

NFRC Product Certification Authorization Report



Manufacturer: MGM Industries
Street: 287 Free Hill Road
City/State/Zip: Hendersonville, TN 37075
Print Date: 12/08/2011

Product Series: 4600 Picture Window
Product Type: FIXD
Air Leakage:

Simulation Lab: SATI
Sim. Report #: 99966.10-116-45
Sim. Report Date: 09/07/2011
Test Date: 06/18/2010

Initial Cert. Date: 06/02/2009
Re-Certification Date: 12/08/2011
Revised Date: 09/07/2011
Expiration Date: 06/18/2014

CPD Number: MGM-A-21

IA: American Architectural Manufacturers Association

Status	Product Num.	Manufacturer Code	Frame/Sash	Glaz Lyrs	Low-E (Surface)	Gap Width(s)	Spacer	Gap Fill	Grids	Dividers	Tint	U-Factor	SHGC	VT	Cond. Res.
	00003-00001	CLR/AIR/CLR (2mm/2mm) 1"	VY/NA	2		0.813	CU-D	Fill 1: AIR (100)	N		CL	0.47	0.69	0.72	43
	00003-00002	CLR/AIR/CLR (2mm/2mm) 1"	VY/NA	2		0.813	CU-D	Fill 1: AIR (100)	G	0.75	CL	0.47	0.62	0.65	43
	00003-00003	CLR/AIR/CLR (3mm/3mm) 1"	VY/NA	2		0.750	CU-D	Fill 1: AIR (100)	N		CL	0.47	0.68	0.71	43
	00003-00004	CLR/AIR/CLR (3mm/3mm) 1"	VY/NA	2		0.750	CU-D	Fill 1: AIR (100)	G	0.75	CL	0.47	0.61	0.64	43
	00003-00005	GRY/AIR/CLR (3mm/3mm) 1"	VY/NA	2		0.750	CU-D	Fill 1: AIR (100)	N		GY	0.47	0.52	0.48	43
	00003-00006	GRY/AIR/CLR (3mm/3mm) 1"	VY/NA	2		0.750	CU-D	Fill 1: AIR (100)	G	0.75	GY	0.47	0.47	0.43	43
	00003-00007	BRZ/AIR/CLR (3mm/3mm) 1"	VY/NA	2		0.750	CU-D	Fill 1: AIR (100)	N		BZ	0.47	0.55	0.53	43
	00003-00008	BRZ/AIR/CLR (3mm/3mm) 1"	VY/NA	2		0.750	CU-D	Fill 1: AIR (100)	G	0.75	BZ	0.47	0.49	0.48	43
	00004-00001	CLR/ARG/CLR (3mm/3mm) 1"	VY/NA	2		0.750	CU-D	Fill 1: ARG/AIR (95/5)	N		CL	0.45	0.66	0.71	44
	00004-00002	CLR/ARG/CLR (3mm/3mm) 1"	VY/NA	2		0.750	CU-D	Fill 1: ARG/AIR (95/5)	G	0.75	CL	0.45	0.60	0.63	44
	00004-00003	GRY/ARG/CLR (3mm/3mm) 1"	VY/NA	2		0.750	CU-D	Fill 1: ARG/AIR (95/5)	N		GY	0.45	0.52	0.48	44
	00004-00004	GRY/ARG/CLR (3mm/3mm) 1"	VY/NA	2		0.750	CU-D	Fill 1: ARG/AIR (95/5)	G	0.75	GY	0.45	0.47	0.43	44
	00004-00005	BRZ/ARG/CLR (3mm/3mm) 1"	VY/NA	2		0.750	CU-D	Fill 1: ARG/AIR (95/5)	N		BZ	0.45	0.54	0.53	44
	00004-00006	BRZ/ARG/CLR (3mm/3mm) 1"	VY/NA	2		0.750	CU-D	Fill 1: ARG/AIR (95/5)	G	0.75	BZ	0.45	0.49	0.48	44
	00005-00001	E270/AIR/CLR (2mm/2mm) 1"	VY/NA	2	0.037(2)	0.813	CU-D	Fill 1: AIR (100)	N		CL	0.33	0.32	0.61	52
	00005-00002	E270/AIR/CLR (2mm/2mm) 1"	VY/NA	2	0.037(2)	0.813	CU-D	Fill 1: AIR (100)	G	0.75	CL	0.33	0.29	0.55	52
	00005-00003	CLR/AIR/E270 (2mm/2mm) 1"	VY/NA	2	0.037(3)	0.813	CU-D	Fill 1: AIR (100)	N		CL	0.33	0.41	0.61	52
	00005-00004	CLR/AIR/E270 (2mm/2mm) 1"	VY/NA	2	0.037(3)	0.813	CU-D	Fill 1: AIR (100)	G	0.75	CL	0.33	0.37	0.55	52
	00005-00005	E270/AIR/CLR (3mm/3mm) 1"	VY/NA	2	0.037(2)	0.750	CU-D	Fill 1: AIR (100)	N		CL	0.33	0.32	0.61	52
	00005-00006	E270/AIR/CLR (3mm/3mm) 1"	VY/NA	2	0.037(2)	0.750	CU-D	Fill 1: AIR (100)	G	0.75	CL	0.33	0.29	0.55	52
	00005-00007	E270/AIR/GRY (3mm/3mm) 1"	VY/NA	2	0.037(2)	0.750	CU-D	Fill 1: AIR (100)	N		GY	0.33	0.31	0.41	52
	00005-00008	E270/AIR/GRY (3mm/3mm) 1"	VY/NA	2	0.037(2)	0.750	CU-D	Fill 1: AIR (100)	G	0.75	GY	0.33	0.28	0.37	52
	00005-00009	E270/AIR/BRZ (3mm/3mm) 1"	VY/NA	2	0.037(2)	0.750	CU-D	Fill 1: AIR (100)	N		BZ	0.33	0.31	0.46	52
	00005-00010	E270/AIR/BRZ (3mm/3mm) 1"	VY/NA	2	0.037(2)	0.750	CU-D	Fill 1: AIR (100)	G	0.75	BZ	0.33	0.28	0.41	52
	00005-00011	CLR/AIR/E270 (3mm/3mm) 1"	VY/NA	2	0.037(3)	0.750	CU-D	Fill 1: AIR (100)	N		CL	0.33	0.40	0.61	52

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	00005-00012	CLR/AIR/E270 (3mm/3mm) 1"	VY/NA	2	0.037(3)	0.750	CU-D	Fill 1: AIR (100)	G	0.75	CL	0.33	0.36	0.55	52
	00005-00013	GRY/AIR/E270 (3mm/3mm) 1"	VY/NA	2	0.037(3)	0.750	CU-D	Fill 1: AIR (100)	N		GY	0.33	0.30	0.41	52
	00005-00014	GRY/AIR/E270 (3mm/3mm) 1"	VY/NA	2	0.037(3)	0.750	CU-D	Fill 1: AIR (100)	G	0.75	GY	0.33	0.28	0.37	52
	00005-00015	BRZ/AIR/E270 (3mm/3mm) 1"	VY/NA	2	0.037(3)	0.750	CU-D	Fill 1: AIR (100)	N		BZ	0.33	0.32	0.46	52
	00005-00016	BRZ/AIR/E270 (3mm/3mm) 1"	VY/NA	2	0.037(3)	0.750	CU-D	Fill 1: AIR (100)	G	0.75	BZ	0.33	0.29	0.41	52
	00006-00001	E270/ARG/CLR (2mm/2mm) 1"	VY/NA	2	0.037(2)	0.813	CU-D	Fill 1: ARG/AIR (95/5)	N		CL	0.29	0.32	0.61	56
	00006-00002	E270/ARG/CLR (2mm/2mm) 1"	VY/NA	2	0.037(2)	0.813	CU-D	Fill 1: ARG/AIR (95/5)	G	0.75	CL	0.29	0.29	0.55	56
	00006-00003	CLR/ARG/E270 (2mm/2mm) 1"	VY/NA	2	0.037(3)	0.813	CU-D	Fill 1: ARG/AIR (95/5)	N		CL	0.29	0.41	0.61	56
	00006-00004	CLR/ARG/E270 (2mm/2mm) 1"	VY/NA	2	0.037(3)	0.813	CU-D	Fill 1: ARG/AIR (95/5)	G	0.75	CL	0.29	0.37	0.55	56
	00006-00005	E270/ARG/CLR (3mm/3mm) 1"	VY/NA	2	0.037(2)	0.750	CU-D	Fill 1: ARG/AIR (95/5)	N		CL	0.29	0.32	0.61	56
	00006-00006	E270/ARG/CLR (3mm/3mm) 1"	VY/NA	2	0.037(2)	0.750	CU-D	Fill 1: ARG/AIR (95/5)	G	0.75	CL	0.29	0.29	0.55	56
	00006-00007	E270/ARG/GRY (3mm/3mm) 1"	VY/NA	2	0.037(2)	0.750	CU-D	Fill 1: ARG/AIR (95/5)	N		GY	0.29	0.31	0.41	56
	00006-00008	E270/ARG/GRY (3mm/3mm) 1"	VY/NA	2	0.037(2)	0.750	CU-D	Fill 1: ARG/AIR (95/5)	G	0.75	GY	0.29	0.28	0.37	56
	00006-00009	E270/ARG/BRZ (3mm/3mm) 1"	VY/NA	2	0.037(2)	0.750	CU-D	Fill 1: ARG/AIR (95/5)	N		BZ	0.29	0.31	0.46	56
	00006-00010	E270/ARG/BRZ (3mm/3mm) 1"	VY/NA	2	0.037(2)	0.750	CU-D	Fill 1: ARG/AIR (95/5)	G	0.75	BZ	0.29	0.28	0.41	56
	00006-00011	CLR/ARG/E270 (3mm/3mm) 1"	VY/NA	2	0.037(3)	0.750	CU-D	Fill 1: ARG/AIR (95/5)	N		CL	0.29	0.40	0.61	56
	00006-00012	CLR/ARG/E270 (3mm/3mm) 1"	VY/NA	2	0.037(3)	0.750	CU-D	Fill 1: ARG/AIR (95/5)	G	0.75	CL	0.29	0.36	0.55	56
	00006-00013	GRY/ARG/E270 (3mm/3mm) 1"	VY/NA	2	0.037(3)	0.750	CU-D	Fill 1: ARG/AIR (95/5)	N		GY	0.29	0.30	0.41	56
	00006-00014	GRY/ARG/E270 (3mm/3mm) 1"	VY/NA	2	0.037(3)	0.750	CU-D	Fill 1: ARG/AIR (95/5)	G	0.75	GY	0.29	0.27	0.37	56
	00006-00015	BRZ/ARG/E270 (3mm/3mm) 1"	VY/NA	2	0.037(3)	0.750	CU-D	Fill 1: ARG/AIR (95/5)	N		BZ	0.29	0.32	0.46	56
	00006-00016	BRZ/ARG/E270 (3mm/3mm) 1"	VY/NA	2	0.037(3)	0.750	CU-D	Fill 1: ARG/AIR (95/5)	G	0.75	BZ	0.29	0.29	0.41	56
	00007-00001	E366/AIR/CLR (2mm/2mm) 1"	VY/NA	2	0.022(2)	0.813	CU-D	Fill 1: AIR (100)	N		CL	0.32	0.24	0.57	53
	00007-00002	E366/AIR/CLR (2mm/2mm) 1"	VY/NA	2	0.022(2)	0.813	CU-D	Fill 1: AIR (100)	G	0.75	CL	0.32	0.22	0.51	53
	00007-00003	CLR/AIR/E366 (2mm/2mm) 1"	VY/NA	2	0.022(3)	0.813	CU-D	Fill 1: AIR (100)	N		CL	0.32	0.34	0.57	53
	00007-00004	CLR/AIR/E366 (2mm/2mm) 1"	VY/NA	2	0.022(3)	0.813	CU-D	Fill 1: AIR (100)	G	0.75	CL	0.32	0.31	0.51	53

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	00007-00005	E366/AIR/CLR (3mm/3mm) 1"	VY/NA	2	0.022(2)	0.750	CU-D	Fill 1: AIR (100)	N		CL	0.32	0.24	0.56	53
	00007-00006	E366/AIR/CLR (3mm/3mm) 1"	VY/NA	2	0.022(2)	0.750	CU-D	Fill 1: AIR (100)	G	0.75	CL	0.32	0.22	0.50	53
	00007-00007	E366/AIR/GRY (3mm/3mm) 1"	VY/NA	2	0.022(2)	0.750	CU-D	Fill 1: AIR (100)	N		GY	0.32	0.23	0.38	53
	00007-00008	E366/AIR/GRY (3mm/3mm) 1"	VY/NA	2	0.022(2)	0.750	CU-D	Fill 1: AIR (100)	G	0.75	GY	0.32	0.21	0.34	53
	00007-00009	E366/AIR/BRZ (3mm/3mm) 1"	VY/NA	2	0.022(2)	0.750	CU-D	Fill 1: AIR (100)	N		BZ	0.32	0.23	0.42	53
	00007-00010	E366/AIR/BRZ (3mm/3mm) 1"	VY/NA	2	0.022(2)	0.750	CU-D	Fill 1: AIR (100)	G	0.75	BZ	0.32	0.21	0.38	53
	00007-00011	CLR/AIR/E366 (3mm/3mm) 1"	VY/NA	2	0.022(3)	0.750	CU-D	Fill 1: AIR (100)	N		CL	0.32	0.34	0.56	53
	00007-00012	CLR/AIR/E366 (3mm/3mm) 1"	VY/NA	2	0.022(3)	0.750	CU-D	Fill 1: AIR (100)	G	0.75	CL	0.32	0.31	0.50	53
	00007-00013	GRY/AIR/E366 (3mm/3mm) 1"	VY/NA	2	0.022(3)	0.750	CU-D	Fill 1: AIR (100)	N		GY	0.32	0.26	0.38	53
	00007-00014	GRY/AIR/E366 (3mm/3mm) 1"	VY/NA	2	0.022(3)	0.750	CU-D	Fill 1: AIR (100)	G	0.75	GY	0.32	0.23	0.34	53
	00007-00015	BRZ/AIR/E366 (3mm/3mm) 1"	VY/NA	2	0.022(3)	0.750	CU-D	Fill 1: AIR (100)	N		BZ	0.32	0.27	0.42	53
	00007-00016	BRZ/AIR/E366 (3mm/3mm) 1"	VY/NA	2	0.022(3)	0.750	CU-D	Fill 1: AIR (100)	G	0.75	BZ	0.32	0.25	0.38	53
	00008-00001	E366/ARG/CLR (2mm/2mm) 1"	VY/NA	2	0.022(2)	0.813	CU-D	Fill 1: ARG/AIR (95/5)	N		CL	0.28	0.24	0.57	56
	00008-00002	E366/ARG/CLR (2mm/2mm) 1"	VY/NA	2	0.022(2)	0.813	CU-D	Fill 1: ARG/AIR (95/5)	G	0.75	CL	0.28	0.22	0.51	56
	00008-00003	CLR/ARG/E366 (2mm/2mm) 1"	VY/NA	2	0.022(3)	0.813	CU-D	Fill 1: ARG/AIR (95/5)	N		CL	0.28	0.35	0.57	56
	00008-00004	CLR/ARG/E366 (2mm/2mm) 1"	VY/NA	2	0.022(3)	0.813	CU-D	Fill 1: ARG/AIR (95/5)	G	0.75	CL	0.28	0.31	0.51	56
	00008-00005	E366/ARG/CLR (3mm/3mm) 1"	VY/NA	2	0.022(2)	0.750	CU-D	Fill 1: ARG/AIR (95/5)	N		CL	0.28	0.24	0.56	56
	00008-00006	E366/ARG/CLR (3mm/3mm) 1"	VY/NA	2	0.022(2)	0.750	CU-D	Fill 1: ARG/AIR (95/5)	G	0.75	CL	0.28	0.22	0.50	56
	00008-00007	E366/ARG/GRY (3mm/3mm) 1"	VY/NA	2	0.022(2)	0.750	CU-D	Fill 1: ARG/AIR (95/5)	N		GY	0.28	0.23	0.38	56
	00008-00008	E366/ARG/GRY (3mm/3mm) 1"	VY/NA	2	0.022(2)	0.750	CU-D	Fill 1: ARG/AIR (95/5)	G	0.75	GY	0.28	0.21	0.34	56
	00008-00009	E366/ARG/BRZ (3mm/3mm) 1"	VY/NA	2	0.022(2)	0.750	CU-D	Fill 1: ARG/AIR (95/5)	N		BZ	0.28	0.23	0.42	56
	00008-00010	E366/ARG/BRZ (3mm/3mm) 1"	VY/NA	2	0.022(2)	0.750	CU-D	Fill 1: ARG/AIR (95/5)	G	0.75	BZ	0.28	0.21	0.38	56
	00008-00011	CLR/ARG/E366 (3mm/3mm) 1"	VY/NA	2	0.022(3)	0.750	CU-D	Fill 1: ARG/AIR (95/5)	N		CL	0.28	0.34	0.56	56
	00008-00012	CLR/ARG/E366 (3mm/3mm) 1"	VY/NA	2	0.022(3)	0.750	CU-D	Fill 1: ARG/AIR (95/5)	G	0.75	CL	0.28	0.31	0.50	56
	00008-00013	GRY/ARG/E366 (3mm/3mm) 1"	VY/NA	2	0.022(3)	0.750	CU-D	Fill 1: ARG/AIR (95/5)	N		GY	0.28	0.26	0.38	56

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	00008-00015	BRZ/ARG/E366 (3mm/3mm) 1"	VY/NA	2	0.022(3)	0.750	CU-D	Fill 1: ARG/AIR (95/5)	N		BZ	0.28	0.27	0.42	56
	00008-00016	BRZ/ARG/E366 (3mm/3mm) 1"	VY/NA	2	0.022(3)	0.750	CU-D	Fill 1: ARG/AIR (95/5)	G	0.75	BZ	0.28	0.25	0.38	56

Baseline Information

Test Lab	Test Date	Test Size	Tested U-Value	Standard U-Value	Test Report Number
TATM	06/18/2010	1200 mm x 1499 mm	0.174	0.172	99967.08-201-46

Comments:

I hereby certify that all requirements for NFRC Certification Authorization have been met and that the above information is true and correct, to the best of my knowledge.

Authorized IA
Signature: _____