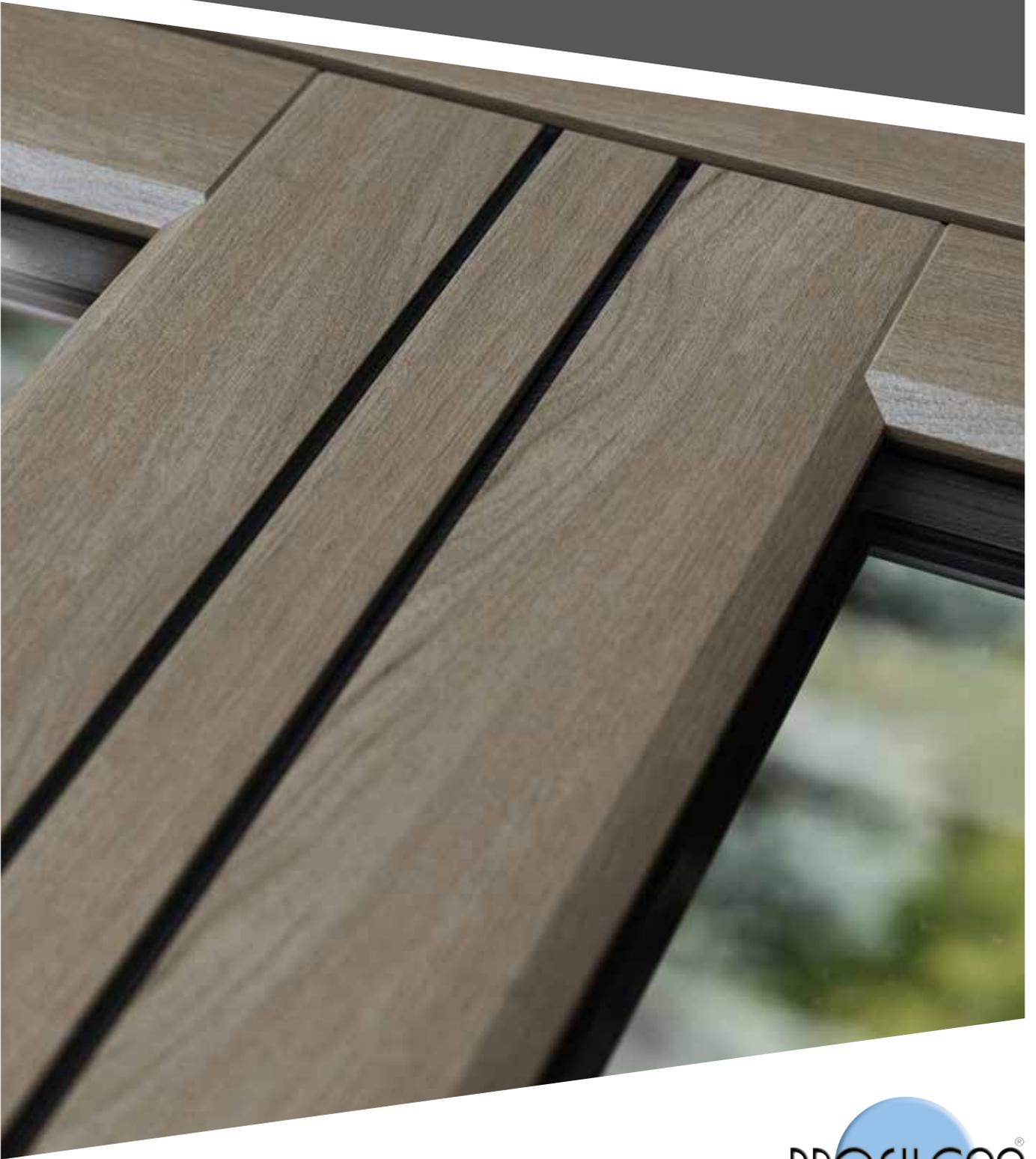


# Optima<sup>TM</sup>

FLUSH CASEMENT SYSTEM



THE BEST WINDOWS ARE MADE FROM



# Optima™

FLUSH CASEMENT SYSTEM





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## Welcome to a new tradition

Finding the right PVC-U system for more traditional, heritage or unusual contemporary projects isn't easy. Some suppliers offer a couple of trims. Others offer a system that looks the part, but which forgets the essential benefits of PVC-U and simply replicates a draughty or poorly insulated frame. What you need is a system that strikes the right balance: complete, purpose-made and offering the authentic appearance of a historical design alongside the weatherproofing, easy care and insulating qualities of a 21st-century window. Welcome to a new tradition.

The Optima Flush Casement has been developed by the trusted expert in window systems, Profile 22. Over the decades, Profile 22 has earned a fantastic reputation for the quality of its production and its designs. It's a British business and part of the highly respected Epwin Group of companies. Epwin believes in bringing only those products to market which will enhance the lifestyle of homeowners and the businesses of its fabricators and installers.

The Optima Flush Casement system represents the best of British manufacturing tradition. In the standards of craftsmanship and design, it is world class. Its windows are charming, elegant, energy-efficient and secure. In appearance, they are virtually indistinguishable from the real thing. Let's rephrase that – they are the real thing.





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## A world brimming with opportunity

### Special solutions for heritage properties

Regular casement windows don't suit some properties. A beautiful home, school or municipal building can be ruined with an unsympathetic installation of the wrong frame type. If there are planning restrictions to take into account, and if you want to open up more markets, you need windows that suit these special buildings.

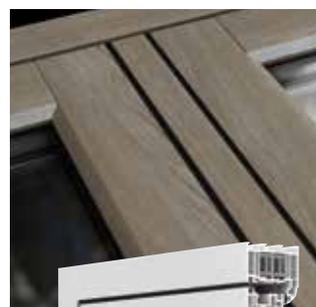
### Preserving character

All over the country, in villages, towns and cities there are properties that need replacement windows. It could be an old traditional inn, a remote farm cottage or a converted church that's providing office accommodation for today's professionals. Many people believe that these buildings can only have timber windows fitted as replacements. Occupiers struggle with draughts and constant maintenance. They suffer for years with windows sealed shut with layers of paint or unattractive and inefficient secondary glazing. That's no way to carry on when PVC-U windows can solve the problems and do it without compromising the special character of the property.

### The new planning landscape

Planning departments are catching up with the benefits of PVC-U. Systems like the Optima Flush Casement have addressed their fears about inappropriate design. Planet-friendly credentials and energy-efficient features are turning the tide in favour of materials that cope with the British weather and which make buildings into practical homes, social facilities, commercial premises and places of work.

If you've turned down the chance to supply windows to heritage properties in the past, we suggest you take a closer look at Optima.



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# The Optima Flush Casement

The principle is very simple. We take the appearance of a traditional window frame, its proportions and its sightlines and we replicate it. We add all the extra features: period hardware, ancillaries, cills and glazing bars. We select period colours and finishes. To that we add the benefits of 21st-century, easily maintained materials, weatherproofing, thermal and acoustic insulation, and security.

## **It makes a winning combination.**

We've studied all the finer details of historical window design, but we haven't forgotten that someone has to fabricate and install these windows. We made it part of the design brief that these windows should be easy to live with and to work with. Our Flush Casement suite is compatible with other components from our Optima range so that your stockholding is easier to manage.

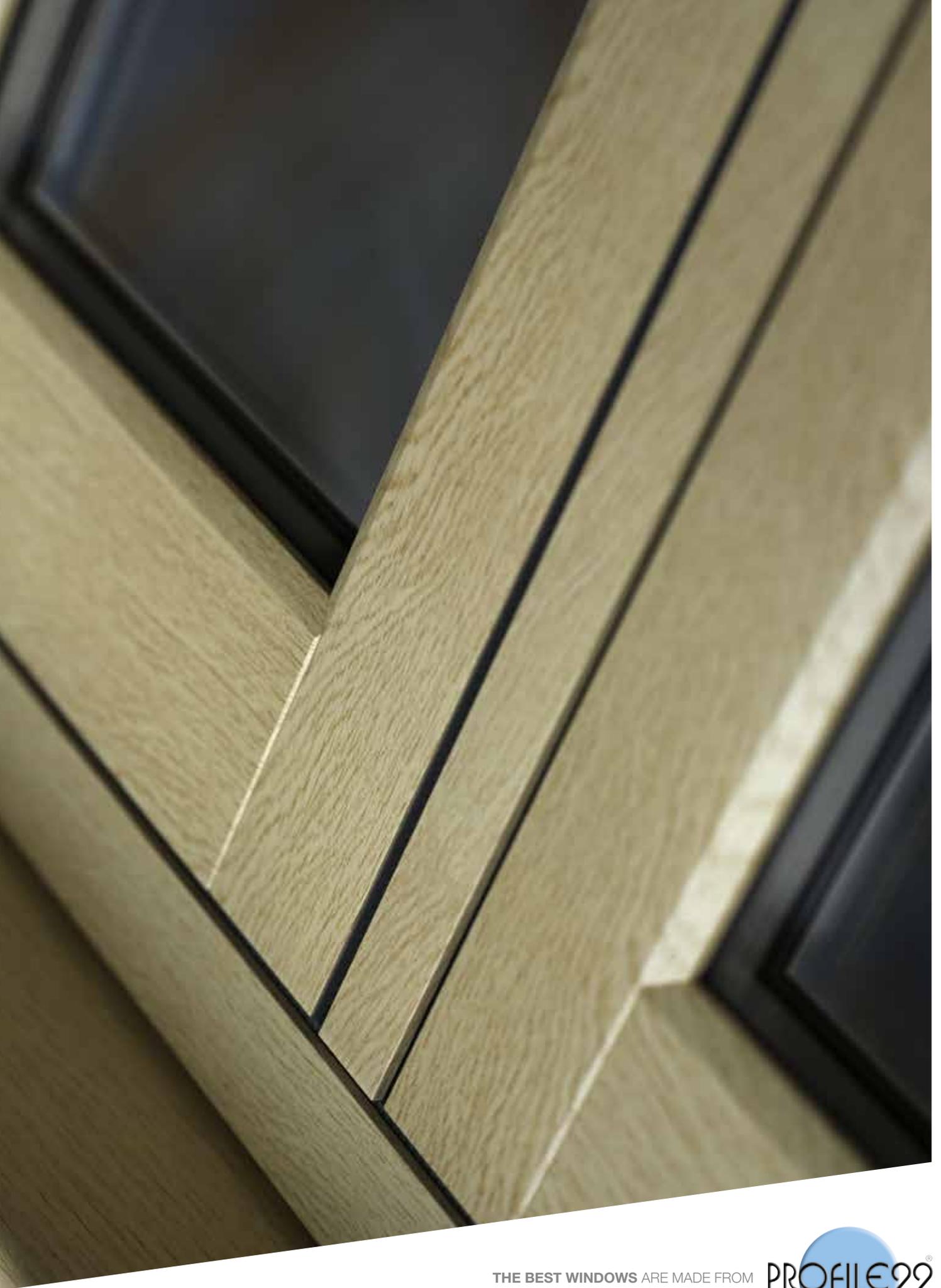
The whole of the Optima range is made to the highest possible standards using advanced technology and tooling. Not only does this ensure superb surface finish, but also precise dimensions, wall thickness and internal webs. Hardware is easy to locate, drainage is optimised and seals perfectly placed for long-lasting performance. The system surpasses the requirements of UK and EU Building Regulations and PAS24 and is accredited by the British Standards Institute.

## **The Optima difference**

There are other flush casements on the market, but in developing Optima, we've refused to compromise. Optima Flush Casements replicate more accurately the original features of timber casements and at the same time, give superior thermal performance over rival products.

They look better and insulate better, and that's the Optima difference.





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## The Optima French Flush Casement windows

Blend traditional style with high performance and add another opportunity to your product portfolio. Our Flush Casement system can be used to make superb French Casement windows. The double-opening style looks fantastic with the simple lines and proportions of the flush design, and the modern materials and methods ensure excellent weather protection. Even better, these windows have no central mullion to interfere with a view, and the full-width opening can be handy for both extra ventilation and as an emergency escape route.





## Respecting our heritage and moving with the times

The market is opening up for flush casements. Suddenly homeowners have realised that there is an alternative to timber frames. And it's not only the ease of maintenance with PVC-U frames that is making the difference. Some older properties, however charming or attractive they may be, can really use the benefit of the extra insulation provided by an energy-efficient window. Consumers genuinely want to do what they can to make their homes more secure, warmer and weatherproof.

Start looking around, you'll soon see the properties with the wrong frames ... rotten old timber ones or shoehorned-in, lipped casements that just don't look the part. There is an alternative. A flush casement system that looks absolutely like its traditional predecessors, but which performs the way a 21st-century window should.





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## Traditional style

We're not interested in getting rid of traditional style. We're only interested in improving what's already there. Optima Flush Casements match the proportions of the originals. We have all the trims and traditional-styled hardware you need. A dummy sash provides a balanced look for frames with fixed lights and our foiled options include period colours.

### Mechanically jointed sashes and outerframes

Every detail matters. Our sashes, deep bottom rails and outer frames have been designed so that you can offer a mechanically-jointed version that accurately recreates the carpenter's finish. No mitred welds, just a neat, tidy appearance that looks just like a timber frame.

### Deep bottom rails

If the original timber frames had a deep bottom rail, we believe our version should look just the same. That's why the Optima Flush Casement system includes a deep sash profile specially designed for the job.

### The blacksmith's art

Our tribute to the hand-forged hardware of a bygone era is seen in our choice of monkey-tail handles and dummy peg stays. Nothing else would look the part.

### Flexibility and practicality

We don't expect you to hold masses of stock to offer our flush casements. This system fits a Profile 22 standard Optima frame and transom and works with Optima ancillaries. The frames are designed for a simple, chamfered finish outside but, with a choice of Chamfered and Sculptured frame styles and astragal bars, you can have the interior look that best suits your customer's home.

## Updated performance

In all this talk about appearance, we've not forgotten the other things that matter – things like security and energy efficiency. With 24mm double glazing, an A-rated window and an impressive U-value of 1.2W/m<sup>2</sup>K are easily achievable. We've made sure that Optima Flush Casements are easy to fabricate too, taking care of design details like adding support webs to counter weld sink. And with standard Optima outerframes and packers, these flush casements are simple to install – an important consideration when dealing with the variations in older properties.



## Optima ancillaries

Finishing any installation properly can make the difference between something that doesn't quite work and a fabulous result. We've made sure that all of our ancillary products fit perfectly and match the main systems with the right proportions, shapes and detail. All of our ancillaries are manufactured to the same high standards and have the same long lifespan.

### Cills

There is a range of cill sizes from 85mm up to 225mm for our Optima Flush Casements. There's a single reinforcing size to help keep your stockholding under control and steel and recycled composite options.

### Thermal Inserts

Thermal inserts are an effective way to achieve better U-values and WERs without the cost of the most highly insulating sealed units. Simply add them to our outerframes during fabrication. They're easy to use and effectively increase the number of insulating chambers in the profiles. What's more, they're made from recycled materials – a small, but important, detail that your customers will love.

### Baypoles

A range of baypoles enables the installation of strong and robust bay and bow windows. With variable, square and 135° variants, all shapes and sizes of immaculately-finished installation are possible.

### Couplers

Couplers are available in a range of sizes from 3mm to 29mm

### Packers

Packers are available in four sizes ranging from 15mm to 50mm.

### Astragal Bars

The Optima Flush Casement system has a choice of a chamfered or a sculptured section. Both styles of glazing bar are available in the full range of colours and finishes.



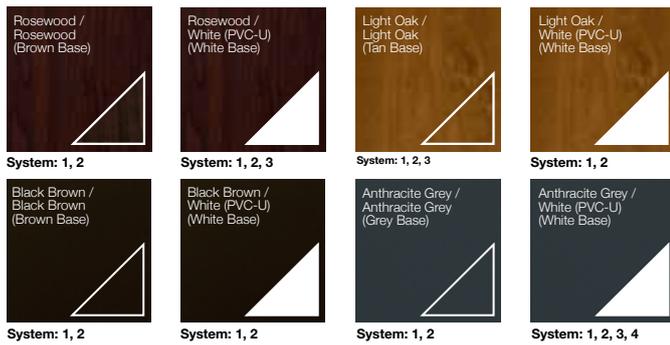
# Optima colours

Throughout the years, the colours of windows have changed with the fashions. Casement windows have varied from black to white and every colour in between. We're pleased to offer one of the best selections of coloured and woodgrained finishes available directly from stock – including dual-colour options. If we don't stock it, we'll make it. Using our FoilExpress service, you won't have to place a huge order or wait weeks and weeks.

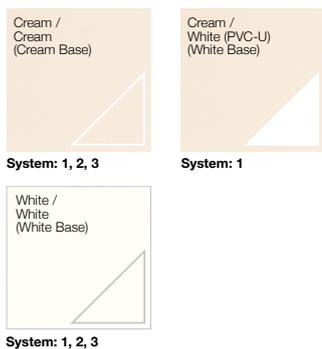
Now, offering the colours your customer wants is easy. And the more colours you have to offer, the more possibilities there are to make a sale.

## Stock Colours

### Premium



### Premium Plus



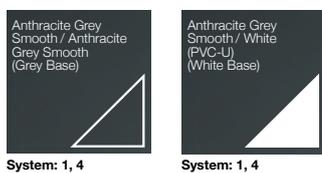
**The colour options available on profiles offered within each system, as indicated by the Systems Key, may be restricted to selected popular sections.**

Please refer to the Product Guide for availability. If in any doubt, please speak to your Customer Service Advisor

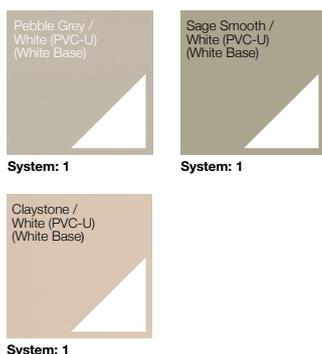
Rosewood = Black Cherry,  
Light Oak = Golden Oak

## Fast Track Colours

### Premium



### Premium Plus



### Systems Key

- 1**
  - Optima-C
  - Optima-S
  - Flush Casement
  - CD70
  - PD86
- 2**
  - Optima-C Composite Door
  - Optima-S Composite Door
- 3**
  - Vertical Slider
- 4**
  - Flush Tilt & Turn
  - Fully Reversible

## Foilexpress Colours



Available on a white base. For non-white base please check for availability.

**\*Premium Plus**



## Thermal performance

Naturally, you'll expect high standards of thermal performance from the Optima Flush Casement and we're happy to say that we can deliver that. Typically, it's not easy to achieve a high performing window with a flush casement simply because of the frame to glass ratio being higher on these traditional-styled windows. Adding dummy sashes for a real authentic appearance also cuts the possible solar gain, but don't worry, it's perfectly easy to have an A-rated window with this system. You can offer your customers the period look they want and great insulation.

### Glazing options

Optima is available in 24, 28\* and 32\*mm glazed options. Not only does that give you more opportunities, it also means outstanding thermal performance in a traditionally styled window.

\* Certain styles only.

### U-values and WERs

#### Typical U-values

Achieves 1.2 W/m<sup>2</sup>K with double glazing

#### Typical WERs

Achieves A+ with double glazing

## Keeping an eye on the future

It's not just the past you need to think about when you're looking for heritage type windows. The future can't be ignored. That's why we're doing all we can to make our operations and our products as planet friendly as possible. It's important to consumers too – every change we can make is appreciated, be it using recycled materials or investing in technology to reduce our carbon footprint.

We're British based and proud of that. We avoid shipping from overseas, support our manufacturing industry and jobs and have complete control over our production, emissions and environmental impact. Investment in advanced extrusion technology is helping to cut our water and energy usage. We were one of the first in the industry to be awarded the Building Research Establishment's BES 6001 standard for responsible sourcing and we work to the internationally recognised environmental policy standard ISO 14001.

Some people with a 'green' agenda have chosen to ignore PVC-U as a building material. We think this is misguided. PVC-U can be made entirely from sustainable sources. Its lifespan in a window is estimated to be in excess of 40 years – that's 40 years without painting, wood preservatives or other noxious chemicals. At the end of a frame's life, it can be recycled, and that process can happen time and time again. PVC-U is also a poor conductor which makes it an effective insulator, allowing homes to be warmer with less heating. PVC-U is not the environmental 'bad guy' that its detractors would have you believe.



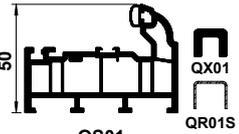
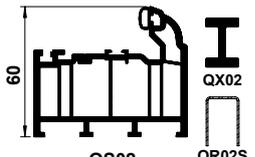
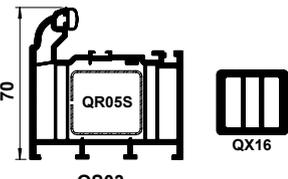
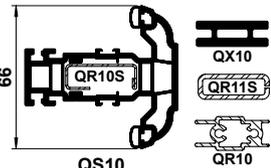
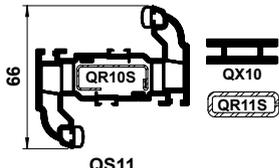
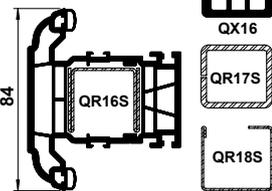
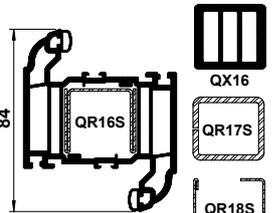
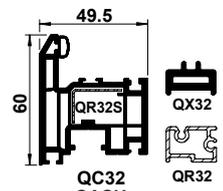
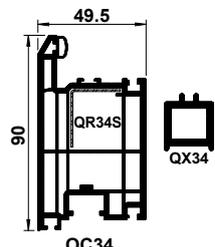
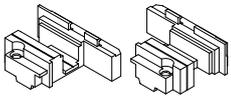
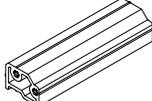
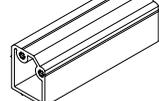
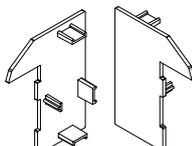
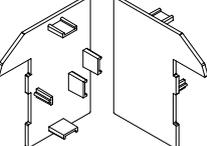
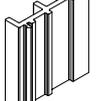
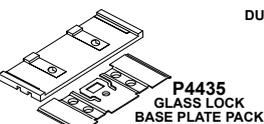
# Main Profiles - Sculptured



**Optima**  
BY PROFILE 22 SYSTEMS

SCULPTURED FLUSH  
CASEMENT



OUTER FRAMES	 <b>QS01</b> OUTER FRAME <small>QX01 QR01S</small>	 <b>QS02</b> OUTER FRAME <small>QX02 QR02S</small>	 <b>QS03</b> OUTER FRAME <small>QR05S QX16</small>					
TRANSOMS/MULLIONS	 <b>QS10</b> 'T' TRANSOM/ MULLION <small>QR10S QX10 QR11S QR10</small>	 <b>QS11</b> 'Z' TRANSOM/ MULLION <small>QR10S QX10 QR11S</small>	 <b>QS16</b> 'T' TRANSOM/ MULLION <small>QR16S QX16 QR17S QR18S QR16</small>	 <b>QS17</b> 'Z' TRANSOM/ MULLION <small>QR16S QX16 QR17S QR18S</small>				
WINDOW SASHES	 <b>QC32</b> SASH <small>QR32S QX32 QR32</small>	 <b>QC34</b> DEEP BOTTOM RAIL <small>QR34S QX34</small>	GLAZING BEADS	 <b>QS65</b> 24mm BEAD (SASHES)	GEORGIAN BARS	 <b>VS11</b> 22mm OVULO GEORGIAN BAR (INTERNAL)		
MECHANICAL JOINT	 <b>QM32</b> MECHANICAL JOINT EUROGROOVE END CAP	 <b>QM132</b> MECHANICAL JOINT BLOCK (SASH)	 <b>QM134</b> MECHANICAL JOINT BLOCK (DEEP BOTTOM RAIL)	 <b>QM42</b> OUTER FRAME END CAP (FOR QS02)	 <b>QM43</b> OUTER FRAME END CAP (FOR QS03)			
GASKETS & WEATHERSEALS	 <b>1838</b> WEATHER SEAL (Q-LON)	 <b>700610</b> FRAME SEAL (WOOLPILE)	 <b>QG34</b> SASH INFILL (TPE)	ACCESSORIES	 <b>QM02</b> CAVITY LOCKING BLOCK SASH	 <b>QM05</b> GLAZING BRIDGE	 <b>P4437</b> DUMMY SASH CLIP	 <b>QM11</b> MEETING RAIL PACKER
GASKETS & WEATHERSEALS	 <b>QG20</b> GLAZING CENTRE SEAL (Q-LON)	 <b>QG02</b> FRAME INFILL (TPE)	 <b>QG32</b> SASH SEAL (TPE)	 <b>QM03</b> CAVITY LOCKING BLOCK FRAME	 <b>P4435</b> GLASS LOCK BASE PLATE PACK	 <b>P4436</b> GLASS LOCK 24mm CLIP PACK	 <b>QM12</b> RISER BLOCK	 <b>QSM10</b> MEETING RAIL END CAP

August 2017 22.08.17

EXTRUSIONS FULL SIZE AT A1

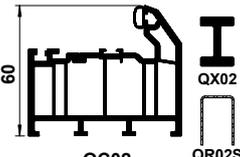
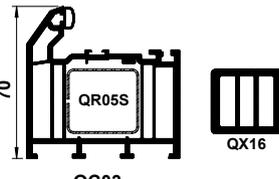
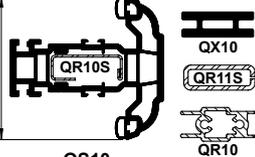
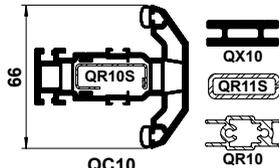
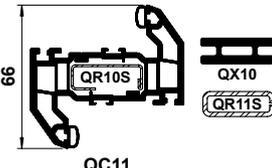
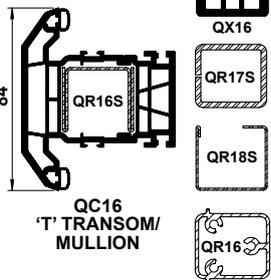
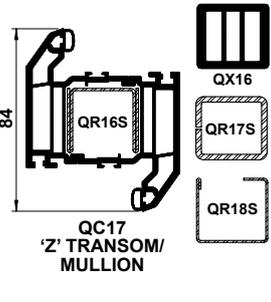
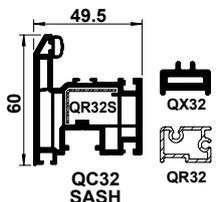
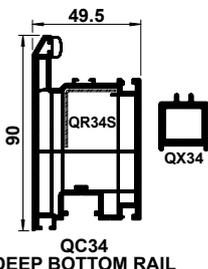
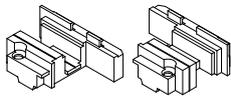
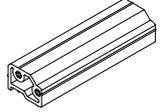
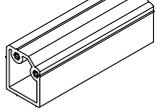
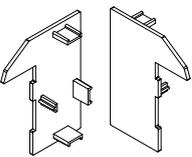
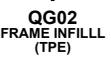
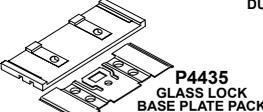
# Main Profiles - Chamfered



BY PROFILE 22 SYSTEMS

## CHAMFERED FLUSH CASEMENT



OUTER FRAMES	 <p><b>QC01</b> OUTER FRAME</p>	 <p><b>QC02</b> OUTER FRAME</p>	 <p><b>QC03</b> OUTER FRAME</p>	 <p><b>QS10</b> MEETING RAIL</p>
TRANSOMS/MULLIONS	 <p><b>QC10</b> 'T' TRANSOM/ MULLION</p>	 <p><b>QC11</b> 'Z' TRANSOM/ MULLION</p>	 <p><b>QC16</b> 'T' TRANSOM/ MULLION</p>	 <p><b>QC17</b> 'Z' TRANSOM/ MULLION</p>
WINDOW SASHES	 <p><b>QC32</b> SASH</p>	 <p><b>QC34</b> DEEP BOTTOM RAIL</p>	 <p><b>QS65</b> 24mm BEAD (SASHES)</p>	 <p><b>VS11</b> 22mm OVOLO GEORGIAN BAR (INTERNAL)</p>
MECHANICAL JOINT	 <p><b>QM32</b> MECHANICAL JOINT EUROGROOVE END CAP</p>	 <p><b>QM132</b> MECHANICAL JOINT BLOCK (SASH)</p>	 <p><b>QM134</b> MECHANICAL JOINT BLOCK (DEEP BOTTOM RAIL)</p>	 <p><b>QM42</b> OUTER FRAME END CAP (FOR QC02)</p>
GASKETS & WEATHERSEALS	 <p><b>1838</b> WEATHER SEAL (Q-LON)</p>	 <p><b>700610</b> FRAME SEAL (WOOLPILE)</p>	 <p><b>QG34</b> SASH INFILL (TPE)</p>	 <p><b>VS11</b> 22mm OVOLO GEORGIAN BAR (INTERNAL)</p>
ACCESSORIES	 <p><b>QG20</b> GLAZING CENTRE SEAL (Q-LON)</p>	 <p><b>QG02</b> FRAME INFILL (TPE)</p>	 <p><b>QG32</b> SASH SEAL (TPE)</p>	 <p><b>VS61</b> 22mm BEVELLED GEORGIAN BAR (EXTERNAL)</p>
	 <p><b>1814</b> CENTRE SEAL (WOOLPILE)</p>	 <p><b>QGM32</b> SASH SEAL CORNER (TPE)</p>	 <p><b>QM02</b> CAVITY LOCKING BLOCK SASH</p>	 <p><b>QM05</b> GLAZING BRIDGE</p>
	 <p><b>QM12</b> RISER BLOCK</p>		 <p><b>QM03</b> CAVITY LOCKING BLOCK FRAME</p>	 <p><b>P4437</b> DUMMY SASH CLIP</p>
			 <p><b>P4435</b> GLASS LOCK BASE PLATE PACK</p>	 <p><b>QM11</b> MEETING RAIL PACKER</p>
			 <p><b>P4436</b> GLASS LOCK 24mm CLIP PACK</p>	 <p><b>QSM10</b> MEETING RAIL END CAP</p>

## The best of the old, the best of the new

We know that it's possible to have the best of both worlds. We can have windows that respect our nation's architecture and heritage. We can have windows that look exactly like original features and which have the right lines, proportions, ancillaries and hardware. We can have all this and high standards of insulation and energy efficiency. We can have windows that keep out the wind and the rain, even windows designed to prevent excess heat build-up in the summer. We can have windows with secure locks and reliable hardware. We can have windows in period colours or beautiful wood-effect finishes that never need painting. We can keep the planners happy and have windows that are a doddle to maintain.

The Optima Flush Casement allows you to offer the best of both worlds to your customers and because it's from the Profile 22 stable, you know it will be reliable, simple to fabricate and easy to install.

Start enjoying the best of both worlds. Get in touch.





## Reassurances and guarantees

We are proud of our reputation. Over the years, Profile 22 has become respected and trusted because we get things right and because our products reflect the high standards of quality and performance that we hold dear. The systems in the Optima range are no different – every part of our range has undergone stringent testing under extreme conditions. These products are proven and accredited, conforming to all relevant British Standards.

All of our white profiles carry a ten-year guarantee. The guarantee on our foiled profiles varies according to the finish and full details are available upon request.

The Optima Flush Casement system is Kitemarked to BS EN 12608 and certified to PAS24. We manufacture under a quality management system that conforms to BS EN ISO 9001 and are recognised for responsible sourcing under BES 6001.

THE BEST WINDOWS ARE MADE FROM



# Optima<sup>TM</sup>

FLUSH CASEMENT SYSTEM

For more information about Profile 22 products speak to your installer or visit our website at

[www.profile22.co.uk](http://www.profile22.co.uk)

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