## **Roof Glass Guide**

Version 6 | Nov 2022



Ultraframe offer a range of glazing options to be used with our roofing systems. These includes both the Celsius and Conservaglass glazing brands available in a range of specifications and colour options. Ordering from Ultraframe is simple and easy, reducing the number of suppliers as well as providing you with specialist support in choosing and providing your glazing requirements.



## In summary, Ultraframe can support you with;

- One call gets it all
- Confidence by ordering from one source.
- No mis-measures, split responsibility or waiting for glass sizes.
- 5-7 day lead time.

- Specialist roof glass factories we know shapes!
- Delivered to your premises or site.
- 10 year warranty.

### Conservaglass Range

- True self cleaning.
- Keep out up to 86% of the suns heat energy.
- U-Values of 1.0 or 1.2.
- All units are 4-16-4 toughened, argon gas filled and come with black warm edge spacer as standard.
- Up to 3.59m long units in tier 1 blue (see table below), max length other specs is 3200mm.
- Warm Edge Spacer.

### Celsius Range

- \* Premium brand name.
- \* Superior UV ray protection up to 94%
- \* Self cleaning technology ensuring glass require much less maintenance.
- \* Can provide U-Value as low as 0.9.
- \* Light transmission as high as 61%
- \* Argon filled units to increase insulation as well as reduce overall rain and traffic noise.

## Ultraframe Sealed Units (4-16-4)

	Cor	nparison	Tier 4			Tier 3		Tier 2	Tier 1	
	Standard Glass	25mm Poly	Celsius Elite	Conservaglass Ultra86	Celsius One	Conservaglass Ultimate Blue	Celsius Clear	Conservaglass 4S	Conservaglass Standard	
U-Value	2.8	1.7	0.9	1.0	1.0	1.0	1.0	1.0	1.2	
Light Tranmission	80%	68%	34%	15%	38% 27%		61%	41%	42%	
Solar Rejection	25%	45%	83%	86%	83% 80%		58%	67%	60%	
UV Protection/ Rejection	25%	45% (bronze)	94%	90%	94% 90%		73%	86%	83%	
Toughened to BS EN 12150-1	√	Х	√	√	√	√	√	√	√	
Manufactured to BE EN 1279-2	√	Х	√	√	√	√	<b>√</b>	√	√	
10 year Guarantee	√	√	√	√	√	√	<b>√</b>	√	√	
Cleaning	√	Х	Self Clean	Self Clean	Self Clean	Self Clean	Self Clean Self Clean		Self Clean	
Cavity Fill	Air	Х	Argon	Argon	Argon	Argon	Argon	Argon	Argon	
Warm Edge	Х	Х	√	<b>√</b>	√	√ √		<b>√</b>	√	
24mm* (4-16-4)	√	Х	√	√	√	√ √ √		√	√	
Colour tints	√	√	Blue	Azure Blue	Blue	Blue	Neutral	Blue, Neutral, Aqua, Bronze	Blue, Neutral, Aqua, Bronze	

Oversized units available in Conservaglass in blue and neutral \*Neutral coating gives a slightly grey appearance

\*\* Quoted figures blue glass only.



In order to pass building regulations, the thermal design guide within UDesign will provide the specific U-value of each glass roof.

# **Conservaglass Range**

Conservaglass is a high-performing glazing product used to ensure your customers get the best value from their investment. It comes in a range of different colours (tier 1 and 2) – which means you'll be able to customise the appearance of your conservatory, with self cleaning included on all options as standard. With a variety of U-Value and solar rejection options, Conservaglass is an ideal glazing product to be used in Ultraframe's roofing systems.

### Conservaglass details:

- Conservaglass Standard With self cleaning coating technology, Conservaglass Standard is the perfect where light transmission is received. Available in blue, neutral, agua and bronze.
- Conservaglass 4S Offers 90% UV projection and 78% solar rejection as well as the self-cleaning properties. Available in blue, neutral, aqua and bronze.
- **Ultimate Blue** Ultimate Blue intelligent glass reflects 80% of solar energy in your new conservatory and will help reduce heat and solar glare in summer. Available in blue only.
- Conservaglass Ultra86 Conservaglass Ultra86 offer self cleaning technology and optimum solar control properties, reflecting 86% of solar heat. Available in blue only.

# Conservaglass Sealed Units (4-16-4)

	Tier 4	Tier 3	Tier 2	Tier 1		
	Conservaglass Ultra86	Ultimate Blue	Conservaglass 4S	Conservaglass Standard		
U-Value	1.0	1.0	1.0 1.0 1.2			
Light Tranmission	15%	27%	41%	42%		
Solar Rejection 86%		80%	67%	60%		
UV Protection/ Rejection	90%	90%	86%	83%		
Cleaning	eaning Self Clean Self Clea		Self Clean	Self Clean		
Colour tints Azure Blue		Blue	Blue, Neutral, Aqua, Bronze	Blue, Neutral, Aqua, Bronze		

Oversized units available in Conservaglass in blue \*Neutral coating gives a slightly grey appearance





#### **U-Value**

U-value measures internal heat loss, the lower the number, the greater the insulation.



#### Light Transmission

Conservaglass softens the impact of natural light through the roof of your conservatory, for increased comfort.



## Solar Rejection

Conservaglass reflects approx 3 times more solar energy then standard glass.



### UV Protection/Rejection

Reduces the effect of harmful UV rays allowing greater protection of your furniture and fabrics.



### Cleaning

A coating that actively breaks down organic materails using the power of the sun. Rain water then washes this away meaning a greatly reduced need for maintenance.



#### Colour tints

A variety of colour choices are available.

# **Celsius Range**

One of the first perfomance glass products available for domestic roofs. With 'Self Clean' technology included as standard, your glass will require much less maintenance. Whether large or small, simple or complex, sheltered or exposed, Celsius offers the complete high performance glazing solution for your conservatory.

### Climate Range Glass details:

- Celsius One With its blue tint and enhanced abilities, Celsius One sets a new standard in performance
- glazing.
- Celsius Elite With its blue tint and improved abilities, Celsius Elite is the ultimate in performance glazing.
- Celsius Clear Is a neutral tinted glass ideally suited roof installations where natural light is low or required.

## Celsius Sealed Units (4-16-4)

	Tier 4	Tier 3	Tier 2	
	Celsuis Elite	Celsius One	Celsius Clear	
U-Value	0.9	1.0	1.0	
Light Tranmission	34%	38%	61%	
Solar Rejection	83%	83%	58%	
UV Protection/ Rejection	94%	94%	73%	
Cleaning	Self Clean	Self Clean	Self Clean	
Colour tints	Blue	Celsius Blue	Neutral	

<sup>\*</sup>Neutral coating gives a slightly brown appearance





### U-Value

U-value measures internal heat loss, the lower the number, the greater the insulation.



#### Light Transmission

Celsius glass softens the impact of natural light through the roof of your conservatory, for increased comfort.



### Solar Rejection

Celsius glass reflects approx 3 times more solar energy then standard glass.



### UV Protection/Rejection

Reduces the effect of harmful UV rays allowing greater protection of your furniture and fabrics.



### Colour tints

Available in blue and clear.



### Cleaning

The self clean coating prevent organic contaminants from adhering to the glass, allowing rainwater to wash these away, greatly reducing the maintenance required.

# **Glazing Specification**

			Tier 4 Tier 3		Tier 2					Tier 1					
	Standard Glass	25mm Poly	Celsius Elite	Ultra86 Blue	Celsius One	Ultimate Blue	Celsius Clear	Blue 4S	Neutral* 4S	Aqua 4S	Bronze 4S	Std Blue	Std Neutral*	Std Aqua	Std Bronze
U-Value	2.8	1.7	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.2	1.2	1.2	1.2
Light Tranmission	80%	68%	34%	15%	38%	27%	61%	41%	37%	32%	42%	42%	45%	39%	52%
Solar Rejection	25%	45%	83%	86%	83%	80%	58%	67%	65%	78%	66%	60%	60%	72%	51%
UV Protection/ Rejection	25%	45% (bronze)	94%	90%	94%	90%	73%	86%	82%	90%	89%	83%	78%	92%	86%
Toughened to BS EN 12150-1	√	Х	√	√	√	√	√	√	<b>√</b>	√	√	√	√	√	<b>√</b>
Manufactured to BE EN 1279-2	<b>√</b>	Х	√	√	√	√	√	√	<b>√</b>	√	<b>√</b>	√	√	√	<b>√</b>
10 year guarantee	√	√	<b>√</b>	<b>√</b>	√	√	√	√	√	√	√	√	√	√	<b>√</b>
Cleaning	√	Х	Self Clean	Self Clean	Self Clean	Self Clean	Self Clean	Self Clean	Self Clean	Self Clean	Self Clean	Self Clean	Self Clean	Self Clean	Self Clean
Cavity Fill	Air	×	Argon	Argon	Argon	Argon	Argon	Argon	Argon	Argon	Argon	Argon	Argon	Argon	Argon
Warm Edge	Х	Х	<b>√</b>	√	√	√	√	√	√	√	√	√	√	√	<b>√</b>
24mm* (4-16-4)	<b>√</b>	Х	√	<b>√</b>	√	√	<b>√</b>	√	<b>√</b>	√	√	√	√	<b>√</b>	<b>√</b>
Colour tint	√	Х	Blue	Azure Blue	Blue	Blue	Neutral	Blue	Neutral	Aqua	Bronze	Blue	Neutral	Aqua	Bronze

Oversized units available in Conservaglass in blue \*Neutral coating gives a slightly grey appearance. Equivalent glass may be substituted. Delivery cost for glass may apply.

In order to pass building regulations, the thermal design guide within UDesign will provide the specific U-value of each glass roof.

## Oversize\* Sealed Units

Unit Length from	3200 - 3590mm
Width in mm	790

Maximum size on Celsius glass is 3200mm.

### Pitch Factors and calculating your glazing area

U Design will calculate your exact price but use this 'ready reckoner' for an approximate price

Georgian with jack rafters | Size - 4m x 4m | Pitch - 25°



- 4m x 4m = 16m<sup>2</sup>
- Pitch 25° add 10% for pitch factor (see table)
- 16m<sup>2</sup> + 1.6m<sup>2</sup> = 17.6m<sup>2</sup>

Price List effective 1st January 2020. All prices quoted are in pound sterling and exclude VAT. Every effort has been made to ensure the accuracy of this price guide. However, the Ultraframe computer system is the final arbiter on price

Pitch Conversion Factor						
Up to 12.5°	No factor					
12.6-15°	+ 4%					
15.1-20°	+ 6%					
20.1-25°	+ 10%					
25.1-30°	+ 15%					
30.1-35°	+ 21%					
35.1-40°	+ 30%					

