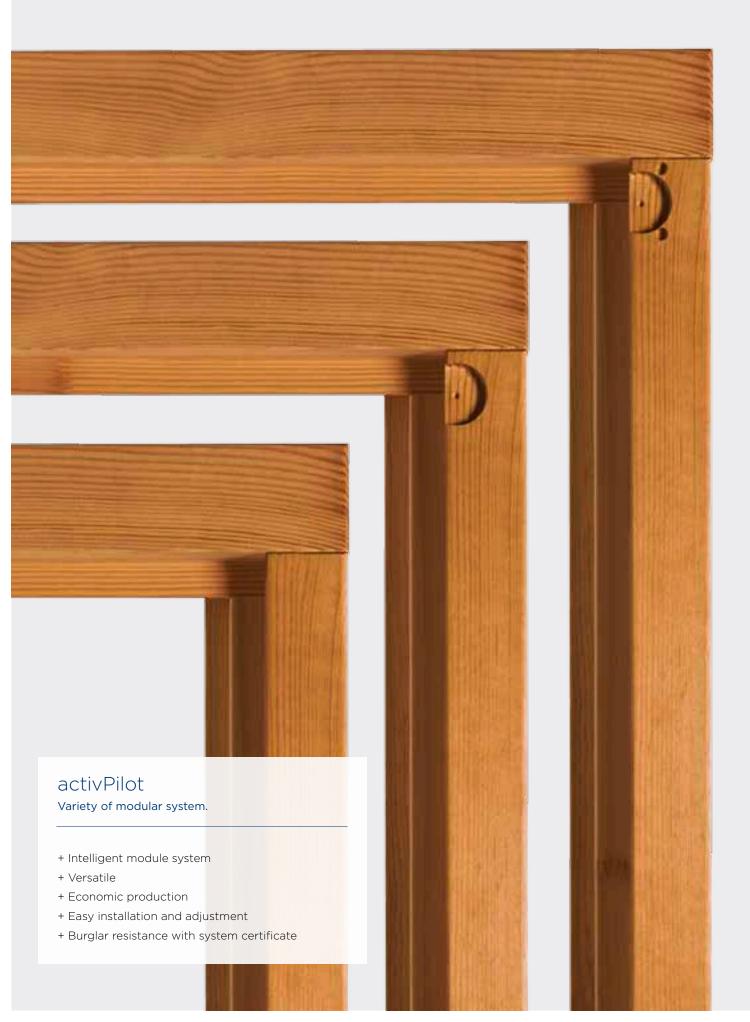


## Winkhaus activPilot

The modular fitting system for timber windows.



02 The challenges Winkhaus Window Fittings



Winkhaus Window Fittings 03

# Many windows, many formats, one single fitting system.

In the carpenter's workshop of the window builder, production is running at maximum capacity. Several complex orders need to be handled at the same time: a modern detached house including large and heavy windows. Renovation of an old building with requirements for monument protection – narrow frames desired. The architect of a semi-detached house requests invisible fitting parts. And the multi-generation house needs to be equipped with low-threshold patio doors and burglar protection to RC2. A different fitting system for any requirement?

#### A system for all situations – activPilot

The unique activPilot fitting system from Winkhaus helps you to satisfy all requests individually and economically at the same time. Its major benefit: the intelligent modular system. It enables window producers to meet all requirements placed on modern timber windows. activPilot allows windows to be manufactured flexibly and economically living up to the highest standards in terms of function, design and security.

Based on the activPilot modular system it is possible to achieve rational and individual solutions by exchanging single fitting components. By replacing the hinge side you can install concealed hinges of the activPilot Select range. In case you wish to use a locking and/or opening surveillance system, only some additional components are needed.

Survey on special window types to design from Winkhaus activPilot fitting systems.









04 The system Winkhaus Window Fittings

## activPilot

### Intelligent module system - individual and quick in assembly.

The unique modular Winkhaus system offers dual benefit: It makes production easier and quicker due to less components that need to be assembled. Furthermore, activPilot fitting modules can be retrofitted after installation for added functions.



#### Individual protection

activPilot frame parts are suitable for rebate depths of 18 mm and more. The modular fitting system can be matched to individual security requirements to DIN EN 1627-1630.



#### Certified quality

Winkhaus activPilot fittings are certified in accordance with QM 328. The turn-only and turn-tilt fittings undergo a large number of tests in the stringent certification programme, which verifies aspects such as durability and quality control mechanisms.



#### Flexible retrofitting

activPilot fittings form an innovative modular system that can readily be enhanced with additional functions – even later on. This always allows the activPilot fitting system to be easily adapted to changing user requirements.



#### Easy adjustment

The activPilot fitting system offers manifold options for easy adjustment. For example as an added feature besides the height and side adjustment, the octagonal locking bolts with mushroom head design can be easily adjusted - for an optimally tight seal in seconds.

## Scene of the crime: the window

### Approved Winkhaus security.

Police statistics reveal it: Burglars do not only go to work when it's dark, but just as frequently in broad daylight when people are absent. All the more important to protect oneself at any time, 365 days a year!

#### Certified burglar resistance for effective protection!

Windows and patio doors are the Achilles heel of a house. They are the target in 80 % of all burglary attempts. However, concerted burglary-resistant action provides an efficient way to stop burglars. Benefit from the activPilot RC2 system testing for your production of burglary-resistant windows!

#### Individual burglar resistance

Mushroom-head octagonal locking bolts coupled with sturdy security keeps allow the burglary-resistant features to be extended in modules and to be individually adjusted. Lockable window handles, drilling protection and security glass are available for the activPilot system to enable burglary-resistant solutions for higher resistance classes.



#### The house's weak points

#### 01. Basic security

for dormer and gable windows

#### 02.Burglar resistance to RC1 N

for windows and patio doors in the upper floor that are hard to access and visible from the outside

#### 03.Burglar resistance to RC2

for ground floor windows and basement and souterrain windows as well as patio doors 06 The fitting standard Winkhaus Window Fittings

## activPilot Concept

The modular basis of the activPilot fitting system.







\* Please pay attention to the application diagrams!

#### **Product features**

- + Modular turn-tilt fitting system with visible hinge side
- + Simple and intuitive operation
- + Versatile and simple adjustment
- + Individual design matching due to powder-coated hinge parts or caps in different colours
- + Economic and logistic advantages thanks to reduced number of components per window

- + Suitable for window sashes up to 130 kg\*
- + For burglar-resistant windows according to DIN EN 1627-1630
- + activPilot Topcoat surface for use in Accoya®
  windows as well as in windows made of wood
  which is high in tannic acid
- + Suitable for round-arch and sloping windows

Winkhaus Window Fittings The fitting standard 07







## Exactly positioned. activPilot Concept, pot hinge version (HT)

- Drill holes can be positioned before assembly on the loose profile part.
- Symmetrical drilling pattern for corner and shear hinges
- For 4 and 12 mm airgaps
- With turn restriction of the shear hinge
- Corner and shear hinges selectively with or without positioning pins

## Easy to assemble. activPilot Concept, rebate hinge version (HW)

- Easy assembly because hinges are positioned without jigs
- For 12 mm airgap
- For timber windows with overlap gasket

- + For rebate depths of 18 mm and more
- + Airgap 4 mm or 12 mm
- + Pot or rebate hinge at choice
- + Symmetrical positions of corner and shear hinges
- + Quick installation due to fewer components
- + Simple height and side adjustment
- + Integrated friction turn control
- + Increased functional security due to progressive shear retraction of 18 to 25 mm

## activPilot Select

The fully concealed turn-tilt fitting system.







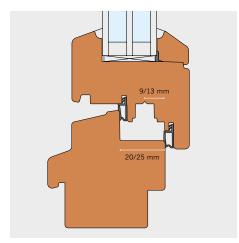
\* Please pay attention to the application diagrams!

#### **Product features**

- + Fully-concealed turn-tilt fittings
- + No visible hinge parts
- + Free choice of colour for window sashes and frames
- + Certified according to QM 328
- + Additional functions can be retrofitted at any time

- + Meets the demanding aesthetic requirements of modern architecture
- + Suitable for door and window sashes up to 3  $\mathrm{m}^2$  and 150  $\mathrm{kg}^*$
- + For burglar-resistant windows according to DIN EN 1627-1630
- + 3-sash windows can be implemented without central post





#### The rebate design

- For 9 mm central groove position the standard rebate must be at least 20 mm
- Can be used for 13 mm eurogroove position and 25 mm standard rebate and more



#### Note:

For profiles with a frame rebate depth from 18 mm we can offer you our fully-concealed fitting solution activPilot Elegance.

- + Efficient production without the need for special drilling action, time-consuming routings or special tools
- + Quick installation due to fewer components
- + Simple height and side adjustment
- + Retrofit possible from 100 kg to 150 kg\* without additional treatment of the sash and the frame
- + Quick and easy installation of the sash
- + Energy efficiency sealing planes are not interrupted by the fitting system
- + Opening angle > 95° (without turn limiter)

## activPilot Topstar

For wooden windows with high aesthetic demands.





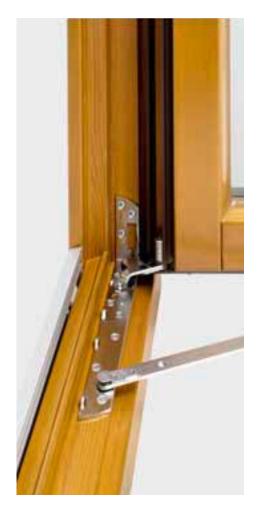


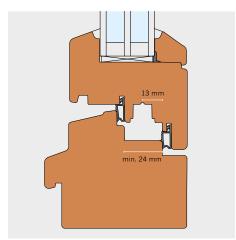
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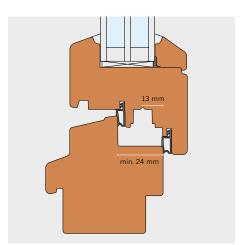
#### Product features

- + Fully-concealed turn-tilt fitting system with special kinematics of movement directed inwardly
- + Enables the production of flush windows with narrow shadow joints from a width of 4 mm
- + In offset profiles it is possible to achieve a free size of the frame from 4 mm to the wall reveal.
- + Certified according to QM 328

- + For large and heavy windows which are required to offer superior design without visible hinges
- + activPilot Topstar seamlessly integrates with the existing fully-concealed fitting solutions activPilot Elegance and activPilot Select adding further solution possibilities in the field of design windows.
- + For door and window sashes up to 130 kg\* sash weight







#### The rebate design

- Can be used for 13 mm groove centre position and from 24 mm frame rebate depth
- Suitable for sash weights of up to 130 kg without requiring additional parts for load transfer
- For flush and offset wooden profiles
- Suitable for narrow frames with small free sizes of the frame

#### Note:

For profiles with a frame rebate depth from 18 mm we can offer you our fully-concealed fitting solution activPilot Elegance.

- + Easy to combine with the modular activPilot system
- + Compatible with top rails from the activPilot Select product segment
- + Simple three-dimensional adjustment
- + High-strength stainless steel keeps help to reduce wear and tear on sensitive friction surfaces improving the endurance of hinge components.
- + Convenient installation simply lower the sash on the hinge brackets in a slightly tilted position
- + Convincing due to compact design, assembly friendliness and easy accessibility of the adjustment screws
- + Energy efficiency sealing planes are not interrupted by the fitting system
- + Opening angle approx. 95°

## activPilot Control

Turn-tilt fittings with integrated window surveillance.





activPilot Control meets security class B or C (RFID).

#### Product features

- + Fitting-integrated locking and opening surveillance
- + Can be integrated into Winkhaus activPilot fittings directly
- + Reliable signal transfer with airgaps of 10 to 15 mm
- + Suitable for controlling heating and alarm systems
- + RFID: transponder technology for optimum protection against manipulation when used with alarm systems

- + Magnetic contact as switch unit for climate control systems
- + To avoid loss of energy when the window is open while the heating is on
- + Magnetic contact for VdS class B burglar alarm systems
- + RFID transponder technology for burglar alarm systems up to VdS class C level







#### Versatile.

Signal contacts based on magnetic field technology are approved for VdS class B burglar alarm systems. At the same time they can be used as window contacts for controlling radiators, extractor hoods and any other kinds of switching and securing functions which depend on the opening / locking position of the window sash.

#### Unassailable.

The RFID transponder technology is a yardstick of locking and opening surveillance. The transponder is integrated into the window sash whereas the locking sensor is a frame component. When the window sash is locked, the transponder is identified by the locking sensor via a code and this identification is conveyed to an alarm system. In this way a very high level of protection from manipulation is achieved.

- + Extended protection against manipulation
- + Certified to VdS class B or C (RFID)
- + Received the "GIT Security Award"
- + For rebate depths of 18 mm and more
- + Elegantly integrated into the frame

For special requirements Winkhaus Window Fittings

## Innovative product extensions

## Special demands? Winkhaus has got the solutions.

#### Product types and additions

The activPilot fitting system offers a large variety of individual solutions. Thanks to the fittings' modular system, additional functions can easily be integrated at any time.



#### Operating sequence tilt before turn

For use in kindergartens, schools, hospitals and nursing homes: fittings that first move the window into the tilt position (90° handle position). The modular system is easily retrofittable.



#### Low thresholds

No matter whether you use pushchairs, wheelchairs or serving trolleys:

The activPilot portfolio offers the suitable frame parts for low-threshold living concepts.



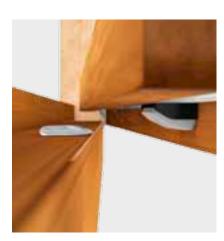
#### **Dual function element**

The fail safe device prevents improper use of the window. At the same time, the integrated support keep guarantees precise entry of the sash into the frame. It is optionally available as triple function element including an additional balcony door catch function.



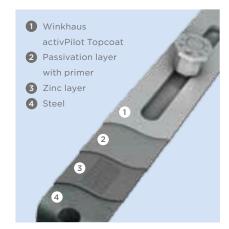
#### Window lock

The window lock prevents a turn-tilt window from being opened into the turn position.



#### Sash lifter

The patented Winkhaus sash lifter enables an easy closing of heavy windows. Sashes are lifted up to 6 mm when they run up onto the piece.



#### activPilot Topcoat surface finishing

The high-quality Winkhaus surface provides the fittings with added protection when used in Accoya® windows and profiles made of wood high in tannic acid. We recommend you to use the special surface in areas with particularly high exposure to corrosion or to extreme environmental effects, such as coastal regions.

## Service and quality

#### Winkhaus warranty and certification.

By using activPilot fittings you and your customers can benefit from innovative and durable product quality "Engineered in Germany". Our products are all controlled very thoroughly - from the core functions to the surface. The demanding requirements of the DIN EN ISO 9001 standard determine the optimum distribution of all tasks and responsibilities with the aim to guarantee maximum benefits for our customers. Internal and external controllers permanently make sure that the quality standards are adhered to.

#### Winkhaus warranty

The Winkhaus seal of quality for the activPilot fitting system ensures that no security-relevant parts and the components linked to them will break. In a warranty case free replacement of the defective parts is provided by Winkhaus. You can gather the detailed warranty terms from our warranty certificate.



#### Winkhaus certification process

The QM 328 certification process places high demands on turn and turn-tilt fittings. Tests are carried out both to EN 13126-8 standards (endurance testing of turn and turn-tilt fittings) and EN 1191 standards (endurance testing of windows and doors). Winkhaus assures the high product quality by conducting continuous internal tests. Additionally we have products and processes controlled by independent test institutes on a regular basis. In the long term the high quality level of our products is ensured by our consistent quality management.

#### Winkhaus. Competence to produce the best solutions.

Winkhaus has committed itself to quality since 1854 - without compromise, but indeed with great success. We have constantly advanced quality standards for window fittings, security door locking systems and access control systems with numerous innovations. Winkhaus products mark the latest developments in state-ofthe-art window technology engineered in Germany.

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