Window and Door Specification for 7 Stars

LET'S RAISE THE BAR.

7 Star energy efficiency guide for VIC and the ACT



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 Victoria, the Australian Capital Territory and Tasmania. Source: abcb.gov.au

Victoria and the Australian Capital Territory have multiple climate zones:

This document deals with climate zones 6, 7 and 8 which are considered heating climates, requiring windows and doors with a low U Value (which denotes better insulation) and high Solar Heat Gain Co-efficient (SHGC) (to capture free heat from the sun).

For the Central Victorian region from Shepparton to the NSW border and out to Echuca (climate zone 4), please refer to our New South Wales guide.

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



DOUBLE GLAZED CLEAR

STANDARD

DOUBLE GLAZED LOW-E

GOOD

DOUBLE GLAZED LOW-E DOUBLE COAT

BETTER

DOUBLE GLAZED THERMALLY BROKEN

ULTIMATE

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.

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.

The pinnacle in energy efficient glazing systems, take the power of a Low-E coating and then apply that on both pieces of glass. This solution offers unparalleled thermal efficiency as well as UV protection. While it represents a higher initial investment, the long-term benefits are substantial.

Our best-performing solution is our Envira Collection thermally broken aluminium frame with Low-E Double Glazing. The combination of the high-performing glass and improved energy efficiency of the thermally broken frame provides superior energy efficiency and will suit the most demanding applications.

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.

To reiterate, Victoria and the Australian Capital Territory are classified as heating climate zones and therefore to keep your home thermally comfortable, energy is predominantly used to heat the home.

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-001-023	Standard	Residential DG Clear	4.2	0.57	**1	****
	STG-001-070	Good	Residential DG Low-E Soft Coat	3.1	0.45	****	*****
	STG-001-TBA	Better	Hybrid DG Low-E Double Coat	2.7	0.42		
	STG-102-039	Best	EnviraSlim Thermally Broken DG Low-E	2.0	0.40	****	*****
Residential Sliding Window	STG-006-041	Standard	Residential DG Clear	4.3	0.71	***	****
	STG-006-068	Good	Residential DG Low-E Soft Coat	3.4	0.45	****	****
	STG-006-300	Better	Residential DG Low-E Double Coat	3.1	0.41	****	****
	STG-104-037	Best	EnviraSlim Thermally Broken DG Low-E	1.9	0.46	***	****
Semi Commercial Awning Window	STG-068-TBA	Good	Alumiere DG Clear	4.2	0.57		
	STG-068-TBA	Better	Alumiere DG Low-E Soft Coat	3.4	0.44		
	STG-068-300	Best	Alumiere DG Low-E Double Coat	3.2	0.40	****	*****
	STG-103-020	Best	EnviraLuxe Thermally Broken DG Low-E	2.1	0.35	****	*****
Semi Commercial Sliding Window	STG-066-TBA	Standard	Alumiere DG Clear	3.9	0.63		
	STG-066-TBA	Good	Alumiere DG Low-E	3.2	0.59		
	STG-066-TBA	Better	Alumiere DG Low-E Soft Coat	3.0	0.48		
	STG-066-300	Best	Alumiere DG Low-E Double Coat	2.8	0.43	****	****
Residential Sliding Door	STG-004-012	Standard	Residential DG Clear	3.9	0.60	***	****
	STG-004-030	Good	Residential DG Low-E Soft Coat	2.8	0.44	***	*****
	STG-004-300	Better	Residential DG Low-E Double Coat	2.7	0.44	****	****
	STG-108-024	Best	EnviraSlim Thermally Broken DG Low-E	1.7	0.44	****	*****
Semi Commercial Sliding Door	STG-076-001	Standard	Alumiere DG Clear	3.8	0.58	***	****
	STG-076-TBA	Good	Alumiere DG Low-E Soft Coat	3.0	0.48		
	STG-076-300	Better	Alumiere DG Low-E Double Coat	2.8	0.41	****	****
	STG-109-053	Best	EnviraLuxe Thermally Broken DG Low-E	1.7	0.41	****	*****

*DG - Double Glazed



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