



***METAS*[®] cell window**

- » Reliable forced entry and break out resistant cell window even without grilles
- » Tested and certified according to DIN EN 1627-1630



High security even without grilles

METAS® windows are tested on both sides in accordance with the European standard for forced entry resistance DIN EN 1627-1630¹⁾:

1. Fixed glazing:
 - inside and outside, up to resistance level RC4
2. Operable window elements:
 - A. inside, up to resistance level RC3
 - B. outside, up to resistance level RC4

This ensures reliable security without the use of grilles. Furthermore the **METAS®** window corresponding to guidelines and specific requirements of various federal states.



Example: 2 fixed windows with ventilation grilles at each side.



Window combination: fixed window field at the left side in combination with a side hung outward opening window leaf, inside a perforated sheet.

New: window also tested with outward opening tilt window sash.

Advantages:

Flush window sash and profile, no gaps between window sash and frame, concealed hardware

- Window sash and glazing beads are rounded and flush and offer therefore no risk of injury.
- Also the SÄLZER openable windows are constructed to avoid suicide: the inner profiles of frame and sash form an unit with the stop seal, if the window is closed. There is no gap between sash and frame and no threading a wire/thread to commit suicide is possible. Due to this construction the stop seal can't be pulled out.
- The glazing bead can't be removed and the glazing gasket can't be pulled out by the inmates.
- The hardware is installed concealed, so the window sash can't be unhinged or pulled out.
- No window handle is installed to prevent suicide and vandalism. The sash will be opened and closed with a square spanner by the staff. After closing the window and removing the square spanner the square in the profile will be protected by closing the edgewise installed profile cylinder.

Various design types

No standard **METAS®** window exist due to the many different range of application. Each window is designed and produced according to customer requirements.

Below a selection of possible design types:



Fixed window with inward opening side hung turn window sash (right), option: perforated sheet outside.



Fixed window with outward opening side hung turn window sash (right), option: perforated sheet inside.



Inward opening turn window sash (right) to open for cleaning. Outward opening window sash (left), option: perforated sheet inside.



Inward opening turn window sash (right) to open for cleaning. Inward opening turn window sash (left), option perforated sheet outside.



Fixed window (right) with ventilation grille (left). The inmate/patient can independently adjust the ventilation. The ventilation grille can be installed at both sides, above or below the fixed window.



Inward opening turn window sash (right) to open for cleaning. Ventilation grille (left). The inmate/patient can independently adjust the ventilation.

¹⁾There is no own testing standard for break out resistance products. Because of this SÄLZER tests its products from both sides according to the standard for forced entry resistance DIN EN 1627-1630.

Features at a glance

Natural ventilation, easy maintenance

We recommend to integrate an openable window element for natural ventilation. The inmate can independently regular the ventilation. This is important for the successful medication in forensic hospitals. To prevent the exchange of items between patient rooms the window can be equipped with internal and external installed perforated sheets.

Openable windows have another advantages: they are easy to clean. Significant higher cleaning efforts arise if only fixed glazing are installed, particular in higher floors.

Surfaces and design

Despite the high security, the construction does not negatively affect the design options. Modern architecture or the restoration of historic buildings can be easily realized with the **METAS®** window.

Surface options: powder coated, anodized, clad with timber or stainless steel or the construction of muntin windows in various design options etc.

No hollow spaces or gaps

The **METAS®** window has no hollow spaces or gaps which could be used by the occupants to hide drugs or other banned items.

High protection against vandalism

The forced entry and break out resistant window is very solid constructed. Therefore it is reliable and durable even by rough and high mechanical use.

Building physical facts

Our security window meets all requirements concerning thermal insulation, resistance to wind load, water tightness, air permeability etc. The **METAS®** window has a very good U-value of 0.9 W/m²K (depend on the design type). Because the window is glazed from the inside the water tightness is also very good.

Security & product characteristics according to DIN EN 14351-1

Forced entry Break out resistance DIN EN 1627-1630		Fixed glazing: inside and outside, up to resistance level RC4 Operable window elements: A. inside, up to resistance level RC3 B. outside, up to resistance level RC4
Bullet resistance DIN EN 1522 +1523		Up to FB4-NS Optional
Resistance against wind load DIN EN 12210		Up to C5 (2,000 Pa) Depending on the type
Water tightness DIN EN 12208		Up to E900 (900 Pa) Depending on the type
Air permeability DIN EN 12207		Up to class 4 (600 Pa) Depending on the type
Thermal insulation DIN EN ISO 10077-1		$U_W = 0.9 - 1.7 \text{ W/m}^2\text{K}$ Values depending on the element size and glazing
Impact resistance DIN EN 13049		Up to class 5 (drop height: 950 mm) Depending on the type
Life cycle DIN EN 12400		Class 2 Turn hardware: 10,000 open-close cycles
Sound insulation DIN EN ISO 717-1		Up to 45db Values depending on the element size and glazing

Explosion resistance on request.



On the left side: 2 blinds are installed inside the glass, next to them on the right side the blinds are installed outside in front of the windows.



SYSTEM SÄLZER®

Combined Protection

For more than 40 years SÄLZER has led the industry in the development and technology of forced entry, bullet, fire, smoke and blast resistant building components.

Each of our products is subject to a strict internal and external quality management.

Please ask for additional brochures about our further products: windows, facades, doors, gates, guard houses, partition walls, access control, barriers, bollards, accessory components etc.



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