

OS2

FRAME SERIES



PERFORMANCE
SPECIFICATIONS.



> OS2 Window - Single OR Double Sash (Inswing Casement)

Characteristic	Standards	Class	Assessment of Classification
Air Permeability	EN 1026 (Test) EN 12207 (Classification)	4	Airtight up to pressure of 600 Pa (12.5 psf) Airtight up to wind speed of 112 km/h (69.6 mph) Joint Permeability → 0.75 m ³ /hm Overall Area Permeability → 3.0 m ³ /hm ²
Water Permeability A → Non-shielded test	EN 1027 (Test) EN 12208 (Classification)	8A	Watertight up to pressure of 450 Pa (9.4 psf) Watertight up to wind speed of 97 km/h (60.3 mph)
Wind Load Resistance (DP)	EN 12211 (Test) EN 12210 (Classification)	C4	Frame deflection at 1600 Pa (33.4 psf) ≤ 1/300
Acoustic Insulation Performance Rw → Weighted Sound Reduction Index At → Total Unit Area	EN ISO 717-1:2007 EN 14351-1:2006+A1:2010		Rw IGU (Glass) = 40 dB → Rw Window = 42 dB (-2, -6) Rw IGU (Glass) = 42 dB → Rw Window = 43 dB (-2, -5) Rw IGU (Glass) = 45 dB → Rw Window = 43 dB (-1, -4) At < 2.7 m ² (29.1 ft ²) → Rw Window -0 dB 2.7 m ² (29.1 ft ²) < At < 3.6 m ² (38.8 ft ²) → Rw Window -1 dB 3.6 m ² (38.8 ft ²) < At < 4.6 m ² (49.5 ft ²) → Rw Window -2 dB At < 4.6 m ² (49.5 ft ²) → Rw Window -3 dB
Thermal Transmittance (U-value) ** Ug → Glass Thermal Transmittance Ut → Frame Thermal Transmittance	EN ISO 10077-1:2006, 2:2006 EN ISO 10077-2:2006 EN 14351-1:2006+A1:2010		Ug = 1.0 W/m ² K → Ut = 1.60 W/m ² K Ug = 0.17 BTU/ft ² h°F → Ut = 0.28 BTU/ft ² h°F
Visual Transmittance **	ANSI/NFRC 100-2014		VT → 0.4106
Solar Heat Gain Coefficient **	ANSI/NFRC 100-2014		SHGC → 0.2908
Test Unit Type: Double Casement / Test Unit Size (area): 1.82 m ² (19.6 ft ²)		* Averaged Value	** Dependent on Glass and Glazing Type

> OS2 Window - Single OR Double Sash (Outswing Casement)

Characteristic	Standards	Class	Assessment of Classification
Air Permeability	EN 1026 (Test) EN 12207 (Classification)	3	Airtight up to pressure of 600 Pa (12.5 psf) Airtight up to wind speed of 112 km/h (69.6 mph) Joint Permeability → 2.25 m ³ /hm Overall Area Permeability → 9.0 m ³ /hm ²
Water Permeability A → Non-shielded test	EN 1027 (Test) EN 12208 (Classification)	8A	Watertight up to pressure of 450 Pa (9.4 psf) Watertight up to wind speed of 97 km/h (60.3 mph)
Wind Load Resistance (DP)	EN 12211 (Test) EN 12210 (Classification)	C4	Frame deflection at 1600 Pa (33.4 psf) ≤ 1/300
Acoustic Insulation Performance Rw → Weighted Sound Reduction Index At → Total Unit Area	EN ISO 717-1:2007 EN 14351-1:2006+A1:2010		Rw IGU (Glass) = 40 dB → Rw Window = 42 dB (-2, -6) Rw IGU (Glass) = 42 dB → Rw Window = 43 dB (-2, -5) Rw IGU (Glass) = 45 dB → Rw Window = 43 dB (-1, -4) At < 2.7 m ² (29.1 ft ²) → Rw Window -0 dB 2.7 m ² (29.1 ft ²) < At < 3.6 m ² (38.8 ft ²) → Rw Window -1 dB 3.6 m ² (38.8 ft ²) < At < 4.6 m ² (49.5 ft ²) → Rw Window -2 dB At < 4.6 m ² (49.5 ft ²) → Rw Window -3 dB
Thermal Transmittance (U-value) ** Ug → Glass Thermal Transmittance Ut → Frame Thermal Transmittance	EN ISO 10077-1:2006, 2:2006 EN ISO 10077-2:2006 EN 14351-1:2006+A1:2010		Ug = 1.0 W/m ² K → Ut = 1.60 W/m ² K Ug = 0.17 BTU/ft ² h°F → Ut = 0.28 BTU/ft ² h°F
Visual Transmittance **	ANSI/NFRC 100-2014		VT → 0.4106
Solar Heat Gain Coefficient **	ANSI/NFRC 100-2014		SHGC → 0.2908
Test Unit Type: Double Casement / Test Unit Size (area): 1.82 m ² (19.6 ft ²)		* Averaged Value	** Dependent on Glass and Glazing Type

> OS2 Window - Hopper over Fixed Window (Inswing Casement + Fixed)

Characteristic	Standards	Class	Assessment of Classification
Air Permeability	EN 1026 (<i>Test</i>) EN 12207 (<i>Classification</i>)	4	Airtight up to pressure of 600 Pa (12.5 psf) Airtight up to wind speed of 112 km/h (69.6 mph) Joint Permeability → 0.75 m ³ /hm Overall Area Permeability → 3.0 m ³ /hm ²
Water Permeability A → Non-shielded test	EN 1027 (<i>Test</i>) EN 12208 (<i>Classification</i>)	E1200	Watertight up to pressure of 1200 Pa (25.1 psf) Watertight up to wind speed of 159.3 km/h (99.0 mph)
Wind Load Resistance (DP)	EN 12211 (<i>Test</i>) EN 12210 (<i>Classification</i>)	C4	Frame deflection at 1600 Pa (33.4 psf) ≤ 1/300
Acoustic Insulation Performance Rw → Weighted Sound Reduction Index At → Total Unit Area	EN ISO 717-1:2007 EN 14351-1:2006+A1:2010		Rw IGU (Glass) = 40 dB → Rw Window = 42 dB (-2, -6) Rw IGU (Glass) = 42 dB → Rw Window = 43 dB (-2, -5) Rw IGU (Glass) = 45 dB → Rw Window = 43 dB (-1, -4) At < 2.7 m ² (29.1 ft ²) → Rw Window -0 dB 2.7 m ² (29.1 ft ²) < At < 3.6 m ² (38.8 ft ²) → Rw Window -1 dB 3.6 m ² (38.8 ft ²) < At < 4.6 m ² (49.5 ft ²) → Rw Window -2 dB At < 4.6 m ² (49.5 ft ²) → Rw Window -3 dB
Thermal Transmittance (U-value) ** Ug → Glass Thermal Transmittance Ut → Frame Thermal Transmittance	EN ISO 10077-1:2006, 2:2006 EN ISO 10077-2:2006 EN 14351-1:2006+A1:2010		Ug = 1.0 W/m ² K → Ut = 1.60 W/m ² K Ug = 0.17 BTU/ft ² h°F → Ut = 0.28 BTU/ft ² h°F
Visual Transmittance **	ANSI/NFRC 100-2014		VT → 0.4106
Solar Heat Gain Coefficient **	ANSI/NFRC 100-2014		SHGC → 0.2908

Test Unit Type: Hopper over Fixed Window / Test Unit Size (area): 2.67 m² (28.7 ft²)

* Averaged Value

** Dependent on Glass and Glazing Type

Test Sash Size (area): 0.98 m² (10.5 ft²)

> OS2 Door - Single OR Double Panel (Inswing OR Outswing)

Characteristic	Standards	Class	Assessment of Classification
Air Permeability	EN 1026 (Test) EN 12207 (Classification)	2	Airtight up to pressure of 300 Pa (6.3 psf) Airtight up to wind speed of 79.8 km/h (69.6 mph) Joint Permeability → 6.75 m ³ /hm Overall Area Permeability → 27 m ³ /hm ²
Water Permeability A → Non-shielded test	EN 1027 (Test) EN 12208 (Classification)	1A	Watertight up to pressure > 50 Pa (1.04 psf) Watertight up to wind speed of 32.4 km/h (20.2 mph)
Wind Load Resistance (DP)	EN 12211 (Test) EN 12210 (Classification)	C1	Frame deflection at 400 Pa (8.4 psf) ≤ 1/300
Acoustic Insulation Performance Rw → Weighted Sound Reduction Index At → Total Unit Area	EN ISO 717-1:2007 EN 14351-1:2006+A1:2010		Rw IGU (Glass) = 40 dB → Rw Door = 42 dB (-2, -6) Rw IGU (Glass) = 42 dB → Rw Door = 43 dB (-2, -5) Rw IGU (Glass) = 45 dB → Rw Door = 43 dB (-1, -4) At < 2.7 m ² (29.1 ft ²) → Rw Door -0 dB 2.7 m ² (29.1 ft ²) < At < 3.6 m ² (38.8 ft ²) → Rw Door -1 dB 3.6 m ² (38.8 ft ²) < At < 4.6 m ² (49.5 ft ²) → Rw Door -2 dB At < 4.6 m ² (49.5 ft ²) → Rw Door -3 dB
Thermal Transmittance (U-value) ** Ug → Glass Thermal Transmittance Ut → Frame Thermal Transmittance	EN ISO 10077-1:2006, 2:2006 EN ISO 10077-2:2006 EN 14351-1:2006+A1:2010		Ug = 1.0 W/m ² K → Ut = 1.60 W/m ² K Ug = 0.17 BTU/ft ² h°F → Ut = 0.28 BTU/ft ² h°F
Visual Transmittance **	ANSI/NFRC 100-2014		VT → 0.4106
Solar Heat Gain Coefficient **	ANSI/NFRC 100-2014		SHGC → 0.2908

Test Unit Type: Double Panel / Test Unit Size (area): 3.45 m² (37.1 ft²)

* Averaged Value

** Dependent on Glass and Glazing Type

Important: European testing labs do not consider a threshold or a sill when performing their tests on hinged doors. With that said, the results herein for Air permeability, Water permeability and Wind Load Resistance do not accurately represent the performance you should expect from our inswing and outswing doors. If you are using a drop seal or a threshold with compression gasket, refer to the specifications for our inswing and outswing OS2 series casement windows.



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