

### Application\*:

- Wintergarden unit
- Standard window
- Living space / Fixed unit

### Profile System

- ▮ SOLARLUX SL 97 series - or equivalent
- ▮ The folding glass door specified below is constructed from laminated timber window scandlings with an aluminium cladding on the outside and a thermally insulation layer between. Wood from a sustainable forest management system and special types of wood should be available as an option.
- ▮ The design of the outer ventilated aluminium cladding should follow the guidelines for aluminium/wood windows of the Institute for Window Technology e.V., Rosenheim.
- ▮ According to DIN EN ISO 10077-1 an  $U_w$  value of  $U_w = 0.80 \text{ W/m}^2\text{K}$  must be achieved for a folding glass door with three panels ( $W \times H$  2700 x 2300 mm), inward opening, a floor track with rebate and triple-glazing with an  $U_g = 0.80 \text{ W/m}^2\text{K}$  value and thermally improved outer edge.
- ▮ Air permeability Class 3 according to EN 12 207, impermeability to rain Class 7A according to EN 12 208, resistance to wind loads Class C3 according to EN 12 210 must be achieved.
- ▮ The panels shall be inward or outward folding.
- ▮ The running and guide tracks are to be integrated flush into the system and should not protrude.
- ▮ The system must be constructed so that height tolerances and expansion are allowed for without leading to a fault in function or impermeability.

### Hardware

- ▮ All fittings must lie concealed in the profiles.
- ▮ To ensure stability of the folding system, low-maintenance, low-rattle, rustproof and foolproof fittings are to be provided.
- ▮ Adjustable hinges should make it easy to adjust the folding system.
- ▮ In addition it should not be possible to knock the hinges out (break-in prevention).
- ▮ The interlocking mechanism rods should be made of aluminium and provide interlock into the upper and lower running and guide rails. The rods must have polyamide caps so as not to operate "metal on metal". For optimum impermeability and break-in protection, the entry door panel (swinging panel) should be laterally engaged with the frame or with the neighbouring panel by an additional bolting device.
- ▮ In principle, latching and unlatching of the doors should be effected by a user-friendly, one-handed 180° turn of sturdy flat handles (with a blocking element for break-in protection) from the inside. In addition, it must be possible for these handles to be lockable.

- ▮ An integrated, separately operated entry/exit door panel with a handle inside and outside, lock and profile cylinder must be structurally possible.

### Running Gear

- ▮ The folding glass door SL 97 is fitted with floor mounted (SL 97 / u) or top hung (SL 97 / o) running gear.
- ▮ SL 97 / u (standard):  
The bottom fitted runner assemblies run on low noise ball bearings, a combination of stainless-steel rollers with stainless-steel bearing surfaces which give a long service life.
- ▮ SL 97 / o:  
The top fitted runner assemblies also run on ball bearings with low noise plastic bearing surfaces.

### Sealing

- ▮ A triple layer of EPDM weather stripping must be provided horizontally and vertically to seal against rain and draughts.

### Glazing

- ▮ "Dry" glazing with flush sills must be provided.
- ▮ Trouble-free pane replacement at a later date should be possible without having to dismantle the aluminium cladding.

**\* The possible applications referred to and schematic diagrams shown are examples only. This does not discharge the customer of his duty to examine in detail the applicability of a system (i.e. use, heating, country-specific regulations etc.)**