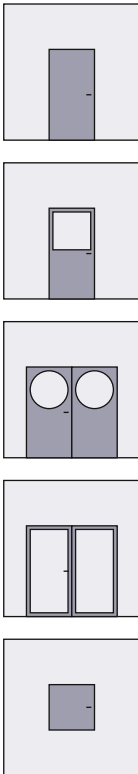
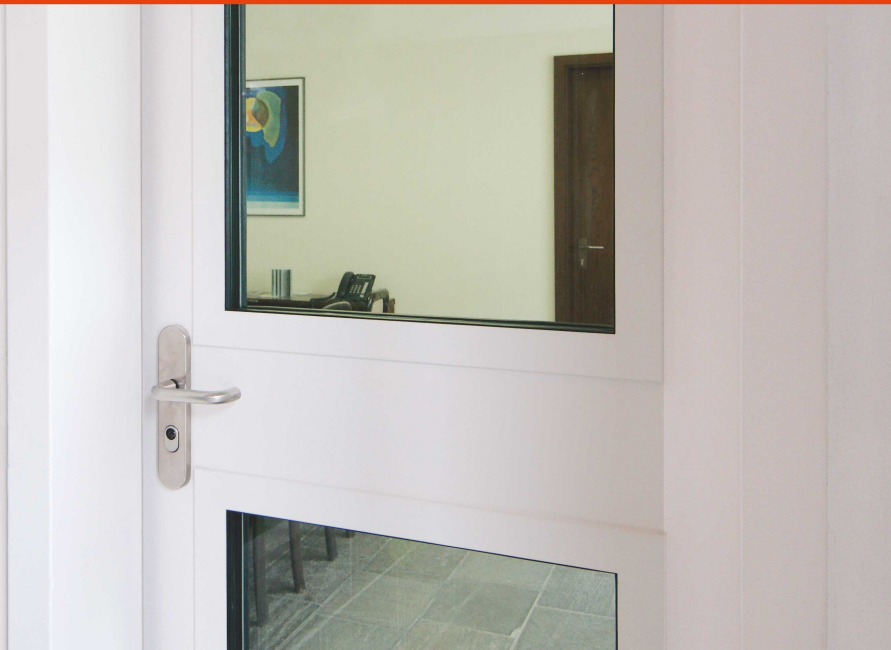





## Technical information



### Franzen ESN-1 / ESN-2 "System Schröders"

**Burglar resistance steel door up to RC4 acc. to DIN EN 1627 for single leaf (ESN-1) and double leaf (ESN-2)**

-  optional with glass inset
-  optional in combination as **acoustic performance door**  
up to  $R_w (C, C_{tr}) = 53$  dB  
acc. to EN ISO 10140 / EN ISO 717-1
-  optional in combination with **increased air tightness**  
up to class 4 acc. to EN 12207



## Performance characteristics

### Burglar resistance

RC4, RC3, RC2, RC1  
acc. to DIN EN 1627 ff

### Thermal transmittance

UD-value  $\geq 1,2 \text{ W}/(\text{m}^2\text{K})$  acc. to EN ISO 10077-1

### Combinable with additional performance characteristics:

#### Acoustic performance (optional)

up to  $R_{W}(C;C_{tr}) = 53 (-1;-5) \text{ dB}$   
acc. to EN ISO 10140-1 / EN ISO 10140-2 / EN ISO 717

#### Air tightness (optional)

up to class 4 acc. to EN 12207 (up to 600 Pa)

#### Installation in external walls (optional)

acc. to DIN EN 14351-1 with CE-marging

#### Resistance to wind load (optional)

up to class C5 (up to 2,000 Pa) acc. to EN 12210

#### Watertightness (optional)

up to class 8A acc. to EN 12208

#### Resistance to positive and negative pressure (optional)

up to 5.000 Pa acc. to DIN EN 12211

### Behaviour between different climates (optional)

class 2 (d + e) acc. to EN 12219 (deflection)

### Ability to release (optional)

acc. to DIN EN 14351-1 proven for doors in  
escape and rescue routes

### Flush with surface (optional)

flush-mounted design FLAT

### Explosion protection (optional)

for installation in potentially explosive (ATEX)

### Performance characteristics combinable with further Franzen door types "System Schröders":

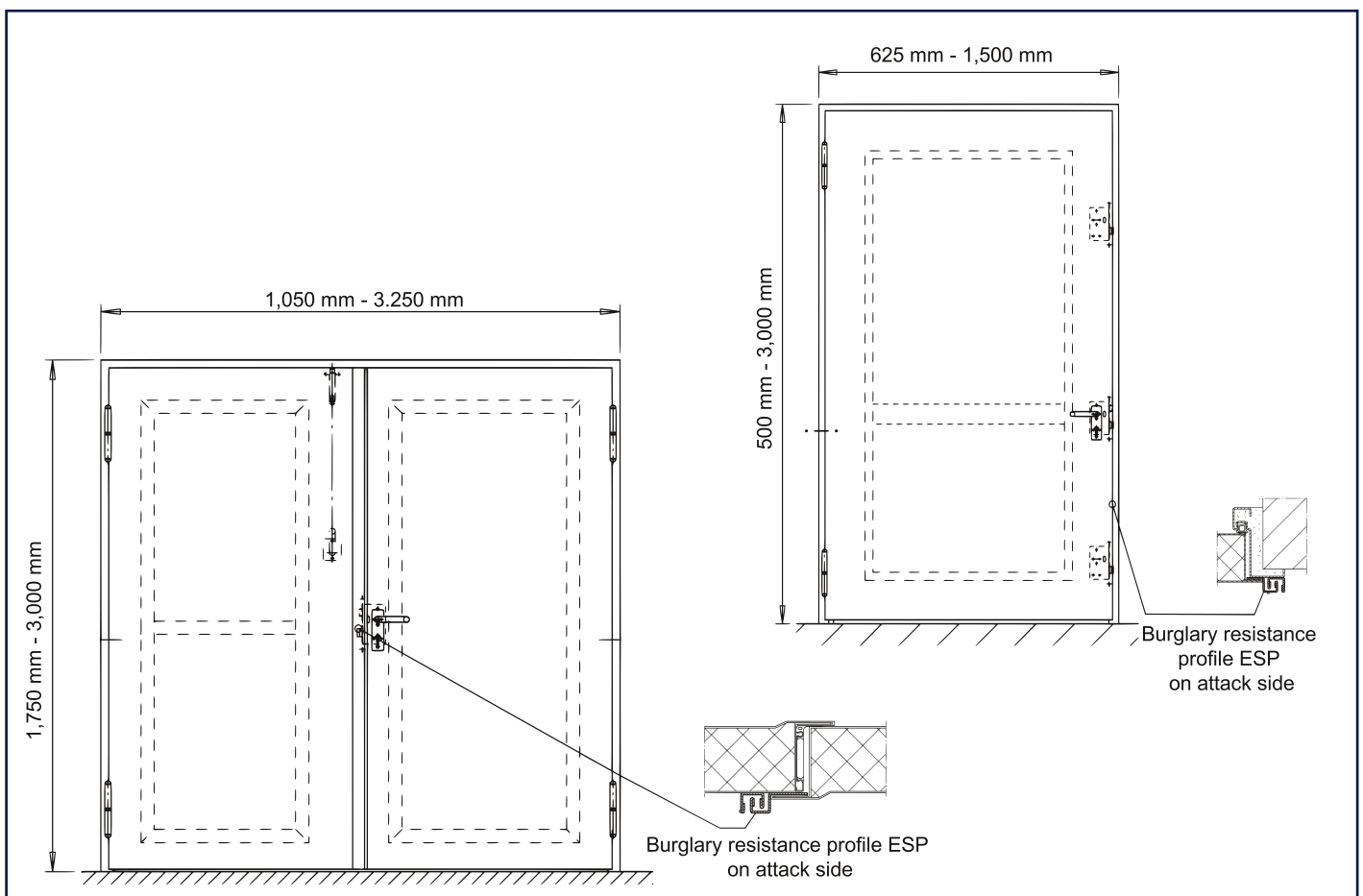
#### Fire resistance (optional)

EI<sub>2</sub>90, EI<sub>2</sub>60, EI<sub>2</sub>30 tested acc. to EN 1634-1  
(e.g. fire door Franzen TSN-3)

T90, T30 with "allg. bauaufsichtliche Zulassung"  
(e.g. fire door Franzen TSN-12)

#### Smoke control (optional)

acc. to DIN 18095  
(e.g. smoke control door Franzen RSN-1)



## Technical data

### Dimensions single leaf (basic dimensions)

width	from	625 mm	up to	1,500 mm
height	from	500 mm	up to	3,000 mm

### Dimensions double leaf (basic dimensions)

width	from	1,050 mm	up to	3,250 mm
height	from	1,750 mm	up to	3,000 mm

### Door leaf

leaf thickness 69 mm - smooth double-walled  
 plate thickness 1.5 mm  
 thin rebate design  
 optional thick rebate design  
 mineral wool filling (other fillings on request)  
 optional insulation inlet full-face glued and pressed with cover plate, thus particularly plane and smooth door leaf

### Frame

frame system "ZNG" or "ZG" (see installation variants)  
 seal type depending on performance characteristic  
 elastic rubber seal  
 silicone seal  
 corner frame  
 optional enclosing frame  
 optional block frame

### Rebate protection

rebate protection through ESP safety profile (patented)

### Floor seal

depending on performance characteristic

### Glas inset (optional)

RC4: glass inset acc. to DIN EN 356 min. P6B  
 RC3: glass inset acc. to DIN EN 356 min. P5A  
 glass dimensions and -form variable  
 minimum frieze width: 130 mm  
 glass inset bars with concealed screw connection

### Hinges

2/3-part KO door hinges  
 with patented easy-running bearings as easy running doors  
 optional door hinge with 3D adjustment

### Fittings

RC4: protection fitting DIN 18257 ES3  
 RC3: protection fitting DIN 18257 ES2  
 RC2 / RC1: protection fitting DIN 18257 ES1  
 optional any approved handle set  
 acc. to EN 1906 resp. EN179  
 optional panic bar handle acc. to EN 1125

### Locking single leaf

profile cylinder prepared (cylinder on-site)  
 RC4: triple locking  
 (optional NEMEF, BMH, HZ-Lock, Fliether, Dorma, eff eff)  
 securing pins  
 for panic lock with full-surface drilling protection

RC3: single locking with drop-in lock  
 min. DIN 18 251 class 3  
 optional panic lock  
 for door height > 2,500 mm  
 triple locking  
 (optional NEMEF, BMH, HZ-Lock, Fliether, Dorma, effeff)  
 securing pins

### Locking double leaf

active leaf  
 profile cylinder prepared (cylinder on-site)  
 RC4: triple locking  
 (optional NEMEF, BMH, HZ-Lock, Fliether, Dorma, eff eff)  
 securing pins  
 for panic lock with full-surface drilling protection  
 RC3: single locking with drop-in lock  
 min. DIN 18 251 class 3  
 optional panic locking  
 for door height > 2,500 mm  
 triple locking  
 (optional NEMEF, BMH, HZ-Lock, Fliether, Dorma, effeff)  
 securing pins

### fixed leaf

RC3 / RC4: rebate shoot bolt (shoot bolt lock) with locking upwards and downwards  
 securing pins

### Self-closing single leaf (optional)

door closer acc. to DIN EN 1154  
 optional spring hinge for smaller doors / flaps

### Self-closing double leaf (optional)

both leaves with door closer acc. to DIN EN 1154 resp. EN 1155  
 with door closing sequence control acc. to EN 1158

### Installation

in masonry (thk ≥ 240 mm)  
 in concrete (thk ≥ 140 mm)  
 in aerated concrete (thk ≥ 150 mm)  
 in steel frame / steel container  
 optional blunt installation in soffit  
 optional installation on the wall plate

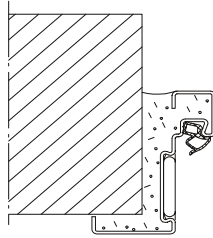
### Optional

sock control  
 automated opening  
 motor locks (also in 3-way locking)  
 powder coating in RAL colours  
 prison cell doors (special locking and food flap)  
 special solutions acc. to request and customer requirements

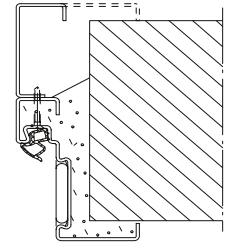
# Installation variants

**Installation in**

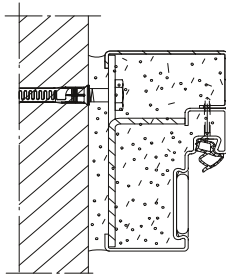
masonry /  
concrete



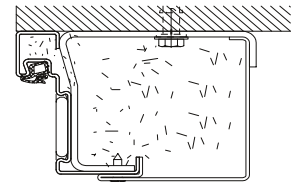
**corner frame**  
corner frame with  
supplementary frame



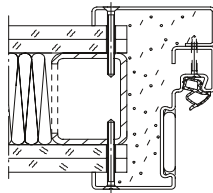
masonry /  
concrete



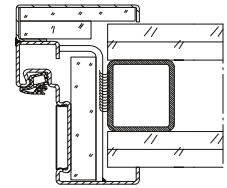
**block frame**  
corner frame with  
supplementary frame



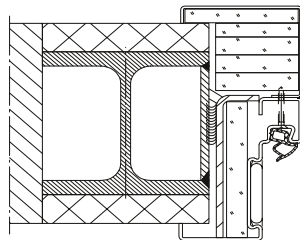
mounting walls



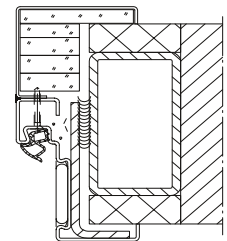
**enclosing frame**  
corner frame with  
supplementary frame



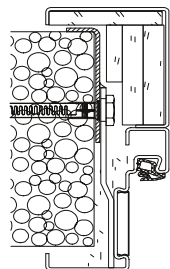
steel columns /  
steel supports



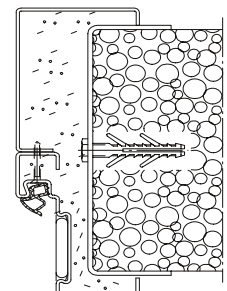
**enclosing frame**  
corner frame with  
supplementary frame



aerated concrete



**enclosing frame**  
corner frame with  
supplementary frame



**FRANZEN**  
Feuerschutztüren