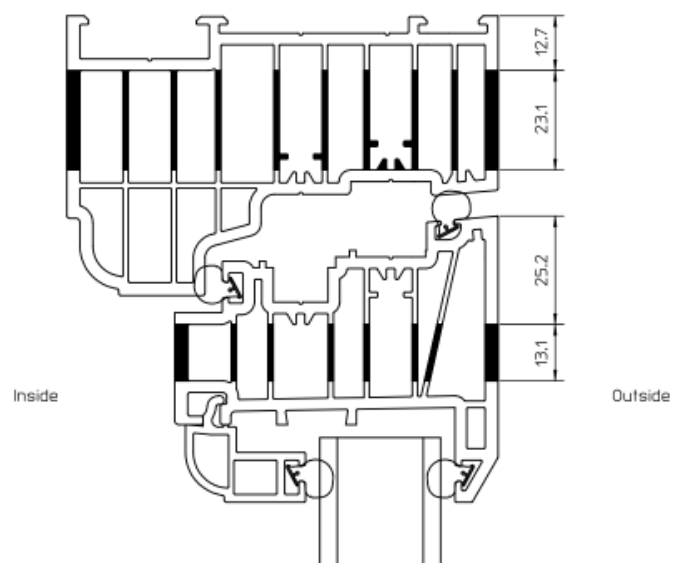
These images show the external of the window with head vents fitted in to the sashes.

It is important to note that there are no extension pieces for the Flush Fitting Casement window system so positioning head vents in the outer frame could lead to issues regarding the internal plaster lines.

Please be aware that head vents will be sprayed to the nearest colour match, some woodgrain foils have multiple colours on them so we have to pick one colour and match as best we can, please see page 6.

If you want us to use a different colour you must let us know when you place the order otherwise we will use the colours listed on page 6.

These images are taken from the inside of the frame.





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## Profile Chart

