

# Helping you understand Double Glazing, and it's importance in your home.

Understanding the performance of double-glazed units can be complex, but we've simplified it to help you grasp the essentials.. At its core, our double glazing involves two panes of glass separated by a spacer bar and filled with Argon gas. This design creates an effective barrier against heat loss and external noise, with the introduction of further glass technologies double glazing can also offer significant solar control improvement

We've broken it down to explain how our products work to keep your home comfortable year-round, reducing heat transfer in summer and retaining warmth in winter. For further details be sure to ask your fabricator, they should be able to assist you with all the expert advice needed to support you when selecting which DGU works best for your project.

## Understanding Insulation (U-Value)

The U-Value measures how well a window stops heat from escaping your home. The lower the U-Value, the better the insulation. In Victoria's cooler months, this means your home stays warmer for longer, reducing the need for extra heating. Across the board, all our DGU ranges offer impressive insulation properties, but it's in solar control where we truly start to see a noticeable difference in performance.

## Understanding Solar Control (SHGC)

The Solar Heat Gain Coefficient (SHGC) measures how much heat from the sun passes through a window. A lower SHGC means better solar control, which is crucial during Victoria's hot summer months. With improved SHGC, our double-glazed units help keep your home cooler by reducing the amount of heat entering, lessening the need for air conditioning and lowering cooling costs. While all our DGU ranges offer strong insulation, it's in solar control where the performance difference truly shines.

## Performance Data

### Essential

DGU Essential - Unit Makeup	U-Val	SHGC	VLT	Tdw-I	Tuv
6 Clear   12 Argon 90%   6 Clear	2.6	0.71	0.78	0.68	0.44
6 Crystal Clear   12 Argon 90%   6 Clear	2.6	0.79	0.81	0.73	0.54
6 Grey   12 Argon 90%   6 Clear	2.6	0.48	0.39	0.34	0.16
6.38 Clear Lam   12 Argon 90%   6 Clear	2.5	0.67	0.78	0.55	0.01
6.76 Acoustic Lam   12 Argon 90%   6 Clear	2.5	0.66	0.77	0.53	0.00

### Pro

DGU Pro - Unit Makeup	U-Val	SHGC	VLT	Tdw-I	Tuv
6 Clear   12 Argon 90%   6 EnergyTech#3	1.6	0.67	0.73	0.61	0.36
6 Grey   12 Argon 90%   6 EnergyTech#3	1.6	0.43	0.36	0.31	0.13
6 Evantage Clear#2   12 Argon 90%   6 Clear	1.7	0.56	0.61	0.48	0.23
6 Grey   12 Argon 90%   6 Evantage Clear#3	1.7	0.40	0.31	0.24	0.09
6 Evantage Grey#2   12 Argon 90%   6 Clear	1.7	0.33	0.29	0.23	0.08
6 Evantage Grey#2   12 Argon 90%   6 Grey	1.7	0.31	0.14	0.12	0.04
6 Clear   12 Argon 90%   6 Planibel G#3	1.7	0.67	0.72	0.60	0.35
6 Grey   12 Argon 90%   6 Planibel G#3	1.7	0.43	0.36	0.30	0.13
6 Clear   12 Argon 90%   6 SolTech#3	1.6	0.64	0.56	0.50	0.30
6 SolTech#2   12 Argon 90%   6 Clear	1.6	0.45	0.56	0.50	0.30

### Premium

DGU Pro - Unit Makeup	U-Val	SHGC	VLT	Tdw-I	Tuv
6 Clear   12 Argon 90%   6 LightTech#3	1.4	0.56	0.77	0.62	0.33
6 Crystal Clear   12 Argon 90%   6 LightTech#3	1.4	0.61	0.80	0.66	0.40
6 Grey   12 Argon 90%   6 LightTech#3	1.4	0.35	0.39	0.32	0.13
6.38 Clear Lam   12 Argon 90%   6 LightTech#3	1.4	0.53	0.77	0.52	0.01
6.76 Acoustic Lam   12 Argon 90%   6 LightTech#3	1.4	0.53	0.76	0.50	0.00

### Max

DGU Max - Unit Makeup	U-Val	SHGC	VLT	Tdw-I	Tuv
6 LightTech LI Max#2   12 Argon 90%   6 Clear	1.4	0.33	0.70	0.49	0.09
6 LightTech LI Max#2   12 Argon 90%   6 Crystal Clear	1.4	0.33	0.72	0.51	0.11
6 Grey   12 Argon 90%   6 LightTech LI Max#3	1.4	0.25	0.35	0.25	0.04
6 LightTech LI Max#2   12 Argon 90%   6.38 Clear Lam	1.4	0.33	0.69	0.45	0.00
6 LightTech LI Max#2   12 Argon 90%   6.76 Acoustic Lam	1.4	0.33	0.69	0.44	0.00

GLASS  
MATTERS

THE PERFECT FRAME REQUIRES  
THE PERFECT GLASS



For Further details and in-depth performance data scan the QR codes displayed!





# Supporting You in Selecting the Perfect Glass Solution

The first step in creating the perfect indoor environment is understanding that the glass used in your chosen framing system is essential for improving overall performance and achieving the ideal aesthetics for your home. Remember, **Glass Matters**. Now that we've established there's more to a window than just the frame, selecting the right glass becomes your next priority.

Typically, Australian homes have been single-glazed, largely due to a lack of infrastructure for double glazing. However, with the introduction of new 7-star building standards and a growing desire to create homes that are both financially and environmentally efficient, ensuring your home is equipped with high-quality double glazing isn't just an upgrade—it's becoming essential. Not pairing your frames with the right glass is like sleeping on just a bed frame—hardly comfortable, is it? The frame's sole purpose is to support what matters most: the mattress. In your case, it's the glass.

That's why FGS has heavily invested in crafting the perfect double-glazed solutions for the Australian market, designed to handle cooler winter months and scorching summers alike. Our DGU range covers every aspect to help create the perfect living environment year-round.

It's important to remember that our solutions aren't a one-size-fits-all fix. Different homes will require different glass combinations to achieve optimal efficiency and comfort. Do you have a room where summer heat becomes unbearable due to large glass windows? DGU Max might be the best fit. Have a darker space in your home where glare isn't an issue, but it gets too cold in winter due to low light? DGU Pro could be the perfect choice for you.

The best part? You don't need to worry about making this decision on your own. A quick chat with your fabricator will guide you to the right solution for each room, ensuring you consider both your budget and living needs.



## DGUEssential

Base Performance  
Double-Glazing



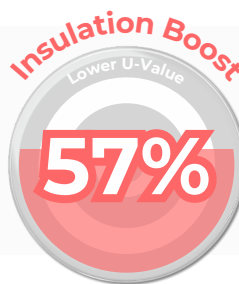
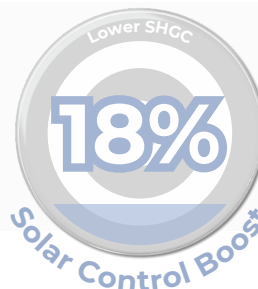
### About

A necessary upgrade from single glazing, offering improved insulation at an affordable price. Ideal for rooms where summer heat isn't a concern, this budget-friendly solution provides just the right amount of insulation, making it perfect for spaces needing a basic energy efficiency boost.

### Essential Features



- Winter Comfort
- Insulating Properties
- Sound Proofing
- Added Security



## DGUPremium

High Performance  
Double-Glazing



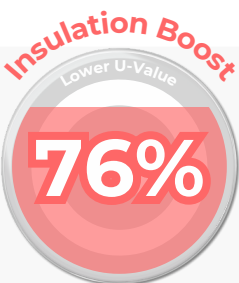
### About

Ideal for spaces and openings where moderate sun exposure is an issue, while maintaining warmth during the winter is the main concern. Offering a **76%** improvement in insulation and a **36%** boost in solar control, this single silver double glazing strikes a balance, providing dependable energy efficiency and comfort without unnecessary solar protection.

### Premium Features



- Winter & Spring Comfort
- Enhanced Solar Control
- Top-Tier Insulation
- Single-Silver Technology
- Highly Energy Efficient



## DGUPro

A level above standard  
Double-Glazing



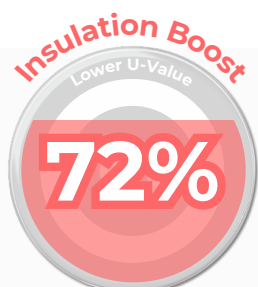
### About

Perfect for rooms where insulation is the key priority, especially in areas with low light exposure. Offering solid energy efficiency, this hardcoat double glazing delivers the insulation you need without overcompensating for solar control, making it ideal for cooler, darker spaces.

### Pro Features



- Enhanced Winter Comfort
- Improved Insulation
- Enhanced Durability
- High UV Protection



## DGUMax

Our Highest Performing  
Double-Glazed Unit to date.



### About

Perfect for large openings exposed to sunlight and stunning views, DGU Max offers a **77%** improvement in insulation and a **62%** boost in solar control, all while maintaining perfect clarity due to its low iron composition. This triple silver solution ensures year-round comfort, allowing abundant visible light and transparency making it ideal for energy efficiency without compromising on style.

### Max Features



- Year-Round Comfort
- Unrivaled Solar Control
- Low Iron Composition
- Triple-Silver Technology
- Superior Energy Efficiency

