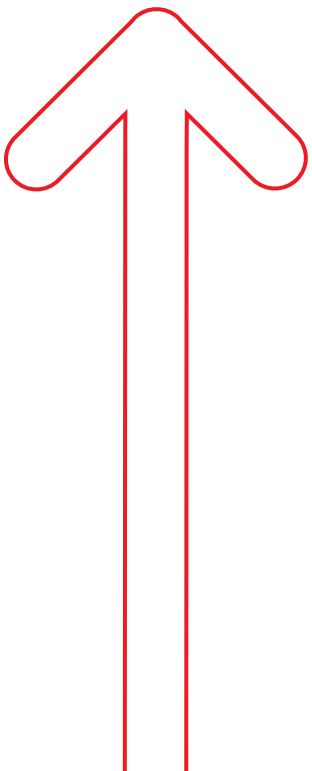
ARTech
technical catalogue for **wooden** systems

AGB

Did you know that security could be your golden opportunity?

Security is a **need** for customers and a sales **opportunity** for you.



Let your customer discover the **opportunities** achieved by the window:

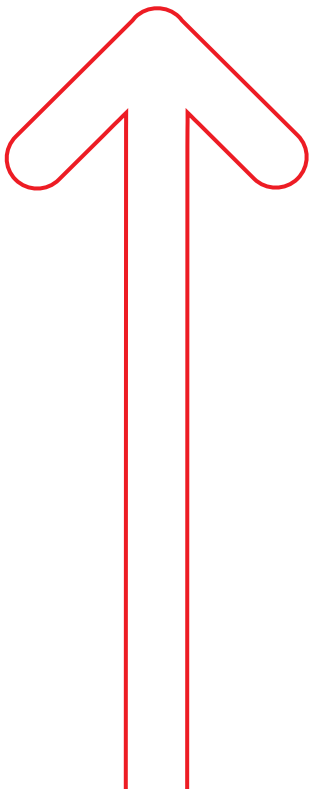
a **barrier** against break-in attempts.

Often an alarm system isn't enough to stop a robber:

it is off when the owner is at home, it could give false alarm and it sounds when the robber is already in.

Security is your **golden opportunity**:

it improves the value of your window boosting the **sales**.



Choose
Artech:
it offers
unique solutions
to let you make
unique windows.

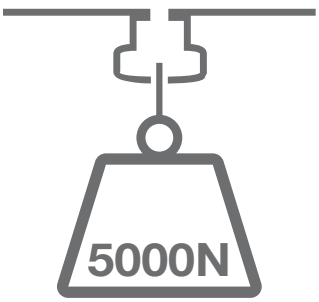
The Artech anti-burglar cam

The cam is fastened on a **supporting plate** that is firmly fixed on the hardware.

The plate distributes the lateral load of the cam head in order to facilitate the **fluidity** of the hardware on a **wide smoothness surface**.

Detail of the plate.

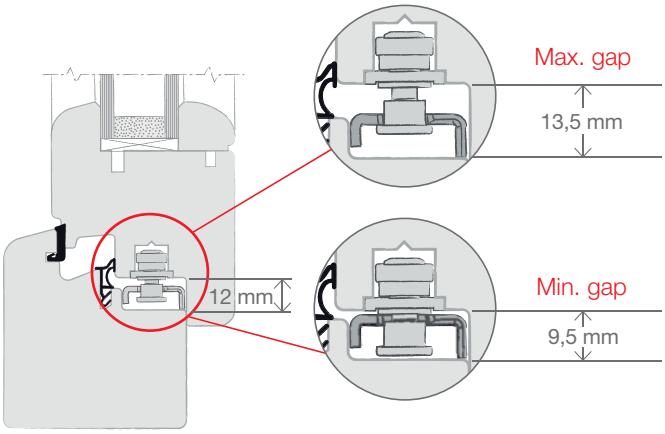
The cam keeps the adjustment over the time and, compared to the auto-adjustable cams, it has **better resistance to the break** (more than 5000 N of traction resistance).
The monolitic cam is much stronger than the telescopic one during the anti-burglar attack. Thanks to this solution, any play between pin and rotating head is avoided, therefore gaskets are always efficiently compressed.

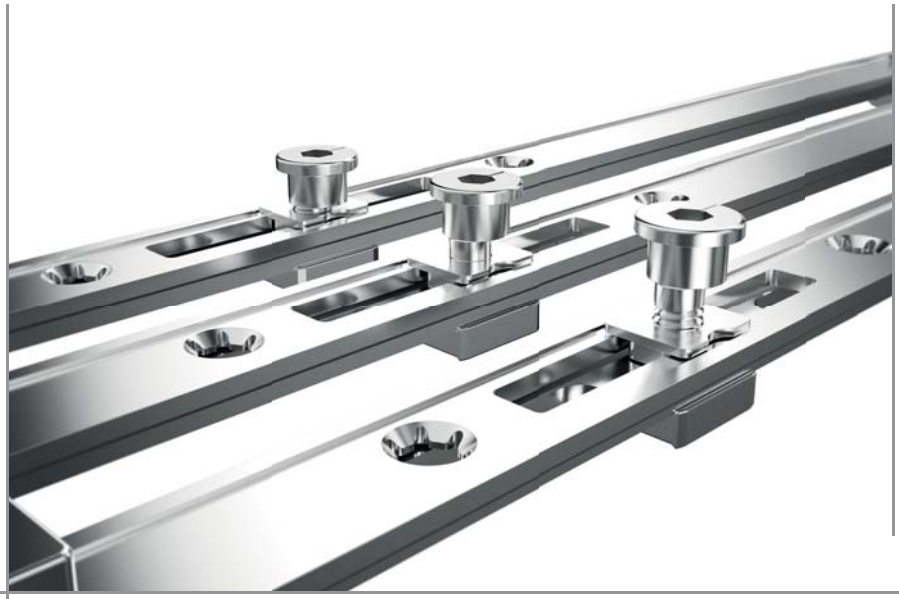


The adjustments: always secure

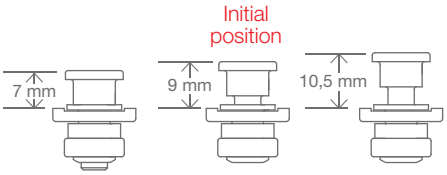
The locking point keeps **the same anti-burglar performances in each adjustment position**.

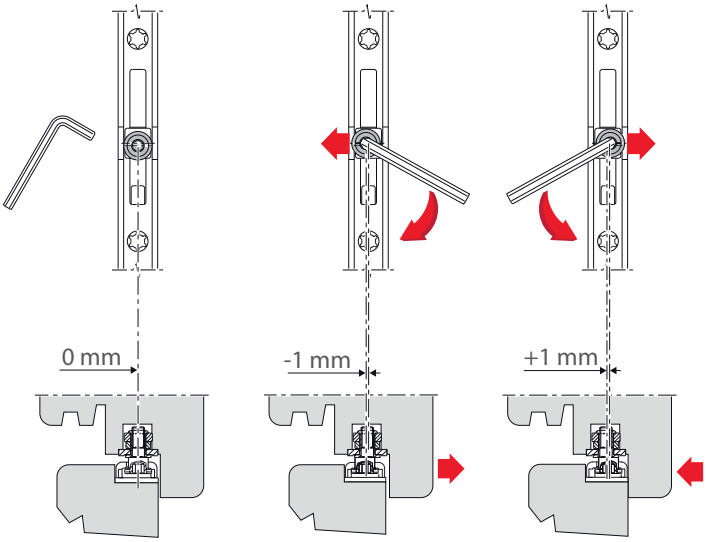
Tolerances of coupling:
The tolerance between cam and striker allows a dimensional range between sash and frame between a minimum of 9,5 mm and a maximum of 13,5 mm using steel open strikers, **without adjusting the cam**.





Vertical adjustment:
Cams have **vertical adjustment** to solve sash failures due to wood settling. By adjusting the cam, the range of minimum and maximum gap **is 9,5/15 mm**.





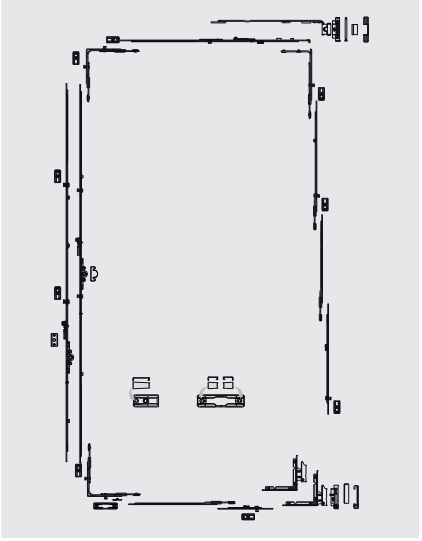
Pressure adjustment:
The screwed cam makes the pressure adjustment ± 1 mm much stable and precise.

More security levels, more value to your window

With Artech, the RC1N class is a default security, thanks to the anti-burglar strikers as a standard. But our suggestion is to choose the Armoured Class Poseidon TT for windows on the ground floor and the Certified Class (RC2) for first and last floors.

Certified Security RC1N

From the standard level, the cam and tilt strikers with axis 13 and gap 12 mm cost as a standard cam and are in RC1N (Resistance Class 1). The design is well-detailed and the central screw can be fixed in an inclined way to avoid wood cracks.

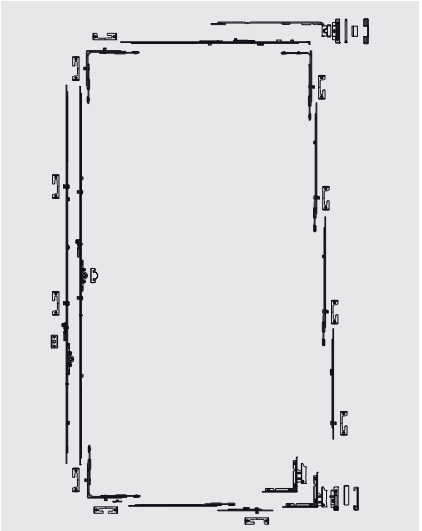


	STATIC LOAD	DYNAMIC LOAD	MANUAL BREAK-IN
ACHIEVED TESTS	300 kg	450 mm x 8 impacts *variable according to the sash dimension*	not provided by the law

Certified Security RC2

Improving the level, you can reach the RC2 class where the strikers in special steel allow to overpass difficult tests of:

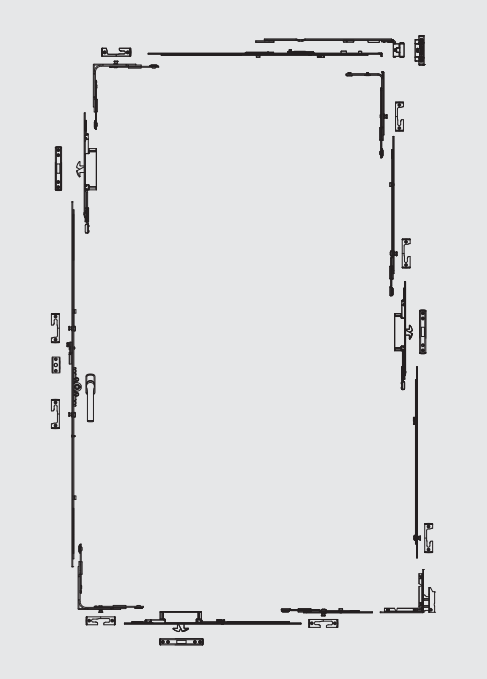
- push with 3000 N (Newton) of hydraulic ram;
- impact with 50 kg weight falling from a height of 450 mm;
- break-in with tools expected by the regulation.



	STATIC LOAD	DYNAMIC LOAD	MANUAL BREAK-IN
ACHIEVED TESTS	300 kg	450 mm x 8 impacts *variable according to the sash dimension*	more than 3 minutes of resistance against break-in attempts required by the law

Armoured class Poseidon TT

The two facing hooks of the security lock Poseidon TT goes to insert in tempered steel striker. A dedicated plate blocks Poseidon TT from the glass area through the sash thickness. Unhinge the door becomes an impossible mission. The two facing hooks trasform the windows in an armoured barrier and help giving the security perception to end users.



Why is it so resistant?

1

Fastening

Poseidon TT is fixed from the internal side of the glass milling using a plate. In case of burglary, **it overpasses the rip holding limit of screws from the wood**.

2

It's impossible to unhinge the sash

Two facing hooks avoid the robber to unhinge the sash both by lifting and ripping the sash.

Artech means security as a standard

Security has always been at the heart of Artech project.
It is a secure system, where each component has been designed to block break-in attempts.
Artech means security because it offers accessories that are able to transform the window making it safer.

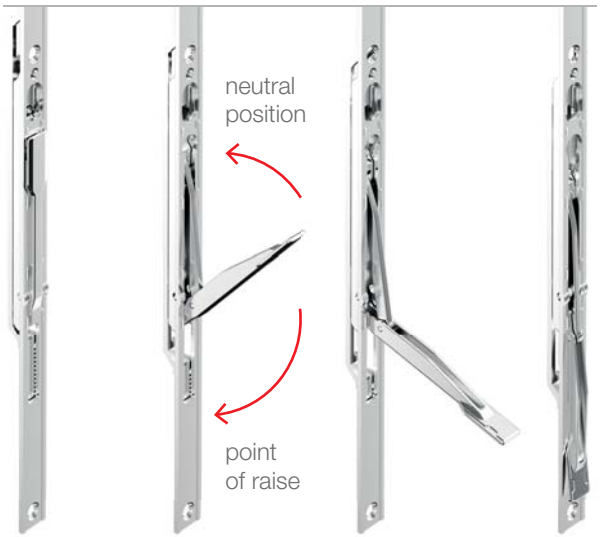
Extensible bolt with front lever

A

Anti-burglar pre-welded strikers on the extensible bolt make it suitable against break-in attempts.

B

Device for sash position.



The extensible bolt with front lever guarantees the anti-burglar function of double sashed window. The lever can't be opened pulling it from the outside: the closed sash avoids the lever movement.
The front movement allows to exercise more force to move many points of closing on the second sash. The lever has a movement of 180°:
this means the first sash can be closed even with the lever opened on the second sash, avoiding damages on the lever it self.
To ensure the anti-burglar security on the higher corner drive, there is a device that advises about the lever rod status.
The 180° opening movement of the lever make it suitable for windows with three sashes.

Central locks: improve your window

The need of different kinds of locking systems is much more required.
According to the height, standard windows require a good positioning of locking points to prevent wood bending and ensure good compression of the gaskets.
On anti-burglar windows the locking points must be placed within certain interaxis and be as close as possible to top and bottom hinges.
For this reason, components like central locks, terminal elements and extensions, have different dimensions, trimmable or not, are easy to assemble, allow customer to avoid trimming the components (except for windows dimensions that require trimming of some elements to reach bottom corner for RC2).

It's possible to choose the following solutions:

Extension

200 mm*
200 mm
320 mm**
400 mm
600 mm
800 mm

Uncuttable terminal element

200 mm
400 mm
600 mm
800 mm

Cuttable terminal element

400 mm
600 mm

* without cam
** cuttable and without cam

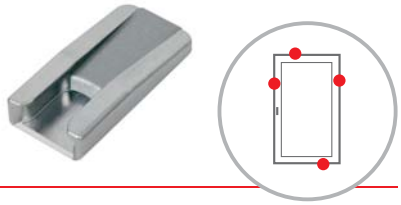
Artech means design

Artech is the solution for the contemporary architecture: wide glazing openings, minimalist lines, well-detailed components. **Artech highlights the beauty of the window and make it a new design element for architects.**

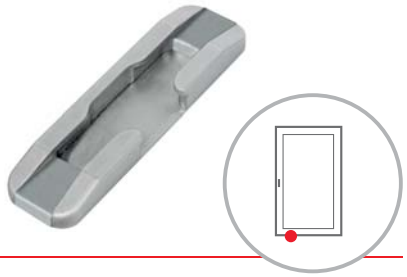
RC1N CLASS

Strikers with concealed screws

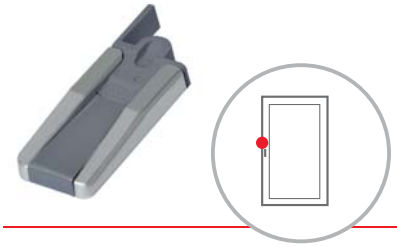
Covers hide the screw head and change the concept of the window design, with the guarantee of anti-burglar security that is the heart of the Artech project. A system of hardware that **allows to reach the certification in class RC1N** with standard components. So, **more design and more security**.



Cam striker

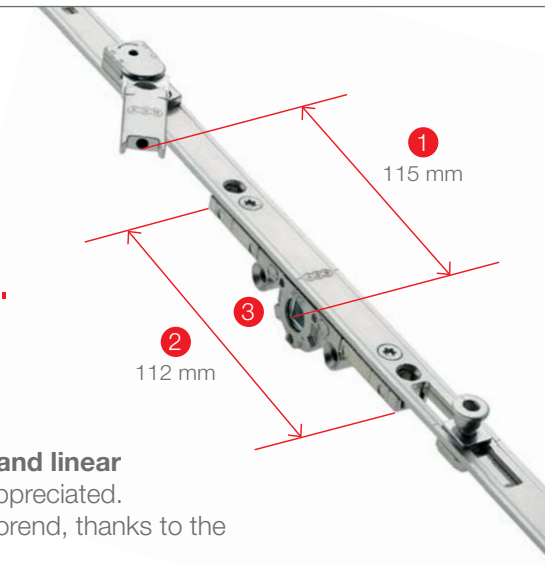


Non-handed tilt striker



DSS (Safety and lifting device) striker

Artech espagnolette: minimal design, smart solutions.



Linear faceplate

When the sash is open, the **elegant and linear design** of the espagnolette can be appreciated. The gearbox disappears behind the forend, thanks to the fastening system with screws.

1. The DSS device, which is located near the pushing point of the hand, allows to lift up the sash easily.
2. The lengthened gearbox side allows to distribute the loading caused by the screw fastening of the handle on the edges of groove, ensuring a smooth movement of hardware.
3. Interchangeable box thanks to the screw fastening.
   Available backsets: 15/25/30/35/40/45/50 mm

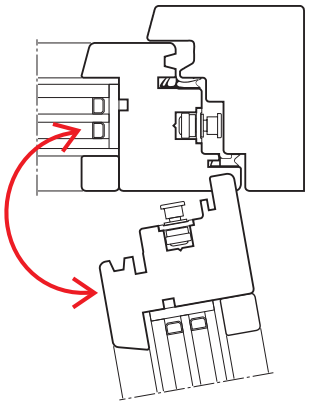
Artech Plana: concealed system for tilt&turn windows

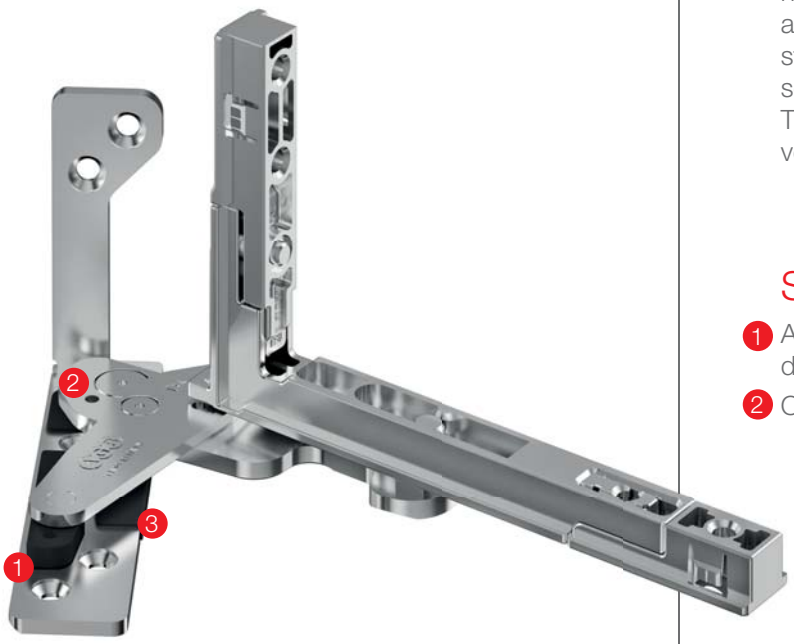
Concealed hinge Plana

150 kg capacity allows to produce balcony-doors with wide glasses, high insulation and security.
Plana is the perfect solution for windows with high thermal insulation and anti-burglar resistance.

Flush system

Artech Plana allows to produce flush windows with minimum gap between sash and frame.
It is the perfect solution for flush wooden windows and walls.





AUTO-JIG FUNCTION

The hinge is shaped to be applied to the frame rebate, so the installation can be done both with jig and auto-jig.

150 KG CAPACITY

150 kg capacity on balcony-doors allow to produce high dimension sashes. The hinge has no positioning pin and it doesn't need additional accessories to increase the capacity; for fastening, standard screws are recommended, specific screws with long neck are not required.
The use of some thresholds for balcony-doors is verified and tested according with the EN 13126/8.

SMOOTH MOVEMENT

1. All the sliding parts are covered to prevent the dirt to get in.
2. On the top lever, there are holes for lubrication.

USE OF TECHNOPOLYMERS

3. Artech Plana uses new generation technopolymer components, which facilitate the blade sliding. This choice prevents corrosion problems that could be caused by components in stainless steel.

Adjustments

Lower hinge

It allows lateral and vertical adjustments of the sash. The lower ring avoids the pin extraction.

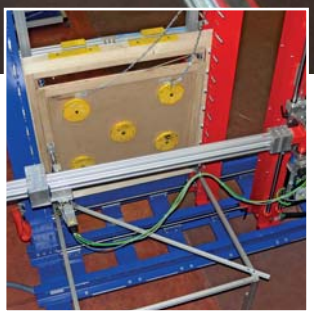
Stay arm, frame part

It allows the lateral adjustment of the sash from -4 mm to +2 mm. Only two GRs can be coupled to four GRs of stay arm.

Stay arm

Non-handed and universal for simple sashes or TBT. Thanks to the adjustable guide, it is possible to choose between two tilt openings: 140 mm or 80 mm.

Loading capacity and reliability



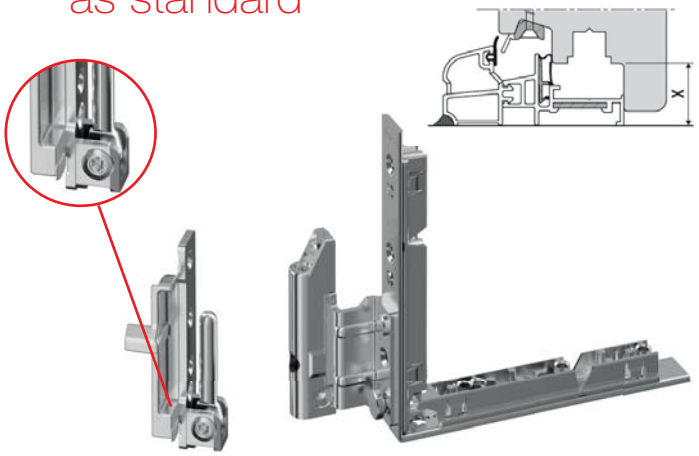
The Research & Development laboratory AGB*Lab*

The Research & Development laboratory AGB*Lab* allows to test new products in order to guarantee the highest performances and its compliance with the standard by the regulation. When the product has been launched in the market, AGB*Lab* follows the performances. The production process ensures the constancy of the hardware characteristics.

Continuous innovations for product development and investments in production technologies allow the company to be placed in first positions for quality standards offered. To guarantee maximum security and protection levels, AGB has got dedicated machines to test hardware on windows and doors directly.
The laboratory has simulators with UV rays and chambers to test the hardware against corrosion in salt spray. In the laboratory, we perform cyclic tests to guarantee the security of product use even in mechanic stress conditions and intense use.

Certified capacity 150 kg

Standard hinges: 150 kg as standard



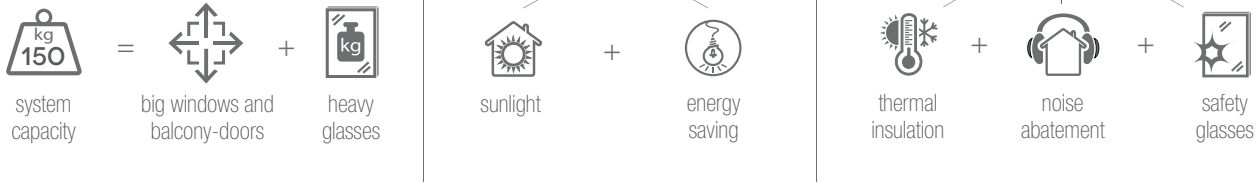
The corner hinge has been reinforced in points where there is more stress in order to increase the capacity. It is available in versions with or without 16/12 adapter. When the aluminium jamb allows this (X > 22 mm), the window hinge can be used even in balcony-doors.
The male hinge is produced using a double welded technology to guarantee high capacity even in case of accidental impacts.

Artech Plana: 150 kg without supplementary accessories

Plana is the perfect solution for windows with high performances of thermal insulation and anti-burglar resistance, thanks to the 150 kg capacity, certified even for doors with some thresholds and thermal cut.

The components fastening is done with suitable standard screws for the material used, without using supporting bushings or additional rod kits to reach 150 kg.

Does a system of hardware with 150 kg capacity improve the residential comfort?



DID YOU KNOW THAT

the capacity of hardware has been ensured by certifications according to the regulation EN 13126/8 tested at an European level (IFT of Rosenheim)? The certification can be reached after passing 15,000 cycles of tilt opening, 10,000 cycles of simple sash opening. At the end of cycles, the window undergo to a 100 kg accidental load applied for 5 minutes on the sash edge, handle side, 90° opening. After that, the window has to overpass accidental impact tests simulating three impacts against the edge of the wall, as the window can be installed in the middle. Finally, the window has to pass other three accidental impacts against an obstacle between sash and frame. This happens with a window of dimensions defined by the regulation and 150 kg weight declared. Certifications and tests can be checked at the website of the IFT institute: **http://zertifikate.ift-rosenheim.de/links_zertifizierte.php?id=207632590&view=-standard**

Activeage: active hi-protection finish

Activeage

High corrosion resistance even in difficult weather conditions.

More than 2000 hours in salt spray test*

* according to the regulation EN ISO 9227 without any notch of the surface from red rust.

Above the law

Activeage reaches extraordinary anti-corrosion standards, much higher than the regulation requirements of the EN 13126-1 and outclasses the measurement scale of corrosion resistance indicated in the EN 1670.

PRÜFZEUGNIS

EN 13126-1: requirement and test methods for accessories for windows and doors.

EN 1670: resistance against corrosion of accessories for windows and doors.

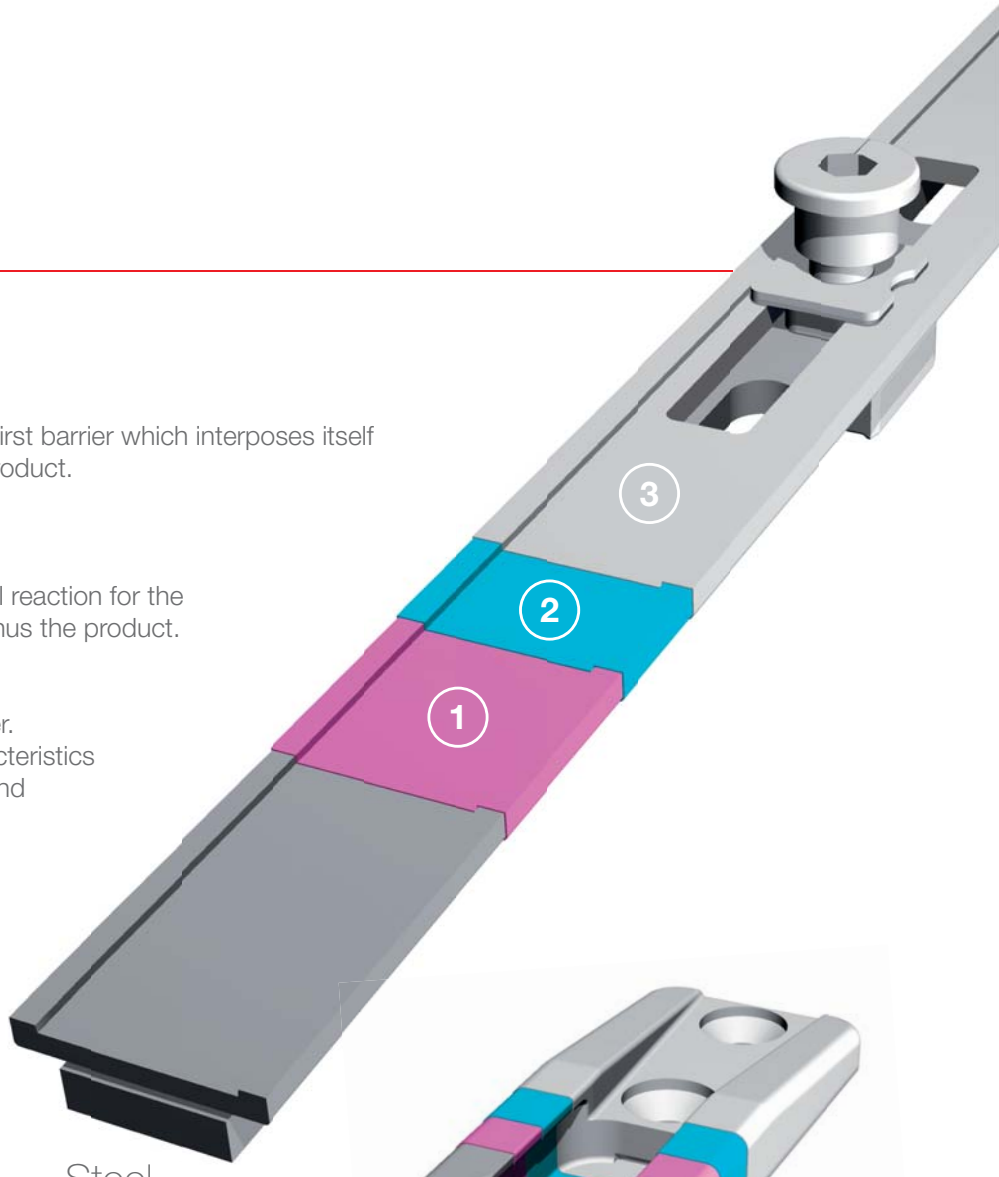
Performances of Activeage finish are guaranteed only if screws with same or higher corrosion resistance are used, except for stainless steel screws.

Three-layer cover

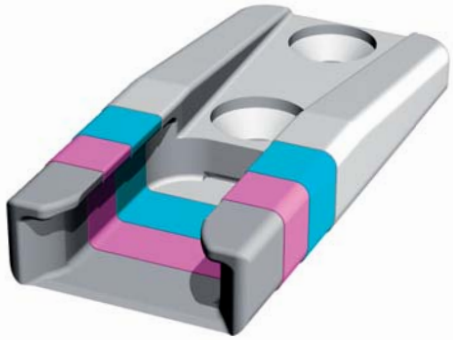
1 **Zinc**
Protects the metal by creating a first barrier which interposes itself between corrosion agents and product.

2 **Chromic passivation with nano particles of silica**
Actively acts with electrochemical reaction for the protection of the Zinc layer and thus the product.

3 ***Active* hermetic protection**
Organic-mineral chromating cover.
Maintain the anti-corrosive characteristics even in case of thermal shocks and dynamic stress.



Steel



Zamak

RESEARCH

In association with research studies and technology developed with partner producers of paint was born **Activeage.**

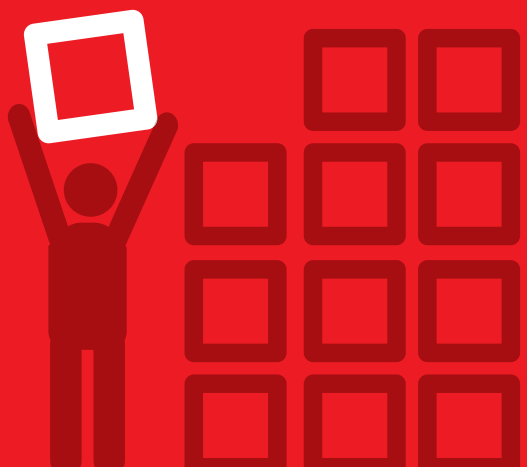
PERFORMANCES

The research for materials protection done in accredited institutes prove excellent results of resistance against salt spray, humidity and ageing.

TOP PRODUCT MASS-PRODUCED

Activeage is the standard finish for all windows components, entrance doors and sliding systems in Silver finish.

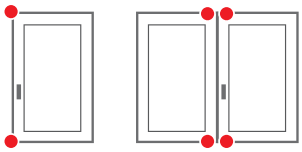
If you
choose **Artech**,
you also choose
a complete
range of solutions.



Modularity and versatility: few components to do everything

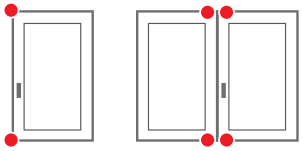
Standard window

A unique corner movement to produce all windows with one sash or two sashes.

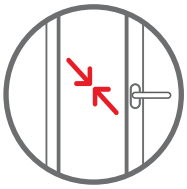


Anti-burglar window

Anti-burglar strikers are welded on the corner drive and they make it a specific component for anti-burglar windows.

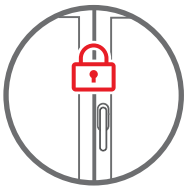


The advantages compared to the solution with push rod

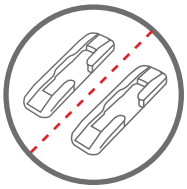


Great ray
Thanks to a wider ray, the cam helps the sash closing even if it isn't strictly close to the frame.

More security for wind tightness
If the window bends for the wind pressure, the mushroom cam doesn't slide outside the striker as a push rod could do.



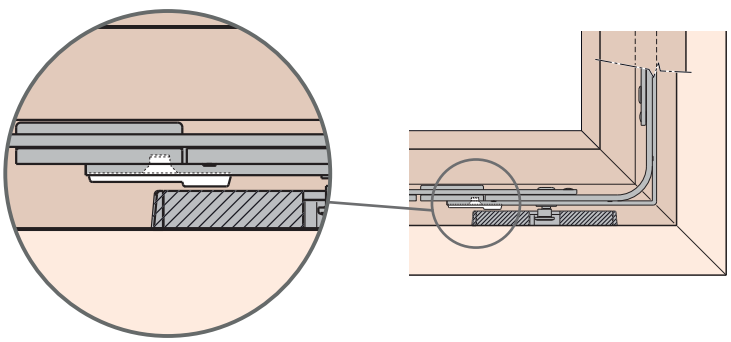
More anti-burglar security
Thanks to mushroom cams and undercut strikers as a standard.



Better symmetry
The same corner movement on both sashes allows to use the same striker for the two sashes window design is improved.

Lifting wedge

For the great functioning of windows and doors, Artech provides the lifting wedges to be installed in correspondence of screw hole of the lower corner drive in order to unload the sash weight on strikers: we suggest the use on active sash to support the tilt position and on the passive sash it is helpful as a support when you load the weight of the active sash by the use of the DSS device. It can work from gap 10,5 to 11,5 mm.



Espagnolettes for balcony-doors

ARTECH CREATED NEW SOLUTIONS FOR BALCONY-DOORS

Stop to architectural barriers

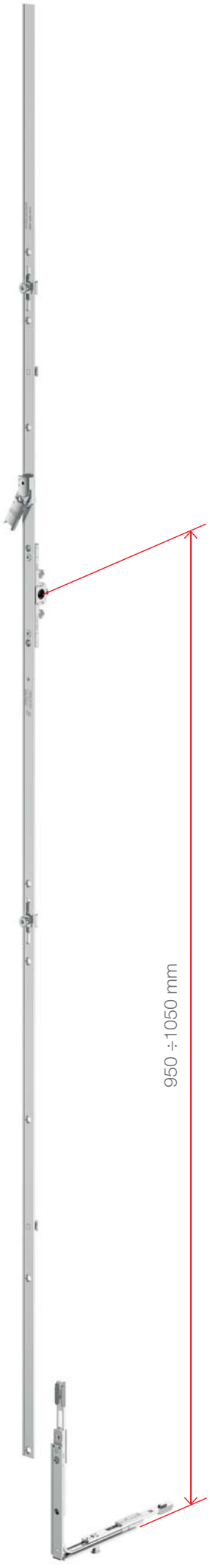
Espagnolettes for balcony-doors can be cut even in the lower part. This allows to lower the handle height up to **950 mm** in order to comply with the regulations for the demolition of architectural barriers all over the world.

Espagnolette GR7 bis

The espagnolette GR7 bis allows to produce windows and doors with **1050 mm** handle from a SRH of **1634 mm.**

Espagnolette GR10

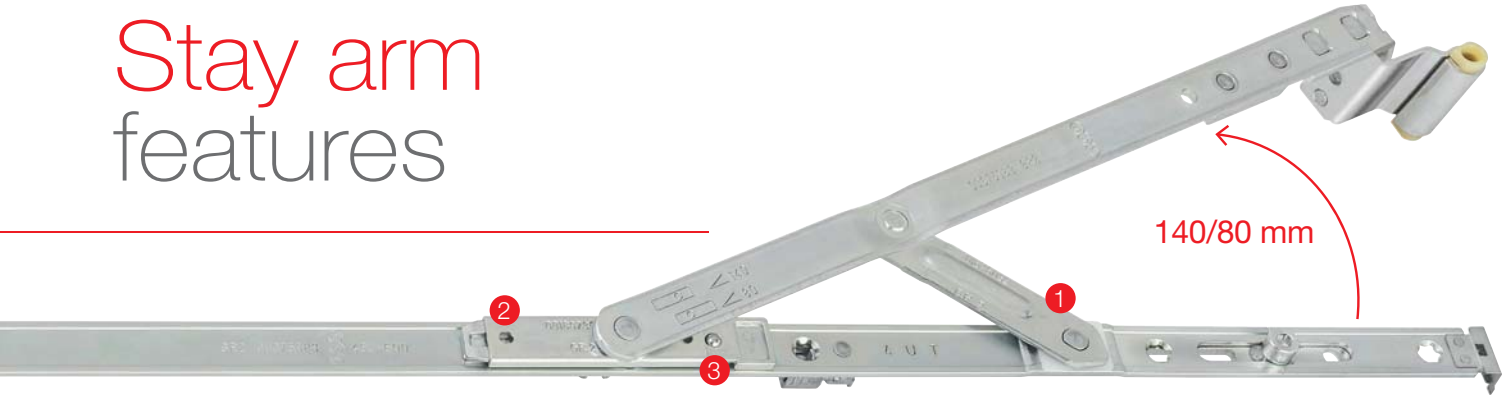
GR10 includes a range of SRH heights up to **2500 mm**; it allows to lower the handle to 950 mm reaching a SRH of 2400 mm without using any extension.



Magnetic sash catcher striker

The production of windows and doors with more than two gaskets means that the sash has holding difficulties during the temporary closing of doors.
The magnetic swing solution allows to reduce the push of gaskets and hold efficiently the door thanks to new generation magnet power. The solution is available for all the windows and doors, both for single and double sashes. This solution can be used even for second sash closing instead of bolts when there is a shutter or a balcony that has to be often closed or opened.

Stay arm features



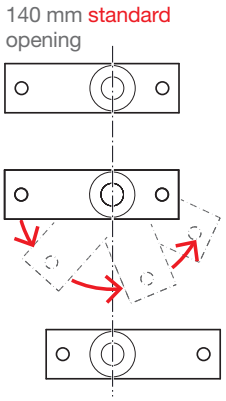
ANTI-MISHANDLING DEVICE AS A STANDARD

1 The anti-mishandling device on the stay arm prevents to rotate the handle and open the sash from the outside.

TURNING DEVICE

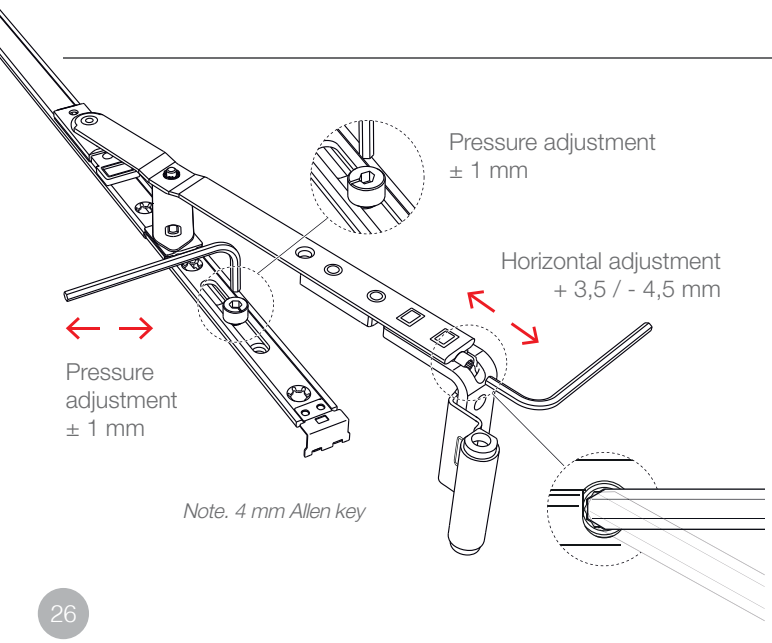
2 With the turning device of Artech stay arms, it is possible to choose the dimensions of tilt opening: 140 mm standard opening, 80 mm for a reduced opening to:

- simplify the locking process of high windows with low handle (renovation),
- to guarantee a great functioning of tilt opening for low windows avoiding the spring effect.



SPHERE FOR TILT POSITION BLOCK

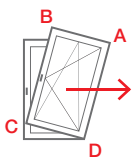
3 The locking sphere in tilt position restricts efficiently the self closing caused by air.



Horizontal stay arm adjustment

Pull (in clockwise)

A) Movement of upper part of sash.
B) Lifting and movement of upper corner.
C) Lifting and movement of the lower edge.
D) Pintle.

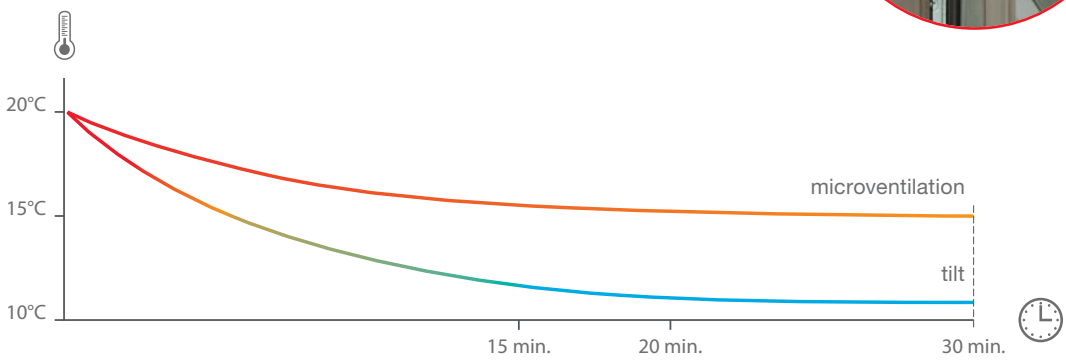


Mark with double hexagon to facilitate the insertion of the key for adjustment.

Microventilation

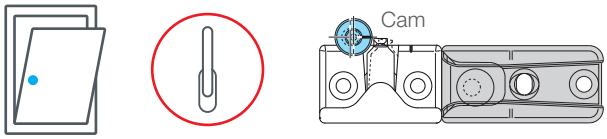
The air circle that doesn't cool the room!

Thanks to the 7 mm tilt opening, the microventilation allows to air the room continuously but in a limited manner, in order to avoid the excessive cooling. Airing the room for 30 minutes with microventilation avoids the reduction of temperature and condensation on walls. In this way, you will prevent one of the causes of mould appearance.

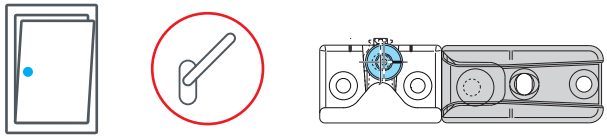


Positioning and striker application

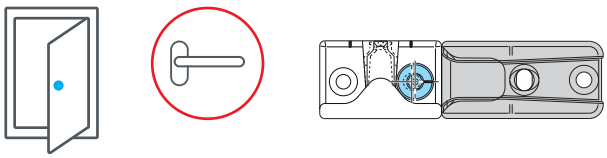
Tilt



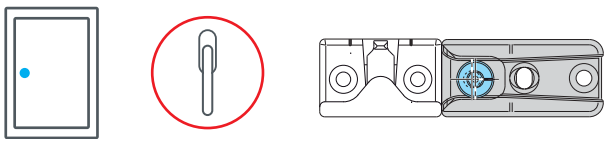
Microventilation

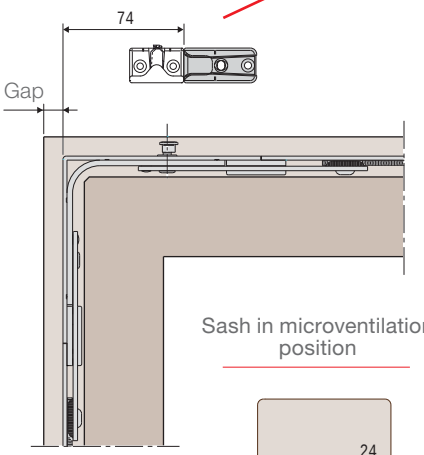


Open

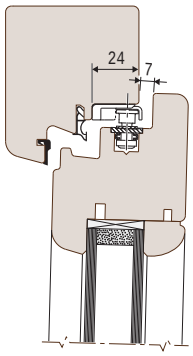


Closed

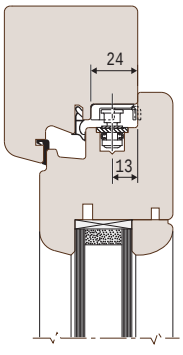




Sash in microventilation position



Sash in closing position



Advanced solutions for axis 9

Artech Euronut bolt

The Artech Euronut bolt permits the joiners who work with the axis 9 to use the Artech technology.

Accessories for Euronut

Terminals for even cut and staggered cut

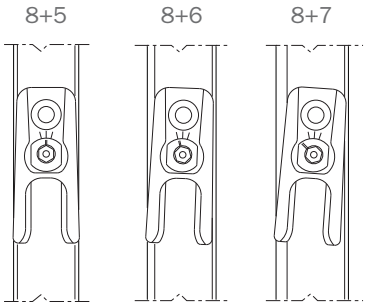
Extensions for even cut and staggered cut

Availability of the specific magnetic sash catcher

Rod catch

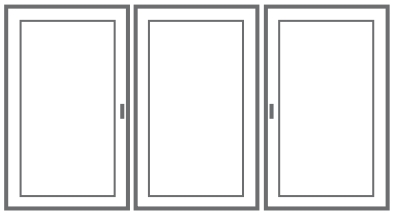
An Euronut bolt for every situation

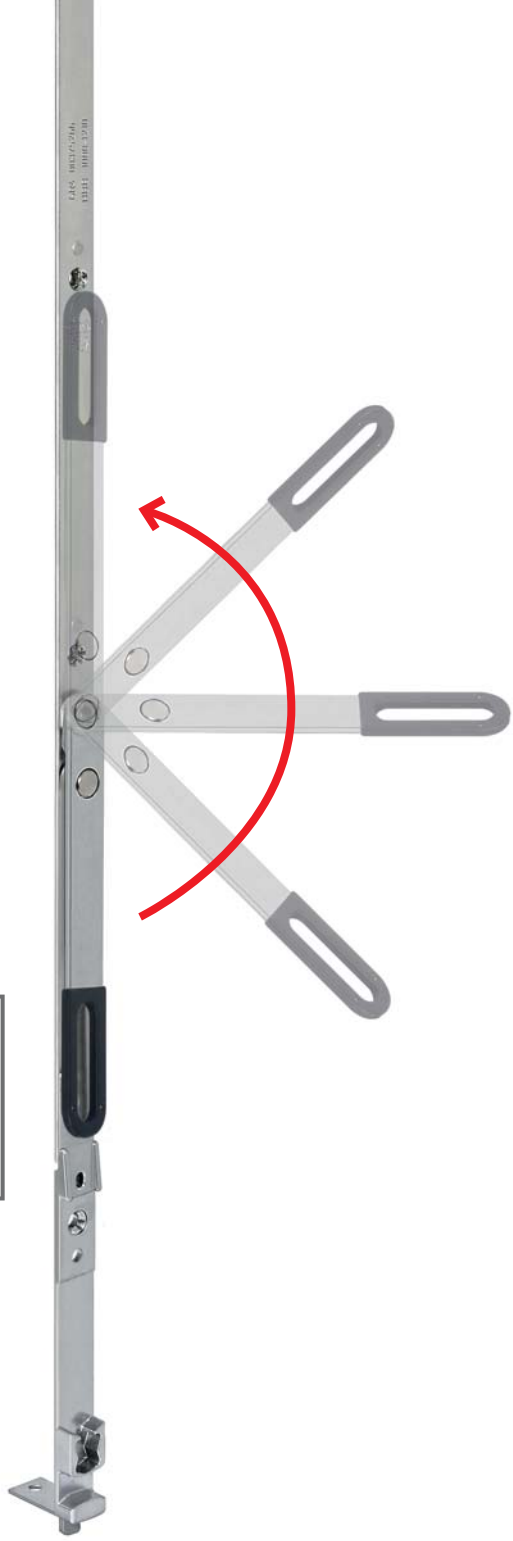
Thanks to adjustable pre-mounted strikers, the dedicated Artech bolt is compatible with all the Euronut grooves.

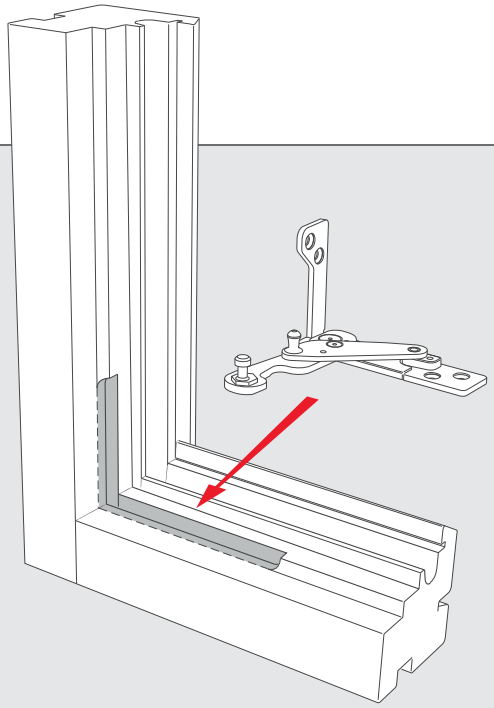


Euronut bolt for third sash

Thanks to the dedicated lever bolt with 180° opening, it is easy to produce windows with 3 sashes.







Plana application on windows and balcony-doors with axis 9

The concealed hinge Artech Plana is available even for axis 9. Thanks to a little additional milling on the frame, it is possible to innovate a window in axis 9 using concealed hardware of 150 kg capacity, with the guarantee to produce a flush system.
Check the lack of gasket on the frame.

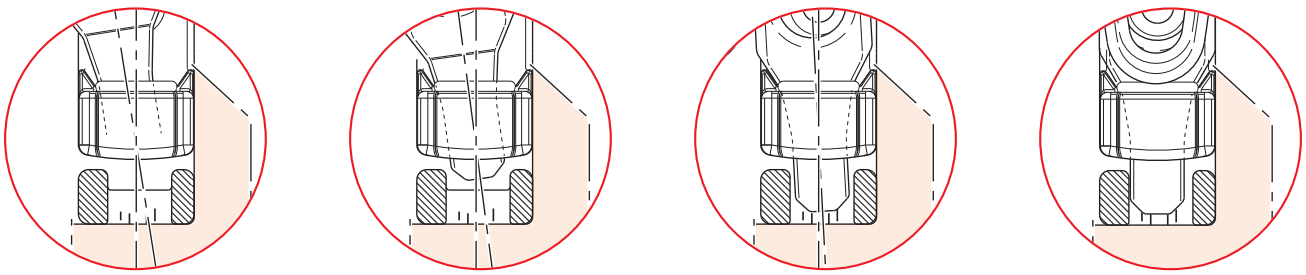
Bolt with pivot-sliding movement

Innovative locking system with dedicated movement

The pivot-sliding movement pilots the push rod the on the striker and optimises the pressure on gasket.

Pressure process on gasket

Movement of bolt with pivot-sliding



Strikers range

Special strikers with a design that is coordinated to tilt strikers.

For solutions with gap 12, the covers are available.

Push rod striker
gap 4 mm, axis 9 mm

Push rod striker
gap 12 mm, axis 9 mm

Push rod striker
gap 12 mm, axis 13 mm

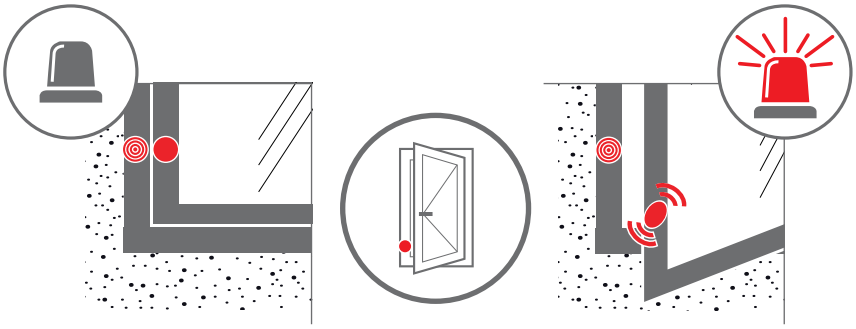
One system, two advantages: alarm and energy saving

Magnetic contacts for controlling systems and alarm

Magnétique is the solution for controlling windows and balcony-doors by magnetic contacts.

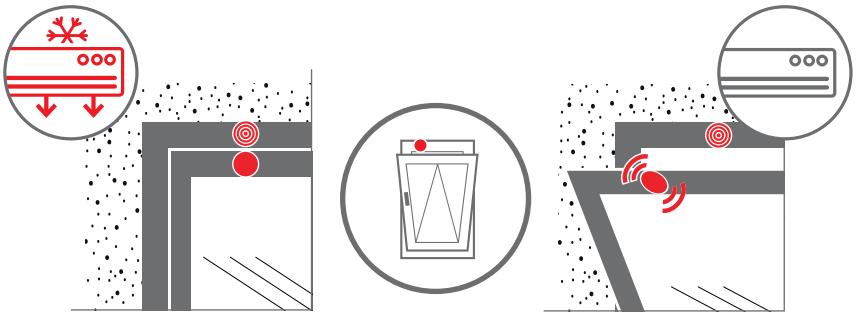
AN INFALLIBLE GUARD

In case of burglary, Artech magnetic contacts communicate wih alarm system to signal the threat giving an impulse.
The system starts working even in case of alterations, thanks to the tamper.



HEALTHY ROOMS WITHOUT WASTING ENERGY

Magnetic strikers have a main role for air-conditioning: the system is directly connected to the conditioning turning it off while opening the window.



Magnétique components

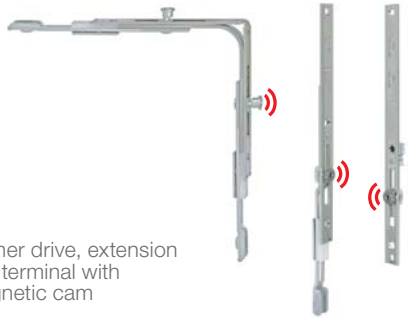
Surface mounted magnet

Embedded magnet

Surface mounted sensor

Embedded sensor

Striker with double sensor

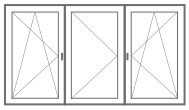


Corner drive, extension and terminal with magnetic cam

Artech Plana for third sash

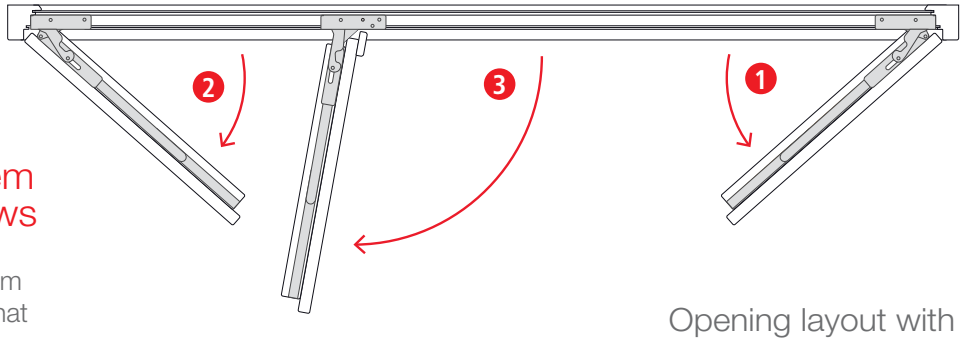
Brilliant ideas for renovations

Thanks to the Artech Plana hinge for three sashes, it is possible to realise windows with concealed hardware, perfect for renovations.



The “no problem” system for three sashes windows

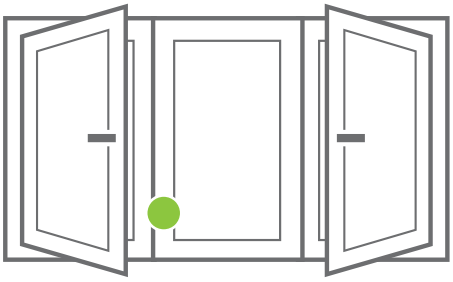
AGB realised a three sashes system with a forced opening sequence that allows to prevent errors during the opening and consequent damages of the window.



Opening layout with three sashes

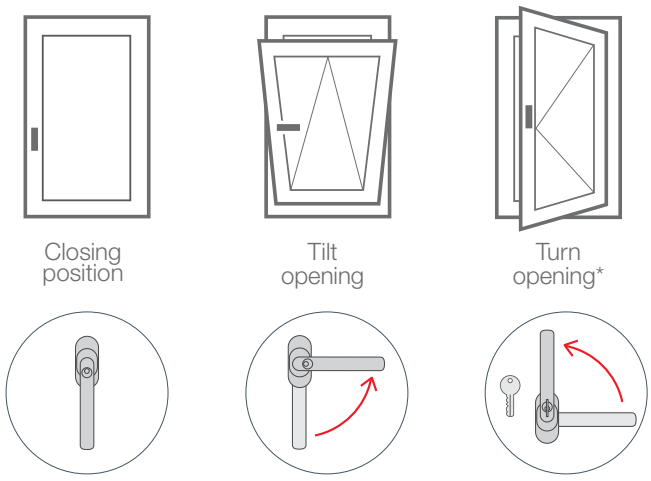
Simplified opening system:

- In the central sash, the opening device can be activated only when lateral sashes are open.



Artech TBT: safety for schools, communities and public places

The **Tilt Before Turn** device (TBT) ensures the maximum safety while using windows installed in dangerous positions. The handle in horizontal position allows tilt opening and room airing, avoiding the risk of accidental falls. The use of a dedicated handle allows to unblock the turn opening only using the key.



* Opening is possible only using the key.

Artech TBT ensures great safety in public places and high floors in general, where there is the need to protect windows from accidental falls. It is suitable for windows installed in dangerous positions.

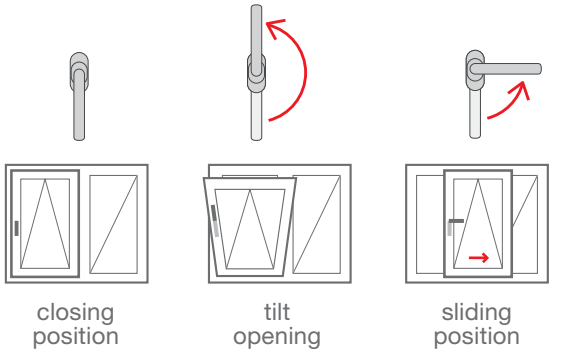
Apartment buildings | Schools | Hospitals

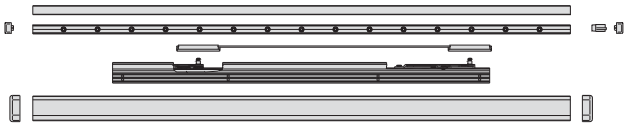
Solutions for coplanar sliding system

The Artech hardware features of modularity and versatility allow to realise coplanar sliding systems with manual command and automatic hook.

Galileo CM

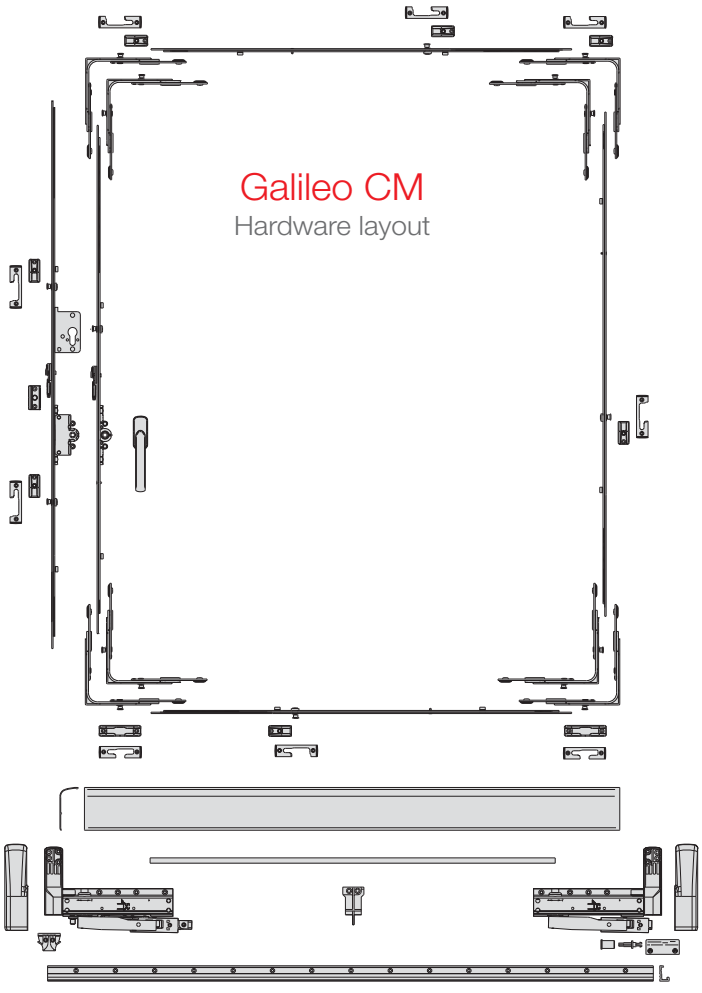
Functionalities of coplanar sliding system





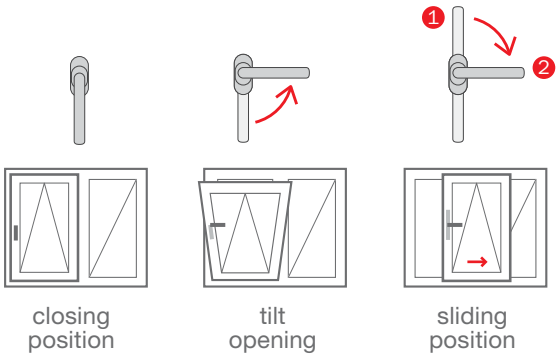
Galileo CM

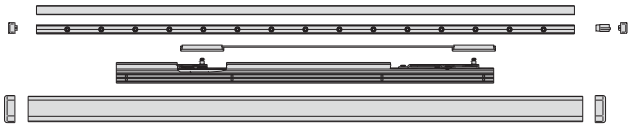
Hardware layout



Galileo SA

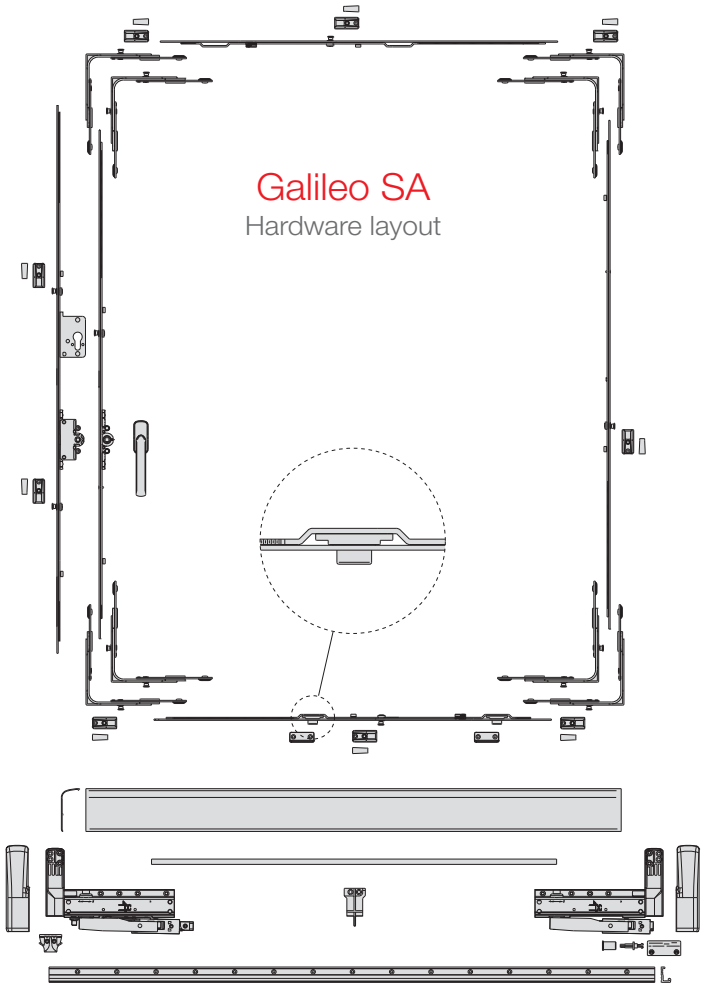
Functionalities of coplanar sliding system





Galileo SA

Hardware layout



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ARTech

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