



Lift and Slide System

Design in Motion

November 2012

HENDERSON

P C Henderson Ltd has teamed up with **AGB** to offer the **Lift and Slide System**

Lift & slide is the ideal solution for rooms requiring a lot of sunlight, or for homes where having a large glass window enables you to enjoy a complete view of the landscape; while also maximising accessibility to the outside, creating a fantastic entertaining space.

Solution Provider

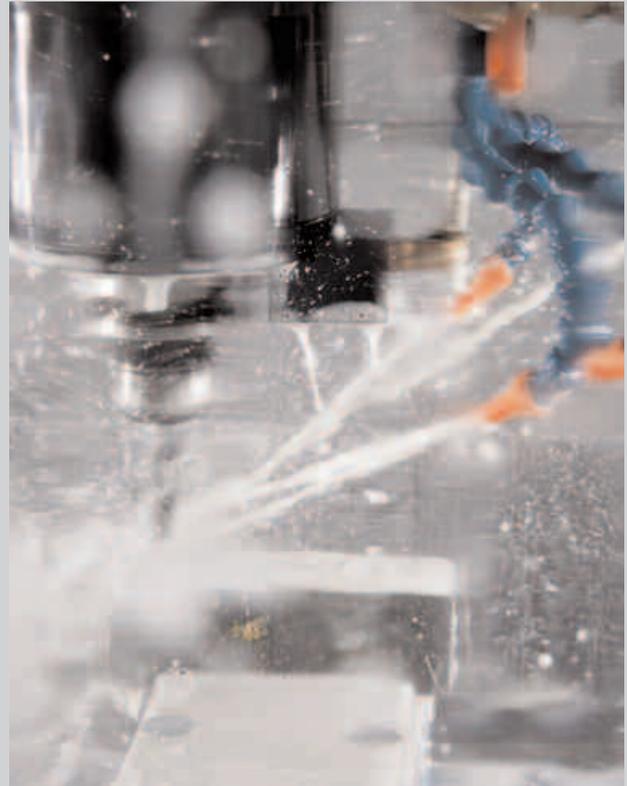
Established in 1921, P C Henderson has long been acknowledged as a world leader in the design and manufacture of sliding and folding door systems.

The 'Henderson' name is synonymous with technical excellence and enduring quality with all products manufactured to meet the most demanding certifications ISO 9001: Quality Management Systems and ISO 14001: Environmental Management System.

P C Henderson has come together with AGB to offer the Lift and Slide System ensuring that we continue to offer the most appropriate and flexible solutions whatever the design requirement. Our experienced technical sales team is on hand to answer any technical or specification query and with the added benefit of a large UK stockholding, Henderson can offer an exceptionally fast, efficient and reliable service.

Detailed instructions are supplied with all hardware and provide joinery details for preparation, assembly and installation.

Milling cutter for wood profiling.



Confidence in design

The Lift and Slide System is designed to accommodate individual door leaves of up to 3m². By incorporating the system into several panels you can open an entire wall to the outside, creating an indoor-outdoor living experience.

The doors operate with a simple turn of the door handle. This unlocks the door, lifts the door up from its weather tight position and allows it to slide easily on the carriages with minimal friction. Once open the door can be lowered at any position and locked by moving the handle down.

This simple operation is achieved with the confidence that the system offers **superior weather resistance** and; with the combination of the multi-lock mechanism and concealed position of the carriages, **excellent security**.



Lifting Carriage



Carriages

The sturdy precision carriages that support the movable doors ensure easy lifting, and a smooth, silent sliding operation. The front and rear carriages are connected by a cut-to-size steel link rod. Durability and ease of movement is ensured by extra hard nylon wheels mounted on shielded ball bearings.

Lift & Slide ...the key features

CE marking on windows and doors became mandatory in 2010. It is the manufacturer's declaration that the product conforms to one or more European standards. The CE mark provides reassurance that the product is manufactured to a high standard and confidently meets rigorous weather and security testing.

The Lift and Slide system is available in three CE certified variations - Base, Intermediate and Climatech. All three systems have achieved high ratings in air, sound, water, wind, heat and security performance tests detailed in the following sections.

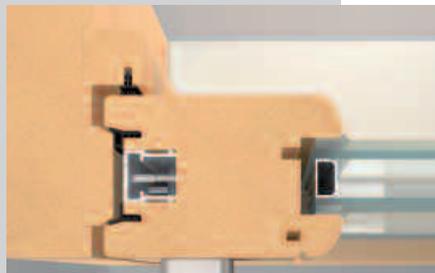


Standard components

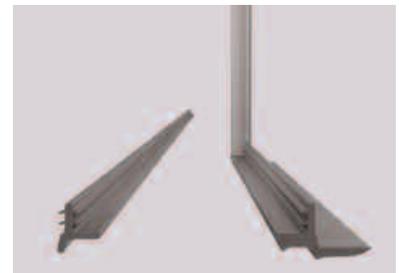
There are a number of key elements which are present in all three certified systems.



A Carriages: Precision engineered carriages are central to the lifting operation. The handle is linked directly to the carriage which, when turned, raises the door from its weathertight position and allows it to move smoothly into position.



B Decompression chamber: This chamber runs down the end of the jamb sealing the door when it is in the closed position, creating an effective weather barrier against water, wind and temperature.



C Gaskets: The heat sealed gaskets are positioned on the perimeter of the moving sash and are a major factor in achieving superior weather ratings. The enhanced outer gasket with its "fin" design creates a seal between the sash and the threshold.

For more information visit www.pchenderson.com or Telephone +44 (0)191 377 7345



CE performance related components

The three systems; Base, Intermediate and Climatch offer differing performance levels through a number of key areas:

- 1 The central meeting point between the sash and frame
- 2 Sealing pads at the bottom of the central meeting point between the sash and frame
- 3 Top guide
- 4 Frame corner joints
- 5 Threshold



D Lock: The secure locking system, encased in sheet steel, is designed to accommodate a Euro profile cylinder with 27.5mm and 37.5mm back set options. Varying lock heights cover doors and windows between 800 - 2400mm high. Additional 500mm lock extensions and covers are also available.

Base system



Water	3A
Air	4
Wind	2(C)
Noise reduction	41dB

Value obtained with glass 43dB. With 41db glass, 39dB is achieved.

NB. Tested window and door dimensions 4x2.78m, thickness 68mm.

Heat transmittance	1.70W/m²K
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NB. Ug 1.4 dimensions 2x2.18m, softwood, section 68x100mm.

Soft heavy body impact	5
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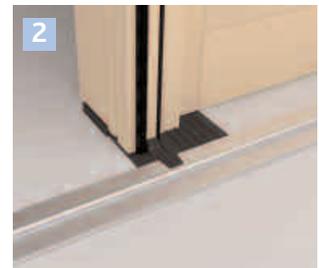
NB. Tested window and door dimensions 1.6x1.5m.

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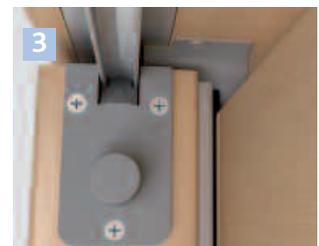
The central meeting point between the sash and frame
Timber profiles are machined to accommodate the gaskets. A brush is then added to the outer profile to create a decompression chamber.



Sealing pads at the central point between the sash and frame
A bottom pad and anti-derail plate provides a seal between the central meeting point stiles and the threshold to give weather protection.



Top guide
The base system utilises a reduced top guide with a top thermal break pad.



Frame corner joints
Shaped bottom rail caps allow easier preparation of the frame to rail seal.



Threshold
The low track when combined with the gaskets and central sealing pad provides a good water resistant seal but should be combined with a timber threshold to improve water flow.



Intermediate system



Intermediate

Water	6A
Air	4
Wind	4(A)
Noise reduction	40dB
<i>Value obtained with glass 43dB. With 41db glass, 39dB is achieved.</i>	
<i>NB. Tested window and door dimensions 4x2.78m, thickness 68mm.</i>	

Heat transmittance	1.73W/m ² K
<i>NB. Ug 1.4 dimensions 2x2.18m, softwood, section 68x100mm.</i>	

Soft heavy body impact	5
<i>NB. Tested window and door dimensions 1.6x1.5m.</i>	

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The central meeting point between the sash and frame

An anti-burglar kit is fitted with a bulb gasket and brushes to give enhanced security protection.



Sealing pads at the central point between the sash and frame

A central sealing pad and caps provide a superior seal between the central meeting point stiles and the threshold to give improved weather protection.



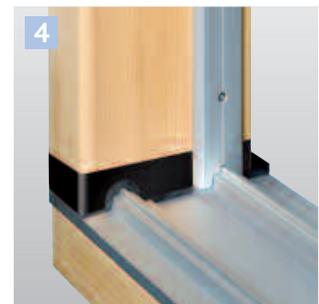
Top guide

The Intermediate system utilises a reduced top guide with a top thermal break pad.



Frame corner joints

A two-part moulded rubber threshold seal and compensating cap ensures that a good weatherproof seal is achieved between the timber jamb and aluminium threshold.



Threshold

An aluminium threshold with a thermal break and concealed fixings provides good weather resistance and thermal insulation, whilst meeting all DDA accessibility guidelines



Climatech system



Water	8A
Air	4
Wind	3(B)
Noise reduction	41dB

Value obtained with glass 43dB. With 41db glass, 39dB is achieved.

NB. Tested window and door dimensions 4x2.78m, thickness 68mm.

Heat transmittance	1.68W/m²K
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NB. Ug 1.4 dimensions 2x2.18m, softwood, section 68x100mm.

Soft heavy body impact	5
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NB. Tested window and door dimensions 1.6x1.5m.

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The central meeting point between the sash and frame

This consists of two robust thermoplastic profiles providing improved insulation due to the brush and gasket configuration. Incorporated within the profile is the anti-burglar meeting stile offering an added security feature.



Sealing pads at the central point between the sash and frame

The central sealing pad is designed to assist water flow and create a strong seal between the central meeting point stiles and the threshold offering superior weather protection.



Top guide

The Climatech system features a reduced top guide with an upper sealing profile which runs along the top rail of the sash and rests on the lintel creating a superior weatherproof seal.



Frame corner joints

A two-part moulded rubber threshold seal and compensating cap ensures a good weatherproof seal is achieved between the timber jamb and aluminium threshold.



Threshold

A fibreglass reinforced threshold with concealed fixings gives optimal strength and heat resistance. In addition, the finish is very durable and scratch resistant, whilst also meeting all DDA accessibility guidelines



Flexible solutions

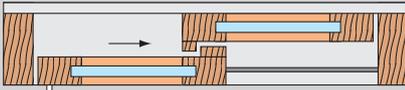


The Lift and Slide System has been designed to create the most flexible solution with three CE rated levels of performance; Base, Intermediate and Climatech. The basic lifting mechanism remains constant throughout the range but each system incorporates progressively higher levels of weather resistance within its design.

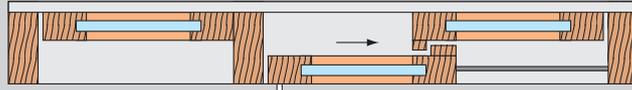


Configurations

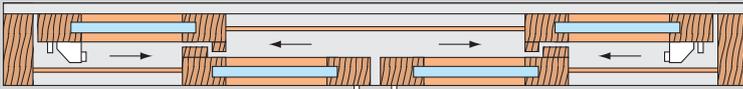
The Lift and Slide System can satisfy any situation and is particularly suited to large openings. The main configurations are as follows.



Pattern 1: One fixed door and one sliding door



Pattern 2: Two fixed doors and one sliding door



Pattern 3: Two fixed doors and two sliding doors

The Lift and Slide System is also suitable for windows where, in addition to reduced dimensions, there is a need for security, weather resistance and durability.



Accurate and controlled finishes

Lift and Slide hardware is engineered to the highest possible specification. Aluminium parts are natural anodised in compliance with current regulations to a minimum thickness of 15 microns. The components made of steel and zinc alloy are also treated with static electrolytic zinc plating and subsequent chrome passivation in compliance with UNI 2081.



EXPERT service



Get a rapid and free, no obligation quote for your sliding or folding door project

Let us recommend the optimum system for your needs. Simply answer a series of straightforward questions about your sliding or folding door project - size of opening, type of folding etc. - and we will do the rest.

Specifying a sliding or folding door gear project can be a complex business involving a seemingly infinite number of choices of systems and materials. Our unique quotation system has been developed to make the specification process as easy as possible.

The Henderson Sliding Door Gear Expert asks a series of questions which narrow down your options to the most suitable system or systems for your particular needs. The answers you give will be reviewed by one of our experienced specifiers and we will send you a full specification and a no obligation quotation for your requirements including bill of materials and quantities.

www.pchenderson.com/expert

If you would rather talk to us directly, our Technical Sales Team can answer your query by phone, fax or e-mail.

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