

# 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.

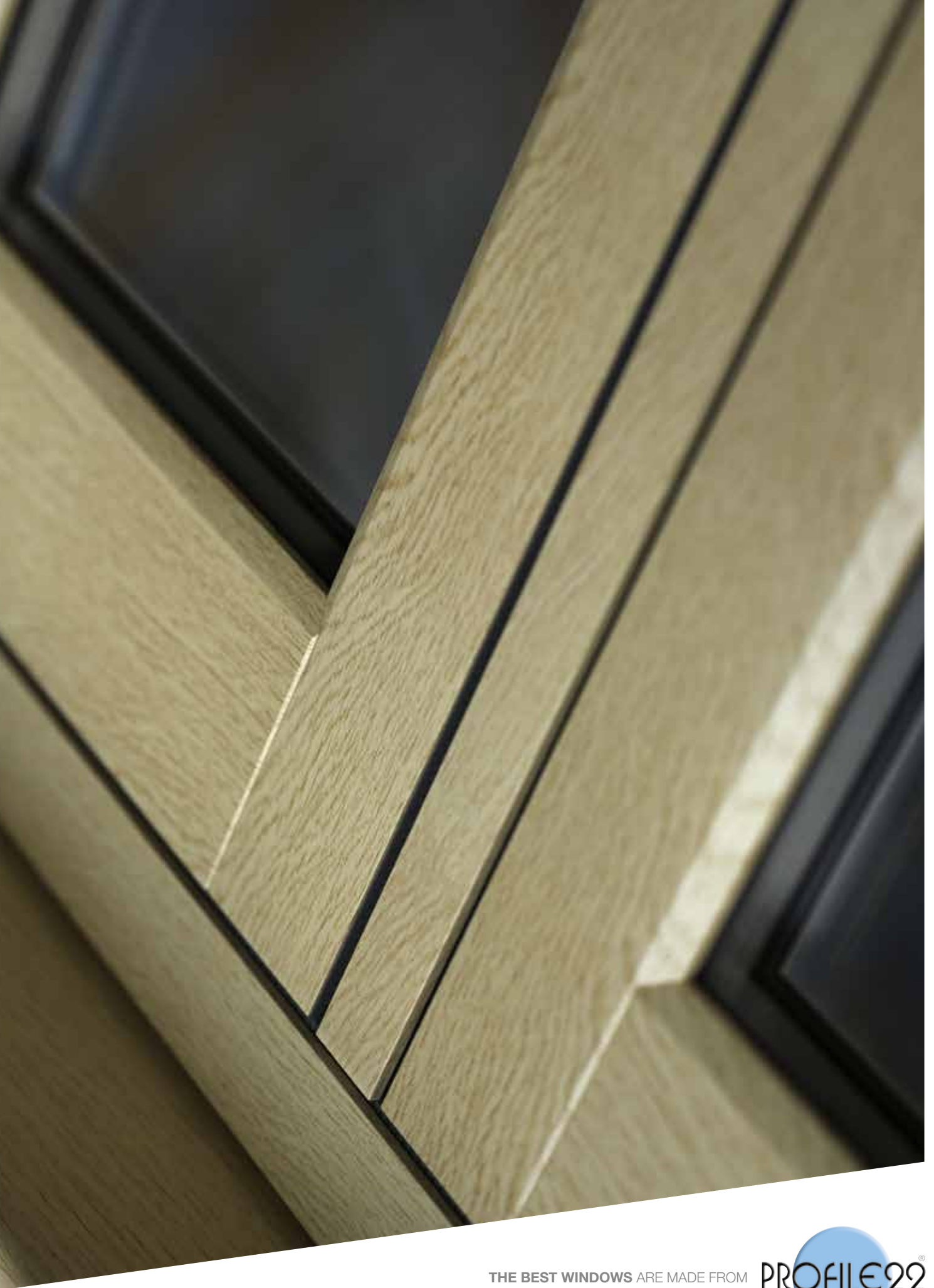
## **The Optima difference**

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.





## Our Guarantee

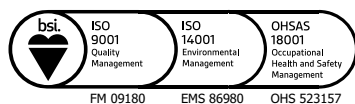
Optima is made by Profile 22, a long established British business with a reputation for delivering consistently high-quality, trusted and reliable products. Profile 22's window and door systems are the most widely specified in the UK.

The Optima system is new and parts of it are revolutionary, but it's undergone stringent testing. We wouldn't have it any other way. We've subjected windows and doors to extreme conditions and we've got the experts in to prove it. Our standards are high and we'll keep pushing them higher as we keep on investing in the latest manufacturing and testing equipment.

### Our products are:

- Kitemarked
- Conform to all relevant British standards
- Produced under an ISO 9001 Quality Management system
- Meet the requirements of ACPO's Secured by Design scheme.

All parts of the Optima system are fully guaranteed. Our white profiles carry a ten-year guarantee. For foiled profiles, the guarantee varies according to the finish. Full details are available upon request.



BS EN 12608  
KMI2895  
PROFILE



BS EN 12608/PAS24  
KM33523  
ENHANCED SECURITY  
WINDOW SYSTEMS  
SUPPLIER



BS EN 12608/PAS24  
KM56791  
ENHANCED SECURITY  
DOOR SYSTEMS  
SUPPLIER



BS 8529/PAS24  
KM594776  
ENHANCED SECURITY  
DOOR SYSTEMS  
SUPPLIER



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# Optima colours

Being able to offer a wider selection of coloured and woodgrain finishes, with complementary base colours, gives a competitive edge to your business, and better looking windows and doors for your customers. Fashions and styles change. Solid colours and subtle creams are replacing the dominance of white. Customers are selecting finishes that respect their building materials, the age of their properties and their local surroundings. Optima offers more colours direct from stock. And if we don't stock the finish you want, we'll use our Foilexpress service to get it to you.

All Optima foils are top quality and fully guaranteed. The biggest difficulty your customers will have is in deciding which of our many finishes they prefer, but samples and swatch books are available to help.

## Stock Colours

### Premium



Anthracite Grey / White (PVC-U) (White Base)  
**System: 1, 2, 3, 4**



Anthracite Grey / Anthracite Grey (Grey Base)  
**System: 1, 2**



Rosewood / White (PVC-U) (White Base)  
**System: 1, 2**



Rosewood / Rosewood (Brown Base)  
**System: 1, 2**



Black Brown / White (PVC-U) (White Base)  
**System: 1, 2**



Black Brown / Black Brown (Brown Base)  
**System: 1, 2**



Light Oak / White (PVC-U) (White Base)  
**System: 1, 2**



Light Oak / Light Oak (Tan Base)  
**System: 1, 2**

### Premium Plus



Cream / White (PVC-U) (White Base)  
**System: 1, 3**



Cream / Cream (Cream Base)  
**System: 1, 2, 3**



White Woodgrain / White Woodgrain (White Base)  
**System: 1, 2, 3**

## Fast Track Colours

### Premium



Anthracite Grey Smooth / White (PVC-U) (White Base)  
**System: 1, 4**



Anthracite Grey Smooth / Anthracite Grey Smooth (White Base)  
**System: 1, 4**



Chartwell Green / White (PVC-U) (White Base)  
**System: 1, 3**



Agate Grey / White (PVC-U) (White Base)  
**System: 1, 3**



Slate Grey / White (PVC-U) (White Base)  
**System: 1**

### Premium Plus



Sage Smooth / White (PVC-U) (White Base)  
**System: 1**



Pebble Grey / White (PVC-U) (White Base)  
**System: 1**



Claystone / White (PVC-U) (White Base)  
**System: 1**

**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

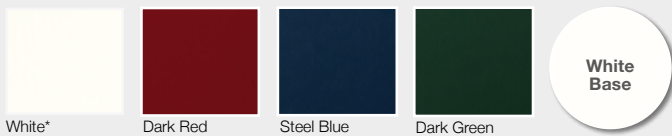
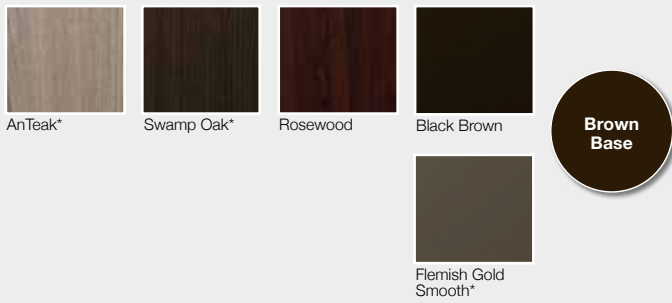
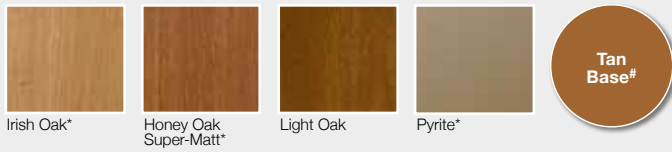
### Systems Key

- 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 Made to Order Colours



Chamfered casement windows, Anthracite Grey



Triple Track inline sliding patio door, Claystone

### \* Premium Plus

#### Main Sections:

One colour, one side – White base  
 One colour, both sides – Colour matched base (see exceptions)  
 Different colours either side – Colour matched base of your choice (see exceptions)

#### Beads & Ancillaries:

Colour/Shade matched base if visible or white base if not visible  
 E.g. Light Oak beads are supplied on a brown base and Anth. Grey beads are supplied on a brown base  
 Frame Packers are supplied on a White base

#### # Exceptions:

Cream base not available on Fully Reversible and Flush Tilt & Turn (Substituted with White)  
 Tan base not available on Fully Reversible and Flush Tilt & Turn (Substituted with Brown)

The base colour options available on profiles offered within each system may be restricted to popular sections. If in any doubt please speak to your Customer Service Advisor.



## 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**<sup>TM</sup>  
BY PROFILE 22 SYSTEMS


SCULPTURED FLUSH  
CASEMENT



OUTER FRAMES	<p><b>QS01</b> OUTER FRAME</p>	<p><b>QS02</b> OUTER FRAME</p>	<p><b>QS03</b> OUTER FRAME</p>
TRANSOMS/MULLIONS	<p><b>QS10</b> 'T' TRANSOM/ MULLION</p>	<p><b>QS11</b> 'Z' TRANSOM/ MULLION</p>	<p><b>QS16</b> 'T' TRANSOM/ MULLION</p>
WINDOW SASHES	<p><b>QC32</b> SASH</p>	<p><b>QC34</b> DEEP BOTTOM RAIL</p>	<p><b>GLAZING BEADS</b></p> <p><b>QS65</b> 24mm BEAD (SASHES)</p> <p><b>QS51</b> 24mm BEAD (FRAMES)</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>
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>
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>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>QM03</b> CAVITY LOCKING BLOCK FRAME</p>	<p><b>QM12</b> RISER BLOCK</p>	<p><b>QM05</b> GLAZING BRIDGE</p>
	<p><b>P4437</b> DUMMY SASH CLIP</p>	<p><b>P4435</b> GLASS LOCK BASE PLATE PACK</p>	<p><b>P4436</b> GLASS LOCK 24mm CLIP PACK</p>
	<p><b>VS11</b> 22mm OVULO GEORGIAN BAR (INTERNAL)</p>	<p><b>VS61</b> 22mm BEVELLED GEORGIAN BAR (EXTERNAL)</p>	<p><b>QM11</b> MEETING RAIL PACKAGER</p>
	<p><b>QM10</b> MEETING RAIL END CAP</p>		




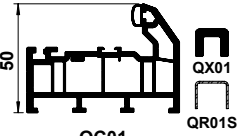
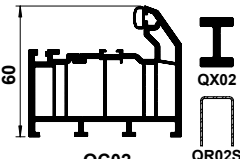
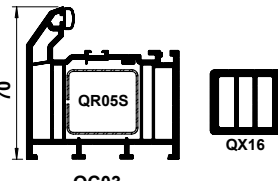
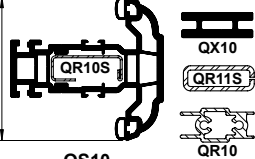
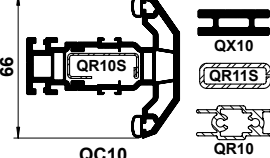
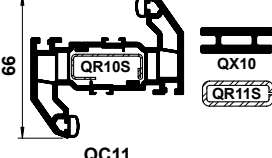
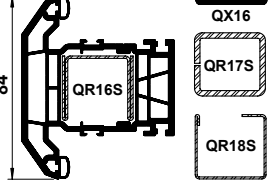
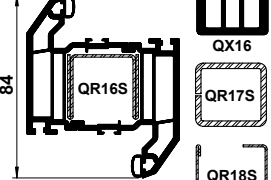
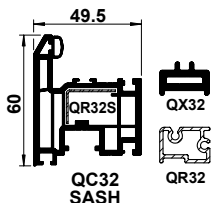
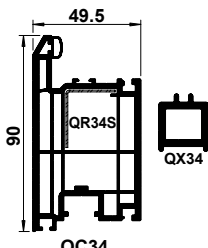
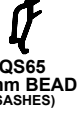

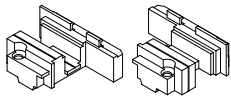
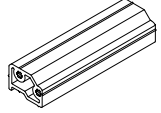
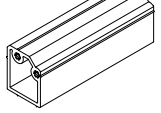
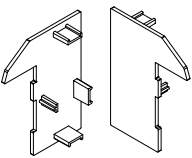





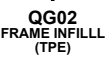








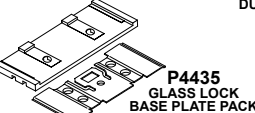
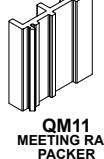

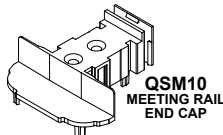
# Main Profiles - Chamfered



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>VS61</b> 22mm BEVELLED GEORGIAN BAR (EXTERNAL)</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>QM02</b> CAVITY LOCKING BLOCK SASH</p>
	 <p><b>1814</b> CENTRE SEAL (WOOLPILE)</p>	 <p><b>QGM32</b> SASH SEAL CORNER (TPE)</p>	 <p><b>QM03</b> CAVITY LOCKING BLOCK FRAME</p>	 <p><b>QM05</b> GLAZING BRIDGE</p>
			 <p><b>QM12</b> RISER BLOCK</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>

# Optima<sup>TM</sup>

FLUSH CASEMENT SYSTEM

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