

Parallel

A new concept in modern façade design

The Parallel Hinge is an innovative concept in façade and curtain walling design. This award-winning hinge range was designed to allow windows to open and close in a parallel motion.

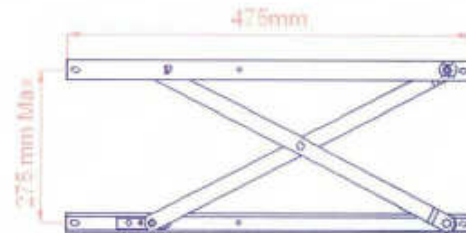
- Vents fitted with the parallel hinge enables the façade to have smooth sight lines and retain its reflective qualities
- Provides all round natural ventilation by allowing air flow around the window perimeter
- Facilitates smoke egress by drawing smoke out of the building.



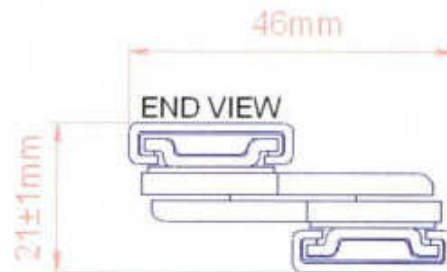
The Main Tower, Frankfurt



The Twin Towers, Dubai fitted with PX200 using Schüco Profile



Actual air gap will vary depending on section profile design



- Composite stainless steel/plastic sliders for strength, durability and smooth operation
- PX2100 does not have opening stops allowing motor operation. A drop in limit stop is available for use on manually operated vents providing 180/ 200/ 220 / 240 / 260 / 295 mm opening.
- Sold in sets of 3, 4, 5 or 6 (including control stays)
- Tested to 10,000 full open cycles

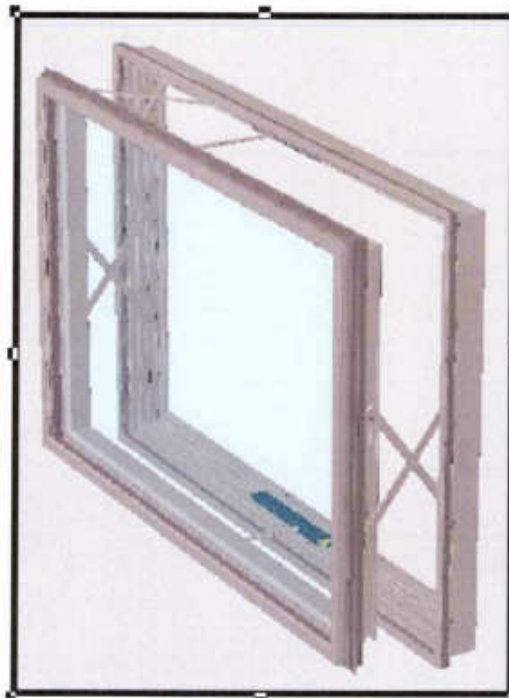
DEVELOPING THE FUTURE - NOW

PARALLEL OPENING WINDOWS

Securistyle Limited offers a new concept for operation of parallel opening windows. The concept comprises a total solution with electrical motors and hinges. The window itself is supplied by major window manufacturers

Why use electrically controlled parallel opening windows ?

- Better four sided natural ventilation than with other window types
- Fully concealed motors, brackets, and hinges are possible
- Opening distance controlled electronically within millimetres
- Does not compromise reflective quality of glazing even when open
- Better noise reduction when opened than with other window types
- Less draught as opening is distributed equally around entire frame perimeter



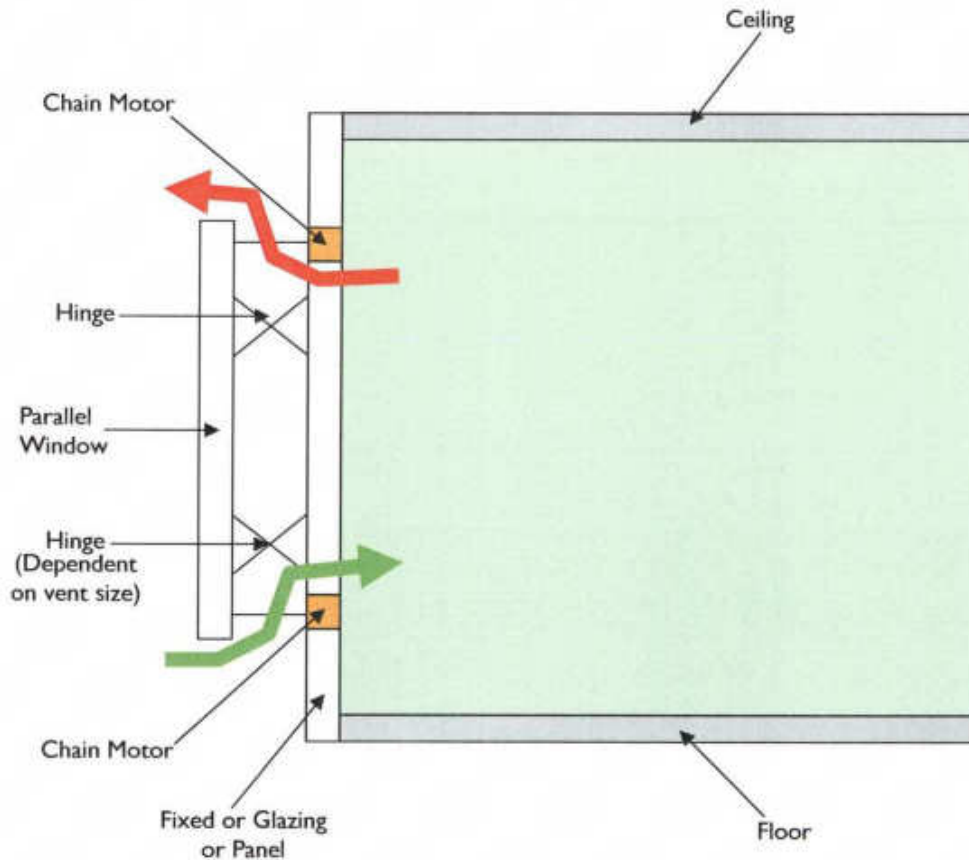
PARALLEL OPENING WINDOWS

The natural ventilation function of a parallel opening window in a single sided ventilated room is shown below.



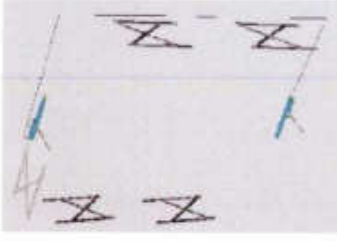


As this window type is open at both top and bottom, it can effectively ventilate comparatively deep rooms with the simple single natural ventilation concept (as opposed to the more complicated cross-ventilation with windows set into each side of the room).

Ideal for offices and high rise buildings, where the precise control system in connection with this unique window type makes it possible to secure the airflow needed at any time, without draught and irrespective of weather conditions.

Securistyle's technical department can advise on ventilation principles and the ventilation capacity of a parallel opening window according to the specific building layout



PARALLEL OPENING WINDOWS

|  |  |  |  |  |
|---|---|--|---|---|
| Window Dimensions Option A | Window Dimensions Option B | Window Dimensions Option C | Window Dimensions Option D | Window Dimensions Option E |
| Height: 500 – 1000 mm | Height: 500 – 1500 mm | Height: 1000 – 2000 mm | Height: 500 – 1500 mm | Height: 1000 – 3000 mm |
| Width: 500 – 1000 mm | Width: 500 – 1500 mm | Width: 500 – 1500 mm | Width: 1500 – 3000 mm | Width: 1500 – 3000 mm |
| Weight: 60 kg Max. | Weight: 80 kg Max. | Weight: 120 kg Max. | Weight: 100 kg Max. | Weight: 220 kg Max. |
| Note: Height and width dimensions to be determined by weight. | | | | |
| Hinges | Hinges | Hinges | Hinges | Hinges |
| PX2100: 2 off left and right | PX2100: 2 off left and right | PX2100: 4 off left and right | PX2100: 4 off left and right | PX2100: 4 off left and right |
| PX2100: 1 off control stay | PX2100: 1 off control stay | PX2100: 1 off control stay | PX2100: 1 off control stay | PX2100: 2 off control stay |
| Motors NOT required* | 2 motors required | 2 or 4 motors required** | 4 motors required | 4 motors required |
| Max. Opening: 275 mm*** | Max. Opening: 275 mm*** | Max. Opening: 275 mm*** | Max. Opening: 275 mm*** | Max. Opening: 275 mm*** |

* Max. 1000 mm square plus drop in limit stops x3 unless otherwise agreed through consultation with Securistyle's Technical Department.

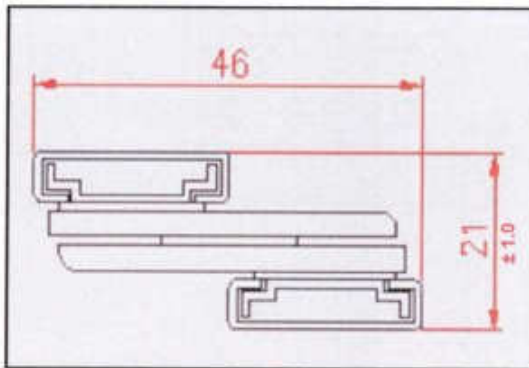
** 2 off 100 N motors minimum, 4 off 50N motors minimum. It should be noted that this is the minimum recommended and the fabricator should ensure sufficient mechanical advantage is provided by the motors to operate the window.

***For further clarification please see page 6, 'Parallel Opening Windows'.

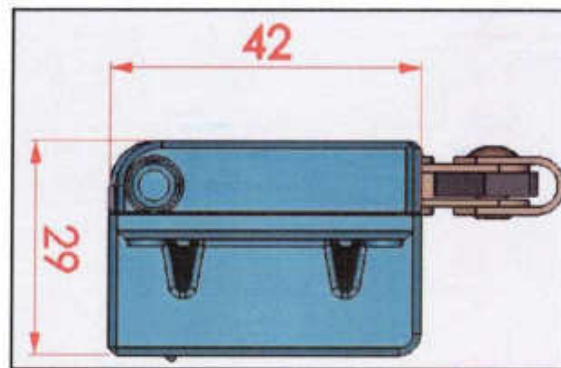
PARALLEL OPENING WINDOWS

Below are the dimensions of the hinges and a typical chain motor. For correct installation please refer to the installation instructions.

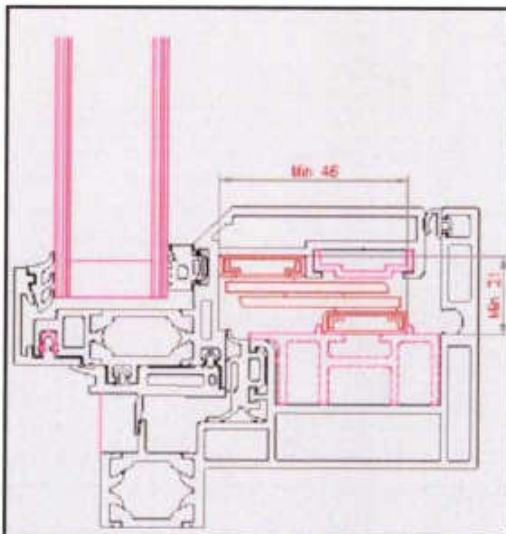
Hinge in closed position



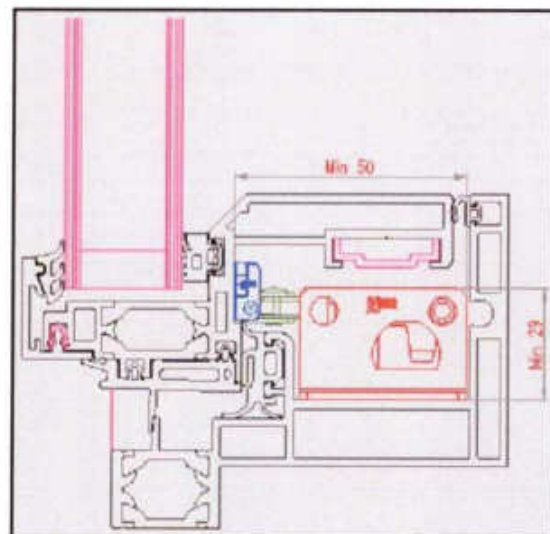
Chain Motor



Installation in window profile section



Hinge detail



Motor detail

PARALLEL OPENING WINDOWS

Weather Sealing

Windows built without electric motors (under 60 kg in weight x max 1000 square) will require the addition of drop in limit stops, a perimeter locking device and an operating handle to achieve adequate weather sealing. If the window is to be automated the weather sealing can normally be achieved through the operation of the motors themselves; further locking devices may not be required. In certain extreme cases however, it may be necessary to supply a perimeter locking mechanism to windows which have also been automated.

Window Automation

If the windows are to be automated, Securistyle can supply all required technical details on the types of synchronous motors to be used, their placement etc. Alternatively we strongly suggest that on every occasion you contact your preferred motor supplier and obtain their recommendations for automating the window(s) you intend to manufacture. These motors and their power packs, cabling etc. can also be supplied by Securistyle, as part of the total hardware package for the window, as can all relevant perimeter locks and handles etc.

Please note! The normal operating force of each PX2100 stay (e.g. PX2100/3 comprises 3 stays) is between 2kg - 4kg up to an opening distance of 230 mm after which the force will increase, therefore it will be necessary to get further clarification on motor size from your supplier. The final operating force for the window will be a combination of the total of individual hinge forces plus the effect of vent size, weight and wind pressures. For special parallel products the operating force will be advised.

N.B. Windows incorporating parallel or Rushmore technology tend to be large and heavy. In every case, we strongly advise you to contact our Technical Department for further advice - Phone John Mayes or John Lambert on;

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