

## Architect brochure

### *KSD-solar-diode-window™*



## The solar window with the right spin...

a further innovative product of the inventor of

- heatable vehicle rear window
- autoglazing without frame
- sun protection glazing
- and much more



## Types

### **TopThermPlus - wood-aluminium-windows**

- Outside aluminium damming bowl with highly compressed insulating core
- Inside natural living with high-quality timber frame
- Profile from substantial wood with enclosing groove seal and covered-lying wing seal
- Window with in the wing arranged rotary wing, as so-called KSD-solar-diode-window™
- Sealing reciprocally with silicone
- Seal (black) in the wing and window frame as well as doubled hose seal in the KSD rotary wing (transparency)

or:

### **Classic Line - wooden window**

- Wooden window as above described (TopThermPlus), however outside substantial wooden shell

## Wood

- *Standard:* Meranti or pine (3-layer glued)
- *Special variant:* Oak, Oregon Pine (Douglas fir) and Larch (price on request)
- These wood is suitable for the climate in Central Europe (see DIN 68 800 part 2 and 3)  
If you want to use the KSD window in other regions, in your own interest please clarify before the there applicable wood, and/or ask us.

## Fitting

- *Standard:* ROTO NT - turning/tilting - fitting system (covered lying)
- Colour: silver



### **Easily tilted, turned, & locked.**

"Tilt & Turn" is the by far the most commonly used opening type for windows in Central and Eastern Europe. However, this convenient solution is also very popular in many other countries. Tilt & Turn-technology enables effortless turning and tilting of the window sash with a single handle operation. ROTO NT is one of the most successful Tilt & Turn hardware systems worldwide.



### **ROTO NT - increased value for all window shapes and sizes.**

In the ROTO NT system, all integral hardware components are integrated via a central locking system. The system already offers a high level of security in the basic version. This can be operated very conveniently and enables simple integration of mechanical and electronic components, for example for burglar alarms, thermostat and ventilation control systems. The elegant silver appearance makes ROTO NT unmistakable.

## Mass

- Window / Door breadths: max. 1300 mm (starting from 1301-1400 on request)
- Windows / Doors several wings: max. wing breadths 1300 mm
- Window / Door height: max. 2500 mm (starting from 2501 on request)
- Windows several wings: Selection of firmly post or Stulp (post is fastened to the window/door):  
Selection:
  - with firmly post (in the middle)
  - or with movable (also removable) post (additional price)
  - Stulp soon (on request)
- Terrace doors:
  - barrier 185 mm
  - barrier free treshold system see under **Alumat**
  - **in planning** barrier 50 mm till 105 mm (depending upon installation depth)
- Terrace doors several wings: a combination between barrier and Alumat is not possible
- Different wing sizes (e.g.. 2/3 / 1/3): no additional price

## Special forms

**Round and semicircular windows can be made only in the following types:**

- Type Classic Line
- Type IV 68 (only on request)
- **Note:** only selectable in summer or winter position (no turning wing possible)

**Triangle windows can be made only in the following types:**

- Type TopThermPlus
- Type Classic Line
- Type IV 68 (only on request)
- **Note:** only selectable in summer or winter position (no turning wing possible)

**Further special forms on request**

## Folding door

- Only in type Classic Line
- Price on request



## Sliding windows / doors

- Only selectable in summer or winter position
- We do not offer sliding doors with turning wing!

## Skylights

- Offering not yet
- In Planning: skylights in winter position with sun protection device

## Rain protection bar

- Rain protection bar with cover
- Colours: silver or white

## Window sill connection

- Inside and outside (type to clarify for each order)



## Glazing

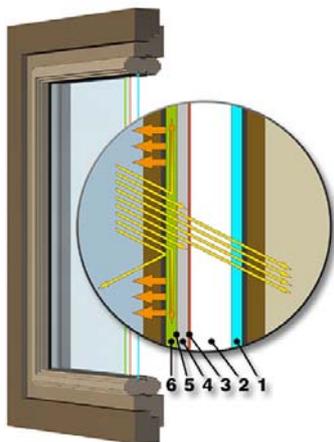
- Patented structure of special glass KSD therm 1.1  
CPT 8 mm / LZR 16 / Float 4 mm (pane strength altogether 28 mm)
- Inserted after the glazing guidelines
- Improved edge of glass (so-called "warm edge")
- Compound plate technology
- Sound absorption: 39 dB

### Patterned glass:

- For KSD-window™ with patterned panes we cannot guarantee the physical values, since the cool and heating effect is reduced..

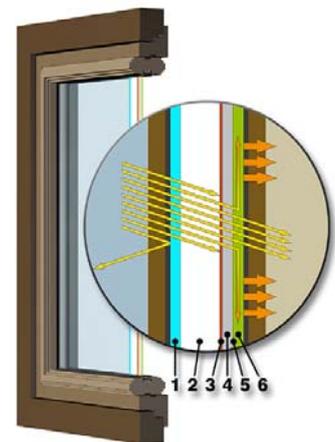
### The functional elements

#### The summer position:

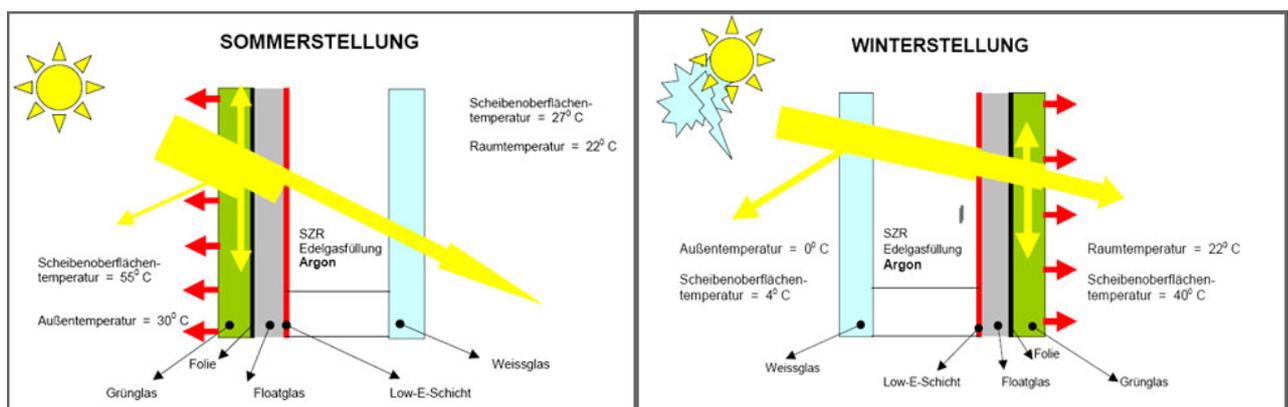


- 1: White glass
- 2: SZR with argon filling
- 3: Low - E - layer
- 4: Floatglass
- 5: Foil
- 6: Green glass

#### The winter position:



### Possible pane temperature (example):



### Result:

Today usual special glasses and windows function – **however in each case only in one direction !**

- Passive windows/glasses isolate satisfying, permit however no sufficient solar profit.
- Solar sun protection panes/windows hold the house/building in the summer coolly, unfortunately in addition, in the winter. Therefore none, and/or not sufficient heat gain is possible, exact in the season in which warmth is necessary.

### The solution:

**KSD-window™** perfectly for each season

- **Cooling in summer** PLUS free and pollution free solar **heat gains in winter** -



## Data & facts – values of insulating glazing with 3 panes

Possible pane temperature (°C) example

Value of light transmission	0,70	U- value frame	0,62
Ug- value glass	1,10	Uw- value whole window	0,92
		(size 1 x 1 m, 35 mms of insulating bowl)	

air temperature	winter position		summer position	
	To = 0°	Ti = 20°	To = 21°	Ti = 20°
solar irradiation (W/m²)	outside pane	inside pane	outside pane	inside pane
0	1,3	16,3	20,9	20,2
*1 100	2,2	21,3	23,7	20,9
300	3,3	29,7	29,0	22,2
500	4,6	37,0	37,0	23,5
700	5,9	43,8	39,4	25,0

To = temperature outside, Ti = temperature inside

(\*1) example

Even 100 W of solar irradiation in winter (of cloudy skies) and an outside temperature of 0 ° C means the inside pane heats up to more than 21 ° C (=> ambient temperature). There is created a so-called " thermal barrier " (without help of heaters!) >>> no energy loss due to the glass!

**U eff = +/- 0,0 W/m² K !**

## Technical details

	double pane windows 3.0	energy saving windows 1.4	passive windows 0.7 - 0.9	KSD- windows™
colour neutrality	very well	well	adequate	well
sound absorption	30 dB	32 dB	32 - 34 dB	39 dB
security / burglary protection	no	no	no	yes
U- value with 100 W/m²	3.0	1.4	0.8	0.0
inside pane - temperature (temperature outside 0 °C)	12,2 °C	16,4 °C	17,1 °C	see table above*
thermal transmission coefficient [g]	67 %	58 %	48 %	summer 39 % winter 69 %

## Window handle

- Standard: brand Hoppe Secustik®  
Type Atlanta: Aluminium Nature / Aluminium Steel / Traffic white  
To product description Hoppe Secustik® see also enclosure 1
- Prices for further figuration and colours on request



*10 years warranty of function  
of all HOPPE  
door and window handle.*

**Secustik®** - The Handle of Excellence with **built-in security** you can hear



About a third of break-ins every year are made through the window. A popular way of breaking-in is by moving the window handle into the opening position from outside, whereupon the uninvited guest is able to make his way in!

HOPPE puts a bar in his way:  
Secustik® window handles offer an effective basic security at an attractive price.

A patented blocking mechanism in the Secustik® handle impedes tampering of the window handle from outside. It's the clearly audible precision clicking, similar to that of a safe-lock, when the handle is turned, that tells you of the security function. The clicking, therefore, is the audible reminder of increased security, giving you the feeling of being increasingly safe at home. Find out more about how the Secustik® handle works and the typical precision sound it makes. Then you can choose one which suits your own personal interior design.

## Designs and colours of the Secustik® window handle (selection)

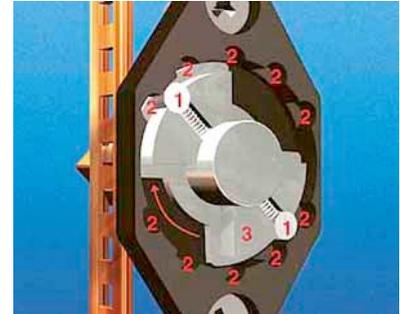
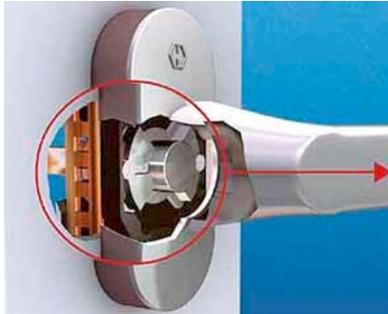


1. 2. 3. 4. 5. 6. 7. 8. 9. 10.

1.	Luxembourg	099/US952	Aluminium steel
2.	Brugge	0715/US945	Aluminium bronze
3.	Brisbane	0670/US956	Aluminium silver matt textured
4.	Melbourne	0672/US956	Aluminium steel matt textured
5.	Amsterdam	0400/US956	Aluminium silver/Stainless steel, brushed
6.	Atlanta	M0530/US956	Polished brass
7.	Verona	E0800/US956	Stainless steel, brushed
8.	Las Vegas	E0440/US956	Stainless steel, brushed
9.	Bilbao	E0365/US956	Stainless steel, brushed
10.	Paris	E038/US956	Stainless steel, brushed



*This is how the typical Secustik® click is made when opening and shutting the window.*



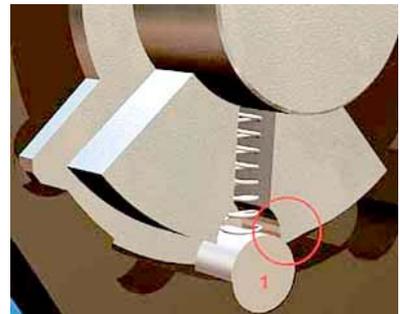
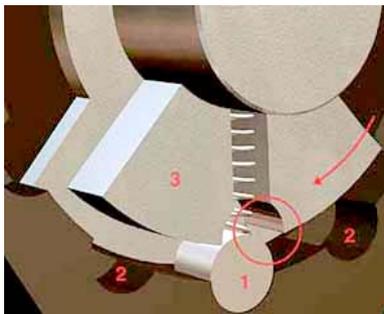
Patented blocking mechanism of the Secustik® window handle

(Secustik®: European Patent number EP 1121501)

As the window handle is turned, the sprung security bolts (1) click as they go over special notches (2) in the housing, -indicating the built-in security.

As the handle is turned, the security bolts (1) are carried by the coupling element (3) to the individual notches (2) producing the clicking sound.

*This is how Secustik® window handles help prevent attempted break-ins.*



As a break-in is attempted, the security bolts (1) are forced into special notches (2) in the housing by a second coupling element (3).

It's in this position that the security bolts (1) effectively prevent the turning of the window handle from outside. The window handle locks and foils the attempted break-in.



**- the new generation of window handles by HOPPE  
with integrated cable and sound-powered radio technology!**

Wouldn't it be more assuring if, before you left the house, you could check at a glance whether all windows were closed or not?

The SecuSignal® system consists of at least one SecuSignal® window handle with a radio emitter – **without the need for batteries** – and a SecuSignal® receiver.

The SecuSignal® emitter needs neither wiring nor batteries. In turning the SecuSignal® window handle, energy is produced by a **patented system**, so no tiresome checking or changing of batteries is necessary and no batteries need to be disposed of either, preventing further harm to the environment.

- Price on request
- Product description Hoppe - SecuSignal® see also enclosure 2



## **ALUMAT** **- barrier free threshold system**

Thresholds can be pitfalls. But there's a better way. ALUMAT is the world's only manufacturer of absolutely barrier free and driving rain proof (up to 100m / 328 ft storey height) thresholds for outer doors. We also offer our barrier free thresholds for internal doors, sliding (lifting) doors and windows. With ALUMAT you make the best choice for barrier-free living and working. The seals effectively protect against draft and calorific loss, dam the sound and prevent the penetration of rain water, sand, vermin and smoke. Also heating costs are lowered noticeably.

### **MFAT 10: magnet double seal**

Double seal magnetic threshold with silicone sharpening seal **for wooden outer doors**  
ABSOLUTELY BARRIER-FREE (System ALUMAT) for house entrance, terrace and balcony doors (turning doors/turning and tilting doors / single-winged / double-winged as well as with durable glassed side part).

- new building profile, no door stop, therefore without a barrier
- suitable for wheelchairs
- for homes for the disabled, hospitals, senior dwellings, kindergartens, homes of one's own, housebuilding
- no wear, no mechanics
- also for outward-opening doors suitable
- 20 years warranty on magnet traction power
- with compliance of the new energy savings regulation with three-way sealing
- sealing possibility with consideration of the flat roof regulations up to 150 mm height and the DIN 18195 part of 5 Abs.8.1.5 is **alternatively** intended
- Double-sided lagging
- Product description see also enclosure 3



*Info:* Upper edge finished floor with soil beginning at least 70 mm on raw floor.

### **Surface / lacquer**

- High-quality surface with vapor diffusion-open lacquer finish
- RAL colours and glazes made by Sikkens
- Painting system: Impregnation, priming, intermediate painting, exterior finish (corresponds in structure, intermediate treatment and layer strength of the color to the standards of the Institut für Fenstertechnik r.a., Rosenheim)
- Easy colour deviations, particularly with glaze surfaces, are appropriate for that in the characteristic Natural wood and are not lack
- Multi colourness between wings and turning wings possible, not between inside and outside!

#### **Lacquer finish Classic Line**

- In RAL and glaze colours freely selectable (without additional price)

#### **Lacquer finish TopThermPlus**

- Aluminium shell Standard white RAL 9016
- Further RAL colours plus multi-addition (overall)
- Aluminium shells possible in all RAL colours
- Aluminium shell in "wooden design" (price on request)
- The wooden parts can be supplied in RAL and glaze colours (without additional price)



- sets with his product developments, technologies and ultramodern coating systems always new standards.

**Sikkens Cetrol - wood glazes classically**

Highly transparent wood glazes in expression-strong colours underline the natural beauty of the characteristic wood structures.

*Due to the screen resolution and/or the dissolution of your graphic board the following indicated colours can deviate of the original colours (RAL and glazes). We recommend to you to use always with the colour selection the original as reference samples. For colour deviations between the colours explained on the screen and the real colours we do not take over a guarantee.*

**Glaze – colour examples**

F4.08.82T	E1.26.55T	E7.19.77T	E8.35.66T	G1.18.82T	F9.28.79T
C7.44.26T	B8.29.15T	E5.58.44T	D9.54.32T	F1.56.57T	E1.35.22T
A9.17.10T	VVN.00.06T	D5.51.29T	C6.16.11T	D7.23.15T	C5.06.08T
G6.12.76T	J1.05.67T	G7.10.79T	F3.18.55T	L0.08.80T	K7.12.80T
F4.13.42T	E1.30.28T	F9.23.59T	G1.19.39T	M9.16.64T	R6.07.57T
E3.18.21T	E8.08.18T	G1.20.43T	K5.04.15T	N7.04.52T	Q7.03.30T



## Sikkens - RAL – colour examples

Infinite colour variety - boundless colour design.

RAL 1000	RAL 1001	RAL 1002	RAL 1003	RAL 1004	RAL 1005	RAL 1006	RAL 1007
RAL 1011	RAL 1012	RAL 1013	RAL 1014	RAL 1015	RAL 1016	RAL 1017	RAL 1018
RAL 1019	RAL 1020	RAL 1021	RAL 1023	RAL 1024	RAL 1027	RAL 1028	RAL 1032
RAL 1033	RAL 1034	RAL 2000	RAL 2001	RAL 2002	RAL 2003	RAL 2004	RAL 2008
RAL 2009	RAL 2010	RAL 2011	RAL 2012	RAL 3000	RAL 3001	RAL 3002	RAL 3003
RAL 3004	RAL 3005	RAL 3007	RAL 3009	RAL 3011	RAL 3012	RAL 3013	RAL 3014
RAL 3015	RAL 3016	RAL 3017	RAL 3018	RAL 3020	RAL 3022	RAL 3027	RAL 3031
RAL 4001	RAL 4002	RAL 4003	RAL 4004	RAL 4005	RAL 4006	RAL 4007	RAL 4008
RAL 4009	RAL 5000	RAL 5001	RAL 5002	RAL 5003	RAL 5004	RAL 5005	RAL 5007
RAL 5008	RAL 5009	RAL 5010	RAL 5011	RAL 5012	RAL 5013	RAL 5014	RAL 5015
RAL 5017	RAL 5018	RAL 5019	RAL 5020	RAL 5021	RAL 5022	RAL 5023	RAL 5024



### Colour example:

#### KSD-window™ TopThermPlus

Picture left KSD-window™  
outside:

Aluminium shell  
Standard: white (RAL 9016)  
Further RAL colours plus multi-  
addition (overall)

Picture right KSD-window™  
inside:

Frame/wing: grey (RAL 7011)  
Rotary wing: orange (RAL 1017)





## Sikkens - RAL – colour examples page 2

RAL 6000	RAL 6001	RAL 6002	RAL 6003	RAL 6004	RAL 6005	RAL 6006	RAL 6007
RAL 6008	RAL 6009	RAL 6010	RAL 6011	RAL 6012	RAL 6013	RAL 6014	RAL 6015
RAL 6016	RAL 6017	RAL 6018	RAL 6019	RAL 6020	RAL 6021	RAL 6022	RAL 6024
RAL 6025	RAL 6026	RAL 6027	RAL 6028	RAL 6029	RAL 6032	RAL 6033	RAL 6034
RAL 7000	RAL 7001	RAL 7001	RAL 7002	RAL 7003	RAL 7004	RAL 7005	RAL 7006
RAL 7008	RAL 7009	RAL 7010	RAL 7011	RAL 7012	RAL 7013	RAL 7015	RAL 7016
RAL 7021	RAL 7022	RAL 7023	RAL 7024	RAL 7026	RAL 7030	RAL 7031	RAL 7032
RAL 7033	RAL 7034	RAL 7035	RAL 7036	RAL 7037	RAL 7038	RAL 7039	RAL 7040
RAL 7042	RAL 7043	RAL 7044	RAL 8000	RAL 8001	RAL 8002	RAL 8003	RAL 8004
RAL 8007	RAL 8008	RAL 8011	RAL 8012	RAL 8014	RAL 8015	RAL 8016	RAL 8017
RAL 8019	RAL 8022	RAL 8023	RAL 8024	RAL 8025	RAL 8028	RAL 9001	RAL 9002
RAL 9003	RAL 9004	RAL 9005	RAL 9010	RAL 9011	RAL9016	RAL 9017	RAL 9018

## Sikkens - Metallic - colour examples

Special metallic-lacquer for windows and doors (Rubbol WF 390 Metallic).

- Intermediate coating with metallic effect, modern optics, gloss degree: silk matt
- Further colourings / price on request



goldbronze-metallic



rubinred-metallic



greyaluminium-metallic



ultramarinblue-metallic



moss-green-metallic



whitealuminium-metallic



## **Glazing bars**

### **Types**

- Glazing bars glass-dividing starting from 46 mm (only with larger windows)
- Glazing bars Alu - resolution frameworks starting from 20 mm (installed from the outside and can be moved very easy)

### **Important informations**

- The KSD-solar-diode-glass is a special high performance glass, which unusual physical advantages contains and unites.
- When using glazing bars (glazing bars of any kind, like bars put on from outside, removable bars or bars also glued on etc.) by the bars it could come to a so-called "hard shadow formation" on the KSD-glass. Thus up, or in the pane and/or glass cracks can be the result.
- We recommend therefore the installation of KSD-window™ WITHOUT glazing bars of each kind, also to optimize in order by the free panes the solar profits.
- If you insist nevertheless on the installation of glazing bars in your KSD-window™, we must disclaim to any liability for the KSD panes for shatter cracks of any kind.
- With ordering the KSD-window™ with glazing bars you accept this agreement and a non-liability.

## **Enclosures**

### **Enclosure 1**

Product description: Window handle Hoppe - Secustik®

### **Enclosure 2**

Product description: Window handle Hoppe - SecuSignal®

### **Enclosure 3**

Product description Alumat Door Seal System MFAT 10 / barrier free threshold system (suitable for wheelchairs)



The Handle of excellence with built-in security *you can hear* – Secustik<sup>®</sup>

**Feeling safe at home is part of the quality of life, but**

- **in Germany, a flat is broken into every four minutes.\***
- **35% of break-ins occur through the window.**

**Now you can do something about it, - in a simple and effective way!**

\* Source: German police crime statistics



More than 45,000 flats a year are broken into through the window. A popular way of breaking-in is by moving the window handle into the opening position from outside, whereupon the uninvited guest is able to make his way in! HOPPE puts a bar in his way: Secustik®

window handles offer an effective basic security at an attractive price.

A patented blocking mechanism in the Secustik® handle impedes tampering of the window handle from outside.



It's the clearly audible precision clicking, similar to that of a safe-lock, when the handle is turned, that tells you of the security function. The clicking, therefore, is the audible reminder of increased security, giving you the feeling of being increasingly safe at home.

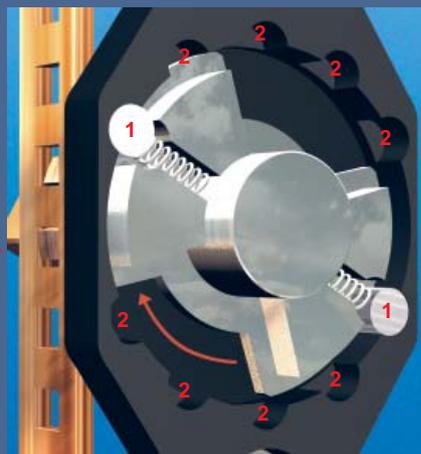
Find out more about how the Secustik® handle works and the typical precision sound it makes. Then you can choose one which suits your own personal interior design.

## Secustik® - the Handle of excellence with built-in security you can hear.

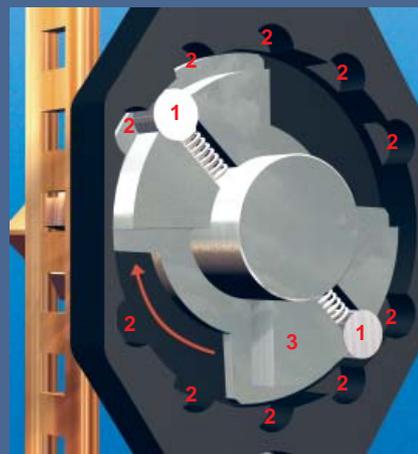
This is how the typical Secustik® click is made when opening and shutting the window.



Patented blocking mechanism of the Secustik® window handle



As the window handle is turned, the sprung security bolts (1) click as they go over special notches (2) in the housing, -indicating the built-in security.



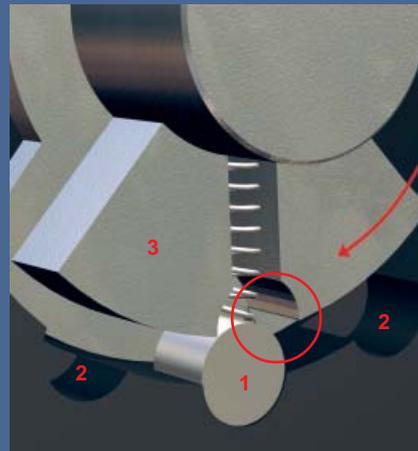
As the handle is turned, the security bolts (1) are carried by the coupling element (3) to the individual notches (2) producing the clicking sound.

You'll find high quality material, beautiful design and uncompromising function in all HOPPE handles. Secustik® handles feature, in addition, an integrated basic security for your protection. When the handle is turned to various positions, a blocking mechanism

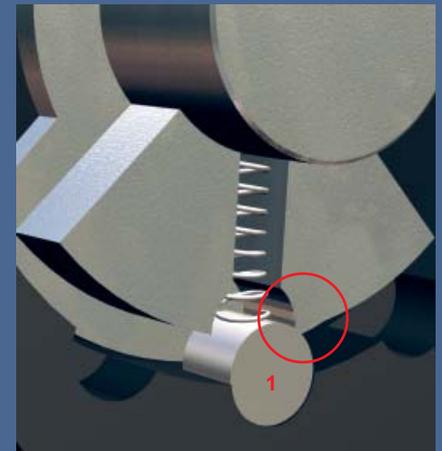
engages itself with a precise audible click, thereby impeding movement of the handle from outside.

HOPPE's Secustik® handles fulfil the requirements of the AhS RAL-RG607/13-guideline and unquestionably

This is how Secustik® window handles help prevent attempted break-ins.



As a break-in is attempted, the security bolts (1) are forced into special notches (2) in the housing by a second coupling element (3).



It's in this position that the security bolts (1) effectively prevent the turning of the window handle from outside. The window handle locks and foils the attempted break-in.

your personal expectations of what an advanced window handle should be.

With numerous designs and colours to choose from, there's plenty of scope to find the right handles to suit

your own interior decor. Secustik® handles feel firm and are easy to use. In short, you can feel the Handle of excellence in a variety of shapes and finishes whilst audibly being reassured that you are safe in your own home.

Secustik®: European Patent number EP 1121501



Luxembourg  
099/US952  
Aluminium steel



Amsterdam  
0400/US956  
Aluminium silver/  
Stainless steel,  
brushed



Brugge  
0715/US945  
Aluminium,  
traffic white powder  
coated



Atlanta  
M0530/US956  
Polished brass



Verona  
E0800/US956  
Stainless steel,  
brushed



Amsterdam  
E0400/US956  
Stainless steel,  
brushed

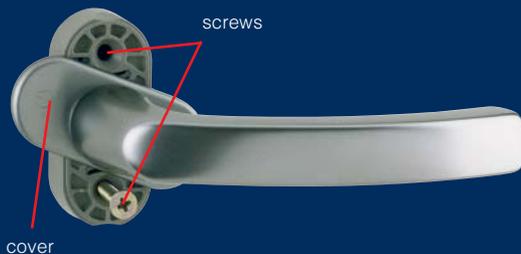


Bilbao  
E0365/US956  
Stainless steel,  
brushed

## Replacing your window handles

It's easy to replace your present window handles with new Secustik® window handles.

Turn the old handle to the opening position (horizontal). Lift up the cover slightly and turn it to the side, loosen the screw and remove the old handle. Now you can fit the new handle.



To reduce the risk of break-in even more, the whole window element should have protective features such as security glass.



SecuSignal – shows you  
what you should know  
about your windows!

Welcome to the assured world of SecuSignal ...



## Does the following situation sound familiar to you?

Monday morning - you leave home in a hurry. Just as you've closed the door you begin to wonder, "Did I close all the windows in case it rains? Did I remember to close the French doors to the patio last night or are they only tilted – an open invitation to intruders?"

In order to be sure, the only thing to do is to open the door, go back inside and check each window upstairs and downstairs to make sure you haven't forgotten one ...

Wouldn't it be more assuring if, before you left the house, you could check at a glance whether all windows were closed or not? SecuSignal, HOPPE's new window handle generation with **integrated cable and radio technology - without the need for batteries** - can offer you just that!

On the following pages you can find out about SecuSignal in detail. You'll see how easy it is to be sure whether your windows are fully closed or not so you can be assured on leaving home.



**SecuSignal**



# What does SecuSignal offer?

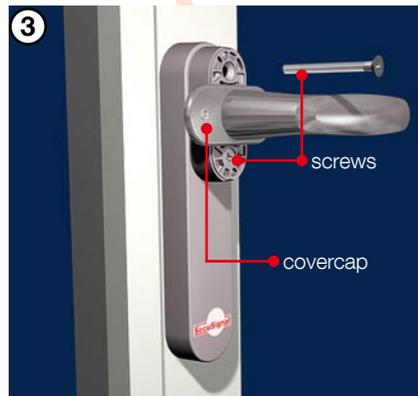
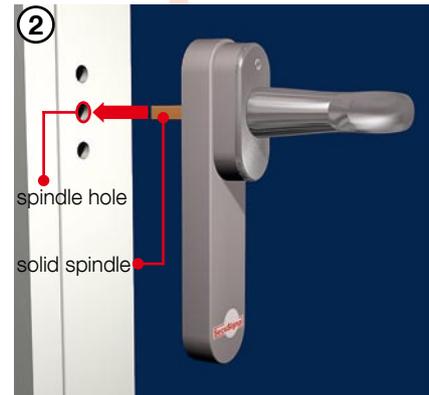
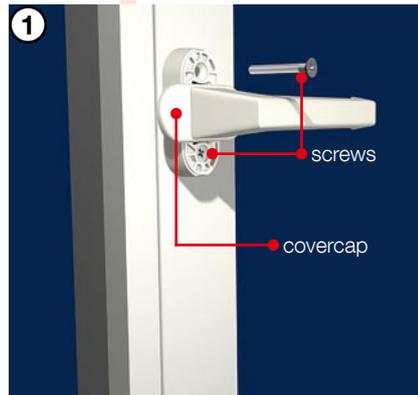


## HOPPE brand quality, simple installation and no maintenance.

The SecuSignal system consists of at least one SecuSignal window handle with a radio emitter - without the need for batteries - and a SecuSignal receiver. As with all HOPPE's door and window handles, this brand name product also comes with a 10-year operational guarantee.

Changing your old window handles or the new SecuSignal window handles is very easy and only takes a few minutes.

- ① Turn the old window handle into the opening position (horizontal). Slightly lift the cover cap and turn it to the side. Then loosen the screws and remove the old handle.
- ② Now you can fit the new SecuSignal window handle with its radio emitter. Simply insert the solid spindle of the handle into the spindle hole of the window. In so doing the window handle remains in the closed position (vertical).
- ③ Turn the SecuSignal window handle to the opening position (horizontal). Lightly lift the cover cap and turn it to the side and then simply attach the window handle and radio emitter with the screws provided.
- ④ All you need to do now is turn the window handle and cover cap to the vertical position and the job is done!



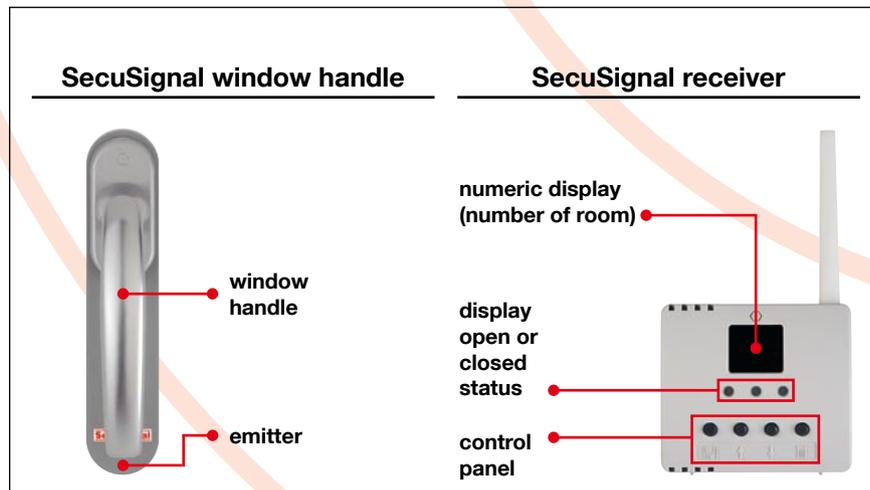
Once the receiver has been connected to the mains (220 v) and the window handle has been set, the emitter sends information about the position of the window handle - and the window handle itself, directly to the receiver unit. Here this information is shown by coloured lights with an indication of the room concerned in a two digit display and stored (see pp 6 and 7). In such a way you can check at a glance whether your windows are open or not at anytime.

### The SecuSignal emitter needs neither wiring nor batteries.

In turning the SecuSignal window handle, energy is produced by a patented system\*, so no tiresome checking or changing of batteries is necessary and no batteries need to be disposed of either, preventing further harm to the environment. The, the SecuSignal radio emitter is totally maintenance-free.

To ensure a high assurance of transmission, the radio signal is sent out many times in short succession at just one turn of the handle. Depending on the type of building, range is about 30 m. With its advanced technology, SecuSignal works with minimal transmitter power, so any electromagnetic pollution is minimal. It's also CE tested.

## SecuSignal

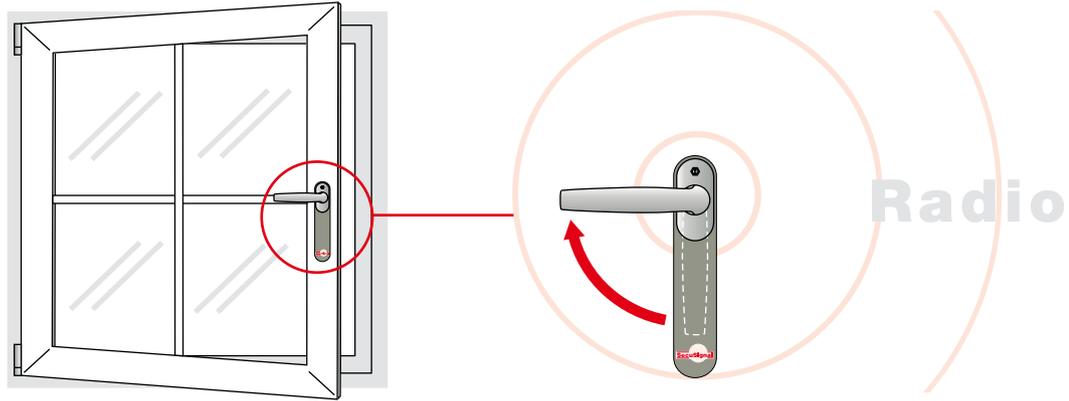


\* technology from **EnOcean**

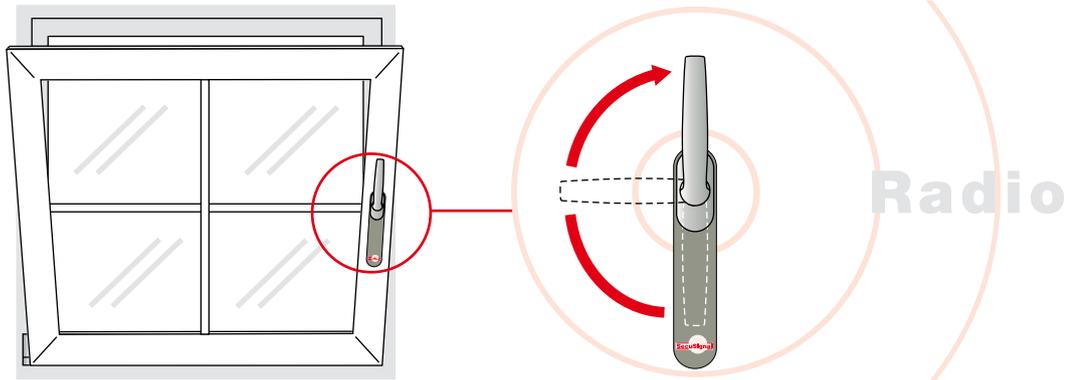


# How does SecuSignal work?

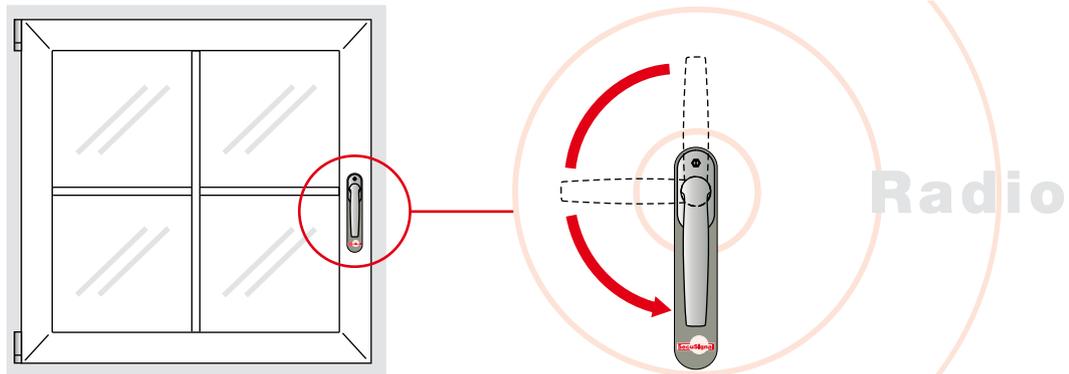
**Window is opened**



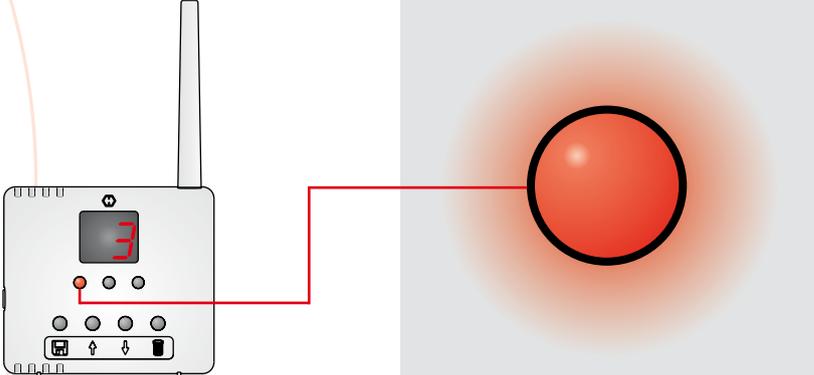
**Window is tilted**



**Window is closed**



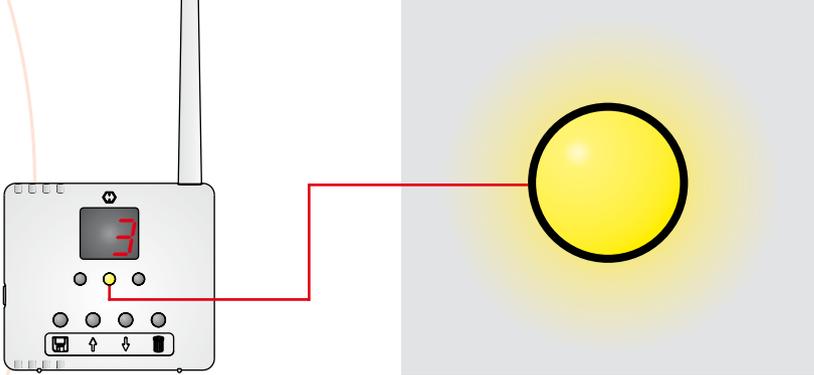
signal



The diagram shows a grey receiver device on the left with a red light illuminated. A red line connects this light to a red circle on the right, representing the window handle. The background behind the circle is a red glow.

- The window handle is turned to the opening position
- The “open” signal is sent out to the receiver
- A **red** light shows on the receiver
- Caution: at least one window in room 3 is open!

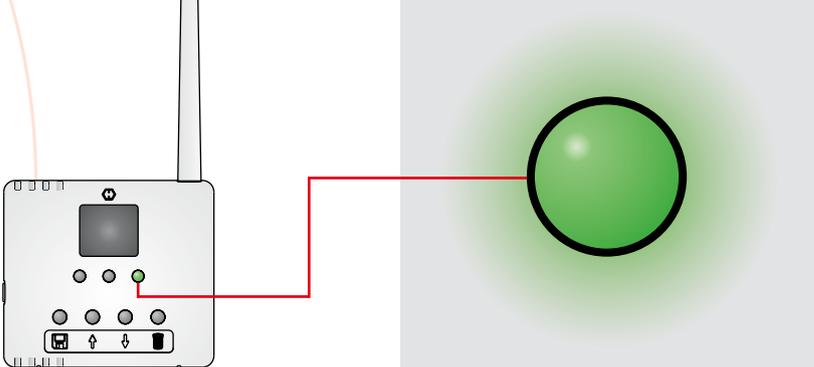
signal



The diagram shows a grey receiver device on the left with a yellow light illuminated. A red line connects this light to a yellow circle on the right, representing the window handle. The background behind the circle is a yellow glow.

- The window handle is turned to the tilt position
- The “tilted” signal is sent out to the receiver
- A **yellow** light shows on the receiver
- At least one window in room 3 is tilted; is this OK?

signal



The diagram shows a grey receiver device on the left with a green light illuminated. A red line connects this light to a green circle on the right, representing the window handle. The background behind the circle is a green glow.

- The window handle is turned to the closed position
- The “closed” signal is sent out to the receiver
- A **green** light shows on the receiver
- The window is closed – all’s well!

# How does SecuSignal monitor all the windows in your house?



## Up to 128 windows can be monitored

As a result of the radio technology without the need for batteries, SecuSignal can be easily and quickly be installed and is suitable for all standard windows\*. You'll be able to check on whether a large number of windows handles in different rooms are in the open, tilted or closed position.

The receiver can deal with up to 128 SecuSignal radio emitters, a maximum 99 of which can be linked in freely programmable groups (eg all living room windows, bedroom windows etc.) and recognised by the receiver. On the two digit display you can then see at a glance where an open window might be a problem.

Example table for allocation and identification of rooms	
1	children's room 1
2	guest toilet
3	children's room 2
4	living room
5	kitchen/dining room
6	study
7	bathroom
8	guest room
9	bedroom
10	...



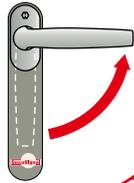
## Two practical tips:

You can install your SecuSignal receiver in a fixed position or have it free-standing (220 v). It's best to have it in the hall, then you can check it as you leave.

The simplest way would be to allocate room numbers, from downstairs to upstairs according to importance eg 1. children's room, 2. bedroom, 3. living room.



The SecuSignal window handle sends out a radio signal saying "window handle in bedroom (9) open" to the central receiver.

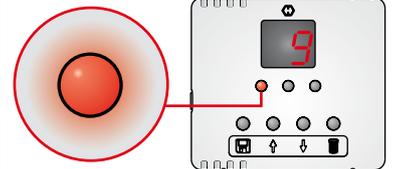


9 bedroom

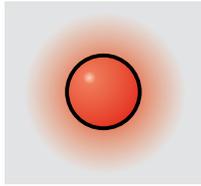
6 study

5 kitchen/dining room

The receiver registers and stores the radio signal. The number of the room is shown on the display (in this case 9 for the group of windows in the bedroom) and the red light appears, warning you that a window in the bedroom is open.



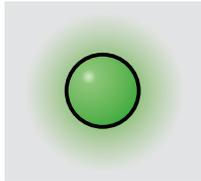
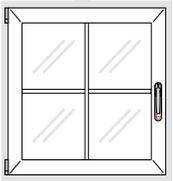
# How does SecuSignal monitor all the windows in your house?



## The most important things first

In normal operation, the SecuSignal receiver shows the window groups (rooms) in order according to potential danger.

- ① Window groups with SecuSignal window handles in open ( ● ) as well as in tilted ( ● ) position
- ② Window groups with SecuSignal window handles in open ( ● ) position
- ③ Window groups with SecuSignal window handles in a tilt ( ● ) position



For a quick and thorough check, the window groups shown change every two seconds. If the green light shows on the receiver, then all SecuSignal window handles are in the closed ( ● ) position. You can still check the SecuSignal receiver manually by “leafing” through the window groups manually.

A practical example (see the chart on the opposite page):

- a In window group bedroom (9) there are both open and tilted windows
- b In window group living room (4) there are open windows
- c In window group children's room 1 (1) and kitchen/ dining room (5) likewise, there are tilted windows

In intervals of two seconds, the SecuSignal receiver shows you firstly (9) the bedroom window group - with a red and yellow light, then (1) the children's room window group 1 - with a yellow light and finally the kitchen/dining room window (5) group (5) - equally with a yellow light. The display cycle then starts all over again.



# The SecuSignal range

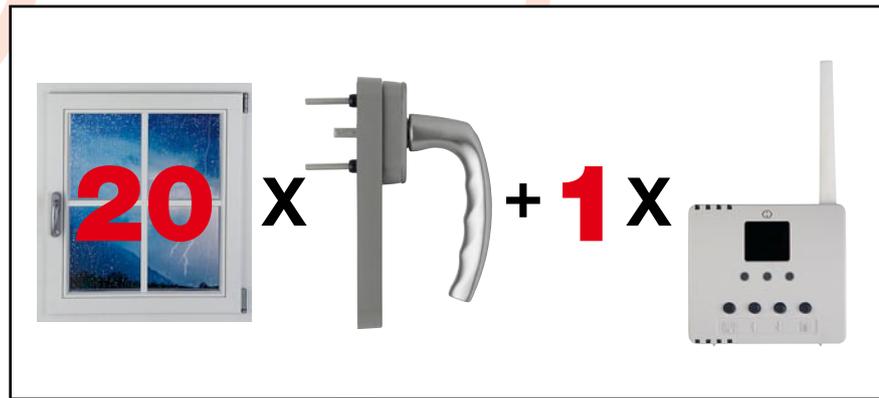


## What do I need to equip my house with SecuSignal?

All you need is

- a SecuSignal window handle on each window and an emitter
- a SecuSignal receiver

**Example:** If your house has 20 windows



On the next page you can see the current SecuSignal range.

**The finishing touch  
in attractive handle designs and materials**

SecuSignal window handle designs with Secustik® technology\*



**Atlanta**  
**0530/US952/FK-410**  
F9/F7501 (aluminium  
steel/steel grey) finish



**Atlanta**  
**M0530/US956/FK-410**  
F71/F1509 (polished  
brass/yellow gold) finish



**Amsterdam**  
**E0400/US956/FK-410**  
F69/F7501 (stainless  
steel matt/steel grey)  
finish

**Secustik®**

\* All SecuSignal window handles have the latest HOPPE Secustik® technology! Secustik® window handles have a patented mechanical blocking mechanism as integrated basic security. This makes a precise clicking sound as the window handle is moved to different positions and helps prevent the window hardware being moved from outside. You can find further information on [www.hoppe.com](http://www.hoppe.com).

SecuSignal-receiver

**FE-411**  
F7035 (light  
grey) finish



**SecuSignal**

# The advantages of SecuSignal at a glance



## Easy, with assured transmittance and environmentally-considerate

- More comfort and safety through
  - central monitoring of the windows
- Based on radio technology, hence -
  - no complex wiring
  - suitable for all standard windows
  - quick and easy installation
- Very low energy signal transmission, hence -
  - high transmission assurance
  - minimal electromagnetic pollution
- No batteries required, hence -
  - totally maintenance-free
  - no worrying about spent batteries
  - no environmentally-harmful spent battery disposal





# MFAT 10

## DOUBLE SEAL MAGNETIC THRESHOLD

for wooden external doors

### ALUMAT – Threshold with it's own Drainage & Thermal Insulation

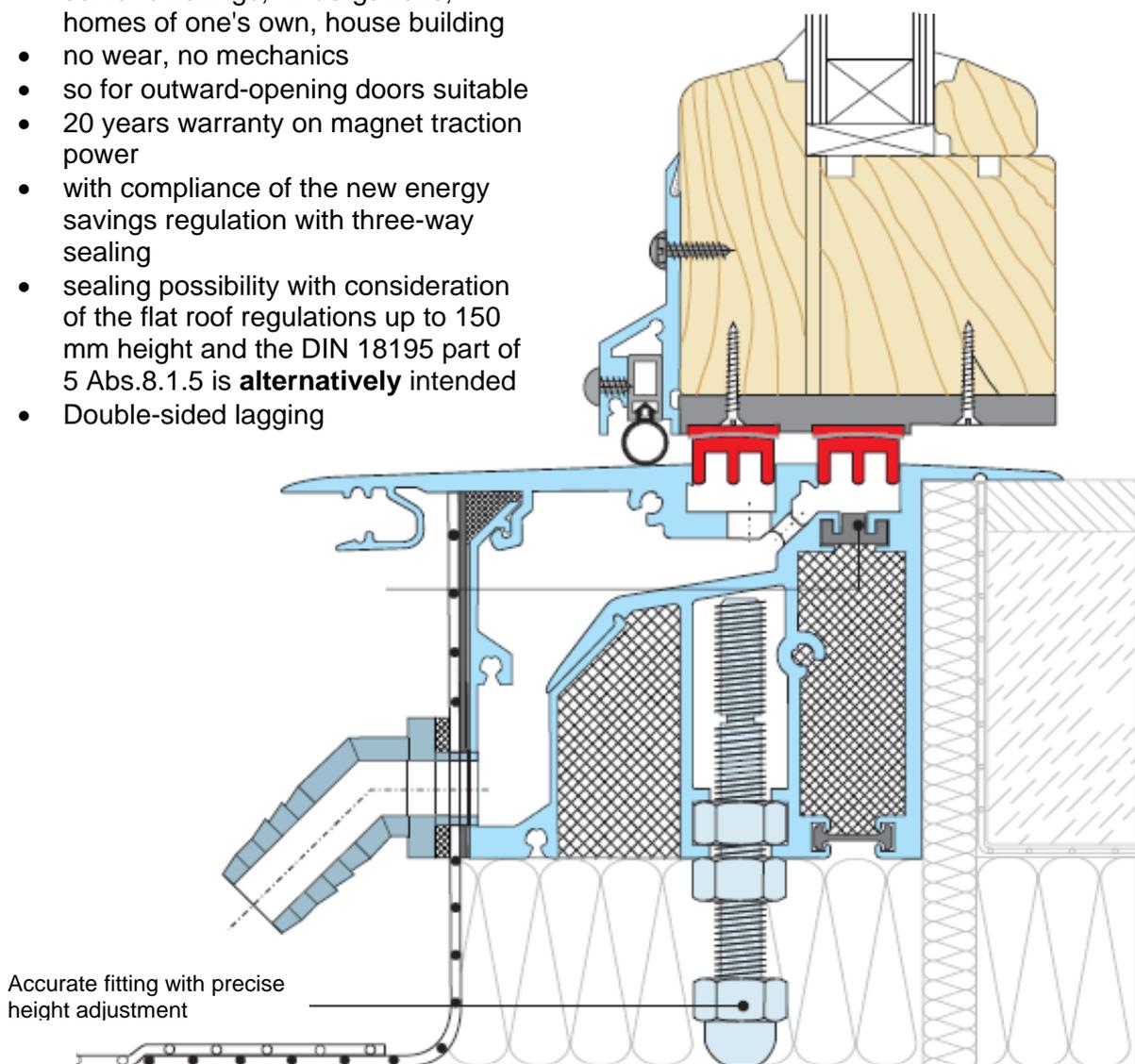
Double seal magnetic threshold with silicone sharpening seal  
**for wooden outer doors**

ABSOLUTELY BARRIER-FREE (System ALUMAT)

for house entrance, terrace and balcony doors.

(turning doors/turning and tilting doors / single-winged /  
double-winged as well as with durable glassed side part)

- new building profile, no door stop, therefore without a barrier
- suitable for wheelchairs
- for homes for the disabled, hospitals, senior dwellings, kindergartens, homes of one's own, house building
- no wear, no mechanics
- so for outward-opening doors suitable
- 20 years warranty on magnet traction power
- with compliance of the new energy savings regulation with three-way sealing
- sealing possibility with consideration of the flat roof regulations up to 150 mm height and the DIN 18195 part of 5 Abs.8.1.5 is **alternatively** intended
- Double-sided lagging



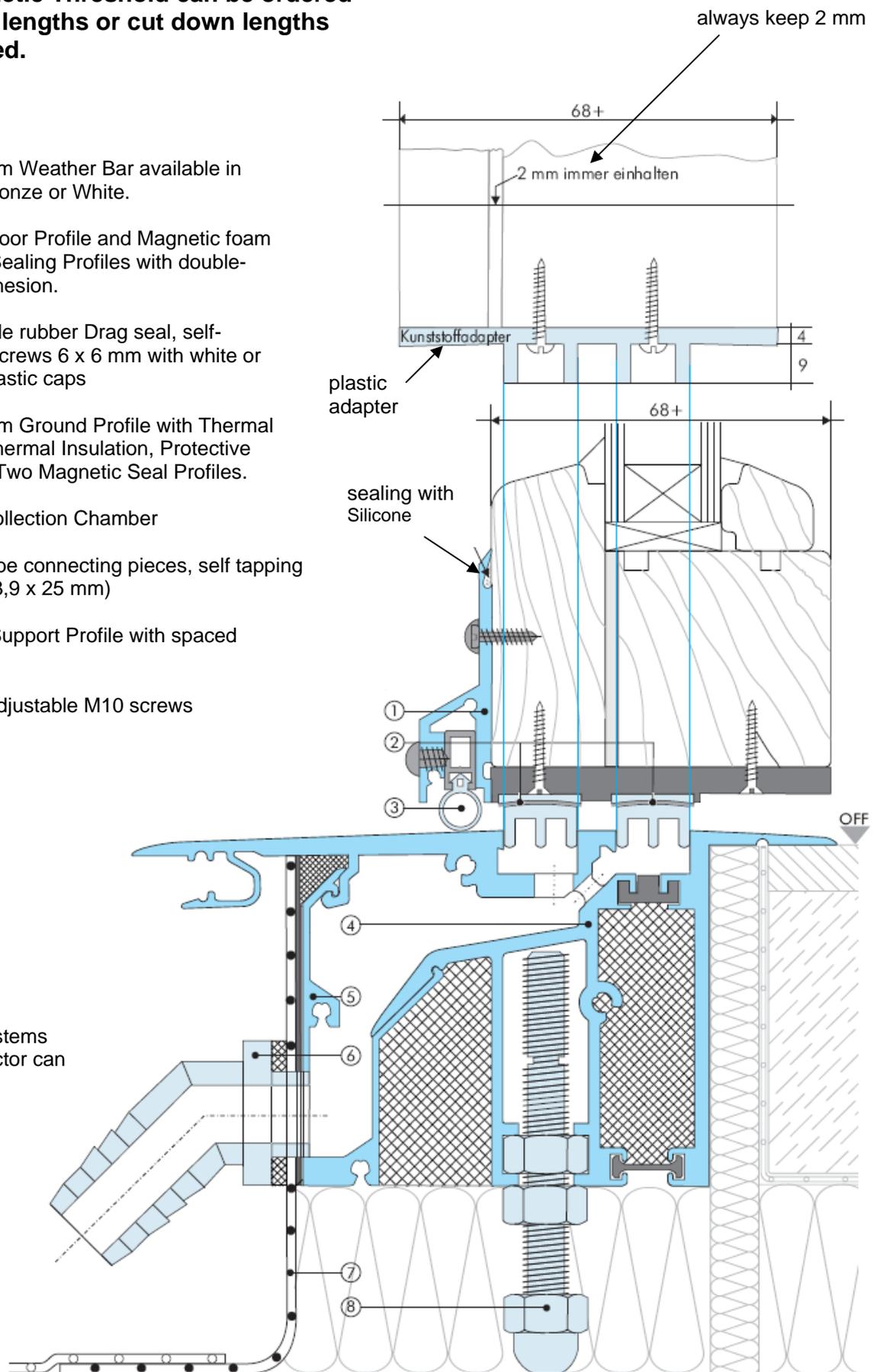
**Tested at 100mtrs height against driving rain**

**completely waterproof and draught proof.**

## DELIVERY RANGE

The Magnetic Threshold can be ordered in full 6m lengths or cut down lengths as required.

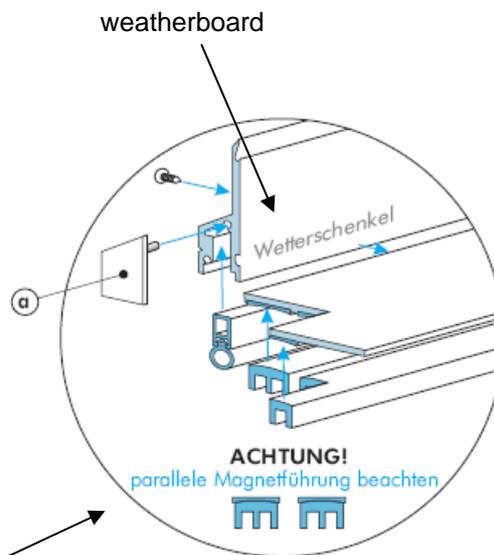
- (1) Aluminium Weather Bar available in Silver, Bronze or White.
- (2) Plastic Door Profile and Magnetic foam layered Sealing Profiles with double-sided adhesion.
- (3) Adjustable rubber Drag seal, self-tapping screws 6 x 6 mm with white or brown Plastic caps
- (4) Aluminium Ground Profile with Thermal Break, Thermal Insulation, Protective Foil and Two Magnetic Seal Profiles.
- (5) Water Collection Chamber
- (6) Water tube connecting pieces, self tapping screws (3,9 x 25 mm)
- (7) Ribbed Support Profile with spaced fractures
- (8) Height Adjustable M10 screws



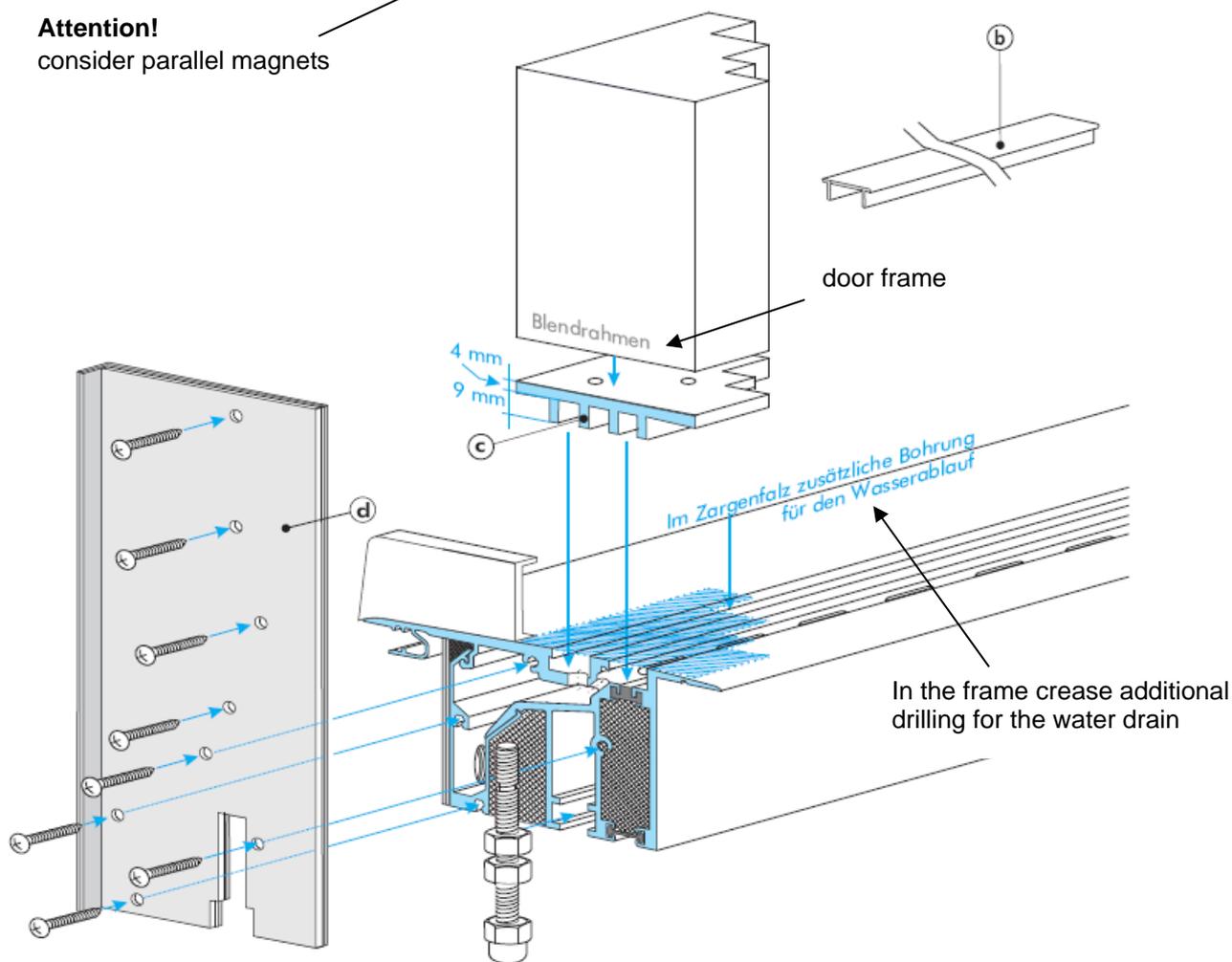
when using drainage systems hose connector can be void (6)

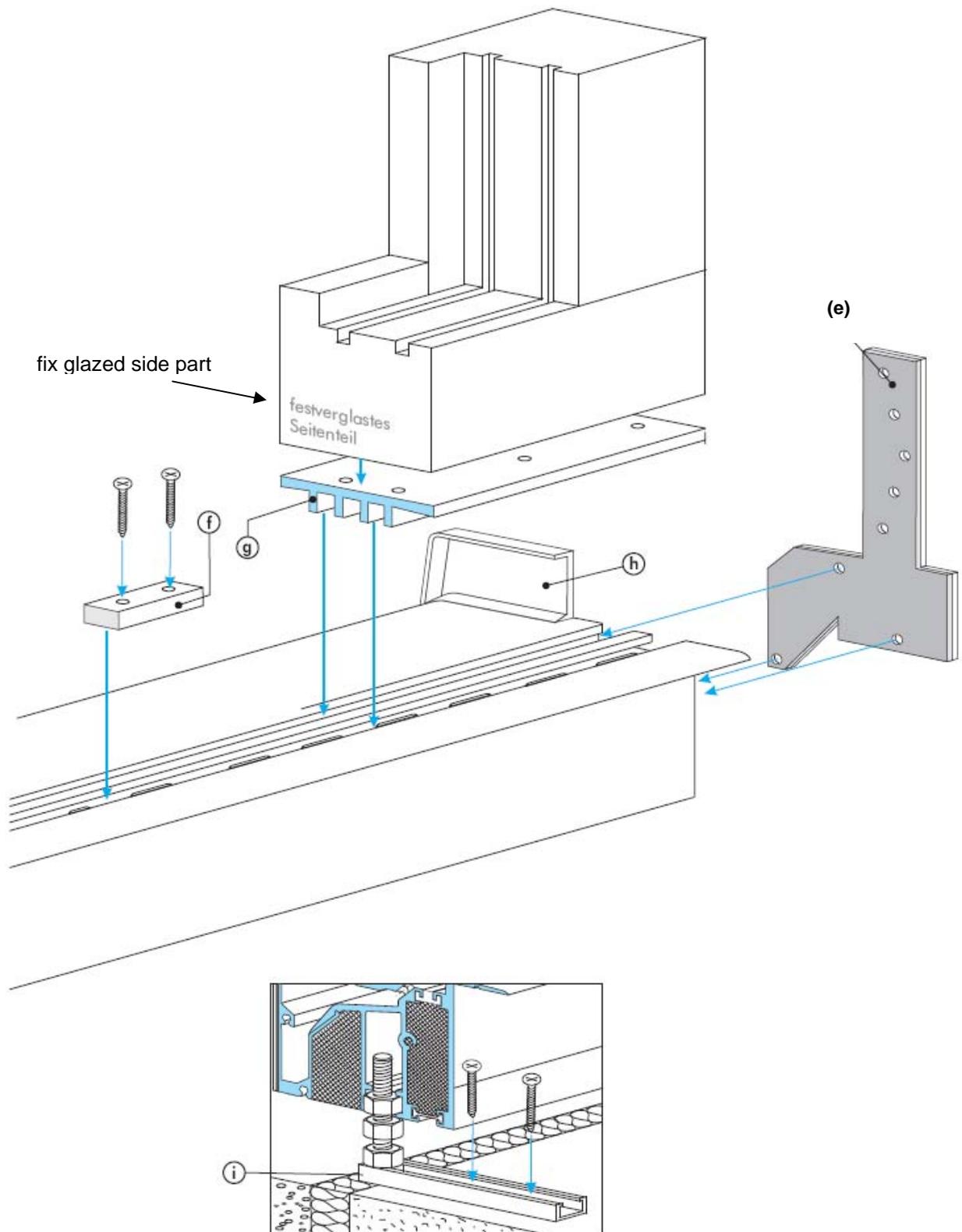
## DELIVERY ALSO INCLUDES:

- (a) 2 Plastic clip cover for side sealing of weather bar (1) (White or Brown)
- (b) Two Aluminium slip-on protective covers against dust and dirt.
- (c) 2 Plastic doorframe adapters (White or Brown). Can also be cut from plastic profile (f).
- (d) 2 foam cushioned galvanised side brackets with 3,9 x 25 mm screws.
- (f) Plastic double-door piece 15 x 9 x 35 mm with drilled holes and screws, 4,0 x 25 mm.
- (g) Plastic adapter profiles (for door with side panels)
- (h) 2 Plastic profiles for sealing against a wall.
- (i) Aluminium fixing profile for use in thermally insulated walls

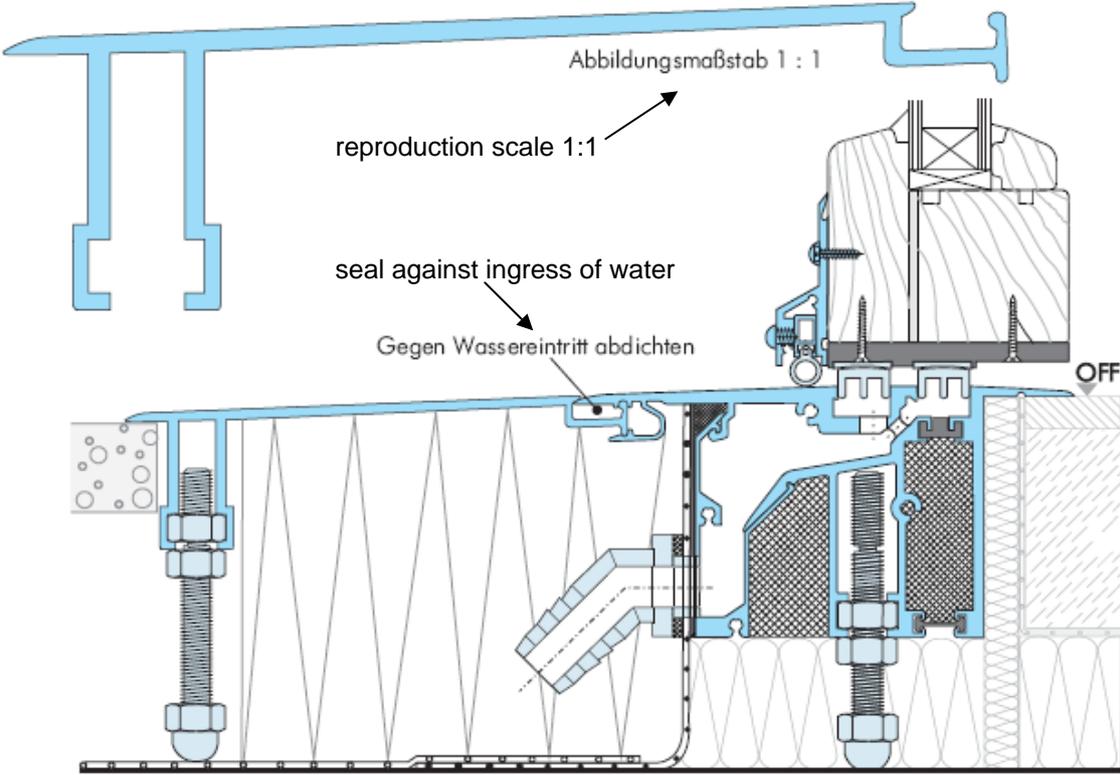


**Attention!**  
consider parallel magnets





**LM extension profile**  
**for the cover of the external isolation with low-energy buildings**



**ALUMAT®**



### **ALUMAT barrier free threshold system**

- Maintenance-free
- Made in Germany
- 20 years warranty
- Patented

## What is the system ALUMAT?

ALUMAT is the world's only manufacturer of absolutely barrier free magnetic thresholds for outer doors. We offer our magnet seals for internal doors, outer doors, windows and sliding (lifting) doors too. With ALUMAT you make the best choice for barrier free living and working. The seals effectively protect against draft and calorific loss, dam sound and prevent the penetration of rain water, sand, vermin and smoke. Also heating costs are lowered noticeably. The principle is simple: A magnet is fastened to the doors lower surface, the other one let into a ground bus. It lifts itself and seals the door perfectly, as soon as it is closed. If the door is opened, the magnet sinks back and frees the passage. Absolutely barrier free. The magnet seals of ALUMAT are simple to install and can be attached to all doors on the outside and the inside. At both - new buildings and at already existing doors. In hotels, homes for the elderly or the home of one's own. Everywhere, where doors should be sealed and barriers are unwanted.

## Comfort

ALUMAT makes life more comfortable. It keeps the heat outside your air conditioned rooms. When heating, no cold air slips below your door. Also noise from other rooms or from outside is significantly reduced. This way you increase your quality of life while saving energy.

## Security

Our barrier free products eliminate the risk of stumbling over your threshold. When closed they stop smoke efficiently.

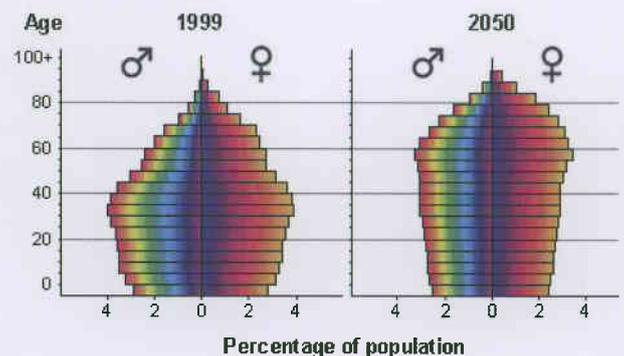
In one of our installations at a hotel they even stopped a fire from entering a room. There was fire blazing outside that room, which caused brass to melt at 900 °C (1.600 °F). Inside, the wooden wardrobe next to the door was not harmed at all. This shows how efficiently the system ALUMAT works in real life and can even save lives.

## Aging Society

Nowadays people live longer and want to enjoy life in their own appartement or house longer than prior generations. Thats why our barrier free thresholds are a good investment in the future. Also handicapped people, people in wheelchairs or walking frames will enjoy the advantage of living in a barrier-free environment.

## Legislation

More and more countries are starting to make barrier free living essential for new construction projects . That includes barrier free thresholds. Thinking ahead may save you a lot of trouble as well as money.



Average age pyramids for developed countries  
(Source: UN Population Aging 1999)





## **ALUMAT for indoors**

The magnetic thresholds can be used inside to create a barrier free and totally dense connection between door and the floor. No matter if tiles, carpet or wooden floor - the indoor system can be used everywhere. This stops infiltration, noise, smoke and keeps your air conditioned room cool and your heated room warm and cozy.

All ALUMAT-thresholds are available in different colours to fit your requirements.



## **ALUMAT for doors and windows facing outside**

On doors to the outside the thresholds work as reliable as inside. These magnetic threshold keeps driving rain from entering your building up to 100 m or 328 ft story height). This threshold can be installed on front doors, balcony doors and even windows.



## **ALUMAT for sliding doors**

Our newest innovation is the magnetic threshold for sliding (lifting) doors. Finally you can enjoy the comfort of ALUMAT with sliding doors. This model uses two magnetic strips to fully seal the door when closed.

Now you can step outside without the hassle of a barrier created by conventional sliding doors. This way there are no dangerous swells.