

**Product Brochure 2011** 



Astraseal has evolved from small beginnings to become one of the UK's most prominent PVCu and aluminium window, door and conservatory manufacturers in the United Kingdom.

Astraseal have always strived to manufacture innovative and best quality products to meet the changing demands of our customers. Today Astraseal offer one of the most comprehensive product ranges available. With industry accreditation a necessary part of shaping a professional and quality conscious company, Astraseal have over the years gained almost every accreditation available, and in many cases they have lead the way.

Our technical experience is unparalleled and Astraseal's longevity is assured through continued investment in plant, machinery, innovation and our valued staff. For further information on our different business activities, please visit our website: www.astraseal.com

All of our products are manufactured to current building regulations as standard but we are able to produce products to meet varying U' Values and security standards.

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As part of our ongoing attempt to reduce our carbon footprint and maintain our prestigious ISO 14001 certificate, this brochure along with individual brochures and technical data sheets for every product that we manufacture can be conveniently downloaded from – www.astrasealdownloads.com

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## Casement Windows - S706 70mm System

#### **Key Characteristics**

Ideal replacement for British timber casement due to 70mm depth. Choice of chamfered or sculptured profiles. Compatible with fully reversible and pivot windows, entrance doors, in-line and Bi-Fold patio doors. The 70mm system can be incorporated into Astraseal conservatory designs.

#### Appearance

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Available in white, rosewood and golden oak. Rosewood and golden oak are also available on white. Other non-standard laminate options and the range of RAL colours are available using our Acryl II colour system, please refer to page 31.



#### Reinforcement

Totally separate reinforcement chambers in profiles enables galvanised steels to be inserted for additional strength when required. Galvanised steel fitted according to size and wind loading, or to clients specification.

### Insulation

Complies with the requirements of the building Regulations covering Conservation of Fuel & Power - Part L (England & Wales) and Part J (Scotland) when glazed using the correct type of sealed unit.

#### Glass Units - Standard

28mm overall thickness, Soft coated low emissivity glass and argon gas to achieve a U-Value of not more than 1.6 W/m<sup>2</sup>K.

### Glass Units - Alternative

Astraseal offer a full range of glass types to meet all energy rating requirements, Secured by Design, safety, sound reduction and solar control.

#### Glazing

- Low level glazing as standard
- Choice of sloped or sculptured beads

#### Drainage

- Standard Concealed drainage
- Alternative Face drainage

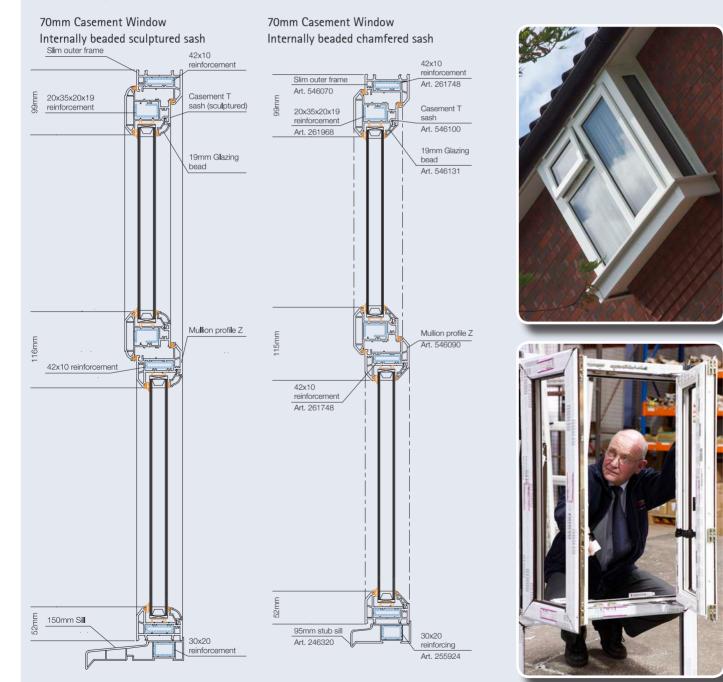


NB: these size dependent on	Sash Sizes s are for guidance only and are fittings and hardware used. Please eal for more detailed information.	n.		Outward opening top hung			
Sash	Finish	Max		Max			
		W x H cm	m²	kg	W x H cm	m²	kg
Sash Z	White	80x150	1.2	40	120x120	1.0	40
Sash T	White	80x150	1.2	40	120x120	1.0	40
Sash Z	Coloured/Foiled	70x150	1.2	40	100x100	1.0	40
Sash T	Coloured/Foiled	70x150	1.2	40	100x100	1.0	40

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## Ideal replacement for British timber casement windows





## Casement Windows - Tritec 60mm System

#### **Key Characteristics**

A versatile system offering the benefits of slim sight-lines, choice of chamfered or sculptured sashes. French window and Run-through sash horn designs available. Compatible with composite doors, PVCu Resi doors, tilt and turn windows and stable doors. The Tritec 60mm system can be incorporated into Astraseal conservatory designs.

#### Appearance

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Available in white, rosewood and golden oak. Rosewood and golden oak are also available on white.

For other non-standard colour laminate options and the range of RAL colours available using our Acryl II colour system please refer to page 31.

#### Reinforcement

Totally separate reinforcement chambers in profiles enables galvanised steels to be inserted for additional strength when required. Steel fitted according to size and wind loading, or to clients specification.

## Insulation

Complies with the requirements of the building Regulations covering Conservation of Fuel & Power - Part L (England & Wales) and Part J (Scotland) when glazed using the correct type of sealed unit.

#### Glass Units - Standard

24mm overall thickness, Soft coated low emissivity glass and argon gas to achieve a U Value of not more than 1.6 W/m2K.

## Glass Units - Alternative

Astraseal offer a full range of glass types to meet all energy rating requirements, Secured by Design, safety, sound reduction and solar control.

#### Glazing

- Low level glazing as standard
- Choice of sloped or scultured beads. Silver grey, black or white gasket with white profiles available. Like coloured gasket with rosewood and golden oak are less obtrusive

#### Drainage

- Standard Concealed drainage
- Alternative Face drainage

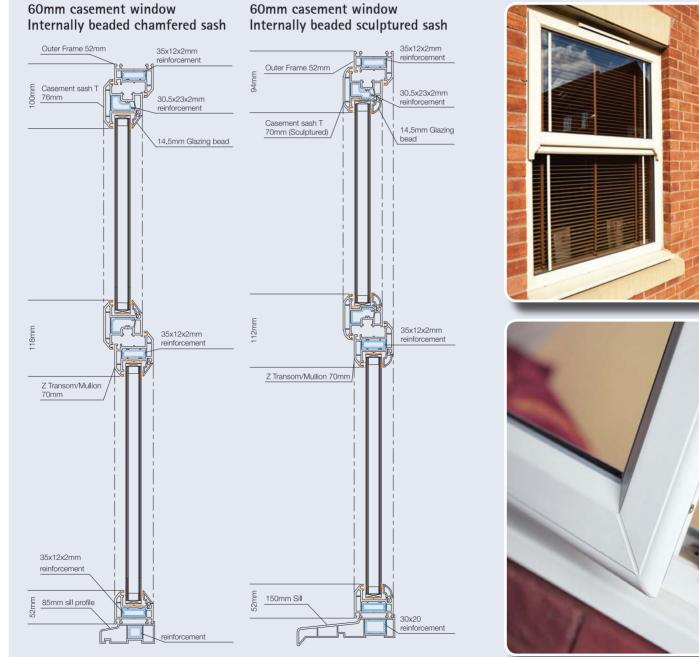


Run-through sash horn available

Maximum Sash Sizes NB: these sizes are for guidance only and are dependent on fittings and hardware used. Please consult Astraseal for more detailed information.			ng	Outwar top	d opei hung	ning	
Sash	Finish	Max		Max			
		W x H cm	m²	kg	W x H cm	m²	kg
Sash Z	White	80x150	1.2	40	120x120	1.0	40
Sash T	White	80x150	1.2	40	120x120	1.0	40
Sash Z	Coloured/Foiled	70x150	1.0	40	100x100	1.0	40
Sash T	Coloured/Foiled	70x150	1.0	40	100x100	1.0	40



## A versatile system offering the benefits of slim sight-lines



Detailed technical drawings are available on request

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## French Windows - 60mm Tritec System

#### **Key Characteristics**

A versatile system offering the benefits of slim sight-lines, choice of chamfered or sculptured sashes. Compatible with entrance doors, tilt and turn windows and tilt and slide patio doors. The 60mm system can be incorporated into Astraseal conservatory designs.

#### Appearance

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Available in white, rosewood and golden oak. Rosewood and golden oak are also available on white.

For other non-standard laminate options and the range of RAL colours available using our Acryl II colour system please refer to page 31.

#### Reinforcement

Totally separate reinforcement chambers in profiles enables galvanised steel to be inserted for additional strength when required.

## Insulation

Complies with the requirements of the building Regulations covering Conservation of Fuel & Power - Part L (England & Wales) and Part J (Scotland) when glazed using the correct type of sealed unit.

#### Glass Units - Standard

24mm overall thickness, Soft coated low emissivity glass and argon gas to achieve a U Value of not more than 1.6 W/m2K.

## Glass Units - Alternative

Astraseal offer a full range of glass types to meet all energy rating requirements, Secured by Design, safety, sound reduction and solar control.

### Glazing

- Low level glazing as standard
- Choice of sloped or scultured beads. Silver grey, black or white gasket with white profiles available. Like coloured gasket with rosewood and golden oak are less obtrusive

#### Size Limitations

- Maximum sash size 0.8m wide by 1.5m high
- Overall maximum frame size 1400 x 1500

#### Drainage

- Standard Concealed drainage
- Alternative Face drainage

The Astraseal French window meets all quality standards and is Kite marked.

Frame and sash dimensions can be adjusted to comply with the requirements of Approved Document B (means of escape).





## Pivot Windows - 60mm Tritec System

## **Key Characteristics**

Ideal for high rise applications. Choice of outer frame widths to match sight-line requirements or building detail without the need for clip-on profiles.

#### Appearance

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Available in white as standard. For other non-standard laminate options and the range of RAL colours available using our Acryl II colour system please refer to page 31.

### Reinforcement

Galvanised steel (thickness depending on exposure ratings).

## Insulation

Complies with the requirements of the Building Regulations covering Conservation of Fuel & Power - Part L (England & Wales) and Part J (Scotland) when glazed using the correct type of sealed unit.

### Glass Units - Standard

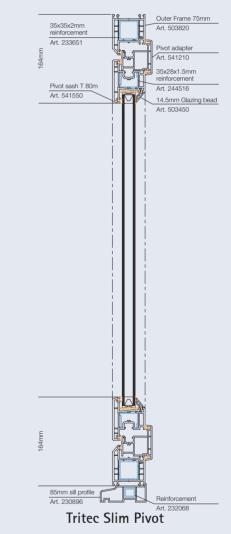
24mm overall thickness, Soft coated low emissivity glass and argon gas to achieve a U Value of not more than 1.6 W/m2K.

#### Glass Units - Alternative

Astraseal offer a full range of glass types to meet all energy rating requirements, Secured by Design, safety, sound reduction and solar control.

## Drainage

- Standard Concealed drainage
- Alternative Face drainage





	Maximum S	ash Sizes	
NB: these sizes are for guidance only and are dependent on fittings and hardware used. Please consult Astraseal for more detailed information.		ttings and hardware used. Please	
	Sash	Finish	Max
			W x H cm m <sup>2</sup> kg
	Sash T	White	80x150 1.2 40

Detailed technical drawings are available on request



## Fully Reversible Window - S706 70mm System

### **Key Characteristics**

Possible combinations include: top turn with fixed lights. Ideal for high rise applications and suitable for safe cleaning.

### Appearance

Available in white, rosewood and golden oak on white, rosewood and golden oak both sides. For other non-standard laminate options and the range of RAL colours available using our Acryl II colour system please refer to page 31.

#### Reinforcement

Totally separate reinforcement chambers in profiles enables galvanised steels to be inserted for additional strength.

## Insulation

Complies with the requirements of the building Regulations covering Conservation of Fuel & Power - Part L (England & Wales) and Part J (Scotland) when glazed using the correct type of sealed unit.

## Glass Units - Standard

28mm overall thickness, soft coated low emissivity glass to achieve a U-Value of not more than 1.6  $W/m^2K$ .

#### Glass Units - Alternative

Astraseal offer a full range of glass types to meet all energy rating requirements, Secured by Design, safety, sound reduction and solar control.

#### Glazing

- 4mm to 42mm glazing
- Internally beaded for security and ease of glazing
- Sloped, semi-sloped or featured co-extruded glazing beads for choice of aesthetics.
- Co-extruded solid and cellular EPDM casement seal for optimum performance
- Integral head-drip for high performance and improved aesthetics

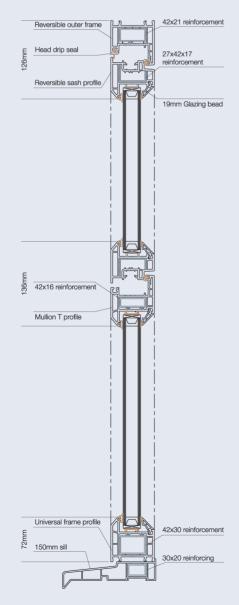


dependent on f	Sash Sizes are for guidance only and are ttings and hardware used. Please al for more detailed information.				
Sash	Finish	Min - Max	Min - Max		
		W x H cm r	n²	kg	
Top Turn	White	50-150 x 50-150 2.	.25	60	

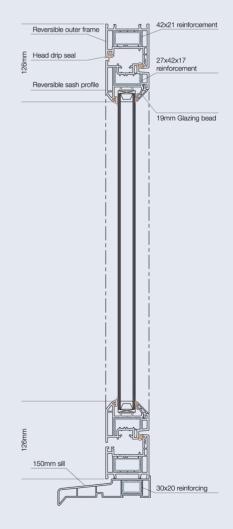


## Ideal for High Rise Applications

## 70mm Fully reversible Window Top swing with fixed light



# 70mm Fully reversible Window Top swing



Detailed technical drawings are available on request



## Vertical Sliding Window System

### **Key Characteristics**

Developed in conjunction with housing associations and conservation bodies. Traditional timber appearance achieved with putty-line heritage sash, sculptured inside. Optional mechanical or fully welded flush cill for tile or stone cills. Sash horns and surface mounted Astragal Bar can be added to complement the traditional appearance. Both sashes will tilt in as standard for ease of cleaning.

#### Appearance

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Available in white as standard and also Golden Oak, Rose Wood and Cream Foil. For other non-standard options see the range of RAL colours on page 31.

### Reinforcement

All vertical sliders are fully reinforced sliding sash windows.

#### Insulation

Complies with the requirements of the building Regulations covering Conservation of Fuel & Power - Part L (England & Wales) and Part J (Scotland) when glazed using the correct type of sealed unit.

#### Glass Units - Standard

28/24mm overall thickness, hard coated low emissivity glass to achieve a U-Value of not more than 1.6 W/m<sup>2</sup>K.

## Glass Units - Alternative

Astraseal offer a full range of glass types to meet requirements for Secured by Design, safety, sound reduction and solar control and improved energy ratings.

#### Drainage

- Standard Concealed drainage
- Alternative Face drainage







Vertical Sliding Window Systems – Rehau S719 MKII Heritage or Synseal Evolve Developed following extensive consultation with conservation bodies and housing associations



For more information please visit: www.astrasealtrade.com

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## Tilt and Turn Windows - S706 70mm System

## **Key Characteristics**

Chamfered profiles using the S706 70mm system. The system offers slim sight-lines and enhanced aesthetic appeal. Inward opening for effective fire escape, easy cleaning and where safety considerations makes outward opening hazardous.

#### Appearance

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Available in white, rosewood and golden oak. Rosewood and golden oak are also available on white.

For other non-standard laminate options and the range of RAL colours available using our Acryl II colour system, please refer to page 31.

#### Reinforcement

Totally separate reinforcement chambers in profiles enables galvanised steels to be inserted for additional strength when required. Galvanised steel fitted according to size and wind loading, or to clients specification.

### Insulation

Complies with the requirements of the building Regulations covering Conservation of Fuel & Power - Part L (England & Wales) and Part J (Scotland) when glazed using the correct type of sealed unit.

#### Glass Units - Standard

28mm overall thickness, Soft coated low emissivity glass to achieve a U-Value of not more than 1.6  $W/m^2K$ .

### Glass Units - Alternative

Astraseal offer a full range of glass types to meet all energy rating requirements, Secured by Design, safety, sound reduction and solar control.

#### Glazing

- Low level glazing as standard
- Choice of sloped or scultured beads, black or white gasket with white profiles

#### Drainage

- Standard Concealed drainage
- Alternative Face drainage



Optional RAL Colours available





## Tilt and Turn Windows - Tritec 60mm System

## **Key Characteristics**

Chamfered 60mm profile system offers slim sight-lines and enhanced aesthetic appeal. Inward opening for effective fire escape, easy cleaning and where safety considerations makes outward opening hazardous.

### Appearance

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Available in white, rosewood and golden oak. Rosewood and golden oak are also available on white.

For other non-standard laminate options and the range of RAL colours available using our Acryl II colour system please refer to page 31.

#### Reinforcement

Totally separate reinforcement chambers in profiles enables galvanised steels to be inserted for additional strength when required. Galvanised steel fitted according to size and wind loading, or to clients specification.

## Insulation

Complies with the requirements of the building Regulations covering Conservation of Fuel & Power - Part L (England & Wales) and Part J (Scotland) when glazed using the correct type of sealed unit.

## Glass Units - Standard

24mm overall thickness, soft coated low emissivity glass to achieve a U-Value of not more than 1.6  $W/m^2K$ .

### **Glass Units - Alternative**

Astraseal offer a full range of glass types to meet all energy rating requirements, Secured by Design, safety, sound reduction and solar control.

#### Glazing

- Low level glazing as standard
- Choice of sloped or scultured beads. Silver grey, black or white gasket with white profiles. Like coloured gasket with rosewood and golden oak are less obtrusive

### Drainage

- Standard Concealed drainage
- Alternative Face drainage



Maximum Sash Sizes	Tilt/Turn	
NB: these sizes are for guidance only and are dependent on fittings and hardware used. Please consult Astraseal for more detailed information.		
Finish	Max	
	W x H cm m <sup>2</sup> kg	
White	150x170 2.1 100	
Coloured/Foiled	130x150 1.9 100	)



## Residential Doors - S706 and Tritec 60mm System

## **Key Characteristics**

Available in open-in and open-out styles for a variety of installations. Compatible with casement, fully reversible, pivot and tilt-turn windows. Can be incorporated into Astraseal conservatory designs. Available with a comprehensive range of decorative panels and glasses.

2 Claw Locking with a 52mm threshold as standard. Doors can be manufactured to Part M and/or PAS23/24 Secured By Design

Available with Butt of Flag hinge options.



#### Appearance

Available in white, rosewood and golden oak. Rosewood and golden oak are also available on white.

For other non-standard laminate options and the range of RAL colours available using our Acryl II colour system please refer to page 31.

#### Reinforcement

All door leaf and frame profiles are fully reinforced with galvanised steel.

#### Insulation

Complies with the requirements of the building Regulations covering Conservation of Fuel & Power - Part L (England & Wales) and Part J (Scotland) when glazed using the correct type of sealed unit.

## Glass Units - Standard

24mm or 28mm overall thickness, soft coated low emissivity safety glass to achieve a U-Value of not more than 1.8 W/m<sup>2</sup>K.

### Low Threshold

Can be included as an option to comply with the requirements of Approved Document M.

#### Glass Units - Alternative

Astraseal offer a full range of glass types to meet requirements for Secured by Design, safety, sound reduction and solar control and improved energy ratings.

#### Glazing

- Low level glazing as standard
- Choice of sloped or sculptured beads

#### Drainage

- Standard Concealed drainage
- Alternative Face drainage

Butt hinges sh	Sash Sizes h shown not less than 590mm. uould be used when producing nder 850mm widths.	Residential Do	or
Sash	Finish	Max	
		W x H cm m <sup>2</sup>	kg
Sash Z	White	100x220	100
Sash T	White	100x220	100
Sash Z	Coloured/Foiled	100x210	100
Sash T	Coloured/Foiled	100x210	100

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## Non-standard laminate options and the range of RAL colours available







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## French Doors - 70mm and 60mm Systems

#### **Key Characteristics**

Open-in or open-out styles offer increased versatility. Dummy mullion allows 90 degree aperture opening. Can be constructed for equal or non equal split.

#### Appearance

Available in white, rosewood and golden oak. Rosewood and golden oak are also available on white.

For other non-standard laminate options and the range of RAL colours available using our Acryl II colour system please refer to page 31.

#### Reinforcement

Fully reinforced using galvanised steel. Pre-routed on locking side ensures continuous reinforcement.

### Insulation

Complies with the requirements of the Building Regulations covering Conservation of Fuel & Power - Part L (England & Wales) and Part J (Scotland) when glazed using the correct type of sealed unit.

#### Glazing

• 24mm or 28mm safety double glazing

• Choice of sloped or sculptured beads

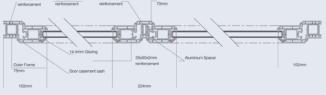
#### Glass Units - Standard

28/24mm overall thickness, Soft coated low emissivity glass and argon gas to achieve a U Value of not more than 1.8 W/m2K.

### **Glass Units - Alternative**

Astraseal offer a full range of glass types to meet all energy rating requirements, Secured by Design, safety, sound reduction and solar control.





60mm French Door Inward opening

NB: Sash wid	Sash Sizes	French Doo	r
2	nuould be used when producing nder 850mm widths.		
Sash	Finish	Max	
		W x H cm m <sup>2</sup>	kg
Sash Z	White	80x220	100
Sash T	White	80x220	100
Sash Z	Coloured/Foiled	70x210	100
Sash T	Coloured/Foiled	70x210	100



## **Astraseal Composite Doors**

The door sashes are processed on the Astraseal composite door line to ensure a perfect fit into the Rehau Tritec 60mm or S706 70mm profiles. It's your choice.

After cutting, trimming and production of the door and frame the two units come together to be furnished with the specified gearing. The glass for the door is cut and toughened in the Astraseal factory and any stain or bevel designs are applied prior to glazing into the door.

Astraseal composite doors are constructed using GRP skins which give defined panel relief detail and replicate a timber door appearance. Combined with the high density core the door will provide excellent sound and heat insulation with very low expansion or contraction characteristics.

To ensure a finish that will impress even the most discerning customer, Astraseal fit an aluminium cloaking profile to both the lock and hinge sides. This adds strength and an ideal location for the Winkhaus 2 claw STV2 Cobra mechanism. The door can be manufactured to accept alternative lock gearing systems if required.

### Features and Benefits

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- 1. High density core for insulation and strength. Maximum U-Values of 1.1 achievable
- 2. GRP outer skin for minimal contraction and expansion with a highly detailed finish.
- 3. Inner sub-frame adds strength and prevents warping or bending.
- 4. Outer composite sub-frame ensures weather fastness and contributes to strength.
- 5. Aluminium edge detail allows for adjustments if required and houses locks and hinges, protecting door skin from Impact.
- 6. Market leading Rehau 60mm or 70mm outer frames.
- 7. Full galvanised steel reinforcing for strength and rigidity.



Available in a range of styles and colours with many different glass designs and accessories





## Polytec 50 Curtain Walling System

### **Key Characteristics**

The curtain walling system has the capability of providing six meter spans to facilitate greater elevation design capability. This makes it ideal for schools and entrance foyers where glazing is required to span more than one floor. The system is also suitable for multi-storey buildings where the mullions are fixed back to the structural floor slabs.

It is a slim system with face profiles measuring just 50mm and combines the economics of polymer materials with the advantages of conventional transom/ mullion construction. Using a wide range of reinforcement sections, profiles can accommodate variable static load factors. There is a corresponding selection of Snap-On profiles. Straight or polygon construction also possible.

#### Appearance

The Polytec 50 System is available in white and a vast range of RAL colours.

### Insulation

The frame achieves a coefficient of heat transmission of  $U_p < 1.5 Wm^2 K$ .

#### Glazing

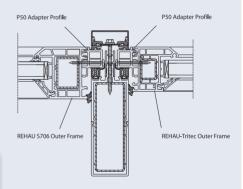
The system incorporates direct fix and or sub frames for all types of openers from both the Tritec 60mm and 70mm systems.

#### Maximum Sizes

Maximum frame sizes, spans and dimensions depend mainly on the design criteria weight of the mouldings, pressure-suction loads and dead weights. This relationship is designed in the Glazing Recommendations under Static Load Factors. In the EU, roof glazing is generally limited to a width of 1m, tied in two sides of the building. If one of these limits is exceeded, an individual static load analysis is required.

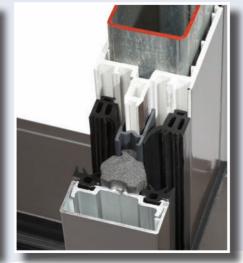
#### Approvals

The Polytec 50 Curtain Walling System has been indicatively tested at Rosenheim and resulting reports can be made available on request. Specific testing for wind and water penetration can be commissioned for individual projects if required.



CAD design service available





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## **Flametek Doors and Screens**



## **Standard Specification**

The Astraseal Fire door with the patented Rauferno fire resistant system has a range of door designs using the Rehau S706 70mm frame profile.

## Applications include:

- Fire escape routes
- Entrance Halls

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- Deck access flats
- Fixed panels next to doors
- Windows/doors between a house and integral garage
- Fixed lights (and sidelights coupled to doors)
- Assessed to BS476 Pt22 (30 minutes only)
- Patents pending
- Door styles and colours are similar to those shown in Astraseal composite door brochure
- Warrington fire report No: 148957, Issue 2
- FIRAS accredited installer

### Fire Testing:

5 mins

20 mins

30 mins





NETWORK AWARD WINNER Available with side screens and in a wide

range of colours and styles (see page 19)

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NER

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20-21 COMPLETE.indd 2

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## **CURTAIN WALLING**

Our main curtain wall system is designed to create a dramatic but practical façade, allowing maximum light into multi-storey buildings. Rapid on-site installation and concealed transoms, for seamless / uninterrupted glass to glass joints, are among the many special features of this versatile polyamide thermal break system. The system incorporates a top hung frameless vent and also accommodates all aluminium windows, doors and horizontal sliders.

Our smaller curtain wall system is designed for low to medium rise façades including large shopfronts and showrooms and accommodates a wide range of aluminium windows and doors. Rapid on-site installation is facilitated by construction of the frames in the factory.



Our Shopfront system is specifically designed for all ground floor treatments and severe duty doors. It is stylish, practical and accommodates all windows and horizontal sliders. It offers various sightline options to the head, midrail and cill detail as well as anti fingertrap stiles and concealed transom closers.

ALUMINIUM

The versatility of the system is amply demonstrated by the variety of installations depicted in the Astraseal Aluminium product guide. Designed to be robust, our shopfront system will withstand heavy traffic in commercial buildings such as high street shops/store, office buildings, health clubs and many others.







## **WINDOWS**

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Innovative designs and a comprehensive range of windows suitable for the architectural, commercial, public, new build and retail markets are hallmarks of Astraseal Aluminium Systems.

Our window ranges include casements (top / side hung, fixed lights and any combination of these), tilt and turn, hopper, tilt and slide, projecting, fully reversible, pivot (horizontal or vertical), sliding and heavy duty. Windows are available externally or internally beaded, open-in/open-out, with polyamide thermal barrier. High security glazing, shoot-bolt locking, dual colour options, excellent weather performance (BS6375 Pts 1 &t 2), compliance with BS7950 and a choice of ovolo, chamfered or square main profiles are just some of the many special features of our window systems.

## DOORS

Astraseal offer a range of doors suitable for the architectural, commercial, public, new build and retail markets. The doors available are commercial hinged, commercial swing, patio, tilt and slide, slide folding, multi-track slide and automatic. Our doors are designed for use as open out or open in, single or double doors, internally or externally beaded with sidelight options for domestic and/or commercial applications.

Doors are available with a polyamide thermal barrier. High security glazing, locking mechanism including security deadlock and hook bolts, dual colour options, excellent weather performance (BS6375 Pt 1) are inherent features of the system.





For full details on our range of Aluminium products, please request a brochure.



# **Inline Sliding Patio Doors**

- 70mm coupling face
- 28mm sealed unit facility as standard
- Internally beaded
- Recessed letterplate midrail
- High security hardware
- Woodgrain options available
- PVC / Aluminium interlock
- Fully welded construction
- 2, 3 and 4 part slides

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• Compatible couplings with windows, doors and conservatories







Available as 2, 3 & 4 part slider

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## **Bi-Fold Doors**

The Astraseal bi-fold door is available in S706 70mm.

The Astraseal bi-fold door concertinas smoothly and is easy to operate.

Panels can be connected in a number of configurations so that the doors can be bi-fold or multi-fold allowing greater flexibility. This is ideal for connecting any rooms in the house or the interior to the exterior.

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It is vital that the doors are able to endure harsh weather conditions therefore they have been subject to vigorous in-house testing.

Bi-fold doors are suitable for both domestic and commercial applications.

White, rosewood and golden oak finishes are available to meet individual tastes.

Astraseal bi-fold doors completely open up an aperture to create a feeling of light and space.

Can be used as an alternative to patio doors and can be used in conjunction with them to accentuate open plan living.



#### Surface finish

White, mahogany and golden oak finishes are available to meet individual tastes

#### Fully assessed

To endure harsh weather conditions Astraseal bi-fold doors have been subject to vigorous testing

#### Specification

Suitable for domestic and commercial applications as they create openings and partitions

#### ··· Flexibility

Connect any room to the outside and provide additional natural light to a space

#### Engineering

Door concertinas smoothly & is remarkably easy to open

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## Conservatories

Astraseal design and manufacture bespoke conservatories in an almost infinite range of styles with many polycarbonate glass and roof options

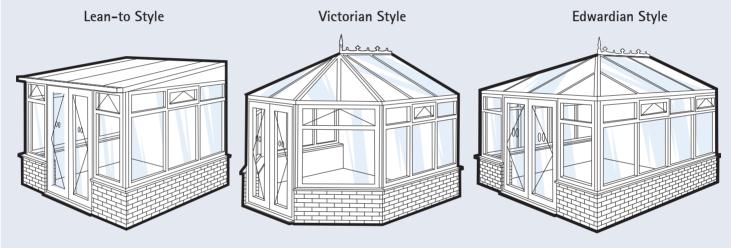
- Personalised CAD Drawings available
- Anti-sun and shaped roof glass manufactured in-house
- Patented roof glazing system prefabricated in-house
- Manual and electric roof vents
- Full survey and building works service available
- Extensive range of designs available
- Same day quotes and drawings provided
- Solar control and self cleaning glass options available

### Standard Specification

- Rehau Tritec or S706 internally beaded windows and doors
- Sealed units, toughened glass to all doors and windows below fanlight
- Espagnolette gearing
- Six point gearing to all doors
- White push to release key locking handles
- Global roof glazed with polycarbonate or glass
- Welded cills and couplings



# Example conservatory designs:



Detailed drawings are available for planning and sales presentations



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# **Curves and Arches**

## Circles

We provide both fixed and opening circles, supplied with fittings, in any colour or foiled on white combinations.

### **Arched Frames**

Astraseal can supply arched frames made to your measurements. This includes fixed and opening frames, which can be supplied with hardware fitted from Astraseal stock.

#### **French Doors**

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A comprehensive range of any arched french doors or any entrance door, with all the hardware fitted if required. Astraseal also supply Gothic windows and doors also which can be supplied in any colour.

## **Angled Frames**

Astraseal can supply angled frames of any size including all kinds of conservatory wedges – triangles only, or including the full support frame too. We also supply a full range of conservatory gable ends including sunbursts if required.

### Specials

Unusual shaped windows of any size, any shape, and in any colour. Please contact us for further information.







## **Stable Doors**

### **Key Characteristics**

- Dual opening facility
- Independent operation & locking mechanism on each door leaf
- Available in white, mahagany, woodgrain and woodgrain on white
- Equal sash sightlines

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• Traditional farmhouse door appearance



## Appearance

Available in white, rosewood and golden oak. Rosewood and golden oak are also available on white.

For other non-standard laminate options and the range of RAL colours available using our Acryl II colour system please refer to page 31.

#### Reinforcement

All door leaf and frame profiles are fully reinforced with galvanised steel.

#### Insulation

Complies with the requirements of the building Regulations covering Conservation of Fuel & Power - Part L (England & Wales) and Part J (Scotland) when glazed using the correct type of sealed unit.



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## Glass Units - Standard

24mm overall thickness, soft coated low emissivity safety glass to achieve a U-Value of not more than 1.8  $W/m^2K$ .

## Low Threshold

Can be included as an option to comply with the requirements of Approved Document M.

## Glass Units - Alternative

Astraseal offer a full range of glass types to meet all energy rating requirements, Secured by Design, safety, sound reduction and solar control.

### Glazing

- Low level glazing as standard
- Choice of sloped or sculptured beads

#### Drainage

- Standard Concealed drainage
- Alternative Face drainage

Dual opening facility and equal sash sightlines

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# Roof Line & Cladding Products

Astraseal supply and fit a range of roof line and cladding products including:

- Guttering
- Ancillary items
- Silicon & mastics
- Window & door fittings
- Soffit boards
- Cladding
- Angles
- Trims
- Cills

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- Replacment boards
- Cover boards
- Flat boards

• Ogee buffalo boards and more...













## **RAL Colours & Profile Painting**

Rehau offers it's PVCu systems in over 150 RAL colour options though the use of the distinctive Acryll II colour coating and lamination system.

## Acryl II

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The Acryl II colour coating system is the result of a development by the Rehau automotive division, which has used a similar system for many years to produce colour matched polymer car bumpers.

It is a two component acrylic coating system, which involves tightly controlled preparation, application of the cross-linking polyurethane acrylic by wet spraying and then air curing. The finish is durable, colour fast and weather resistant. Acryl II coating does not affect the impact resistance of the PVC-u profile.

There is a choice of over 150 RAL colours and the system allows for optimum versatility and creative use of colour. For example, the frame and the sash or the inside and outside can be finished in two different colours. Alternatively, cills or beading can be finished to contrast with the frame. Due to the flexibility if the system it is suitable for both small and large-scale installations.

## Laminate PVCu

Rehau have a range of standard laminate options. For most systems they are mahogany, golden oak and rosewood on white and mahogany, rosewood and golden oak both sides. A further range of 7 woodgrain and 10 colour non-standard laminate options are available to special order. Laminate can be applied to the inside or outside or both sides of brown and acorn base profiles. The finish is colourfast, weather resistant and durable. Due to the complexity of the the process, lamination is best suited to large volume installations in the same colour. A selection of laminated foils is also available.





# Astraseal & The Environment

Astraseal is committed to saving energy and recognises the importance of environmental sustainability.

To this end, an important step is achieving ISO 14001 and we are also undertaking the following measures:

- We recycle all our polythene and cardboard which is taken from site and recycled
- We optimise all our production processes to limit off cuts from profile and glass. All PVCu off cuts are taken from site and recycled as is the glass
- Astraseal utilise a large on-site crushing machine so that after deconstructing usable accessories from the frames, they are crushed therefore minimising the number of skips going to landfill
- We meticulously plan journeys and use large vehicles for deliveries to reduce short trips and our carbon emissions
- Last year we recycled 400 tons of PVCu, 400 tons of glass and 24 tons of cardboard and polythene

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BS EN 14001:2004 EMS 548701





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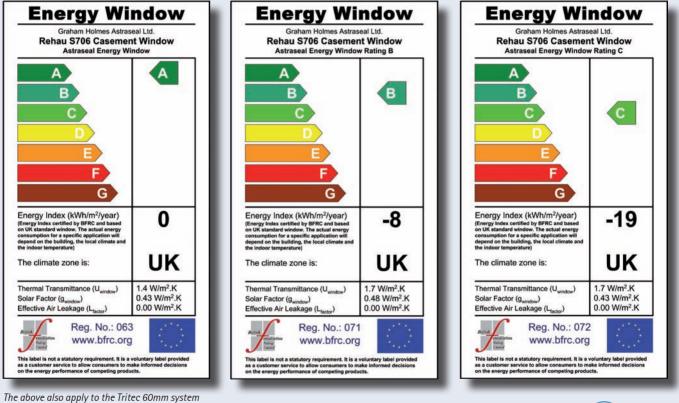


# **Energy Rated Windows**

## Astraseal Energy Window

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Astraseal can now provide a range of BFRC energy rated windows to A, B and C as well as the standard Part L compliant window.



### Rehau S706 Casement Window





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## **Toughened Glass & Sealed Units**

To ensure continuity of supply and improve turnaround times, Astraseal brought toughened glass production in house in 2004 as part of a multi-million pound production technology investment programme.

Along with competitively priced toughened glass sealed units, Astraseal can also provide:

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## Service

- Rapid Quotations
- Your company name on the spacer bar
- Dedicated account manager

### Delivery

- Nationwide Delivery
- Loose or Stillaged
- Own fleet of vehicles for delivery flexibility

## Expertise

- Over 20 years manufacturing experience
- Technical support

#### Quality

- TQM ISO 9001
- EN1279 Parts 2 and 3 for units
- Toughened glass to BS EN 12150-Class 1



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# **Accreditations / Kite Marks**

Astraseal always strive to achieve and surpass the latest industry standards. Astraseal have been awarded the illustrated accreditations allowing us comply with tender requirements. It also means our customers can have complete confidence in our professionalism and abilities.



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PAS 23/24 KM76088













BS EN 1279 KM29331



BS EN 12150 - Class 1 KM97477













BS EN 14001:2004 EMS548701



KM30563

## Secured by Design



**Official Police Security Initiative** 

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BS 8213-4 KM71853





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