



## We're not all the same

Every one of us is unique with our own personal blend of character and taste. We might follow fashion, or we might choose to break out of the mould, but often we compromise and settle for ordinary. That's why some homes can feel a little disappointing. We live with someone else's choice of door. We tolerate serviceable windows, accepting second best when what we really want is something as exceptional as we are.



And even though it's an outstanding system, Stellar doesn't steal the show. It has the slimmest sightlines on the market, allowing your view to take centre stage. The glass area in windows and doors is maximised and your home is filled with light. Stellar isn't demanding. Maintenance is simple, and it will last for years. Stellar insulates your home, protects it and enhances it.

Stellar is resilience without weight. It's elegance without effort. It's extraordinary, but then, so are you.

# Why Stellar?

Stellar is, simply, an outstanding system

Unlike many aluminium window and door systems, Stellar isn't a compromise. The brief given to its developers was to start from scratch, to accept no limitations and produce the best aluminium system for the UK's homeowners.

That's why Stellar is breaking new ground. It's the slimmest system, with some sections 30% narrower than the nearest alternative. The slim sections maximise the glass-to-frame ratio, improving views and letting more light into your home.

Stellar also includes a revolutionary, patent pending design feature, unique in aluminium systems. The reverse butt joint ensures Stellar can always be glazed from the inside without spoiling its amazing lines with dummy window sashes.

Stellar is the system with the light touch on the planet. It uses less material than other systems, saves energy in your home and is responsibly produced, with a Green Guide A rating. It can reach Band A+ thermal performance with triple glazing.

And Stellar, because its designers refused to compromise, has looks that work in all types of property, ultra-modern and traditional. There's even a true fully-flush version.



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## Why aluminium?

We've known for decades that aluminium is a remarkable material. It's plentiful, strong, corrosion resistant and 100 per cent recyclable. It's used for everything from soft drinks cans to aircraft manufacture and is now the material of choice for windows and doors.

In the 1970s and 1980s, early generations of aluminium glazing appeared on the market. Frankly, those windows and doors are best forgotten. The styling dated quickly, and insulation was poor. It's no wonder those who had rushed to replace their old timber frames went looking for an alternative and chose PVC-U.

But in the intervening years, aluminium systems for glazing improved beyond recognition. Now aluminium sections are purpose made. They incorporate the latest thermal break technology. They're enhanced with tough, lasting, powder-coated finishes. They're designed to keep the weather and intruders at bay, but perhaps the biggest advantage comes from their strength.

Aluminium's inherent strength allows windows and doors to be made with super-slim frames. And when there's less frame, there's more glass, more light and better views. Another benefit is that frames can be larger, without the need for expensive reinforcing. That's why aluminium is perfect for today's architecture and its wide expanses of glass. It's simply ideal when there's a large gap to span.

Aluminium frames are long-term performers. The material is resilient, durable and will last for decades without the fuss of constant maintenance. And if, eventually, the frames need to be replaced, the aluminium can be recycled.

All things considered there's nothing to beat aluminium for windows and doors.





## Part of the architecture

For too long, windows and doors have been a secondary consideration in homebuilding. It makes no sense when our living spaces and the way we use them are fundamentally altered by light. Now, though, with aluminium, the possibilities are, often quite literally, opening up.

Rooms don't have to be dark and gloomy to be warm and comfortable. With aluminium frames, stairwells can be flooded with natural daylight. Walls can be replaced with full expanses of insulated glass. This is the 21st century – if you want to entertain, slide back the glass and open up your home.

#### Perfect harmony

Installing Stellar windows or doors is where the real magic begins because Stellar is form and function in perfect harmony. Its aluminium profiles allow us to make slimmer frames. We can have clean crisp lines and simplified shapes. It allows us to have weather protection without the chunky overlap of most timber or PVC-U windows. Made to your specification, glazed with your choice of glass, fitted with hardware that complements the whole and finished with a tough, durable coat – every window or door is fully bespoke. Stellar is the system that can disappear into your architecture – it's slim enough to be unobtrusive – or bold enough to be a statement with a dramatic splash of colour or a transom line which draws the eye.

#### Enjoy

Every minute you waste wishing for something better could be one you spend enjoying something better.

Stellar gives you lots more opportunities to enjoy living, and because it's so simple to care for, you won't waste your precious time on maintenance chores.

#### Life's short. What are you waiting for?

### Stellar by name, stellar by nature

#### Less frame, more light

Stellar's frames are 30%\* slimmer than those of the closest competitor. That gives you more glass, less frame to interrupt the view, and more natural daylight in your home.

## Swift trouble-free installation

Stellar is easy to live with, but it's also easy to work with. Because we've paid attention to how it's glazed and installed, new windows and doors can be fitted with only minimal disruption.

## More affordable and more sustainable

Stellar uses approximately 30% less aluminium than comparable systems. It's therefore more affordable, more sustainable and less likely to generate waste.

#### Easy to care for

Stellar needs very little maintenance. Its shapes and lines are simple and easy to clean, and its tough coating stays looking great year after year.



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## Thermal performance

Strong aluminium sections allow large glazed areas, while advanced thermal break technology ensures no compromise on insulation. Stellar can be double or triple-glazed and can reach a Window Energy Rating of Band A+ and U-values of 1.1W/m<sup>2</sup>K.



## Robust protection

Stellar's internally glazed frames enhance security, backed by advanced hardware, locks and hinges. Even in exposed locations, it protects your home from the elements, and a range of door thresholds keep you weatherproof, allowing easy access for those with impaired mobility.

## Cleaner lines and adaptable style

Stellar has clean lines and the option of minimal flush styling both inside and outside. With a choice of Georgian bars and the generous proportions of a timber-style cill, Stellar can enhance almost any architecture. It's even suitable for conservation areas.







## Staying safe

Stellar is an advanced system designed to meet or exceed all the standards laid down in the Building Regulations. It's engineered for structural strength and to provide protection for your home from the weather. Heat, rain, wind and cold can do their worst, but you and your home will stay safe and warm.

We haven't simply thought about the fabric of your home, though. We've thought about those who live there. Stellar doors and windows can incorporate all the features you'd expect, including night ventilation, egress hinges in case there's a fire, or child safety restrictors to ensure little ones can't take a tumble through a wide-open window. Even our bifold doors have guards so that fingers don't get pinched.

## Staying secure

Sadly, break-ins happen, but that doesn't mean we can't be proactive about prevention. Burglars like an easy life and we won't give them one with Stellar.

Doors and windows are fitted with multipoint locking technology, which provides protection all around the frame. Hinges are concealed so they can't be targeted and Stellar accommodates the latest high-security locks from Yale, the trusted home security specialist. Kitemarked and approved, these locks can't be picked, drilled, pulled, snapped or bumped.

It's a comprehensive approach to security – folding doors incorporate shootbolts which secure each pane and sliding doors cannot be prised from their tracks. What's more, we've developed Stellar to meet the exacting standards of the Secured by Design scheme which aims to deter opportunistic thieves. It surpasses the requirements of PAS24 – the recognised standard for glazing security.





## The Stellar **performer**

Aluminium systems have come a long way since their earliest days. Now, Stellar is pushing standards even higher, with insulation and weather protection a fundamental part of the design, not an afterthought.

#### **Window Energy Ratings**

In windows, insulating performance is calculated using a mixture of air leakage, solar gain and thermal transmittance. Combining the three calculations can get complicated, but they've been simplified into a single measure known as a Window Energy Rating or WER.

The performance depends on several variables, including the layout and size of the window and the choice of glass. Stellar offers a choice of double or triple glazing, and with triple-glazing can reach an A+ rating for outstanding energy efficiency.



## Let's talk about the **reverse butt joint**

Forgive us for diving into window jargon, but the reverse butt joint is something unique to Stellar and is one of the features that makes it so special.

Glass in a window frame is held in place by a bead. For security, it's better that the bead is on the inside. When a fixed pane is situated next to a pane that opens, the ideal is to reverse the frame so that the opening pane fits snugly against it. This is straightforward with PVC-U which can be welded, and a skilled carpenter can craft a strong, neat joint in a timber frame, but aluminium frames are crimped, not welded.

The conventional way to manufacture an aluminium window is to include a dummy sash in the frame to avoid having a bead externally, but, frankly, it looks a little clumsy. There's no point choosing aluminium for its slim appearance and then adding the extra weight of a dummy opener.

And that's the problem that Stellar's design solves.

It allows internally glazed frames that are neat and uncluttered, and which let more light into your home. It also uses less material, so it's a more sustainable design.

"Reverse butt joint" might be jargon to some people, but to those who know windows, it's a quantum leap.





## Flush window range

When advanced design meets outstanding materials and a commitment to long-term performance, you know you're looking at a Stellar window. You're looking at a confident display of understated style that enhances your home and frames your view.





With Stellar there are two style options.

#### A classic flush casement

With flush lines to the exterior and a neat square shape indoors, our Stellar casement windows are simple, elegant and understated. The frames are slim, allowing more light into your home than comparable sized PVC-U or timber frames, but built from robust aluminium sections, they're strong enough to support large panes without the need for reinforcing. The result is pure class.

Opening panes can be top or side hung, and you can choose almost any configuration. If symmetry is important, dummy sashes allow us to create equal sightlines for opening and non-opening panes. These windows are designed to work perfectly with high-security hardware, lock systems and hinges for your complete peace of mind. Choose the colours that best suit your home, handles in contrasting or matching colours and every detail will be made to your exact specification.

#### A fully-flush casement

The sleek fully-flush casement window offers the most streamlined look on the market with flush styling for both the interior and exterior. No angles, no overlaps, just pure clean shapes and ultra-thin frames that set Stellar apart.

Hardware has been carefully selected. In addition to reliability and durability, every lock, stay, hinge and handle contributes to the high level of security. What's more, all these practical qualities are delivered without compromising Stellar's remarkable lines.

Again, the configuration is up to you. Replicate the pattern of opening and fixed panes in your existing frames and enjoy improved light levels, better insulation and easier maintenance or throw caution to the wind and choose a radical pared-back style. Stellar is adaptable and will cope beautifully whatever your design ambitions.

#### **Fixed frame windows**

Not every window needs to open, and there's something very special about a window with a purpose that's purely aesthetic. With Stellar's proportions, the frame doesn't dominate. There's more view, more light and more interest.



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#### Dimensions

- Side-hung sash max 700mm x 1300mm
- ☆ Top-hung sash max 1200mm x 1200mm.

#### Performance

- ☆ WER up to Band A+ with triple glazing
- $\bigstar$  U-values as low as 1.1W/m<sup>2</sup>K.

- ☆ Market-leading slim sightlines
- ☆ Astragal bars

**Aesthetics** 

- ☆ Thicker cill to replicate timber
- ightarrow Needs no dummy sashes
- ☆ Flush sash.

#### Guarantees

- ☆ 10-year mechanical performance guarantee
- ☆ 25-year surface paint finish guarantee
- Lifetime security guarantee on hardware.



## Flush door range

Doors need to be tough. Doors need to be secure. Doors need to be safe. But with Stellar, doors can be strong, resilient, safe and practical without being chunky, without compromising aesthetics and without restricting the daylight in your home.

#### **French doors**

The French door, with its symmetrical layout, has always been popular, but with the slimmest aluminium frames, it's better than ever. It's strong, of course, durable and resilient as high-quality French doors need to be, but the frame never dominates. It's the view you enjoy and the extra light that floods into your home.

Stellar French doors have clean lines and refined elegance, but they're high performers too, insulating your home from the cold outside and from external noise. They're built to be secure and reliable with advanced locking systems from leaders in home security and finishes that are tough enough to withstand years and years of daily traffic.

Configure the doors to suit your home. They can be designed to open inwards or outwards and can be coupled with fixed panes to create a full wall of glass.



#### **Residential doors**

Equally suitable for a front or rear entrance, Stellar's residential doors are a refreshing alternative to timber, PVC-U or composite door designs. They use our super strong aluminium frames, with the same simple lines as our flush windows. Beyond that, the choice is yours – a precision-built bespoke door that will enhance your home and protect it for years.

Stellar doors can be fully or partially glazed or incorporate a full height aluminium panel. There's even a purpose designed midrail which is just right if you want to include a letterbox.

These are doors engineered for strength and security. They're fitted with multipoint locking systems and can accommodate the most advanced lock cylinders. Every hardware component has been tested through cycle after cycle and every single element contributes to a secure, robust and very stylish whole. Fully compliant with PAS24, they'll also make sure your home is protected from the elements. Effective seals keep the wind and rain outside. Our advanced thermal break technology and high specification sealed units keep the warmth indoors, and of course, if you're choosing a glazed door, we'll ensure safety glass is part of the package.

#### Side panels and fanlights

Stellar is an integrated system, and side panels and fanlights – either glazed or with matching infill panels – will blend in perfectly. Every proportion is just right. The same shapes, colours, and details ensure an entrance that's strong, secure, insulating, durable, easy to care for and very smart.

#### **Internal doors**

If you need an internal door Stellar is a fantastic choice. Unlike some systems, the flush styling works with very low thresholds, making Stellar a great choice for connecting rooms, with the added benefit of styling that matches other windows and doors. A beautifully coordinated home is easier with Stellar.





#### Lift and slide doors

A well-designed sliding patio door can be a thing of beauty. The proportions are just right, and the frame doesn't dominate. The panes glide smoothly along their tracks, but when closed, the doors are reassuringly secure. The wind can howl but there's no trace of a draught and you can stand indoors on a frosty morning without feeling the chill.

That's what happens with Stellar. The streamlined style hides engineering that makes these sliding doors safe, easy to open and easy to secure. It's packed with technology that insulates your home. Its weatherseals are effective and long-lasting.

#### Why lift and slide?

When you're choosing to have feature glazing – that gorgeous wall of glass – your view will be interrupted by the vertical frame that marks the edge of each pane. If you reduce the number of panes, your view is better. One of the benefits of a sliding door is that each pane can be larger than on a bifolding door. It's simply a matter of weight and glass can be surprisingly heavy. Hardware is a crucial part of any sliding door, and Stellar's lift and slide doors boast some of the very best with four locking points on the gearing. 'Lift' simply means that there's a built-in system designed to take some of the weight when you're opening the panes. It makes them glide more freely along their tracks. Stellar has very slim frames anyway but they excel in a lift and slide design. With its incredibly slim profiles and interlock options as low as 50mm, it makes the most of the glass area, delivering the coveted light and airy feel and clean aesthetics.



#### Guarantees

- ☆ 10-year mechanical performance guarantee
- ☆ 25-year surface paint finish guarantee
- ☆ 10-year mechanical guarantee on hardware.

#### Thresholds

When you're choosing a door designed to make getting outside as easy as possible, you don't want to be stepping over a huge frame. Equally you need to be sure your home is protected from the weather. Stellar has various options for thresholds, which balance easy access with features designed to prevent leaks and draughts. Some threshold systems are set into the floor, providing an almost seamless transition. Others are designed to offer easy access for wheelchairs, and for very exposed locations there are deeper threshold options developed to channel water away from your home.

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# <u>.</u> 11 Dimensions ☆ Up to seven sashes ☆ Sashes – min 750mm, max 1000mm (W). Max height 2400mm ☆ Maximum weight of 120kg.

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#### **Bifold doors**

The attraction of a door that simply folds out of the way is undeniable. It's extra freedom in the way you use your home. It's a boon when you're entertaining, and it's wonderful on a balmy summer evening. But a bifold that isn't well built can spell trouble. The forces and the weight are considerable which is why Stellar is ideal.

Stellar has all the strength a bifold needs and packs a real punch with its ultra-slim sashes. Because it includes full-length thermal break technology in its sections, Stellar is also highly insulating. The tough polyester powder coating resists damage from scuffs and day-to-day knocks.

Stellar can be configured to your exact needs and is a fabulous example of great engineering. Its components include double hinge fixings for reliable long-term performance, multipoint locking to the main door and shootbolts for high security. There's also an outstanding track and roller system that's easy to operate and maintain, ensuring Stellar is always reliable and always ready to impress.



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#### Configuration

- Multiple options including left, right and both sides stacking
- ☆ Choice of access door position
- ☆ Wide choice of handle colours.

#### Performance

security

- ☆ Up to Door Set Energy
- Rating C
- ☆ U-values as low as 1.1W/m²K
  ☆ 28mm double glazing as
- standard

  Double hinge fixing for reliable
- long-term performance
   Multipoint locking for the main door and shootbolts for high

- ☆ Parallel stainless-steel tracks for ease of operation and stability
- ☆ Quad stainless-steel rollers with wiper brushes to spread the load and resist debris build-up
- Robust corner cleat system for strong precise corners
- Weather performance to BS6375-1
- ☆ Meets Building Regs without foams or special polyamides.

#### **Aesthetics**

- ☆ Slim sightlines
- Suites with other window & door systems.

#### Guarantees

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- ☆ 10-year mechanical performance guarantee
- ☆ 25-year surface paint finish guarantee
- ☆ Lifetime security guarantee on hardware.



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## **Colours** and **finishes**

All Stellar's aluminium sections are finished with a tough, durable polyester powder coat, certified to the Qualicoat standard, which surpasses European requirements.

The finishes need next to no maintenance – just a quick wipe down to remove surface dirt. For more challenging environments, we can also supply special marine-grade finishes.

There's a wide choice of stocked colours chosen to enhance all types of building materials and if you want to choose something different, it's possible to have your windows or doors finished in any RAL colour.



## Hardware and handles

Stellar's quality demands an equally high-quality range of hardware.

That's why in addition to choosing hardware that looks fantastic, we have selected products known for their reliability, ease of use and durability. Every item in the range has undergone rigorous testing and should give years of trouble-free operation.







#### **Casement windows**

Stellar's flush and fully flush windows have high-quality hardware throughout. Stays and hinges are robust and reliable. Locking systems have been chosen for long-term performance with stainless steel plates that resist corrosion. Handles are proven, stylish and benefit from key locking and easy operation. For extra peace of mind, all Yale components within the window hardware range come with Yale's Lifetime Security Guarantee.



#### Flush doors

Security, weather protection and ease of use were essentials in the selection of hardware for Stellar doors, but style hasn't been forgotten – handles match Stellar window handles for design consistency and letterplates have clean modern looks and an immaculate finish. For security, there's a 3-star cylinder option from Yale and the reassurance of their Lifetime Security Guarantee. All door hardware is proven for long-term performance.



#### Lift and slide doors

The handle and gearing for Stellar lift and slide doors carefully balance the needs of safety and security with ease of operation. The system benefits from proven engineering which ensures a smooth gliding action even with substantial sash weights. The most advanced lock cylinders can be accommodated, and four locking points add extra reassurance. There's also a soft-close and handle damping option for safety in use.



#### **Bifold doors**

Hardware has been chosen for consistent styling across the Stellar range, but every element is also robust and reliable. Double hinge fixings combine with multipoint locking for the main door. There are shootbolts for security on each folding leaf. The track system is stainless steel with four steel rollers for stability and wiper brushes to prevent debris build-up. The result is a bifolding door that opens easily and is highly secure when it's closed.

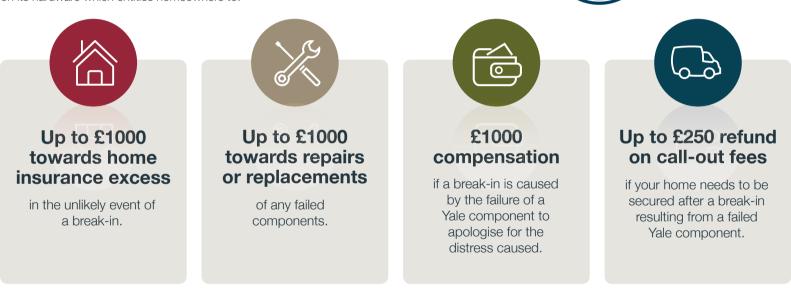




## The Yale Lifetime Security Guarantee

Yale is acknowledged as the leading home security brand.

Yale not only has a reputation for excellence but also offers a fantastic Lifetime Security Guarantee on its hardware which entitles homeowners to:



#### Stellar and Yale – the secure partnership

Together, Stellar and Yale offer the ultimate – maximum performance and peace of mind. Combining Stellar's gorgeous styling, its thermal insulation, its resilience, weather protection and easy maintenance with Yale's Lifetime Security Guarantee provides all the reassurance you need.







## Glass

Advanced production methods and smart technologies have resulted in glass that has insulating, solar control or even selfcleaning qualities. Combined with energy-efficient sealed units, your home can be more comfortable all year round.



#### Solar-control glass

Ideal for south facing rooms with large expanses of glass, solar control coatings reflect the sun's heat rather than letting it build up indoors.



#### Low-emissivity glass

The near-invisible coating on this glass helps to keep the sun's warmth in your home cutting your reliance on your heating system.



#### Self-cleaning glass

A microscopic coating helps to deter the adhesion of dirt and particulates with normal rainfall keeping the glass surface clean.



## Tested and Proven

Our product development, manufacturing and fabrication are designed to ensure you get windows and doors of the very highest quality. We design, model, prototype, test and refine constantly until we're completely satisfied.

Every component is subjected to rigorous testing. Moving parts are operated through tens of thousands of cycles, windows and doors are put into test rigs and battered by 'wind' and water to ensure they can withstand nature's forces. In-house laboratories control and monitor our production. Independent agencies have verified our results.

## **Guarantees**

When you're choosing windows and doors, you need to feel sure you're making a sound investment in your home. That's why we've engineered an outstanding system, and in turn, that's why we have no hesitation in backing our products with comprehensive guarantees.



#### Profile guarantee

All Stellar's aluminium profiles have an optical and mechanical performance guarantee for a period of 10 years. This guarantee does not cover window fittings, glass or components not manufactured by Epwin Window Systems and does not affect the statutory rights of the consumer.



#### **Paint Finish guarantee**

A 25-year guarantee covers the coated aluminium against the following:

- ☆ Peeling, powdering and blistering
- ☆ Corrosion except due to bending or folding after the application of the paint
- ☆ Chalking, fading and loss of sheen out of the Qualicoat\* regulation
- ☆ Filiform corrosion.



#### **Lifetime Security Guarantee**

Yale is one of the most trusted names in security. Their hardware is a perfect fit with the Stellar system and comes complete with Yale's very reassuring Lifetime Security Guarantee.

Although Stellar is a low-maintenance product, appropriate aftercare is necessary. Failure to follow cleaning and maintenance guidelines may invalidate the guarantee.

\* Qualicoat is an organisation committed to maintaining and promoting the quality of coating on aluminium and its alloys used in architectural applications. It gives purchasers the assurance of a premium grade product.

## **Planning** Permission

In most cases planning permission won't be required when you decide to replace windows or doors, but if your home is in a conservation area, you may have certain restrictions placed on the size, style, materials and colour of the new glazing. If your home is listed, you may not be able to make changes even to the interior of your property without listed building consent. Your local authority will be happy to help.



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## A note about **Building Regulations**

These are standards for the construction of buildings laid down by the Government. Building Regulations are divided into various Parts, some of which apply to windows and doors, covering things like safety, security, ventilation, access and thermal performance. Registered installers will ensure your windows and doors are fully compliant. If you adopt a DIY approach to installation, you will need to get the work certified by your Local Authority Building Control or by an Approved Inspector.





Stellar Aluminium Systems is an aluminium profile system supplied to local independent manufacturers and installers who contract to install windows and doors. Stellar Aluminium cannot be held accountable for manufacture or installation by independent companies. All information in this publication is provided for guidance only and is given in good faith. As it is company policy to continually improve products, methods and materials, changes of specification may be made from time to time without prior notice. This statement does not affect your statutory rights. © Stellar Aluminium Systems. Part of the Epwin Group PIc. STE16449