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Terminology

Sightlines

When talking about sightlines, we are referring to the width of the profile itself. With many now opting for an open plan feel in their home, the trend is for slim sightlines that allow as much light in as possible without obstructing the view to the outside. With bi-fold doors is it essential that the profile is not too thin as it can significantly affect the strength of the door, and its ability to house a substantial locking system. Visit page 5 to find out more about the varying materials available for bi-fold doors and the sightlines they allow.

U-Value

U-values measure how effective a material is as an insulator. With doors, this is how much heat is transferred between the inside and outside of a building. U-values show the amount of heat lost in watts (W) per square metre of material, so the lower the number, the better the thermal efficiency. It is important to have the U-value of a full set of doors and not just the centre pane.

The U-value is expressed in W/m2K.

RAL Colour

RAL is a European colour-matching system, predominantly used for defining painting colours for varnish and powder coating.

Bi-fold Doors are available in many different RAL colours to suit the style of your home. Origin offer over 150 different RAL colours to choose from, including dual-coloured frames (inside and out).

Threshold

A threshold is the barrier you walk over as you enter a room or building. Traditionally doors have a threshold you can step over, with bi-folds there are many options available, with different features. From a rebated threshold for a fully weather-tight door, through to a low threshold for a completely flat transition between the inside and out.

Choosing the right threshold depends on where your doors will be (internal or external) and the overall look you want to achieve.

Thermal break

As aluminium is a natural conductor, a thermal break is used to reduce heat loss. The thermal break runs between the internal and external face of the doors to stop as much heat as possible being transferred. The most popular material used is polyamide due to its great insulation properties.







Which door type?

Choosing the right door for a renovation project is a big decision to make, as it will affect how you use the space in your home and garden. So first and foremost, it is important to identify what you want to achieve with your project, and which products best meet your practical and aesthetic needs.

There are many products out there to choose from, with a style to suit every home. If you plan on letting lots of light in, and opening up your home on summer days, there isn't a better product than bi-fold doors.

However, if you have no requirement for the doors to fold back and open up a room, consider getting a comparison quote for sliding doors. Sliding doors let in the maximum amount of light and provide almost unimpeded views

If you have an opening of under 2m, as well as a larger aperture for bi-folding, you might not need to have folding doors. We offer a French door option which uses the same profile as our bi-folding doors, so your products can aesthetically match.

Bi-fold Doors

Opening

Inwards or outwards & left or right

Recommended sizes

1.4m - 10m depending on door quantity

Number of doors

2-10+ bi-fold door sets

French Doors

Opening

Inwards or outwards

Recommended sizes

1.4 - 2.4m which can be increased up to 3.8m with fixed panels, ('flags') either side of the doors

Number of doors

2 doors with the option of 2 fixed panels

Sliding Doors

Opening

Horizontally (left or right)

Recommended sizes

7m+ to allow panels to slide past each other to offer a wide opening

Number of doors

Usually 2-3 doors







Varying materials

uPVC

There are a number of different uPVC bi-fold systems available, and they are usually a cheaper alternative to the more popular timber and aluminium products. uPVC Doors are usually available in 10-15 different colour options, including woodgrains, but this varies depending on supplier, with some offering more and some less.

uPVC Doors have thicker sightlines than aluminium, due to the material not being as strong. This also has a knock on effect to how wide each door panel can be, and the more door panels needed, the less glass to let light through.

uPVC bi-fold doors usually come with a 10 year guarantee.

Aluminium

The physical strength of aluminium is reflected in its narrow sightlines, long guarantees and resilience to flex, expansion or contraction.

Bi-folding doors are usually available in any RAL colour due to the powder coating process used to colour them. However, many manufacturers will also offer stock colours on a shorter lead time. Aluminium used to have a reputation for not being very thermally efficient, but with insulating technology improving, a polyamide thermal break now gives aluminium increased thermal performance.

Timber

Timber doors can look great in a certain type of property and offer a warm feel. In some listed properties, timber will be specified as the only option for doors and windows, however it is worth checking with your local council.

Like uPVC, timber bi-fold doors often come with large sightlines, which can restrict your view and make your doors look a little clunky. Regular maintenance is required to keep a timber bi-fold looking good, especially when the doors are in direct sunlight.

	uPVC	Aluminium	Timber
Narrow Sightlines	✓	✓ ✓ ✓	✓
Colour Options	✓ ✓	√ √ √	✓
Panel Width	\checkmark	√ √ √	✓ ✓
Low Maintenance	✓ ✓	√ √ √	✓
Security	\checkmark	✓ ✓ ✓	✓ ✓
Cost	✓ ✓ ✓	✓ ✓	✓



Different budgets

As the bi-folding door market has matured, there are now many different companies offering bi-fold doors to suit any budget. Prices can range drastically on bi-folds, from low cost uPVC systems, value for money aluminium doors, through to expensive timber options.

A high quality, bespoke aluminium bi-fold door, glazed and installed will normally cost around £1,200 - £1,500 per door. Due to the bespoke nature of bi-folding doors, the overall price varies depending on the choice of hardware, components, colours and glazing.



Planning required?

Prior to commencing your project, you should look into whether your new doors require planning permission. Most installations for doors are classed as permitted developments (PDs) which means no planning permission is required. However, it's always best to check, especially if your home is in a listed building or in a National Park, where different restrictions apply.

We also recommend you have a survey carried out to highlight any potential issues with creating the aperture, and installing your doors. You might want to speak to an architect too. Especially if you're planning a complete home redesign or have an older property and would like ideas on how to incorporate modern doors into the design.











How much work is required?

The amount of work required to have bi-folding doors varies from home to home

Creating an aperture

If you have no existing doors and windows in the area and you're installing bi-folds, you will need to discuss the work required to create the aperture, usually with an architect, structural engineer or builder. As part of the wall will need to be knocked down, you may require a lintel to be installed to support the doors. If you require a level threshold, you may need work to be carried out on both the internal and external flooring.

New extensions

If you are building a new extension and incorporating bi-fold doors, it should be a simple and straightforward process. We recommend that you inform the project manager as early as possible, to allow them to plan the extension with the doors in mind. Ensuring they have the necessary structural support and appropriate drainage and threshold requirements. Not to mention bespoke features such as opening configurations, colour and finishes, and much more.

Replacing

If you are just looking to replace your sliding doors with bi-folds, it is usually very simple. Once you have disposed of your sliding doors, new bi-folds can be installed into the existing aperture. However, for the doors to run smoothly, it is important that there is structural support above the doors, to install the doors into.

What to look for in a bi-fold door

There are lots of different types of bi-folding doors on the market, so it's good to know what to look for





Guarantee/ Warranty

When looking into the different warranties, it is important to find out exactly what the warranty covers. Due to some manufacturers offering different warranties on paint and components, it can be somewhat confusing. The Origin 20 year guarantee covers all manufactured parts and paint. You just need to check that your local installers offer the standard 10 year warranty on installation and glass.



Smooth operation

How effortlessly the doors glide is a good indication of a well-designed system. Which is why we always recommend you physically see and operate the bi-fold doors you're interested in, before making a purchase. Visit your local window & door showroom to test the operation of bi-folds. Usually they will have more than one option on display, to help you decide which offers the smoothest operation.

Top tip Visit US

Top tip

If you are close to the sea, or installing the doors into a pool house, check the manufacturer offers their warranty in marine environments. – FENSA registered installers must guarantee their installation for 10 years. – Check what parts are covered by the manufacturer's warranty.



Thermal Efficiency

Top tip
Origin's
U-value
is the full
door

The best indicator of thermal efficiency for bi-folding doors are U-values. U-values show the amount of heat lost in watts (W) per square metre of material, so, the lower the number, the better the thermal efficiency. It is important to have the U-value of a full set of doors and not just the centre pane U-value.

Depending on your project, the U-values of your bi-folding doors will need to meet different building regulations.

As of 2015 the U-values for bi-fold doors within the following must be:

Replacements: 1.8W/(m2K)

New Builds & Extensions: 2.0 W/(m2K)

Origin – 1.67 Double Glazed | 1.32 Triple Glazed



Requirement

Origin Bi-fold Doors







Security

As with any external door on your home, you will want to ensure your bi-folding doors are as secure as possible. There are a few easy ways to check the security of the door.

- The whole system conforms to PAS 23/24 security standards
- Check how many points of locking are on the lead door
- Check the locking cylinder/barrel has the most secure features anti pick, snap, bump, lift and drill
- Hinges must be made of a strong material, such as aluminium or zinc

Glass is a major part of a bi-folding door and can enhance security. Double and triple glazed panes are reasonably strong, however, if you want to increase security further, you can opt for laminated glass (but it does come at a premium).



Approximate laminated glass price:

£68 per m²



Lead Times

The standard lead time for manufacturing and delivering bi-fold doors is 6-8 weeks, which often causes issues for homeowners. Installers often need to measure the finished opening (to ensure exact size) before placing an order with their suppler, as a result

homeowners can be left waiting for several months, leaving their property boarded up and exposed, affecting their insurance.

However, there is a solution as Origin now offer an unbeatable service called "Your lead time, not ours" which allows you to receive your bespoke doors within 48 hours of placing an order. For less popular colours, Origin can still manufacture and deliver within 3 weeks.



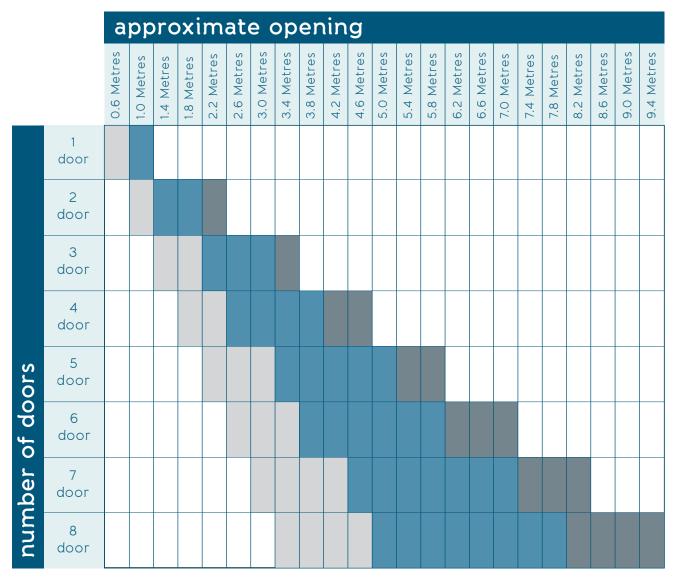
What Configuration?

Deciding on which configuration will work best, depends on the size of your opening and the layout of your home. We would recommend going for larger panels as it means you will have less aluminium and more glass, creating a less obstructed view. Opting for less door panels will also keep costs down, due to the majority of material costs being the door profiles.

View our easy to follow guide which will show you how many doors you require, based on the size of the aperture.

The first decision is open in, or open out. Open in means when folded back, the doors stack on the inside and when open out they stack on the outside. The majority of our customers opt for open out as they don't want the doors to take up any internal space.

Next you can decide on the actual configuration you desire: which means the total number of door panels and whether they fold left, right or both ways. On the following page we have listed our recommended configuration for each number of panels. As the configuration is a crucial part of the build, it is worth discussing your options with the manufacturer or installer.



*Above sizes are for guidance only and are subject to glass specification.

Key:



Recommended Configurations

Our recommended 2 door configurations:

2 Door 2+0



Our 2 door set works for small openings. This door comes with a mullion and will have slave locking, as opposed to our multipoint lock.



2 Door French Door



The Origin French door matches our bi-folding doors perfectly. It comes with our leading multipoint locking system.



Our recommended 3 door configuration:

3 Door 3+0



We recommend the 3+0 configuration as it allows for all doors to be folded back in the same direction whilst incorporating an everyday access door.



Our recommended 4 door configuration:

4 Door 3+1



The 3+1 is a favourite because it will give an everyday access door, multipoint lock and no mullion.



Single Door



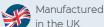
Our single door consists of the same slim profile as our bi-folding doors. It is available with a mid-rail or can be specified to hold one full pane of glass. This is often used when matching a back door, to bi-folding doors.



Kev















Our recommended 5 door configuration:

5 Door 5+0



This configuration works almost identically to the 3+0 configuration meaning it comes with an access door, multipoint lock and no mullion.



Configurations as viewed from inside, other configurations available.

Our recommended 6 door configuration:

6 Door 3+3



Ideal for larger apertures, the 3+3 is one of the most diverse configurations as it can operate as a French door at the centre, have 3 doors opening one way whilst the other 3 remain closed, or they can be opened fully with 3 doors folding each way to give symmetry.

(i) 20 sp /

Our recommended 7 door configuration:

7 Door 3+4



This door set will allow you to have an everyday access door, with our multipoint lock. We also recommend this configuration due to its ease of operation.



Thresholds

The threshold, or bottom track, is what the bottom wheels run along. The trend is to make this threshold as low as possible to give a better aesthetic appeal and less of a trip hazard. We recommend sinking the threshold into the flooring which will reduce the step significantly.

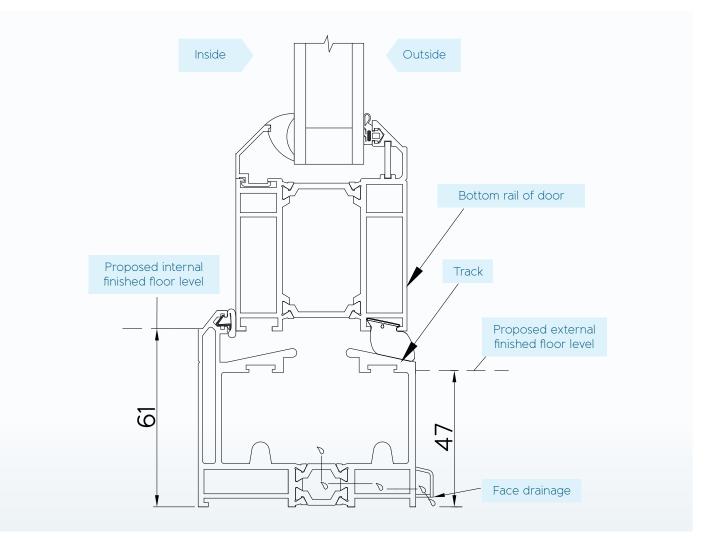
Origin, and other companies, do offer a level threshold to make it completely flush when the doors are open. However, we do not recommend a low threshold for external doors as it can't guarantee all weather is kept out. We recommend sinking our rebated track into the floor by 61mm internally and 47mm externally for external doors. This will give the most even finish possible and keep out all weather, with just a small up-stand of 6mm. These measurements will vary from system to system, so it is important to check with whoever you choose as your supplier.

Top tip
A small 6mm
upstand will
keep out all
weather















Glazing

As standard, glass for bi-folding doors will be double glazed and come with the following features:

- Toughened/laminated safety glass to increase security and means if broken, the glass will break into small blunt pieces instead of large sharp shards
- Warm edge spacer bars, to separate and insulate the edge of each pane of glass
- Argon gas filled units to increase the thermal efficiency by slowing down convection inside the air space
- Low E coating will help with thermal efficiency by reflecting UV rays. It also offers UV protection to prevent fading of soft furnishings

There are many other features that you can specify with your installer, at an additional cost. Including krypton filled, tinted glass, triple glazing or acoustic glass. We recommend discussing the pros and cons with an expert, such as one of Origin's accredited partners.

Top tip
Discuss
your glazing
options with
an expert

	Included as standard	Additional feature
Safety glass	✓	
Warm edge space bars	✓	
Argon gas	✓	
Low E coating	✓	
Krypton filled		✓
Tinted glass		✓
Triple glazed		✓
Acoustic glass		✓

Drainage

There are two types of drainage on bi-folding doors, concealed and face



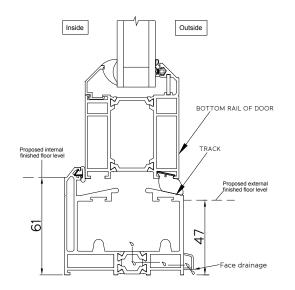


Face Drainage

Face drainage can be used with or without a cill, this is because the excess water is released through the front of the track. We recommend face drainage when there is no cill. The diagram below shows how the face drainage works.

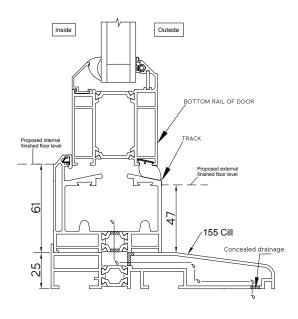
Concealed

Concealed drainage can only be used if your doors have a cill. As the name suggests, this type of drainage is not visible. Any water will drop through the bottom track/threshold into the cill, where it will run along and exit through the bottom. See illustration below.



Top tip

Consider the drainage route as early as possible – Discuss with your builder and/or the window and door company fitting the doors – If using concealed drainage, make sure you factor in the height of the cill.





When sinking the track into flooring...

It is still important to have a drainage route when installing the bottom track below floor level. To do this, we recommend using a similar configuration to below, however, each build is different so it is best to consult with an accredited Origin partner to find out the option for you.

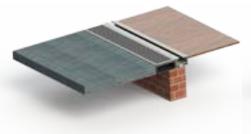
Concealed Drainage
Non-weathered
With Cill





Face Drainage
Non-weathered Threshold
Without Cill





Concealed Drainage
Weathered Threshold
With Cill





Face Drainage Weathered Threshold Without Cill





Customisation

Colours...

Bi-fold doors are available in many different RAL colours to suit the style of your home. Origin offer over 150 different RAL colours to choose from, including dual-coloured frames (inside and out) - so creating your own unique look is easy.

The most popular colours are available on Origin's industry-leading 'Your Lead Time, Not Ours' delivery promise.

Ranging from Hipca White to Jet Black with greys in between, and the ever popular authentic wood grain finishes; these colours can be ordered to fit your schedule, so you have your bi-fold doors ready when you need them.

We keep 11 of our most popular colours in stock, and they all come with our Your lead time, not ours, promise. For non-standard bespoke colours, please allow 3 weeks.





Our popular colours are:



Hipca White (9910 G)



Jet Black (9005 M)



Light Silver Metallic (9006 M)



Dark Silver Metallic (9007 M)



Slate Grey (7015 M)



Anthracite Grey (7016 M)



Natural Oak



Golden Oak



Mahogany



Walnut



Black Grey (7021 M)

Key: G = Gloss finish M = Matt finish

Dual Colour:9910G (Hipca White) in

9910G (Hipca White) in / 7106M (Anthracite Grey) out

Colours shown here may not be 100% representative. Visit your local showroom or contact Origin directly for physical samples.





Premium Range in Stainless Steel







Solid stainless steel lever handle - comes with separate escutcheon (Style 251/280)





Solid stainless steel lever handle - comes with separate escutcheon (Style 301/280)



Solid stainless steel lever handle - comes with separate escutcheon (Style 303/280)

Standard Range in Aluminium









Trickle Vents



Trickle vents offer a ventilation solution when other means have not been provided. They are required to allow a specific amount of airflow as described in building regulations. We offer a 2500 or 5000 trickle vent, which are routed out into the head of the frame.

Trim Kits

Trim kits can be ordered at the same time as the doors. We only do 1 size of trim, 25mm x 5m lengths. They come in packs of 2 or 5 lengths and are available in any colour to match.



Maintenance

Origin Doors contain mechanical moving parts that will need to be lubricated periodically. This includes the hinges, multipoint lock, handles and the trolley wheels in the top and bottom track. Lubricate using silicone spray or grease, and wipe away any excess with a non-abrasive cloth.

Routine Care

Powder coated aluminium profile

Use a light, soapy solution (washing up liquid is not recommended) and non-abrasive cloth to wipe dirt from the doors. Avoid using an abrasive cloth such as a scouring pad, as the doors can be scratched. Do not use solvent based cleaning products. In salt water environments, the external surface of the doors should be washed down with fresh water on a weekly basis as it is common for salt deposits to build up.



"QLon" seals

Use a light, soapy solution and non-abrasive cloth to gently clean QLon seals. Do not use solvent based cleaning products.



Tracks

Use a small brush to loosen any debris from the track. Using a suitable vacuum cleaner with a thin attachment, vacuum up the debris in the track. Do not allow debris to build up in the track as this will affect the operation.

The next step...

Call Origin to speak to our specialist team of sales and technical professionals...







Once you have thoroughly researched the types of doors and options available, and what will work best for your renovation. Your next step is to decide where and who you want to purchase your bi-fold doors from.

Why Origin?

Origin are the UK's leading specialist manufacturer of bespoke aluminium Bi-folding Doors, Windows and made-to-measure Blinds. At Origin, we exclusively design and manufacture all of our products at our Buckinghamshire based factory, and every Door, Window and Blind we produce is manufactured to our customers' bespoke specifications.

Speak to our specialist team...

At Origin, we have a specialist team of sales and technical professionals who are fully committed to providing customers with a personal service, ensuring your experience buying our products is as exceptional as the products themselves. Call our expert customer service team to find out more about our doors and accompanying products. The team will help answer any additional questions you may have, and will be able to direct you to your local accredited Origin dealer.

Our nationwide network of trade agents are carefully selected and extensively trained to ensure you receive the greatest quality product, backed with a reliable and helpful service.

Make sure you visit your local showroom to view the Origin Home range. Your accredited Origin parter will be the one undertaking your installation, so they will be best placed to discuss your building project and costs with.

Call 0808 168 5816 or visit www.origin-global.com

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