intertek
Total Quality. Assured.

130 Derry Court
York, Pennsylvania 17406

Telephone: 717-764-7700
Facsimile: 717-764-4129
www.intertek.com/building

TEST REPORT FOR VIG WINDOWS (SHANDONG) CO., LTD
Report No: Q8071.01-116-45 R0
Date: 04/22/24

SECTION 6
SIMULATION RESULTS

TOTAL PRODUCT CALCULATIONS (VWP91 Awning)														
Option Number	Pane Thickness 1 (in)	Gap Width 1 (in)	Pane Thickness 2 (in)	Gap Width 2 (in)	Pane Thickness 3 (in)	Gap Width 3 (in)	Pane Thickness 4 (in)	Gap Fill	Low-e (Surface #)	Tint	Spacer	Grid Type
	U-Factor (Btu/Hr-Ft2-F)			Solar Heat Gain Coefficient (SHGC) Grids (None / <1 / >=1)					Visible Transmittance (VT) Grids (None / <1 / >=1)		Condensation Resistance (CR)	
1	Optisolar D80 / Arg90 / Clear (6mm/6mm) 24mm IG											
	0.235	0.472	0.231					ARG90	0.072(#2)	CL	TS-D	N
	U-Factor 0.30			**SHGC(N) 0.20**					**VT(N) 0.36**		**CR 58**	
2	Solarban 70 / Arg90 / Clear (6mm/6mm) 24mm IG											
	0.223	0.472	0.231					ARG90	0.018(#2)	CL	TS-D	N
	U-Factor 0.29			**SHGC(N) 0.15**					**VT(N) 0.33**		**CR 60**	
3	Optisolar D80 / Arg90 / Clear (6mm/6mm) 28mm IG											
	0.235	0.630	0.231					ARG90	0.072(#2)	CL	TS-D	N
	U-Factor 0.30			**SHGC(N) 0.20**					**VT(N) 0.36**		**CR 56**	
4	Solarban 70 / Arg90 / Clear (6mm/6mm) 28mm IG											
	0.223	0.630	0.231					ARG90	0.018(#2)	CL	TS-D	N
	U-Factor 0.29			**SHGC(N) 0.15**					**VT(N) 0.33**		**CR 57**	
5	Optilite S1,16 / VIG / Clear (5mm/5mm) 10,15mm IG											
	0.189	0.006	0.191					VIG	0.076(#2)	CL	TS-D	N
	U-Factor 0.26			**SHGC(N) 0.30**					**VT(N) 0.41**		**CR 11**	
6	Optisolar D80 / VIG / Clear (6mm/6mm) 12,15mm IG											
	0.235	0.006	0.231					VIG	0.072(#2)	CL	TS-D	N
	U-Factor 0.27			**SHGC(N) 0.20**					**VT(N) 0.36**		**CR 12**	
7	Optisolar D80 / Arg90 / Optisolar D80 / Arg90 / Clear (6mm/6mm/6mm) 42mm IG											
	0.235	0.472	0.235	0.472	0.231			ARG90	0.072(#2) / 0.072(#4)	CL	TS-D	N
	U-Factor 0.22			**SHGC(N) 0.16**					**VT(N) 0.28**		**CR 73**	
8	Optilite S1,16 / Arg90 / Optilite S1,16 / Arg90 / Clear (5mm/5mm/5mm) 39mm IG											
	0.189	0.472	0.189	0.472	0.191			ARG90	0.076(#2) / 0.076(#4)	CL	TS-D	N
	U-Factor 0.22			**SHGC(N) 0.25**					**VT(N) 0.36**		**CR 73**	
9	Solarban 70 / Arg90 / Optilite S1,16 / Arg90 / Clear (6mm/5mm/5mm) 40mm IG											
	0.223	0.472	0.189	0.472	0.191			ARG90	0.018(#2) / 0.076(#4)	CL	TS-D	N
	U-Factor 0.22			**SHGC(N) 0.13**					**VT(N) 0.30**		**CR 73**	
10	Solarban 70 / Arg90 / Optilite S1,16 / Arg90 / Clear (6mm/6mm/6mm) 42mm IG											
	0.223	0.472	0.235	0.472	0.231			ARG90	0.018(#2) / 0.072(#4)	CL	TS-D	N
	U-Factor 0.22			**SHGC(N) 0.13**					**VT(N) 0.26**		**CR 74**	

130 Derry Court
York, Pennsylvania 17406

Telephone: 717-764-7700
Facsimile: 717-764-4129
www.intertek.com/building

TEST REPORT FOR VIG WINDOWS (SHANDONG) CO., LTD
Report No: Q8071.01-116-45 R0
Date: 04/22/24

SECTION 6 (Continued)
SIMULATION RESULTS

TOTAL PRODUCT CALCULATIONS (VWP91 Awning)

Option Number	Pane Thickness 1 (in)	Gap Width 1 (in)	Pane Thickness 2 (in)	Gap Width 2 (in)	Pane Thickness 3 (in)	Gap Width 3 (in)	Pane Thickness 4 (in)	Gap Fill	Low-e (Surface #)	Tint	Spacer	Grid Type
	U-Factor (Btu/Hr-Ft2-F)			Solar Heat Gain Coefficient (SHGC) Grids (None / <1 / >=1)					Visible Transmittance (VT) Grids (None / <1 / >=1)		Condensation Resistance (CR)	
11	Optisolar D80 / Arg90 / Optisolar D80 / VIG / Clear (6mm/6mm/6mm) 30,15mm IG											
	0.235	0.472	0.235	0.006	0.231			ARG90/VIG	0.072(#2) / 0.072(#4)	CL	TS-D	N
	U-Factor		**0.22**	**SHGC(N)**			**0.15**		**VT(N)**	**0.28**	**CR**	**25**
12	Optisolar D80 / Arg90 / Optisolar D80 / VIG / Clear (6mm/6mm/6mm) 36,15mm IG											
	0.235	0.709	0.235	0.006	0.231			ARG90/VIG	0.072(#2) / 0.072(#4)	CL	TS-D	N
	U-Factor		**0.21**	**SHGC(N)**			**0.15**		**VT(N)**	**0.28**	**CR**	**26**
13	Optilite S1,16 / Arg90 / Optilite S1,16 / VIG / Clear (6mm/6mm/6mm) 24,15mm IG											
	0.189	0.354	0.189	0.006	0.191			ARG90/VIG	0.076(#2) / 0.076(#4)	CL	TS-D	N
	U-Factor		**0.22**	**SHGC(N)**			**0.24**		**VT(N)**	**0.36**	**CR**	**23**
14	YNE0675 Low-e / Arg90 / Clear Lami (10mm/8mm|1,52SGP|8mm) 47,52mm IG											
	0.394	0.787	0.652					ARG90	0.032(#2)	CL	TS-D	N
	U-Factor		**0.28**	**SHGC(N)**			**0.21**		**VT(N)**	**0.34**	**CR**	**58**
15	Solarban 70 / Arg90 / Optilite S1,16 / VIG / Clear (6mm/5mm/5mm) 25,15mm IG											
	0.223	0.354	0.189	0.006	0.191			ARG90/VIG	0.018(#2) / 0.076(#4)	CL	TS-D	N
	U-Factor		**0.22**	**SHGC(N)**			**0.13**		**VT(N)**	**0.30**	**CR**	**24**
16	Solarban 70 / Arg90 / Optilite S1,16 / VIG / Clear (6mm/6mm/6mm) 27,15mm IG											
	0.223	0.354	0.235	0.006	0.231			ARG90/VIG	0.018(#2) / 0.072(#4)	CL	TS-D	N
	U-Factor		**0.22**	**SHGC(N)**			**0.12**		**VT(N)**	**0.26**	**CR**	**24**
17	Optisolar D80 Lami / Arg90 / Clear Lami (8mm|1,52SGP|6mm/8mm|1,52SGP|6mm) 59,56mm IG											
	0.576	1.102	0.652					ARG90	0.072(#2)	CL	TS-D	N
	U-Factor		**0.28**	**SHGC(N)**			**0.19**		**VT(N)**	**0.33**	**CR**	**60**
18	Clear Lami / Arg90 / Optilite S1,16 / VIG / Clear (6mm|2,28SGP|6mm/5mm/5mm) 36,43mm IG											
	0.551	0.472	0.189	0.006	0.191			ARG90/VIG	0.076(#4)	CL	TS-D	N
	U-Factor		**0.22**	**SHGC(N)**			**0.24**		**VT(N)**	**0.36**	**CR**	**18**
19	Clear Lami / Arg90 / Optisolar D80 / VIG / Clear (6mm|1,52SGP|6mm/6mm/6mm) 37,67mm IG											
	0.525	0.472	0.235	0.006	0.231			ARG90/VIG	0.072(#4)	CL	TS-D	N
	U-Factor		**0.22**	**SHGC(N)**			**0.18**		**VT(N)**	**0.32**	**CR**	**18**
20	Clear Lami / Arg90 / Optilite S1,16 / VIG / Clear (6mm|1,52SGP|6mm/5mm/5mm) 35,67mm IG											
	0.525	0.472	0.189	0.006	0.191			ARG90/VIG	0.076(#4)	CL	TS-D	N
	U-Factor		**0.22**	**SHGC(N)**			**0.24**		**VT(N)**	**0.36**	**CR**	**18**