

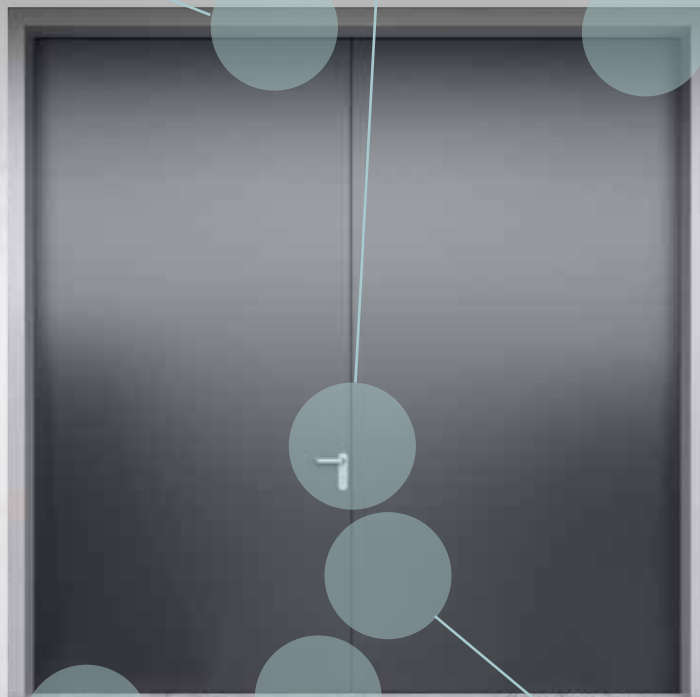
THE SPECIALISTS

Object competence for data centers

Security sets with
multipoint locking system

Slide rail closer for
automatic closures

Magnetic contact and
escape door strike



Raised installation positions
(raised floors) with lightweight
stud wall constructions
possible*



Specially designed for
fire-rated doors:
Mushroom head locking
incl. bottom seal



Especially for
pressure doors:
hook-and-bolt
locking system

* explanatory view!
Open floors are
from an occupational
safety point of view
to be closed off
correctly!

SAFETY FIRST

CHALLENGE: DATA CENTRES

The greatest challenges of IT data centres arise primarily from the special structural infrastructure.

Increasingly large server cabinets, shaft situations as well as raised installation positions due to accessible intermediate floors and high, combined fire protection requirements require special attention. Floors should generally have fire resistance class F30 and walls and ceilings should be fire-resistant to at least F90. Often, even the highest protection class RZ 4 of the DIN standard must be fulfilled in order to ensure that computer operations can be maintained even during a fire.

Another essential aspect includes the special safety precautions with regulated access techniques.

To do this, it is necessary to clarify in advance whether it is a a centre for individual IT companies or a colocation centre with several companies. Here is just a small sample of the common technology that one is confronted with at the very beginning of such a building project: Connection to existing building management and security systems and electric locks, magnetic contacts, panic functions and their compatibility with on-site card readers and fingerprint sensors.

Schematic structure of a data centre:
Here, a smooth process is essential.



Main requirements for data centres

- Special fire protection (safety, pressure, sound) at raised installation positions in connection with light-weight stud wall constructions
- Comprehensive requirements for access technology
- Increased safety requirements
- Protection against flue gas, splash water and pressure loads during the continuation of computer operation
- Exclusively use tested and approved solutions

Magnetic contact and escape door strike

Concealed in the frame and door leaf, the magnetic contact reliably signals when the door is closed or opened. The escape door strike also enables quick opening in dangerous situations. Especially in data centres, where seemingly contradictory requirements often arise, special solutions of this type represent real added value. Teckentrup supplies a wide range of hardware and access systems.



Magnetic contact and escape door strike



Pressure Door with hook-bolt latch



Fire protection door with mushroom headed bolt and floor seal

Hook-bolt latch

Especially for pressure doors the hook-and-bolt locking system in its version as a multipoint lock is a perfect fit. This combination pulls the door firmly into its frame and thus high tightness and pressure resistance will be achieved. In addition bolts and swivel hooks prevent the door from being forced to open.

Mushroom headed bolt

The combination of mushroom headed bolts and a bottom seal is a reliable locking and sealing technology, especially for fire doors. While the mushroom headed bolts interlocking securely into the passive leaf when the door leaf is closed and with that providing protection against levering open, the bottom seal provides the sound-absorbing effect and also reliably prevents the passage of smoke.

Raised installation position

If the accessible floor as an intermediate floor is 500 millimetres higher than the actual floor, this is known as raised assembly, which requires special doors with special equipment and approval. The combination of increased fire protection and raised floor of this type requires a great deal of attention here, as often light-weight wall constructions and doors of three metres with fire resistance classes of up to 90 minutes come together.



Raised installation position

CONVINCING AT ALL LEVELS

- Fire certification EI₂60 + EI₂90 for sandwich panel wall (no steel substructure necessary)
- 1- and 2-leaf design
- Door size up to 3,0 x 3,0 meters
- All features can be combined: incl. certification for most European markets
- Special equipment (among others soundproof glass, 4-sided frames)
- Raised access floors with lightweight stud wall constructions combinable
- Special lock and access technology for increased security requirements (connection to existing building management and security systems possible)

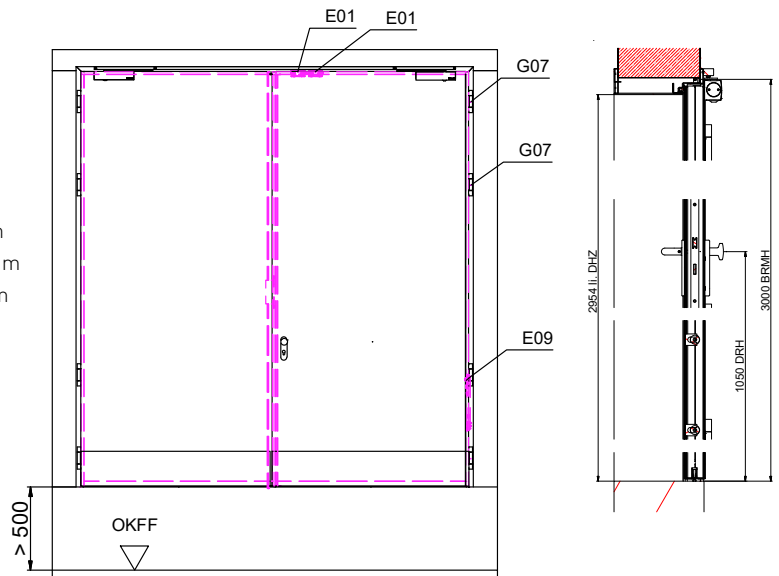
FIRE PROTECTION DOOR

Door leaf

- (G01) Sheet thickness door leaf 1.00 mm
- standard colour 9002 powder primed
- Coating thickness 50-80 micron
- Active leaf width 1371 mm, box dimension height 2970 mm
- Inactive leaf width 1371 mm, box dimension height 2970 mm
- (G12) with retractable bottom seal, bottom clearance 8 mm
- (G07) 3 x 3D hinges, 4 mm galvanised
- Secured hinge bolts
- (G10) Number of security bolts per leaf 3

E-components

- (E01) 2 x magnetic contacts (1-leaf/GF) type 655 / VdS class C 4 (E01) 1 x magnetic contact Inactive leaf type 655 / VdS class C 4
- Emergency escape strike



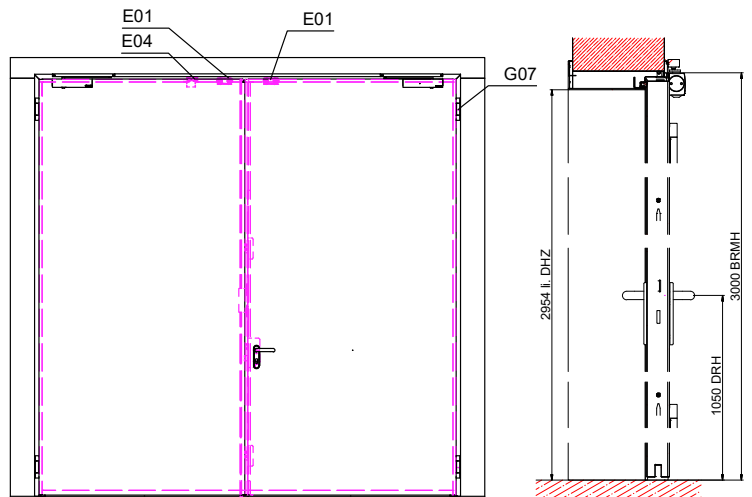
PRESSURE DOOR

Door leaf

- (G01) Sheet thickness door leaf 1.50 mm,
- standard colour 9002 powder primed
- Coating thickness 50-80 micron
- Active leaf width 1472 mm, box dimension height 2970 mm
- Inactive leaf width 1472 mm, box dimension height 2970 mm
- (G12) without bottom seal, bottom clearance 8 mm
- (G07) 2 x 3D hinges, 4 mm galvanised
- (G10) Number of security bolts per leaf 3

E-components

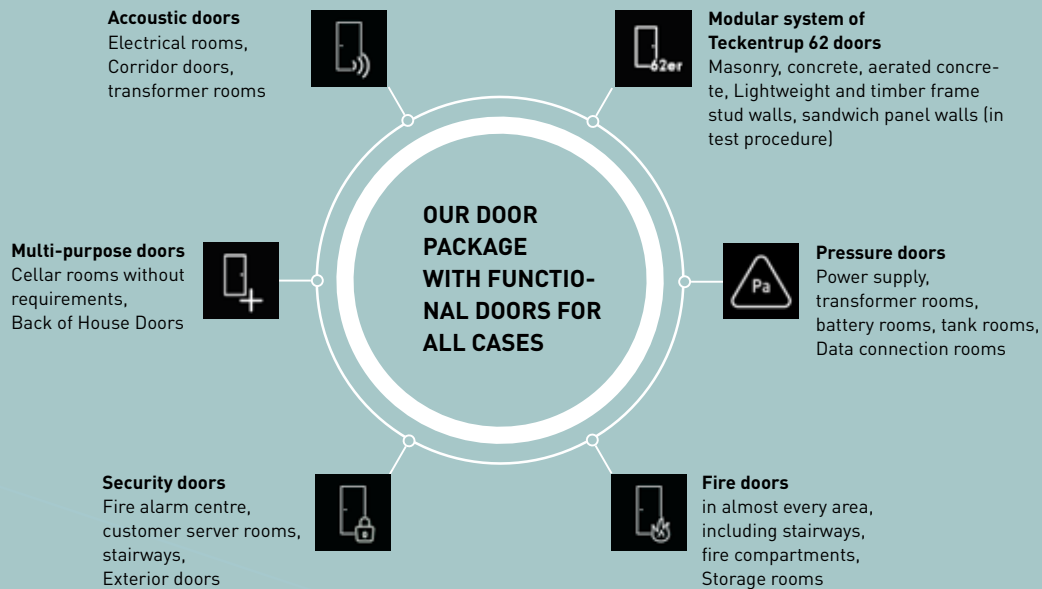
- (E01) 1 x magnetic contact (1-leaf/GF) type 655 / VdS class C 4 (E01) 1 x magnetic contact Inactive leaf type 655 / VdS class C 4



Note: Pressure loads up to 7500 Pa possible.

FUNCTIONAL DOORS FOR ALL CASES

Our all-round door package ensures your success. Especially data centers in particular, are subject to stringent requirements in terms of security and fire protection. With doors from Teckentrup, operators can be sure to meet all requirements.



OUR PRODUCTS

- Approval compliant, country-specific product proposals
- Special equipment & special sizes possible

OUR SERVICE

- Needs-based, customised planning
- Support as early as possible within the planning /execution
- Quick quotation for budget calculation
- Short delivery delays

YOUR SECURITY

- Early clarification of technical feasibility
- Avoidance of costly planning errors
- High level of understanding for construction progress programmes
- Smooth construction process with high transparency
- On-time delivery of the goods
- Low risk thanks to exclusive use of tested and approved solutions

We are happy to advise you.