# **ALUMINIUM MADE EASY**

# YOUR COMPLETE ALUMINIUM WINDOW & DOOR RANGE.









REAL ALUMINIUM. THE FINER CHOICE.



# WHY REAL ALUMINIUM? IT'S AS EASY AS CHILD'S PLAY...



REAL Aluminium fabricates a comprehensive range of aluminium fenestration products for all domestic and commercial installations. Manufactured using profiles and components held in stock at the dedicated factory in Gloucestershire.

All stock aluminium products on a 2-week turnaround

With strong, slim profiles and long-lasting quality materials and finish, REAL Aluminium covers a full suite of aluminium products. That includes: casement windows, bi-folding doors, sliding doors, residential doors and designer doors.

#### LEAD TIMES 🔗



Quoting - 24/48 hours on standard products or immediate via pricing tools

Delivery - 2 weeks\*

\*From sign off/next delivery date Astragal bar products = 3 weeks Grey exterior and white interior = 2 weeks Composite door bespoke colours = 3 weeks

#### COLOUR OPTIONS **②**



White, Black, Grey, Grey Exterior/White Interior

#### OUR PROFILES 🔮



The REAL aluminium range of products provide a full solution for any aluminium installation as the systems are manufactured to the highest quality and have been specifically engineered to meet the new Document L standards.

All the profile options are designed to give optimum strength and durability to ensure a structurally sound product that requires minimal maintenance to deliver reliable performance over a lifetime of use.

For Profile Charts and Assembly Charts of all REAL

#### MARKETING SUPPORT 🕢



Our Marketing Team are happy to support you and are on hand to help.

Contact us on: 01453 826884 or email marketing@customade.co.uk

#### A SERVICE YOU CAN RELY ON

Each and every product within the REAL Aluminium range is manufactured from stocked profile and components. Should there be any requirements for replacements or remakes these can be turned around in 1 week, compared to 3 weeks or more for nonstocked products.

















# ALUMINIUM...THE FINER CHOICE

#### Why choose aluminium?

There are a multitude of reasons to choose aluminium. Homeowners are becoming more aware of the benefits of this slimmer and stronger material for their home. Improvements to aesthetics and thermal performance differentiate today's aluminium products from those of the eighties and nineties.

Aluminium is the preferred product of discerning architects...why would discerning homeowners choose anything else? Whatever the taste or style of your home. the REAL Aluminium range offers distinctive styles and designs to suit.

Aluminium - designed and built to last.



Powder-coated aluminium is one of the most durable finishes available for windows and doors. It won't discolour, rust or peel, giving it a long-lasting, attractive appearance,

All aluminium products from the REAL Aluminium range come with superior guarantees. This guarantee covers the powder-coating against the following faults:

- peeling, powdering and blistering
  corrosion
  chalking, fading and loss of sheen

Refer to the Care & Maintenance Instructions for guarantee exclusions: www.re-aluminium.co.uk









Aluminium, by its very nature, is a strong material compared to PVCu and doesn't require additional reinforcements.

The superior strength of aluminium allows for larger arrangements which are only possible with timber or PVCu when using bulky profiles and couplers.

Most PVCu bi-folds can only extend to 750mm-wide sashes; the REAL Aluminium Bi-folding Doors can accommodate 1200mm sashes.

Aluminium is easy to keep looking great and is virtually maintenance free. Modern powder coating delivers a hard-wearing finish which will last for years.

With occasional cleaning and periodic lubrication of locks and hinges, aluminium windows and doors will look and operate 'as-new' for longer.



Refer to the Care & Maintenance Instructions for details: www.re-aluminium.co.uk

Aluminium is a durable substance, therefore windows and doors made from aluminium will continue to open and slide smoothly over many years.

Aluminium is infinitely recyclable, and when recycled uses just 5% of the total energy needed to produce frames from scratch.

#### THERMALLY EFFICIENT

THERMALET EFFICIENT
The REAL Aluminium range is enhanced with polyamide thermal barrier technology, enabling the windows and doors to exceed the energy performance requirements of current Building Regulations.

Profiles used in all products from the REAL Aluminium range have a very high resistance to heat transfer from the inner face of the frame to the external face of the frame, giving superior thermal efficiency and reduced condensation.

# YOUR COMPLETE ALUMINIUM WINDOWS & DOORS

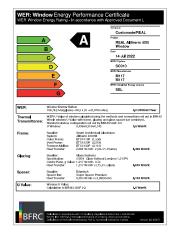
#### Building Regulation Compliance, Window Energy Ratings (WER) and Doorset Energy Ratings (DSER)



Compliance with current Building Regulations is a vital part of every installation and can sometimes be complex. Using REAL Aluminium, meeting the requirements of Part L of current UK Building Regulations, is easy as the entire range is compliant using energy ratings for renovations to existing properties when installed with a double-glazed unit with a U Value of 1.2 W/m<sup>2</sup>K and a solar gain of 0.71 or better

that is manufactured using an Edgetech Super Spacer Bar or equivalent, All REAL Casement Windows achieve an 'A'-rating if the aforementioned glass unit is upgraded to low-iron glass. The thermal efficiency of the REAL Aluminium range can be enhanced further by using higherperformance double-glazed or triple-glazed units.

#### REAL Aluminium WER, DSER & U Values





1.	U Value .2 W/m	2 <b>K</b>	Project	W PROST LINES
WER:	Window Energy Rat 196,74((1-f)oggless)	ing - 68,5 × (U + (0,0165 ×AL))		-10.4 kWH:m? Yes
Thermal Transmittance:	Whose window U Va	dow calculated using the me too with frame, placing and g dispursion set out by RR443 0.596+0.531+0.125	lass steperba	
Frame:	Supplier: System: Objet Frame: Vect Frame: Transom Mullion: Heat Transfer:	Smert Architectual Alumin Alchem 300 "ZSB166F (1,915) ETC428N (2,947) ETC358 (8,194) 2,223 Wherk x (21,2% Fr		0.586 W m/K
Glazing:	Supplier Specification Centre Pene, g Valu- Heat Transfer	Glass Systems 6/12/6/12/6 clean/softcoat e 0.672 Winn/K, 0.42 0.672 Winn/K x (79.6% GL		7 CPV
Spacer:	Supplier: Spacer Bar Heat Transfer:	Edgetech Super Spacer Premium 0.000 WimK x [4.165m/m		0.125 W m/K
U Value:	Window U Value Coloubition to RR66	NGGE 2,1		1-2 WineFK

#### Note:

All REAL Aluminium products when used in conjunction with the glass specifications on pages 8,9,10 and 11 satisfy current Building Regulations Part L for refurbishment and new-build applications

The addition of <mark>low-</mark>iron glass will not improve U Values but will improve WER/DSER rating due to solar gain.

The addition of triple glazing will improve U Values but due to reduced solar gain has limite effect on WER/DSER ratings.

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#### APPROVED DOCUMENT L RENOVATION

REPLACEMENT O	REPLACEMENT ON EXISTING DWELLINGS OR EXTENSIONS (Energy ratings)				
REQUIREMENT	WINDOW / DOOR DESIGN	SYSTEM	DOUBLE GLAZED UNIT SPEC	ACTUAL RATING	
	1230.0	Alitherm 300 Window System 1 (F)	28mm unit clear/argon/softcoat 1.2 Centre pane 1,22 W/m²k warm edge spacer	В	A achievable with low iron glass + FF insulation
B rated or Uw 1,4 W/m <sup>3</sup> k	14900	Alitherm 300 Window System 2 (F)	28mm unit clear/argen/softceat 1,2 Centre pane 1,22 W/m²k warm edge spacer	В	Band A achievat glass + FF
		NEW PRODUCT Alitherm 400 Window (F)	28mm unit clear/argon/softcoat 1.2 Centre pane 1.22 W/m²k warm edge spacer	A*	
>60% glazed door C rated or Ud 1.4 W/m²k	1200	NEW PRODUCT Altherm 400 Rosi Door (F)	28mm unit clear/argon/softcoat 1,2 Centro pano 1,22 W/m <sup>2</sup> k warm adge spacer	С	
C rated or Ud 1.4 W/m <sup>2</sup> k	3000	NEW PRODUCT Alitherm 400 French Door (F)	28mm unit dear/argon/softcoet 1,2 Centre pane 1,22 W/m/k warm edge spacer	С	Band Bachlevable with low iron glass
C rated or Ud 1.4 W/m <sup>i</sup> k	3000	Visofold 1000 SLIM Bi-fold door	28mm unit clear/argon/softcost 1.2 Centre pane 1.22 W/m²k warm edge spacer	С	Band B achievable with low iron glass
C rated or Ud 1.4 W/m²k	77000	Visoglide Plus Sliding Door	28mm unit dear/srgon/softcoat 1,2 Centre pane 1,22 W/m <sup>2</sup> k warm edge spacer	С	Band B achievable with low iron glazs + F insulation
B rated or Uw 1.4 W/m²k	0.000 1.000	Ecofutural TBT	28mm unit clear/srgon/softcost 1,2 Centre pane 1,22 W/m/k warm edge spacer	В	

Glass type 1.2 -examples K glass S, Planitherm Total, Climaguard A+
"Internally glazed Alitherm 400 windows need low iron glass to achieve an A rating.

#### EXTENSIONS LLVALUES (Limiting LLvalue 1.4 W/m²k)

EXTENSIONS U VALUES (Limiting U value 1.4 W/m²k)				
REQUIREMENT	WINDOW / DOOR DESIGN	SYSTEM	GLAZED UNIT SPEC	ACTUAL UW/UD
	<del> </del>	Alitherm 300 Window System 1 (F)	Triple glazed 36mm unit clear/softcoat 1,2/softcoat 1,2 Centre pane 0,8 W/m²k warm edge spacer	1,3 W/m²K
B rated or Uw 1.4W/m <sup>1</sup> k	0.00	Alitherm 300 Window System 2 (F)	Triple glazed 36mm unit clear/softcoat 1.2/softcoat 1.2 Centre pane 0.8 W/m²k warm edge spacer	1.3 W/m <sup>3</sup> K
		NEW PRODUCT Alltherm 400 Window (F)	Double glazed 28mm unit clear/argon/softcoat 1 Centre pane 1,068 W/m²k warm edge spacer	1.4 W/m²K
>60% glazed door C rated or Ud 1.4W/m <sup>-</sup> k	1283	NEW PRODUCT Altherm 400 Resi Door (F)	Double glazed 28mm unit clear/argon/softcoat 1 Centre pane 1.068W/m³k warm edge spacer	1,4 W/m <sup>2</sup> K
C rated or Ud 1.4W/m <sup>2</sup> k	2002	NEW PRODUCT Alitherm 400 French Door (F)	Double glazed 28mm unit clear/argon/softcoat 1 Centre pane 1,07W/m²k warm edge spacer	1.4 W/m²K
C rated or Ud 1.4W/m <sup>2</sup> k	25007	Visofold 1000 SLIM Bi-fold door	Triple glazed 44mm unit dear/softcoat 1,2/softcoat 1,2 Centre pane 0,7 W/m <sup>2</sup> k warm edge spacer	1.3 W/m²K
C rated or Ud 1.4W/m°k	2000 0	Visoglide Plus Sliding Door (F)	Triple glazed 35mm unit dear/softcoat 1.2/softcoat 1.2 Centre pane 0.75 W/m/k warm edge spacer	1.3 W/m <sup>-</sup> K
B rated or Uw 1.4W/m <sup>2</sup> k	1230.0	Ecofutural TBT	Double glazed 28mm unit clear/argon/softcoat 1 Centre pane 1,068W/m³k warm edge spacer	1.4 W/m²K

Glass type 1.2 -examples K glass S, Planitherm Total, Climaguard A+, Glass type 1-examples Pilkington S1, Planitherm one, Climaguard 1

#### APPROVED DOCUMENT L NEW BUILD

#### NEW BUILD U VALUES WITH DOUBLE GLAZING (Limiting U value 16 W/m²k)

NEW BUILD U VALU	ES WITH DOUBLE GLAZING (I	_imiting U value	1.6 W/m²k)	
REQUIREMENT	WINDOW / DOOR DESIGN	SYSTEM	DOUBLE GLAZED UNIT SPEC	ACTUAL UW/UD
	1230.0	Alitherm 300 Window System 1 (FF)	28mm clear/argon/softcoat 1 Centre pane 1,068 W/m³k warm edge spacar	1,6 W/m <sup>2</sup> K
Uw 1.6 W/m²k minimum Uw 1.2 W/m²k Target	14800	Alitherm 300 Window System 2 (FF)	28mm clear/argon/softcoat 1 Centre pane 1.058 W/m²k warm edge spacer	1.5 W/m <sup>2</sup> K
	<u> </u>	NEW PRODUCT Alitherm 400 Window (F)	28mm unit cjear/argon/softcoat 1 Centre pane 1,058 W/m²k warm edge spacer	1,4 W/m <sup>2</sup> K
>60% glazed door Ud 1,6 W/m½ minimum Ud 1,2 W/m¾ Target	1983 —	NEW PRODUCT Altherm 400 Resi Door (F)	28mm clear/argon/softcoat 1 Centre pane 1,088 W/m <sup>2</sup> k warm edge spacer	1.4 W/m²K
Ud 1.6 W/m³k minimum Ud 1.2 W/m³k Target	72202	NEW PRODUCT Alltherm 400 French Door (F)	28mm clear/argon/softcoat 1 Centre pare 1.058 W/m²k warm edge spacer	1.4 W/m%
Ud 1,6 W/m2k minimum Ud 1,2 W/m2k Target	79937	Visofold 1000 SL IM Bi-fold door	28mm clear/argen/seitceat 1 Centre pane 1,068 W/m²k warm edge spacer	1.6 W/m <sup>3</sup> K
Ud 1.6 W/m2k minimum Ud 1.2 W/m2k Target		Visoglide Plus Sliding Door (F)	28mm clear/argon/softcoat 1 Centre pane 1,088 W/m/k warm edge spacer	1.6 W/m³K
Uw 1,6 W/m²k minimum Uw 1,2 W/m²k Target	1230.0	Ecofutural TBT	28mm clear/argon/softcoat.1 Centre pare 1,058 W/m²k warm adge spacer	1.4 W/m <sup>2</sup> K

Glass type 1 - examples Pilkington S1, Planitherm One, Climaguard 1

#### NEW BUILD U VALUES WITH TRIPLE GLAZING NOTIONAL METHOD (Target U value 1.2 W/m²k)

REQUIREMENT	WINDOW / DOOR DESIGN	SYSTEM	TRIPLE GLAZED UNIT SPEC	ACTUAL UW/UD
	1230.0	Alitherm 300 Window System 1 (FF)	36mm unit clear/softcoat 1/softcoat 1 Centre pane 0,7 W/m³k warm edge spacer	1,2 W/m²K
Uw 1.6 W/m²k minimum Uw 1.2 W/m²k Target	44800	Alitherm 300 Window System 2 (FF)	36mm unit clear/softcoat 1/softcoat 1 Centre pane 0.7 W/m³k warm edge spacer	1.2 W/m²K
	<u> </u>	NEW PRODUCT Alitherm 400 Window (F)	40mm unit clear/softcoat 1/softcoat 1 Centre pane 0,63 W/m²k warm edge spacer	1,1 W/m²K
>60% glazed door Ud 1,6 W/m% minimum Ud 1,2 W/m% Target	- 1283 U	NEW PRODUCT Altherm 400 Resi Door (F)	40mm unit clear/softceat 1/softceat 1 Centre pane 0.63 W/m/k warm edge spacer	11 W/m <sup>3</sup> K
Ud 1.6 W/m½ minimum Ud 1.2 W/m½ Target	799GZ	NEW PRODUCT Alltherm 400 French Door (F)	40mm unit clear/softcoat l/softcoat 1 Centre pane 0.63 W/m/k warm edge spacer	11 W/m <sup>®</sup> K
Ud 1,6 W/m³k minimum Ud 1,2 W/m²k Target	75727	Visofold 1000 SL M Bi-fold door NEW BEAD	44mm unit clear/softcoat 1/softcoat 1 Centre pane 0.6 W/m <sup>2</sup> k warm edge spacer	1.2 W/m <sup>2</sup> K
Ud 1.6 W/m³k minimum Ud 1.2 W/m³k Target		Visoglide Plus Sliding Door (F)	36mm unit clear/softcoat 1/softcoat 1 Centre pane 0.72 W/m/k warm edge spacer	1.3 W/m²K
Uw 1,6 W/m¾ minimum Uw 1,2 W/m¾ Target	1230.0	Ecofutural TBT	36mm unit clear/softcoat 1/softcoat 1 Centre pane 0.67 W/m <sup>2</sup> k warm edge spacer	11 W/m²K

Glass type 1 -examples Pilkington S1, Planitherm One, Climaguard 1
+Note: Triple glazing reduces light transmission to the inside



#### AD L: ENERGY EFFICIENCY - NEW DWELLINGS

The Notional dwelling Target 'U' Values for Windows and Doors are laid out in Table 1.1 of the Approved Document L.

The notional method enables Architects to trade off 'U' values against other materials in the dwelling as long as they are within the limiting 'U' values.

#### Table 1.1 from Doc L

DESCRIPTION	TARGET 'U' VALUE
Windows	1.2 W/m²K
Doors with glazed area greater than 60%	1.2 W/m²K
Other doors	1.0 W/m²K

The lowest specification 'U' Value allowable referred to as the Limiting 'U' Values are shown in Table 4.1.

#### Table 4.1 from Doc L

DESCRIPTION	LIMITING 'U' VALUE
Windows	1.6 W/m²K
Doors	1.6 W/m²K



#### AD L: ENERGY EFFICIENCY -EXISTING DWELLINGS

'U' Values, Window Energy Ratings (WER) and Doorset Energy Ratings (DSER) of replacement windows and doors must be both:

- No worse than that of the element being replaced
- Meet the limiting standards in Table 4,2 (Lowest specification of 'U' Value or WER/DSER allowable)

#### Table 4.2 from Doc L

DESCRIPTION	'U' VALUE	WER/DSER
Windows	1.4 W/m²K	В
Doors with glazed area greater than 60%	1,4 W/m²K	С
Other doors	1,4 W/m²K	В

'U' Values, Any windows and doors replaced will need to be at least the level of performance detailed in Table 4.2 above.

#### FRESHER, CLEANER INDOOR AIR (PART F)

The new TTF Similine is a through-frame trickle ventilator that is a robust, yet attractive aluminum ventilator. With its built-in updraught and various operating modes the TTF Similine is stylish and effective product that perfectly complements our beautiful REAL profiles.

#### TTF SLIMLINE

- Independently tested to BS EN 13141-1:2019
- · Water tightness of 400pa
- Independently acoustically tested in accordance with BS EN 20140-10:1992, ISO 140-10:1991.
- Tested in accordance with BS EN 1026:2016 & BS EN 1027: 2016 Weather performance

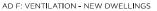


Table 1.7 from Doc

	MINIMUM EQUIVALENT AREA OF BACKGROUND VENTILATORS FOR DWELLINGS WITH MULTIPLE FLOORS	MINIMUM EQUIVALENT AREA OF BACKGROUND VENTILATORS FOR SINGLE STORY DWELLINGS
Habitable Room (see note 2 & 3)	8,000mm²	10,000mm²
Kitchen (see note 2 & 3)	8,000mm²	10,000mm <sup>2</sup>
Utility Room	NO MINIMUM	NO MINIMUM
Bathroom (see note 4)	4,000mm²	4,000mm²
Sanitary Accommodation	NO MINIMUM	NO MINIMUM

The use of this table is not appropriate in the following situations or conditions and expert advice must be sought.

- la) If the dwelling has only one exposed facade (e.g. within a multi-storey building).
- 1b) If the dwelling has 70% of its openings on the same facade.
- If a kitchen has no windows or external facade where a ventilator could be installed.
- Where a kitchen and living room accommodation are not separate rooms (i.e. open plan), no fewer than three ventilators of the same equivalent area as for other habitable rooms should be provided within the open plan space (8,000mm).
- 3) The total number of ventilators installed in the dwelling's habitable rooms and kitchen/s should be no fewer than five, except in one bedroom properties where there should be no fewer than four.
- 4) If a bathroom has no window or external facade through which a ventilator can be installed, the minimum equivalent area specified should be added to the ventilator sizes specified in nearest adjoining rooms, (i.e. 8,000mm² increased to 12,000mm² and 10,000mm² increased to 14,000mm².

#### AD F: VENTILATION - REPLACEMENT WINDOWS

If the existing windows have background ventilators, the replacement windows should have background ventilators that are:-

- No smaller than the background ventilators in the original windows.
- original windows.

  ii) Be controllable either automatically or by the occurs

If the existing windows do not have background ventilators and there is no mechanical ventilation with a heat recovery system, it is necessary to ensure that the ventilation provision in the dwelling is no worse than it was before the work was carried out.

This may be demonstrated in any of the following ways:

- i) Incorporating background ventilators in the replacement windows equivalent to column one in the above table 1.7.
- ii) If there is a continuous mechanical extract ventilation, replacement windows in habitable rooms which are not wet rooms must have a minimum background ventilation area of 4,000mm?.
- Other ventilation provisions, if it can be demonstrated to a building control body that they comply.

Note: If it is not technically feasible to adopt the minimum equivalent areas set out in the above table 1.7, the background ventilators should have equivalent areas as close to the minimum value as is feasible.

For full clarity and guidance on New Part L and Part F regulations, please visit www.gov.uk





#### **CASEMENT WINDOWS**

All REAL Aluminium profiles utilise innovative polyamide thermal break technology which creates a barrier between the cold air outside and the warm air inside. This technology significantly reduces thermal transmittance and enhances the overall U Value of a product, allowing REAL Aluminium casement windows to achieve a Window Energy 'A' Rating when used in conjunction with the correct double-glazed unit.

The REAL aluminium range of windows offers style and elegance to suit all tastes. Each window is manufactured using the very latest technologies and processes to create the finest finish to your windows. Options are available in both internally and externally glazed.



#### REAL SYSTEM 1 & 2

#### SQUARE - CONTEMPORARY

EXCLUSIVE TO REAL ALUMINIUM

The square-edged profile of the 'Contemporary' window provides clean, slim sightlines and a modern finish to any home

orovides clean, sinn signifines and a modern milism to any nome,		
System	Modified 70mm Alitherm 300	
Finish	Polyester powder coated	
WER	up to A-rating using suitable double-glazed unit	
U Value	up to 1.2 w/m²k using suitable triple-glazed unit	
Locking system	Espag locking	
Frame depth	70mm	
Typical sightline	67mm	
SH Max o/a width	600mm	
SH Max o/a height	1400mm	
TH Max o/a width	1400mm	
TH Max o/a height	1400mm	
Glazino	20 develo elected on 76 trials elected	





















#### DUMMY SASHES\*

System options

- 1 Contemporary frame flat sash, internally glazed, square bead with dummy sashes 2 Contemporary frame bevel sash, externally glazed, square bead

## **ALITHERM 400 RANGE**



The new Alitherm 400 offers outstanding quality, performance and value via a range of stylish casement windows and single and double doors. As the first thermally broken aluminum system to feature an extruded glazing gasket, it provides enhanced performance and reduced installation time.

Its innovative design incorporates polyamide thermal break technology that significantly reduces thermal transmittance, enhancing the systems overall "U" value, Available in neutral colours. All therm 400's new Quick-Glaze Bead is simply tapped in on site with the gasket already in place, eliminating the need for wedge gaskets on internally beaded windows. Making for a faster, simpler and more cost-effective glazing process.

#### Features and specifications:

- Fully compliant with changes to document L of the building regulations
- Improved thermal and weather performance
- Brand new quick glaze bead for a simpler, faster and cost-
- PAS 24: 2016 approved to added security
- Unlimited colour choice provided by any RAL colour on top of the stock colour solostions.

# Alitherm 400 Windows

Alitherm 400 windows are currently available in two options. The popular Alitherm 400 range is an internally beaded system with dummy sashes which can achieve PAS 24 security standards.

Alternatively, we have the externally glazed Alitherm 400x range, which can be upgraded to PAS 24 security standards with the introduction of glass security clips.

Quick-Glaze tap in bead standard on internally glazed windows with 28mm double glazing.









#### SPECIFICATION ALITHERM 400 WINDOW

System	Alitherm 400*
Finish	Polyester powder organic coating to BS6496
WER	down to A+ rating using suitable double glazed unit
U Value	down to 11 w/m²k with triple-glazing
Handles	Espag locking handles by ERA
Frame depth	70mm
Typical sight line	71,5mm
SH Max o/a width	864mm
SH Max o/a height	1400mm
TH Max o/a width	1400mm
TH Max o/a height	1500mm
Glazing	28mm double glazed or 40mm triple glazed

Externally glazed and triple glazed windows require wedge gasketing.



#### RESIDENTIAL OR FRENCH DOORS

Our elegant, yet strong and durable aluminium residential or French doors enhance the beauty of a home, keep in the warmth and let in more light due to their slim sightlines.



Open out or open in, the REAL Aluminium Residential or French Door is a high-performance product suitable for use in high traffic or exposed areas where a durable and reliable door is required. Available as single or double doors, both with internal beading. Adjustable hinges, colour-matched flat panels and a double seal make the REAL Aluminium Residential Doors a perfect option for any home.

# Alitherm 400 Doors

Suitable for both residential and commercial applications, Alitherm 400 doors perfectly complement the window range, offering the same stylish lines and same ease of fabrication and installation. With unrivalled thermal performance and security assurance, the system is available as open-in or open-out, single or double doors.

Quick-Glaze tap in bead standard on internally glazed doors with 28mm double glazing.









#### SPECIFICATION ALITHERM 400 DOOR

Peace of mind is ensured with the inclusion of an enhanced security multi-point locking system on double doors. Security can be further enhanced with additional shootbolts.

All main sections feature an extended Polyamide thermal break that allows the residential doors from the REAL range to achieve a U Value of 1.4 W/m2K when installed with a suitable double-glazed sealed unit.

System	Alitherm 400
U Value	up to 11 w/m²k using a suitable triple-glazed unit
Security	Multi-point locking & 3 star cylinder
Max height	2400mm
Max width	1100mm
Max weight	100kg
Glazing	28mm double-glazed or 40mm triple-glazed





Available colours:

Square Profile



Aluminium designer door panels are available.

Alitherm 400

Contemporary frame – flat sash, internally glazed, square bead

#### ALUMINIUM DESIGNER DOORS

Safety and security were central to each design decision in the development of the new Designer Door range, with each door meeting the requirements of PAS24, a British Standards test used to assess the security performance

Our extensive Designer Door collection features an impressive array of designs and styles the cutting edge of minimalist chic in our Modern range to the timeless elegance of our Traditional, Cottage and Vintage portfolios. We have also put together a wide range of colour, glazing and hardware options to provide those all-important finishing touches for your new door.

Select the perfect colour combination for the inside and Select, the perfect coolur combination for the inside and outside of your Designer Door, with options ranging from traditional white to pastel shades of blue and from greys and blacks through to vibrant reds and greens. With this huge selection, you can choose to match an existing colour, or to make a real design statement with a striking contrast.







#### RELIABLE SECURITY YOU CAN DEPEND ON

- 10-point locking for high security
- Hardened stainless steel and picking protection pins provide tamper-protection
- Upper and lower locking pins shaped conically for efficient closure
- Our laser-cut key profile system prevents the use of any unauthorized keys
- Horizontal key has a cross groove in the core which can only align with the 10-point spring-loaded pin pairs within the lock
- Hidden hinge protectors provide robust security against external impacts
- ISEO R7 cylinder, anti-bumping and placed 60mm away from the frame: high security and easy opening
- Adjustable hinges and lock
- Successfully tested to PAS 24:2016 Enhanced Security Performance

Door sashes sit flush internally and externally with the outer frame for an elegant finish.

A high security
10-point lock and
escutcheon plate
system, with drill
proof 'anti-bump'
cylinder, is fitted
as standard.

An integrated, enclosed glazing panel prevents the need for glazing beads - which provides maximum protection against ramming and forced entry. forced entry.

'Block door' construction incorporates a totally hidden sash and fixing system for added security.













#### **BI-FOLDING DOORS**



All profiles feature a polyamide thermal break which enhances the thermal performance of the profile and improves the overall U value. Profiles feature high-quality EPDM gaskets and weather brushes to aid weather resistance.

REAL Aluminium Bi-folds comply with the requirements of Building Regulations Document L 2022. Security is assured by multi-point lock mechanisms on main opening sashes, and shootbolt locking on floating mullions.

All bi-folding doors within the REAL Aluminium range have the option of either low thresholds for unimpeded, easy access, integrated cills on opening out doors or rebated thresholds that offer improved weather resistance.

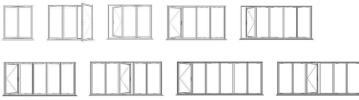


#### **SPECIFICATION** SLIM QUICK-GLAZE TAP IN BEAD

Bi-folding doors offer a choice of opening configurations to suit any application. Choose to fold the sashes internally or externally, place the opening at the side so the sashes all fold one way, at one end, to create a single entrance door for easy access, or in the middle to give the option of a double door.



#### Configuration examples:



System	Visofold 1000 Slim Quick-Glaze Tap In Bead
Finish	Polyester powder coated
U Value	up to 1.2 w/m²k using suitable triple-glazed unit
Security tested	PAS 24: 2016 enhanced security-rated doors on a three-pane open-out door
Weather tested	BS 6375 Part 1: 2009
Security	Multi-point locking with shootbolt
Frame depth	70mm
Typical sight line	122mm
Max sash weight	100kg
Max o/a height (per sash)	2500mm
Max o/a width (per sash)	1200mm*
Glazing	28mm double-glazed or 44mm triple-glazed

\*provided sash does not exceed recommended weight limits







System options

1 Contemporary frame - flat sash, internally glazed, square bead

#### **SLIDING DOORS**







Delivering optimum performance and tested to the highest standards REAL Aluminium Sliding Doors guarantee reliability. The strong and thermally broken aluminium sections make large sliding doors and large gless areas possible without compromising thermal performance or weather resistance.

Special sliding mechanisms enable even the largest sashes to slide effortlessly, whatever the size, Each sliding panel can be up to 2500mm high and when closed these large sliding doors form a thermally efficient glass facade, a wonderful way to flood a space with light and to enjoy beautiful views.

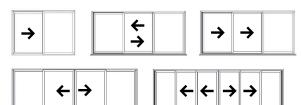
This adaptable system is ideal for use as residential sliding doors that maximise light and give stunning unimpeded views or as sliding commercial entrances where large opening apertures are required.

REAL Aluminium Silding Door profiles have been designed to improve both strength and weather resistance. All main sections feature an extended Polyamide thermal break that allows the sliding doors from the REAL range to achieve a U Value of 1.6 W/m2K when installed with a standard double-glazed sealed unit.

#### **SPECIFICATION**



#### Configuration examples:



System	Visoglide Plus
Finish	Polyester powder coated
U Value	up to 1.3 w/m²k using a suitable triple-glazed unit
Security	Multi-point locking plus individual keeps
Frame depth	99mm or 126mm double track
Frame depth	165.5mm or 182.5mm triple track
Max sash weight	200kg
Max sash height	2500mm
Max sash width	Within above limitations
Glazing	28mm double-glazed or 36mm triple-glazed
Track	Double or triple dependent on configuration











## HANDLES AND ACCESSORIES

	nce chart below to discover the and accessories for your home.						-
			White	Black	Grey	Graphite	Chrome
BI-FOLDING DOORS	Lever (straight) handle						<b>Ø</b>
	Locking pop up handle						
	D handle	0		<b>Ø</b>			
	Magnetic catch						
	Trickle vents			<b>Ø</b>			
SLIDING PATIO DOORS	Long lever handle						
	Sliding Door D handle	D		<b>Ø</b>	•		
CASEMENT	Offset handle	ď					
	Monkey tail handle	J					
	Lever (straight) handle						
ENTRANCE & FRENCH DOORS	Lever (swan) handle	-					
	Letterplate (black ABS surround)						
	Letterplate (matching surround)						
	Lever (Ergonomic) hand <b>i</b> e	•					
	Lever (Mitre) handle	•					
	Lever (T Bar) handle	-					
	Pull Knob	<b>a</b>					<b>Ø</b>
ALUMINIUM COMPOSITE DOORS	Inline Round Pull Bar						
	Flush Escutcheon	0					<b>Ø</b>
	Pull Escutcheon	9					
	Letterplate						<b>Ø</b>
	Knocker (Urn)						
	Knocker (Bullnose)	Ĝ				•	<b>Ø</b>
	Knocker (architectura <b>!</b> )	1				<b>Ø</b>	<b>Ø</b>
	Knocker (Horse Tail)	ţ					<b>Ø</b>
	Spyhole	1					<b>Ø</b>

Satin Silver	Polished Gold	Stainless Steel	Antique Black
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# LOCKS

REAL Aluminium doors that have more than one lock will only require one key to operate all of them (this is called 'keyed alike'). Separate doors will have unique keys unless specified. Alitherm 400 doors have a high-security key system (3 Star System) as standard. With our standard high-security key system (3 Star System), all keys will be unique. For further details, please speak to your REAL Retailer.



Antique b**l**ack range



Lever Straight Handle



Letterp**l**ate

range of locking cylinders are available to give enhanced security on bifold and sliding doors, Please speak to your REAL retailer for details,