Window and Door Specification for 7 Stars

LET'S RAISE THE BAR

7 Star energy efficiency guide for NSW & SA



ACHIEVING ENERGY EFFICIENCY

What are the steps you can take to improve your Window and Door energy efficiency?

When it comes to evaluating the performance of your windows and doors, there are several factors to be considered when deciding the best options for keeping your home thermally comfortable.

Glazing has the greatest impact and which glass is best depends on your climate and whether more energy is used heating or cooling your house: 'Climate zones' are defined by the Australian Building Codes Board, referenced in the National Construction Code and they are used in energy rating a home.



The above map highlights the different climate zones you'll find throughout New South Wales and South Australia. Source: abcb.gov.au

New South Wales and South Australia have multiple climate zones:

This document deals with Sydney and surrounds, including Wollongong, Hunter and Port Macquarie regions and coastal areas of SA encompassing Ceduna and Adelaide and some hinterland areas north of Whyalla and east of Adelaide (climate zone 5). As well as inland NSW and SA (climate zone 4). These regions are considered warm temperate climates, requiring a balance between reducing heating loads in winter and cooling loads in summer.

For these climate zones, your windows and doors must have both a low U value (for better insulation) and a low Solar Heat Gain Co-efficient (SHGC), to prevent the heat from the sun from entering your house.

For Northern NSW, the region above Port Macquarie from the coast to the border of QLD (climate zone 2), please refer to our QLD guide.

For the ACT and NSW Alpine regions (climate zones 6, 7 and 8), please refer to our VIC and ACT guide.

Potential options for improving your Energy Efficiency through glass are as follows:

STANDARD

SINGLED GLAZED CLEAR

This is the entry-level of window and door glazing, with a single layer of clear glass. It is not highly efficient from an insulation or energy performance perspective. It allows natural light to enter the space but doesn't offer the enhanced features found in more advanced glazing options. This is where you start if you're looking for a cost-effective and simple solution.

GOOD

SINGLE GLAZED - LOW-E NEUTRAL

A good upgrade from Single Glazed Clear, the glass is coated in thin layers of metallic oxide when manufactured, which reflects radiant heat helping to maintain a cooler interior.

DOUBLE GLAZED CLEAR

BETTER

Double Glazing is the starting point of superior insulation and creating a thermally comfortable home. Featuring two layers of glass separated by a spacer, providing a substantial barrier against heat loss as well as external noise.

BEST

DOUBLE GLAZED - LOW-E

Take Double Glazing to another level by applying a high-performance soft coat Low-E coating to the inside piece of glass. This helps to further minimise heat loss to the external environment, reducing the windows U value to meet 7-star compliance. Soft coat Low-E is the highest performing Low-E.

While performance will be a very important factor in determining what glass you ultimately choose, other factors such as cost, window colours, availability and lead times may also influence your decision.

Stegbar will work with you to understand your needs and provide you with a personalised recommendation on product and glass type that will align with your project requirements.







NSW and SA are classified as mixed climate zones and require a balance between reducing heating loads in winter and cooling loads in summer to keep occupants thermally comfortable.

Colour choice can also play a part in achieving Energy Efficiency in conjunction with U Value and SHGC; Darker colours are preferable to capture and transfer radiant heat into the interior of the dwelling.

In addition to good design and orientation, the products and glazing we recommend below will assist in achieving 7-stars for your building.

Product Type	WERS Code	Option	Glass Type	U Value	SHGC	Cooling	Heating
Residential Awning Window	STG-002-001	Standard	SG Clear	6.4	0.64	*	****
	STG-002-013	Good	SG Low-E Neutral	5.0	0.42	***	****
	STG-001-044	Better	DG Clear	4.4	0.57	***	*****
	STG-001-070	Best	DG Low-E Soft Coat	3.1	0.45	****	*****
Residential Sliding Window	STG-007-001	Standard	SG Clear	6.3	0.71	k	***
	STG-007-012	Good	SG Low-E Neutral	4.6	0.46	***	****
	STG-006-042	Better	DG Clear	4.2	0.57	***	****
	STG-006-068	Best	DG Low-E Soft Coat	3.4	0.45	****	****
Alumiere Awning Window	STG-067-001	Standard	SG Clear	6.6	0.63	**	****
	STG-067-020	Good	SG Low-E Neutral	5.3	0.42	***	****
	STG-068-TBA	Better	DG Clear	4.2	0.57	****	*****
	STG-068- TBA	Best	DG Low-E Soft Coat	3.4	0.44	****	*****
Alumiere Sliding Window	STG-065-001	Standard	SG Clear	6.5	0.69	t.	***
	STG-065-020	Good	SG Low-E Neutral	4.9	0.44	***	***
	STG-066-TBA	Better	DG Clear	3.9	0.63	****	****
	STG-066-TBA	Best	DG Low-E Soft Coat	3.0	0.48	****	****
Residential Sliding Door	STG-005-002	Standard	SG Clear	6.2	0.72	4	***
	STG-005-011	Good	SG Low-E Neutral	4.5	0.47	***	****
	STG-004-012	Better	DG Clear	3.9	0.60	***	****
	STG-004-TBA	Best	DG Low-E Soft Coat	2.8	0.44	****	****
Alumiere Sliding Door	STG-075-001	Standard	SG Clear	6.1	0.64	**	***
	STG-075-022	Good	SG Low-E Neutral	4.5	0.41	****	****
	STG-076-001	Better	DG Clear	3.8	0.58	***	****
	STG-076-TBA	Best	DG Low-E Soft Coat	3.0	0.48	****	****

* SG - Single Glazed; DG - Double Glazed



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