NFRC Product Line Summary (2023 Std)

Simulation Report # FLE24001-SS

Manufacturer: Fleetwood Windows & Doors
Series/Model: 450-T Casement
Operator Type: Casement-Single Vent
Frame Type: Aluminum w/Thermal Breaks (AT)
Sash Type: Aluminum w/Thermal Breaks (AT)

Product Line ID: FLE-M-111
Model Size: 600mm x 1500mm
Frame Abs.: 0.3

Simulation Orig Report Date: 8/19/2024
Simulation Revision Date: 8/19/2024
Report Type: Recertification
Simulation Lab Code: SWWW

Note: Options without numbers are grouped with the option(s) above

											No Dividers		Dividers < 1"		Dividers > 1"	
Option	Description/Code	Glass Thicknesses	Gap Width(s)	Gas	Emissivity(sfc)	Spacer/Seal	Divider	U-Factor	CR	Tint	SHGC	VT	SHGC	VT	SHGC	VT
174	CIG366/Arg 5mm SS-D (1" IG)	0.197, 0.197	0.632	ARG	0.020(2)	SS-D	N,G	**0.32**	**56**	CL	**0.20**	0.46	**0.19**	0.42	**0.17**	0.38
175	CIG366/Arg 6mm SS-D (1" IG)	0.236, 0.236	0.522	ARG	0.020(2)	SS-D	N,G	**0.32**	**56**	CL	**0.20**	0.45	**0.19**	0.41	**0.17**	0.37
176	CIG366-i89/Arg 5mm SS-D (1" IG)	0.197, 0.197	0.632	ARG	0.020(2) 0.149(4)	SS-D	N,G	**0.28**	**50**	CL	**0.20**	0.45	**0.18**	0.41	**0.17**	0.37
177	CIG366-i89/Arg 6mm SS-D (1" IG)	0.236, 0.236	0.522	ARG	0.020(2) 0.149(4)	SS-D	N,G	**0.28**	**49**	CL	**0.20**	0.44	**0.18**	0.40	**0.17**	0.36
178	CIG272/Arg 5mm SS-D (1" IG)	0.197, 0.197	0.632	ARG	0.042(2)	SS-D	N,G	**0.33**	**55**	CL	**0.30**	0.51	**0.27**	0.46	**0.25**	0.42
179	CIG272/Arg 6mm SS-D (1" IG)	0.236, 0.236	0.522	ARG	0.042(2)	SS-D	N,G	**0.32**	**56**	CL	**0.29**	0.50	**0.27**	0.46	**0.25**	0.41
180	CIG272-i89/Arg 5mm SS-D (1" IG)	0.197, 0.197	0.632	ARG	0.042(2) 0.149(4)	SS-D	N,G	**0.29**	**49**	CL	**0.29**	0.50	**0.27**	0.45	**0.24**	0.41
181	CIG272-i89/Arg 6mm SS-D (1" IG)	0.236, 0.236	0.522	ARG	0.042(2) 0.149(4)	SS-D	N,G	**0.28**	**48**	CL	**0.29**	0.49	**0.26**	0.45	**0.24**	0.40
182	CIG180/Arg 5mm SS-D (1" IG)	0.197, 0.197	0.632	ARG	0.068(2)	SS-D	N,G	**0.33**	**55**	CL	**0.45**	0.56	**0.41**	0.51	**0.38**	0.46
183	CIG180/Arg 6mm SS-D (1" IG)	0.236, 0.236	0.522	ARG	0.068(2)	SS-D	N,G	**0.33**	**56**	CL	**0.44**	0.55	**0.40**	0.50	**0.37**	0.45
184	CIG180-i89/Arg 5mm SS-D (1" IG)	0.197, 0.197	0.632	ARG	0.068(2) 0.149(4)	SS-D	N,G	**0.29**	**48**	CL	**0.44**	0.55	**0.40**	0.50	**0.36**	0.45
185	CIG180-i89/Arg 6mm SS-D (1" IG)	0.236, 0.236	0.522	ARG	0.068(2) 0.149(4)	SS-D	N,G	**0.29**	**48**	CL	**0.43**	0.54	**0.39**	0.49	**0.35**	0.44
186	CIG340/Arg 5mm SS-D (1" IG)	0.197, 0.197	0.632	ARG	0.028(2)	SS-D	N,G	**0.32**	**56**	CL	**0.14**	0.28	**0.13**	0.25	**0.12**	0.23
187	CIG340/Arg 6mm SS-D (1" IG)	0.236, 0.236	0.522	ARG	0.028(2)	SS-D	N,G	**0.32**	**56**	CL	**0.14**	0.27	**0.13**	0.25	**0.12**	0.22
188	CIG340-i89/Arg 5mm SS-D (1" IG)	0.197, 0.197	0.632	ARG	0.028(2) 0.149(4)	SS-D	N,G	**0.29**	**49**	CL	**0.13**	0.27	**0.12**	0.24	**0.11**	0.22
189	CIG340-i89/Arg 6mm SS-D (1" IG)	0.236, 0.236	0.522	ARG	0.028(2) 0.149(4)	SS-D	N,G	**0.28**	**49**	CL	**0.13**	0.27	**0.12**	0.24	**0.11**	0.22
190	Clear/Air 5mm A1-D (1" IG)	0.197, 0.197	0.621	AIR		A1-D	N,G	**0.51**	**42**	CL	**0.53**	0.58	**0.48**	0.52	**0.44**	0.47
191	Clear/Air 6mm A1-D (1" IG)	0.236, 0.236	0.542	AIR		A1-D	N,G	**0.51**	**42**	CL	**0.51**	0.57	**0.47**	0.52	**0.43**	0.47
192	SN68/Air 5mm A1-D (1" IG)	0.197, 0.197	0.621	AIR	0.039(2)	A1-D	N,G	**0.40**	**48**	CL	**0.28**	0.49	**0.26**	0.45	**0.23**	0.40
	sBZ-SN68/Air 5mm A1-D (1" IG)	0.197, 0.197	0.621	AIR	0.039(3)	A1-D	N,G	**0.40**	**48**	BZ	**0.25**	0.32	**0.23**	0.29	**0.21**	0.26
193	SN68/Air 6mm A1-D (1" IG)	0.236, 0.236	0.542	AIR	0.039(2)	A1-D	N,G	**0.39**	**48**	CL	**0.28**	0.49	**0.25**	0.44	**0.23**	0.40
	sBZ-SN68/Air 6mm A1-D (1" IG)	0.236, 0.236	0.542	AIR	0.039(3)	A1-D	N,G	**0.39**	**48**	BZ	**0.23**	0.29	**0.22**	0.26	**0.20**	0.24
194	SN68/Arg 5mm A1-D (1" IG)	0.197, 0.197	0.621	ARG	0.039(2)	A1-D	N,G	**0.37**	**48**	CL	**0.28**	0.49	**0.25**	0.45	**0.23**	0.40
195	SN68/Arg 6mm A1-D (1" IG)	0.236, 0.236	0.542	ARG	0.039(2)	A1-D	N,G	**0.36**	**48**	CL	**0.27**	0.49	**0.25**	0.44	**0.23**	0.40

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WESTLab

Initials: SZ

NFRC Product Line Summary (2023 Std)

Simulation Report # FLE24001-SS

Manufacturer: Fleetwood Windows & Doors
Series/Model: 450-T Casement
Operator Type: Casement-Single Vent
Frame Type: Aluminum w/Thermal Breaks (AT)
Sash Type: Aluminum w/Thermal Breaks (AT)

Product Line ID: FLE-M-111
Model Size: 600mm x 1500mm
Frame Abs.: 0.3

Simulation Orig Report Date: 8/19/2024
Simulation Revision Date: 8/19/2024
Report Type: Recertification
Simulation Lab Code: SWWW

Note: Options without numbers are grouped with the option(s) above

											No Dividers		Dividers < 1"		Dividers > 1"	
Option	Description/Code	Glass Thicknesses	Gap Width(s)	Gas	Emissivity(sfc)	Spacer/Seal	Divider	U-Factor	CR	Tint	SHGC	VT	SHGC	VT	SHGC	VT
196	SNX62/Air 5mm A1-D (1" IG)	0.197, 0.197	0.621	AIR	0.020(2)	A1-D	N,G	**0.39**	**48**	CL	**0.20**	0.45	**0.18**	0.40	**0.17**	0.36
197	SNX62/Air 6mm A1-D (1" IG)	0.236, 0.236	0.542	AIR	0.020(2)	A1-D	N,G	**0.39**	**48**	CL	**0.20**	0.44	**0.18**	0.40	**0.17**	0.36
198	SNX62/Arg 5mm A1-D (1" IG)	0.197, 0.197	0.621	ARG	0.020(2)	A1-D	N,G	**0.36**	**48**	CL	**0.19**	0.45	**0.18**	0.40	**0.16**	0.36
199	SNX62/Arg 6mm A1-D (1" IG)	0.236, 0.236	0.542	ARG	0.020(2)	A1-D	N,G	**0.36**	**48**	CL	**0.19**	0.44	**0.18**	0.40	**0.16**	0.36
200	SN68/Arg 5mm ZF-S (1" IG)	0.197, 0.197	0.625	ARG	0.039(2)	ZF-S	N,G	**0.32**	**58**	CL	**0.28**	0.49	**0.25**	0.45	**0.23**	0.40
201	SN68/Arg 6mm ZF-S (1" IG)	0.236, 0.236	0.538	ARG	0.039(2)	ZF-S	N,G	**0.32**	**57**	CL	**0.27**	0.49	**0.25**	0.44	**0.23**	0.40
202	SN68-IS20/Arg 5mm ZF-S (1" IG)	0.197, 0.197	0.625	ARG	0.039(2) 0.198(4)	ZF-S	N,G	**0.28**	**51**	CL	**0.27**	0.48	**0.25**	0.43	**0.23**	0.39
203	SN68-IS20/Arg 6mm ZF-S (1" IG)	0.236, 0.236	0.538	ARG	0.039(2) 0.198(4)	ZF-S	N,G	**0.28**	**51**	CL	**0.27**	0.48	**0.25**	0.43	**0.22**	0.39
204	SNX62/Arg 5mm ZF-S (1" IG)	0.197, 0.197	0.625	ARG	0.020(2)	ZF-S	N,G	**0.31**	**58**	CL	**0.19**	0.45	**0.18**	0.40	**0.16**	0.36
205	SNX62/Arg 6mm ZF-S (1" IG)	0.236, 0.236	0.538	ARG	0.020(2)	ZF-S	N,G	**0.31**	**57**	CL	**0.19**	0.44	**0.18**	0.40	**0.16**	0.36
206	SNX62-IS20/Arg 5mm ZF-S (1" IG)	0.197, 0.197	0.625	ARG	0.020(2) 0.198(4)	ZF-S	N,G	**0.28**	**52**	CL	**0.19**	0.44	**0.17**	0.39	**0.16**	0.36
207	SNX62-IS20/Arg 6mm ZF-S (1" IG)	0.236, 0.236	0.538	ARG	0.020(2) 0.198(4)	ZF-S	N,G	**0.28**	**51**	CL	**0.19**	0.43	**0.17**	0.39	**0.16**	0.35
208	SN68/Arg 5mm TS-D (1" IG)	0.197, 0.197	0.596	ARG	0.039(2)	TS-D	N,G	**0.33**	**55**	CL	**0.28**	0.49	**0.25**	0.45	**0.23**	0.40
209	SN68/Arg 6mm TS-D (1" IG)	0.236, 0.236	0.534	ARG	0.039(2)	TS-D	N,G	**0.33**	**54**	CL	**0.27**	0.49	**0.25**	0.44	**0.23**	0.40
210	SN68-IS20/Arg 5mm TS-D (1" IG)	0.197, 0.197	0.596	ARG	0.039(2) 0.198(4)	TS-D	N,G	**0.30**	**48**	CL	**0.27**	0.48	**0.25**	0.43	**0.23**	0.39
211	SN68-IS20/Arg 6mm TS-D (1" IG)	0.236, 0.236	0.534	ARG	0.039(2) 0.198(4)	TS-D	N,G	**0.30**	**48**	CL	**0.27**	0.48	**0.25**	0.43	**0.22**	0.39
212	SNX62/Arg 5mm TS-D (1" IG)	0.197, 0.197	0.596	ARG	0.020(2)	TS-D	N,G	**0.33**	**55**	CL	**0.19**	0.45	**0.18**	0.40	**0.16**	0.36
213	SNX62/Arg 6mm TS-D (1" IG)	0.236, 0.236	0.534	ARG	0.020(2)	TS-D	N,G	**0.33**	**54**	CL	**0.19**	0.44	**0.18**	0.40	**0.16**	0.36
214	SNX62-IS20/Arg 5mm TS-D (1" IG)	0.197, 0.197	0.596	ARG	0.020(2) 0.198(4)	TS-D	N,G	**0.29**	**49**	CL	**0.19**	0.44	**0.17**	0.39	**0.16**	0.36
215	SNX62-IS20/Arg 6mm TS-D (1" IG)	0.236, 0.236	0.534	ARG	0.020(2) 0.198(4)	TS-D	N,G	**0.29**	**48**	CL	**0.19**	0.43	**0.17**	0.39	**0.16**	0.35
216	CIG366/Arg 5mm SS-D (1.25" IG)	0.197, 0.197	0.837	ARG	0.020(2)	SS-D	N,G	**0.32**	**58**	CL	**0.20**	0.46	**0.19**	0.42	**0.17**	0.38
217	CIG366/Arg 6mm SS-D (1.25" IG)	0.236, 0.236	0.778	ARG	0.020(2)	SS-D	N,G	**0.32**	**57**	CL	**0.20**	0.45	**0.19**	0.41	**0.17**	0.37
218	CIG366-i89/Arg 5mm SS-D (1.25" IG)	0.197, 0.197	0.837	ARG	0.020(2) 0.149(4)	SS-D	N,G	**0.28**	**48**	CL	**0.20**	0.45	**0.18**	0.41	**0.17**	0.37
219	CIG366-i89/Arg 6mm SS-D (1.25" IG)	0.236, 0.236	0.778	ARG	0.020(2) 0.149(4)	SS-D	N,G	**0.28**	**49**	CL	**0.20**	0.44	**0.18**	0.40	**0.17**	0.36

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WESTLab

Initials: SZ

NFRC Product Line Summary (2023 Std)

Simulation Report # FLE24001-SS

Manufacturer: Fleetwood Windows & Doors
Series/Model: 450-T Casement
Operator Type: Casement-Single Vent
Frame Type: Aluminum w/Thermal Breaks (AT)
Sash Type: Aluminum w/Thermal Breaks (AT)

Product Line ID: FLE-M-111
Model Size: 600mm x 1500mm
Frame Abs.: 0.3

Simulation Orig Report Date: 8/19/2024
Simulation Revision Date: 8/19/2024
Report Type: Recertification
Simulation Lab Code: SWWW

Note: Options without numbers are grouped with the option(s) above

											No Dividers		Dividers < 1"		Dividers > 1"	
Option	Description/Code	Glass Thicknesses	Gap Width(s)	Gas	Emissivity(sfc)	Spacer/Seal	Divider	U-Factor	CR	Tint	SHGC	VT	SHGC	VT	SHGC	VT
220	CIG272/Arg 5mm SS-D (1.25" IG)	0.197, 0.197	0.837	ARG	0.042(2)	SS-D	N,G	**0.33**	**57**	CL	**0.30**	0.51	**0.27**	0.46	**0.25**	0.42
221	CIG272/Arg 6mm SS-D (1.25" IG)	0.236, 0.236	0.778	ARG	0.042(2)	SS-D	N,G	**0.33**	**57**	CL	**0.29**	0.50	**0.27**	0.46	**0.25**	0.41
222	CIG272-i89/Arg 5mm SS-D (1.25" IG)	0.197, 0.197	0.837	ARG	0.042(2) 0.149(4)	SS-D	N,G	**0.29**	**48**	CL	**0.29**	0.50	**0.27**	0.45	**0.24**	0.41
223	CIG272-i89/Arg 6mm SS-D (1.25" IG)	0.236, 0.236	0.778	ARG	0.042(2) 0.149(4)	SS-D	N,G	**0.29**	**49**	CL	**0.29**	0.49	**0.26**	0.45	**0.24**	0.40
224	CIG180/Arg 5mm SS-D (1.25" IG)	0.197, 0.197	0.837	ARG	0.068(2)	SS-D	N,G	**0.34**	**57**	CL	**0.45**	0.56	**0.41**	0.51	**0.38**	0.46
225	CIG180/Arg 6mm SS-D (1.25" IG)	0.236, 0.236	0.778	ARG	0.068(2)	SS-D	N,G	**0.33**	**57**	CL	**0.44**	0.55	**0.40**	0.50	**0.37**	0.45
226	CIG180-i89/Arg 5mm SS-D (1.25" IG)	0.197, 0.197	0.837	ARG	0.068(2) 0.149(4)	SS-D	N,G	**0.29**	**47**	CL	**0.44**	0.55	**0.40**	0.50	**0.37**	0.45
227	CIG180-i89/Arg 6mm SS-D (1.25" IG)	0.236, 0.236	0.778	ARG	0.068(2) 0.149(4)	SS-D	N,G	**0.29**	**48**	CL	**0.43**	0.54	**0.39**	0.49	**0.35**	0.44
228	CIG340/Arg 5mm SS-D (1.25" IG)	0.197, 0.197	0.837	ARG	0.028(2)	SS-D	N,G	**0.33**	**57**	CL	**0.14**	0.28	**0.13**	0.25	**0.12**	0.23
229	CIG340/Arg 6mm SS-D (1.25" IG)	0.236, 0.236	0.778	ARG	0.028(2)	SS-D	N,G	**0.32**	**57**	CL	**0.14**	0.27	**0.13**	0.25	**0.12**	0.22
230	CIG340-i89/Arg 5mm SS-D (1.25" IG)	0.197, 0.197	0.837	ARG	0.028(2) 0.149(4)	SS-D	N,G	**0.28**	**48**	CL	**0.13**	0.27	**0.12**	0.24	**0.11**	0.22
231	CIG340-i89/Arg 6mm SS-D (1.25" IG)	0.236, 0.236	0.778	ARG	0.028(2) 0.149(4)	SS-D	N,G	**0.28**	**49**	CL	**0.13**	0.27	**0.12**	0.24	**0.11**	0.22
232	Clear/Air 5mm A1-D (1.25" IG)	0.197, 0.197	0.851	AIR		A1-D	N,G	**0.52**	**42**	CL	**0.53**	0.58	**0.48**	0.52	**0.44**	0.47
233	Clear/Air 6mm A1-D (1.25" IG)	0.236, 0.236	0.788	AIR		A1-D	N,G	**0.51**	**42**	CL	**0.51**	0.57	**0.47**	0.52	**0.43**	0.47
234	SN68/Air 5mm A1-D (1.25" IG)	0.197, 0.197	0.851	AIR	0.039(2)	A1-D	N,G	**0.41**	**48**	CL	**0.28**	0.49	**0.26**	0.45	**0.23**	0.40
	sBZ-SN68/Air 5mm A1-D (1.25" IG)	0.197, 0.197	0.851	AIR	0.039(3)	A1-D	N,G	**0.41**	**48**	BZ	**0.25**	0.32	**0.23**	0.29	**0.21**	0.26
235	SN68/Air 6mm A1-D (1.25" IG)	0.236, 0.236	0.788	AIR	0.039(2)	A1-D	N,G	**0.40**	**48**	CL	**0.28**	0.49	**0.25**	0.44	**0.23**	0.40
	sBZ-SN68/Air 6mm A1-D (1.25" IG)	0.236, 0.236	0.788	AIR	0.039(3)	A1-D	N,G	**0.40**	**48**	BZ	**0.23**	0.29	**0.21**	0.26	**0.20**	0.24
236	SN68/Arg 5mm A1-D (1.25" IG)	0.197, 0.197	0.851	ARG	0.039(2)	A1-D	N,G	**0.37**	**48**	CL	**0.28**	0.49	**0.25**	0.45	**0.23**	0.40
237	SN68/Arg 6mm A1-D (1.25" IG)	0.236, 0.236	0.788	ARG	0.039(2)	A1-D	N,G	**0.37**	**48**	CL	**0.27**	0.49	**0.25**	0.44	**0.23**	0.40
238	SNX62/Air 5mm A1-D (1.25" IG)	0.197, 0.197	0.851	AIR	0.020(2)	A1-D	N,G	**0.40**	**48**	CL	**0.20**	0.45	**0.18**	0.40	**0.17**	0.36
239	SNX62/Air 6mm A1-D (1.25" IG)	0.236, 0.236	0.788	AIR	0.020(2)	A1-D	N,G	**0.40**	**48**	CL	**0.20**	0.44	**0.18**	0.40	**0.17**	0.36
240	SNX62/Arg 5mm A1-D (1.25" IG)	0.197, 0.197	0.851	ARG	0.020(2)	A1-D	N,G	**0.37**	**48**	CL	**0.20**	0.45	**0.18**	0.40	**0.17**	0.36
241	SNX62/Arg 6mm A1-D (1.25" IG)	0.236, 0.236	0.788	ARG	0.020(2)	A1-D	N,G	**0.37**	**49**	CL	**0.19**	0.44	**0.18**	0.40	**0.16**	0.36

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WESTLab

Initials: SZ

NFRC Product Line Summary (2023 Std)

Simulation Report # FLE24001-SS

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Series/Model: 450-T Casement
Operator Type: Casement-Single Vent
Frame Type: Aluminum w/Thermal Breaks (AT)
Sash Type: Aluminum w/Thermal Breaks (AT)

Product Line ID: FLE-M-111
Model Size: 600mm x 1500mm
Frame Abs.: 0.3

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Simulation Revision Date: 8/19/2024
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											No Dividers		Dividers < 1"		Dividers > 1"	
Option	Description/Code	Glass Thicknesses	Gap Width(s)	Gas	Emissivity(sfc)	Spacer/Seal	Divider	U-Factor	CR	Tint	SHGC	VT	SHGC	VT	SHGC	VT
242	SN68/Arg 5mm ZF-S (1.25" IG)	0.197, 0.197	0.875	ARG	0.039(2)	ZF-S	N,G	**0.32**	**59**	CL	**0.28**	0.49	**0.25**	0.45	**0.23**	0.40
243	SN68/Arg 6mm ZF-S (1.25" IG)	0.236, 0.236	0.750	ARG	0.039(2)	ZF-S	N,G	**0.32**	**60**	CL	**0.27**	0.49	**0.25**	0.44	**0.23**	0.40
244	SN68-IS20/Arg 5mm ZF-S (1.25" IG)	0.197, 0.197	0.875	ARG	0.039(2) 0.198(4)	ZF-S	N,G	**0.28**	**51**	CL	**0.27**	0.48	**0.25**	0.43	**0.23**	0.39
245	SN68-IS20/Arg 6mm ZF-S (1.25" IG)	0.236, 0.236	0.750	ARG	0.039(2) 0.198(4)	ZF-S	N,G	**0.28**	**51**	CL	**0.27**	0.48	**0.24**	0.43	**0.22**	0.39
246	SNX62/Arg 5mm ZF-S (1.25" IG)	0.197, 0.197	0.875	ARG	0.020(2)	ZF-S	N,G	**0.32**	**59**	CL	**0.20**	0.45	**0.18**	0.40	**0.17**	0.36
247	SNX62/Arg 6mm ZF-S (1.25" IG)	0.236, 0.236	0.750	ARG	0.020(2)	ZF-S	N,G	**0.31**	**60**	CL	**0.19**	0.44	**0.18**	0.40	**0.16**	0.36
248	SNX62-IS20/Arg 5mm ZF-S (1.25" IG)	0.197, 0.197	0.875	ARG	0.020(2) 0.198(4)	ZF-S	N,G	**0.28**	**51**	CL	**0.19**	0.44	**0.17**	0.39	**0.16**	0.36
249	SNX62-IS20/Arg 6mm ZF-S (1.25" IG)	0.236, 0.236	0.750	ARG	0.020(2) 0.198(4)	ZF-S	N,G	**0.28**	**51**	CL	**0.19**	0.43	**0.17**	0.39	**0.16**	0.35
250	SN68/Arg 5mm TS-D (1.25" IG)	0.197, 0.197	0.817	ARG	0.039(2)	TS-D	N,G	**0.33**	**57**	CL	**0.28**	0.49	**0.25**	0.45	**0.23**	0.40
251	SN68/Arg 6mm TS-D (1.25" IG)	0.236, 0.236	0.784	ARG	0.039(2)	TS-D	N,G	**0.33**	**56**	CL	**0.27**	0.49	**0.25**	0.44	**0.23**	0.40
252	SN68-IS20/Arg 5mm TS-D (1.25" IG)	0.197, 0.197	0.817	ARG	0.039(2) 0.198(4)	TS-D	N,G	**0.29**	**48**	CL	**0.27**	0.48	**0.25**	0.43	**0.23**	0.39
253	SN68-IS20/Arg 6mm TS-D (1.25" IG)	0.236, 0.236	0.784	ARG	0.039(2) 0.198(4)	TS-D	N,G	**0.29**	**49**	CL	**0.27**	0.48	**0.24**	0.43	**0.22**	0.39
254	SNX62/Arg 5mm TS-D (1.25" IG)	0.197, 0.197	0.817	ARG	0.020(2)	TS-D	N,G	**0.33**	**57**	CL	**0.19**	0.45	**0.18**	0.40	**0.16**	0.36
255	SNX62/Arg 6mm TS-D (1.25" IG)	0.236, 0.236	0.784	ARG	0.020(2)	TS-D	N,G	**0.33**	**56**	CL	**0.19**	0.44	**0.18**	0.40	**0.16**	0.36
256	SNX62-IS20/Arg 5mm TS-D (1.25" IG)	0.197, 0.197	0.817	ARG	0.020(2) 0.198(4)	TS-D	N,G	**0.29**	**48**	CL	**0.19**	0.44	**0.17**	0.39	**0.16**	0.36
257	SNX62-IS20/Arg 6mm TS-D (1.25" IG)	0.236, 0.236	0.784	ARG	0.020(2) 0.198(4)	TS-D	N,G	**0.29**	**49**	CL	**0.19**	0.43	**0.17**	0.39	**0.16**	0.35
258	CIG180-Clr-CIG180/Arg 5mm SS-D (1.75" IG)	0.197, 0.197, 0.197	0.580, 0.580	ARG	0.068(2) 0.068(5)	SS-D	N,G	**0.23**	**61**	CL	**0.39**	0.49	**0.36**	0.45	**0.33**	0.40
259	CIG180-Clr-CIG180/Arg 6mm SS-D (1.75" IG)	0.236, 0.236, 0.236	0.522, 0.522	ARG	0.068(2) 0.068(5)	SS-D	N,G	**0.23**	**62**	CL	**0.38**	0.48	**0.35**	0.44	**0.31**	0.39
260	CIG180-CIG180-CIGi89/Arg 5mm SS-D (1.75" IG)	0.197, 0.197, 0.197	0.580, 0.580	ARG	0.068(2) 0.068(4) 0.149(6)	SS-D	N,G	**0.21**	**58**	CL	**0.37**	0.48	**0.34**	0.43	**0.31**	0.39
261	CIG180-CIG180-CIGi89/Arg 6mm SS-D (1.75" IG)	0.236, 0.236, 0.236	0.522, 0.522	ARG	0.068(2) 0.068(4) 0.149(6)	SS-D	N,G	**0.21**	**60**	CL	**0.36**	0.47	**0.33**	0.43	**0.30**	0.38
262	CIG272-Clr-CIG180/Arg 5mm SS-D (1.75" IG)	0.197, 0.197, 0.197	0.580, 0.580	ARG	0.042(2) 0.068(5)	SS-D	N,G	**0.23**	**61**	CL	**0.27**	0.44	**0.24**	0.40	**0.22**	0.36
263	CIG272-Clr-CIG180/Arg 6mm SS-D (1.75" IG)	0.236, 0.236, 0.236	0.522, 0.522	ARG	0.042(2) 0.068(5)	SS-D	N,G	**0.22**	**62**	CL	**0.26**	0.44	**0.24**	0.39	**0.22**	0.36
264	CIG272-CIG180-CIGi89/Arg 5mm SS-D (1.75" IG)	0.197, 0.197, 0.197	0.580, 0.580	ARG	0.042(2) 0.068(4) 0.149(6)	SS-D	N,G	**0.21**	**59**	CL	**0.26**	0.43	**0.23**	0.39	**0.21**	0.35
265	CIG272-CIG180-CIGi89/Arg 6mm SS-D (1.75" IG)	0.236, 0.236, 0.236	0.522, 0.522	ARG	0.042(2) 0.068(4) 0.149(6)	SS-D	N,G	**0.21**	**60**	CL	**0.25**	0.43	**0.23**	0.39	**0.21**	0.35

The Condensation Resistance results obtained from this procedure are for controlled laboratory conditions and do not include the effects of air movement through the specimen, solar radiation, and the thermal bridging that may occur due to the specific design and construction of the fenestration system opening. (NFRC 500)

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NFRC Product Line Summary (2023 Std)

Simulation Report # FLE24001-SS

Manufacturer: Fleetwood Windows & Doors
Series/Model: 450-T Casement
Operator Type: Casement-Single Vent
Frame Type: Aluminum w/Thermal Breaks (AT)
Sash Type: Aluminum w/Thermal Breaks (AT)

Product Line ID: FLE-M-111
Model Size: 600mm x 1500mm
Frame Abs.: 0.3

Simulation Orig Report Date: 8/19/2024
Simulation Revision Date: 8/19/2024
Report Type: Recertification
Simulation Lab Code: SWWW

Note: Options without numbers are grouped with the option(s) above

											No Dividers		Dividers < 1"		Dividers > 1"	
Option	Description/Code	Glass Thicknesses	Gap Width(s)	Gas	Emissivity(sfc)	Spacer/Seal	Divider	U-Factor	CR	Tint	SHGC	VT	SHGC	VT	SHGC	VT
266	SN68-Clr-SN68/Air 5mm A1-D (1.75" IG)	0.197, 0.197, 0.197	0.571, 0.571	AIR	0.039(2) 0.039(5)	A1-D	N,G	**0.28**	**52**	CL	**0.24**	0.38	**0.22**	0.34	**0.20**	0.31
267	SN68-Clr-SN68/Air 6mm A1-D (1.75" IG)	0.236, 0.236, 0.236	0.509, 0.509	AIR	0.039(2) 0.039(5)	A1-D	N,G	**0.29**	**53**	CL	**0.24**	0.37	**0.22**	0.34	**0.20**	0.30
268	SN68-Clr-SN68/Arg 5mm A1-D (1.75" IG)	0.197, 0.197, 0.197	0.571, 0.571	ARG	0.039(2) 0.039(5)	A1-D	N,G	**0.26**	**52**	CL	**0.24**	0.38	**0.22**	0.34	**0.20**	0.31
269	SN68-Clr-SN68/Arg 6mm A1-D (1.75" IG)	0.236, 0.236, 0.236	0.509, 0.509	ARG	0.039(2) 0.039(5)	A1-D	N,G	**0.26**	**53**	CL	**0.23**	0.37	**0.22**	0.34	**0.20**	0.30
270	SNX62-Clr-SNX62/Air 5mm A1-D (1.75" IG)	0.197, 0.197, 0.197	0.571, 0.571	AIR	0.020(2) 0.020(5)	A1-D	N,G	**0.28**	**52**	CL	**0.17**	0.31	**0.16**	0.28	**0.15**	0.26
271	SNX62-Clr-SNX62/Air 6mm A1-D (1.75" IG)	0.236, 0.236, 0.236	0.509, 0.509	AIR	0.020(2) 0.020(5)	A1-D	N,G	**0.28**	**53**	CL	**0.17**	0.31	**0.16**	0.28	**0.14**	0.25
272	SNX62-Clr-SNX62/Arg 5mm A1-D (1.75" IG)	0.197, 0.197, 0.197	0.571, 0.571	ARG	0.020(2) 0.020(5)	A1-D	N,G	**0.26**	**52**	CL	**0.17**	0.31	**0.16**	0.28	**0.14**	0.26
273	SNX62-Clr-SNX62/Arg 6mm A1-D (1.75" IG)	0.236, 0.236, 0.236	0.509, 0.509	ARG	0.020(2) 0.020(5)	A1-D	N,G	**0.26**	**53**	CL	**0.17**	0.31	**0.16**	0.28	**0.14**	0.25
274	SN68-Clr-SN68/Arg 5mm ZF-S (1.75" IG)	0.197, 0.197, 0.197	0.562, 0.562	ARG	0.039(2) 0.039(5)	ZF-S	N,G	**0.21**	**63**	CL	**0.24**	0.38	**0.22**	0.34	**0.20**	0.31
275	SN68-Clr-SN68/Arg 6mm ZF-S (1.75" IG)	0.236, 0.236, 0.236	0.500, 0.500	ARG	0.039(2) 0.039(5)	ZF-S	N,G	**0.22**	**63**	CL	**0.23**	0.37	**0.22**	0.34	**0.20**	0.30
276	SN68-SN68-IS20/Arg 5mm ZF-S (1.75" IG)	0.197, 0.197, 0.197	0.562, 0.562	ARG	0.039(2) 0.039(4) 0.198(6)	ZF-S	N,G	**0.20**	**62**	CL	**0.21**	0.37	**0.20**	0.33	**0.18**	0.30
277	SN68-SN68-IS20/Arg 6mm ZF-S (1.75" IG)	0.236, 0.236, 0.236	0.500, 0.500	ARG	0.039(2) 0.039(4) 0.198(6)	ZF-S	N,G	**0.21**	**62**	CL	**0.21**	0.36	**0.19**	0.33	**0.18**	0.30
278	SNX62-Clr-SNX62/Arg 5mm ZF-S (1.75" IG)	0.197, 0.197, 0.197	0.562, 0.562	ARG	0.020(2) 0.020(5)	ZF-S	N,G	**0.21**	**63**	CL	**0.17**	0.31	**0.16**	0.28	**0.14**	0.26
279	SNX62-Clr-SNX62/Arg 6mm ZF-S (1.75" IG)	0.236, 0.236, 0.236	0.500, 0.500	ARG	0.020(2) 0.020(5)	ZF-S	N,G	**0.21**	**63**	CL	**0.17**	0.31	**0.16**	0.28	**0.14**	0.25
280	SNX62-SNX62-IS20/Arg 5mm ZF-S (1.75" IG)	0.197, 0.197, 0.197	0.562, 0.562	ARG	0.020(2) 0.020(4) 0.198(6)	ZF-S	N,G	**0.20**	**62**	CL	**0.15**	0.30	**0.13**	0.27	**0.12**	0.25
281	SNX62-SNX62-IS20/Arg 6mm ZF-S (1.75" IG)	0.236, 0.236, 0.236	0.500, 0.500	ARG	0.020(2) 0.020(4) 0.198(6)	ZF-S	N,G	**0.20**	**62**	CL	**0.14**	0.30	**0.13**	0.27	**0.12**	0.24
282	SN68-SN68-IS20/Arg 5mm TS-D (1.75" IG)	0.197, 0.197, 0.197	0.577, 0.577	ARG	0.039(2) 0.039(4) 0.198(6)	TS-D	N,G	**0.21**	**58**	CL	**0.21**	0.37	**0.20**	0.33	**0.18**	0.30
283	SN68-SN68-IS20/Arg 6mm TS-D (1.75" IG)	0.236, 0.236, 0.236	0.514, 0.514	ARG	0.039(2) 0.039(4) 0.198(6)	TS-D	N,G	**0.22**	**58**	CL	**0.21**	0.36	**0.19**	0.33	**0.18**	0.30
284	SNX62-SNX62-IS20/Arg 5mm TS-D (1.75" IG)	0.197, 0.197, 0.197	0.577, 0.577	ARG	0.020(2) 0.020(4) 0.198(6)	TS-D	N,G	**0.21**	**58**	CL	**0.15**	0.30	**0.13**	0.27	**0.12**	0.25
285	SNX62-SNX62-IS20/Arg 6mm TS-D (1.75" IG)	0.236, 0.236, 0.236	0.514, 0.514	ARG	0.020(2) 0.020(4) 0.198(6)	TS-D	N,G	**0.21**	**58**	CL	**0.14**	0.30	**0.13**	0.27	**0.12**	0.24

The Condensation Resistance results obtained from this procedure are for controlled laboratory conditions and do not include the effects of air movement through the specimen, solar radiation, and the thermal bridging that may occur due to the specific design and construction of the fenestration system opening. (NFRC 500)

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ANSI/NFRC 100/200-2023 /NFRC 500-2017 Simulation Report

WESTLab Report No.:	**FLE24001-SS**
WESTLab Report Date:	**8/19/2024**
Revision/Addendum Date:	**8/19/2024**
NFRC Product Line ID:	**FLE-M-111**
Report Type:	**Recertification**

Manufacturer: **Fleetwood Windows & Doors**

Contact: **Joe Zammit**

Address: 1 Fleetwood Way
Corona, CA 92879

Phone: 951-279-1070

RECERTIFICATION REPORT

Model/Series: **450-T Casement**

Operator Type: Casement-Single Vent

Frame Type: Aluminum w/Thermal Breaks (AT)

Sash Type: Aluminum w/Thermal Breaks (AT)

Baseline Product for U-Factor Validation Testing:

Description: **Validation Unit Triple Glazed IG:** 5mm Guardian SN68 (e=0.039, sfc#2), 0.571" Air-filled Gap, 5mm Clear, 0.571" Air-filled Gap, 5mm Guardian SN68 (e=0.039, sfc#5) with Aluminum Box spacer and no grids. The validation unit has an anodized finish. See W7 Option #999 for area weighted calculations.

Simulated U-factor: **0.29**

Test Size (mm): 600 **x** 1500 **(23.6in. x 59.1in.)**

Physical Test Tolerance: *0.26 to 0.32*

Notes: *Manufacturer must have the product described above tested by an accredited physical testing laboratory. Physical test window U-factor results must be within the tolerance range listed above. The baseline product simulated U-factor is within 20% or 0.10 of the lowest simulated U-factor listed in the matrix (as allowed by ANSI/NFRC 100-2023) unless otherwise noted in the "Other Notes and Comments" section.*

Signature of Simulator In-Responsible-Charge: Staci Zastrow

Staci Zastrow, Certified Simulator

Disclaimers/Notes:

The window U-factor, SHGC, VT & CR values presented in this report were determined using the Therm and Window computer programs in full compliance with ANSI/NFRC 100-2023, ANSI/200-2023 and NFRC 500-2017, and from information supplied by the manufacturer. This report does not constitute certification of this product and only relates to the fenestration products simulated. Authorized use of any U-factor, SHGC Visible Transmittance and Condensation Resistance ratings may only be granted by the Certification Program Administrator.
WESTLab does not imply or claim that the product simulated in this report will perform as stated in actual use conditions. This report is the property of WESTLab and the client, and must not be reproduced, except in full, without written approval from WESTLab and the client.
Ratings values included in this report are for submittal to an NFRC-licensed IA are not meant to be used directly for labeling purposes. Only those values identified on a valid Certificate of Authorization (CA) by an NFRC accredited Inspection Agency (IA) are to be used for labeling purposes.
Rounding of values in this report is per NFRC 601 NFRC unit and measurement policy.

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