



WINDOW TECHNOLOGY  
DOOR TECHNOLOGY  
AUTOMATIC ENTRANCE SYSTEMS  
BUILDING MANAGEMENT SYSTEMS



GRETSCH-UNITAS GROUP

## Product programme

Securing technology for you



# Modern technology

The entire product range



## Commitment to tradition – setting the highest design and quality standards

### A corporate group with tradition

For over 100 years, the owner-managed GU Group has been fascinated with the opening, swinging, closing and locking of windows and doors. Technical innovations and continual development of architectural hardware technology have and will continue to shape forces in the market, setting new standards and trends for the future.

### The Gretsch-Unitas Group

The corporate group consists of more than 50 manufacturing and distribution companies in 35 countries. With the internationally leading brands GU (architectural hardware), BKS (locks, locking systems) and FERCO (architectural hardware), the group offers "Securing technology for you".

### Corporate group product overview

In its window technology, door technology, automatic entrance systems and building management systems divisions, the GU Group manufactures and distributes about 30,000 single items which are easy to combine.

### Securing technology for you

We use the major challenges of creating innovative and visionary system solutions to break new ground. Together with architects, planners and profile system manufacturers, we develop individual comprehensive solutions.

---

The corporate group has solutions for every product range, offering greater convenience and satisfying the criteria for barrier-free construction in accordance with DIN 18040.

---

Suitable for barrier-free construction to 

## Innovative functionality and aesthetic window architecture

Sophisticated facade solutions .....	5
The UNI-JET Tilt&Turn hardware .....	5
Tilt&Slide hardware .....	6
Parallel-Slide hardware .....	6
Fold&Slide hardware .....	7
Horizontal- and Vertical-Pivot hardware .....	7
Lift&Slide hardware .....	8
Additional kits for Lift&Slide hardware.....	8
Humidity-controlled ventilators.....	9
Fanlight opening systems .....	9
Electrical ventilation systems .....	10
Smoke and heat exhaust ventilation systems (RWA) .....	10
Hardware for doors, handles for windows and sliding units.....	11
Thresholds for doors, windows and Lift&Slide units.....	11
Construction accessories.....	12
GU product range for new-build and renovation work.....	12



## The door as a convenient access zone

Secure mechanics and convenient mechatronics!.....	14
Multi-point locks .....	14
GU-SECURY system technology.....	15
GU-SECURY Automatic access controlled – the GU house entrance door concept.....	15
Electric strikes .....	16
Door closers.....	16
Mechanical locking systems .....	17
SE electronic locking system.....	17
Escape door system solutions.....	18
Access control systems .....	18



## Transparent convenience for entrance solutions

Automatic sliding doors.....	20
Revolving doors and single-person access control systems.....	20
Automatic swing-door drives.....	21
All-glass sliding panels .....	21



## Where it all comes together

GEMOS physical security information management system.....	22
Service .....	23
Exclusion of liability / Copyright notice / Image credits ...	26



# Window technology

Innovative functionality and aesthetic window architecture





Sophisticated facade solutions using standard hardware



The UNI-JET Tilt&Turn hardware range makes anything possible

## Sophisticated facade solutions

Skilled in the development of innovative opening mechanisms and specialised in every method of facade opening, Gretsch-Unitas has been a competent partner in facade construction for many years. GU experts take project-related special parts developed exclusively for individual projects as innovative engineering work and combine them with elements from the tried-and-tested GU range. With hardware for lowering Top-Hung, Parallel-Projecting, Horizontal-Pivot or Turn-Only windows, as well as special designs based on individual customer specifications, it is possible to satisfy demands for new methods of opening and window shapes with unique aesthetic qualities. The range of services extends from technical planning and design through to production of the special parts and handling of projects together with customers all over the world.

Technical data		
	Lowering Top-Hung sash hardware	Parallel-Projecting hardware
Version	Aluminium, timber, PVC	Aluminium, timber, PVC
Sash weight in kg	up to 180	200
Sash height in mm	276 – 2500	380 – 3000
Hollow dimension in mm	17 +/-1	21 +/-1
Handle version	<ul style="list-style-type: none"> <li>- SPACIO, standard</li> <li>- SPACIO, lockable</li> <li>- Concealed gear for standard handles</li> <li>- Other standard handles</li> </ul>	<ul style="list-style-type: none"> <li>- SPACIO, standard</li> <li>- SPACIO, lockable</li> <li>- Concealed gear for standard handles</li> <li>- Other standard handles</li> </ul>

## The UNI-JET Tilt&Turn hardware range

Each window makes particular demands of the hardware – whether its the variety of the materials used for the frame (PVC, timber or aluminium) or the desired look (face-fixed or concealed hinge side). The UNI-JET Tilt&Turn hardware range for windows and balcony-doors offers the right solutions: aesthetically pleasing, high-quality and easy to work with. The last word in versatility: the modular UNI-JET central locking system can be used for all profiles with a 16 mm hardware groove in Tilt&Turn, Tilt-First, Turn-Only, Tilt-Only, Top-hung, Horizontal-Pivot and Vertical-Pivot windows as well as Fold&Slide, Parallel-Slide and Tilt&Slide balcony-doors. Gretsch-Unitas is a system supplier for burglar-inhibiting solutions up to RC 2 for timber, aluminium and PVC elements with a comprehensive CE certification programme especially for timber units. The GU Group supports its customers as a system partner from the planning stage until eventual delivery.

Technical data			
Hardware version	Sash width in mm	Sash height in mm	Sash weight in kg
<b>Timber</b>			
UNI-JET M (milled)	280 – 1700	280 – 2800	up to 200
UNI-JET S (screwed)	280 – 1600	280 – 2800	up to 130
UNI-JET S-CONCEALED F	390 – 1400	350 – 2800	up to 130*
<b>PVC</b>			
UNI-JET D (drilled)	280 – 1600	280 – 2800	up to 150
UNI-JET S-CONCEALED F	390 – 1400	350 – 2800	up to 130*
<b>Aluminium</b>			
ALU-JET AK 8	355 – 1700	500 – 2800	up to 130
UNI-JET C (clamped)	280 – 1600	280 – 2800	up to 130
UNI-JET D (drilled)	280 – 1600	280 – 2800	up to 100
UNI-JET C-CONCEALED	390 – 1400	350 – 2800	up to 130

\* up to 150 when using the load-absorbing device

# Window technology

Innovative functionality and aesthetic window architecture



Integrated mishandling device supplied as standard



The hardware solution without a tilting function for projects with changing users

## Tilt&Slide hardware

Tilt&Slide hardware allows the user to place the balcony-door in the tilt position. Sashes tilted for ventilation are held securely by storm-proof stays. The additional power-control feature (mZ) of the hardware variants for large and heavy units ensures that the sash is pulled against the gasket evenly upon closing and returned to the tilt position upon opening. This makes things really easy and convenient for the user.

The version without the power-control feature (oZ) uses components from the Tilt&Turn range, which helps reduce storage. Also, the stays are joined together in a way which ensures the sash is pressed evenly against the frame upon closing.

Used in conjunction with the GU DKS threshold, GU-966/100 bb hardware without power control is also suitable for "barrier-free living" in compliance with DIN 18040. Gresch-Unitas Tilt&Slide hardware also ensures the highest burglar resistance up to resistance class RC2 in accordance with EN 1627.

## Parallel-Slide hardware

With its precise functionality, Parallel-Slide hardware is designed to last. It meets the individual demands of frequently changing users for convenience and security associated with certain projects. These may include hotels or public buildings. Sash widths of up to 2000 mm are possible, as are large passage widths. Thanks to the innovative combination of PVC-coated and ball-bearing-supported (i.e. maintenance-free) rollers and the proven Tilt&Slide bogies fitted to the sash at the bottom, the sliding sashes slide gently and quietly into their open or closed position. This kind of functionality prevents maloperation of balcony-doors. This hardware system without a tilting function can be used in all the usual standard window profiles.

### Technical data

Hardware version	Sash width in mm	Sash height in mm	Sash weight in kg
<b>Timber or PVC</b>			
GU-966/200 mZ	640 – 2000	700 – 2350	up to 200
GU-966/150 mZ	720 – 1600	820 – 2350	up to 150
GU-966/150 oZ	640 – 1600	700 – 2350	up to 130
GU-966/100 oZ bb	720 – 1600	700 – 2350	up to 100
GU-90 oZ	640 – 1600	700 – 2350	up to 90
<b>Metal</b>			
GU-968/200 mZ	740 – 2000	895 – 2400	up to 200
GU-968/150 mZ	740 – 1600	895 – 2400	up to 150
GU-968/150 oZ	600 – 1600	730 – 2400	up to 130
GU-90 oZ	640 – 1600	700 – 2350	up to 90

### Technical data

Hardware version	Sash width in mm	Sash height in mm	Sash weight in kg
<b>Timber or PVC</b>			
GU-966/200 oZ	720 – 2000	820 – 2350	130
	1050 – 2000	820 – 2350	up to 180*
	1050 – 2000	1050 – 2350	up to 200**
<b>Metal</b>			
GU-968/200 oZ	600 – 2000	730 – 2400	130
	1050 – 2000	730 – 2400	up to 180*
	1050 – 2000	730 – 2400	up to 200**

\* with tandem scissor sliders at top

\*\* with tandem bogies at bottom and tandem scissor sliders at top



Safety, convenience and installation friendliness in perfect harmony



Horizontal-pivot window for sash weights up to 300 kg

## Fold&Slide hardware

Larger sections of glass with sash widths of up to 1000 mm and a permissible sash weight of 130 kg offer the maximum possible opening widths based on a total frame width of 6700 mm. Qualities such as an incomparable running smoothness and really easy operation provide even more comfort and make Fold&Slide hardware from Gretsch-Unitas something quite special.

Ball-bearing-supported and PVC-coated rolls in the bogies at the bottom and in the guide roll at the top ensure even heavy sashes are really easy to move and that sashes are securely guided along the tracks with hardly any noise at all.

Depending on the profile system, this Fold&Slide hardware generation is also suitable for use in barrier-free areas and, in the context of burglar inhibition, the hardware system offers the highest level of security. The improvements in burglar inhibition include the concealed screws for the hinges and the option to attach the central locking system to just one sash. The two-dimensional adjustability of GU hinges ensures optimal installation conditions.

### Technical data

Hardware version	Sash width* in mm	Sash height* in mm	Sash weight* (in kg)
<b>Timber or PVC</b>			
GU-922 (bottom-running)	400 – 900	850 – 2350	up to 80
GU-923	500 – 1000	851 – 2350	up to 130
GU-925 (top-running)	400 – 900	850 – 2350	up to 80
<b>Metal</b>			
GU-822 (bottom-running)	– 1000	– 2350	up to 80
GU-823	500 – 1000	851 – 2350	up to 80
GU-825 (top-running)	400 – 1000	851 – 2350	up to 80

\* depends on the processing guidelines of the profile manufacturer

## Horizontal- and Vertical-Pivot hardware

The UNITAS series can be used for both rectangular and round Horizontal-Pivot windows weighing up to 300 kg. The adjustable sash brake in the pivot holds the sash securely in any position, while still allowing the window to rotate 180°. Barrier-free solutions, whereby sashes can be moved without using any force, can be implemented, for example, by combining Horizontal-Pivot hardware with the ELTRAL K35 concealed chain drive.

One of the advantages of using Vertical-Pivot hardware, as opposed to Horizontal-Pivot hardware, is the possibility of positioning the pivots eccentrically, and also the fact that it supports windows with a sash height of up to 2850 mm. As a result, interior design requirements can be perfectly implemented.

### Technical data

Hardware version	Sash width in mm	Sash height in mm	Sash weight in kg
<b>Horizontal-Pivot hardware</b>			
<b>Timber</b>			
UNITAS 5 Bo, 7 Bo	576 – 2950	700 – 2200	up to 175
UNITAS 10/22°	576 – 2950	700 – 2200	up to 300
UNITAS 4 circular window	Ø 424 – 2016		up to 100
FERCO 44 E	576 – 1450	700 – 2000	up to 80
FERCO 45 E	576 – 1450	700 – 2200	up to 120
<b>PVC</b>			
UNITAS 16	576 – 2950*	700 – 2200*	up to 175
<b>Aluminium</b>			
UNITAS 18/3	580 – 2800*	600 – 2200*	up to 175
<b>Vertical-Pivot hardware</b>			
UNITAS 93 Bo (timber)	356 – 1600	800 – 2850	up to 175
UNITAS 88 (aluminium)	600 – 1600*	600 – 2800*	up to 175

\* max. SW and SH as specified by the system supplier

# Window technology

Innovative functionality and aesthetic window architecture



Oliver Schuster, Stuttgart / baukunst philipp haus GmbH



More than 50 years of innovative hardware technology

## Lift&Slide hardware

Gretsch-Unitas developed the first Lift&Slide system in 1958 and is still setting the standards for others to follow. As a result of the consistent further development of Lift&Slide hardware, a multitude of hardware solutions including profile-system-related variants is available today for all customary joinery materials. A high level of burglar inhibition is achieved thanks to security components tested to resistance class RC 2 in accordance with EN 1627 and certified for retrofitting in accordance with DIN 18104-2. The stringent requirements of Germany's energy saving ordinance (EnEV) are more than satisfied, which means the systems are suitable in passive house applications. Motor-driven drives are available if required, and these offer even greater convenience in terms of barrier-free solutions in accordance with DIN 18040.

### Technical data

Hardware version, manual	Sash width in mm	Sash height in mm	Sash weight in kg
<b>Timber</b>			
GU-934 door	700 – 3300	1851 – 3250**	up to 300*
GU-934 window	700 – 3300	850 – 1865	up to 300*
GU-937 door	700 – 3300	1851 – 3250**	up to 150***
GU-937 window	700 – 3300	850 – 1865	up to 150***
<b>PVC / Metal</b>			
GU-934 balcony-door/window	depending on profile system	depending on profile system	up to 300*
GU-937 balcony-door/window	depending on profile system	depending on profile system	up to 150***
Hardware version, motor-driven	Sash width in mm	Sash height in mm	Sash weight in kg
<b>Timber, PVC or metal</b>			
HS-Master, pattern A	950 – 3300	1855 – 2765	up to 300
HS-Master, pattern C	950 – 3300	1855 – 2765	up to 300
HS-Master CONCEALED, pattern A	1200 – 3300	1840 – 2765	up to 300

\* with tandem bogies up to 400 kg. Maximum of 600 kg upon request

\*\* with gear extension 3750 mm upon request

\*\*\* with tandem bogie up to 300 kg

## Additional kits for Lift&Slide hardware

### Barrier freedom

- Turn handle 400 mm
- Tension spring for gear
- Comfort profile for thresholds
- HS-Master motor-driven drive



### Burglar protection

- SE security centre-closer
- Anti-jemmy device
- Anti-drill plate for gear
- Locked status monitoring
- HS meeting stile security profile



### Child safety

- Speed limiter
- Handle damper for controlled lowering of the sliding sash



### Design

- LED lighting
- Stainless turn handle
- Concealed P 1850 guide track



### Ventilation

- Night ventilation
- Bottom keeper and night ventilation frame cam
- Humidity-controlled ventilators



### GU-thermostep 204 threshold

- Excellent thermal properties
- With structural sealing set ex works
- Prefabrication: service based on various stages of pre-assembly





Ventilation as required: easy installation and retrofitting



Manual or motor-driven operation for ventilation purposes

## Humidity-controlled ventilators

The demand-driven ventilation system – whereby air is exchanged without any user input – creates a very comfortable place to live, helps to save energy efficiently and protects the building structure by preventing the formation of mould. With their discreet looks, the ventilators can fit seamlessly into the relevant domestic setting.

The self-regulating ventilators with humidity sensor require no electricity. A special sound insulation version is available. Designed for use with timber, PVC and aluminium frame materials, the devices are easy to install and do not require any additional installation work on the building. Retrofitting is just as easy.

## Fanlight opening systems

The VENTUS fanlight opening system from the GU Group enables manual operation of a fanlight or, when combined with the ELTRAL electric drive, a cost-effective means of motor-driven control for more than one sash unit. The flat design of the opening stays means fanlights require little space when installed with inward-opening, vertically-installed, rectangular Tilt-Only windows made of timber, PVC or metal. The automatic locking in the stays and the optional additional locking on the sash enable a high gasket pressure and therefore increase the tightness of the sash. The system is easy to install and is highly versatile in terms of operation.

Technical data		
	Free ventilation (shaft ventilation)	Ventilator-based ventilation
<b>Air quality indoors</b>		
Air quantity control	+	++++
Intensive ventilation possible	only possible manually	++++
<b>Energy efficiency</b>		
Minimisation of heat losses	++	++++
Low energy consumption	++++	+
<b>Acoustic characteristics</b>		
Low-noise operation	++++	+
<b>Installation / maintenance</b>		
Low costs	++++	+
Simple installation	++++	++
Simple retrofitting	++++	+
Simple maintenance / cleaning	++++	+

Technical data – manual operation			
Hardware version	Sash width in mm	Sash height in mm	Opening width in mm
VENTUS F 200	400 – 3600	from 300	165/200
VENTUS F 300	620 – 3600	from 350	220/300

Technical data – motor-driven operation		
	ELTRAL S 230	ELTRAL 300 E1
Thrust in N	1200	3000
Current consumption in A	0.15	0.1
Max. travel in mm	50/70	40 – 70
Duty ratio in %	20	100
IP protection type	50	54
Dimensions in mm (L/W/H)	210/36/76	270/55/102

# Window technology

Innovative functionality and aesthetic window architecture



Chain drives ensure rooms receive the perfect amount of ventilation with opening widths up to 750 mm



Low smoke density rescue routes with SHEV system solutions from GU

## Electrical ventilation systems

Ventilation drives are the convenient solution for daily room ventilation, ensuring health and well-being with automated, electromotive ventilation. Chain drives from the ELTRAL L series support a large selection of fastening types and make almost any installation situation or mounting type possible (concealed or face-fixed) with inward- and outward-opening Turn-Only, Tilt-Only, Top-Hung, Parallel-Projecting, lowering Top-Hung, Horizontal- or Vertical-Pivot windows and skylights. Intelligent, integrated electronics allow for synchronous control of two or more drives (for large sash widths).

Spindle drives and rack and pinion drives from the ELTRAL S/Z series are the ideal solution for opening and closing heavy and large skylights or openings in facades – such as may be found in shopping centres, theatre lobbies, airport terminals or conservatories.

## Smoke and heat exhaust ventilation systems (RWA)

The Gretsch-Unitas Group offers state-of-the-art smoke and heat exhaust ventilation systems powered by electric motors for all kinds of natural smoke extraction (NRA) applications: from smoke evacuation in staircases to complex smoke and heat exhaust ventilation systems associated with major projects and SHEV system solutions with tested and certified components for timber profiles and euro groove aluminium profiles from major systems providers in all common opening types. With the GU range of spindle drives, chain drives, locking drives and combined opening and locking systems, there is a hardware solution for any individual application.

Technical data						
Chain/spindle drives ELTRAL 230 V AC	K25	KS 30/40	K30	K60	S80	Z45
Pull/push force in N	250	300	300	600	800	450
Current consumption in A	0.2	0.12	0.16	0.2	0.12	0.25
Opening width (travel) in mm	200 up to 400	variable adjustment	variable adjustment	250 400	300 up to 750	230 to 550
Protection type	IP 32	IP 30	IP 32	IP 32	IP 54	IP 44
Dimensions in mm W x H x D	L x 26 x 41	386 x 38 x 58	456 x 43 x 60	L x 40 x 56	(travel + 190) x 43x76	L x 54 x 115

Technical data							
Chain/spindle drives ELTRAL 24 V AC	K25	KS 30/40	K30	K35	K60	S80	Z45
Pull/push force in N	250	300	300	350	600	800	450
Current consumption in A	0,8	0,9	0,9	0,9	0,8	1,0	0,25
Opening width (travel) in mm	200 up to 800	variable adjustment	variable adjustment	variable adjustment	200 600	300 up to 1000	300 up to 1000
Protection type	IP 32	IP 30	IP 32	IP 32	IP 32	IP 65	IP 65
Dimensions in mm W x H x D	L x 26 x 41	386 x 38 x 58	456 x 43 x 60	L x 35 x 35	L x 40 x 56	(travel + 342) x 36	(travel + 342) x 36



Coordinated design lines for the entire building



Tailor-made solutions for any installation situation

## Hardware for doors, handles for windows and sliding units

The hardware solutions and lever handle series from the GU Group make it possible to maintain a consistent design throughout a building for both windows and doors – from standard hardware and burglar inhibition versions through to versions for glass doors, fire protection and smoke protection doors, and escape doors.

The hardware range offers a broad spectrum of hardware for timber and steel doors as well as aluminium and PVC narrow stile doors. The series also extends to hardware for large-format slide elements such as, e.g., Tilt&Slide and Lift&Slide elements and to hardware for all-glass doors and escape doors to EN 179 and panic doors to EN 1125.

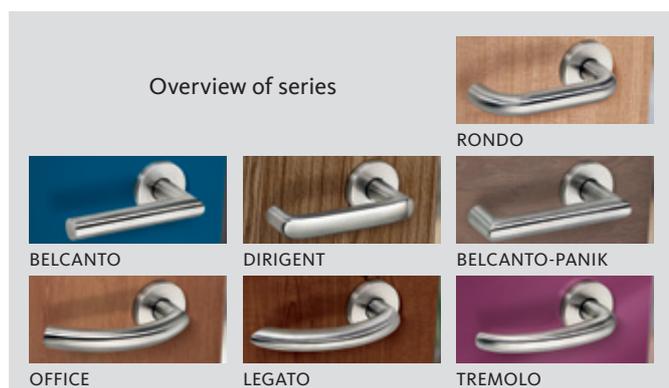
The option to combine the various lever handles and backplate types allows plenty of scope for customisation. Hardware for project doors includes a maintenance-free lever handle bearing (WDL), and all of these satisfy the user category 4 criteria in accordance with EN 1906.

## Thresholds for doors, windows and Lift&Slide units

A wide range of thresholds for Lift&Slide units, balcony-doors and house entrance doors made of timber and PVC and with CE certification in accordance with EN 14351-1 ensure energy efficiency, a high level of stability and problem-free adaptation to individual installation situations.

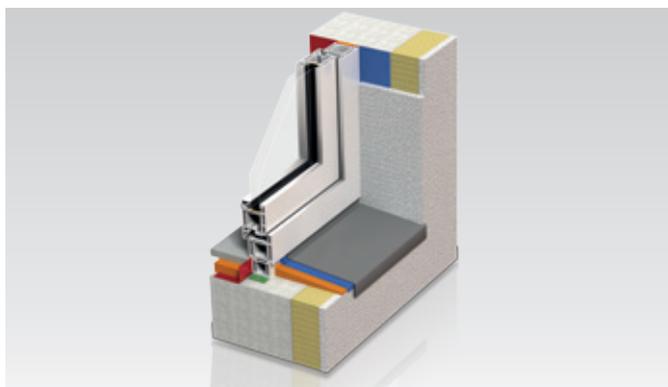
The needs of the fabricator inform ongoing technical development with a view to making Gretsch-Unitas products easy, quick and safe to put together. The GU-thermostep 204 threshold for Lift&Slide units represents a kind of made-to-measure prefabrication service for fabricators. It is possible to choose the level of prefabrication required.

A comprehensive range of accessories and standard installation heights make simple installation in new buildings and renovation projects possible. Almost all of our system solutions are suitable for "barrier-free living" in accordance with DIN 18040.



### Technical data

Threshold	Lift&Slide units	Balcony doors	House entrance doors	Height
GU-thermostep 164	■			67 mm
GU-thermostep 204	■			68 mm
GU-threshold 47	■			47 mm
GU-flatstep 164	■			22 mm
GU-flatstep 222	■			24 mm
GU-timberstep 164	■			22 mm
GU-timberstep 204	■			22 mm
GU system threshold		■	■	20 mm
DKS threshold		■		20 mm
HTS threshold			■	20 mm



Sealing systems, building chemicals, glazing technology:  
all from a single source

## Construction accessories

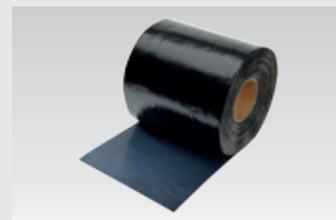
Professional installation significantly influences the usability of windows and doors over a reasonable usage period. Continued development of structural engineering, in particular as regards building air tightness by reducing unplanned infiltration heat loss, requires air-tight window attachment. General requirements for the installation of windows should be derived from energy conservation regulations (in Germany, the Energieeinsparverordnung, EnEV) among other things. In order to keep the indoor environment completely separate from that outdoors, the internal seal must be air-tight.

In contrast, the external seal must allow transmission of water vapour but include protection against driving rain. To ensure that all relevant features, standards and regulations are included in planning right from the start, everyone involved in the build – from designers (architects) to executors (workmen), right up to the client – should work as a team for the success of the building project and only use mutually compatible product systems which comply with the standards. The Gretsche-Unitas Group offers exactly that: a range of accessory products covering every requirement in the professional installation of windows and doors – and all from a single source.

## GU product range for new-build and renovation work

### Sealing systems

- Weathering protection
- For heat and sound purposes
- Separating indoor and outdoor environment
- Construction-foil adhesive and sealants



### Building chemicals

- Sealing compounds and smoothing agents
- PVC adhesives and PVC cleaners
- Aluminium cleaners and aluminium adhesives
- Maintenance sets



### Glazing accessories

- GU filler tapes
- GU glazing packers
- GU glazing packers with vent
- GU compensating blocks
- GU glazing paddle



### Window and door seals

Sash rebate seals with wire, without wire or for welding; frame, overlap, faceplate, glazing, renovation and tube seals



### GU frame for projecting installation

- Approved for use in passive houses
- Load-bearing capacity of up to approx. 500 kg
- High sound insulation
- RC 2 tested according to EN 1627



### GU installation bracket and retaining angle

- Secure load transfer, tested as ifft system to 250 kg
- Ideal connection for composite thermal insulation system
- RC 2 tested according to EN 1627



# Door technology

The door as a convenient access zone



# Door technology

The door as a convenient access zone



One lock series with one lock case for any door requirement



GU-SECURITY Automatic: reassurance with the door just pulled shut

## Secure mechanics and convenient mechatronics!

The GU Group offers convenient and secure door functions on timber, steel, aluminium, PVC or glass doors. The technology used is sophisticated, from the simple mortise lock in accordance with DIN 18251 class 1 to the panic lock for escape doors in accordance with EN 179/EN 1125. Performance features such as burglar inhibition, fire protection and escape door suitability as well as possible integration in access control systems enable you to use BKS mortise locks for doors in many areas.

### Manual-locking locking systems

- Room door locks, project and heavy-duty locks for internal doors
- Escape door locks in accordance with EN 179/EN 1125 for use in 1- and 2-leaf narrow stile, PVC, timber and steel doors
- Locks for fire and smoke protection doors and burglar inhibition doors
- Miscellaneous locks such as radius bolt or hook bolt locks for sliding, side entrance or double-action swing doors

### Self-locking locking systems

- Escape door locks in accordance with EN 179/EN 1125 for use in 1- and 2-leaf narrow stile, PVC, timber and steel doors
- Electrically-locking panic locks (EVP)
- Mechatronic locks such as electrically coupled locks or motor-driven locks (e.g. for access control or barrier-free designs or in conjunction with swing-door drives)
- Radio battery locks: battery-operated, electrically coupled panic locks for 1- and 2-leaf timber and steel doors

## Multi-point locks

Main entrance and facade doors present special challenges with regard to burglar resistance, fire protection, impermeability and accessibility. GU multi-point locks meet these challenges perfectly: additional locking elements at the top and bottom of the door as well as individual solutions for many installation situations – from the manual version to the self-locking central locking system with panic function.

Security for timber, PVC, aluminium and steel doors: with large and small backsets in all standard lock faceplate variants, with customised lever handle height for the slim profiles of aluminium or PVC doors, with continuous one-piece strikers in the frame and multi-point locks with fire-retardant characteristics – you can find a secure solution that fits your needs.

### Manual-locking locking systems

- SECURITY key-operated locks and SECURITY EUROPA lever-operated locks with
  - Massive bolt ('MR')
  - Hook bolt ('SH')
  - Double bolt ('DR')
  - Mushroom and roller cams

### Self-locking locking systems

- SECURITY Automatic self-locking locks with
  - Automatic latchbolt
  - Automatic double latchbolt
  - Automatic pin bolt
  - Automatic with panic function
  - A-opener as an option



Standard dimensions for all door locking systems and one-piece strikers



GU house entrance door concept: safe, comfortable and flexible

## GU-SECURITY system technology

Nowadays, door fabricators must be flexible in order to satisfy the wide range of customer requirements. In view of the security and convenience requirements as well as the design constraints and associated variation in door heights that presently exist, particularly specialised demands must be met. This is why Gretsch-Unitas has developed GU-SECURITY system technology – a particularly efficient modular system which also enables very high doors to be fitted with GU locking systems from the standard range. At the heart of GU-SECURITY system technology is a faceplate length concept based on a standardised faceplate length of 1750 mm. The extension elements make it possible to adapt the lock system for house entrance doors, using a modular approach, to the high security level associated with Gretsch-Unitas and to suit the specific requirements associated with the respective entrance situation.

- Flexible usage associated with standard, convenient and panic versions of SECURITY products – locking points are in the same position, which means the milling position is the same regardless of the lock type
- Standardised faceplate length of 1750 mm for multi-point locks and one-piece strikers
- Modular faceplate and one-piece striker extensions with additional locking for door heights above 2500 mm
- Suitable for timber, PVC and metal door systems

## GU-SECURITY Automatic access controlled – the GU house entrance door concept

The modular system offers outstanding flexibility and consists of installer-friendly complete sets. The complete system can be assembled in the workshop and tested as an assembly group. The GU-SECURITY Automatic multi-point lock means the door is automatically locked at all times. Convenient access is assured with fingerprint recognition or individual access code. The set includes a finger scanner and is VdS-certified as grade A and B locking system.

### Components of the VdS-approved house entrance door package

- 1 GU-SECURITY Automatic or GU-SECURITY Automatic6 with A-opener kit, each
- 2 Wireless power and data transmission with SECUREconnect 200
- 3 Control via fingerprint scanner (Idencom)

Required standard components (not included in the scope of delivery)

- I VdS-approved security hardware, minimum ES 1/ES 2 (e.g. BKS RONDO ES 3 security hardware)
- II VdS-approved locking cylinder (e.g. BKS janus reversible key system)

# Door technology

The door as a convenient access zone



Electric door strike series no. 6: compact, flexible, powerful



The new OTS 73x series: 1 slide rail, 1 slide arm, 1 axle extension and 1 mounting plate for all application and installation types

## Electric strikes

The electric door strike series no. 6 offers the right solution for any door profile, be it the fail-secure version with or without high-preload controller or the fail-safe version. It is also available with a latch slide cover for concealed installation. For use on fire and smoke protection doors, there is a fire-rated FH version. The melting point of the material used to manufacture the mechanical components is over 1000°C.

- Non-handed (DIN lh and DIN rh usable) due to the symmetrical design
- Small and compact size
- Adjustable radius keeper: 3 mm in 4 steps
- Twin coil design for a wide operating voltage range
- Connectable with electronic control units thanks to pole-reversal-proof spike protection with bipolar TVS diode (EMC protection)
- Whole range of requirements (aluminium, PVC and timber profiles) covered with just a few variants

## Door closers

An extensive selection of face-fixed and concealed overhead and floor-level door closers ensures there are solutions for barrier-free designs and hold-open systems for 1- and 2-leaf doors – even as part of more challenging building concepts. The new generation of OTS 73x series door closers is making an impact as an innovative modular system with very small dimensions, discreet design features and convenience of access.

Technical data	
Breaking resistance	3500 N
Operating temperature	-20°C to +50°C
Endurance rating	250,000
Door handing	DIN left/DIN right
Installation position	vertical/horizontal
Contact version	with contact to latch monitoring
Dimensions in mm (with contact) H x W x D	64.5 x 15.8 x 25.8

Technical data			
Door closer type	Version or max. door weight in kg	Closing force size in accordance with DIN EN 1154	For fire doors and smoke protection doors
<b>Overhead door closers</b>			
OTS 736	with slide rail	3 – 6	<b>F</b>
OTS 735	with slide rail	2 – 5	<b>F</b>
OTS 733	with slide rail	3	<b>F</b>
OTS 536	with scissor-action arm	2 – 6	<b>F</b>
OTS 430	with scissor-action arm	2 – 5	<b>F</b>
OTS 210	with scissor-action arm	2/3/4	–
OTS 140	with scissor-action arm	2/3/4	–
OTS 130	with scissor-action arm	2/3/4	<b>F</b>
<b>Concealed overhead door closer</b>			
VTS 735	with slide rail	3 – 5	<b>F</b>
<b>Floor springs</b>			
UTS 60	170	4	–
UTS 50	120	3	–
UTS 42	120	1 – 4	–
UTS 840	120	3/4	–
<b>Rebate door closers</b>			
20	35 – 80	1 – 2	–
24	50 – 140	2 – 3	–



janus reversible key system

## Mechanical locking systems

BKS locking systems offer individual and tailor-made solutions and are manufactured in accordance with the highest quality standards. You may wish to integrate high-quality mechanical security technology into your home with a registered key bitting or equip your multiple-dwelling building or company premises with a master key system – whatever the case, BKS locking cylinders are the right choice, and not just in terms of security. State-of-the-art locking systems with different levels of equipment and functionality, as well as numerous patents and certificates, speak volumes for the innovation of BKS products. All systems feature lock bumping protection as standard and can be fitted with certified drill and pick protection elements as an option. They therefore give you flexible design options, also when installing retrospectively in existing buildings.

- Tested in accordance with EN 1303 and DIN 18252
- Conventional locking systems such as detect3 with paracentric key profile
- janus, livius and helius reversible key systems for exceptional convenience
- Coded single key bitting in the normal profile
- Registered key bitting with security card
- Patent-protected cylinder systems
- Locking cylinder with modular design



The SE electronic locking system – the flexible master key system for every application

## SE electronic locking system

Electronic locking systems are extremely economic to run when combined with mechanical and mechatronic master key systems. They offer the convenience and flexibility of networked access control, with no wiring of doors required. The SE electronic locking system offers convenient solutions in terms of flexibility, altering amended access rights and security measures like secure encryption and easy blocking of lost keys. The modular security system satisfies any access requirement in any project situation – including in combination with mechanical master key systems if required. The focus is on simplicity and clear operating logic with only one medium. New or modified access rights can be flexibly adapted at any time during operation.

- Particularly low energy consumption of the products: up to 600,000 locking cycles or up to 10 years standby/stand-by battery
- Certified highest security (BZ VdS approval, explosion protection, etc.)
- Flexible system versions
  - Offline (with programming device)
  - Online (via radio control, 868 MHz)
  - Data on transponder (virtual network)
- Transponders can be combined with mechanical keys
- Intuitive software operation (KeyManager) for administration and programming of master key systems
- Satisfies the highest security classes of EN 15684, the standard for mechatronic locking cylinders

# Door technology

The door as a convenient access zone



Holistic system solutions for securing escape from a building



GEMOS access: intelligent solutions for building access control

## Escape door system solutions

You can combine GU Group products for perfectly integrated system solutions that guarantee a safe escape route in compliance with EltVTR (German directive for electrical locking systems on escape route doors) or DIN EN 13637. Effective protection against unauthorised door use and safe opening in an emergency are no longer mutually exclusive.

### Escape door monitoring

The compact BÜ10 approach area monitoring device can be mounted over the door without structural modification. It monitors a flexibly adjustable area in front of the door and sets off an alarm before someone opens the door.

### Escape door control systems

The combination of an EVP lock and the FTNT10/20 escape door control system with its innovative signaling concept offers ideal escape door protection. Whether for single doors or networked systems – the GU Group offers a solution for every application.

### Escape door locking elements

In addition to separate electric locking elements for panic locks on doors, the GU Group also offers products with integrated locking elements:

- The electrically locking panic lock (EVP)
- The electrically locking touch bar (EVT)

- Effective protection of doors
- System solutions with reduced number of system components
- Automatic configuration
- Simple installation
- Innovative signalling concept with clear symbols
- Modern locking elements
- Extensive accessories
- Integrated BKS-NET interface

## Access control systems

GEMOS access, the access control system for small, medium-sized and large projects and applications. Possible uses range from an offline access control system for small applications with 3 doors to premises with thousands of employees. GEMOS access spans different technical trades involved in the security – on and around the door – on a door. This means access control, escape door control and monitoring systems are combined on the door itself. The open interface architecture enables the connection of many customary card readers – independently of the reading technique. Clear menu structures, predefined settings for typical applications as well as hardware recognition assistants allow for fast and therefore economic handling both during installation and operation.

Performance features:

- Management of user groups with authorisation and time profiles
- Timed anti-passback
- Four-eyes principle (multiple person presence check)
- Parking space or other reporting system
- Connection with external systems for extended authorisation checks
- Multi-door sluice system and lift management
- Up to 1,000,000 users (authorised access)
- Up to 1,000,000 identification cards
- Up to 10 identification cards per user
- Up to 10,000 user groups
- Up to 10,000 reader groups or room zones
- Up to 20,000 readers
- Up to 1,000 time frames, including per user
- Up to 4 time intervals per day

# Automatic entrance systems

Transparent convenience for entrance solutions



# Automatic entrance systems

Transparent convenience for entrance solutions



compactMaster CM in-line sliding door: slender and technically flawless



For entrances that are sure to make an impression: revolving doors

## Automatic sliding doors

Automatic sliding doors are easy and convenient to pass through, meaning they are scarcely noticed by those using the building. They provide a modern entrance solution for public buildings, airports, train stations, shopping centres, banks, hospitals, retirement homes and homes for the disabled. The -F version of the series is tested and certified for use in escape and rescue routes.

The compactMaster CM in-line sliding door combines improved performance with a really compact design. With a "genuine" installation height of just 100 mm, the drive takes up all the top leaf profile and can be discreetly integrated into the demanding architecture of glass facades.

The HM-F FT type-tested escape route sliding door guarantees a secure escape route, even when locked – an excellent solution from the range of automatic sliding doors, which offers a harmonious combination of barrier freedom, functionality and great looks in accordance with the relevant directives.

### Product overview

- compactMaster CM and CM-F in-line sliding door: combining slim design with elegant looks
- econoMaster EM/EM-F in-line sliding door: reliable and economical, for almost all applications
- heavyMaster HM/HM-F in-line sliding door: the solution for heavier sliding panels
- HM-F FT escape route sliding door: guaranteed escape route even when door is locked
- EMT/EMT-F telescoping sliding door: for maximum passage widths in minimum space
- CMR/CMR-F curved sliding door: rounded out – sliding door with a revolving appearance
- CMW/CMW-F prismatic sliding door: entrance doors adapted to the building architecture

## Revolving doors and single-person access control systems

Revolving doors are used wherever impressive entrances are needed. They are primarily used to provide public buildings, hotels, banks, insurance offices or airports with a striking entrance. Both the GRA-F standard revolving door and the GGR all-glass revolving door are tested and suitable for use in escape and rescue routes; any relevant national regulations must also be observed. The fixing of the leaf is released when triggered by the fire alarm system, power failure or actuation of the emergency switch on the revolving door: the leaves can then be folded back.

Security revolving doors and security curved sliding doors are used for entrances that require extra security. In particular, they provide banks, insurance offices, government ministry buildings, authorities, data centres, industrial plants or office buildings with extra security and convenience.

### Product overview

- GRA and GRA-F standard revolving door: individual solutions come as standard
- GGG all-glass revolving door: perfect integration of the entrance area into glass facades
- GGR large-capacity revolving door: comfortable entry, even in high-traffic areas
- GSI security revolving door: secure access control and fast access
- GSI security curved sliding door: single-person access control and transparency



Barrier-free passage with standard or fire protection doors



All-glass sliding panels: modular system with maximum functionality

## Automatic swing-door drives

The swing-door drives from the DTR series offer modern and barrier-free entrance solutions in public buildings. They ensure secure closure yet allow comfortable access via the radar motion sensor, push-button or access control system. Entrance doors in the facade can also make use of the benefits of the swing-door drive: when combined with multi-point locking, burglar protection and escape route safety are equally possible as well as barrier freedom. Running extremely quietly, the DTR/DTR B drives are suitable for installation in noise-sensitive areas. The drives are type-tested by TÜV and certified to DIN 18650/EN 16005. The DTR B version is approved by DIBt for use on fire protection doors.

## All-glass sliding panels

Elegant appearance, flexible in terms of use of space and minimal space requirements: the benefits of glass sliding panels are most evident in public areas. As partition walls, the glass sliding panel systems from the GU Group offer modern solutions that combine barrier freedom with a high level of versatility.

### shopMaster GSW-M manual all-glass sliding panel system

As a partition wall or facade concept for shop-in-shop constructions, the shopMaster GSW-M manual all-glass sliding panel system offers diverse and individual solutions for almost any floor plan. The glass panels can be flexibly arranged in a variety of ways by hand, a floor guide is not needed. Passages can be created by combining, for example, a side-hung end panel with door locks from the PRIME OFFICE series.

### shopMaster GSW-A automatic all-glass sliding panel system

The shopMaster GSW-A automatic all-glass sliding panel system is really convenient to use. The integrated obstacle recognition function provides the required level of security for variable sash clearances of up to 1500 mm. Panels can be easily moved manually if needed. The roller tracks and parking niches require only the bare minimum of space thanks to compact design. All systems offer the latest in bogie technology and their PVC-coated, ball-bearing-supported rollers ensure reliable long-term performance. The panels (with a maximum size of 3500 x 1250 mm) can be installed with a weight of up to 150 kg.

### Technical data

Hardware version	DTR swing-door drive	DTR B swing-door drive
<b>Timber, PVC or metal</b>		
1-leaf	■	■
2-leaf	■	■
For fire and smoke protection doors		■
Push-open version with scissor-action arm or slide rail	■	■
Pull-open version with slide rail	■	■
Opening	electromechanical	
Closing	electromechanical and with spring force	
Hold-open time, adjustable (in seconds)	60	
Door leaf weight (in kg)	200 (for a leaf width of 1000 mm)	
Protection type	IP 20	

# Physical security information management systems (PSIM)

Where it all comes together



Person photo: Cultura collection / Getty Images

GEMOS is a range of products comprising software, hardware, accessories and services. A software-based graphical management platform, GEMOS helps protect against all kinds of risks from both a technical and organisational perspective. Security is the main consideration, but the instrumentation must favour consistent implementation by the employees responsible during daily use and ensure operation is simple, logical and intuitive. GEMOS achieves this via cross-system interaction and logical connections between security-related equipment such as:

- Lift shafts
- Fire alarm systems
- Intrusion and attack alarms
- Electrotechnical equipment (lights, sockets via KNX/EIB)
- Electroacoustic equipment
- Electronic master key systems
- Escape route management systems
- Communications and telephone systems
- Media systems (audio, video, etc.)
- Personal emergency response systems
- Video systems
- Intercoms
- Access control and sluice-door systems

- GEMOS is the leading physical security information management system (PSIM) in the German market with over 700 different manufacturer-neutral interfaces and over 1000 installations
- GEMOS is manufacturer-neutral, i.e. integration of systems from different manufacturers is possible
- The web-based interface makes it possible to design customised user interfaces in accordance with customer needs
- Superior availability thanks to various redundancy concepts (network, server, database, etc.)
- Special solutions for different sectors such as multifunctional sports arenas, penal facilities or data centres
- With CAD direct import, it is possible to save floor plans directly in the structural drawing format, which is often available, and then use these as a helpful guide
- High scalability thanks to flexible licence models, divided into three levels of light, standard and professional
- Software, hardware, and licences with modular system design



## ■ Production

### Germany:

Gretsch-Unitas GmbH  
Baubeschläge

BKS GmbH

GU Automatic GmbH

ela-soft GmbH

### France:

FERCO International S.A.S.

### Slovakia:

GU Slovensko S.R.O.

## ■ Sales – worldwide

Albania	Costa Rica	Iran	Myanmar	Slovenia
Argentina	Croatia	Iraq	Netherlands	Spain
Australia	Cyprus	Ireland	Nicaragua	Sri Lanka
Austria	Czech Republic	Italy	Norway	Sweden
Bahrain	Denmark	Japan	Oman	Switzerland
Belarus	East Timor	Kazakhstan	Pakistan	Thailand
Belgium	Ecuador	Korea	Panama	Turkey
Belize	El Salvador	Kosovo	Paraguay	Ukraine
Bolivia	Estonia	Kuwait	Peru	Uruguay
Bosnia- Herzegovina	Finland	Laos	Philippines	USA
Brazil	France	Latvia	Poland	United Arab Emirates
Brunei	Germany	Libya	Portugal	Venezuela
Bulgaria	Great Britain	Lithuania	Qatar	Vietnam
Cambodia	Greece	Luxembourg	Romania	Yemen
Canada	Guatemala	Macedonia	Russia	
Chile	Honduras	Malaysia	Saudi Arabia	
China	Hungary	Mexico	Serbia	
Columbia	India	Moldova	Singapore	
	Indonesia	Montenegro	Slovakia	

# The GU pledge

Tested safety

## Quality: successfully certified



ISO 9001 defines a company's structural, operational and quality management requirements.

In 1995, the AGQS e.V. accreditation association certified Gretsch-Unitas GmbH Baubeschlage's successful implementation of a quality control system in compliance with ISO 9001. The manufacture of high-quality products is a top priority for the corporate group. The certification programme also confirms that the internal company processes – from development right through to sales and customer service – coincide with this concern.

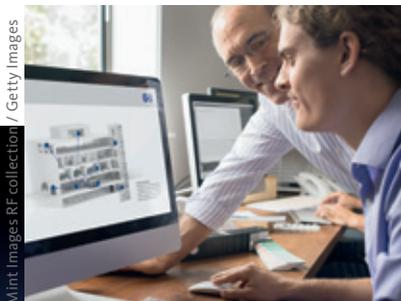
## Successfully tested RC approval for our customers:

The Gretsch-Unitas Group has had its 1- and 2-sashed Tilt&Turn windows, 1-sashed special designs such as round-arch and pitched windows, 1- and 2-sashed Tilt&Slide and Lift&Slide units and its fanlight openers tested at ift Rosenheim, with all being awarded resistance class RC 2 in accordance with EN 1627.

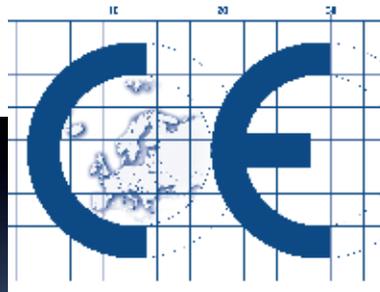
We now offer you the service of using this test documentation without having to carry out the tests yourself. The only requirement is your participation in a 1-day, fee-based training seminar at our headquarters in Ditzingen. This training course authorises you to manufacture burglar-inhibiting units and distribute windows and balcony-doors tested to EN 1627 RC 2. You will receive a licence agreement, a certificate and the system folder "Burglar-inhibiting windows and balcony doors in accordance with EN 1627-1630". These documents enable you to manufacture window systems that meet the European standard for burglar-inhibiting components.

Our modular system provides you with all common window systems, opening types and glazing systems as well as installation systems without having to significantly deviate from your own standard systems.

Additional information can be found at: [www.g-u.com](http://www.g-u.com)



Advice right from the planning stage



System supplier for CE and RC2



Security through quality manufacturing

More than 100 years of experience

Worldwide presence

System solutions in the project

## System supplier for CE certification

The Gretsch-Unitas Group commissioned the German test institute for construction elements, PFB Rosenheim, to perform Initial Type Testing (ITT) on timber windows and balcony-doors in accordance with the EN 14351-1 product standard.

Since February 2010, only CE-marked windows and balcony-doors may be placed on the market. As a system supplier, we are happy to transfer the right to use our test results to you in accordance with ITT cascading procedures. This procedure enables you to CE mark your windows and balcony-doors in accordance with the EN 14351-1 product standard without having to test your own units.

We support you in implementing your Factory Production Control system (FPC), and instruct you in CE marking and Declaration of Performance with a 1-day, fee-based training session at our headquarters in Ditzingen. All participating companies have the opportunity to acquire the licence upon completing the training session. This licence contains the system folder "CE marking for windows and balcony-doors made of timber", including test reports and calculation tools to help you manufacture window systems (and make the relevant declarations) in accordance with the EN 14351-1 product standard.

## Electronic ordering systems

### Planning – ordering – information – administration

Online order processing guarantees errorless data transmission, less scheduling/planning, shorter procurement periods and current prices and terms **around the clock, 7 days a week.**

#### Customer Information System (CIS)

Ordering and customer information system for all articles with specified article numbers.

■ Contact: [cis@g-u.de](mailto:cis@g-u.de)

#### confiGurator

Product finder for finding, quoting and ordering hardware sets and part lists.

■ Contact: [configurator@g-u.de](mailto:configurator@g-u.de)

#### Obs – Order by Scanning

Barcode scanner ordering system for production, warehouse and/or administration to record material order requirements by scanning barcode labels.

■ Contact: [transfermanager@g-u.de](mailto:transfermanager@g-u.de)

#### MasterKeySystem (MKS)

Planning and ordering system for master key systems and registered key bittings with mechanical, mechatronic and electronic locking cylinders.

■ Contact: [mks@bks.de](mailto:mks@bks.de)



Future-proof with patent protection



Logistics – just-in-time wherever you are



Guarantee and aftersales service

Special solutions development

Modular system technology

Products in stock around the globe

## Exclusion of liability

The information provided in this publication consists of product descriptions. This is general information based on our experience and tests and therefore does not take any specific application into account. No claims for compensation can be made on the basis of the product descriptions.

Although we have made every attempt to ensure the information provided here is accurate, it is non-binding. It should be adapted to the respective construction projects, usage and specific on-site demands.

The publication has been compiled to the best of our knowledge. The Gretsch-Unitas Group accepts no liability for any errors. The document is subject to modifications during the course of technical developments.

The product images shown in the publication may differ from the actual product.

## 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.

## Image credits

Page 1	Photo revolving doors: © EYE-SCREAM / photographer Hansjörg Riedel
Page 2	With kind permission of: kab gmbh, Fellbach
Page 3	Photo revolving doors: © EYE-SCREAM / photographer Hansjörg Riedel
Page 8	Photo on left: photographer Oliver Schuster, Stuttgart / baukunst philipphaus GmbH
Page 10	Photos, provided courtesy of: aumüller aumatic gmbh, Augsburg
Page 18	Photo on right, provided courtesy of: Vogt+Partner GbR, Hildesheim
Page 19	Photo © EYE-SCREAM / photographer Hansjörg Riedel
Page 20	Photo © EYE-SCREAM / photographer Hansjörg Riedel
Page 21	Photo on right: © EYE-SCREAM / photographer Hansjörg Riedel
Page 22	Person photo: Students watching screens in forensics training facility provided courtesy of Cultura collection / Getty Images
Page 24	Architects discussing a green construction project, designing and building efficient environmentally friendly buildings. Green architectural practice, provided courtesy of Mint Images RF collection / Getty Images
Page 25	With kind permission of: kab gmbh, Fellbach

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





WINDOW TECHNOLOGY  
DOOR TECHNOLOGY  
AUTOMATIC ENTRANCE SYSTEMS  
BUILDING MANAGEMENT SYSTEMS

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 01-77980

BKS GmbH  
Heidestr. 71  
D-42549 Velbert  
Tel. + 49 (0) 20 51 2 01-0  
Fax + 49 (0) 20 51 2 01-9733

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

Securing technology for you

