

Areas of Application

Introduction

The areas of application for frames are diverse and extensive. This flyer explains in detail various applications so that a target-specific solution can be chosen. The standards and guidelines needed as a basis for planning have to be properly interpreted and applied by a specialist planner.

Areas of application

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• Schools	07
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Senior citizens' residential and nursing homes

The planning of senior citizens' residential and nursing homes is particularly challenging, characterized by a high level of complexity. Doors and frames play a discreet, but important role in this planning.

Frames and door elements have to function simply, reliably and continuously. They should also fit into the whole concept in regard to function and visual attractiveness.

BOS Best Of Steel offers individual solutions for this purpose, which have been created and developed in agreement with architects, investors and specialist planners.

The following product solutions are recommended for senior citizens' residential and nursing homes:

• LineaCompact sliding door frame	09
• CasePlus Solutions	10
• Sino frame	11
• Shadow groove frame	13
• Top light/side part frame	14
• Special frame for bi-fold doors	16
• Slanting soffit frame	18

Office, residential and commercial buildings

These serve today more than ever as a representative space for customers and the public.

The corporate identity of the company is mirrored in the architecture and the interior decoration.

The frame/door element is the entrance to each respective room and thus influences the first impression.

The following product solutions are recommended for office, residential and commercial buildings:

• LineaCompact sliding door frame	09
• CasePlus Solutions	10
• Sino frame	11
• Planar soffit frame	12
• Shadow groove frame	13
• Top-light/side part frame	14

Health care and hospitals

Few projects confront building designers and architects with such immense challenges as planning buildings in this sector. In buildings of this complexity there are a countless planning details to be taken into account, to ensure a smooth running of all procedures afterwards. BOS has gained much experience with numerous projects in this field.

The following product solutions are recommended for healthcare and hospitals:

• LineaCompact sliding door frame	09
• CasePlus Solutions	10
• Top-light/side part frame	14
• LineaOutside OP sliding door frame	15
• Slanting soffit frame	18
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Hotels

A hotel is a temporary home for people with varying needs. Originally an accommodation and food service with exclusive flair, the hotel of today has become more than ever living space, communication centre and wellness area.

BOS can implement a perfect combination of design, function and efficiency in the hotel sector.

The following product solutions are recommended for hotels:

• LineaCompact sliding door frame	09
• CasePlus Solutions	10
• Sino frame	11
• Shadow groove frame	13
• The Hotel Room Door	20

Child care facilities

BOS has developed the SafetyDesign frame with finger protection especially for kindergartens and day care facilities etc.

The special profile form protects little hands:

The round form of the architrave and hinge prevents fingers from getting trapped in the hinge side of the door.

- the pivot point of the door is in the centre of the architrave radius
- the door leaf remains the same distance from the frame architrave at all times when moving, preventing fingers from getting trapped
- raised seals offer additional protection in the rebate area

Note for BOS steel frames:

The radius of the fold in BOS steel frames is at least 2.5 mm.

The German Guidelines for Kindergartens (GUV-SR S2) stipulate at least 2.0 mm.

Up to a height of at least 2.0 m safety glass has to be used for all glazing elements.

The following product solutions are recommended for child care facilities:

- SafetyDesign frame

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Schools

Building elements in public buildings must be able to withstand heavy strain – this is particularly true in schools.

Door frames in steel offer many solutions when building or renovating schools as they are robust and manifold in design and function.

BOS steel frames with special attachments meet the high requirements that are demanded in schools.

Note for BOS steel frames (GUV-V S 1):

The radius of the fold in BOS steel frames is at least 2.5 mm. The German Accident Prevention Regulations for Schools (§ 11 Section 1) stipulates that the folds, edges and hooks of fixed and moveable furnishings should either be rounded or appropriately bevelled (radius > 2mm).

Up to a height of at least 2.0 m safety glass has to be used for all glazing elements (§7).

This must be clearly and easily recognizable (e.g. via stickers, structuring etc.).

The following product solutions are recommended for schools:

• Planar soffit frame	12
• Top-light/side part frame	14
• SafetyDesign frame	17

Sports halls

Building elements in sports halls have to withstand particular strain.

Door frames in steel offer many solutions as they are robust and versatile in design – one part or two part split.

BOS Sports halls frames are constructed so that the door element is flush with the inside wall of the hall. The door opens into the corridor and not into the hall.

BOS tips for more safety and stability:

- 3D hinge pockets
- striking plate reinforcement
- stainless steel striking plate
- latch adjustment
- 2 mm sheet thickness

Our recommendation:

- Use a door stopper so that the door does not hit the frame or the wall when opened
- Use a door closer with opening restrictor

The following product solutions are recommended for sports halls:

- Planar soffit frame

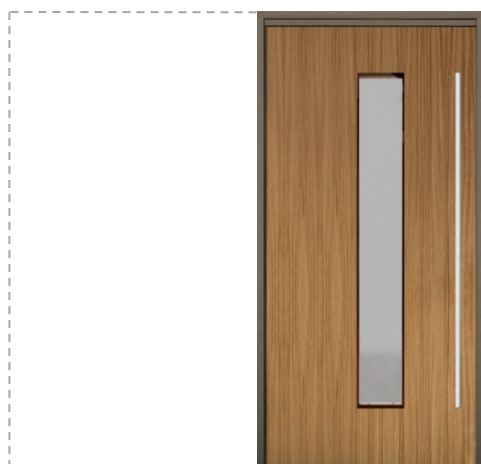
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LineaCompact sliding door frame

- larger clearance width for more comfort
- optimal solution for limited spaces
- increased freedom of movement via sliding door – no space needed to open
- simple operation
- easy wheelchair access
- frame and entry case completely pre-mounted
- is manufactured in the requested size to meet exact requirements
- various profile forms possible, e.g. with shadow groove etc.

Available designs:

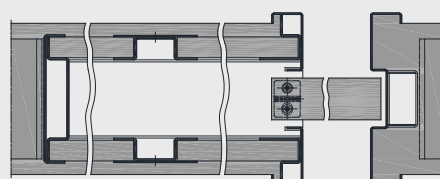
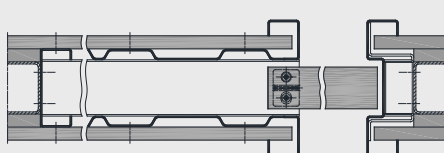
- for the mounting of load bearing elements with reinforced entry case
- with automatic operator: an advantage for barrier-free building
- as a sealed closing version: reduces draughts, odours and sound



Timber door leaf



Glass door leaf



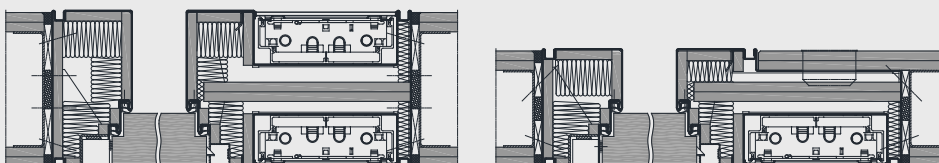
Versions with timber door leaf, illustration for stud and brick walls

CasePlus Solutions

- system for professional housing of technical door components and other elements of building technology
- large installation space for electronic components such as light and automatic switches, door closers, door openers, access control, communication and network connections, plug sockets etc.
- easy access for replacement, updating and maintenance of equipment because the door leaf does not need to be removed – high flexibility
- coverage using glass tiles or acrylic panes possible
- various designs of installation area are possible – on one, two or three sides of the frame



GIRA Modular Function Profile in black, umbra, mint and white



Version T30, SK3, RS, two sided and single sided with flush closing door leaf, illustration for stud walls, installation in finished wall

Sino frame

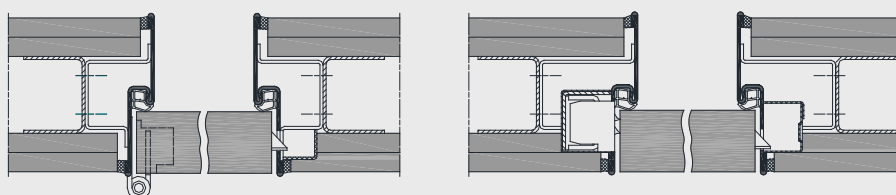
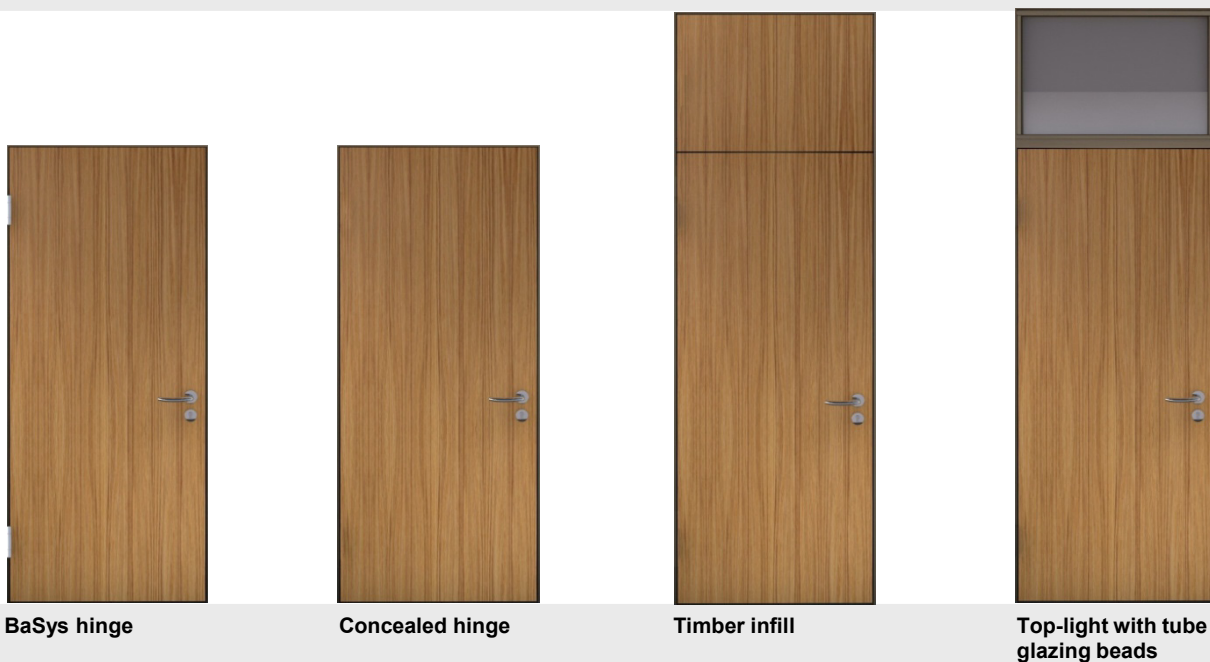
The modern and filigree Sino frame is suitable for stud and brick walls. It is particularly characterized by its extremely narrow architrave offering an unmistakable visual effect.

Note:

- for flush closing door leaves
- stud walls from wall thickness 100mm
- brick walls from wall thickness 130mm
- with top-light, timber or glass infill available
- in one part design
- galvanized steel sheet (2.0mm) available
- stainless steel (1.5mm) available
- design available for concealed hinges
- design for glass door leaf possible
- extremely narrow architrave of only 4mm

Recommendations:

- hinges BaSys 2029/120/56 D15 "Gracila", BaSys 2029/120/56 Kr. 15 mm
- loop hinges Simonswerk VN 2927/160 Compact Planum
- concealed hinge Simonswerk Tectus 541 3D FVZ



Versions with flush closing door leaf, illustration for stud walls

Planar soffit frame

The BOS Planar soffit frame allows for installation of the door and frame flush with the corridor wall, regardless of whether the door opens into the room (Version 1) or into the corridor (Version 2, e.g. in the case of barrier-free toilet facilities, which must open outwards according to regulations). The corridor and door elements give a quiet and elegant impression, especially when used in combination with concealed hinges. Without Planar: doors with different opening directions jump back and forth in the soffit.

Our recommendations:

- use a door stopper so that the door does not hit the frame or the wall when opened
- use an integrated door closer / overhead door closer with opening restrictor
- use 3D hinge pockets for more safety and stability
- concealed hinges provide a flush, elegant appearance
- use 2 mm sheet thickness for more stability

Tips for use:

- stainless steel striking plate for stability and paint protection, particularly for flush closing door leaves
- bolt and latch hole reinforcement, particularly for rebated door leaves
- latch adjustment for later tuning of the contact pressure of door leaf to the seal



VX hinge, Version 1



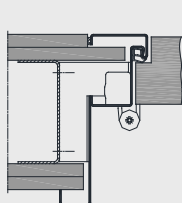
Concealed hinge



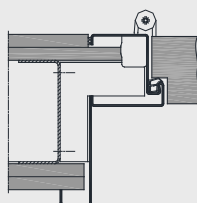
Timber infill



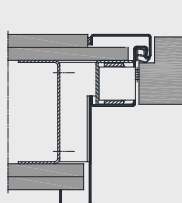
Top-light with tube glazing beads



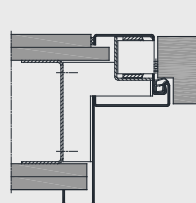
Version 1



Version 2



Version 1



Version 2

Versions with flush closing door leaf, illustration for stud walls

Version 1: Door opens into the room

Version 2: Door opens into the corridor

Shadow groove frames

BOS shadow groove frames are decorative and design oriented. With appropriate hinges and flush door leaves the whole element provides a linear and high quality appearance.

Further options:

- simple elegance via concealed hinges
- different shadow groove designs
- top-light/ side part elements
- window elements
- fire protection glazing
- single/double sided shadow groove
- 10/15mm shadow groove
- diverse profile forms
- available as a 2 part split design
- for rebated and flush doors

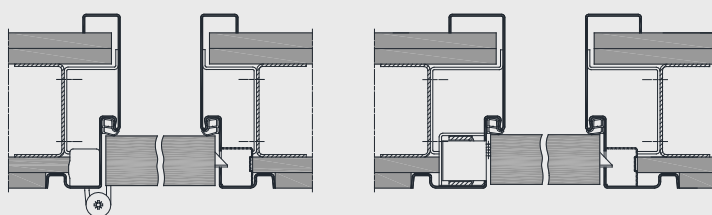


VX hinge

Concealed hinge

Timber infill

Top-light with tube
glazing beads



Version with flush closing door leaf, illustration for stud walls

Top-light/side part frame

BOS top-light/side part frames have extra window surface and thus provide a light and friendly interior.

Especially in commercial or residential buildings, these elements offer an elegant finish to rooms as the design possibilities are virtually unlimited.

A wide range of profile forms fulfil extensive architectural and functional requirements.

- suitable for all wall types
- virtually all profile forms possible
- various transom bar designs available
- single, double or insulation glazing
- timber or glass infill
- with socket/switch provision
- 1 part or 2 part split
- single or double rebate
- in 1.5 mm or 2.0 mm sheet thickness
- hot-dip galvanized and primed
- powder coated in RAL colours
- in stainless steel inox 304 and 316ti



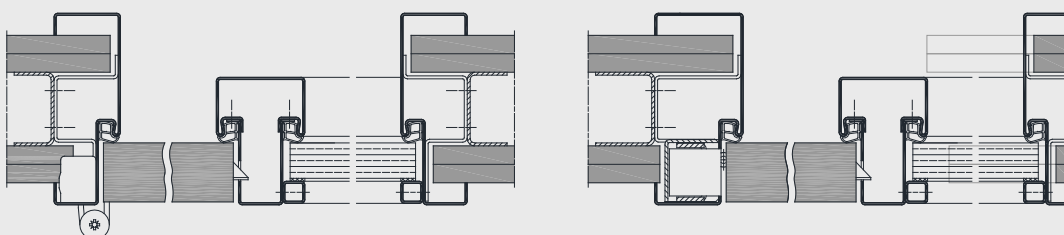
Side part frame with VX hinges



Top-light/side part frame with VX hinges



Top-light frame with tube glazing beads



Versions with flush closing door leaf, illustration for stud walls

LineaOutside OP sliding door frame

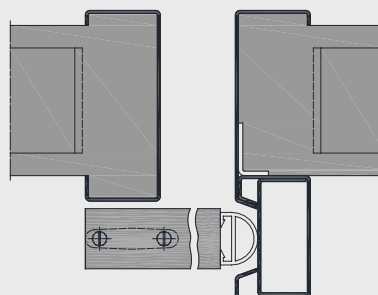
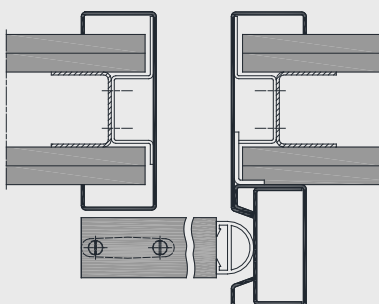
- sliding door element in stainless steel or with an anti-bacterial powder coating for the highest hygiene requirements
- integrated automatic operator, on request with bacterial slide on the track case
- use flush glazing beads for vision panels to ensure easy cleaning



Without bacterial slide



With bacterial slide



Versions with sliding door running in front of the wall for stud and brick walls

Special frame for bi-fold doors

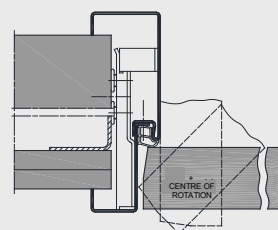
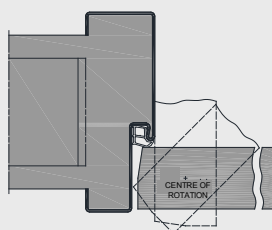
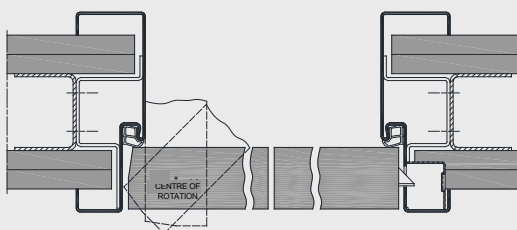
- more freedom of movement due to the small pivot range of the door
- easy operation for wheelchair or walking frame users
- ergonomic opening movement of the door
- optimum handle access
- integrated finger guard in the folding area of the door
- integrated emergency opening system if door is blocked
- can be used with every BOS steel frame, 1 part or 2 part split
- various designs according to requirements and structural conditions
- frame available in stainless steel for particular hygiene requirements
- door leaves for humid or wet rooms available
- frame clearance width reduced by approx. 85 mm when door open



Bi-fold door



Bi-fold door with vision panel



Version with flush closing door leaf, illustration for stud and brick walls

SafetyDesign frame

- 1 part or 2 part split
- raised seal
- for flush closing door leaves
- incl. 2 special hinges for finger protection
- incl. stainless steel striking plate
- 2 mm material strength

Further options:

- double rebate
- 2 part split frame for installation in finished walls
- back architrave can be individually designed
- as top-light/side part frame

Attachments:

- automatic opener
- integrated door closer
- additional finger guard from Athmer company



Globus hinge



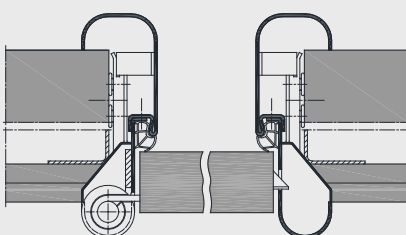
Vision panel with inner blind



Timber infill



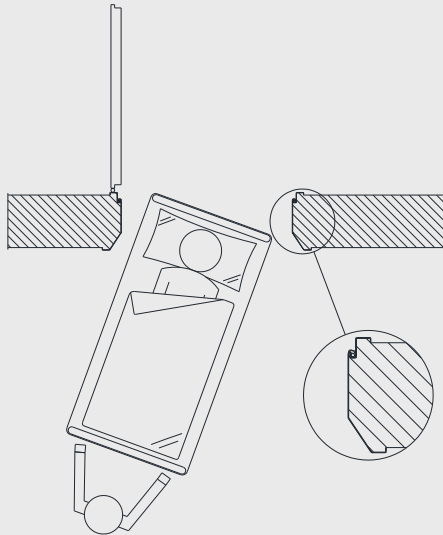
Top-light with tube glazing beads



Version with flush closing door leaf, illustration for stud and brick walls

Slanting soffit frame

- significantly larger entry angle via special geometric design
- better manoeuvrability of beds, e.g. from narrow corridors into the room
- with a top-light for optimum light conditions, e.g. in interior corridors



VX hinge



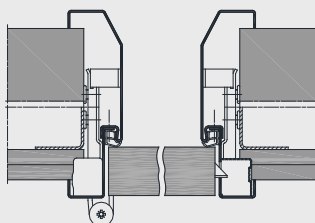
Vision panel with inner blind



Timber infill



Top-light with tube glazing beads



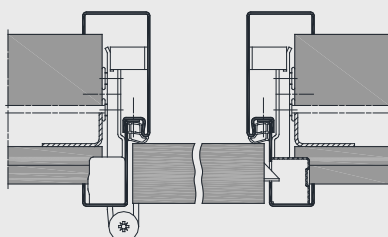
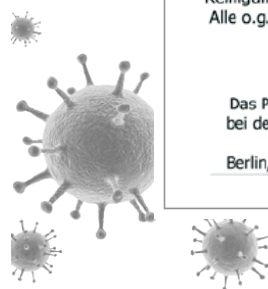
Version with flush closing door leaf, illustration for stud and brick walls

asepticDOOR

Together with partners, BOS Best Of Steel has developed a door system which is perfectly tuned for the requirements in the healthcare sector and equipped with anti-bacterial and easy to clean surfaces and products.

The system has been tested by Dr. med. Klaus-Dieter Zastrow, a medical specialist for hygiene and environmental medicine in Berlin.

In addition to the use in hospitals, the asepticDOOR can be used in other hygiene sensitive areas such as senior citizen residential homes, child care centres or in the food processing industry.

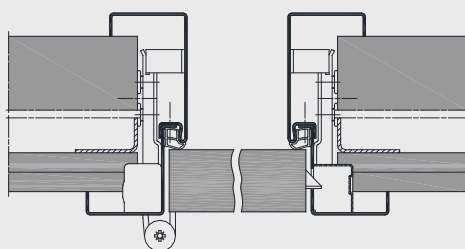
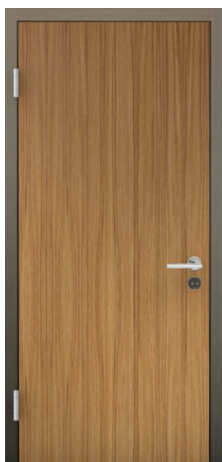


Version with flush closing door leaf, illustration for stud and brick walls

The Hotel Room Door

The system The Hotel Room Door encompasses not only the frame and door leaf but in particular all mechanical and electronic fittings. The result of the technically uniform and certified system: extraordinary security and cost efficiency in planning, installation and during operation.

More information can be found in the brochure:
The Hotel Room Door



Version with flush closing door leaf, illustration for stud and brick walls

We are here for you!

Head Office:

BOS GmbH Best Of Steel
Lütkenfelde 4
D-48282 Emsdetten

Jana Schievelkamp
Tel.: +49 2572 203 703
E-Mail: js@BestOfSteel.de

or by e-mail:
architects@BestOfSteel.co.uk

UK Sales Management:

BOS GmbH Best Of Steel
12 Greencoates
GB-Hertford SG13 8AA

Matthew Jones
Tel.: +44 758 465 5828
E-Mail: mj@BestOfSteel.co.uk

