

TORMAX T2 opac hermetic

Hermetic and airtight automatic sliding door systems



TORMAX T2 opac hermetic Superb quality for sensitive work areas



TORMAX pays the utmost attention to each technological and functional aspect of its door systems. With TORMAX T2 opac hermetic, we have set new quality standards for hermetically and airtight closing doors. The innovative sliding door system meets the specific quality requirements of highly sensitive work areas in hospitals, clinics, laboratories and industrial facilities.

TORMAX T2 opac hermetic sliding doors are certified and can be equipped with single or combined application modules such as radiation, fire and smoke protection, sound insulation or as damp and wet room doors.

Added value for your business processes



In clinics, hospitals, laboratories and industrial facilities, the need for rooms with special requirements in terms of hygiene, radiation, germ, particle, sound, fire and smoke protection is growing continuously. This in turn is raising demands on the corresponding door systems: factors such as operational and economic efficiency, safety and convenience have become as important as flawless hermetic sealing.

With its technically advanced solutions, TORMAX T2 opac hermetic meets all of these criteria, thus creating real added value and helping to ensure smooth processes in your business.

Concentrated work in peace and quiet

Disturbing noises are particularly annoying when you need to focus. That is why automatic hermetic sliding doors must run noiselessly and shut out any sound when they are closed. Reliable operation and short intervention times for door maintenance work are equally important, as any interruption in the use of the facility disrupts operational processes and can lead to a considerable loss of income.



Ensuring consistent pressure and climatic conditions

Even very heavy doors must open and close as quickly and smoothly as possible to maintain a strictly controlled atmosphere. Sliding doors are ideal in this respect, as they create much less air turbulence than swing doors and thus minimise any unwanted air currents.



Preventing contamination

Depending on the situation, it is essential to keep out any unwanted germs or to avoid any other kinds of contamination. That is why hermetic doors must seal reliably and safely even with differences in pressure between rooms, both with overpressure and vacuum pressure ventilation. Airlocks and pressure cascades can be achieved with a set of networked door systems.

Tailor-made overall system for a broad range of applications

TORMAX T2 opac hermetic is a tailor-made overall system comprising the drive, integrated sensor, door leaf, wall connection profile and operating units. Our competent technical advisors support you with the configuration of the system and accompany your project from the idea to the installation.

Hermetic or airtight design

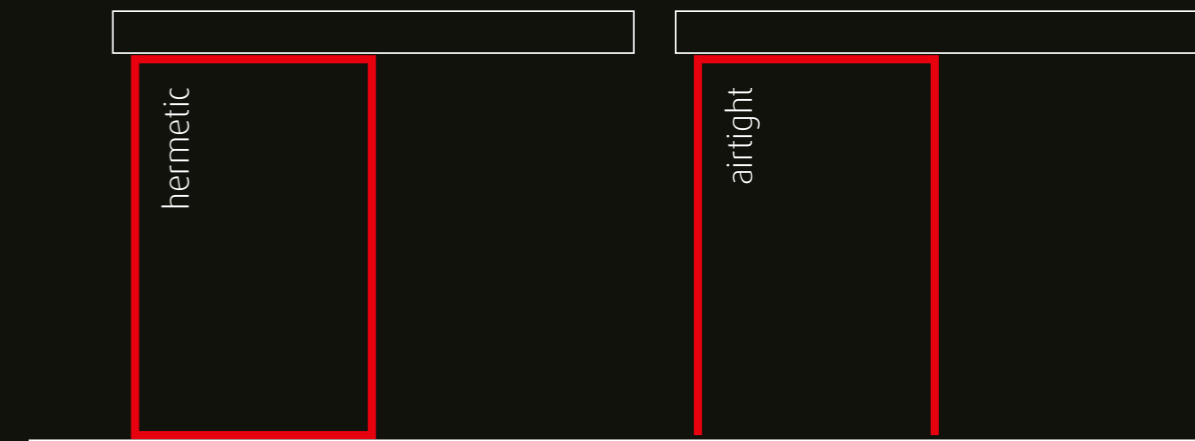
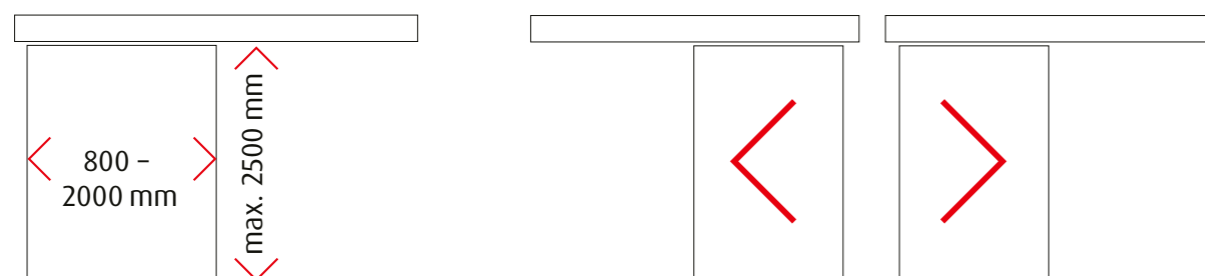
Depending on the ventilation system, you opt for the hermetically sealed or the airtight version. The hermetically closing door system seals all around by gently lowering the door leaf just before closing and pressing it against the wall connection profile. With the airtight version, three sides are sealed. The door leaf is pressed against the wall but does not lower itself. Instead, it leaves a gap open at the bottom edge for controlled and consistent overpressure.

Automatic sliding doors make sense with clean rooms

Sliding doors not only create much less air circulation than swing doors, but they also require less space because the open door leaf does not protrude into the aisle. Automatic doors can be operated touchless to ensure strict hygiene and swift work processes.

Customised configuration

The TORMAX T2 opac hermetic door system can be configured to your individual requirements. Dimensions, door leaves and surfaces, colour combinations, digital prints on door panels, user interfaces, the integration with higher-level building management systems or specific protection applications – your TORMAX consultant will gladly discuss your wishes with you.



Five decisive advantages

TORMAX T2 opac hermetic stands for state-of-the-art technology and functionality in special-purpose automatic sliding door systems. Here are the five key benefits of our product in a nutshell; we go into more detail on the following pages.



Secure sealing

- › Multicomponent seal
- › Reliable, gentle lowering and pressing mechanism
- › Certified safety standards

Discreet operation

- › Elegant design
- › Quiet operation
- › Powerful and dynamic
- › Low maintenance costs

Outstanding hygiene

- › Hygienic design
- › Invisible door guide
- › Easy to clean, antibacterial surfaces

Wide range of applications

- › Radiation protection
- › Sound insulation
- › Damp and wet rooms
- › Fire and smoke protection

Individual design and configuration

- › A wide range of design options, equipment and accessories

Secure sealing

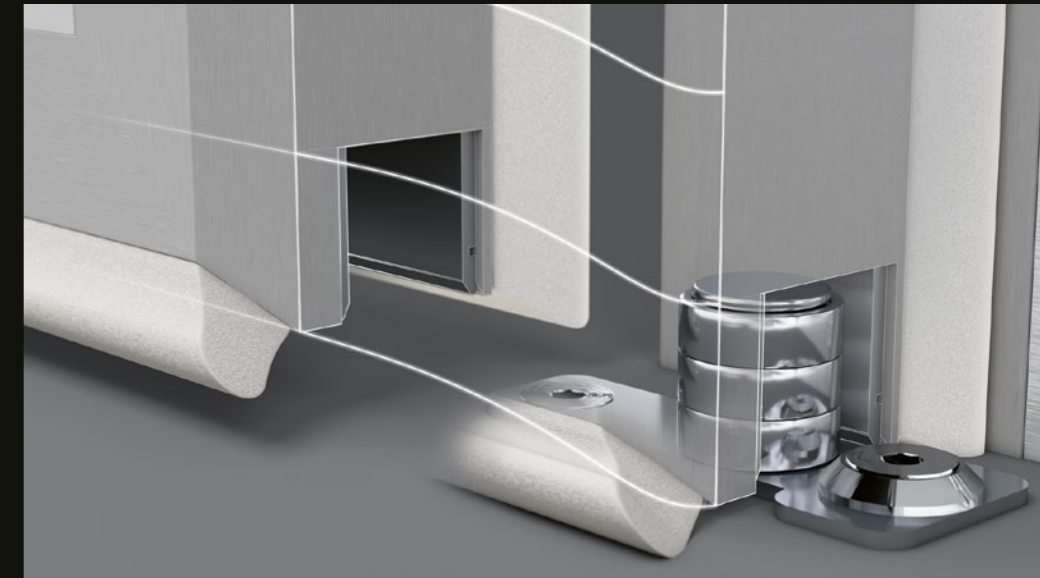
Multicomponent seal

- › Certified air permeability up to 100 Pa pressure (class 4, EN 12207)
- › Purpose-built multicomponent seal with soft edge, smooth non-stick surface, unique pinch protection system and durable corner joints (welded)



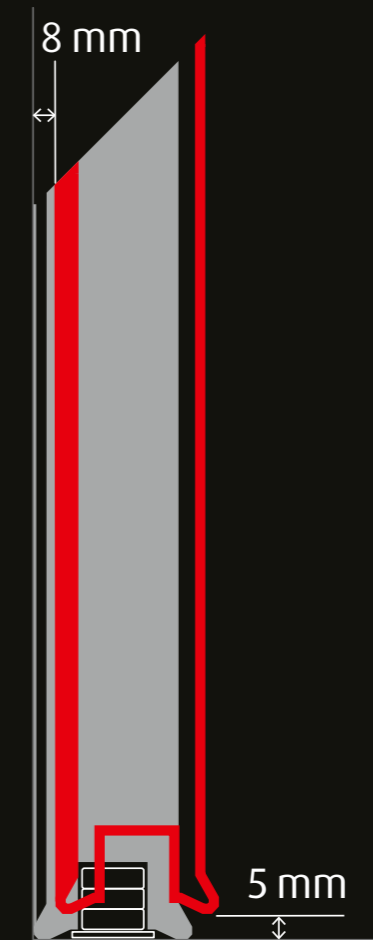
Reliable, gentle lowering and pressing mechanism

- › 3D-modelled drive curve for secure sealing
- › Guiding track with continuous transition from linear sliding to lowering movement
- › Stainless steel guide cams with ball bearings
- › Fully integrated in drive and door leaf



Built-in safety

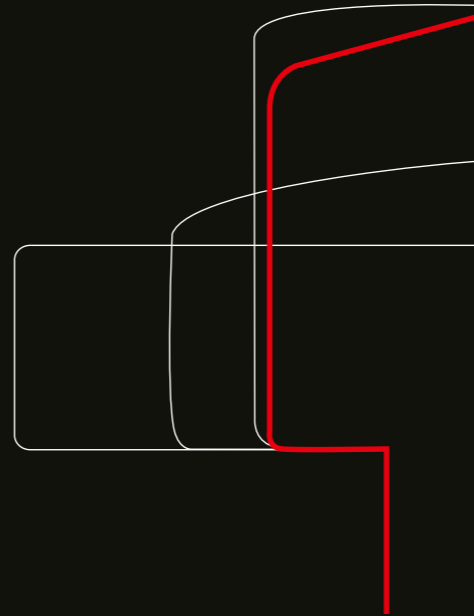
- › Designed and equipped for maximum people safety
- › Door leaf lowered only shortly before complete closing; no hazardous shearing points
- › Maximum safety distances between door leaf and wall (8mm) and between door leaf and floor (5mm) is structurally ensured, no difficult adjustment works required on site
- › Permanent equipotential bonding of the door leaf
- › Innovative, unique pinch protection
- › Fully compliant with safety standards (safety distances according to EN 16005/EN ISO 13857)
- › Monitored active infrared sensor TORMAX 7501 for motion and presence detection; covers the entire passageway area
- › Intelligent direction recognition with programmable direction change function



Discreet operation

Elegant design

- › The most slender drive housing on the market with integrated safety sensor
- › Housing design with floating effect makes the door system appear light and slender



Quiet operation

- › Silent operation thanks to vibration-absorbing components and smooth door movements with a low mechanical load

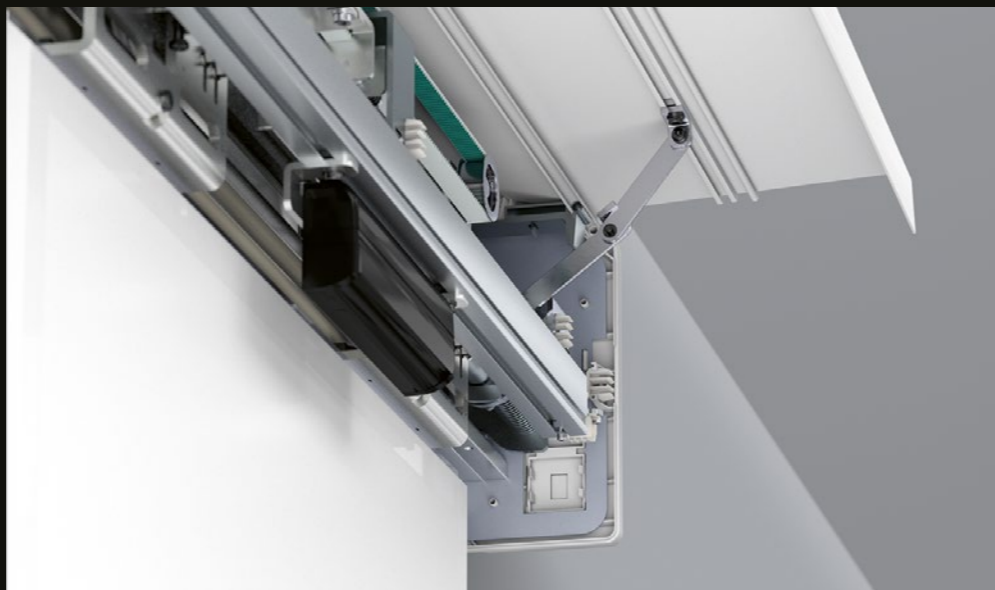
Powerful and dynamic

- › Swift and unhindered passage thanks to highly dynamic acceleration and movement even with heavy door leaves up to 300 kg
- › Reinforced gear motor



Low maintenance costs

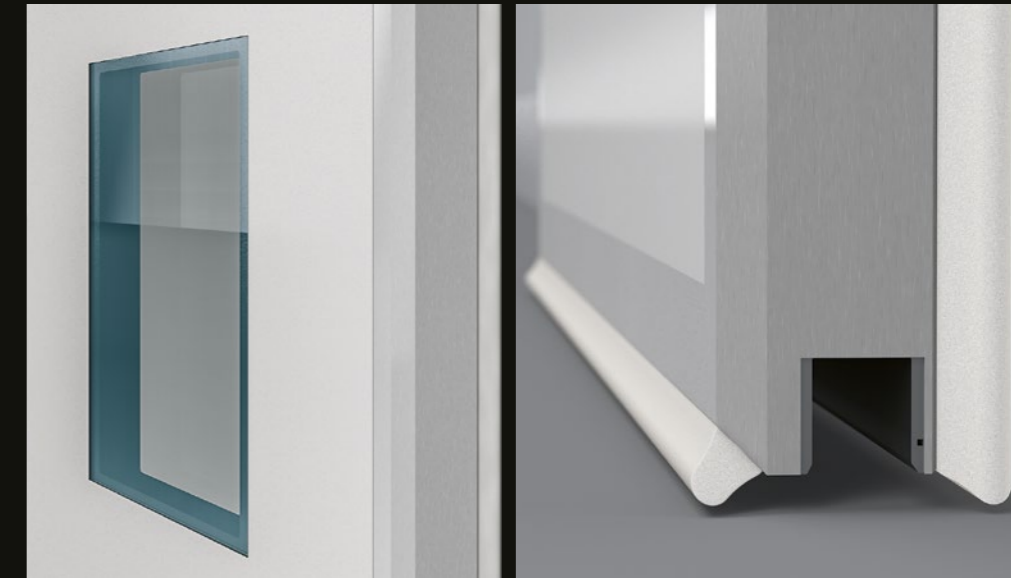
- › Optimal utilisation of facility thanks to simple maintenance and short intervention times
- › Durable materials for longer life and fewer interruptions
- › Excellent accessibility due to hinged drive housing



Outstanding hygiene

Hygienic design

- › No joining seams with door panel widths of up to 2000 mm for standard HPL doors (up to 1250 mm for antibacterial HPL doors) and up to 2500 mm height
- › Flush transition between door panel and profile with no sharp edges
- › Sloping drive housing for reduced dust deposition, easier to clean
- › No aprons required on bottom edge of door; anti-trap protection according to EN 16005 thanks to unique, discreet rubber profile



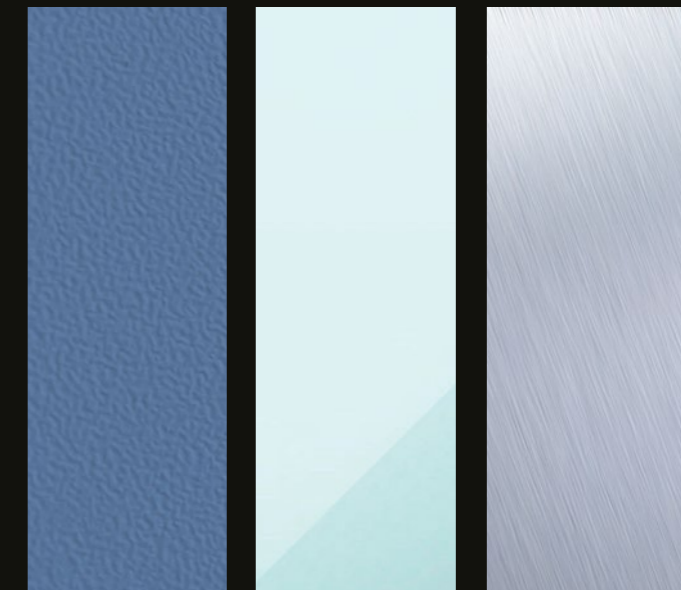
Invisible floor guide

- › Unobstructed passage and easy cleaning thanks to fully concealed guide cams outside the door opening



Easy to clean, antibacterial surfaces

- › Choice of 3 surface materials for door leaf: standard or antibacterial high pressure laminate (HPL), antibacterial glass, brushed stainless steel
- › Door leaf core does not absorb moisture



A wide range of applications

The TORMAX T2 opac hermetic door system includes a comprehensive set of application modules. The individual applications can be combined with each other.



Radiation

- › Lead inlays with a thickness of up to 3mm, radiation protection confirmed by independent testing body



Acoustic

- › Effective reduction of noise levels to sound insulation class 3 (Rw 37dB)



Damp / Wet

- › Inorganic door leaf cores for damp or wet rooms, resistant to liquids and cleaning agents up to climate class III



Fire / Smoke

- › Fire protection EI_{1,30}/EI_{2,30} and smoke protection S_a/S₂₀₀
- › Heat and fire resistant door leaf inlays combined with stainless steel guide rails on door edges for at least 30 minutes fire resistance
- › Windows and door handles for fire protection applications
- › Smoke protection tested at ambient temperature and 200°C

Individual design and configuration

Configure your individual door system from a broad choice of design options, equipment and accessories. Customisation is no longer an option but part of the planning process for the sliding door that suits your specific needs.

Customised digital prints

- › High-resolution, brilliant prints on HPL surfaces
- › Any motif possible: photographs, graphics, fonts
- › Scratch resistant, easy to clean, hygienic

Force compensation with TORMAX open boost

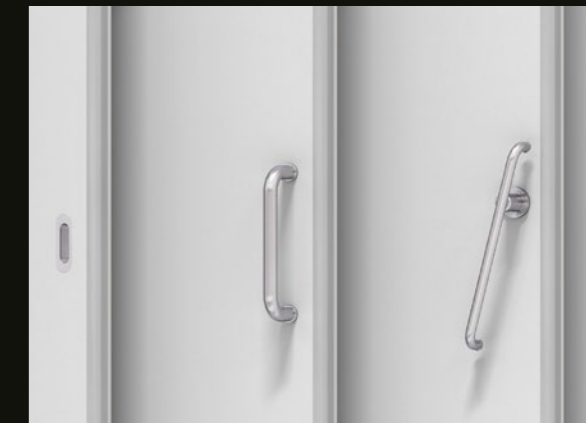
- › Spring-operated energy storage technology "TORMAX open boost" helps users to lift and open the door from its lowered position effortlessly in the event of a power failure
- › Free design options with discreet door handles and handle recesses, no manual lever is required even for maximum door weights
- › The required opening force remains below 220 N even with door leaf weights of up to 300 kg
- › Intensity of force compensation can be adjusted continuously to the corresponding weight
- › Optional accessory, can also be retrofitted

Variety of colours

- › Standard or custom colours or deco foil for door leaf and frame, drive housing and wall connection profile
- › Colours can be determined individually for each element

Windows

- › Mounted flush with the surface
- › Square, rectangular or round
- › Optional: manual or electric blinds in 9 different colours

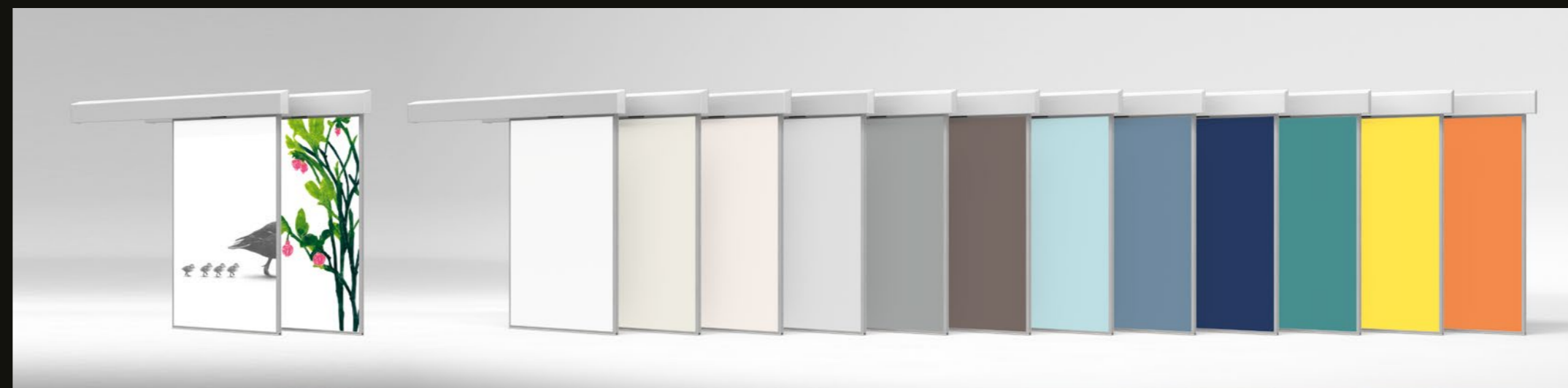


Door handles

- › Handle recess (stainless steel or aluminium)
- › Bow handle (two sizes, stainless steel or aluminium)
- › Manual lever (stainless steel)

Broad choice of accessories

- › Elbow or foot switches, touchless switches, control panels, holding brake



Technical specifications

System parameters	Clear opening width*	800 – 2000 mm
	Clear opening height*	Max. 2500 mm
	Maximum door leaf weight*	1 × 300 kg
	Opening direction	1-leaf opening right (ER), 1-leaf opening left (EL)
	Air permeability	Tested and certified class 4 up to 100 Pa (EN 1026 / DIN EN 12207)
	Sound insulation	Tested and certified up to class 3, $R_w = 37$ dB (EN ISO 717-1)
	Climate class	Up to climate class 3 (DIN EN 1121 test climate c)
	Reinforced gear motor	Extremely durable, running quietly
	Opening speed	Up to 0.7 m/s
	Emission sound pressure	Type 55 dB (A) at 50 cm distance, depending on substructure
	Durability	EN 16005: 200 000 test cycles at 2400 cycles/day DIN 18650-2: class 1, 200 000 test cycles at 2400 cycles/day
Operation	6 operating modes (automatic, partial opening, exit, always open, closed, manual operation)	
	Full opening, partial opening adjustable with time and step switching combined	
	Control unit with status display and error display	
	Push & Go, Pull & Close functions	
	Emergency opening and closing	
	Integration of components for status display, access control and door operation of building management systems, I/O and RS485 (Modbus)	
	Airlock function	
Design	Very flat, elegant drive housing, cross-section only 280 × 135 mm (H × D), with floating effect	
	TORMAX 7501 active infrared sensor for opening and securing is integrated discreetly into the casing. The door is protected by the sensor even when the casing is open.	
	No joining seams with door panel widths of up to 2000 mm (up to 1250 mm for antibacterial HPL doors) and up to 2500 mm height	
	Door leaf surfaces	HPL with NCS colour of choice Antibacterial HPL with NCS colour of choice Stainless steel VA 1.4301 brushed Glass antibacterial on both sides 4 mm
	Window	Triple glazing (VSG 4/18/6/18/4), U_g value 0.7 W/m ² K, flush with surface Rectangular: 400 × 400, 300 × 600, 600 × 600 mm or at choice Round: 300 / 500 mm or at choice Options: Antibacterial, sound insulation, radiation and fire protection

* Larger dimensions on request

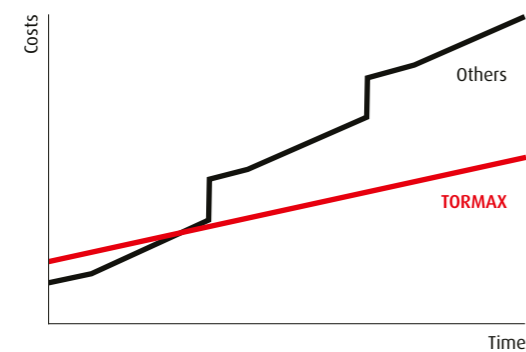
Options	Window blinds	Electrical or manual indoor blinds SL20 (control unit, power supply unit, power supply via spiral cable in the drive housing) NCS colour at choice
	Door handle	Manual lever 535 mm, stainless steel, on both sides Bow handle 350 mm or 500 mm, anodised aluminium or stainless steel Handle recess anodised aluminium or stainless steel
	Aluminium profiles (door leaf frame, frame, drive casing)	Anodised Powder-coated RAL or NCS colour at choice Powder-coated antibacterial RAL or NCS colour at choice
	Door activators	Elbow or foot switches, touchless switches, card readers, key operated switches
	Airtight door system	Without lowering mechanism, sealed on three sides
	Dry room application	Door leaf thickness 50 mm, 3-ply wood core, 39 kg/m ²
	Damp and wet room application	Door leaf thickness 50 mm, polystyrene core, 27 kg/m ² Resistant to liquids and cleaning agents up to climate class III
	Sound insulation	Wood core with extra sound absorbing door leaf inlay ($R_w = 37$ dB)
	Radiation protection	1, 2 or 3 mm lead inlay, other dimensions on request Shielding effect verified by independent body Radiation protection glass Door leaf thickness 58 mm
	Fire and smoke protection	Complies with EI _{1,30} / EI _{2,30} (fire protection) and S _a / S ₂₀₀ (smoke protection) Heat and fire resistant door leaf Door leaf thickness 58 mm Additional guide rails on door edges
	Guidelines / Standards	Bacteria repellent surfaces
Monitored battery unit		
Lock unit		
2006/42/EG, 2014/35/EU, 2014/30/EU, 2011/65/EG		
EN 60335-1, EN 60335-2-103		
EN 61000-6-2, EN 61000-6-3		
EN 13849-1 (performance level d)		
EN 16005, DIN 18650-1, DIN 18650-2		
EN 1634-1 (fire protection), EN 1634-3 (smoke protection)		
UL 325		
Approvals	CE, TÜV, ift, PFB	



All-round quality from a single source

With a TORMAX T2 opac hermetic sliding door system, you are opting for comprehensive quality from a single source.

- › **Superb product quality** with high-grade components and innovative technical solutions
- › **Close project support** by highly qualified technical staff, from design and production to installation and service
- › **Flawless, efficient installation** with pre-assembled modules
- › **High service quality** thanks to our own thoroughly trained service technicians and the use of original spare parts throughout the entire service life of your automatic door system
- › **Low carbon footprint** thanks to a long service life, recycling-friendly materials and advanced production methods
- › **Significantly lower lifecycle** costs than other systems due to exceptionally long service life, reliable technologies, fewer interruptions and service calls



the passion to drive doors

TORMAX installed Europe's first automatic door in 1951. Today, we are a leading manufacturer of automatic pedestrian and industrial door systems, distinguished by technologically advanced, reliable and innovative solutions.

As an independent Swiss industrial group with global operations, we offer the full range of automatic pedestrian and industrial door systems and ensure their reliable operation throughout their service life.

TORMAX will be pleased to advise you about suitable door systems and support you from design to manufacturing, supervising construction, installation and service.

Get in touch with TORMAX!

www.tormax.com