



Approval body for construction products and types of construction

**Bautechnisches Prüfamt** 

An institution established by the Federal and Laender Governments



# **European Technical Assessment**

### ETA-17/0443 of 26 April 2019

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

This version replaces

Deutsches Institut für Bautechnik

"NovoPorta Premio ..."

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

Novoferm GmbH Schüttensteiner Straße 26 46419 Isselburg-Werth DEUTSCHLAND

Novoferm Riexinger Türenwerke GmbH Industriestraße 74336 Brackenheim DEUTSCHLAND Novoferm GmbH Schüttensteiner Straße 26

42 pages including 37 annexes which form an integral part of this assessment

EAD 020029-00-1102

46419 Isselburg-Werth

ETA-17/0443 issued on 11 September 2018



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English translation prepared by DIBt

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#### **Specific Part**

#### 1 Technical description of the product

Internal fire resisting and/or smoke control single or double leaf doorsets (pivot doorsets)

"NovoPorta Premio EI<sub>2</sub> 30-C5 S<sub>a</sub>" and "NovoPorta Premio EI<sub>2</sub> 30-C5 S<sub>200</sub>",

"NovoPorta Premio  $EI_2$  60-C5  $S_a$ " and "NovoPorta Premio  $EI_2$  60-C5  $S_{200}$ ",

"NovoPorta Premio El<sub>2</sub> 90-C5 S<sub>a</sub>" and "NovoPorta Premio El<sub>2</sub> 90-C5 S<sub>200</sub>"

- made of steel - are the subject of this ETA.

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 flush over panel or transom panel (with or without glazing) and contained within a single perimeter frame for inclusion in a single aperture,
- with or without any vision panel(s) in the doorsets leaf or leave(s),
- 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 conjuction with a soil liner (for smoke control).

Single leaf fire resisting and/or smoke control doorsets - without flush over panel or transom panel - are verified at levels other than the floor level (i.e. at increased heights). These doorsets in the area of the frame of the leaf have to be designed with a four-sided permanently elastic seal to prevent smoke from penetrating. The lower edge of the leaf and the frame has to be designed like the upper edge if need be.

The system setup of the product "NovoPorta Premio  $El_2$  30-C5  $S_a$ " and "NovoPorta Premio  $El_2$  30-C5  $S_{200}$ " is given in Annexes A2 to A17.

The system setup of the product "NovoPorta Premio  $El_2\,60\text{-}C5~S_a$ " and "NovoPorta Premio  $El_2\,60\text{-}C5~S_{200}$ " is given in Annexes B2 to B10.

The system setup of the product "NovoPorta Premio  $El_2$  90-C5  $S_a$ " and "NovoPorta Premio  $El_2$  90-C5  $S_{200}$ " is given in Annexes C2 to C10.

#### 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 the assumption of 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.



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

#### 3.1 Mechanical resistance and stability (BWR 1) - not applicable

#### 3.2 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		A1 to E
	Gypsum p	laster board	A2
	Sealing		A2
	Polyuretha	ane foam	B1
	Intumesce	ent material	E
Resistance to fire acc. to EN 13501-2	El <sub>2</sub> 30	"NovoPorta Premi	io El <sub>2</sub> 30-C5 S <sub>a</sub> "
	El <sub>2</sub> 60	"NovoPorta Premi	io El <sub>2</sub> 60-C5 S <sub>a</sub> "
	El <sub>2</sub> 90	"NovoPorta Premi	io El <sub>2</sub> 90-C5 S <sub>a</sub> "
Smoke control acc. to EN 13501-2	S <sub>a</sub> / S <sub>200</sub>	"NovoPorta Premi	io El <sub>2</sub> 30-C5 S <sub>200</sub> "
		"NovoPorta Premi	io El <sub>2</sub> 60-C5 S <sub>200</sub> "
		"NovoPorta Premi	io El <sub>2</sub> 90-C5 S <sub>200</sub> "

#### 3.3 Hygiene, health and the environment (BWR 3) - not applicable

#### 3.4 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	No performance assessed

#### 3.5 Protection against noise (BWR 5)

Essential characteristic	Performance
Direct airborne sound insulation index	Single leaf door Rw (C;Cw) = 23 (-1;-3) to Rw (C;Cw) = 44 (-3;-9)
acc. to EN ISO 717-1	Double leaf door Rw (C;Cw) = 22 (-1;-3) to Rw (C;Cw) = 43 (-3;-9)

#### 3.6 Energy economy and heat retention (BWR 6) - not applicable

#### 3.7 Sustainable use of natural resources (BWR 7)

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





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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 26 April 2019 by Deutsches Institut für Bautechnik

Prof. Gunter Hoppe Head of Department *beglaubigt:* Pritzkow



"NovoPorta Premio El<sub>2</sub> 30-C5 S<sub>a</sub>"
"NovoPorta Premio El<sub>2</sub> 30-C5 S<sub>200</sub>"

#### Annex A1

Internal fire resisting and/or smoke control single or double leaf doorsets (pivot doorsets) "NovoPorta Premio  $El_2$  30-C5  $S_{a0}$ " and "NovoPorta Premio  $El_2$  30-C5  $S_{200}$ " are be 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 are made of steel plates and fire-resistant inlays with building hardware. They may be designed with or without any vision panel(s) in the doorsets leaf or leave(s)

The products shall be designed with or without flush over panel or transom panel (with or without glazing) and contained within a single perimeter frame for inclusion in a single aperture.

Fire resisting 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/or 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 conjuction with a soil liner (for smoke control).

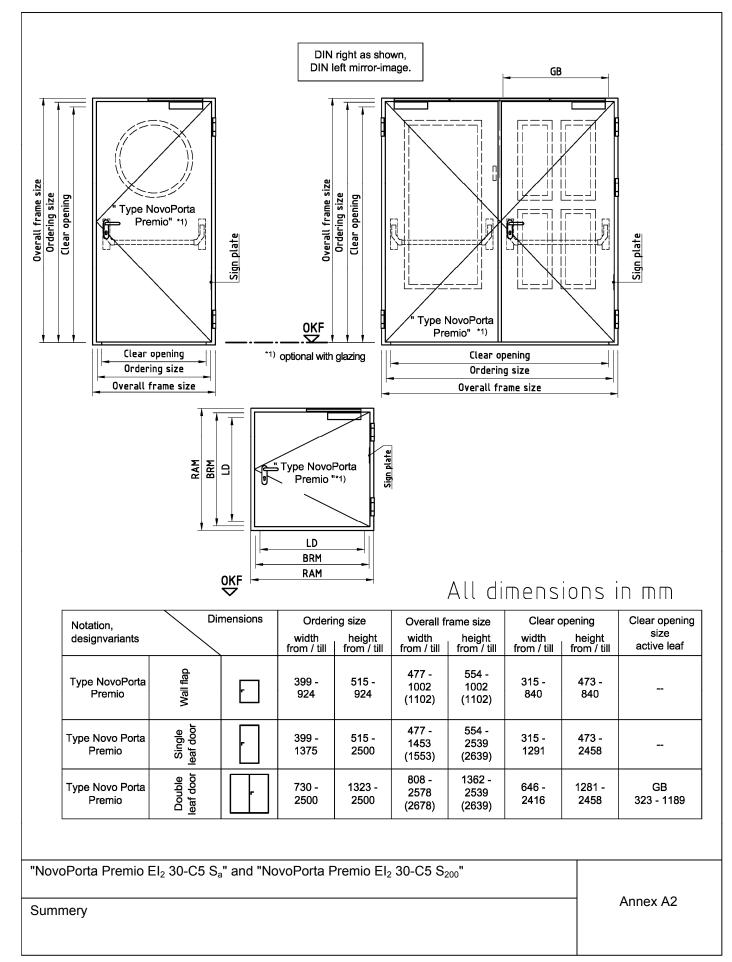
Single leaf fire resisting and/or smoke control doorsets - without flush over panel or transom panel - are verified at levels other than the floor level (i.e. at increased heights). These doorsets in the area of the frame of the leaf have to be designed with a four-sided permanently elastic seal to prevent smoke from penetrating. The lower edge of the leaf and the frame has to be designed like the upper edge if need so.

The system setup of the product is given in Annexes A2 to A17.

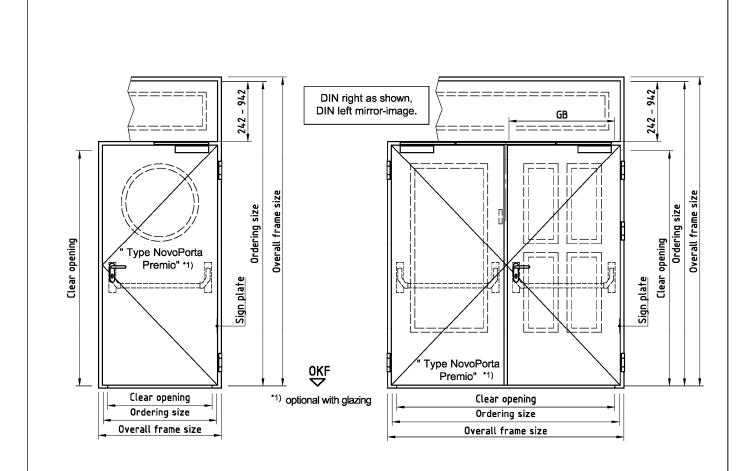
The products "NovoPorta Premio  $EI_2$  30-C5  $S_a$ " and "NovoPorta Premio  $EI_2$  30-C5  $S_{200}$ " are proved as internal fire resisting and/or smoke control single and double leaf doorsets in internal walls:

- ≥ 115 mm high density solid wall of masonry with an overall density of ≥ 850 kg/m³, or
- ≥ 100 mm solid wall of concrete masonry with an overall density ≥ 850 kg/m³, or
- 2 150 mm low density solid wall of aerated concrete with an overall density of ≥ 650 ± 200 kg/m³, or
- ≥ 100 mm fire resistant light weight plasterboard faced steel stud partition, or
- ≥ 100 mm fire resistant light weight plasterboard faced wood stud partition.









### All dimensions in mm

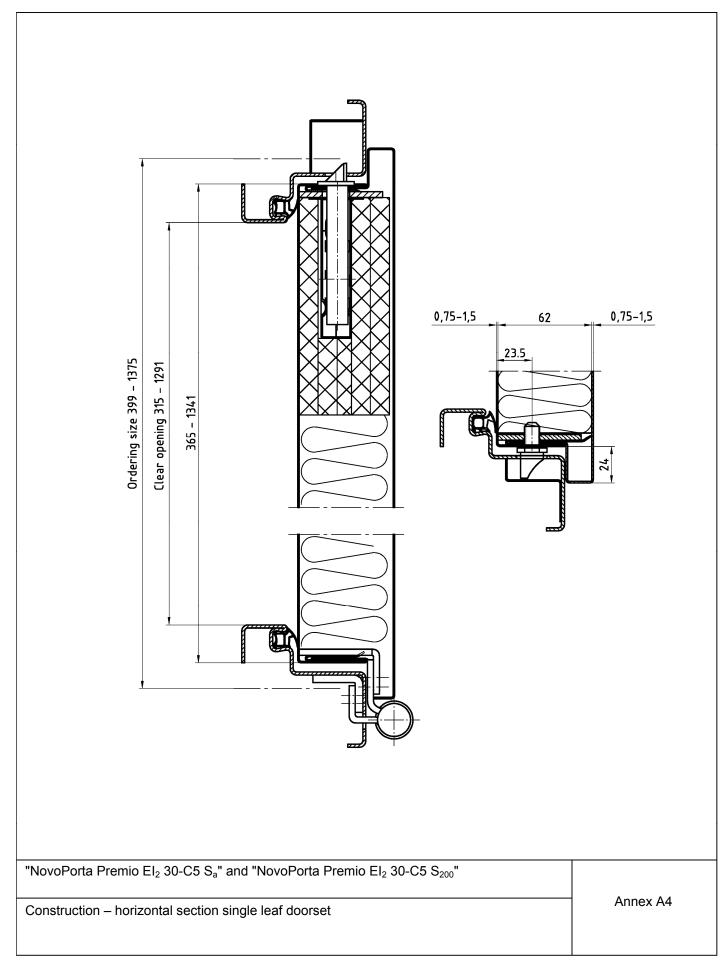
Notation,	lotation, Dimensions		Ordering size		Overall frame size		Clear opening		Clear opening size
designvariants			width from / till	height from / till	width from / till	height from / till	width from / till	height from / till	active leaf
Type Novo Porta Premio	Single leaf door with overpanel		399 - 1375	2050 - 3500	477 - 1453 (1553)	2089 - 3539 (3639)	315 - 1291	1699 - 2449	
Type Novo Porta Premio	Double leaf door with overpanel	r	730 - 2500	2050 - 3500	808 - 2578 (2678)	2089 - 3539 (3639)	646 - 2416	1699 - 2449	GB 323 - 1189

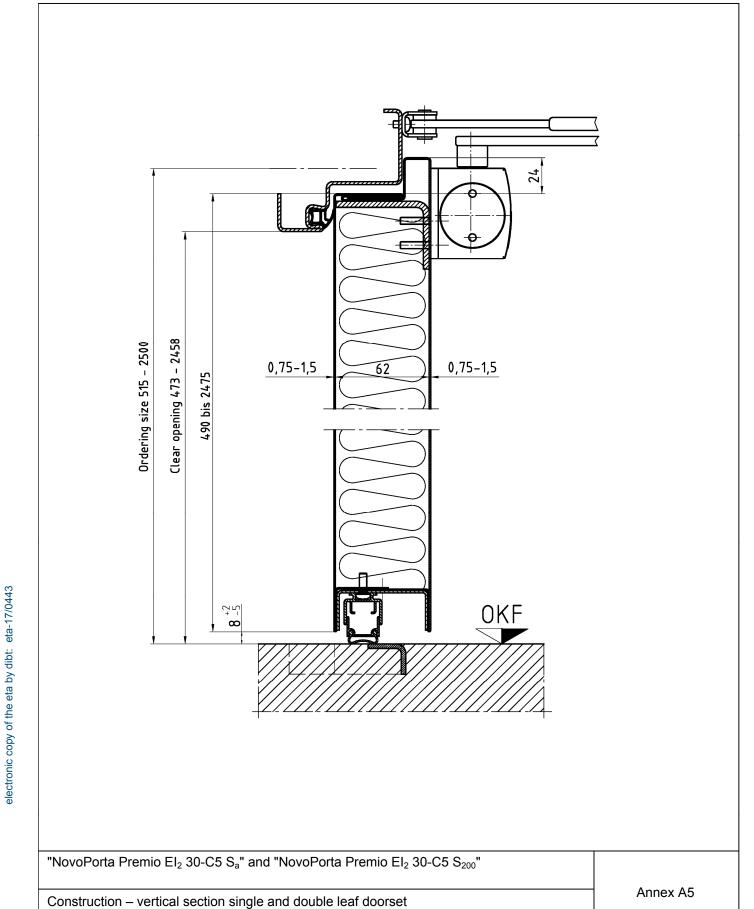
"NovoPorta Premio El<sub>2</sub> 30-C5 S<sub>a</sub>" and "NovoPorta Premio El<sub>2</sub> 30-C5 S<sub>200</sub>"

Summery

Annex A3





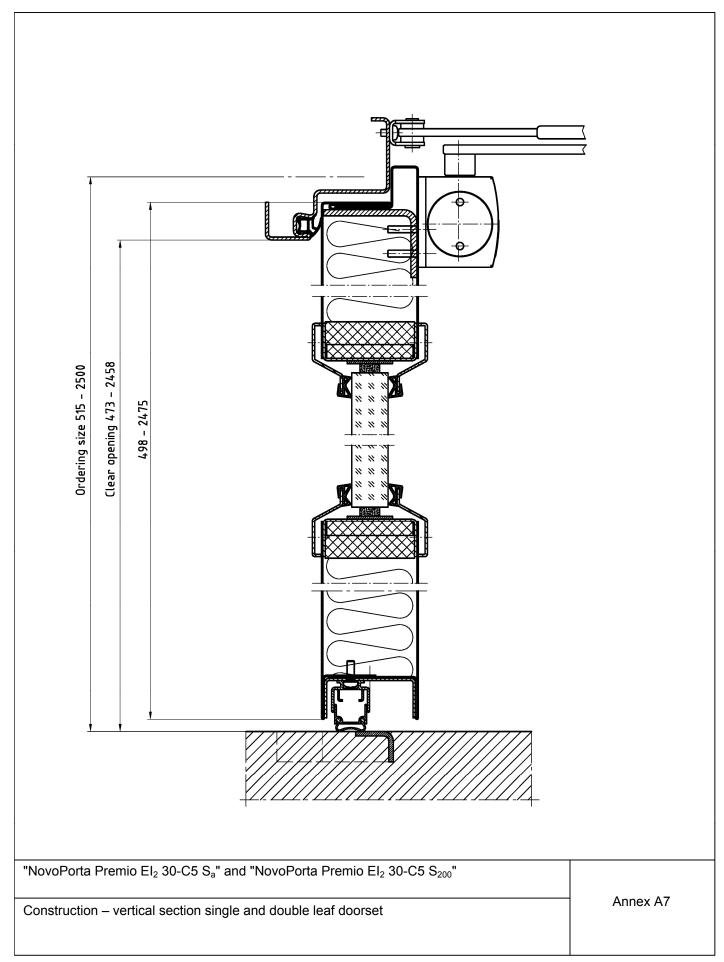


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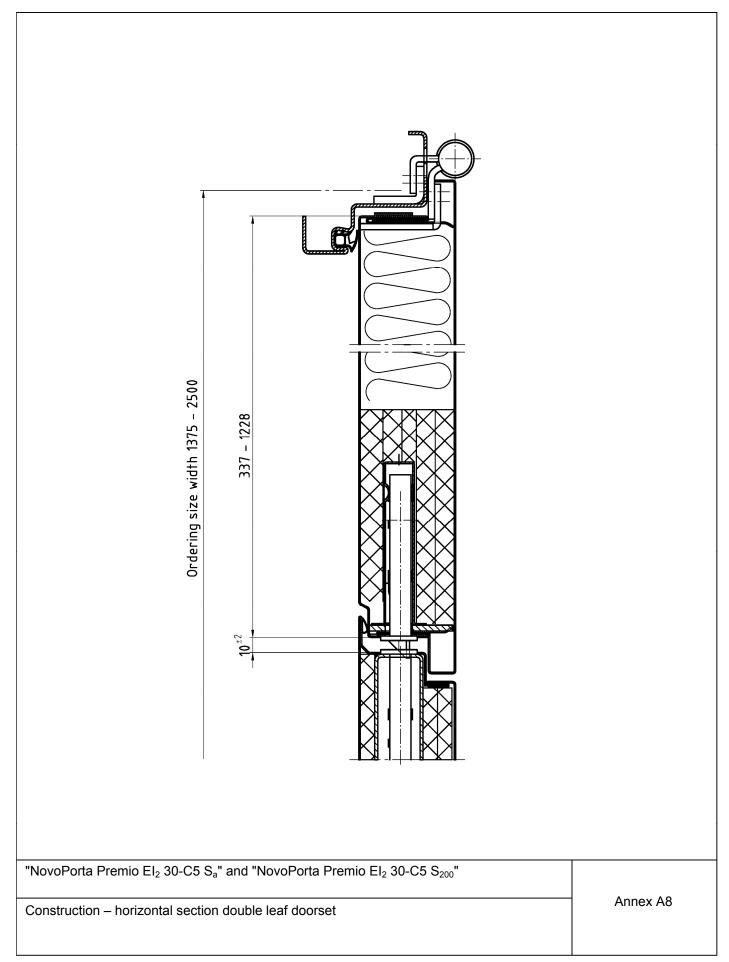
"NovoPorta Premio  $EI_2$  30-C5  $S_a$ " and "NovoPorta Premio  $EI_2$  30-C5  $S_{200}$ " Annex A6 Construction – horizontal section single leaf doorset

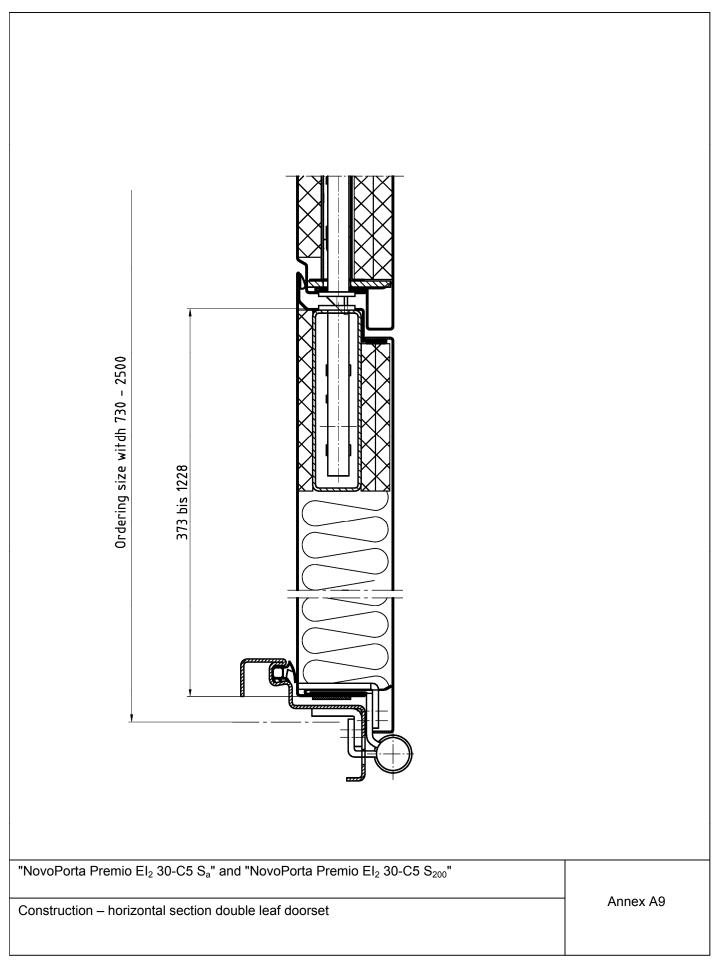
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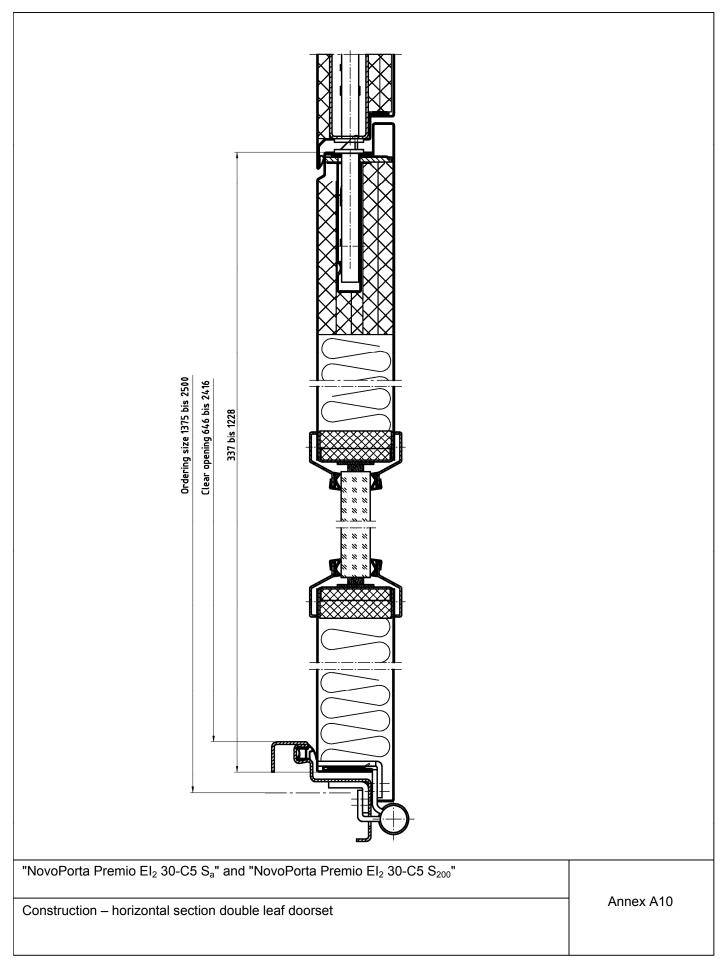




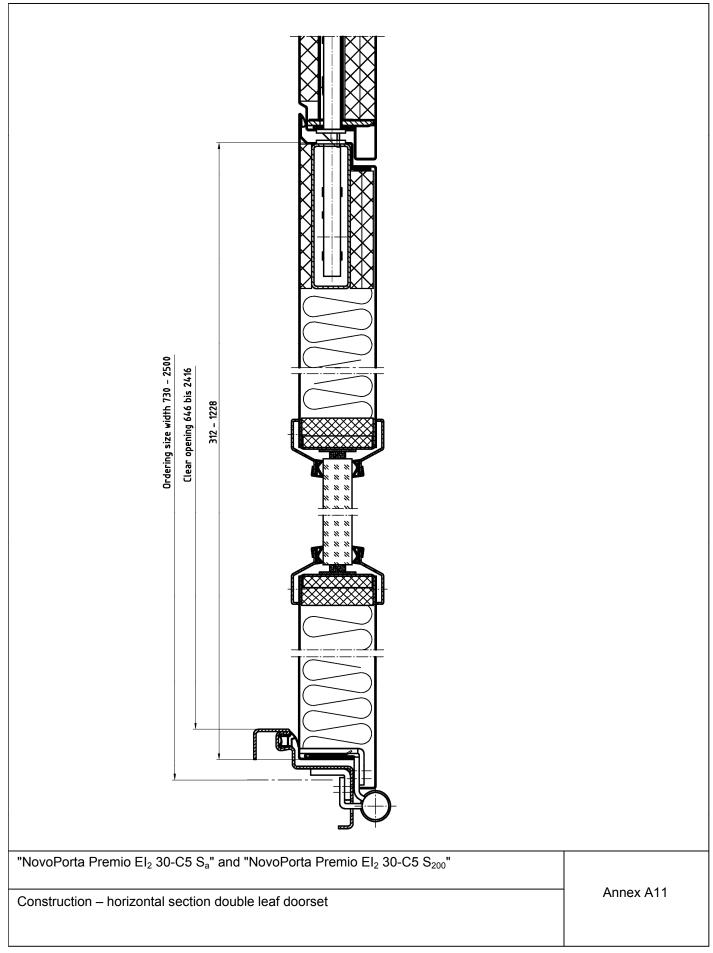




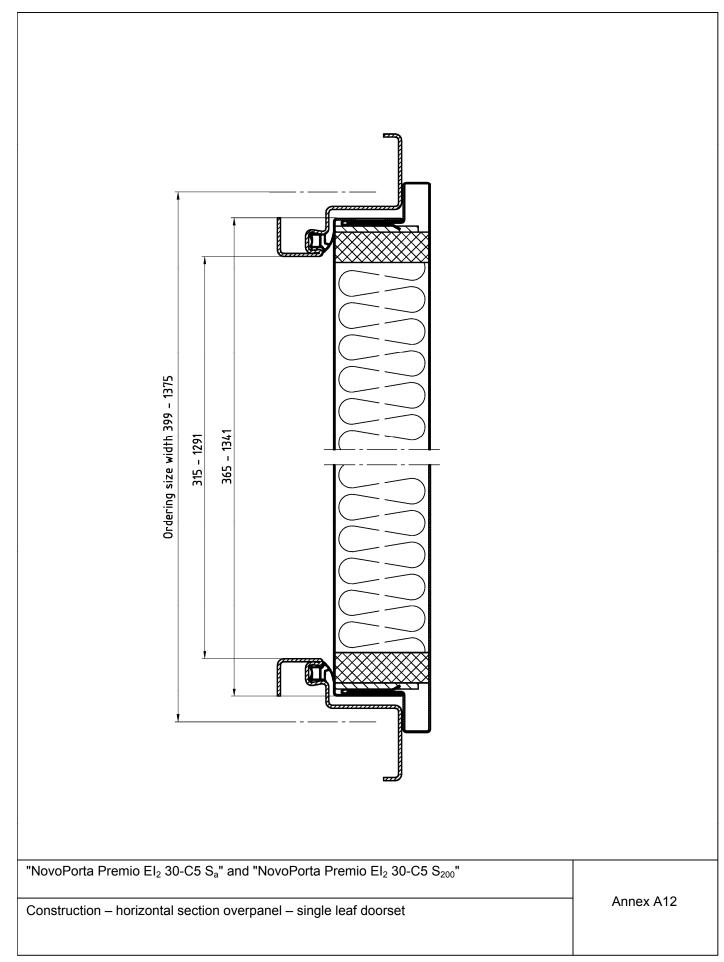




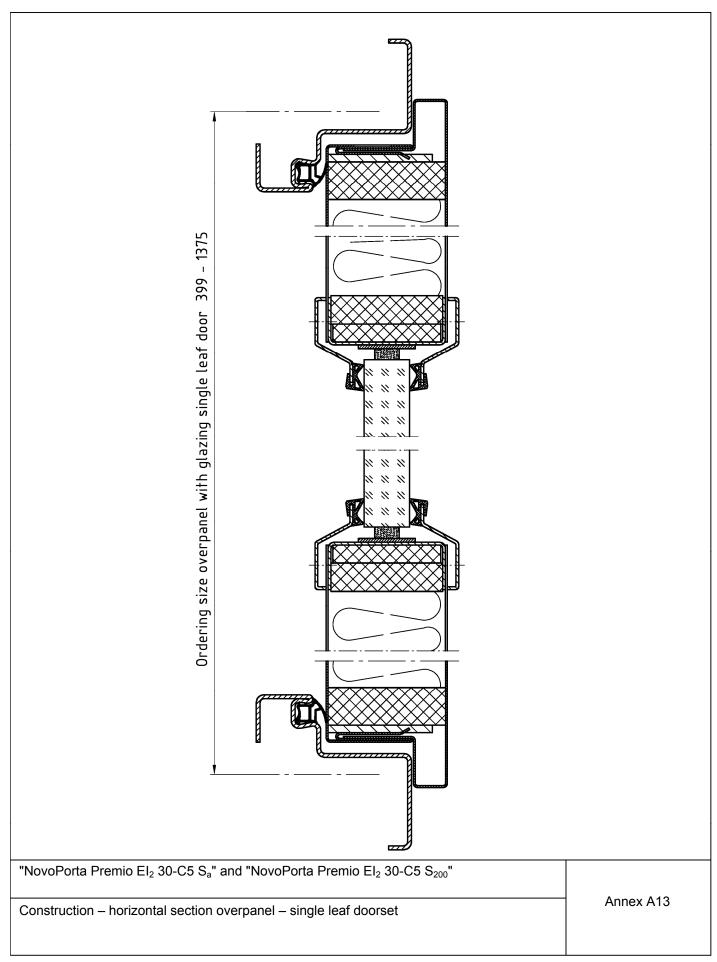




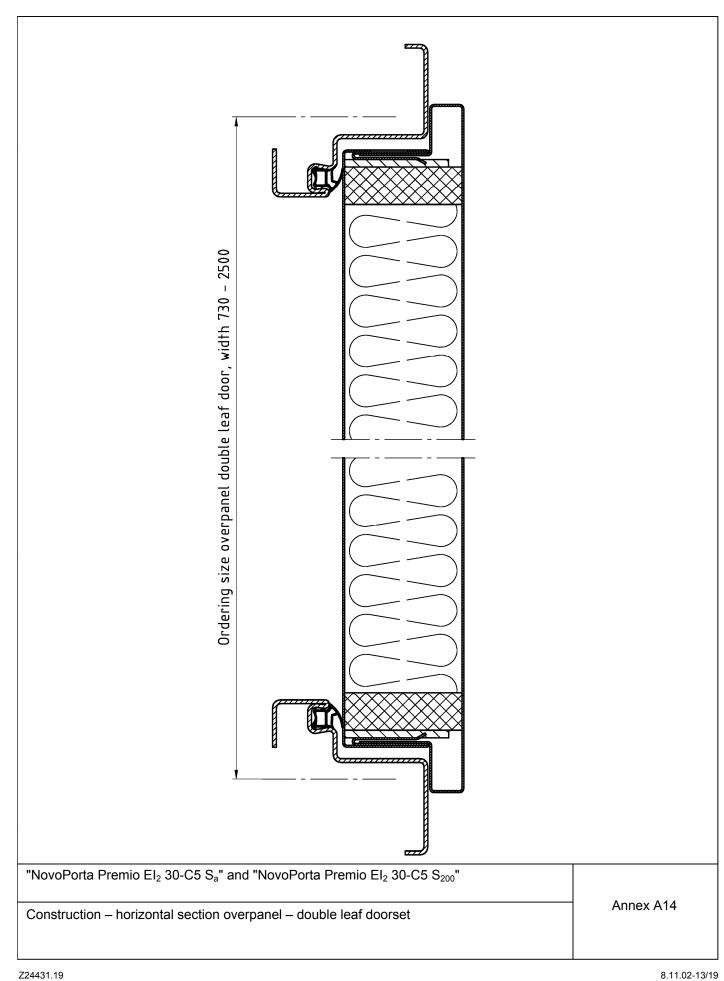






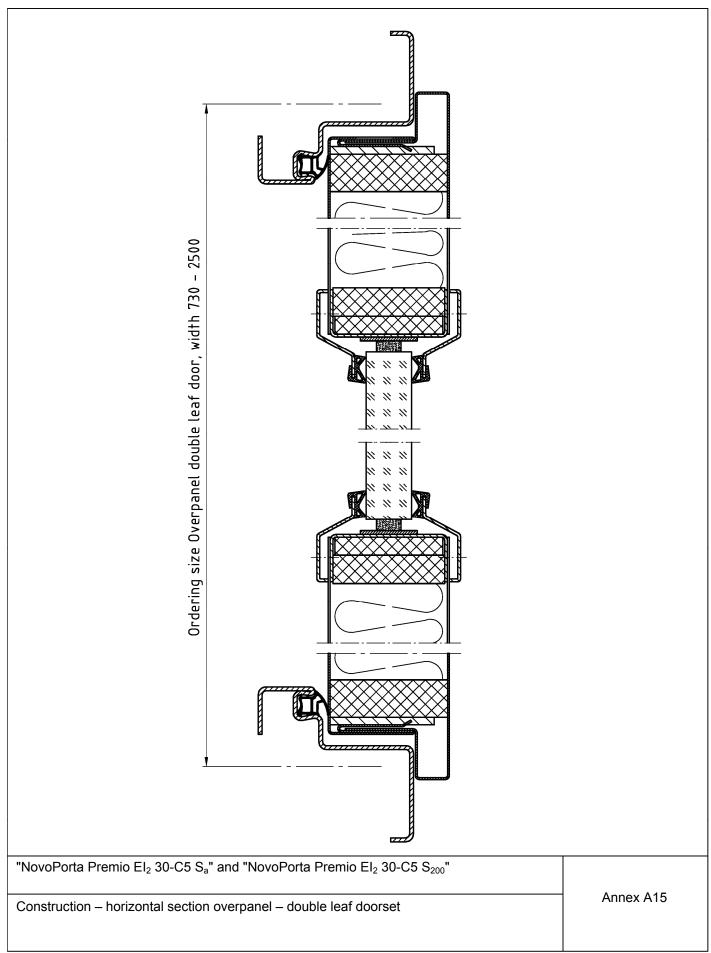




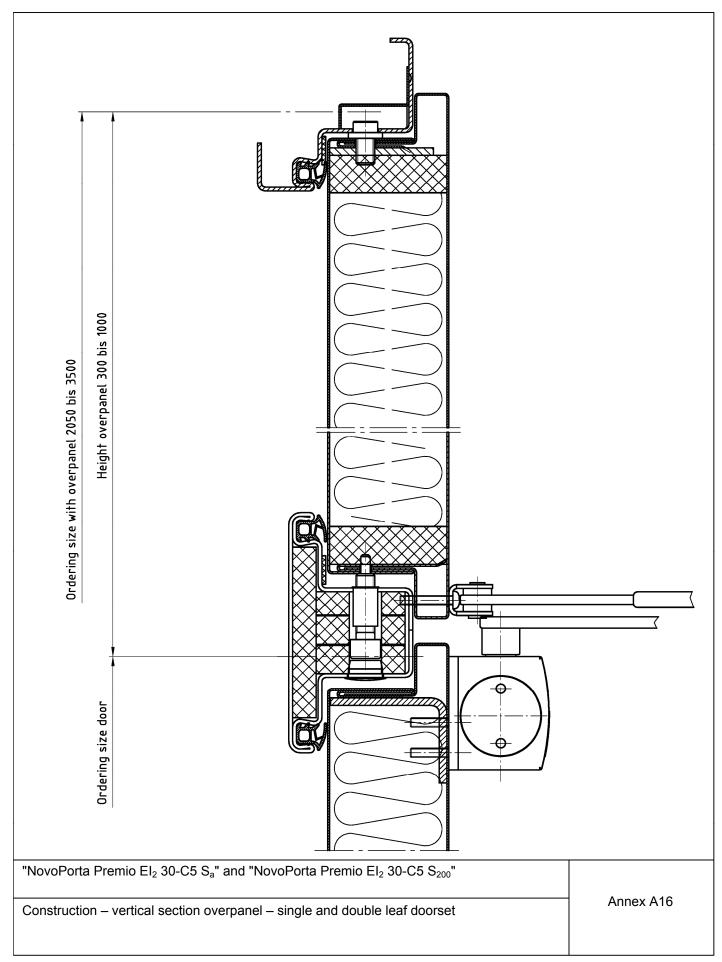


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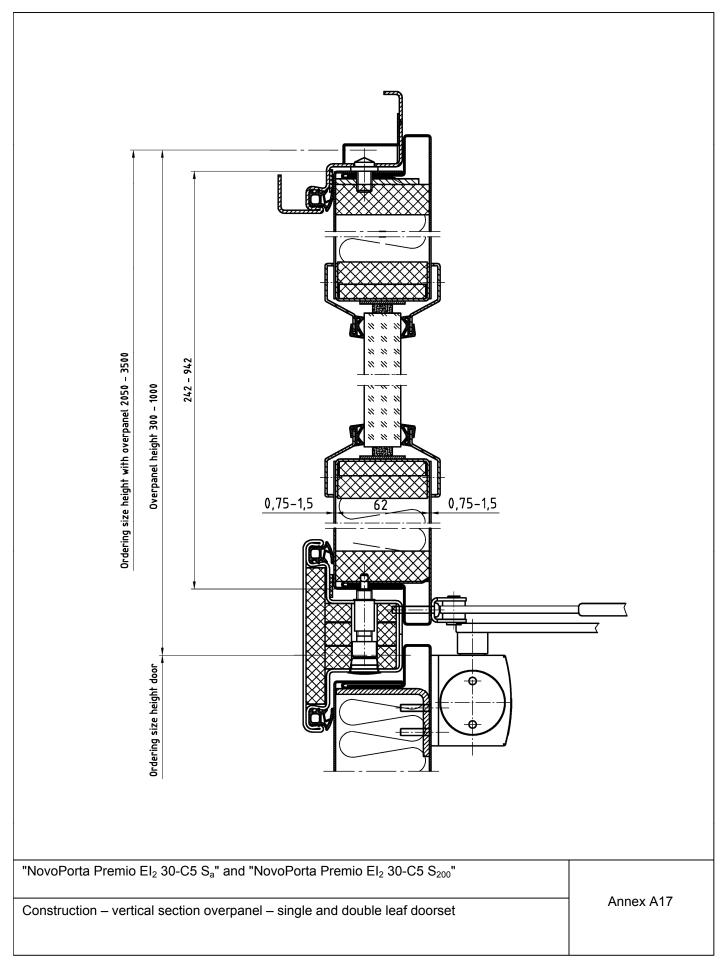
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"NovoPorta Premio El<sub>2</sub> 60-C5 S<sub>a</sub>"
"NovoPorta Premio El<sub>2</sub> 60-C5 S<sub>200</sub>"

#### **Annnex B1**

Internal fire resisting and/or smoke control single or double leaf doorsets (pivot doorsets) "NovoPorta Premio  $El_2\,60\text{-C5}\,S_a$ " and "NovoPorta Premio  $El_2\,60\text{-C5}\,S_{200}$ " are be 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 products are made of steel plates and fire-resistant inlays with building hardware. They may be designed with or without any vision panel(s) in the doorsets leaf or leave(s)

Fire resisting 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/or 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 conjuction with a soil liner (for smoke control).

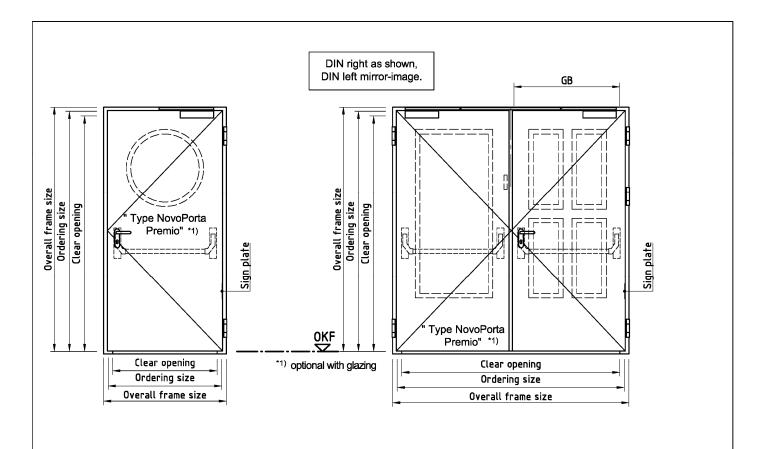
Single leaf fire resisting and/or smoke control doorsets are verified at levels other than the floor level (i.e. at increased heights). These doorsets in the area of the frame of the leaf have to be designed with a four-sided permanently elastic seal to prevent smoke from penetrating. The lower edge of the leaf and the frame has to be designed like the upper edge.

The system setup of the product is given in Annexes C2 to C10.

The products "NovoPorta Premio  $El_2$  60-C5  $S_a$ " und "NovoPorta Premio  $El_2$  60-C5  $S_{200}$ " are proved as internal fire resisting and/or smoke control single and double leaf doorsets in internal walls:

- ≥ 115 mm high density solid wall of masonry with an overall density of ≥ 850 kg/m³, or
- ≥ 100 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
- ≥ 100 mm fire resistant light weight plasterboard faced steel stud partition.



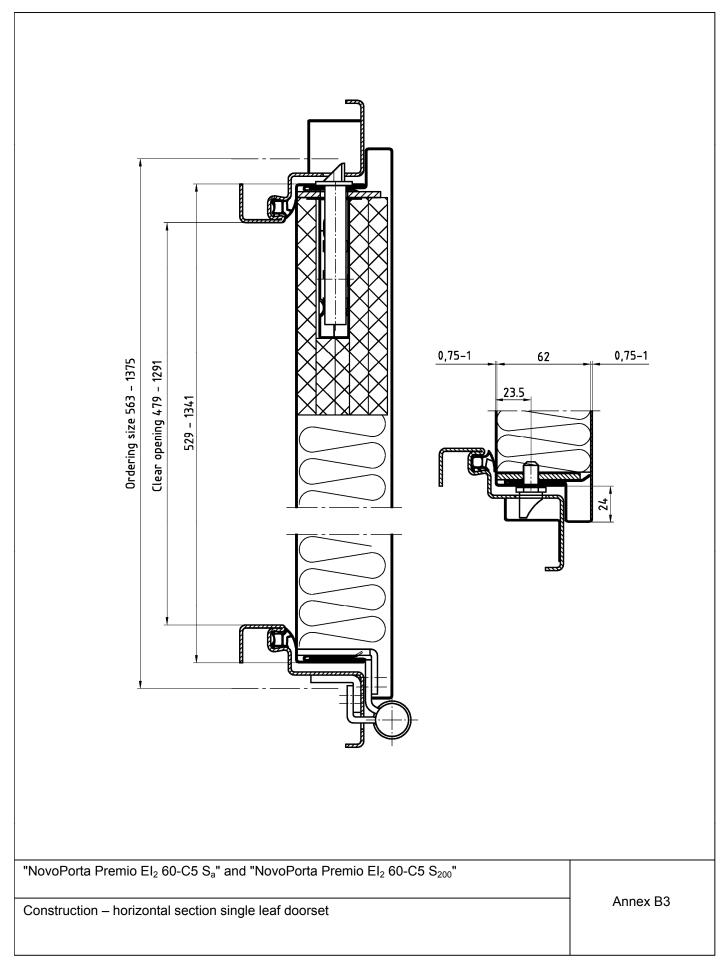


### All dimensions in mm

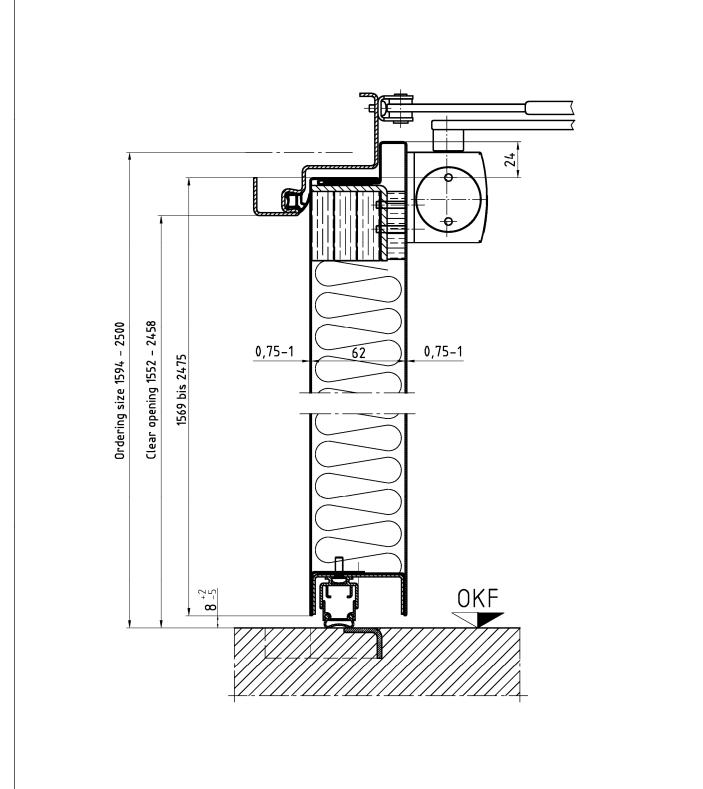
Notation, Dimensions		Ordering size		Overall frame size		Clear opening		Clear opening	
designvariants			width from / till	height from / till	width from / till	height from / till	width from / till	height from / till	size active leaf
Type NovoPorta Premio	Single leaf door		563 - 1375	1594 - 2500	641 - 1453 (1553)	1633 - 2539 (2589)	479 - 1291	1552 - 2458	-
Type NovoPorta Premio	Double leaf door	F	1250 - 2500	1750 - 2500	1328 - 2578 (2678)	1789 - 2539 (2639)	1166 - 2416	1708 - 2458	GB 564 - 1189

"NovoPorta Premio El <sub>2</sub> 60-C5 S <sub>a</sub> " and "NovoPorta Premio El <sub>2</sub> 60-C5 S <sub>200</sub> "	. 50
Summary	Annex B2



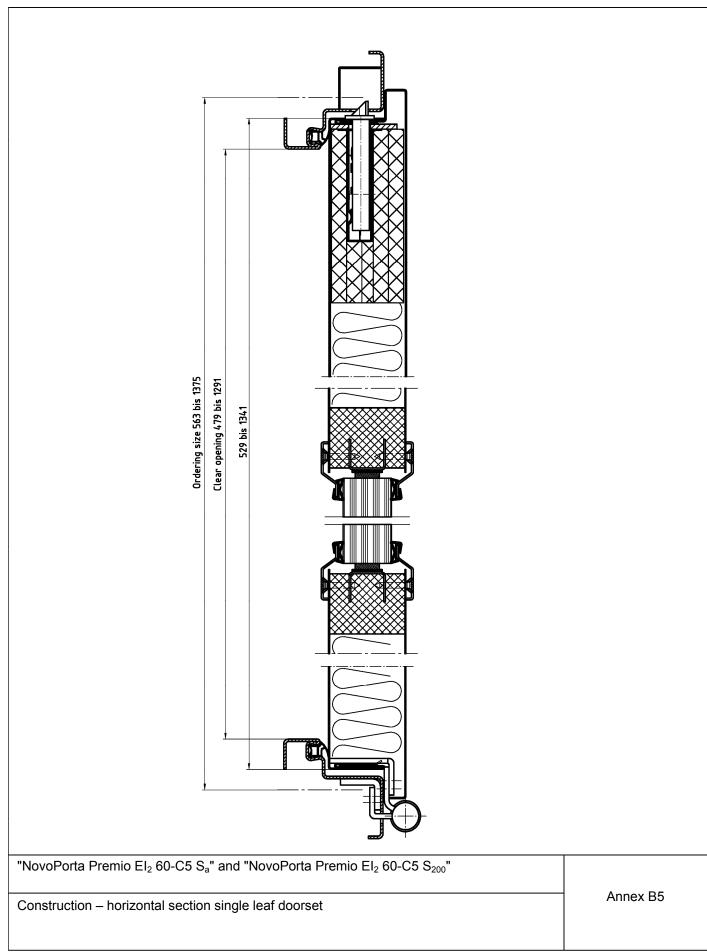


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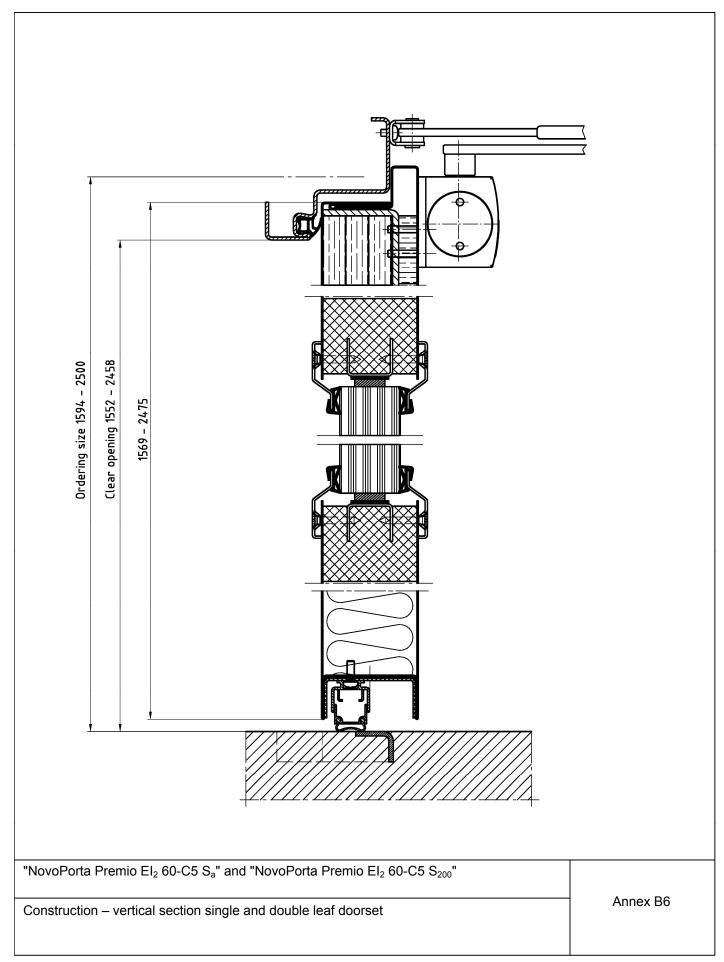


"NovoPorta Premio El <sub>2</sub> 60-C5 S <sub>a</sub> " and "NovoPorta Premio El <sub>2</sub> 60-C5 S <sub>200</sub> "	
Construction – vertical section single and double leaf doorset	1 Annex B4

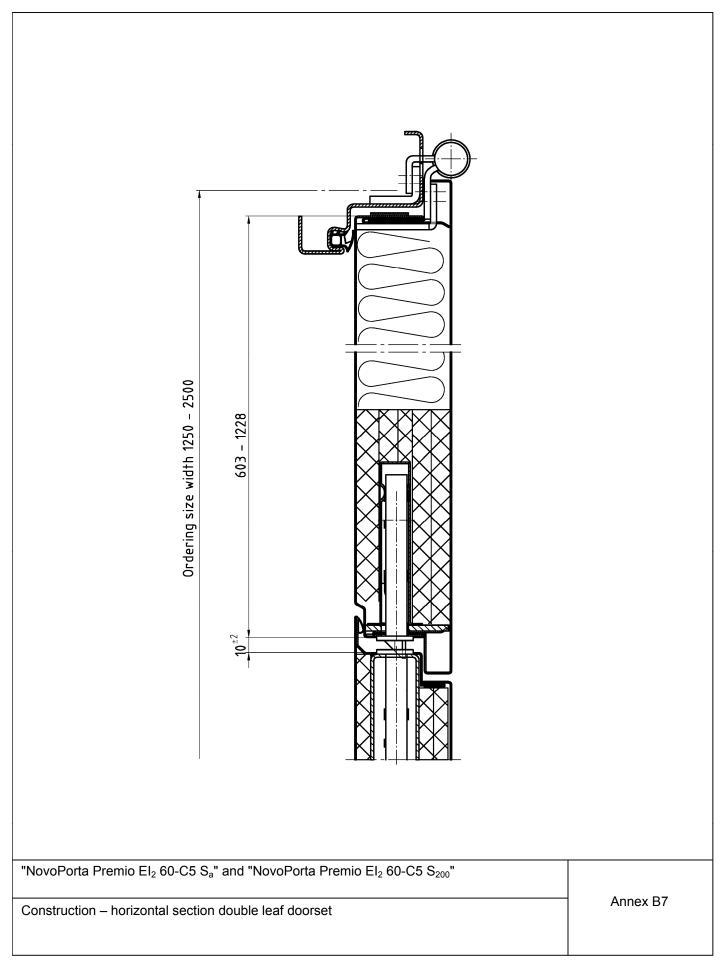
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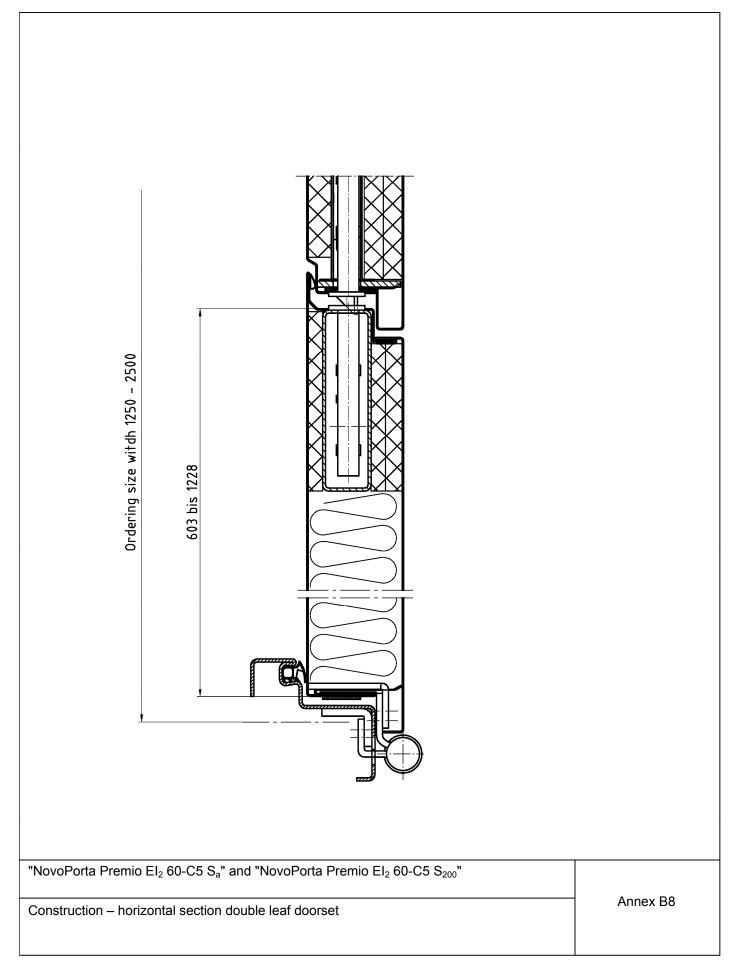










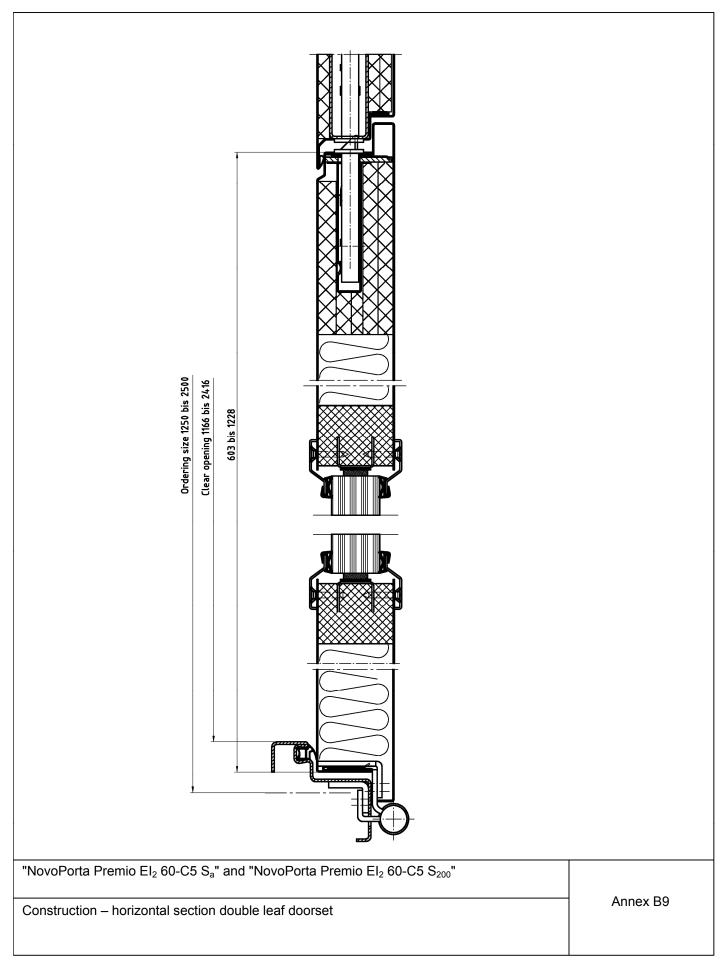


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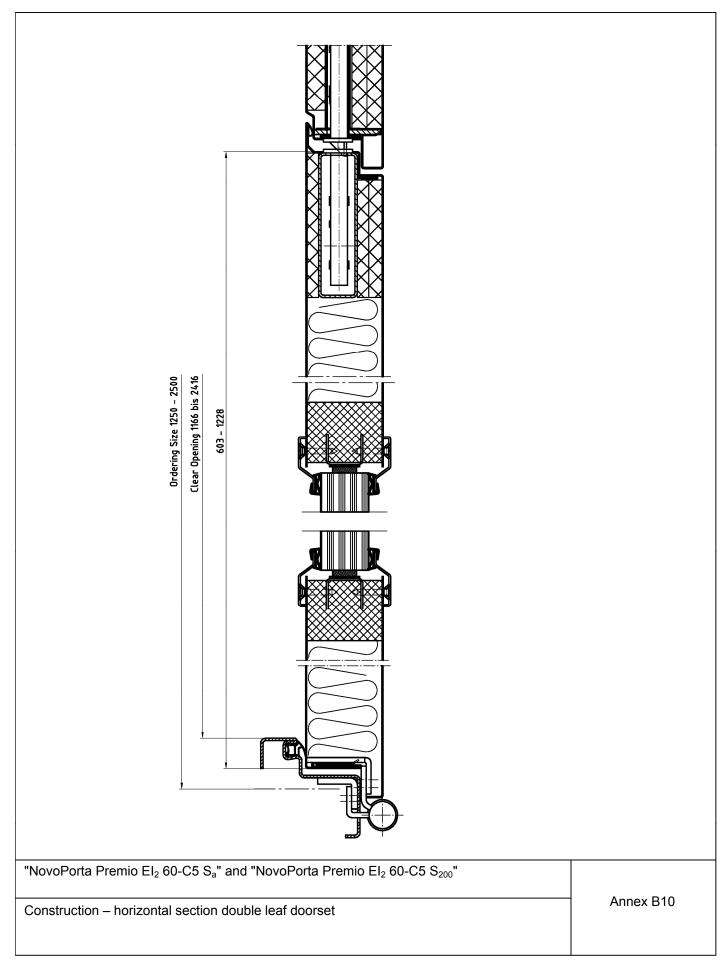
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"NovoPorta Premio El<sub>2</sub> 90-C5 S<sub>a</sub>"
"NovoPorta Premio El<sub>2</sub> 90-C5 S<sub>200</sub>"

Annex C1

Internal fire resisting and/or smoke control single or double leaf doorsets (pivot doorsets) "NovoPorta Premio  $El_2\,90\text{-C5}\,S_{a}$ " and "NovoPorta Premio  $El_2\,90\text{-C5}\,S_{200}$ " are be 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.

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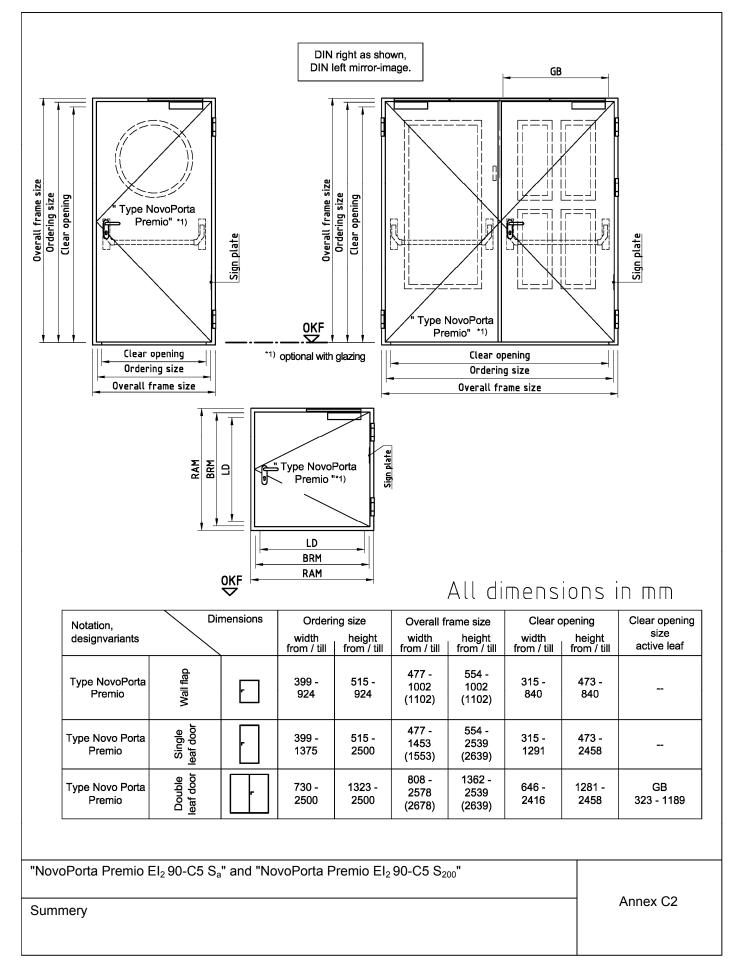
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The system setup of the product is given in Annexes C2 to C10.

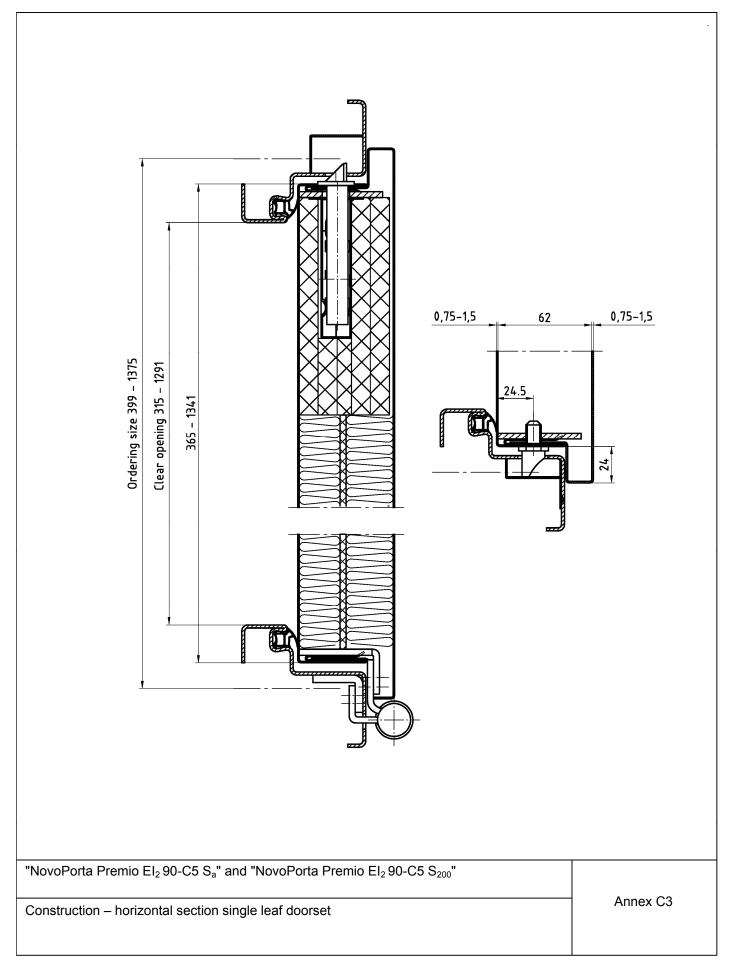
The products "NovoPorta Premio  $El_2$  90-C5  $S_a$ " und "NovoPorta Premio  $El_2$  90-C5  $S_{200}$ " are proved as internal fire resisting and/or smoke control single and double leaf doorsets in internal walls:

- ≥ 175 mm high density solid wall of masonry with an overall density of ≥ 850 kg/m³, or
- ≥ 140 mm solid wall of concrete masonry with an overall density ≥ 850 kg/m³, or
- ≥ 175 mm low density solid wall of aerated concrete with an overall density of ≥ 650 ±200 kg/m³, or
- ≥ 100 mm fire resistant light weight plasterboard faced steel stud partition.

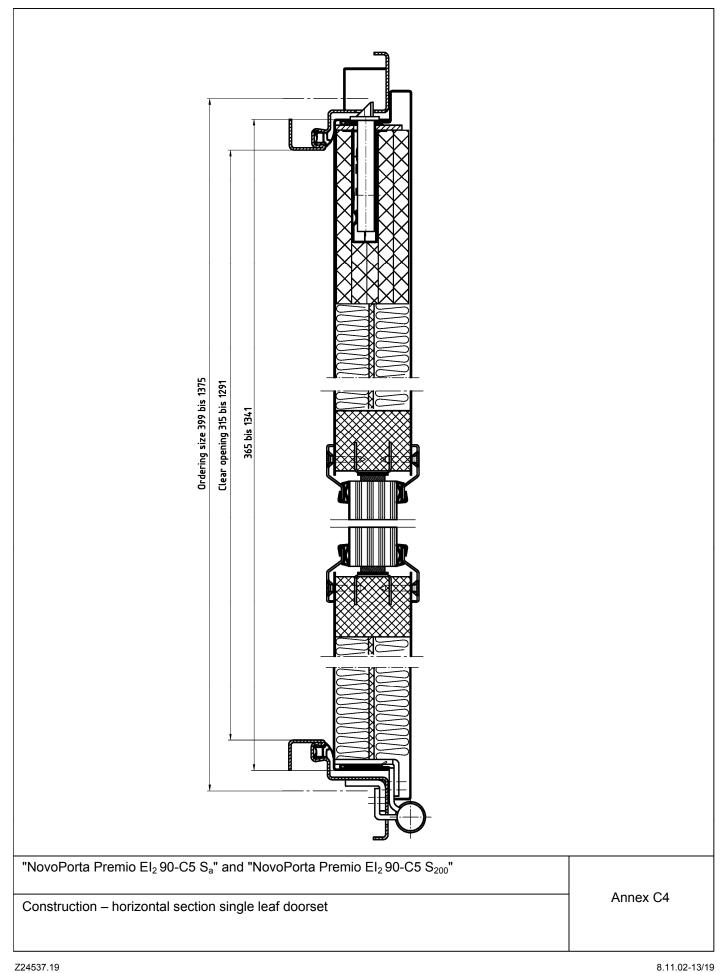






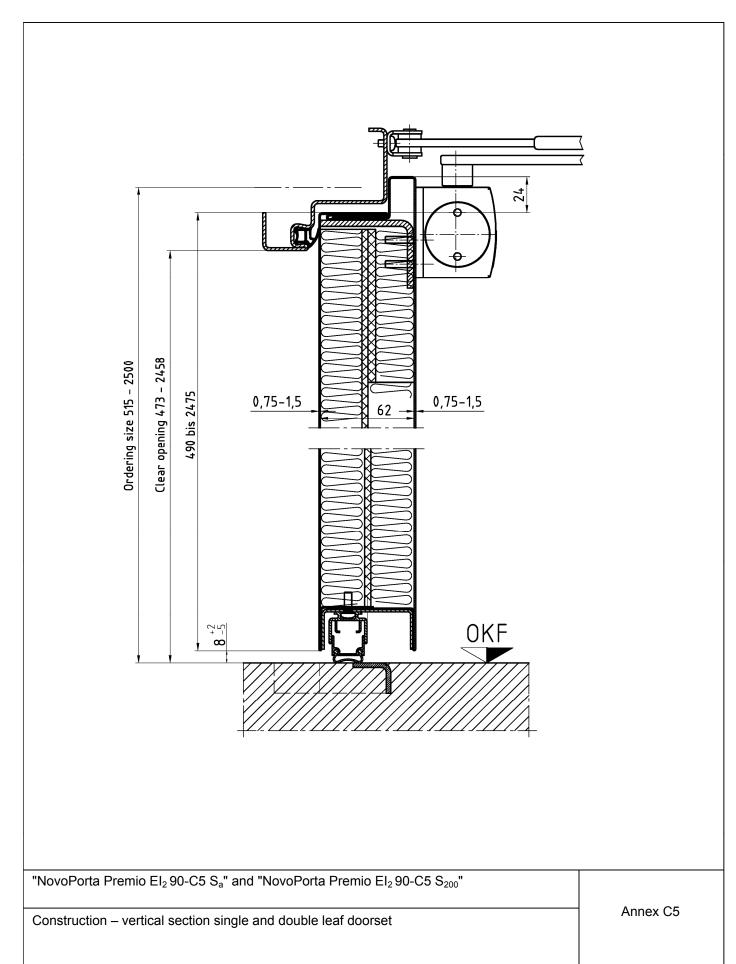




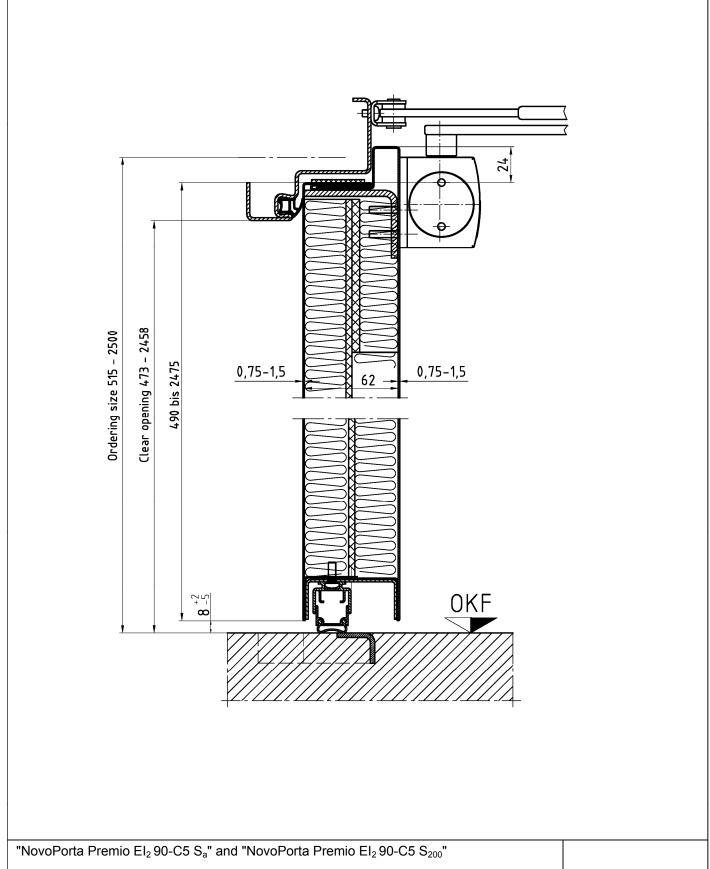


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Construction – vertical section single and double leaf doorset

Annex C6

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