



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 8 December 2021

English translation prepared by DIBt - Original version in German language

### **General Part**

Technical Assessment Body issuing the European Technical Assessment:

Trade name of the construction product

Product family to which the construction product belongs

Manufacturer

Manufacturing plant

This European Technical Assessment contains

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

Deutsches Institut für Bautechnik

"FP30-1" and "FP00-1"

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

Peneder Bau-Elemente GmbH Ritzling 9 4904 ATZBACH ÖSTERREICH

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

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

EAD 020029-00-1102



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## **Specific Part**

## 1 Technical description of the products

The subject of this ETA are single-leaf internal doors (pivot doorsets) 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 a three-sided permanently elastic seal (for fire resistance),
- with a three-sided permanently elastic seal in conjunction with a soil liner (for smoke control).

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

The system setup of the product "FP00-1" 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	Steel plate	A1
acc. to EN 13501-1	Insulation	A1
	Glazing	В
	Gypsum plaster board	A2
	Sealing	E
	Intumescent material	B-E
Resistance to fire acc. to EN 13501-2	El <sub>2</sub> 30	
Smoke control acc. to EN 13501-2	Sa/S200	

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# 3.2 Safety and accessibility in use (BWR 4)

Essential characteristic	Performance
Self-closing acc. to EN 13501-2	С
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	Rw (C;Cw) = 22 (-1;-1) to Rw (C;Cw) = 49 (-1;-5)

### 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 8 December 2021 by Deutsches Institut für Bautechnik

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Head of section Fritzsche

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"FP30-1" Annex A1

The system structure of the single-leaf "FP30-1" interior doors, 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 doorsets are made with a three-sided permanently elastic seal.

Fire resisting and smoke control doorsets are made with a three-sided permanently elastic seal in conjuction 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 single in internal walls/on internal components:

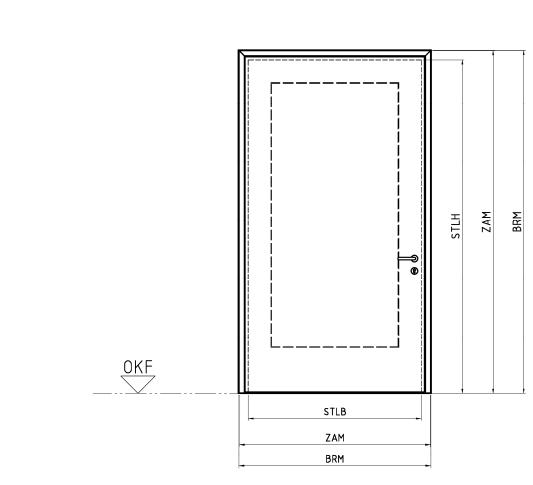
- ≥ 170 mm high density solid wall of masonry with an overall density of ≥ 850 kg/m³, or
- ≥ 170 mm solid wall of concrete masonry with an overall density ≥ 850 kg/m³, or
- ≥ 150 mm low density solid wall of aerated concrete with an overall density of ≥ 650 ± 200 kg/m³, or
- ≥ 75 mm fire resistant light weight plasterboard faced steel stud partition (≥ EI 30), or
- ≥ 75 mm fire resistant light weight plasterboard faced wood stud partition (≥ El 30), or
- ≥ 75 mm fire resistant steel column or -beam (≥ R 30).

The single leaf "FP30-1" doorsets with the max. dimensions 1.108 mm x 2.729 (STL) mm are proved as internal fire resisting and smoke control single in internal walls/on internal components:

≥100 mm fire resistant lightweight wall "Lindner Logic 100 Metall".

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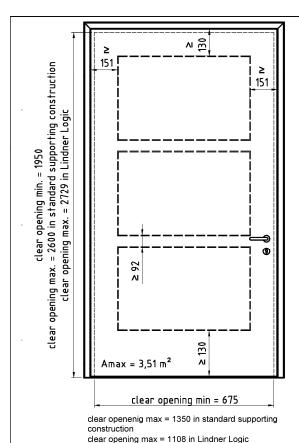


dimensions			al size [mm]	overall frame size ZAM [mm]		clear opening size STL [mm]		active leaf 90° opened
typ, design variant		width B min/max	height H min/max	width B min/max	height H min/max	width B min/max	height H min/max	accessible width min/max
FP30-1	-	603 - 1665	1975 - 2753 1975 - 2882*		1972 - 2750 1972 - 2879*	554 - 1350	1950 - 2600 1950 - 2729*	

<sup>\*</sup>Dimensions valid for installation in lightweight walls "Lindner Logic 100 Metall"

"FP30-1"		
	Annex A2	
Summery	Aillex Az	

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**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

#### 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

#### **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

### Vision panel:

- Glazing flush on both sides
- Multiple panels per leaf
- Panel size max. 1254 x 2808 mm (clear measure)
- Amax per leaf = 2,3 m<sup>2</sup>

When combined with smoke control please note the restrictions!

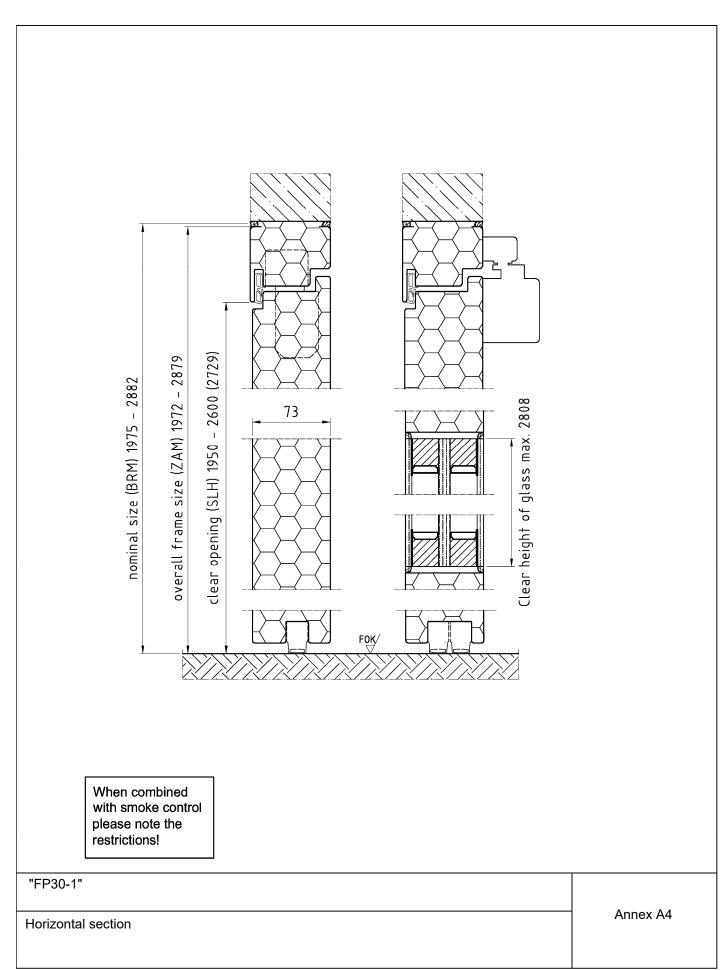
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"FP30-1"

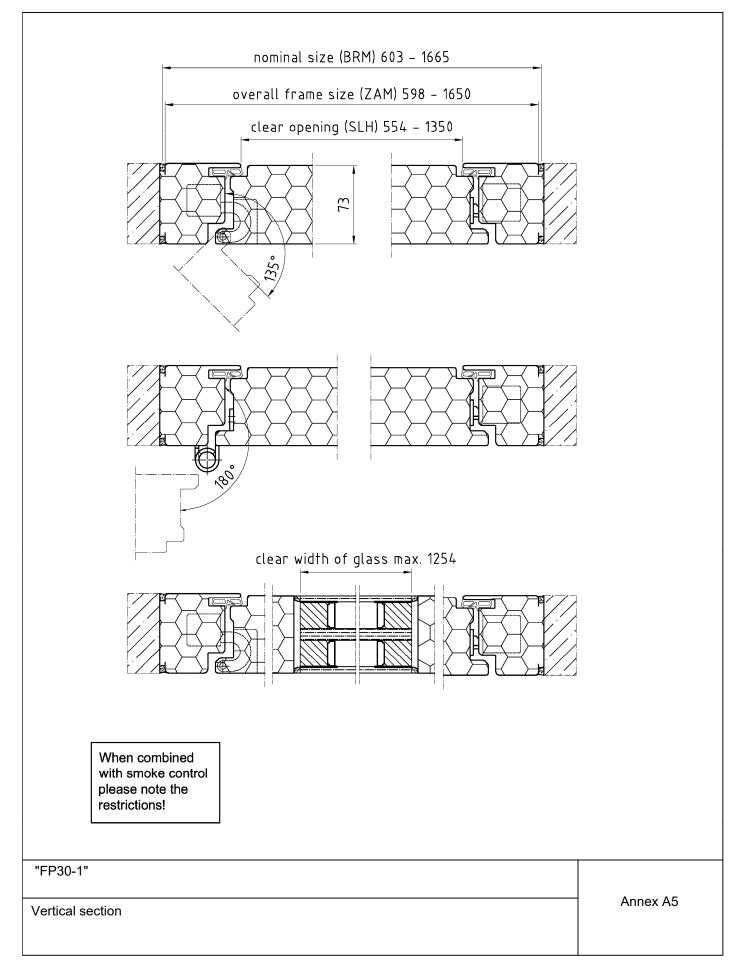
Authorized detail

Annex A3











"FP00-1" Annex B1

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

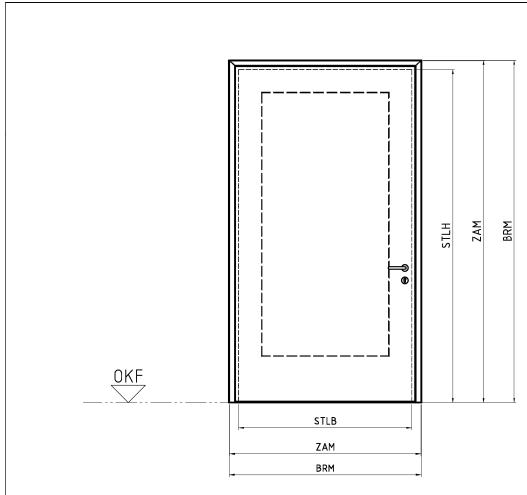
The smoke control doorsets are made of steel plates and inlays with building hardware and with or without glazing.

Smoke control doorsets are made with a three-sided permanently elastic seal 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 single in internal walls/on internal components:

- ≥ 115 mm high density solid wall of masonry with an overall density of ≥ 850 kg/m³, or
- ≥ 75 mm solid wall of concrete masonry with an overall density ≥ 850 kg/m³, or
- ≥ 115 mm low density solid wall of aerated concrete with an overall density of ≥ 650 ± 200 kg/m³, or
- ≥ 75 mm fire resistant light weight plasterboard faced steel stud partition (≥ El 30), or
- ≥ 75 mm fire resistant light weight plasterboard faced wood stud partition (≥ El 30), or
- ≥ 75 mm fire resistant steel column or -beam (≥ R 30), or
- ≥ 100 mm lightweight wall "Lindner Logic 100 Metall".

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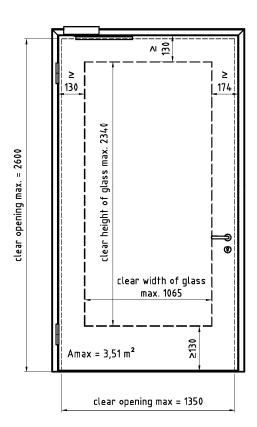
dimensions			al size [mm]	overall frame size clear ope ZAM [mm] STL		-	active leaf 90° opened	
typ, design variant		width B up to	height H up to	width B up to	height H up to	width B up to	height H up to	accessible width up to
FP00-1		1665	2753	1650	2750	1350	2600	1295

"FP00-1"

Summery

Annex B2

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## **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

#### 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
- If Sa-classification, frame without infill is possible

### **Autorized 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 S<sub>200</sub>, two drop seals in one door leaf allowed
- Gap between door leaf and floor: 10 +5/-7 mm

### Vision panel:

- Glazing flush on both sides
- Max. 1 panel per leaf

When combined with resistance to fire please note the restrictions!

"FP00-1"

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Authorized details

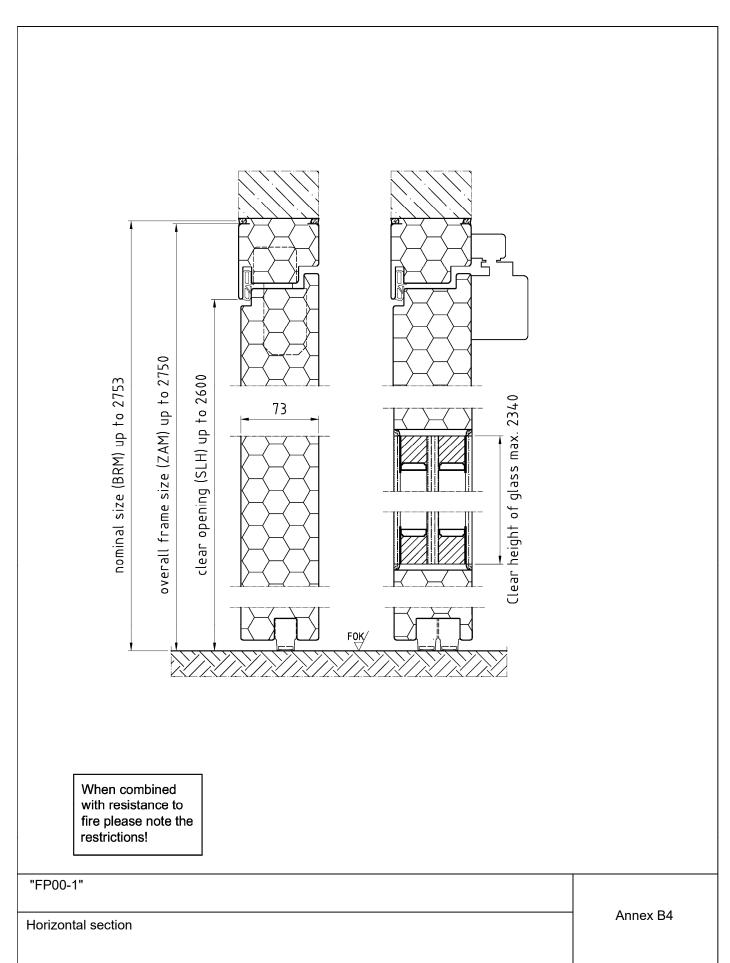
Annex B3

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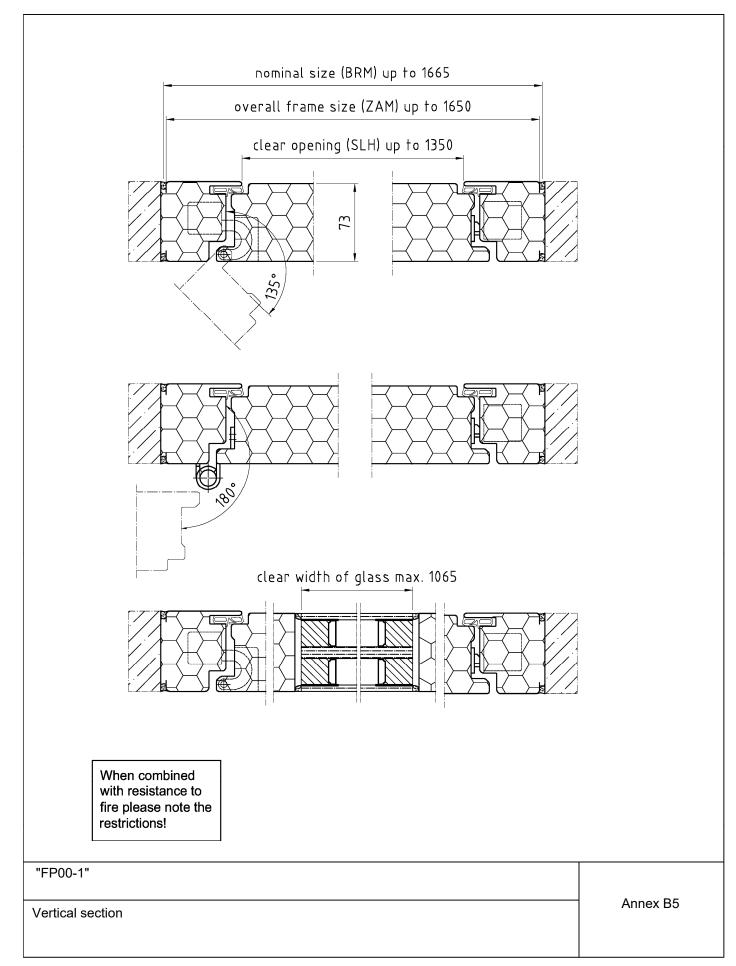
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