

pool cover
guillotine windows/doors
in-façade guillotine
FoldWings bi-fold door
glide-in retracted roof
wind breaks
leaning on structures
green house
stand alone structures



SkyTech

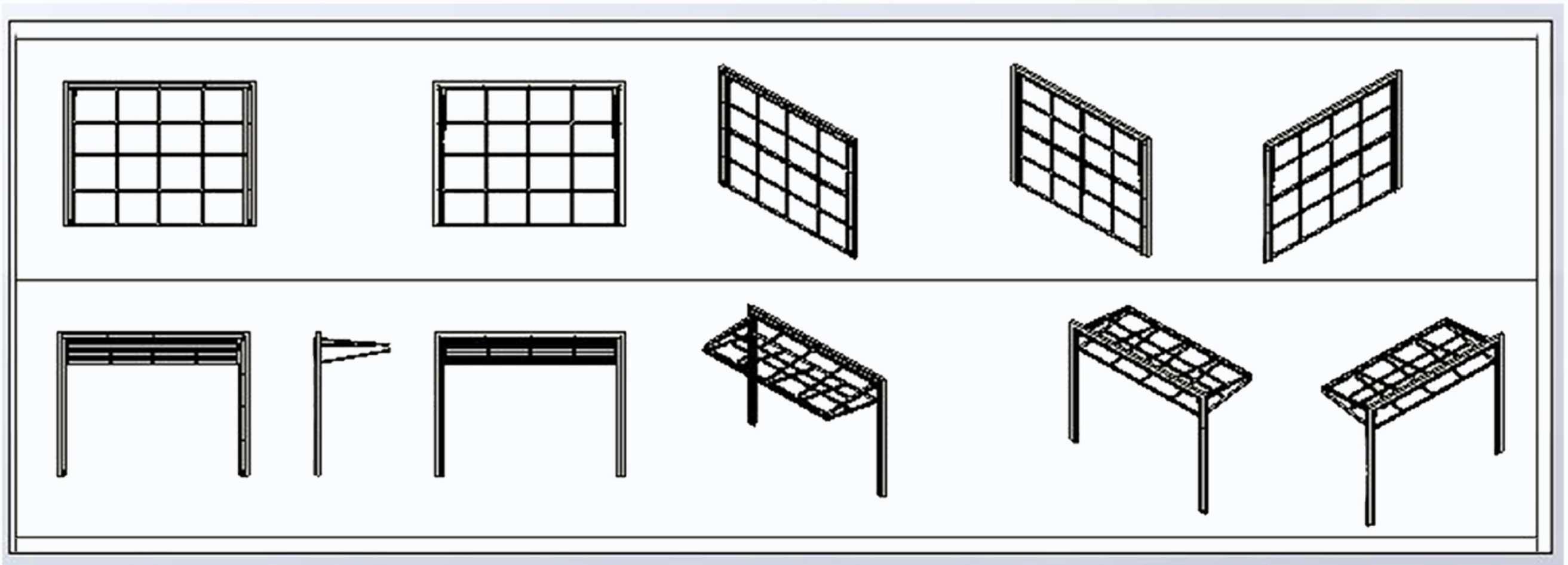
Breath of fresh air in kinetic architecture

Product Data Sheet 4

what is a SkyTech FoldWings system?

A new interpretation of façade

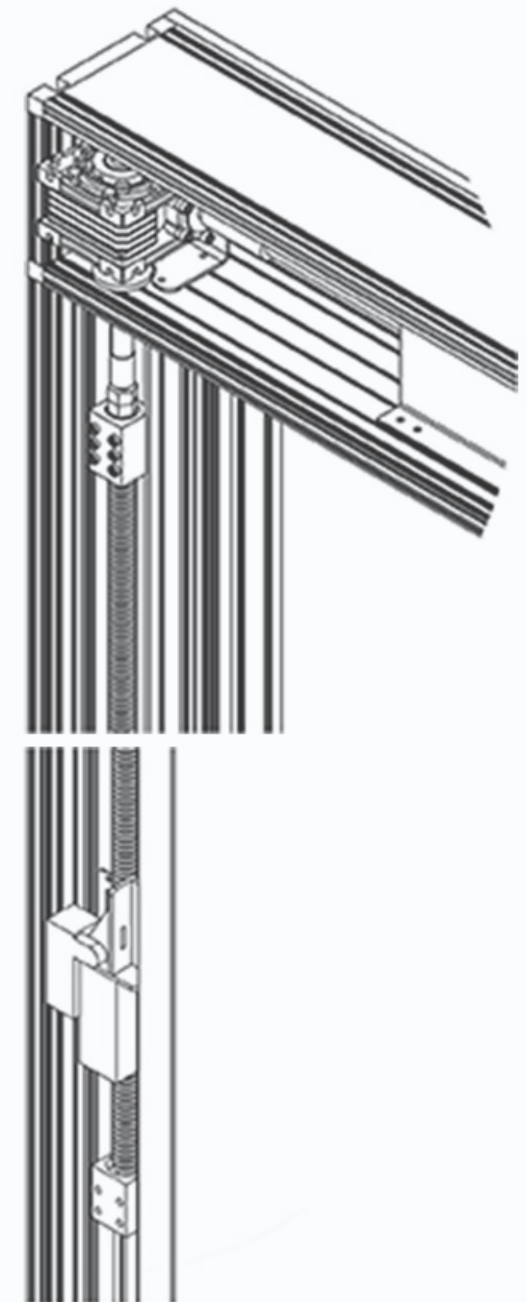
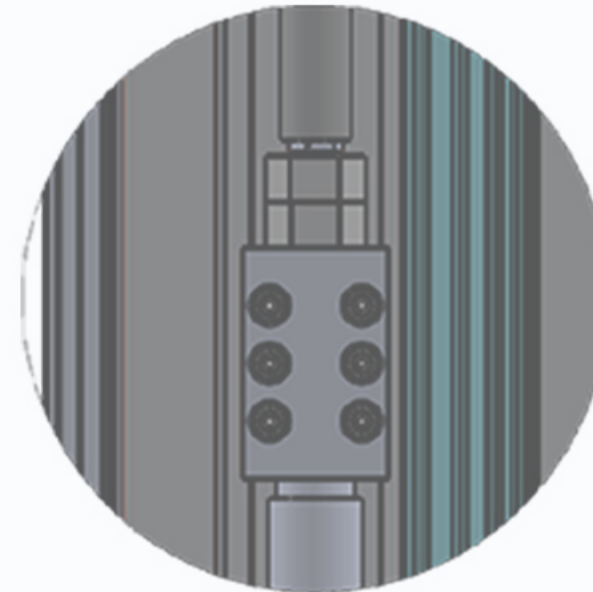
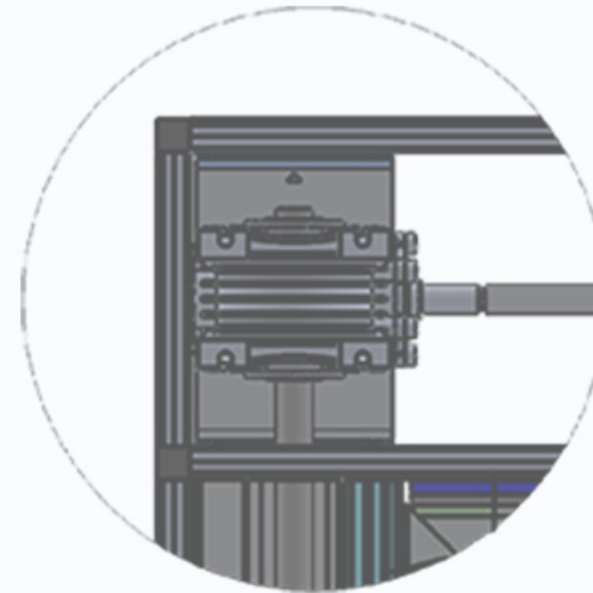
A SkyTech FoldWings system is a vertical bi-fold door, consisted of two frames, which is a part of the façade in closed position and a canopy in open. Once the motor receives the command “run” the system starts folding by the hinges in the middle as the two pivots on connection points on top and on the bottom rotate, the one on the bottom also elevating by pushing the bottom frame upwards.



how is it secure against falling?

Safety is our priority!

The movement shaft of a SkyTech bi-fold system consists of screw drivers on both lateral sides which are connected to gears on top that are turned by the motor. The Aluminium frames of main body are connected to the shafts by two pivot pairs on the top and on the bottom and the pivots on the bottom are mounted on the screw drive via polyamid nuts which elevate with the screw drive turning while both pushing and rotating the bottom frame; resulting in folding the system by the hinges in the middle. All described driving mechanism above is out of chromized steel and supported by the Aluminium cases which are mounted onto the main structure.



Statical Features

width: 1250–5500 mm

height: 1200–5500 mm

support profiles: 1 wind support profile per frame after 2 m of width

Physical Features

motor box size: 230x200 (h) mm

lateral case size: 190 (wall) x 160 (view) mm

frame width: 70 mm

Configuration and Movement

frame quantity: 2 frames

system type: door&canopy

movement: vertical bi-fold, parking on top

Motor and Electricity

motor: 1,1 kW industrial motor, gear and screw drive

weight: max 1600 kg

electric feed "World": 220V 1 phase / 380V 3 phase 50–60Hz

electric feed "USA": 110V 2 phase 50–60Hz

control system: remote control / wall button / central automation / mobile application

safety photocells: single pair sensor / linear photocell

speed: 1,8 m/minute

Insulation

Aluminium body: 100% thermally broken

glass thickness: 12–37 mm, insulated glass is available

min. Uw value: 1.0 W/m²K

watertightness class 8A (at 600 Pa)

air permeability EN 12207 class 2 (at +660 Pa); Class (at-660 Pa)

Material

Aluminium body: 6063-T6 Aluminium alloy

surface finish: electrostatic powder coating, anodization, pre-treatment,
seaside application

gaskets: EPDM

mechatronic main parts: chromated steel

mechatronic connection parts: polyamid / keastamid

fasteners: galvanized steel

Assembly

structural connection: screwed twice, each 50 cm on sides and top

installation tolerance: shim support up to 5 mm tolerance

frame assembly: 45 corner press assembly

glass assembly: structural glazing, slide-in assembly

Extra Features

self-locking: special design SkyTech full automatic locking and unlocking mechanism