Results Comparison Versions W 7.8.57/ T 7.8.57 to 7.8.575/ T 7.8.55
Whole Products

10/05/2022 -- calculated W 7.8.57/ T 7.8.57
10/05/2022 -- calculated W 7.8.55/ T 7.8.55

Product Ref.	Product Type	Material: Frame / Spacer	Glazing System	Size		U (W/m2-K)				SHGC				VT				CR			
				Width (mm)	Height (mm)	W7.8.55 / T7.8.55	W7.8.57 / T7.8.57	diff (if >= 0.0005)	Diff %	W7.8.55 / T7.8.55	W7.8.57 / T7.8.57	diff	Diff %	W7.8.55 / T7.8.55	W7.8.57 / T7.8.57	diff	Diff %	W7.8.55 / T7.8.55	W7.8.57 / T7.8.57	diff	Diff %
Kawneer 1600 S1	Curtain Wall	TI AL / AL	Clr-6_Air_Clr-6	2032.0	2032.0	3.560851	3.560851	0.00000	0.00%	0.582036	0.582036	0.000	0.00%	0.63921	0.63921	0.000	0.00%	28.445076	28.445076	0.00000	0.0%
CW3	Curtain Wall	TI AL (e=0.2) / AL	Clr-6_Air_Clr-6	2032.0	2032.0	3.127928	3.127928	0.00000	0.00%	0.607401	0.607401	0.000	0.00%	0.672392	0.672392	0.000	0.00%	16.063749	16.063749	0.00000	0.0%
		TI AL (e=0.9) / AL		2032.0	2032.0	3.439398	3.439398	0.00000	0.00%	0.610191	0.610191	0.000	0.00%	0.672392	0.672392	0.000	0.00%	21.733385	21.733385	0.00000	0.0%
Fiberglass	Casement	Fiberglass / AL	Clr-6_Air_LowE272-6	600.0	1500.0	1.973812	1.973812	0.00000	0.00%	0.338189	0.338189	0.000	0.00%	0.483322	0.483322	0.000	0.00%	48.137314	48.137314	0.00000	0.0%
PFM	Casement	Wood / AL	Clr-5-Air-Clr-5	914.4	1219.2	2.683719	2.683719	0.00000	0.00%	0.629168	0.629168	0.000	0.00%	0.682002	0.682002	0.000	0.00%	39.734173	39.734173	0.00000	0.0%
			Lowe179-5_Air_Clr5	914.4	1219.2	2.017673	2.017673	0.00000	0.00%	0.529966	0.529966	0.000	0.00%	0.654087	0.654087	0.000	0.00%	46.801956	46.801956	0.00000	0.0%
PVC	Casement	PVC / AL Swiggle	LowE_037-Air-Clr	609.6	1219.2	1.790276	1.790276	0.00000	0.00%	0.254844	0.254844	0.000	0.00%	0.38176	0.38176	0.000	0.00%	46.801956	56.551159	9.74920	20.8%
Velux - FS87	Skylight	AL Clad Wood / SST	Lowe270-3_Ar_Clr-3	547.9	1314.4	3.09251	3.09251	0.00000	0.00%	0.352361	0.352361	0.000	0.00%	0.665323	0.665323	0.000	0.00%	48.857265	48.857265	0.00000	0.0%
TRR01	Fixed	TB AL / AL	CmftE2-3_Air_HMSC75_Air_CmftE2-3	1016.0	1016.0	1.89341	1.89341	0.00000	0.00%	0.275227	0.275227	0.000	0.00%	0.414402	0.414402	0.000	0.00%	40.442394	40.442394	0.00000	0.0%
TRR97	Fixed	AL Clad Wood / Galv. Steel	LowE272-5_Air_Clr-5	1219.2	1219.2	1.952107	1.952107	0.00000	0.00%	0.346445	0.346445	0.000	0.00%	0.596056	0.596056	0.000	0.00%	47.163074	47.163074	0.00000	0.0%
TRR99	Hor. Slider	AL / Galv. Steel	Clr-3_Air_HMSC75_Air_S500CL-3	1524.0	914.4	2.760558	2.760558	0.00000	0.00%	0.314969	0.314969	0.000	0.00%	0.499902	0.499902	0.000	0.00%	14.569366	14.569366	0.00000	0.0%
Max Diff								**0.00000**	**0.00%**			**0.000**	**0.00%**			**0.000**	**0.00%**			**9.74920**	**20.83%**

Note: TRR99: Made slight geometry adjustment to 7.7.07 THERM files due to new error about bad points which may have affected the U-factor slightly
Recalculated TRR99 window with new geometry for both 7.4 and 7.7

Results Comparison THERM Version 7.8.55 to **7.8.57**

Frames

Note: Nominal Glass thickness was used when importing the glazing systems into the THERM models

NOTE: Glazing systems recalculated, frame files calculated using BC condition #2

10/04/2022 -- ran W7.8.55 / T 7.8.55

10/05/2022 -- ran W7.8.57 / T 7.8.57

													Uval (W/m2K)		U_edge (W/m2K)		Pfd		Ucenter (W/m2K)	
		W7.8.55 - T7.8.55					W7.8.57 - T7.8.57						DIFF	Diff (%)	DIFF	Diff (%)	DIFF	Diff (%)	DIFF	Diff (%)
ID	Name	Uval	U_edge	Pfd	Ucenter	Abs	ID	Uval	U_edge	Pfd	Ucenter	Abs								
11	1600S1_hd.thm	7.227078	2.861175	67.361816	2.689528	0.3	11	7.227078	2.861175	67.361816	2.689528	0.3	0.000	0.00%	0.00000	0.00%	0.00000	0.00%	0.00000	0.00%
12	1600S1_jb.thm	7.217208	2.858271	67.361328	2.689528	0.3	12	7.217208	2.858271	67.361328	2.689528	0.3	0.000	0.00%	0.00000	0.00%	0.00000	0.00%	0.00000	0.00%
13	1600S1_mr.thm	9.805065	2.792671	71.233887	2.689528	0.3	13	9.805065	2.792671	71.233887	2.689528	0.3	0.000	0.00%	0.00000	0.00%	0.00000	0.00%	0.00000	0.00%
14	1600S1_si.thm	7.206437	2.860169	67.361328	2.689528	0.3	14	7.206437	2.860169	67.361328	2.689528	0.3	0.000	0.00%	0.00000	0.00%	0.00000	0.00%	0.00000	0.00%
21	CW3_hd_02.thm	5.256989	3.092469	59.556183	2.681182	0.3	21	5.256989	3.092469	59.556183	2.681182	0.3	0.000	0.00%	0.00000	0.00%	0.00000	0.00%	0.00000	0.00%
22	CW3_jb_02.thm	5.245121	3.090606	59.55603	2.681182	0.3	22	5.245121	3.090606	59.55603	2.681182	0.3	0.000	0.00%	0.00000	0.00%	0.00000	0.00%	0.00000	0.00%
23	CW3_mr_02.thm	6.93888	3.084777	68.312256	2.681182	0.3	23	6.93888	3.084777	68.312256	2.681182	0.3	0.000	0.00%	0.00000	0.00%	0.00000	0.00%	0.00000	0.00%
24	CW3_si_02.thm	5.26776	3.097395	57.777527	2.681182	0.3	24	5.26776	3.097395	57.777527	2.681182	0.3	0.000	0.00%	0.00000	0.00%	0.00000	0.00%	0.00000	0.00%
25	CW3_hd_09.thm	7.521026	2.900585	59.556183	2.681182	0.3	25	7.521026	2.900585	59.556183	2.681182	0.3	0.000	0.00%	0.00000	0.00%	0.00000	0.00%	0.00000	0.00%
26	CW3_jb_09.thm	7.515224	2.906112	59.55603	2.681182	0.3	26	7.515224	2.906112	59.55603	2.681182	0.3	0.000	0.00%	0.00000	0.00%	0.00000	0.00%	0.00000	0.00%
27	CW3_mr_09.thm	9.571445	2.908318	68.312256	2.681182	0.3	27	9.571445	2.908318	68.312256	2.681182	0.3	0.000	0.00%	0.00000	0.00%	0.00000	0.00%	0.00000	0.00%
28	CW3_si_09.thm	7.627611	2.9064	57.777527	2.681182	0.3	28	7.627611	2.9064	57.777527	2.681182	0.3	0.000	0.00%	0.00000	0.00%	0.00000	0.00%	0.00000	0.00%
31	Fiberglass_hd.thm	2.185568	2.351746	70.637405	1.677865	0.3	31	2.185568	2.351746	70.637405	1.677865	0.3	0.000	0.00%	0.00000	0.00%	0.00000	0.00%	0.00000	0.00%
32	Fiberglass_jb.thm	2.126909	2.350252	70.63623	1.677865	0.3	32	2.126909	2.350252	70.63623	1.677865	0.3	0.000	0.00%	0.00000	0.00%	0.00000	0.00%	0.00000	0.00%
33	Fiberglass_si.thm	2.183917	2.351504	70.63623	1.677865	0.3	33	2.183917	2.351504	70.63623	1.677865	0.3	0.000	0.00%	0.00000	0.00%	0.00000	0.00%	0.00000	0.00%
41	PFM01_hd.thm	2.20664	3.012841	42.87616	2.714314	0.3	41	2.20664	3.012841	42.87616	2.714314	0.3	0.000	0.00%	0.00000	0.00%	0.00000	0.00%	0.00000	0.00%
42	PFM01_jb.thm	2.20444	3.013326	42.876221	2.714314	0.3	42	2.20444	3.013326	42.876221	2.714314	0.3	0.000	0.00%	0.00000	0.00%	0.00000	0.00%	0.00000	0.00%
43	PFM01_si.thm	2.20822	3.013447	42.876221	2.714314	0.3	43	2.20822	3.013447	42.876221	2.714314	0.3	0.000	0.00%	0.00000	0.00%	0.00000	0.00%	0.00000	0.00%
44	PFM02_hd.thm	2.183683	2.418898	42.87616	1.853738	0.3	44	2.183683	2.418898	42.87616	1.853738	0.3	0.000	0.00%	0.00000	0.00%	0.00000	0.00%	0.00000	0.00%
45	PFM02_jb.thm	2.181394	2.419343	42.876221	1.853738	0.3	45	2.181394	2.419343	42.876221	1.853738	0.3	0.000	0.00%	0.00000	0.00%	0.00000	0.00%	0.00000	0.00%
46	PFM02_si.thm	2.185318	2.419544	42.876221	1.853738	0.3	46	2.185318	2.419544	42.876221	1.853738	0.3	0.000	0.00%	0.00000	0.00%	0.00000	0.00%	0.00000	0.00%
51	PVC_hd.thm	1.760401	2.021321	72.357208	1.723423	0.3	51	1.760401	2.021321	72.357208	1.723423	0.3	0.000	0.00%	0.00000	0.00%	0.00000	0.00%	0.00000	0.00%
52	PVC_jb.thm	1.697629	2.042479	89.807007	1.723423	0.3	52	1.697629	2.042479	89.807007	1.723423	0.3	0.000	0.00%	0.00000	0.00%	0.00000	0.00%	0.00000	0.00%
53	PVC_si.thm	1.75528	2.020876	72.357193	1.723423	0.3	53	1.75528	2.020876	72.357193	1.723423	0.3	0.000	0.00%	0.00000	0.00%	0.00000	0.00%	0.00000	0.00%
61	FS95_hd_75_c_20.thm	24.364826	2.416385	8.60376	2.014867	0.3	61	24.364826	2.416385	8.60376	2.014867	0.3	0.000	0.00%	0.00000	0.00%	0.00000	0.00%	0.00000	0.00%
62	FS95_jb_75_c_20.thm	24.412632	2.415304	8.600586	2.014867	0.3	62	24.412632	2.415304	8.600586	2.014867	0.3	0.000	0.00%	0.00000	0.00%	0.00000	0.00%	0.00000	0.00%
63	FS95_si_75_c_20.thm	11.087026	2.129416	19.075211	2.014867	0.3	63	11.087026	2.129416	19.075211	2.014867	0.3	0.000	0.00%	0.00000	0.00%	0.00000	0.00%	0.00000	0.00%
71	TRR01_hd.thm	3.595419	1.75223	61.035721	1.265482	0.3	71	3.595419	1.75223	61.035721	1.265482	0.3	0.000	0.00%	0.00000	0.00%	0.00000	0.00%	0.00000	0.00%
72	TRR01_jb.thm	3.616276	1.752918	61.035828	1.265482	0.3	72	3.616276	1.752918	61.035828	1.265482	0.3	0.000	0.00%	0.00000	0.00%	0.00000	0.00%	0.00000	0.00%
73	TRR01_si.thm	3.594953	1.75215	61.035828	1.265482	0.3	73	3.594953	1.75215	61.035828	1.265482	0.3	0.000	0.00%	0.00000	0.00%	0.00000	0.00%	0.00000	0.00%
81	TRR97_hd.thm	2.500365	2.36067	50.013748	1.721165	0.3	81	2.500365	2.36067	50.013748	1.721165	0.3	0.000	0.00%	0.00000	0.00%	0.00000	0.00%	0.00000	0.00%
82	TRR97_jb.thm	2.499379	2.356269	50.013779	1.721165	0.3	82	2.499379	2.356269	50.013779	1.721165	0.3	0.000	0.00%	0.00000	0.00%	0.00000	0.00%	0.00000	0.00%
83	TRR97_si.thm	2.483982	2.352191	50.013779	1.721165	0.3	83	2.483982	2.352191	50.013779	1.721165	0.3	0.000	0.00%	0.00000	0.00%	0.00000	0.00%	0.00000	0.00%
91	TRR99_hf.thm	9.34186	2.148648	37.613419	1.732537	0.3	91	9.34186	2.148648	37.613419	1.732537	0.3	0.000	0.00%	0.00000	0.00%	0.00000	0.00%	0.00000	0.00%
92	TRR99_hv.thm	4.560099	2.555985	37.700272	1.732537	0.3	92	4.560099	2.555985	37.700272	1.732537	0.3	0.000	0.00%	0.00000	0.00%	0.00000	0.00%	0.00000	0.00%
93	TRR99_jf.thm	10.219017	2.136627	22.236633	1.732537	0.3	93	10.219017	2.136627	22.236633	1.732537	0.3	0.000	0.00%	0.00000	0.00%	0.00000	0.00%	0.00000	0.00%
94	TRR99_jv.thm	4.442008	2.565494	36.218216	1.732537	0.3	94	4.442008	2.565494	36.218216	1.732537	0.3	0.000	0.00%	0.00000	0.00%	0.00000	0.00%	0.00000	0.00%
95	TRR99_mr.thm	9.708306	2.346953	40.82782	1.732537	0.3	95	9.708306	2.346953	40.82782	1.732537	0.3	0.000	0.00%	0.00000	0.00%	0.00000	0.00%	0.00000	0.00%
96	TRR99_sf.thm	12.586723	2.241881	37.594925	1.732537	0.3	96	12.586723	2.241881	37.594925	1.732537	0.3	0.000	0.00%	0.00000	0.00%	0.00000	0.00%	0.00000	0.00%
97	TRR99_sv.thm	4.552389	2.55643	36.589401	1.732537	0.3	97	4.552389	2.55643	36.589401	1.732537	0.3	0.000	0.00%	0.00000	0.00%	0.00000	0.00%	0.00000	0.00%
	Max												-	0.00%	-	0.00%	-	0.00%	-	0.00%

Results Comparison WINDOW Version 7.8.55 to 7.8.57

Glazing Systems

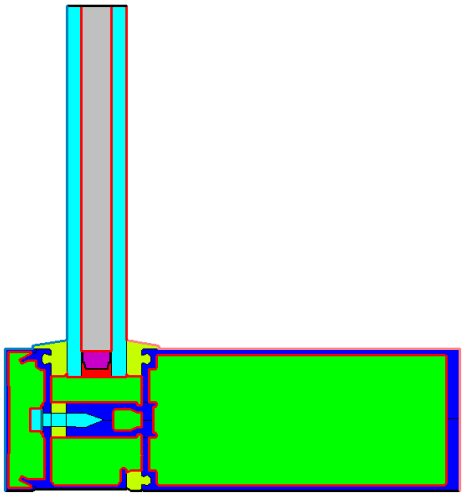
10/05/2022 -- calculated 7.8.57

10/05/2022 -- calculated 7.8.55

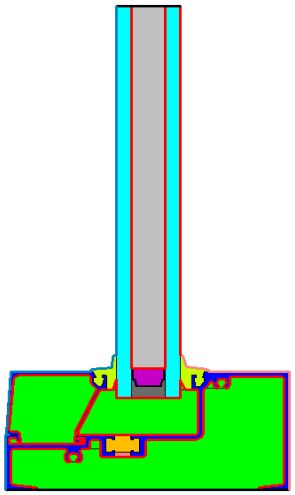
Results are identical between the two versions

Results are for actual (not nomial) thickness

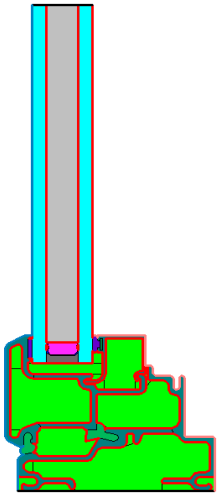
								U-factor (W/m^2-K)				SHGC				VT			
GlzSys ID	IG Name	Glass Layers	Glass	emiss.	Glass / Gap / Glass layers	Glass /Gap / Glass (mm)	Gas	**W7.8.55**	**W7.8.57**	DIFF	DIFF (%)	**W7.8.55**	**W7.8.57**	DIFF	DIFF (%)	**W7.8.55**	**W7.8.57**	DIFF	DIFF (%)
1	Kawneer IGU	2	Un-Coated	0.84	5012/Air/5012	6/12.7/6	Air	2.689528	2.689528	0.00000	0.00%	0.70296	0.702964	0.000	0.00%	0.7911	0.791102	0.000	0.00%
2	No3	2	Un-Coated	0.84	103/Air/103	6/13.4/6	Air	2.681182	2.681182	0.00000	0.00%	0.70444	0.704438	0.000	0.00%	0.7861	0.786104	0.000	0.00%
3	Clr-Air-LowE_042	2	Coated #3	0.042	2004/Air/2014	6/13.4/6	Air	1.677865	1.677865	0.00000	0.00%	0.47784	0.47784	0.000	0.00%	0.6979	0.697898	0.000	0.00%
4	PFM01	2	Un-Coated	0.84	2003/Air/2003	5/16.5/5	Air	2.714314	2.714314	0.00000	0.00%	0.74262	0.742617	0.000	0.00%	0.80952	0.809516	0.000	0.00%
5	PFM02	2	Coated #2	0.11	2186/Air/2003	5/16.5/5	Air	1.853738	1.853738	0.00000	0.00%	0.62472	0.624722	0.000	0.00%	0.77638	0.776382	0.000	0.00%
6	LowE_037-Air-Clr	2	Coated #2	0.037	917/Air/102	3/15.9/3	Air	1.723423	1.723423	0.00000	0.00%	0.39798	0.397977	0.000	0.00%	0.61412	0.614123	0.000	0.00%
7	Velux FS87 Type 75	2	Coated #2	0.037	2026/Argon 95	3/9.9/3	Argon 95	2.014867	2.014867	0.00000	0.00%	0.37063	0.370629	0.000	0.00%	0.70166	0.701664	0.000	0.00%
8	TRR01	3	Coated #2,#3,#5	0.204/0.055/0.204	0907/Air/1510/Air/907	3/8.6/.1/8.6/3	Air	1.265482	1.265482	0.00000	0.00%	0.34151	0.341514	0.000	0.00%	0.53531	0.535309	0.000	0.00%
9	TRR97	2	Coated #2	0.042	2013/Air/2003	5/15.9/5	Air	1.721165	1.721165	0.00000	0.00%	0.40731	0.407306	0.000	0.00%	0.70736	0.707364	0.000	0.00%
10	TRR99	3	Coated #3,#5	0.055, 0.215	5009/Air/1510/Air/5242	3/6.2/0.1/6.2/3	Air	1.732537	1.732537	0.00000	0.00%	0.3562	0.356202	0.000	0.00%	0.58235	0.582346	0.000	0.00%
											0.00%				0.00%				0.00%
											0.00%				0.00%				0.00%
							Max Diff				0.00%				0.00%				0.00%



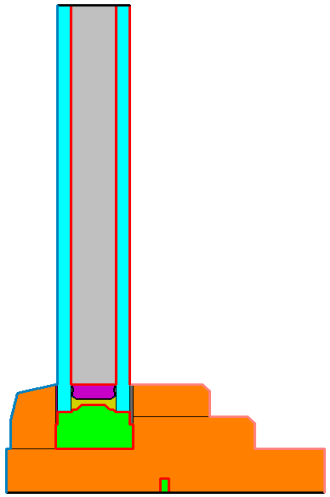
Kawneer 1600 S1



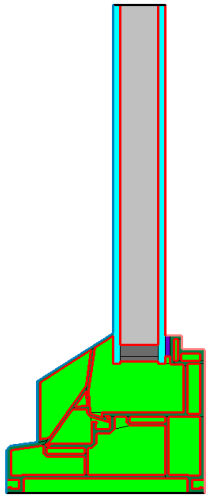
CW3



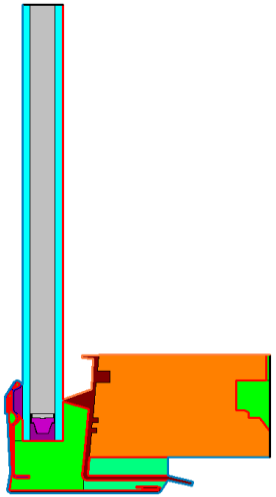
Fiberglass



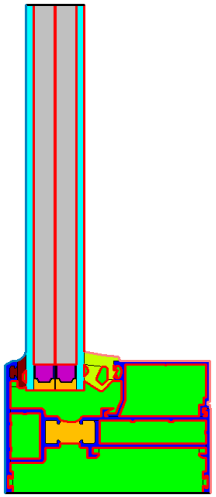
PFM



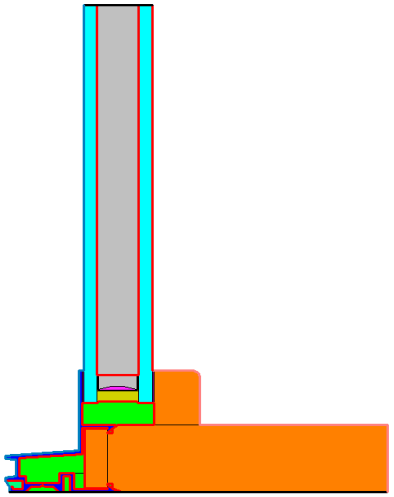
PVC



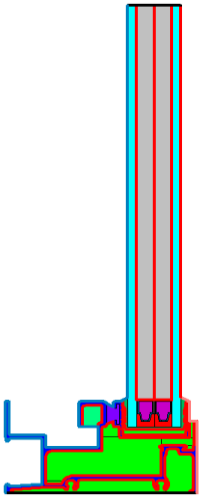
Skylight



TRR01



TRR97



TRR99