

Approval body for construction products
and types of construction

Bautechnisches Prüfamt

An institution established by the Federal and
Laender Governments



European Technical Assessment

ETA-21/0258
of 17 January 2024

English translation prepared by DIBt - Original version in German language

General Part

Technical Assessment Body issuing the
European Technical Assessment:

Deutsches Institut für Bautechnik

Trade name of the construction product

"FP30-1" and "FP00-1" or
"FP30-2" and "FP00-2"

Product family
to which the construction product belongs

Internal fire resisting and/or smoke control single and
double leaf doorsets made of steel

Manufacturer

Peneder Bau-Elemente GmbH
Ritzling 9
4904 ATZBACH
ÖSTERREICH

Manufacturing plant

Peneder Bau-Elemente GmbH
Zweigniederlassung Fraham
Aumühle 28
4075 FRAHAM
ÖSTERREICH

This European Technical Assessment
contains

15 pages including 10 annexes which form an integral
part of this assessment

This European Technical Assessment is
issued in accordance with Regulation (EU)
No 305/2011, on the basis of

020029-00-1102

This version replaces

ETA-21/0258 issued on 8 December 2021

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Specific Part

1 Technical description of the products

The subject of this ETA are single-leaf internal doors (pivot doorsets) "FP30-1" and "FP00-1" and double leaf internal doors (pivot doorsets) "FP30-2" and "FP00-2" made of steel with fire and/or smoke protection properties, which are intended for use by people.

The products involve those which are used manually, opening and self-closing as a normal mode of operation. They can also be normally held open but self-close in the event of fire or smoke.

The fire resisting and/or smoke control doorsets shall be designed:

- using steel plates featuring fire-resistant inlays
- with building hardware,
- with or without any vision panel(s) in the doorsets,
- with or without insulate against direct airborne noise,
- with covered or visible hinges and door closers,
- with a three-sided permanently elastic seal and a permanently elastic middle rebate seal additionally in the event of double leaf doorsets (for fire resistance),
- with a three-sided permanently elastic seal and a permanently elastic middle rebate seal additionally in the event of double leaf doorsets in conjunction with a soil liner (for smoke control).

The system setup of the products "FP30-1" and "FP30-2" is given in Annexes A1 to A5.

The system setup of the products "FP00-1" and "FP00-2" is given in Annexes B1 to B5.

2 Specification of the intended use in accordance with the applicable European Assessment Document

Fire resisting and/or smoke control doorsets are used internally as closures in fire resisting walls and/or for escape routes. The products can be used as internal fire resisting and/or smoke control single and double leaf doorsets in internal walls.

The verifications and assessment methods on which this European Technical Assessment is based lead to the assumption of a working life of the fire resisting and/or smoke control doorsets of 15 years. The indications given on the working life cannot be interpreted as a guarantee given by the producer, but are to be regarded only as a means for choosing the right products in relation to the expected economically reasonable working life of the works.

The performances given in Section 3 are only valid if the products are used in compliance with the specifications and conditions given in Annex A and Annex B.

3 Performance of the product and references to the methods used for its assessment

3.1 Safety in case of fire (BWR 2)

Essential characteristic	Performance
Reaction to fire of components acc. to EN 13501-1	Steel plate A1 Insulation A1 Glazing B
Reaction to fire of components acc. to EN 13501-1	Gypsum plaster board A2 Sealing E Intumescent material B-E
Resistance to fire acc. to EN 13501-2	El ₂ 30
Smoke control acc. to EN 13501-2	S _a /S ₂₀₀

3.2 Safety and accessibility in use (BWR 4)

Essential characteristic	Performance
Self-closing acc. to EN 13501-2	C
Ability to release	"released"
Durability of the ability to release	"release maintained"
Durability of self-closing against degradation (cycling testing) acc. to EN 13501-2	5
Durability of self-closing against ageing (corrosion)	"achieved"
Impact resistance acc. to EN 13049	5
Strength requirements acc. EN 947 to EN 950	3

3.3 Protection against noise (BWR 5)

Essential characteristic	Performance
Direct airborne sound insulation index acc. to EN ISO 717-1	Single leaf door $R_w (C; C_{tr}) = 22 (-1; -1)$ to $R_w (C; C_{tr}) = 49 (-1; -5)$ Double leaf door $R_w (C; C_{tr}) = 22 (0; 0)$ to $R_w (C; C_{tr}) = 45 (-2; -6)$

3.4 Sustainable use of natural resources (BWR 7)

For the sustainable use of natural resources no performance was investigated for this product.

4 Assessment and verification of constancy of performance (AVCP) system applied, with reference to its legal base

In accordance with EAD No. 020029-00-1102, the applicable European legal act is: 1999/93/EU.

The system to be applied is: 1

5 Technical details necessary for the implementation of the AVCP system, as provided for in the applicable EAD

Technical details necessary for the implementation of the AVCP system are laid down in the control plan deposited with Deutsches Institut für Bautechnik.

Issued in Berlin on 17 January 2024 by Deutsches Institut für Bautechnik

Cristina Pritzkow
Head of Section

beglaubigt:
Fritzsche

The system structure of the single-leaf interior doors "FP30-1" and double leaf interior doors "FP30-2", made of steel and with fire and smoke protection properties is shown in Annexes A2 to A5.

The fire resisting and smoke control doorsets are made of steel plates and fire-resistant inlays with building hardware and with or without glazing.

Fire resisting single leaf doorsets are made with a three-sided permanently elastic seal and a permanently elastic middle rebate seal additionally in the event of double leaf doorsets.

Fire resisting and smoke control doorsets are made with a three-sided permanently elastic seal and a permanently elastic middle rebate seal additionally in the event of double leaf doorsets in conjunction with a soil liner.

The single leaf "FP30-1" doorsets with the max. dimensions 1.350 mm x 2.600 mm (STL) are proved as internal fire resisting and smoke control doors in internal walls/on internal components:

- ≥ 170 mm high density solid wall of masonry with an overall density of $\geq 850 \text{ kg/m}^3$, or
- ≥ 170 mm solid wall of concrete masonry with an overall density $\geq 850 \text{ kg/m}^3$, or
- ≥ 150 mm low density solid wall of aerated concrete with an overall density of $\geq 650 \pm 200 \text{ kg/m}^3$, or
- ≥ 75 mm fire resistant light weight plasterboard faced steel stud partition ($\geq \text{EI } 30$), or
- ≥ 75 mm fire resistant light weight plasterboard faced wood stud partition ($\geq \text{EI } 30$), or
- ≥ 75 mm fire resistant steel column or -beam ($\geq \text{R } 30$).

The double leaf "FP30-2" doorsets with the max. dimensions 2.700 mm x 2.800 mm (STL) are proved as internal fire resisting and smoke control doors in internal walls/on internal components:

- ≥ 100 mm fire resistant light weight plasterboard faced steel stud partition ($\geq \text{EI } 30$), or
- ≥ 100 mm Cross laminated timber wall.

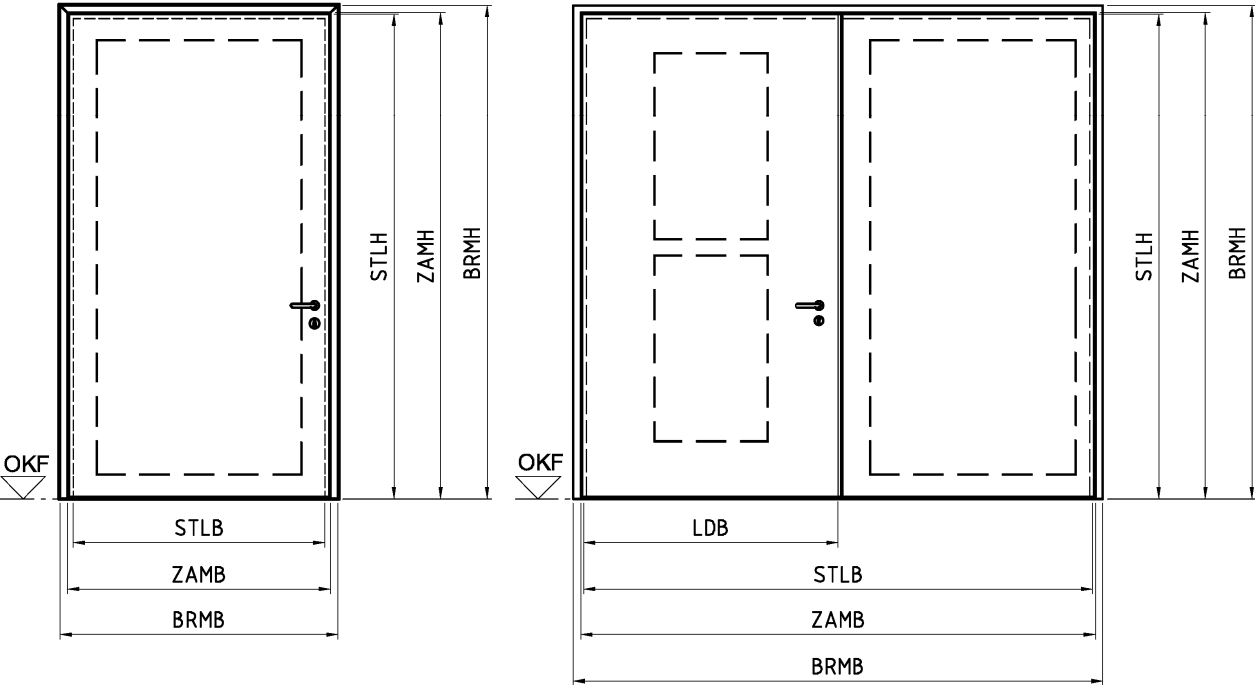
The single leaf "FP30-1" doorsets and the double leaf "FP30-2" with the max. dimensions 1.108 mm x 2.729 (STL) mm are proved in internal walls:

- ≥ 100 mm lightweight wall "Lindner Logic 100 Metall".

"FP30-1" and "FP00-1" or
"FP30-2" and "FP00-2"

Generally

Annex A1

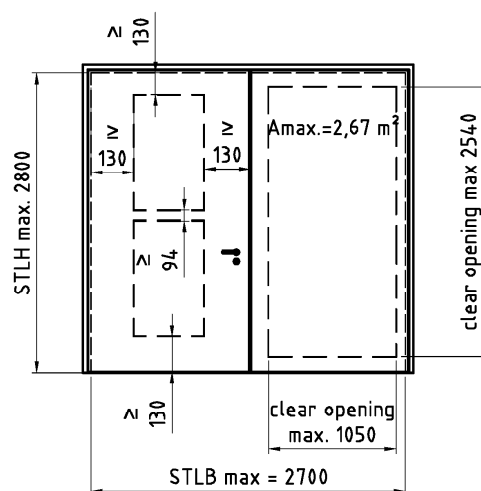
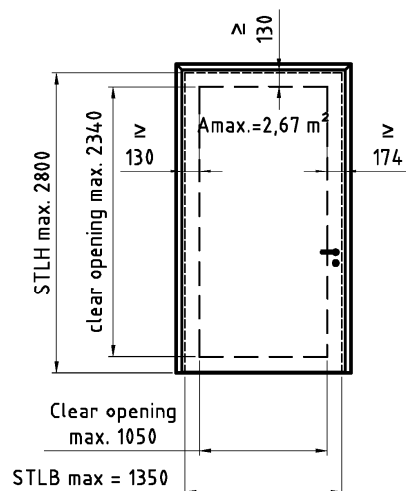


dimensions typ, design variant		nominal size BRM [mm]		overall frame size ZAM [mm]		clear opening size STL [mm]		active leaf 90° opened
		width B min/max	height H min/max	width B min/max	height H min/max	width B min/max	height H min/max	accessible width min/max
FP30-1		603 - 1655	1975 - 2953 1975 - 2882*	598 - 1650	1972 - 2950 1972 - 2879*	554 - 1350	1950 - 2800 1950 - 2729*	499 - 1285
FP30-2		1157 - 3005	1975 - 2953 1975 - 2882*	1152 - 3000	1972 - 2950 1972 - 2879*	1108 - 2700	1950 - 2800 1950 - 2729*	499 - 1285

Classifications: E30 , E30-C5 , EW30 , EW30-C5 , EI₂30 , EI₂30-C5
E30-S_a , E30-S_aC5 , EW30-S_a , EW30-S_aC5 , EI₂30-S_a , EI₂30-S_aC5
E30-S₂₀₀ , E30-S₂₀₀C5 , EW30-S₂₀₀ , EW30-S₂₀₀C5 , EI₂30-S₂₀₀ , EI₂30-S₂₀₀C5

* = valid for installation in Lindner-wall

"FP30-1" and "FP00-1" or "FP30-2" and "FP00-2"	Annex A2
Summery	



Door frame:

- Profile shape "Stumpf FP" (flush on both sides)
- Profile shapes block, corner, U (wrap around), front (face)
- 3-sided or 4-sided
- Cleated or sunk
- Frame gasket silicone or TPE
- various thresholds

Vision panel:

- Glazing flush on both sides
- Multiple panels per leaf
- Panel size max. 1050 x 2540 mm (clear measure)
- Amax per leaf = 2,67 m²

Building hardware:

- Additional locks or latches on side or top
- Multi-point locks
- Electronic or mechatronic locks
- electric door opener on side or top
- Magnetic contacts, alarm contacts, proximity switches, latch contacts
- Push plates, kick plates and bumpers
- Moldings, door signs
- Concealed cable loops and cable ducts
- armatures of hold open devices
- Holding magnets
- Drives and sensors
- Door viewers
- Finger protection devices
- Grounding
- Door dampers

Authorized details:

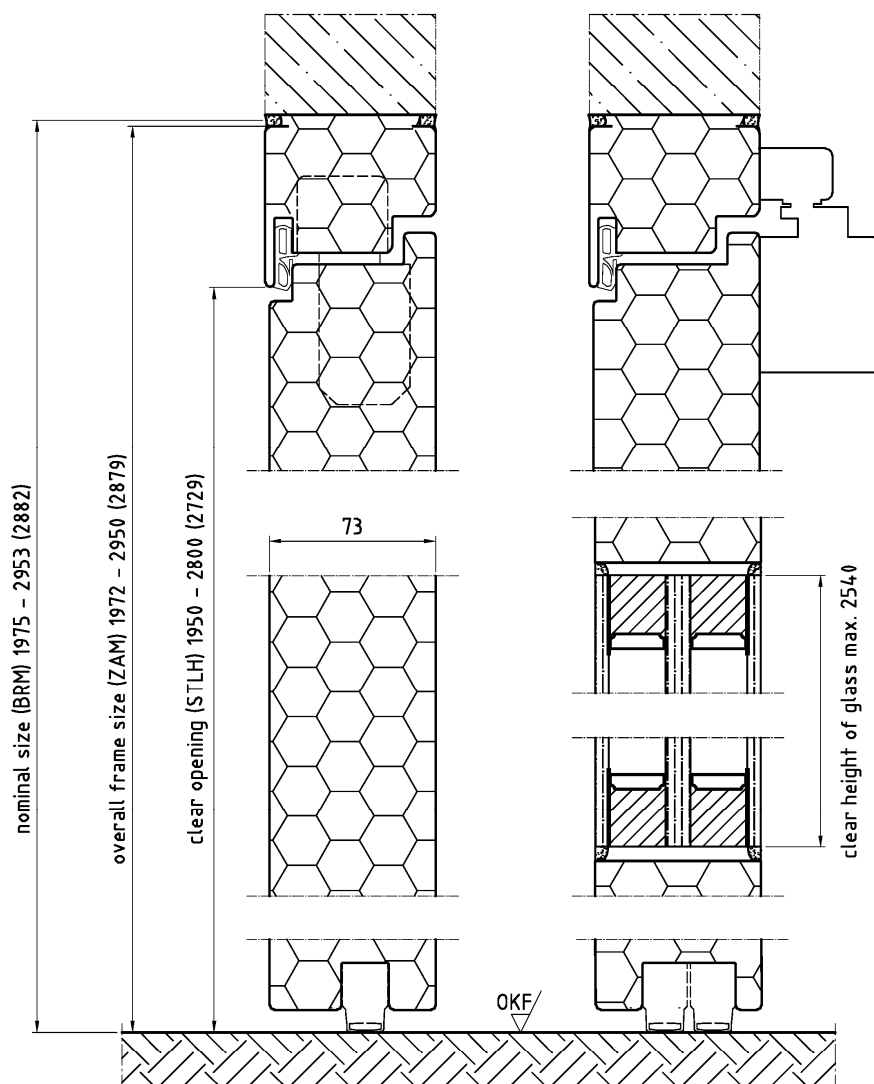
- Mild steel or stainless steel (door leaf and frame)
- Surface: galvanized, raw, powder coated, foiled
- With gasket in frame and with/without gasket on door leaf
- Hinges: according to EN 1935 or tested against EN 1634-1/2/3, number corresponding to door leaf weight
- Locks for fire doors acc. to EN 12209, EN 179, EN 1125, EN 14846, EN 15685 or DIN 18250 or ÖNORM B 3858, up to a backset of 100 mm
- Cylinders acc. to EN 1303, EN 15684, ÖNORM B 5356, DIN 18252, blind cylinders made of various materials (e.g. brass or timber)
- Door handles suitable for fire doors acc. to EN 1906, ÖNORM B 3859, DIN 18273
- Emergency exit devices (various materials)
- Flush lever handle on both sides or in combination with a lever handle/knob or with panic exit devices
- Flush lever handle suitable for EN 179
- Door closer: face fixed or concealed door closers acc. to EN 1154
- Door leaf design at the bottom: 3-sided or 4-sides in variants
- Drop seal or threshold with gasket, two drop seals in one door leaf allowed
- Gap between door leaf and floor: 10 +5/-7 mm

When combined
with smoke control
please note the
restrictions!

"FP30-1" and "FP00-1" or
"FP30-2" and "FP00-2"

Authorized detail

Annex A3

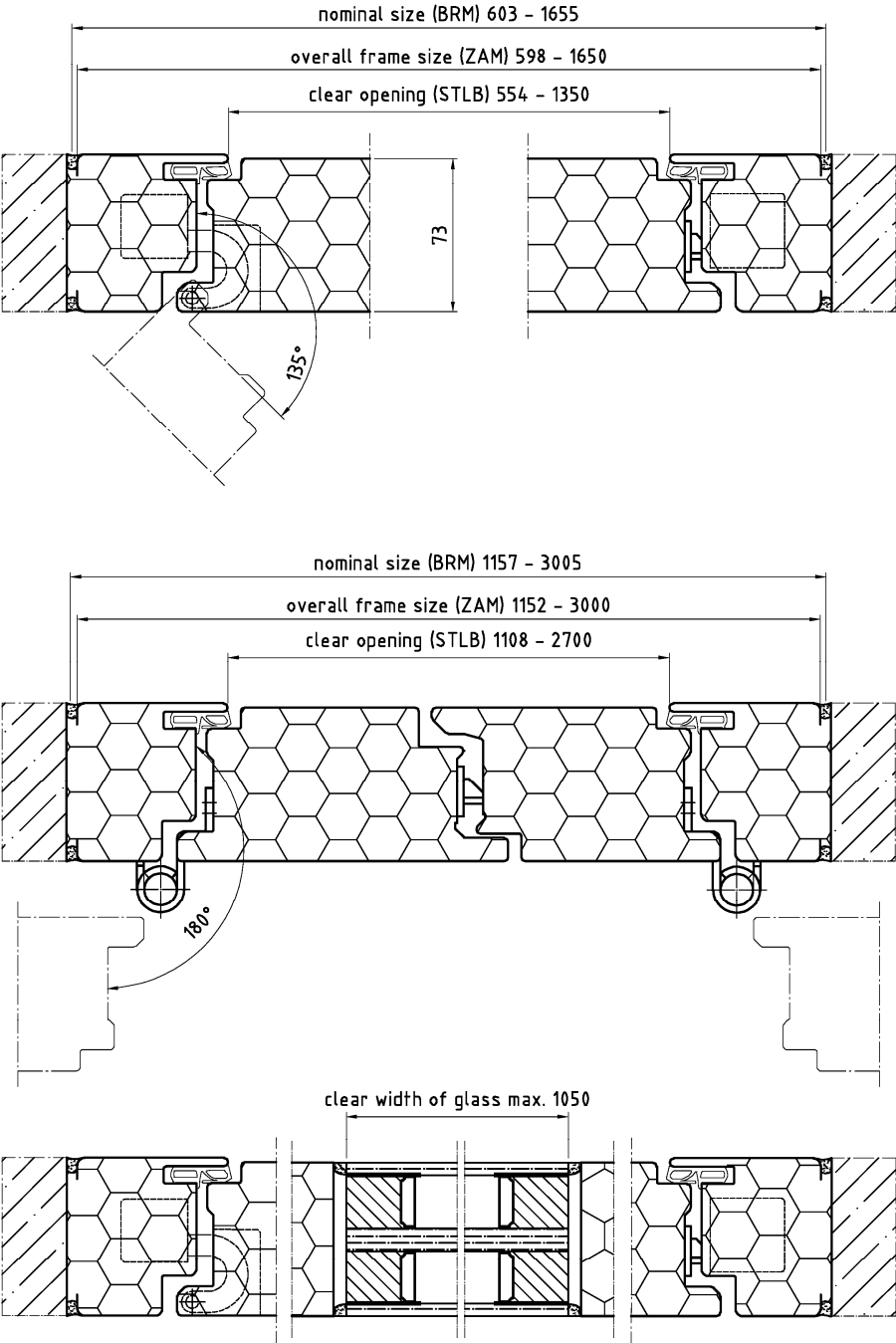


When combined
with smoke control
please note the
restrictions!

"FP30-1" and "FP00-1" or
"FP30-2" and "FP00-2"

Horizontal section

Annex A4



Cross-section example of three specific designs

When combined
with smoke control
please note the
restrictions!

"FP30-1" and "FP00-1" or "FP30-2" and "FP00-2"
Vertical section

Annex A5

The system structure of the single-leaf "FP00-1" and double-leaf "FP00-2" interior doors, made of steel and with smoke control protection properties is shown in Annexes B2 to B5.

The smoke control doorsets are made of steel plates and inlays with building hardware and with or without glazing.

Smoke control doorsets are made with a three-sided permanently elastic seal and a permanently elastic middle rebate seal additionally in the event of double-leaf doorsets in conjunction with a soil liner.

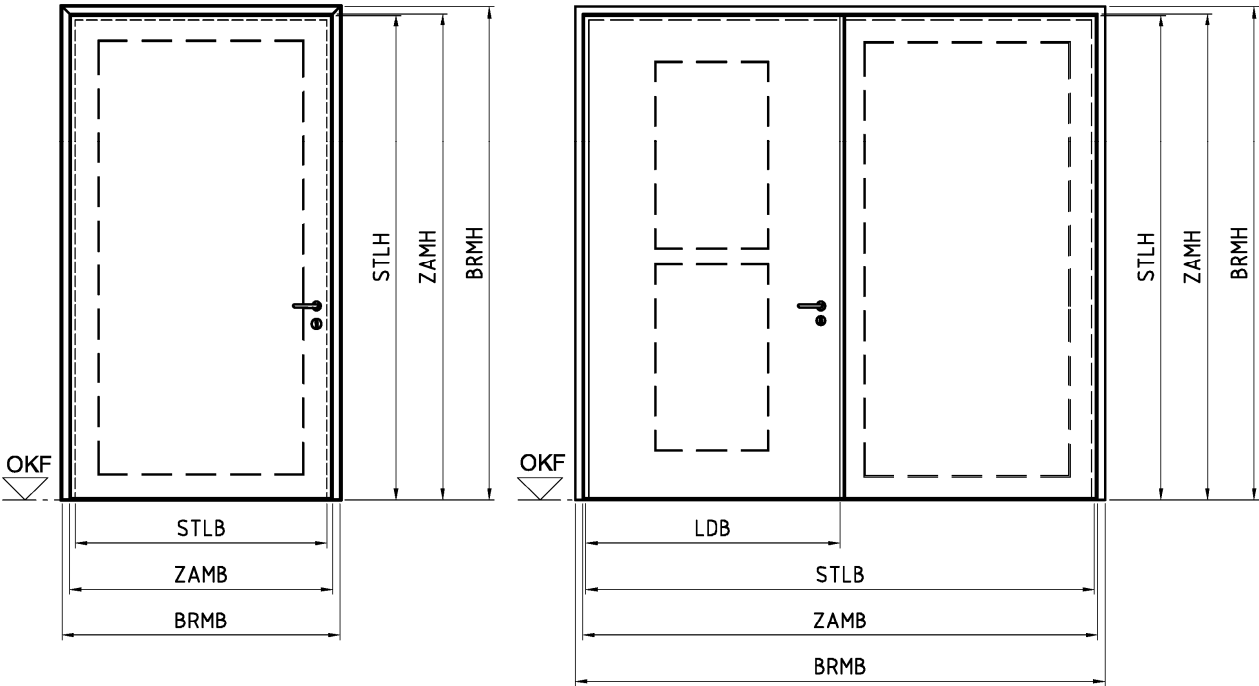
The single-leaf "FP00-1" doorsets with the max. dimensions 1.350 mm x 2.600 mm (STL) are proved as internal smoke control in internal walls/on internal components:

- ≥ 115 mm high density solid wall of masonry with an overall density of $\geq 850 \text{ kg/m}^3$, or
- ≥ 75 mm solid wall of concrete masonry with an overall density $\geq 850 \text{ kg/m}^3$, or
- ≥ 115 mm low density solid wall of aerated concrete with an overall density of $\geq 650 \pm 200 \text{ kg/m}^3$, or
- ≥ 75 mm fire resistant light weight plasterboard faced steel stud partition ($\geq \text{EI } 30$), or
- ≥ 75 mm fire resistant light weight plasterboard faced wood stud partition ($\geq \text{EI } 30$), or
- ≥ 75 mm fire resistant steel column or -beam ($\geq \text{R } 30$), or
- ≥ 100 mm lightweight wall "Lindner Logic 100 Metall".

The double-leaf "FP00-2" doorsets with the max. dimensions 2.700 mm x 2.600 mm (STL) are proved as internal smoke control in internal walls:

- ≥ 100 mm fire resistant light weight plasterboard faced steel stud partition ($\geq \text{EI } 30$).

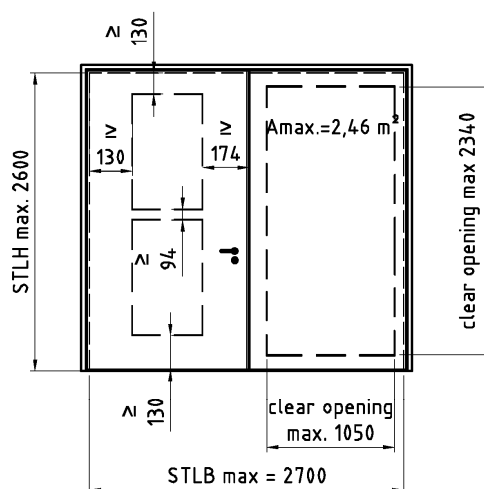
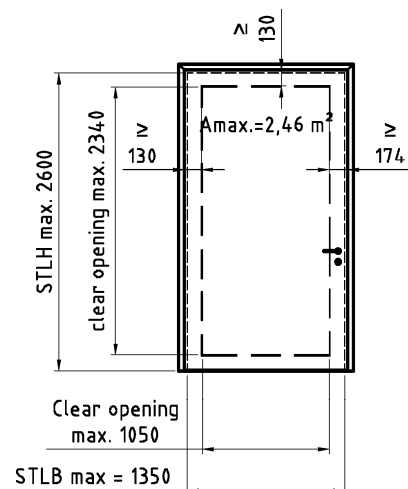
"FP30-1" and "FP00-1" or "FP30-2" and "FP00-2"	Annex B1
Generally	



dimensions typ. design variant		nominal size BRM [mm]		overall frame size ZAM [mm]		clear opening size STL [mm]		active leaf 90° opened
		width B up to	height H up to	width B up to	height H up to	width B up to	height H up to	accessible width up to
FP00-1		1655	2753	1650	2750	1350	2600	1295
FP00-2		3005	2753	3000	2750	2700	2600	1295

Classifications: S_a , S_{aC5} , S_{200} , S_{200C5}

"FP30-1" and "FP00-1" or "FP30-2" and "FP00-2"	Annex B2
Summery	



Door frame:

- Profile shape "Stumpf FP" (flush on both sides)
- Profile shapes block, corner, U (wrap around), front (face)
- 3-sided or 4-sided
- Cleated or sunk
- Frame gasket silicone or TPE
- various thresholds
- frame without infill is possible

Vision panel:

- Glazing flush on both sides
- Max. 2 panel per leaf
- Panel size max. 1050 x 2340 mm (clear measure)
- Amax per leaf = 2,46 m²

Building hardware:

- Additional locks or latches on side or top
- Multi-point locks
- Electronic or mechatronic locks
- electric door opener on side or top
- Magnetic contacts, alarm contacts, proximity switches, latch contacts
- Push plates, kick plates and bumpers
- Moldings, door signs
- Concealed cable loops and cable ducts
- armatures of hold open devices
- Holding magnets
- Drives and sensors
- Door viewers
- Finger protection devices
- Grounding
- Door dampers

Authorized details:

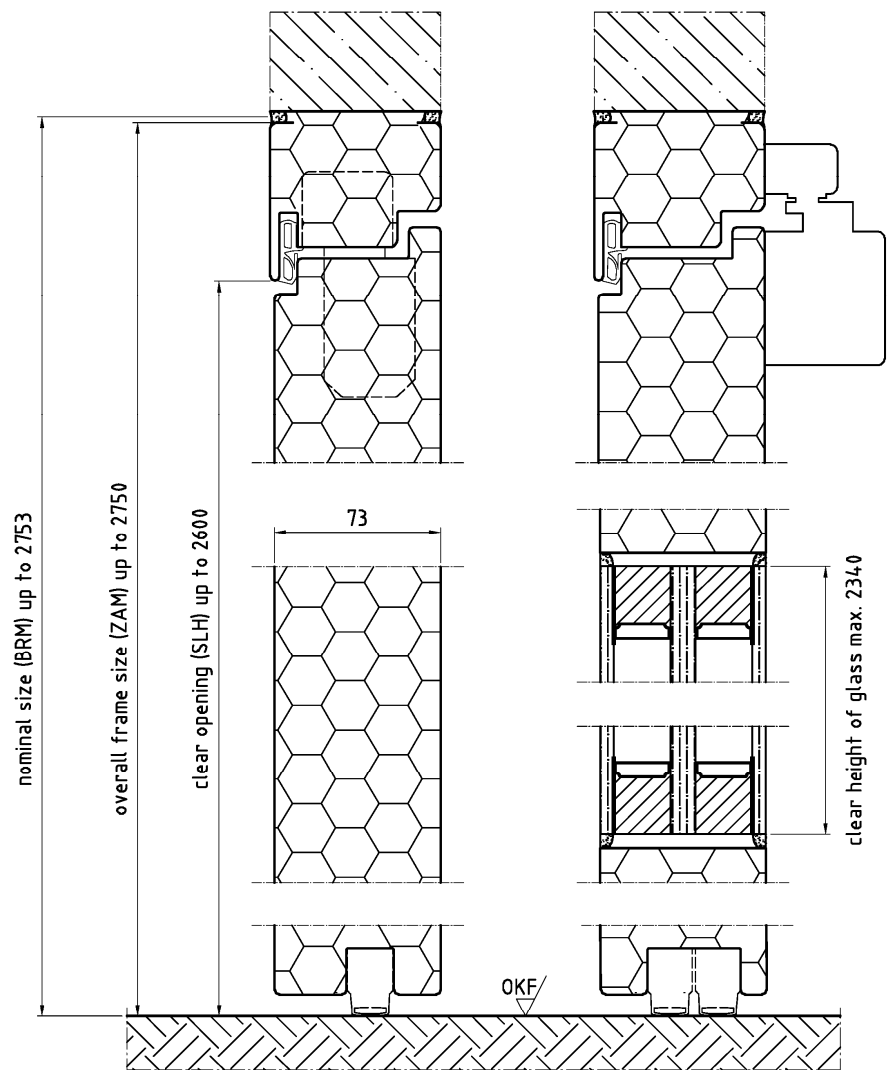
- S200: Mild steel (door leaf and frame) or stainless steel (frame only)
- Sa: Mild steel or stainless steel (door leaf and frame)
- Surface: galvanized, raw, powder coated, foiled
- With gasket in frame and with/without gasket on door leaf
- Hinges: according to EN 1935 or tested against EN 1634-1/2/3, number corresponding to door leaf weight
- Locks for smoke control doors acc. to EN 12209, EN 179, EN 1125, EN 14846, EN 15685 or DIN 18250 or ÖNORM B 3858, up to a backset of 100 mm
- Cylinders acc. to EN 1303, EN 15684, ÖNORM B 5356, DIN 18252, blind cylinders made of various materials (e.g. brass or timber)
- Door handles suitable for smoke control doors acc. to EN 1906, ÖNORM B 3859, DIN 18273
- Emergency exit devices (various materials)
- Flush lever handle on both sides or in combination with a lever handle/knob or with panic exit devices
- Flush lever handle suitable for EN 179
- Door closer: face fixed or concealed door closers acc. to EN 1154
- Door leaf design at the bottom: 3-sided or 4-sides in variants
- Drop seal or threshold with gasket if S₂₀₀, two drop seals in one door leaf allowed
- Gap between door leaf and floor: 10 +5/-7 mm

When combined
with resistance to fire
please note the
restrictions!

"FP30-1" and "FP00-1" or
"FP30-2" and "FP00-2"

Authorized details

Annex B3

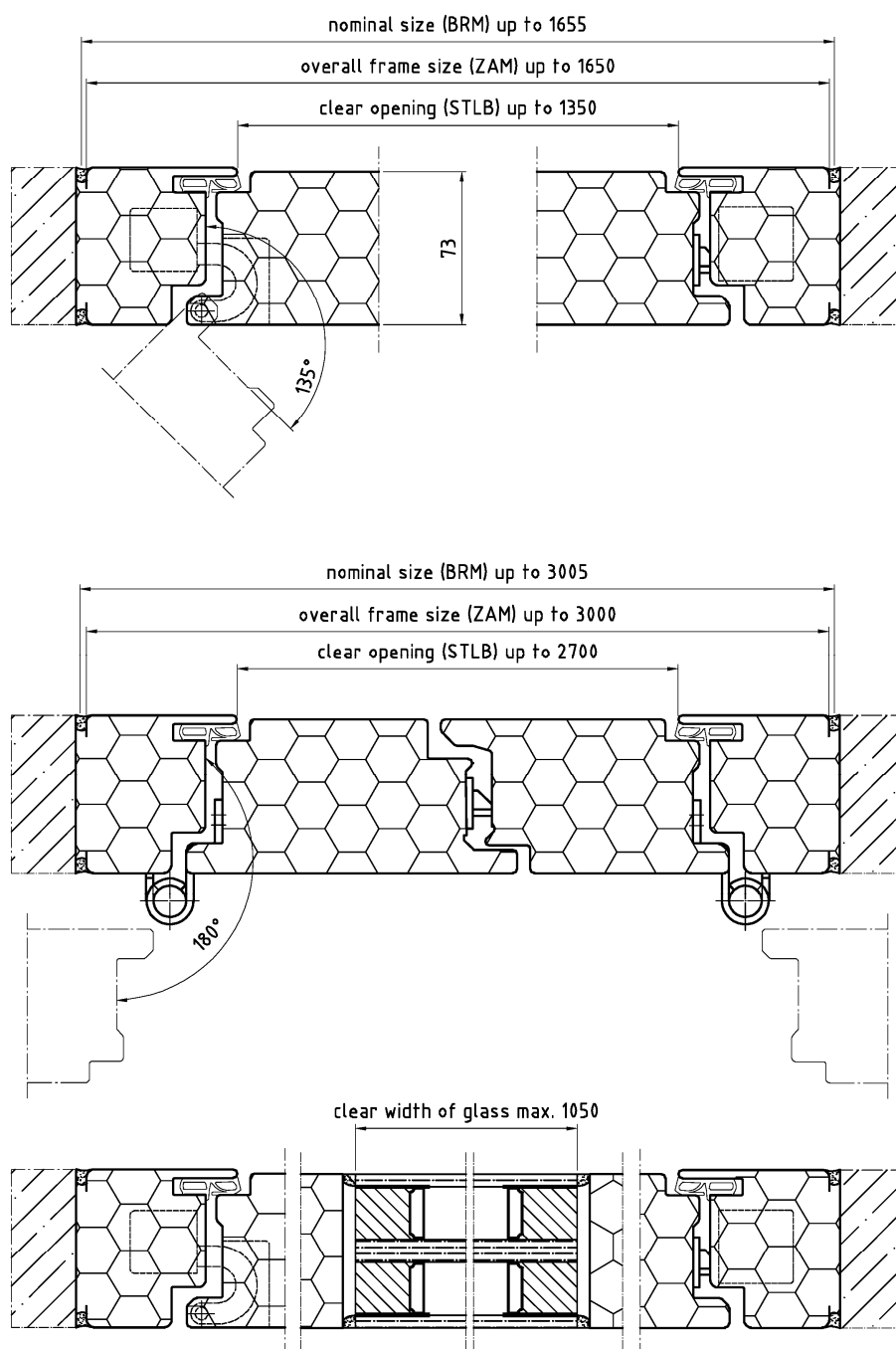


When combined
with resistance to
fire please note the
restrictions!

"FP30-1" and "FP00-1" or
"FP30-2" and "FP00-2"

Horizontal section

Annex B4



Cross-section example of three specific designs

When combined
with resistance to
fire please note the
restrictions!

"FP30-1" and "FP00-1" or
"FP30-2" and "FP00-2"

Vertical section

Annex B5