WINDOW PERFORMANCE SUMMARY — **** Products not having a MGM # A- __ are not yet certified by NFRC and Can Not be labeled as an Energy Star Product**** — 5/8/2012

		STRUCTURAL PERFORMANCE				THERMAL SIMULATIONS																							
							U FACTOR						SOLAR HEAT GAIN COEFFICIENT (SHGC)					VISIBLE TRANSMITTANCE (VT)					CONDENSATION RESISTANCE (CR)					PCAR	
			DP				Clear		270		366		Clear	270		366		Clear	270		366		Clear	270		366			
	Series#	Type	Class Rating	Size Tested	EXP. Date	AIR cfm/ft²	Air N/G	LoE Surf.	Air N/G	Arg. N/G	Air N/G	Arg N/G	Air N/G	Air N/G	Argon N/G	Air N/G	Argon N/G	Air N/G	Air N/G	Argon N/G	Air N/G	Argon N/G	Air N/G	Air N/G	Argon N/G	Air N/G	Argon N/G	EXP. Date	MGM #	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	
1	4010	DH	NT	NT	NT	0.10	0.45	#2	0.32	0.29	0.32	0.29	.57/.51	.27/.25	.27/.25	.21/.19	.20/.18	.60/.53	.52/.46	.52/.46	.48/.42	.48/.42	43	52	55	53	56	11/2014	A-20	1
2	4010	PICS	NT	NT	NT	0.10	0.43	#2	0.3	0.26	0.29	0.26	.59/.53	.28/.26	.28/.25	.21/.19	.21/.19	.62/.55	.53/.48	.53/.48	.49/.44	.49/.44	46	46	46	46	46	10/2015	A-29	2
3	4600	DH	DP-45	40"x63"	03/2015	0.30	0.47	#2	0.34	0.3	0.34	0.3	.60/.54	.28/.25	.28/.25	.21/.19	.21/.19	.63/.56	.53/.47	.53/.47	.49/.43	.49/.43	43	53	56	53	56	12/2015	A-37	3
4	4680	DH	DP-50	54"x76"	1/2015	0.20	0.47	#2	0.35	0.31	0.34	0.31	.50/.45	.28/.25	.28/.25	.21/.19	.21/.19	.60/.53	.51/.45	.51/.45	.47/.42	.47/.42	43	51	54	52	55	11/22/14	A-22	4
5	4600	HS	Check on current AWS report.			0.20	0.47	#2	0.34	0.31	0.34	0.3	.60/.54	.29/.26	.28/.26	.21/.19	.21/.19	.63/.56	.54/.48	.54/.48	.49/.44	.49/.44	42	51	54	51	55	10/2014	A-28	5
6	4600	PIC	DP-45	98"x59"	12/2014	0.10	0.47	#2	0.33	0.29	0.32	0.28	.68/.61	.32/.29	.32/.29	.24/.22	.24/.22	.71/.64	.61/.55	.61/.55	.56/.50	.56/.50	43	52	56	53	56	06/2014	A-21	6
7	4650	DH	DP-50	54"x76"	01/2015	0.20	0.47	#2	0.35	0.31	0.35	0.31	.59/.53	.28/.25	.28/.25	.21/.19	.21/.19	.62/.55	.53/.47	.53/.47	.49/.43	.49/.43	41	50	53	50	53	10/2014	A-22	7
8	4650	PIC	DP-45	98"x59"	12/2014	0.10	0.47	#2	0.33	0.29	0.32	0.28	.68/.61	.32/.29	.32/.29	.24/.22	.24/.22	.71/.64	.61/.55	.61/.55	.56/.50	.56/.50	43	52	56	53	56	06/2014	A-21	8
9	4650	HS	DP-50	63"x44"	03/2012	0.20	0.47	#2	0.34	0.31	0.34	0.3	.60/.54	.29/.26	.28/.26	.21/.19	.21/.19	.63/.56	.54/.48	.54/.48	.49/.44	.49/.44	42	51	54	51	55	10/2014	A-28	9
10	4710	CSMT	DP-65	36"x72"	05/2015	0.10	0.42	#2	0.31	0.27	0.3	0.27	.60/.54	.25/.23	.25/.23	.19/.17	.19/.17	.62/.55	.47/.42	.47/.42	.43/.39	.43/.39	43	55	58	55	59	08/2015	A-17	10
11	4710	AWN			8/2015	0.10	0.42	#2	0.31	0.28	0.3	0.27	.60/.54	.25/.23	.25/.23	.19/.17	.19/.17	.62/.55	.47/.42	.47/.42	.43/.39	.43/.39	43	57	61	57	62	08/2015	A-36	11
12	4710	PIC	DP-75	36"x72"	10/2015	0.10	0.43	#2	0.29	0.26	0.29	0.25	.62/.56	.29/.26	.29/.26	.22/.20	.21/.19	.65/.58	.55/.49	.55/.49	.50/.45	.50/.45	44	53	53	53	53	08/2015	A-2	12
13	4780	CSMT	DP-60	36"x72"	05/2015	0.10	.45/.46	#3	.36/.37	.31/.32	.35/.36	.31/.32	.45/.41	.29/.26	.29/.26	.25/.23	.25/.23	.53/.48	.45/.41	.45/.41	.41/.37	.41/.37	43	50	54	50	55	08/2015	A-17	13
14	5010	SH	DP-30	36"x74"	10/2012	0.10	0.49	#2	0.34	0.29	0.34	0.29	.65/.59	.31/.28	.31/.28	.23/.21	.23/.21	.68/.61	.58/.52	.58/.52	.54/.48	.54/.48	43	54	59	54	59	10/2015	A-3	14
15	5010	HS	NT	NT		0.20	0.49	#2	0.33	0.29	0.33	0.28	.62/.56	.30/.27	.29/.26	.22/.20	.22/.20	.65/.58	.55/.49	.55/.49	.51/.45	.51/.45	43	54	58	54	58	08/2015	A-4	15
16	5010	PICS	NT	NT		0.10	0.48	#2	0.32	0.28	0.32	0.27	.66/.60	.31/.28	.31/.28	.24/.21	.23/.21	.70/.62	.59/.53	.59/.53	.55/.49	.55/.49	47	58	61	58	61	10/2015	A-1	16
17	5010	PIC	NT	NT		0.10	0.49	#2	0.34	0.29	0.34	0.28	.68/.61	.32/.29	.32/.29	.24/.22	.24/.22	.71/.64	.60/.54	.60/.54	.56/.50	.56/.50	44	56	60	56	60	11/2015	A-34	17
18	5610	SH	DP-40	44"x63"	11/2010	0.20	0.46	#2	0.32	0.28	0.32	0.28	.62/.56	.29/.26	.29/.26	.22/.20	.22/.20	.65/.58	.55/.49	.55/.49	.51/.46	.51/.46	45	56	60	56	60	09/2015	A-19	18
19	5610/65	PIC	DP-65	72"x60"	10/2015	0.10	0.46	#2	0.31	0.27	0.31	0.26	.68/.61	.32/.29	.32/.29	.24/.22	.23/.21	.71/.64	.60/.54	.60/.54	.56/.50	.56/.50	45	58	62	58	62	09/2015	A-30	19
20	5610/65	PIC	DP-65	48"x84"	10/2015	0.10	0.46	#2	0.31	0.27	0.31	0.26	.68/.61	.32/.29	.32/.29	.24/.22	.23/.21	.71/.64	.60/.54	.60/.54	.56/.50	.56/.50	45	58	62	58	62	09/2015	A-30	20
21	5610	PICS	NT	NT		0.10	0.46	#2	0.3	0.26	0.3	0.26	.70/.63	.33/.30	.33/.30	.25/.22	.24/.22	.73/.66	.62/.56	.62/.56	.58/.52	.58/.52	45	57	61	57	61	09/2015	A-31	21
22	5665	SH	DP-30	56"x91"	11/2015	0.10	0.48	#2	0.34	0.31	0.34	0.3	.61/.55	.29/.26	.29/.26	.22/.20	.22/.20	.65/.58	.55/.49	.55/.49	.51/.45	.51/.45	43	49	50	49	50	09/2015	A-19	22
23	5665	SH	DP-55	36"x84"	11/2015	0.10	0.48	#2	0.34	0.31	0.34	0.3	.61/.55	.29/.26	.29/.26	.22/.20	.22/.20	.65/.58	.55/.49	.55/.49	.51/.45	.51/.45	43	49	50	49	50	09/2015	A-19	23
24	5665	SHTW	DP-50	72"X84"	11/2015	0.10	0.48	#2	0.34	0.31	0.34	0.3	.61/.55	.29/.26	.29/.26	.22/.20	.22/.20	.65/.58	.55/.49	.55/.49	.51/.45	.51/.45	43	49	50	49	50	09/2015	A-19	24
25	5680	PIC	DP-50	36"x84"	04/2014	0.10	.49/.50	#3	.37/.38	.31/.32	.36/.38	.30/.32	.58/.52	.37/.33	.37/.33	.31/.28	.31/.28	.68/.61	.58/.52	.58/.52	.53/.48	.53/.48	43	47	50	47	50	10/2015	A-15	25
26	5680	SH	DP-50	3070	04/2014	0.20	.52/.53	#2	.40/.42	.35/.37	.40/.42	.34/.37	.53/.48	.29/.26	.29/.26	.22/.20	.22/.20	.62/.56	.53/.47	.53/.47	.49/.44	.49/.44	42	46	48	46	48	09/2015	A-19	26
27	5680	SHTW	DP-50	72"X84"	04/2014	0.20	.52/.53	#2	.40/.42	.35/.37	.40/.42	.34/.37	.53/.48	.29/.26	.29/.26	.22/.20	.22/.20	.62/.56	.53/.47	.53/.47	.49/.44	.49/.44	42	46	48	46	48	09/2015	A-19	27
28	6010	SH	DP-25	48"x75"	06/2014	0.10	0.46	#2	0.32	0.28	0.32	0.28	.65/.58	.31/.28	.30/.27	.23/.21	.23/.20	.67/.60	.57/.51	.57/.51	.53/.47	.53/.47	45	56	60	56	60	10/13/15	A-5	28
29	6010	SH	DP-40	48"x60"	06/2014	0.10	0.46	#2	0.32	0.28	0.32	0.28	.65/.58	.31/.28	.30/.27	.23/.21	.23/.20	.67/.60	.57/.51	.57/.51	.53/.47	.53/.47	45	56	60	56	60	10/13/15	A-5	29
30	6010	SH	DP-35	36"x72"	06/2014	0.10	0.46	#2	0.32	0.28	0.32	0.28	.65/.58	.31/.28	.30/.27	.23/.21	.23/.20	.67/.60	.57/.51	.57/.51	.53/.47	.53/.47	45	56	60	56	60	10/13/15	A-5	30
31	6010	HS	DP-30	69"x48"	02/2008	0.10	0.47	#2	0.33	0.29	0.33	0.29	.62/.55	.29/.26	.29/.26	.22/.20	.21/.19	.64/.57	.55/.49	.55/.49	.50/.45	.50/.45	44	56	59	56	60	10/2015	A-32	31
32	6010	PIC	DP-60	72"x60"	10/2015	0.10	0.5	#2	0.33	0.29	0.33	0.29	.67/.60	.31/.28	.31/.28	.23/.21	.23/.21	.70/.62	.59/.53	.59/.53	.55/.49	.55/.49	45	58	62	58	62	08/2015	A-6	31
33	6060	PIC	DP-60	72"x60"	10/2015	0.10	0.5	#2	0.33	0.29	0.33	0.29	.67/.60	.31/.28	.31/.28	.23/.21	.23/.21	.70/.62	.59/.53	.59/.53	.54/.49	.54/.49	45	58	62	58	62	08/2015	A-6	32
34	6060	PIC	DP-50	48"x84"	10/2015	0.10	0.5	#2	0.33	0.29	0.33	0.29	.67/.60	.31/.28	.31/.28	.23/.21	.23/.21	.70/.62	.59/.53	.59/.53	.54/.49	.54/.49	45	58	62	58	62	08/2015	A-6	33
35	6060	SH	DP-40	44"x65"	01/2013	0.10	0.49	#2	0.34	0.3	0.34	0.3	.63/.57	.31/.28	.30/.27	.23/.21	.22/.20	.67/.60	.57/.51	.57/.51	.52/.47	.52/.47	44	55	58	55	58	08/2015	A-5	34
36	6060	SH	DP-50	36"x74"	01/2013	0.10	0.49	#2	0.34	0.3	0.34	0.3	.63/.57	.31/.28	.30/.27	.23/.21	.22/.20	.67/.60	.57/.51	.57/.51	.52/.47	.52/.47	44	55	58	55	58	08/2015	A-5	35
37	6060	SHTW	DP-50	72"x74"	01/2013	0.10	0.49	#2	0.34	0.3	0.34	0.3	.63/.57	.31/.28	.30/.27	.23/.21	.22/.20	.67/.60	.57/.51	.57/.51	.52/.47	.52/.47	44	55	58	55	58	08/2015	A-5	36
38	6060SH	TRIP	DP-40	108"X74"	01/2013	0.10	0.49	#2	0.34	0.3	0.34	0.3	.63/.57	.31/.28	.30/.27	.23/.21	.22/.20	.67/.60	.57/.51	.57/.51	.52/.47	.52/.47	44	55	58	55	58	08/2015	A-5	37
39	6060SH	TW-HR	DP-50	2860-5/4HR	01/2013	0.10	0.49	#2	0.34	0.3	0.34	0.3	.63/.57	.31/.28	.30/.27	.23/.21	.22/.20	.67/.60	.57/.51	.57/.51	.52/.47	.52/.47	44	55	58	55	58	08/2015	A-5	38
40	7010	DH	DP-30	48"x74"	11/2011	0.10	0.45	#2	0.32	0.28	0.32	0.28	.60/.54	.28/.25	.28/.25	.21/.19	.21/.19	.63/.56	.53/.47	.53/.47	.49/.44	.49/.44	44	55	59	55	59	09/2015	A-16	39
41	7010	PIC	DP-55	32"x64"	11/2011	0.10	0.46	#2	0.31	0.27	0.3	0.26	.68/.61	.32/.29	.32/.29	.24/.22	.23/.21	.71/.64	.60/.54	.60/.54	.56/.50	.56/.50	46	58	62	58	62	10/2015	A-33	40
42	7010	PICS	DP-25	32"x64"	11/2011	0.10	0.45	#2	0.32	0.28	0.31	0.27	.61/.55	.29/.26	.29/.26	.22/.20	.21/.19	.64/.57	.54/.48	.54/.48	.50/.45	.50/.45	45	58	62	58	62	10/2015	A-8	41
43	7010DH	TWIN	DP-25	72'X74'	11/2011	0.10	0.46	#2	0.32	0.28	0.32	0.28	.60/.54	.28/.25	.28/.25	.21/.19	.21/.19	.63/.56	.53/.47	.53/.47	.49/.44	.49/.44	44	55	59	55	59	09/2015	A-16	42
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	

SH, Single Hung — HS, Horizontal Slider — N/G, None/Grid — SGD, Sliding Glass Door — O, Stationary Panel — PIC, Picture Window Direct Set — PCAR, Product Certification Authorization Report

DH, Double Hung — DP, Design Pressure — HR, Half Round — HGD, Hinged Glass Door — X, Moving Panel — AWS, Air- Water- Structural — PICS, Picture Window with Sash Insert

MGM

WINDOW PERFORMANCE SUMMARY — **** Products not having a MGM # A- __ are not yet certified by NFRC and Can Not be labeled as an Energy Star Product**** — 5/8/2012

	STRUCTURAL PERFORMANCE				THERMAL SIMULATIONS																								
						U FACTOR						SOLAR HEAT GAIN COEFFICIENT (SHGC)					VISIBLE TRANSMITTANCE (VT)					CONDENSATION RESISTANCE (CR)					PCAR	
								270		366		Clear	270		366		Clear	270		366		Clear	270		366			
	Series#	Type	DP Class Rating	Size Tested	EXP. Date	Air cfm/ft²	Clear Air	LoE Surf.	Air N/G	Argon N/G	Air N/G	Argon N/G	Air N/G	Air N/G	Argon N/G	Air N/G	Argon N/G	Air N/G	Air N/G	Argon N/G	Air N/G	Argon N/G	Air N/G	Air N/G	Argon N/G	Air N/G	Argon N/G	EXP. Date	MGM #	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	
1	8010	DH	DP-35	44"x63"	08/2010	0.21	0.46	#2	0.32	0.28	0.32	0.28	.61/.54	.29/.26	.28/.26	.21/.19	.21/.19	.64/.57	.54/.48	.54/.48	.50/.44	.50/.44	44	55	58	55	59	10/2015	A-13	1
2	8010	PICS	DP-65	44"x63"	08/2010	0.10	0.44	#2	0.31	0.27	0.3	0.26	.62/.56	.29/.27	.29/.26	.22/.20	.22/.20	.65/.58	.56/.50	.56/.50	.51/.46	.51/.46	46	58	63	59	63	11/2015	A-9	2
3	8010/65	PIC	DP-65	72"x60"	10/2015	0.10	0.46	#2	0.31	0.27	0.3	0.26	.68/.61	.32/.29	.32/.29	.24/.22	.23/.21	.71/.64	.60/.54	.60/.54	.56/.50	.56/50	45	57	61	58	62	11/2015	A-15	3
4	8010/65	PIC	DP-65	48"x84"	10/2015	0.10	0.46	#2	0.31	0.27	0.3	0.26	.68/.61	.32/.29	.32/.29	.24/.22	.23/.21	.71/.64	.60/.54	.60/.54	.56/.50	.56/50	45	57	61	58	62	11/2015	A-15	4
5	8065	DH	DP-65	44"x63"	04/2012	0.21	0.48	#2	0.35	0.31	0.34	0.3	.60/.53	.29/.26	.28/.26	.21/.19	.21/.19	.63/.56	.54/.48	.54/.48	.49/.44	.49/.44	43	51	51	51	51	08/2015	A-13	5
6	8065	DH	DP-65	36"x84"	04/2013	0.21	0.48	#2	0.35	0.31	0.34	0.3	.60/.53	.29/.26	.28/.26	.21/.19	.21/.19	.63/.56	.54/.48	.54/.48	.49/.44	.49/.44	43	51	51	51	51	08/2015	A-13	6
7	8065	DHTW	DP-50	88"X74"	04/2012	0.21	0.48	#2	0.35	0.31	0.34	0.3	.60/.53	.29/.26	.28/.26	.21/.19	.21/.19	.63/.56	.54/.48	.54/.48	.49/.44	.49/.44	43	51	51	51	51	08/2015	A-13	7
8	8080	DH	DP-50	36"x84"	04/2013	0.21	.51/.51	#2	.39/.41	.34/.35	.40/.40	.34/.35	.52/.47	.29/.26	.28/.25	.22/.20	.21/.19	.61/.54	.52/.46	.52/.46	.48/.43	.48/.43	41	43	46	43	46	08/2015	A-13	8
9	8080	PIC	DP-50	48"x60"	04/2013	0.10	.49/.50	#3	.37/.38	.31/.32	.36/.38	.30/.32	.58/.52	.37/.33	.37/.33	.31/.28	.31/.28	.68/.61	.58/.52	.58/.52	.53/.48	.53/.48	43	47	50	47	50	10/2015	A-15	9
10	8080	PIC	DP-50	36"x72"	04/2013	0.10	.49/.50	#3	.37/.38	.31/.32	.36/.38	.30/.32	.58/.52	.37/.33	.37/.33	.31/.28	.31/.28	.68/.61	.58/.52	.58/.52	.53/.48	.53/.48	43	47	50	47	50	10/2015	A-15	10
11	8080	PIC	DP-50	48"x48"	04/2013	0.10	.49/.50	#3	.37/.38	.31/.32	.36/.38	.30/.32	.58/.52	.37/.33	.37/.33	.31/.28	.31/.28	.68/.61	.58/.52	.58/.52	.53/.48	.53/.48	43	47	50	47	50	10/2015	A-15	11
12	8017	DH	DP-40	36"x72"	05/2015	0.10	0.41	#2	0.28	0.25	0.28	0.25	.61/.54	.29/.26	.28/.25	.21/.19	.21/.19	.63/.56	.54/.48	.54/.48	.50/.44	.50/.44	30	34	35	34	35	07/2015	A-25	12
13	8017/67	PIC	NT	NT	NT	0.10	0.44	#2	0.3	0.26	0.29	0.25	.69/.62	.33/.30	.32/.29	.24/.22	.24/.22	.73/.65	.62/.55	.62/.55	.57/.51	.57/.51	38	44	46	45	46	07/2015	A-26	13
14	8017	PICS	NT	NT	NT	0.10	0.42	#2	0.29	0.25	0.29	0.25	.62/.56	.29/.26	.29/.26	.22/.20	.22/.20	.65/.58	.55/.49	.55/.49	.51/.46	.51/.46	38	44	46	44	46	07/2015	A-27	14
15	8087	PIC	NT	NT	NT	0.10	.50/.52	#3	.38/.40	.32/.35	.37/.40	.31/.34	.59/.53	.38/.34	.37/.34	.32/.29	.32/.29	.69/.62	.59/.53	.59/.53	.55/.49	.55/.49	41	50	54	50	55	07/2015	A-26	15
16	8067	DH	NT	NT	NT	0.10	0.48	#2	0.35	0.31	0.35	0.31	.59/.53	.28/.26	.28/.25	.21/.19	.21/.19	.63/.56	.53/.47	.53/.47	.49/.44	.49/.44	42	50	50	50	50	07/2015	A-26	16
17	8087	DH	NT	NT	NT	0.10	.51/.52	#2	.40/.42	.35/.37	.40/.42	.35/.37	.52/.46	.28/.26	.28/.25	.22/.20	.21/.19	.61/.54	.52/.46	.52/.46	.48/.42	.48/.42	40	42	45	42	45	07/2015	A-26	17
18	8005	SGD	DP-35	72"x80"	08/2005	0.20	0.48	#2	.34/.34	0.31	0.34	.34/.34	.62/.54	.30/.26	.29/.26	.22/.20	.22/.20	.65/.57	.55/.48	.55/.48	.51/.45	.51/.45	43	54	57	54	57	9/2015	A-18	18
19	8005	SGD	DP-20	96"x80"		0.20	0.48	#2	.34/.34	0.31	0.34	.34/.34	.62/.54	.30/.26	.29/.26	.22/.20	.22/.20	.65/.57	.55/.48	.55/.48	.51/.45	.51/.45	43	54	57	54	57	09/2015	A-18	19
20	9000	SGD	DP-35	60610	01/2014	0.10		#2	0.32	0.29	0.32	0.28		.30/.27	.30/.27	.22/.20	.22/.20		.57/.50	.57/.50	.52/.46	.52/.46		53	54	54	54	8/29/13	A-24	20
21	9050	SGD	DP-50	90610	03/2014	0.10		#2	0.32	0.29	0.32	0.28		.30/.27	.30/.27	.22/.20	.22/.20		.57/.50	.57/.50	.52/.46	.52/.46		53	54	54	54	8/29/13	A-24	21
22	9050	SGD	DP-30	142"x80"	03/2012	0.15		#2	0.32	0.29	0.32	0.28		.30/.27	.30/.27	.22/.20	.22/.20		.57/.50	.57/.50	.52/.46	.52/.46		53	54	54	54	8/29/13	A-24	22
23	9050	SGD	DP-50	8080	10/2011	0.10		#2	0.32	0.29	0.32	0.28		.30/.27	.30/.27	.22/.20	.22/.20		.57/.50	.57/.50	.52/.46	.52/.46		53	54	54	54	8.29/13	A-24	23
24	9080	SGD	DP-50	80610	04/2014	0.10	0.44	#2	0.31	0.27	0.3	0.27	.54/.47	.30/.26	.30/.26	.22/.20	.22/.20	.64/.57	.55/.48	.55/.48	.51/.44	.51/.44	43	52	55	52	55	8/29/13	A-24	24
25	9201	HGD	DP-40	3068	09/2005	0.10	0.51	#2	0.42	0.39	0.41	0.39	.46/.40	.23/.20	.23/.20	.17/.15	.17/.15	.48/.41	.41/.35	.41/.35	.38/.33	.38/.33	41	42	42	42	42	10/14	A-35	25
26	9202	HGD	DP-35	6068	10/2005	0.10	0.51	#2	0.42	0.39	0.41	0.39	.46/.40	.23/.20	.23/.20	.17/.15	.17/.15	.48/.41	.41/.35	.41/.35	.38/.33	.38/.33	41	42	42	42	42	10/14	A-35	26
27	9301	HGD	DP-50	3068	03/2006	0.18	0.51	#2	0.42	0.39	0.41	0.39	.46/.40	.23/.20	.23/.20	.17/.15	.17/.15	.48/.41	.41/.35	.41/.35	.38/.33	.38/.33	41	42	42	42	42	10/14	A-35	27
28	9302	HGD	DP-50	6068	03/2006	0.18	0.51	#2	0.42	0.39	0.41	0.39	.46/.40	.23/.20	.23/.20	.17/.15	.17/.15	.48/.41	.41/.35	.41/.35	.38/.33	.38/.33	41	42	42	42	42	10/14	A-35	28
29	9380	HGD	DP-50	6068	06/2010	0.18	0.5	#2	0.4	0.38	0.4	0.37	.40/.35	.23/.20	.23/.20	.17/.15	.17/.15	.47.40	.40/.34	.40/.34	.37/.32	.37/.32	42	42	43	42	43	10/14	A-35	29
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	

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SH, Single Hung
DH, Double Hung
HS, Horizontal Slider
DP, Design Pressure
N/G, None/Grid
HR, Half Round
SGD, Sliding Glass Door
HGD, Hinged Glass Door
O, Stationary Panel
X, Moving Panel
PIC, Picture Window Direct Set
AWS, Air- Water- Structural
PCAR, Product Certification Authorization Report
PICS, Picture Window with Sash Insert

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Example on the use of the performance table

Let's assume a customer is in the "Northern region" (This is the blue area--see page 4.) and is looking for a 6010 Single Hung. Look at the map on the next page - in this case the U-value must be lower or equal to 0.30 and the SHGC should be “ANYTHING”. Now with the MGM performance table in hand go to the row marked "6010" (Row #28). You will note that there are three different rows with data for our 6010 Single hung. (Row numbers 28, 29 and 30) These rows represent three different test data for different size windows. Continuing with the 6010 SH data you will note that all the thermal data is the same no matter which row you look at. The difference in the rows of 6010 SH is in the structural performance of the window with different window sizes with varying wind loads. This is confusing to many people, so lets explain the row: 6010 SH DP-25 48" x 72". Somewhere along the line one of our customers needed a specific test for this size on one of their multi-family bids. We tested the window with an independent test laboratory, and since we have a certified test report, we are summarizing all such tests and data in this table.

Alternative method to find the U-Factor required in your area.

The Federal EPA/Energy Star website has a convenient wizard that you can use to determine the U-Factor required in your geographic location.

Go to http://www.energystar.gov/index.cfm?fuseaction=windows_doors.search_climate to find out more

Finding the U-Factor within our energy table.

Under the 6010 SH DP-25 row (row #28) look in the “U FACTOR” column (Column #7) and you will find that a 6010 Single Hung has :

- a U-value of 0.32 with Cardinal 270 Low-E and air; (air: NO ARGON) {column #9}
- a U-value of 0.28 with Cardinal 270 Low-E and Argon gas; {column #9}
- a U-value of 0.46 with clear glass and air. {column #7}
- a U-value of 0.32 with Cardinal 366 Low-E and air; (air: NO ARGON) {column #10}

Finding the Solar Heat Gain Coefficient (SHGC) for your MGM product

Still working within the same row (6010 SH DP...), look for the columns with the words "SOLAR HEAT GAIN COEFFICIENT" as a header. Now look at the sub-header: Clear Air, N/G. Clear Air means: clear glass (not low-E), N/G is confusing, so for clarification: N is the first data point--for NO GRID. G is the second data point--for WITH GRID. The data entry is: .65/.58--another source for confusion. 0.65 is the SHGC for our 6010 without Low-E (i.e., clear glass) and without Argon and NO GRIDS. 0.58 is the SHGC for our 6010 without Low-E (i.e., clear glass) and without Argon and---WITH GRIDS. (the addition of grids blocks the sun, hence lowers the SHGC)

ENERGY STAR® Qualification Criteria for Residential Windows, Doors, and Skylights

Windows

Climate Zone	U-Factor[1]	SHGC[2]	
Northern	≤ 0.30	Any	Prescriptive
	=0.31	≥ 0.35	Equivalent Energy Performance
	=0.32	≥ 0.40	
North-Central	≤ 0.32	≤ 0.40	
South-Central	≤ 0.35	≤ 0.30	
Southern	≤ 0.60	≤ 0.27	

[1] Btu/h.ft^2.˚F

[2] Fraction of incident solar radiation

Doors

Glazing Level	U-Factor[1]	SHGC[2]
Opaque	≤ 0.21	No Rating
≤ ½-Lite	≤ 0.27	≤ 0.30
> ½-Lite	≤ 0.32	≤ 0.30

Skylights

Climate Zone	U-Factor[1]	SHGC[2]
Northern	≤ 0.55	Any
North-Central	≤ 0.55	≤ 0.40
South-Central	≤ 0.57	≤ 0.30
Southern	≤ 0.70	≤ 0.30