



■  
**VERTICAL WINDOWS**  
APPLICATIONS

- ELECTRICALLY OPERATED

■  
**WINDBREAKS**  
APPLICATIONS

- MANUALLY OPERATED



# VERTICAL WINDOWS

## electrically operated

INAL® Framed Vertical Windows solutions, are suitable for applications in shop fronts where partial opening is required. Cafés, restaurants, etc. can have partial opened or fully closed sides according to weather conditions and offer either the filling of an open space or the closed protection against the aggressive weather conditions. The Silent and Smooth Electrical Operation is making INAL® vertical windows the best solution where adjustable opening height is required, providing also Safety Night Locking. Special designed heavy duty aluminum column profiles are ensuring a variety of application types with combinations of fixed and vertical sliding windows (up to 2 movable) and functionality. Frames are made from aesthetical slim line designed aluminum profiles which are providing stability and strength. Parts and Accessories such as motor, drive transmission mechanism, rollers etc. are manufactured from high quality materials for long lasting uninterrupted performance and at the same time provides Quick & Easy installation.

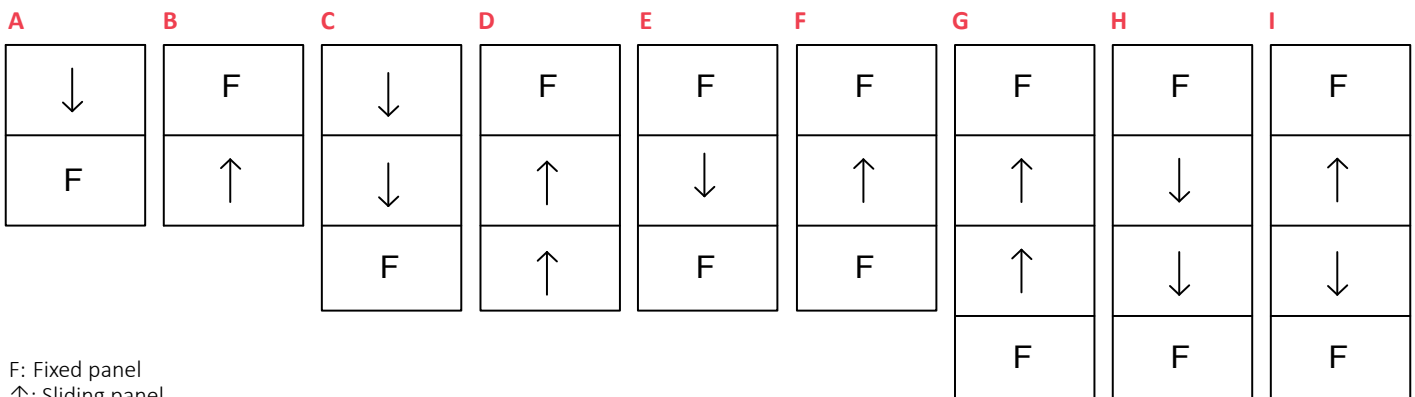


## technical specifications

|                             |                        |
|-----------------------------|------------------------|
| Moving panel max dimensions | 5000mm x 1200mm*       |
| Max lifting weight          | 200kg                  |
| Max glass thickness         | up to 11,52mm          |
| Multiple applications       | Up to 2 movable panels |
| Motor position              | Top/Bottom             |
| Finishing                   | RAL Powder coating     |
| Column dimensions           | TYPE A 130 x 124       |
|                             | TYPE B 130 x 142       |

\*Dimensions in accordance with local legislations

## applications types



## manually operated

INAL® minimal Frameless and Framed Windbreak solutions, are suitable for outdoor applications in cafés, restaurants, terraces, patio and gardens, where partial control of weather and external conditions is required.

Easy, Silent and Smooth Operation, INAL® Windbreaks are the best solution where adjustable operation opening height is required, providing protection and isolation from weather conditions, strong winds and disturbing external noise.

The aluminum columns in both Framed and Frameless Systems are designed for self-supporting and to be floor or side mounted. In combination with specially designed parts and accessories can support side fixed glass and glass doors. Security Locking bolt is included for securing the outdoor facilities during night.

### Available types

- Frameless Vertical Sliding panel
- Framed Vertical Sliding panel

## technical specifications

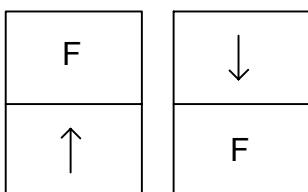
| COLUMN TYPE | COLUMN DIMENSIONS (mm) | EXAMPLE FOR OPENING DIMENSIONS (mm) HEIGHT x LENGTH | GLASS THICKNESS |
|-------------|------------------------|---|-----------------|
| A           | 50 x 160               | 2000 x 1650   | up to 10 mm     |
| B           | 100 x 160              | 2500 x 2000   | up to 10 mm     |
| C           | 100 x 210              | 2800 x 2200   | up to 10 mm     |

Finishing: RAL powder coating

- Dimensions in accordance with local legislations
- Column type in accordance with opening sizes and type of mounting

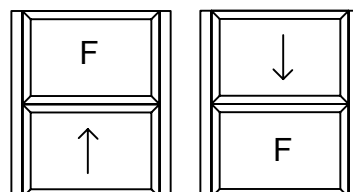


### frameless windbreaks applications types



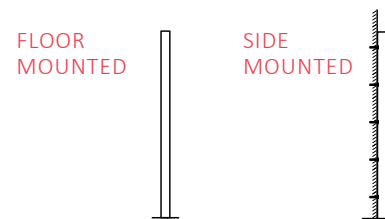
F: Fixed panel  
↑: Sliding panel

### framed windbreaks applications types

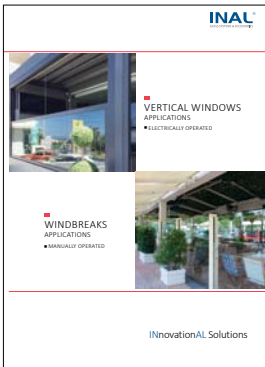


F: Fixed panel  
↑: Sliding panel

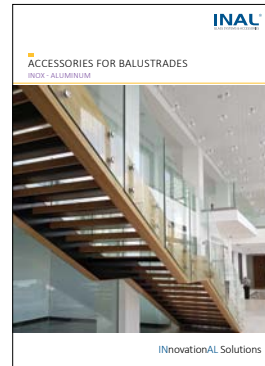
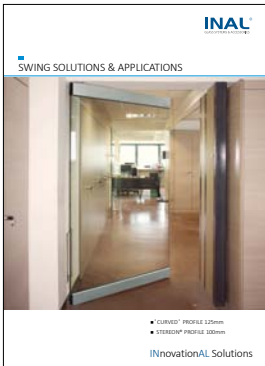
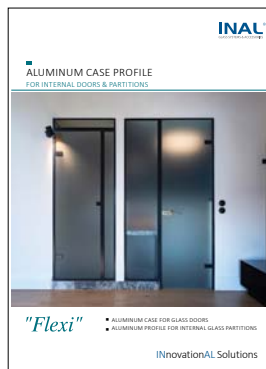
### mounting- fixing types



# VERTICAL WINDOWS & WINDBREAKS APPLICATIONS



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