

Single Leaf EI₂90 / T90 Fire Resistant Acoustic Steel Door

Fire Protection	EI₂90 / T90	tested acc. to EN 1634-1
Smoke Control (optional)	S_a, S₂₀₀ / RS	tested acc. to EN 1634-3
Self-Closing (optional)	up to C5	tested acc. to EN 1191
Sound Insulation	up to R_{w,P} 46 dB	tested acc. to EN ISO 10140-2

Certified in accordance with DIN EN 16034 / 14351-1 / 13241

General Building Approval as T90-1 (-RS) -FSA acc. to DIN 4102-5 / DIN 18095

Optional Audited Additional Functions

- Burglar Protection	RC2/RC3/RC4	tested acc. to EN 1627
- Bullet Resistance	FB4/FB6	tested acc. to EN 1522
- Air Tight	up to class 4	tested acc. to EN 1026
- Rain- and Fire-Water Tight	Klasse 6A	tested acc. to EN 1027
- Wind load Resistance	up to class C5	tested acc. to EN 12211
- Blast Resistance	up to 20 kPa	tested acc. to EN 13124-1
- Explosion Protection	up to Zone 1/21	acc. to EN 1127-1 or ATEX 2014/34/EU
- Stainless Steel		

Range of Dimension

Range of Dimension for Doors **Width** from 625 mm to 1500 mm
Height from 1750 mm to 3000 mm

Range of Dimension for Hatches **Width** from 500 mm to 750 mm
Height from 500 mm to 1750 mm

Technical Specification and Tender Text

Product:	EI₂90 / T90 single leaf fire resistant acoustic steel door brand Buchele tested acc. to EN 1634-1 and EN ISO 10140-2
Door Type:	PLANE Line PL 901 BASIC
Sound Insulation R_{w,P}	46 dB
Structural Opening: x mm
Door Leaf:	Double-walled, planar 70 mm thick steel door leaf without hinge embossing, three sides rebated with thick rebate. Without bottom stop. Special insulating inserts fully laid-in and glued. Securing pin screwed in door leaf rebate. Drop sealing system.
Threshold:	Floor bracket as separation sill. Surface galvanized and welded to the frame.
Frame:	3-sided circumferential rebated corner frame with visible black coated intumescent material in rebate. High-quality multi chamber sealing profile adjustable fixed in the three-sided groove.
Hinges:	Three-part, height adjustable construction hinges with hinge pin retention and ball bearing spacer ring for smooth door movement.

Door Closer:	Door closer system with standard arm acc. to EN 1154 silver coloured mounted on hinge side.	
Fitting:	Mortise lock with latch lever function acc. to EN 12209 (prepared for installation of a profile cylinder lock, provided by customer). Door handle set in acc. to EN 1906 fixed pivoted synthetic material black in U-shape with rounded short-plate.	
Surface:	Door leaf and frame galvanized und primed with 2K-PUR primer (Very High Solid) similar RAL 7035.	
Installation:	masonry	≥ 175 mm
	concrete	≥ 140 mm
	areated concrete	≥ 200 mm
	mounting wall F60	≥ 125 mm

Alternative: PLANE Line PL 901 PREMIUM with flush mounted optics

Frame:	3-sided circumferential rebated PLANE Line special corner frame for flush mounted optics on hinge side. With visible, black coated intumescent material in rebate. High-quality multi-chamber sealing profile adjustable fixed in the three-sided groove.	
Hinges:	Object hinges type VB-3D 160 adjustable in three dimensions. Fixture element with slide bearings inside for smooth door movement.	
Door Closer:	Slide rail door closer system acc. to EN 1154 silver coloured mounted on hinge side.	

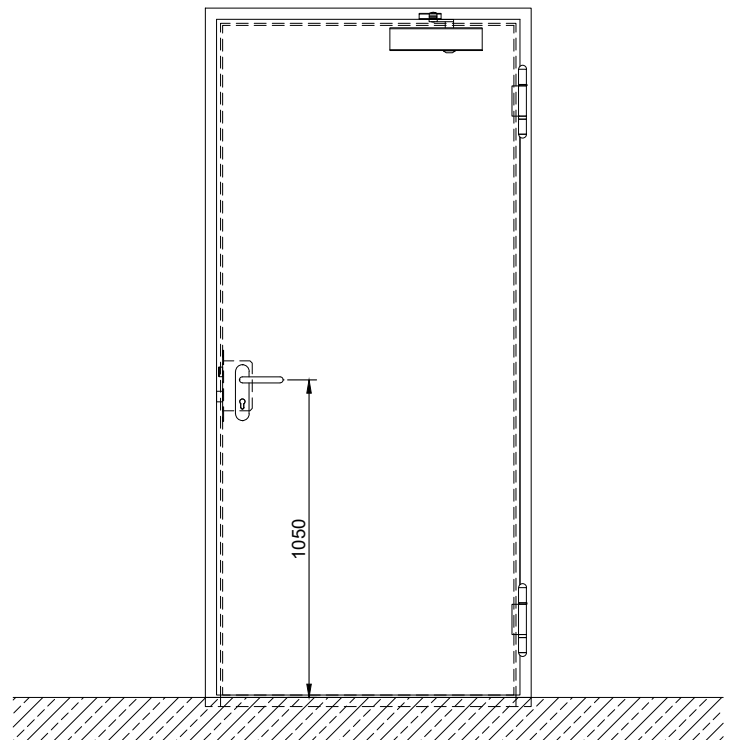
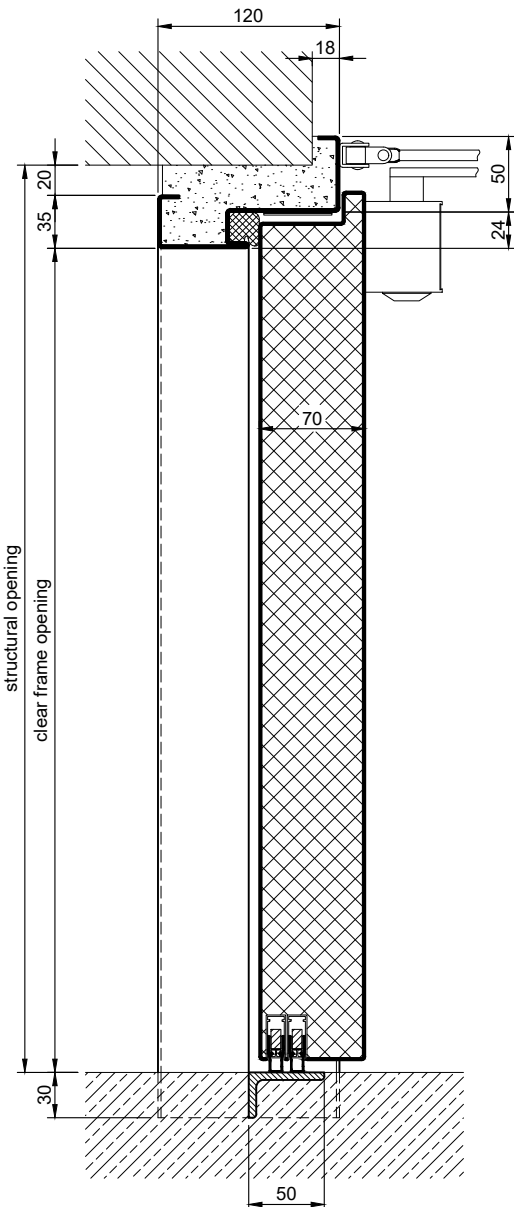
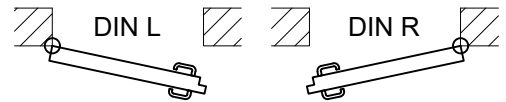
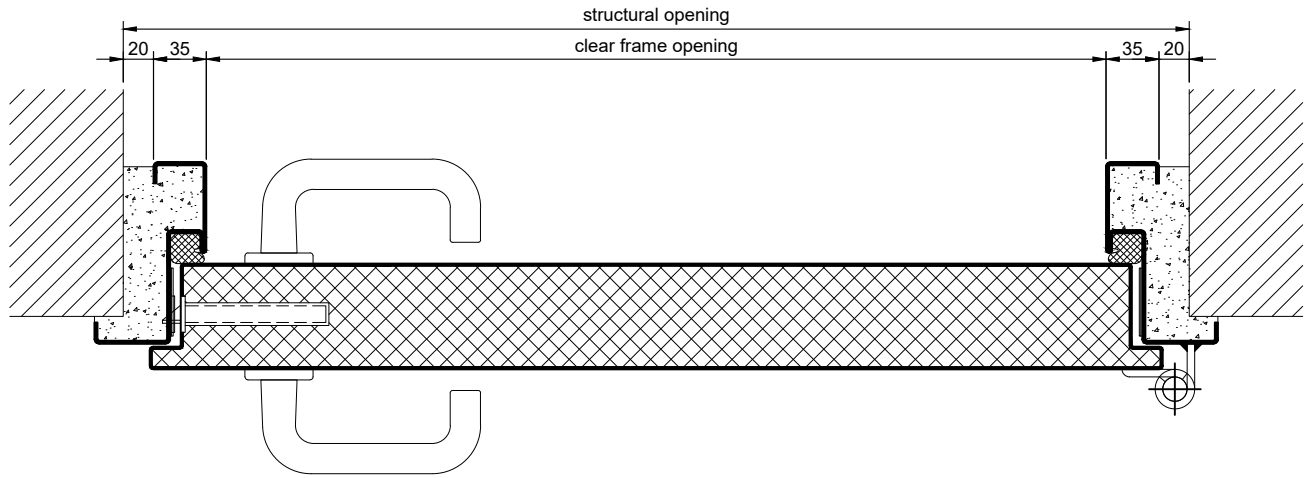
Alternative: PLANE Line PL 901 SUPERIOR with flush mounted optics

Frame:	3-sided circumferential rebated PLANE Line special corner frame for flush mounted optics on hinge side. With visible, black coated intumescent material in rebate. High-quality multi-chamber sealing profile adjustable fixed in the three-sided groove.	
Hinges:	Concealed hinge system adjustable in three dimensions.	
Door Closer:	Concealed slide rail door closer system acc. to EN 1154 integrated in frame and door leaf.	

Supplementary Equipment

Glazing:	F90 fire-protective glazing fixed with profiled and visible screwed steel glazing bars. Minimum border 125 mm on side and top, base 300 mm.	
Stainless Steel:	Material 1.4301 (V2A) or 1.4404 (V4A), Surface mill finish or brushed.	
BUCHELE DELUXE:	The exclusive surface coating.	

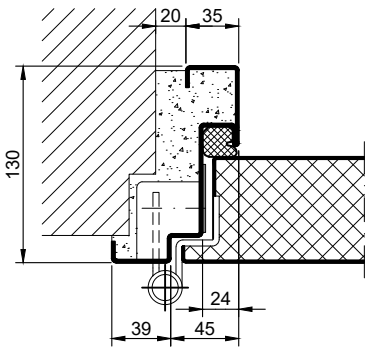
BASIC - Version



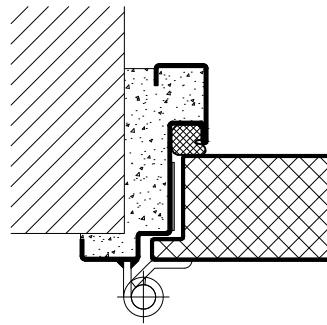
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PREMIUM Version

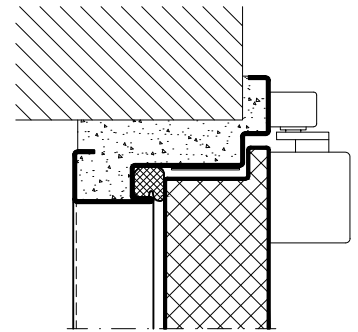
object hinges VB-3D



construction hinges

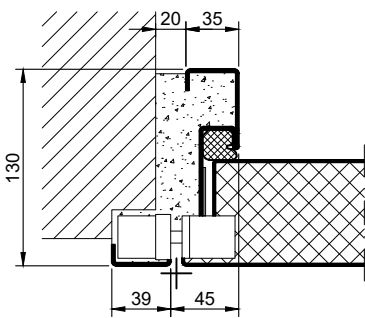


slide rail door closer

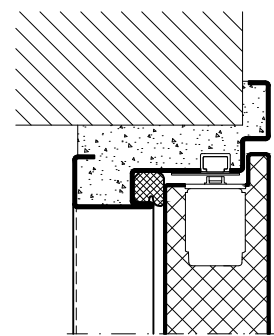


SUPERIOR Version

concealed hinges

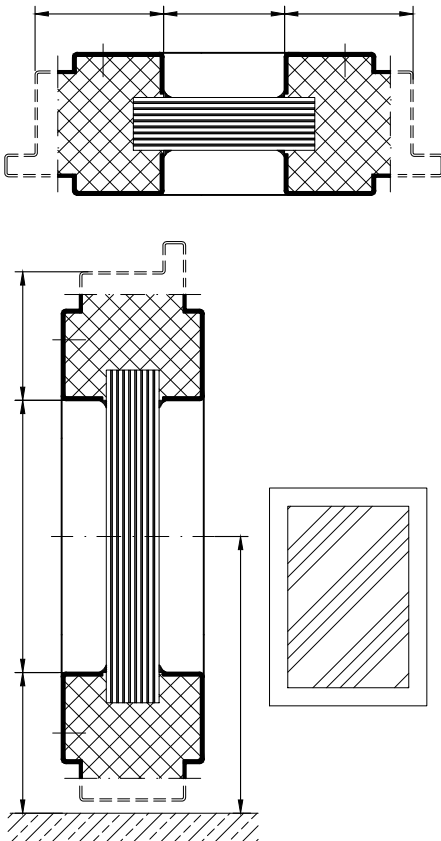


integrated door closer

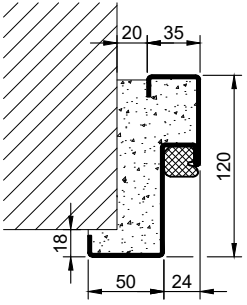
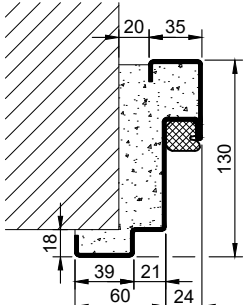
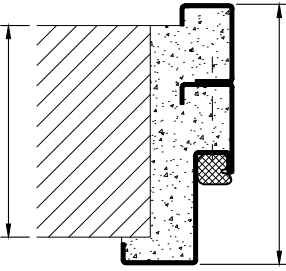
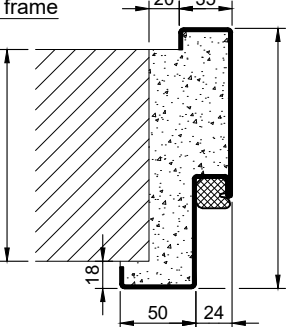
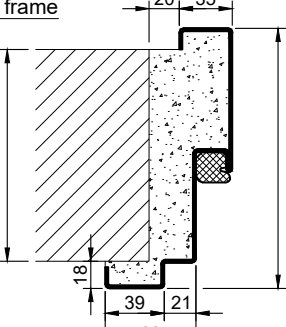
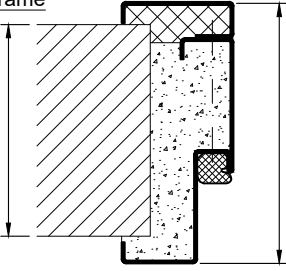
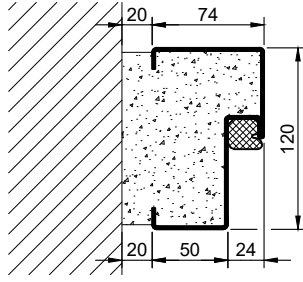
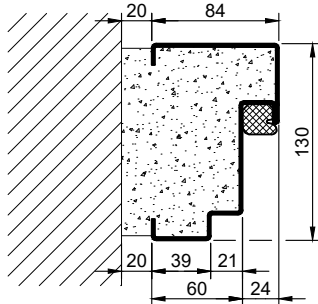
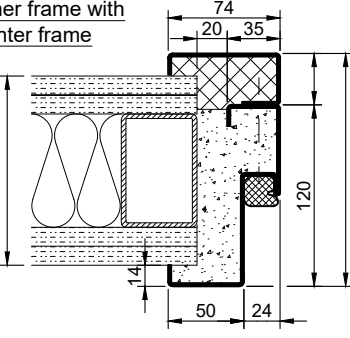
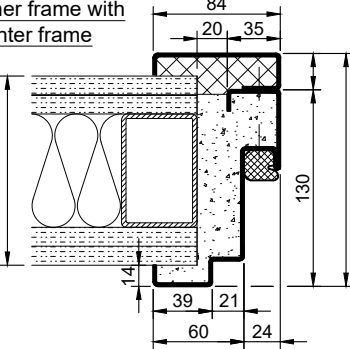
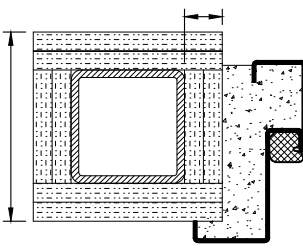


Options

glazing

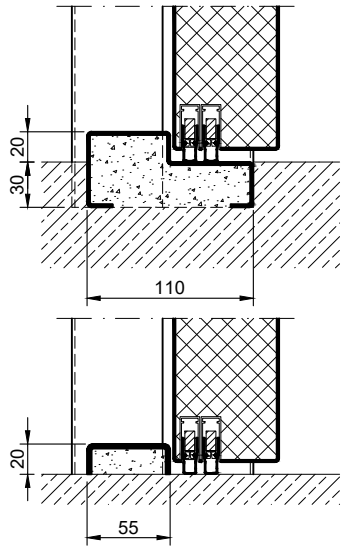


1.41.4 PLANE LINE PL 901-46DB_EN

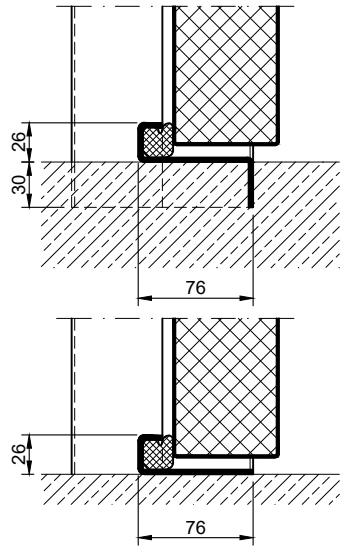
Frames BASIC	Frames PREMIUM/SUPERIOR	Variants (illustration BASIC)
<p>corner frame</p> 	<p>corner frame</p> 	<p>corner frame with additional frame</p> 
<p>encasing frame</p> 	<p>encasing frame</p> 	<p>encasing frame with counter frame</p> 
<p>block frame</p> 	<p>block frame</p> 	
<p>corner frame with counter frame</p> 	<p>corner frame with counter frame</p> 	<p>corner frame at support / pillar</p> 

Thresholds

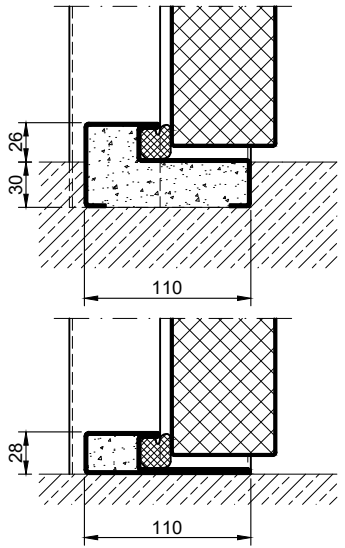
drop seal



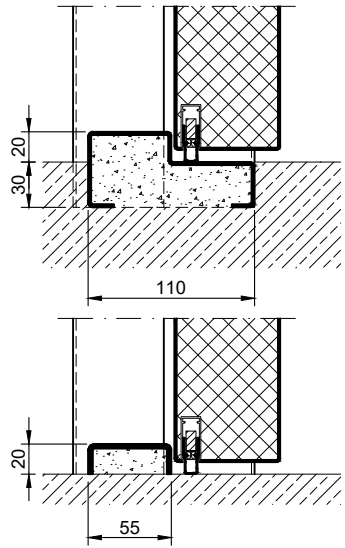
stop sill with seal



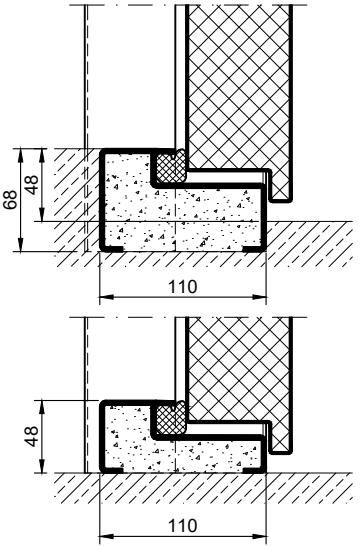
stop sill with seal



stop sill with drop seal



full sill



1.41.4_PLANE LINE PL 901-46DB_EN

technical modifications reserved - edition 05/2024