GEZE

SYSTEM INTEGRATION MADE EASY

GEZE

Content

System integration made easy!

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As a global market leader in products, systems, and services related to door, window and safety technology, GEZE products offer a high degree of automation and technical intelligence. The new GEZE Cockpit building automation system and interface modules that interact with the world of KNX and BACnet make it possible to create unique networking opportunities from the broad product portfolio of automatic door systems, smoke and heat extractions solutions, emergency exit management or access control systems.

GEZE solutions turn buildings into Smart Buildings

Whether in office buildings, industrial constructions or hotels: GEZE Cockpit can function both as an independent building automation system or be integrated as part of a higher-ranking building management system. Data is exchanged via the GEZE IO 420 interface module on the BACnet open communication protocol. Interdisciplinary networking in Smart Buildings offers new options for secure, convenient, and energy-saving building operation.

Energy-efficient ventilation, a healthy indoor climate and monitoring of the window modes are also key demands in large buildings. By using the IQ box KNX interface module, GEZE enables the simple integration of automatic window drives into KNX environments – to create an intelligent interplay between window drive and sensors. System integration made easy!

GEZE Cockpit building automation system

IO 420 interface module

BACnet

Powerturn F/R

GC 342

1. Automated escape route door with emergency exit system (RWS)

IQ lock EL

TZ 320 stainless steel

FTV 320

MBZ 300

Powerchain

4. Smoke and heat extraction system (RWA)

Power lock

Slimchain

TZ 320 stainless steel

Lock A

2. Automatic sliding door with improved burglar resistance

Slimdrive SL NT-FR-RWS

Boxer EFS

3. Fire protection door with hold-open system

TS 5000 RFS

RSZ 6

GEZE Cockpit:
the first smart door, window and safety system

With GEZE Cockpit, we are closing the gaps in building automation with the first smart door, window and safety system. The unique networking of door and window technology with smart software and open interfaces offers planners and operators new options for building automation. For more efficiency, security, and convenience. For dynamic safety and fire protection concepts, intelligent smoke and heat extraction, and for targeted escape route release. For modular automation and more opportunities.

GEZE Cockpit uses the open BACnet standard to integrate door, window and safety technology into building management systems. It can be used as an independent stand-alone solution or be integrated into a higher-ranking building management system. The hardware component comprises an embedded system, on which three different GEZE software packages can be installed. Data is exchanged via the IO 420 interface module. Whether you use a PC, tablet, or smartphone: since the applications for GEZE Cockpit are browser-based, they can be operated on every IP-enabled device.

Different software packages – tailored to your needs

With the GEZE Cockpit BASIC application, GEZE Cockpit can be integrated into a higher-ranking building management system to allow installed GEZE products to be operated and monitored. Detailed configuration software and user data administration are also available. The GEZE Cockpit VISU and VISU+ applications enable the solution to be used as an independent building automation system. For example, the GEZE Cockpit VISU version includes an application that enables you to visualise products – so that the specific mode can be detected and changed at any time and independently of location. With GEZE Cockpit VISU+, alarms, monitoring and an e-mail reporting service can also be configured – thus enabling the control of all products without visual inspection.

At a glance:

- efficient and safe building automation system for GEZE products
- up to 62 GEZE products can be connected per GEZE Cockpit
- secure data exchange via the BACnet communication standard
- BTL-certified in accordance with BACnet standard ISO 16484-5
- user-friendly applications, browser-based
- different software packages: GEZE Cockpit BASIC, VISU and VISU+
- can be integrated as surface-mounted or top hat rail casing
- BACnet device profile B-BC

IO 420 interface module:
the networker for building management systems

With the GEZE IO 420 interface module, GEZE products from the automatic door systems, window technology, smoke and heat extraction systems (RWA), and safety technology segments can be integrated quickly and easily into network solutions with BACnet and networked with one another through BACnet MS/TP. This intelligent module enables central visualisation and control of all automatic door systems via the building management system. In this way, monitoring and setting the modes of operation of doors, emergency exit protection systems and windows does not only save time, but it also optimises the energy balance sheet and increases security.

At a glance:

- access to the future-oriented BACnet world
- standardised networking of all GEZE automation solutions
- easy integration into building management systems
- MS/TP interface
- BACnet device profile B-ASC
- BTL-certified in accordance with BACnet standard ISO 16484-6

1. Automated escape route door with emergency exit system (RWS)

The IO 420 interface module makes it possible to release emergency exit systems (RWS), e.g. the TZ 320 door control unit, via a building management system. Door control units can be monitored and report errors and alarm statuses. In case of danger, electric locks and swing door drives are controlled automatically and emergency exit routes are activated – for safe and efficient building management.

TZ 320 stainless steel: sophisticated door control unit

- controls and monitors one or more electrically locked escape route doors
- features a high-quality stainless steel cover
- protected against vandalism and exceptionally stable
- removal of front plate will trigger the sabotage alarm
- simple installation using only four screws
- surface- or flush-mounting possible
- simple retrofitting of lighting etc.
- approved in the test certificates of the GEZE TZ 320 and TZ 300 door control units

Powerturn F/R: strong connection

- drive for single- and double-leaf swing doors
- approved for heavy fire protection doors
- smoke control unit invisibly integrated into the cover
- Smart swing function for easy manual access
- opening and closing even under adverse conditions (wind, suction, etc.)
- quick and easy installation
- door leaf widths of up to 1,600 mm or leaf weights of up to 600 kg
- overall height of just 7 cm

GC 342: compact protection

- laser scanner with complete door leaf protection
- can be combined with all GEZE swing door drives for leaf widths of up to 1,600 mm
- 'one button commissioning' and an automatic learning function
- integrated wall blanking
- whole-area door protection including secondary closing edge
- fast, intelligent installation and commissioning

IQ lock EL: electronic motor lock

- motor lock for single-leaf swing doors
- cross latch construction for quick, jarring-free locking
- different modes of operation (e.g. night-time operation, hold open, etc.)
- potential-free contact evaluation
- routing to a monitoring system

FTV 320: secure unlocking – safe escape route

- electric escape door lock combined with TZ 320 or TZ 300 door control units
- secures escape routes against unauthorised access
- strong hold of over 5,000 N thanks to three-latch-construction
- reliable unlocking in case of danger, even under heavy preload
- vandalism protection: reporting of sabotage attempts
- versatile installation options
- quick and easy installation

2. Automatic sliding door with improved burglar resistance

GEZE automatic sliding door systems open and close passage doors reliably and provide barrier-free access. The automatic Lock A hook bolt lock, fully integrated into the main closing edge, provides for a secure lock as required. IO 420 monitors and controls the automatic components via a building management system.

Slimdrive SL NT-FR-RWS: sleek all-rounder

- automatic sliding door system, ideal for glass façades
- low overall height of only seven centimetres
- moves door leaf weights up to 125 kg
- easy commissioning, maintenance and diagnosis
- easy installation thanks to modular design and new track

TZ 320 stainless steel: sophisticated door control unit

- controls and monitors one or more electrically locked escape route doors
- features a high-quality stainless steel cover
- protected against vandalism and exceptionally stable
- removal of front plate will trigger the sabotage alarm
- simple installation using only four screws
- surface- or flush-mounting possible
- simple retrofitting of lighting etc.
- approved in the test certificates of the GEZE TZ 320 and TZ 300 door control units

3. Fire protection door with hold-open system

Fire protection doors which are held open electrically with a hold-open system for barrier-free use can be closed from a central point in case of emergency thanks to the IO 420. This helps to reliably prevent the spread of fire.

Boxer EFS: integrated free swing door closer

- variable closing force setting from EN 4 to EN 6
- standard comfort hold-open function at the end of the free swing area
- flexible spindle extension by 4 or 8 mm possible using accessories
- reduced inventory costs as DIN left and DIN right lever can be used
- simple door processing thanks to compact installation dimensions
- concealed installation to meet the highest of design requirements

TS 5000 RFS: barrier-free fire protection doors

- variable closing force setting from EN 3 to EN 6 (up to 1,400 mm leaf width)
- standard comfort hold-open function at the end of the free swing area
- unobtrusive, easy to install electrical connection
- simple cable connection after door closer installation

RSZ 6: reliable smoke switch control unit

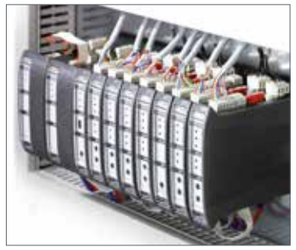
- detects fire and smoke at an early stage
- controls hold-open devices for fire and smoke protection doors
- can be combined with door closers with integrated hold-open function and hold-open magnet
- additional smoke switches can be connected

4. Smoke and heat extraction system (RWA)

The MBZ 300 modular control panel takes over control of the smoke and heat extraction system. Combined with the IO 420 BACnet interface module, MBZ 300 can be integrated into the building management system and implement a wide range of ventilation scenarios.

MBZ 300: flexible control panel

- bus control panel for RWA cases and daily ventilation
- will take over the power supply to all connected opening systems in RWA situations and ensure their coordination and monitoring
- flexible modular design, can easily be extended
- mapping of even complex RWA systems with PC software
- can be configured ex works as an individual solution
- can be used as a central control panel or in the form of multiple networked control panels



Slimchain: slim all-rounder

- compact chain drive for unobtrusive façade design
- suitable for natural ventilation, smoke and heat extraction and SHEVs
- different stroke versions of 300 mm, 500 mm and 800 mm
- individual adjustment of drive stroke and speeds
- easy synchronisation of up to four drives without an external control unit

Powerchain: genuine power package

- strong chain drive for heavy window façades, roof windows and skylights
- suitable for natural ventilation, smoke and heat extraction and SHEVs
- achieves high opening speeds in smoke and heat extraction situations
- different stroke versions of 600 mm, 800 mm and 1,200 mm
- individual adjustment of drive stroke and speeds
- easy synchronisation of up to four drives without an external control unit

Power lock: secure locking

- locking drive for large windows
- can be used for frame and leaf installation
- flexible retro-fitting with the new chain and spindle drives
- can be used with the Slimchain, Powerchain and the E 250 NT spindle drive in SHEVs
- can be used with standard central closures
- simple commissioning and automatic sequence control

Practical example: intelligent building automation

Building-specific solution for modern building management system with IO 420

Project: Construction of a new office complex

Focus:
- building automation with intelligent control
- interoperability between automated product groups

Demands:
- monitoring and control of escape doors via a building management system
- changing of modes of operation and status monitoring of automatic door systems
- activation of hold-open systems
- controlling the flow of people into buildings – as required (e.g. for events)
- status monitoring of the smoke and heat extraction system and activation of the multifunctional smoke and heat extraction fresh air door

GEZE solution:
- connection of the integrated GEZE products (TZ 320 door control unit, swing door drive, revolving doors, motor locks, hold-open systems) via the IO 420 interface module on BACnet MS/TP
- integration of third-party products such as high-speed doors

Building control
Elsner WS1000 Style

ECturn Inside

KNX Display
Elsner Corlo Touch
with WLAN

GEZE IQ box KNX

TOF/Spot
time of flight measurement
(AIR)

1. Automated entrance door with improved burglar resistance

GEZE SecuLogic
GCER 100

2. Automated ventilation window

Slimchain

GEZE IQ box KNX
Direct dialogue between windows and components

A natural, energy-efficient supply of fresh air whenever needed – entirely on demand and under control at all times: the new GEZE IQ box KNX interface module allows GEZE IQ windowdrives to be directly incorporated in KNX building systems. This enables a dialogue with other KNX-enabled components, such as push buttons and sensors. In contrast to simple switch contacts, the IQ box KNX uses the intelligence of the window drives and after performing a 'command' reports the mode of a window to the KNX building system or building management system. More detailed window information is also made available via the module, such as the precise opening width.

At a glance:

- precise positional activation of GEZE IQ windowdrives
- safe integration into the KNX world
- easy and time-saving installation and commissioning
- scalable system – according to demand
- reliable status report from every automated window
- more efficient window monitoring

1. Automated entrance door with improved burglar resistance

Outstanding protection against burglary, controlled access and comfortable use: multifunctional door systems are also becoming increasingly important in the entrance areas of private houses or smaller commercial buildings. GEZE offers solutions that are fully tailored to the individual need. For example with the ECturn Inside automatic swing door drive, a multi-point locking system, and the GEZE SecuLogic GCER 100 stand-alone access control system. This can be combined with all motor locks and multi-point locking systems on entrance doors. It also fits perfectly into the world of GEZE system products and controls swing and sliding door drives, electric strikes, panic locks and emergency exit protection.

ECturn Inside: barrier-free passage doors

- compact automatic swing door drive
- flexible integration in various door leaves or door frames
- operation in low-energy and automatic mode
- for door leaf widths of up to 1,100 mm or leaf weights of up to 125 kg
- optional battery for continued operation in the event of a power failure
- additional sensors can be connected

GEZE SecuLogic GCER 100: keyless access control

- access control system for smaller buildings and up to 100 people
- use of ID cards, key rings (“tags”) and all standard car keys possible
- managed using a master card
- encrypted data transmission for high data security
- straightforward commissioning
- can be used inside and outside

2. Automated and secured ventilation window

The GEZE solutions for ventilation and indoor climate control complete the comprehensive range of drive systems for daily ventilation, as well as the GEZE RWA systems and can be optimally combined with these. Via a KNX interface of the indoor climate control, this can be adopted into an overall KNX system, and existing KNX devices can be used for the activation of the room climate control system. Building operators thus benefit from a variety of automation, comfort and safety functions. Safety sensors ensure that people, children in particular, are not exposed to any increased risk from automated windows.

Slimchain: slim all-rounder

- compact chain drive for unobtrusive façade design
- suitable for natural ventilation, smoke and heat extraction and SHEVs
- different stroke versions of 300 mm, 500 mm and 800 mm
- individual adjustment of drive stroke and speeds
- easy synchronisation of up to four drives without an external control unit

TOF/Spot time of flight measurement (AIR): compact unit

- self-monitored compact sensor
- precise light beam for protection
- hiding of certain detection areas
- suitable for use in façade, wall or ceiling components
- can be used inside and outside (IP rating IP65)

Practical example: networked system solutions by GEZE

Building-specific solution for automated windows with IQ box KNX

Project: New build of a Town Hall complex

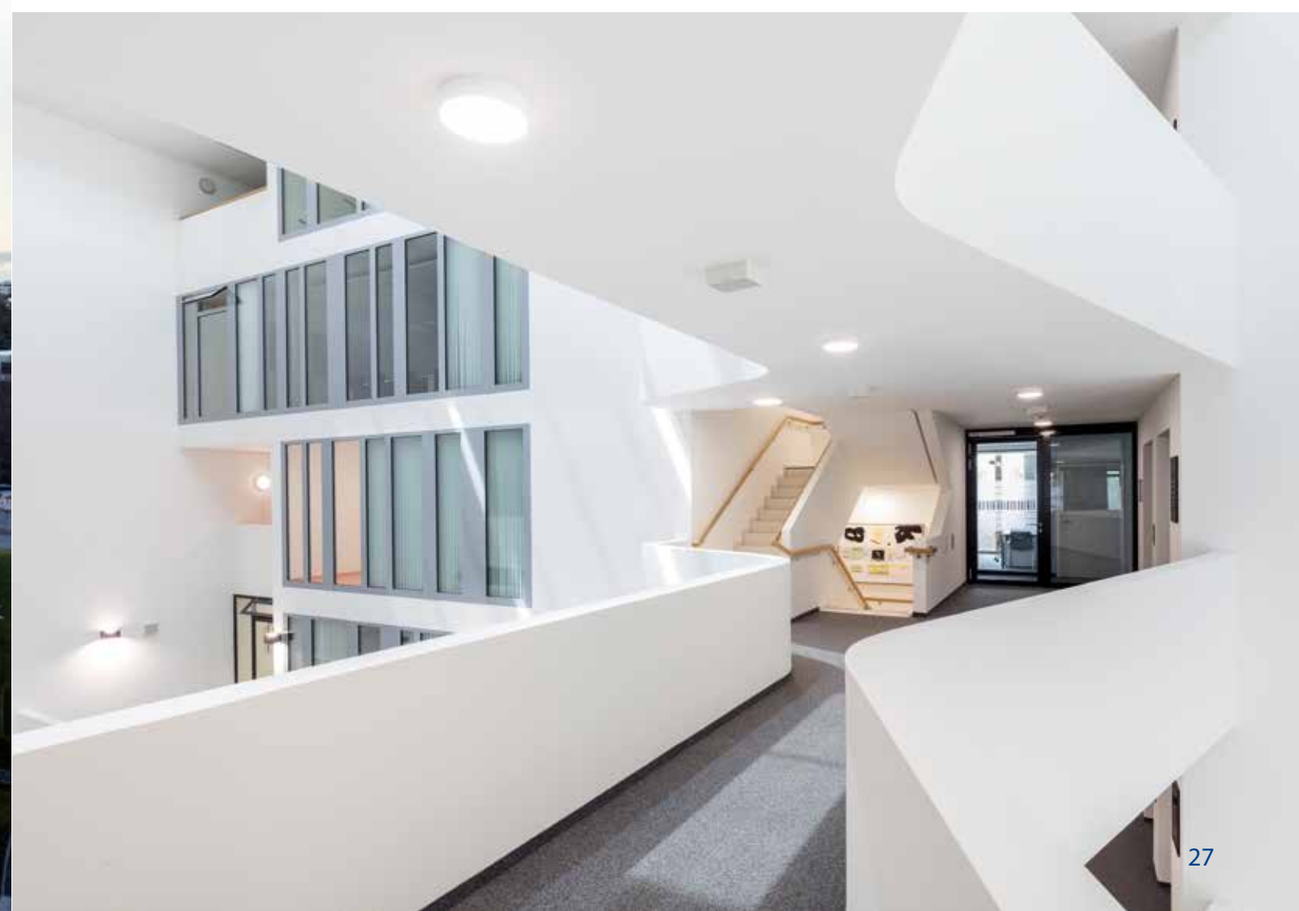
Focus: Increased safety, accessibility and a sustainable energy concept

Demands:

- automated opening of the windows
- coordination and monitoring of the window systems
- automated night-time back cooling
- ventilation at the touch of a button

GEZE solution:

- individual activation of window systems and components
- integration of the GEZE drives into the building management system through the IQ box KNX



A4000 vector electric strike: the perfect fit for comfort and design

Electric strikes are an essential aid on highly frequented entrance doors. The A4000 vector electric strikes from IST Systems, a member of the GEZE Group, are an optimum solution here. Their particular strengths include almost silent opening with direct current – even under heavy preload and without additional electronics. With the typical small size expected from IST, A4000 vector electric strikes give door manufacturers, installation companies, architects, and planners new design options and greater planning security. The versions with optional I.S.T.Kingfix lock latch guide support discreet door designs. Cutaways on the door profile can be reduced to a minimum. This means that door seals are not compromised and that the A4000 I.S.T.Kingfix is an optimal component when increased heat and sound proofing are needed. The dimensions of the I.S.T.Kingfix lock latch guide are compatible with standard electric strikes and strike plates - guaranteeing simple retrofitting.

At a glance:

- high retention forces of 5,000 N
- symmetrical configuration: installation DIN left/DIN right as well as vertical or horizontal
- integrated bipolar EMC protective diodes
- very quiet opening under preload
- small dimensions (typical of IST)
- can be combined with standard strike plates
- large operating voltage due to twin coil technology
- numerous versions to meet different needs

Services from GEZE: quick, efficient, reliable

Customer satisfaction takes top priority for GEZE. From initial consultancy through individual solution-finding to commissioning, regular after-sales service and training: services from GEZE guarantee reliable planning possibilities and reduce your day-to-day effort and costs.

Data packages for LogiKal (Orgadata): efficient planning

When planning, calculating and building façades, planners and metal processors can also access GEZE product data. The Orgadata software solution LogiKal optimises planning and manufacturing processes and saves time and costs. At the click of a mouse, the technical details of GEZE products can easily be included in the calculation and planning as package solutions and integrated in further manufacturing processes. Special requests are no problem either. For example, even complex systems can be planned and produced simply and technical perfect.

At a glance:

- optimisation of planning and production processes
- flexible choice and composition of GEZE products
- broad scope of functions and simple maintenance
- efficient and precise planning and production of solutions to match requests

GEZE Customer Solutions: creative freedom with specialised solutions

With GEZE Customer Solutions, customers benefit from sophisticated, customised and special solutions, which offer the best-possible safety and comfort. And all this from a single source. A central contact person is available for all questions from the initial idea right up to commissioning; irrespective of whether the questions refer to special building requests, applications in terms of traffic or solutions for machines and systems. GEZE customised solutions provide everything you need.

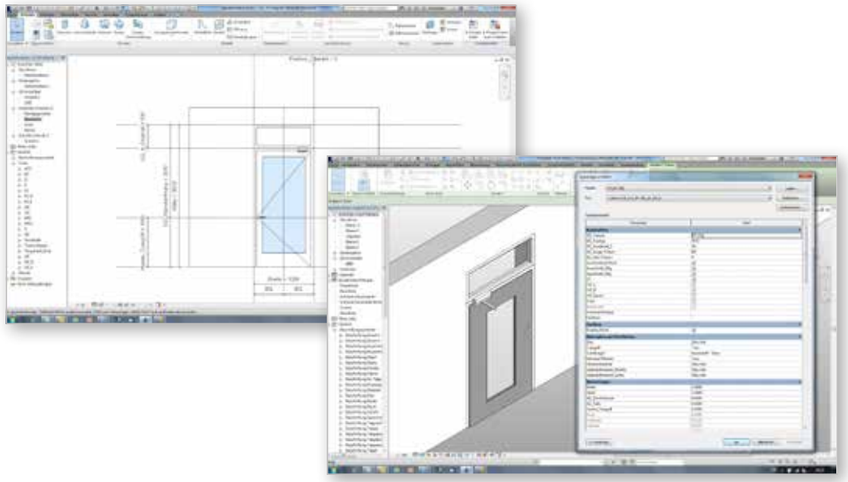
At a glance:

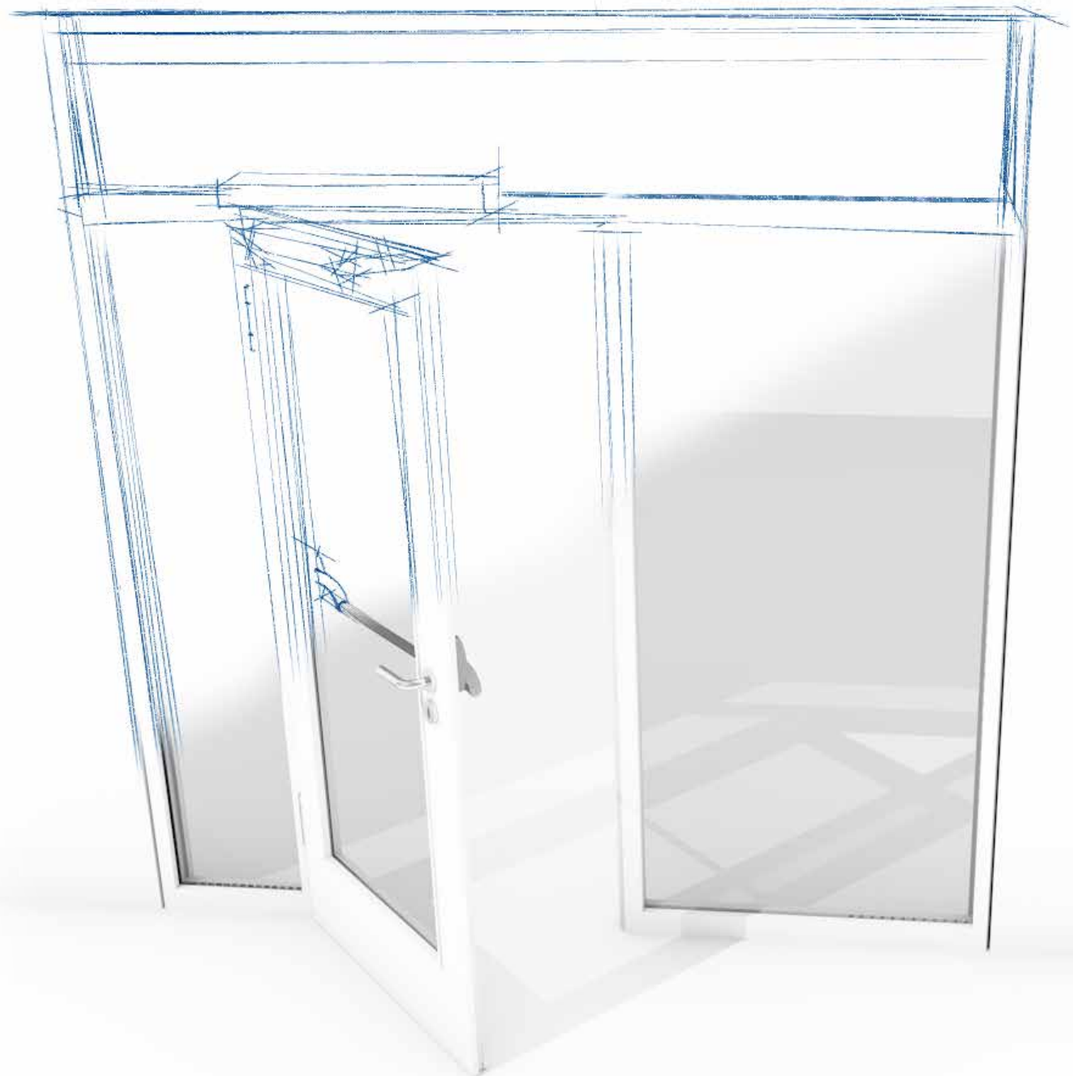
- sound advice for individual requests, national and international service
- compilation of customised, cross-product (special) solutions e.g. for buildings, ships, trains, transport vehicles or machines
- coordination of the interfaces in case of specific demand
- one central contact person to answer all your questions

Building Information Modeling (BIM): five elements for complete door planning

Greater planning security with little effort: all the doors in a building can be planned extremely easily using GEZE BIM objects. Because the GEZE solution enables everything to be displayed using just five multifunctional doors – from swing and sliding doors through to revolving doors. GEZE BIM objects are compatible with the most common CAD programmes, so that planners can generate their door list directly.

Behind Building Information Modeling (BIM) is a method of innovative building planning that uses a digital building model – from planning and implementation through to operation and possible demolition. BIM allows buildings to be designed, modelled, optimised and simulated. During this process, all relevant building data is recorded, combined and networked. And all that in just one 3D model which all the participants work on jointly.





At a glance:

- all door solutions generated with just five door types
- simple and easy to use
- can be used flexibly in every phase of the project
- complete depiction possible in 3D
- complete list of elements at the push of a button
- compatible with the most common CAD programmes
- can be used offline
- better exchange of information among all participants
- increased productivity
- earlier error detection and rectification
- more planning and cost security

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