



ETC Laboratories

Corporate Offices / Laboratories

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Rochester, NY 14624
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Simulation Report (Revised)

Rendered To:

Showcase Custom Vinyl Windows
1002 Olde Towne Drive
Irving, TX 75061

Productline Series/Model

Series 500 Casement Window

Report Number

ETC-07-738-20425.B

Report Number: ETC-07-738-20425.B
 Job Number: ETC-08-738-20621-3
 Simulation Date: January 29, 2008
 Report Date: January 29, 2008
 Expiration Date: January 29, 2012
 Revision Date: February 20, 2008

NFRC 100-2004, 200-2004, 500-2004 Simulation Report

Rendered To:

Showcase Custom Vinyl Windows
 1002 Olde Towne Drive
 Irving, TX 75061

Product Series/Model	Operating Type	Model Size (mm x mm)
Series 500 Casement Window	Casement - Single, X	600 x 1500

Validation Test Unit Description*

Item	Unit	Value
Frame type	-	VY
Sash type	-	VY
Overall width	in.	23.62
Overall height	in.	59.06
Overall IG nominal thickness	-	0.750
Number of glazing layers	-	2
Glass type	-	Float
Glass 1 thickness	in.	0.118
Glass 2 thickness	in.	0.118
Glass 3 thickness	in.	-
Spacer type	-	A8-D
Gap 1 thickness	in.	0.514
Gap 2 thickness	in.	-
Low-e emissivity	-	0.044
Low-e surface	-	2
IG gap fill	-	AIR
Percent gap fill	-	100

*No reinforcements.

Validation Test Unit U-factor

Item	Unit	Value
Simulated U-Factor	Btu/hr-ft ² -°F	0.31

Notes: The validation unit was not submitted by Showcase Custom Vinyl Windows.
 This report is a reissue from Report - ETC-05-072-16989.0

NFRC 100-2004 (U-factor), 200-2004 (SHGC and VT), and 500-2004 (CR-value) Productline Matrix

Manufacturer Name: Showcase Custom Vinyl Windows
 Product Series / Model: Series 500 Casement Window
 Operator Type: Casement - Single, X
 Frame Type: VY
 Sash Type: VA

Job Number: ETC-08-738-20621-3
 Sim Lab Code: SETC
 Model Size (mm x mm) 600 x 1500
 Thermal Break Type:

Report Number: ETC-07-738-20425.B

Product Number	Grouping ID Number	Overall IG Thickness	Pane Thickness #[1]	Pane Thickness #[2]	Pane Thickness #[3]	Gap 1	Gap 2	Gap Fill 1	% of Gap fill 1	Gap Fill 2	% of Gap fill 1	Spacer	Emissivity Surface 1	Emissivity Surface 2	Emissivity Surface 3	Emissivity Surface 4	Emissivity Surface 5	Emissivity Surface 6	Tint	C-O-G U-factor	C-O-G SHGC	C-O-G VT	Grid Type	Grid Size	Total Product U-factor	CR - Value	Total Product SHGC	Total Product VT	Additional Comments
001	00	0.750	0.098	0.098		0.553		AIR				A8-D	0.042							0.30	0.42	0.73	N		0.31	56	0.28	0.48	E272 / CL
	01	0.750	0.098	0.098		0.553		AIR				A8-D	0.042							0.30	0.42	0.73	G	< 1"	0.31	56	0.26	0.43	
	02	0.750	0.098	0.098		0.553		AIR				A8-D	0.042							0.30	0.42	0.73	S	< 1"	0.31	56	0.26	0.43	
	03	0.750	0.098	0.098		0.553		AIR				A8-D	0.036							0.30	0.37	0.70	N		0.31	56	0.25	0.46	RLE / CL
	04	0.750	0.098	0.098		0.553		AIR				A8-D	0.036							0.30	0.37	0.70	G	< 1"	0.31	56	0.23	0.42	
	05	0.750	0.098	0.098		0.553		AIR				A8-D	0.036							0.30	0.37	0.70	S	< 1"	0.31	56	0.23	0.42	
	06	0.750	0.118	0.118		0.514		AIR				A8-D	0.042							0.30	0.42	0.72	N		0.31	56	0.28	0.47	E272 / CL
	07	0.750	0.118	0.118		0.514		AIR				A8-D	0.042							0.30	0.42	0.72	G	< 1"	0.31	56	0.26	0.43	
	08	0.750	0.118	0.118		0.514		AIR				A8-D	0.042							0.30	0.42	0.72	S	< 1"	0.31	56	0.26	0.43	
	09	0.750	0.118	0.118		0.514		AIR				A8-D	0.036							0.30	0.37	0.70	N		0.31	56	0.25	0.46	RLE / CL
	10	0.750	0.118	0.118		0.514		AIR				A8-D	0.036							0.30	0.37	0.70	G	< 1"	0.31	56	0.23	0.41	
	11	0.750	0.118	0.118		0.514		AIR				A8-D	0.036							0.30	0.37	0.70	S	< 1"	0.31	56	0.23	0.41	
002	00	0.750	0.098	0.098		0.553		ARG	90			A8-D	0.042							0.25	0.42	0.73	N		0.28	60	0.28	0.48	E272 / CL, Arg
	01	0.750	0.098	0.098		0.553		ARG	90			A8-D	0.042							0.25	0.42	0.73	G	< 1"	0.28	60	0.26	0.43	
	02	0.750	0.098	0.098		0.553		ARG	90			A8-D	0.042							0.25	0.42	0.73	S	< 1"	0.28	60	0.26	0.43	

Report Number: ETC-07-738-20425.B

Product Number	Grouping ID Number	Overall IG Thickness	Pane Thickness #[1]	Pane Thickness #[2]	Pane Thickness #[3]	Gap 1	Gap 2	Gap Fill 1	% of Gap fill 1	Gap Fill 2	% of Gap fill 1	Spacer	Emissivity Surface 1	Emissivity Surface 2	Emissivity Surface 3	Emissivity Surface 4	Emissivity Surface 5	Emissivity Surface 6	Tint	C-O-G U-factor	C-O-G SHGC	C-O-G VT	Grid Type	Grid Size	Total Product U-factor	CR - Value	Total Product SHGC	Total Product VT	Additional Comments
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	03	0.750	0.098	0.098		0.553		ARG	90			A8-D	0.036							0.25	0.36	0.70	N		0.28	60	0.25	0.46	RLE / CL, Arg
	04	0.750	0.098	0.098		0.553		ARG	90			A8-D	0.036							0.25	0.36	0.70	G	< 1"	0.28	60	0.22	0.42	
	05	0.750	0.098	0.098		0.553		ARG	90			A8-D	0.036							0.25	0.36	0.70	S	< 1"	0.28	60	0.22	0.42	
	06	0.750	0.118	0.118		0.514		ARG	90			A8-D	0.042							0.25	0.41	0.72	N		0.28	60	0.28	0.47	E272 / CL, Arg
	07	0.750	0.118	0.118		0.514		ARG	90			A8-D	0.042							0.25	0.41	0.72	G	< 1"	0.28	60	0.25	0.43	
	08	0.750	0.118	0.118		0.514		ARG	90			A8-D	0.042							0.25	0.41	0.72	S	< 1"	0.28	60	0.25	0.43	
	09	0.750	0.118	0.118		0.514		ARG	90			A8-D	0.036							0.25	0.36	0.70	N		0.28	60	0.24	0.46	RLE / CL, Arg
	10	0.750	0.118	0.118		0.514		ARG	90			A8-D	0.036							0.25	0.36	0.70	G	< 1"	0.28	60	0.22	0.41	
	11	0.750	0.118	0.118		0.514		ARG	90			A8-D	0.036							0.25	0.36	0.70	S	< 1"	0.28	60	0.22	0.41	
003	00	0.750	0.197	0.197		0.356		AIR				A8-D	0.042							0.33	0.41	0.71	N		0.33	52	0.28	0.47	E272 / CL
	01	0.750	0.197	0.197		0.356		AIR				A8-D	0.042							0.33	0.41	0.71	S	< 1"	0.33	52	0.25	0.42	
	02	0.750	0.197	0.197		0.356		AIR				A8-D	0.036							0.33	0.37	0.68	N		0.33	52	0.25	0.45	RLE / CL
	03	0.750	0.197	0.197		0.356		AIR				A8-D	0.036							0.33	0.37	0.68	S	< 1"	0.33	52	0.23	0.41	
004	00	0.750	0.197	0.197		0.356		AIR				A8-D	0.042							0.33	0.41	0.71	G	< 1"	0.34	52	0.25	0.42	
	01	0.750	0.197	0.197		0.356		AIR				A8-D	0.036							0.33	0.37	0.68	G	< 1"	0.34	52	0.23	0.41	
005	00	0.750	0.197	0.197		0.356		ARG	90			A8-D	0.042							0.27	0.41	0.71	N		0.29	56	0.27	0.47	E272 / CL, Arg
	01	0.750	0.197	0.197		0.356		ARG	90			A8-D	0.042							0.27	0.41	0.71	S	< 1"	0.29	56	0.25	0.42	
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	03	0.750	0.197	0.197		0.356		ARG	90			A8-D	0.036							0.27	0.36	0.68	S	< 1"	0.29	56	0.22	0.41	
006	00	0.750	0.197	0.197		0.356		ARG	90			A8-D	0.042							0.27	0.41	0.71	G	< 1"	0.30	56	0.25	0.42	

Report Number: ETC-07-738-20425.B

Product Number	Grouping ID Number	Overall IG Thickness	Pane Thickness #[1]	Pane Thickness #[2]	Pane Thickness #[3]	Gap 1	Gap 2	Gap Fill 1	% of Gap fill 1	Gap Fill 2	% of Gap fill 1	Spacer	Emissivity Surface 1	Emissivity Surface 2	Emissivity Surface 3	Emissivity Surface 4	Emissivity Surface 5	Emissivity Surface 6	Tint	C-O-G U-factor	C-O-G SHGC	C-O-G VT	Grid Type	Grid Size	Total Product U-factor	CR - Value	Total Product SHGC	Total Product VT	Additional Comments
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	01	0.750	0.197	0.197		0.356		ARG	90			A8-D	0.036							0.27	0.36	0.68	G	< 1"	0.30	56	0.22	0.41	
007	00	0.750	0.118	0.315		0.317		AIR				A8-D	0.042							0.35	0.41	0.70	N	< 1"	0.34	52	0.28	0.46	E272/060-Lami
	01	0.750	0.118	0.315		0.317		AIR				A8-D	0.042							0.35	0.41	0.70	S	< 1"	0.34	52	0.25	0.42	
	02	0.750	0.118	0.315		0.317		AIR				A8-D	0.036							0.35	0.36	0.68	N	< 1"	0.34	52	0.25	0.45	RLE/060-Lami
	03	0.750	0.118	0.315		0.317		AIR				A8-D	0.036							0.35	0.36	0.68	S	< 1"	0.34	52	0.22	0.40	
	04	0.750	0.118	0.266		0.366		AIR				A8-D	0.042							0.32	0.41	0.70	N	< 1"	0.34	52	0.28	0.46	E272/030-Lami
	05	0.750	0.118	0.266		0.366		AIR				A8-D	0.042							0.32	0.41	0.70	S	< 1"	0.34	52	0.25	0.42	
	06	0.750	0.118	0.266		0.366		AIR				A8-D	0.036							0.32	0.36	0.68	N	< 1"	0.34	52	0.25	0.45	RLE/030-Lami
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	10	0.750	0.118	0.315		0.317		AIR				A8-D	0.036							0.34	0.36	0.67	N	< 1"	0.34	52	0.24	0.44	RLE/090-Lami
	11	0.750	0.118	0.315		0.317		AIR				A8-D	0.036							0.34	0.36	0.67	S	< 1"	0.34	52	0.22	0.40	
008	00	0.750	0.118	0.315		0.317		AIR				A8-D	0.042							0.35	0.41	0.70	G	< 1"	0.35	52	0.25	0.42	
	01	0.750	0.118	0.315		0.317		AIR				A8-D	0.036							0.35	0.36	0.68	G	< 1"	0.35	52	0.22	0.40	
	02	0.750	0.118	0.266		0.366		AIR				A8-D	0.042							0.32	0.41	0.70	G	< 1"	0.35	52	0.25	0.42	
	03	0.750	0.118	0.266		0.366		AIR				A8-D	0.036							0.32	0.36	0.68	G	< 1"	0.35	52	0.22	0.41	
	04	0.750	0.118	0.315		0.317		AIR				A8-D	0.042							0.35	0.41	0.70	G	< 1"	0.35	52	0.25	0.41	
	05	0.750	0.118	0.315		0.317		AIR				A8-D	0.036							0.34	0.36	0.67	G	< 1"	0.35	52	0.22	0.40	
009	00	0.750	0.118	0.315		0.317		ARG	90			A8-D	0.042							0.28	0.41	0.70	N	< 1"	0.30	57	0.28	0.46	E272/060-Lami,Arg

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Product Number	Grouping ID Number	Overall IG Thickness	Pane Thickness #[1]	Pane Thickness #[2]	Pane Thickness #[3]	Gap 1	Gap 2	Gap Fill 1	% of Gap fill 1	Gap Fill 2	% of Gap fill 1	Spacer	Emissivity Surface 1	Emissivity Surface 2	Emissivity Surface 3	Emissivity Surface 4	Emissivity Surface 5	Emissivity Surface 6	Tint	C-O-G U-factor	C-O-G SHGC	C-O-G VT	Grid Type	Grid Size	Total Product U-factor	CR - Value	Total Product SHGC	Total Product VT	Additional Comments
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	01	0.750	0.118	0.315		0.317		ARG	90			A8-D	0.042							0.28	0.41	0.70	S	< 1"	0.30	57	0.25	0.42	
	02	0.750	0.118	0.315		0.317		ARG	90			A8-D	0.036							0.28	0.36	0.68	N		0.30	57	0.24	0.45	RLE/060-Lami,Arg
	03	0.750	0.118	0.315		0.317		ARG	90			A8-D	0.036							0.28	0.36	0.68	S	< 1"	0.30	57	0.22	0.40	
	04	0.750	0.118	0.266		0.366		ARG	90			A8-D	0.042							0.26	0.41	0.70	N		0.30	57	0.28	0.46	E272/030-Lami,Arg
	05	0.750	0.118	0.266		0.366		ARG	90			A8-D	0.042							0.26	0.41	0.70	S	< 1"	0.30	57	0.25	0.42	
	06	0.750	0.118	0.266		0.366		ARG	90			A8-D	0.036							0.26	0.36	0.68	N		0.30	57	0.24	0.45	RLE/030-Lami,Arg
	07	0.750	0.118	0.266		0.366		ARG	90			A8-D	0.036							0.26	0.36	0.68	S	< 1"	0.30	57	0.22	0.41	
	08	0.750	0.118	0.315		0.317		ARG	90			A8-D	0.042							0.28	0.41	0.70	N		0.30	57	0.27	0.46	E272/090-Lami,Arg
	09	0.750	0.118	0.315		0.317		ARG	90			A8-D	0.042							0.28	0.41	0.70	S	< 1"	0.30	57	0.25	0.41	
	10	0.750	0.118	0.315		0.317		ARG	90			A8-D	0.036							0.28	0.36	0.67	N		0.30	57	0.24	0.44	RLE/090-Lami,Arg
	11	0.750	0.118	0.315		0.317		ARG	90			A8-D	0.036							0.28	0.36	0.67	S	< 1"	0.30	57	0.22	0.40	
010	00	0.750	0.118	0.315		0.317		ARG	90			A8-D	0.042							0.28	0.41	0.70	G	< 1"	0.31	57	0.25	0.42	
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	02	0.750	0.118	0.266		0.366		ARG	90			A8-D	0.042							0.26	0.41	0.70	G	< 1"	0.31	57	0.25	0.42	
	03	0.750	0.118	0.266		0.366		ARG	90			A8-D	0.036							0.26	0.36	0.68	G	< 1"	0.31	57	0.22	0.41	
	04	0.750	0.118	0.315		0.317		ARG	90			A8-D	0.042							0.28	0.41	0.70	G	< 1"	0.31	57	0.25	0.41	
	05	0.750	0.118	0.315		0.317		ARG	90			A8-D	0.036							0.28	0.36	0.67	G	< 1"	0.31	57	0.22	0.40	

011	00	0.750	0.098	0.098		0.553		AIR				A8-D	0.022							0.29	0.28	0.65	N		0.30	57	0.19	0.43	EE366/Clr
	01	0.750	0.098	0.098		0.553		AIR				A8-D	0.022							0.29	0.28	0.65	G	< 1"	0.30	57	0.17	0.39	
	04	0.750	0.098	0.098		0.553		AIR				A8-D	0.022							0.29	0.28	0.65	S	>1"	0.30	57	0.16	0.35	

Report Number: ETC-07-738-20425.B

Product Number	Grouping ID Number	Overall IG Thickness	Pane Thickness #[1]	Pane Thickness #[2]	Pane Thickness #[3]	Gap 1	Gap 2	Gap Fill 1	% of Gap fill 1	Gap Fill 2	% of Gap fill 1	Spacer	Emissivity Surface 1	Emissivity Surface 2	Emissivity Surface 3	Emissivity Surface 4	Emissivity Surface 5	Emissivity Surface 6	Tint	C-O-G U-factor	C-O-G SHGC	C-O-G VT	Grid Type	Grid Size	Total Product U-factor	CR - Value	Total Product SHGC	Total Product VT	Additional Comments
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	05	0.750	0.118	0.118		0.514		AIR				A8-D	0.022							0.29	0.28	0.65	N		0.30	57	0.19	0.43	EE366/Clr
	06	0.750	0.118	0.118		0.514		AIR				A8-D	0.022							0.29	0.28	0.65	G	< 1"	0.30	57	0.17	0.39	
	09	0.750	0.118	0.118		0.514		AIR				A8-D	0.022							0.29	0.28	0.65	S	>1"	0.30	57	0.16	0.35	
012	00	0.750	0.098	0.098		0.553		ARG	90			A8-D	0.022							0.25	0.27	0.65	N		0.27	60	0.18	0.43	EE366/Clr, Arg
	01	0.750	0.098	0.098		0.553		ARG	90			A8-D	0.022							0.25	0.27	0.65	G	< 1"	0.27	60	0.17	0.39	
	04	0.750	0.098	0.098		0.553		ARG	90			A8-D	0.022							0.25	0.27	0.65	S	>1"	0.27	60	0.15	0.35	
	05	0.750	0.118	0.118		0.514		ARG	90			A8-D	0.022							0.24	0.27	0.65	N		0.27	60	0.18	0.43	EE366/Clr, Arg
	06	0.750	0.118	0.118		0.514		ARG	90			A8-D	0.022							0.24	0.27	0.65	G	< 1"	0.27	60	0.17	0.39	
	09	0.750	0.118	0.118		0.514		ARG	90			A8-D	0.022							0.24	0.27	0.65	S	>1"	0.27	60	0.15	0.35	
013	00	0.750	0.197	0.197		0.356		AIR				A8-D	0.022							0.32	0.28	0.64	N		0.33	53	0.19	0.42	EE366/Clr
	01	0.750	0.197	0.197		0.356		AIR				A8-D	0.022							0.32	0.28	0.64	S	>1"	0.33	53	0.16	0.34	
014	00	0.750	0.197	0.197		0.356		AIR				A8-D	0.022							0.32	0.28	0.64	G	< 1"	0.34	53	0.18	0.38	
015	00	0.750	0.197	0.197		0.356		ARG	90			A8-D	0.022							0.26	0.28	0.64	N		0.29	57	0.19	0.42	EE366/Clr, Arg
	01	0.750	0.197	0.197		0.356		ARG	90			A8-D	0.022							0.26	0.28	0.64	S	>1"	0.29	57	0.16	0.34	
016	00	0.750	0.197	0.197		0.356		ARG	90			A8-D	0.022							0.26	0.28	0.64	G	< 1"	0.30	57	0.17	0.38	
017	00	0.750	0.118	0.315		0.317		AIR				A8-D	0.022							0.34	0.28	0.63	N		0.33	52	0.19	0.42	EE366/060-Lami
	01	0.750	0.118	0.315		0.317		AIR				A8-D	0.022							0.34	0.28	0.63	S	>1"	0.33	52	0.16	0.34	
	02	0.750	0.118	0.266		0.366		AIR				A8-D	0.022							0.32	0.28	0.63	N		0.33	52	0.19	0.42	EE366/030-Lami
	03	0.750	0.118	0.266		0.366		AIR				A8-D	0.022							0.32	0.28	0.63	S	>1"	0.33	52	0.16	0.34	
	04	0.750	0.118	0.315		0.317		AIR				A8-D	0.022							0.34	0.28	0.63	N		0.33	52	0.19	0.41	EE366/090-Lami

Report Number: ETC-07-738-20425.B

Product Number	Grouping ID Number	Overall IG Thickness	Pane Thickness #[1]	Pane Thickness #[2]	Pane Thickness #[3]	Gap 1	Gap 2	Gap Fill 1	% of Gap fill 1	Gap Fill 2	% of Gap fill 1	Spacer	Emissivity Surface 1	Emissivity Surface 2	Emissivity Surface 3	Emissivity Surface 4	Emissivity Surface 5	Emissivity Surface 6	Tint	C-O-G U-factor	C-O-G SHGC	C-O-G VT	Grid Type	Grid Size	Total Product U-factor	CR - Value	Total Product SHGC	Total Product VT	Additional Comments
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	05	0.750	0.118	0.315		0.317		AIR				A8-D	0.022							0.34	0.28	0.63	S	>1"	0.33	52	0.16	0.34	
018	00	0.750	0.118	0.315		0.317		AIR				A8-D	0.022							0.34	0.28	0.63	G	< 1"	0.35	52	0.17	0.38	
	01	0.750	0.118	0.266		0.366		AIR				A8-D	0.022							0.32	0.28	0.63	G	< 1"	0.35	52	0.17	0.38	
	02	0.750	0.118	0.315		0.317		AIR				A8-D	0.022							0.34	0.28	0.63	G	< 1"	0.35	52	0.17	0.37	
019	00	0.750	0.118	0.315		0.317		ARG	90			A8-D	0.022							0.27	0.28	0.63	N		0.29	57	0.19	0.42	EE366/060-Lami, Arg
	01	0.750	0.118	0.315		0.317		ARG	90			A8-D	0.022							0.27	0.28	0.63	S	>1"	0.29	57	0.16	0.34	
	02	0.750	0.118	0.266		0.366		ARG	90			A8-D	0.022							0.25	0.27	0.63	N		0.29	57	0.19	0.42	EE366/030-Lami, Arg
	03	0.750	0.118	0.266		0.366		ARG	90			A8-D	0.022							0.25	0.27	0.63	S	>1"	0.29	57	0.16	0.34	
	04	0.750	0.118	0.315		0.317		ARG	90			A8-D	0.022							0.27	0.27	0.63	N		0.29	57	0.19	0.41	EE366/090-Lami, Arg
	05	0.750	0.118	0.315		0.317		ARG	90			A8-D	0.022							0.27	0.27	0.63	S	>1"	0.29	57	0.16	0.34	
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	01	0.750	0.118	0.266		0.366		ARG	90			A8-D	0.022							0.25	0.27	0.63	G	< 1"	0.31	57	0.17	0.38	
	02	0.750	0.118	0.315		0.317		ARG	90			A8-D	0.022							0.27	0.27	0.63	G	< 1"	0.31	57	0.17	0.37	

Comments : Single Casement window with vinyl frame and sash.
 Aluminum reinforcements in all rails and stiles of sash.
 ARG - Argon with Single Probe filling method.
 A8-D - Duraseal Spacer - Dual Sealed.
 N - Products with no internal grids.
 G (Grid Size: <1") - Products with 0.188" x 0.802" size internal grids.
 S - Products with 1.121" size simulated divided lites.
 Low-e: 0.042 - LoE² 272 (Cardinal IG); 0.036 - Acclimate RLE 70/36 (Guardian); 0.022 - LoE³-366 (Cardinal IG)

Revision History: ETC-07-738-20425.B - Options 011 - 020 were added.

Specialty Products

Series 500 Casement Window

Report Number: ETC-07-738-20425.B

	No Dividers	Divider <1"	Divider >1"
SHGC0	0.005	0.008	0.010
SHGC1	0.665	0.603	0.544
VT0	0.000	0.000	0.000
VT1	0.659	0.595	0.534

$$SHGC = SHGC_0 + SHGC_c * (SHGC_1 - SHGC_0)$$

$$VT = VT_0 + VT_c * (VT_1 - VT_0)$$

Where $SHGC_c$ = Center of Glass Solar Heat Gain Coefficient
& VT_c = Center of Glass Visible transmittance

Modeling Assumptions

1. Grouping Performed: 1) Center-of-Glass, 2) Frame
2. CA5501 Frame Profile With J-Channel (Group Leader) and CA5501 Without J-Channel were grouped in accordance to section H(i) of NFRC 100-2004.

Product Description

Series 500 Casement Window

Report Number: ETC-07-738-20425.B

Frame:

Size (mm)	600 x 1500
Material	Vinyl - Rigid
Glazing Method	
Glazing Sealant	

Sash (1):

Operation Type	Projecting - Out
Material	Vinyl - Rigid
Glazing Method	Interior Glazed
Glazing Sealant	Silicone

Sash (2):

Operation Type	
Material	
Glazing Method	
Glazing Sealant	

Reinforcement Material & Locations:

Aluminum reinforcements in all rails and stiles of sash.

Weatherstripping Type and Locations:

Foam fill vinyl weatherstrippings in all frame and sash members.

Others:

ARG - Argon with Single Probe filling method.

A8-D - Duraseal Spacer - Dual Sealed.

Low-e: 0.042 - LoE² 272 (Cardinal IG);0.036 - Acclimate RLE 70/36 (Guardian); 0.022 - LoE³-366 (Cardinal IG)

This report, in its original form contains product drawings and a Bill of Materials.

Report Number: ETC-07-738-20425.B

Conditions, Terms, and General Notes Regarding The Simulation

The individual products were simulated in full accordance with NFRC 100-2004, 200-2004 & 500-2004, using NFRC approved programs Window 5.2 and THERM 5.2. All window specifications were received from drawings and bill of materials supplied by the manufacturer. This report may not be reproduced except in full, without the approval of ETC Laboratories. This report relates only to the items simulated. Rounding is per NFRC unit conversion and rounding Policy. **The rating values included in this report are for submittal to an NFRC-licensed IA and not meant to be used directly for labeling purposes.** Only those values identified on a valid Certification Authorization Report (CAR) by an NFRC accredited Inspection Agency (IA) are to be used for labeling purposes.

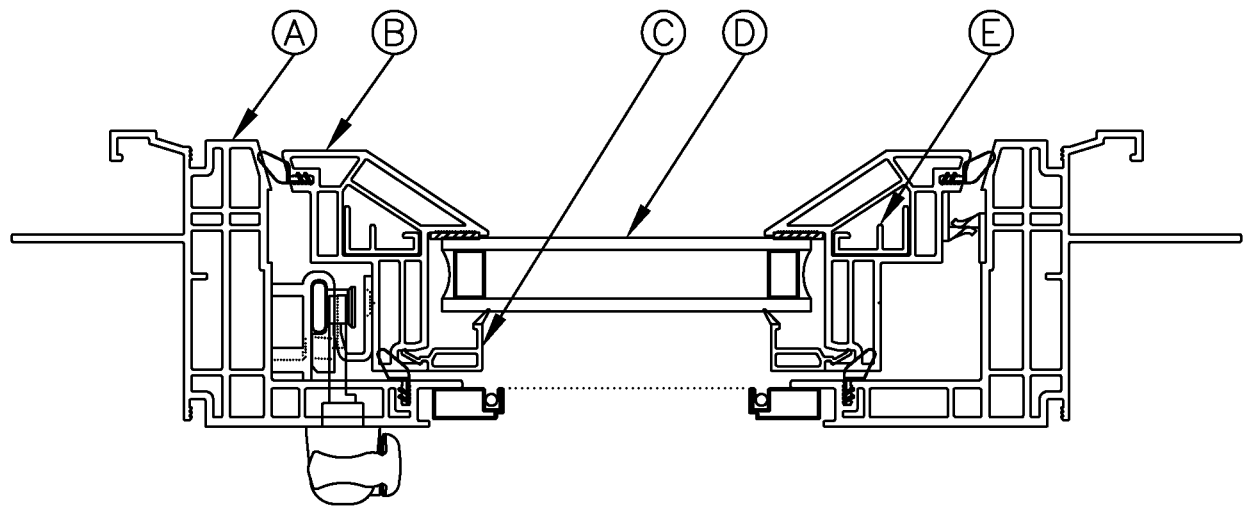
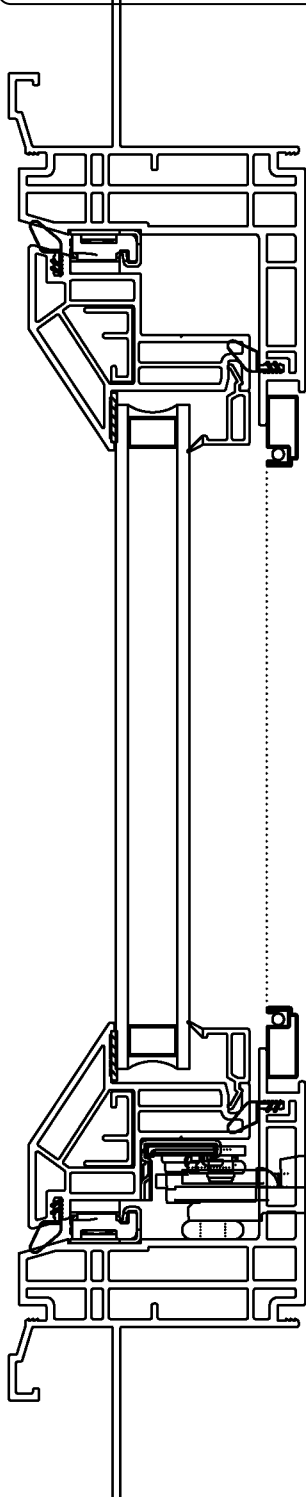
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FOR ETC LABORATORIES

Michael Cooper
Simulation Technician, NFRC Certified Simulator
Thermal Simulation Department

Gurjinder Singh
Simulator-in-Responsible Charge, NFRC Certified Simulator
Thermal Simulation Department



- (A) CA5501 COMMON FRAME
- (B) PC02 COMMON SASH
- (C) BV48 GLAZING BEAD
- (D) 3/4" I.G.
- (E) RFSH37 COMMON REINF.

NOTES:

TRUTH MAXIM HARDWARE RECOMMENDED. REFER TO BILL OF MATERIAL AND FABRICATIONS FOR REQUIRED PART NUMBERS.

AS VIEWED FROM OUTSIDE, LEFT HAND OPERATION SHOWN. RIGHT HAND IS SYMMETRICALLY OPPOSITE.

CA55WW



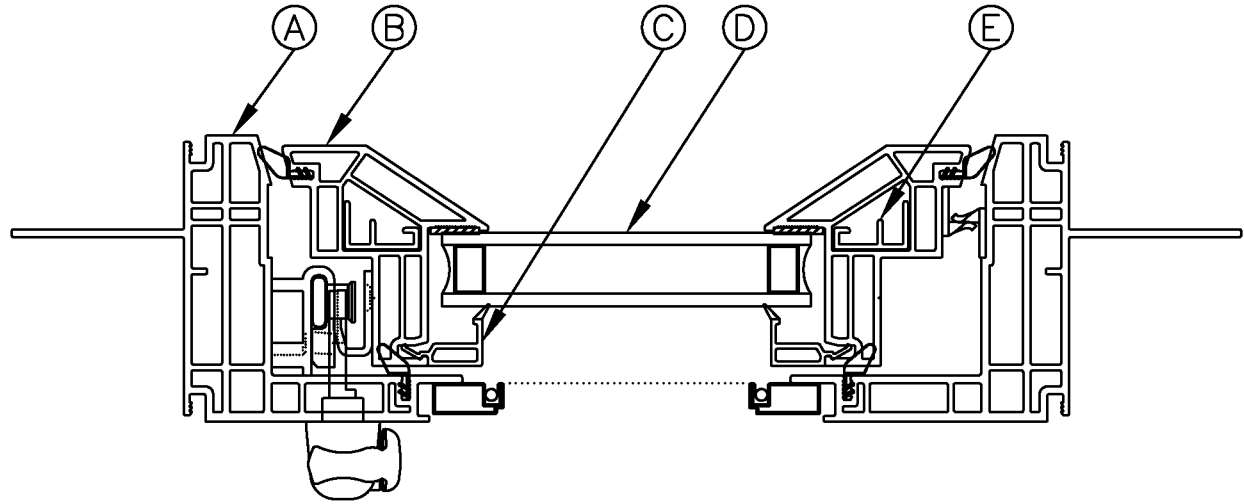
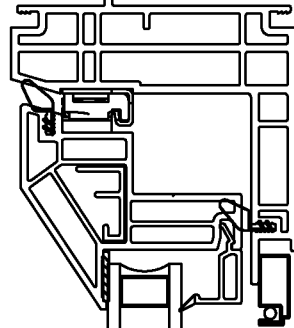
VEKA INC.
100 VEKA DRIVE
FOMBELL, PA 16123

DESCRIPTION: 55 SERIES CASEMENT ASSEMBLY
FULLY WELDED; TRUTH MAXIM HARDWARE

C-SIZE	BY	DATE
	MTN	06/08/05

A	XXXX	XXX	XXX	XX/XX/XX
REV	ECN.	CHANGE	BY	DATE

SCALE	DWG #
FULL	CA55WW

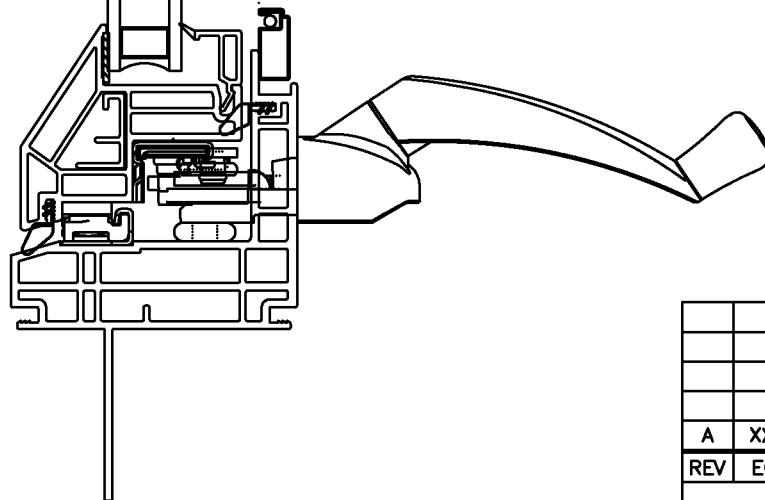


- (A) CA5501 COMMON FRAME NO J-CHANNEL
- (B) PC02 COMMON SASH
- (C) BV48 GLAZING BEAD
- (D) 3/4" I.G.
- (E) RFSH37 COMMON REINF.

NOTES:

TRUTH MAXIM HARDWARE RECOMMENDED. REFER TO BILL OF MATERIAL AND FABRICATIONS FOR REQUIRED PART NUMBERS.

AS VIEWED FROM OUTSIDE, LEFT HAND OPERATION SHOWN. RIGHT HAND IS SYMMETRICALLY OPPOSITE.



CA55WW



VEKA INC.
100 VEKA DRIVE
FOMBELL, PA 16123

DESCRIPTION: 55 SERIES CASEMENT ASSEMBLY
FULLY WELDED; TRUTH MAXIM HARDWARE

C-SIZE

BY

DATE

BJF

08/08/05

A	XXXX	XXX	XXX	XX/XX/XX
REV	ECN.	CHANGE	BY	DATE

SCALE

FULL

DWG #

CA55WW