



# Energy and structural Performance

## Tradition - Casement - Wood - Aluminum-Cladding- Exterior

### INFORMATION

**SDL :** Simulated Divided Light is composed of small bars glued directly on both sides of the glass surface to simulate the appearance of true divided lites.

**U Factor:** (Btu/h·ft<sup>2</sup>·F) The lower the U-factor, the better the ability to resist heat transfer.

**SHGC:** Solar Heat Gain Coefficient, the higher the SHGC, the more solar heat is transmitted inside.

**ER:** The Energy Rating is the result of a formula taking into account the U-value, the SHGC and the airtightness of the product. The ER value measures the overall performance of a window. The higher the value, the better the product efficiency in terms of energy.

**NFRC :** National Fenestration Rating Council

**VT** Visible transmittance (expressed as a number from 0 to 1) also known as Visible light transmission (VLT - expressed as a percentage %) is a measurement of the amount of light in the visible portion of the spectrum that passes through glass

NFRC CODE	THERMOS	CODE	U Factor/ (Btu/h·ft <sup>2</sup> ·F)	Solar Heat Gain Coefficient (SHGC)	Visible transmittance (VT)	Energy Rating (ER)
MPE-M-1-00027	SG-400 double	HYB, 3mm_7/8_PCI-arg95-SG400#3, su	0.30	0.49	0.54	31
MPE-M-1-00028	SG-400 double	HYB, 3mm_7/8_PCI-arg95-SG400#3, su, Grids<1"	0.30	0.45	0.49	28
MPE-M-1-00029	SG-400 double	HYB, 3mm_7/8_PCI-arg95-SG400#3, su, SDL<1"	0.30	0.45	0.49	28
MPE-M-1-00030	SG-400 double	HYB, 3mm_7/8_PCI-arg95-SG400#3, su, SDL>1"	0.30	0.40	0.44	25
MPE-M-1-00031	SG-400 double	HYB, 3mm_7/8_PCI-arg95-SG400#3, su, SDL-SB<1"	0.30	0.45	0.49	28
MPE-M-1-00032	SG-400 double	HYB, 3mm_7/8_PCI-arg95-SG400#3, su, SDL-SB>1"	0.30	0.40	0.44	25
MPE-M-1-00033	SG-400 triple 1 lowe	HYB, 3mm_1 1/4_PCI-arg95-PCI-arg95-SG400#5, su	0.23	0.45	0.49	37
MPE-M-1-00034	SG-400 triple 1 lowe	HYB, 3mm_1 1/4_PCI-arg95-PCI-arg95-SG400#5, su, Grids<1"	0.23	0.41	0.45	35
MPE-M-1-00035	SG-400 triple 1 lowe	HYB, 3mm_1 1/4_PCI-arg95-PCI-arg95-SG400#5, su, SDL<1"	0.23	0.41	0.45	35
MPE-M-1-00036	SG-400 triple 1 lowe	HYB, 3mm_1 1/4_PCI-arg95-PCI-arg95-SG400#5, su, SDL>1"	0.23	0.37	0.40	32
MPE-M-1-00037	SG-400 triple 1 lowe	HYB, 3mm_1 1/4_PCI-arg95-PCI-arg95-SG400#5, su, SDL-SB<1"	0.23	0.41	0.45	35
MPE-M-1-00038	SG-400 triple 1 lowe	HYB, 3mm_1 1/4_PCI-arg95-PCI-arg95-SG400#5, su, SDL-SB>1"	0.24	0.37	0.40	31
MPE-M-1-00039	SG-400 triple 2 lowe	HYB, 3mm_1 1/4_SG400#2-arg95-PCI-arg95-SG400#5, su	0.20	0.39	0.47	37
MPE-M-1-00040	SG-400 triple 2 lowe	HYB, 3mm_1 1/4_SG400#2-arg95-PCI-arg95-SG400#5, su, Grids<1"	0.20	0.35	0.43	35
MPE-M-1-00041	SG-400 triple 2 lowe	HYB, 3mm_1 1/4_SG400#2-arg95-PCI-arg95-SG400#5, su, SDL<1"	0.20	0.35	0.43	35
MPE-M-1-00042	SG-400 triple 2 lowe	HYB, 3mm_1 1/4_SG400#2-arg95-PCI-arg95-SG400#5, su, SDL>1"	0.20	0.32	0.38	33
MPE-M-1-00043	SG-400 triple 2 lowe	HYB, 3mm_1 1/4_SG400#2-arg95-PCI-arg95-SG400#5, su, SDL-SB<1"	0.21	0.35	0.43	34
MPE-M-1-00044	SG-400 triple 2 lowe	HYB, 3mm_1 1/4_SG400#2-arg95-PCI-arg95-SG400#5, su, SDL-SB>1"	0.21	0.32	0.38	32
MPE-M-1-00045	SB-60 double	HYB, 3mm_7/8_PCI-arg95-SB60#3, su	0.28	0.34	0.50	24
MPE-M-1-00046	SB-60 double	HYB, 3mm_7/8_PCI-arg95-SB60#3, su, Grids<1"	0.28	0.31	0.45	23
MPE-M-1-00047	SB-60 double	HYB, 3mm_7/8_PCI-arg95-SB60#3, su, SDL<1"	0.28	0.31	0.45	23
MPE-M-1-00048	SB-60 double	HYB, 3mm_7/8_PCI-arg95-SB60#3, su, SDL>1"	0.28	0.28	0.40	21
MPE-M-1-00049	SB-60 double	HYB, 3mm_7/8_PCI-arg95-SB60#3, su, SDL-SB<1"	0.28	0.31	0.45	23
MPE-M-1-00050	SB-60 double	HYB, 3mm_7/8_PCI-arg95-SB60#3, su, SDL-SB>1"	0.28	0.28	0.40	21
MPE-M-1-00051	SB-60 triple 1 lowe	HYB, 3mm_1 1/4_PCI-arg95-PCI-arg95-SB60#5, su	0.22	0.32	0.46	31
MPE-M-1-00052	SB-60 triple 1 lowe	HYB, 3mm_1 1/4_PCI-arg95-PCI-arg95-SB60#5, su, Grids<1"	0.22	0.29	0.41	29
MPE-M-1-00053	SB-60 triple 1 lowe	HYB, 3mm_1 1/4_PCI-arg95-PCI-arg95-SB60#5, su, SDL<1"	0.22	0.29	0.41	29
MPE-M-1-00054	SB-60 triple 1 lowe	HYB, 3mm_1 1/4_PCI-arg95-PCI-arg95-SB60#5, su, SDL>1"	0.22	0.27	0.37	28
MPE-M-1-00055	SB-60 triple 1 lowe	HYB, 3mm_1 1/4_PCI-arg95-PCI-arg95-SB60#5, su, SDL-SB<1"	0.22	0.29	0.41	29
MPE-M-1-00056	SB-60 triple 1 lowe	HYB, 3mm_1 1/4_PCI-arg95-PCI-arg95-SB60#5, su, SDL-SB>1"	0.22	0.27	0.37	28
MPE-M-1-00057	SB-60 triple 2 lowe	HYB, 3mm_1 1/4_SB60#2-arg95-PCI-arg95-SB60#5, su	0.19	0.24	0.40	30
MPE-M-1-00058	SB-60 triple 2 lowe	HYB, 3mm_1 1/4_SB60#2-arg95-PCI-arg95-SB60#5, su, Grids<1"	0.19	0.22	0.36	29
MPE-M-1-00059	SB-60 triple 2 lowe	HYB, 3mm_1 1/4_SB60#2-arg95-PCI-arg95-SB60#5, su, SDL<1"	0.19	0.22	0.36	29
MPE-M-1-00060	SB-60 triple 2 lowe	HYB, 3mm_1 1/4_SB60#2-arg95-PCI-arg95-SB60#5, su, SDL>1"	0.19	0.20	0.33	28
MPE-M-1-00061	SB-60 triple 2 lowe	HYB, 3mm_1 1/4_SB60#2-arg95-PCI-arg95-SB60#5, su, SDL-SB<1"	0.19	0.22	0.36	29
MPE-M-1-00062	SB-60 triple 2 lowe	HYB, 3mm_1 1/4_SB60#2-arg95-PCI-arg95-SB60#5, su, SDL-SB>1"	0.19	0.20	0.33	28

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Eligible for the Energy Star program



### Structural Performance

PERFORMANCE TESTING IN ACCORDANCE WITH AAMA/WDMA/CSA 101/I.S.2/A440-08

Performance Grade (PG)	Airtightness	Water tightness	Wind load resistance	Screen resistance	Resistance to forced entry	Usability	Structural test
CW-CP90-C	A3	B7	C5	S1	F20	Successful	PES 90 (4 320 Pa)

**PG:** Performance Grade from the NAFS-08 harmonized standard (North American Fenestration Standard) for a given size on a scale from PG15 to PG100. The higher the value is, the better the product efficiency.

**Airtightness:** Resistance to air exfiltration/infiltration on a scale ranging from A1 to A3. The higher the value, the greater the sealing.

**Water tightness:** Resistance to water infiltration on a scale ranging from B1 to B7. The higher the value, the greater the sealing.

**Wind load resistance:** Resistance to wind pressures on a scale ranging from C1 to C5 without breakage or permanent deformation. The higher the value, the greater the resistance.

**Screen resistance:** Resistance rating without damage or permanent deformation while remaining firmly attached to the window under a force of 60 Newtons outwards.

**Resistance to forced entry:** Capacity when locked to withstand a forced entry under specified load and conditions for a rating of F10 or F20. The higher the value, the greater the resistance.

**Usability:** Test for measuring the force required to initiate and maintain the opening movement of the window or the door.

**Structural test:** Structural test pressure (STP) [greater than values specified in pounds per square foot (psf) or in pascals (Pa)] supported before permanent deformation measured on the jamb of the sash. Maximum values indicated.