

Approval body for construction products
and types of construction

Bautechnisches Prüfamt

An institution established by the Federal and
Laender Governments



European Technical Assessment

ETA-22/0696
of 15 March 2023

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

"NM-T55_1"

Product family
to which the construction product belongs

Internal fire resisting and smoke control single leaf
doorset made of steel

Manufacturer

Nagel Metallbau GmbH & Co. KG
Im Barnholz 12
74731 Walldürn
DEUTSCHLAND

Manufacturing plant

Nagel Metallbau GmbH & Co. KG
Im Barnholz 12
74731 Walldürn

This European Technical Assessment
contains

9 pages including 5 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

EAD 020029-00-1102

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Specific Part

1 Technical description of the products

This report describes the methods used to assess the fitness for the planned use of internal pedestrian fire resisting and smoke control single leaf doorset "NM-T55F_1" - made of steel.

The product involves 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 door with fire and smoke protection properties shall be designed:

- using steel plates featuring fire-resistant inlays
- with building hardware,
- with fire-resistant glass in the door leaf,
- with a three-sided permanently elastic seal in conjunction with a soil liner,
- with a latch lock.

The components and the system structure of the product are shown in Annexes 1 to 5.

2 Specification of the intended use in accordance with EAD No. 02029-00-1102

The fire resisting and smoke control doorset is used internally as closures in fire resisting partition walls and/or for escape routes.

The verifications and assessment methods on which this European Technical Assessment is based lead the assumption of working life of the fire resisting and smoke control door at least 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.

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	A
	Insulation	A1
	Glazing	A2
	Glazing blocks	A1
	Gypsum plaster board	A1
	Sealing	N/A
	Intumescent material	A1 – B2
Resistance to fire acc. to EN 13501-2	El ₂ 90	
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	npd ¹
Durability of the ability to release	npd ¹
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	npd ¹
Strength requirements acc. EN 947 to EN 950	npd ¹

¹ no performance determined

3.3 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 15. März 2023 by Deutsches Institut für Bautechnik

Christina Pritzkow
Head of section

beglaubigt:
Fritzsche

"NM-T55F_1"

Annex 1

EI₂ 90-S_a / S₂₀₀ C5

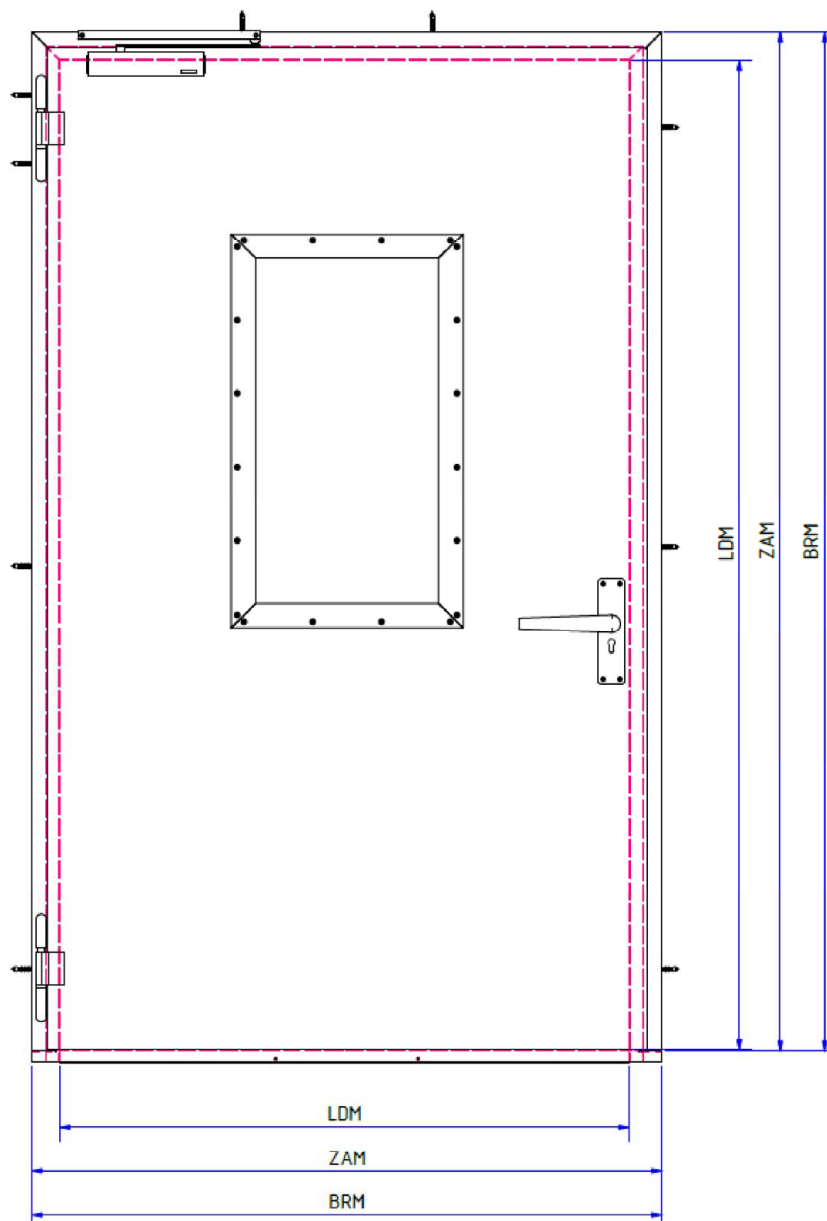
The system structure of the single-leaf "NM-T55F_1" interior door with the classification EI₂ 90 S_a / S₂₀₀ C5 is shown in Annexes 2 to 5.

The fire resisting and smoke control door are made of steel plates and fire-resistant inlays with building hardware and with glazing in the door leaf and with a three-sided permanently elastic seal in conjunction with a soil liner.

Locking: The closure is designed with a latch lock.

The single leaf "NM-T55F_1" door with the max. dimension 1.383 x 2.423 mm are proved as internal fire resisting and smoke control single leaf door in internal walls:

- ≥ 175 mm low density solid wall of aerated concrete with an overall density of ≥ 600 kg/m³.

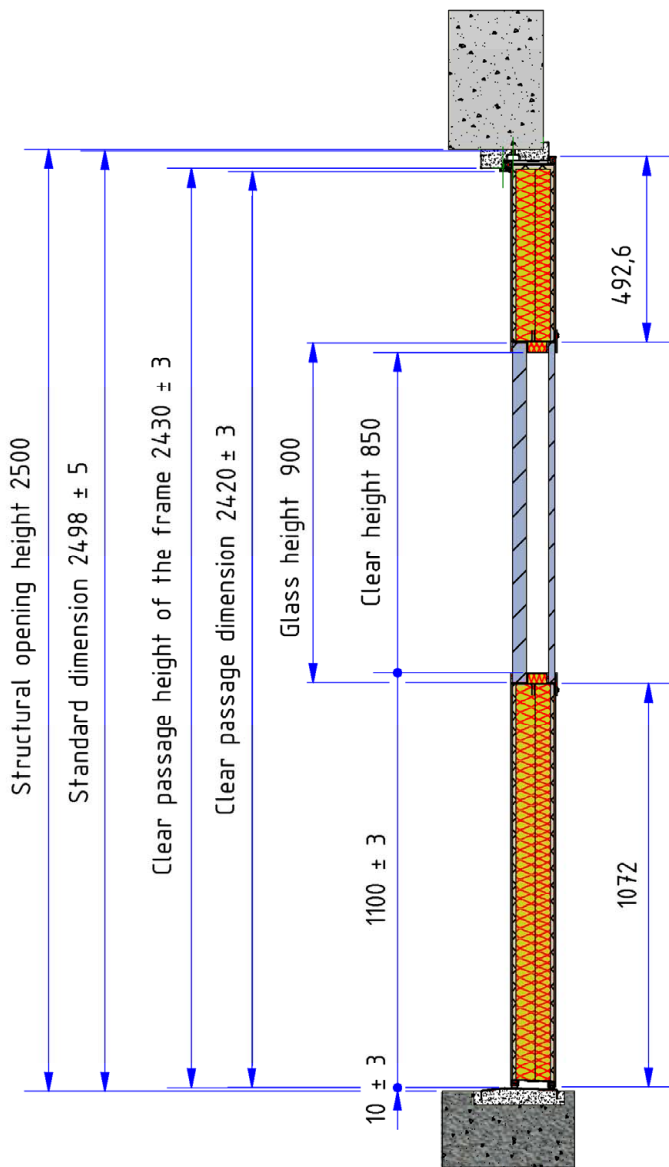


Description	Standard size BRM (mm)		Outer frame size ZAM (mm)		Clear passage size LDM (mm)	
	width	height	width	height	width	height
NM-T55F_1	1.510 ±20	2.498 ±5	1.550 ±3	2.513 ±3	1.380 ±3	2.420 ±3

"NM-T55_1"

Summary

Annex 2

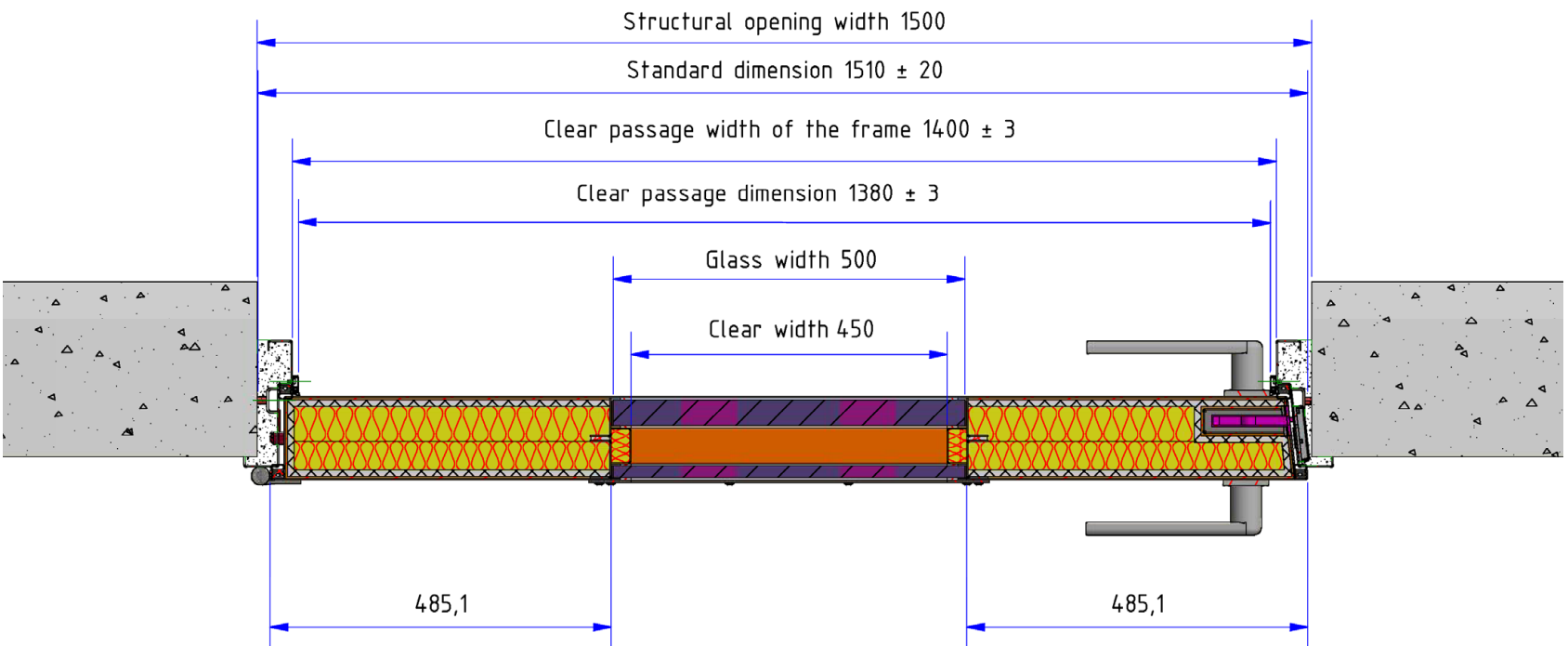


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"NM-T55_1"

Construction – horizontal section

Annex 3



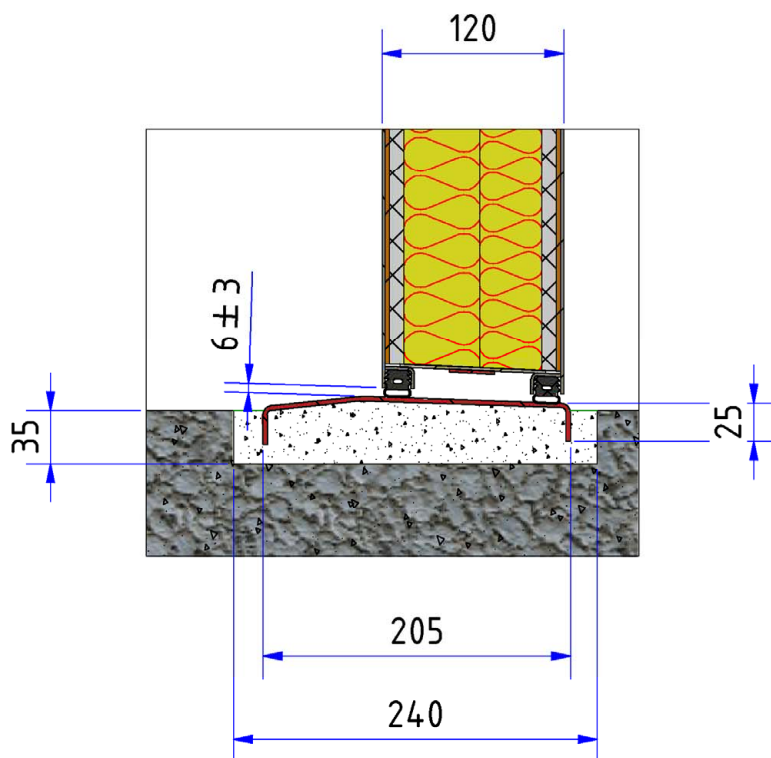
"NM-T55_1"

Construction – horizontal section

Annex 4

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"NM-T55_1"

Soil liner

Annex 5