

**Application\*:**

- Wintergarden unit
  - Pool glazing
  - Commercial application
  - Commercial façade
  - Living space / Fixed unit
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**Profile System**

- ▮ The folding system SL 70e is an aluminium construction made of insulated profiles in accordance with the "Guidelines for the Verification of the Stability of Metal/Synthetic Combined Profiles" of the DIBt.
- ▮ Construction depth of the panel 70 mm and of the frame 80 mm
- ▮ The U value of the frame is  $U_{f,BW} = 2.6 \text{ W/m}^2\text{k}$  according to DIN V 4108-4; 2004-07 (corresponds to RMG 2.1 according to DIN V 4108-4; 1998-10).
- ▮ According to DIN EN ISO 10077-1:2000-11 the following  $U_w$  value for a folding façade with three panels can be used:  $U_w = 1,8 \text{ W/m}^2\text{k}$ . If glass with a better  $U_g$  value or with thermally improved outer edge of composite profile ("warm edge") is used the  $U_w$  value of the folding façade improves accordingly.
- ▮ Air permeability class 3 in accordance with DIN EN 12 207 impermeability to rain Class 9A according to EN 12 208, resistance to wind loads Class C3/B3 according to EN 12 210 (stress group "C" in accordance with DIN 18 055) must be achieved.
- ▮ The panel profiles are mitred and are firmly joined with internal bonded and pressed corner pieces.
- ▮ The panels should be able to either fold inwards or outwards.
- ▮ The bottom track should be able to operate with or without a threshold and, as an option, be set into the floor. The design without a threshold must be available for shop fronts or for "barrier-free dwellings" in compliance with DIN 18 025.
- ▮ Segmented layouts available upon request.
- ▮ 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.
- ▮ The interlocking mechanism rods should be made of aluminium and provide a stroke of 24 mm movement in 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 both on the inside and outside, lock and profile cylinders must be structurally possible.
- ▮ A design with an integrated tilt or tilt-turn panel within a door unit should be made available as an option.
- ▮ Adjustable hinges should make it easy to position the folding system.
- ▮ In addition it should not be possible to knock the hinge pins out (break-in prevention).

**Running Gear**

- ▮ The floor-mounted running gears have 4 rollers that are ball-bearing and with a low-noise combination of stainless steel rollers and stainless steel running track extremely durable and solid.

**Sealing**

- ▮ Vertically and horizontally: the sealing must be continuous by means of a centre seal. A sliding brush seal with flexible plastic edging should be applied to the surrounding frame.
- ▮ Vertically at the outer door jambs, additional weather stripping against driving rain must be provided.

**Glazing**

- ▮ The glass must be positioned into sills with a continuous snap-in bead.
- ▮ Trouble-free pane replacement at a later date should be possible.

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**\* 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.)**

