BASIX Certificate Alterations and Additions

Certificate number: A1765426 - 20, September 2024

Hot Water
The applicant must install the following hot water system in the development: electric heat pump.

Lighting
The applicant must ensure a minimum of 40% of new or altered light fixtures are fitted with fluorescent, compact fluorescent, or light-emitting-diode (LED) lamps.

Fixtures
The applicant must ensure new or altered showerheads have a flow rate no greater than 9 litres per minute or a 3 star water rating. The applicant must ensure new or altered toilets have a flow rate no greater than 4 litres per average flush or a minimum 3 star water rating. The applicant must ensure new or altered taps have a flow rate no greater than 9 litres per minute or minimum 3 star water rating.

Insulation requirements
The applicant must construct the new or altered construction (floor(s), walls, and ceilings/roofs) in accordance with the specifications listed in the table below, except that a) additional insulation is not required where the area of new construction is less than 2m2, b) insulation specified is not required for parts of altered construction where insulation already exists.

Construction	Additional Insulation required (R-value	Other Specifications
concrete slab on ground floor	nil	
Floor above existing dwelling or building	nil	
external wall: framed (weatherboard, fibro, metal clad)	R1.30 (or R1.70 including construction)	
Flat ceiling, pitched roof	ceiling: R2.5 (up), roof: foil/sarking	medium (solar absorptance 0.475 – 0.7)
Flat ceiling, flat roof: framed	ceiling: R2.5 (up), roof: foil/sarking	medium (solar absorptance 0.475 – 0.7)

Windows and glazed doors
The applicant must install the windows, glazed doors and shading devices, in accordance with the specifications listed in the table below. Relevant overshadowing specifications must be satisfied for each window and glazed door. The following requirements must also be satisfied in relation to each window and glazed door: Each window or glazed door with standard aluminium or timber frames and single clear or toned glass may either match the description, or, have a U-value and a Solar Heat Gain Coefficient (SHGC) no greater than that listed in the table below. Total system U-values and SHGCs must be calculated in accordance with National Fenestration Rating Council (NFRC) conditions. Each window or glazed door with improved frames, or pyrolytic low-e glass, or clear/air gap/clear glazing, or toned/air gap/clear glazing must have a U-value and a Solar Heat Gain Coefficient (SHGC) no greater than that listed in the table below. Total system U-values and SHGCs must be calculated in accordance with National Fenestration Rating Council (NFRC) conditions. The description is provided for information only. Alternative systems with complying U-value and SHGC may be substituted. For projections described in millimetres, the leading edge of each eave, pergola, verandah, balcony or awning must be no more than 500 mm above the head of the window or glazed door and no more than 2400 mm above the sill. For projections described as a ratio, the ratio of the projection from the wall to the height above the window or glazed door sill must be at least that shown in the table below. Pergolas with polycarbonate roof or similar translucent material must have a shading coefficient of less than 0.35. Pergolas with fixed battens must have battens parallel to the window or glazed door above which they are situated, unless the pergola also shades a perpendicular window. The spacing between battens must not be more than 50 mm. Overshadowing buildings or vegetation must be of the height and distance from the centre and the base of the window and glazed door, as specified in the 'overshadowing' column in the table below.

Note: All details on this summary should be cross checked with the actual BASIX Certificate before ordering.

Window/door no.	Orientation	Area of glass inc. frame (m2)	Overshadowing		Shading device	Frame and glass type
			Height (m)	Distance (m)		
W1	NE	1.38	5.7	2.7	None	timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66)
W2	NE	1.81	6.0	2.7	None	timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66)
W3	NE	1.51	6.0	2.7	None	timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66)
W4	NE	2.09	8.4	4.0	eave/verandah/pergola/balcony >=600 mm	Standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)
W5	NE	13.46	7.9	4.0	eave/verandah/pergola/balcony >=900 mm	Standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)
W6	NW	18.02	0.0	0.0	projection/height above sill ratio >=0.43	Standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)
W7	SE	2.7	0.0	0.0	eave/verandah/pergola/balcony >=900 mm	timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66)
W8	NE	1.8	2.3	2.7	External louvre/blind (adjustable)	timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66)
W9	NE	6.27	6.5	4.0	External louvre/blind (adjustable)	Standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)
W10	NE	8.71	3.1	4.0	eave/verandah/pergola/balcony >=450 mm	Standard aluminium, single pyrolytic low E, (or U-value: 5.7 SHGC: 0.47
W11	NW	15.9	0.0	0.0	projection/height above sill ratio >=0.43	Standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)
W12	NE	4.32	0.0	0.0	External louvre/blind (fixed)	Standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)
W13	NE	2.16	0.0	0.0	External louvre/blind (fixed)	Standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)
W14	NW	11.34	0.0	0.0	projection/height above sill ratio >=0.36	Standard aluminium, single pyrolytic low E, (or U-value: 5.7 SHGC: 0.47
W15	NE	2.85	3.1	4.0	External louvre/blind (adjustable)	Standard aluminium, single clear, (or U-value: 7.63, SHGC: 0.75)
D1	NE	1.91	5.7	2.7	None	timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66)

Skylights
The applicant must install the skylights in accordance with the specifications listed in the table below. The following requirements must also be satisfied in relation to each skylight: Each skylight may either match the description, or, have a U-value and a Solar Heat Gain Coefficient (SHGC) no greater than that listed in the table below.

Skylight Number	Area of glazing inc. frame (m2)	Shading Device	Frame and glass type
S1	1.09	No shading	Timber, Low –E internal/argon fill/clear external, or (U-Value: 2.5, SHGC: 0.456)
S2	0.66	No shading	Timber, Low –E internal/argon fill/clear external, or (U-Value: 2.5, SHGC: 0.456)
S3	0.39	No shading	Timber, Low –E internal/argon fill/clear external, or (U-Value: 2.5, SHGC: 0.456)