SIKORA
Custom Windows and Doors

WINDOW SYSTEMS PERFORMANCE CHART

TEST	SPECIFICATIONS	TEST RESULTS	RATING
EASE OF OPERATION	MAXIMUM FORCES TO INITIATE AND MAINTAIN MOTION: **Sash Lock** ≤ 100 N (22.5 lb) **Operator** Initiate: ≤ 60 N (13.5 lb) Maintain: ≤ 30 N (6.75 lb)	**MEASURED FORCES** **Initiate** **Maintain** **SASH LOCK** Opening: 34 N (7.6 lb) -- Closing: 62 N (13.9 lb) -- **OPERATOR** Opening: -- -- Closing: -- --	**PASS**
AIR TIGHTNESS ASTM E283	**Rating Rate of Air Tightness** **A1:** ≤ 2.79 $m^3/h.m^{-1}$ (0.50 cfm/ft) **A2:** ≤ 1.65 $m^3/h.m^{-1}$ (0.30 cfm/ft) **A3:** ≤ 0.55 $m^3/h.m^{-1}$ (0.10 cfm/ft)	**Crack Length:** 4.900 m (16.076 ft) **Measured Air Flow:** Infiltration: 1.131 m^3/h (0.666 cfm) Exfiltration: 1.124 m^3/h (0.662 cfm) **Rates of Air Leakage:** Infiltration: 0.231 $m^3/h.m$ (0.041 cfm/ft) Exfiltration: 0.229 $m^3/h.m$ (0.041 cfm/ft) Average: 0.230 $m^3/h.m$ (0.041 cfm/ft)	**A3**
WATER RESISTANCE ASTM E547, 4 cycles, each 5 minutes pressure ON and 1 minute pressure OFF	**RATING** **PRESSURE** **B1:** 150 Pa (3.13 psf) **B2:** 200 Pa (4.18 psf) **B3:** 300 Pa (6.26 psf) **B4:** 400 Pa (8.35 psf) **B5:** 500 Pa(10.44 psf) **B6:** 600 Pa(12.53 psf) **B7:** 700 Pa(14.62 psf)	NO WATER LEAKAGE OCCURRED AT PRESSURE DIFFERENTIALS PROGRESSIVELY INCREASING TO BEYOND **700** Pa	**B7**
WIND LOAD RESISTANCE (DEFLECTION) ASTM E330	MAXIMUM SASH DEFLECTION ≤ L/125 = 12.20 mm (0.480") **RATING** **PRESSURE** **C1:** ± 500 Pa (10.4 psf) **C2:** ± 750 Pa (15.7 psf) **C3:** ± 1200 Pa (25.1 psf) **C4:** ± 1600 Pa (33.4 psf) **C5:** ± 2000 Pa (41.8 psf)	NET DEFLECTION OF HINGE STILES LEVEL DEFLECTION **Inward** **Outward** **C1** 0.64 mm (0.025") -- **C2** 0.99 mm (0.039") -- **C3** 1.63 mm (0.064") -- **C4** 2.24 mm (0.088") -- **C5** 2.77 mm (0.109") -- **0 Pa** 0.25 mm (0.010") --	**C5**
WIND LOAD RESISTANCE (BLOW-OUT) ASTM E330	**RATING** **PRESSURE** **C1:** ± 1500 Pa (31.3 psf) **C2:** ± 2000 Pa (41.8 psf) **C3:** ± 3000 Pa (62.6 psf) **C4:** ± 4000 Pa (83.5 psf) **C5:** ± 5000 Pa(104.4 psf)	NO FAILURE OR PERMANENT DEFLECTION WHICH WOULD IMPAIR OPERATION WAS OBSERVEDAT ALTERNATING PRESSURE DIFFERENTIALS PROGRESSIVELY INCREASING TO BEYOND ± **5000** Pa.	**C5**
SASH STRENGTH &STIFFNESS (RACKING)	MAXIMUM VERTICAL DEFLECTION OF OUTER FREE EDGE OF OPEN SASH IS 5 mm (0.197") AT 265 N (60 lb) VERTICAL FORCE APPLIED TO THE FREE STILE.	MEASURED VERTICAL DEFLECTION OF OUTER FREE EDGE **1.24 mm (0.049")**	**PASS**
SASH STRENGTH & STIFFNESS (WARPING)	MAXIMUM DEFLECTION OF SASH BLOCKED IN OPEN POSITION < 18.0 mm UNDER 60 N (13.5 lb) APPLIED AT CENTRE OF TOP RAIL.	**MEASURED SASH DEFLECTION** 9.42 mm (0.371")	**PASS**
SASH PULL - OFF	MID-SPAN SASH DEFLECTION ≤ 14.25 mm (75% OF NET GLAZING ENGAGEMENT OF 19.0 mm) @ 265 N (60lb) CONCENTRATED LOAD.	**LOAD** **DEFLECTION** Hinge Stile: 265 N (60lb) 2.21 mm (0.087") Free Stile: 265 N (60lb) 2.52 mm (0.099") Top Rail: 265 N (60lb) 0.91 mm (0.036") Bottom Rail: 265 N (60lb) 1.22 mm (0.048")	**PASS**
SCREEN STRENGTH	NO DAMAGE OR PERMANENT DEFORMATION TO SREENING MATERIAL, ITS FRAMING AND FASTENING UNDER 60 N (13.5 lb) AND 330 N (74.25 lb) FOR STANDARD AND HEAVY DURY RATING RESPECTIVELY.	NO DAMAGE OR PERMANENT DEFORMATION WAS OBSERVED UNDER **60 N** LOAD	**PASS (Standard Duty)**
FORCED ENTRY RESISTANCE ASTM F 588	NO ENTRY SHALL BE GAINED URING 5 MINUTES OF HAND MANIPULATION AND 5 MINUTES OF TOOL MANIPULATION PERFORMED PRIOR TO AND FOLLOWING THE APPLICATION OF THE SPECIFIED LOADS ON THE HARDWARE	NO ENRY WAS GAINED DURING 5 MINUTES OF HAND MANIPULATION AND 5 MINUTES TOOL MANIPULATION PERFORMED PRIOR TO AND FOLLOWING THE LOAD TESTS ON THE HARDWARE	**F2**

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