



The S4-Z series of doors

for detention facilities



Steel door: series S4-Z

For detention facilities

The SÄLZER S4-Z range of doors are products especially developed for the use in police stations, courts, prisons, forensic hospitals, armed forces and other facilities which needs detention cells.

Product testing and certification

The door is extremely resistant to torsional loads due to the double-walled steel construction. With a leaf thickness of 70-72 mm, this provides maximum protection against vandalism and break out attempts. The door leaf consists of an inner reinforced frame made of flat steel profiles and clad on the cell side with 3 mm and on the corridor side of 2 mm galvanized steel sheets.

Tested in accordance with European standard resistance class RC4

For break out resistant products no standard exist. Therefore SÄLZER tested the doors of the S4-Z series in accordance with the standard for forced entry resistance, DIN EN 1627-1630, to ensure proven security. The door was tested from both sides:

- from the exterior side (corridor side, against forced entry or escape attempts) and additionally
- from the interior side (cell side, against break out attempts).

The door has been tested with multiple locks and performed in the resistance class RC4 (WK4).

Tested according to the guidelines for cell doors of the federal state of Saxony-Anhalt

In the tests according this guideline the door reached much better test result as required. The test results confirm the high torsional rigidity and robustness of the door, which not only offers a very high level of security but also a tremendous vandalism protection.

The test results in detail:

- at an **edge load of 2 t** - the deflection was < 3 mm (target: < 5 mm) and
- at a **static load of 2.5 t** - the deflection was < 6.5 mm (target < 15 mm) and
- at a **torsion of 1.3 t load** - the deflection was < 4 mm (target: 1.3 t load / deflection < 80 mm).
- similarly, the door must be operable with a key from the corridor without further technical aids **after 15 min. fire exposure inside the cell.**

As a further variation the door is available in the following combination of security:

- **fire resistant** - 30 min resistance - and
- **forced entry and breakout resistance in RC4.**



Historical cell door, an exact replica of an existing cell door. Massive steel door with wooden planking, equipped with the latest security technology. Specifically bent steel frame adapted to the shape of the masonry.

Individual Design

Different locks

The use of different lock types is possible because of the door leaf depth. The door is prepared for the integration of the locks of all known manufacturers. E.g. following lock variations can be installed:

- passage locks with both sides closing; with/without lever bolt lock.
- cell door locks with unilateral closure; with/without lever bolt lock (quick locking).
- electromechanical locks.
- cell door lock, with inmates closure.



Cell section of a police station. Detention doors with stainless steel covering, food passers, security chains and quick release fasteners.

Anti ligature design

The SÄLZER door design of the series S4-Z has no protruding edges inside the cell and therefore no possibility of any injury or suicide attempts by detainees .



Cell section of a prison.



View inside the cell: SÄLZER S4-Z door with fanlight. The door is mounted flush to the wall inside the cell. Therefore no protruding edges and no basis for any injury or suicide attempts.

Variations of the frame

The frame consists of a roll formed 2.5 - 3 mm thick steel plate.
The installation depth of the frame is about 111 mm.

For individual design SÄLZER offers different frame variations:

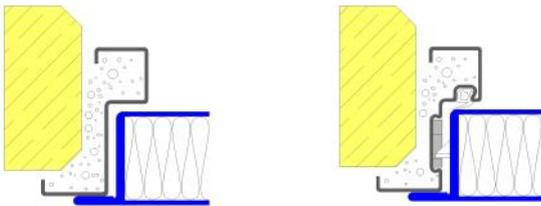
- edge frame (standard).
- block frame.
- edge and counter frame (surrounding frame).

Additional options

- frame with surrounding seal for sound reduction.
- three-sided fire bars.
- stainless steel threshold.

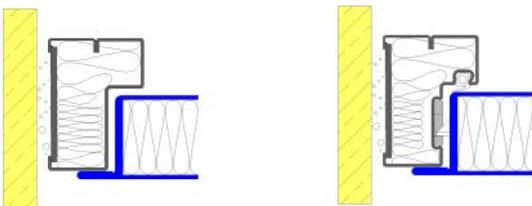
Edge frame (standard)

Installation options: concealed fixing with anchor brackets or with bolts.



Left option without gasket, right-hand option with rubber gasket.

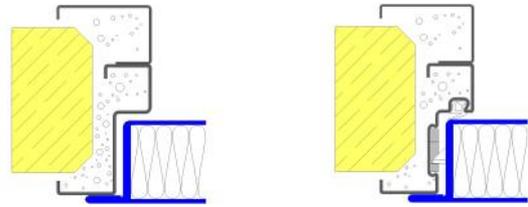
Block frame for the flush installation into the opening



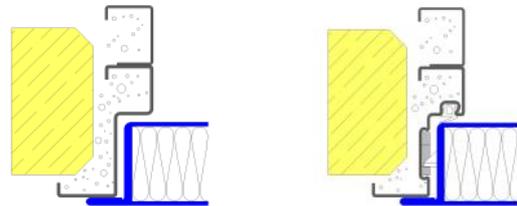
Left option without gasket, right-hand option with rubber gasket.

Edge and counter frame (surrounding frame)

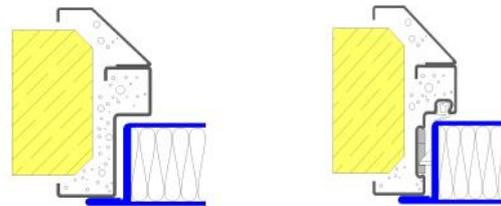
The counter frame is in accordance with the wall thickness available in 3 different types: type A, type B, type C.



Typ A; left option without gasket, right-hand option with rubber gasket.



Typ B; left option without gasket, right-hand option with rubber gasket.



Typ C; left option without gasket, right-hand option with rubber gasket.

Compact and robust Design



Hardware

- 2 or 3 steel hinges (3 parts) with hardened, ball bearing and secured hinge pin.
- 3 massive safety bolts prevent door removal when locked.

Surface

Galvanized and primed, provided for customer's final painting.

Installation

According to installation instructions from SÄLZER GmbH. On request, SÄLZER implement the proper installation.



Door Variations

The SÄLZER steel door of the series S4-Z can be opened up to 180 °.

The door can be construction inward or outward opening and hinged left or right.

Options:

- top and side lights.
- additional grill door.
- designed as particularly secured detention room door (BGH-door).

Sound Insulation

Sound insulation in accordance with DIN 4109 **up to 39dB**. A higher sound insulation is available on request.

Solid door construction offers protection against vandalism and break out attempts. Equipped with multiple lock (lever bolt lock), handle, sliding bolt, security chain and food passer.

Supplementary equipment

Food passer

The SÄLZER food passer is a double walled steel unit, including a food passer lock. The food passer is flush to the inside door surface in the closed position. The two heavy duty hinges serve as an opening delimiter. The locking mechanism can be supplied by the customer depending upon the security situation.



Food passer

Door viewer

The door viewer is manipulation and vandalism resistant:

- wide angle: 150°.
- easy installation and no exposed parts for manipulation on cell side.
- operation by authorized staff outside the cell.
- pass through position: opening to pass medication, can also be used to clean the door viewer, if inmate has obstructed the viewer.
- standard door viewer available.



Door viewer

Security chain

For extremely heavy use SÄLZER has developed a special, solid security chain, with mounting plate attached to the frame and locking rail installed on the door leaf. As an option: SÄLZER provide a security chain that can be locked from either direction.



Security chain

Observation window

The SÄLZER observation window allows the authorities to observe cells, common rooms etc. The glazing is tested in accordance with DIN EN 356 and is available up to the highest forced entry/break out resistance levels. The size and shape are customized. Optional, outside blinds can be installed on the window.



Observation window

Fanlight

In the fanlight, video equipment and lighting systems are installed. Inside the cell the bullet resisting glazing is flush mounted. The glazing is tested in accordance with DIN EN 356. Outside the cell there is a perforated sheet installed as revision opening.



Fanlight

Quick Release fastener for cell doors

- **Sliding bolt**
Two solid sliding bolts, each made of flat steel 45 x 12 mm. Mounting guide plate is installed on the door leaf and the inlet anchor is mounted on the frame.
- **Hand lever**
This fastener locks quickly and reliably with a lever bolt. The hand lever is particularly easy to use.



Sliding bolt

Vandalism-resistant door status display

- red-green door status indicator (traffic light system), with optional door buzzer.
- mechanical latch position indicator.



Hand lever



Door status display

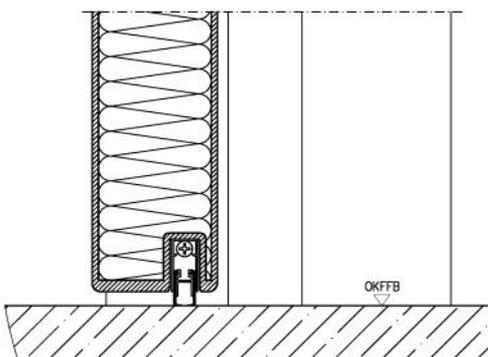
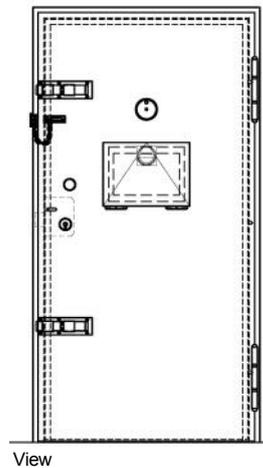
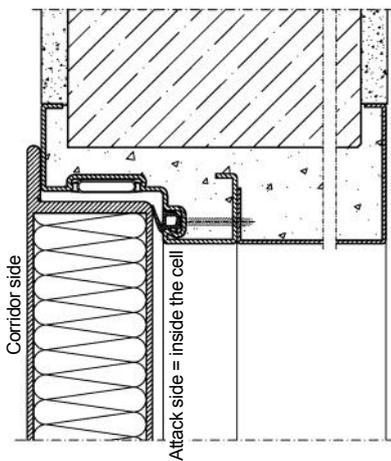
Further options

- earthing straps for the reliable earthing the frame.
- door stop for wall and floor mounting.
- stainless steel door protectors.
- automatic retractable bottom seal.
- additional fixed door knob or handle for better handling of the doors.

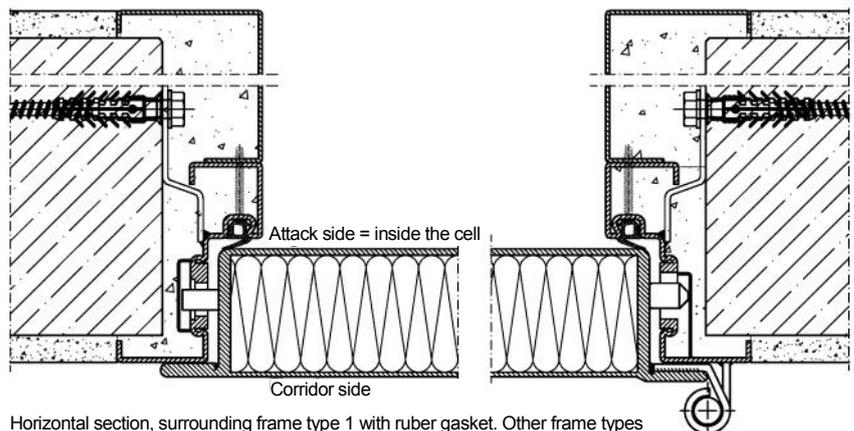


Left door equipped with door viewer and door knob.
Door right, cell door with handle, stainless steel covering and door viewer.

Design variation



Vertical section, surrounding frame type 1 with rubber gasket.



Horizontal section, surrounding frame type 1 with rubber gasket. Other frame types available.

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