



WINDOW TECHNOLOGY  
DOOR TECHNOLOGY  
AUTOMATIC ENTRANCE SYSTEMS  
BUILDING MANAGEMENT SYSTEMS



FOR TIMBER, PVC AND ALUMINIUM WINDOWS AND BALCONY-DOORS

## Fold&Slide hardware – the new generation



Securing technology for you



# Unlimited scope for architectural design, up to 130 kg

Fully-fledged technology  
of a new generation of Fold&Slide doors



The new Fold&Slide hardware reveals solutions that combine countless benefits. As higher sash weights are permitted, fewer individual elements are required which guarantees maximum opening widths. The larger glass areas allow daylight to flood into the room thus creating an exclusive living atmosphere.

## Unrivalled running smoothness, for sash weights up to 130 kg

The sashes are precisely and quietly guided in the grooves of the running track by ball-bearing supported, plastic-coated rolls in the bogie at the bottom and guide roll at the top. Thanks to this technically innovative combination, large and heavy Fold&Slide sashes move safely and effortlessly. This means that window elements up to 6700 mm wide with a single sash weight of up to 130 kg can be used.

## Barrier-free threshold

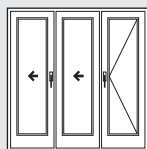
With regard to the threshold, this new Fold&Slide generation offers barrier freedom as a standard solution – every Fold&Slide system can be positioned using the running track to obtain a barrier-free version (depending on the profile).

## Enhanced security

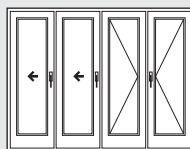
Emphasis is placed on burglar inhibition at the Fold&Slide element (among others) where the screw connection of the sash hinges is concealed and a UNI-JET central locking system is installed at each individual sash.

## Universally usable

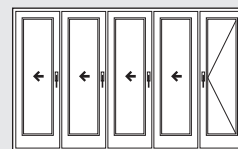
Fold&Slide hardware is used in the public sector and also particularly in the private sector – e.g. to provide barrier-free access in a private apartment to a terrace or the conservatory. The open sashes can be parked to the side in a space saving manner, e.g. as an optimum solution for the transition in a restaurant from inside to outside.



**Pattern 321 [1]**  
2 Fold&Slide sashes  
1 Turn-Only sash



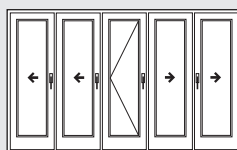
**Pattern 431 [1]**  
2 Fold&Slide sashes  
1 Turn-Only dummy mullion sash,  
1 Turn-Only sash



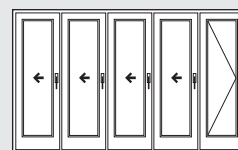
**Pattern 541 [1]**  
4 Fold&Slide sashes  
1 Turn-Only sash



**Pattern 330**  
2 Fold&Slide sashes  
1 Turn-Only sash

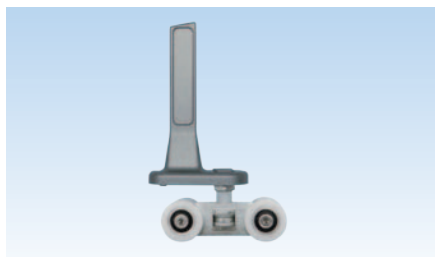


**Pattern 532**  
4 Fold&Slide sashes  
1 Turn-Only sash



**Pattern 550**  
4 Fold&Slide sashes  
1 Turn-Only sash

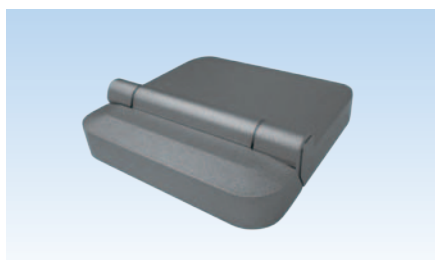
[1] Passage leaf also as Tilt&Turn sash  
– with sash hinges and UNI-JET Turn-Only locking system  
– with UNI-JET Turn-Only hardware  
[2] A passage leaf is recommended, especially for use in winter



**Bottom bogie with pivot rest with 6 ball-bearing supported, plastic-coated rolls**



**Top guide roll with pivot rest with 2 ball-bearing supported, plastic-coated rolls**



**Sash hinge with concealed screw connection**

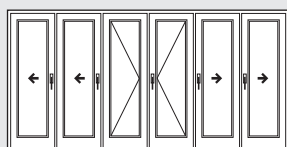
### Technical characteristics of the new Fold&Slide hardware system generation:

- Elements with a sash weight of up to 130 kg can be manufactured with the new GU hardware – this is ideal for even larger glass surfaces that can be safely moved with fewer sashes
- Bottom bogie with 6 ball-bearing supported, plastic-coated rolls (and 2 more on the top guide rolls) ensure that even heavy sashes can be guided smoothly and quietly
- Sash widths of up to 1000 mm are possible with GU hardware; large element widths of up to 6700 mm can be achieved
- The ferGUard\*silver surface sealing offers lasting corrosion protection
- This hardware system has made it possible to implement the new Grets&Unitas design line systematically, which is reflected in the sash hinges and pivot rests
- The pivot rests and sash hinges are available in the silver (-1), dark brown RAL 8022 (-5) and white (-7) surface finishes

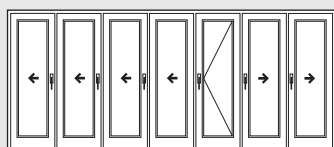
#### Fold&Slide hardware

	Timber	PVC	Aluminium
<b>Description</b>	<b>GU-923</b>	<b>GU-923</b>	<b>GU-823</b>
Sash weight [kg]*	up to 130	up to 130	up to 130
Sash width [mm]*	1000	1000	1000
Sash height*	2350	2350	2400
Number of sashes*	2-7	2-7	2-7

\* depends on the processing guidelines of the profile manufacturer



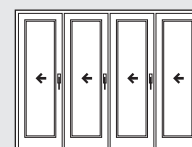
**Pattern 633**  
4 Fold&Slide sashes  
1 Turn-Only dummy mullion sash,  
1 Turn-Only sash



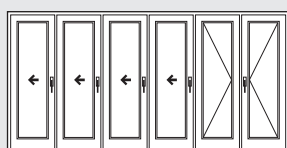
**Pattern 743**  
6 Fold&Slide sashes  
1 Turn-Only sash



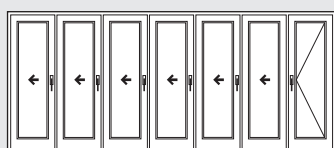
**Pattern 220 [2]**  
2 Fold&Slide sashes



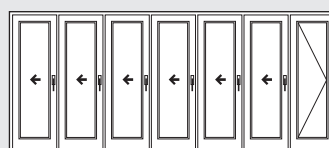
**Pattern 440 [2]**  
4 Fold&Slide sashes



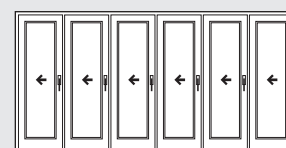
**Pattern 651 [1]**  
4 Fold&Slide sashes  
1 Turn-Only dummy mullion sash,  
1 Turn-Only sash



**Pattern 761 [1]**  
6 Fold&Slide sashes  
1 Turn-Only sash



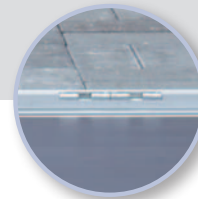
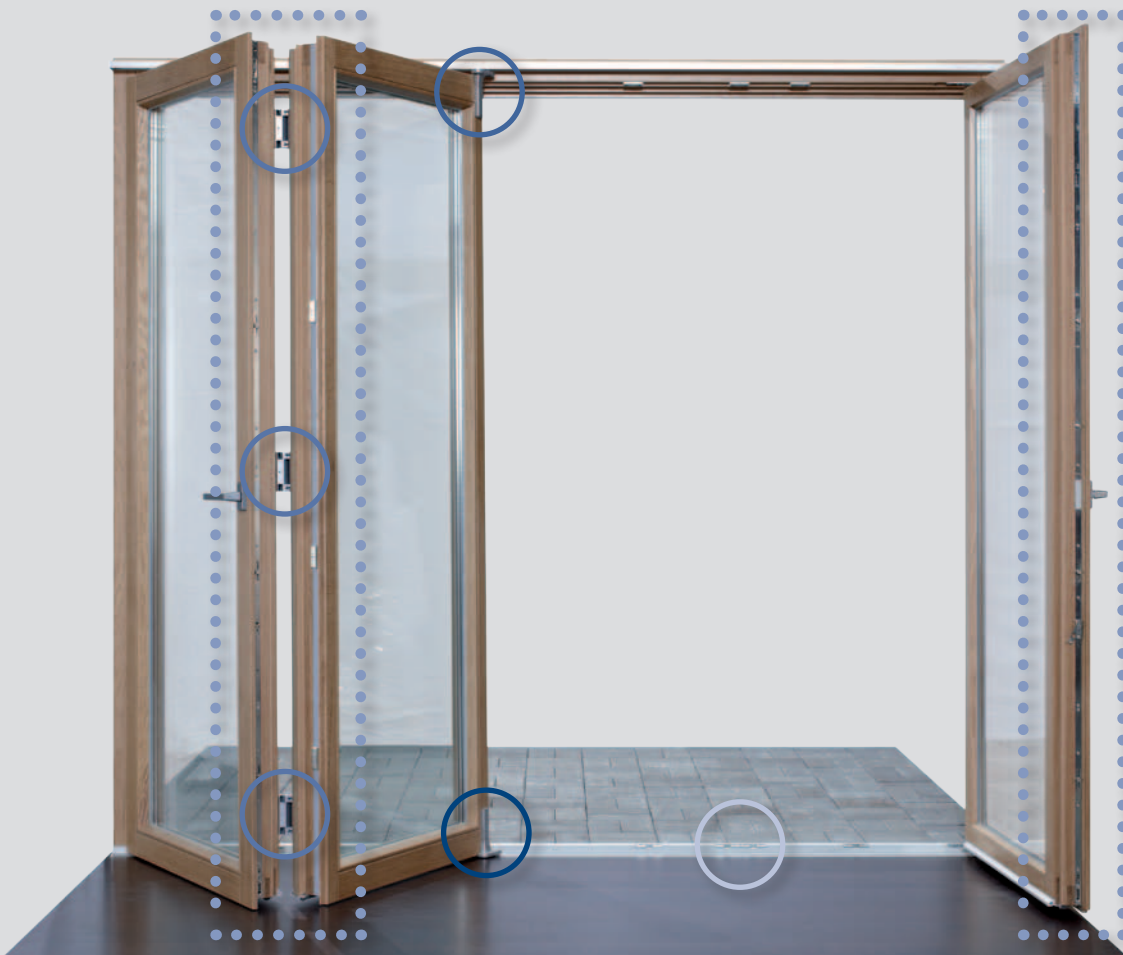
**Pattern 770**  
6 Fold&Slide sashes  
1 Turn-Only sash



**Pattern 660 [2]**  
6 Fold&Slide sashes

# Innovative architectural hardware at a glance

The new generation of Fold&Slide elements



**Bottom bogie:**  
Sash weights  
up to 130 kg;  
6 ball-bearing supported,  
plastic-coated rolls

**Guide roll at top:**  
2 ball-bearing supported,  
plastic-coated rolls

**Sash hinges  
and pivot rests:**  
Fully concealed screw  
connection; adjustable  
horizontal and vertical  
position

**UNI-JET Tilt&Turn  
central locking system:**  
can be installed on  
individual sashes; use of  
standard components  
and UNI-JET Concealed  
hardware possible

**Use of barrier-free  
GU system threshold**  
possible depending on  
profile system, threshold  
height 20 mm

**Safety and convenience  
during operation of all  
sash sizes!**

**Quiet and effortless  
movement of large and  
heavy sashes!**

**Increased burglar  
inhibition & optimum  
installation conditions!**

**Increased burglar  
inhibition & reduced  
warehouse overheads!**

**Suitable for barrier-free  
construction in  
compliance with  
DIN 18040**

Suitable for  
barrier-free  
construction to





Sashes weighing up to 130 kg can be moved safely and conveniently using an innovative architectural hardware; here an installation example with an aluminium profile system

## Unique combination of bogie and guide rolls

The new generation of Fold&Slide hardware with a permissible sash weight of 130 kg can reach element widths of up to 6700 mm. More glass can be incorporated in window elements with large sash widths of up to 1000 mm which allows light to flood into rooms.

Once opened, the sashes can be easily and conveniently moved to the side and parked. This allows unrestricted use of the internal living space and outdoor terrace space and also blurs the boundaries between the two.

Six plastic-coated, ball-bearing supported rolls mounted in each bottom bogie guide the sash precisely and quietly in the three grooves of the running track. The guide rolls at the top of the sash also feature two ball bearing supported plastic-coated rolls. Thanks to this unique combination, even large and heavy Fold&Slide elements can be moved safely and effortlessly.

A brush seal seals the guide track on the floor which prevents dirt entering the running track.



The guide roll at the top in combination with the bottom bogie ensures that sashes can be operated quietly and effortlessly

## Increased burglar inhibition

The screw connection of the sash hinges provides increased burglar inhibition and is elegantly concealed by metal cover caps. These caps can only be removed when the sash is in the open position.

Horizontal adjustment range +1.5 / -5.0 mm

Vertical adjustment range +2.0 / -2.0 mm

The GU sash hinges can for the first time be adjusted in two dimensions, horizontally and now also vertically.

The central locking system which can be installed on each individual sash is another way to optimise burglar inhibition. The sashes are also locked into the threshold at the bottom.

The optionally available opening and locked status monitoring satisfies more stringent security requirements. If the magnetic field that forms the connection between the components under surveillance is interrupted, this is signalled via the alarm control unit.



Increased burglar inhibition due to concealed screw connection of sash hinges

# Barrier-free living

Space for unlimited possibilities



## Barrier-free construction in accordance with DIN 18040

The meaning of 'barrier freedom' in the true sense goes far beyond the notion of making public and private rooms accessible to persons with physical limitations e.g. making public and private spaces available to wheelchair users so they can access these independently without the assistance of others. In fact, it also defines situations that suddenly arise and can frequently be encountered by anybody in everyday life in which personal mobility is restricted by the specific situation. This could be a person with a pushchair, or an injured sports person on crutches or someone travelling with heavy bulky luggage.

Barrier-free construction increases safety and added convenience for everyone: irrespective of age and health, the usefulness of a building and therefore quality of life is significantly improved. This makes barrier-free construction not only a social responsibility, it also makes a significant contribution towards safeguarding the future of a building and thus protecting the investment in the long term. Barrier-freedom is becoming a basic requirement to be met by a building and products that satisfy these requirements will achieve commercial success.

Our new Fold&Slide hardware system satisfies these requirements in every respect and is even available as a standard solution: each Fold&Slide system can have a barrier-free design (depending on the profile) without requiring additional components such as a special threshold.

The flat GU system threshold can provide a maximum passage width without obstructions. Frame parts that anchor the sash to the floor do not represent a tripping hazard by projecting out of the floor when the sashes are parked at the side and instead recessed in the threshold in the floor.

Even heavy large sashes can be effortlessly opened and moved safely and to the side thanks to ball-bearing supported, plastic-coated rolls in the bottom bogie and the top guide roll. Not only older persons or persons with restricted mobility appreciate this, but also service employees in the gastronomy industry for example, who value fast, short and obstruction-free routes in the outdoor area of the restaurant.



Even heavy large sashes can be pushed effortlessly and safely to one side in order to achieve the maximum obstruction-free passage width



A threshold which is easy for wheelchair users or persons with restricted mobility to negotiate without obstructions, e.g. upwards projecting frame parts that anchor the sash to the floor

Suitable for barrier-free construction to



# Installation and quality

Tried-and-tested central locking system and adjustable pivot rests / sash hinges guarantee optimum installation conditions



Central locking system with Cleverle: simplified inventory management due to tried-and-tested UNI-JET modular principle

## Central locking system

The central locking components required for the elements come from the successful UNI-JET Tilt&Turn hardware range. In this case, face-fixed or even fully concealed stay bearings and pivot rests can be used. All locking points feature automatic cams which provide ingenious clearance compensation.

The different climatic conditions in the summer and winter frequently lead to changes in the locking cam settings. The self-adjusting Cleverle locking cam automatically adjusts clearance tolerances, thus the adjusting effort during production or on site is minimized. This significantly reduces the need for adjustment during fabrication and thereafter.

By using standard components, this significantly reduces the inventory costs of fabricators of timber, PVC or aluminium window elements.



Height-adjustable sash hinge, view from outside; the screw connection is concealed from the outside which increases burglar inhibition

## Pivot rest

The pivot rests are accurately and securely fixed to the sash using 3 supporting bolts at 3 screw fixing points. The sash hinges are equipped with infinitely adjustable bearing pins and are therefore ideal for adjusting the sash to suit a wide range of profile systems.

In addition to the wide horizontal adjustment range, large vertical adjustment is now possible for the first time.

**Vertical adjustment range + 3.5 / - 1.0 mm**

A scale helps make these adjustments quickly and precisely which is a huge advantage with existing elements in projects.

The sash hinges and pivot rests are suitable for all profile systems with overlap heights between 15 and 26 mm – packers are not required!

Once installed, metal cover caps are fitted on the sash hinges and are extremely easy to remove again in order to make adjustments at the open element.



Height-adjustable sash hinges, view from inside; the caps of the sash hinges can only be removed in the open position

## Copyright notice

© All illustrations and texts in this publication are protected by copyright. Unless otherwise stated in the image credits, the rights belong to the Gretsch-Unitas Group. Any use of copyright protected materials without the consent of the holder of the rights is prohibited.

## Publisher

Gretsch-Unitas GmbH Baubeschläge

Johann-Maus-Str. 3 | D-71254 Ditzingen

Tel. + 49 (0) 71 56 3 01-0 | Fax + 49 (0) 71 56 3 01-2 93

www.g-u.com



WINDOW TECHNOLOGY  
DOOR TECHNOLOGY  
AUTOMATIC ENTRANCE SYSTEMS  
BUILDING MANAGEMENT SYSTEMS

Gretsch-Unitas GmbH  
Baubeschlage  
Johann-Maus-Str. 3  
D-71254 Ditzingen, Germany  
Tel. +49(0)7156 301-0  
Fax +49(0)7156 301-77980

BKS GmbH  
Heidestr. 71  
D-42549 Velbert, Germany  
Tel. +49(0)2051 201-0  
Fax +49(0)2051 201-9733

[www.g-u.com](http://www.g-u.com)

Securing technology for you

