

### Double Leaf EI<sub>2</sub>90 / T90 Fire and Explosion Resistant Door

|                                 |                                            |                                  |
|---------------------------------|--------------------------------------------|----------------------------------|
| <b>Fire Protection</b>          | <b>EI<sub>2</sub>90 / 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>Blast Resistance</b>         | <b>0,5 kPa</b>                             | <b>tested acc. to EN 13124-1</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

|                              |                 |                                      |
|------------------------------|-----------------|--------------------------------------|
| - 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

|                                       |                                       |
|---------------------------------------|---------------------------------------|
| <b>Range of Dimension for Doors</b>   | <b>Width</b> from 1375 mm to 3000 mm  |
|                                       | <b>Height</b> from 1750 mm to 3000 mm |
| <b>Range of Dimension for Hatches</b> | <b>Width</b> from 1000 mm to 1375 mm  |
|                                       | <b>Height</b> from 500 mm to 1750 mm  |

### Technical Specification and Tender Text

|                            |                                                                                                                                                                                                                                                                                                                        |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product:</b>            | EI <sub>2</sub> 90 / T90 double leaf fire and explosion resistant door brand Buchele tested acc. to EN 1634-1 and EN 13124-1                                                                                                                                                                                           |
| <b>Door Type:</b>          | PLANE Line PL 902 BASIC                                                                                                                                                                                                                                                                                                |
| <b>Blast Resistance:</b>   | 0,5 kPa                                                                                                                                                                                                                                                                                                                |
| <b>Structural Opening:</b> | .... x .... mm                                                                                                                                                                                                                                                                                                         |
| <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 mortise lock with latch lever function acc. to EN 12209 (prepared for installation of a profile cylinder lock, provided by customer).<br>Door handle set in acc. to EN 1906 fixed pivoted synthetic material black in U-shape with rounded short-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.                                                                                                                                                                            |  |

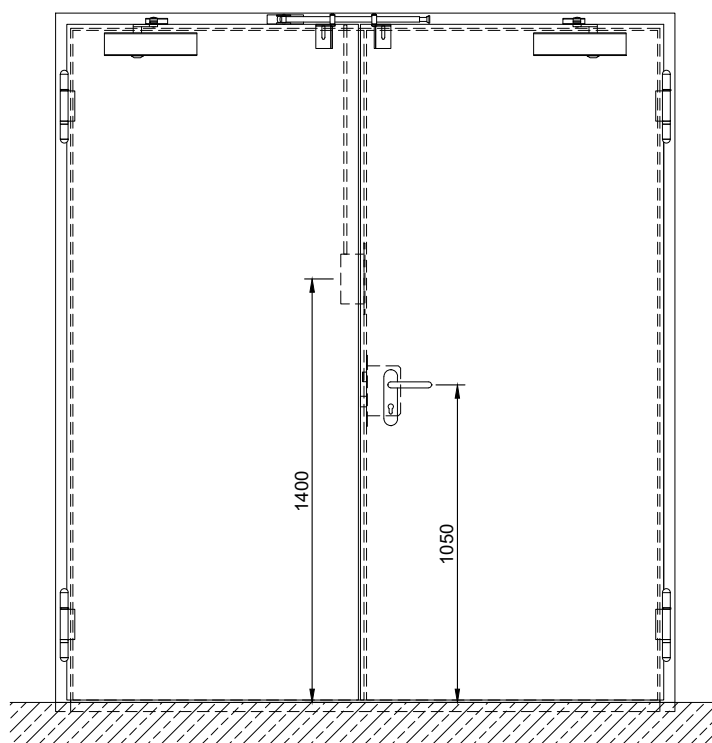
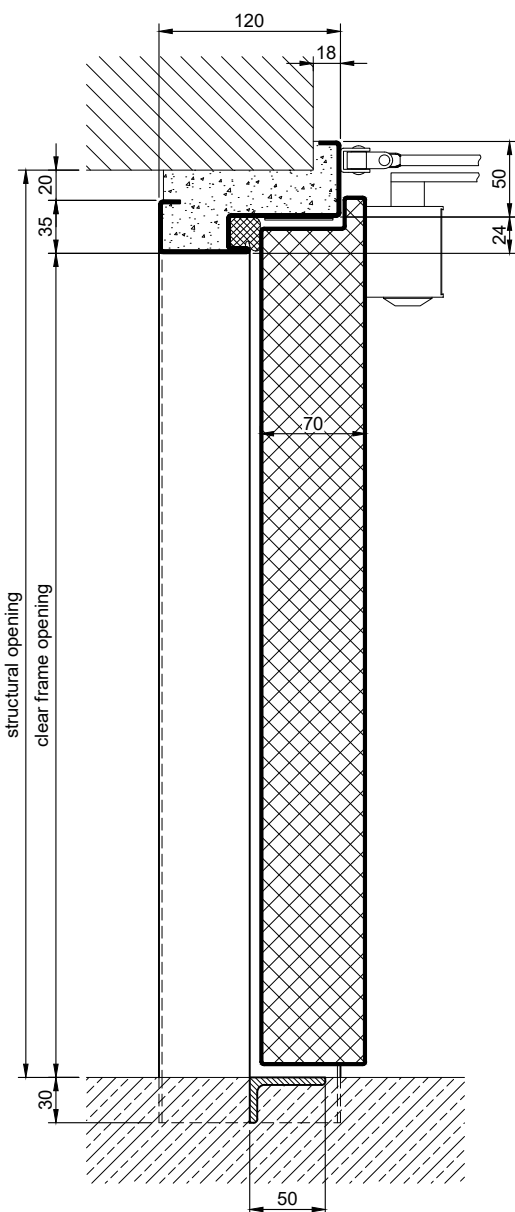
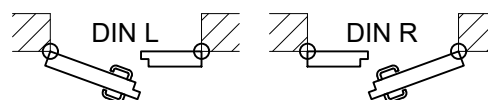
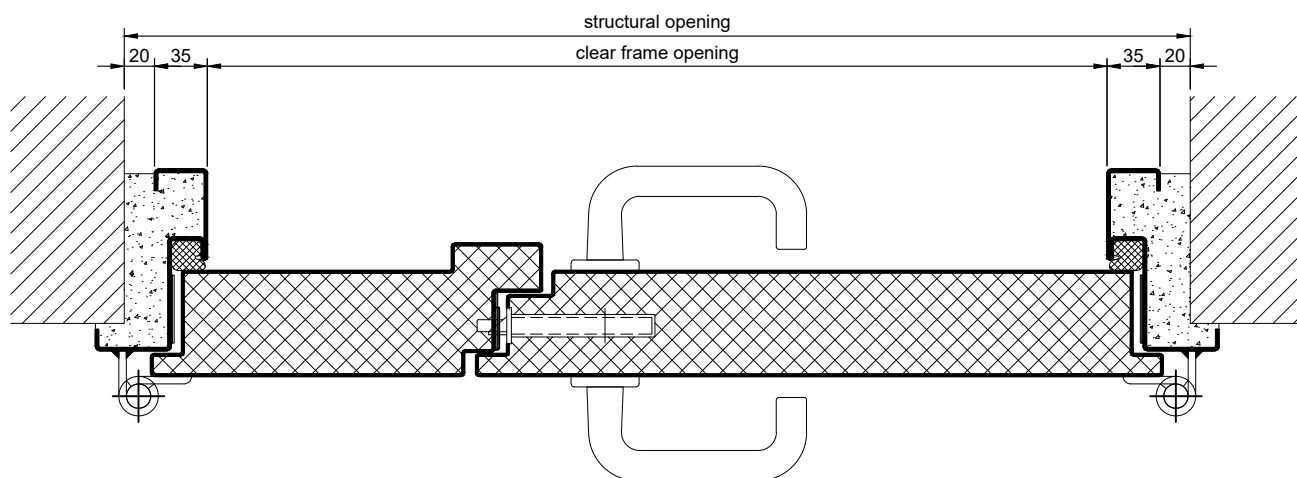
### Alternative: PLANE Line PL 902 SUPERIOR with flush mounted optics

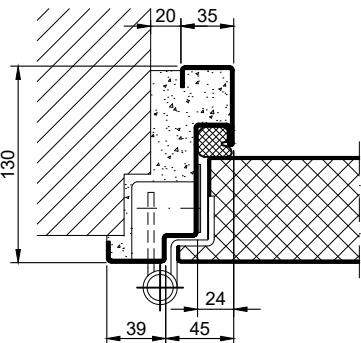
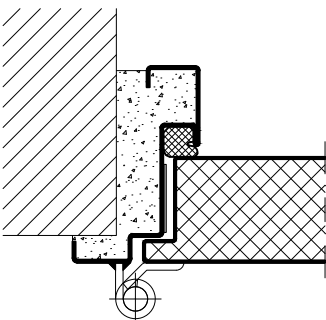
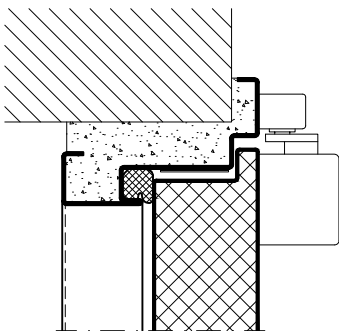
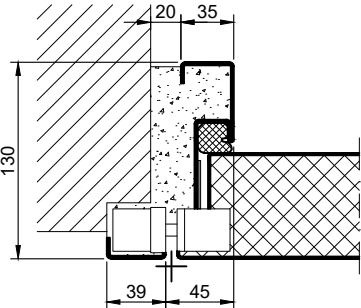
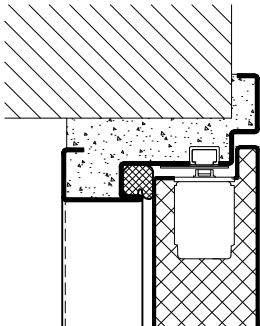
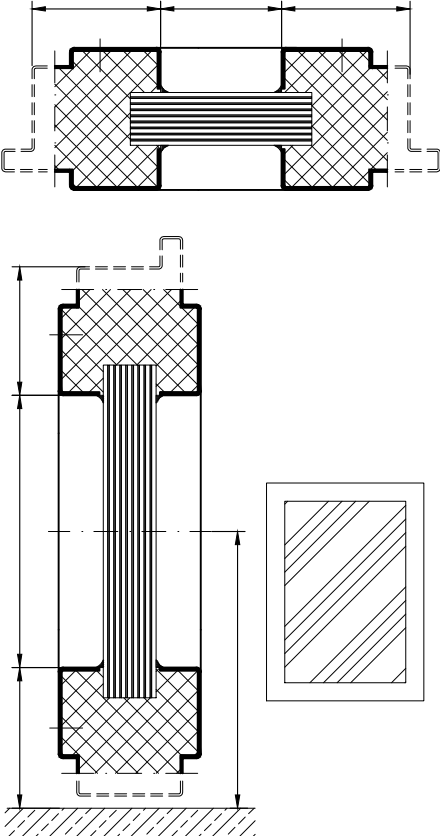
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|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <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

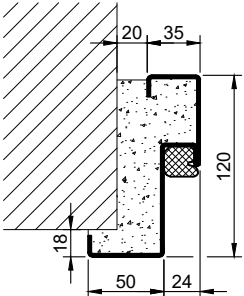
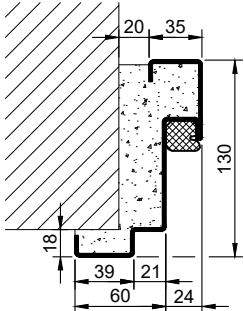
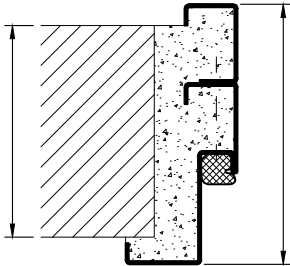
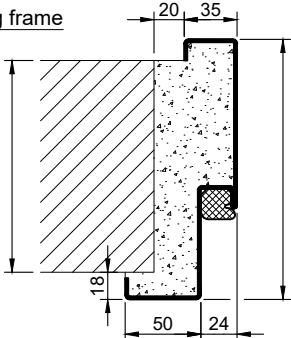
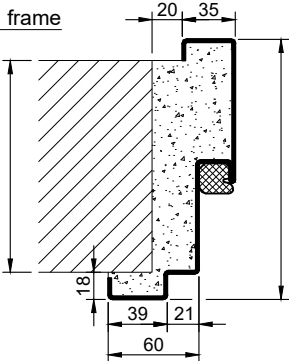
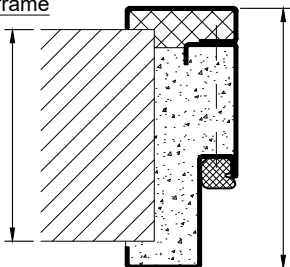
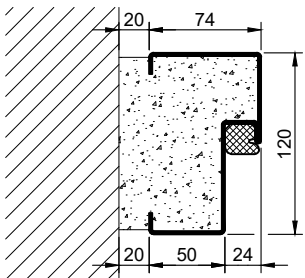
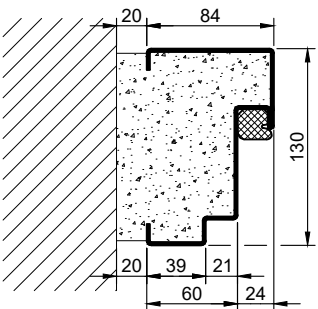
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|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>Glazing:</b>         | F90 fire-protective glazing fixed with profiled 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



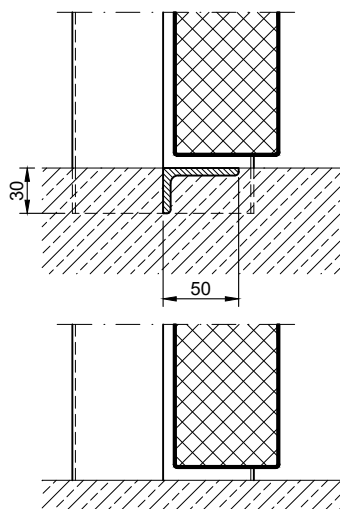
| PREMIUM - Version                                                                                            |                                                                                                              |                                                                                                                    |
|--------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| <p>object hinges VB-3D</p>  | <p>construction hinges</p>  | <p>slide rail door closer</p>   |
| SUPERIOR - Version                                                                                           |                                                                                                              |                                                                                                                    |
| <p>concealed hinges</p>    |                                                                                                              | <p>integrated door closer</p>  |
| Options                                                                                                      |                                                                                                              |                                                                                                                    |
| <p>glazing</p>            |                                                                                                              |                                                                                                                    |

1.55.1 PLANE LINE PL 902 - 0,5KPA\_EN

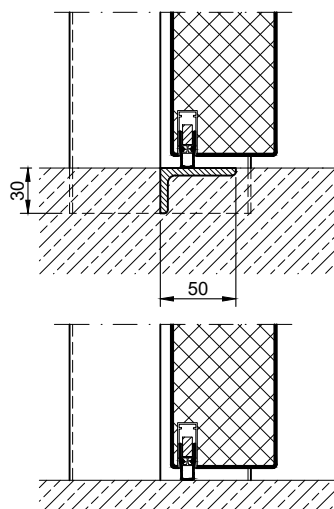
| Frames BASIC                                                                                            | Frames PREMIUM/SUPERIOR                                                                                  | Variants (illustration BASIC)                                                                                                 |
|---------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| <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>    |                                                                                                                               |
|                                                                                                         |                                                                                                          |                                                                                                                               |
|                                                                                                         |                                                                                                          |                                                                                                                               |

### Thresholds

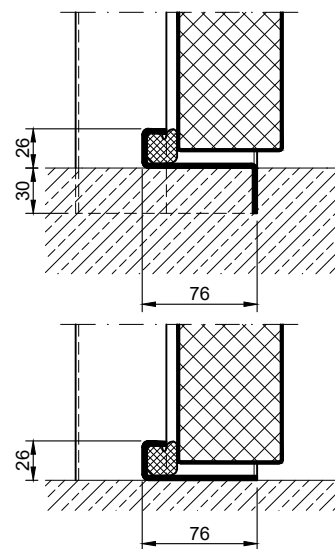
separation sill



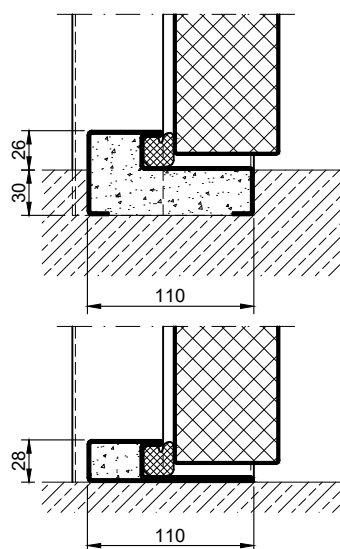
drop seal



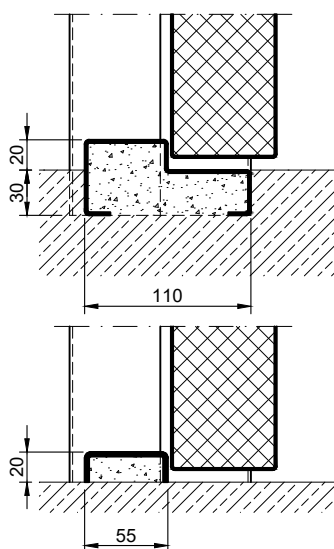
stop sill with seal



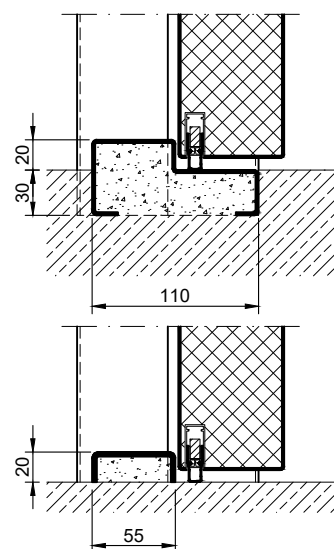
stop sill with seal



stop sill without seal



stop sill with drop seal



full sill

