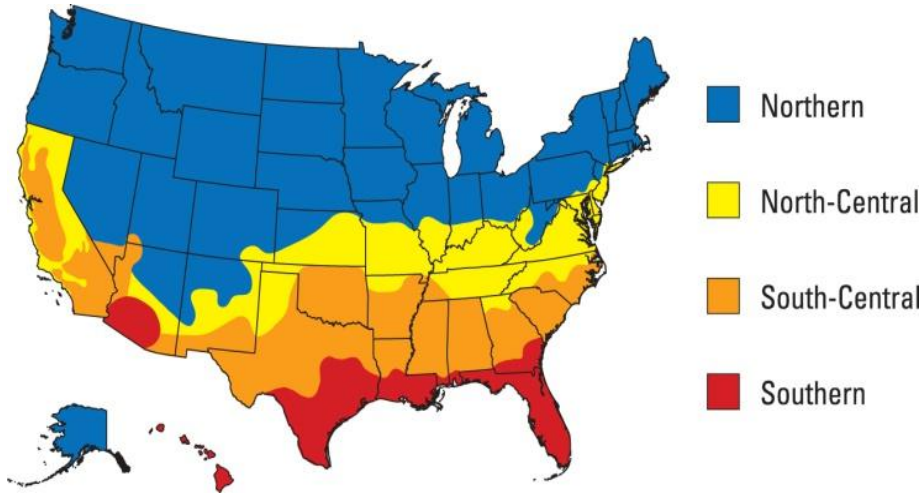


VigorSpace™ Alplast Thermal-Break Series Energy Rating Information

The ENERGY STAR program for the United States divides the nation into four separate climate zones – Northern, North-Central, South-Central, and Southern. The performance criteria that needs to be met in order to be ENERGY STAR® compliant in specific climate zones are shown in the charts provided.

US ENERGY STAR® Climate Zone Map and Criteria(2016)



Windows

Climate Zone	U-factor (BTU/h·ft ² ·°F)	SHGC
Northern	≤ 0.27	Any
Northern Equivalent	= 0.28	≥ 0.32
	= 0.29	≥ 0.37
	= 0.30	≥ 0.42
North-Central	≤ 0.30	≤ 0.40
South-Central	≤ 0.30	≤ 0.25
Southern	≤ 0.40	≤ 0.25

Doors

Glazing Level	U-factor (BTU/h·ft ² ·°F)	SHGC
Opaque	≤ 0.17	No Rating
≤ 1/2 ~ Lite	≤ 0.25	≤ 0.25
≥ 1/2 ~ Lite	≤ 0.30	Northern
		North-Central
		South-Central
		Southern
		≤ 0.40
		≤ 0.25

VigorSpace™ energy efficient Window/ Door energy keep you comfortable and protected. The ENERGY STAR® rating has accreditation for different climates, ranging from very hot to very cold, to moderate.

All simulation of the following products have been performed in National Fenestration Rating Council (NFRC) NFRC 100-2010 procedures and NFRC Simulation Manual July 2013 in LBNL Windows7.3 and LBNL Therm7.3.

The Energy Rating provides U-factor, Solar Heat Gain Coefficient(SHGC), Visible Transmittance(Tvis) and Applicability per US ENERGY STAR® Climate Zone(2016) for VigorSpace™ products.

U-Factor is the rate of heat transfer of the window or door. U-Factor values generally range from 0.25 to 1.25 and are measure in Btu/h-ft². 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 ho 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.

Source: <http://www.energystar.gov>

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. EA is for Energy Advantage Low-E coating, OL is Online Low-E coating
6. #2 is the 2nd surface of glass from window outside

Glazing	U-factor W/m ² ·K	U-factor BTU/h·ft ² ·°F	SHGC	Tvis	Applicability / US ENERGY STAR® Climate Zone(2016)			
					N	NC	SC	S
Ecofutural Awning & Casement Window								
double glazing								
5 / 12 / 5	3.11	0.55	0.61	0.63	---	---	---	---
5 lowE, #2 / 12 / 5 (EA)	2.35	0.41	0.52	0.59	---	---	---	---
5 lowE, #2 / 12Ar / 5 (EA)	2.15	0.38	0.51	0.59	---	---	---	---
5 lowE, #2 / 12 / 5 (OL120)	2.17	0.41	0.50	0.55	---	---	---	---
6 / 12 / 6	3.10	0.55	0.59	0.63	---	---	---	---
6 lowE, #2 / 12 / 6 (EA)	2.34	0.41	0.50	0.58	---	---	---	---
6 lowE, #2 / 12Ar / 6 (EA)	2.14	0.38	0.50	0.58	---	---	---	---
6 lowE, #2 / 12 / 6 (OL120)	2.15	0.41	0.50	0.54	---	---	---	---
6 lowE, #2 / 12Ar / 6 lowE, #4 (EA, OL120)	1.87	0.33	0.45	0.52	---	---	---	---
6 Solar Reflective on 05 Marine Blue 0540, #2 / 12 / 6	3.01	0.53	0.24	0.14	---	---	---	---
6 Solar Reflective on 05 Marine Blue 0540, #2 / 12 / 6 lowE, #3(EA)	2.33	0.41	0.20	0.13	---	---	---	---
6 Solar Reflective on 05 Marine Blue 0540, #2 / 12Ar / 6 lowE, #3 (OL120)	2.03	0.36	0.16	0.12	---	---	---	S
6 Solar Reflective on 22 F Green 2250, #2 / 12 / 6	3.03	0.53	0.25	0.29	---	---	---	---
6 Solar Reflective on 22 F Green 2250, #2 / 12 / 6 lowE, #3 (EA)	2.34	0.41	0.22	0.27	---	---	---	---
6 Solar Reflective on 22 F Green 2250, #2 / 12Ar / 6 lowE, #3 (OL120)	2.04	0.36	0.18	0.26	---	---	---	S
6 Solar Reflective on 58 EuroGrey 5840, #2 / 12 / 6	3.01	0.53	0.24	0.14	---	---	---	---
6 Solar Reflective on 58 EuroGrey 5840, #2 / 12 / 6 lowE, #3(EA)	2.33	0.41	0.20	0.13	---	---	---	---
6 Solar Reflective on 58 EuroGrey 5840, #2 / 12Ar / 6 lowE, #3 (OL120)	2.03	0.36	0.15	0.12	---	---	---	S
triple glazing								
5 lowE, #2 / 9Ar / 5 / 9Ar / 5 (EA)	1.92	0.34	0.48	0.50	---	---	---	---
5 lowE, #2 / 9Ar / 5 / 9Ar / 5 (OL120)	1.67	0.29	0.42	0.47	N	---	---	---
5 lowE, #2 / 9Ar / 5 lowE, #4 / 9Ar / 5 (OL120, EA)	1.51	0.27	0.40	0.44	N	NC	---	---
6 lowE, #2 / 12Ar / 6 / 12Ar / 6 (EA)	1.87	0.34	0.46	0.49	---	---	---	---
6 lowE, #2 / 12Ar / 6 / 12Ar / 6 (OL120)	1.63	0.29	0.41	0.46	N	---	---	---
6 lowE, #2 / 12Ar / 6 Solar Reflective on 05 Marine Blue 0540, #3 / 12Ar / 6 (OL120)	1.51	0.27	0.15	0.11	N	NC	SC	S
6 lowE, #2 / 12Ar / 6 Solar Reflective on 22 F Green 2250, #3 / 12Ar / 6 (OL120)	1.51	0.27	0.16	0.23	N	NC	SC	S
6 lowE, #2 / 12Ar / 6 Solar Reflective on 58 EuroGrey 5840, #3 / 12Ar / 6 (OL120)	1.51	0.27	0.15	0.11	N	NC	SC	S
6 lowE, #2 / 12Ar / 6 lowE, #4 / 12Ar / 6 (OL120, EA)	1.48	0.27	0.39	0.43	N	NC	---	---
Ecofutural Tilt&Turn Window								
double glazing								
5 / 12 / 5	3.06	0.54	0.61	0.65	---	---	---	---
5 lowE, #2 / 12 / 5 (EA)	2.30	0.41	0.52	0.60	---	---	---	---
5 lowE, #2 / 12Ar / 5 (EA)	2.11	0.37	0.52	0.60	---	---	---	---
5 lowE, #2 / 12 / 5 (OL120)	2.10	0.41	0.50	0.55	---	---	---	---
6 / 12 / 6	3.05	0.54	0.59	0.65	---	---	---	---
6 lowE, #2 / 12 / 6 (EA)	2.30	0.40	0.51	0.60	---	---	---	---
6 lowE, #2 / 12Ar / 6 (EA)	2.10	0.37	0.51	0.60	---	---	---	---
6 lowE, #2 / 12 / 6 (OL120)	2.09	0.41	0.50	0.54	---	---	---	---
6 lowE, #2 / 12Ar / 6 lowE, #4 (EA, OL120)	1.83	0.33	0.45	0.52	---	---	---	---
6 Solar Reflective on 05 Marine Blue 0540, #2 / 12 / 6	2.96	0.52	0.25	0.15	---	---	---	---
6 Solar Reflective on 05 Marine Blue 0540, #2 / 12 / 6 lowE, #3(EA)	2.29	0.40	0.21	0.14	---	---	---	S
6 Solar Reflective on 05 Marine Blue 0540, #2 / 12Ar / 6 lowE, #3 (OL120)	1.99	0.35	0.17	0.13	---	---	---	S
6 Solar Reflective on 22 F Green 2250, #2 / 12 / 6	2.97	0.52	0.26	0.30	---	---	---	---
6 Solar Reflective on 22 F Green 2250, #2 / 12 / 6 lowE, #3 (EA)	2.29	0.40	0.22	0.28	---	---	---	S
6 Solar Reflective on 22 F Green 2250, #2 / 12Ar / 6 lowE, #3 (OL120)	2.00	0.35	0.19	0.26	---	---	---	S
6 Solar Reflective on 58 EuroGrey 5840, #2 / 12 / 6	2.96	0.52	0.25	0.15	---	---	---	---
6 Solar Reflective on 58 EuroGrey 5840, #2 / 12 / 6 lowE, #3(EA)	2.29	0.40	0.21	0.14	---	---	---	S
6 Solar Reflective on 58 EuroGrey 5840, #2 / 12Ar / 6 lowE, #3 (OL120)	1.99	0.35	0.16	0.13	---	---	---	S
triple glazing								
5 lowE, #2 / 9Ar / 5 / 9Ar / 5 (EA)	1.89	0.33	0.48	0.51	---	---	---	---
5 lowE, #2 / 9Ar / 5 / 9Ar / 5 (OL120)	1.64	0.29	0.41	0.49	N	---	---	---
5 lowE, #2 / 9Ar / 5 lowE, #4 / 9Ar / 5 (OL120, EA)	1.48	0.26	0.40	0.45	N	NC	---	---
6 lowE, #2 / 12Ar / 6 / 12Ar / 6 (EA)	1.85	0.34	0.46	0.50	---	---	---	---
6 lowE, #2 / 12Ar / 6 / 12Ar / 6 (OL120)	1.61	0.29	0.40	0.47	N	NC	---	---

6 lowE, #2 / 12Ar / 6 Solar Reflective on 05 Marine Blue 0540, #3 / 12Ar / 6 (OL120)	1.51	0.27	0.15	0.12	N	NC	SC	S
6 lowE, #2 / 12Ar / 6 Solar Reflective on 22 F Green 2250, #3 / 12Ar / 6 (OL120)	1.51	0.27	0.16	0.23	N	NC	SC	S
6 lowE, #2 / 12Ar / 6 Solar Reflective on 58 EuroGrey 5840, #3 / 12Ar / 6 (OL120)	1.51	0.27	0.15	0.12	N	NC	SC	S
6 lowE, #2 / 12Ar / 6 lowE, #4 / 12Ar / 6 (OL120, EA)	1.45	0.27	0.39	0.45	N	NC	---	---
Ecofutural Fixed Window								
double glazing								
5 / 12 / 5	2.88	0.51	0.64	0.68	---	---	---	---
5 lowE, #2 / 12 / 5 (EA)	2.17	0.38	0.54	0.63	---	---	---	---
5 lowE, #2 / 12Ar / 5 (EA)	1.99	0.35	0.54	0.63	---	---	---	---
5 lowE, #2 / 12 / 5 (OL120)	1.97	0.41	0.52	0.56	---	---	---	---
6 / 12 / 6	2.87	0.51	0.62	0.67	---	---	---	---
6 lowE, #2 / 12 / 6 (EA)	2.17	0.38	0.53	0.63	---	---	---	---
6 lowE, #2 / 12Ar / 6 (EA)	1.98	0.35	0.53	0.63	---	---	---	---
6 lowE, #2 / 12 / 6 (OL120)	1.96	0.41	0.52	0.55	---	---	---	---
6 lowE, #2 / 12Ar / 6 lowE, #4 (EA, OL120)	1.72	0.33	0.46	0.54	---	---	---	---
6 Solar Reflective on 05 Marine Blue 0540, #2 / 12 / 6	2.79	0.49	0.26	0.15	---	---	---	---
6 Solar Reflective on 05 Marine Blue 0540, #2 / 12 / 6 lowE, #3(EA)	2.16	0.38	0.21	0.14	---	---	---	S
6 Solar Reflective on 05 Marine Blue 0540, #2 / 12Ar / 6 lowE, #3 (OL120)	1.88	0.33	0.17	0.13	---	---	---	S
6 Solar Reflective on 22 F Green 2250, #2 / 12 / 6	2.81	0.49	0.27	0.32	---	---	---	---
6 Solar Reflective on 22 F Green 2250, #2 / 12 / 6 lowE, #3 (EA)	2.16	0.38	0.23	0.30	---	---	---	S
6 Solar Reflective on 22 F Green 2250, #2 / 12Ar / 6 lowE, #3 (OL120)	1.89	0.33	0.19	0.28	---	---	---	S
6 Solar Reflective on 58 EuroGrey 5840, #2 / 12 / 6	2.79	0.49	0.26	0.15	---	---	---	---
6 Solar Reflective on 58 EuroGrey 5840, #2 / 12 / 6 lowE, #3(EA)	2.16	0.38	0.21	0.14	---	---	---	S
6 Solar Reflective on 58 EuroGrey 5840, #2 / 12Ar / 6 lowE, #3 (OL120)	1.88	0.33	0.16	0.13	---	---	---	S
triple glazing								
5 lowE, #2 / 9Ar / 5 / 9Ar / 5 (EA)	1.79	0.31	0.50	0.54	---	---	---	---
5 lowE, #2 / 9Ar / 5 / 9Ar / 5 (OL120)	1.56	0.27	0.42	0.51	N	---	---	---
5 lowE, #2 / 9Ar / 5 lowE, #4 / 9Ar / 5 (OL120, EA)	1.45	0.25	0.40	0.47	N	NC	---	---
6 lowE, #2 / 12Ar / 6 / 12Ar / 6 (EA)	1.72	0.31	0.48	0.53	---	---	---	---
6 lowE, #2 / 12Ar / 6 / 12Ar / 6 (OL120)	1.51	0.27	0.42	0.51	N	---	---	---
6 lowE, #2 / 12Ar / 6 Solar Reflective on 05 Marine Blue 0540, #3 / 12Ar / 6 (OL120)	1.47	0.26	0.16	0.13	N	NC	SC	S
6 lowE, #2 / 12Ar / 6 Solar Reflective on 22 F Green 2250, #3 / 12Ar / 6 (OL120)	1.47	0.26	0.17	0.25	N	NC	SC	S
6 lowE, #2 / 12Ar / 6 Solar Reflective on 58 EuroGrey 5840, #3 / 12Ar / 6 (OL120)	1.47	0.26	0.16	0.13	N	NC	SC	S
6 lowE, #2 / 12Ar / 6 lowE, #4 / 12Ar / 6 (OL120, EA)	1.41	0.25	0.40	0.47	N	NC	---	---
Ecofutural Hinged Door								
double glazing								
5 / 12 / 5	3.04	0.53	0.61	0.64	---	---	---	---
5 lowE, #2 / 12 / 5 (EA)	2.29	0.40	0.52	0.59	---	---	---	---
5 lowE, #2 / 12Ar / 5 (EA)	2.09	0.37	0.51	0.59	---	---	---	---
5 lowE, #2 / 12 / 5 (OL120)	2.07	0.41	0.50	0.54	---	---	---	---
6 / 12 / 6	3.03	0.53	0.59	0.63	---	---	---	---
6 lowE, #2 / 12 / 6 (EA)	2.28	0.40	0.50	0.59	---	---	---	---
6 lowE, #2 / 12Ar / 6 (EA)	2.09	0.37	0.50	0.59	---	---	---	---
6 lowE, #2 / 12 / 6 (OL120)	2.07	0.41	0.49	0.53	---	---	---	---
6 lowE, #2 / 12Ar / 6 lowE, #4 (EA, OL120)	1.81	0.33	0.45	0.52	---	---	---	---
6 Solar Reflective on 05 Marine Blue 0540, #2 / 12 / 6	2.93	0.52	0.24	0.14	---	---	---	---
6 Solar Reflective on 05 Marine Blue 0540, #2 / 12 / 6 lowE, #3(EA)	2.27	0.40	0.20	0.14	---	---	---	---
6 Solar Reflective on 05 Marine Blue 0540, #2 / 12Ar / 6 lowE, #3 (OL120)	1.98	0.35	0.16	0.12	---	---	---	---
6 Solar Reflective on 22 F Green 2250, #2 / 12 / 6	2.95	0.52	0.25	0.30	---	---	---	---
6 Solar Reflective on 22 F Green 2250, #2 / 12 / 6 lowE, #3 (EA)	2.28	0.40	0.22	0.28	---	---	---	---
6 Solar Reflective on 22 F Green 2250, #2 / 12Ar / 6 lowE, #3 (OL120)	1.99	0.35	0.18	0.26	---	---	---	---
6 Solar Reflective on 58 EuroGrey 5840, #2 / 12 / 6	2.93	0.52	0.24	0.14	---	---	---	---
6 Solar Reflective on 58 EuroGrey 5840, #2 / 12 / 6 lowE, #3(EA)	2.27	0.40	0.20	0.14	---	---	---	---
6 Solar Reflective on 58 EuroGrey 5840, #2 / 12Ar / 6 lowE, #3 (OL120)	1.98	0.35	0.16	0.12	---	---	---	---
triple glazing								
5 lowE, #2 / 9Ar / 5 / 9Ar / 5 (EA)	1.88	0.33	0.48	0.50	---	---	---	---
5 lowE, #2 / 9Ar / 5 / 9Ar / 5 (OL120)	1.63	0.29	0.42	0.48	---	---	---	---
5 lowE, #2 / 9Ar / 5 lowE, #4 / 9Ar / 5 (OL120, EA)	1.47	0.26	0.40	0.44	N	NC	---	---
6 lowE, #2 / 12Ar / 6 / 12Ar / 6 (EA)	1.83	0.34	0.46	0.49	---	---	---	---
6 lowE, #2 / 12Ar / 6 / 12Ar / 6 (OL120)	1.58	0.29	0.40	0.47	N	NC	---	---

6 lowE, #2 / 12Ar / 6 Solar Reflective on 05 Marine Blue 0540, #3 / 12Ar / 6 (OL120)	1.50	0.27	0.15	0.12	N	NC	SC	S
6 lowE, #2 / 12Ar / 6 Solar Reflective on 22 F Green 2250, #3 / 12Ar / 6 (OL120)	1.51	0.27	0.16	0.24	N	NC	SC	S
6 lowE, #2 / 12Ar / 6 Solar Reflective on 58 EuroGrey 5840, #3 / 12Ar / 6 (OL120)	1.50	0.27	0.15	0.12	N	NC	SC	S
6 lowE, #2 / 12Ar / 6 lowE, #4 / 12Ar / 6 (OL120, EA)	1.43	0.27	0.39	0.45	N	NC	---	---

Slide+ Sliding Window

double glazing								
5 / 12 / 5	3.27	0.58	0.61	0.64	---	---	---	---
5 lowE, #2 / 12 / 5 (EA)	2.47	0.43	0.52	0.59	---	---	---	---
5 lowE, #2 / 12Ar / 5 (EA)	2.26	0.40	0.52	0.59	---	---	---	---
5 lowE, #2 / 12 / 5 (OL120)	2.21	0.41	0.51	0.54	---	---	---	---
6 / 12 / 6	3.26	0.57	0.59	0.63	---	---	---	---
6 lowE, #2 / 12 / 6 (EA)	2.46	0.43	0.51	0.59	---	---	---	---
6 lowE, #2 / 12Ar / 6 (EA)	2.25	0.40	0.51	0.59	---	---	---	---
6 lowE, #2 / 12 / 6 (OL120)	2.20	0.41	0.50	0.53	---	---	---	---
6 lowE, #2 / 12Ar / 6 lowE, #4 (EA, OL120)	1.96	0.33	0.44	0.51	---	---	---	---
6 Solar Reflective on 05 Marine Blue 0540, #2 / 12 / 6	3.16	0.56	0.25	0.14	---	---	---	---
6 Solar Reflective on 05 Marine Blue 0540, #2 / 12 / 6 lowE, #3(EA)	2.45	0.43	0.21	0.13	---	---	---	---
6 Solar Reflective on 05 Marine Blue 0540, #2 / 12Ar / 6 lowE, #3 (OL120)	2.13	0.38	0.17	0.12	---	---	---	S
6 Solar Reflective on 22 F Green 2250, #2 / 12 / 6	3.18	0.56	0.26	0.30	---	---	---	---
6 Solar Reflective on 22 F Green 2250, #2 / 12 / 6 lowE, #3 (EA)	2.45	0.43	0.22	0.28	---	---	---	---
6 Solar Reflective on 22 F Green 2250, #2 / 12Ar / 6 lowE, #3 (OL120)	2.15	0.38	0.19	0.26	---	---	---	S
6 Solar Reflective on 58 EuroGrey 5840, #2 / 12 / 6	3.16	0.56	0.25	0.14	---	---	---	---
6 Solar Reflective on 58 EuroGrey 5840, #2 / 12 / 6 lowE, #3(EA)	2.45	0.43	0.21	0.13	---	---	---	---
6 Solar Reflective on 58 EuroGrey 5840, #2 / 12Ar / 6 lowE, #3 (OL120)	2.13	0.38	0.16	0.12	---	---	---	S
triple glazing								
5 lowE, #2 / 6Ar / 5 / 6Ar / 5 (EA)	1.96	0.35	0.50	0.53	---	---	---	---
5 lowE, #2 / 6Ar / 5 / 6Ar / 5 (OL60)	1.71	0.30	0.46	0.50	N	---	---	---
5 lowE, #2 / 6Ar / 5 Solar Reflective on 05 Marine Blue 0540, #3 / 6Ar / 5 (OL60)	1.55	0.27	0.17	0.13	N	NC	SC	S
5 lowE, #2 / 6Ar / 5 Solar Reflective on 22 F Green 2250, #3 / 6Ar / 5 (OL60)	1.55	0.27	0.18	0.26	N	NC	SC	S
5 lowE, #2 / 6Ar / 5 Solar Reflective on 58 EuroGrey 5840, #3 / 6Ar / 5 (OL60)	1.55	0.27	0.17	0.13	N	NC	SC	S
5 lowE, #2 / 6Ar / 5 lowE, #4 / 6Ar / 5 (OL60, EA)	1.56	0.27	0.44	0.46	N	---	---	---

Superglide Sliding Door

double glazing								
5 / 12 / 5	3.17	0.56	0.64	0.67	---	---	---	---
5 lowE, #2 / 12 / 5 (EA)	2.39	0.42	0.54	0.61	---	---	---	---
5 lowE, #2 / 12Ar / 5 (EA)	2.19	0.39	0.54	0.61	---	---	---	---
5 lowE, #2 / 12 / 5 (OL120)	2.16	0.41	0.52	0.56	---	---	---	---
6 / 12 / 6	3.16	0.56	0.62	0.66	---	---	---	---
6 lowE, #2 / 12 / 6 (EA)	2.38	0.42	0.53	0.61	---	---	---	---
6 lowE, #2 / 12Ar / 6 (EA)	2.18	0.38	0.53	0.61	---	---	---	---
6 lowE, #2 / 12 / 6 (OL120)	2.15	0.41	0.52	0.56	---	---	---	---
6 lowE, #2 / 12Ar / 6 lowE, #4 (EA, OL120)	1.90	0.33	0.46	0.53	---	---	---	---
6 Solar Reflective on 05 Marine Blue 0540, #2 / 12 / 6	3.07	0.54	0.26	0.15	---	---	---	---
6 Solar Reflective on 05 Marine Blue 0540, #2 / 12 / 6 lowE, #3(EA)	2.38	0.42	0.21	0.14	---	---	---	---
6 Solar Reflective on 05 Marine Blue 0540, #2 / 12Ar / 6 lowE, #3 (OL120)	2.07	0.36	0.17	0.13	---	---	---	S
6 Solar Reflective on 22 F Green 2250, #2 / 12 / 6	3.09	0.54	0.27	0.31	---	---	---	---
6 Solar Reflective on 22 F Green 2250, #2 / 12 / 6 lowE, #3 (EA)	2.38	0.42	0.23	0.29	---	---	---	---
6 Solar Reflective on 22 F Green 2250, #2 / 12Ar / 6 lowE, #3 (OL120)	2.08	0.37	0.19	0.27	---	---	---	S
6 Solar Reflective on 58 EuroGrey 5840, #2 / 12 / 6	3.07	0.54	0.26	0.15	---	---	---	---
6 Solar Reflective on 58 EuroGrey 5840, #2 / 12 / 6 lowE, #3(EA)	2.38	0.42	0.21	0.14	---	---	---	---
6 Solar Reflective on 58 EuroGrey 5840, #2 / 12Ar / 6 lowE, #3 (OL120)	2.07	0.36	0.16	0.13	---	---	---	S
triple glazing								
5 lowE, #2 / 9Ar / 5 / 9Ar / 5 (EA)	1.96	0.35	0.50	0.52	---	---	---	---
5 lowE, #2 / 9Ar / 5 / 9Ar / 5 (OL120)	1.70	0.30	0.42	0.50	N	---	---	---
5 lowE, #2 / 9Ar / 5 lowE, #4 / 9Ar / 5 (OL120, EA)	1.54	0.27	0.40	0.46	N	NC	---	---
6 lowE, #2 / 9Ar / 6 / 9Ar / 6 (EA)	1.90	0.34	0.48	0.51	---	---	---	---
6 lowE, #2 / 9Ar / 6 / 9Ar / 6 (OL120)	1.66	0.29	0.44	0.49	N	---	---	---
6 lowE, #2 / 12Ar / 6 Solar Reflective on 05 Marine Blue 0540, #3 / 12Ar / 6 (OL120)	1.54	0.27	0.16	0.13	N	NC	SC	S
6 lowE, #2 / 12Ar / 6 Solar Reflective on 22 F Green 2250, #3 / 12Ar / 6 (OL120)	1.54	0.27	0.17	0.25	N	NC	SC	S
6 lowE, #2 / 12Ar / 6 Solar Reflective on 58 EuroGrey 5840, #3 / 12Ar / 6 (OL120)	1.54	0.27	0.16	0.13	N	NC	SC	S

6 lowE, #2 / 9Ar / 6 lowE, #4 / 9Ar / 6 (OL120, EA)	1.51	0.27	0.42	0.45	N	---	---	---	---
Ultraglide Lift-Sliding Door									
double glazing									
5 / 12 / 5	3.08	0.54	0.66	0.69	---	---	---	---	---
5 lowE, #2 / 12 / 5 (EA)	2.32	0.41	0.56	0.64	---	---	---	---	---
5 lowE, #2 / 12Ar / 5 (EA)	2.12	0.37	0.56	0.64	---	---	---	---	---
5 lowE, #2 / 12 / 5 (OL120)	2.11	0.41	0.54	0.59	---	---	---	---	---
6 / 12 / 6	3.07	0.54	0.64	0.68	---	---	---	---	---
6 lowE, #2 / 12 / 6 (EA)	2.31	0.41	0.55	0.64	---	---	---	---	---
6 lowE, #2 / 12Ar / 6 (EA)	2.12	0.37	0.55	0.64	---	---	---	---	---
6 lowE, #2 / 12 / 6 (OL120)	2.11	0.41	0.54	0.58	---	---	---	---	---
6 lowE, #2 / 12Ar / 6 lowE, #4 (EA, OL120)	1.86	0.33	0.48	0.55	---	---	---	---	---
6 Solar Reflective on 05 Marine Blue 0540, #2 / 12 / 6	2.98	0.52	0.27	0.16	---	---	---	---	---
6 Solar Reflective on 05 Marine Blue 0540, #2 / 12 / 6 lowE, #3(EA)	2.31	0.41	0.22	0.15	---	---	---	---	---
6 Solar Reflective on 05 Marine Blue 0540, #2 / 12Ar / 6 lowE, #3 (OL120)	2.01	0.35	0.18	0.14	---	---	---	---	S
6 Solar Reflective on 22 F Green 2250, #2 / 12 / 6	3.00	0.53	0.28	0.32	---	---	---	---	---
6 Solar Reflective on 22 F Green 2250, #2 / 12 / 6 lowE, #3 (EA)	2.31	0.41	0.24	0.30	---	---	---	---	---
6 Solar Reflective on 22 F Green 2250, #2 / 12Ar / 6 lowE, #3 (OL120)	2.02	0.36	0.20	0.28	---	---	---	---	S
6 Solar Reflective on 58 EuroGrey 5840, #2 / 12 / 6	2.98	0.52	0.27	0.16	---	---	---	---	---
6 Solar Reflective on 58 EuroGrey 5840, #2 / 12 / 6 lowE, #3(EA)	2.31	0.41	0.22	0.15	---	---	---	---	---
6 Solar Reflective on 58 EuroGrey 5840, #2 / 12Ar / 6 lowE, #3 (OL120)	2.01	0.35	0.17	0.14	---	---	---	---	S
triple glazing									
5 lowE, #2 / 9Ar / 5 / 9Ar / 5 (EA)	1.90	0.34	0.52	0.54	---	---	---	---	---
5 lowE, #2 / 9Ar / 5 / 9Ar / 5 (OL120)	1.65	0.29	0.42	0.52	N	---	---	---	---
5 lowE, #2 / 9Ar / 5 lowE, #4 / 9Ar / 5 (OL120, EA)	1.49	0.26	0.40	0.48	N	NC	---	---	---
6 lowE, #2 / 12Ar / 6 / 12Ar / 6 (EA)	1.84	0.34	0.51	0.52	---	---	---	---	---
6 lowE, #2 / 12Ar / 6 / 12Ar / 6 (OL120)	1.60	0.29	0.40	0.52	N	NC	---	---	---
6 lowE, #2 / 12Ar / 6 Solar Reflective on 05 Marine Blue 0540, #3 / 12Ar / 6 (OL120)	1.53	0.27	0.16	0.14	N	NC	SC	SC	S
6 lowE, #2 / 12Ar / 6 Solar Reflective on 22 F Green 2250, #3 / 12Ar / 6 (OL120)	1.53	0.27	0.17	0.25	N	NC	SC	SC	S
6 lowE, #2 / 12Ar / 6 Solar Reflective on 58 EuroGrey 5840, #3 / 12Ar / 6 (OL120)	1.53	0.27	0.16	0.14	N	NC	SC	SC	S
6 lowE, #2 / 12Ar / 6 lowE, #4 / 12Ar / 6 (OL120, EA)	1.45	0.26	0.39	0.47	N	NC	---	---	---
Ultraglide Lift-Sliding Stacking Door									
double glazing									
5 / 12 / 5	3.14	0.55	0.64	0.67	---	---	---	---	---
5 lowE, #2 / 12 / 5 (EA)	2.37	0.42	0.55	0.62	---	---	---	---	---
5 lowE, #2 / 12Ar / 5 (EA)	2.17	0.38	0.55	0.62	---	---	---	---	---
5 lowE, #2 / 12 / 5 (OL120)	2.15	0.41	0.52	0.58	---	---	---	---	---
6 / 12 / 6	3.13	0.55	0.62	0.66	---	---	---	---	---
6 lowE, #2 / 12 / 6 (EA)	2.36	0.42	0.53	0.62	---	---	---	---	---
6 lowE, #2 / 12Ar / 6 (EA)	2.16	0.38	0.53	0.62	---	---	---	---	---
6 lowE, #2 / 12 / 6 (OL120)	2.14	0.41	0.52	0.57	---	---	---	---	---
6 lowE, #2 / 12Ar / 6 lowE, #4 (EA, OL120)	1.88	0.33	0.47	0.54	---	---	---	---	---
6 Solar Reflective on 05 Marine Blue 0540, #2 / 12 / 6	3.04	0.53	0.26	0.15	---	---	---	---	---
6 Solar Reflective on 05 Marine Blue 0540, #2 / 12 / 6 lowE, #3(EA)	2.35	0.41	0.22	0.14	---	---	---	---	---
6 Solar Reflective on 05 Marine Blue 0540, #2 / 12Ar / 6 lowE, #3 (OL120)	2.05	0.36	0.17	0.13	---	---	---	---	S
6 Solar Reflective on 22 F Green 2250, #2 / 12 / 6	3.06	0.54	0.27	0.31	---	---	---	---	---
6 Solar Reflective on 22 F Green 2250, #2 / 12 / 6 lowE, #3 (EA)	2.36	0.41	0.23	0.29	---	---	---	---	---
6 Solar Reflective on 22 F Green 2250, #2 / 12Ar / 6 lowE, #3 (OL120)	2.06	0.36	0.20	0.27	---	---	---	---	S
6 Solar Reflective on 58 EuroGrey 5840, #2 / 12 / 6	3.04	0.53	0.26	0.15	---	---	---	---	---
6 Solar Reflective on 58 EuroGrey 5840, #2 / 12 / 6 lowE, #3(EA)	2.35	0.41	0.22	0.14	---	---	---	---	---
6 Solar Reflective on 58 EuroGrey 5840, #2 / 12Ar / 6 lowE, #3 (OL120)	2.05	0.36	0.16	0.13	---	---	---	---	S
triple glazing									
5 lowE, #2 / 9Ar / 5 / 9Ar / 5 (EA)	1.94	0.34	0.51	0.53	---	---	---	---	---
5 lowE, #2 / 9Ar / 5 / 9Ar / 5 (OL120)	1.68	0.30	0.42	0.50	N	---	---	---	---
5 lowE, #2 / 9Ar / 5 lowE, #4 / 9Ar / 5 (OL120, EA)	1.52	0.27	0.40	0.47	N	NC	---	---	---
6 lowE, #2 / 12Ar / 6 / 12Ar / 6 (EA)	1.89	0.34	0.50	0.52	---	---	---	---	---
6 lowE, #2 / 12Ar / 6 / 12Ar / 6 (OL120)	1.63	0.30	0.41	0.49	N	---	---	---	---
6 lowE, #2 / 12Ar / 6 Solar Reflective on 05 Marine Blue 0540, #3 / 12Ar / 6 (OL120)	1.54	0.27	0.16	0.14	N	NC	SC	SC	S
6 lowE, #2 / 12Ar / 6 Solar Reflective on 22 F Green 2250, #3 / 12Ar / 6 (OL120)	1.54	0.27	0.17	0.25	N	NC	SC	SC	S
6 lowE, #2 / 12Ar / 6 Solar Reflective on 58 EuroGrey 5840, #3 / 12Ar / 6 (OL120)	1.54	0.27	0.16	0.14	N	NC	SC	SC	S

6 lowE, #2 / 12Ar / 6 lowE, #4 / 12Ar / 6 (OL120, EA)	1.46	0.27	0.40	0.46	N	NC	---	---
Panorama Bi-Folding Door								
double glazing								
5 / 12 / 5	3.09	0.54	0.63	0.66	---	---	---	---
5 lowE, #2 / 12 / 5 (EA)	2.33	0.41	0.53	0.61	---	---	---	---
5 lowE, #2 / 12Ar / 5 (EA)	2.13	0.37	0.53	0.61	---	---	---	---
5 lowE, #2 / 12 / 5 (OL120)	2.11	0.41	0.51	0.56	---	---	---	---
6 / 12 / 6	3.08	0.54	0.61	0.65	---	---	---	---
6 lowE, #2 / 12 / 6 (EA)	2.32	0.41	0.52	0.61	---	---	---	---
6 lowE, #2 / 12Ar / 6 (EA)	2.12	0.37	0.52	0.61	---	---	---	---
6 lowE, #2 / 12 / 6 (OL120)	2.10	0.41	0.51	0.56	---	---	---	---
6 lowE, #2 / 12Ar / 6 lowE, #4 (EA, OL120)	1.85	0.33	0.46	0.52	---	---	---	---
6 Solar Reflective on 05 Marine Blue 0540, #2 / 12 / 6	2.99	0.53	0.25	0.15	---	---	---	---
6 Solar Reflective on 05 Marine Blue 0540, #2 / 12 / 6 lowE, #3(EA)	2.31	0.41	0.21	0.14	---	---	---	---
6 Solar Reflective on 05 Marine Blue 0540, #2 / 12Ar / 6 lowE, #3 (OL120)	2.01	0.35	0.17	0.13	---	---	---	---
6 Solar Reflective on 22 F Green 2250, #2 / 12 / 6	3.01	0.53	0.26	0.31	---	---	---	---
6 Solar Reflective on 22 F Green 2250, #2 / 12 / 6 lowE, #3 (EA)	2.32	0.41	0.22	0.29	---	---	---	---
6 Solar Reflective on 22 F Green 2250, #2 / 12Ar / 6 lowE, #3 (OL120)	2.02	0.36	0.19	0.27	---	---	---	---
6 Solar Reflective on 58 EuroGrey 5840, #2 / 12 / 6	2.99	0.53	0.25	0.15	---	---	---	---
6 Solar Reflective on 58 EuroGrey 5840, #2 / 12 / 6 lowE, #3(EA)	2.31	0.41	0.21	0.14	---	---	---	---
6 Solar Reflective on 58 EuroGrey 5840, #2 / 12Ar / 6 lowE, #3 (OL120)	2.01	0.35	0.16	0.13	---	---	---	---
triple glazing								
5 lowE, #2 / 9Ar / 5 / 9Ar / 5 (EA)	1.91	0.34	0.49	0.52	---	---	---	---
5 lowE, #2 / 9Ar / 5 / 9Ar / 5 (OL120)	1.66	0.29	0.42	0.49	---	---	---	---
5 lowE, #2 / 9Ar / 5 lowE, #4 / 9Ar / 5 (OL120, EA)	1.50	0.26	0.40	0.46	N	NC	---	---
5 lowE, #2 / 9Ar / 5 / 9Ar / 5 (EA)	1.84	0.34	0.48	0.50	---	---	---	---
6 lowE, #2 / 9Ar / 6 / 9Ar / 6 (OL120)	1.61	0.29	0.40	0.47	N	NC	---	---
6 lowE, #2 / 12Ar / 6 Solar Reflective on 05 Marine Blue 0540, #3 / 12Ar / 6 (OL120)	1.50	0.27	0.15	0.12	N	NC	SC	S
6 lowE, #2 / 12Ar / 6 Solar Reflective on 22 F Green 2250, #3 / 12Ar / 6 (OL120)	1.51	0.27	0.16	0.24	N	NC	SC	S
6 lowE, #2 / 12Ar / 6 Solar Reflective on 58 EuroGrey 5840, #3 / 12Ar / 6 (OL120)	1.50	0.27	0.15	0.12	N	NC	SC	S
6 lowE, #2 / 9Ar / 6 lowE, #4 / 9Ar / 6 (OL120, EA)	1.44	0.26	0.39	0.45	N	NC	---	---