



# Insulglass®

An Australian Glass Group Product



**Superior Insulation  
with a full range of  
variations to suit your  
performance needs**



Insulglass® Insulated Glass Units (IGU) consist of 2 or more pieces of glass manufactured as one unit with a trapped air gap separated by a desiccant filled spacer bar and sealed with a primary and secondary seal for structure and guaranteed performance.

Most commonly utilised as a Double Glazed Unit (DGU) you can also change the two glass types to allow multiple aesthetics and applications.

DGU's work extremely well in both cold and hot environments. Superior insulation when it's cold – keeping the heat in and the cold out while more efficient use of your cooling system when it's hot – keeping it cooler inside.

We also fill the air space with Argon gas as standard to add further insulation benefits and we offer a comprehensive range of glass options to suit multiple performance needs.

When adding High Performance LowE coated glass options you supercharge your Insulation and can also significantly reduce Solar Heat Gain – if required.

### Insulglass® Benefits\*:

- **Superior Insulation compared to anything single glazed**
- **Control Solar Heat Gain**
- **Reduce Heating and Cooling energy Waste**
- **Reduce Heating and Cooling energy Costs**
- **Increase the size of your window/door without compromising performance**
- **Control Visible Light levels / Glare factors**
- **Ultraviolet (UV) protection against fading factors**
- **Virtually eliminate Internal Condensation**
- **Superior Acoustics versus any monolithic option**
- **High Performance coated LowE options to stay ahead of trajectory increases in Energy Efficiency demands from Building Codes**

\*Utilising the full range of Insulglass® options



Australian Glass Group also understands the vital importance of certification and compliance of glass products. Our products are manufactured and certified to Australian Standards by an international certification body, Bureau Veritas. Relevant compliance is certified and available on request in key areas including;

AS/NZS 2208:1996 – Safety glazing materials in buildings

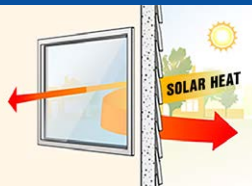
AS/NZS 4666:2012 – Insulated Glass Units





### Natural Light Factor

Visible Light Transmittance – VLT  
Control Natural Light levels



### Cooling Factor

Solar Heat Gain Coefficient – SHGC  
A Cooler home in Summer



### Heating Factor

U-Value – W/m<sup>2</sup>-K  
A Warmer home in Winter

\*Comparisons based on centre of glass performance data in NFRC standards.

## Proudly manufactured, stocked and supported in Australia by Australian Glass Group®

Australian Glass Group offers a full customised range with all Insulglass® offerings

- Warm Edge spacer for further Thermal performance
- Tempershield® toughened options for strength and A-Grade safety
- Obscure Pattern and Acid Etch for privacy
- Laminated for security and A-Grade safety – available in:
  - Standard laminate
  - White translucent laminate for privacy
  - Audioshield™ acoustic laminate for superior sound performance



**Australian Glass Group®**

## Single Glazed Glass

(4mm Clear)



No relative Glare Control



No relative Solar Control



No relative Insulation

Single glazed float glass – keeps the wind and rain out but no relevant Energy Efficiency

Single Float Glass Performance Data

	Colour	Visible Light VLT	Insulation U-Value	Solar Control SHGC
<b>Clear</b>				
4mm Clear	Clear	91	5.9	0.87
5mm Clear	Clear	90	5.8	0.86
6mm Clear	Clear	89	5.8	0.84
8mm Clear	Clear	88	5.7	0.82
<b>Grey</b>				
4mm Grey	Grey	56	5.9	0.69
6mm Grey	Grey	44	5.8	0.61
<b>Clear Laminate</b>				
6.38mm Clear	Clear	89	5.7	0.82
<b>White Translucent Laminate</b>				
6.38mm WhiteTrans	White	68	5.7	0.70

Note: Data using centre of glass performance in NFRC standards.



(4mm Clear/12argon/4mm Clear)



High VLT to allow high levels of Natural Light inside



High SHGC for cold environments to allow more Solar Heat inside



**56%** better Insulation than standard single glaze\*

A full range of non-coated DGU options, surpassing any single glazed option in terms of insulation



(4mm LowE Prime/12argon/4mm Clear)



Lower VLT to reduce Glare Factors



**37%** better Solar Control than standard single glaze\*



**71%** better Insulation than standard single glaze\*

An ideal LowE for warmer climates to minimise Glare and a balance of Solar Control & great Insulation

**Insulglass Classic<sup>®</sup> Performance Data**

Double Glazed Units (DGU)	Colour	Visible Light VLT	Insulation U-Value	Solar Control SHGC
<b>Insulglass Classic<sup>®</sup> - Clear</b>				
4mm Clear/12mm argon/4mm Clear	Clear	81	2.6	0.77
5mm Clear/12mm argon/5mm Clear	Clear	81	2.6	0.76
6mm Clear/12mm argon/6mm Clear	Clear	80	2.5	0.74
8mm Clear/12mm argon/8mm Clear	Clear	79	2.5	0.71
<b>Insulglass Classic<sup>®</sup> - Grey</b>				
4mm Grey/12mm argon/4mm Clear	Grey	51	2.6	0.58
6mm Grey/12mm argon/6mm Clear	Grey	40	2.5	0.49
<b>Insulglass Classic<sup>®</sup> - Clear Laminate</b>				
6.38mm Clear lam/12mm argon/4mm Clear	Clear	81	2.5	0.72
6.38mm Clear lam/12mm argon/6mm Clear	Clear	80	2.5	0.71
<b>Insulglass Classic<sup>®</sup> - White Translucent Laminate</b>				
6.38mm WTrans lam/12mm argon/4mm Clear	White	62	2.5	0.59
6.38mm WTrans lam/12mm argon/6mm Clear	White	61	2.5	0.59

Note: Data using centre of glass performance in NFRC standards with argon gas.

**Insulglass LowE Prime<sup>®</sup> Performance Data**

Double Glazed Units (DGU)	Colour	Visible Light VLT	Insulation U-Value	Solar Control SHGC
<b>Insulglass LowE Prime<sup>®</sup> - Clear</b>				
4mm LowE Prime/12mm argon/4mm Clear	Neutral	69	1.7	0.55
5mm LowE Prime/12mm argon/5mm Clear	Neutral	68	1.7	0.54
6mm LowE Prime/12mm argon/6mm Clear	Neutral	68	1.6	0.54
8mm LowE Prime/12mm argon/8mm Clear	Neutral	67	1.6	0.52
<b>Insulglass LowE Prime<sup>®</sup> - Grey</b>				
4mm Grey/12mm argon/4mm LowE Prime	Grey	43	1.7	0.48
6mm Grey/12mm argon/6mm LowE Prime	Grey	34	1.6	0.40
<b>Insulglass LowE Prime<sup>®</sup> - Clear Laminate</b>				
4mm LowE Prime/12mm argon/6.38mm Clear lam	Neutral	69	1.6	0.55
6mm LowE Prime/12mm argon/6.38mm Clear lam	Neutral	68	1.6	0.54
<b>Insulglass LowE Prime<sup>®</sup> - White Translucent Laminate</b>				
4mm LowE Prime/12mm argon/6.38mm WTrans lam	White	52	1.6	0.53
6mm LowE Prime/12mm argon/6.38mm WTrans lam	White	52	1.6	0.52

Note: Data using centre of glass performance in NFRC standards with argon gas and coating to surface #2 and surface #3 for the Grey options.



(4mm Clear/12argon/4mm LowE Plus)



High VLT to allow high levels of Natural Light inside



High SHGC for cold environments to allow more Solar Heat inside



**76%** better Insulation than standard single glaze\*

An ideal LowE for colder climates with maximum Visible Light, Passive Heat Gain & excellent Insulation

**Insulglass LowE Plus® Performance Data**

Double Glazed Units (DGU)	Colour	Visible Light VLT	Insulation U-Value	Solar Control SHGC
<b>Insulglass LowE Plus® - Clear</b>				
4mm Clear/12mm argon/4mm LowE Plus	Clear	81	1.4	0.61
5mm Clear/12mm argon/5mm LowE Plus	Clear	80	1.4	0.60
6mm Clear/12mm argon/6mm LowE Plus	Clear	79	1.4	0.59
8mm Clear/12mm argon/8mm LowE Plus	Clear	78	1.4	0.57
<b>Insulglass LowE Plus® - Grey</b>				
4mm Grey/12mm argon/4mm LowE Plus	Grey	51	1.4	0.44
6mm Grey/12mm argon/6mm LowE Plus	Grey	39	1.4	0.36
<b>Insulglass LowE Plus® - Clear Laminate</b>				
6.38mm Clear lam/12mm argon/4mm LowE Plus	Clear	80	1.4	0.56
6.38mm Clear lam/12mm argon/6mm LowE Plus	Clear	79	1.4	0.56
<b>Insulglass LowE Plus® - White Translucent laminate</b>				
6.38mm WTrans lam/12mm argon/4mm LowE Plus	White	61	1.4	0.45
6.38mm WTrans lam/12mm argon/6mm LowE Plus	White	60	1.4	0.45

Note: Data using centre of glass performance in NFRC standards with argon gas and coating to surface #3.



(6mm LowE Max/12argon/6mm Clear)



Reduce Glare Factors and Superior Light to Solar Gain ratio



**68%** better Solar Control than standard single glaze\*



**78%** better Insulation than standard single glaze\*

Superior performance to maximise both Solar Control and Insulation without compromising Visible Light

**Insulglass LowE Max® Performance Data**

Double Glazed Units (DGU)	Colour	Visible Light VLT	Insulation U-Value	Solar Control SHGC
<b>Insulglass LowE Max® - Clear</b>				
6mm LowE Max/12mm argon/6mm Clear	Neutral	64	1.3	0.27
6mm LowE Max/12mm argon/6mm Low Iron	Neutral	66	1.3	0.27
<b>Insulglass LowE Max® - Grey</b>				
6mm Grey/12mm argon/6mm LowE Max	Grey	32	1.3	0.23
<b>Insulglass LowE Max® - Clear Laminate</b>				
6mm LowE Max/12mm argon/6.38mm Clear lam	Neutral	64	1.3	0.27
<b>Insulglass LowE Max® - White Translucent Laminate</b>				
6mm LowE Max/12mm argon/6.38mm WTrans lam	White	49	1.3	0.26

Note: Data using centre of glass performance in NFRC standards with argon gas and coating to surface #2 and surface #3 for the Grey option.

Australian Glass Group  
are proud members of:



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WINDOW**  
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