


HIGH-QUALITY WINDOWS & DOORS

ENERGATE 963 • Wood with aluminium cladding

ENERGATE 



OUR PRODUCT ADVANTAGES

► Superior thermal performance 

	Width Left & Right	Width Above	Width Below	Width - French casement
Frame dimensions:	115 mm	115 mm	135 mm	136 mm
U_{frame}	1.2 W/m²K	1.2 W/m²K	1.5 W/m²K	1.2 W/m²K

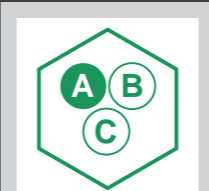
THERMAL INSULATION*:

U_{glass}	Double 1.1 W/m²K	Triple 0.7 W/m²K	Triple 0.5 W/m²K
U_{window} *	1.24 W/m²K	0.97 W/m²K	0.84 W/m²K

*Specified values are calculated for tested window: Dual action, single opening window
Window Size: 1.23 x 1.48 m · Norm: EN ISO 10077-2 · Wood species: spruce or larch

- High quality selected wood - wood type: spruce (picea abies), oak, larch
- Excellent weathering resistance with highly weatherproof aluminium cladding qualicode 2
- Airtight continuous gaskets

MORE PERFORMANCE BEST EUROPEAN WINDOW



LESS ENERGY



MORE COMFORT

- Thermal bridge free floor connection/wheel chair accessible flat threshold for patio doors
- All types of glass available: Sun protection · Sound insulation
Safety toughend or laminated glass · burglar glass
Possible glass thickness from 26 mm to 53 mm
- Triple glass: Ug = 0.5 or 0.7 W/m²K or double glazing Ug = 1.10 W/m²K
Execution always with warm edge spacer
- Make your choice: Standard exposed or fully concealed window hinges
- Adjustable window hinges up to 130 kg, tested on 20.000 opening and closing cycles
- Optional: welded alu clad corners
- All products are CE-certified

ENERGATE® Standard

Serviceability deflection	DIN EN 12210 ± 1800Pa, 2400 Pa and 3000 Pa
Operating force of opening sashes	DIN EN12217 75N (tilt&turn sashes) and 100 N (sliding doors)
Air infiltration	DIN EN12007 Class 4 0.13L/s=0.47m³/h@600Pa
Water penetration	DIN EN12208 9A(600 Pa in both +/- directions) single opening window
Ultimate strength	DIN EN 12210 C5 (1/300, 2000/1000/3000 Pa) single opening window
Permanent function	DIN EN 1191 Class 3 up to 20.000 opening & closing cycles

A WIDE CHOICE OF PRODUCT TYPES



1.002
Single opening
window with fixed side light



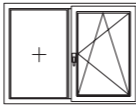
Tilt position



Turn position



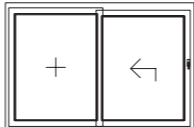
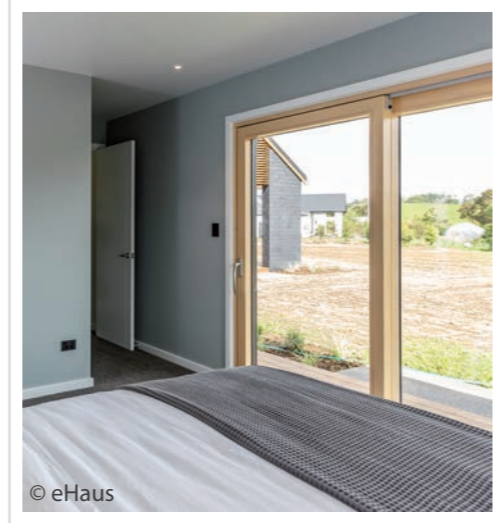
Turn position



8.001
Lift & slide door
with flat threshold



Opening position



ENERGATE 963 - Wood with aluminium cladding

WINDOW
1.001

INSWING

VERTICAL SECTION

HINGES

Standard hinges

HORIZONTAL SECTION

OPTIONAL:
Concealed hinges

HORIZONTAL SECTION

FIXED FRAME
1.021

VERTICAL SECTION

PATIO DOOR with flat threshold
1.101

window handle
inside and pull grip outside

VERTICAL SECTION

HINGES
A
HORIZONTAL SECTION
see drawing 1.001

SIDE ENTRANCE DOOR with flat threshold
3.001

Lever handle set

VERTICAL SECTION

HINGES

3.001 INSWING

HORIZONTAL SECTION

3.001.3 OUTSWING

VERTICAL SECTION

3.001.3 OUTSWING

HORIZONTAL SECTION

B **THRESHOLD**
INSWING
see drawing 1.101

MAIN ENTRANCE DOOR with flat threshold
2.201

Door handle set

VERTICAL SECTION

2.201 INSWING

HORIZONTAL SECTION

2.201.3 OUTSWING

VERTICAL SECTION

2.201.3 OUTSWING

HORIZONTAL SECTION

OPTIONAL:
Concealed hinges

Various security level and
accessories available
see main entrance door catalog

LOCKABLE PATIO DOOR with flat threshold
5.001

Exterior key cylinder and window handle
inside and outside

VERTICAL SECTION

A **HINGES**
B **THRESHOLD**
INSWING
HORIZONTAL SECTION see drawing 1.001
VERTICAL SECTION see drawing 1.101

PARALLEL SLIDE & TILT DOOR
6.001

VERTICAL SECTION

LIFT & SLIDE DOOR
8.001

VERTICAL SECTION

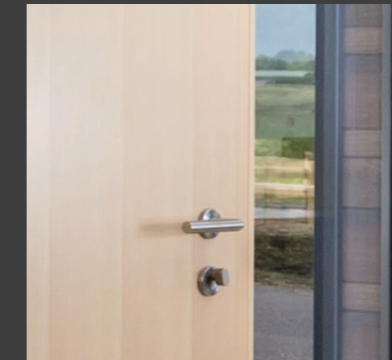
Window & Door System also available as WOOD version without aluminium cladding



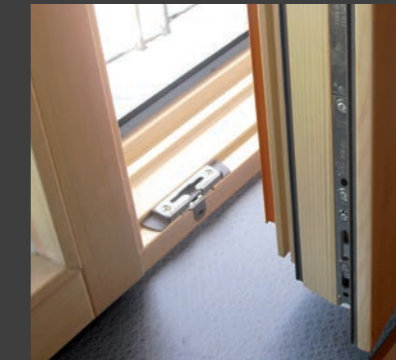
FULL CHOICE OF ACCESSORIES



Toughened safety glass



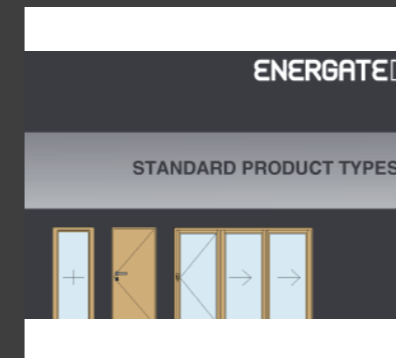
Customized doors



Child safety lock
Hidden rotating lock



Handle choice:
Standard or customized



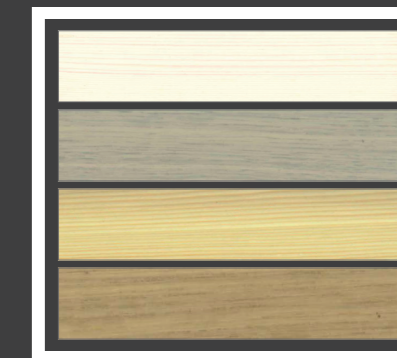
Product types catalog



Main entrance doors



Various
Alu-clad colors



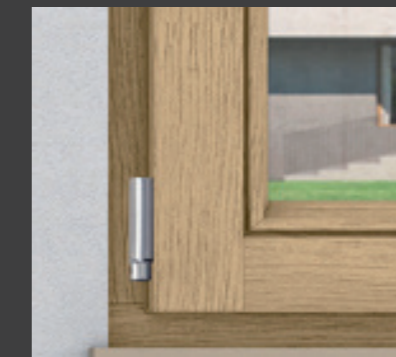
Great choice of fine selected
wood



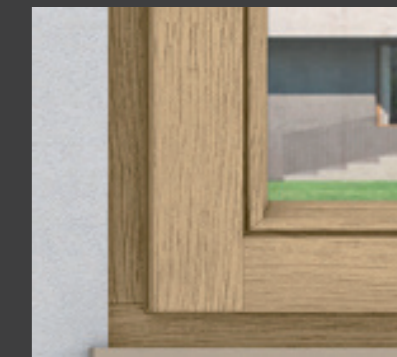
Welded alu clad corners



Plugged alu clad corners



Standard exposed hinges



or
fully concealed hinges

„With ENERGATE windows you get the best value
for a great price“ Customer's review



Expo Haus in Waikato, NZ

- ▶ ENERGATE products available in a range of thermal performances to suit your requirements
- ▶ ENERGATE products are tested in extreme climatic conditions to ensure performance
- ▶ Installation assistance available on request
- ▶ We are specialist in product consulting tailored to your needs

Ludwig International GmbH

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