



ergo line wood and aluminium windows

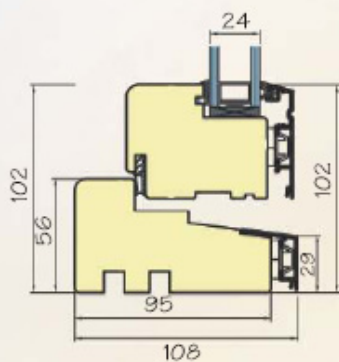
By combining resistant and light aluminium with solid wood, we have managed to combine modern design of the façade with the warmth of wood inside, high usability parameters and freedom from the need of constant conservation.

The application of an aluminium lap in Natura Ergo windows has greatly improved durability of the woodwork.

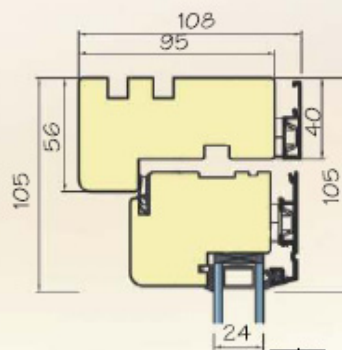
Construction

Construction based on the Scandinavian system.

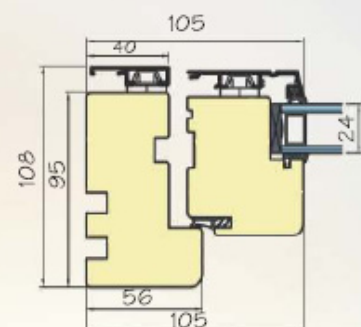
Frame edges and inside leaf edges rounded at R6 diameter.
Maximum thickness of the glazed unit: 24mm



bottom rail



upper rail



side rail

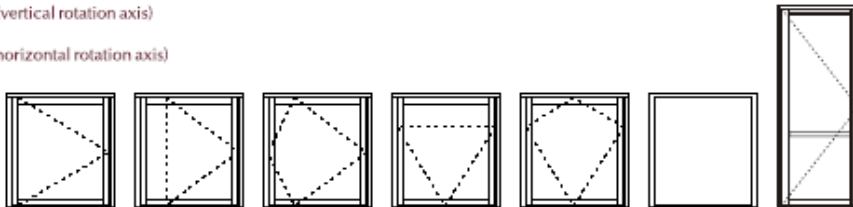
Natura reserve the right to implement technical changes.

structure

transverse section of the frame	56 x 95 mm	transverse section of the permanent post	56 x 95 mm
transverse section of the window leaf	56 x 68 mm	transverse section of the wash board (an element increasing the firmness of a balcony door leaf, installed at the leaf bottom part)	56 x 68 mm
transverse section of the balcony leaf	75 x 68 mm	transverse section of the structural grill installed in the leaf	75 x 68 mm
transverse section of the transom bar	71 x 95 mm	transverse section of the structural grille installed in the full-glazing option	71 x 95 mm
transverse section of the permanent post	56 x 95 mm		

functional variants

- side hung opening up to 90°
- side swing, rotation up to 180° (vertical rotation axis)
- top hung opening up to 80°
- top swing, rotation up to 180° (horizontal rotation axis)



standard options

- **Material:**
Pine gluelam
- **Aluminum clad:**
Aluron System Nordic, colors from the RAL palette
- **Varnishing:**
 - Glasurit or Sikken's transparent varnishes, water dilutable, 11 colors.
 - GORI body coating varnishes, RAL palette colors.
- **Fittings:**
 - IPA fittings for open out windows, scissor hinges concealed between the leaf and window frame.
 - Scissor hinges – side hung (installed at the top and bottom of the window, leaf opens up to 90°)
 - Scissor hinges – side swing (installed at the top and bottom of the window, leaf opens up to 90° and vertical rotation up to 180°)
 - Scissor hinges – top hung (installed on the sides of the window, leaf opens up to 80°)
 - Scissor hinges, top swing (installed on the sides of the window, leaf horizontal rotation up to 180°)
 - In all side hung windows a hook bolt is used (two hooks on the bolt regardless of height).
 - The top swing window is additionally fitted with a swing blocking system (protection for children)
 - In all top hung and top swing windows a roller bolt is used (two bolting rollers and one fixed –controlling –roller)
 - Balcony doors – exterior hinges (3 pcs.), asymmetrically distributed – 2 in the top part of the window, hinges without the regulation function, color: white galvanized, no covers. Hook bolt (three hooks on the bolt regardless of height). Swing limit at 90°

Leaves higher than 1000 mm are additionally equipped with a hitch protecting the leaf bar from being bent, placed at the middle point (vertically or horizontally as appropriate) of the window, always opposite from the bolt.

Fittings allow for microventilation – the leaf is bolted at non-air tight position – gap of 8-10 mm.

- **Handle:**
Hoppe Tokyo, bent handle, colors: aluminum F1, steel F9, white F9010



- **Sealing:**
 - Aluron exterior rubber sealing AU1004 and interior AU1003
 - Primo cut-in sealing (for the leaf-frame connection) ACF 7150

- **Double glazed units:**
 - Airspace structure 4/16/4TF, heat penetration rate $U=1.1W/m^2K$
 - Glazed unit thickness 24 mm.

additional accessories

- **Permanent mullion** of 56, 85 mm in width
- **Grilles:**
 - structural,
 - in the airspace, width: 8, 18, 26 or 45 mm (only with a 16 mm distance post and glazed unit thickness of 24 mm)
- **Panes:**
Safe, burglar inhibiting, thermally insulating, glass with ornaments, units not exceeding 24 mm thickness.
- **Fittings:**
 - two-sided handle with a key insert
 - handle with a key
 - handle brake
- **TITON ventilation grooves**
TRIMWENT TV90 425 or 625, colors: white, brown, on custom order RAL palette colors.
- **Aluminum threshold** for balcony doors



Ventilation groove



Hoppe Tokyo handle

dimensions

leaf dimensions and weight

Way of opening	width	height	Max. weight
side hung (scissor hinges)	410-900	500-1600	40 kg
top hung	400-1400	350-1600	20-70 kg
side swing	450-1150	500-1500	40 kg
top swing	400-1400	610-1450	45 kg
single leaf balcony doors	600-900	2100-2250	-

livingwood windows ltd