

## Double Leaf EI<sub>290</sub> / T90 Fire Resistant Security Door

|                                 |  |                                 |
|---------------------------------|--|---------------------------------|
| <b>Fire Protection</b>          | <b>EI<sub>290</sub> / T90</b>              | <b>tested acc. to EN 1634-1</b> |
| <b>Smoke Control (optional)</b> | <b>S<sub>a</sub>, S<sub>200</sub> / RS</b> | <b>tested acc. to EN 1634-3</b> |
| <b>Self-Closing (optional)</b>  | <b>up to C5</b>                            | <b>tested acc. to EN 1191</b>   |
| <b>Burglar Protection</b>       | <b>RC3</b>                                 | <b>tested acc. to EN 1627</b>   |

**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

|                              |                                   |                                      |
|------------------------------|-----------------------------------|--------------------------------------|
| - Smoke Control              | <b>RS (S<sub>200</sub>)</b>       | tested acc. to EN 1634-3             |
| - Sound Insulation           | <b>up to R<sub>w,P</sub> 54dB</b> | tested acc. to EN ISO 10140-2        |
| - Bullet Resistance          | <b>FB4/FB6</b>                    | tested acc. to EN 1522               |
| - Air Tight                  | <b>up to class 4</b>              | tested acc. to EN 1026               |
| - Rain- and Fire-Water Tight | <b>class 6A</b>                   | tested acc. to EN 1027               |
| - Wind load Resistance       | <b>up to class C5</b>             | tested acc. to EN 1221               |
| - Blast Resistance           | <b>up to 20 kPa</b>               | tested acc. to EN 13124-1            |
| - Explosion Protection       | <b>up to zone 1/21</b>            | 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 1250 mm to 1375 mm  
**Height** from 500 mm to 1750 mm

## Technical Specification and Tender Text

|                            |  |
|----------------------------|--|
| <b>Product:</b>            | <b>EI<sub>290</sub> / T90 double leaf fire resistant security door</b><br><b>brand Buchele tested acc. to EN 1634-1 and EN 1627</b>  |
| <b>Door Type:</b>          | <b>PLANE Line PL 902 BASIC</b>   |
| <b>Resistance Class:</b>   | <b>RC 3</b>  |
| <b>Structural Opening:</b> | <b>.... x .... mm</b>  |
| <b>Door Leaf:</b>          | Double-walled, planar 70 mm thick steel door leaf without hinge embossing, three sides rebated with thick rebate.<br>Without bottom stop.<br>Special insulating inserts fully laid-in and glued.<br>Passive leaf with multi-chamber sealing profile in the middle rebate.<br>Securing pin screwed in door leaf rebate. |
| <b>Threshold:</b>          | Floor bracket as separation sill. Surface galvanized and welded to the frame.  |
| <b>Frame:</b>              | 3-sided circumferential rebated corner frame with visible black coated intumescent material in rebate.<br>High-quality multi chamber sealing profile adjustable fixed in the three-sided groove.   |

|                      |  |          |
|----------------------|--|----------|
| <b>Hinges:</b>       | Three-part, height adjustable construction hinges with hinge pin retention and ball bearing spacer ring for smooth door movement.  |          |
| <b>Door Closer:</b>  | 2 pieces door closer system with standard arm acc. to EN 1154 silver coloured mounted on hinge side.<br>Door coordinator and 2 pieces of 30 mm high brackets with plastic roller.  |          |
| <b>Fitting:</b>      | <b>Active leaf</b> with 2-point security mortise lock with latch lever function acc. to EN 12209 (prepared for installation of a profile cylinder lock, provided by customer). Security door handle set in acc. to EN 1906 fixed pivoted synthetic material black in U-shape with rounded long-plate.<br><b>Passive leaf</b> with self-locking concealed shoot bolt lock with upper switch lock. |          |
| <b>Surface:</b>      | Door leaf and frame galvanized und primed with 2K-PUR primer (Very High Solid) similar RAL 7035.   |          |
| <b>Installation:</b> | 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

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

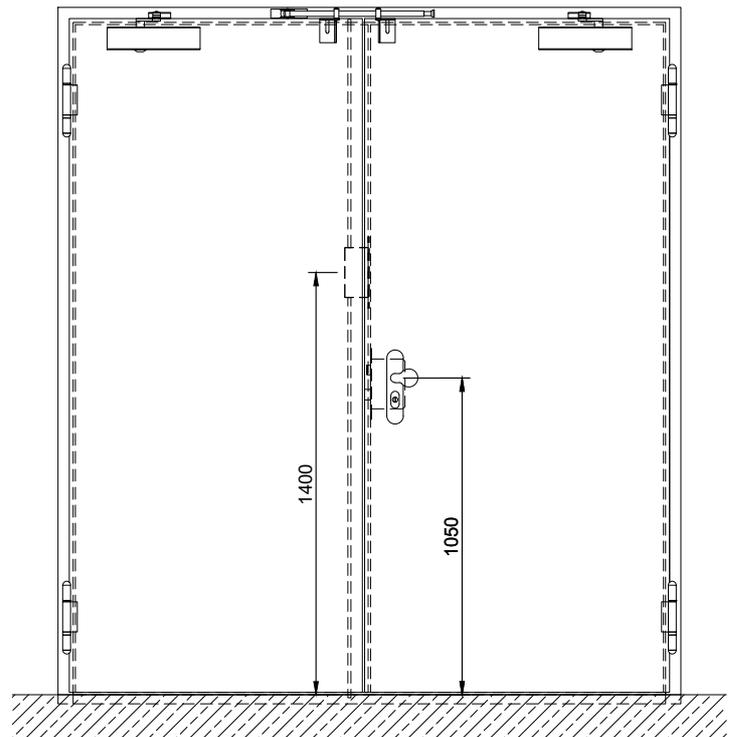
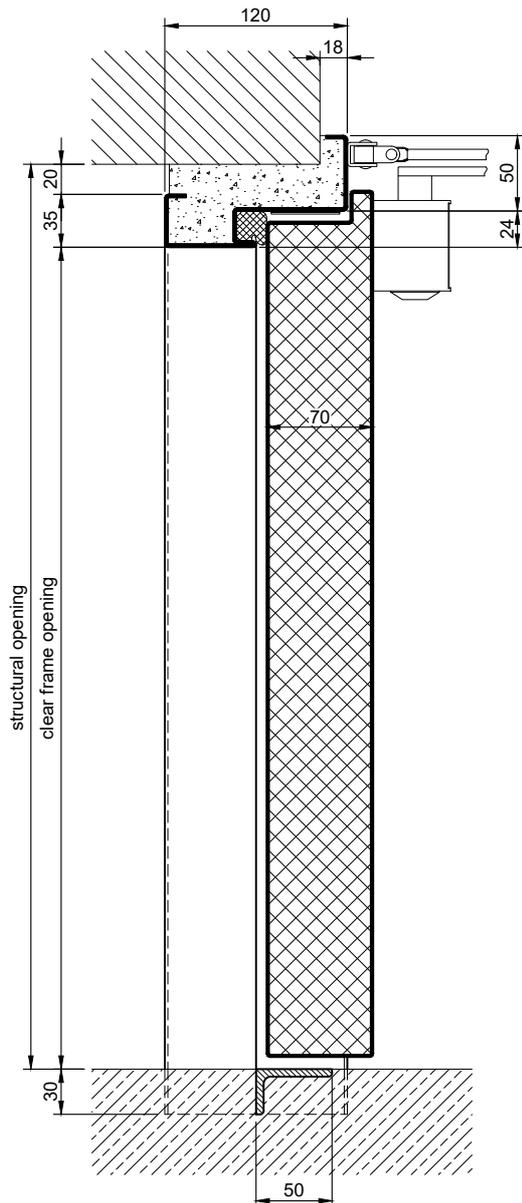
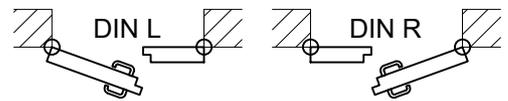
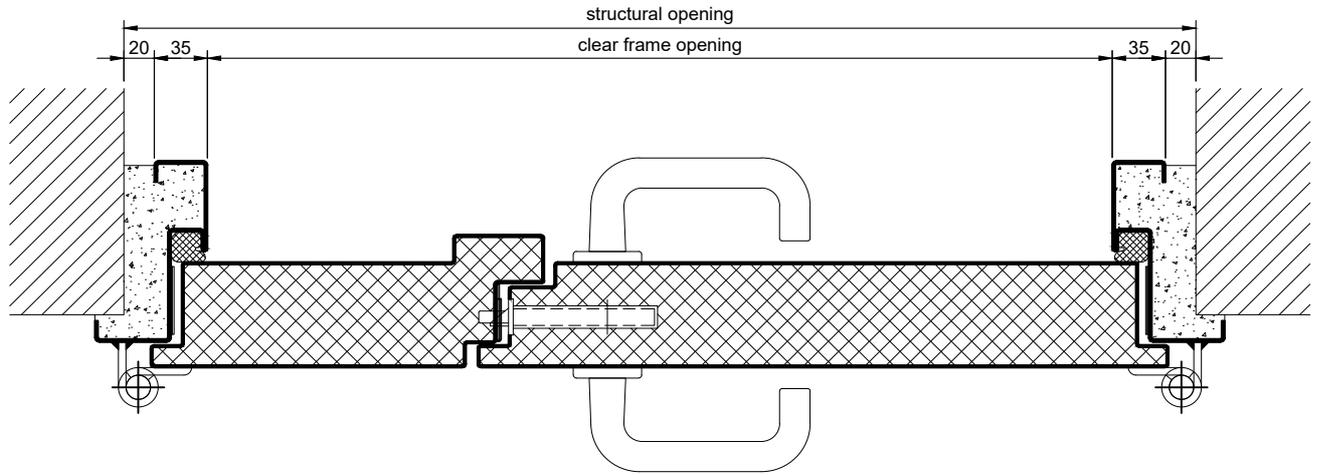
### Alternative: PLANE Line PL 902 SUPERIOR with flush mounted optics

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

### Supplementary Equipment

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

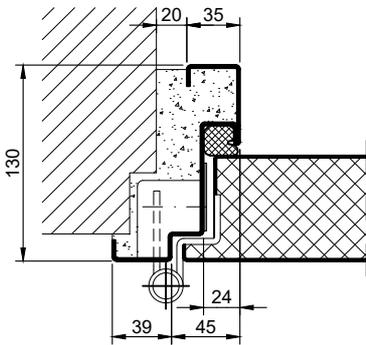
### BASIC - Version



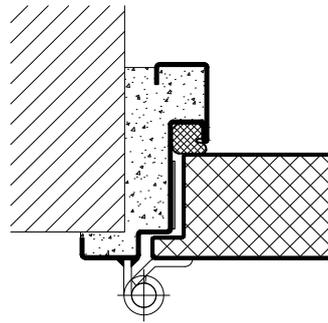
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### PREMIUM - Version

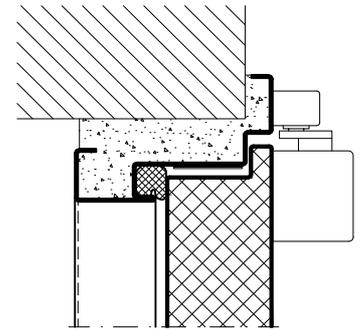
object hinges VB-3D



construction hinges

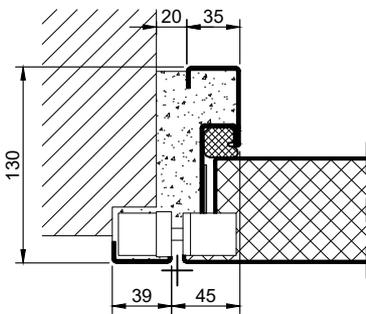


slide rail door closer

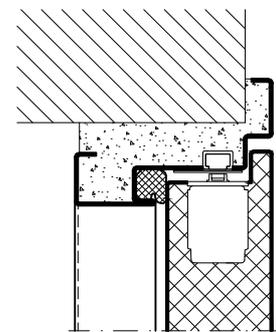


### SUPERIOR - Version

concealed hinges

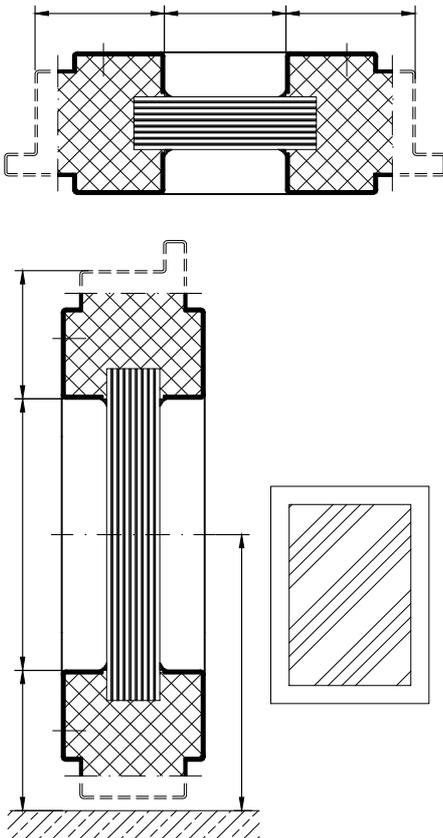


integrated door closer

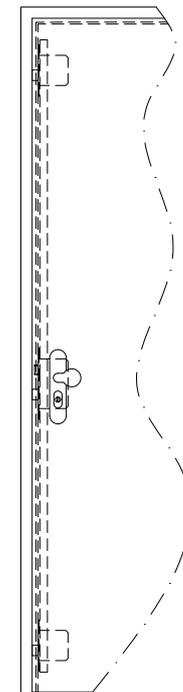


### Options

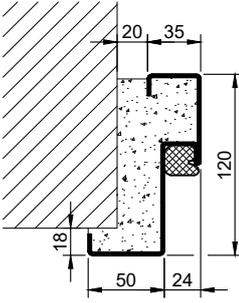
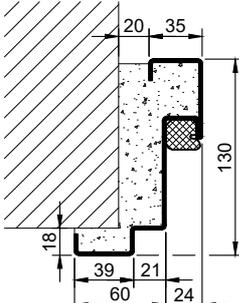
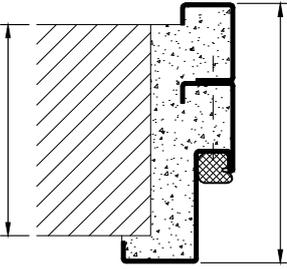
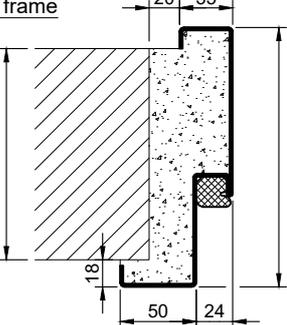
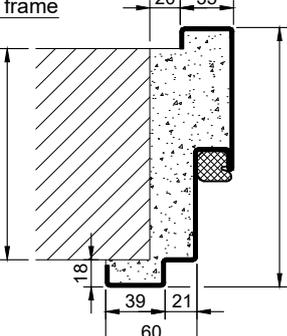
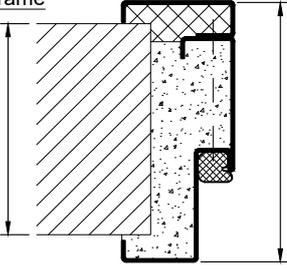
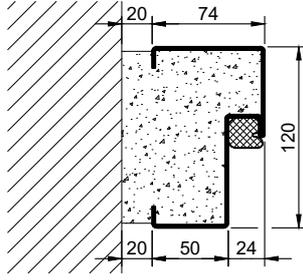
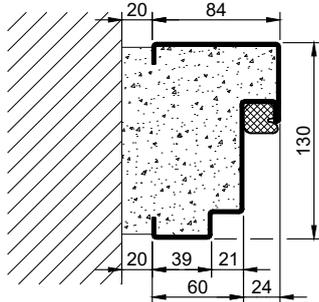
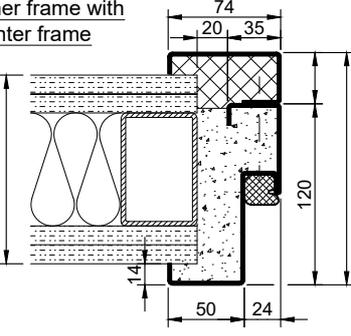
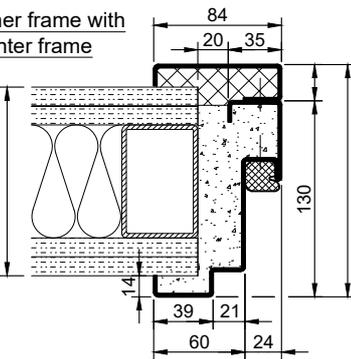
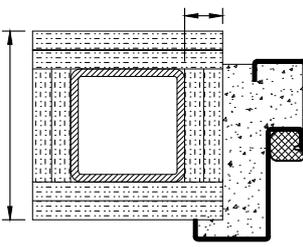
glazing



3-point locking system

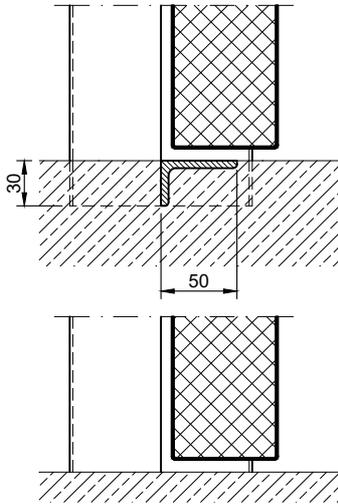


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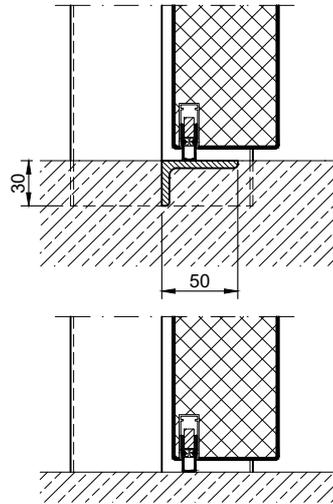
| Frames BASIC   | Frames PREMIUM/SUPERIOR  | Variants (illustration BASIC)   |
|--|--|---|
| <p>corner frame</p>                       | <p>corner frame</p>                       | <p>corner frame with additional frame</p>  |
| <p>encasing frame</p>                     | <p>encasing frame</p>                     | <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

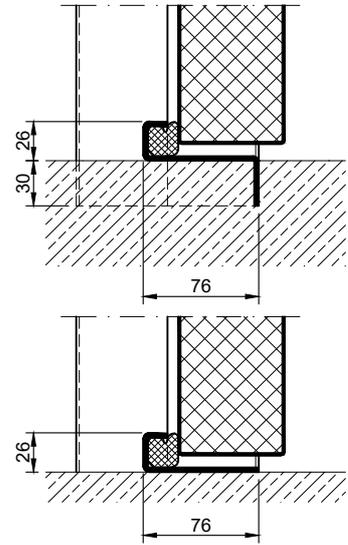
separation sill



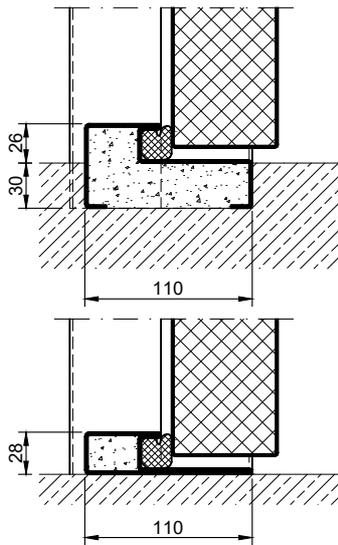
drop seal



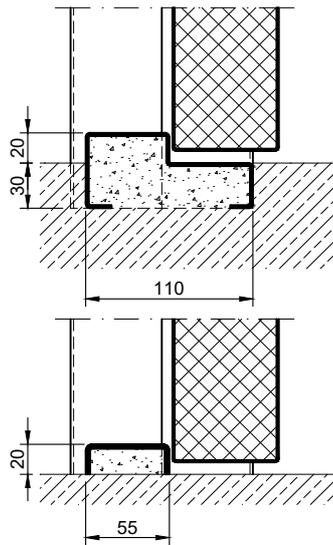
stop sill with seal



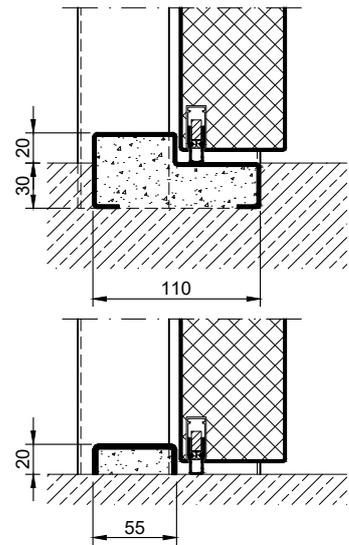
stop sill with seal



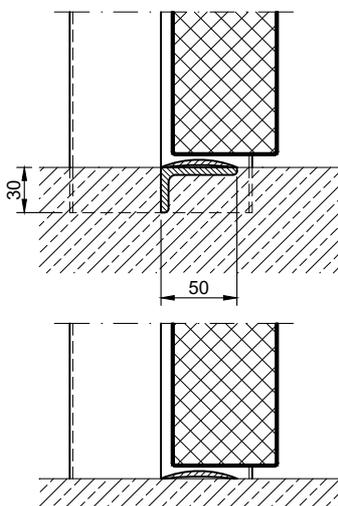
stop sill without seal



stop sill with drop seal



Trennschiene mit Halbrundschwelle



full sill

