

SMART WINDOW 2+2



Scandinavian SMART WINDOW 2+2 MSE for commercial and hotel buildings

Product type:

Smart Window is MSEA type, with glazing 2+2 and side hung inward openable Scandinavian window system.

Both window casements are side hung inward openable for cleaning and maintaining purposes only.

Active Solar protection and different effects are integrated inside window, between two separately openable casements. Window key is used for opening window locks.

Ventilation hatch is operated with motorized openers, which work with remote controls or iPad application

Emergency and smoke evacuation windows have fixed handle for opening purposes.

Wooden parts and surface treatment:

Main window frame is finger jointed, engineered timber laminated from two or three sections made from Nordic Redwood, all visible surfaces knotless, on the back side of frame small singular knots are allowed. Inner casement massive jointed Nordic Redwood, all visible surfaces knotless.

Base coating with polyurethane paint, surface painting with water based paint. Manufacturing process of the billet structures with knot and defect removal gives an excellent base for surface treatment. Automated electro- static coating process. The painting takes place prior to installation for loose components, whereby the surface treatment agent can also be supplied to the grooves and joints of the components.

Standard colour: white RAL 9010

Aluminum cladding and surface treatment:

The outer casement and outer cladding of frame are powder coated aluminum profiles.

Standard colours: white RAL 9010, light grey RAL 7040, dark grey RAL 7024, black RAL 9005

Hinge and locking system:

Hinge in inner and outer casement are 8 mm bolt hinges.

Window fasteners in inner casements are with metallic strikers and plates. Outer casement has plastic turn and lock system or metallic strikers.

Fixed window handle is used only if window is used as emergency exit window or smoke evacuation window. Type of window handle is nickel free natural anodized aluminum handle.

Child security:

Child security is taken care of when window is correctly closed and locked according to user information.

Window effects are child secure as they are remote controlled and do not have any loose strings.

Contact information:

Send enquiries to:

Company address:

www.smartwindow.fi

export@smartwindow.fi

Arvomarkiisi Oy, Rajamaankaari 5, 02970 Espoo, Finland



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Solar shading system:

Smart window has several different effects to choose from. By selecting correct effect, you can affect on various functions of window such as LT-value, G-value, Uw-value and even Rw-value, see attached sheet.

With different glazing types you can also have influence on Smart Windows sound reduction abilities.

Window sizes, min and max:

Window width	1-opening	2-openings	3-openings	
	min	6M	12M	18M
	max	17M	30M	30M
Window height	1-opening	2-openings	3-openings	
	min	5M	5M	5M
	max	18M (21M)	18M(21M)	18M(21M)



Window frame area max 6 sqm

NOTE! Actual min and max window sizes will always be checked by the producer before offer/order. Sizes are given as Modular sizes, i.e 6M means 580mm and 10M means 980mm

Frame depth: 210mm and 230mm

Glass opening measurement: see detail drawing above.

Glazing: 2+2, with 210mm frame, Uw-value 0,63 and sound reduction value Rw45dB

Outside casement: dbl glazing unit with 2x 4mm glasses with 1x low-e glass, cavity 16mm Ar

Inside casement: dbl glazing unit with 2x 4mm glasses with 1x low-e glass, cavity 16mm Ar

CE-marking and testing: Products are CE marked and tested by the producer.

Environment:

Producer is working with respect for environmental issues. Guideline is ISO 14001 (no certificated).

Technical information:

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Light transmission (LT) tells percentage of daylight passing through glazing system.

Solar transmittance (Gg) tells percentage of solar energy passing through glazing system

Heat transmission through window construction is validated by Uw-value, calculated window size is 1230x1480 mm

Type/Glass/ Frame/ Effect screen	Sound reduction		Technical information	
	Rw	LT-value (%)	Gg-value (%)	Uw-value
MSEA / 2+2 / 210mm/ NO EFFECT	50dB	71	55	0,63
MSEA / 2+2 / 210mm/ SUN EFFECT	50dB (+ ~1dB)	3,5	16,5	0,60 *
MSEA / 2+2 / 210mm/ MILKY EFFECT	50dB (+ ~1dB)	4,9	16,9	0,60 *
MSEA / 2+2 / 210mm/ BLACKOUT EFFECT	50dB (+ ~1dB)	0	21,5	0,60 *

*) Values are estimated, not tested.

**) Values are calculated (SSF ESBO Light 2,2), not tested.

MSEA is offered in several different sound reduction levels depending on glazing and frame depth.

Sound reduction levels are from Rw 45dB up to Rw 51dB. Sound reduction is tested in laboratory or calculated.

LT value is value for glass area only.

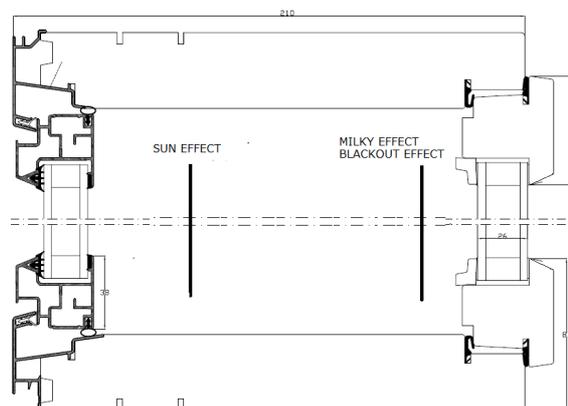
Product standard, performance characteristics according to EN 14351

Air permeability class 4, according to EN 12207

Water tightness class E1200, according to EN 12208

Wind pressure resistance class C3, according to EN 12210

Detail drawing, vertical section.



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