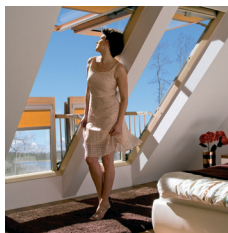




## Balcony Window **FGH-V P2 Gallery**



Opened window forms a functional balcony



When closed, the barriers hide under cladding elements



Balcony window in horizontal combination

An innovative, large roof window, in which the sashes create a functional balcony in the loft. The upper sash is opened steplessly upwards. The bottom sash tilts forwards to a vertical position, allowing free access to the balcony recess. It is enough to take a few steps in order to get “outside” and feel the warmth of the sun rays, refreshing breeze or admire beautiful views.

The upper sash is opened steplessly upwards, up to an angle of 45°. The side rails are integrated into the bottom sash and extend during its opening.

When the lower sash is closed, the balcony rails hide inside the window and are not visible above the roof surface. They are concealed under the window flashing, hence do not collect dirt or spoil aesthetic appearance of the roof.

Both upper and bottom sashes are equipped with safe P2 glazing units as standard with laminated inner panes and toughened outer panes with easy maintenance coating.

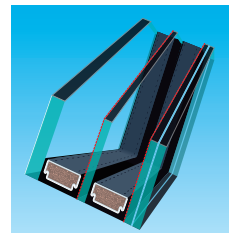
The window features a multi-point locking system, without a traditional locking assembly. After turning the handle, the sash is locked at two sides of the frame.

Large sizes of the balcony window let plenty of natural light into the room. The window is equipped with an automatic air inlet V40P ensuring the optimum amount of fresh air in the room and energy savings.

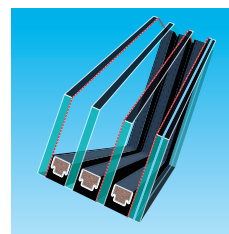
Balcony windows are available in size 94x255cm along with universal flashings. Installed in the roofs with pitches between 35° and 55° without the L-shaped wall.



## **FTT Thermo** centre pivot roof window



U6 glazing unit,  $U_g=0.5 \text{ W/m}^2\text{K}$



U8 glazing unit,  $U_g=0.3 \text{ W/m}^2\text{K}$



Raised pivot point facilitates approaching the open window

FTT Thermo windows have been designed with regard to stringent requirements of energy-efficient passive buildings. A specialist and innovative structure ensures excellent performance and guarantees high energy savings.

The FTT U8 Thermo achieving U value of  $0.68 \text{ W/m}^2\text{K}$  is the most energy-efficient roof window on the market from amongst the windows offered by the largest manufacturers. Glazing units are set in a specially designed sash frames which offer wider wooden profiles minimising thermal bridging and provides improved window insulation.

FTT Thermo windows may be equipped with highly energy efficient glazing units:

- standard double chamber glazing unit U6 with  $U$  value of  $0.5 \text{ W/m}^2\text{K}$ . The whole window achieves  $U$  value of  $0.81 \text{ W/m}^2\text{K}$
- optionally, with triple-chamber glazing units U8 with  $U$  value of  $0.3 \text{ W/m}^2\text{K}$ . Then, the whole window achieves  $U$  value of  $0.68 \text{ W/m}^2\text{K}$ .

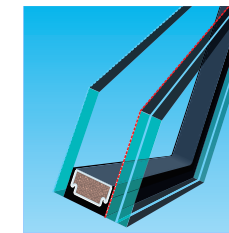
Both glazing units are equipped with toughened outer pane and laminated inner pane (safety glass) class P2A.

The FTT Thermo is a centre pivot window, in which the sash axis of rotation has been raised, so even a tall person can comfortably stand by the open window. The sash can be stopped in open position anywhere between 0° and 45°, as its opening is assisted by an innovative supporting mechanism. Its large dimensions and raised axis of rotation ensure plenty of light in the room and easy access to the open window.

The FTT window is equipped with a quadruple sealing system made of flexible TPE material. The new Thermo window has a modified way of closing the sash without a traditional locking assembly. By turning the handle, the sash is locked at two sides of the frame. The FTT U6 Thermo and FTT U8 Thermo offer acoustic performance of 38 [dB]. Very good  $R_w$  parameter means effective protection against outside noise penetration. Installed in the roofs with pitches between 15° and 70°.



## **FTP-V P2 Secure** Window



Laminated and anti-burglary glazing class P2A



System protecting against easy glazing removal



Handle with a lock

Secure window features a range of innovative solutions which makes it more burglary resistant. The window is fitted with laminated and burglary-resistant P2A glazing, new system preventing glazing removal and handle with a lock. What is more, FTP-V P2 Secure window offers all the benefits of an innovative structure reinforcement system — topSafe. Such window do not require any other security measure as, for example, additional locks which could hamper normal window opening.

Installing roof windows with increased resistance to burglary is particularly important in case of low-pitched roofs and multi-family buildings. These buildings often have common stairways with an exit leading onto the roof. This provides easy access to the roof for unauthorized individuals increasing the risk of potential housebreaking. The simplest solution in such situation is application of Secure roof windows which protect against many forms of break-in attempts:

- kicking or even jumping on the window, thanks to hardware utilized in the topSafe system. Hinges are mounted in a way which prevents their rupture and forcing the sash inside,
- levering, thanks to a metal slat making burglary attempts with the use of tools difficult and handle with safety lock to prevent opening the sash,
- easy glazing removal, as a result of the system preventing undoing and forcing glazing out,
- easy glass breaking, thanks to laminated and anti-burglary glass class P2A.

Installed in the roofs with pitches between 15 and 90°.





## LMF – Fire-Resistant Loft Ladder



Fire-resistant hatch

The LMF loft ladder with a metal ladder acts as a blaze-block preventing the fire and smoke from getting in from both the attic and room for as long as 120 minutes.

The special design of the hatch and materials used for its production prevent the fire from spreading onto higher or lower floor which may be still free from fire.

The LMF is a folding section loft ladder, in which the unloading mechanism enables ladder operation with the use of one rod.



Slide-out section

The finishing slats and easy-installations angles integrated with steel supporting frame, simplify and accelerate installation of the loft ladder in the ceiling.

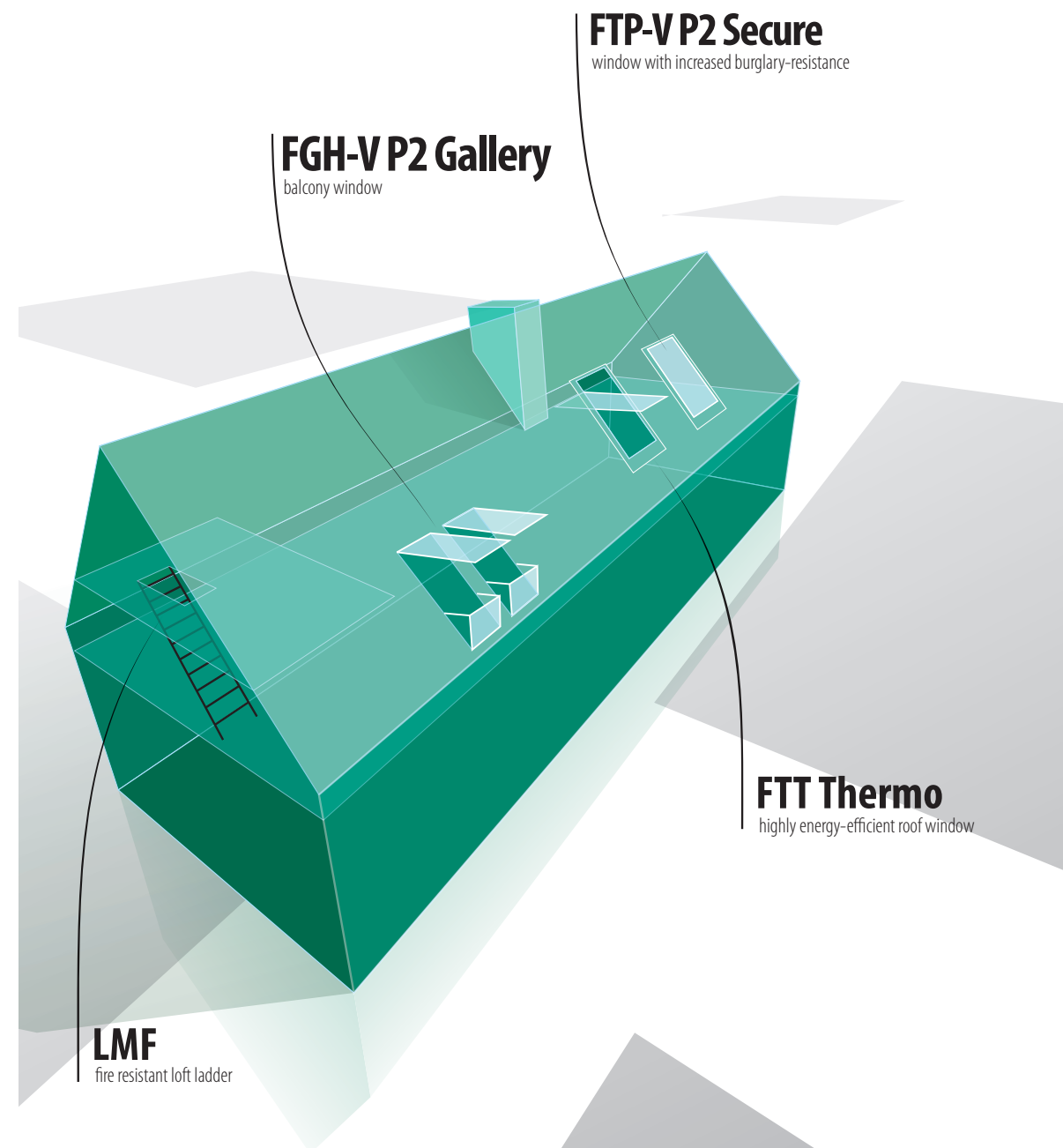
Thanks to a special system allowing length adjustment of the last ladder section, it is possible to adapt it to the room height without the need for cutting.

The specially designed hinges and materials used in production ensure high load bearing capacity (up to 200kg). Anti-slip profiles of the wide threads (13 cm) significantly improve loft ladder usage safety protecting from accidental foot slipping. Additional step in the box ensures convenient access to the attic.



Additional step in the box

Fire-resistance  $EI_2 = 120\text{min.}$



## FGH-V P2 Gallery

balcony window

## FTP-V P2 Secure

window with increased burglary-resistance

## FTT Thermo

highly energy-efficient roof window

## LMF

fire resistant loft ladder

