



LET'S RAISE THE BAR.

7 Star energy efficiency guide for Queensland

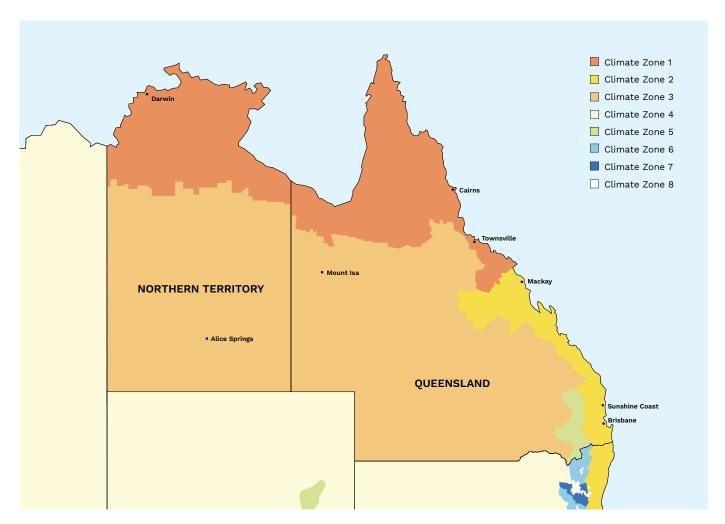
STEGBAR

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 Queensland. Source: abcb.gov.au

Queensland has multiple climate zones:

This document deals with the Queensland coastal region (climate zone 2) which is primarily a cooling climate, so it is most important that your windows and doors have a low Solar Heat Gain Co-efficient (SHGC), as you want to prevent the heat from the sun entering your house.

At the same time, climate zone 2 experiences mild winters, so having windows with a lower U Value is equally important. A lower U Value contributes to energy efficiency by minimising heat loss and reducing the need for heating in cooler seasons. In turn, this lowers energy consumption and associated heating costs.

For the Western region, including Toowoomba and Dalby (climate zone 5), please refer to the NSW 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.



BETTER

SINGLE GLAZED - LOW-E GREY

Perfect for the Queensland climate and a step up in performance from Low-E Single Glazed, adding the grey tone to your selection will provide improved solar control and thermal insulation. Not only increasing your thermal comfort, but also helping to reduce the fading of your furniture, carpet and other interior surfaces.



BEST

DOUBLE GLAZED - LOW-E GREY

Double glazing with Low-E Grey toned glass provides a significant improvement in the U value helping to retain heat in cooler months, and SHGC helping to prevent the heat from the sun entering your house in the warmer months.



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. Queensland has predominantly cooling climate zones which means that most energy used is to cool the home 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-002-024	Standard	SG Clear	6.4	0.64	**	****
	STG-002-007	Good	SG Low-E Neutral	4.9	0.41	***	****
	STG-002-022	Better	SG Low-E Grey	4.9	0.37	****	****
	STG-001-055	Best	DG Low-E Grey	3.7	0.35	****	*****
Residential Sliding Window	STG-007-001	Standard	SG Clear	6.3	0.71	7	***
	STG-007-007	Good	SG Low-E Neutral	4.5	0.45	**1	****
	STG-007-019	Better	SG Low-E Grey	4.6	0.41	****	****
	STG-006-055	Best	DG Low-E Grey	3.8	0.39	****	****
Alumiere Awning Window	STG-067-001	Standard	SG Clear	6.6	0.63	**	****
	STG-067-022	Good	SG Low-E Neutral	5.3	0.40	***	***
	STG-067-026	Better	SG Low-E Grey	5.3	0.37	***	****
	STG-068-303	Best	DG Low-E Grey	3.4	0.31	****	*****
Alumiere Sliding Window	STG-065-001	Standard	SG Clear	6.5	0.69	7	***
	STG-065-022	Good	SG Low-E Neutral	4.8	0.43	***	***
	STG-065-026	Better	SG Low-E Grey	4.9	0.39	****	***
	STG-066-301	Best	DG Low-E Grey	3.0	0.33	****	****
Residential Sliding Door	STG-005-002	Standard	SG Clear	6.2	0.72	7	***
	STG-005-006	Good	SG Low-E Neutral	4.4	0.45	***	****
	STG-005-018	Better	SG Low-E Grey	4.5	0.43	***	****
	STG-004-302	Best	DG Low-E Grey	3.4	0.38	****	****
Alumiere Sliding Door	STG-075-001	Standard	SG Clear	6.1	0.64	*1	***
	STG-075-022	Good	SG Low-E Neutral	4.4	0.40	****	****
	STG-075-026	Better	SG Low-E Grey	4.5	0.36	****	****
	STG-076-301	Best	DG Low-E Grey	3.4	0.35	****	***

^{*} SG - Single Glazed; DG - Double Glazed



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