

Double Leaf EI₂90 / T90 Fire and Explosion Resistant 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
Blast Resistance	5 kPa	tested acc. to EN 13124-1

Certified in accordance with DIN EN 16034 / 14351-1 / 13241
General Building Approval as T90-2 (-RS) -FSA acc. to DIN 4102-5 / DIN 18095

Optional Audited Additional Functions

- Sound Insulation	up to 54 dB	tested acc. to EN ISO 10140-2
- Burglar Protection	RC2/RC3/RC4	tested acc. to EN 1627
- Bullet Resistance	FB4/FB6-NS	tested acc. to EN 1522
- Air Tight	up to class 4	tested acc. to EN 1026
- Rain- and Fire-Water Tight	class 6A	tested acc. to EN 1027
- Wind load Resistance	up to class C5	tested acc. to EN 1221
- 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 1375 mm to 3000 mm Height from 1750 mm to 3000 mm
Range of Dimension for Hatches	Width from 1000 mm to 1375 mm Height from 500 mm to 1750 mm

Technical Specification and Tender Text

Product:	EI ₂ 90 / T90 double leaf fire and explosion resistant door brand Buchele tested acc. to EN 1634-1 and EN 13124-1
Door Type:	PLANE Line PL 902 BASIC
Blast Resistance:	5 kPa
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. Passive leaf with multi-chamber sealing profile in the middle rebate. Securing pin screwed in door leaf rebate.
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:	2 pieces door closer system with standard arm acc. to EN 1154 silver coloured mounted on hinge side. Door coordinator and 2 pieces of 30 mm high brackets with plastic roller.	
Fitting:	Active leaf with 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. Passive leaf with self-locking concealed shoot bolt lock with upper switch lock.	
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 902 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.	

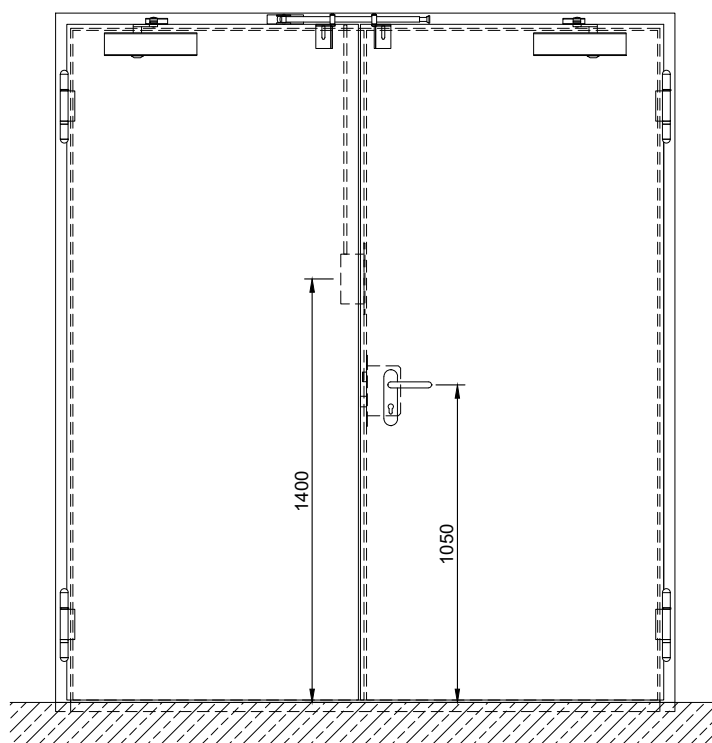
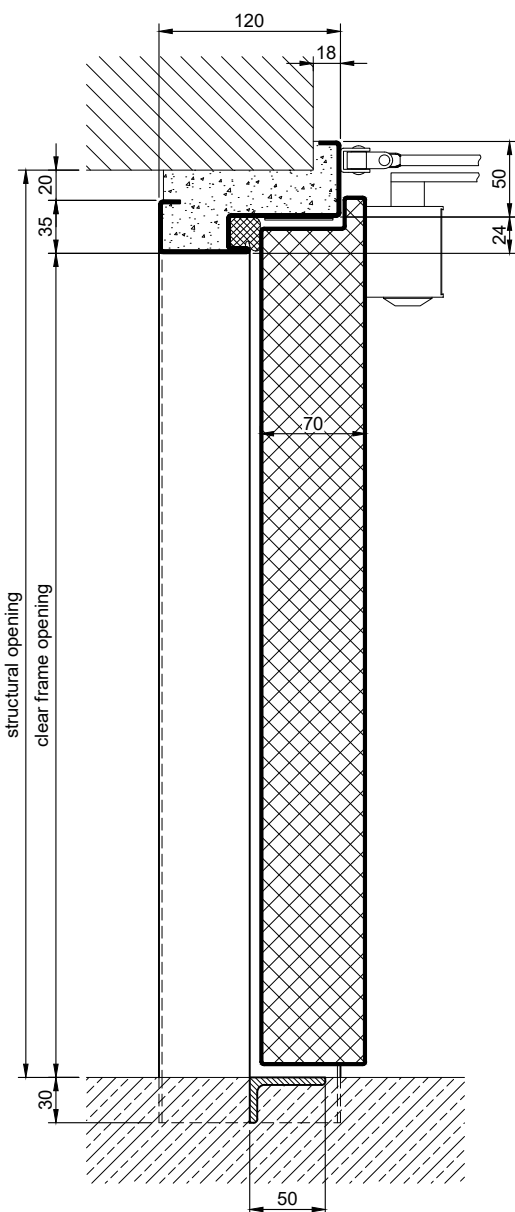
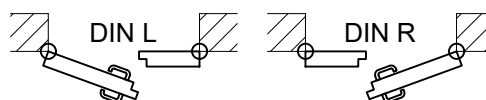
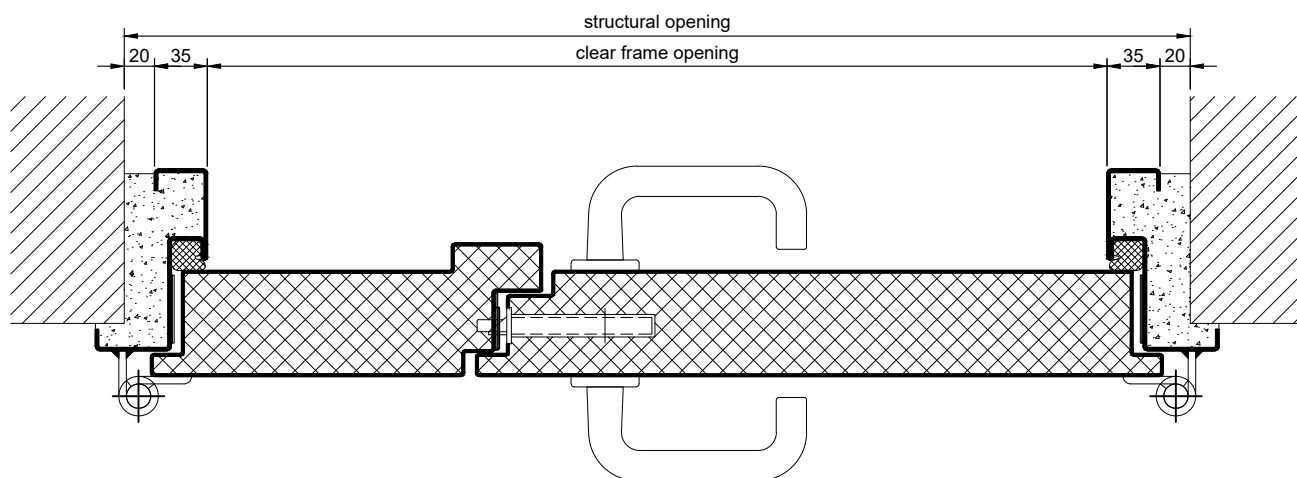
Alternative: PLANE Line PL 902 SUPERIOR with flush mounted optics

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

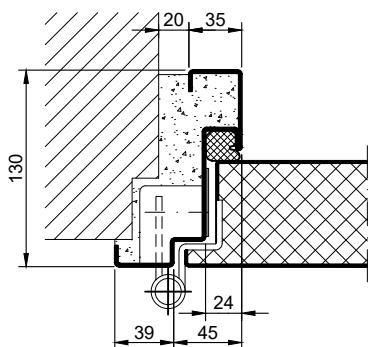
Glazing:	F90 fire-protective glazing fixed with profiled and visible screwed steel glazing bars. Minimum border 125 mm on side and top, base 300 mm.	
Stainless Steel:	Material 1.4301 (V2A) or 1.4404 (V4A), Surface mill finish or brushed.	
BUCHELE DELUXE:	The exclusive surface coating.	

BASIC - Version

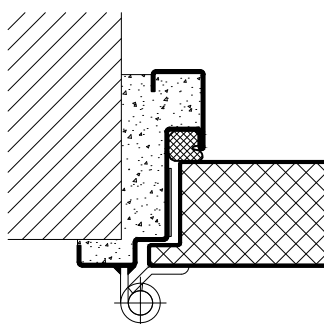


PREMIUM - Version

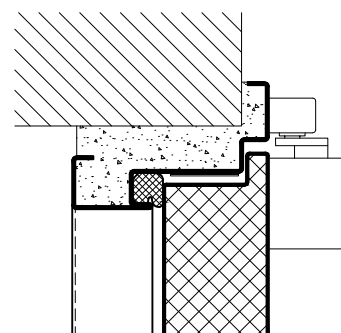
object hinges VB-3D



construction hinges

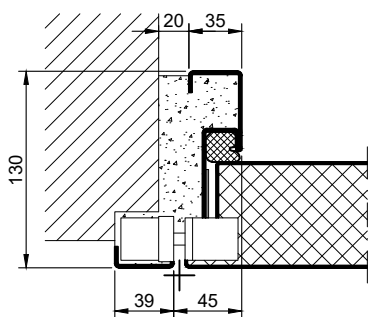


slide rail door closer

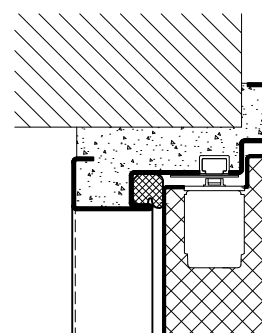


SUPERIOR - Version

concealed hinges

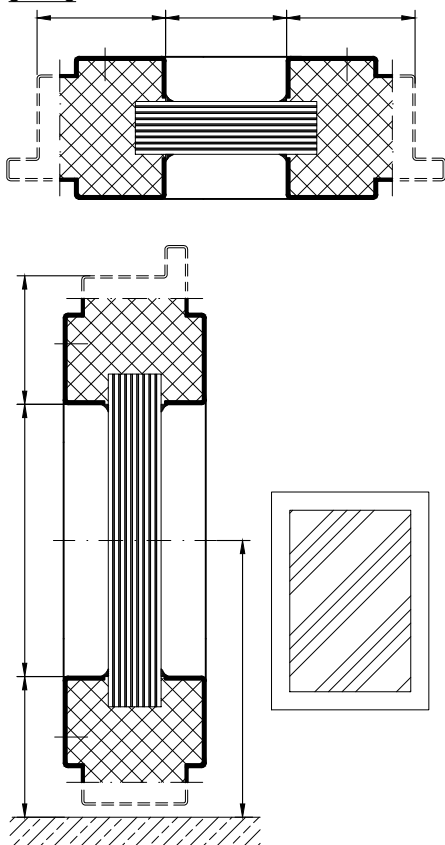


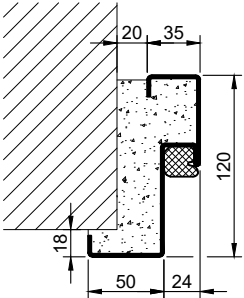
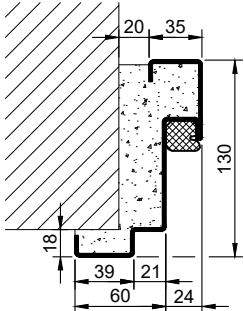
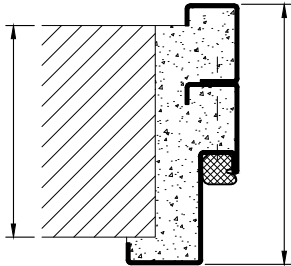
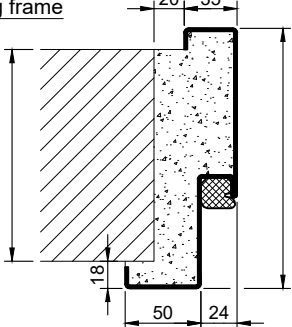
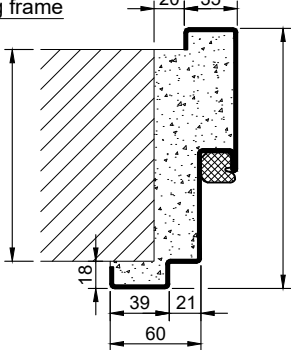
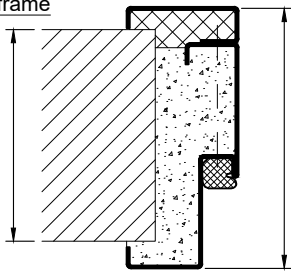
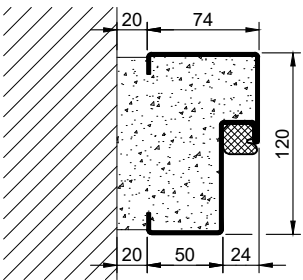
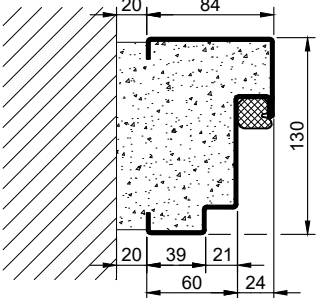
integrated door closer



Options

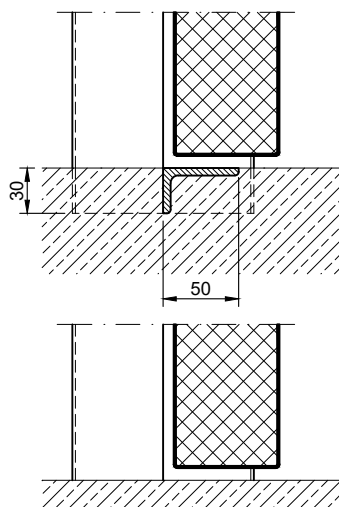
glazing



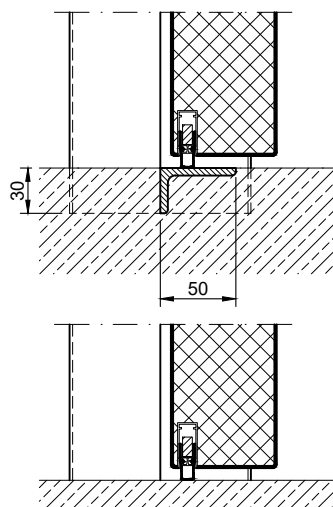
Frames BASIC	Frames PREMIUM/SUPERIOR	Variants (illustration BASIC)
corner frame 	corner frame 	corner frame with additional frame 
encasing frame 	encasing frame 	encasing frame with counter frame 
block frame 	block frame 	

Thresholds

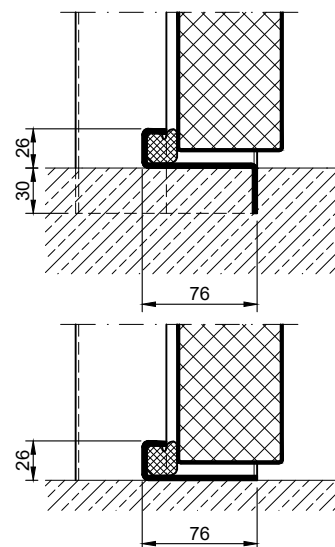
separation sill



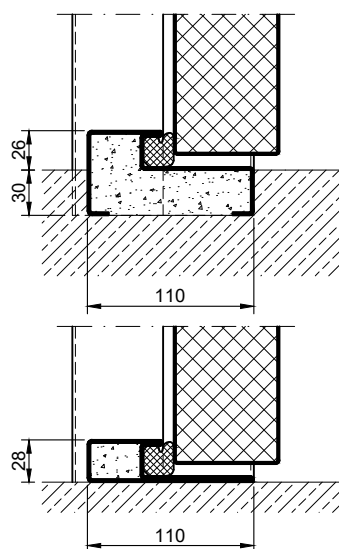
drop seal



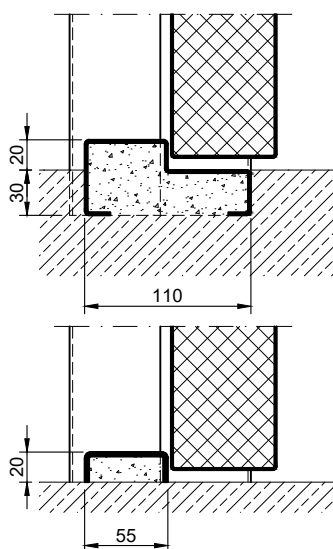
stop sill with seal



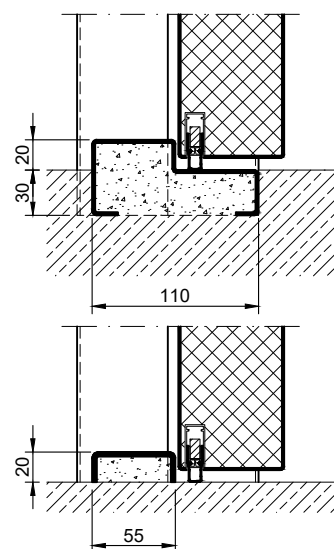
stop sill with seal



stop sill without seal



stop sill with drop seal



full sill

