



# Insulglass®

An Australian Glass Group Product



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



Australian  
Glass Group®



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.

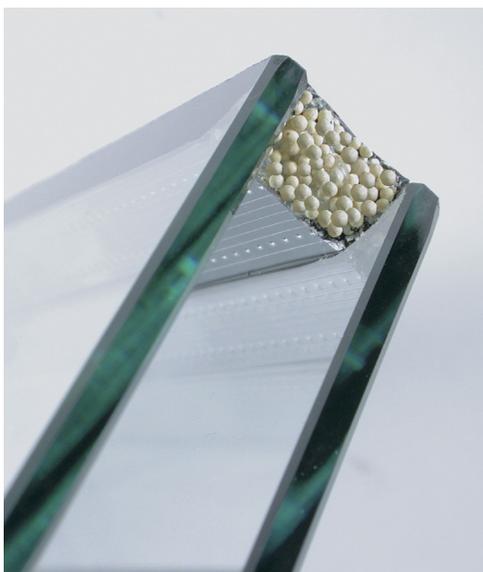
When adding High Performance LowE coated glass options you supercharge your Insulation and can also significantly reduce Solar Heat Gain – if required.

\* May exclude some specialised sizes.

### Insulglass® Benefits\*:

- **Superior Insulation compared to anything single glazed (low U-Value)**
- **Control Solar Heat Gain (High, Mid or Low SHGC)**
- **Reduce Heating and Cooling loads**
- **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





## Energy Efficient Double Glazing



### Natural Light Factor

Visible Light Transmittance – VLT  
Control Natural Light levels



### Heating Factor

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



### Cooling Factor

Solar Heat Gain Coefficient – SHGC  
A Cooler home in Summer



### Selectivity

Light to Solar Gain ratio (LSG)  
Allow Light in but block the Heat



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



High VLT to allow high levels of Natural Light inside



**57%** better Insulation than standard single glaze\*



High SHGC for cold environments to allow more Solar Heat inside



High VLT but also high SHGC



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



Lower VLT to reduce Glare Factors



**72%** better Insulation than standard single glaze\*



**36%** better Solar Control than standard single glaze\*



A balance of VLT and SHGC



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



High VLT to allow high levels of Natural Light inside



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



High SHGC for cold environments to allow more Solar Heat inside



Looks like regular float glass but with better Selectivity



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



Reduce Glare Factors and Excellent Light to Solar Gain ratio



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



**58%** better Solar Control than standard single glaze\*



Spectrally Selective with an LSG ratio above 2.0



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



Reduce Glare Factors and Superior Light to Solar Gain ratio



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



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



Superior Spectrally Selective with the highest LSG ratio of 2.44 with Clear glass and 2.52 with Low Iron

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

Insulglass Classic® Performance Data				
Double Glazed Units (DGU)	Colour	Visible Light VLT	Insulation U-Value	Solar Control SHGC
<b>Insulglass Classic® – Clear</b>				
4mm Clear/12mm argon/4mm Clear	Clear	81	2.6	0.77
5mm Clear/12mm argon/5mm Clear	Clear	80	2.6	0.76
6mm Clear/12mm argon/6mm Clear	Clear	79	2.5	0.74
8mm Clear/12mm argon/8mm Clear	Clear	79	2.5	0.71
<b>Insulglass Classic® – 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® – Clear Laminated</b>				
4mm Clear/12mm argon/6.38mm Clear lam	Clear	81	2.5	0.76
6mm Clear/12mm argon/6.38mm Clear lam	Clear	80	2.5	0.73
<b>Insulglass Classic® – White Translucent Laminated</b>				
6.38mm WTrans lam/12mm argon/4mm Clear	White	62	2.5	0.70
6.38mm WTrans lam/12mm argon/6mm Clear	White	61	2.5	0.68

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

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

Insulglass LowE Prime® Performance Data				
Double Glazed Units (DGU)	Colour	Visible Light VLT	Insulation U-Value	Solar Control SHGC
<b>Insulglass LowE Prime® – 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® – 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® – Clear Laminated</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® – White Translucent Laminated</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 LowE Prime coating to surface #2 except the Grey options having coating on surface #3.

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 Laminated</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 Laminated</b>				
6.38mm WTrans lam/12mm argon/4mm LowE Plus	White	61	1.4	0.46
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 LowE Plus coating to surface #3.

Excellent performance to advance both Solar Control and Insulation, without compromising Visible Light

Insulglass LowE Advance® Performance Data				
Double Glazed Units (DGU)	Colour	Visible Light VLT	Insulation U-Value	Solar Control SHGC
<b>Insulglass LowE Advance® – Clear</b>				
6mm LowE Advance/12mm argon/4mm Clear	Clear	72	1.3	0.35
6mm LowE Advance/12mm argon/5mm Clear	Clear	71	1.3	0.35
6mm LowE Advance/12mm argon/6mm Clear	Clear	71	1.3	0.35
8mm LowE Advance/12mm argon/8mm Clear	Clear	70	1.3	0.34
<b>Insulglass LowE Advance® – Grey</b>				
6mm Grey/12mm argon/6mm LowE Advance	Grey	35	1.3	0.26
8mm Grey/12mm argon/8mm LowE Advance	Grey	27	1.3	0.22
<b>Insulglass LowE Advance® – Clear Laminated</b>				
6mm LowE Advance/12mm argon/6.38mm Clear lam	Clear	71	1.3	0.35
8mm LowE Advance/12mm argon/8.38mm Clear lam	Clear	71	1.3	0.34
<b>Insulglass LowE Advance® – White Translucent Laminated</b>				
6mm LowE Advance/12mm argon/6.38mm WTrans lam	White	54	1.3	0.34
8mm LowE Advance/12mm argon/6.38mm WTrans lam	White	54	1.3	0.33

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

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/4mm Clear	Neutral	67	1.3	0.27
6mm LowE Max/12mm argon/5mm Clear	Neutral	66	1.3	0.27
6mm LowE Max/12mm argon/6mm Clear	Neutral	66	1.3	0.27
8mm LowE Max/12mm argon/8mm Clear	Neutral	65	1.3	0.27
<b>Insulglass LowE Max® – Low Iron</b>				
6mm LowE Max/12mm argon/6mm Low Iron	Neutral	68	1.3	0.27
<b>Insulglass LowE Max® – Grey</b>				
6mm Grey/12mm argon/6mm LowE Max	Grey	33	1.3	0.22
8mm Grey/12mm argon/8mm LowE Max	Grey	25	1.3	0.19
<b>Insulglass LowE Max® – Clear Laminated</b>				
6mm LowE Max/12mm argon/6.38mm Clear lam	Neutral	66	1.3	0.27
<b>Insulglass LowE Max® – White Translucent Laminated</b>				
6mm LowE Max/12mm argon/6.38mm WTrans lam	White	51	1.3	0.26

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

## 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 Grade A safety
- Obscure Pattern and Acid Etch for privacy
- Laminated for security and Grade A safety – available in:
  - Standard laminate
  - White translucent laminate for privacy
  - Audioshield® acoustic laminate for superior sound performance



Australian Glass Group  
are proud members of:



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**GLASS &  
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ASSOCIATION



[agg.com.au](http://agg.com.au) | [info@agg.com.au](mailto:info@agg.com.au) | 1300 768 024

**AGG NSW**

140 Gilba Rd  
Girraween, NSW  
P: (02) 9896 0566  
F: (02) 9896 0190

**AGG VIC**

81-83 Rushdale St  
Knoxfield, VIC  
P: (03) 9730 7400  
F: (03) 9730 7488

**AGG TAS**

39 South Arm Rd  
Rokeya, TAS  
P: (03) 6247 1625  
F: (03) 6247 6843