

# VigorSpace™ SP100 Commercial Series Energy Rating Information

All simulation of the following products have been performed using Australian Fenestration Rating Council (AFRC) regulations in LBNL Windows7.3 and LBNL Therm7.3.

The performance values displayed on the following pages are for use in the calculation of **Whole of Window (WoW)** energy requirements with reference to G.James window rating datas in accordance with Australian National Construction Code, Volume 1 (section J) & Volume 2 Part 3.12. These values are not to be used for the purpose of glass only energy requirements.

The Energy Rating provides U-value, Solar Heat Gain Coefficient(SHGC), Visible Transmittance(Tvis) and Australian Window Energy Rating(cooling and heating star).

**U-value** is the rate of heat transfer of the window or door. U-Factor values generally range from 1.4 to 7.0 in  $\text{W}/\text{m}^2 \cdot \text{K}$ . The Lower the U-factor, the better the window or door insulates.

**Solar Heat Gain Coefficient(SHGC)** is the fraction of solar energy transmitted and indicates how much solar heat window or door (glass and frame) gained and released inward. SHGC is measured on a scale of 0 to 1, values typically range from 0.25 to 0.80. The lower the SHGC, the less solar heat the window transmits.

**Tvis** is the fraction of how much light coming through the window or door (glass and frame). Tvis is measured on a scale of 0 to 1, the higher the value is, the more light coming through the window or door.

## NOTES

1. U-value is the whole window U-value
2. SHGC is the whole window solar heat gain coefficient
3. Tvis is the whole window visible (light) transmittance
4. 5 / 12 / 5 means double 5mm clear tempered glass with 12mm air gap, Ar is argon gap
5. OL is Online Low-E coating
6. #2 is the 2nd surface of glass from window outside
7. Cooling and Heating Star of Australian Window Energy Rating are concluded with reference to WERS Certified Products Directory and relevant ratings of A&L, Capral, G.James and Trend Windows, for reference only.

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Glazing	U-value W/m <sup>2</sup> ·K	SHGC	Tvis	Australian Window Energy Rating				
				Cooling Star	Heating Star			
<b>SP100 Commercial Sliding Stacking Door</b>								
<b>Single Glazed</b>								
6	5.78	0.70	0.74	★	★★★			
6 LowE ( OL120 )	3.78	0.56	0.67	★★★	★★★★★			
<b>Laminated Glazed</b>								
8.38 ( 4 + 0.38 pvb + 4 )	5.65	0.65	0.73	★★	★★★			
8.38 ( 4 + 0.38 pvb + 4 LowE, OL120 )	3.48	0.53	0.68	★★★★	★★★★★			
8.38 ( 4 Solar Reflective on EuroGrey 5840 + 0.38 pvb + 4 )	5.56	0.29	0.35	★★★	★			
8.38 ( 4 Solar Reflective on EuroGrey 5840 + 0.38 pvb + 4 LowE, OL120 )	3.42	0.23	0.31	★★★★★	★★★★★			
9.38 ( 5 + 0.38 pvb + 4 )	5.64	0.63	0.72	★★	★★★			
9.38 ( 5 + 0.38 pvb + 4 LowE, OL120 )	3.47	0.52	0.68	★★★	★★★★★			
9.38 ( 5 Solar Reflective on EuroGrey 5840 + 0.38 pvb + 4 )	5.55	0.28	0.35	★★★	★			
9.38 ( 5 Solar Reflective on EuroGrey 5840 + 0.38 pvb + 4 LowE, OL120 )	3.42	0.23	0.31	★★★★★	★★★★★			
<b>Double Glazed</b>								
5 / 12 / 5	3.51	0.64	0.67	★★★	★★★★★			
5 / 12 Ar / 5	3.34	0.64	0.68	★★★	★★★★★			
5 lowE / 12 / 5 (OL120)	2.59	0.47	0.62	★★★	★★★★★			
5 lowE / 12 Ar / 5 (OL120)	2.44	0.47	0.62	★★★	★★★★★			
5 Solar Reflective on EuroGrey 5840 / 12 / 5 lowE (OL120)	2.29	0.21	0.29	★★★★★	★★★★★			
5 Solar Reflective on EuroGrey 5840 / 12Ar / 5 lowE (OL120)	2.18	0.20	0.29	★★★★★	★★★★★			
<b>SP100 Commercial Sliding Door</b>								
<b>Single Glazed</b>								
6	5.99	0.68	0.71	★	★★★			
6 LowE ( OL120 )	3.92	0.54	0.65	★★★	★★★★★			
<b>Laminated Glazed</b>								

8.38 ( 4 + 0.38 pvb + 4 )	5.86	0.62	0.71	★★	★★★
8.38 ( 4 + 0.38 pvb + 4 LowE, OL120)	3.60	0.51	0.66	★★★	★★★★★
8.38 ( 4 Solar Reflective on EuroGrey 5840 + 0.38 pvb + 4 )	5.75	0.27	0.33	★★★	★
8.38 ( 4 Solar Reflective on EuroGrey 5840 + 0.38 pvb + 4 LowE, OL120 )	3.54	0.23	0.31	★★★★	★★★★★
9.38 ( 5 + 0.38 pvb + 4 )	5.84	0.61	0.70	★★	★★★
9.38 ( 5 + 0.38 pvb + 4 LowE, OL120)	3.59	0.50	0.66	★★★	★★★★★
9.38 ( 5 Solar Reflective on EuroGrey 5840 + 0.38 pvb + 4 )	5.74	0.26	0.33	★★★	★
9.38 ( 5 Solar Reflective on EuroGrey 5840 + 0.38 pvb + 4 LowE, OL120 )	3.54	0.23	0.31	★★★★	★★★★★

#### Double Glazed

5 / 12 / 5	3.64	0.61	0.66	★★★	★★★★★
5 / 12 Ar / 5	3.46	0.62	0.66	★★★	★★★★★
5 lowE / 12 / 5 (OL120)	2.68	0.45	0.60	★★★	★★★★★
5 lowE / 12 Ar / 5 (OL120)	2.52	0.45	0.60	★★★	★★★★★
5 Solar Reflective on EuroGrey 5840 / 12 / 5 lowE (OL120)	2.37	0.21	0.29	★★★★★	★★★★★
5 Solar Reflective on EuroGrey 5840 / 12Ar / 5 lowE (OL120)	2.25	0.20	0.29	★★★★★	★★★★★

### SP100 Commercial Awning & Casement Window

#### Single Glazed

6	5.97	0.69	0.72	★	★★★
6 LowE ( OL120 )	3.92	0.53	0.64	★★★	★★★★★

#### Laminated Glazed

8.38 ( 4 + 0.38 pvb + 4 )	5.80	0.62	0.69	★★	★★★
8.38 ( 4 + 0.38 pvb + 4 LowE, OL120)	3.56	0.50	0.65	★★★	★★★★★
8.38 ( 4 Solar Reflective on EuroGrey 5840 + 0.38 pvb + 4 )	5.67	0.28	0.32	★★★	★
8.38 ( 4 Solar Reflective on EuroGrey 5840 + 0.38 pvb + 4 LowE, OL120 )	3.49	0.23	0.31	★★★★	★★★★★
9.38 ( 5 + 0.38 pvb + 4 )	5.78	0.61	0.67	★★	★★★
9.38 ( 5 + 0.38 pvb + 4 LowE, OL120 )	3.55	0.49	0.64	★★★	★★★★★
9.38 ( 5 Solar Reflective on EuroGrey 5840 + 0.38 pvb + 4 )	5.66	0.27	0.33	★★★	★
9.38 ( 5 Solar Reflective on EuroGrey 5840 + 0.38 pvb + 4 LowE, OL120 )	3.49	0.23	0.31	★★★★	★★★★★

#### Double Glazed

5 / 12 / 5	3.61	0.63	0.64	★★★	★★★★★
5 / 12 Ar / 5	3.44	0.63	0.64	★★★	★★★★★
5 lowE / 12 / 5 (OL120)	2.63	0.47	0.60	★★★	★★★★★
5 lowE / 12 Ar / 5 (OL120)	2.47	0.47	0.59	★★★	★★★★★
5 Solar Reflective on EuroGrey 5840 / 12 / 5 lowE (OL120)	2.34	0.21	0.30	★★★★★	★★★★★
5 Solar Reflective on EuroGrey 5840 / 12Ar / 5 lowE (OL120)	2.23	0.20	0.29	★★★★★	★★★★★

### SP100 Commercial Hinged Door

#### Single Glazed

6	5.94	0.70	0.72	★	★★★
6 LowE ( OL120 )	3.89	0.55	0.65	★★★	★★★★★

#### Laminated Glazed

8.38 ( 4 + 0.38 pvb + 4 )	5.77	0.63	0.69	★★	★★★
8.38 ( 4 + 0.38 pvb + 4 LowE, OL120)	3.54	0.50	0.65	★★★	★★★★★
8.38 ( 4 Solar Reflective on EuroGrey 5840 + 0.38 pvb + 4 )	5.64	0.28	0.33	★★★	★
8.38 ( 4 Solar Reflective on EuroGrey 5840 + 0.38 pvb + 4 LowE, OL120 )	3.48	0.24	0.31	★★★★	★★★★★
9.38 ( 5 + 0.38 pvb + 4 )	5.75	0.62	0.68	★★	★★★
9.38 ( 5 + 0.38 pvb + 4 LowE, OL120 )	3.53	0.49	0.65	★★★	★★★★★
9.38 ( 5 Solar Reflective on EuroGrey 5840 + 0.38 pvb + 4 )	5.63	0.27	0.33	★★★	★
9.38 ( 5 Solar Reflective on EuroGrey 5840 + 0.38 pvb + 4 LowE, OL120 )	3.47	0.23	0.31	★★★★	★★★★★

#### Double Glazed

5 / 12 / 5	3.59	0.64	0.65	★★★	★★★★★
5 / 12 Ar / 5	3.42	0.64	0.65	★★★	★★★★★
5 lowE / 12 / 5 (OL120)	2.62	0.47	0.61	★★★	★★★★★
5 lowE / 12 Ar / 5 (OL120)	2.46	0.47	0.60	★★★	★★★★★
5 Solar Reflective on EuroGrey 5840 / 12 / 5 lowE (OL120)	2.33	0.21	0.30	★★★★★	★★★★★
5 Solar Reflective on EuroGrey 5840 / 12Ar / 5 lowE (OL120)	2.22	0.20	0.29	★★★★★	★★★★★

### SP100 Commercial Fixed Window

#### Single Glazed

6	5.46	0.72	0.76	★	★★★★★
6 LowE ( OL120 )	3.56	0.59	0.69	★★★★★	★★★★★★
<b>Laminated Glazed</b>					
8.38 ( 4 + 0.38 pvb + 4 )	5.34	0.67	0.75	★★★	★★★★★
8.38 ( 4 + 0.38 pvb + 4 LowE, OL120 )	3.28	0.55	0.69	★★★★★	★★★★★★
8.38 ( 4 Solar Reflective on EuroGrey 5840 + 0.38 pvb + 4 )	5.26	0.29	0.36	★★★★★	★
8.38 ( 4 Solar Reflective on EuroGrey 5840 + 0.38 pvb + 4 LowE, OL120 )	3.23	0.24	0.33	★★★★★	★★★★★
9.38 ( 5 + 0.38 pvb + 4 )	5.33	0.65	0.75	★★★	★★★★★
9.38 ( 5 + 0.38 pvb + 4 LowE, OL120 )	3.27	0.55	0.70	★★★★★	★★★★★★
9.38 ( 5 Solar Reflective on EuroGrey 5840 + 0.38 pvb + 4 )	5.24	0.28	0.36	★★★★★	★
9.38 ( 5 Solar Reflective on EuroGrey 5840 + 0.38 pvb + 4 LowE, OL120 )	3.23	0.24	0.33	★★★★★	★★★★★
<b>Double Glazed</b>					
5 / 12 / 5	3.32	0.66	0.70	★★★	★★★★★
5 / 12 Ar / 5	3.17	0.66	0.70	★★★	★★★★★
5 lowE / 12 / 5 (OL120)	2.45	0.48	0.64	★★★	★★★★★★
5 lowE / 12 Ar / 5 (OL120)	2.31	0.48	0.64	★★★	★★★★★★
5 Solar Reflective on EuroGrey 5840 / 12 / 5 lowE (OL120)	2.16	0.22	0.31	★★★★★	★★★★★
5 Solar Reflective on EuroGrey 5840 / 12Ar / 5 lowE (OL120)	2.06	0.21	0.30	★★★★★	★★★★★
<b>SP100 Glass Louver</b>					
5 clear	5.42	0.71	0.75	★	★★★★★
6 clear	5.38	0.71	0.74	★	★★★★★
6 LowE (OL120)	3.45	0.57	0.68	★★★	★★★★★