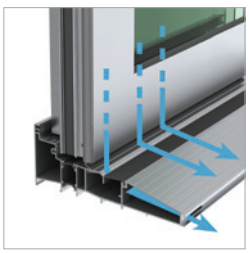
What to consider when choosing folding doors

A quality folding door should last a lifetime - so it pays to think carefully about the folding doors you are looking to specify...

This handy guide helps you identify how and where quality can affect performance, both now and in the future. When choosing folding doors, you should consider the following points:

Weather resistance

Because folding doors are much larger than ordinary patio doors, they are more susceptible to the effects of wind and rain. While 100pa water resistance is suitable for sheltered spaces, 250pa+ is advisable for doors that are unprotected from the elements.



Thermal performance

Any larger expanse of glass will result in increased heat loss, so go for the best performing glass you can afford – it will pay back in lower heating bills. Make sure both the aluminium panels and the frames of your folding doors have a thermal barrier between the inner and outer profiles to reduce conduction and condensation. Thermal performance is measured by U values – 1.7 is a realistic minimum and anything approaching 1.0 is exceptionally good.

External noise

Bigger doors mean more possibilities for noise pollution. Double glazed panels are extremely effective, but only with effective panel sealing. Look for triple sealing, incorporating high-performing acoustic foam-filled seals.

Torsional stability

When door panels are joined to each other, it is important that each panel is sufficiently rigid to support the adjacent panel. Aluminium is significantly stronger than PVC and a square cut (not mitred) corner adds considerably to a panel's torsional stability and consequently to overall ease of movement.

Rattle free

Large doors need to be able to handle a huge amount of wind pressure, as well as vibrations caused by noise and air movement. However, they should never rattle under these conditions. Sealing, intermediate locking and inter-leaving panels work together to ensure doors remain rattle free.

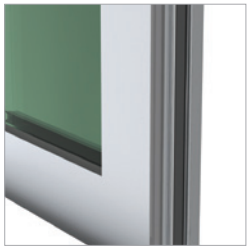
Adjustability

Buildings are rarely exactly square and there can also be building settlement over time which can cause door frames to move out of alignment. This can mean doors may not open and close as smoothly as the when they were first installed. As folding doors are typically larger than other types of doors, these factors have a greater effect. Full adjustability – lateral as well as vertical – will allow your installer to make any small adjustments that are necessary to keep your doors working optimally for years to come.

Easy movement

Folding doors are heavy, so the rolling system needs to operate smoothly at all times. Flat wheels that absorb deflections running on a flat surface will work better than grooved wheels on rails to ensure free movement regardless of the door position. Always try before you buy...

Strength

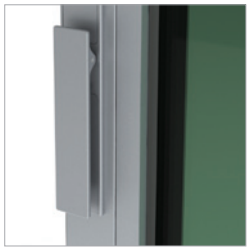


Because folding doors need to withstand all sorts of pressures, both when closed and when moving, the panel profiles (vertical 'stiles' and horizontal 'rails') that hold the glass in place need to be strong. But you will also want narrow sight lines, which are more aesthetically pleasing. Therefore, look for stile and rail profiles that are thicker in depth but still narrow when viewed front-on – this gives the required stability and robustness while also maximising the glass area.

Thermal stability

Wide folding doors are invariably susceptible to expansion due to heat from sunlight. PVC expands much more than aluminium or wood. Convenient lateral adjustability within the folding door system easily resolves this issue if your location is particularly sunny or there are large seasonal variations.

Security

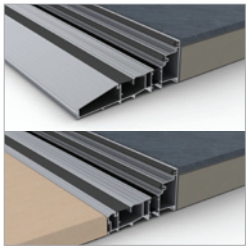


Folding doors are inherently more secure than sliding doors. To maintain this barrier, irremovable hinge pins, a 25mm bolt throw, tested multi-point locks and high security cylinders are all essential. As are strong, interlocking profiles that have higher impact resistance and can't be pried open easily.

Configuration and functionality

Folding doors can be configured in any combination, so choose the arrangement that best suits your living environment. If you are planning to use your folding doors for regular access to the garden or patio or only fully opening, choose an odd number of panels on one side. Having all doors moving in one direction will minimise the effect of opening doors at 90º into other spaces. Don't forget to consider the impact of your doors on your patio space if they are outward opening or on furniture and curtains if inward opening. Doors opening in both directions can be used to create a wind break.

Sill design



The sill creates a transition between inside and outside, and also provides drainage. A small rise is unavoidable if you need any effective level of water and air resistance, so make the inner side flush with the internal flooring and the outside level with your patio or decking. Always ensure that drainage is away from any brickwork and bear in mind that a covered sill track looks better and prevents dirt affecting the movement of the rolling system.

Structural support

Floor-rolling folding door systems are the easiest to install, as all the weight is carried on the sill. While top-rolling systems need to be fixed to a sturdy overhead beam or lintel, floor-rolling systems can easily be installed without the need for major structural reinforcements. This makes them ideal for renovation or refurbishment projects.

Appearance

Aluminium folding doors can be powder coated in a wide variety of colours and textures to suit your particular preferences. If painted white, they give a consistent appearance with PVC windows. Timber gives an added texture and warmth, and with the correct stain or colour can give a contemporary look, but will require regular maintenance.

Appropriate finish

Any colour in a powder coat finish is possible but the paint colour will eventually fade over the course of several years depending on the environment. Harsh outdoor environments such as salt and chlorine accelerate colour fading. Marine grade finishes offer extra protection, which delays these effects. So consider an anodised finish for the best protection.

Centor UK
+44 (0) 121 701 2500
mail.uk@centor.com
www.centor.com

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