Customer Fact Sheet

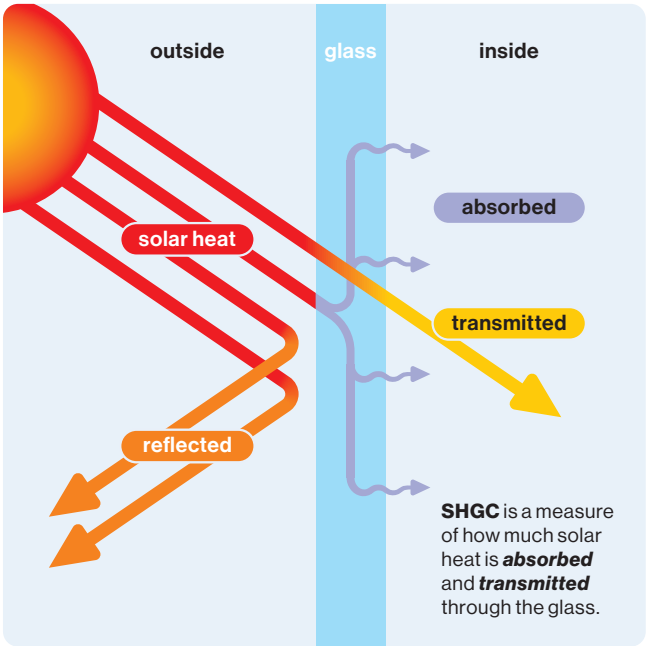
SHGC vs U-Value

What do they mean for your windows?

When choosing energy-efficient windows and glass, two key performance measures you'll come across are **SHGC** and **U-Value**. Understanding what they mean can help you make smarter choices for comfort, energy savings, and climate control.

For new homes and buildings, compliance with the *National Construction Code* will require certain SHGC and U-Values are achieved through the glass and windows used, dependent on overall design and location.

What is SHGC?



SHGC is the **Solar Heat Gain Coefficient**, and is a measure of how much solar heat (sunlight) passes through a window into your home.

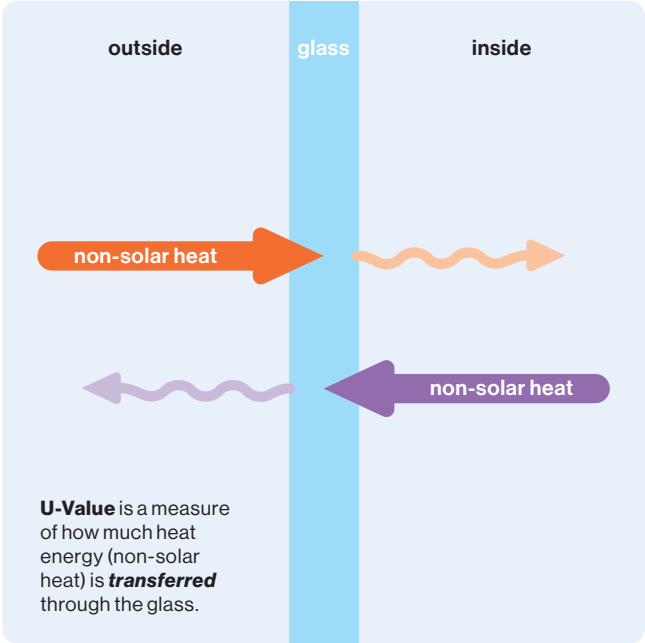
- **Scale:** Ranges from 0 to 1
- **Lower SHGC** = Less solar heat enters
- **Higher SHGC** = More solar heat enters

Why it matters

- In hot climates (like much of Australia), a **low SHGC** keeps homes and buildings cooler and reduces air conditioner use.
- A **low SHGC** also protects interiors and furnishings from fading or deterioration caused by solar / UV radiation.
- In colder climates, a **higher SHGC** may be desirable to let in more heat during winter.

Choose lower SHGC for west- and north-facing windows or large expanses of glass in sunny areas.

What is U-Value?



U-Value measures how much heat transfers through the glass – both in and out.

- **Scale:** Typically ranges from 1 to 10
- **Lower U-Value** = Better insulation
- **Higher U-Value** = More heat loss or gain

Why it matters

- A **low U-Value** helps keep inside air warm during winter and keep the heat out in summer.
- It improves indoor comfort and lowers energy bills year-round.

Look for a low U-Value if energy efficiency and insulation are priorities.

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Quick comparison

Feature	SHGC	U-Value
Measures	Solar heat gain	Heat transfer (insulation)
Scale	0 - 1	Typically 1 - 10 (lower is better)
Lower value means	Less sun/heat enters	Better insulation
Best for	Reducing cooling costs Reducing UV damage	Year-round temperature control
Consider for	Hot climates, sunny windows	All climates

Why it's important

Choosing the right combination of SHGC and U-Value:

- Keeps your home more comfortable
- Reduces your power bills over the entire life of your property
- Permanently reduces energy consumption and improves energy efficiency ratings
- Supports sustainable building practices and reduces environmental impact

What glass delivers the results?

Walshs Glass stocks a complete range of ***Low-E glass***, ***laminated glass*** and ***double glazing*** solutions to meet to suit any budget or performance requirement.

Homeowners.
We recommend you should:

- Check the performance data for SHGC and U-Value against their specific needs
- Choose glass tailored to the home or building's orientation and insulation
- Speak to your builder or window manufacturer about what glass products best suit your needs, budget and long-term energy cost savings.

Trade customers.
For assistance with specification or glass selection:

- Talk to your Walshs Glass account manager or sales team on *08 9366 6666* or *sales@walshsglass.com.au*