

ModLok™ Patio door



As with the window system, the Linar sliding patio door was designed from scratch to take advantage of the very latest technology, and has been cyclic tested by Linar's in-house robot to provide assurance that it's built to last.

Strong and secure

The Linar patio door features the patented ModLok™ system, a combined reinforcement and multi-point locking system developed in conjunction with Yale. In addition, all external sliders feature multiple anti-lift properties to combat would-be intruders.

Unique 'air glide' system

Other patio doors operate on a four-wheel steel opening system. The Linar patio features a unique eight-wheel acetal system, providing stability, durability and smooth, silent operation.

Self-cleaning track

One of the reasons other patio doors are hard to open is when dirt and mud fall into the track. The Linar patio features built-in brushes that sweep the track clean every time the door is opened.

Attractive

With ultra-slim sculptured sightlines, no unsightly crash stops and a built-in decelerator, the Linar patio door is one of the most attractive on the market.

- 2, 3 and 4 pane options available
- Slim sash design (80mm high)
- Optional mechanically jointed outer frame
- Thermally broken Part M low threshold available - just 25mm high with integral ramp
- External sliders are anti-lift, providing additional security
- Patented centre seal creates continuous seal between sash and threshold to prevent water tracking
- Patented decelerator discreetly fixed in head - eliminates unattractive external fix crash stop
- Mechanically jointed, fully sculptured midrail, with letterbox facility
- Patented sealing packer for fixed sash, no need to fit brush pile, halving insertion time
- Fully foiled finish including trims



Case study

Energy efficient windows and patio doors were a key requirement for a small development of two-bedroomed starter homes in Nottingham, as the architect's practice involved with the scheme was renowned for its focus on low energy housing schemes.

The developer was looking for cost effective glazed products that could deliver U-values lower than 1.5 W/m²K, including casement windows and 2-pane sliding patio doors.

PVCu was the obvious choice – and after carrying out research on the different PVCu systems available, the architect selected Liniar's sculptured range to specify for the project.

The high thermal efficiency of the profile used in the Liniar sliding patio door in particular meant that a lower specification of sealed double glazed units could be used to achieve a U-value of 1.2 W/m²K for each door.

This, together with the casement windows utilising standard double glazed sealed units to achieve an A+ rating, significantly reduced the overall project cost.

Once on site, Liniar's window and patio systems also helped to reduce the installation time that was necessary, with installer-friendly features including Liniar's glazing packers and simple beading system speeding up the fitting of each product, and a



full instruction guide and video supplied for the patio door.

The developer is delighted with the end result:

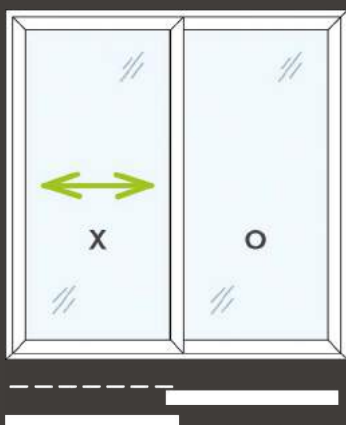
“The focus on high thermal efficiency meant we wanted to select the best product for the lowest cost – and Liniar was able to deliver exactly what we needed.

The project is almost completed and we're very happy with the quality of the products and service – we'll definitely use Liniar again.”

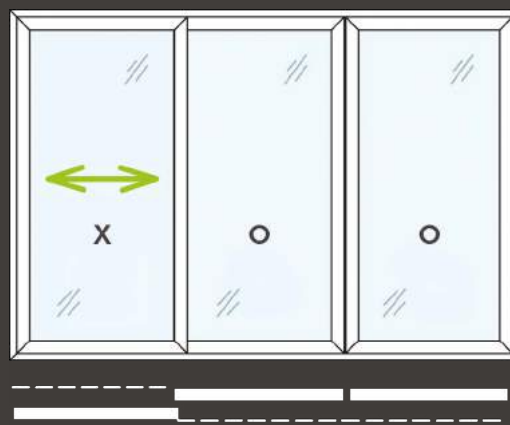
Patio door configurations

The below images show the different patio door configurations available from Linar.

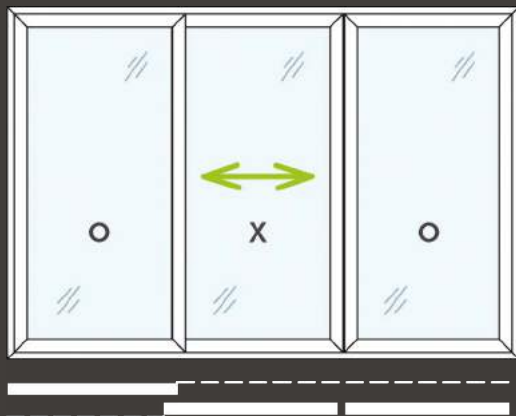
2 Pane - Style OX/XO



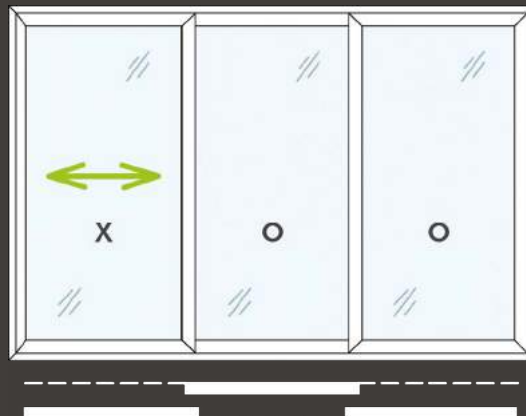
3 Pane - Style XOO/OOX



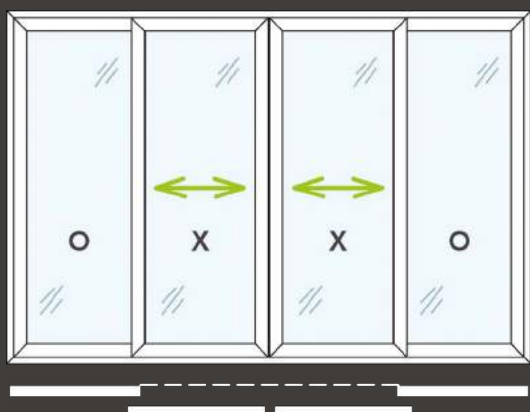
2 Pane - Style OXO (L/R)



3 Pane - Style OOX/XOO (Optional)



4 Pane - Style OXXO





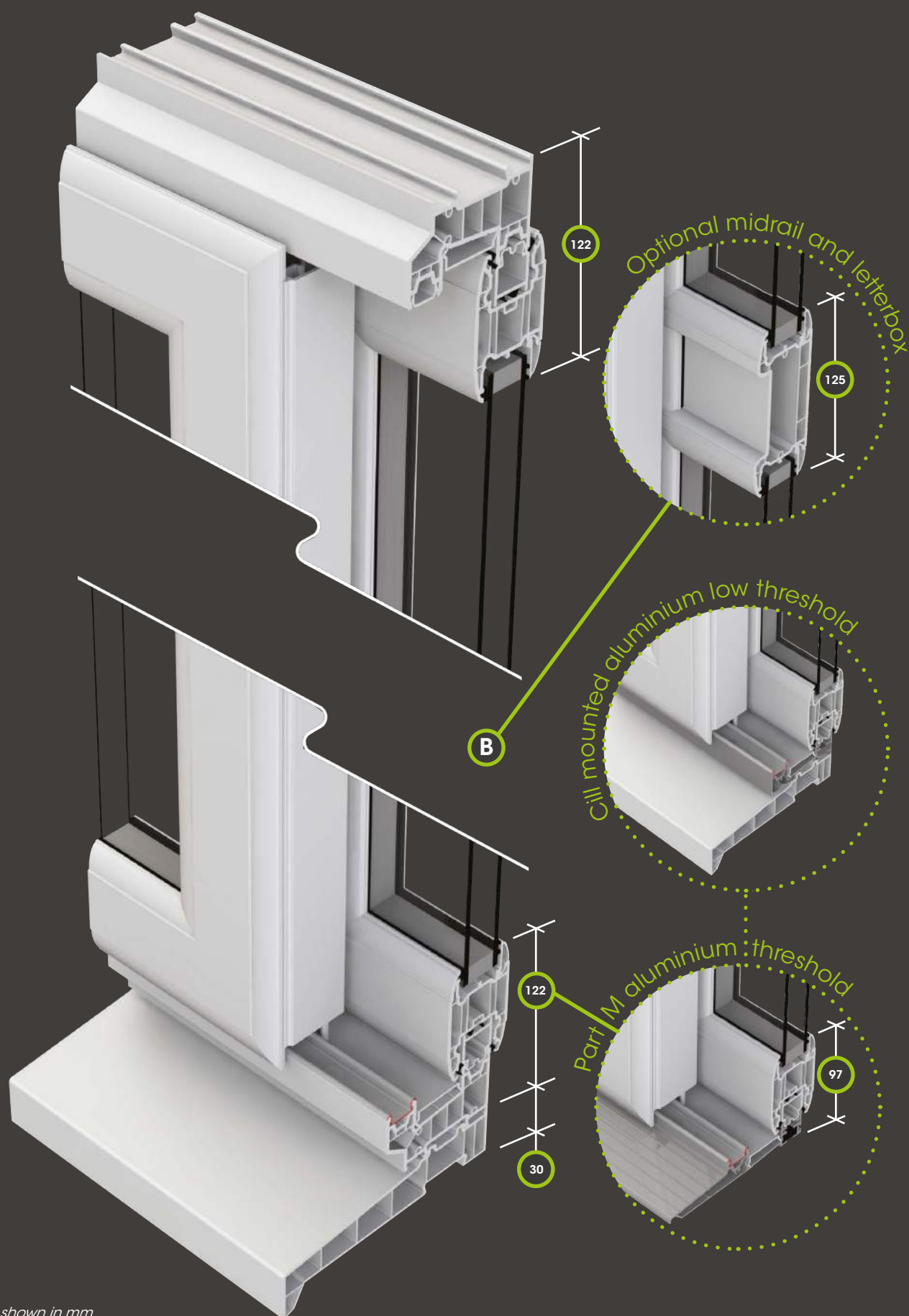
White patio door and casement windows
New build development



ModLok™ Patio door

External sliding, internally beaded

Vertical Cross Section



* all dimensions shown in mm

Technical information

Patio door

- Sculptured suite
- 28mm double and triple glazing
- Multi chambered EnergyPlus profiles
- U-values from 1.2 (DGU) and 1.0 (TGU)
- Patented co-ex gasket

Accreditation



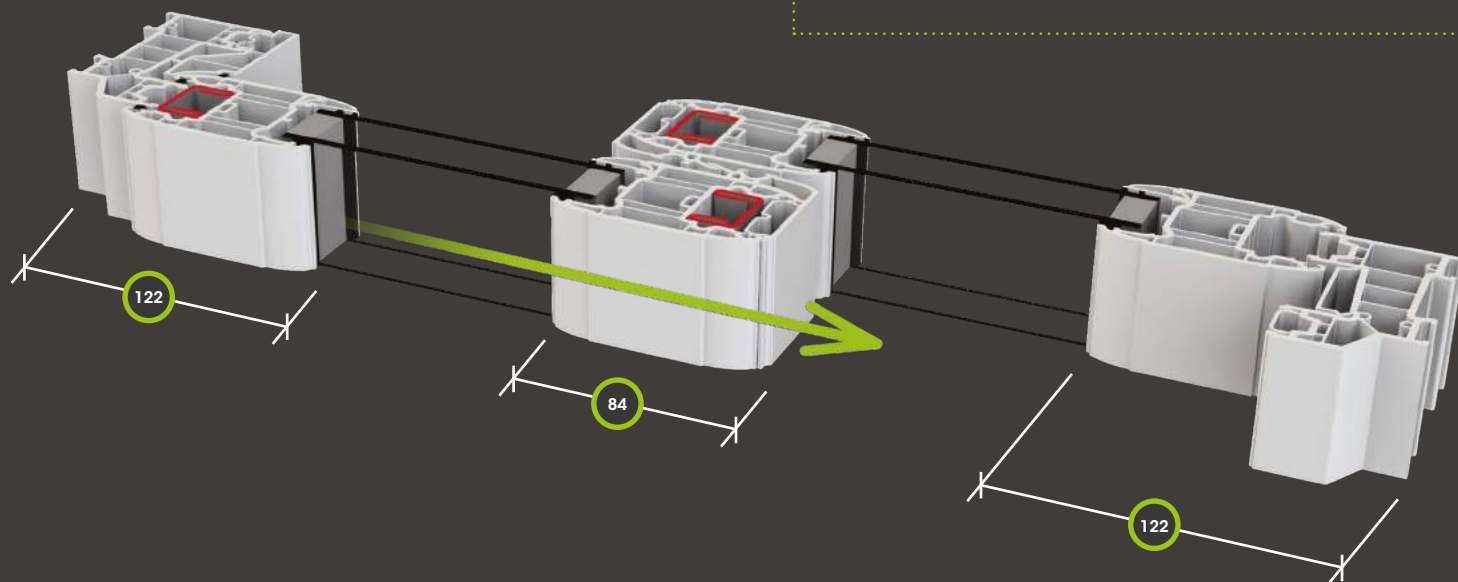
Colour Options



Additional colours are available to order as specials.
The colours shown in this brochure give an indication only.

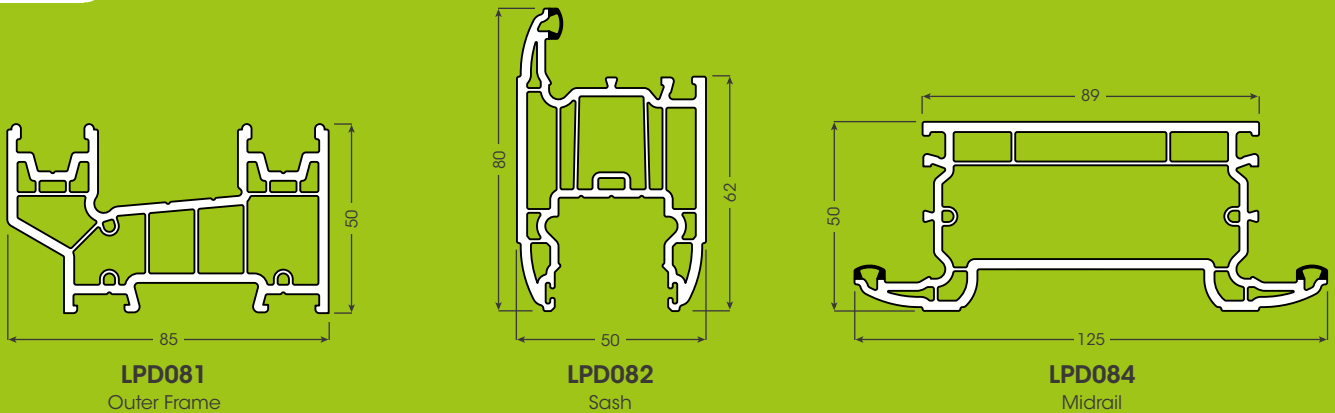


Horizontal Cross Section



Modlok™ Patio product chart

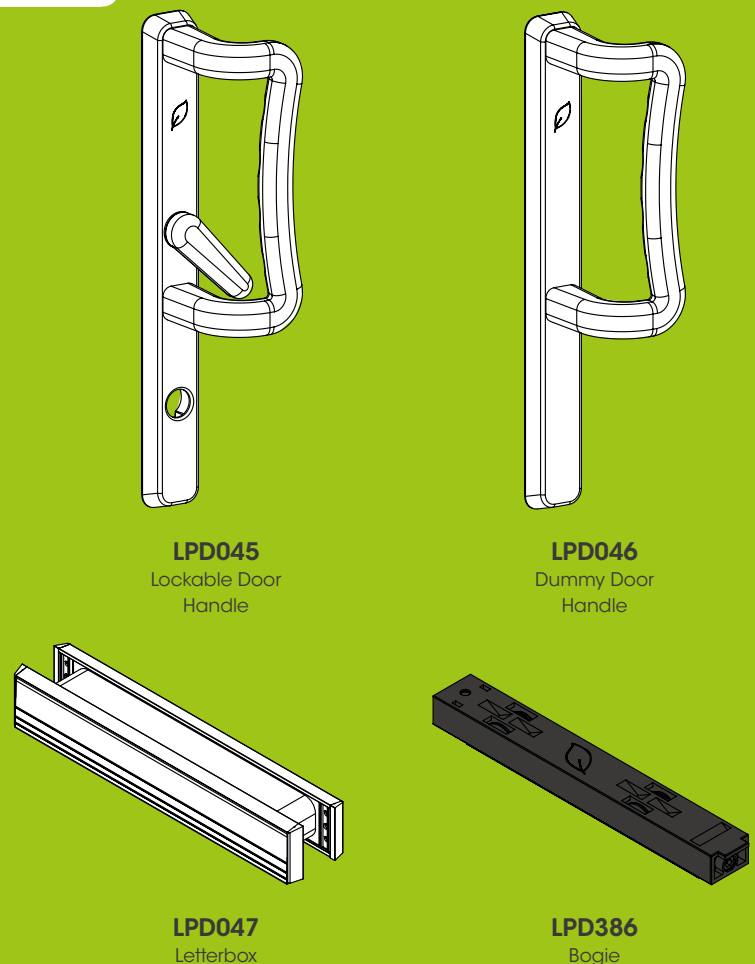
Frames



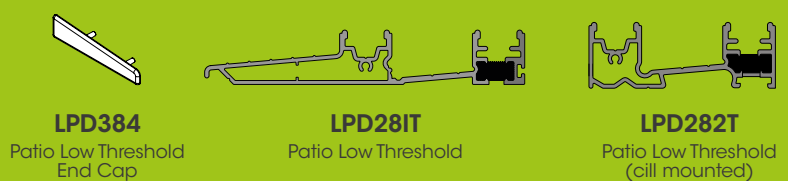
Mouldings



Hardware

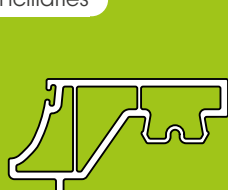


Low Threshold

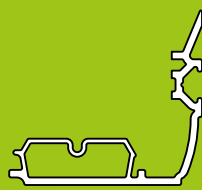




Ancillaries



LPD181
Threshold



LPD182
Interlock



LPD183
Sealing Packer



LPD184
Blanking Strip



LPD185
3/4 Pane Adapter



LPD186
Shootbolt Cover



LPD187
Drainage Cover

Gaskets



LPD482
Brush Pile



LPD483
Interlock Brush Pile

Beads



LPD083
28mm Bead

Steels



LSR081
Steel Track

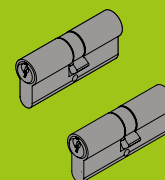


LSR082170
1.7m
Sash Reinforcing



LSR082195
1.95m
Sash Reinforcing

Cylinders



LPD032N
35/35 Anti Bump Nickel

LPD033N
35/35 Anti Pick, Anti Snap,
Anti Bump and Anti Drill
Security Cylinder Nickel



LPD042
Standard Lock & Keep Assembly
(to suit 1.9 - 2.15m outer frame height)

LPD043
Long Lock & Keep Assembly
(to suit 2.15 - 2.4m outer frame height)

Bi-fold door



The first bespoke PVCu bi-fold to be launched to the marketplace, the Linar bi-fold range was designed completely from scratch to meet the growing desire for bi-folding doors in the 'grand design' style, for aspirational living.

Strong and secure

Patented ModLok™, a combined aluminium exo-skeleton reinforcement and multi-point locking system provides additional strength and security together with an unrivalled appearance. Featuring 3 opposing hooks and 2 shootbolts on the master door, together with 2 anti-lift shootbolts on each slave door, the ModLok™ bi-fold has built in anti-lift features and anti-bump cylinders, with optional anti-snap cylinders. Each door's slim hinges are tamper-proof with fixings hidden inside.

Unrivalled benefits

The Linar ModLok™ bi-fold is the first to combine the structural benefits of an aluminium bi-fold with the thermal efficiency and colour benefits of PVCu.

Crammed with innovative features

The system is protected by 4 patents and 12 registered designs. A neat master/slave lock means the wrong door cannot be opened first, avoiding sprained locks, and folding keys avoid potential issues if keys are left in locks. The unique built-in 'keep within lock' faceplate gives the ModLok™ bi-fold an unparalleled appearance.

Standard

- The first bespoke, designed from scratch, PVCu bi-fold
- Doesn't require any trench excavation to benefit from low threshold option
- Ultra slim sightlines for maximum light
- Opening configurations from 2 to 4 panes

ModLok™

- ModLok™ bi-fold provides the first true alternative to an aluminium bi-fold - robot tested to 100,000+ full opening cycles
- Weather tested to 'severe' (category 4, 600 Pascal)
- Four-wheel bottom rolling mechanism with anodised aluminium captive top track
- Patented exo-skeleton - no steel required
- Opening configurations from 2 to 7 panes.



Case study

A brand new residential development of 2, 3 and 4 bed homes in Leicestershire found a cost effective way of being able to offer buyers a truly unique selling point with the Liniar bi-fold door.

Having already chosen Liniar windows for the project, the development team spotted the Liniar 4-pane bi-fold and commented that although they loved it, and it would look great on the development, it would probably be too costly.

Upon investigation, the original plans had been drawn up to include a window and a set of French doors at the rear of each property. It was pointed out that the developer would see additional cost savings if they were to consider a bi-folding door set instead – not just the French doors and the window, but also reducing costs through having just one lintel rather than two, in addition to the reduction in brickwork and plastering between the products.

Even better, the reduced installation time to fit one product instead of two would result in a speedier completion time for each property.

When the team re-worked their calculations, they found that the cost difference taking all of the above into account was only marginal. They agreed the benefits of being able to offer a bi-folding door as standard in each property would set the development apart from others and provide additional value to home buyers, so it was an easy decision to make.



The bi-folding doors were supplied in cream PVCu to match with the Liniar windows on the entire development, and the installation went perfectly to plan.

“It was great to realise we were able to offer a matching Liniar 4-pane bi-folding door as part of every single property.

Today's homeowners are buying into the dream of opening up an entire wall of their homes – the bi-fold offers a unique selling point for this development and we will look to replicate it on future projects.”

Bi-fold door configurations

How configurations work

The Liniar bi-folding door range has a wide variety of options when it comes to sizes and opening configurations – with the Standard range available up to 4 panes wide and the ModLok™ version up to 7 panes wide.

Our door pane numbering works like this:

- The first number shows the number of doors in total within the frame.
- The second number shows the majority of doors folding back to either left or right.
- The third number shows the balance of doors opening in the opposite direction.

So, a 4-3-1 bi-folding door would be four panes wide, with three doors folding back to one side of the frame, and a single opening door on the other.

To see all opening/closing sequences visit our website at:

www.liniar.co.uk/bifoldopeningclosing



Standard and ModLok™ configurations

2-2-0 (L or R)



3-3-0 (L or R)



4-4-0 (L or R)



3-2-1 (L or R)



4-3-1 (L or R)



4-2-2*



OVERALL FRAME SIZE NOT TO EXCEED 4M FOR FOILED DOORS

* Master door to be designated



ModLok™ only configurations

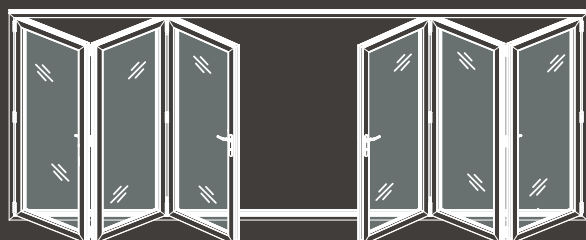
5-4-1 (L or R)



5-3-2 (L or R)



6-3-3*



7-7-0 (L or R)



7-4-3 (L or R)



5-5-0 (L or R)



6-5-1 (L or R)



6-6-0 (L or R)



7-6-1 (L or R)



7-5-2 (L or R)



OVERALL FRAME SIZE NOT TO EXCEED 4M FOR FOILED DOORS

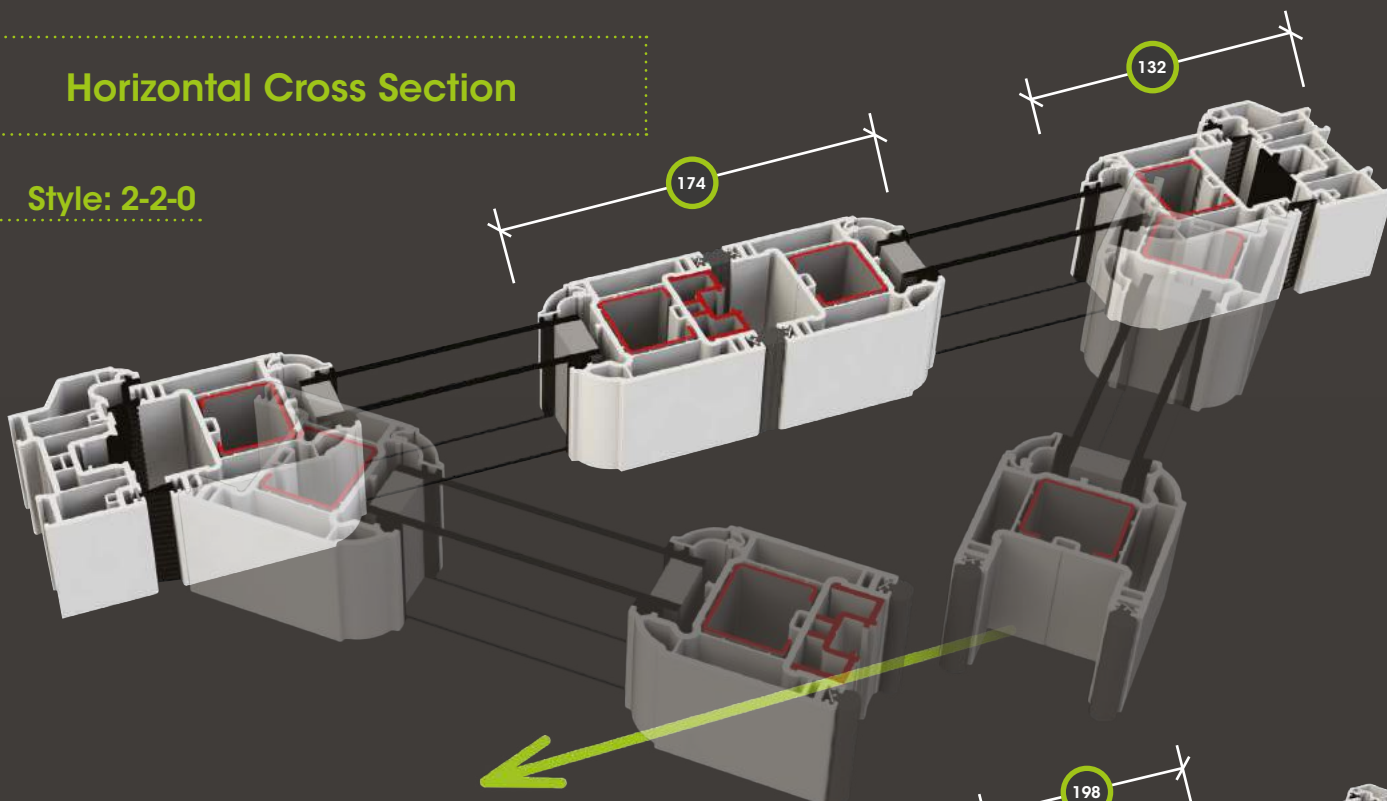
* Master door to be designated

Standard Bi-fold door

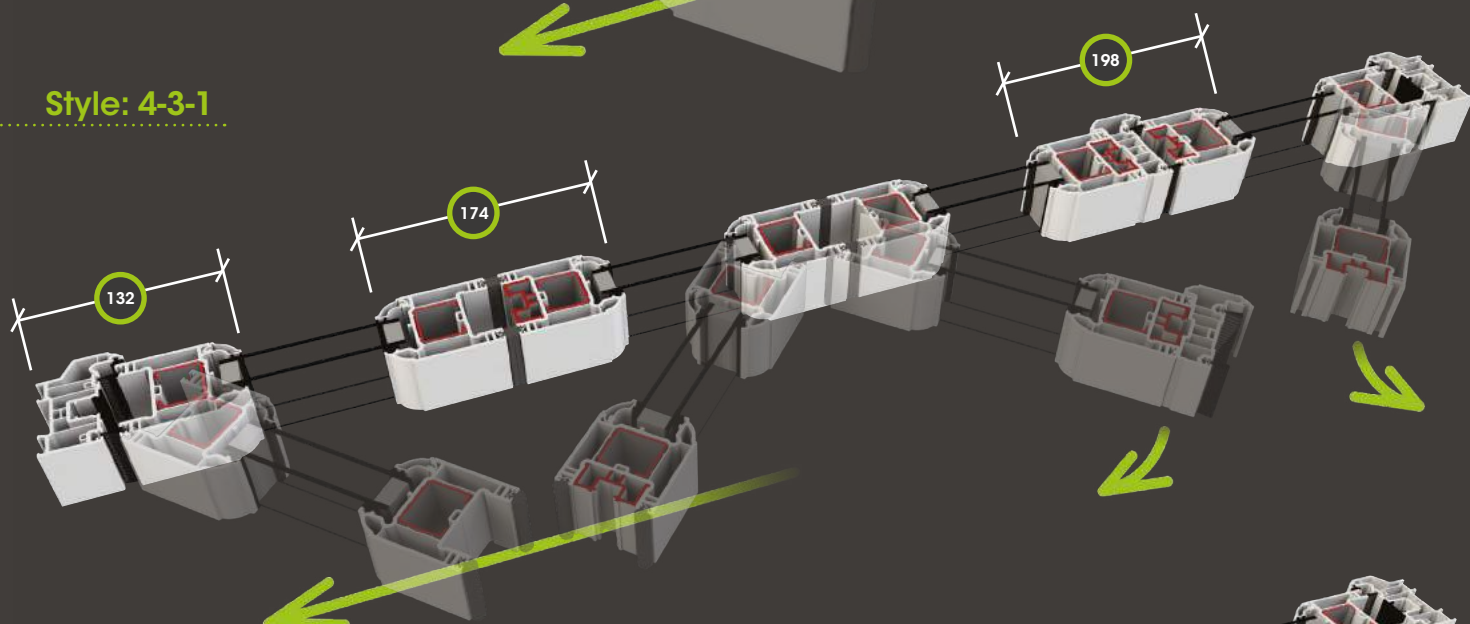
Outward* opening, internally beaded

Horizontal Cross Section

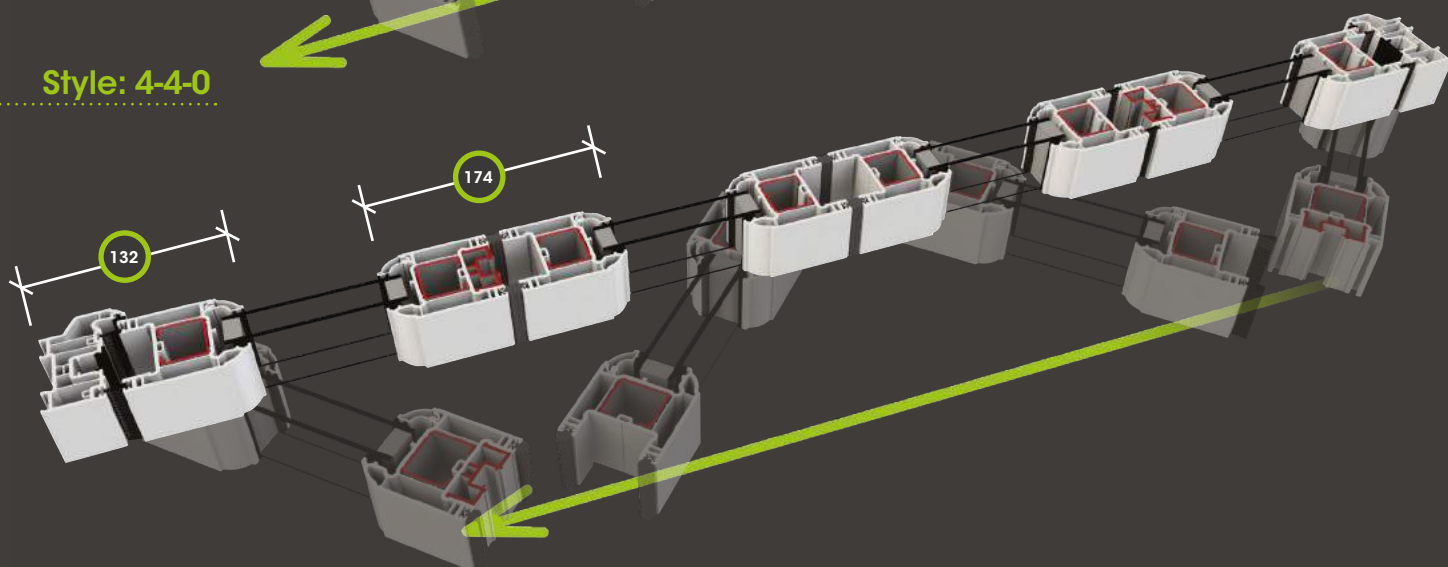
Style: 2-2-0



Style: 4-3-1



Style: 4-4-0



* inward opening styles are also available

** all dimensions shown in mm

Technical information

Standard bi-fold door

- Sculptured suite
- 28mm double glazing
- Multi chambered profiles
- U-values from 1.3 (DGU)
- Patented co-ex gasket

Accreditation



Colour Options



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Product	Dim. A
PVCu outer frame & sash LBF091 & LBF092	132mm
Aluminium thresh. & sash LBF291 & LBF092	115.5mm

Product	Dim. B
PVCu outer frame LBF091	56mm
Aluminium threshold LBF291	24mm

Threshold tray (Part M)

Aluminium threshold

LAN275 threshold tray makes LBF291 "Part M compliant" when fitted together



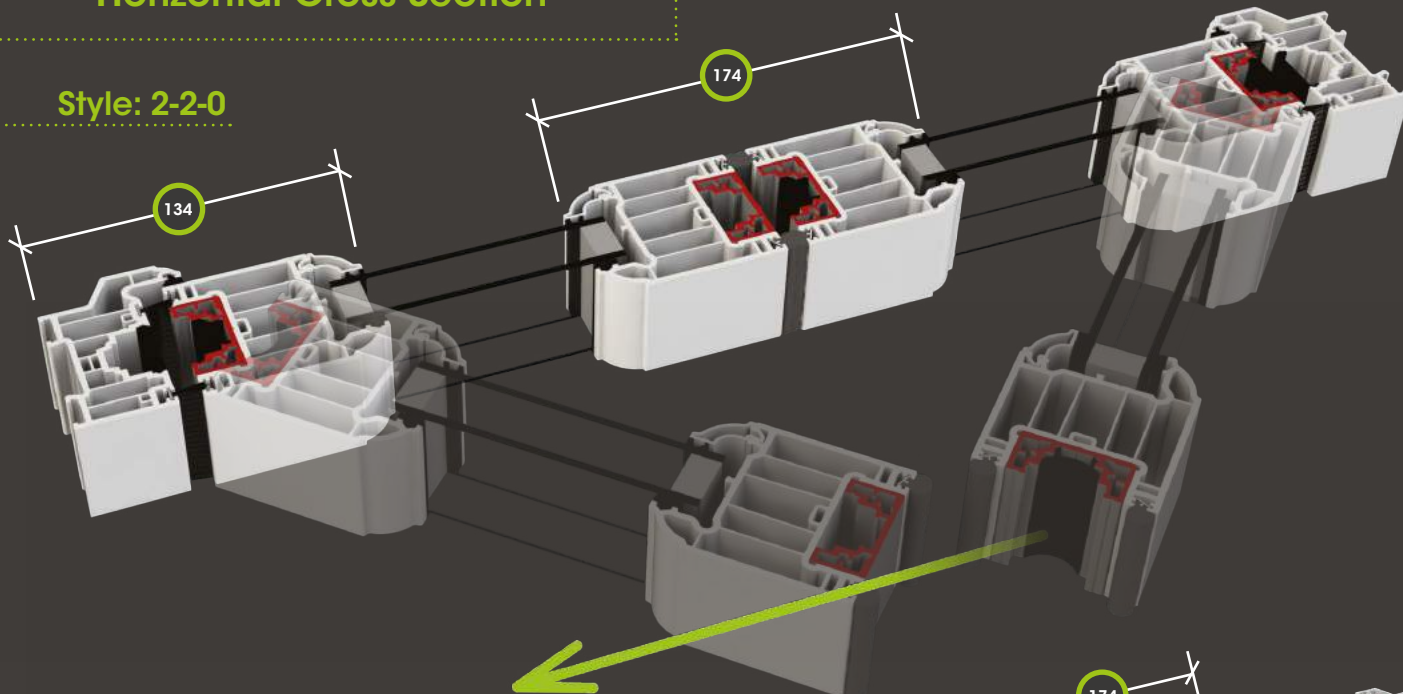


ModLok™ Bi-fold door

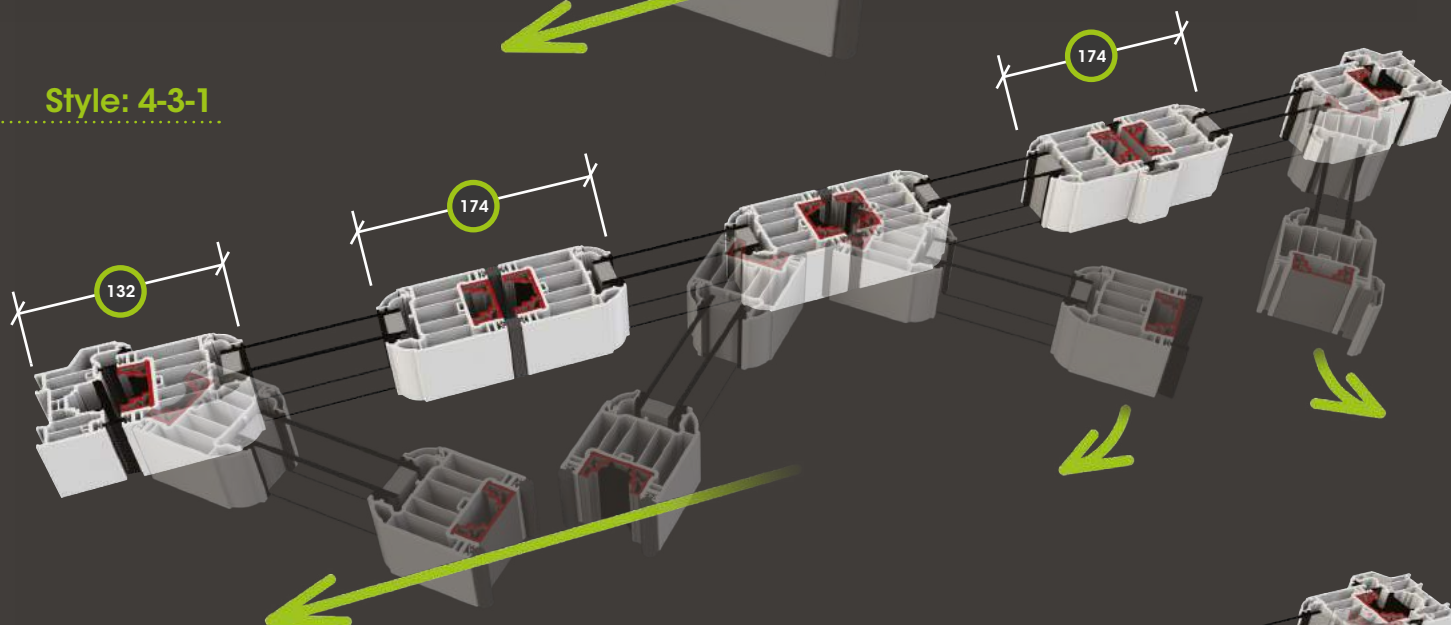
Outward* opening, internally beaded

Horizontal Cross Section

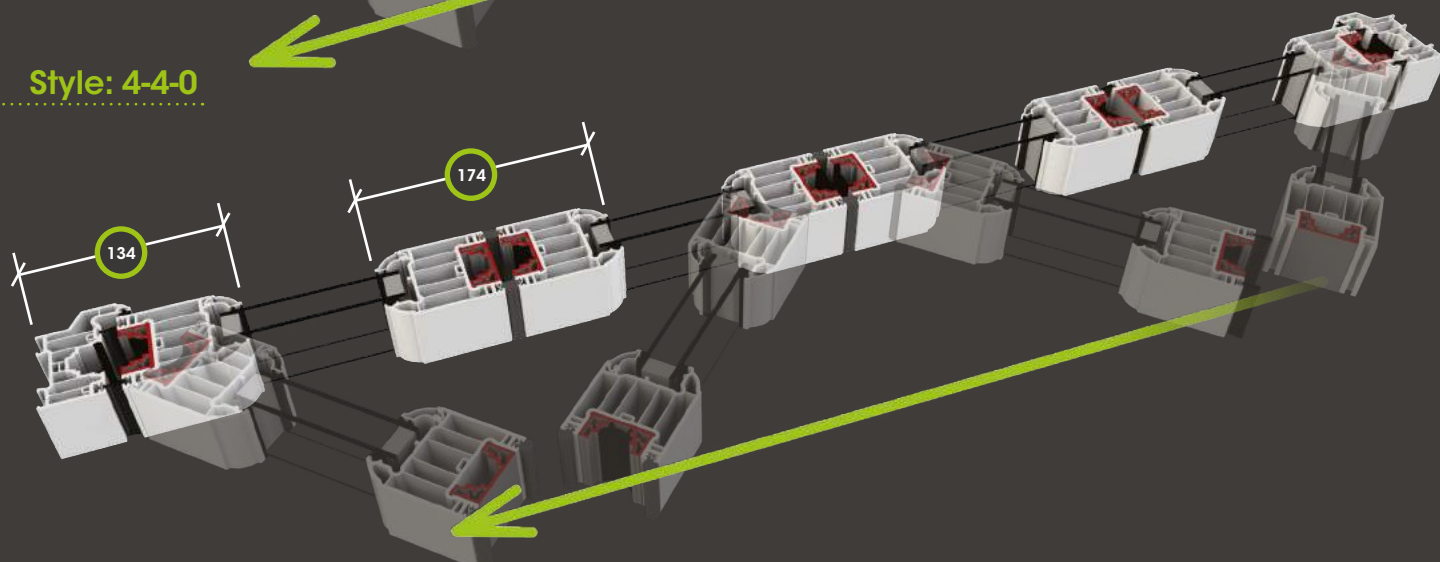
Style: 2-2-0



Style: 4-3-1



Style: 4-4-0



* inward opening styles are also available

** all dimensions shown in mm