



# SYSTEM CASTLE

19'66 W+

ARCHITECTURAL  
CATALOGUE

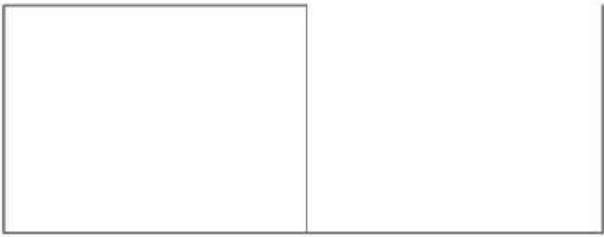
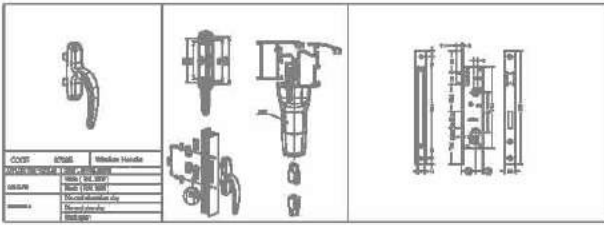




EDITION : 03 / 2006





SYSTEM CASTLE 19'66 W+

**TECHNICAL INFORMATION**

| <b>a - TECHNICAL INFORMATION</b> | <table border="1" style="width: 100%; border-collapse: collapse; font-size: 8px;"> <thead> <tr> <th rowspan="2">ORIGINAL SIZE</th> <th rowspan="2">NR</th> <th rowspan="2">PROFILE</th> <th rowspan="2">DESCRIPTION</th> <th rowspan="2">TECHNICAL CODE</th> <th colspan="2">Distances</th> <th colspan="2">Surfaces</th> <th rowspan="2">L. m</th> </tr> <tr> <th>Jxx (cm)</th> <th>Jyy (cm)</th> <th>Coating Surface (cm)</th> <th>Coating Surface (cm)</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>  | ORIGINAL SIZE                | NR                     | PROFILE              | DESCRIPTION          | TECHNICAL CODE | Distances    |                   | Surfaces              |                        | L. m   | Jxx (cm) | Jyy (cm) | Coating Surface (cm) | Coating Surface (cm) |     |        |     |      |            |     |        |     |      |            | Page<br><b>001.a - 008.a</b> |                              |
|----------------------------------|---|------------------------------|------------------------|----------------------|----------------------|----------------|--------------|-------------------|-----------------------|------------------------|--------|----------|----------|----------------------|----------------------|-----|--------|-----|------|------------|-----|--------|-----|------|------------|------------------------------|------------------------------|
| ORIGINAL SIZE                    | NR  |                              |                        |                      |                      |                | PROFILE      | DESCRIPTION       | TECHNICAL CODE        | Distances              |        | Surfaces |          | L. m                 |                      |     |        |     |      |            |     |        |     |      |            |                              |                              |
|                                  |   | Jxx (cm)                     | Jyy (cm)               | Coating Surface (cm) | Coating Surface (cm) |                |              |                   |                       |                        |        |          |          |                      |                      |     |        |     |      |            |     |        |     |      |            |                              |                              |
|                                  |   |                              |                        |                      |                      |                |              |                   |                       |                        |        |          |          |                      |                      |     |        |     |      |            |     |        |     |      |            |                              |                              |
| <b>b - PROFILE</b>               |   | Page<br><b>001.b - 020.b</b> |                        |                      |                      |                |              |                   |                       |                        |        |          |          |                      |                      |     |        |     |      |            |     |        |     |      |            |                              |                              |
| <b>c - ACCESSORIES</b>           |    | Page<br><b>001.c - 021.c</b> |                        |                      |                      |                |              |                   |                       |                        |        |          |          |                      |                      |     |        |     |      |            |     |        |     |      |            |                              |                              |
| <b>d - GLAZING TABLE</b>         |  <table border="1" style="width: 100%; border-collapse: collapse; font-size: 8px; margin-top: 5px;"> <thead> <tr> <th>A</th> <th>B</th> <th>C</th> <th>D</th> <th>E</th> </tr> <tr> <th>GLAZING BEAD</th> <th>GLAZING THICKNESS</th> <th>GLAZING GASKET INSIDE</th> <th>GLAZING GASKET OUTSIDE</th> <th>WEDGES</th> </tr> </thead> <tbody> <tr> <td>11GW12</td> <td>4mm</td> <td>P1-4</td> <td>3mm MO-BL3</td> <td>---</td> </tr> <tr> <td>11GW12</td> <td>5mm</td> <td>P1-3</td> <td>3mm MO-BL3</td> <td>---</td> </tr> <tr> <td>11GW11</td> <td>8mm</td> <td>P1-6</td> <td>2mm MO-BL3</td> <td>---</td> </tr> </tbody> </table> | A                            | B                      | C                    | D                    | E              | GLAZING BEAD | GLAZING THICKNESS | GLAZING GASKET INSIDE | GLAZING GASKET OUTSIDE | WEDGES | 11GW12   | 4mm      | P1-4                 | 3mm MO-BL3           | --- | 11GW12 | 5mm | P1-3 | 3mm MO-BL3 | --- | 11GW11 | 8mm | P1-6 | 2mm MO-BL3 | ---                          | Page<br><b>001.d - 002.d</b> |
| A                                | B   | C                            | D                      | E                    |                      |                |              |                   |                       |                        |        |          |          |                      |                      |     |        |     |      |            |     |        |     |      |            |                              |                              |
| GLAZING BEAD                     | GLAZING THICKNESS   | GLAZING GASKET INSIDE        | GLAZING GASKET OUTSIDE | WEDGES               |                      |                |              |                   |                       |                        |        |          |          |                      |                      |     |        |     |      |            |     |        |     |      |            |                              |                              |
| 11GW12                           | 4mm   | P1-4                         | 3mm MO-BL3             | ---                  |                      |                |              |                   |                       |                        |        |          |          |                      |                      |     |        |     |      |            |     |        |     |      |            |                              |                              |
| 11GW12                           | 5mm   | P1-3                         | 3mm MO-BL3             | ---                  |                      |                |              |                   |                       |                        |        |          |          |                      |                      |     |        |     |      |            |     |        |     |      |            |                              |                              |
| 11GW11                           | 8mm   | P1-6                         | 2mm MO-BL3             | ---                  |                      |                |              |                   |                       |                        |        |          |          |                      |                      |     |        |     |      |            |     |        |     |      |            |                              |                              |
| <b>e - DETAILS</b>               |   | Page<br><b>001.e - 036.e</b> |                        |                      |                      |                |              |                   |                       |                        |        |          |          |                      |                      |     |        |     |      |            |     |        |     |      |            |                              |                              |
| <b>f - CUTTING SIZES</b>         |   |                              |                        |                      |                      |                |              |                   |                       |                        |        |          |          |                      |                      |     |        |     |      |            |     |        |     |      |            |                              |                              |
| <b>g - APPLICATION DETAILS</b>   |   |                              |                        |                      |                      |                |              |                   |                       |                        |        |          |          |                      |                      |     |        |     |      |            |     |        |     |      |            |                              |                              |

TECHNICAL INFORMATION

## a - TECHNICAL INFORMATION

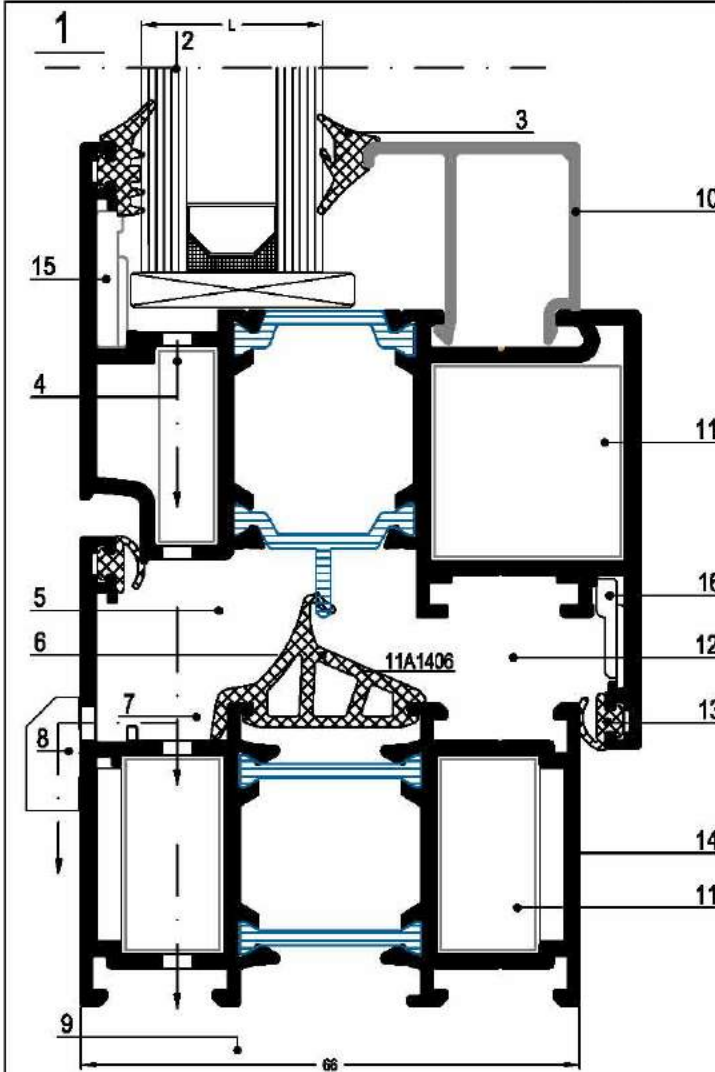
| DATA PAGE | NR | PROFILE  | DESCRIPTION | THEORETICAL WEIGHT kg/m | Statics                            |                                    | Surfaces             |                       | L m  |
|-----------|----|---|-------------|-------------------------|------------------------------------|------------------------------------|----------------------|-----------------------|---|
|           |    |   |             |                         | J <sub>xx</sub> (cm <sup>4</sup> ) | J <sub>yy</sub> (cm <sup>4</sup> ) | Coating Surface (cm) | Covering Surface (cm) |   |
|           |    |   |             |                         |                                    |                                    |                      |                       |   |

\* The weights are theoretical of presed profiles.

\* When profiles are powder coated weight may increase by % 4 .

\* Unless otherwise indicated , all dimensions in this catalogue are  $\pm 0.1$  mm and weights may vary by % 4 .

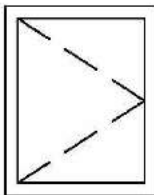
TECHNICAL INFORMATION



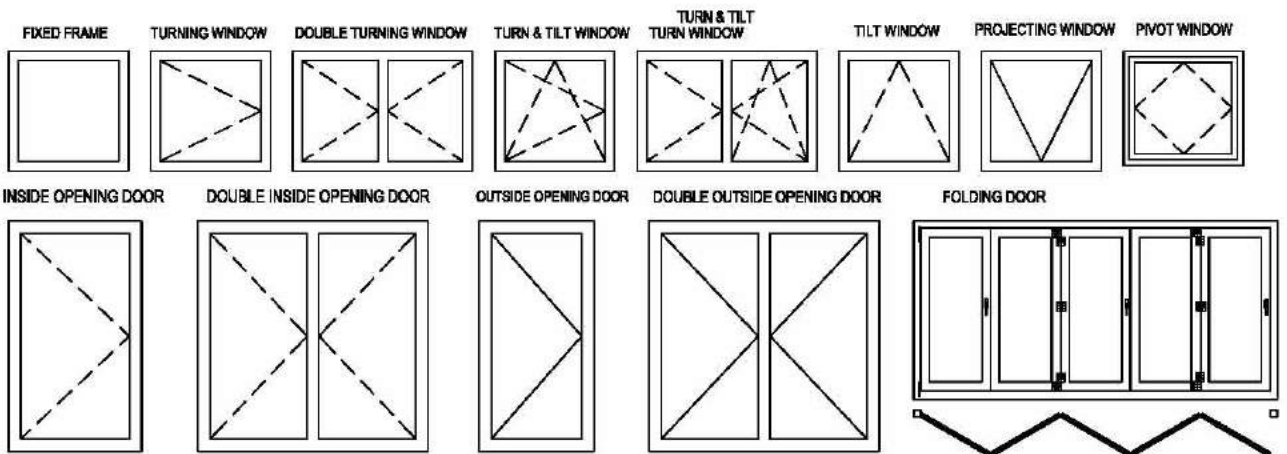
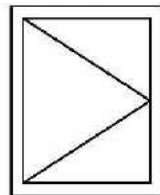
- 1 - Class 3 according to norm DIN4108
- 2 - Glazing : from 17 to 40 mm
- 3 - E.P.D.M. sealing Gasket
- 4 - Efficient drainage of the vent section
- 5 - Efficient chamber for pressure leveling which provides a better watertightness.
- 6 - Central sealing gasket for a better wind and watertightness.
- 7 - Proved drainage avoids infiltration of water under the central gasket.
- 8 - Direct front chamber drainage.
- 9 - Economic height : frame : 66 mm  
vent : 74 mm
- 10- Different glazing beads from 15 mm to 36 mm
- 11 - Corner cleats with PRES
- 12 - Outer profile according to the European norm.
- 13- Acoustical gasket in E.P.D.M.
- 14- Different combinations of outer frames and vent sections.
- 15- Die cast corner joint for perfect corner
- 16- Pvc corner joint for perfect corner

EXTERIOR VIEW

INSIDE OPENING

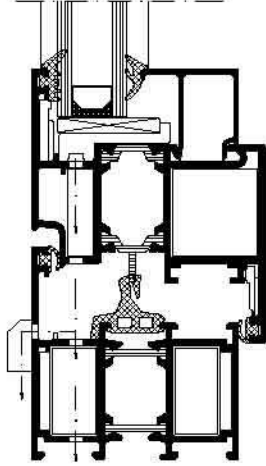



OUTSIDE OPENING





**CONTENTS OF THE TENDER**

|   |   |
|---|---|
| <p><b>DESCRIPTIONS</b></p>  |    |
| <p><b>*** CASTLE 17'60 W+ System insulated window and door systems.</b></p> |   |
| <p><b>Construction Depth</b></p>  | <p>* <b>Window</b> : Frame: 60 mm - Vent : 68 mm<br/>* <b>Door</b> : Frame: 60 mm - Vent :68 mm</p>   |
| <p><b>Glazing</b></p>   | <p>Glazing from 4 mm up to 40 mm with dry E.P.D.M. Gaskets.<br/>The choice of joints and glazing beads depends on the thickness of the glass.According to the tolerances of the glazing either a smaller or bigger joint and or glazing bead is used.</p>   |
| <p><b>Special Characteristics</b></p>                                       | <p>Window types : inside , tilt and turn , double casement , pivot window .<br/>Door types : inside door ,outside door ,double door , folding door.<br/>The structural profile walls have a nominal thickness of 1.6 to 2 mm.<br/>Curved and round windows possible.<br/>Compatible with curtain wall system.<br/>Special ventilation possibilities.</p>  |
| <p><b>Connections</b></p>   | <p>The corner connections between the profiles are applications die cast corner joint.<br/>The transoms are fixed with T-connections or with screw through the outer frame.</p>   |
| <p><b>Gaskets</b></p>   | <p>The opening windows have a central gasket an acoustical gasket and glazing gaskets in E.P.D.M.<br/>This gasket forms a barrier between the cold and the warm chambers and does not allow any cold air to pass through to the profile components on the inside.<br/>The central gasket ensures the window is wind and watertight over the complete surface.<br/>The acoustic gasket is uninterrupted.</p> |
| <p><b>Drainage</b></p>  | <p>All window types must be equipped with a drainage system in the bottom profiles or the transoms.</p>   |
| <p><b>Fitting and anchoring</b></p>   | <p>The windows and doors are fitted level and at perfectly right angles.The aluminium constructions are fixed to the brickwork in such a way that shrinkage or expansion of the building have no influence on the aluminium constructions.</p>  |

**GENERAL PRODUCT DESCRIPTION**

**Aluminium alloy**

The aluminium profiles are made out of the alloy 6060 and 6063 .

The aluminium profiles have been extruded from the alloy AlMgSi 0.5 - F22 in according to the EN 12020 .

Tolerance are based on the standart EN 12020 .

**Physical Properties**

- 1. Density : 2.71 g / cm3
- 2. Elasticity module : 7000 kg / mm2
- 3. Resistance : 2650 kg / mm2
- 4. Melting point : 650 °C
- 5. Coefficient of expansion : 23x10 C
- 6. Thermal permeability : 0.48 cal / cm /s

**Mechanical Properties**

- 1. Rupture strength : 23.9 kg / mm2
- 2. Elasticity limit : 19 kg / mm2
- 3. Hardness : 25 Brinell

**Surface Treatment**

The profiles get a surface treatment as described further on. The colours of the profiles for the inside and outside are the same or different. The anodisation and enamel procedures are carried out under the responsibility of the systems supplier who offer

**Electrostatic Powder Coating**

The thermal break allows all surface treatments when compounded. The enamel construction version has the QUALICOAT label.  
On average, the coating thickness is minimally 60 micron.  
The architect can choose from the standart range of colour of the system su

**Anodised Construction Version**

The complete anodisation process takes place in accordance with the specifications of QUALANOD.

**This procedure has to be applied to all exterior joinery situated in the following zones:**

- \*In industrial or highly polluted zones.
- \*In city centres or along busy roads.
- \*Along railroads.
- \*In swimming pools , laboratories , industrial buildings , etc.

**THERMAL TRANSMITTANCE**
**RMG (DIN 4108)**

|               |  |
|---------------|--|
| 1 group       | $k \leq 2.0 \text{ W/(m}^2\text{K)}$       |
| 2.1 group     | $2.0 < k \leq 2.8 \text{ W/(m}^2\text{K)}$ |
| *** 2.2 group | $2.8 < k \leq 3.5 \text{ W/(m}^2\text{K)}$ |
| 2.3 group     | $3.5 < k \leq 4.5 \text{ W/(m}^2\text{K)}$ |
| 3 group ***   | $k > 4.5 \text{ W/(m}^2\text{K)}$          |

**THERMAL TRANSMITTANCE ACCORDING TO EN ISO 10077-2**
**Theory**

The thermal transmittance of a frame according to EN ISO 10077-2:

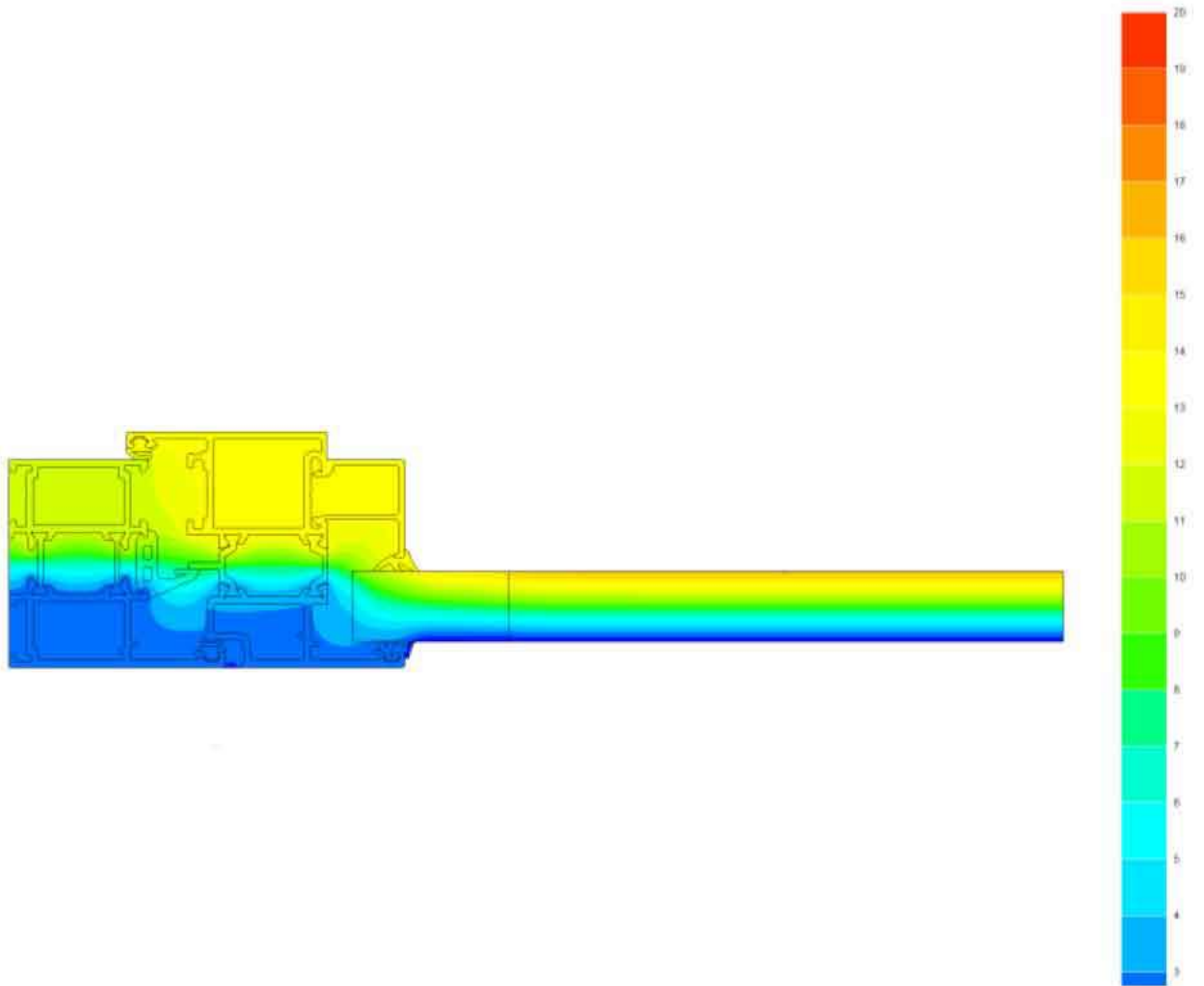
$$U_f = \frac{L_{2D} - U_p * l_p}{l_f} \quad \text{and} \quad L_{2D} = \frac{q_{L,tot}}{\Delta \theta}$$

- with:
- $U_f$ : thermal transmittance of the window frame [W/m<sup>2</sup>K]
  - $U_p$ : thermal transmittance of the flanking panel [W/m<sup>2</sup>K]
  - $l_p$ : projected width of the flanking panel [m]
  - $l_f$ : projected width of the window frame [m]
  - $L_{2D}$ : two-dimensional coupling coefficient [W/mK]
  - $q_{L,tot}$ : total heat flow through the window frame and the flanking panel [W/m]
  - $\Delta \theta$ : temperature difference between inside ( $\theta_i$ ) and outside ( $\theta_e$ ) [K]

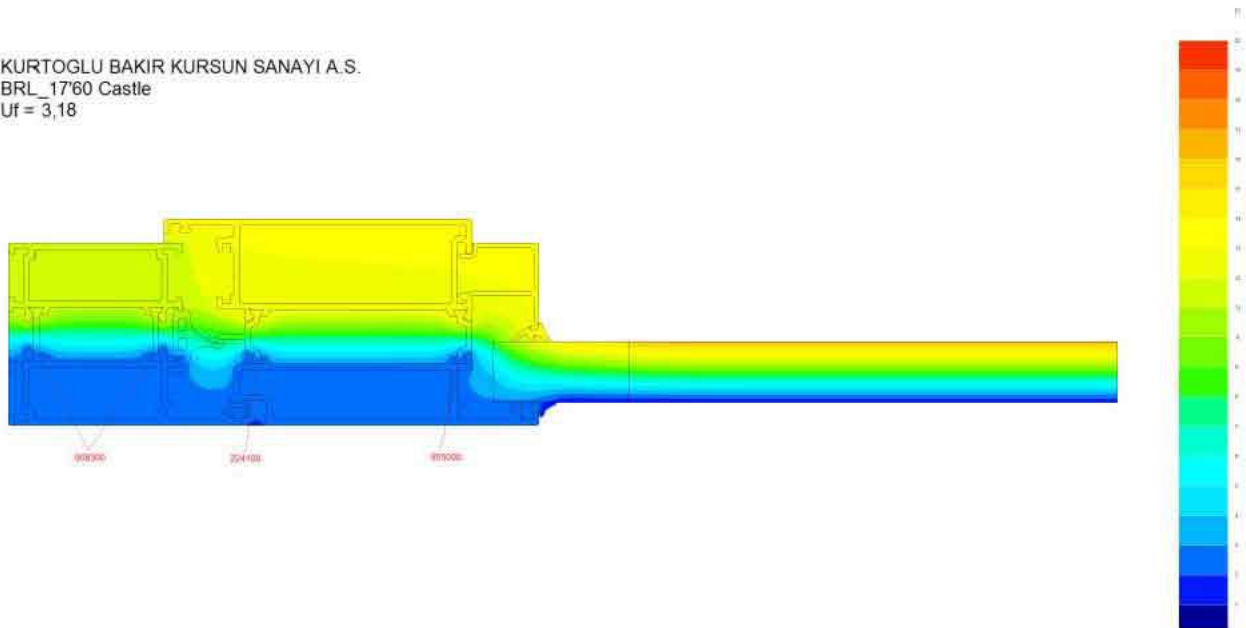
**Calculation Item:**

|             |   |                                       |
|-------------|---|---------------------------------------|
| input data: | $q_{L,tot} = 16,250 \text{ W/m}$              | $R_{se} = 0,04 \text{ m}^2\text{K/W}$ |
|             | $\theta_e = 0,0 \text{ }^\circ\text{C}$       | $R_d = 0,13 \text{ m}^2\text{K/W}$    |
|             | $\theta_i = 20,0 \text{ }^\circ\text{C}$      |                                       |
|             | $d_p = 0,0200 \text{ m}$                      |                                       |
|             | $\lambda_p = 0,035 \text{ W/m}^\circ\text{K}$ |                                       |
|             | $U_p = 1,349 \text{ W/m}^2\text{K}$           |                                       |
|             | $l_p = 0,190 \text{ m}$                       |                                       |
|             |   | calculation results:                  |
|             | $l_f = 0,1750 \text{ m}$                      | $L_{2D} = 0,81 \text{ W/mK}$          |
|             |   | $U_f = 3,18 \text{ W/m}^2\text{K}$    |

THERMAL TRANSMITTANCE



KURTOGLU BAKIR KURSUN SANAYI A.S.  
BRL\_17'60 Castle  
Uf = 3,18





TEST REPORT

**siskom** Test Report  
Sistem Castrol Marked

Order : Order No. 78  
Test No. : KURTOGLU ALM.2  
Tested By : HUSEYIN SIMSEK

Date: 23.06.2006

Window sketch :

Dimensions (W x H) : 1.466 m x 1.256 m  
Seal length: 6.422 m Sash area: 1.841 m<sup>2</sup> Window area: 1.173 m<sup>2</sup>

**Description of Test Element**

Window type : SYSTEM CASTLE 17'60 W+  
Opening type : CIPT ACILIM-TILT AND TURN MECHANISM  
Overall Dim. (W x H) : 1.466 x 1.256 m Area : 1.841 m<sup>2</sup>  
Opening Vent (W x H) : 0.540 x 0.990 m Area : 0.535 m<sup>2</sup>  
                                  : 0.580 x 1.100 m Area : 0.638 m<sup>2</sup>  
                                  Total Area : 1.173 m<sup>2</sup>  
Seal length : 6.420 m

**Reference of profiles**

|          |            |              |           |
|----------|------------|--------------|-----------|
| Frame    | :17 FW03   | Sill Detail  | :         |
| Sash     | :17 VW02   | Transom      | :         |
| Mullion  | :17 MW03   | Glazing bead | :14 GW 19 |
| Sealing  | :11A 1404  | Drip Bar     | :14 PW 02 |
| Hardware | :          | Other        | :         |
| Material | :ALUMINIUM | Locking      | :         |
| Finish   | :          | Hinges       | :         |

**Glazing**

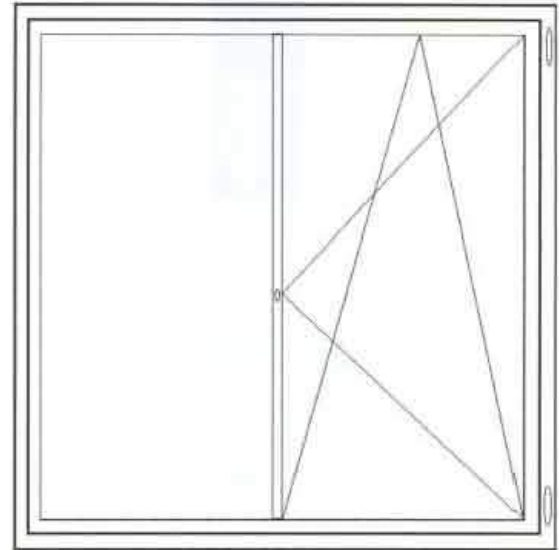
|            |               |          |   |
|------------|---------------|----------|---|
| Type       | :TEMPER GLASS | Filling  | : |
| Glazing    | :6+12+4       | Gas area | : |
| Glass Dim. | :22           | Other    | : |

**Roll shutter box**

Classification (EN 12207;EN 12210; EN 12208)

Dec : Airloss A4 Wind resistance W1 Water tightness RA2  
Est : Airloss A4 Wind resistance W1C Water tightness RA2

Remarks:



Milton Keynes, 23.06.2006 Tested By: 

**Water Tightness EN 1027 : 2000**

|                           |                      |             |                    |
|---------------------------|----------------------|-------------|--------------------|
| Spraying method A         | Number of nozzles: 2 | Vol. water: | 240.0 Litre/Hour   |
| Spraying angle: 24 Degree |                      |             | : 4.0 Litre/Minute |
| Add. spraying pipe        | Number of nozzles: 0 | Vol. water: | 0.0 Litre/Hour     |
| ( 1.0 Litre/Nozzle)       |                      |             | : 0.0 Litre/Minute |

| Pres. Pa | Time     | Remarks |
|----------|----------|---------|
| 0        | 00:15:00 | OK      |
| 50       | 00:05:00 | OK      |
| 100      | 00:05:00 | OK      |
| 150      | 00:05:00 | OK      |
| 200      | 00:05:00 | OK      |
| 250      | 00:05:00 | OK      |
| 300      | 00:05:00 | OK      |
| 450      | 00:05:00 | OK      |
| 600      | 00:05:00 | OK      |

Water tightness class: RA3

Point of water ingress :

Probable cause of leakage :



**TEST REPORT**

# SISKOM

Stoken Control Method **Test Report**

**Airloss EN 1026 : 2003**
Airloss EN 1026:2000

Ambient temperature: 20 Celsius    Ambient humidity : 75 %    Ambient pressure: 10  
 Total area : 1.841 m<sup>2</sup>    length of seal: 6.420 m

| Pres.<br>Pa | Total<br>m3h | Window area |       | Seal length |       |
|-------------|--------------|-------------|-------|-------------|-------|
|             |              | m3/h/m2     | Class | m3/h/m      | Class |
| 50          | 3.18         | 1.73        | A4    | 0.50        | A3    |
| 100         | 4.68         | 2.54        | A4    | 0.73        | A4    |
| 150         | 6.17         | 3.35        | A4    | 0.96        | A4    |
| 200         | 7.47         | 4.05        | A4    | 1.16        | A4    |
| 250         | 8.58         | 4.66        | A4    | 1.34        | A4    |
| 300         | 9.72         | 5.28        | A4    | 1.51        | A4    |
| 450         | 12.81        | 6.96        | A4    | 2.00        | A4    |
| 600         | 16.92        | 9.19        | A4    | 2.64        | A4    |
| -50         | 3.26         | 1.77        | A4    | 0.51        | A3    |
| -100        | 4.54         | 2.47        | A4    | 0.71        | A4    |
| -150        | 5.76         | 3.13        | A4    | 0.90        | A4    |
| -200        | 6.81         | 3.70        | A4    | 1.06        | A4    |
| -250        | 7.77         | 4.22        | A4    | 1.21        | A4    |
| -300        | 8.58         | 4.66        | A4    | 1.34        | A4    |
| -450        | 10.72        | 5.82        | A4    | 1.67        | A4    |
| -600        | 12.32        | 6.69        | A4    | 1.92        | A4    |

Pressure: A4    Suction: A4

| Pres.<br>Pa | m3/h  | m3/h/m2 | Class<br>Area | Difference<br>to 1.Test | m3/h/m | Class<br>Seal Length | Difference<br>to 1.Test |
|-------------|-------|---------|---------------|-------------------------|--------|----------------------|-------------------------|
| 200         | 8.12  | 4.41    | A4            | 0.010                   | 1.26   | A3                   | 0.003                   |
| 250         | 9.12  | 4.95    | A4            | 0.026                   | 1.41   | A3                   | 0.007                   |
| 300         | 10.08 | 5.48    | A4            | 0.049                   | 1.57   | A3                   | 0.014                   |
| 450         | 12.37 | 6.72    | A4            | 0.018                   | 1.93   | A4                   | 0.005                   |
| 600         | 15.36 | 8.34    | A4            | 0.043                   | 2.39   | A4                   | 0.012                   |
| -50         | 3.90  | 2.12    | A3            | 0.029                   | 0.61   | A3                   | 0.008                   |
| -100        | 5.59  | 3.01    | A3            | 0.029                   | 0.86   | A3                   | 0.008                   |
| -150        | 6.89  | 3.74    | A4            | 0.004                   | 1.07   | A3                   | 0.001                   |
| -200        | 8.04  | 4.36    | A4            | 0.004                   | 1.25   | A3                   | 0.001                   |
| -250        | 9.07  | 4.93    | A4            | 0.018                   | 1.41   | A3                   | 0.005                   |
| -300        | 10.10 | 5.48    | A4            | 0.017                   | 1.57   | A3                   | 0.005                   |
| -450        | 12.20 | 6.63    | A4            | 0.007                   | 1.90   | A4                   | 0.002                   |
| -600        | 15.31 | 8.35    | A4            | 0.033                   | 2.39   | A4                   | 0.010                   |

Classification after 2. air permeability: A3

Safety tests:

E3 = -3000 Pa / 3000 Pa

Remarks suction :

Remarks pressure :

Class: W5C

## TEST REPORT

ISTANBUL TECHNICAL UNIVERSITY  
MACHINE FACULTYKurtoğlu Bakar Kurşun  
Sanayii A.Ş.Pencere Sistemi Isı Geçiş  
Katsayısı Tayini

Ds No : 06/3322

02.11.2006

Ek 4. Deney Protokolü

## DENEY RAPORU

SICAK ODA YÖNTEMİNE GÖRE  
MALZEMENİN TOPLAM ISI GEÇİŞ KATSAYISININ TAYİNİ

- Deney Yeri . . . . . : İstanbul Teknik Üniversitesi, Makina Fakültesi,  
Isı Tekniği Birimi, Isı Ölçmeleri Laboratuvarı.
- Deneyi İsteyen . . . . . : Kurtoğlu Bakar Kurşun Sanayi A.Ş.  
Hacı Şeremet Mevkii TEM Otayolu Çıkıp Velimeşe Çorlu
- Denenen Malzeme . . . . . : Deneyi isteyen tarafından getirilen ısı yalıtımlı BRL CASTLE 17'60W  
kodlu pencere sistemi. Pencere sistemlerinde kullanılan profillerin  
kesit resimleri Ek 1'de verilmiştir. Denenen numunenin  
boyutları, Ek 2'deki şematik resimde verilmiştir.
- Deney Tesisi . . . . . : Ek 3'de görülmektedir.
- Deneyde Ölçülen  
Değerler . . . . . : Ek 4'deki deney protokolünde verilmiştir.
- Hesap Yöntemi . . . . . : Ölçülen değerler kullanılarak, denenen malzemenin toplam ısı geçiş  
katsayısı hesaplama yöntemi, Ek 5'de açıklanmıştır.
- Deney Sonucu . . . . . :  $K_C$  : çerçevenin toplam ısı geçiş katsayısı,  $W/m^2 K$   
 $K_i$  : ısıcamın toplam ısı geçiş katsayısı,  $W/m^2 K$   
 $K_p$  : pencere sisteminin toplam ısı geçiş katsayısı,  $W/m^2 K$   
olmak üzere, yapılan deneyler sonucunda, aşağıdaki tabloda verilen,  $h$   
ve  $K_C$  değerleri elde edilmiştir. Burada,  $K_i = 3.0 W/m^2 K$  olarak  
alınmıştır.

| SICAK ODA<br>SICAKLIĞI<br>°C | SOĞUK ODA<br>SICAKLIĞI<br>°C | $K_p$<br>$W/m^2 K$ | $K_C$<br>$W/m^2 K$ |
|------------------------------|------------------------------|--------------------|--------------------|
| 24.09                        | 3.35                         | 2.76               | 2.50               |

|  |       |      |
|--|-------|------|
| Q : Pencere sisteminden geçen ısı, W   | 57.14 |      |
| $T_C$ : soğuk oda sıcaklığı, °C  | 3.35  |      |
| $T_H$ : sıcak oda sıcaklığı, °C  | 24.09 |      |
| Pencerenin<br>sıcak ve soğuk<br>yüzeyleri<br>arasındaki<br>sıcaklık farkı,<br>°C | $T_1$ | 9.1  |
|  | $T_2$ | 10.1 |
|  | $T_3$ | 10.4 |
|  | $T_4$ | 12.1 |
|  | $T_5$ | 10.0 |
|  | $T_6$ | 9.7  |
|  | $T_7$ | 8.9  |
|  | $T_8$ | 9.2  |
|  | $T_9$ | 8.6  |

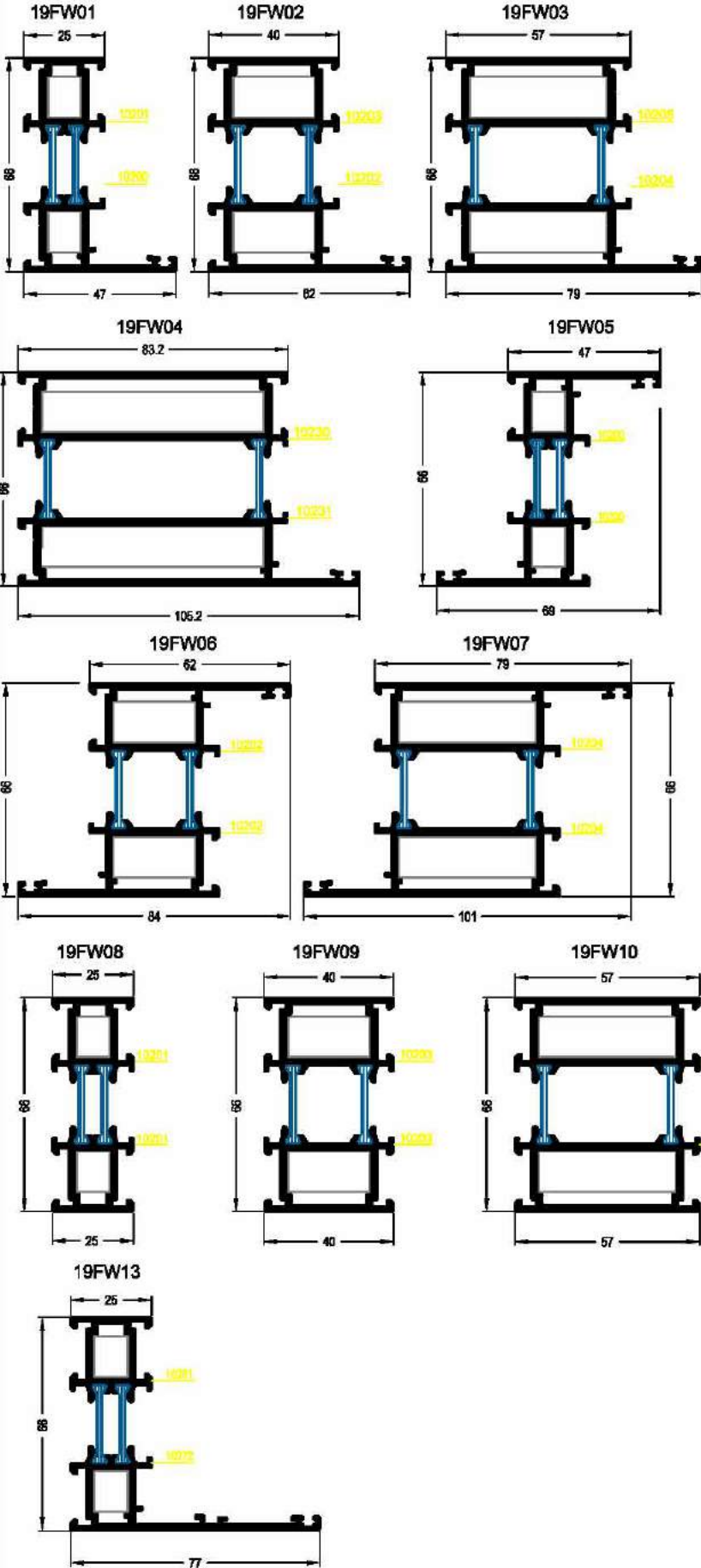
Y.Doç.Dr. Erhan BÖKE

Yukarıdaki imzanın  
Y.Doç.Dr.Erhan BÖKE'ye  
ait olduğu tasdik olunur.

TECHNICAL INFORMATION

| Pr.Nr. | THEORETICAL WEIGHT (kg/m) | Surface                    |                           | Surface                    |                           |
|--------|---------------------------|----------------------------|---------------------------|----------------------------|---------------------------|
|        |                           | Paint (cm <sup>2</sup> /m) | Anod (cm <sup>2</sup> /m) | Paint (cm <sup>2</sup> /m) | Anod (cm <sup>2</sup> /m) |
|        |                           | Paint (cm <sup>2</sup> /m) |                           | Anod (cm <sup>2</sup> /m)  |                           |
| 17FW01 | 1.312                     | 20.289                     | 4.341                     | 38.110                     | 9.187                     |
| 17FW02 | 1.646                     | 28.826                     | 12.746                    | 44.762                     | 12.187                    |
| 17FW03 | 2.015                     | 38.343                     | 27.108                    | 51.582                     | 15.587                    |
| 17FW04 | 2.583                     | 87.801                     | 40.529                    | 62.042                     | 20.827                    |
| 17FW05 | 1.439                     | 28.935                     | 5.760                     | 43.468                     | 11.444                    |
| 17FW06 | 1.773                     | 35.448                     | 14.281                    | 49.940                     | 14.444                    |
| 17FW07 | 2.141                     | 51.599                     | 27.132                    | 56.740                     | 17.844                    |
| 17FW08 | 1.186                     | 15.808                     | 2.111                     | 33.110                     | 6.930                     |
| 17FW09 | 1.520                     | 21.482                     | 9.358                     | 39.584                     | 9.930                     |
| 17FW10 | 1.888                     | 27.888                     | 26.051                    | 46.384                     | 13.330                    |
| 17FW11 | 2.456                     | 73.488                     | 37.757                    | 56.864                     | 18.570                    |
| 17FW13 | 1.505                     | 32.923                     | 10.718                    | 45.686                     | 12.394                    |

FRAMES



TECHNICAL INFORMATION

**FRAMES**

The drawings show various cross-sections of window frames. Key dimensions include widths (e.g., 25, 40, 57, 79, 82, 83.2, 84, 89, 101, 105.2, 106.2, 107, 117) and heights (e.g., 66, 86). Components are labeled with codes like 10201, 10202, 10203, 10204, 10205, 10230, 10231, 10272.

**DESCRIPTION**

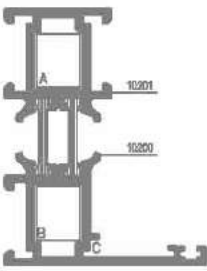

| Pr.Nr. | THEORETICAL WEIGHT<br>kg/mtr | Statics                            |                                    | Surfaces                           |                                     |
|--------|------------------------------|------------------------------------|------------------------------------|------------------------------------|-------------------------------------|
|        |                              | J <sub>xx</sub> (cm <sup>4</sup> ) | J <sub>yy</sub> (cm <sup>4</sup> ) | Coating Surface (cm <sup>2</sup> ) | Covering Surface (cm <sup>2</sup> ) |
| 17FW01 | 1.312                        | 20.289                             | 4.341                              | 38.110                             | 9.187                               |
| 17FW02 | 1.646                        | 26.826                             | 12.748                             | 44.762                             | 12.187                              |
| 17FW03 | 2.015                        | 38.343                             | 27.108                             | 51.562                             | 15.587                              |
| 17FW04 | 2.583                        | 87.901                             | 40.529                             | 62.042                             | 20.827                              |
| 17FW05 | 1.439                        | 26.935                             | 5.760                              | 43.466                             | 11.444                              |
| 17FW06 | 1.773                        | 35.448                             | 14.291                             | 49.940                             | 14.444                              |
| 17FW07 | 2.141                        | 51.599                             | 27.132                             | 58.740                             | 17.844                              |
| 17FW08 | 1.186                        | 15.808                             | 2.111                              | 33.110                             | 8.930                               |
| 17FW09 | 1.520                        | 21.482                             | 9.359                              | 39.584                             | 9.930                               |
| 17FW10 | 1.888                        | 27.888                             | 26.061                             | 46.384                             | 13.330                              |
| 17FW11 | 2.456                        | 73.488                             | 37.757                             | 58.884                             | 18.570                              |
| 17FW13 | 1.505                        | 32.923                             | 10.718                             | 45.686                             | 12.384                              |







## b - PROFILE

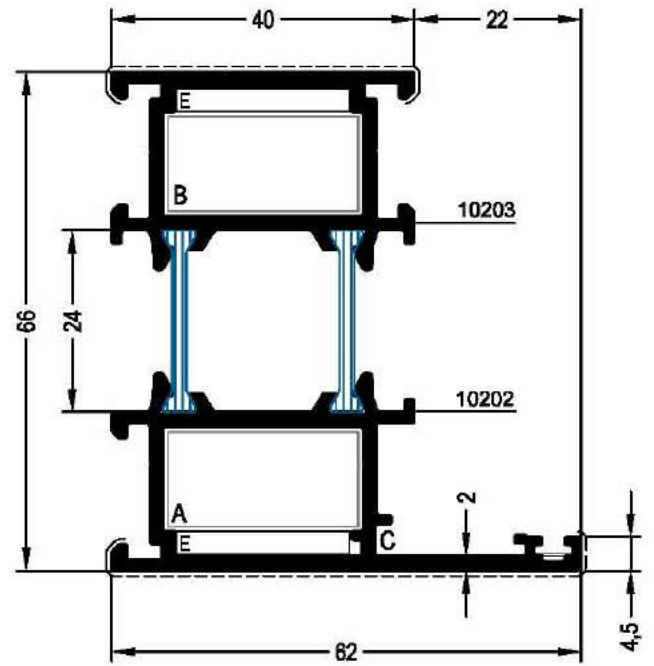
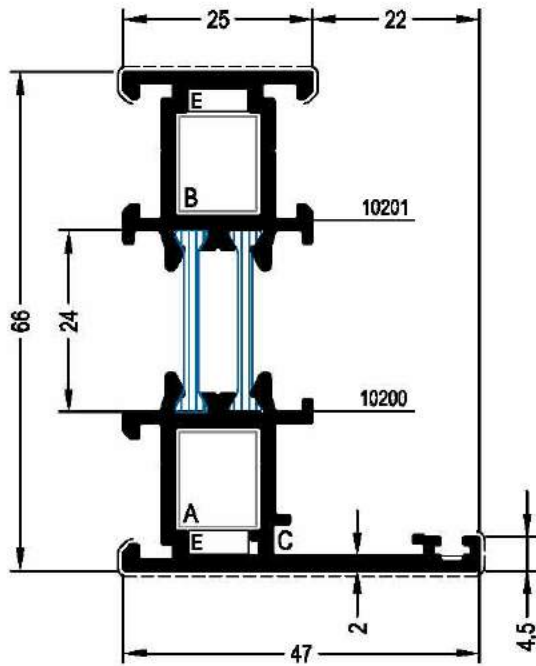
|  |             |                       |       |                                   |       |   |  |
|--|-------------|-----------------------|-------|-----------------------------------|-------|---|--|
|  |             | FRAME PROFILE 25 / 47 |       |                                   |       |  |  |
|  |             | PROFILE CODE 19FW01   |       | THEORETICAL WEIGHT kg/ml<br>1,364 |       |   |  |
| Join<br>(mm)   | -J7<br>(mm) | Coating Surface (cm)  |       | Coating Surface (cm)              |       |   |  |
| —  | —           | 10201                 | 10202 | 10201                             | 10202 |   |  |
| THERMO BREAK   |             | IMPACT (Polyester)    |       | 990300 (18 mm l)                  |       |   |  |
| CORNER CLEATS  |             | LDCAL (Pvc)           |       | —                                 |       |   |  |
| PRESS CORNER   |             | A                     | B     | C                                 | D     |   |  |
| DE-CAST CORNER ADNT  |             | —                     |       | M.A./J 3000                       |       |   |  |
| BRES. CORNER ADNT  |             | —                     |       | —                                 |       |   |  |

\* The weights are theoretical of presed profiles.

\* When profiles are powder coated weight may increase by % 4 .

\* Unless otherwise indicated , all dimensions in this catalogue are  $\pm 0.1$  mm and weights may vary by % 4 .

FRAMES





FRAME PROFILE 25 / 47

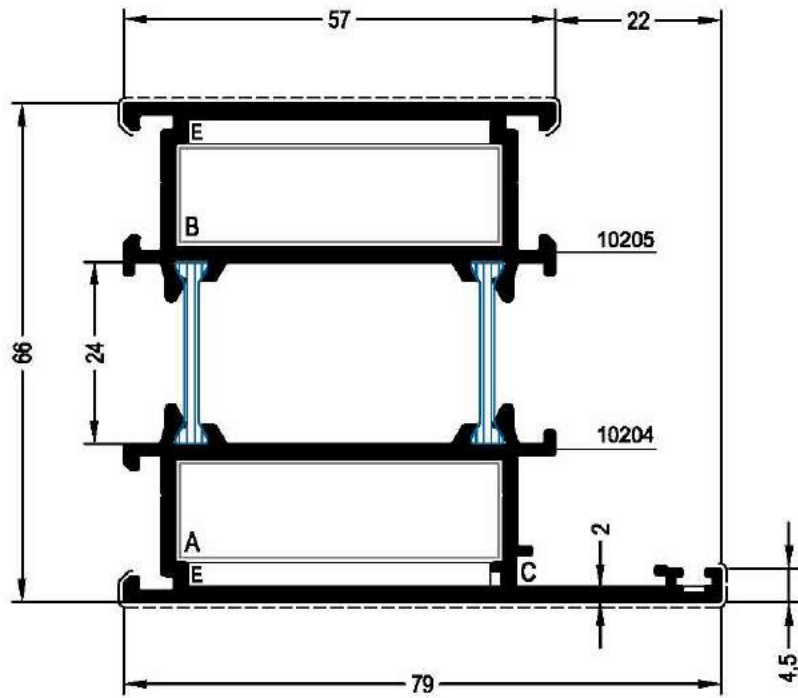


FRAME PROFILE 40 / 62



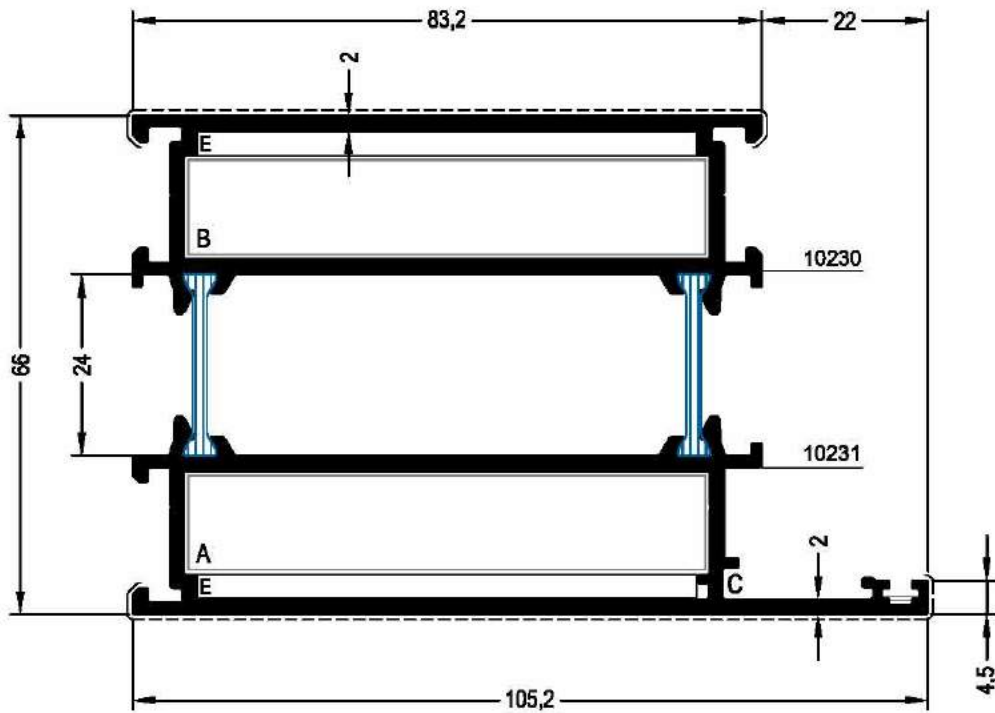
| PROFILE CODE                       |   | 19FW01                |        | THEORETICAL WEIGHT kg/mt |     | 1.364                              |                                    | PROFILE CODE   |        | 19FW02      |             | THEORETICAL WEIGHT kg/mt |        | 1.695 |  |
|------------------------------------|---|-----------------------|--------|--------------------------|-----|------------------------------------|------------------------------------|--|--------|-------------|-------------|--------------------------|--------|-------|--|
| J <sub>xx</sub> (cm <sup>4</sup> ) | J <sub>yy</sub> (cm <sup>4</sup> )  | Covering Surface (cm) |        |                          |     | J <sub>xx</sub> (cm <sup>4</sup> ) | J <sub>yy</sub> (cm <sup>4</sup> ) | Covering Surface (cm)  |        |             |             |                          |        |       |  |
|                                    |   | 10201                 |        | 10200                    |     |                                    |                                    | 10203  |        | 10202       |             |                          |        |       |  |
| 20.289                             | 4.341   | 3.465                 |        | 5.722                    |     | 26.826                             | 12.746                             | 4.965  |        | 7.222       |             |                          |        |       |  |
| THERMO BREAK                       |   | LOCAL (Pvc)           |        |                          |     | ---                                |                                    | THERMO BREAK   |        | LOCAL (Pvc) |             |                          |        | ----  |  |
| CORNER CLEATS                      |   | A                     | B      | C                        | D   | E                                  | CORNER CLEATS                      |  | A      | B           | C           | D                        | E      |       |  |
| PRESS CORNER                       |  | 14LW14                | 14LW14 | ---                      | --- | ---                                | PRESS CORNER                       |  | 14LW32 | 14LW32      | ---         | ---                      | ---    |       |  |
| DIE-CAST CORNER JOINT              |   | ---                   | ----   | M.fuji 2000              | --- | ---                                | DIE-CAST CORNER JOINT              |  | ----   | ---         | M.fuji 2000 | ---                      | ----   |       |  |
| P.V.C. CORNER JOINT                |   | ---                   | ----   | ---                      | --- | P.V.C.                             | P.V.C. CORNER JOINT                |  | ----   | ---         | ---         | ----                     | P.V.C. |       |  |

FRAMES



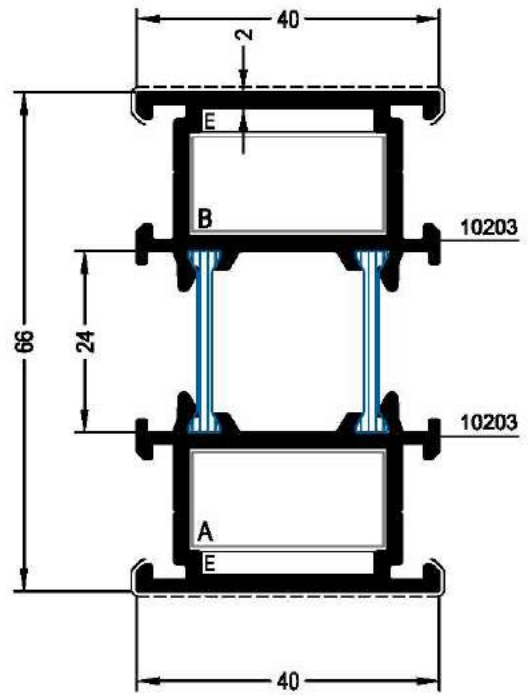
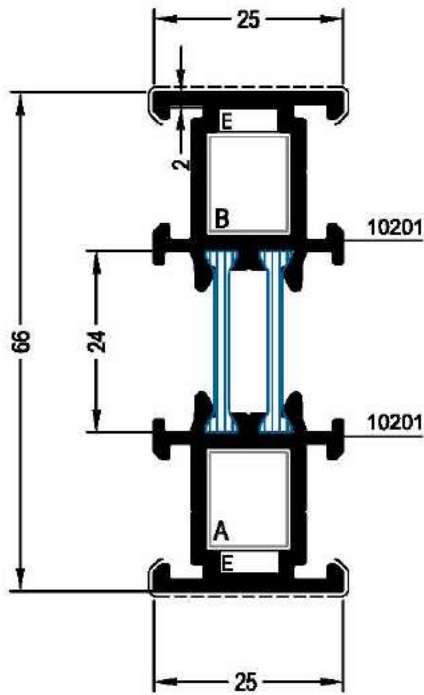
|                                       |                                       |                       |        |                          |   |        |
|---------------------------------------|---------------------------------------|-----------------------|--------|--------------------------|---|--------|
| FRAME PROFILE                         |                                       | 57 / 79               |        |                          |   |        |
| PROFILE CODE                          |                                       | 19FW03                |        | THEORETICAL WEIGHT kg/mt |   |        |
|                                       |                                       |                       |        | 2.064                    |   |        |
| J <sub>xx</sub><br>(cm <sup>4</sup> ) | J <sub>yy</sub><br>(cm <sup>4</sup> ) | Covering Surface (cm) |        |                          |   |        |
|                                       |                                       | 10205                 |        | 10204                    |   |        |
| 38.343                                | 27.108                                | 6.665                 |        | 8.922                    |   |        |
| THERMO BREAK                          |                                       | LOCAL (Pvc)           |        | —                        |   |        |
| CORNER CLEATS                         |                                       | A                     | B      | C                        | D | E      |
| PRESS CORNER                          |                                       | 14LW33                | 14LW33 | —                        | — | —      |
| DIE-CAST CORNER JOINT                 |                                       | —                     | —      | M.fuji 2000              | — | —      |
| P.V.C. CORNER JOINT                   |                                       | —                     | —      | —                        | — | P.V.C. |

FRAMES



|                                       |                                       |                       |        |                          |   |        |
|---------------------------------------|---------------------------------------|-----------------------|--------|--------------------------|---|--------|
| FRAME PROFILE                         |                                       | 83.2 / 105.2          |        |                          |   |        |
| PROFILE CODE                          |                                       | 19FW04                |        | THEORETICAL WEIGHT kg/mt |   |        |
|                                       |                                       |                       |        | 2.630                    |   |        |
| J <sub>xx</sub><br>(cm <sup>4</sup> ) | J <sub>yy</sub><br>(cm <sup>4</sup> ) | Covering Surface (cm) |        |                          |   |        |
|                                       |                                       | 10230                 |        | 10231                    |   |        |
| 87.901                                | 40.529                                | 9.285                 | 11.542 |                          |   |        |
| THERMO BREAK                          |                                       | LOCAL (Pvc)           |        |                          |   |        |
|                                       |                                       | —                     |        |                          |   |        |
| CORNER CLEATS                         |                                       | A                     | B      | C                        | D | E      |
| PRESS CORNER                          |                                       | 14LW34                | 14LW34 | —                        | — | —      |
| DIE-CAST CORNER JOINT                 |                                       | —                     | —      | M.fuji 2000              | — | —      |
| P.V.C. CORNER JOINT                   |                                       | —                     | —      | —                        | — | P.V.C. |

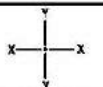
FRAMES







FRAME PROFILE 25 / 25



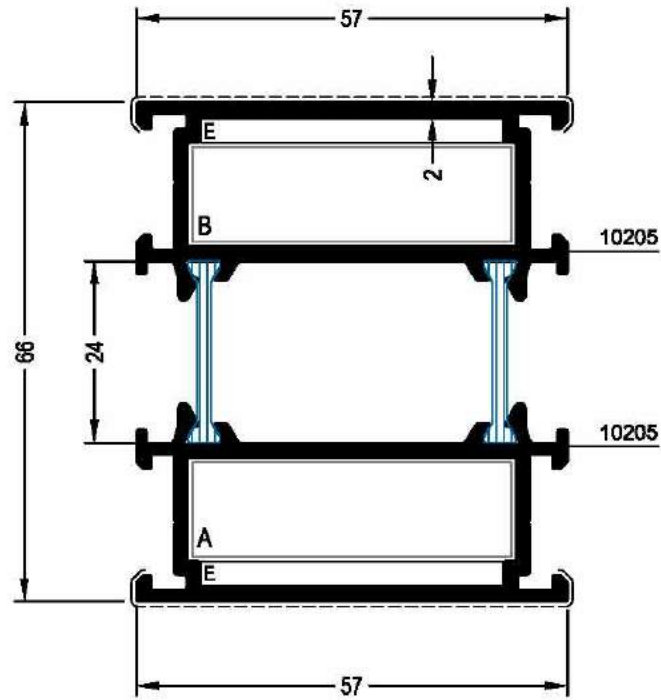
FRAME PROFILE 40 / 40



| PROFILE CODE           |   | 19FW08                |        | THEORETICAL WEIGHT kg/mt | PROFILE CODE           |  | 19FW09 |                        | THEORETICAL WEIGHT kg/mt |
|------------------------|---|-----------------------|--------|--------------------------|------------------------|--|--------|------------------------|--------------------------|
|                        |   |                       |        | 1.237                    |                        |  |        |                        | 1.571                    |
| Jxx (cm <sup>4</sup> ) | Jyy (cm <sup>4</sup> )  | Covering Surface (cm) |        | Jxx (cm <sup>4</sup> )   | Jyy (cm <sup>4</sup> ) | Covering Surface (cm)  |        | Jxx (cm <sup>4</sup> ) | Jyy (cm <sup>4</sup> )   |
|                        |   | 10201                 | 10201  |                          |                        | 10203  | 10203  |                        |                          |
| 15.808                 | 2.111   | 3.465                 | 3.465  | 21.482                   | 9.359                  | 4.965  | 4.965  |                        |                          |
| THERMO BREAK           |   | LOCAL (Pvc)           |        | THERMO BREAK             |                        | LOCAL (Pvc)  |        |                        |                          |
| T JUNCTION             |  | A                     | B      | C                        | T JUNCTION             |  | A      | B                      | C                        |
|                        |   | 14JW04                | 14JW04 | —                        |                        |  | 14JW04 | 14JW04                 | —                        |
| CORNER CLEATS          |  | A                     | B      | C                        | CORNER CLEATS          |  | A      | B                      | C                        |
|                        |   | 14LW14                | 14LW14 | —                        |                        |  | 14LW32 | 14LW32                 | —                        |

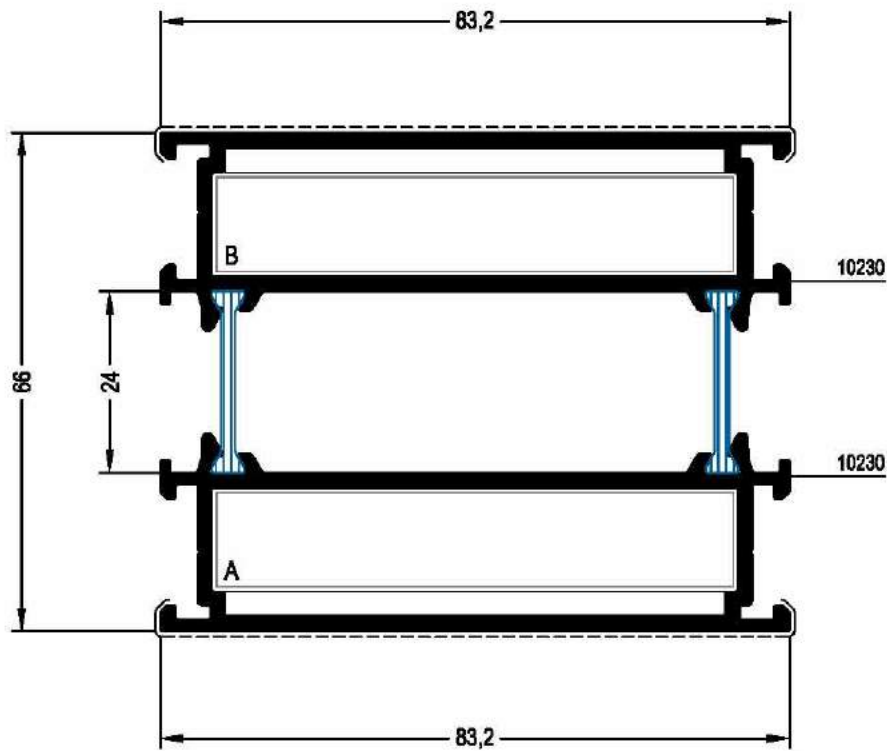


FRAMES



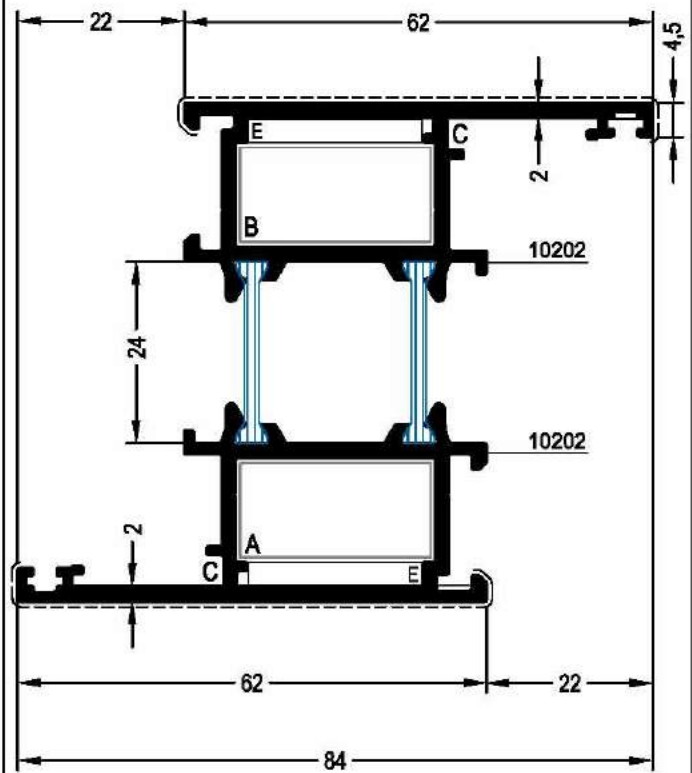
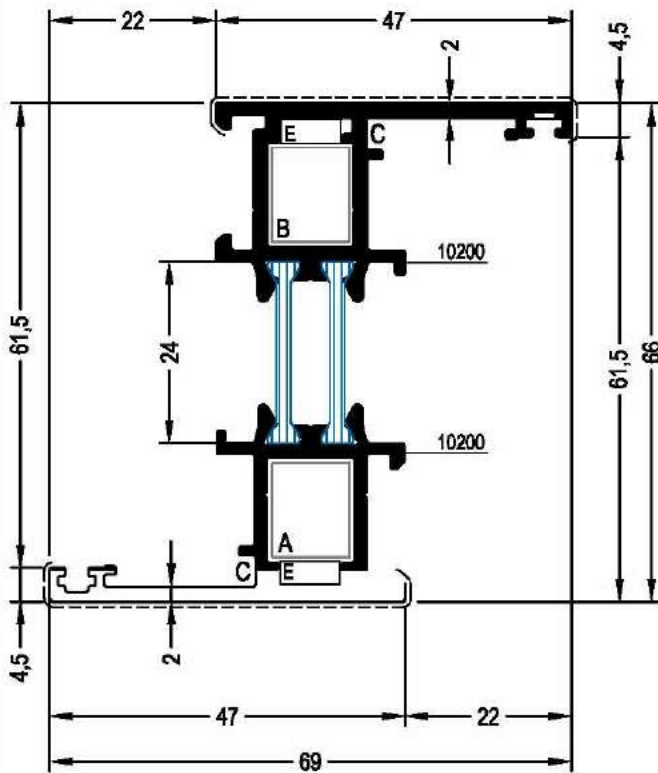
|                                       |                                       |                       |        |                          |  |
|---------------------------------------|---------------------------------------|-----------------------|--------|--------------------------|--|
| FRAME PROFILE                         |                                       | 57 / 57               |        |                          |  |
| PROFILE CODE                          |                                       | 19FW10                |        | THEORETICAL WEIGHT kg/ml |  |
|                                       |                                       |                       |        | 1.940                    |  |
| J <sub>xx</sub><br>(cm <sup>4</sup> ) | J <sub>yy</sub><br>(cm <sup>4</sup> ) | Covering Surface (cm) |        |                          |  |
|                                       |                                       | 10205                 |        | 10205                    |  |
| 27.888                                | 26.051                                | 6.665                 | 6.665  |                          |  |
| THERMO BREAK                          |                                       | LOCAL (Pvc)           |        |                          |  |
|                                       |                                       | —                     |        |                          |  |
| T JUNCTION                            |                                       | A                     | B      | C                        |  |
|                                       |                                       | 14JW04                | 14JW04 | —                        |  |
| CORNER CLEATS                         |                                       | A                     | B      | C                        |  |
|                                       |                                       | 14LW33                | 14LW33 | —                        |  |

FRAMES



|                                |                                |                       |        |                          |  |
|--------------------------------|--------------------------------|-----------------------|--------|--------------------------|--|
| FRAME PROFILE                  |                                | 83.2 / 83.2           |        |                          |  |
| PROFILE CODE                   |                                | 19FW11                |        | THEORETICAL WEIGHT kg/mt |  |
|                                |                                |                       |        | 2.504                    |  |
| $J_{xx}$<br>(cm <sup>4</sup> ) | $J_{yy}$<br>(cm <sup>4</sup> ) | Covering Surface (cm) |        |                          |  |
|                                |                                | 10230                 |        | 10230                    |  |
| 73.488                         | 37.757                         | 9.285                 |        | 9.285                    |  |
| THERMO BREAK                   |                                | LOCAL (Pvc)           |        |                          |  |
|                                |                                | —                     |        |                          |  |
| T JUNCTION                     |                                | A                     | B      | C                        |  |
|                                |                                | 14JW04                | 14JW04 | —                        |  |
| CORNER CLEATS                  |                                | A                     | B      | C                        |  |
|                                |                                | 14LW34                | 14LW34 | —                        |  |

FRAMES



FRAME PROFILE 47 / 47



FRAME PROFILE 62 / 62



PROFILE CODE

19FW05

THEORETICAL WEIGHT kg/ml  
1.490

PROFILE CODE

19FW06

THEORETICAL WEIGHT kg/ml  
1.819

J<sub>xx</sub>  
(cm<sup>4</sup>)

J<sub>yy</sub>  
(cm<sup>4</sup>)

Covering Surface (cm)

10200

10200

26.935

5.760

5.722

5.722

THERMO BREAK

LOCAL (Pvc)

---

J<sub>xx</sub>  
(cm<sup>4</sup>)

J<sub>yy</sub>  
(cm<sup>4</sup>)

Covering Surface (cm)

10202

10202

35.448

14.291

7.222

7.222

THERMO BREAK

LOCAL (Pvc)

---

CORNER CLEATS

A

B

C

D

E

PRESS CORNER

14LW14

14LW14

----

----

---

DIE-CAST CORNER JOINT

---

---

M.fuji 2000

----

---

P.V.C. CORNER JOINT

---

---

----

---

P.V.C.

CORNER CLEATS

A

B

C

D

E

PRESS CORNER

14LW32

14LW32

---

---

---

DIE-CAST CORNER JOINT

---

----

M.fuji 2000

---

---

P.V.C. CORNER JOINT

---

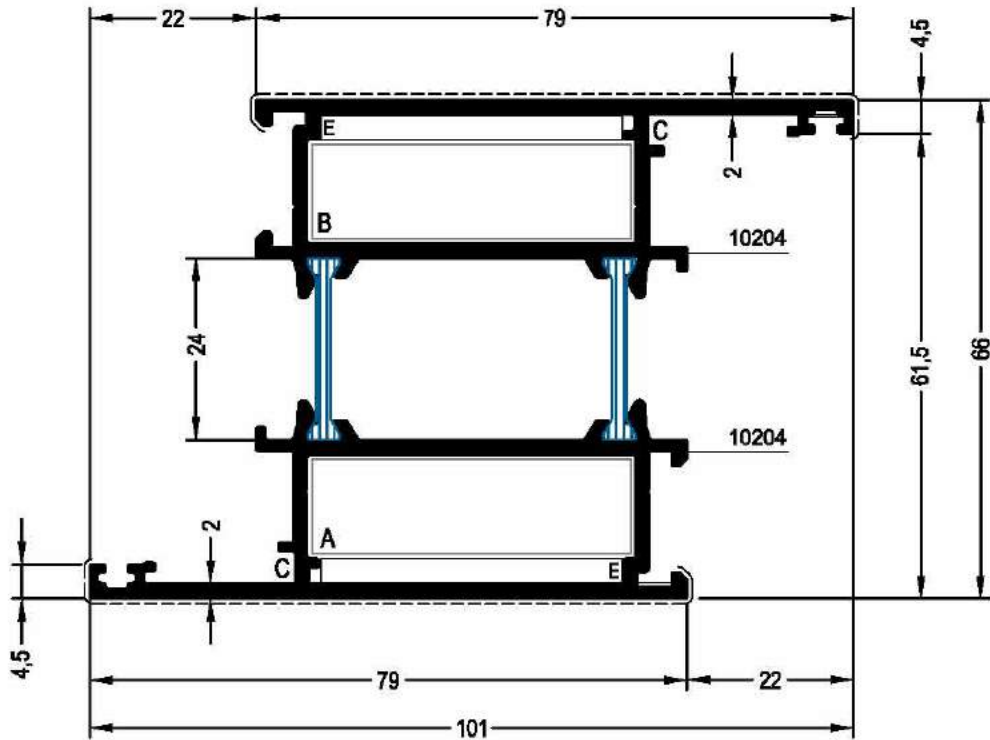
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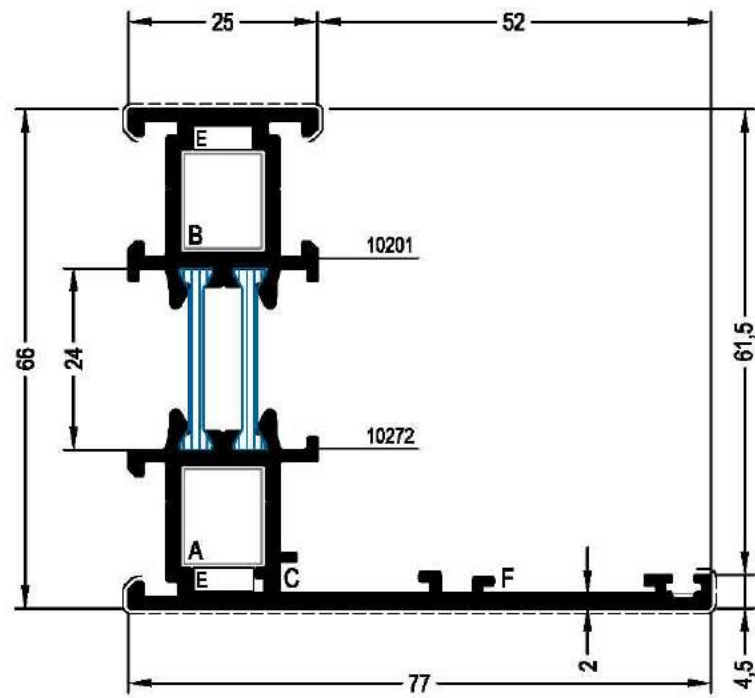
P.V.C.

FRAMES

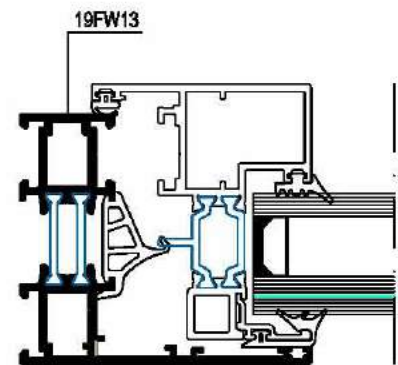


|                                    |                                    |                       |             |                          |        |
|------------------------------------|------------------------------------|-----------------------|-------------|--------------------------|--------|
| FRAME PROFILE                      |                                    | 79 / 79               |             |                          |        |
| PROFILE CODE                       |                                    | 19FW07                |             | THEORETICAL WEIGHT kg/mt |        |
|                                    |                                    |                       |             | 2.188                    |        |
| J <sub>xx</sub> (cm <sup>4</sup> ) | J <sub>yy</sub> (cm <sup>4</sup> ) | Covering Surface (cm) |             |                          |        |
|                                    |                                    | 10204                 |             | 10204                    |        |
| 51.599                             | 27.132                             | 8.922                 |             | 8.922                    |        |
| THERMO BREAK                       |                                    | LOCAL (Pvc)           |             |                          |        |
|                                    |                                    | —                     |             |                          |        |
| CORNER CLEATS                      | A                                  | B                     | C           | D                        | E      |
| PRESS CORNER                       | 14LW33                             | 14LW33                | —           | —                        | —      |
| DIE-CAST CORNER JOINT              | —                                  | —                     | M.fuji 2000 | —                        | —      |
| P.V.C. CORNER JOINT                | —                                  | —                     | —           | —                        | P.V.C. |

FRAMES

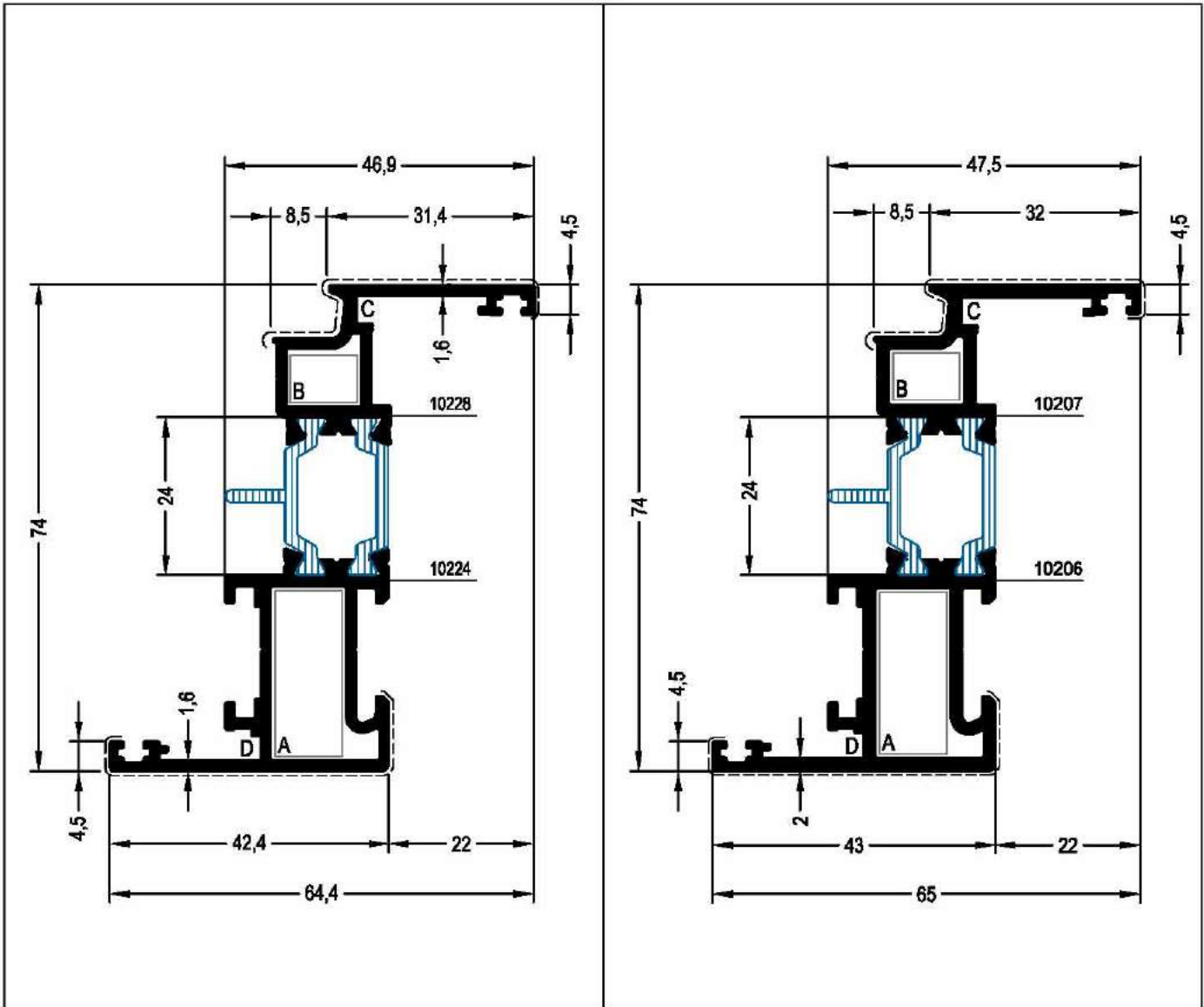




|                                       |                                       |                       |        |                          |   |        |       |
|---------------------------------------|---------------------------------------|-----------------------|--------|--------------------------|---|--------|-------|
| FRAME PROFILE                         |                                       | 25 / 77               |        |                          |   |        |       |
| PROFILE CODE                          |                                       | 19FW13                |        | THEORETICAL WEIGHT kg/mt |   |        |       |
|                                       |                                       |                       |        | 1.555                    |   |        |       |
| J <sub>xx</sub><br>(cm <sup>4</sup> ) | J <sub>yy</sub><br>(cm <sup>4</sup> ) | Covering Surface (cm) |        |                          |   |        |       |
|                                       |                                       | 10201                 |        | 10272                    |   |        |       |
| 32.923                                | 10.718                                | 3.465                 |        | 8.929                    |   |        |       |
| THERMO BREAK                          |                                       | LOCAL (Pvc)           |        |                          |   |        |       |
|                                       |                                       | —                     |        |                          |   |        |       |
| CORNER CLEATS                         |                                       | A                     | B      | C                        | D | E      | F     |
| PRESS CORNER                          |                                       | 14LW14                | 14LW14 | —                        | — | —      | —     |
| DIE-CAST CORNER JOINT                 |                                       | —                     | —      | M.fuji 2000              | — | —      | STEEL |
| P.V.C. CORNER JOINT                   |                                       | —                     | —      | —                        | — | P.V.C. | —     |



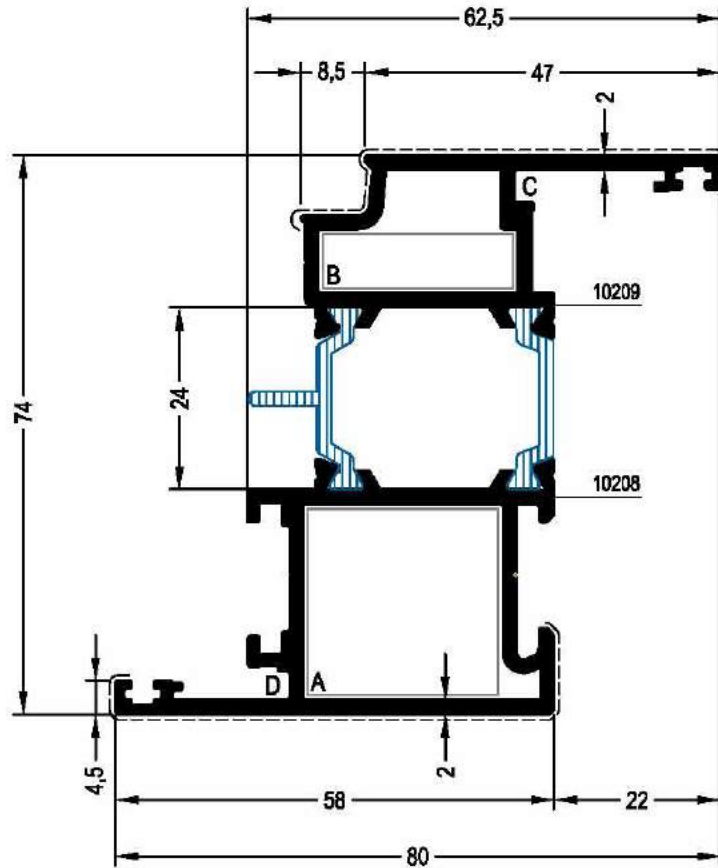


VENTS



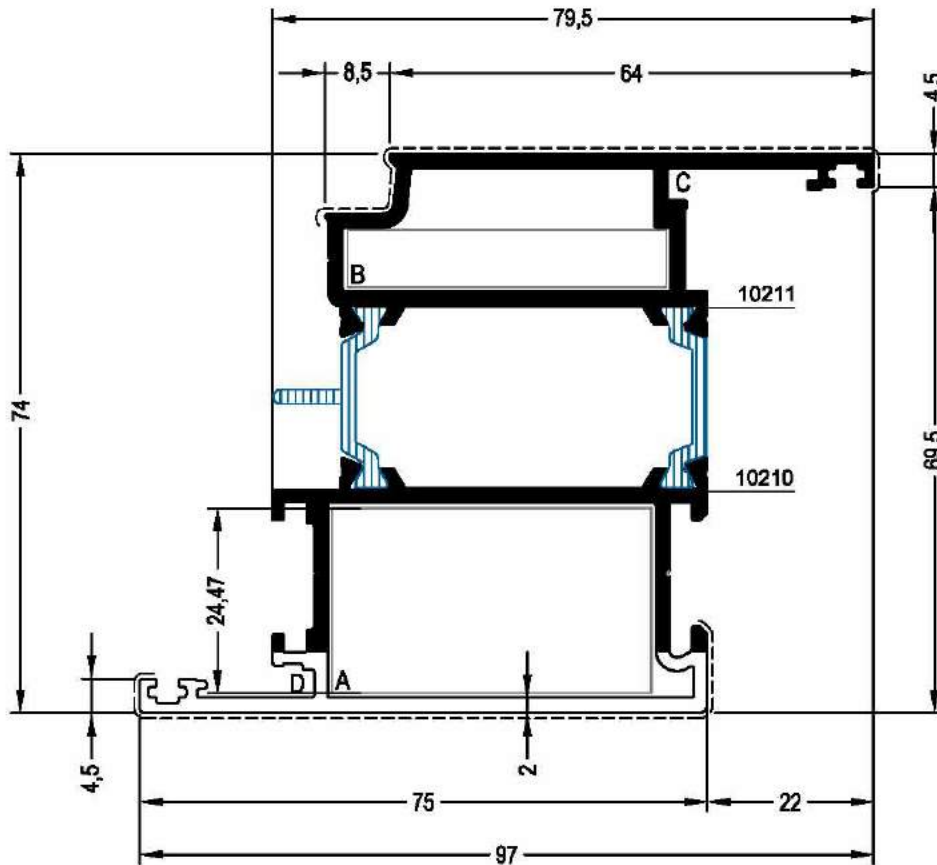
| VENT PROFILE 42.4  |                                    | Y<br>x — x            |        |                          |       | VENT PROFILE 43   |                                    | Y<br>x — x            |        |                          |       |
|--|------------------------------------|-----------------------|--------|--------------------------|-------|---|------------------------------------|-----------------------|--------|--------------------------|-------|
| PROFILE CODE   |                                    | 19VW07                |        | THEORETICAL WEIGHT kg/mt |       | PROFILE CODE  |                                    | 19VW01                |        | THEORETICAL WEIGHT kg/mt |       |
|  |                                    |                       |        | 1.398                    |       |   |                                    |                       |        | 1.547                    |       |
| J <sub>bx</sub> (cm <sup>4</sup> )   | J <sub>yy</sub> (cm <sup>4</sup> ) | Covering Surface (cm) |        |                          |       | J <sub>bx</sub> (cm <sup>4</sup> )  | J <sub>yy</sub> (cm <sup>4</sup> ) | Covering Surface (cm) |        |                          |       |
|  |                                    | 10228                 |        | 10224                    |       |   |                                    | 10207                 |        | 10206                    |       |
| 29.074   | 4.753                              | 5.999                 |        | 6.029                    |       | 32.907  | 5.386                              | 6.156                 |        | 6.089                    |       |
| THERMO BREAK   |                                    | LOCAL (Pvc)           |        | ----                     |       | THERMO BREAK  |                                    | LOCAL (Pvc)           |        | —                        |       |
| CORNER CLEATS  |                                    | A                     | B      | C                        | D     | CORNER CLEATS   |                                    | A                     | B      | C                        | D     |
| PRESS CORNER  |                                    | 14LW14                | 14LW14 | —                        | —     | PRESS CORNER  |                                    | 14LW14                | 14LW14 | —                        | —     |
| DIE-CAST CORNER JOINT  |                                    | —                     | —      | M.fuji 2000              | —     | DIE-CAST CORNER JOINT   |                                    | —                     | —      | M.fuji 2000              | —     |
| P.V.C. CORNER JOINT  |                                    | —                     | —      | —                        | MO 20 | P.V.C. CORNER JOINT   |                                    | —                     | —      | —                        | MO 20 |

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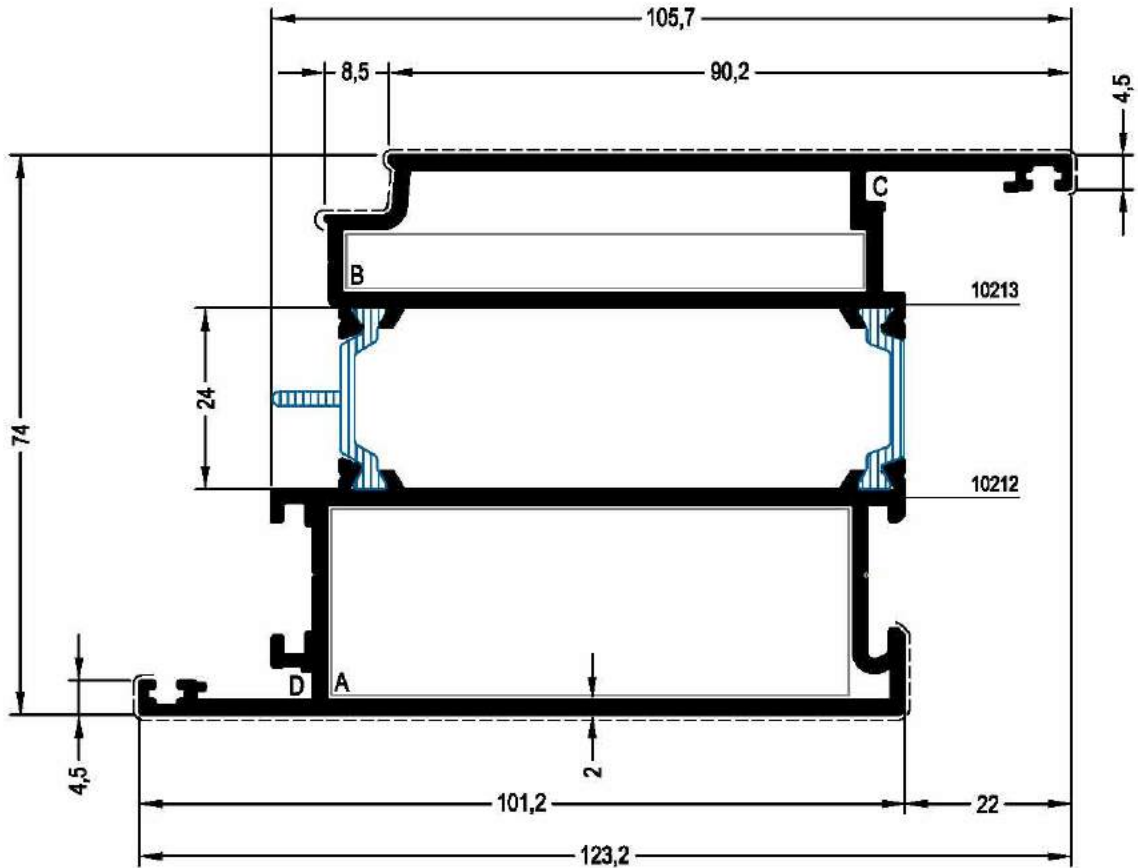
|                                    |                                    |                          |        |
|------------------------------------|------------------------------------|--------------------------|--------|
| VENT PROFILE 58                    |                                    |                          |        |
| PROFILE CODE                       |                                    | 19VW02                   |        |
|                                    |                                    | THEORETICAL WEIGHT kg/mt |        |
|                                    |                                    | 1.898                    |        |
| J <sub>xx</sub> (cm <sup>4</sup> ) | J <sub>yy</sub> (cm <sup>4</sup> ) | Covering Surface (cm)    |        |
|                                    |                                    | 10209                    | 10208  |
| 59.930                             | 20.865                             | 7.410                    | 7.739  |
| THERMO BREAK                       |                                    | LOCAL (Pvc)              |        |
|                                    |                                    | ---                      |        |
| CORNER CLEATS                      |                                    | A                        | B      |
|                                    |                                    | C                        | D      |
| PRESS CORNER                       |                                    | 14LW32                   | 14LW32 |
|                                    |                                    | ----                     | ---    |
| DIE-CAST CORNER JOINT              |                                    | ---                      | ----   |
|                                    |                                    | M.fuji 2000              | ---    |
| P.V.C. CORNER JOINT                |                                    | ---                      | ----   |
|                                    |                                    | ---                      | MO 20  |

INSIDE OPENING VENT PROFILES



|                                    |                                    |                          |             |
|------------------------------------|------------------------------------|--------------------------|-------------|
| VENT PROFILE 75                    |                                    |                          |             |
| PROFILE CODE                       |                                    | 19VW03                   |             |
|                                    |                                    | THEORETICAL WEIGHT kg/mt |             |
|                                    |                                    | 2.266                    |             |
| J <sub>bx</sub> (cm <sup>4</sup> ) | J <sub>yy</sub> (cm <sup>4</sup> ) | Covering Surface (cm)    |             |
|                                    |                                    | 10211                    | 10210       |
| 60.166                             | 30.842                             | 9.110                    | 9.439       |
| THERMO BREAK                       |                                    | LOCAL (Pvc)              |             |
|                                    |                                    | ---                      |             |
| CORNER CLEATS                      |                                    | A                        | B           |
|                                    |                                    | C                        | D           |
| PRESS CORNER                       |                                    | 14LW33                   | 14LW33      |
|                                    |                                    | ----                     | ---         |
| DIE-CAST CORNER JOINT              |                                    | ---                      | M.fuji 2000 |
|                                    |                                    | ----                     | ---         |
| P.V.C. CORNER JOINT                |                                    | ---                      | MO 20       |
|                                    |                                    | ----                     | ---         |

INSIDE OPENING VENT PROFILES

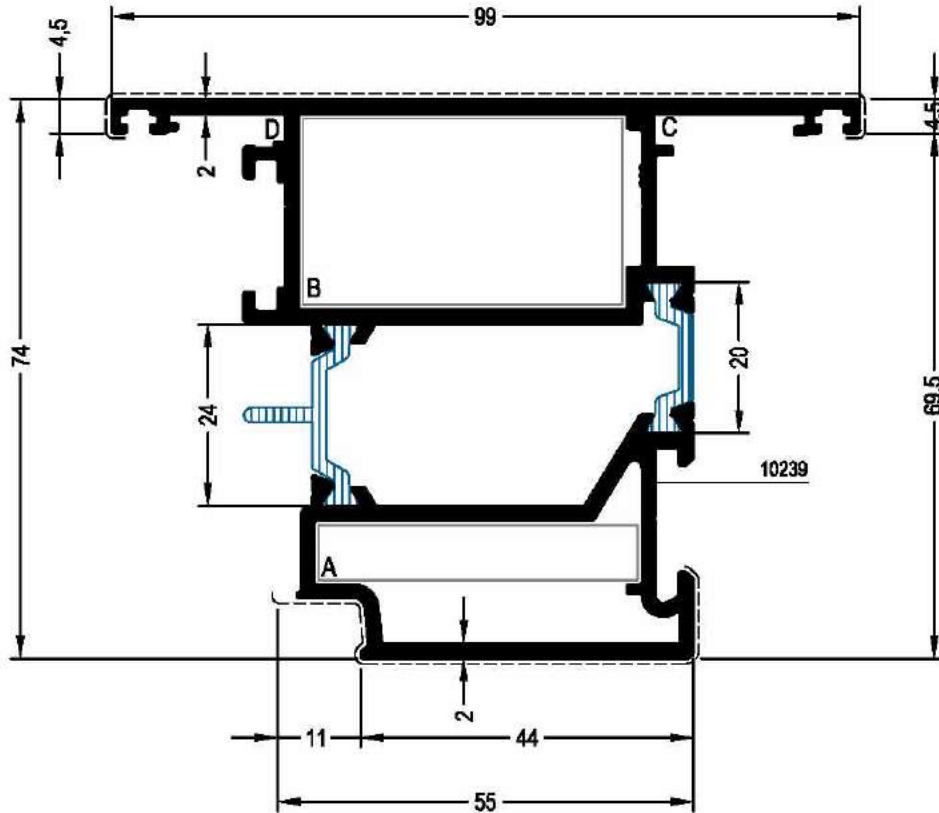


INSIDE OPENING VENT PROFILE 101.2




|                        |                        |                       |        |                          |       |
|------------------------|------------------------|-----------------------|--------|--------------------------|-------|
| PROFILE CODE           |                        | 19VW04                |        | THEORETICAL WEIGHT kg/ml |       |
|                        |                        |                       |        | 2.835                    |       |
| Jxx (cm <sup>4</sup> ) | Jyy (cm <sup>4</sup> ) | Covering Surface (cm) |        |                          |       |
|                        |                        | 10213                 | 10212  |                          |       |
| 52.031                 | 114.999                | 11.647                | 12.059 |                          |       |
| THERMO BREAK           |                        | LOCAL (Pvc)           |        | ---                      |       |
| CORNER CLEATS          |                        | A                     | B      | C                        | D     |
| PRESS CORNER           |                        | 14LW34                | 14LW34 | ---                      | ---   |
| DIE-CAST CORNER JOINT  |                        | ---                   | ---    | M.fuji 2000              | ---   |
| P.V.C. CORNER JOINT    |                        | ---                   | ---    | ---                      | MO 20 |

OUTSIDE OPENING VENT PROFILES

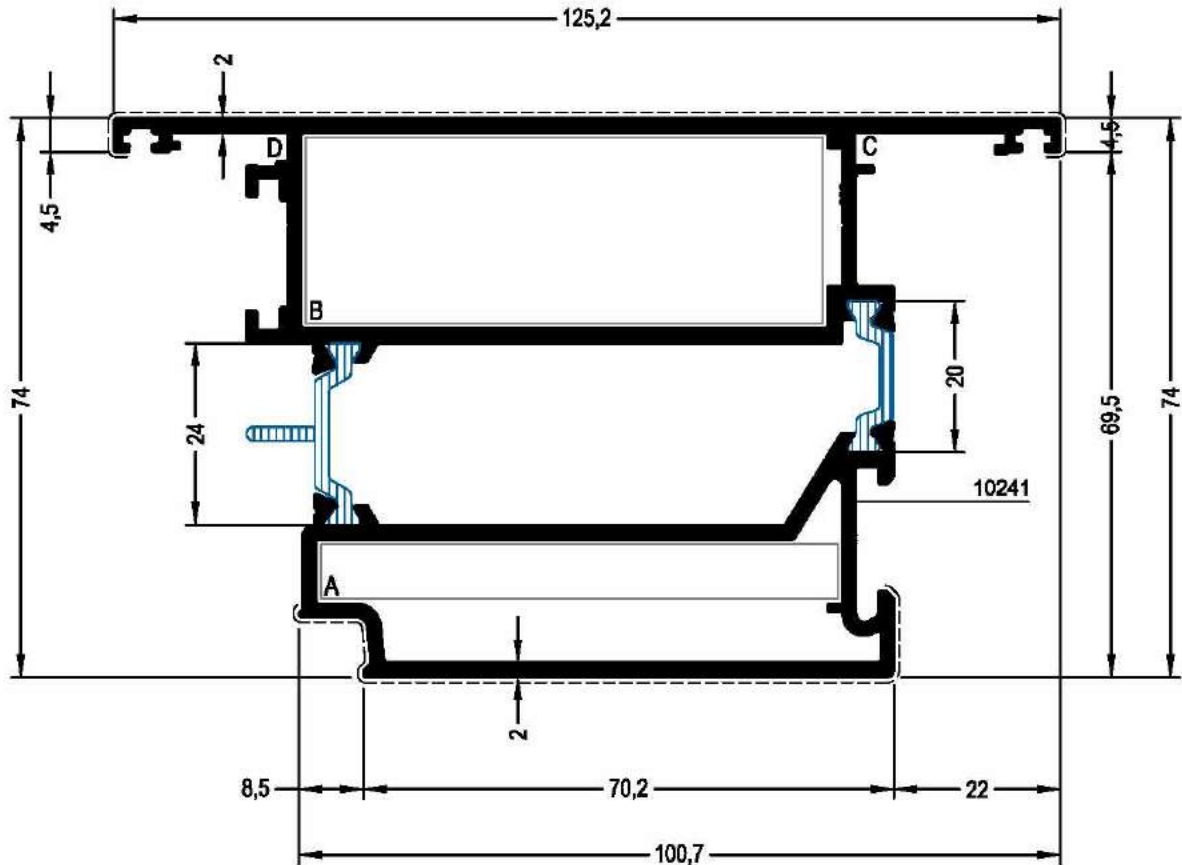


OUTSIDE OPENING VENT PROFILE 44



|                                    |   |                       |        |                          |       |
|------------------------------------|---|-----------------------|--------|--------------------------|-------|
| PROFILE CODE                       |   | 19VW05                |        | THEORETICAL WEIGHT kg/ml |       |
|                                    |   |                       |        | 2.381                    |       |
| J <sub>xx</sub> (cm <sup>4</sup> ) | J <sub>yy</sub> (cm <sup>4</sup> )  | Covering Surface (cm) |        |                          |       |
|                                    |   | 10240                 | 10239  |                          |       |
| 49.750                             | 44.641  | 11.279                | 7.675  |                          |       |
| THERMO BREAK                       |   | LOCAL (Pvc)           |        | —                        |       |
| CORNER CLEATS                      |   | A                     | B      | C                        | D     |
| PRESS CORNER                       |  | 14LW33                | 14LW33 | —                        | —     |
| DIE-CAST CORNER JOINT              |   | ----                  | ----   | M.fuji 2000              | —     |
| P.V.C. CORNER JOINT                |   | ----                  | ----   | —                        | MO 20 |

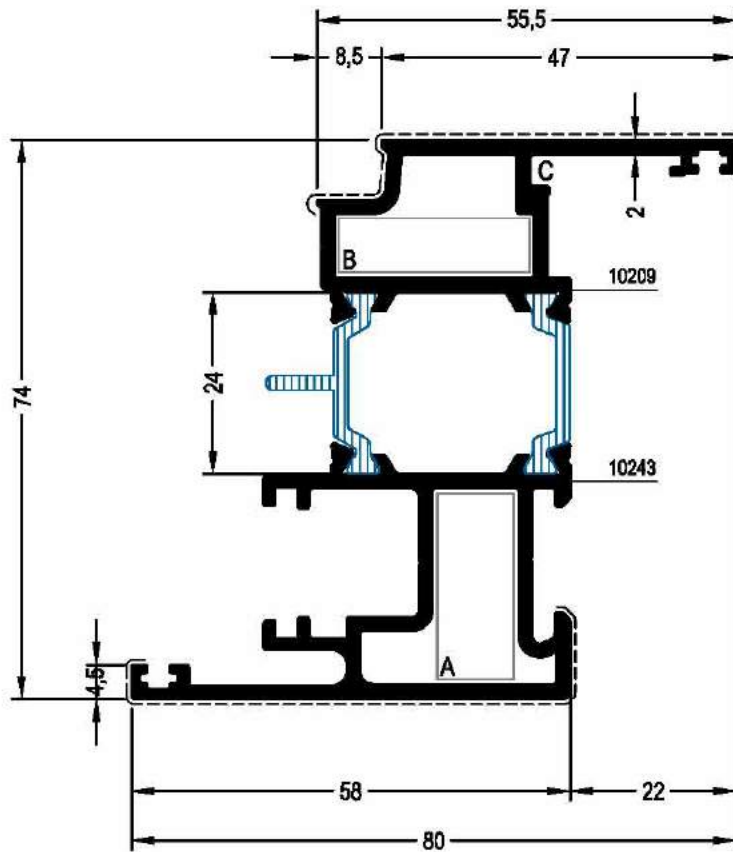
OUTSIDE OPENING VENT PROFILES



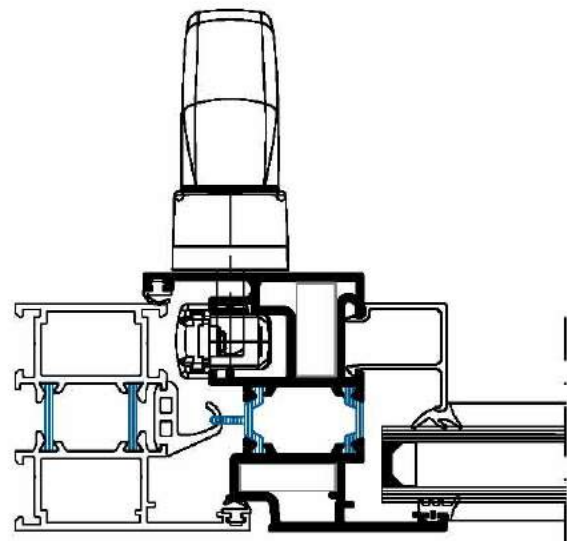
| OUTSIDE OPENING VENT PROFILE 70.2     |                                       |                                     |        |                          |       |
|---------------------------------------|---------------------------------------|-------------------------------------|--------|--------------------------|-------|
| PROFILE CODE                          |                                       | 19VW06                              |        | THEORETICAL WEIGHT kg/mt |       |
|                                       |                                       |                                     |        | 2.952                    |       |
| J <sub>xx</sub><br>(cm <sup>4</sup> ) | J <sub>yy</sub><br>(cm <sup>4</sup> ) | Covering Surface (cm <sup>2</sup> ) |        |                          |       |
|                                       |                                       | 10242                               |        | 10241                    |       |
| 59.304                                | 114.659                               | 13.899                              |        | 10.357                   |       |
| THERMO BREAK                          |                                       | LOCAL (Pvc)                         |        | —                        |       |
| CORNER CLEATS                         |                                       | A                                   | B      | C                        | D     |
| PRESS CORNER                          |                                       | 14LW34                              | 14LW34 | —                        | —     |
| DIE-CAST CORNER JOINT                 |                                       | —                                   | —      | M.fuji 2000              | —     |
| P.V.C. CORNER JOINT                   |                                       | —                                   | —      | —                        | MO 20 |



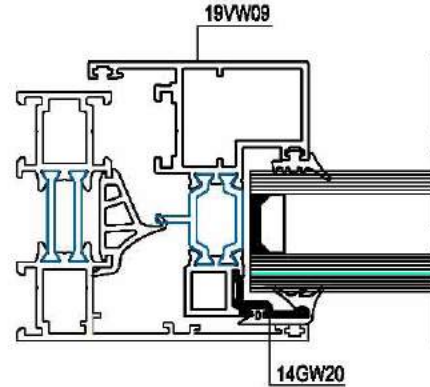
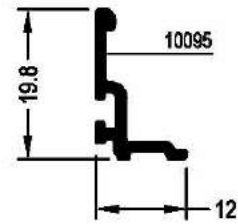
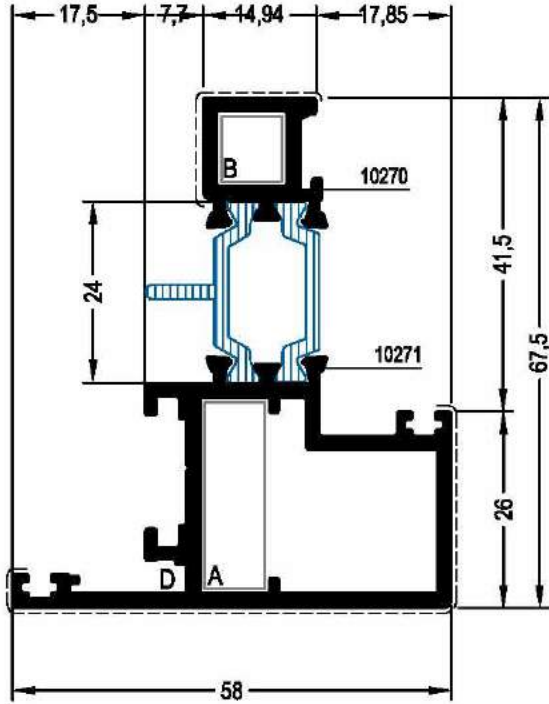
VENTS



|                                    |                                    |                                     |             |
|------------------------------------|------------------------------------|-------------------------------------|-------------|
| VENT PROFILE 58                    |                                    |                                     |             |
| PROFILE CODE                       |                                    | 19VW08                              |             |
|                                    |                                    | THEORETICAL WEIGHT kg/mt            |             |
|                                    |                                    | 1.960                               |             |
| J <sub>xx</sub> (cm <sup>4</sup> ) | J <sub>yy</sub> (cm <sup>4</sup> ) | Covering Surface (cm <sup>2</sup> ) |             |
|                                    |                                    | 10209                               | 10243       |
| 43.773                             | 14.745                             | 7.410                               | 7.797       |
| THERMO BREAK                       |                                    | LOCAL (Pvc)                         |             |
|                                    |                                    | ---                                 |             |
| CORNER CLEATS                      |                                    | A                                   | B           |
|                                    |                                    | C                                   | D           |
| PRESS CORNER                       |                                    | 14LW14                              | 14LW32      |
| DIE-CAST CORNER JOINT              |                                    | ----                                | M.fuji 2000 |
| P.V.C. CORNER JOINT                |                                    | ----                                | ----        |



VENTS



VENT PROFILE 58



PROFILE CODE

19VW09

THEORETICAL WEIGHT kg/m

1.447

J<sub>xx</sub> (cm<sup>4</sup>)

J<sub>yy</sub> (cm<sup>4</sup>)

Covering Surface (cm)

10270

10271

21.938

9.398

3.246

9.307

THERMO BREAK

LOCAL (Pvc)

---

CORNER CLEATS

A

B

C

D

PRESS CORNER



14LW45

14LW45

---

---

DIE-CAST CORNER JOINT

---

---

---

---

P.V.C. CORNER JOINT

---

---

---

MO 20

GLAZING BEAD 12 / 19.8



PROFILE CODE

14GW20

THEORETICAL WEIGHT kg/m

0.132

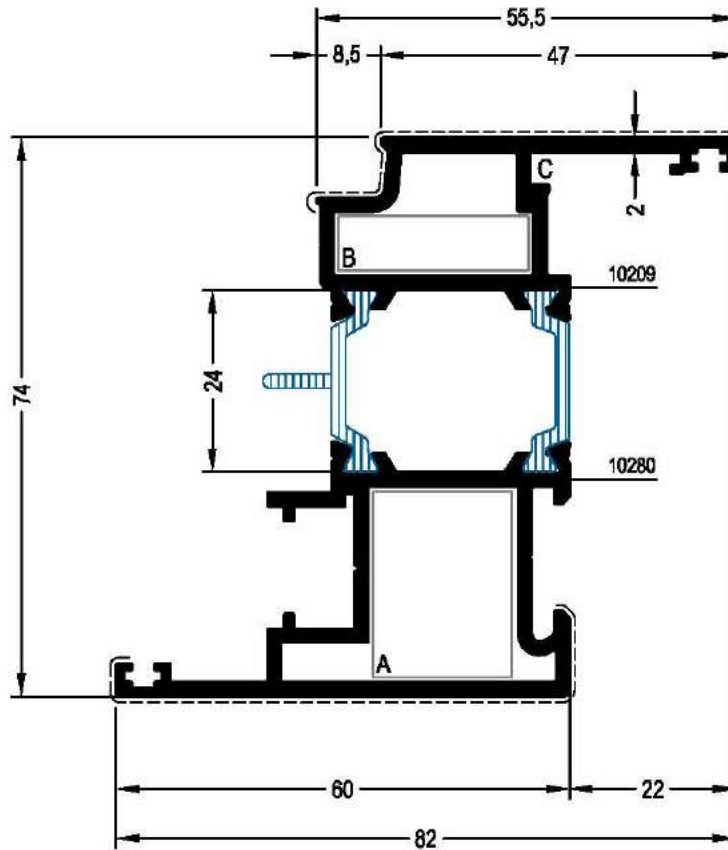
J<sub>xx</sub> (cm<sup>4</sup>)

J<sub>yy</sub> (cm<sup>4</sup>)

Covering Surface (cm)

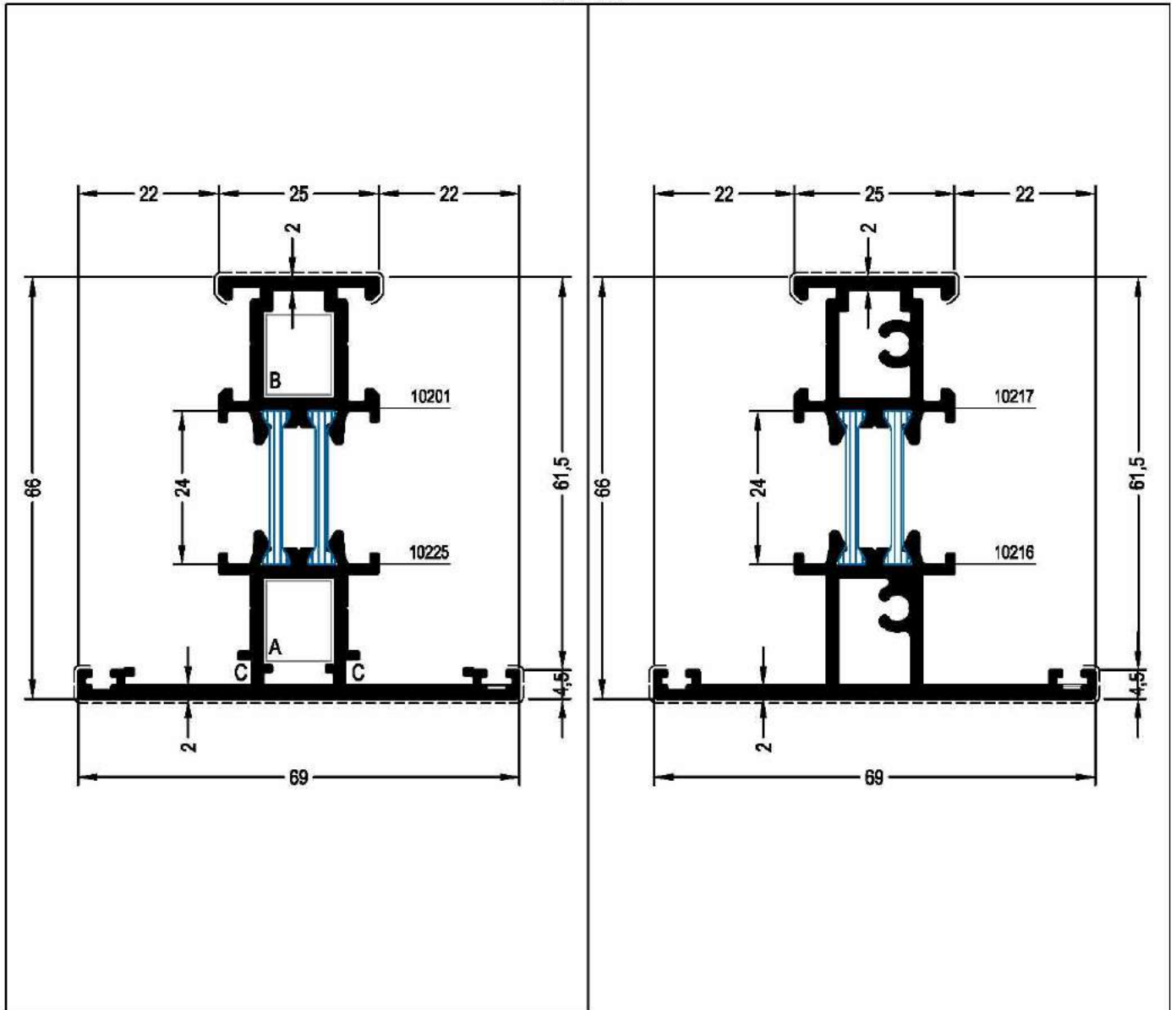
10095

VENTS for P.V.C. ACCESSORIES



| VENT PROFILE 60             |                             |                          |             |
|-----------------------------|-----------------------------|--------------------------|-------------|
| PROFILE CODE                |                             | 19VW11                   |             |
|                             |                             | THEORETICAL WEIGHT kg/mt |             |
|                             |                             | 1.930                    |             |
| $J_{xx}$ (cm <sup>4</sup> ) | $J_{yy}$ (cm <sup>4</sup> ) | Covering Surface (cm)    |             |
|                             |                             | 10209                    | 10280       |
| 44.486                      | 14.826                      | 7.410                    | 7.997       |
| THERMO BREAK                |                             | LOCAL (Pvc)              |             |
|                             |                             | ---                      |             |
| CORNER CLEATS               |                             | A                        | B           |
|                             |                             | C                        | D           |
| PRESS CORNER                |                             | 14LW35                   | 14LW32      |
|                             |                             | ---                      | ---         |
| DIE-CAST CORNER JOINT       |                             | ---                      | M.fuji 2000 |
|                             |                             | ---                      | ---         |
| P.V.C. CORNER JOINT         |                             | ---                      | ---         |

MULLION

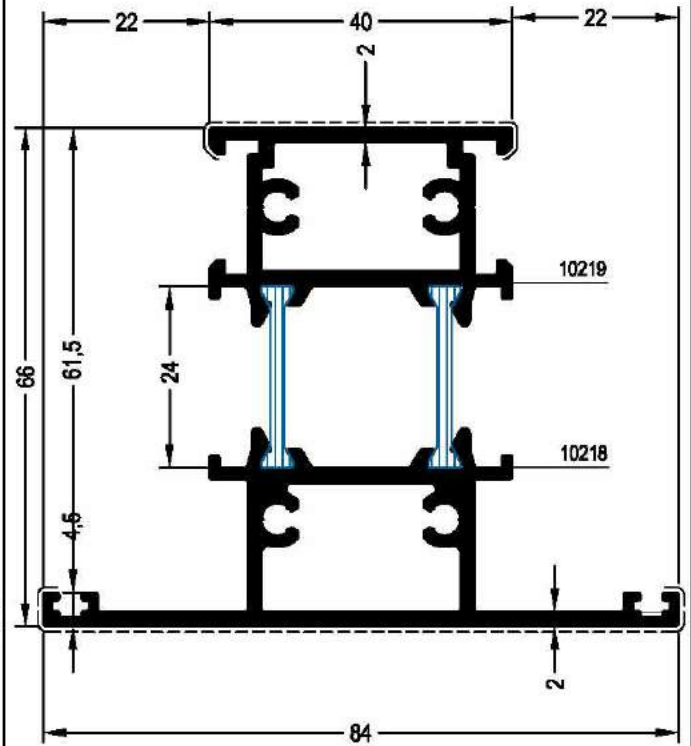
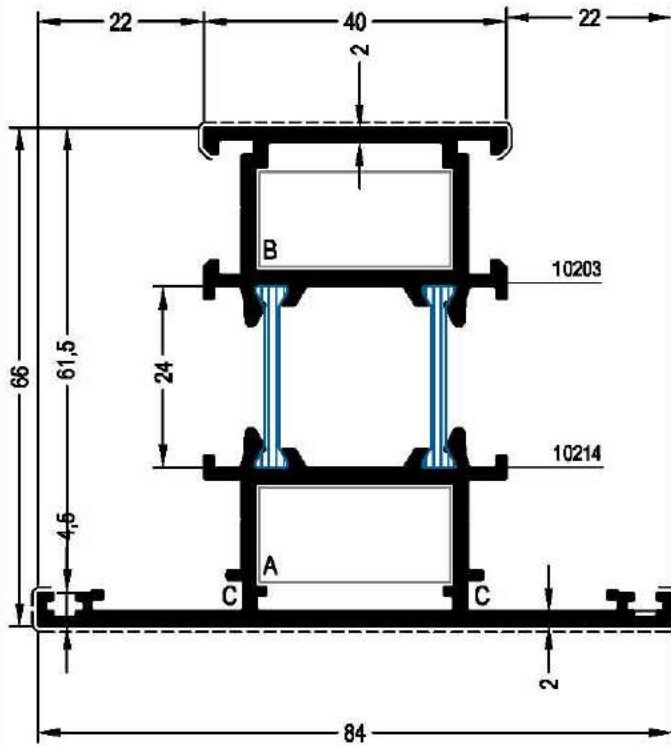


| PROFILE CODE                       |                                    | 19MW01                |        | THEORETICAL WEIGHT kg/mt |  |
|------------------------------------|------------------------------------|-----------------------|--------|--------------------------|--|
|                                    |                                    |                       |        | 1.499                    |  |
| J <sub>xx</sub> (cm <sup>4</sup> ) | J <sub>yy</sub> (cm <sup>4</sup> ) | Covering Surface (cm) |        |                          |  |
| 22.760                             | 8.590                              | 10201                 | 10225  |                          |  |
|                                    |                                    | 3.465                 | 8.279  |                          |  |
| THERMO BREAK                       |                                    | LOCAL (Pvc)           |        | —                        |  |
| T JUNCTION                         |                                    | A                     | B      | C                        |  |
|                                    |                                    | 14JW05                | 14JW04 | —                        |  |
| CORNER CLEATS                      |                                    | A                     | B      | C                        |  |
|                                    |                                    | 14LW14                | 14LW14 | M.fuji 2000              |  |

| PROFILE CODE                       |                                    | 19MW04                |       | THEORETICAL WEIGHT kg/mt |  |
|------------------------------------|------------------------------------|-----------------------|-------|--------------------------|--|
|                                    |                                    |                       |       | 1.570                    |  |
| J <sub>xx</sub> (cm <sup>4</sup> ) | J <sub>yy</sub> (cm <sup>4</sup> ) | Covering Surface (cm) |       |                          |  |
| 23.864                             | 8.636                              | 10217                 | 10216 |                          |  |
|                                    |                                    | 3.465                 | 8.279 |                          |  |
| THERMO BREAK                       |                                    | LOCAL (Pvc)           |       | —                        |  |

MULLION



TRANSOM MULLION PROFILE 40 / 84

|              |        |                          |       |
|--------------|--------|--------------------------|-------|
| PROFILE CODE | 19MW02 | THEORETICAL WEIGHT kg/ml | 1.834 |
|--------------|--------|--------------------------|-------|

| J <sub>xx</sub> (cm <sup>4</sup> ) | J <sub>yy</sub> (cm <sup>4</sup> ) | Covering Surface (cm) |       |
|------------------------------------|------------------------------------|-----------------------|-------|
|                                    |                                    | 10203                 | 10214 |
| 28.683                             | 20.061                             | 4.965                 | 9.779 |

|              |             |   |
|--------------|-------------|---|
| THERMO BREAK | LOCAL (Pvc) | — |
|--------------|-------------|---|

|            |  |        |        |   |
|------------|--|--------|--------|---|
| T JUNCTION |  | A      | B      | C |
|            |  | 14JW05 | 14JW04 | — |

|               |  |        |        |             |
|---------------|--|--------|--------|-------------|
| CORNER CLEATS |  | A      | B      | C           |
|               |  | 14LW32 | 14LW32 | M.fuji 2000 |

TRANSOM MULLION PROFILE 40 / 84

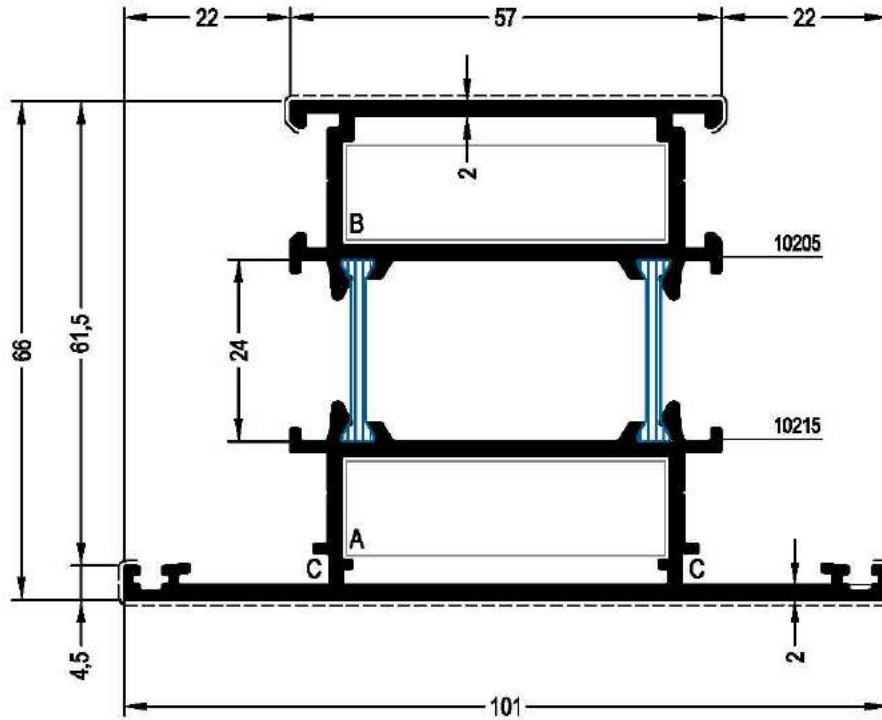
|              |        |                          |       |
|--------------|--------|--------------------------|-------|
| PROFILE CODE | 19MW05 | THEORETICAL WEIGHT kg/ml | 2.007 |
|--------------|--------|--------------------------|-------|



| J <sub>xx</sub> (cm <sup>4</sup> ) | J <sub>yy</sub> (cm <sup>4</sup> ) | Covering Surface (cm) |       |
|------------------------------------|------------------------------------|-----------------------|-------|
|                                    |                                    | 10219                 | 10218 |
| 30.945                             | 21.025                             | 4.965                 | 9.779 |

|              |             |   |
|--------------|-------------|---|
| THERMO BREAK | LOCAL (Pvc) | — |
|--------------|-------------|---|

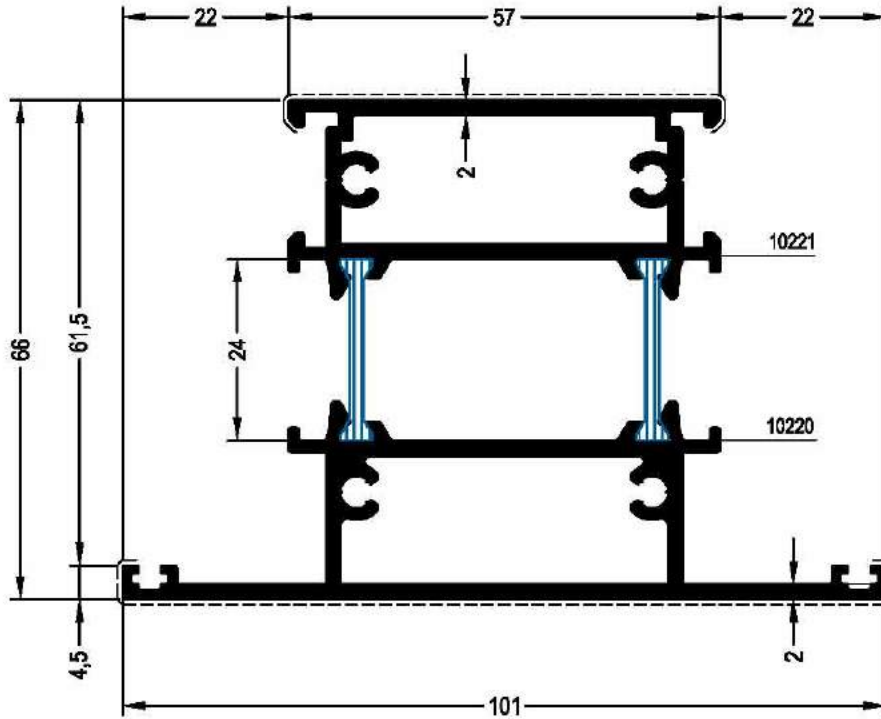


MULLION



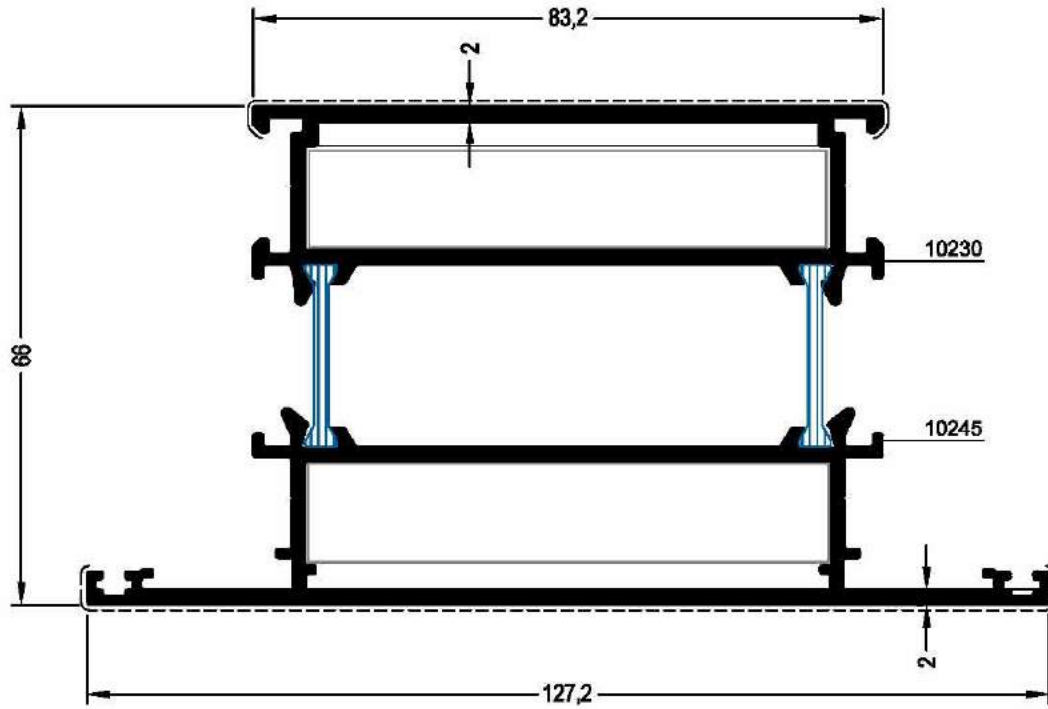
| TRANSOM MULLION PROFILE 57 / 101 |   |                         |             |
|----------------------------------|---|-------------------------|-------------|
| PROFILE CODE                     |   | 19MW03                  |             |
|                                  |   | THEORETICAL WEIGHT kg/m |             |
|                                  |   | 2.202                   |             |
| $J_{xx}$ (cm <sup>4</sup> )      | $J_{yy}$ (cm <sup>4</sup> )   | Covering Surface (cm)   |             |
|                                  |   | 10205                   | 10215       |
| 42.758                           | 35.277  | 6.665                   | 11.479      |
| THERMO BREAK                     |   | LOCAL (Pvc)             |             |
|                                  |   | —                       |             |
| T JUNCTION                       |  | A                       | B           |
|                                  |   | 14JW05                  | 14JW04      |
|                                  |   |                         | —           |
| CORNER CLEATS                    |  | A                       | B           |
|                                  |   | 14LW33                  | 14LW33      |
|                                  |   |                         | M.fuji 2000 |

MULLION



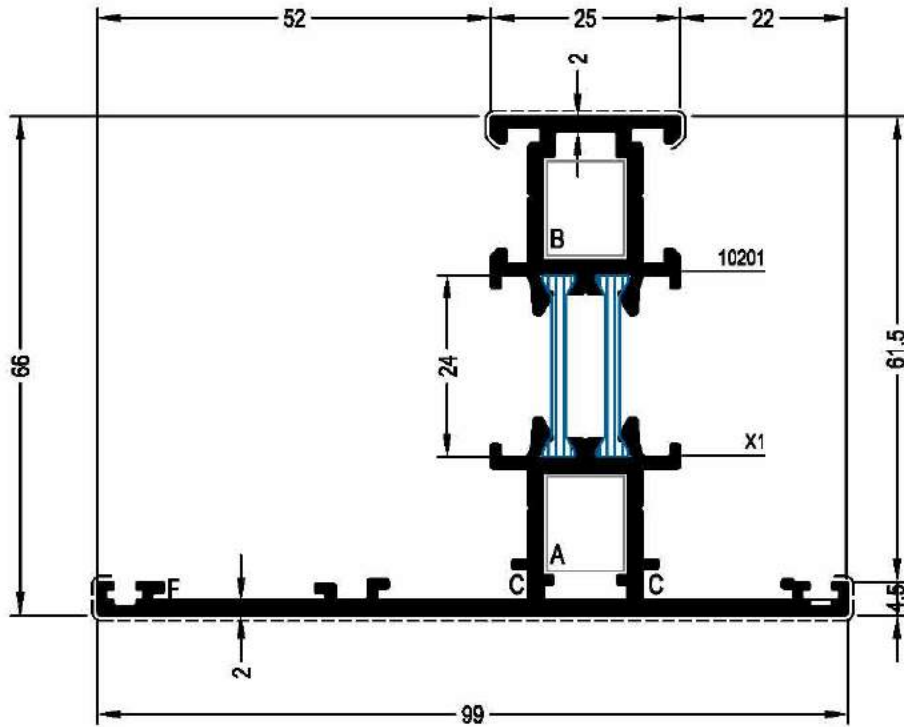
|                                    |                                    |                       |  |                          |  |
|------------------------------------|------------------------------------|-----------------------|--|--------------------------|--|
| TRANSOM MULLION PROFILE 57 / 101   |                                    |                       |  |                          |  |
| PROFILE CODE                       |                                    | 19MW06                |  | THEORETICAL WEIGHT kg/mt |  |
|                                    |                                    |                       |  | 2.375                    |  |
|                                    |                                    | Covering Surface (cm) |  |                          |  |
|                                    |                                    | 10221                 |  | 10220                    |  |
| J <sub>xx</sub> (cm <sup>4</sup> ) | J <sub>yy</sub> (cm <sup>4</sup> ) | 6.665                 |  | 11.479                   |  |
| 45.532                             | 37.493                             |                       |  |                          |  |
| THERMO BREAK                       |                                    | LOCAL (Pvc)           |  |                          |  |
|                                    |                                    | —                     |  |                          |  |



MULLION

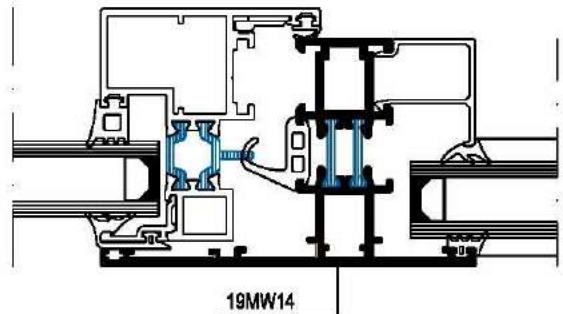


| TRANSOM MULLION PROFILE     |                             | 86 / 130              |        |                          |  |
|-----------------------------|-----------------------------|-----------------------|--------|--------------------------|--|
| PROFILE CODE                |                             | 19MW07                |        | THEORETICAL WEIGHT kg/mt |  |
|                             |                             |                       |        | 2.768                    |  |
| $J_{xx}$ (cm <sup>4</sup> ) | $J_{yy}$ (cm <sup>4</sup> ) | Covering Surface (cm) |        |                          |  |
|                             |                             | 10244                 | 10245  |                          |  |
| 46.415                      | 110.679                     | 9.565                 | 14.379 |                          |  |
| THERMO BREAK                |                             | LOCAL (Pvc)           |        | —                        |  |
| T JUNCTION                  |                             | A                     | B      | C                        |  |
|                             |                             | 14JW05                | 14JW04 | —                        |  |
| CORNER CLEATS               |                             | A                     | B      | C                        |  |
|                             |                             | 14LW34                | 14LW34 | M.fuj  2000              |  |

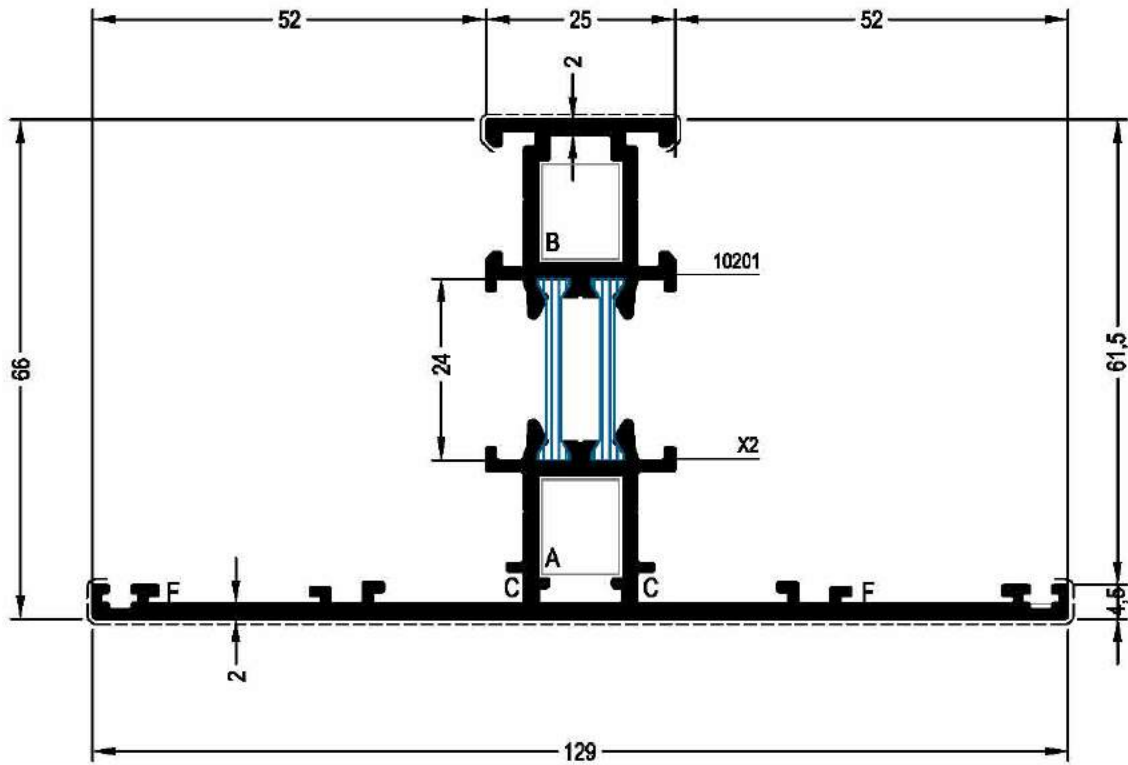
MULLION





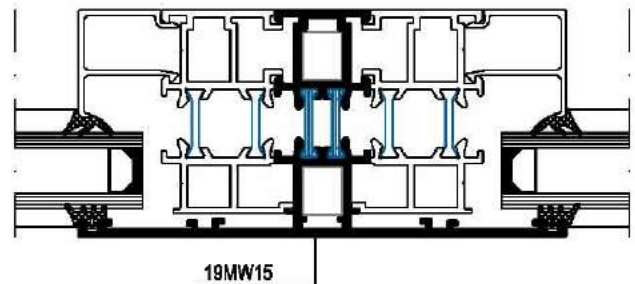
| TRANSOM MULLION PROFILE 25 / 99    |   |                       |        |                          |       |
|------------------------------------|---|-----------------------|--------|--------------------------|-------|
| PROFILE CODE                       |   | 19MW14                |        | THEORETICAL WEIGHT kg/mt |       |
|                                    |   |                       |        | 1.695                    |       |
| J <sub>xx</sub> (cm <sup>4</sup> ) | J <sub>yy</sub> (cm <sup>4</sup> )  | Covering Surface (cm) |        |                          |       |
|                                    |   | 10201                 | X1     |                          |       |
| 33.114                             | 18.308  | 3.465                 | 11.299 |                          |       |
| THERMO BREAK                       |   | LOCAL (Pvc) -----     |        |                          |       |
| T JUNCTION                         |  | A                     | B      | C                        |       |
|                                    |   | 14JW05                | 14JW04 | —                        | —     |
| CORNER CLEATS                      |  | A                     | B      | C                        | F     |
|                                    |   | 14LW14                | 14LW14 | M.fuji 2000              | STEEL |



MULLION

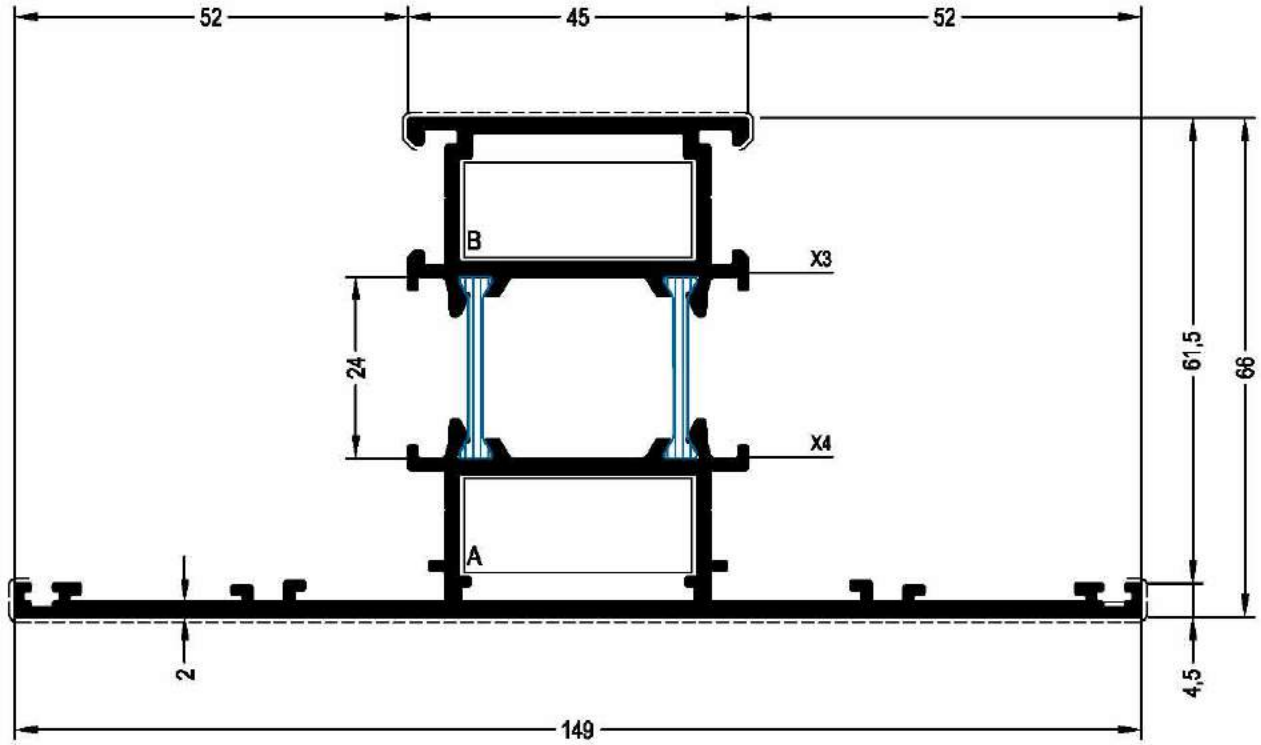


| TRANSOM MULLION PROFILE 25 / 129 |   |                       |        |                          |
|----------------------------------|---|-----------------------|--------|--------------------------|
| PROFILE CODE                     |   | <b>19MW15</b>         |        | THEORETICAL WEIGHT kg/ml |
|                                  |   |                       |        | <b>1.885</b>             |
| $J_{xx}$ (cm <sup>4</sup> )      | $J_{yy}$ (cm <sup>4</sup> )   | Covering Surface (cm) |        |                          |
|                                  |   | 10201                 | X2     |                          |
| 45.113                           | 29.198  | 3.465                 | 14.278 |                          |
| THERMO BREAK                     |   | LOCAL (Pvc)           |        |                          |
|                                  |   | ----                  |        |                          |
| T JUNCTION                       |  | A                     | B      | C                        |
|                                  |   | 14JW05                | 14JW04 | —                        |
| CORNER CLEATS                    |  | A                     | B      | C                        |
|                                  |   | 14LW14                | 14LW14 | M.fujl 2000              |
|                                  |   |                       |        | STEEL                    |

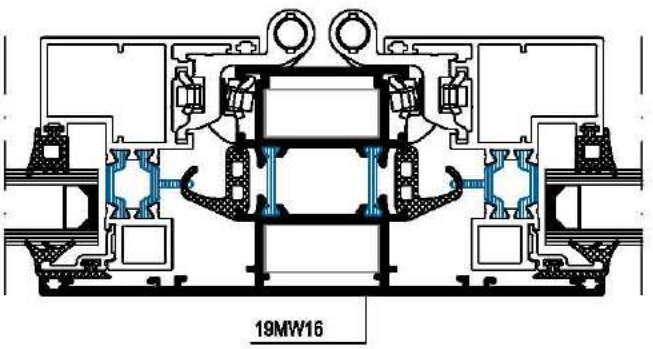




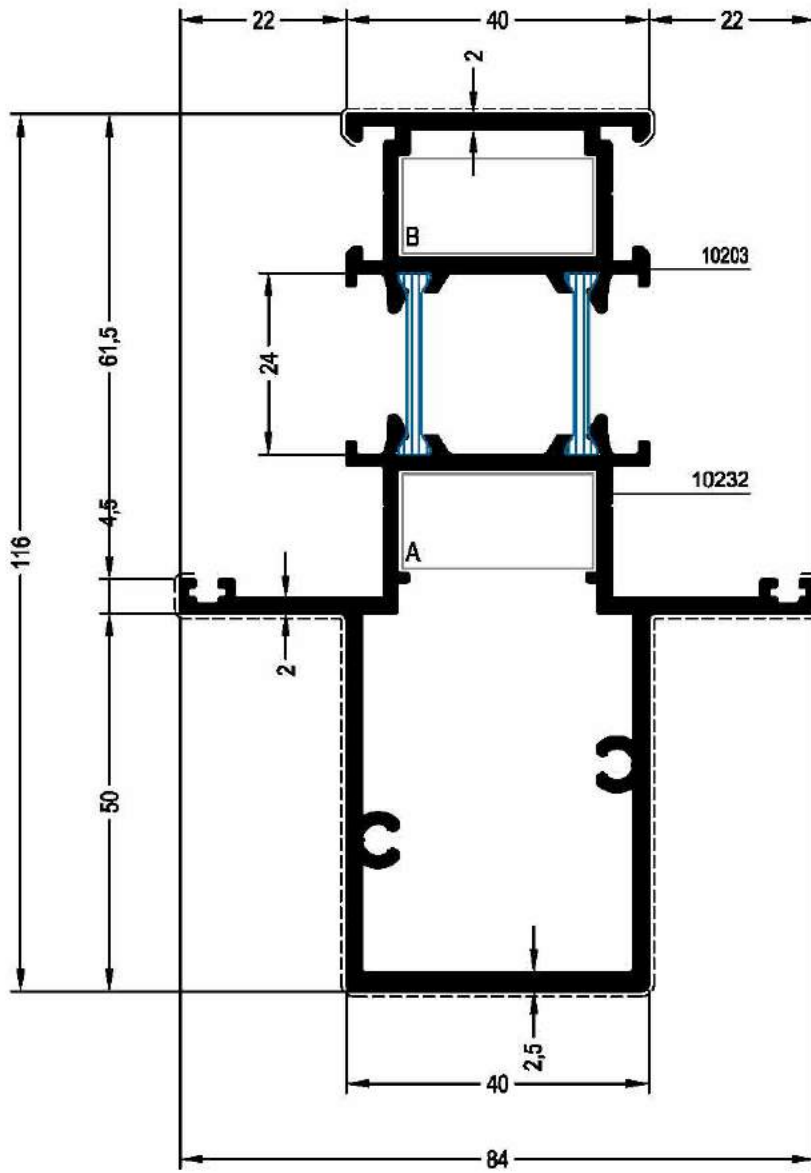
MULLION




| TRANSOM MULLION PROFILE 45 / 149   |                                    |                         |        |
|------------------------------------|------------------------------------|-------------------------|--------|
| PROFILE CODE                       |                                    | 19MW16                  |        |
|                                    |                                    | THEORETICAL WEIGHT kg/m |        |
|                                    |                                    | 2.323                   |        |
| J <sub>xx</sub> (cm <sup>4</sup> ) | J <sub>yy</sub> (cm <sup>4</sup> ) | Covering Surface (cm)   |        |
|                                    |                                    | X3                      | X4     |
| 77.666                             | 37.979                             | 5.465                   | 16.278 |
| THERMO BREAK                       |                                    | LOCAL (Pvc)             |        |
| T JUNCTION                         |                                    | A                       | B      |
|                                    |                                    | 14JW05                  | 14JW04 |

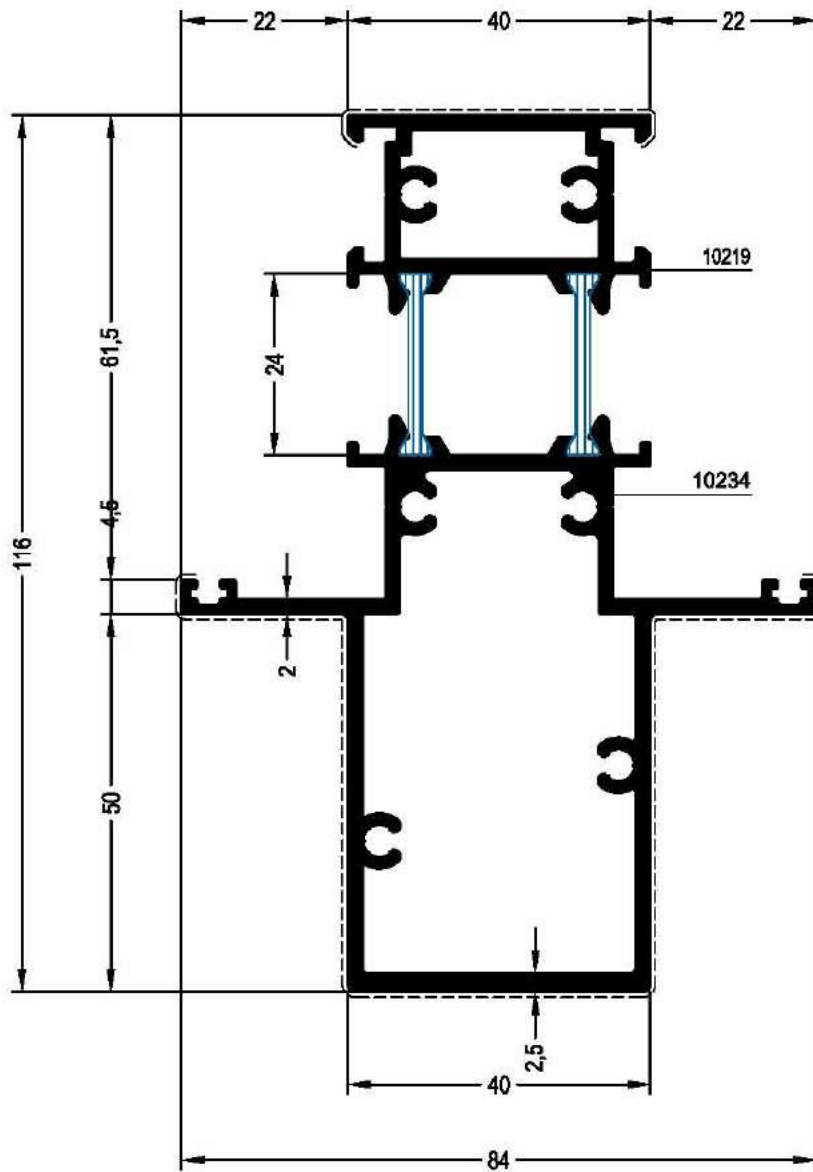


MULLION



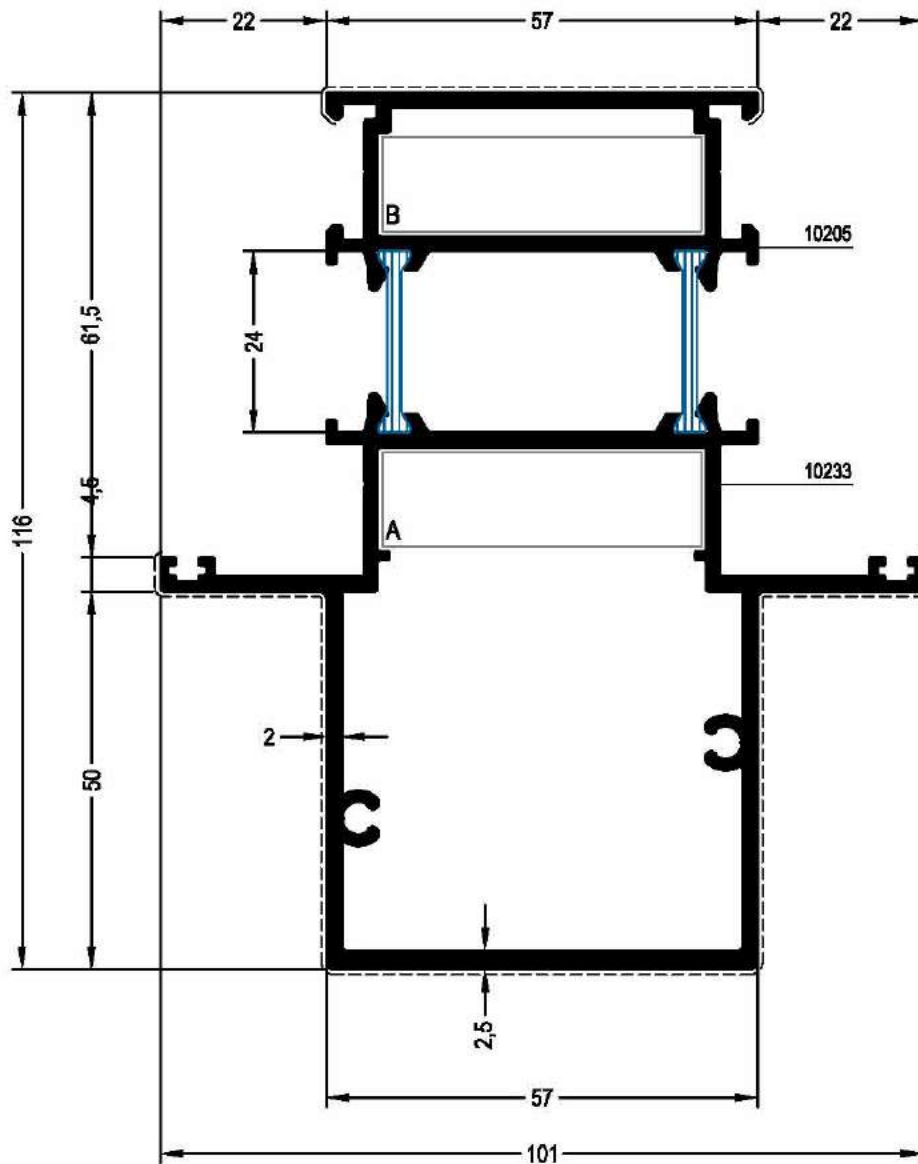
| TRANSOM MULLION PROFILE 40 / 84       |   |                          |        |
|---------------------------------------|---|--------------------------|--------|
| PROFILE CODE                          |   | 19MW08                   |        |
|                                       |   | THEORETICAL WEIGHT kg/mt |        |
|                                       |   | 2.547                    |        |
| J <sub>xx</sub><br>(cm <sup>4</sup> ) | J <sub>yy</sub><br>(cm <sup>4</sup> )   | Covering Surface (cm)    |        |
|                                       |   | 10203                    | 10232  |
| 109.702                               | 28.479  | 4.965                    | 19.608 |
| THERMO BREAK                          |   | LOCAL (Pvc) -----        |        |
| T JUNCTION                            |  | A                        | B      |
|                                       |   | 14JW05                   | 14JW04 |
|                                       |   | C                        | ---    |

MULLION



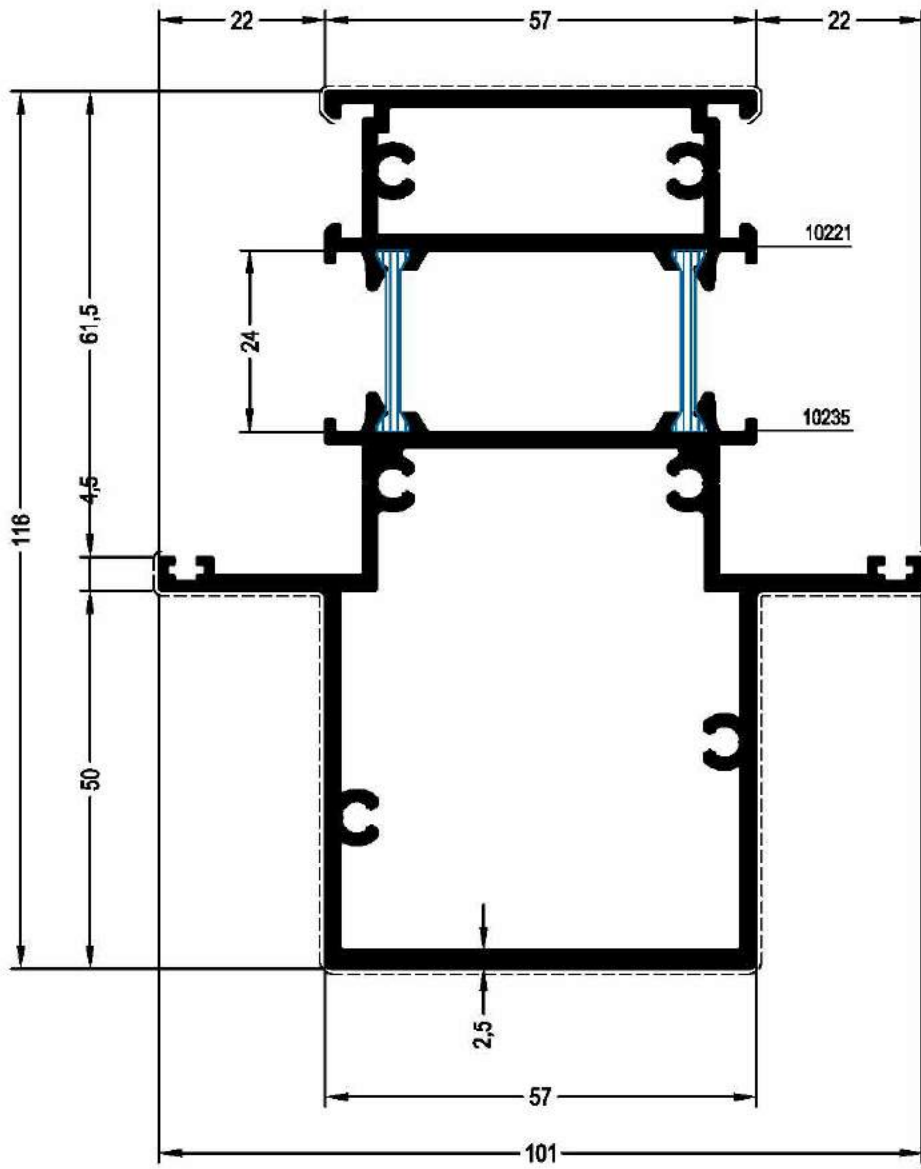
| TRANSOM MULLION PROFILE 40 / 84 |                        |                          |        |
|---------------------------------|------------------------|--------------------------|--------|
| PROFILE CODE                    |                        | 19MW09                   |        |
|                                 |                        | THEORETICAL WEIGHT kg/ml |        |
|                                 |                        | 2.738                    |        |
| Jxx (cm <sup>4</sup> )          | Jyy (cm <sup>4</sup> ) | Covering Surface (cm)    |        |
|                                 |                        | 10219                    | 10234  |
| 115.270                         | 29.143                 | 4.965                    | 19.608 |
| THERMO BREAK                    |                        | LOCAL (Pvc)              |        |

MULLION



| TRANSOM MULLION PROFILE 57 / 101      |                                       |                          |        |
|---------------------------------------|---------------------------------------|--------------------------|--------|
| PROFILE CODE                          |                                       | 19MW10                   |        |
|                                       |                                       | THEORETICAL WEIGHT kg/ml |        |
|                                       |                                       | 2.937                    |        |
| J <sub>xx</sub><br>(cm <sup>4</sup> ) | J <sub>yy</sub><br>(cm <sup>4</sup> ) | Covering Surface (cm)    |        |
|                                       |                                       | 10205                    | 10233  |
| 136.110                               | 60.716                                | 6.728                    | 21.070 |
| THERMO BREAK                          |                                       | LOCAL (Pvc)              |        |
| T JUNCTION                            |                                       | A                        | B      |
|                                       |                                       | 14JW05                   | 14JW04 |
|                                       |                                       |                          | C      |
|                                       |                                       |                          | —      |

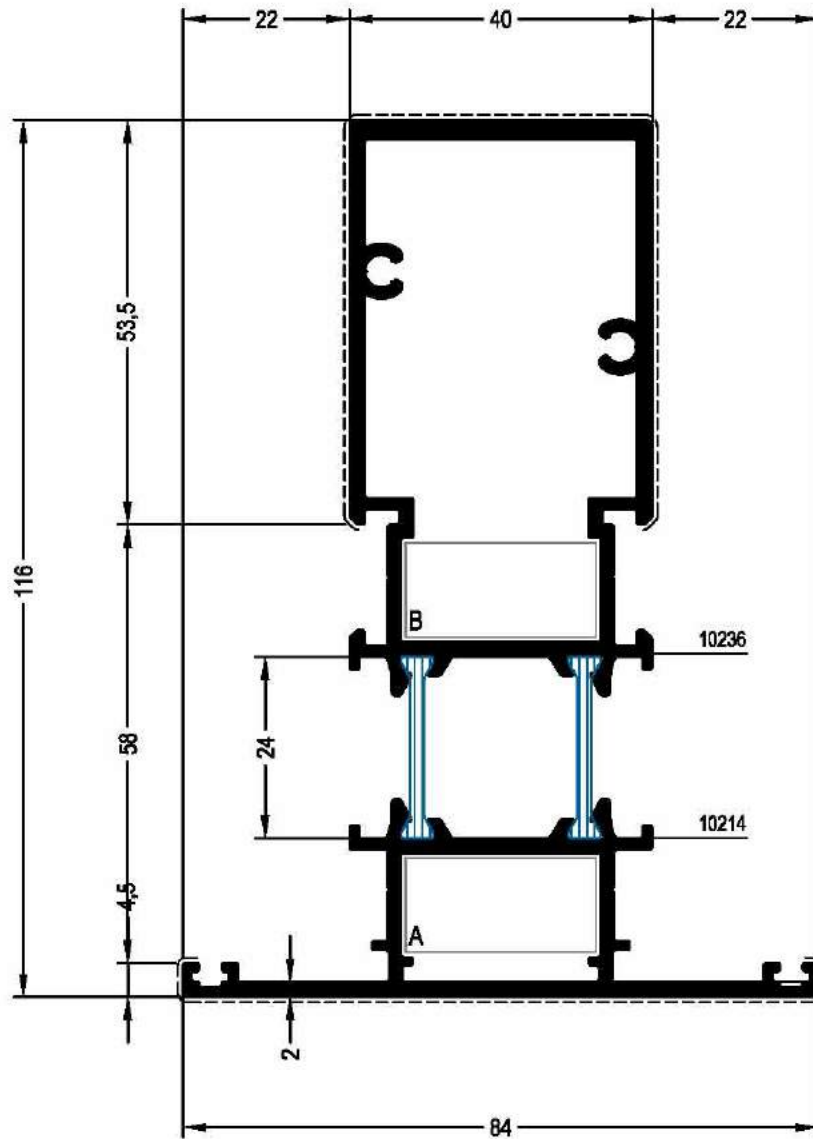
MULLION



|  |  |                       |        |                          |  |
|--|--|-----------------------|--------|--------------------------|--|
| TRANSOM MULLION PROFILE 57 / 101         |  |                       |        |                          |  |
| PROFILE CODE                             |  | <b>19MW11</b>         |        | THEORETICAL WEIGHT kg/mt |  |
|  |  |                       |        | <b>3.130</b>             |  |
| <i>J<sub>xx</sub></i> (cm <sup>4</sup> ) | <i>J<sub>yy</sub></i> (cm <sup>4</sup> ) | Covering Surface (cm) |        |                          |  |
|  |  | 10221                 | 10235  |                          |  |
| 141.500                                  | 63.443                                   | 6.728                 | 21.070 |                          |  |
| THERMO BREAK                             |  |                       |        |                          |  |
|  |  | LOCAL (Pvc) —         |        |                          |  |



MULLION

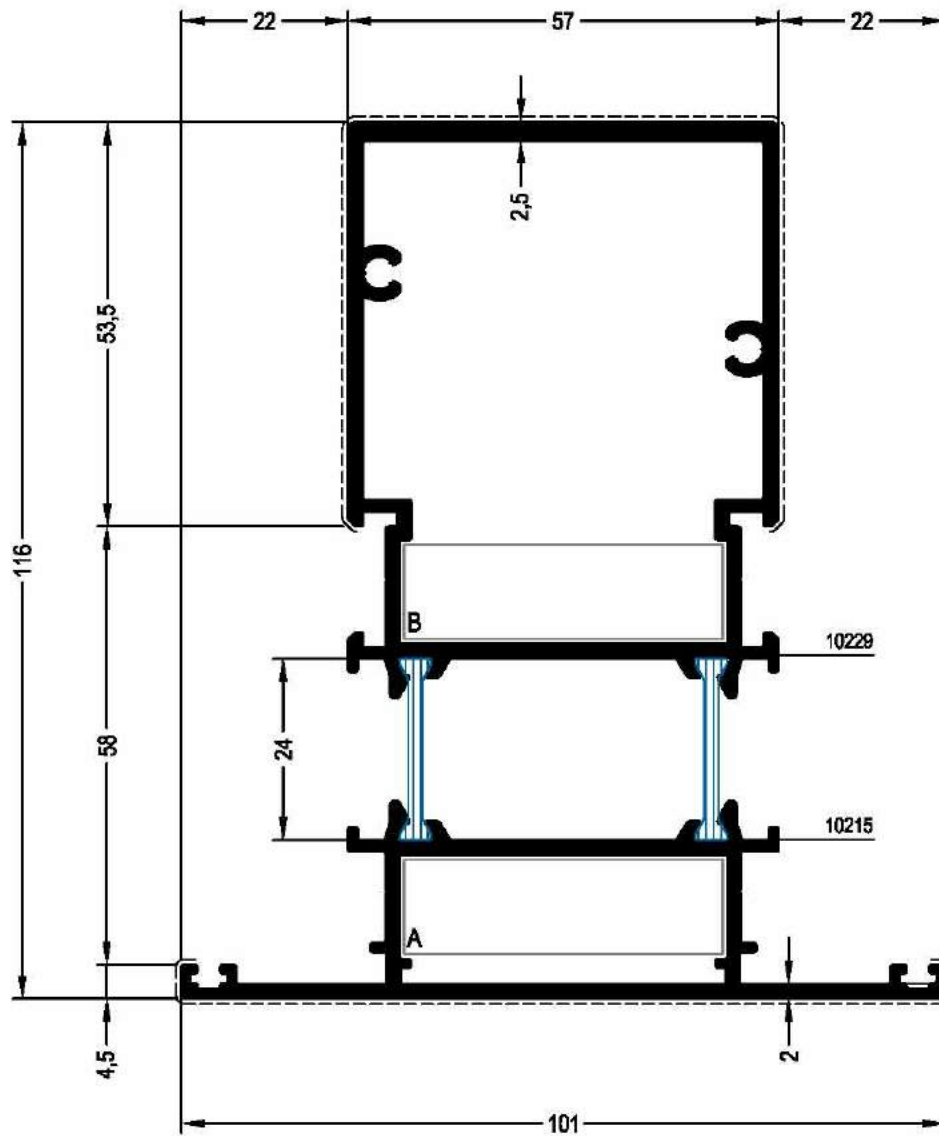


TRANSOM MULLION PROFILE 40 / 84



|                                    |                                    |                       |        |                          |  |
|------------------------------------|------------------------------------|-----------------------|--------|--------------------------|--|
| PROFILE CODE                       |                                    | 19MW12                |        | THEORETICAL WEIGHT kg/mt |  |
|                                    |                                    |                       |        | 2.579                    |  |
| J <sub>xx</sub> (cm <sup>4</sup> ) | J <sub>yy</sub> (cm <sup>4</sup> ) | Covering Surface (cm) |        |                          |  |
|                                    |                                    | 10236                 | 10214  |                          |  |
| 131.547                            | 28.870                             | 14.905                | 9.779  |                          |  |
| THERMO BREAK                       |                                    | LOCAL (Pvc)           |        |                          |  |
|                                    |                                    | —                     |        |                          |  |
| T JUNCTION                         |                                    | A                     | B      | C                        |  |
|                                    |                                    | 14JW05                | 14JW04 | —                        |  |

MULLION

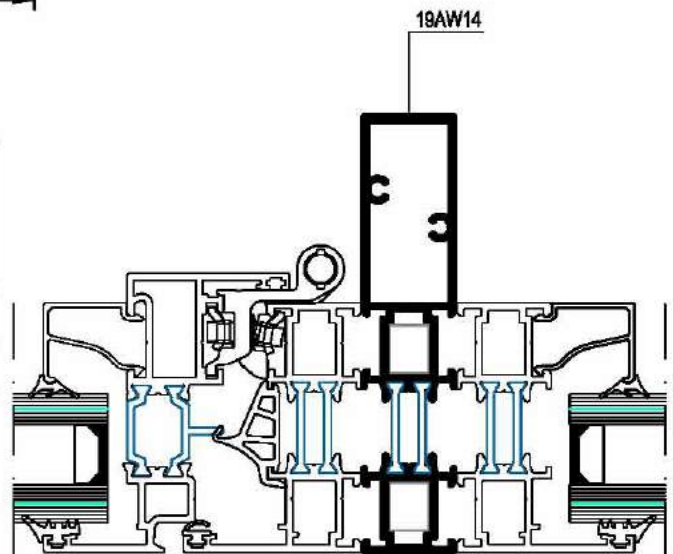
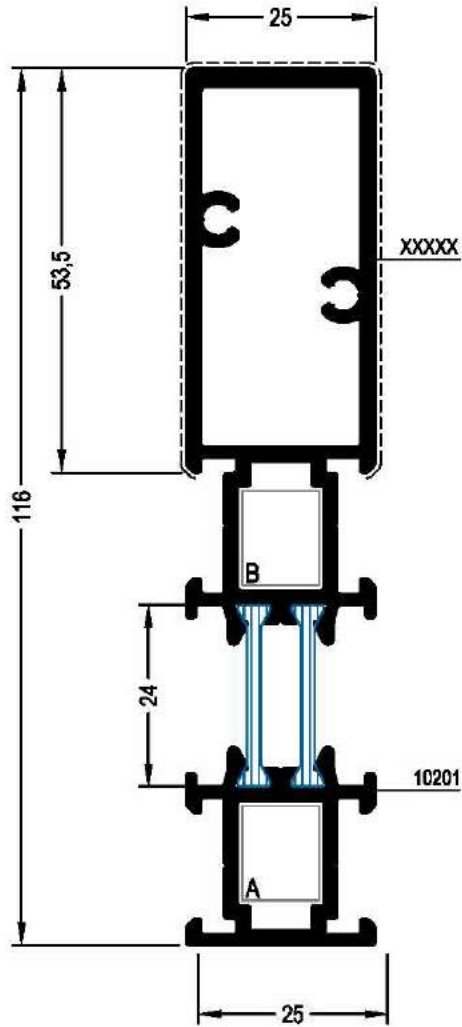


TRANSOM MULLION PROFILE 57 / 101



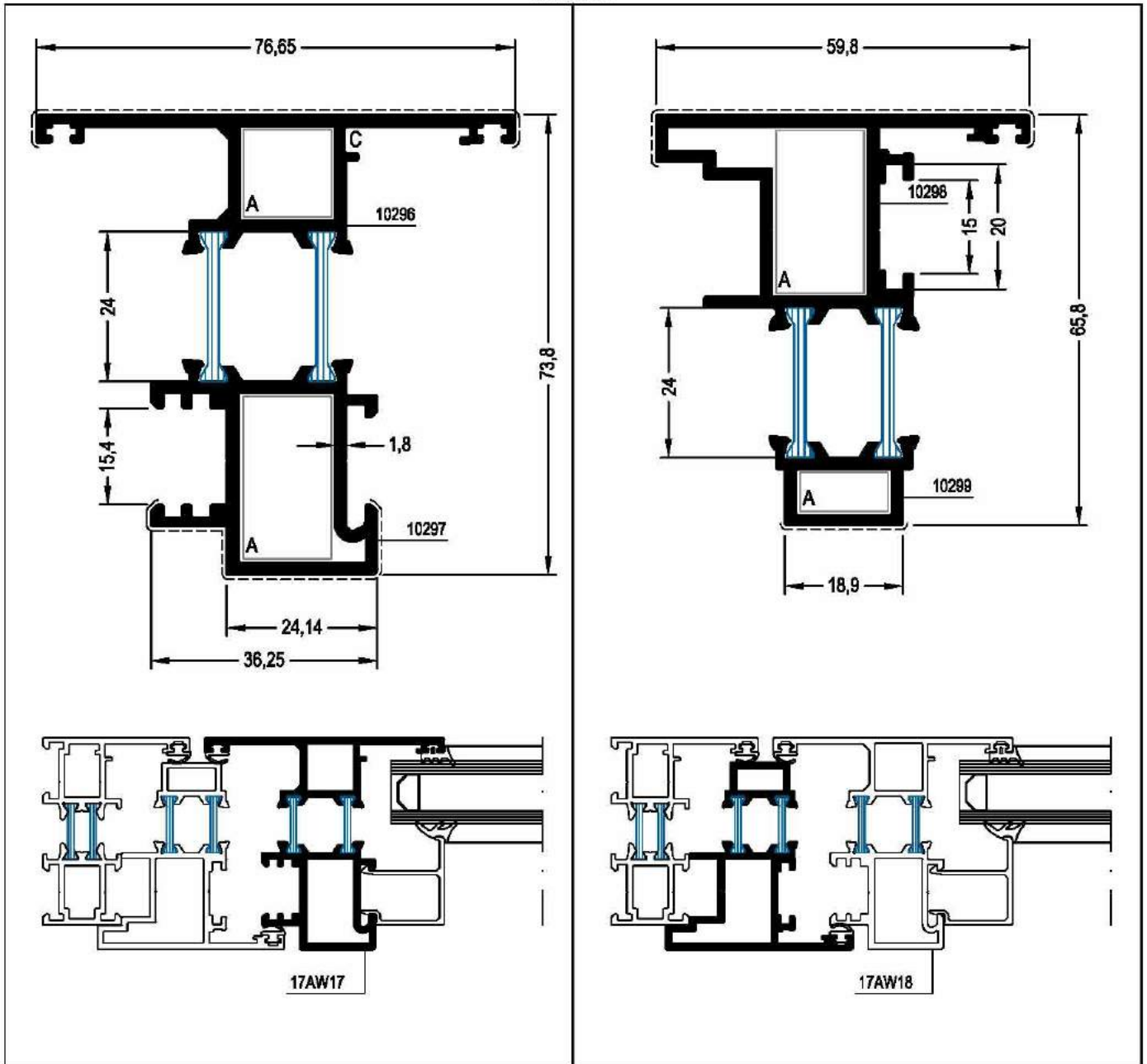
|                                       |                                       |                       |        |                          |  |
|---------------------------------------|---------------------------------------|-----------------------|--------|--------------------------|--|
| PROFILE CODE                          |                                       | 19MW13                |        | THEORETICAL WEIGHT kg/mt |  |
|                                       |                                       |                       |        | 2.971                    |  |
| J <sub>xx</sub><br>(cm <sup>4</sup> ) | J <sub>yy</sub><br>(cm <sup>4</sup> ) | Covering Surface (cm) |        |                          |  |
|                                       |                                       | 10229                 |        | 10215                    |  |
| 156.969                               | 61.200                                | 16.605                | 11.479 |                          |  |
| THERMO BREAK                          |                                       | LOCAL (Pvc)           |        |                          |  |
|                                       |                                       | —                     |        |                          |  |
| T JUNCTION                            |                                       | A                     | B      | C                        |  |
|                                       |                                       | 14JW05                | 14JW04 | —                        |  |

MULLION



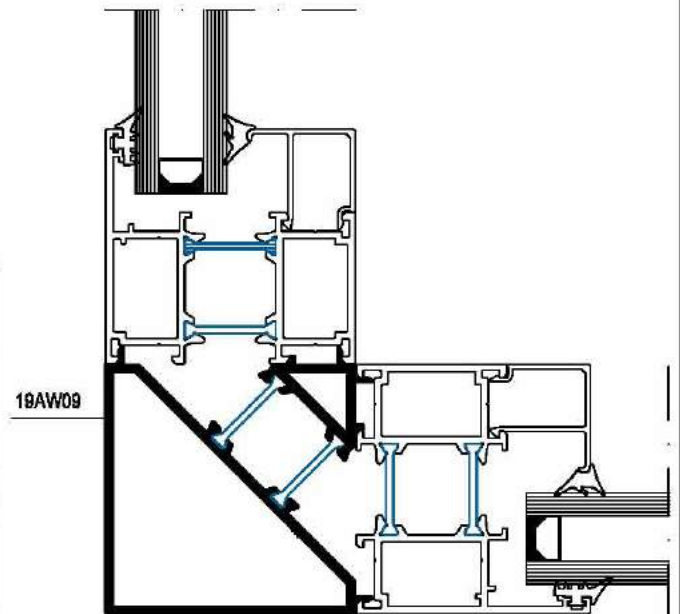
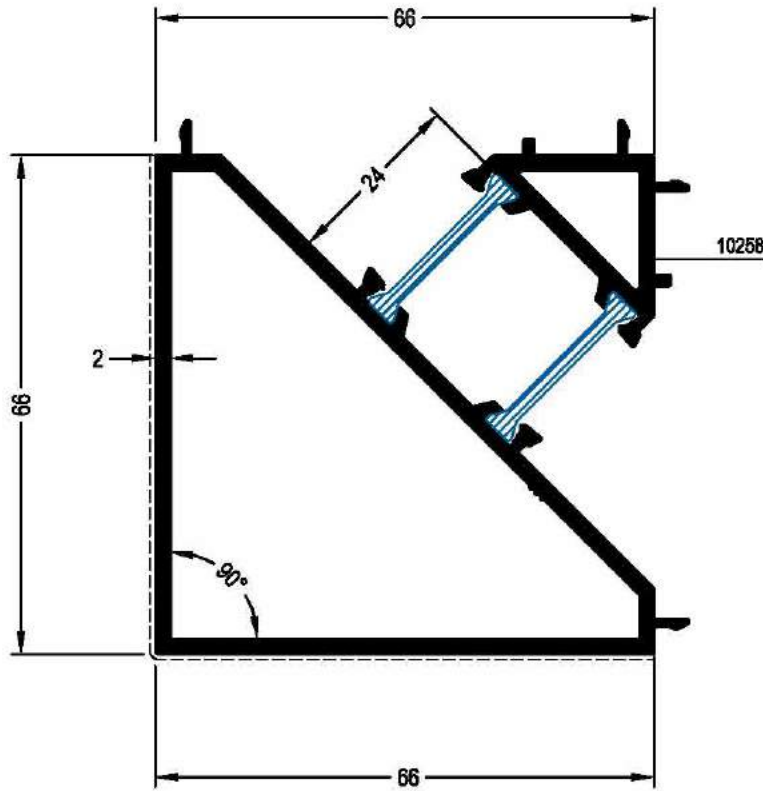
|                                    |                                    |                          |        |
|------------------------------------|------------------------------------|--------------------------|--------|
| ADAPTER PROFILE 25 / 110           |                                    |                          |        |
| PROFILE CODE                       |                                    | 19AW14                   |        |
|                                    |                                    | THEORETICAL WEIGHT kg/mt |        |
|                                    |                                    | 2.504                    |        |
| J <sub>xx</sub> (cm <sup>4</sup> ) | J <sub>yy</sub> (cm <sup>4</sup> ) | Covering Surface (cm)    |        |
|                                    |                                    | 10201                    | XXXXX  |
| 85.872                             | 5.182                              | 3.465                    | 13.405 |
| THERMO BREAK                       |                                    | LOCAL (Pvc)              |        |
|                                    |                                    | —                        |        |
| T JUNCTION                         |                                    | A                        | B      |
|                                    |                                    | 14JW05                   | 14JW04 |
|                                    |                                    |                          | C      |
|                                    |                                    |                          | —      |

MULLION



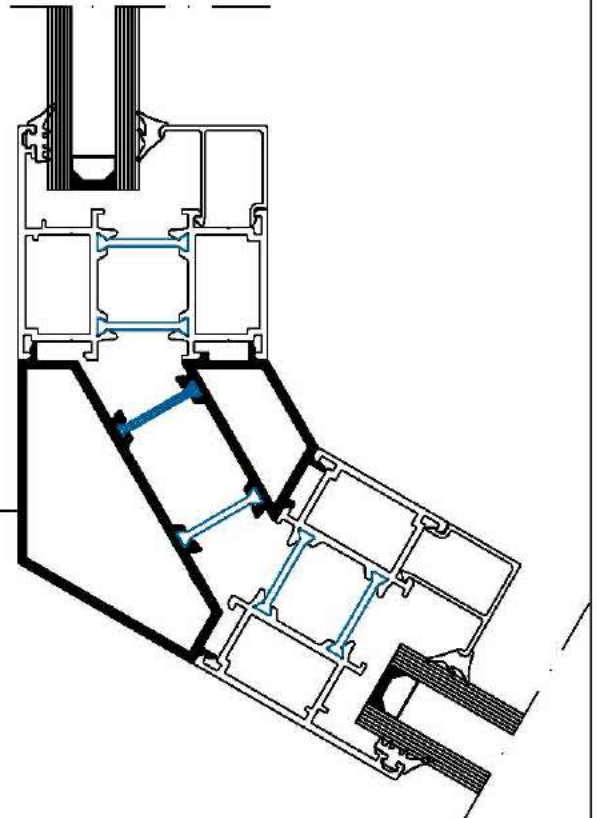
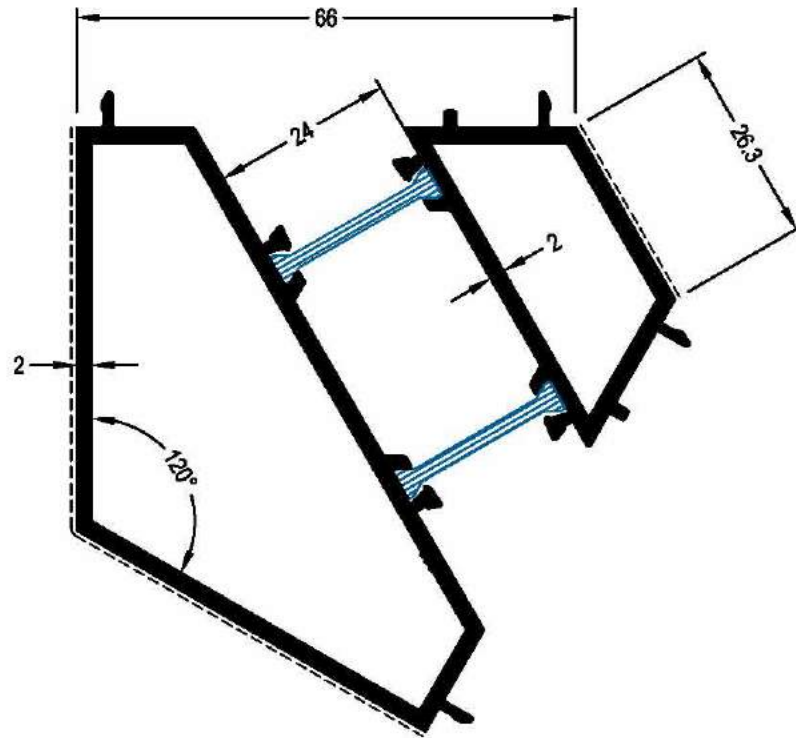
| PIVOT VENT PROFILE 76.65 / 67.8    |                                    |                       |        | PIVOT ADAPTER 61 / 60              |                                    |                       |        |        |             |
|------------------------------------|------------------------------------|-----------------------|--------|------------------------------------|------------------------------------|-----------------------|--------|--------|-------------|
| PROFILE CODE                       |                                    | 19AW17                |        | THEORETICAL WEIGHT kg/mt           |                                    | 1.753                 |        |        |             |
| J <sub>xx</sub> (cm <sup>4</sup> ) | J <sub>yy</sub> (cm <sup>4</sup> ) | Covering Surface (cm) |        | J <sub>xx</sub> (cm <sup>4</sup> ) | J <sub>yy</sub> (cm <sup>4</sup> ) | Covering Surface (cm) |        |        |             |
| 34.136                             | 14.285                             | 10296                 | 10297  | 22.421                             | 9.109                              | 10298                 | 10299  |        |             |
|                                    |                                    | 8.744                 | 6.094  | 7.378                              |                                    | 2.018                 |        |        |             |
| THERMO BREAK                       |                                    | LOCAL (Pvc)           |        | THERMO BREAK                       |                                    | LOCAL (Pvc)           |        |        |             |
| CORNER CLEATS                      |                                    | A                     | B      | C                                  | CORNER CLEATS                      |                       | A      | B      | C           |
|                                    |                                    | 14LW13                | 14LW13 | M.fuji 2000                        |                                    |                       | 14LW13 | 14LW13 | M.fuji 2000 |

MULLION



|                                       |                                       |                       |        |                          |  |
|---------------------------------------|---------------------------------------|-----------------------|--------|--------------------------|--|
| ADAPTER FOR 90° 60 / 60               |                                       |                       |        |                          |  |
| PROFILE CODE                          |                                       | 19AW09                |        | THEORETICAL WEIGHT kg/mt |  |
|                                       |                                       |                       |        | 1.919                    |  |
| J <sub>xx</sub><br>(cm <sup>4</sup> ) | J <sub>yy</sub><br>(cm <sup>4</sup> ) | Covering Surface (cm) |        |                          |  |
|                                       |                                       | 10258                 |        | 10257                    |  |
| 32.325                                | 28.538                                | ---                   | 12.025 |                          |  |
| THERMO BREAK                          |                                       | LOCAL (Pvc)           |        | ---                      |  |

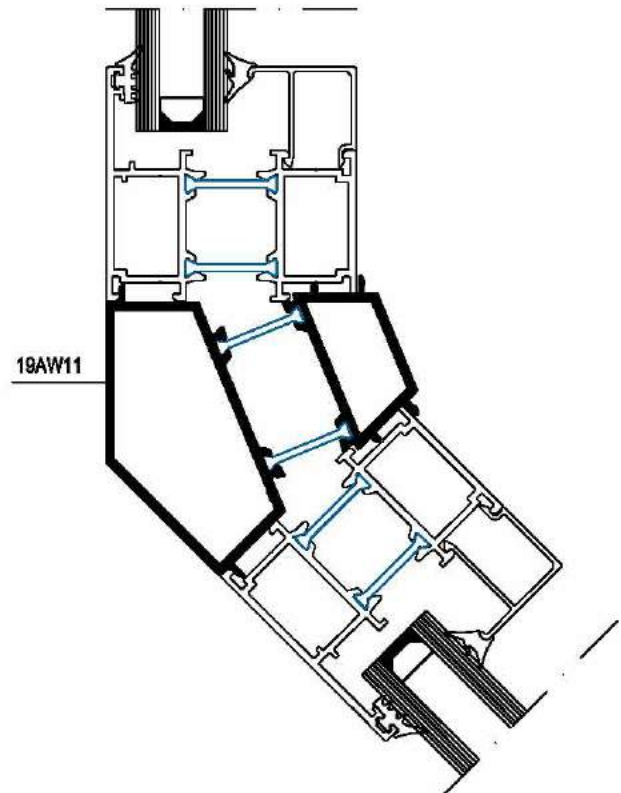
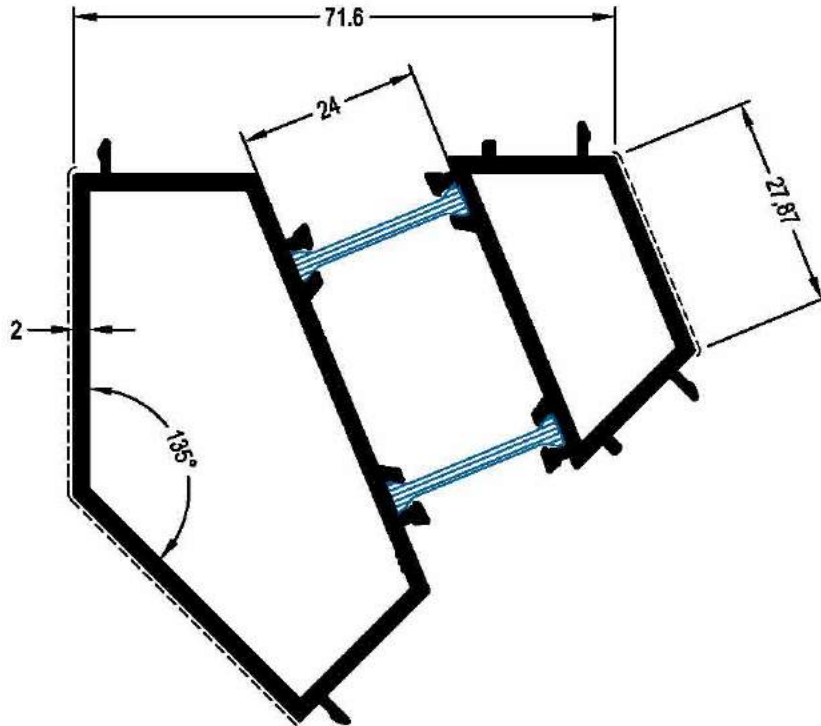
MULLION



|                                    |                                    |                       |  |                          |  |
|------------------------------------|------------------------------------|-----------------------|--|--------------------------|--|
| ADAPTER FOR 120° 60 / 60           |                                    |                       |  |                          |  |
| PROFILE CODE                       |                                    | 19AW10                |  | THEORETICAL WEIGHT kg/mt |  |
|                                    |                                    |                       |  | 2.073                    |  |
| J <sub>xx</sub> (cm <sup>4</sup> ) | J <sub>yy</sub> (cm <sup>4</sup> ) | Covering Surface (cm) |  |                          |  |
|                                    |                                    | 10259                 |  | 10260                    |  |
| 36.344                             | 34.004                             | 9.986                 |  | 2.626                    |  |
| THERMO BREAK                       |                                    | LOCAL (Pvc)           |  |                          |  |
|                                    |                                    | —                     |  |                          |  |

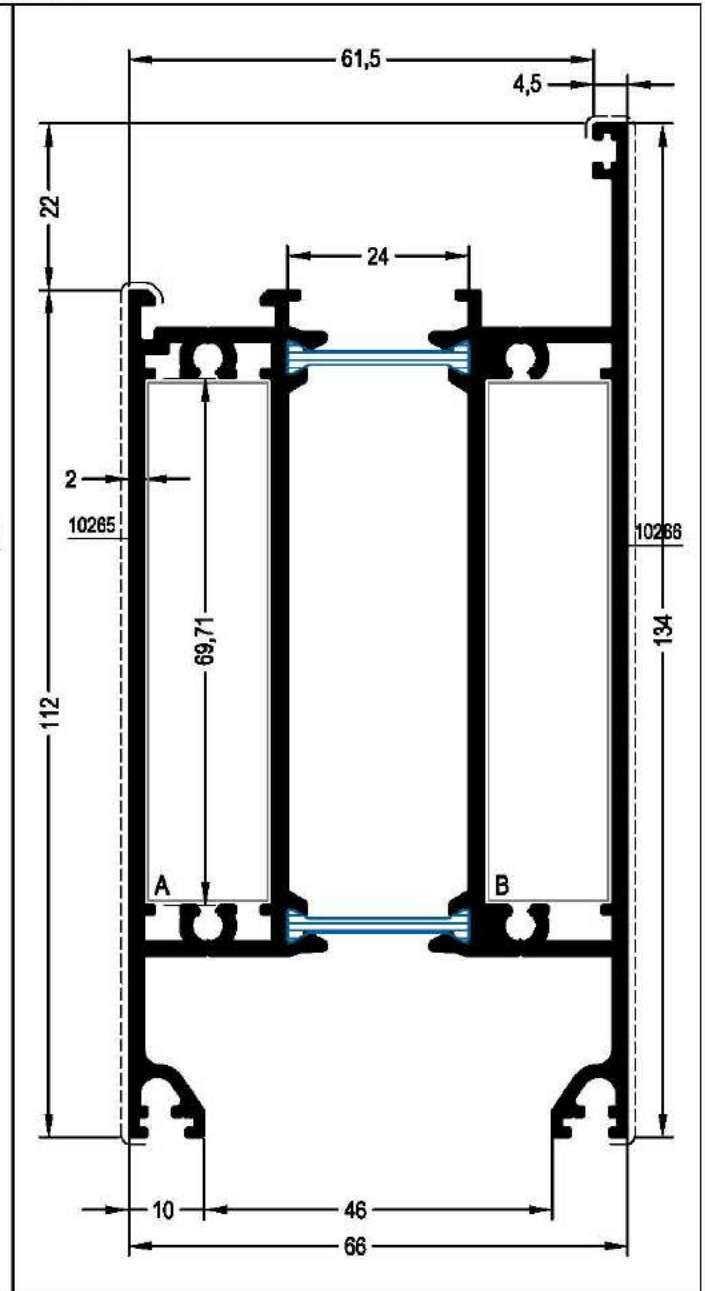
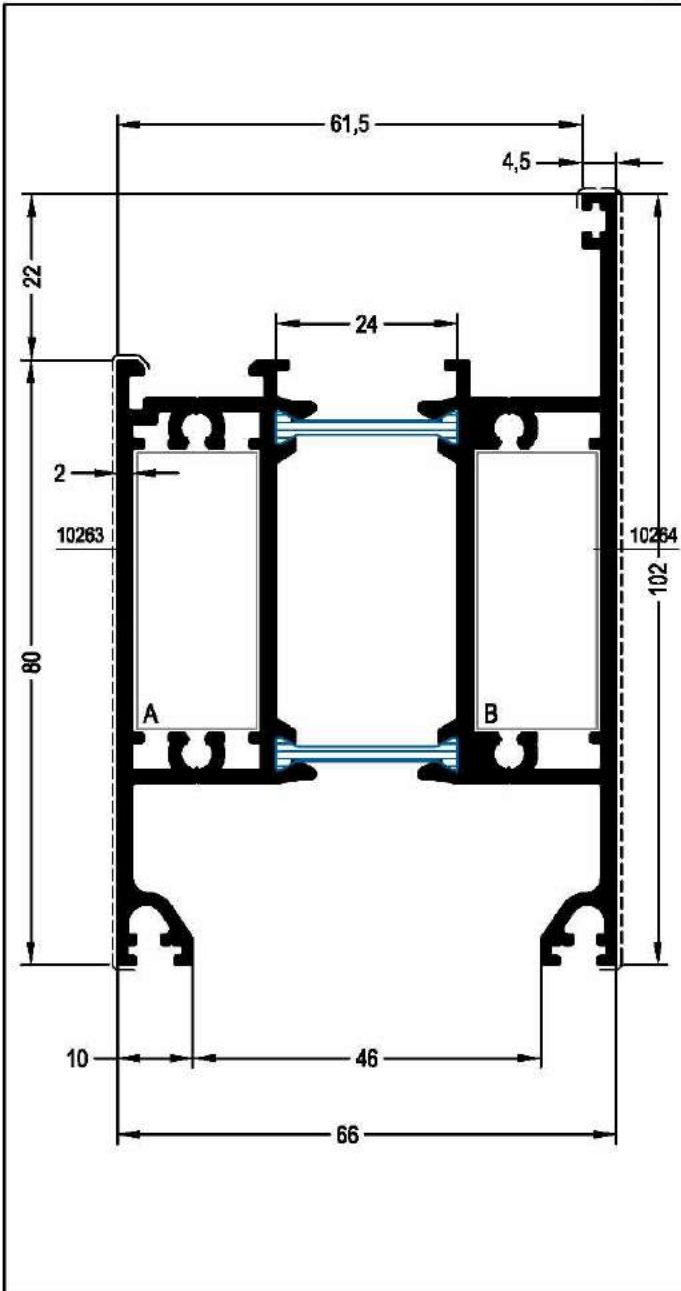



MULLION




|                                    |                                    |                       |  |                          |       |
|------------------------------------|------------------------------------|-----------------------|--|--------------------------|-------|
| ADAPTER FOR 135° 60 / 60           |                                    |                       |  |                          |       |
| PROFILE CODE                       |                                    | 19AW11                |  | THEORETICAL WEIGHT kg/mt |       |
|                                    |                                    |                       |  | 1.939                    |       |
|                                    |                                    | Covering Surface (cm) |  |                          |       |
|                                    |                                    | 10261                 |  | 10262                    |       |
| J <sub>xx</sub> (cm <sup>4</sup> ) | J <sub>yy</sub> (cm <sup>4</sup> ) |                       |  |                          |       |
| 28.873                             | 26.769                             | 8.056                 |  |                          | 2.872 |
| THERMO BREAK                       |                                    |                       |  |                          |       |
|                                    |                                    | LOCAL (Pvc)           |  | —                        |       |

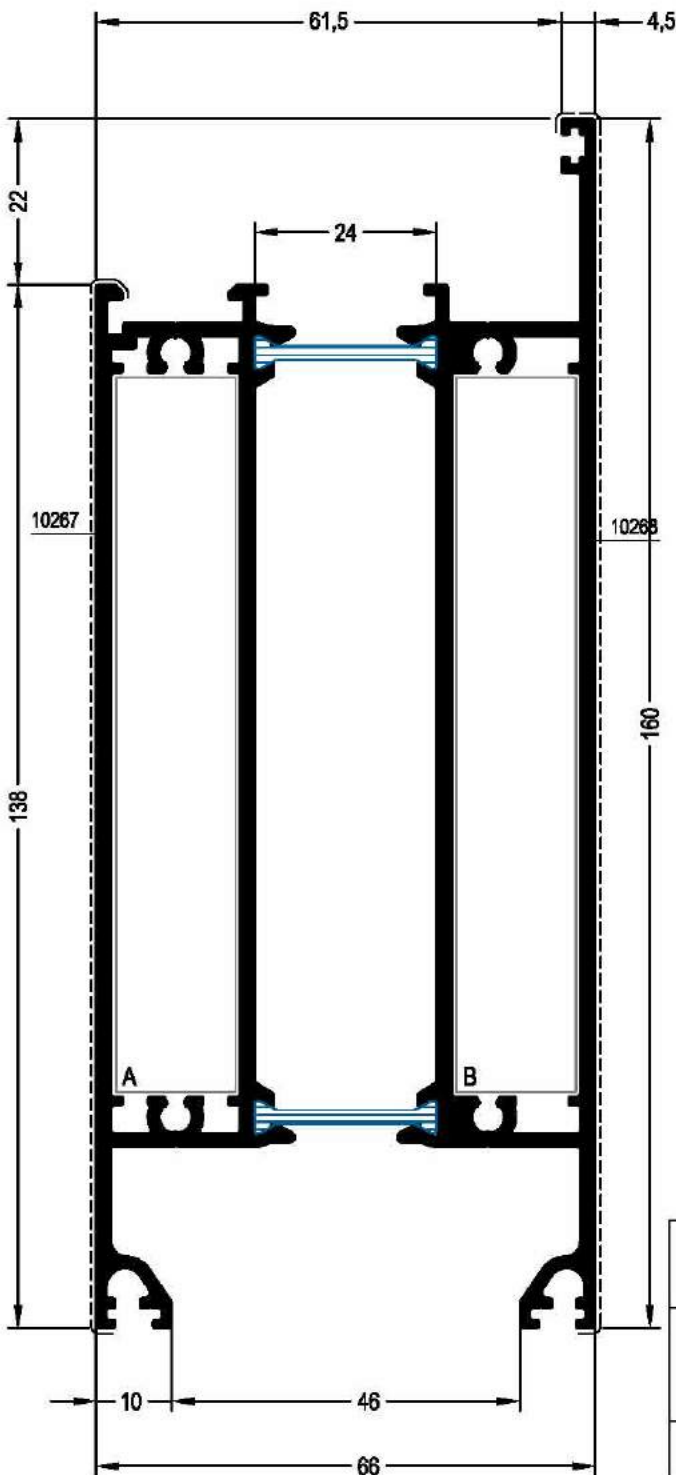
KICK PLATE





|                                    |   |                       |        |                          |  |
|------------------------------------|---|-----------------------|--------|--------------------------|--|
| KICK PLATE PROFILE 80 / 102        |   |                       |        | x — x                    |  |
| PROFILE CODE                       |   | 19KW01                |        | THEORETICAL WEIGHT kg/mt |  |
|                                    |   |                       |        | 2.642                    |  |
| J <sub>xx</sub> (cm <sup>4</sup> ) | J <sub>yy</sub> (cm <sup>4</sup> )  | Covering Surface (cm) |        |                          |  |
|                                    |   | 10263                 | 10264  |                          |  |
| ---                                | ---   | 8.736                 | 11.144 |                          |  |
| THERMO BREAK                       |   | LOCAL (Pvc)           |        |                          |  |
|                                    |   | ---                   |        |                          |  |
| T JUNCTION                         |  | A                     | B      | C                        |  |
|                                    |   | 14JW06                | 14JW07 | ---                      |  |

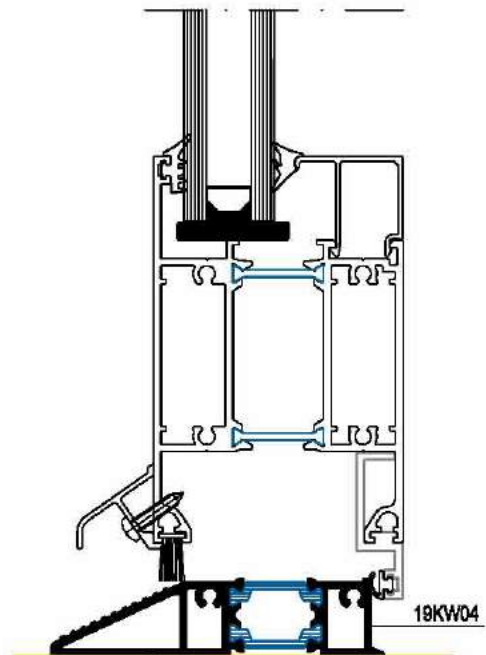
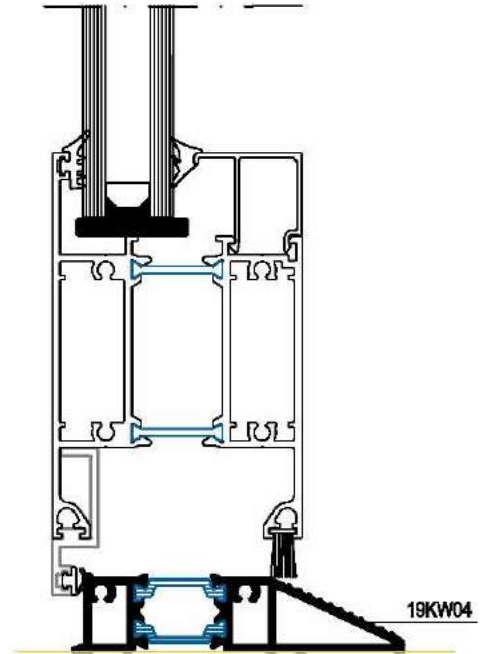
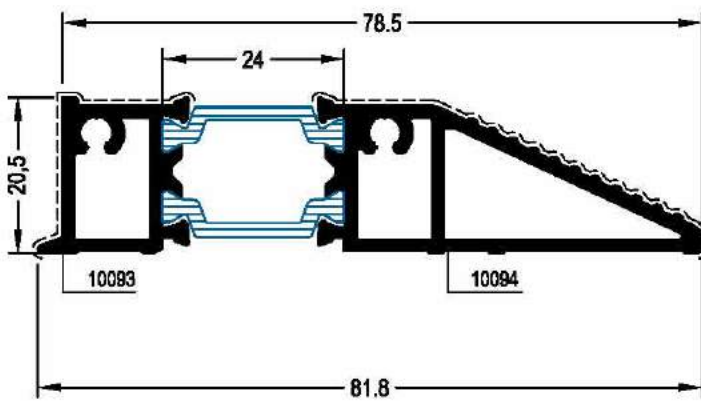
|                                    |  |                       |        |                          |  |
|------------------------------------|--|-----------------------|--------|--------------------------|--|
| KICK PLATE PROFILE 112 / 134       |  |                       |        | x — x                    |  |
| PROFILE CODE                       |  | 19KW02                |        | THEORETICAL WEIGHT kg/mt |  |
|                                    |  |                       |        | 3.335                    |  |
| J <sub>xx</sub> (cm <sup>4</sup> ) | J <sub>yy</sub> (cm <sup>4</sup> )   | Covering Surface (cm) |        |                          |  |
|                                    |  | 10265                 | 10266  |                          |  |
| ---                                | ---  | 11.994                | 14.344 |                          |  |
| THERMO BREAK                       |  | LOCAL (Pvc)           |        |                          |  |
|                                    |  | ---                   |        |                          |  |
| T JUNCTION                         |  | A                     | B      | C                        |  |
|                                    |  | 14JW06                | 14JW07 | ---                      |  |

KICK PLATE



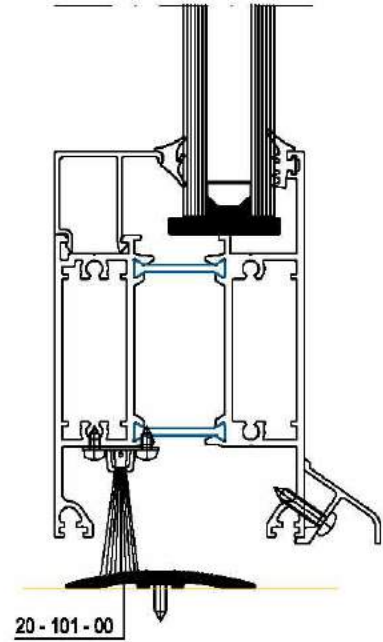
| KICK PLATE PROFILE                 |  | 138 / 160             |        |  |  |
|------------------------------------|--|-----------------------|--------|---|--|
| PROFILE CODE                       |  | 19KW03                |        | THEORETICAL WEIGHT kg/mt  |  |
|                                    |  |                       |        | 3.900   |  |
| J <sub>xx</sub> (cm <sup>4</sup> ) | J <sub>yy</sub> (cm <sup>4</sup> )   | Covering Surface (cm) |        |   |  |
| ---                                | ---  | 10267                 | 10268  |   |  |
| ---                                | ---  | 14.594                | 16.944 |   |  |
| THERMO BREAK                       |  | LOCAL (Pvc)           |        | ---   |  |
| T JUNCTION                         |  | A                     | B      | C   |  |
|                                    |  | 14JW06                | 14JW07 | ---   |  |

KICK PLATE



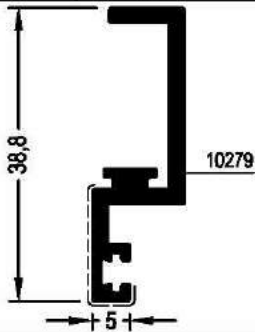
| THRESHOLD PROFILE                  |                                    |                          |       |
|------------------------------------|------------------------------------|--------------------------|-------|
| PROFILE CODE                       |                                    | 19KW04                   |       |
|                                    |                                    | THEORETICAL WEIGHT kg/ml |       |
|                                    |                                    | 1.219                    |       |
| J <sub>bx</sub> (cm <sup>4</sup> ) | J <sub>yy</sub> (cm <sup>4</sup> ) | Covering Surface (cm)    |       |
|                                    |                                    | 10083                    | 10094 |
| ---                                | ---                                | ---                      | ---   |
| THERMO BREAK                       |                                    | LOCAL (Pvc)              |       |
| APPLICATION PROFILE                |                                    |                          |       |
| FACE CAP                           |                                    |                          |       |

KICK PLATE



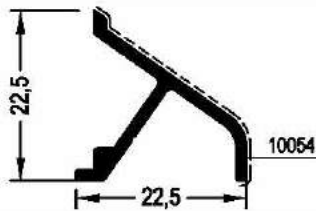
THRESHOLD PROFILE

|                        |               |                          |       |
|------------------------|---------------|--------------------------|-------|
| PROFILE CODE           | 20 - 101 - 00 | THEORETICAL WEIGHT kg/mt | 0.355 |
| Coating Surface ( cm ) | 11.405        |                          |       |



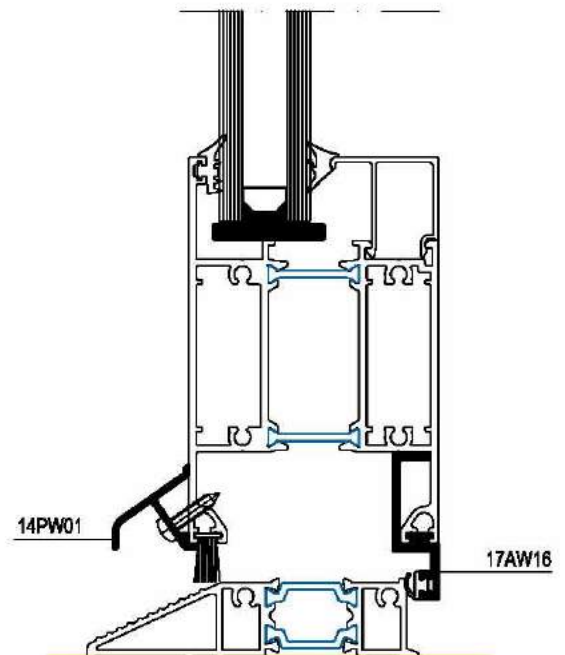
KICK PLATE PROFILE

|                        |        |                          |       |
|------------------------|--------|--------------------------|-------|
| PROFILE CODE           | 17AW16 | THEORETICAL WEIGHT kg/mt | 0.373 |
| Coating Surface ( cm ) | 14.314 | Covering Surface ( cm )  | 2.359 |



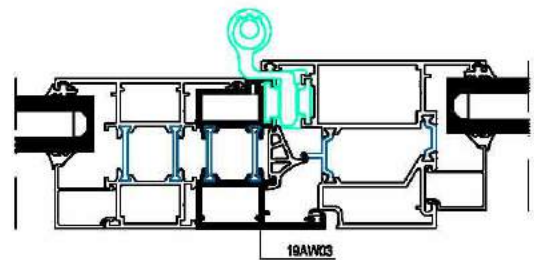
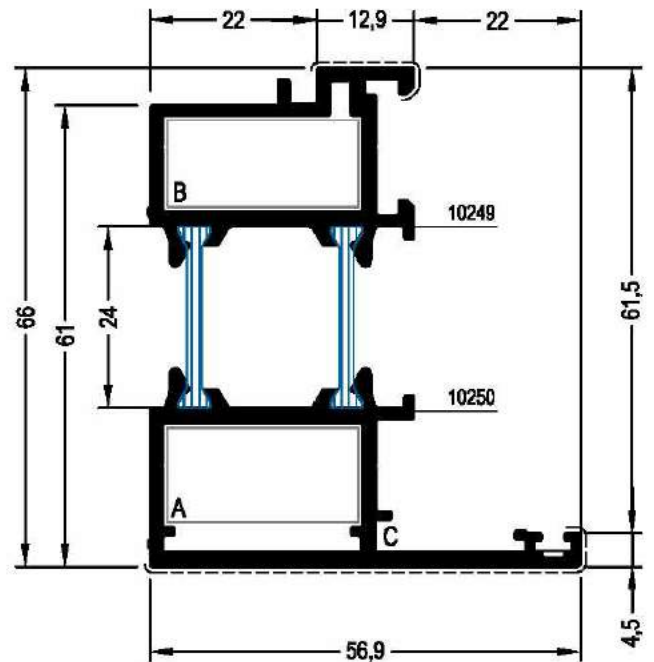
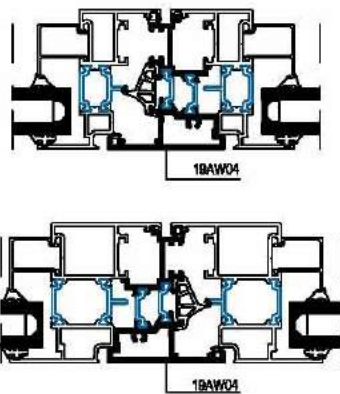
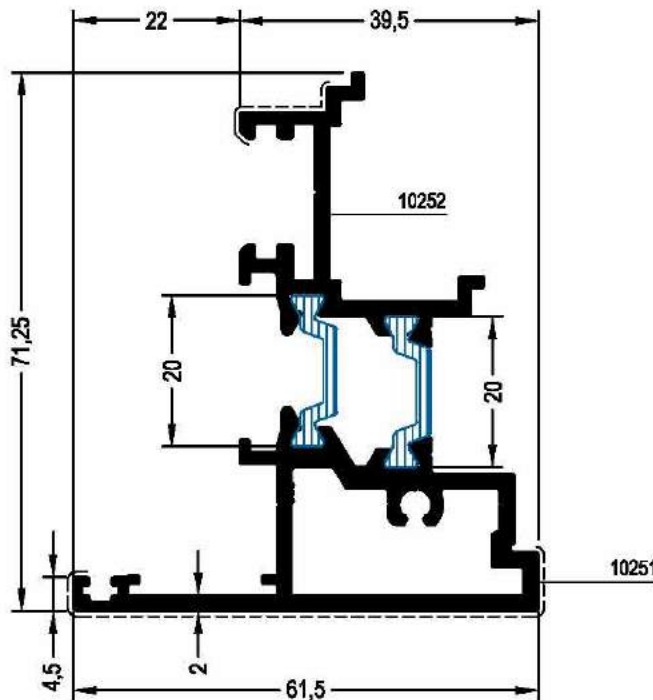
DRAINAGE PROFILE

|                        |        |                          |       |
|------------------------|--------|--------------------------|-------|
| PROFILE CODE           | 14PW01 | THEORETICAL WEIGHT kg/mt | 0.190 |
| Coating Surface ( cm ) | 10.183 |                          |       |





ADAPTERS



ADAPTER 56.9 / 60



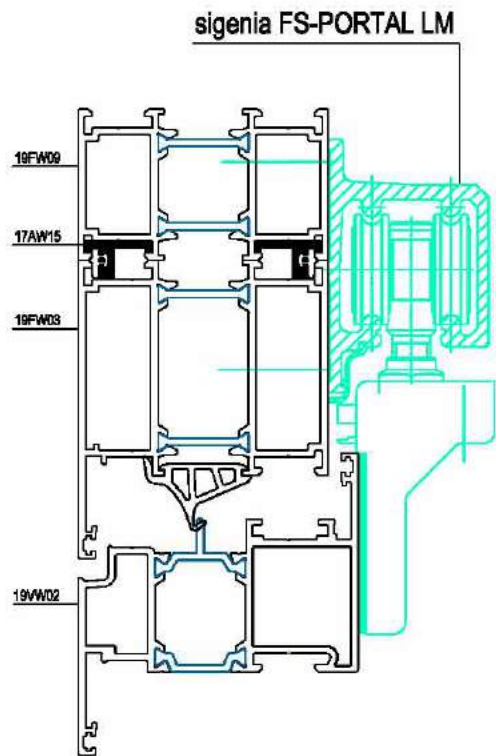
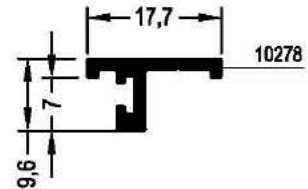
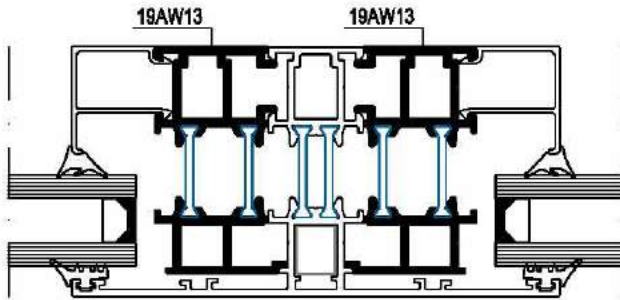
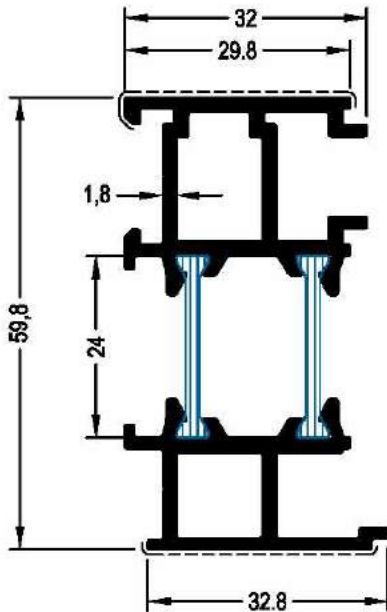
ADAPTER 61.5 / 65.25



| PROFILE CODE                |                             | 19AW04                |           | THEORETICAL WEIGHT kg/mt | ADAPTER 56.9 / 60           |                             |                       | PROFILE CODE                |        |             | 19AW03 |  |  | THEORETICAL WEIGHT kg/mt |
|-----------------------------|-----------------------------|-----------------------|-----------|--------------------------|-----------------------------|-----------------------------|-----------------------|-----------------------------|--------|-------------|--------|--|--|--------------------------|
|                             |                             |                       |           | 1.581                    |                             |                             |                       |                             |        |             |        |  |  | 1.531                    |
| $J_{xx}$ (cm <sup>4</sup> ) | $J_{yy}$ (cm <sup>4</sup> ) | Covering Surface (cm) |           |                          | $J_{xx}$ (cm <sup>4</sup> ) | $J_{yy}$ (cm <sup>4</sup> ) | Covering Surface (cm) |                             |        |             |        |  |  |                          |
| ---                         | ---                         | 10252                 | 10251     |                          | ---                         | ---                         | 10249                 | 10250                       |        |             |        |  |  |                          |
|                             |                             | 1.966                 | 7.718     |                          |                             |                             | 1.894                 | 6.444                       |        |             |        |  |  |                          |
| THERMO BREAK                |                             | LOCAL (Pvc)           |           | ---                      | THERMO BREAK                |                             |                       | LOCAL (Pvc)                 |        |             | ---    |  |  |                          |
| CORNER CLEATS               |                             | ---                   |           |                          | CORNER CLEATS               |                             |                       | A                           | B      | C           |        |  |  |                          |
|                             |                             |                       |           |                          |                             |                             |                       | 14LW32                      | 14LW32 | M.Fuji 2000 |        |  |  |                          |
| APPLICATION PROFILE         |                             | 17VW01,17VW02,17VW07  |           |                          | APPLICATION PROFILE         |                             |                       | 17FW01,17FW02,17FW03,17FW04 |        |             |        |  |  |                          |
|                             |                             |                       |           |                          |                             |                             |                       | 17VW05,17VW06               |        |             |        |  |  |                          |
| FACE CAP                    |                             | TOP                   | BOTTOM    |                          | FACE CAP                    |                             |                       | TOP                         |        | BOTTOM      |        |  |  |                          |
|                             |                             | 17A1207-T             | 17A1207-B |                          |                             |                             |                       | ---                         |        | ---         |        |  |  |                          |



ADAPTERS



ADAPTER 32 / 53.8



|              |        |                         |
|--------------|--------|-------------------------|
| PROFILE CODE | 19AW13 | THEORETICAL WEIGHT kg/m |
|              |        | 1.267                   |

|                             |                             |                       |       |
|-----------------------------|-----------------------------|-----------------------|-------|
| $J_{xx}$ (cm <sup>4</sup> ) | $J_{yy}$ (cm <sup>4</sup> ) | Covering Surface (cm) |       |
| —                           | —                           | 3.616                 | 3.147 |

|              |                    |                  |
|--------------|--------------------|------------------|
| THERMO BREAK | IMPORT (Polyamide) | 908300 (18 mm l) |
|              | LOCAL (Pvc)        | —                |

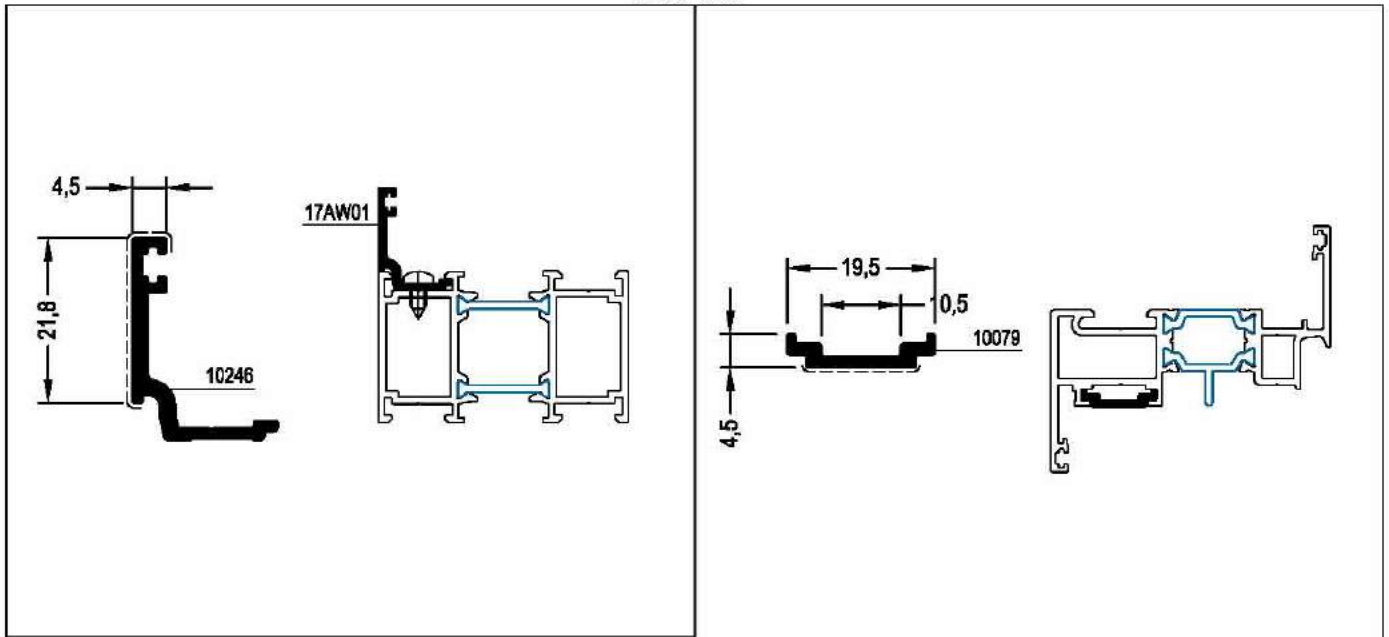
|                     |  |
|---------------------|--|
| APPLICATION PROFILE |  |
|---------------------|--|

ADAPTER 17.7 / 9.6

|              |        |                         |
|--------------|--------|-------------------------|
| PROFILE CODE | 17AW15 | THEORETICAL WEIGHT kg/m |
|              |        | 0.137                   |

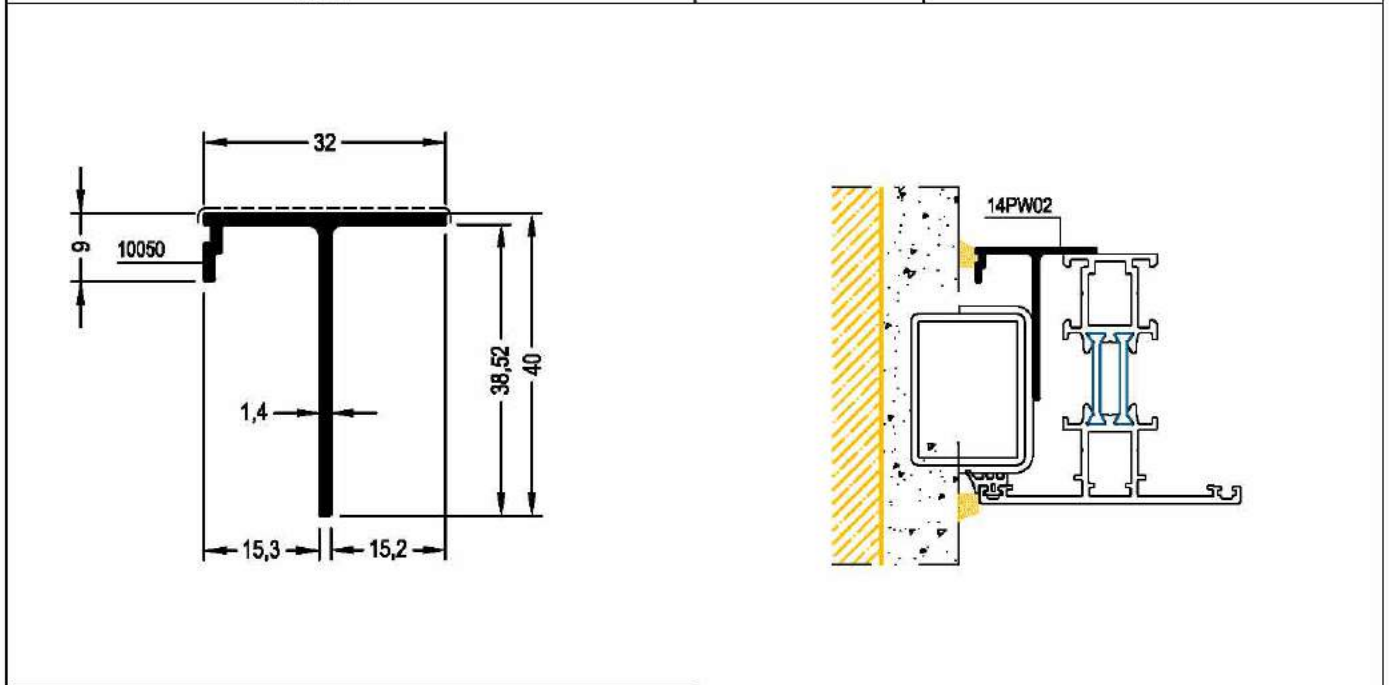
|                       |  |
|-----------------------|--|
| Covering Surface (cm) |  |
| —                     |  |

ADAPTER



ADAPTER 4,5 / 21.8

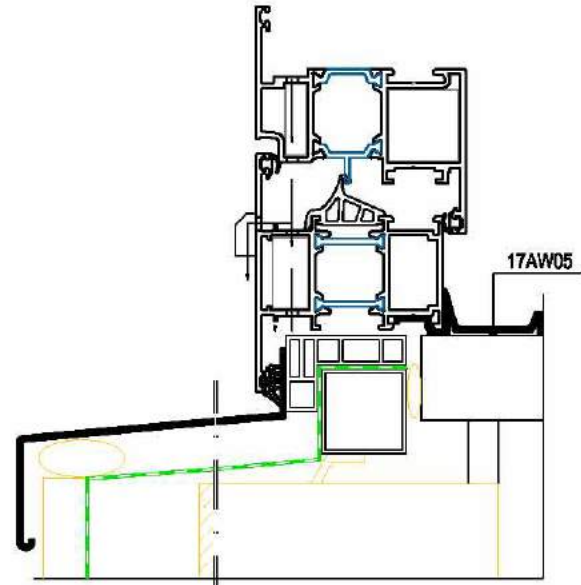
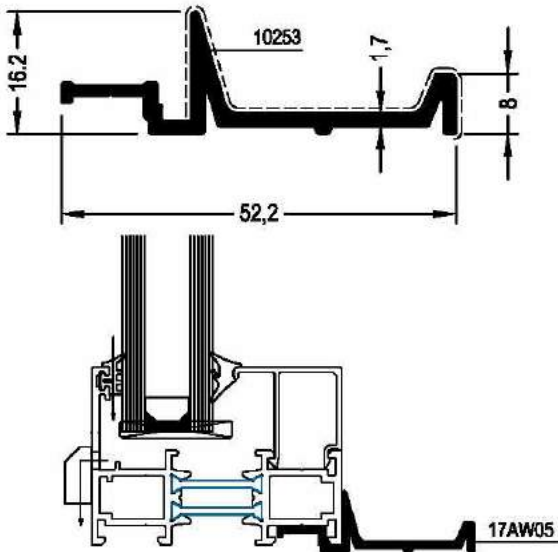
|                         |        |                          |                      |        |                          |
|-------------------------|--------|--------------------------|----------------------|--------|--------------------------|
| PROFILE CODE            | 17AW01 | THEORETICAL WEIGHT kg/mt | SLIDING ROAD PROFILE |        |                          |
|                         |        | 0.234                    | PROFILE CODE         | 14IW01 | THEORETICAL WEIGHT kg/mt |
| Covering Surface ( cm ) |        |                          |                      |        | 0.105                    |
| 3.014                   |        |                          |                      |        |                          |



T PROFILE

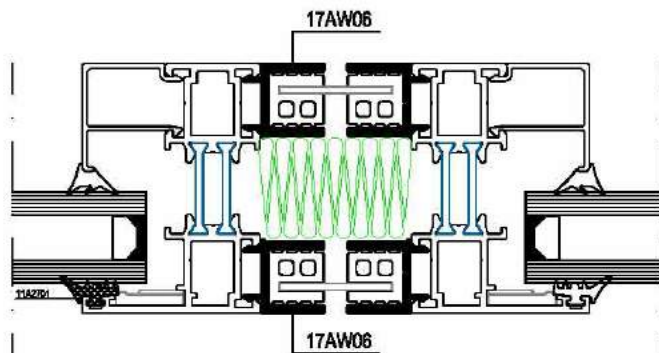
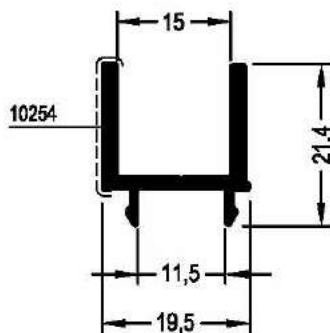
|                         |        |                          |
|-------------------------|--------|--------------------------|
| PROFILE CODE            | 14PW02 | THEORETICAL WEIGHT kg/mt |
|                         |        | 0.321                    |
| Covering Surface ( cm ) |        |                          |
| 3.508                   |        |                          |

ADAPTER



ADAPTER 52.2 / 16.2

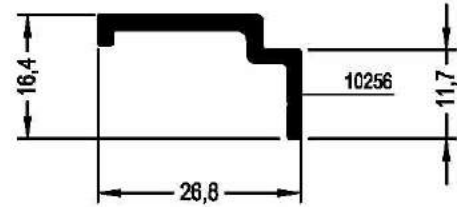
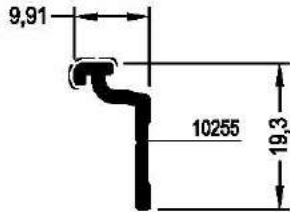
|                       |        |                         |
|-----------------------|--------|-------------------------|
| PROFILE CODE          | 17AW05 | THEORETICAL WEIGHT kg/m |
|                       |        | 0.407                   |
| Covering Surface (cm) |        |                         |
| 7.082                 |        |                         |



ADAPTER 19.5 / 21.4

|                       |        |                         |
|-----------------------|--------|-------------------------|
| PROFILE CODE          | 17AW06 | THEORETICAL WEIGHT kg/m |
|                       |        | 0.278                   |
| Covering Surface (cm) |        |                         |
| 2.127                 |        |                         |

ADAPTER

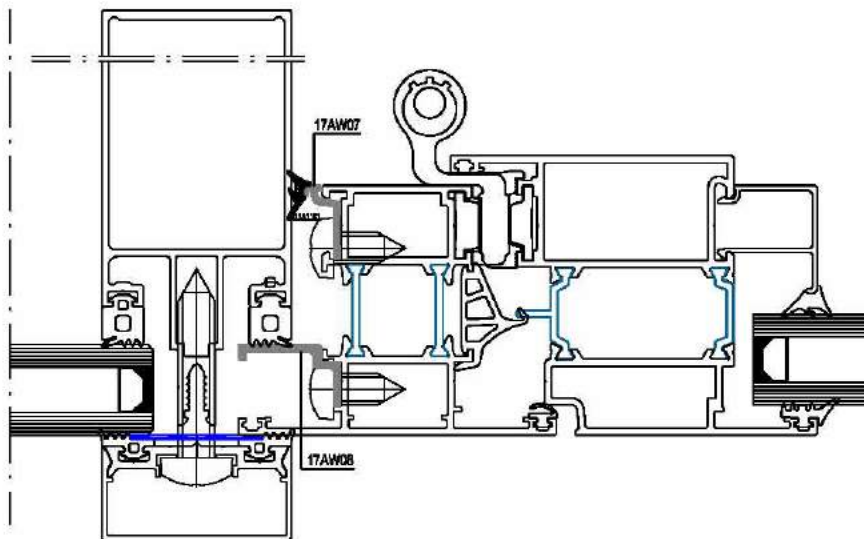


ADAPTER 9.91 / 19.3

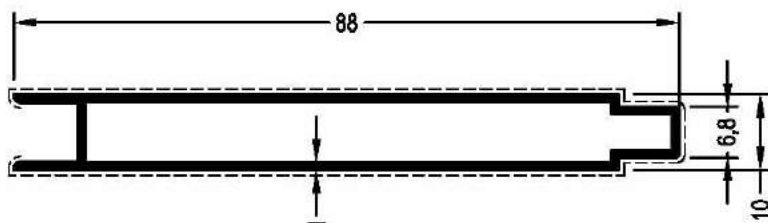
ADAPTER 26.8 / 16.4

|                         |        |                          |
|-------------------------|--------|--------------------------|
| PROFILE CODE            | 17AW07 | THEORETICAL WEIGHT kg/mt |
|                         |        | 0.113                    |
| Covering Surface ( cm ) |        |                          |
| 0.880                   |        |                          |

|                         |        |                          |
|-------------------------|--------|--------------------------|
| PROFILE CODE            | 17AW08 | THEORETICAL WEIGHT kg/mt |
|                         |        | 0.221                    |
| Covering Surface ( cm ) |        |                          |
| ---                     |        |                          |

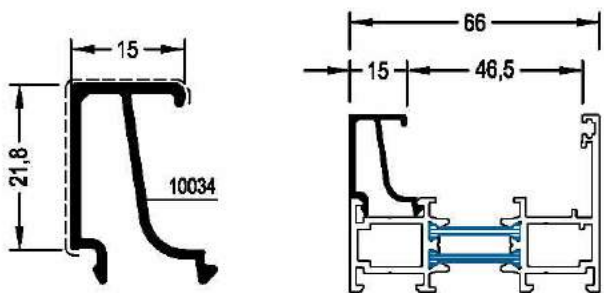
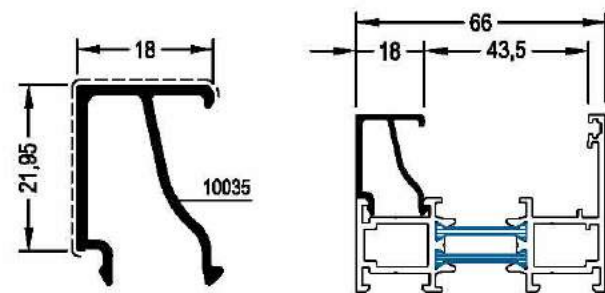
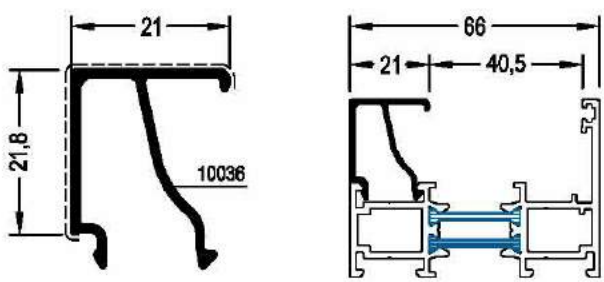
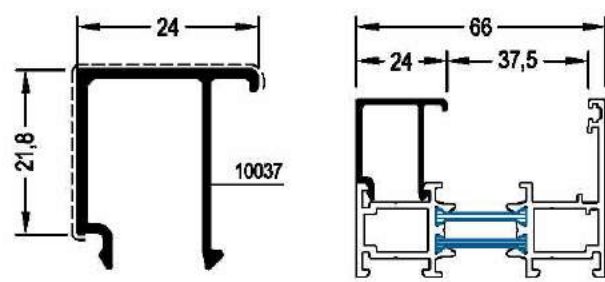
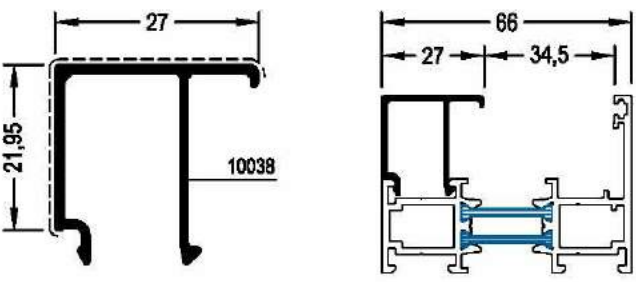
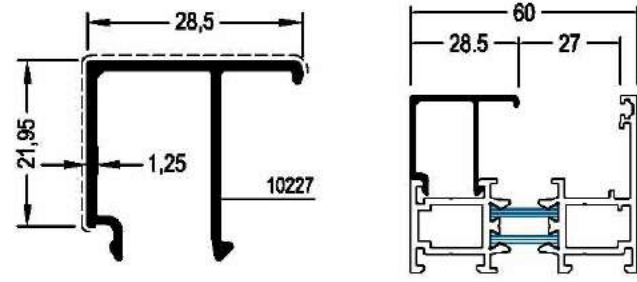


ADAPTER



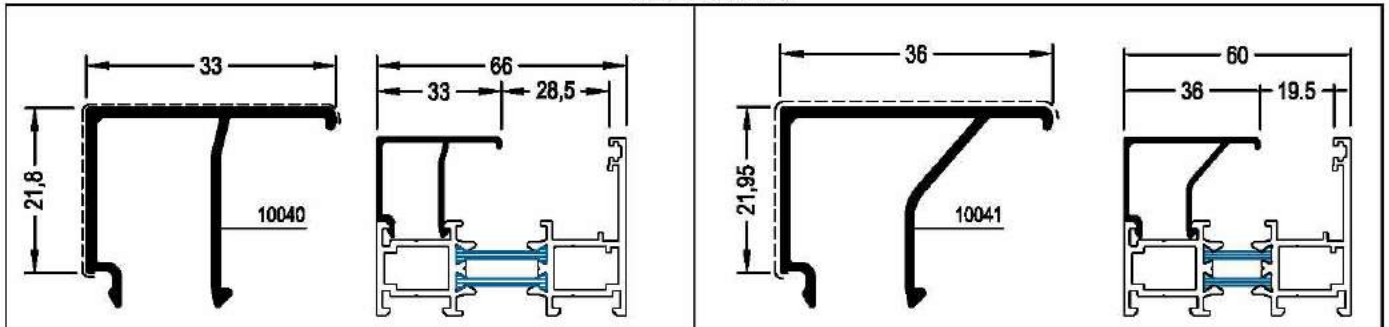
|                         |      |                         |
|-------------------------|------|-------------------------|
| ADAPTER 10 / 88         |      |                         |
| PROFILE CODE            | 1274 | THEORETICAL WEIGHT kg/m |
|                         |      | 0.524                   |
| Covering Surface ( cm ) |      |                         |
| 16.536                  |      |                         |

GLAZING BEAD

|   |        |                                   |  |        |                                   |
|---|--------|-----------------------------------|--|--------|-----------------------------------|
|    |        |                                   |    |        |                                   |
| GLAZING BEAD 15 / 21.8  |        |                                   | GLAZING BEAD 18 / 21.95  |        |                                   |
| PROFILE CODE  | 14GW03 | THEORETICAL WEIGHT kg/mt<br>0.245 | PROFILE CODE   | 14GW04 | THEORETICAL WEIGHT kg/mt<br>0.246 |
| Covering Surface ( cm )   | 4.059  |                                   | Covering Surface ( cm )  | 4.226  |                                   |
|   |        |                                   |   |        |                                   |
| GLAZING BEAD 21 / 21.8  |        |                                   | GLAZING BEAD 24 / 21.8   |        |                                   |
| PROFILE CODE  | 14GW05 | THEORETICAL WEIGHT kg/mt<br>0.256 | PROFILE CODE   | 14GW06 | THEORETICAL WEIGHT kg/mt<br>0.260 |
| Covering Surface ( cm )   | 4.569  |                                   | Covering Surface ( cm )  | 4.959  |                                   |
|  |        |                                   |  |        |                                   |
| GLAZING BEAD 27 / 21.95   |        |                                   | GLAZING BEAD 28.5 / 21.95  |        |                                   |
| PROFILE CODE  | 14GW07 | THEORETICAL WEIGHT kg/mt<br>0.270 | PROFILE CODE   | 14GW19 | THEORETICAL WEIGHT kg/mt<br>0.276 |
| Covering Surface ( cm )   | 5.126  |                                   | Covering Surface ( cm )  | 5.276  |                                   |



GLAZING BEAD



GLAZING BEAD 33 / 21.8

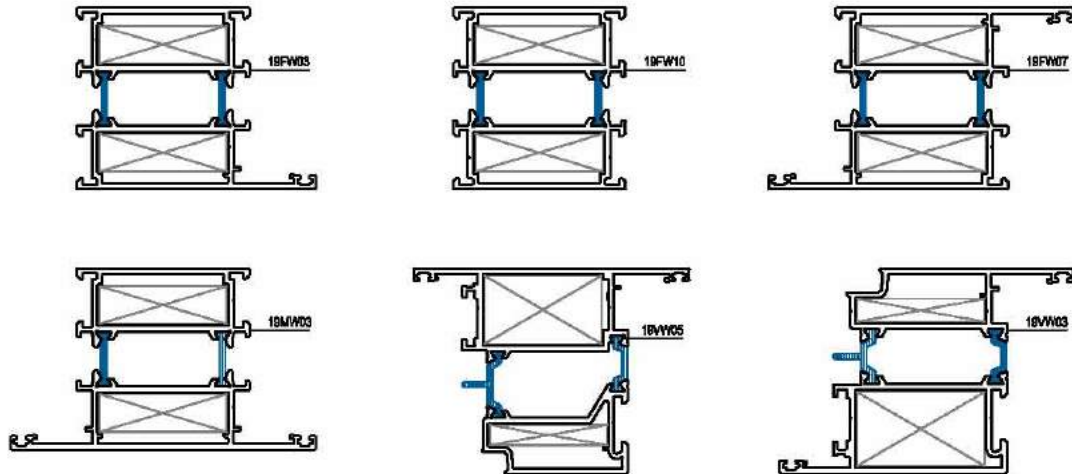
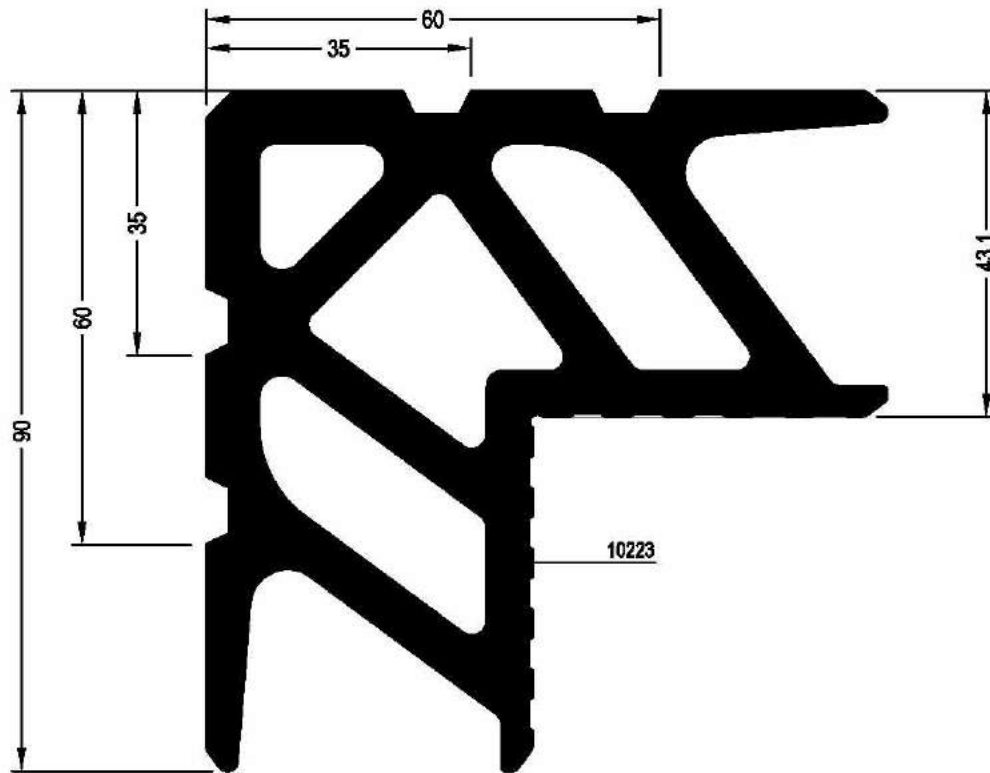
GLAZING BEAD 36 / 21.95

|                         |               |                          |                         |               |                          |
|-------------------------|---------------|--------------------------|-------------------------|---------------|--------------------------|
| PROFILE CODE            | <b>14GW09</b> | THEORETICAL WEIGHT kg/ml | PROFILE CODE            | <b>14GW10</b> | THEORETICAL WEIGHT kg/ml |
|                         |               | <b>0.291</b>             |                         |               | <b>0.311</b>             |
| Covering Surface ( cm ) |               |                          | Covering Surface ( cm ) |               |                          |
|                         | <b>5.830</b>  |                          |                         | <b>6.026</b>  |                          |

CORNER CLEATS

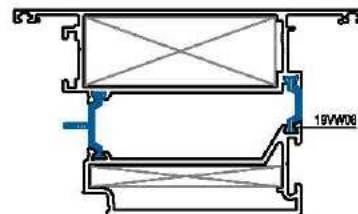
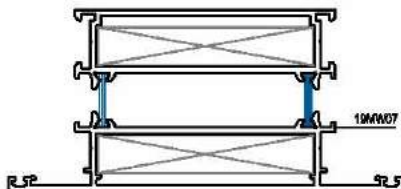
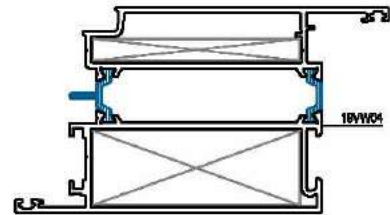
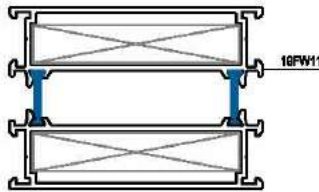
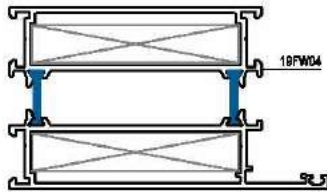
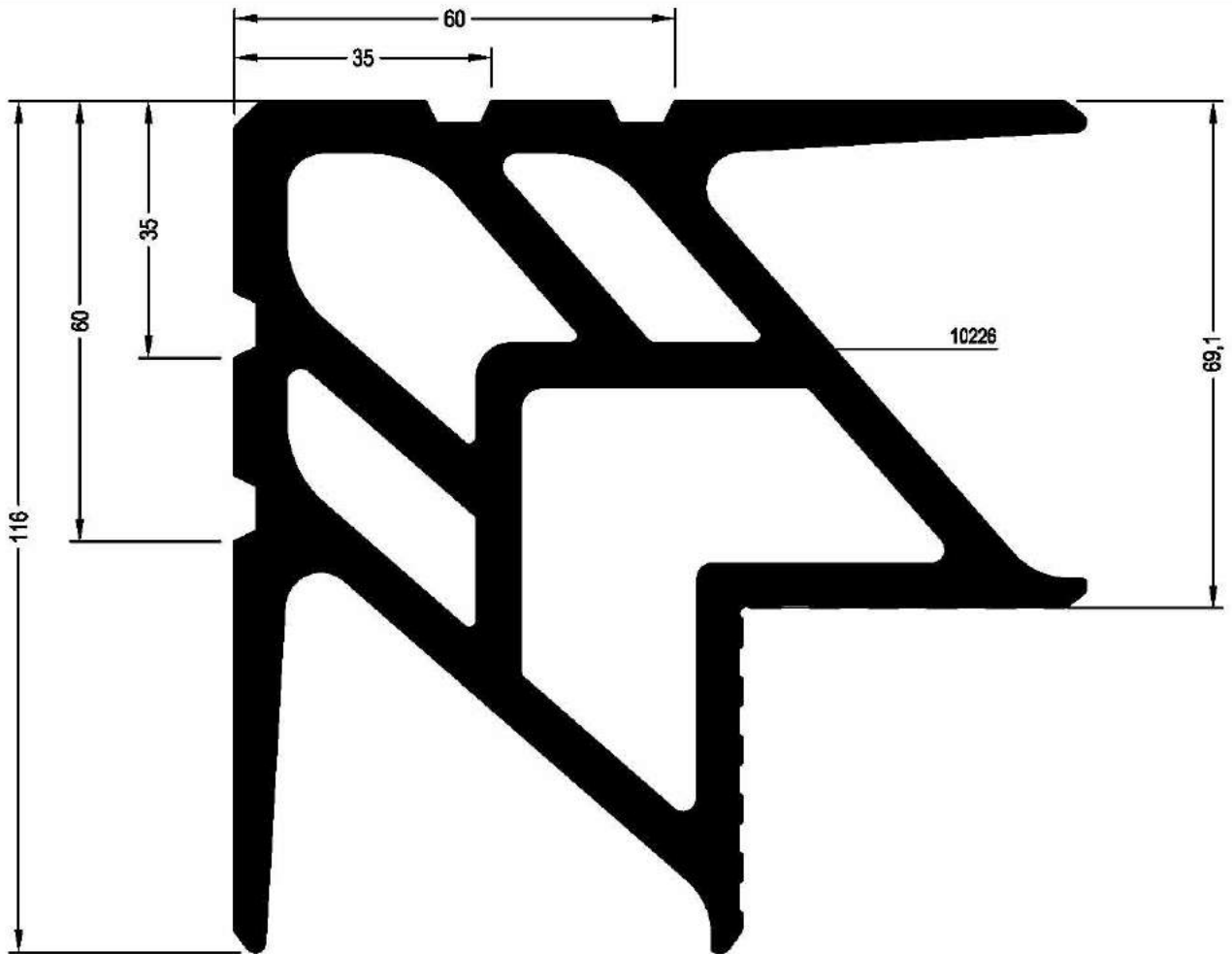
|                     |  |           |  |                     |  |           |  |
|---------------------|--|-----------|--|---------------------|--|-----------|--|
|                     |  |           |  |                     |  |           |  |
|                     |  |           |  |                     |  |           |  |
| * pressed profile   |  |           |  | * pressed profile   |  |           |  |
| CORNER CLEATS       |  | 26.1 / 60 |  | CORNER CLEATS       |  | 11.1 / 55 |  |
| PROFILE CODE        | <b>14LW32</b>                                    | PRES      | THEORETICAL WEIGHT kg/mt<br><b>3.363</b> | PROFILE CODE        | <b>14LW14</b>  | PRES      | THEORETICAL WEIGHT kg/mt<br><b>2.154</b> |
| APPLICATION PROFILE | PROFILE CODE<br>19FW02, 19FW03, 19FW08<br>19VW02 |           |  | APPLICATION PROFILE | PROFILE CODE<br>19FW01, 19FW06, 19FW05<br>19VW01, 19VW07, 19VW08 |           |  |

CORNER CLEATS



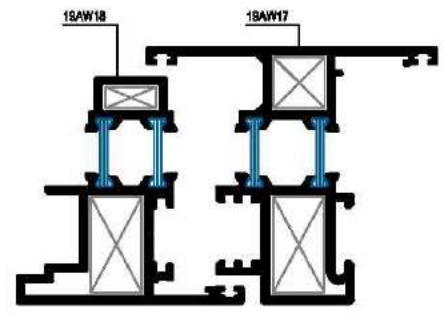
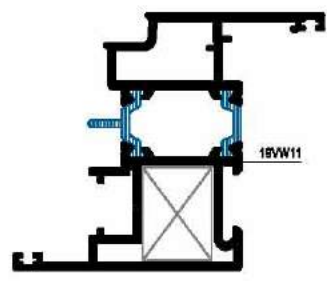
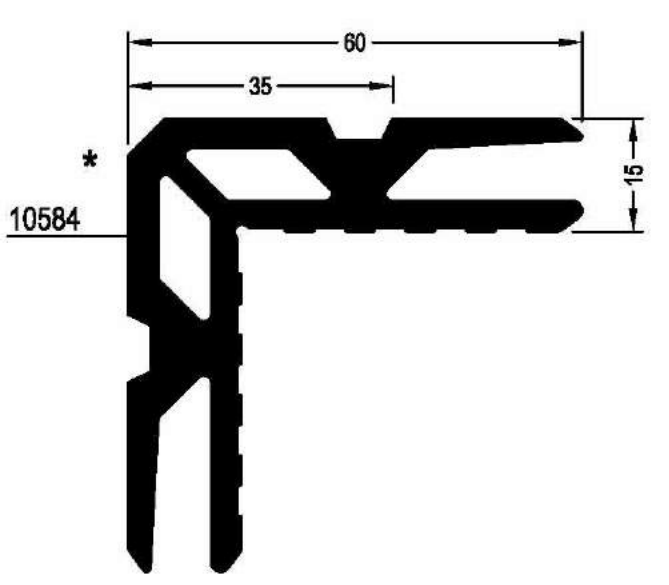
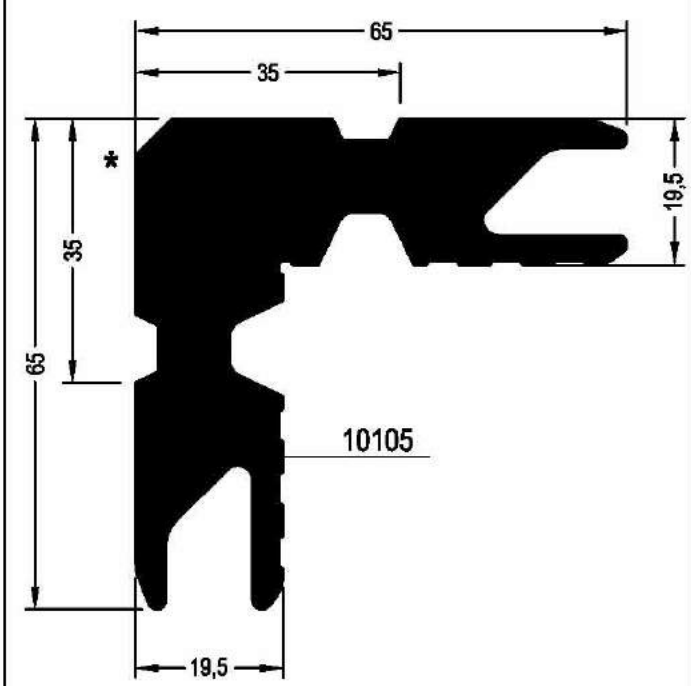
|                     |                        |           |                         |
|---------------------|------------------------|-----------|-------------------------|
| CORNER CLEATS       |                        | 43.1 / 90 |                         |
| PROFILE CODE        | 14LW33                 | PRES      | THEORETICAL WEIGHT kg/m |
|                     |                        |           | 7.344                   |
| APPLICATION PROFILE | PROFILE CODE           |           |                         |
|                     | 19FW03, 19FW07, 19FW10 |           |                         |
|                     | 19MW03, 19VW05, 19VW03 |           |                         |

CORNER CLEATS



|                     |                        |            |                          |
|---------------------|------------------------|------------|--------------------------|
| CORNER CLEATS       |                        | 69.1 / 116 |                          |
| PROFILE CODE        | 14LW34                 | PRES       | THEORETICAL WEIGHT kg/mt |
|                     |                        |            | 10.235                   |
| APPLICATION PROFILE | PROFILE CODE           |            |                          |
|                     | 19FW04, 19FW11         |            |                          |
|                     | 19MW07, 19VW04, 19VW08 |            |                          |

CORNER CLEATS

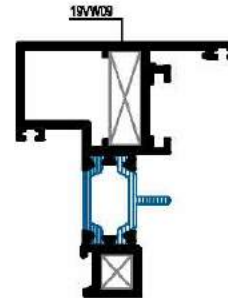
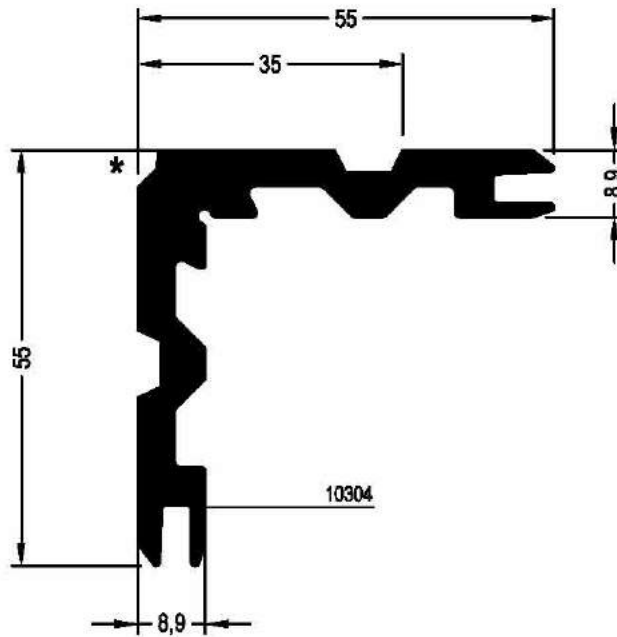


\* pressed profile

\* pressed profile

|                         |                     |      |                         |                       |                             |                         |  |
|-------------------------|---------------------|------|-------------------------|-----------------------|-----------------------------|-------------------------|--|
| CORNER CLEATS 19.5 / 65 |                     |      |                         | CORNER CLEATS 15 / 60 |                             |                         |  |
| PROFILE CODE            | 14LW35              | PRES | THEORETICAL WEIGHT kg/m | PROFILE CODE          | 14LW13                      | THEORETICAL WEIGHT kg/m |  |
|                         |                     |      | 4.270                   |                       |                             | 2.488                   |  |
| APPLICATION PROFILE     | PROFILE CODE 19VW11 |      |                         | APPLICATION PROFILE   | PROFILE CODE 19AW17, 19AW18 |                         |  |

CORNER CLEATS

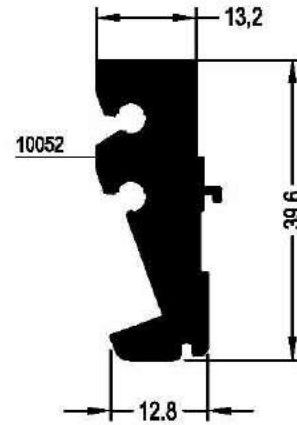
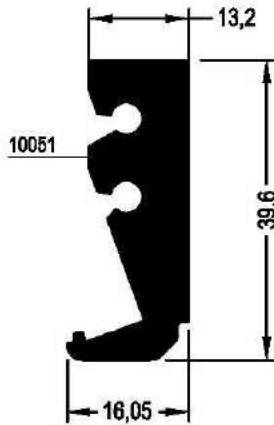


\* pressed profile

|                     |              |          |                          |
|---------------------|--------------|----------|--------------------------|
| CORNER CLEATS       |              | 8.9 / 55 |                          |
| PROFILE CODE        | 14LW45       | PRES     | THEORETICAL WEIGHT kg/mt |
|                     |              |          | 1.672                    |
| APPLICATION PROFILE | PROFILE CODE |          |                          |
|                     | 19'W09       |          |                          |



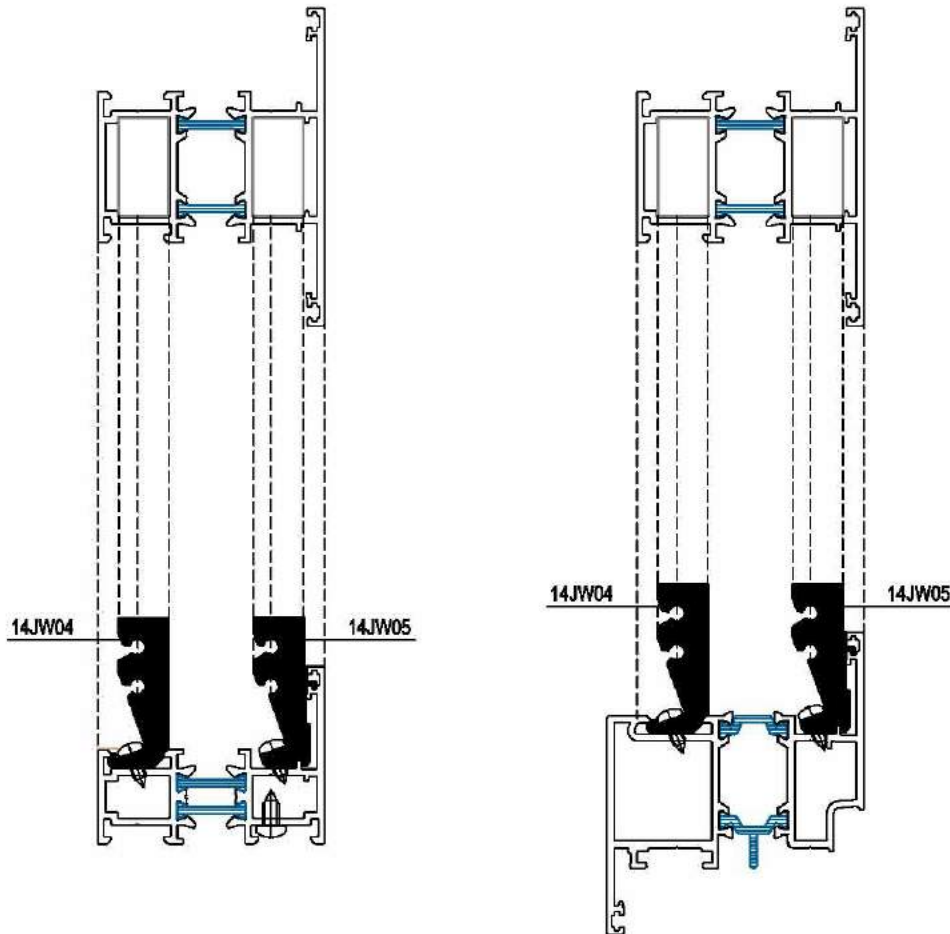
T JUNCTION



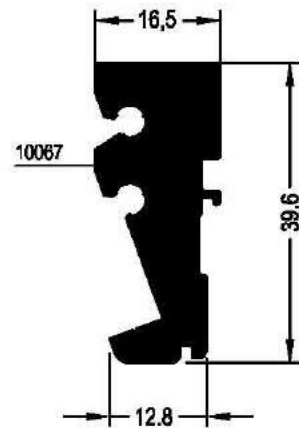
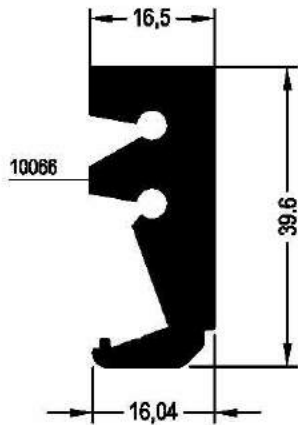
T JUNCTION 13.2 / 39.6

T JUNCTION 13.2 / 39.6

|              |               |      |                          |              |               |      |                          |
|--------------|---------------|------|--------------------------|--------------|---------------|------|--------------------------|
| PROFILE CODE | <b>14JW04</b> | PRES | THEORETICAL WEIGHT kg/mt | PROFILE CODE | <b>14JW05</b> | PRES | THEORETICAL WEIGHT kg/mt |
|              |               |      | <b>1.056</b>             |              |               |      | <b>1.056</b>             |



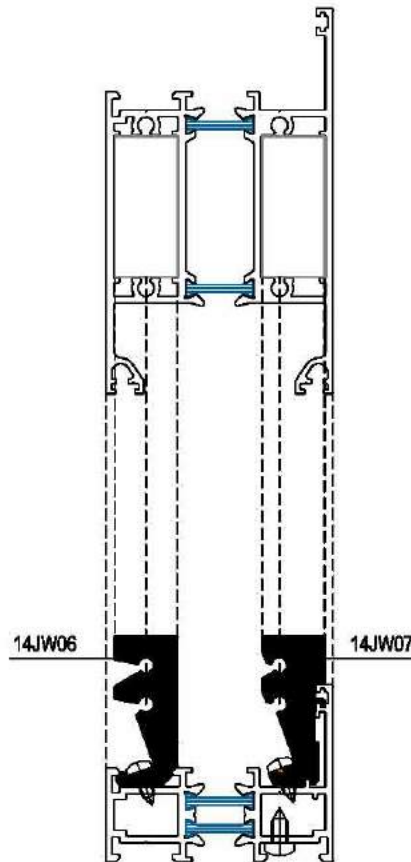
T JUNCTION



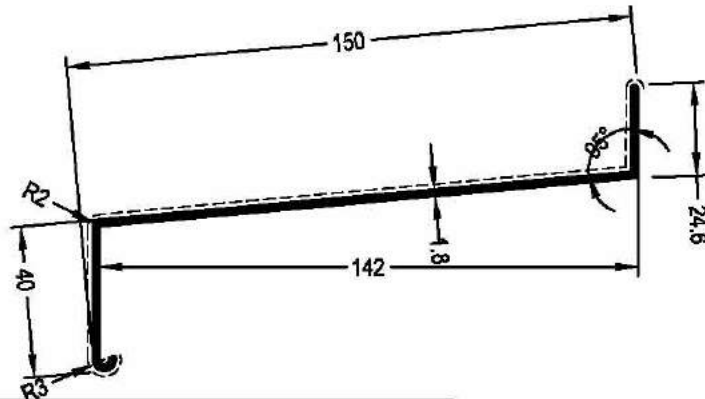
T JUNCTION 16.5 / 39.6

T JUNCTION 16.5 / 39.6

|              |        |      |                          |              |        |      |                          |
|--------------|--------|------|--------------------------|--------------|--------|------|--------------------------|
| PROFILE CODE | 14JW06 | PRES | THEORETICAL WEIGHT kg/mt | PROFILE CODE | 14JW07 | PRES | THEORETICAL WEIGHT kg/mt |
|              |        |      | 1.164                    |              |        |      | 1.170                    |



SILL PROFILE



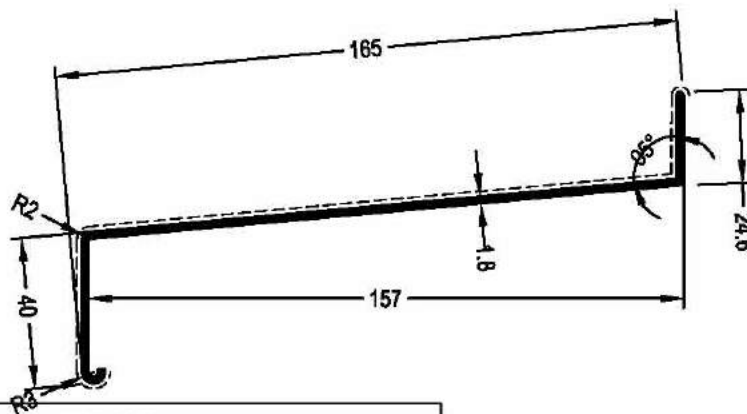
SILL PROFILE 40 / 150

PROFILE CODE

6707

THEORETICAL WEIGHT kg/mt

1.011



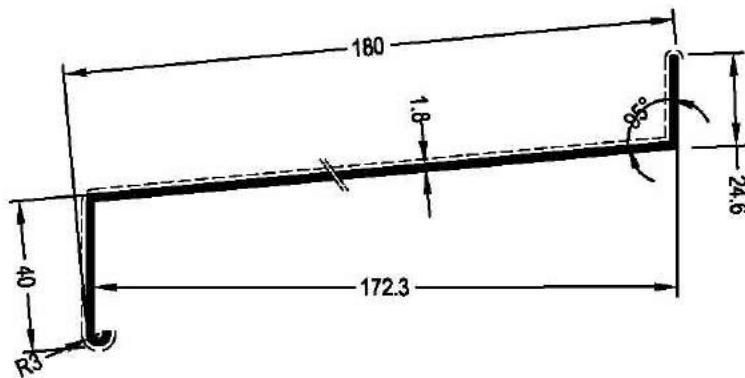
SILL PROFILE 40 / 165

PROFILE CODE

6706

THEORETICAL WEIGHT kg/mt

1.084



SILL PROFILE 40 / 180

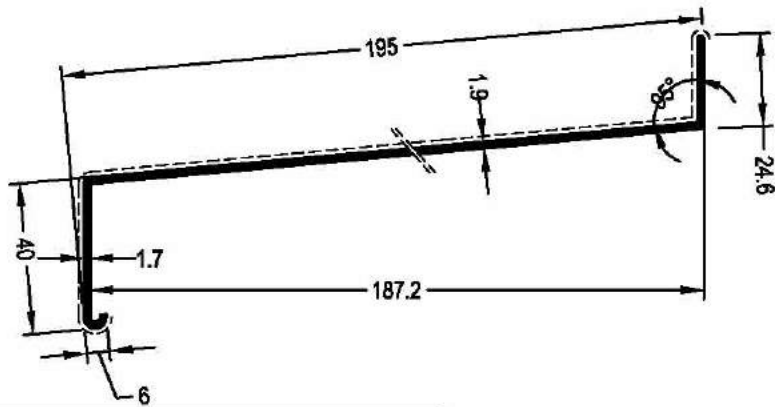
PROFILE CODE

6705

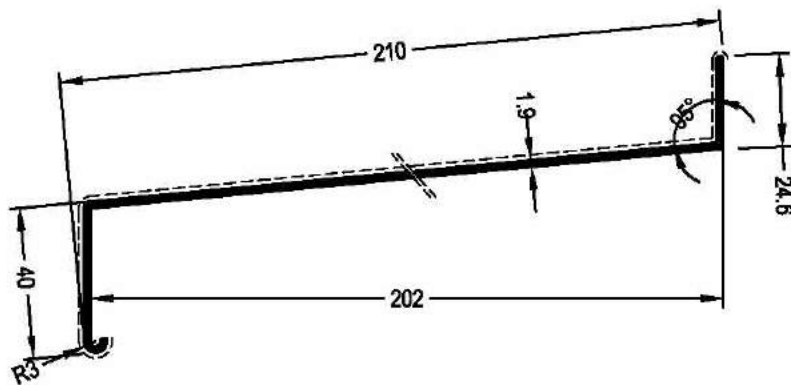
THEORETICAL WEIGHT kg/mt

1.157

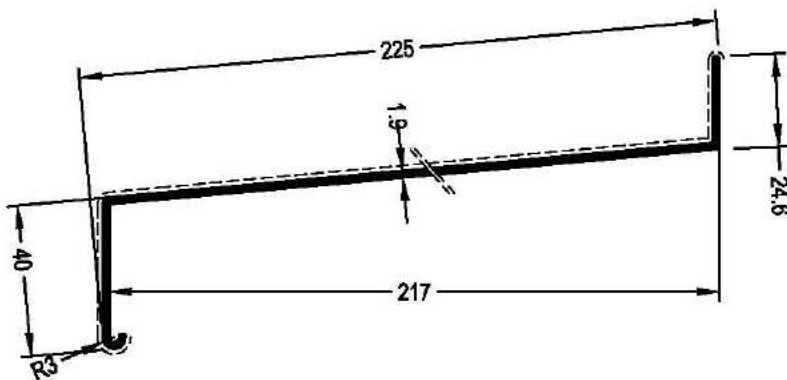
SILL PROFILE



|              |          |                          |
|--------------|----------|--------------------------|
| SILL PROFILE | 40 / 195 |                          |
| PROFILE CODE | 6704     | THEORETICAL WEIGHT kg/mt |
|              |          | 1.292                    |

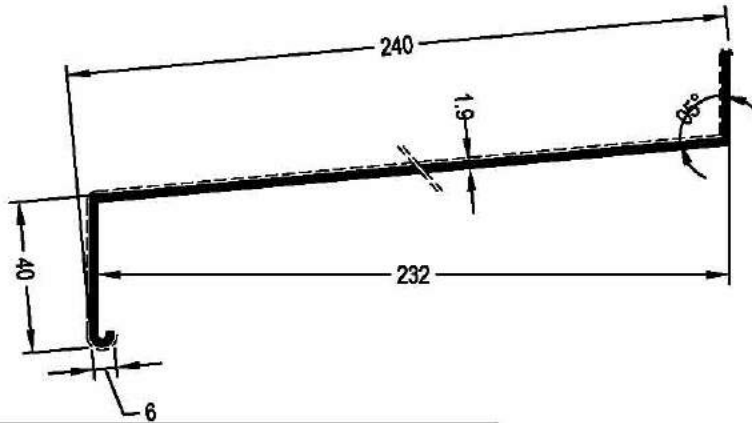


|              |          |                          |
|--------------|----------|--------------------------|
| SILL PROFILE | 40 / 210 |                          |
| PROFILE CODE | 6703     | THEORETICAL WEIGHT kg/mt |
|              |          | 1.589                    |

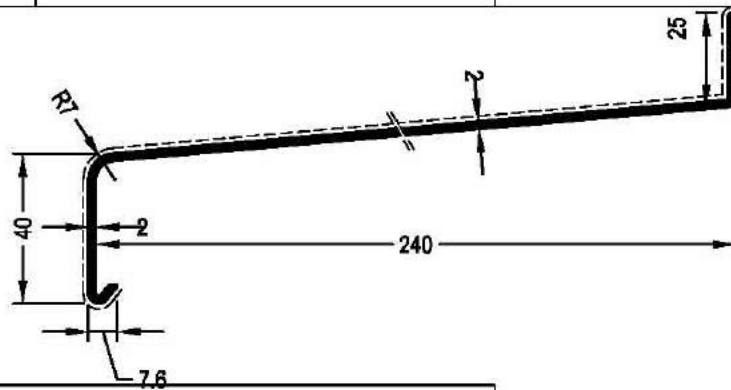


|              |          |                          |
|--------------|----------|--------------------------|
| SILL PROFILE | 40 / 225 |                          |
| PROFILE CODE | 6702     | THEORETICAL WEIGHT kg/mt |
|              |          | 1.446                    |

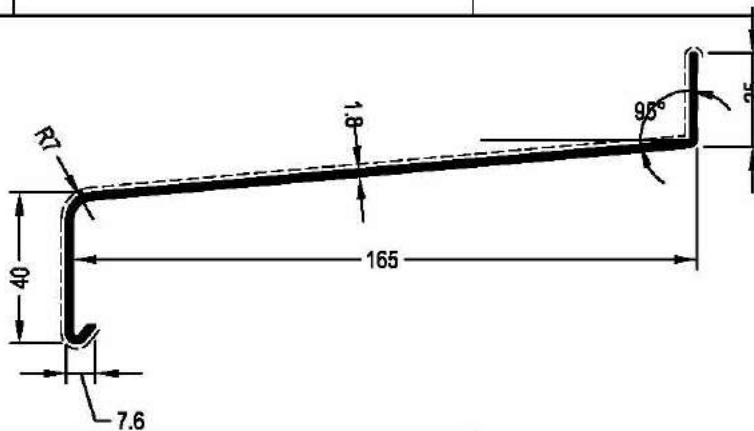
SILL PROFILE



|              |      |                           |
|--------------|------|---------------------------|
| SILL PROFILE |      | 40 / 240                  |
| PROFILE CODE | 6701 | THEORETICAL WEIGHT kg/mt. |
|              |      | 1.522                     |

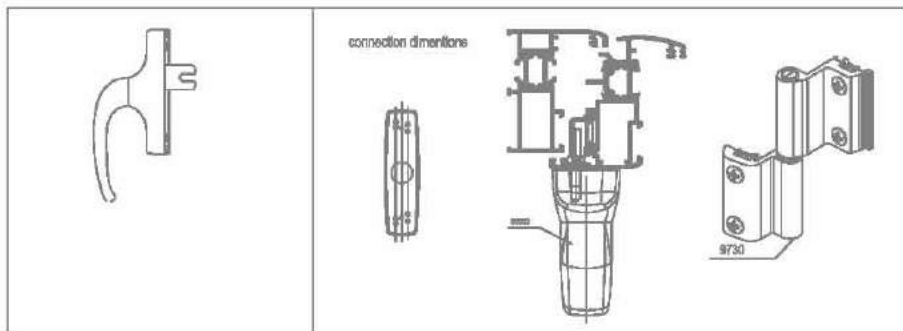


|              |      |                           |
|--------------|------|---------------------------|
| SILL PROFILE |      | 40 / 240                  |
| PROFILE CODE | 6711 | THEORETICAL WEIGHT kg/mt. |
|              |      | 1.645                     |



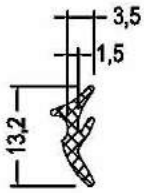
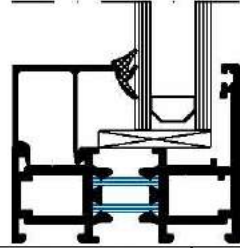
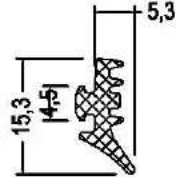
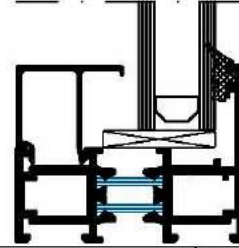
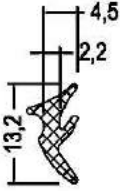
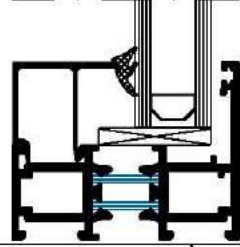
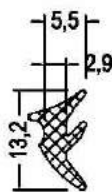
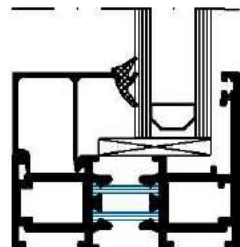
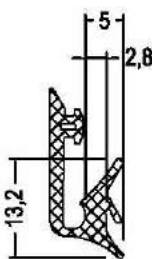
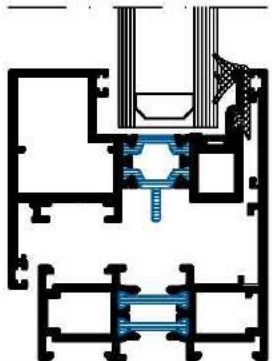
|              |      |                           |
|--------------|------|---------------------------|
| SILL PROFILE |      | 40 / 165                  |
| PROFILE CODE | 6712 | THEORETICAL WEIGHT kg/mt. |
|              |      | 1.119                     |

## c - ACCESSORIES

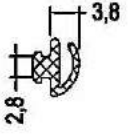
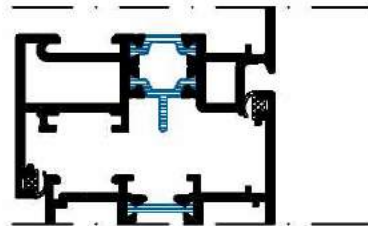
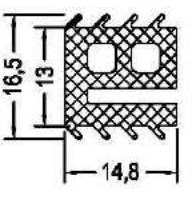
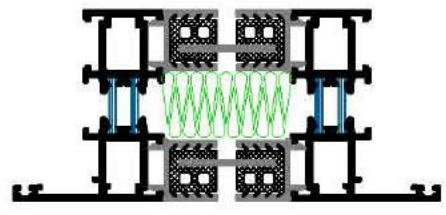
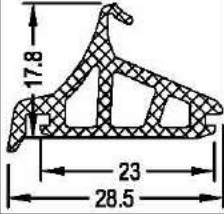
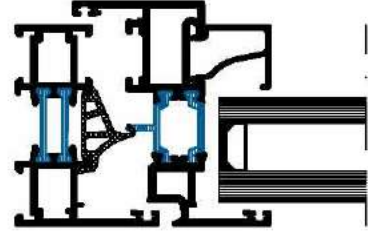
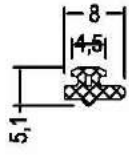
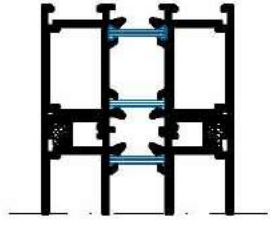
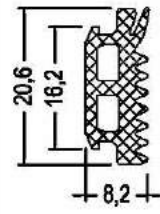
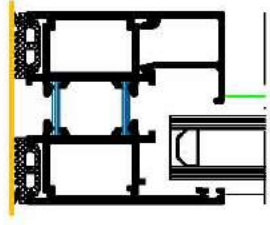




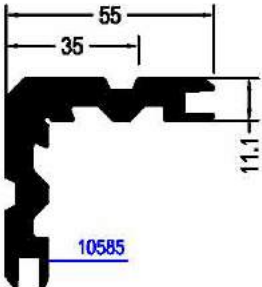
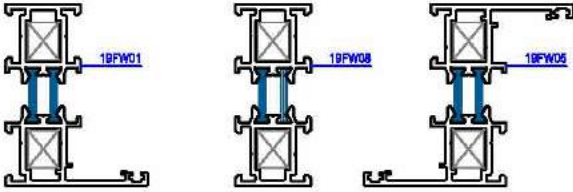
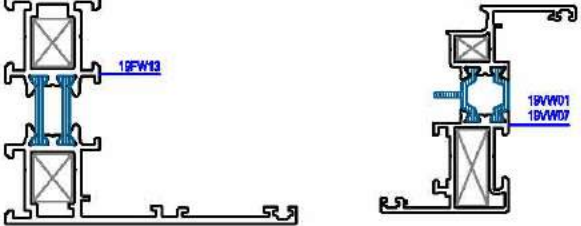

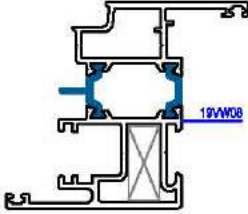
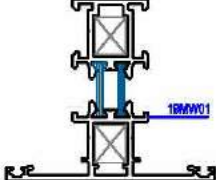
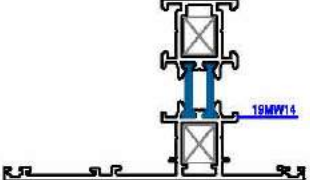
E.P.D.M. GASKETS

|   |   |  |   |  |  |
|---|---|--|---|--|--|
|    |    |  |  |  |  |
| <b>11A1101</b>  | Glazing Gasket Inside<br>300 m in one package                                       | THEORETICAL WEIGHT kg/mt<br><b>0.050 kg/mt</b>                                     | <b>11A2701</b>  | Glazing Gasket Outside<br>270 m in one package | THEORETICAL WEIGHT kg/mt<br><b>0.055 kg/mt</b> |
| <b>MATERIALS</b>  | E.P.D.M.  |  | <b>MATERIALS</b>  | E.P.D.M.                                       |  |
|    |    |  |   |  |  |
| <b>11A1102</b>  | Glazing Gasket Inside<br>250 m in one package                                       | THEORETICAL WEIGHT kg/mt<br><b>0.060 kg/mt</b>                                     |   |  |  |
| <b>MATERIALS</b>  | E.P.D.M.  |  |   |  |  |
|  |  |  |   |  |  |
| <b>11A1103</b>  | Glazing Gasket Inside<br>215 m in one package                                       | THEORETICAL WEIGHT kg/mt<br><b>0.070 kg/mt</b>                                     |   |  |  |
| <b>MATERIALS</b>  | E.P.D.M.  |  |   |  |  |
|  |  |  |   |  |  |
| <b>11A1104</b>  | Glazing Gasket Inside<br>158 m in one package                                       | THEORETICAL WEIGHT kg/mt<br><b>0.095 kg/mt</b>                                     |   |  |  |
| <b>MATERIALS</b>  | E.P.D.M.  |  |   |  |  |

E.P.D.M. GASKETS

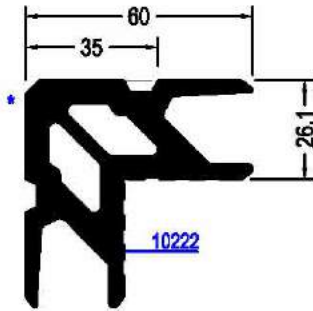
|   |  |   |  |
|---|--|---|--|
|  |                                       |   |   |
| <p><b>11A1301</b></p>   | <p><b>Acoustical Gasket</b><br/>375 m in one package</p> <p><b>THEORETICAL WEIGHT kg/mt</b><br/><b>0.040 kg/mt</b></p> | <p><b>11A1706</b></p>   | <p><b>Gaskets for Adapter Profile</b><br/>73 m in one package</p> <p><b>THEORETICAL WEIGHT kg/mt</b><br/><b>0.205 kg/mt</b></p>  |
| <p><b>MATERIALS</b></p>   | <p>E.P.D.M.</p>  | <p><b>MATERIALS</b></p>   | <p>E.P.D.M.</p>  |
|  |                                       |    |   |
| <p><b>11A1406</b></p>   | <p><b>Central Gasket</b><br/>79 m in one package</p> <p><b>THEORETICAL WEIGHT kg/mt</b><br/><b>0.190 kg/mt</b></p>     | <p><b>11A1502</b></p>   | <p><b>Gaskets for Adapter Profile</b><br/>517 m in one package</p> <p><b>THEORETICAL WEIGHT gr/mt</b><br/><b>0.029 kg/mt</b></p> |
| <p><b>MATERIALS</b></p>   | <p>E.P.D.M.</p>  | <p><b>MATERIALS</b></p>   | <p>E.P.D.M.</p>  |
|   |  |  |   |
|   |  | <p><b>11A1503</b></p>   | <p><b>Gaskets for Adapter Profile</b><br/>128 m in one package</p> <p><b>THEORETICAL WEIGHT kg/mt</b><br/><b>0.155 kg/mt</b></p> |
|   |  | <p><b>MATERIALS</b></p>   | <p>E.P.D.M.</p>  |

CORNER CLEATS

| DRAWING / INFORMATION   |                      |                   |   | APPLICATION   |  |  |  |
|---|----------------------|-------------------|---|---|--|--|--|
|  |                      |                   |   |     |  |  |  |
| * pressed profile   |                      |                   |   |   |  |  |  |
| CORNER CLEATS WITH PRES 11.1 / 55   |                      |                   |   |    |  |  |  |
| PROFILE CODE  | 14LW14               | PRES              | THEORETICAL WEIGHT kg/mf  |   |  |  |  |
|   |                      |                   | 2.154   |   |  |  |  |
| APPLICATION PROFILES  | Cutting Sizes ( mm ) | PIECE CODE NUMBER |  |   |  |  |  |
| 19FW01  | 10200                | 13.3 mm           | ----  |   |  |  |  |
|   | 10201                |                   | ----  |   |  |  |  |
| 19FW05  | 10200                | 13.3 mm           | ----  |   |  |  |  |
|   | 10200                |                   | ----  |   |  |  |  |
| 19FW08  | 10201                | 13.3 mm           | ----  |   |  |  |  |
|   | 10201                |                   | ----  |   |  |  |  |
| 19FW13  | 10201                | 13.3 mm           | ----  |   |  |  |  |
|   | 10272                |                   | ----  |   |  |  |  |
| 19VW01  | 10207                | 8.0 mm            | ----  |   |  |  |  |
|   | 10206                | 25.4 mm           | ----  |   |  |  |  |
| 19VW07  | 10226                | 8.4 mm            | ----  |  |  |  |  |
|   | 10224                | 26.0 mm           | ----  |   |  |  |  |
| 19VW08  | 10209                | ----              | ----  |   |  |  |  |
|   | 10243                | 25.4 mm           | ----  |   |  |  |  |
| 19MW01  | 10201                | 13.3 mm           | =====   |   |  |  |  |
|   | 10225                |                   | =====   |   |  |  |  |
| 19MW14  | 10201                | 13.3 mm           | ----  |   |  |  |  |
|   | x1                   |                   | ----  |   |  |  |  |


CORNER CLEATS

DRAWING / INFORMATION

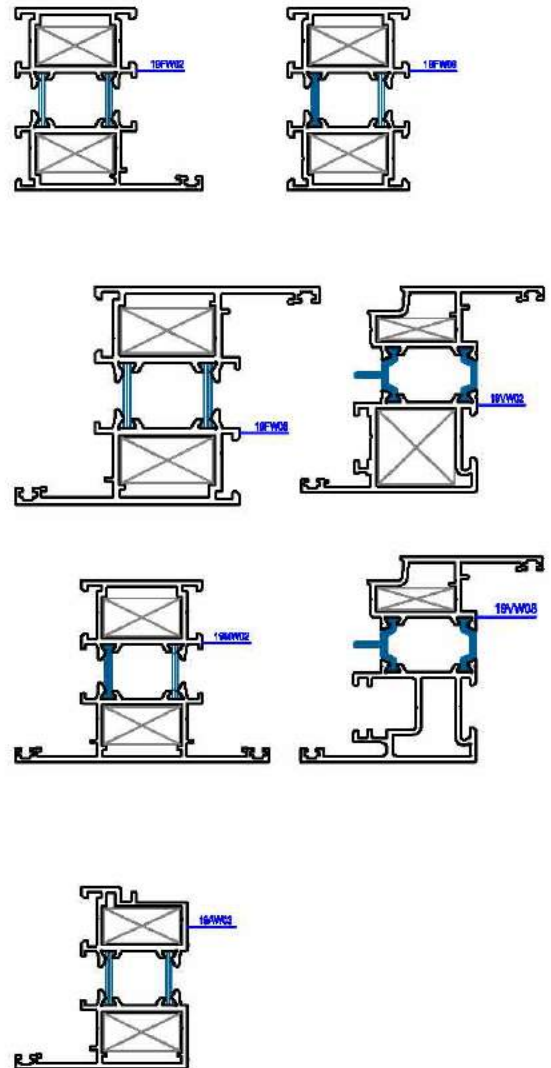


\* pressed profile

CORNER CLEATS WITH PRES 26.1 / 60

| PROFILE CODE         | 14LW32             | PRES              | THEORETICAL WEIGHT kg/m   |
|----------------------|--------------------|-------------------|---|
|                      |                    |                   | 3.363   |
| APPLICATION PROFILES | Cutting Sizes (mm) | PIECE CODE NUMBER |  |
| 19FW02               | 10203              | 13.3 mm           | ----  |
|                      | 10202              |                   | ----  |
| 19FW06               | 10202              | 13.3 mm           | ----  |
|                      | 10202              |                   | ----  |
| 19FW09               | 10203              | 13.3 mm           | ----  |
|                      | 10203              |                   | ----  |
| 19VW02               | 10209              | 8.0 mm            | ----  |
|                      | 10208              | 25.4 mm           | ----  |
| 19VW08               | 10209              | 8.0 mm            | ----  |
|                      | 10243              | ----              | ----  |
| 19VW11               | 10209              | 8.0 mm            | ----  |
|                      | 10280              | ----              | ----  |
| 19MW02               | 10203              | 13.3 mm           | ----  |
|                      | 10214              |                   | ----  |
| 19AW03               | 10249              | 12.3 mm           | ----  |
|                      | 10250              | 13.3 mm           | ----  |

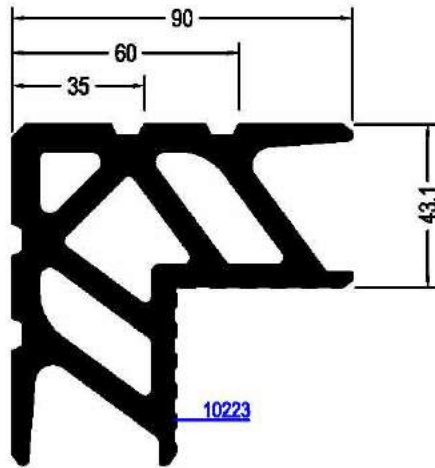
APPLICATION





CORNER CLEATS

DRAWING / INFORMATION



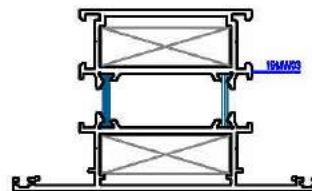
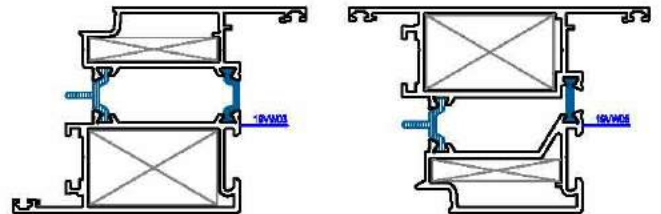
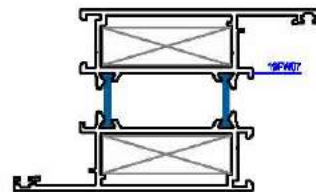
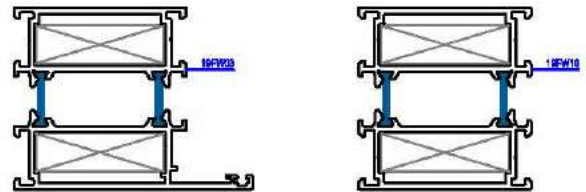
\* pressed profile

CORNER CLEATS WITH PRES 43.1 / 90

|              |               |      |                          |
|--------------|---------------|------|--------------------------|
| PROFILE CODE | <b>14LW33</b> | PRES | THEORETICAL WEIGHT kg/ml |
|              |               |      | <b>7.344</b>             |

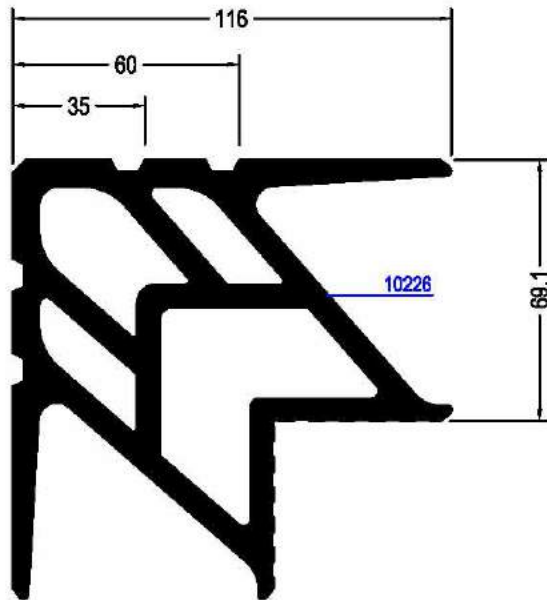
| APPLICATION PROFILES |       | Cutting Sizes ( mm ) | PIECE CODE NUMBER  |
|----------------------|-------|----------------------|---|
| 19FW03               | 10205 | 13.3 mm              | ---   |
|                      | 10204 |                      | ---   |
| 19FW07               | 10204 | 13.3 mm              | ---   |
|                      | 10204 |                      | ---   |
| 19FW10               | 10205 | 13.3 mm              | ---   |
|                      | 10205 |                      | ---   |
| 19VW03               | 10211 | 8.0 mm               | ---   |
|                      | 10210 | 25.4 mm              | ---   |
| 19VW05               | 10240 | 25.4 mm              | ---   |
|                      | 10239 | 8.0 mm               | ---   |
| 19MW03               | 10205 | 13.3 mm              | ---   |
|                      | 10215 |                      | ---   |

APPLICATION




CORNER CLEATS

DRAWING / INFORMATION

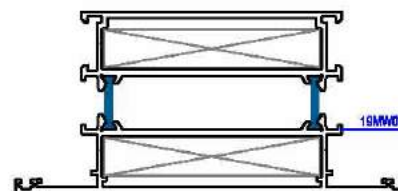
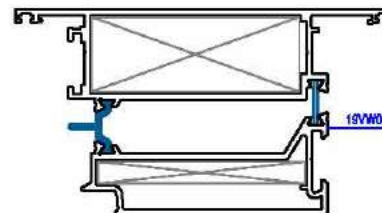
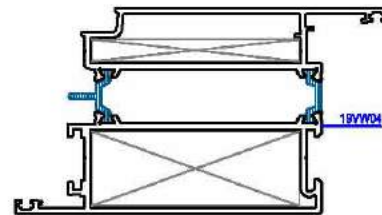
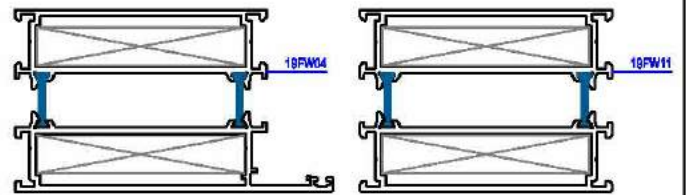


\* pressed profile

CORNER CLEATS WITH PRES 69.1 / 116

| PROFILE CODE         | 14LW34             | PRES              | THEORETICAL WEIGHT kg/mt  |
|----------------------|--------------------|-------------------|---|
|                      |                    |                   | 10.235  |
| APPLICATION PROFILES | Cutting Sizes (mm) | PIECE CODE NUMBER |  |
| 19FW04               | 10230              | 13.3 mm           | —   |
|                      | 10231              |                   | —   |
| 19FW11               | 10230              | 13.3 mm           | —   |
|                      | 10230              |                   | —   |
| 19VW04               | 10213              | 8.0 mm            | —   |
|                      | 10212              | 25.4 mm           | —   |
| 19VW06               | 10242              | 25.4 mm           | —   |
|                      | 10241              | 8.0 mm            | —   |
| 19MW07               | 10244              | 13.3 mm           | —   |
|                      | 10245              |                   | —   |

APPLICATION





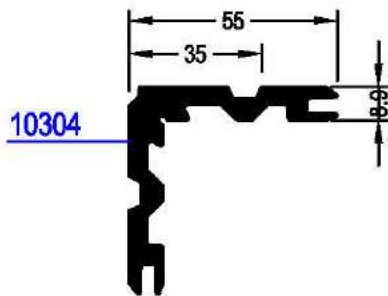
CORNER CLEATS

| DRAWING / INFORMATION             |                      |                   |                          | APPLICATION                        |                      |                   |                          |
|-----------------------------------|----------------------|-------------------|--------------------------|------------------------------------|----------------------|-------------------|--------------------------|
| <p><b>10105</b></p>               |                      |                   |                          | <p><b>10584</b></p>                |                      |                   |                          |
| <p><b>19VW11</b></p>              |                      |                   |                          | <p><b>19AW18</b> <b>19AW17</b></p> |                      |                   |                          |
| * pressed profile                 |                      |                   |                          | * pressed profile                  |                      |                   |                          |
| CORNER CLEATS WITH PRES 19.5 / 65 |                      |                   |                          | CORNER CLEATS WITH PRES 15 / 60    |                      |                   |                          |
| PROFILE CODE                      | <b>14LW35</b>        | PRES              | THEORETICAL WEIGHT kg/mt | PROFILE CODE                       | <b>14LW13</b>        | PRES              | THEORETICAL WEIGHT kg/mt |
|                                   |                      |                   | <b>4.270</b>             |                                    |                      |                   | <b>2.488</b>             |
| APPLICATION PROFILES              | Cutting Sizes ( mm ) | PIECE CODE NUMBER |                          | APPLICATION PROFILES               | Cutting Sizes ( mm ) | PIECE CODE NUMBER |                          |
| <b>19VW11</b>                     | 10209                | -----             | -----                    | <b>19AW17</b>                      | 10296                | 14.8 mm           | -----                    |
|                                   | 10280                | 25.4 mm           | -----                    |                                    | 10297                | 26.8 mm           | -----                    |
|                                   |                      |                   |                          | <b>19AW18</b>                      | 10298                | 26.8 mm           | -----                    |
|                                   |                      |                   |                          |                                    | 10299                | 7.0 mm            | -----                    |

CORNER CLEATS

DRAWING / INFORMATION

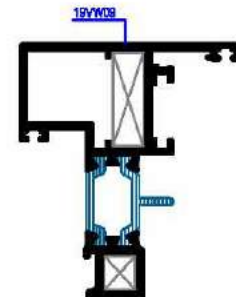
APPLICATION



\* pressed profile

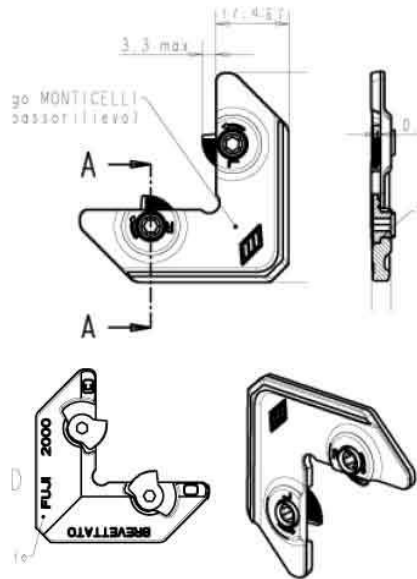
CORNER CLEATS WITH PRES 08.9 / 55

|                      |        |                    |   |
|----------------------|--------|--------------------|---|
| PROFILE CODE         | 14LW45 | PRES               | THEORETICAL WEIGHT kg/m   |
|                      |        |                    | 1.672   |
| APPLICATION PROFILES |        | Cutting Sizes (mm) | PIECE CODE NUMBER  |
| 19VW09               | 10270  | 08.5 mm            | —   |
|                      | 10271  | 25.4 mm            | —   |

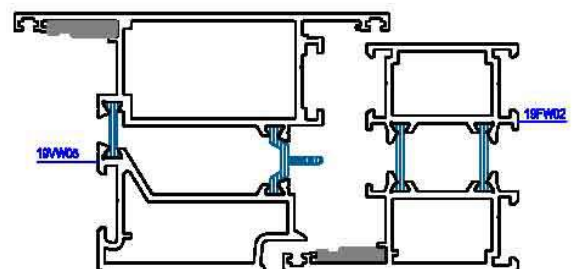
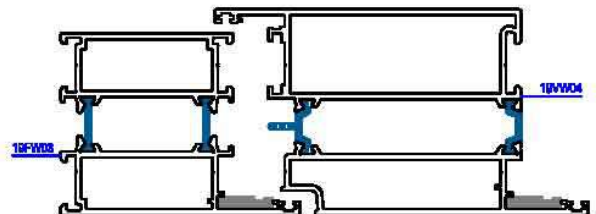
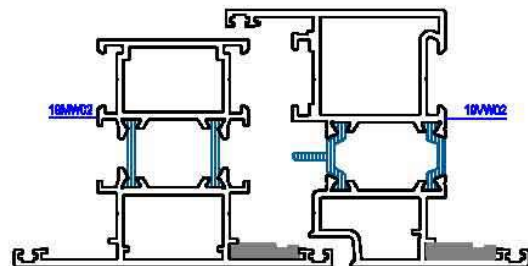
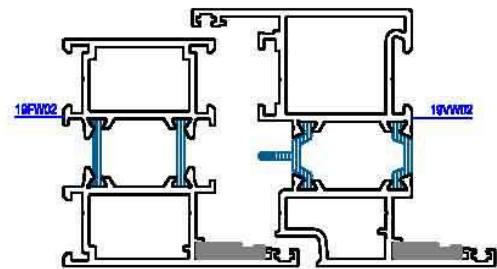
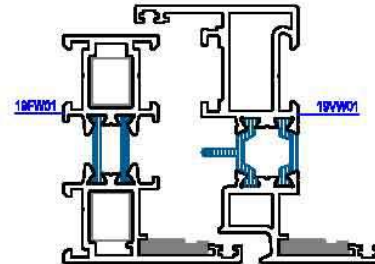


CORNER CLEATS

DRAWING / INFORMATION



APPLICATION



CODE FUJI 2000 Aluminium Corner Joint with nut

APPLICATION PROFILES

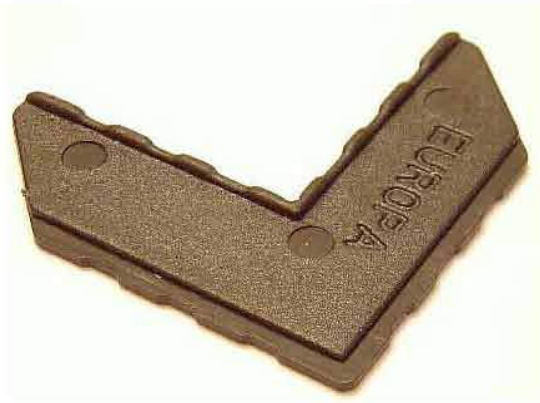
- 17FW01,17FW02,17FW03,17FW04,17FW05,17FW08
- 17FW07,17FW12,17FW13,17FW14
- 17VW01,17VW02,17VW03,17VW04,17VW05,17VW08
- 17VW07,17VW08
- 17MW01,17MW02,17MW03,17MW07

MATERIALS

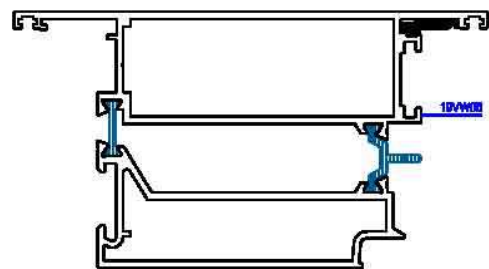
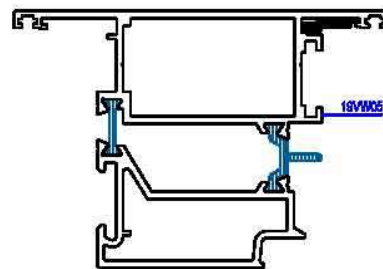
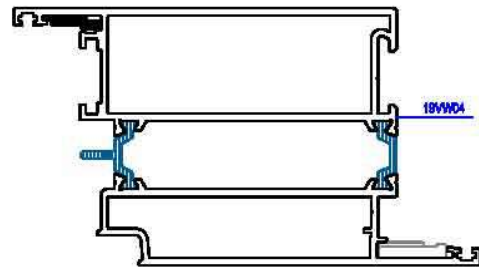
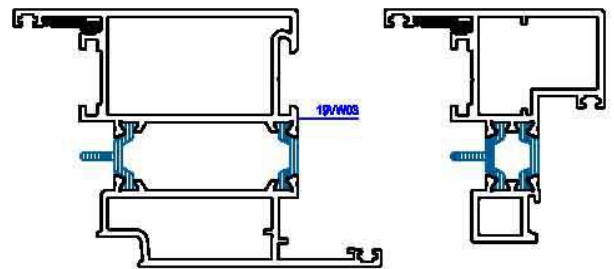
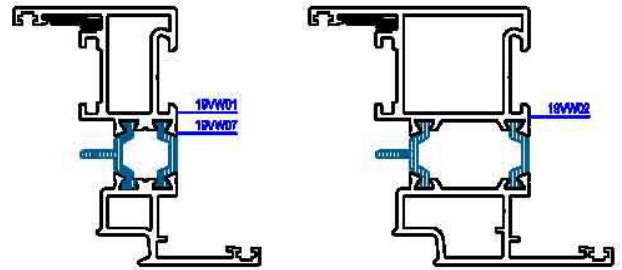
Die -Cast Corner Joint

CORNER CLEATS

DRAWING / INFORMATION



APPLICATION



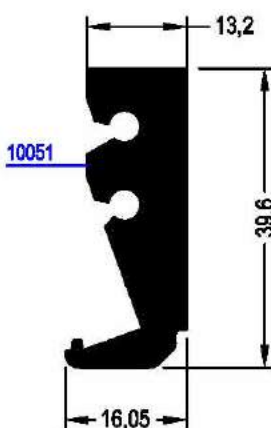
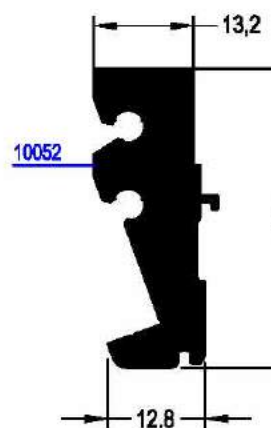


|      |      |                      |
|------|------|----------------------|
| CODE | MO20 | Plastic Corner Joint |
|------|------|----------------------|

|                      |  |
|----------------------|--|
| APPLICATION PROFILES | 17'VW01, 17'VW02, 17'VW03, 17'VW04, 17'VW05, 17'VW06<br>17'VW07, 17'VW09 |
|----------------------|--|

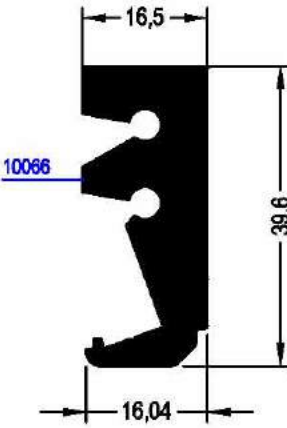
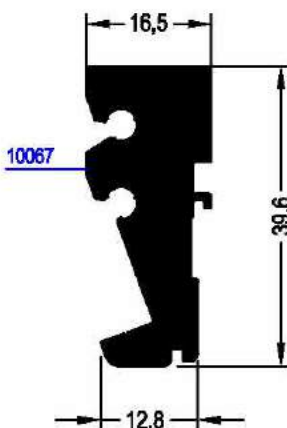


|           |             |
|-----------|-------------|
| MATERIALS | Black nylon |
|-----------|-------------|



T JUNCTION

| DRAWING / INFORMATION  |                      |                   |   | APPLICATION  |                      |                   |   |
|--|----------------------|-------------------|---|--|----------------------|-------------------|---|
|  <p>10051</p> |                      |                   |   |  <p>10052</p> |                      |                   |   |
| * pressed profile  |                      |                   |   | * pressed profile  |                      |                   |   |
| T JUNCTION   |                      | 13.2 / 39.6       |   | T JUNCTION   |                      | 13.2 / 39.6       |   |
| PROFILE CODE   | 14JW04               | PRES              | THEORETICAL WEIGHT kg/mt<br>1.056   | PROFILE CODE   | 14JW05               | PRES              | THEORETICAL WEIGHT kg/mt<br>1.056   |
| APPLICATION PROFILES   | Cutting Sizes ( mm ) | PIECE CODE NUMBER |  | APPLICATION PROFILES   | Cutting Sizes ( mm ) | PIECE CODE NUMBER |  |
| 19MW01   | 10201                | 11.0 mm           | ---   | 19MW01   | 10225                | 11.0 mm           | ---   |
| 19MW02   | 10203                | 26.0 mm           | ---   | 19MW02   | 10214                | 26.0 mm           | ---   |
| 19MW03   | 10205                | 43.0 mm           | ---   | 19MW03   | 10215                | 43.0 mm           | ---   |
| 19MW07   | 10244                | 72.0 mm           | ---   | 19MW07   | 10245                | 72.0 mm           | ---   |
| 19MW15   | 10201                | 11.0 mm           | ---   | 19MW15   | X2                   | 11.0 mm           | ---   |
| 19MW16   | X3                   | 31.0 mm           | ---   | 19MW16   | X4                   | 31.0 mm           | ---   |
| 19MW08   | 10203                | 26.0 mm           | ---   | 19MW16   | 10232                | 31.0 mm           | ---   |
| 19MW10   | 10205                | 43.0 mm           | ---   | 19MW10   | 10233                | 43.0 mm           | ---   |
| 19MW12   | 10236                | 26.0 mm           | ---   | 19MW12   | 10214                | 26.0 mm           | ---   |
| 19MW13   | 10229                | 43.0 mm           | ---   | 19MW13   | 10215                | 43.0 mm           | ---   |
| 19AW14   | XXXX                 | 11.0 mm           | ---   | 19AW14   | 10201                | 11.0 mm           | ---   |

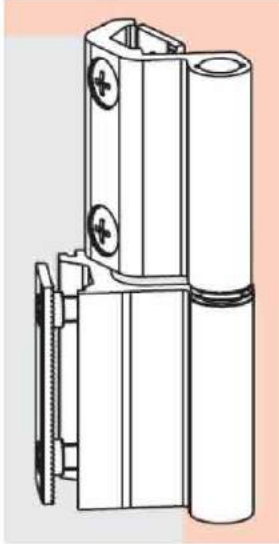
CORNER CLEATS

| DRAWING / INFORMATION  |        |                      |   | APPLICATION   |        |                      |   |
|--|--------|----------------------|---|---|--------|----------------------|---|
|  <p>10066</p> |        |                      |   |  <p>10067</p> |        |                      |   |
| * pressed profile  |        |                      |   | * pressed profile   |        |                      |   |
| T JUNCTION   |        | 16.5 / 39.6          |   | T JUNCTION  |        | 16.5 / 39.6          |   |
| PROFILE CODE   | 14JW06 | PRES                 | THEORETICAL WEIGHT kg/mt<br>1.164   | PROFILE CODE  | 14JW07 | PRES                 | THEORETICAL WEIGHT kg/mt<br>1.170   |
| APPLICATION PROFILES   |        | Cutting Sizes ( mm ) | PIECE CODE NUMBER  | APPLICATION PROFILES  |        | Cutting Sizes ( mm ) | PIECE CODE NUMBER  |
| 17KW01   | 10263  | 37.2 mm              | -----   | 17KW01  | 10264  | 37.2 mm              | -----   |
| 17KW02   | 10265  | 69.2 mm              | -----   | 17KW02  | 10266  | 69.2 mm              | -----   |
| 17KW03   | 10267  | 95.2 mm              | -----   | 17KW03  | 10268  | 95.2 mm              | -----   |

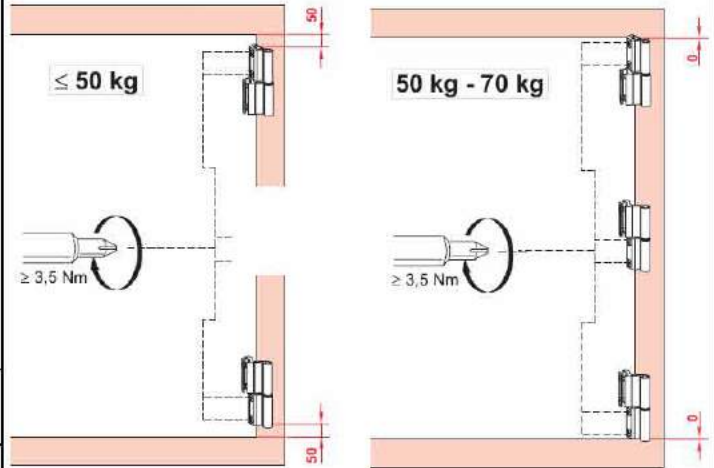


HINGES

DRAWING / INFORMATION



APPLICATION



CODE 14A1701 Window Hinge

COLOURS White (RAL 9016), Black (RAL 9005)

Anodized silver

MATERIALS Black nylon bush, Hinges in extruded aluminium

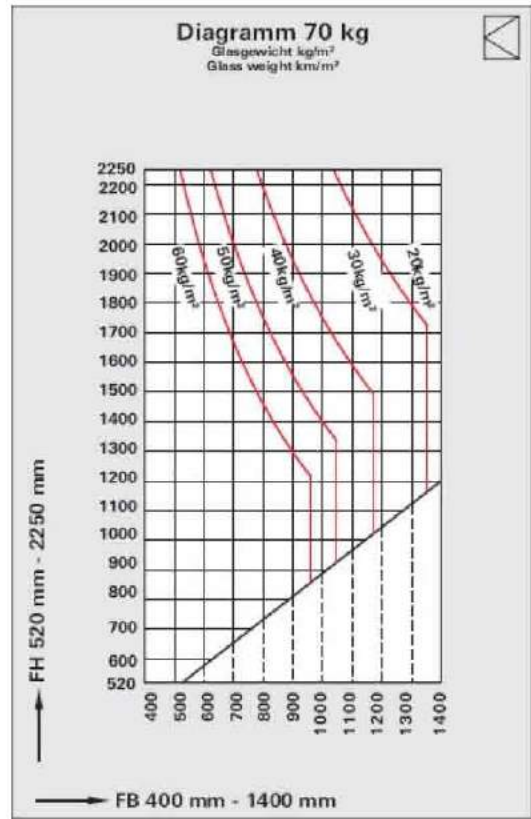
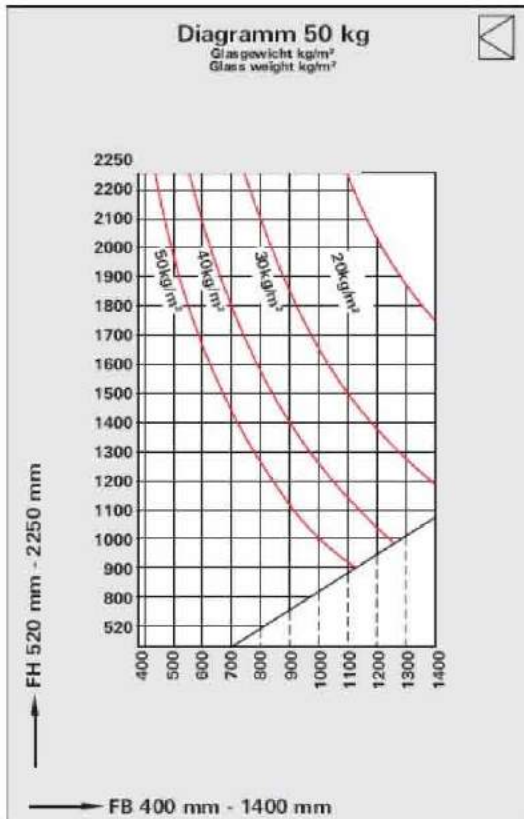
Galvanized steel pin

Galvanized die cast zinc alloy

CAPACITIES 2 hinges : 50 kg

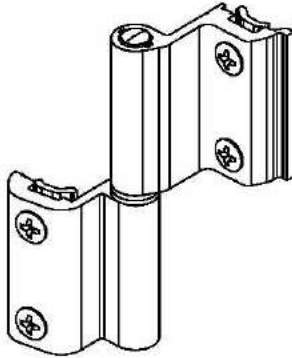
3 hinges : 70 kg

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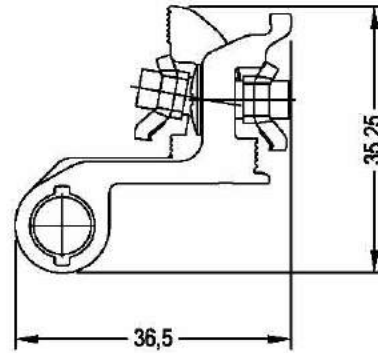


HINGES

DRAWING / INFORMATION



APPLICATION

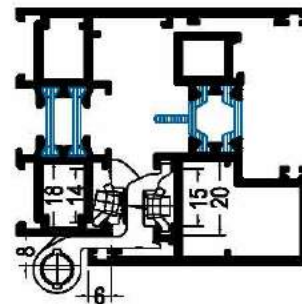
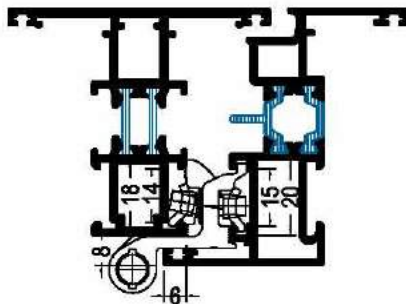
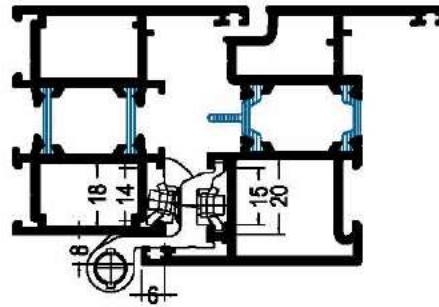
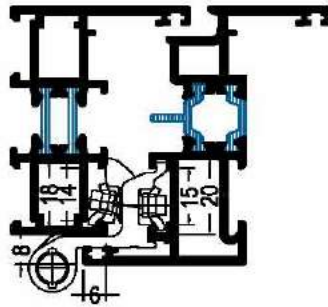


CODE 9730 Window Hinge

COLOURS White (RAL 9016), Black (RAL 9005)

MATERIALS Hinges in extruded aluminium  
Black nylon bush  
Galvanized steel pin  
Galvanized die cast zinc alloy

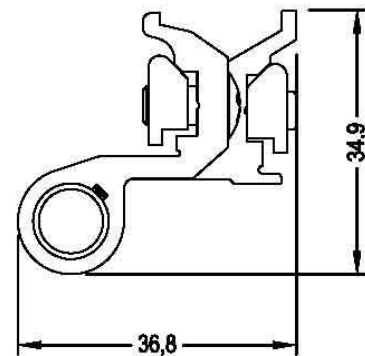
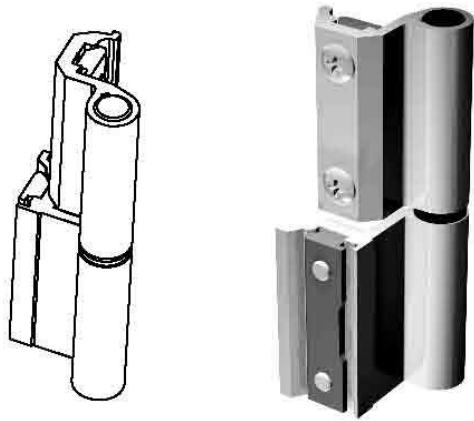
CAPACITIES 2 hinges : 80 kg  
3 hinges : 90 kg



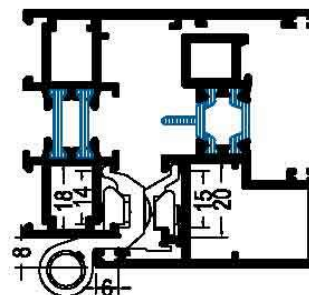
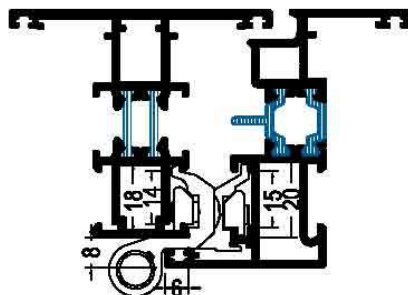
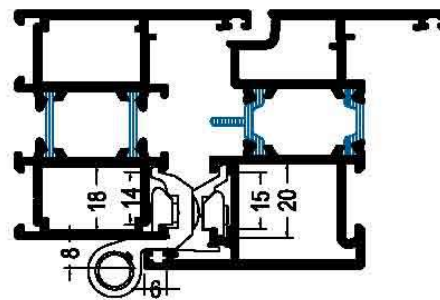
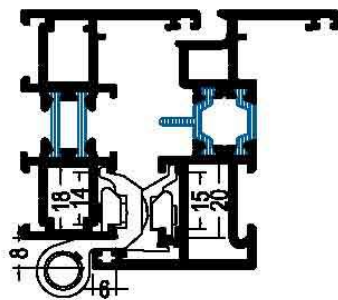
HINGES

DRAWING / INFORMATION

APPLICATION



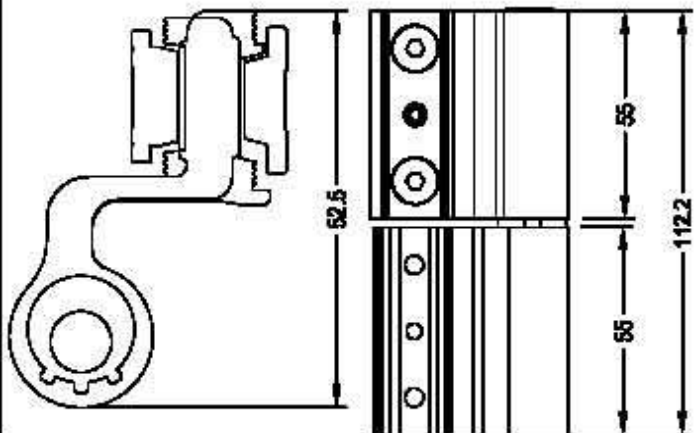
|            |   |              |
|------------|---|--------------|
| CODE       | M10 PR  | Window Hinge |
| COLOURS    | White ( RAL 9016 ) , Black ( RAL 9005 )         |              |
|            | Electrostatic painted in RAL colours            |              |
|            | Anodized silver and bronze                      |              |
| MATERIALS  | Hinges in extruded aluminium , 48 mm length     |              |
|            | Black nylon bush                                |              |
|            | Galvanized steel pin                            |              |
|            | Galvanized die cast zinc alloy , 46.5 mm length |              |
| CAPACITIES | 2 hinges : 80 kg                                |              |
|            | 3 hinges : 90 kg                                |              |



HINGES

DRAWING / INFORMATION

APPLICATION



CODE 5603 Window Hinge

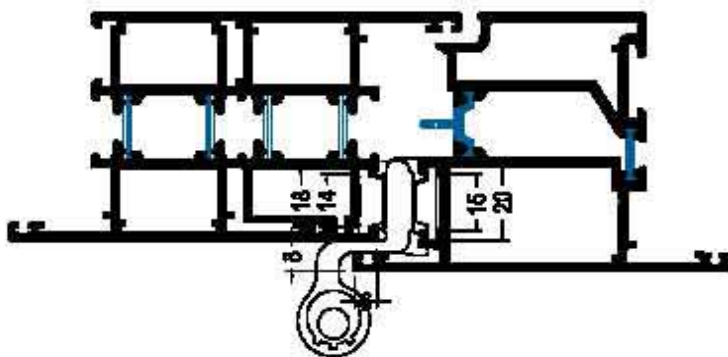
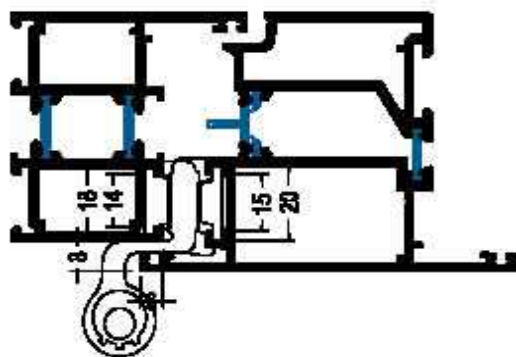
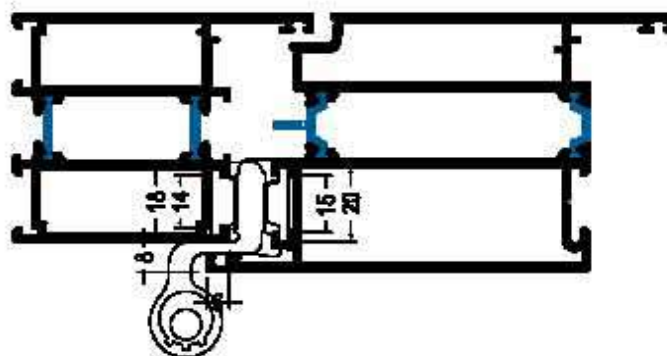
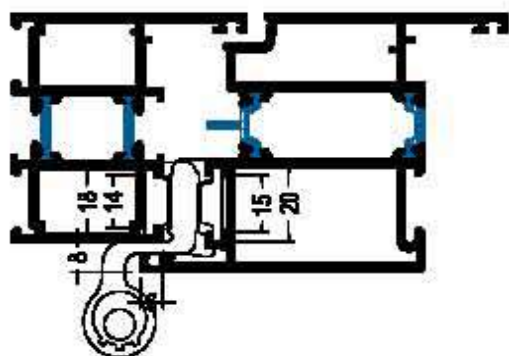
COLOURS White (RAL 9016), Black (RAL 9005)

MATERIALS Hinges in extruded aluminium

Black nylon bush

Galvanized steel pin

Galvanized die cast zinc alloy





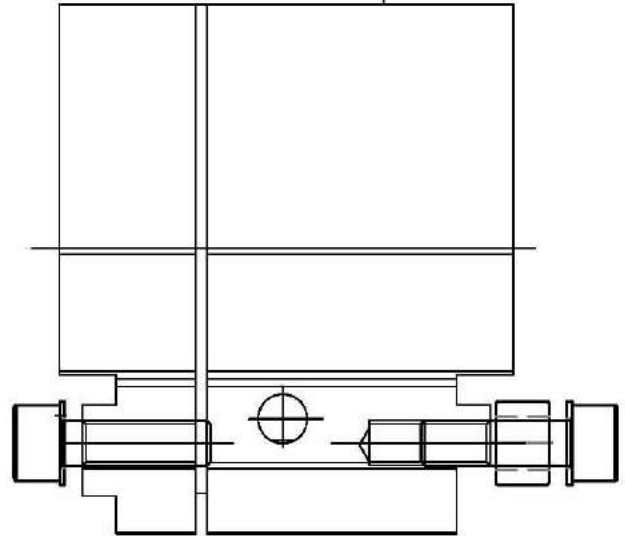
HINGES

DRAWING / INFORMATION

APPLICATION

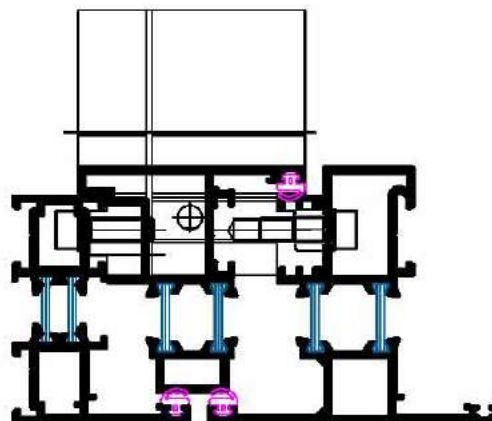


VTF1560\_01441



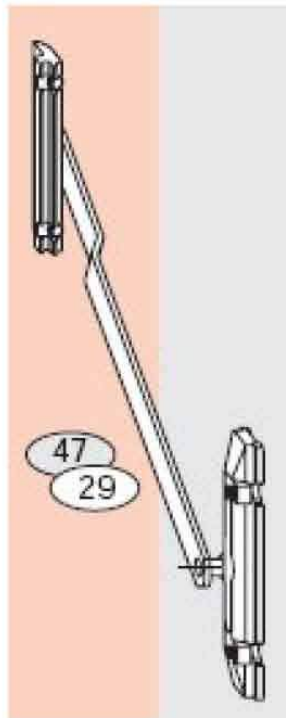
GIESSE VTF1560\_01441

PIVOT Hinge

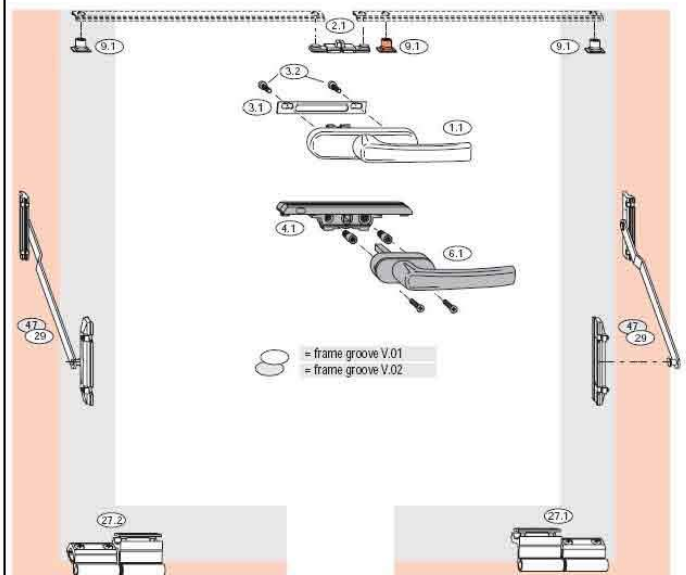


VASISTAS

DRAWING / INFORMATION



APPLICATION



ROTO FRANK

CODE

14A1501

Vasistas

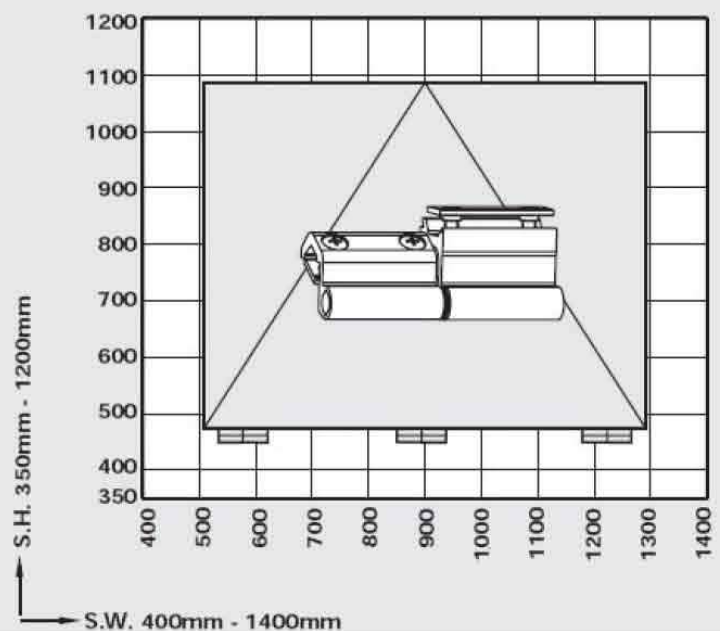


70kg

Limitation of sash formats

S.W. - Sash width 400mm - 1400mm  
 S.H. - Sash height 350mm - 1200mm  
 S.kg.max - Max. sash weight 70kg

The information in the application diagram refers to the glass weight in kg/m<sup>2</sup>.

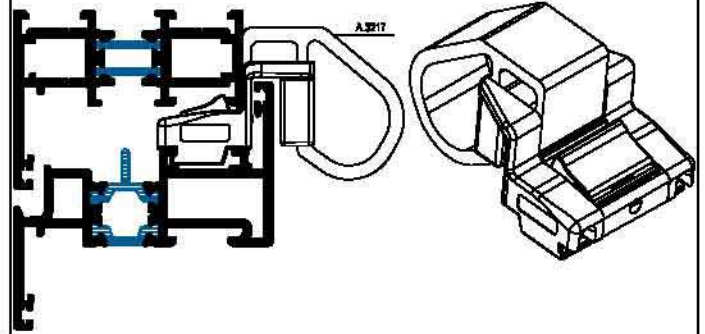
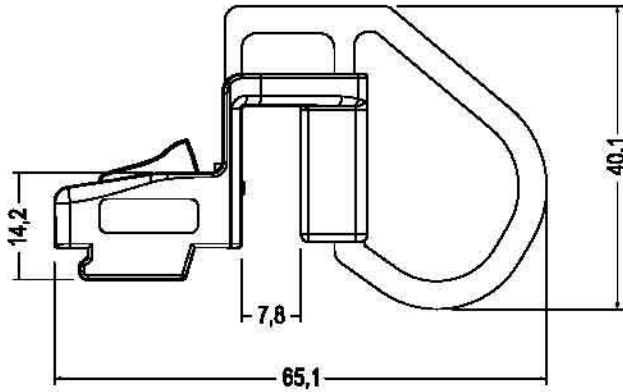




VASISTAS

DRAWING / INFORMATION

APPLICATION



CODE **A.3217** Vasistas Spring

COLOURS White ( RAL 9016 ), Black ( RAL 9005 )

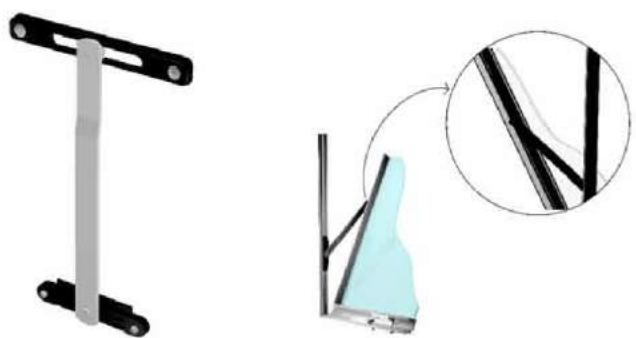
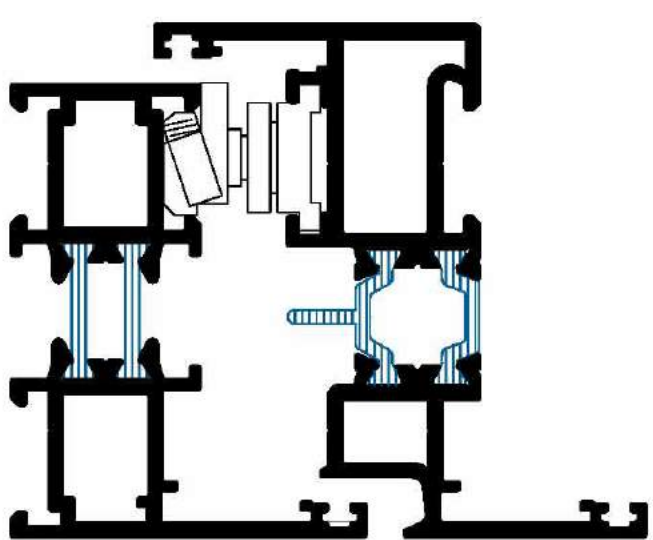

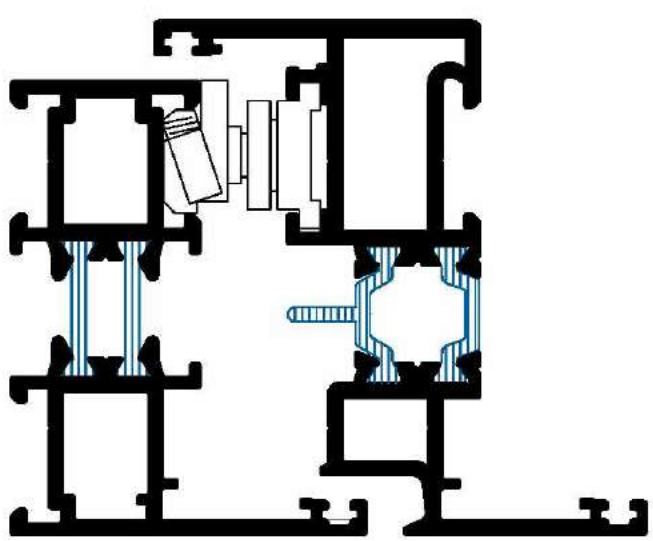


CODE **03209** Vasistas Spring

COLOURS Black

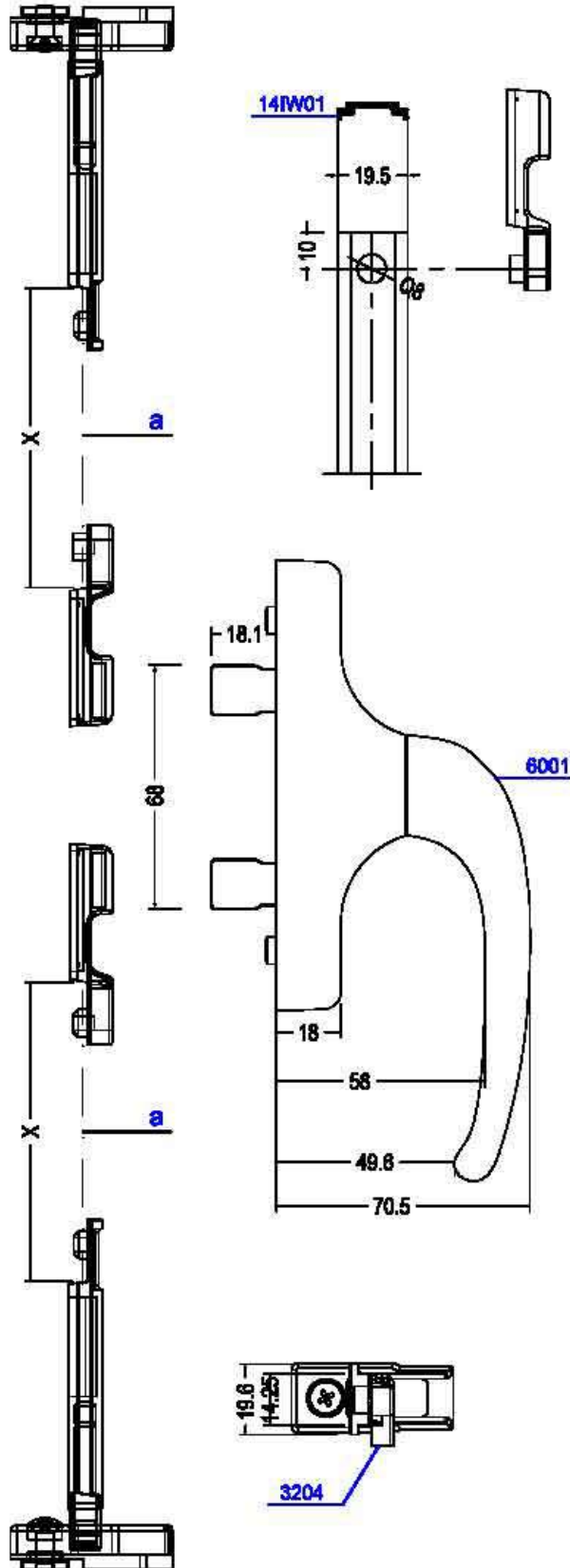
MATERIALS Black nylon

VASISTAS

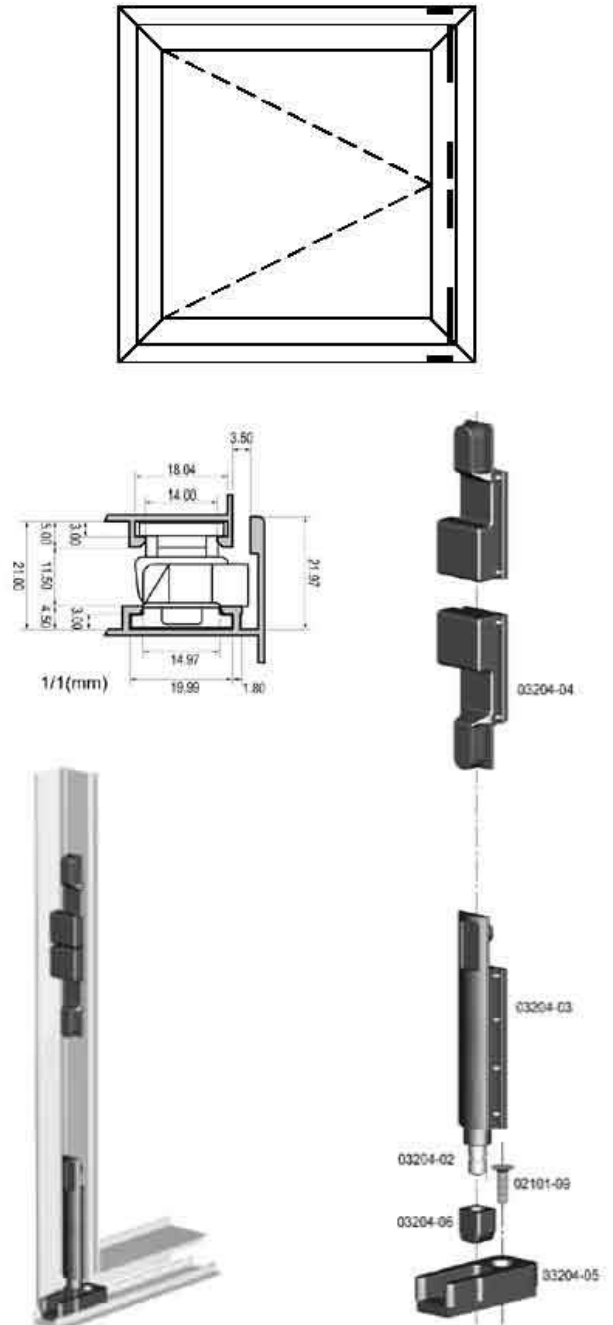
| DRAWING / INFORMATION   |  | APPLICATION  |          |
|---|--|--|----------|
|    |  |   |          |
| CODE  | 3207   |  | Vasistas |
| COLOURS   | Natural , Anodized silver and bronze<br>Electrostatic painted in RAL colours   |  |          |
| MATERIALS   | Extruded aluminium , 209 mm length<br>Black nylon bush<br>Galvanized steel pin |  |          |
| CAPACITIES  | 2 hinges : 60 kg<br>3 hinges : 70 kg   |  |          |
|  |  |  |          |
| CODE  | ERT1861  |  | Vasistas |
| COLOURS   | Natural , Anodized silver and bronze<br>Electrostatic painted in RAL colours   |  |          |

LOCKING KIT

DRAWING / INFORMATION



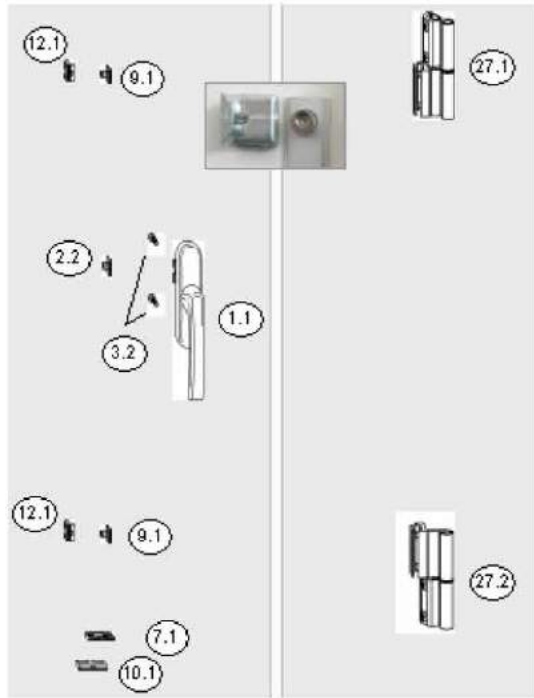
APPLICATION



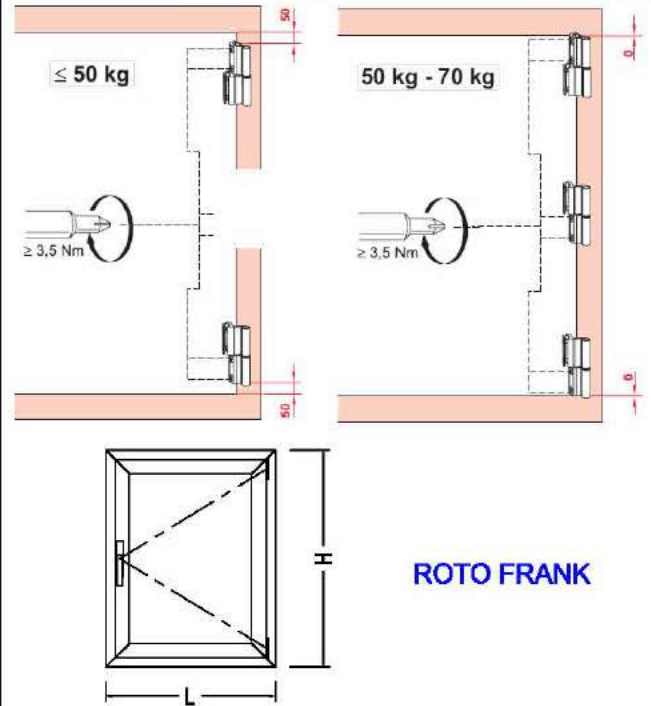
|                  |   |                    |
|------------------|---|--------------------|
| <b>CODE</b>      | <b>03204</b>  | <b>Locking Kit</b> |
| <b>COLOURS</b>   | Black nylon and galvanized coated<br>Galvanized die-cast zinc alloy |                    |
| <b>MATERIALS</b> | Black nylon bush<br>Galvanized steel pin                            |                    |

TURN WINDOWS MECHANISM

DRAWING



APPLICATION

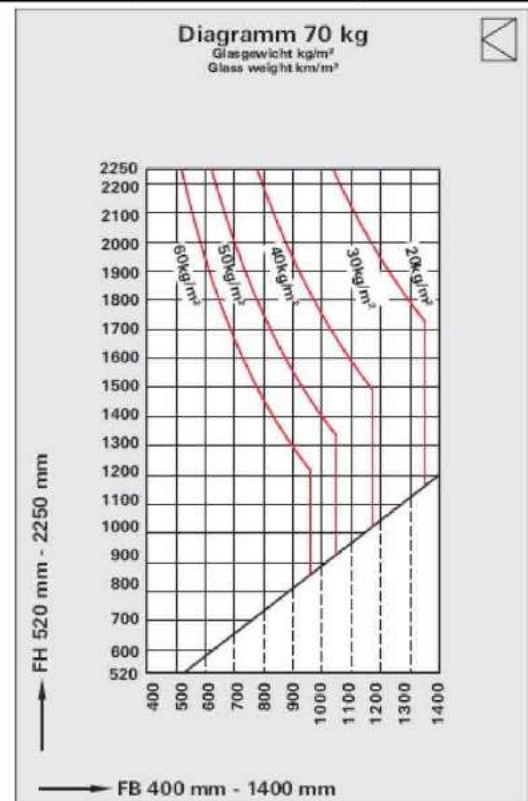
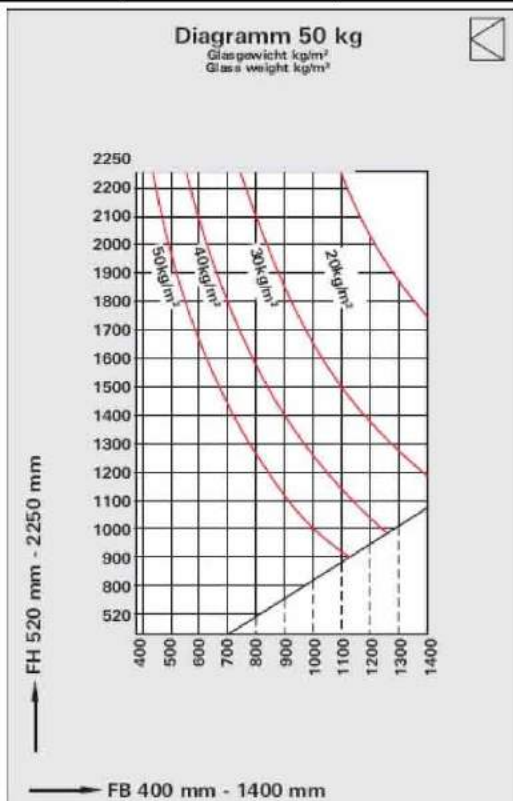


CODE **14A1701** Turn Windows Mechanism

| Width L (mm)     | Height H (mm)    | Weight (kg)   |
|------------------|------------------|---------------|
| 400 mm - 1400 mm | 520 mm - 2250 mm | 50-70 Kg / m2 |

CONTENTS

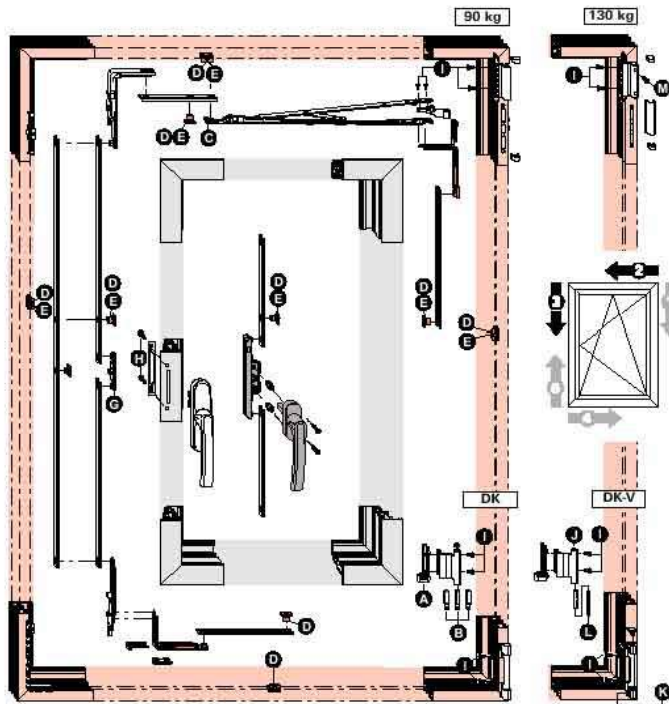
|               |        |
|---------------|--------|
| Hinges        | 2 set. |
| Handle        | 1 set. |
| Locking Group | 1 set. |



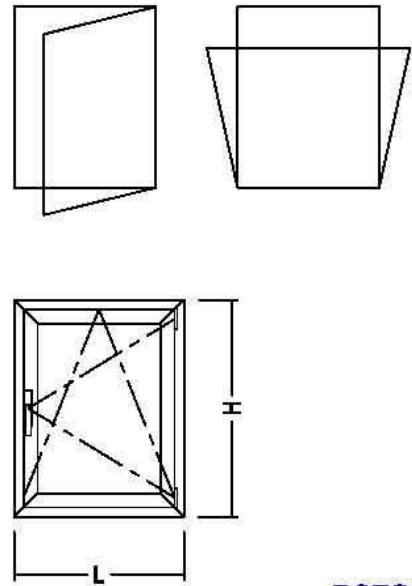


TURN AND TILT MECHANISM

DRAWING



APPLICATION



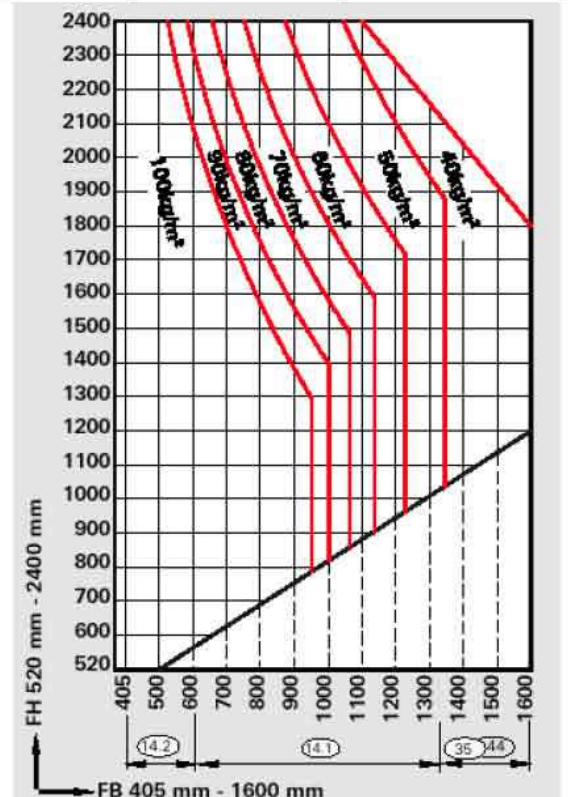
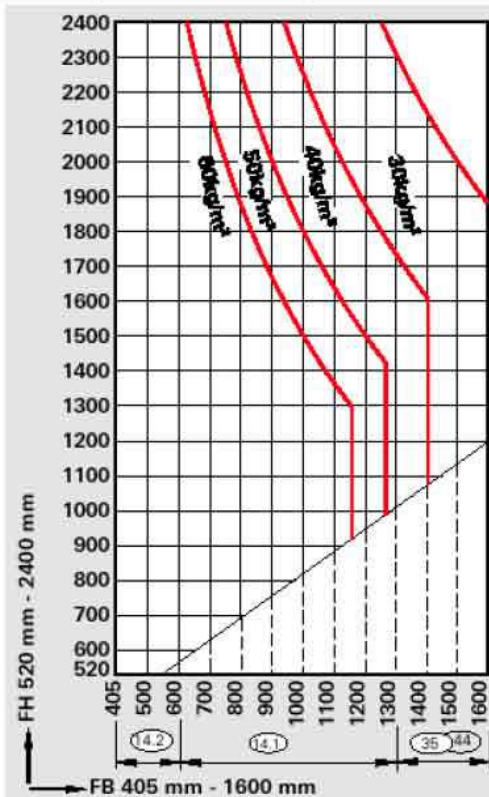
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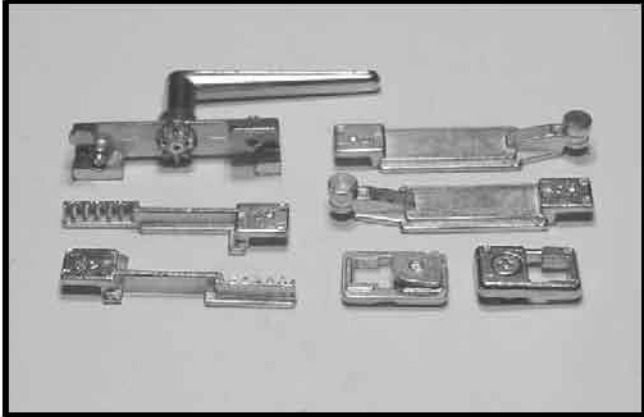
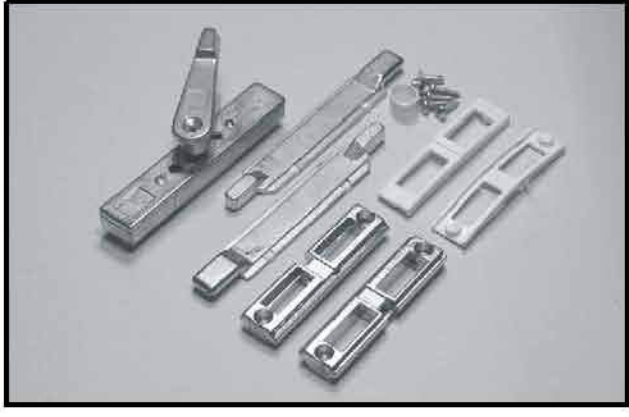
CODE 14A1301 Turn and Tilt Mechanism

CODE 14A1302 Turn and Tilt Mechanism

| Width L (mm)     | Height H (mm)    | Weight (kg) |
|------------------|------------------|-------------|
| 405 mm - 1600 mm | 520 mm - 2400 mm | 90 Kg.      |

| Width L (mm)     | Height H (mm)    | Weight (kg) |
|------------------|------------------|-------------|
| 405 mm - 1600 mm | 520 mm - 2400 mm | 130 Kg.     |

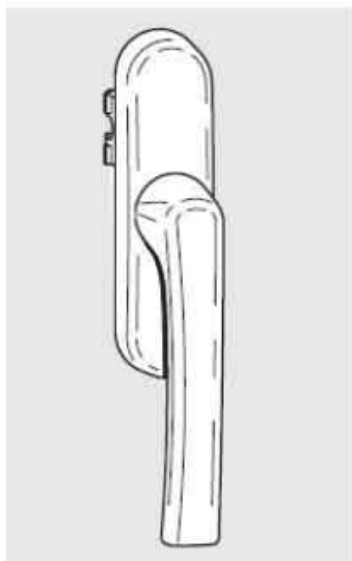


| DRAWING / INFORMATION   |                 |                    | APPLICATION  |                 |                    |
|---|-----------------|--------------------|--|-----------------|--------------------|
|  |                 |                    |  |                 |                    |
| <b>CODE</b>   | <b>MO 22.02</b> | <b>Window Bolt</b> | <b>CODE</b>  | <b>MO 22.01</b> | <b>Window Bolt</b> |
|   |                 |                    |  |                 |                    |



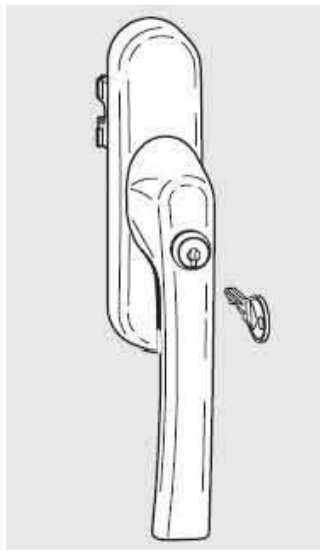
HANDLES

DRAWING / INFORMATION



ROTO FRANK

APPLICATION



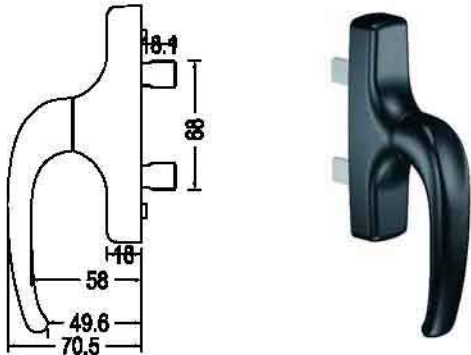
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|                  |                          |                      |                  |                          |                      |
|------------------|--------------------------|----------------------|------------------|--------------------------|----------------------|
| <b>CODE</b>      | <b>14A1101</b>           | <b>Window Handle</b> | <b>CODE</b>      | <b>14A1102</b>           | <b>Window Handle</b> |
| <b>COLOURS</b>   | White ( RAL 9016 )       |                      | <b>COLOURS</b>   | White ( RAL 9016 )       |                      |
|                  | Black ( RAL 9005 )       |                      |                  | Black ( RAL 9005 )       |                      |
|                  | Anodized silver          |                      |                  | Anodized silver          |                      |
| <b>MATERIALS</b> | Die-cast aluminium alloy |                      | <b>MATERIALS</b> | Die-cast aluminium alloy |                      |
|                  | Die-cast zinc alloy      |                      |                  | Die-cast zinc alloy      |                      |
|                  | Black nylon              |                      |                  | Black nylon              |                      |

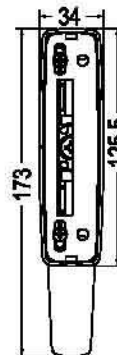
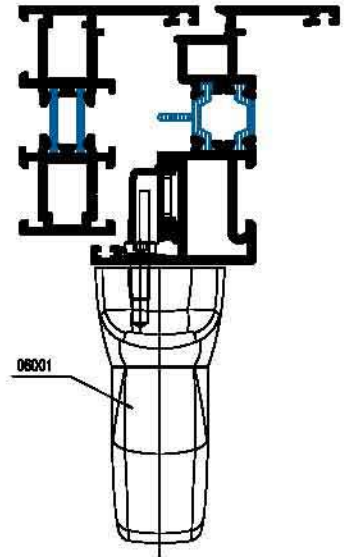
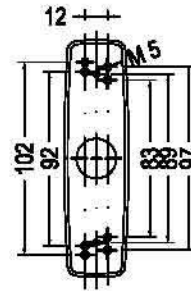
HANDLES

DRAWING / INFORMATION

APPLICATION



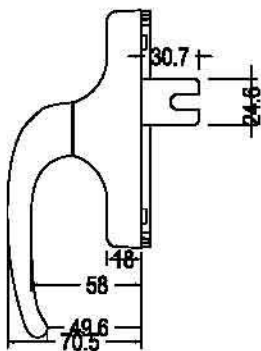
connection dimensions



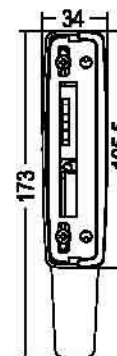
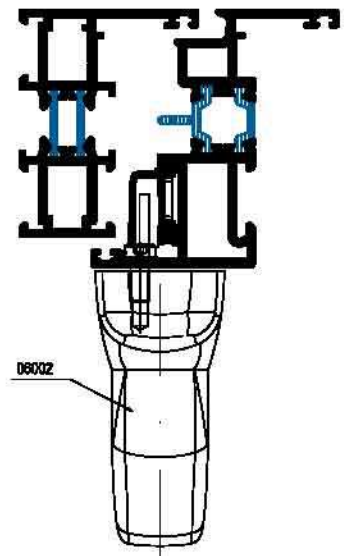
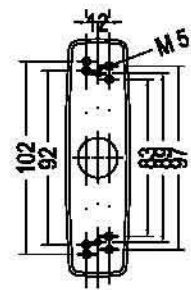
CODE 6001 Window Handle

COLOURS  
White (RAL 9016)  
Black (RAL 9005)  
Electrostatic painted in RAL colours

MATERIALS  
Die-cast aluminium alloy  
Die-cast zinc alloy  
Black nylon



connection dimensions

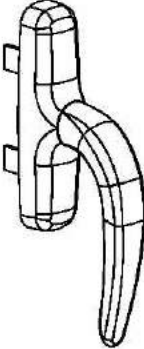
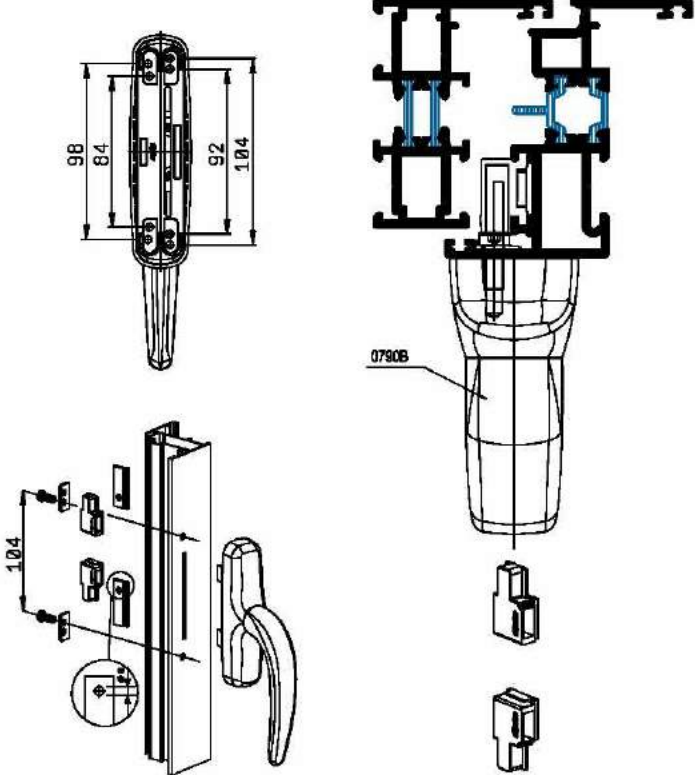
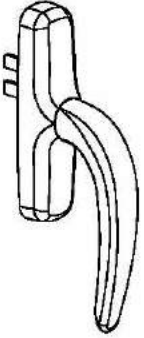
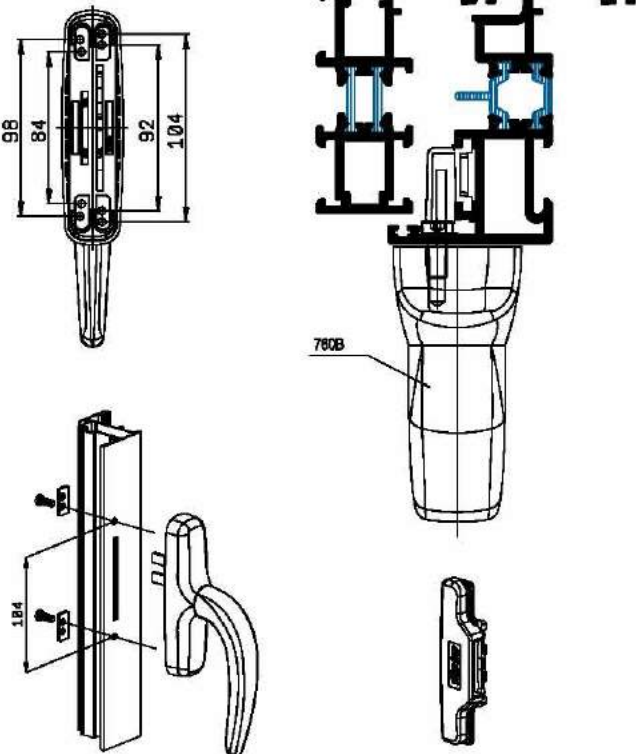


CODE 6002 Window Handle

COLOURS  
White (RAL 9016)  
Black (RAL 9005)  
Electrostatic painted in RAL colours

MATERIALS  
Die-cast aluminium alloy  
Die-cast zinc alloy  
Black nylon

HANDLES

| DRAWING / INFORMATION   |                          | APPLICATION  |
|---|--------------------------|--|
|    |                          |   |
| <b>CODE</b>   | <b>0790B</b>             | <b>Window Handle</b>   |
| <b>COLOURS</b>  | White ( RAL 9016 )       |  |
|   | Black ( RAL 9005 )       |  |
| <b>MATERIALS</b>  | Die-cast aluminium alloy |  |
|   | Die-cast zinc alloy      |  |
|   | Black nylon              |  |
|  |                          |  |
| <b>CODE</b>   | <b>0760B</b>             | <b>Window Handle</b>   |
| <b>COLOURS</b>  | White ( RAL 9016 )       |  |
|   | Black ( RAL 9005 )       |  |
| <b>MATERIALS</b>  | Die-cast aluminium alloy |  |
|   | Die-cast zinc alloy      |  |
|   | Black nylon              |  |

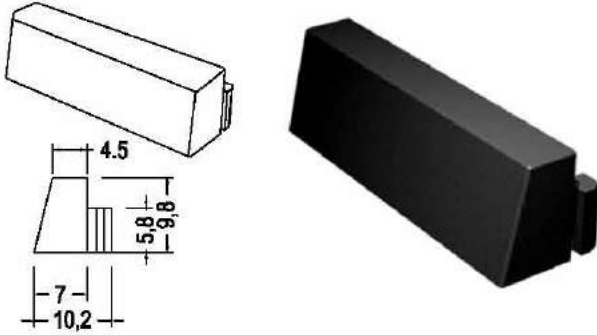
DOOR HANDLES

| DRAWING / INFORMATION   |  | APPLICATION  |  |         |   |             |  |
|---|--|--|--|---------|---|-------------|--|
|    |  |    |  |         |   |             |  |
| CODE  | X402                                     | Door Handle  |  | CODE    | AK23  | Door Handle |  |
| COLOURS   | White ( RAL 9016 )<br>Black ( RAL 9005 ) |  |  | COLOURS | White ( RAL 9016 ) , Black ( RAL 9005 )<br>Electrostatic painted in RAL colours , Anodized silver |             |  |
|  |  |   |  |         |   |             |  |
| CODE  | X103                                     | Door Handle  |  | CODE    | AK20  | Door Handle |  |
| COLOURS   | White ( RAL 9016 )<br>Black ( RAL 9005 ) |  |  | COLOURS | White ( RAL 9016 ) , Black ( RAL 9005 )<br>Electrostatic painted in RAL colours , Anodized silver |             |  |
|  |  |  |  |         |   |             |  |
| CODE  | DH605                                    | Door Handle  |  | CODE    | AK21  | Door Handle |  |
| COLOURS   | White ( RAL 9016 )<br>Black ( RAL 9005 ) |  |  | COLOURS | White ( RAL 9016 ) , Black ( RAL 9005 )<br>Electrostatic painted in RAL colours , Anodized silver |             |  |



COVERS

DRAWING / INFORMATION

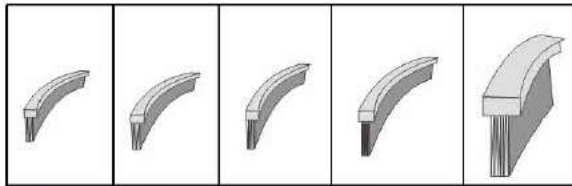
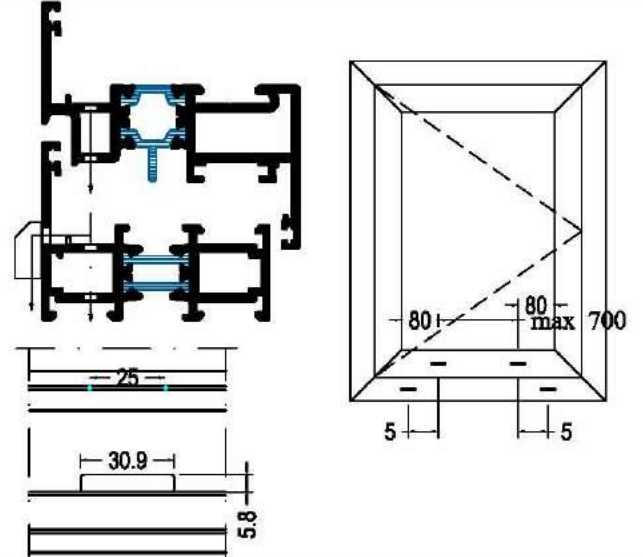


CODE 08000-03 Drainage Cover

COLOURS Black, White

MATERIALS Black nylon

APPLICATION

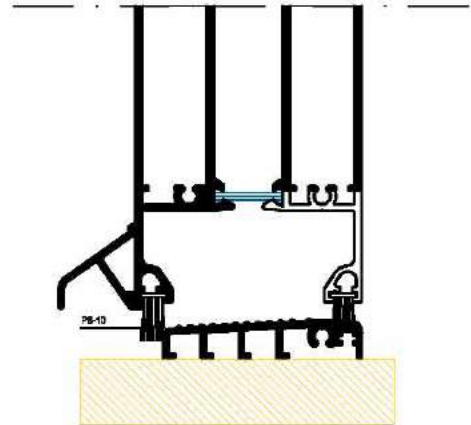


PB - 6 PB - 7 PB - 8 PB - 10 PB - 13

CODE Brush

COLOURS Grey

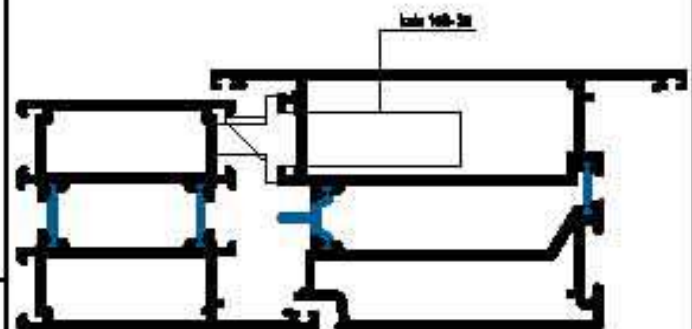
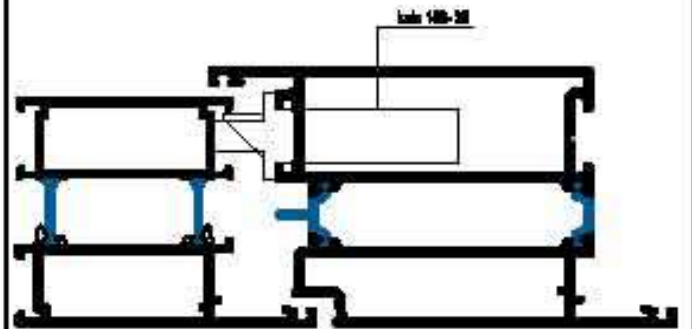
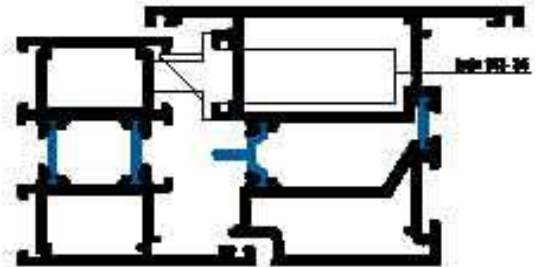
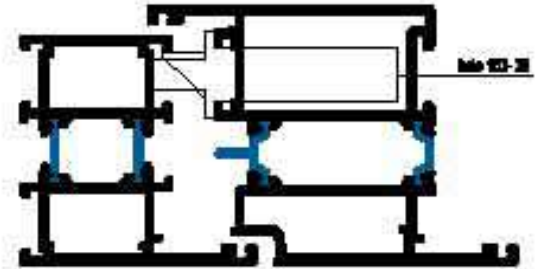
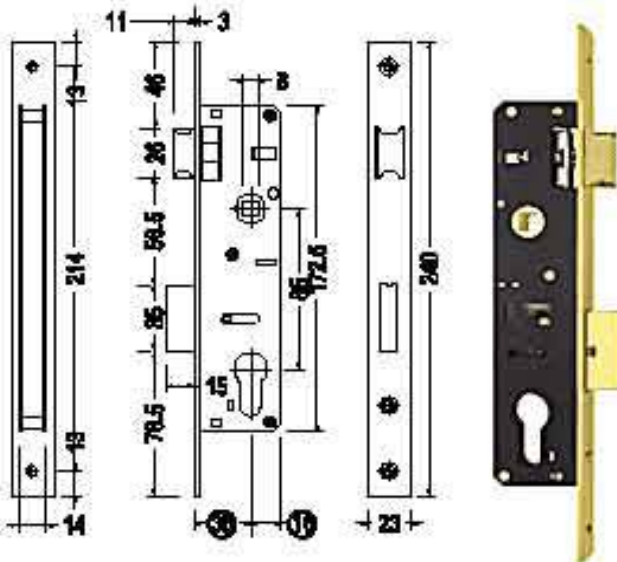
MATERIALS Black nylon



MORTISE LOCKS

DRAWING / INFORMATION

APPLICATION



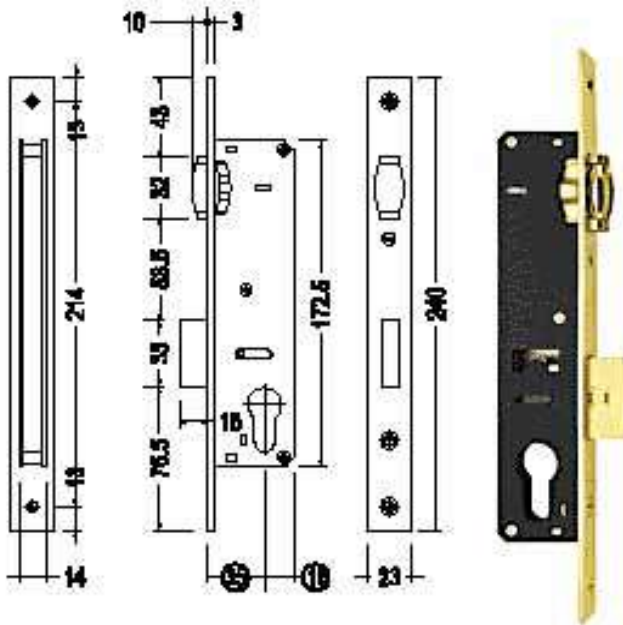
| TYPE   | B  |
|--------|----|
| 153 36 | 36 |

|             |   |              |
|-------------|---|--------------|
| CODE        | 153 36  | Mortise Lock |
| CYLINDER    | DOMUS 1800CK ( 90 )                               |              |
| UNIT WEIGHT | 850 gr  |              |
| MATERIALS   | Case : Steel , Electrostatic black powder painted |              |
|             | Deadbolt : Zinc alloy                             |              |
|             | Linch : MS 58 Brass                               |              |



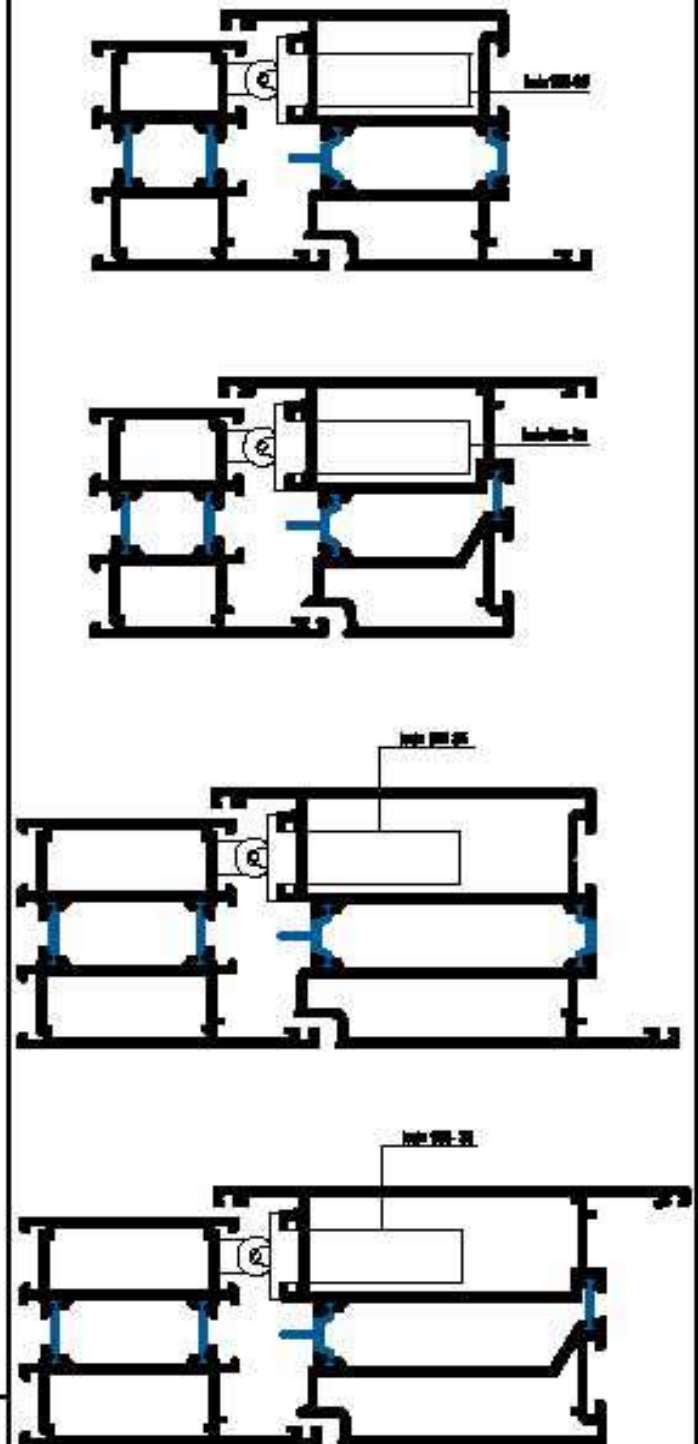
**MORTISE LOCKS**

**DRAWING / INFORMATION**



|        |    |
|--------|----|
| TYPE   | B  |
| 166 35 | 35 |

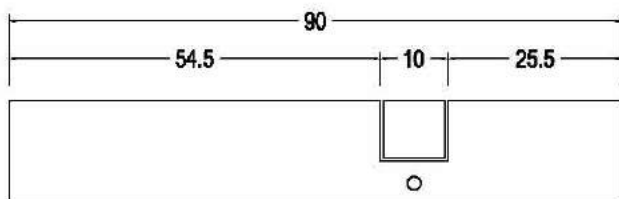
**APPLICATION**



|                    |   |                     |
|--------------------|---|---------------------|
| <b>CODE</b>        | <b>155 35</b>                                     | <b>Mortise Lock</b> |
| <b>CYLINDER</b>    | DOMUS 10090K ( 80 )                               |                     |
| <b>UNIT WEIGHT</b> | 830 gr  |                     |
| <b>MATERIALS</b>   | Case : Steel , Electrostatic black powder painted |                     |
|                    | Deadbolt : Zinc alloy                             |                     |
|                    | Latch : MS 55 Brass                               |                     |

MORTISE LOCKS

DRAWING / INFORMATION

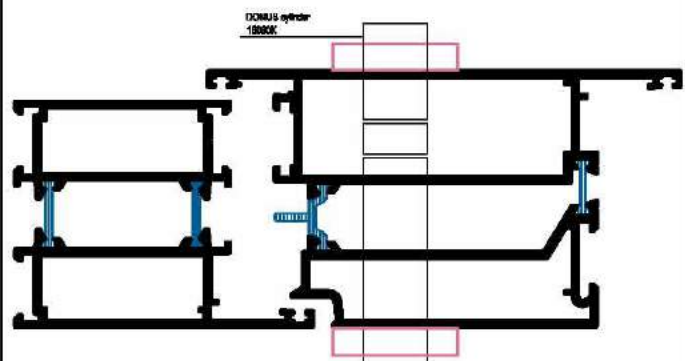
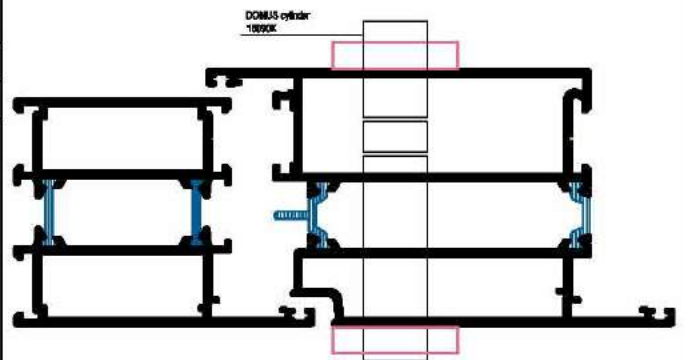
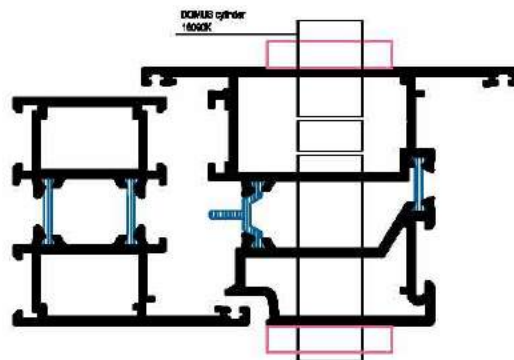
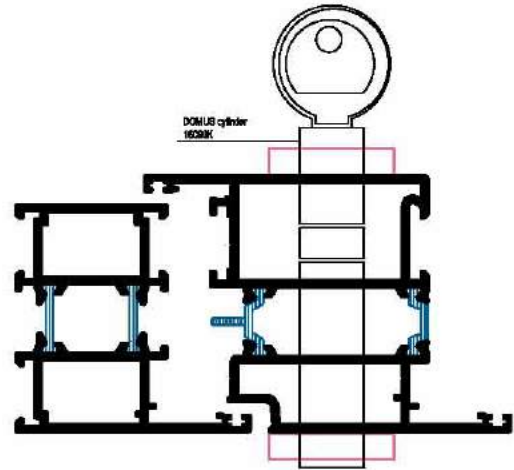


CODE **DOMUS 16090K**     **Cylinder**

MATERIALS

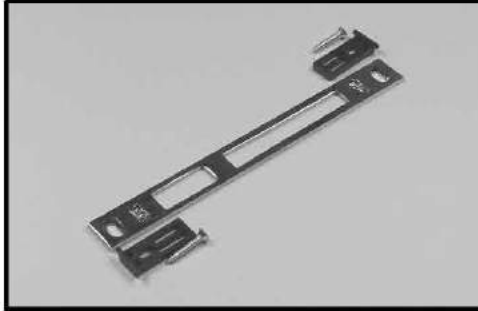
Lenght 90 mm  
Nickel

APPLICATION



MORTISE LOCKS

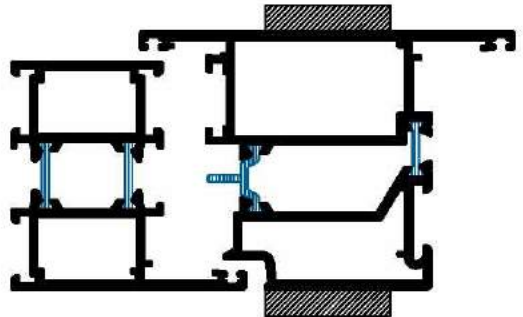
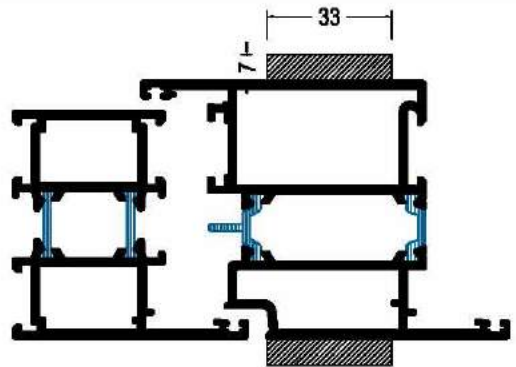
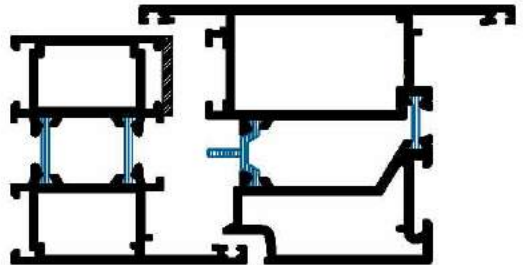
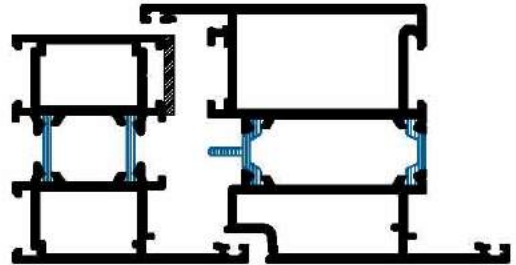
DRAWING / INFORMATION



CODE AA 03205 Striking Plate

MATERIALS Chomized steel , 206.5 mm lenght  
Black nylon bush

APPLICATION



CODE

**DRAWING / INFORMATION**

**APPLICATION**

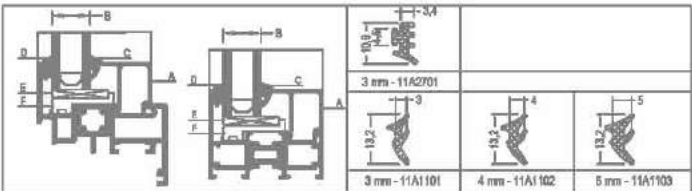


**CODE**    **GEZE TS 1000**

**CODE**    **2215**

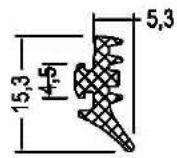
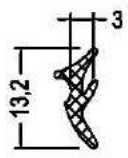
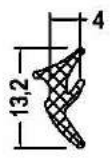
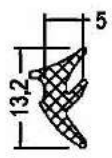
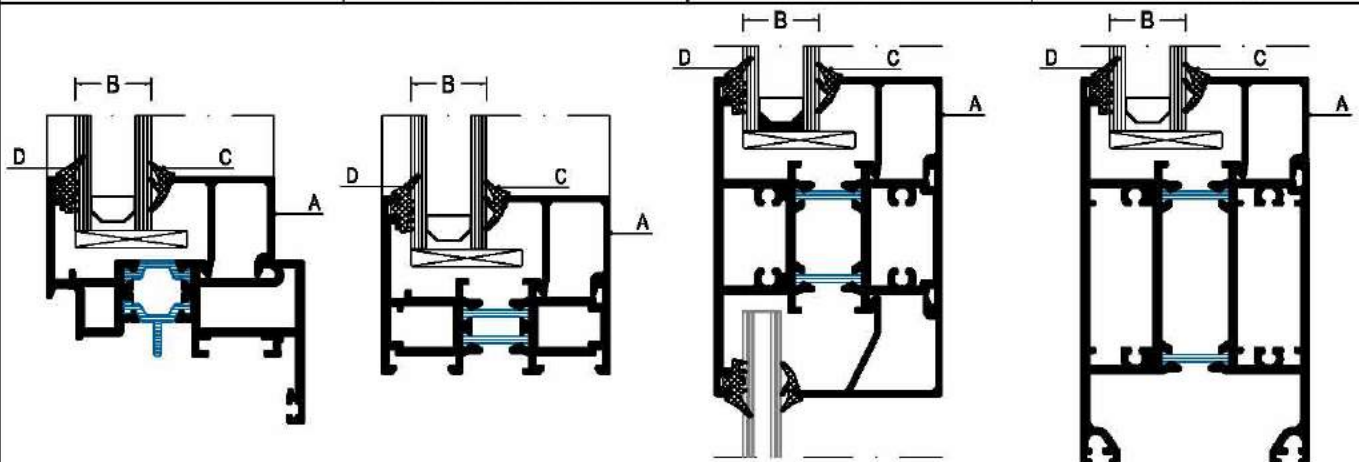
**Bolt**

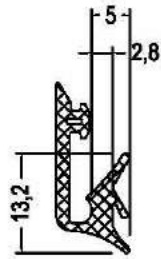
## d - TABLE



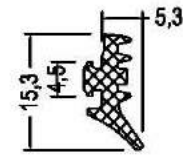
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|--------------|-------------------|-----------------------|------------------------|---------|---------|
| GLAZING BEAD | GLAZING THICKNESS | GLAZING GASKET INSIDE | GLAZING GASKET OUTSIDE | WEDGES  | WEDGES  |
| 14GW12       | 5 mm              | 11A1103               | 11A2701                | 17A1801 | 17A1802 |
| 14GW12       | 6 mm              | 11A1102               | 11A2701                | 17A1801 | 17A1802 |
| 14GW11       | 5 mm              | 11A1103               | 11A2701                | 17A1801 | 17A1802 |



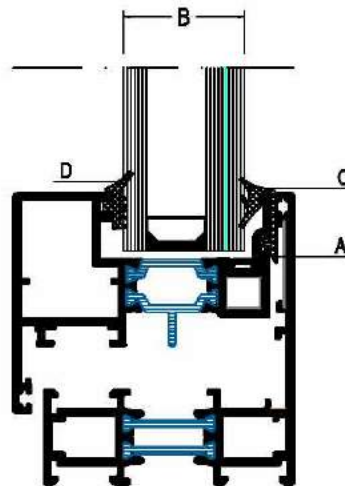
|  |   |  |   |
|--|---|--|---|
|   |  |  |  |
| 3 mm - 11A2701   | 3 mm - 11A1101  | 4 mm - 11A1102   | 5 mm - 11A1103  |
|  |   |  |   |
| <b>A</b><br>GLAZING BEAD   | <b>B</b><br>GLAZING THICKNESS   | <b>C</b><br>GLAZING GASKET<br>INSIDE   | <b>D</b><br>GLAZING GASKET<br>OUTSIDE   |
| 14GW10   | 17 mm   | 11A1103  | 11A2701   |
| 14GW10   | 18 mm   | 11A1102  | 11A2701   |
| 14GW09   | 20 mm   | 11A1103  | 11A2701   |
| 14GW09   | 22 mm   | 11A1101  | 11A2701   |
| 14GW19   | 24 mm   | 11A1103  | 11A2701   |
| 14GW07   | 26 mm   | 11A1103  | 11A2701   |
| 14GW07   | 28 mm   | 11A1101  | 11A2701   |
| 14GW06   | 30 mm   | 11A1102  | 11A2701   |
| 14GW05   | 32 mm   | 11A1103  | 11A2701   |
| 14GW05   | 34 mm   | 11A1101  | 11A2701   |
| 14GW04   | 36 mm   | 11A1102  | 11A2701   |
| 14GW03   | 38 mm   | 11A1103  | 11A2701   |
| 14GW03   | 40 mm   | 11A1101  | 11A2701   |
|  |   |  |   |
|  |   |  |   |
|  |   |  |   |
|  |   |  |   |
|  |   |  |   |



4 mm - 11A1104

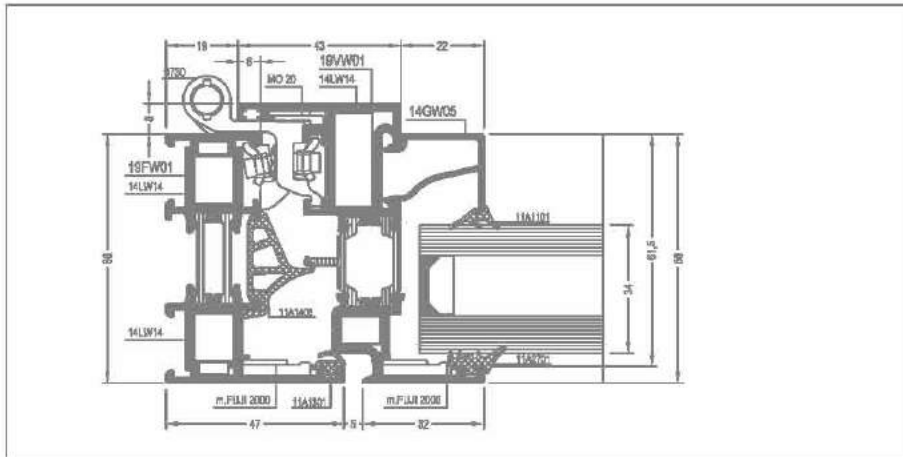


3 mm - 11A2701

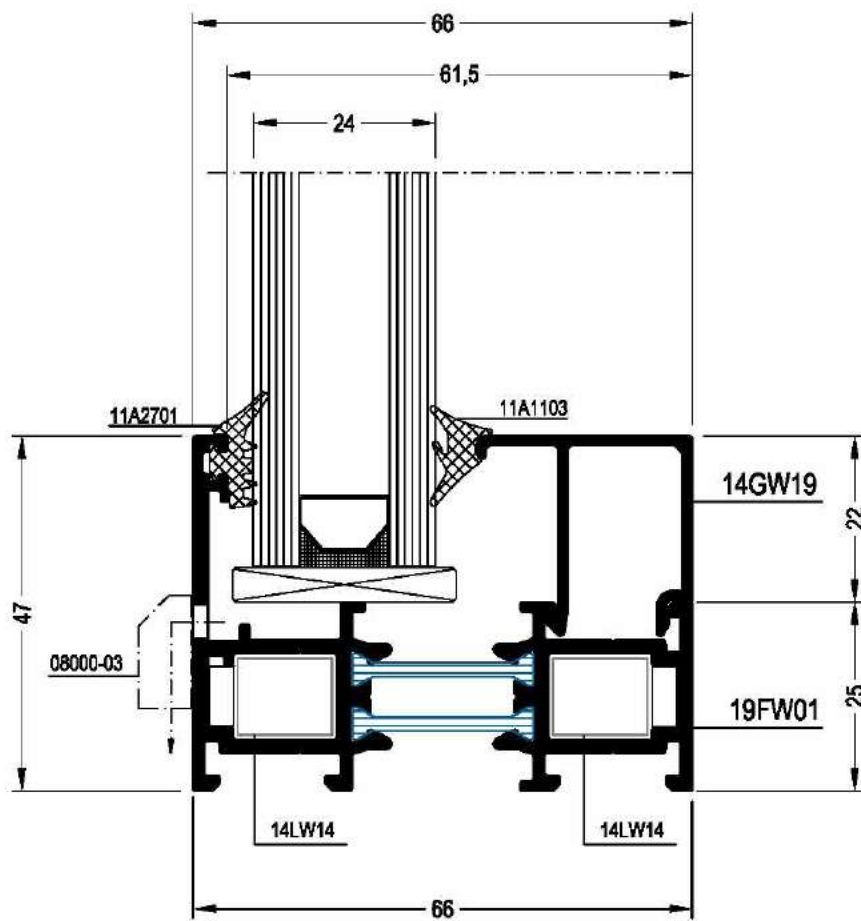
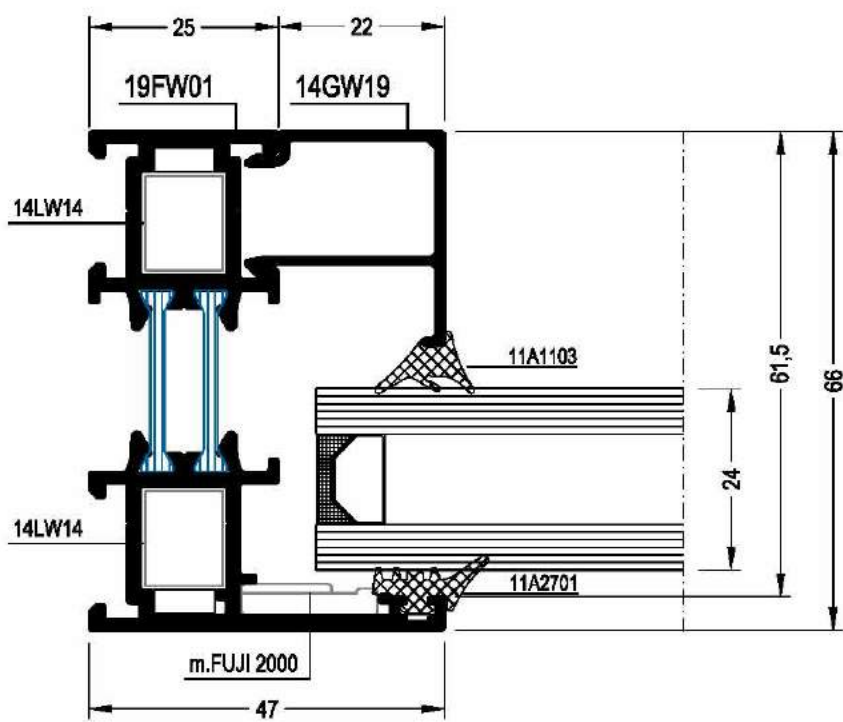


| A<br>GLAZING BEAD | B<br>GLAZING THICKNESS | C<br>GLAZING GASKET<br>INSIDE | D<br>GLAZING GASKET<br>OUTSIDE |
|-------------------|------------------------|-------------------------------|--------------------------------|
| 14GW20            | 26 mm                  | 11A1104                       | 11A2701                        |

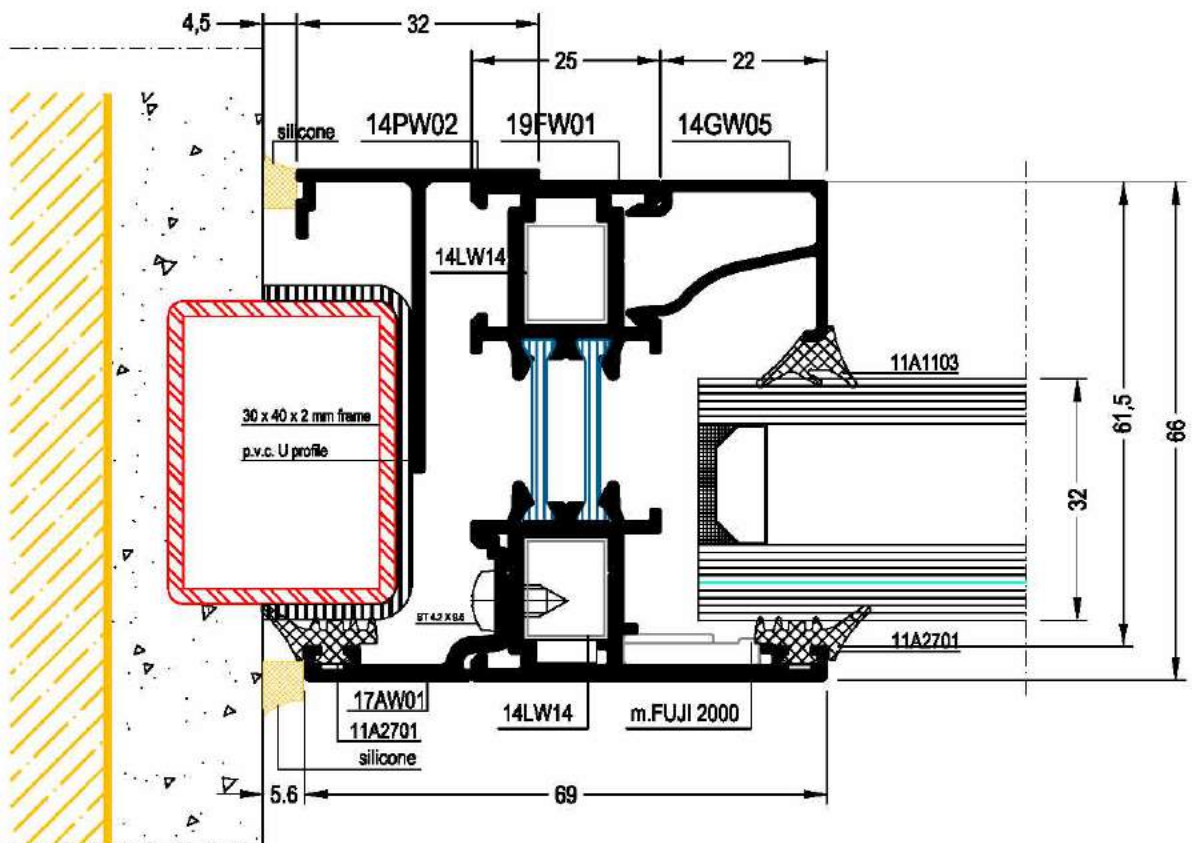
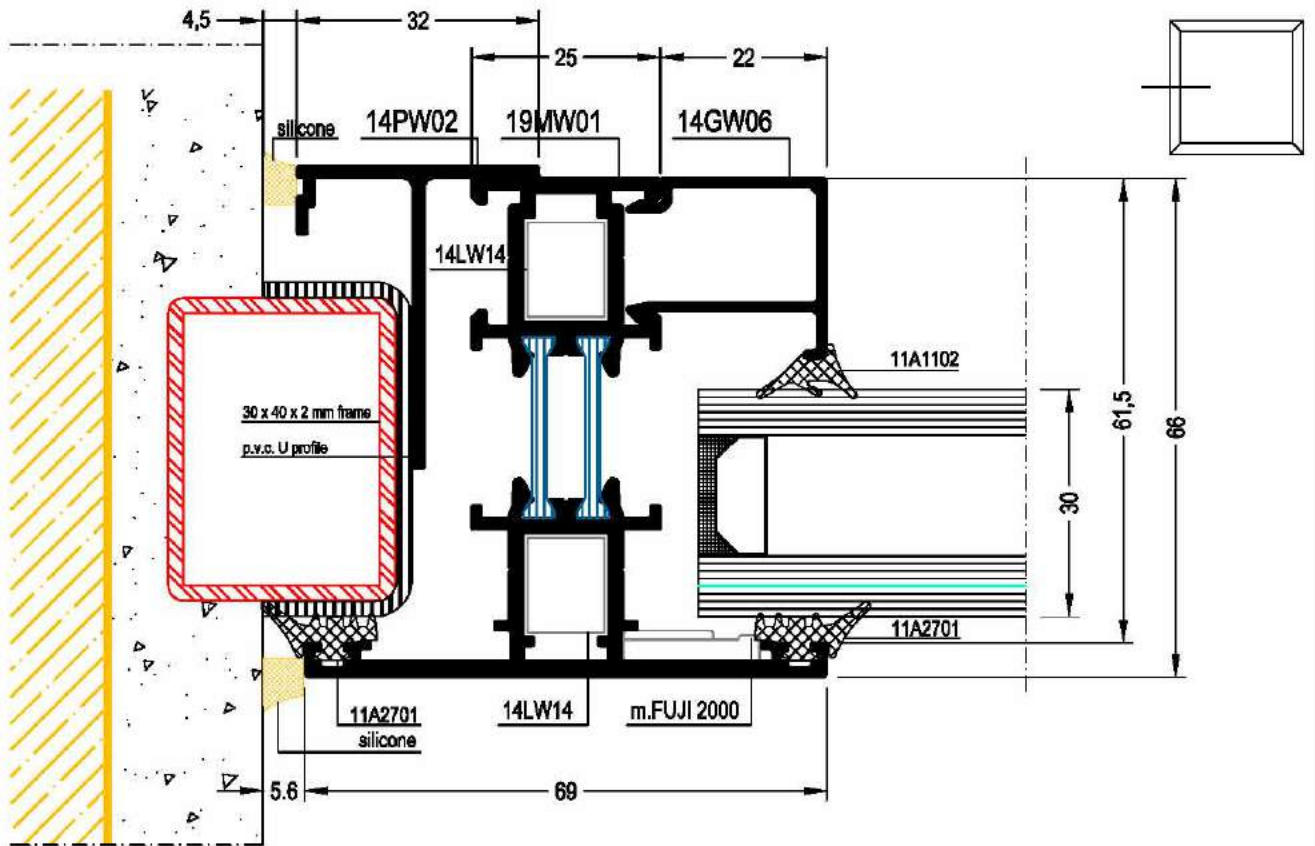
## e - DETAILS



TURNING WINDOW



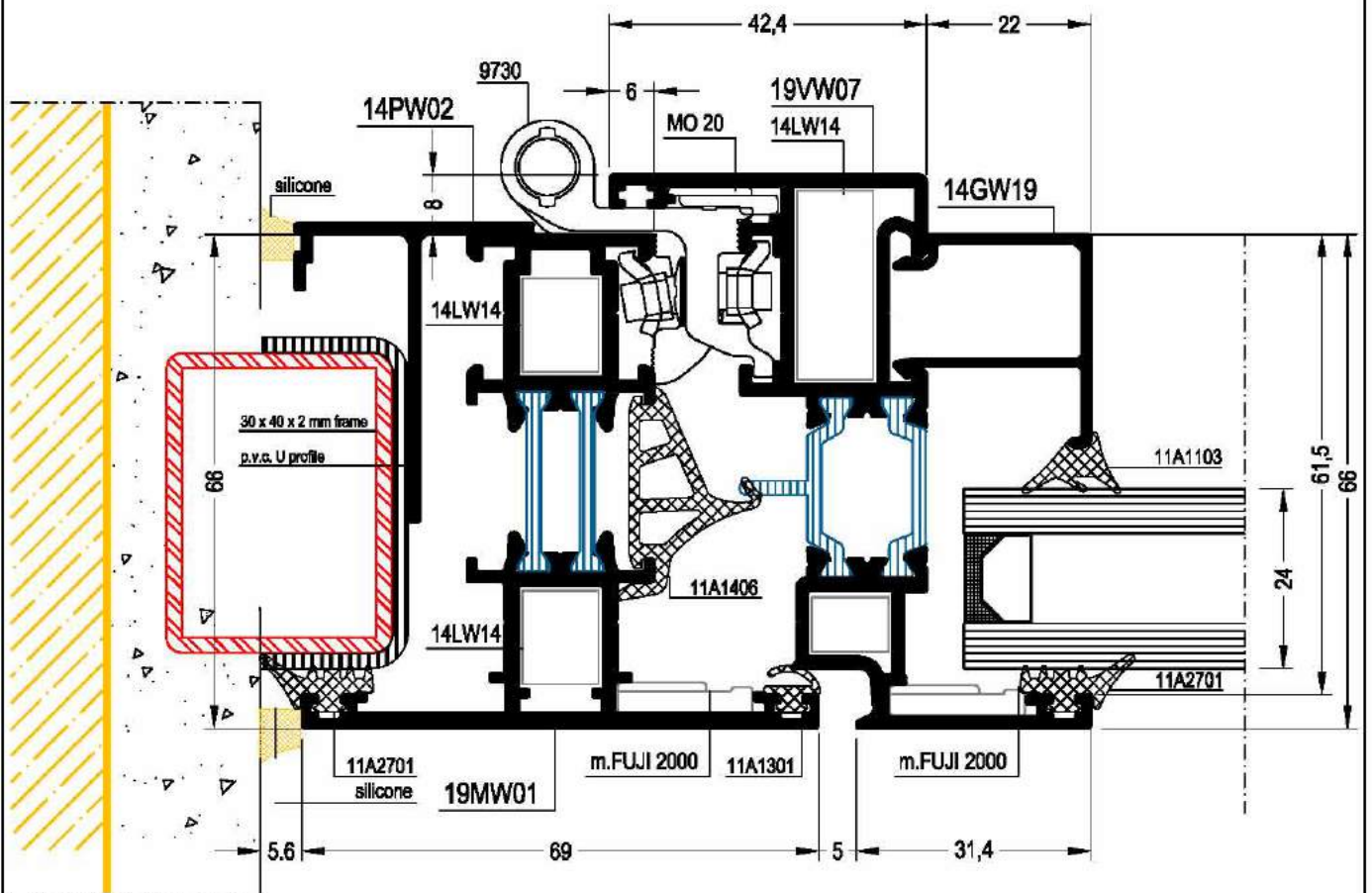
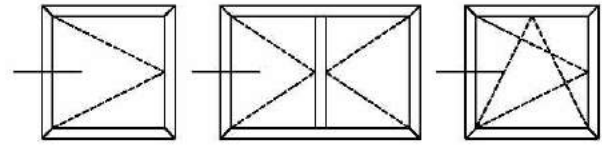
TURNING WINDOW



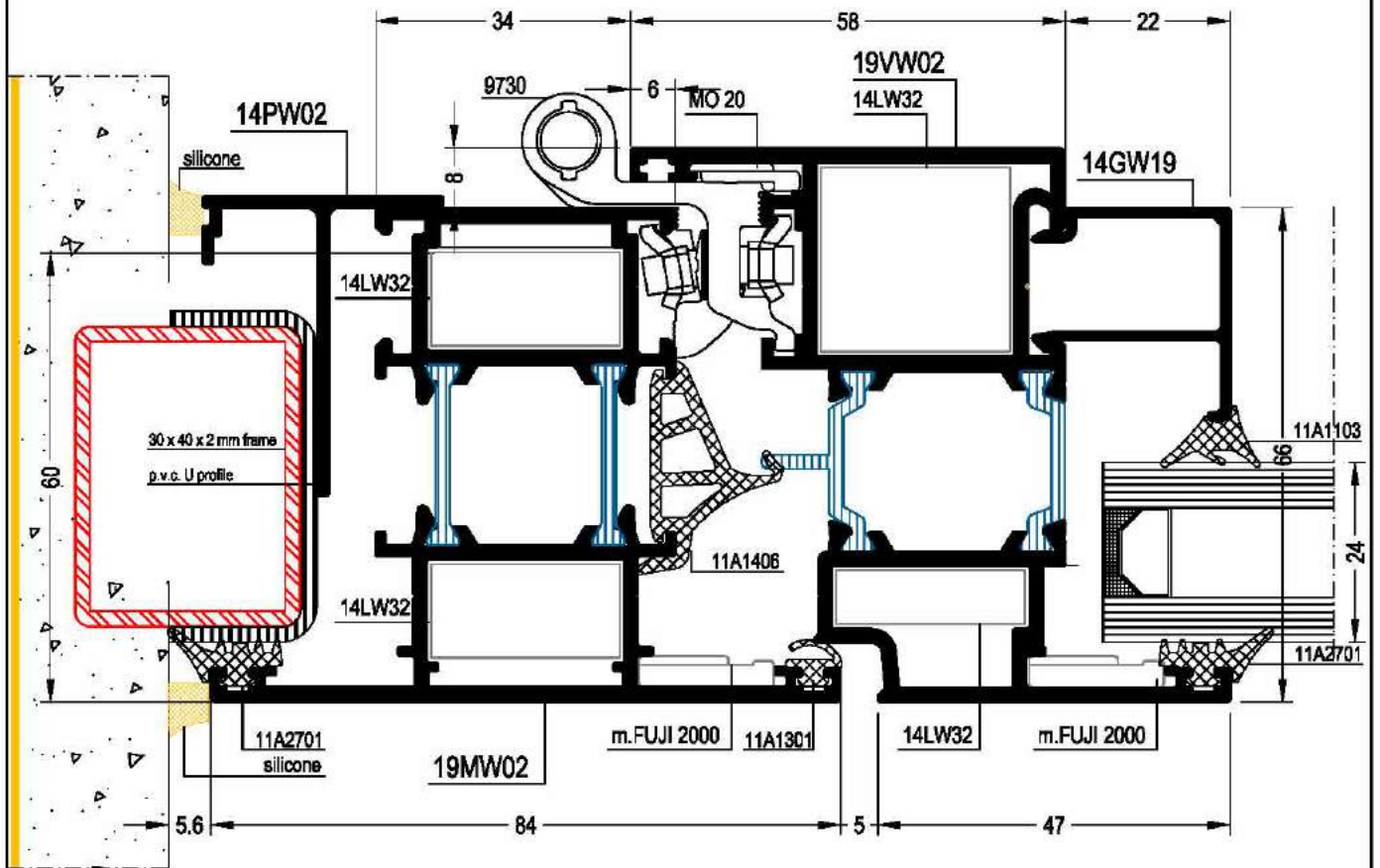
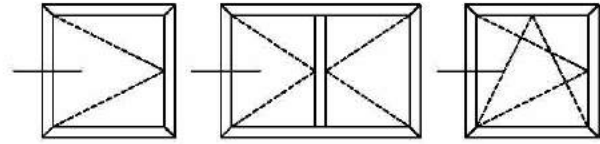




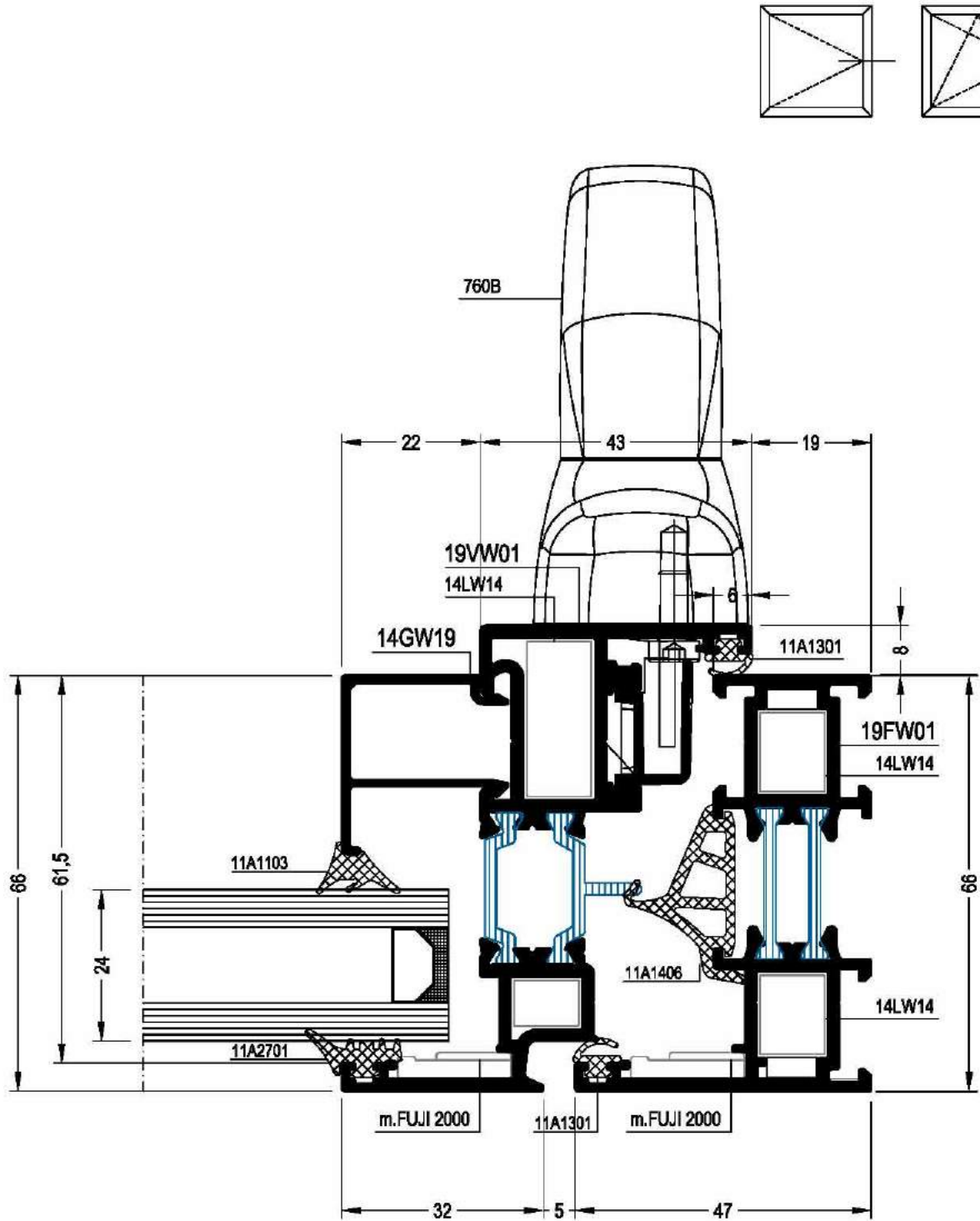
TURNING WINDOW



TURNING WINDOW

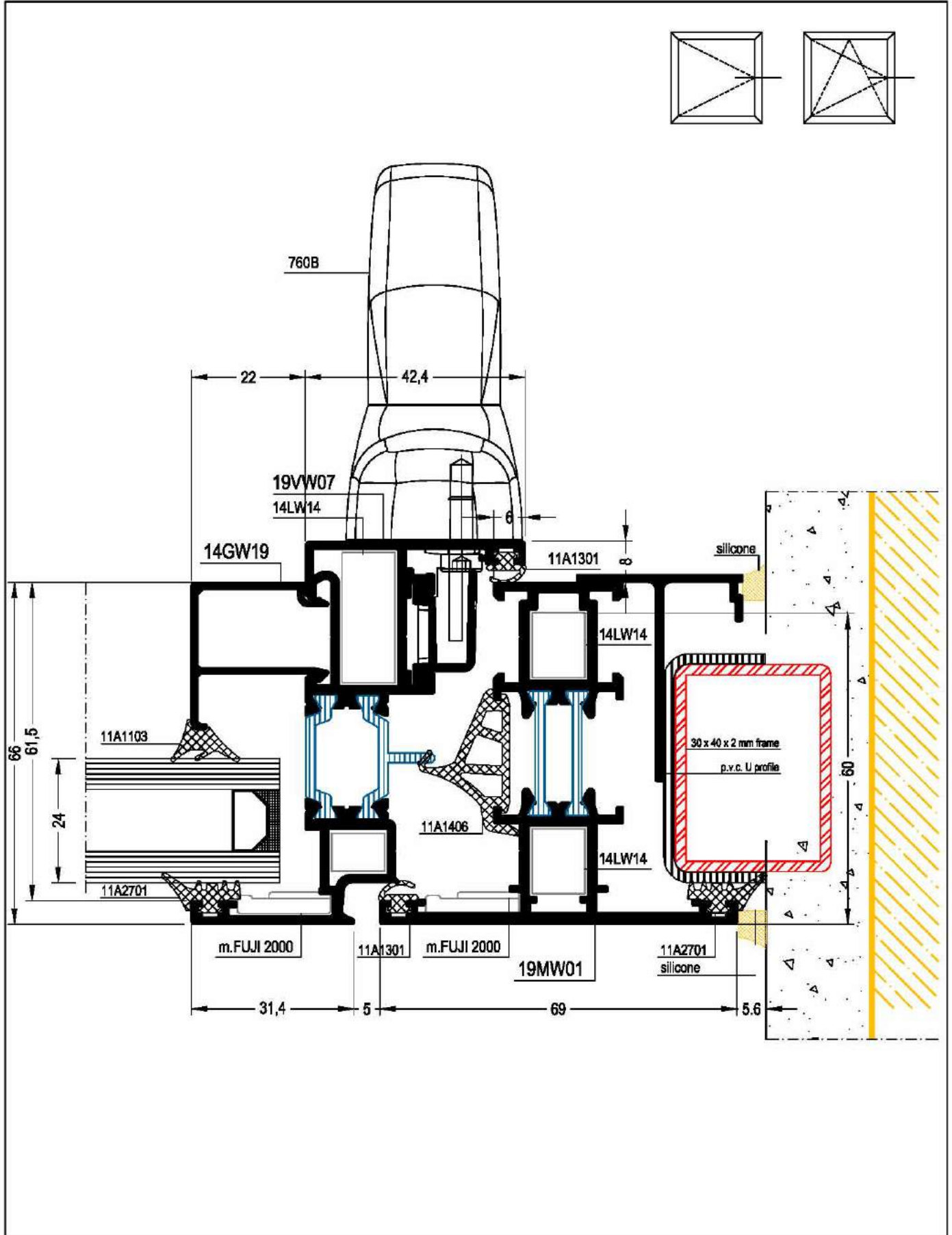


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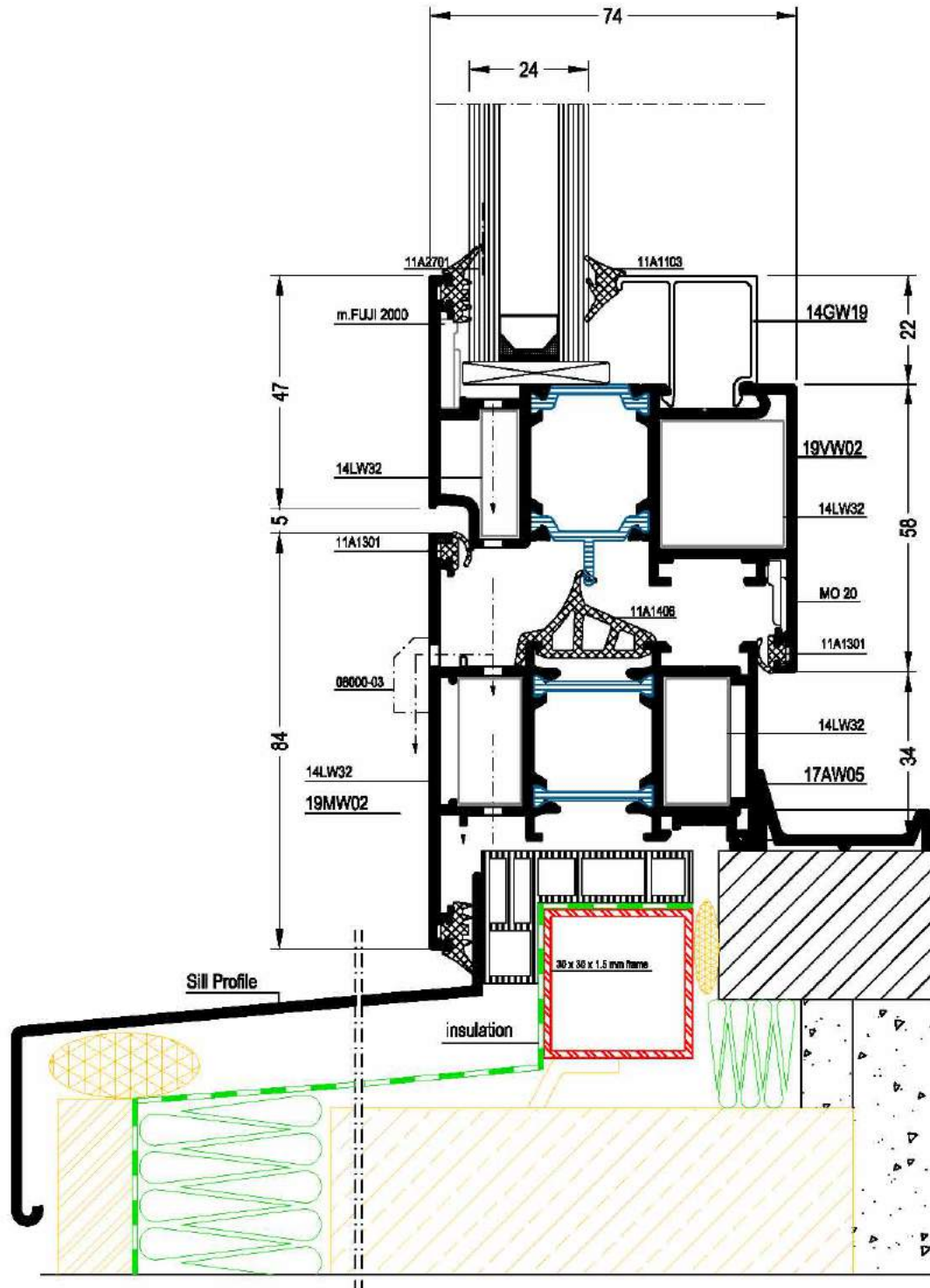
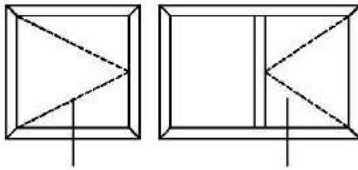


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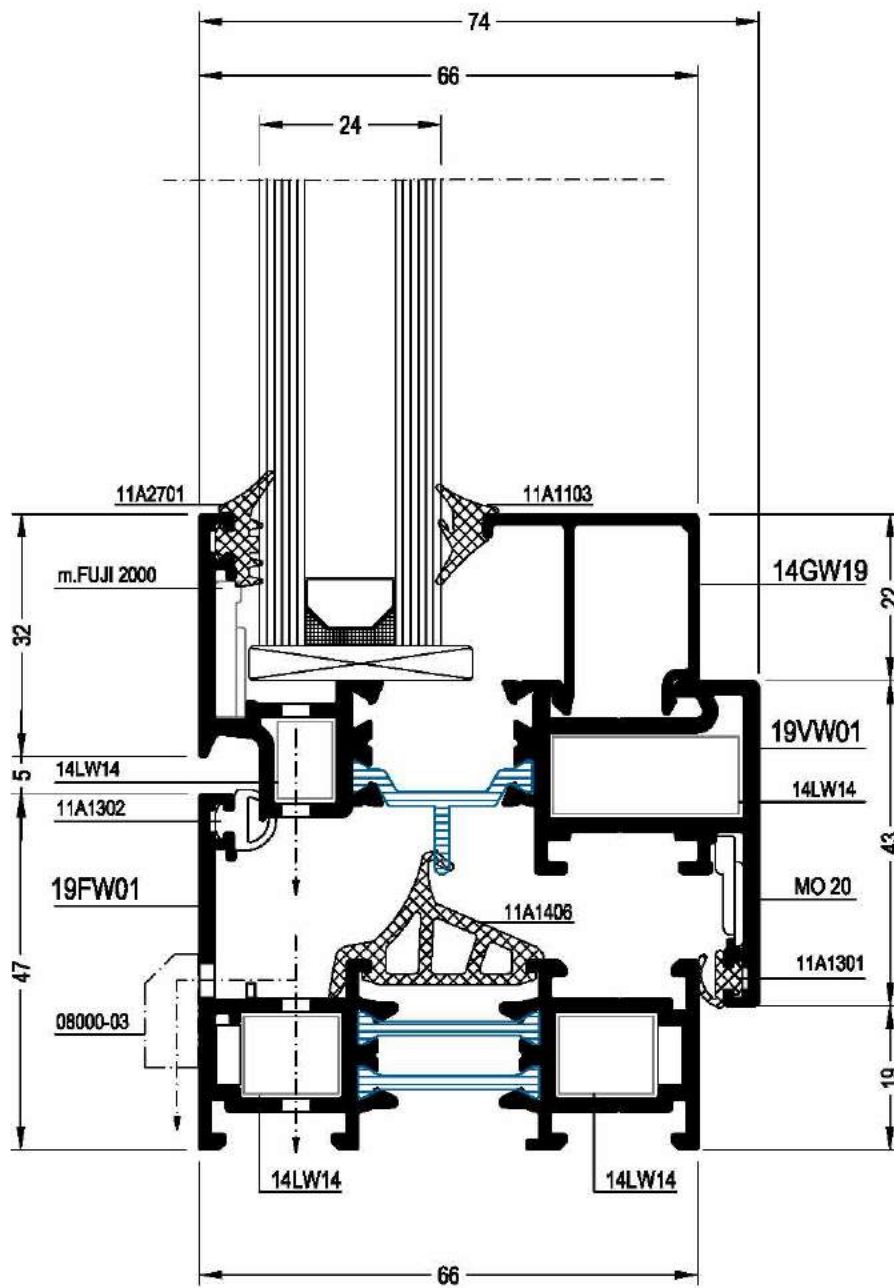
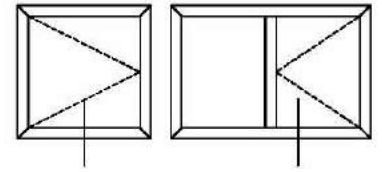




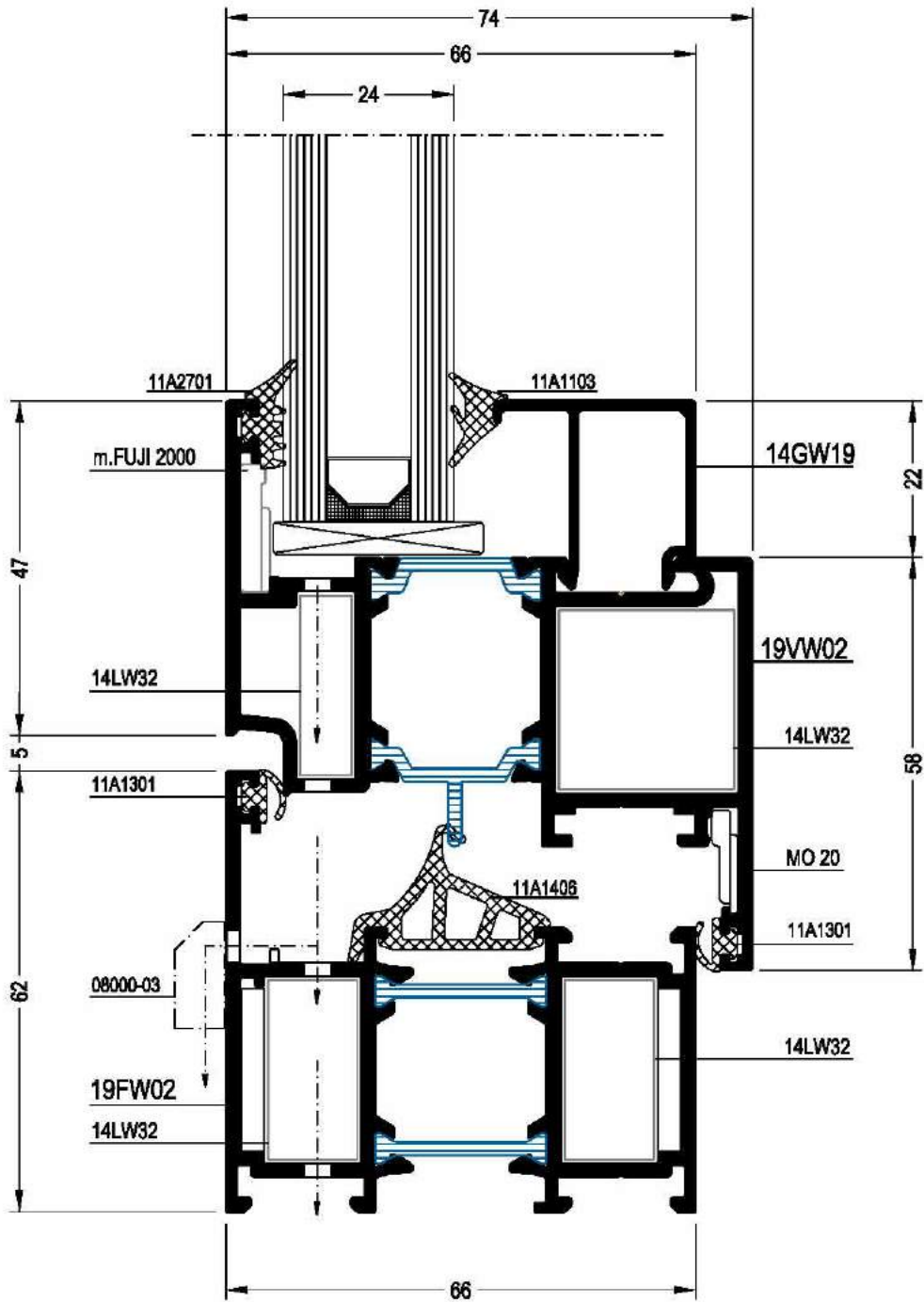
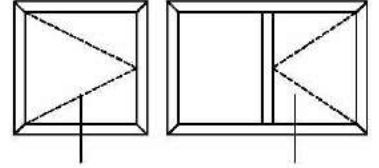
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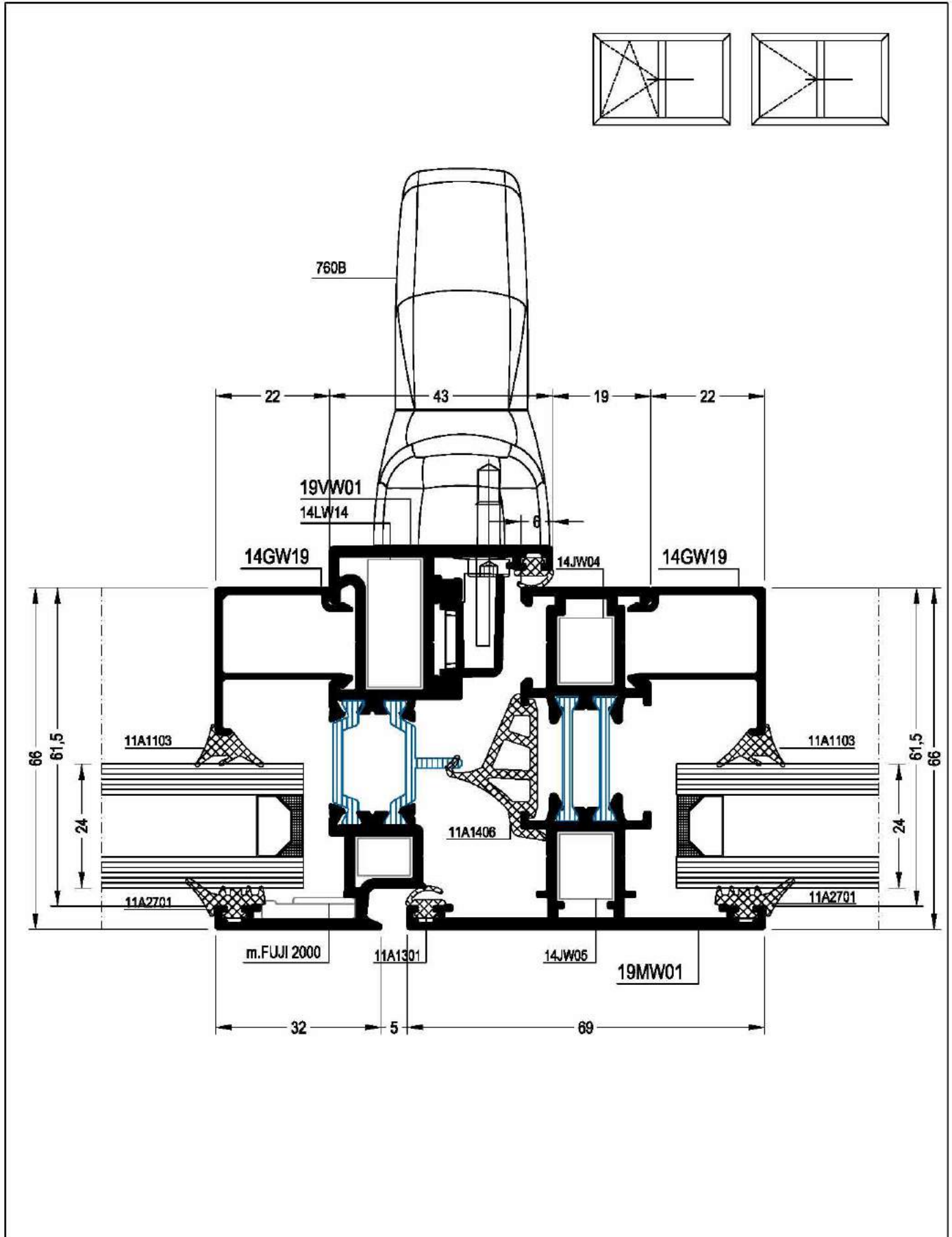
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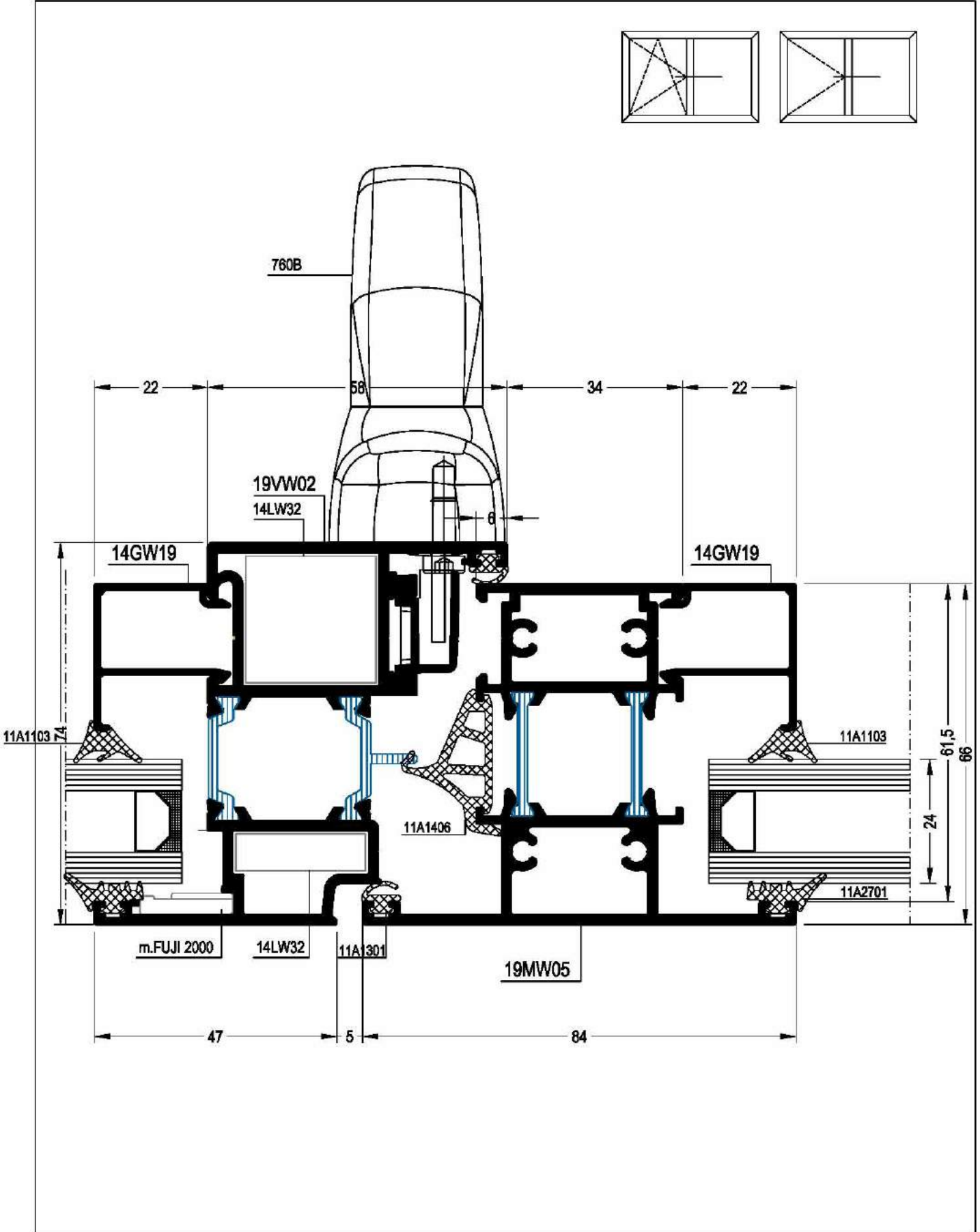
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TURNING WINDOW

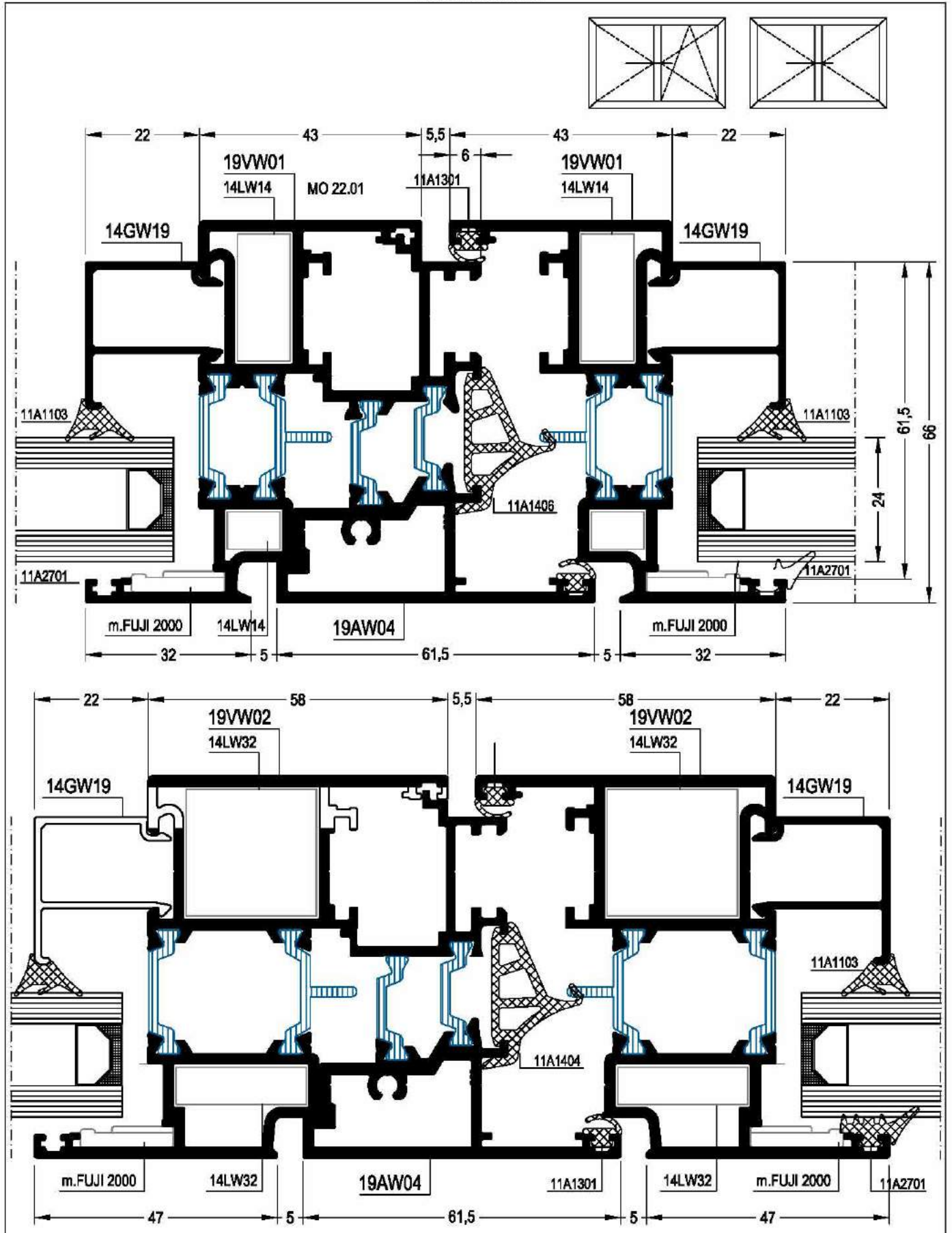


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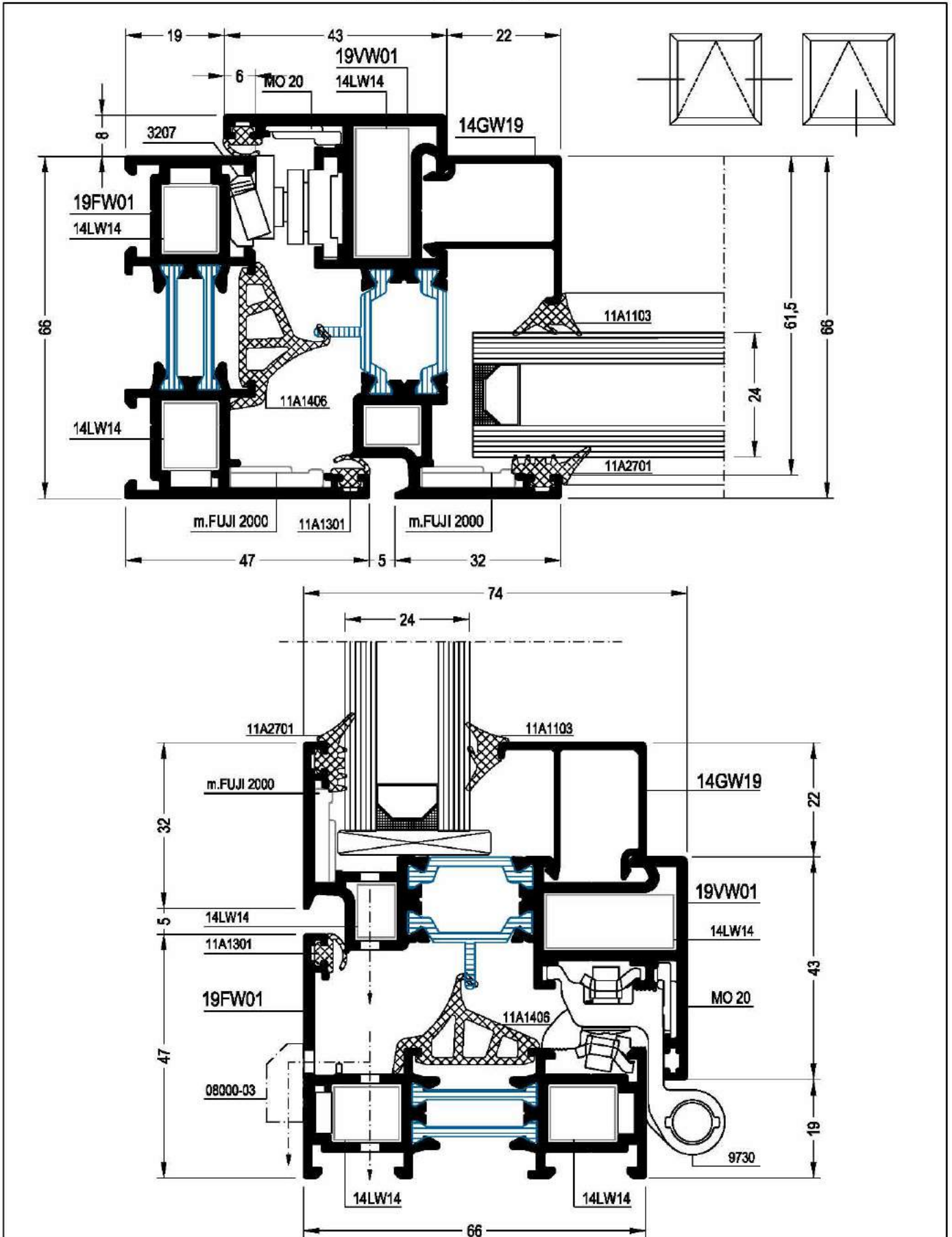




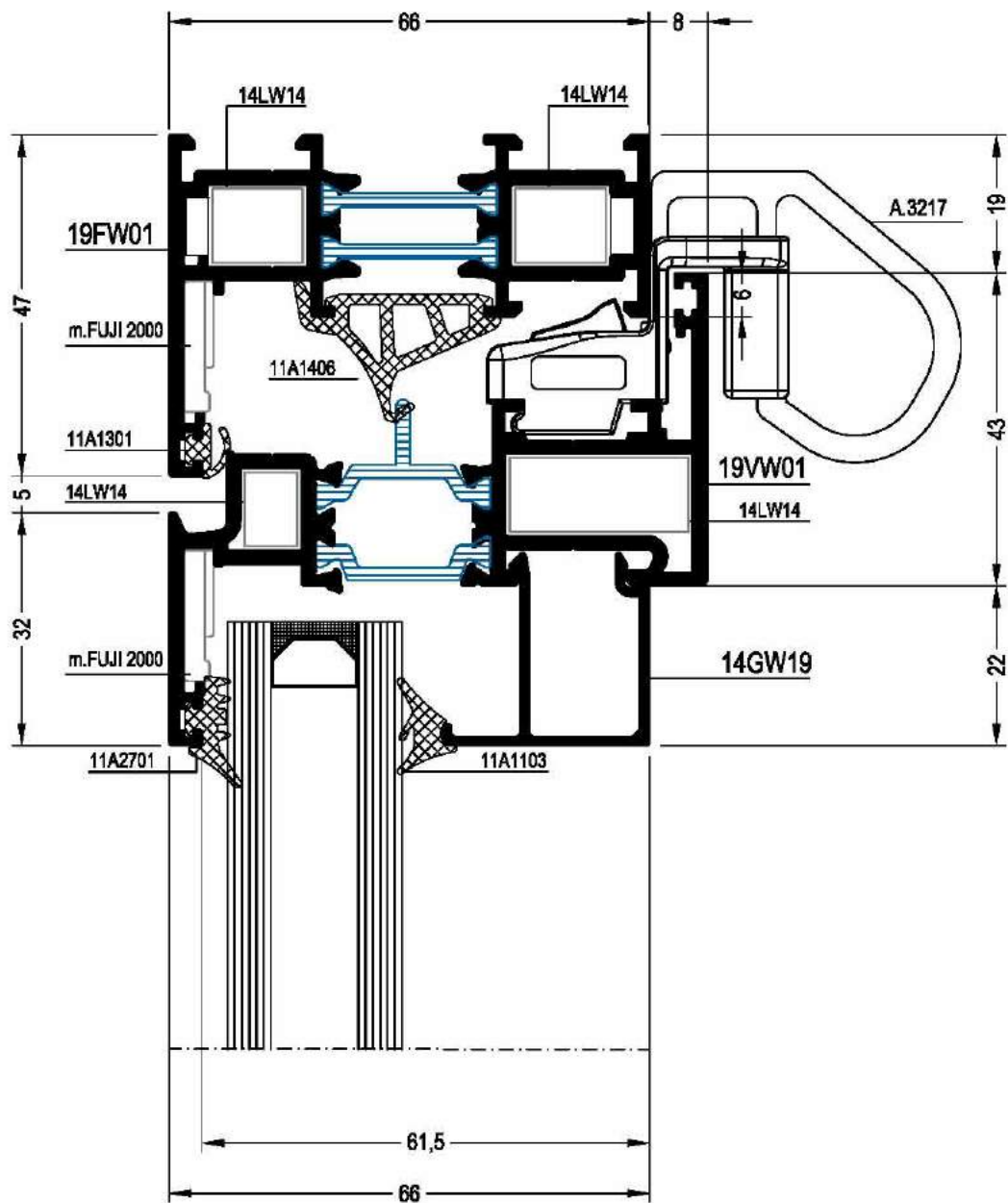
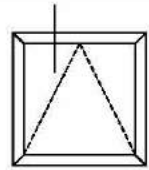
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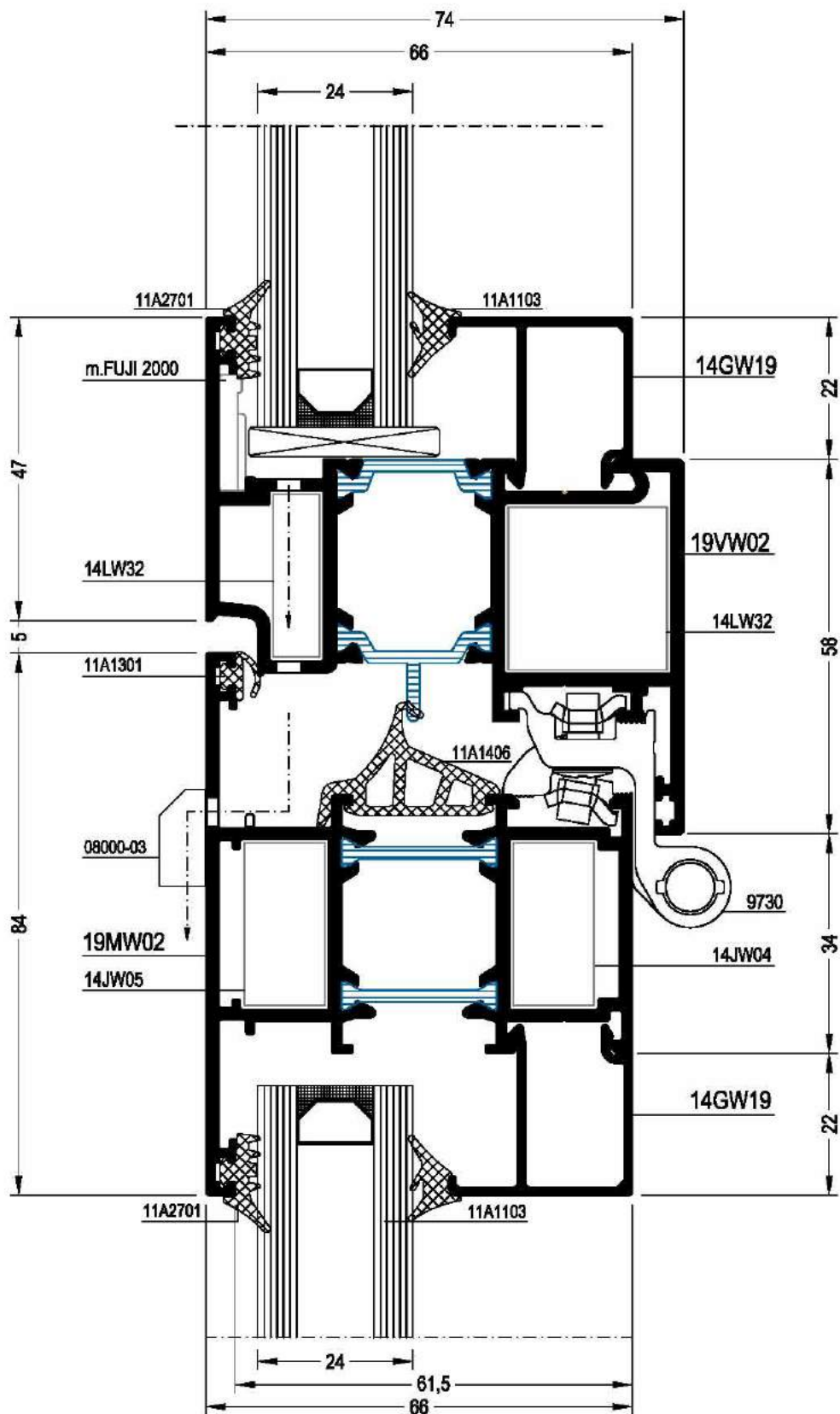
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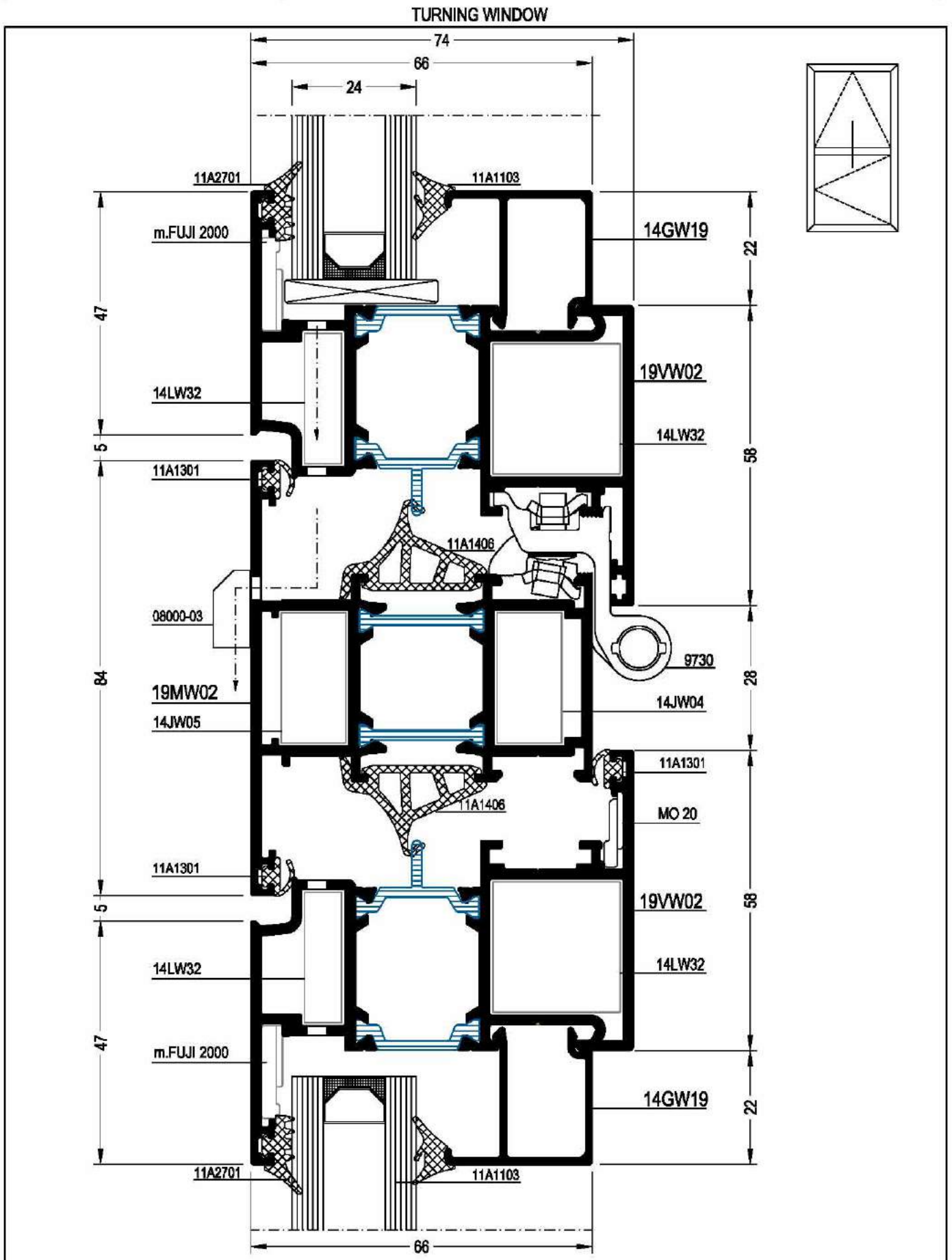


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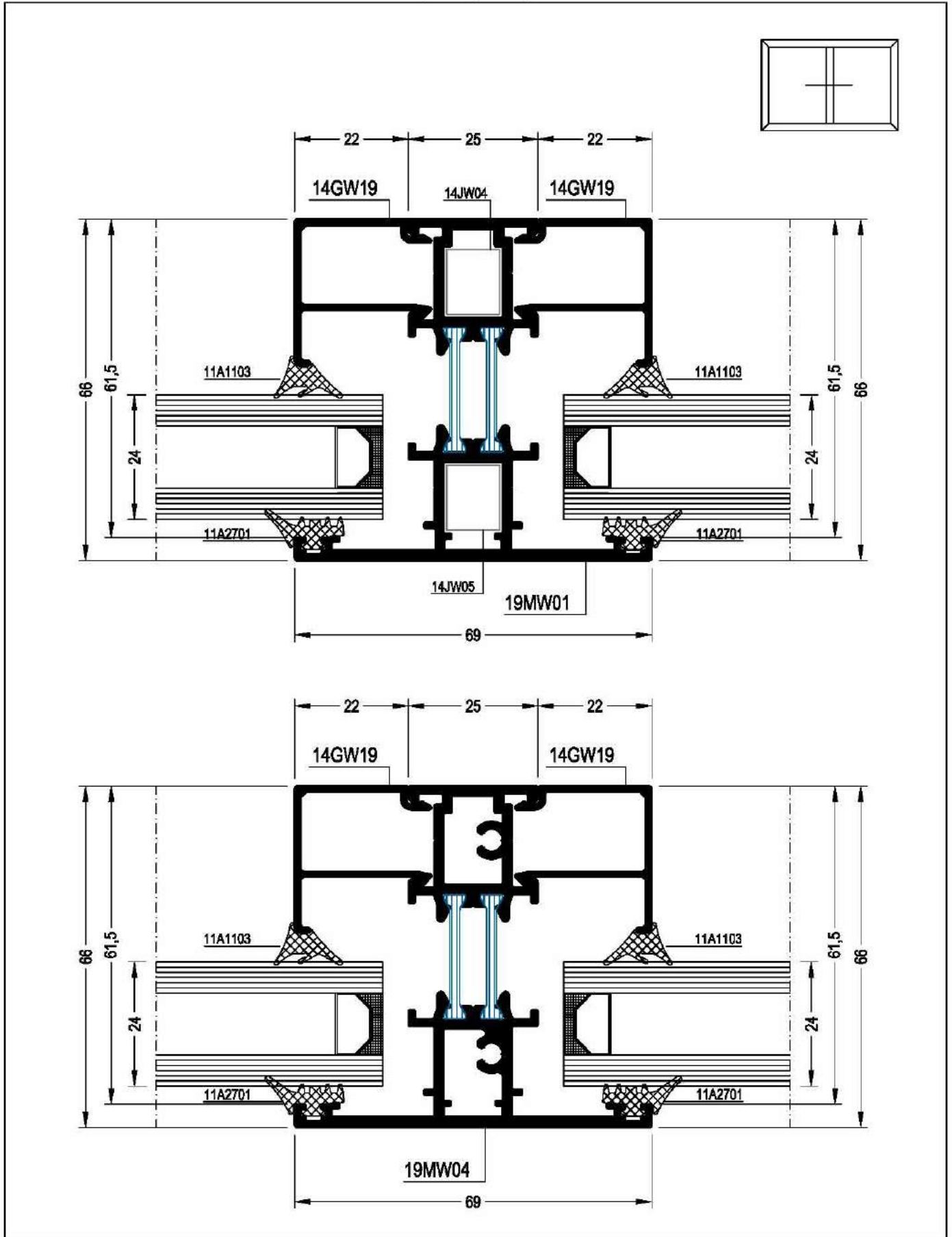
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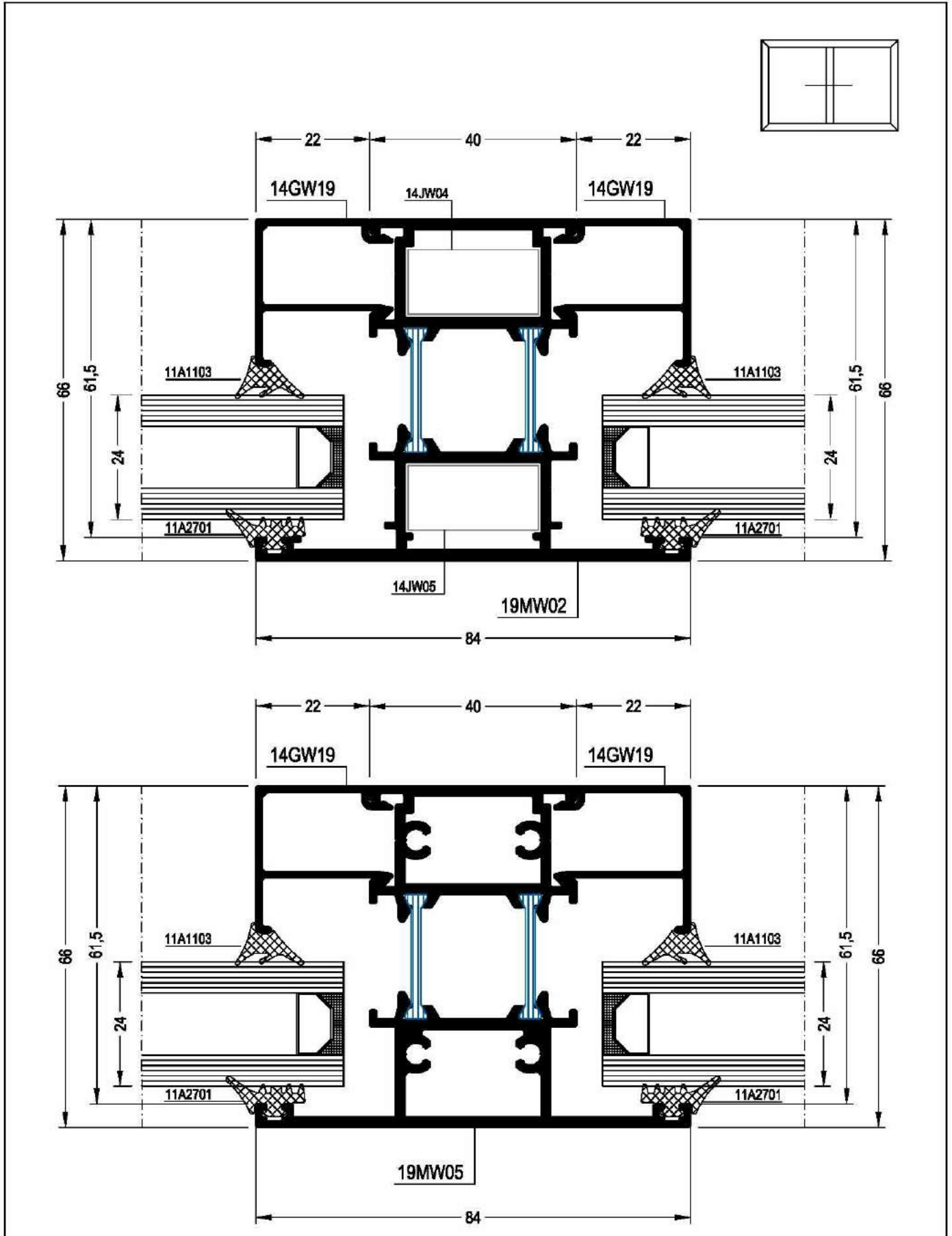




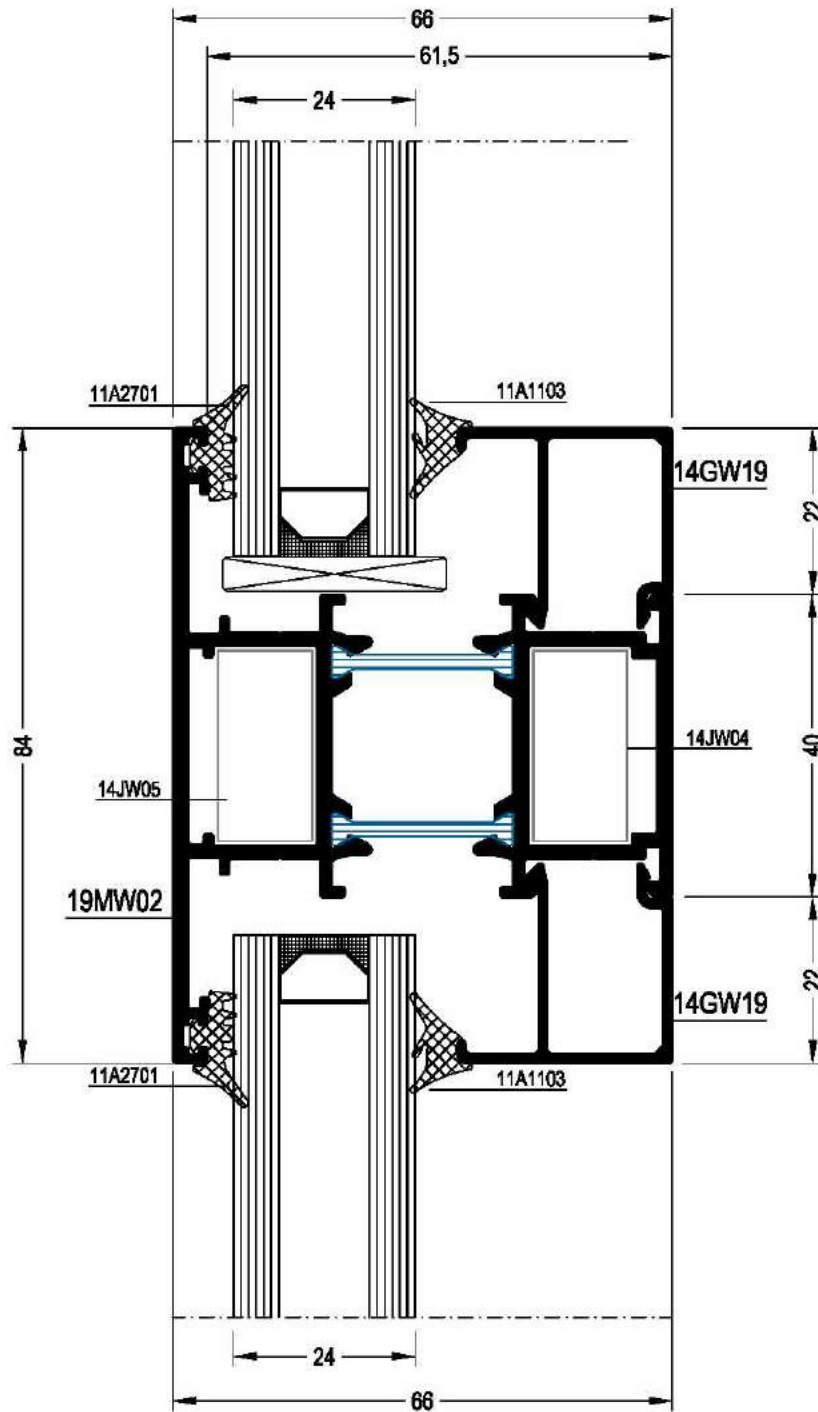
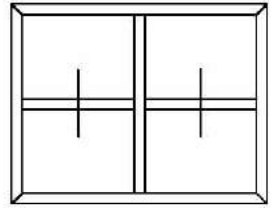
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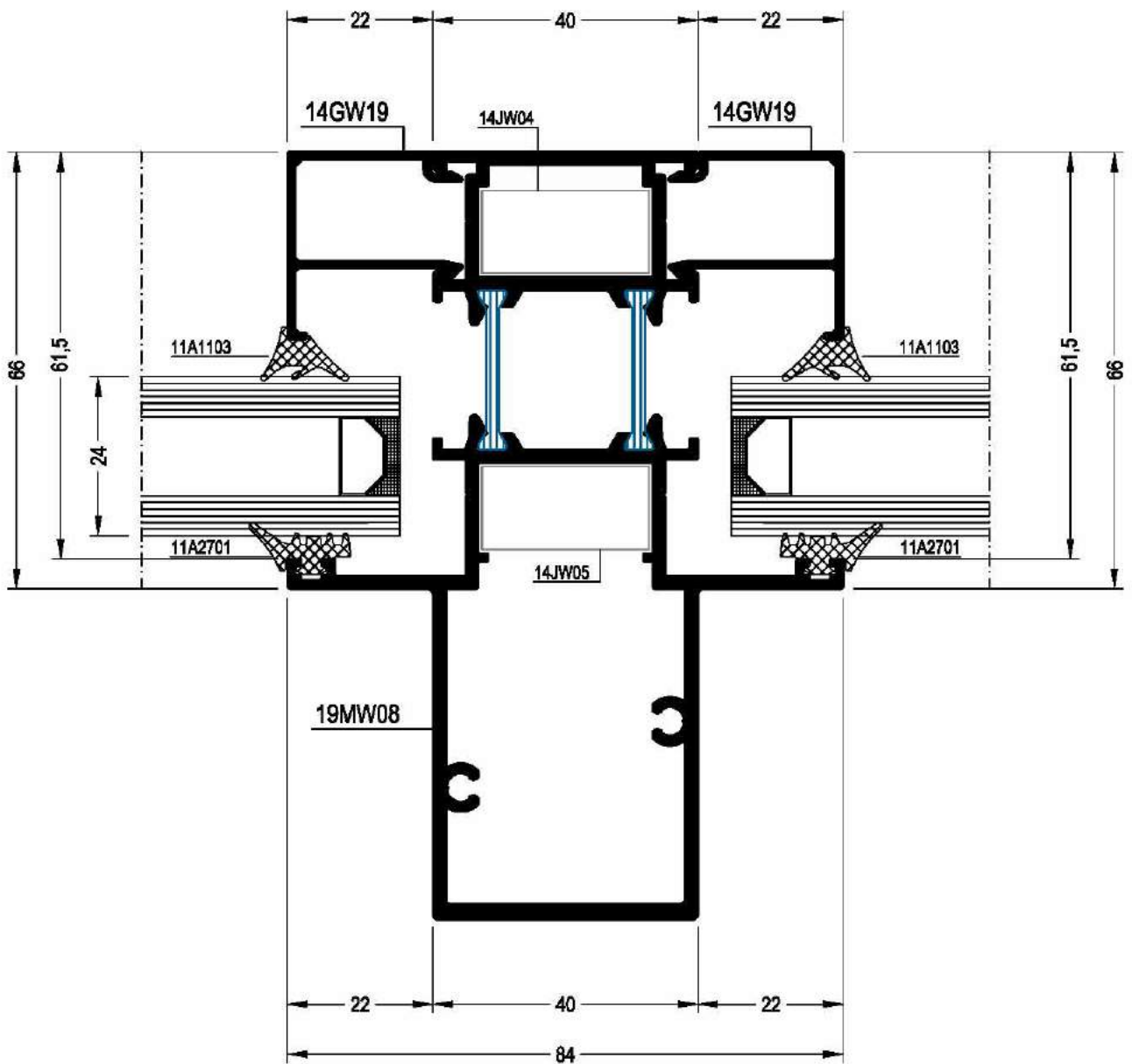
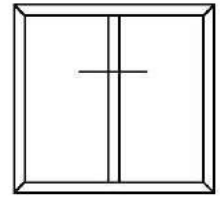
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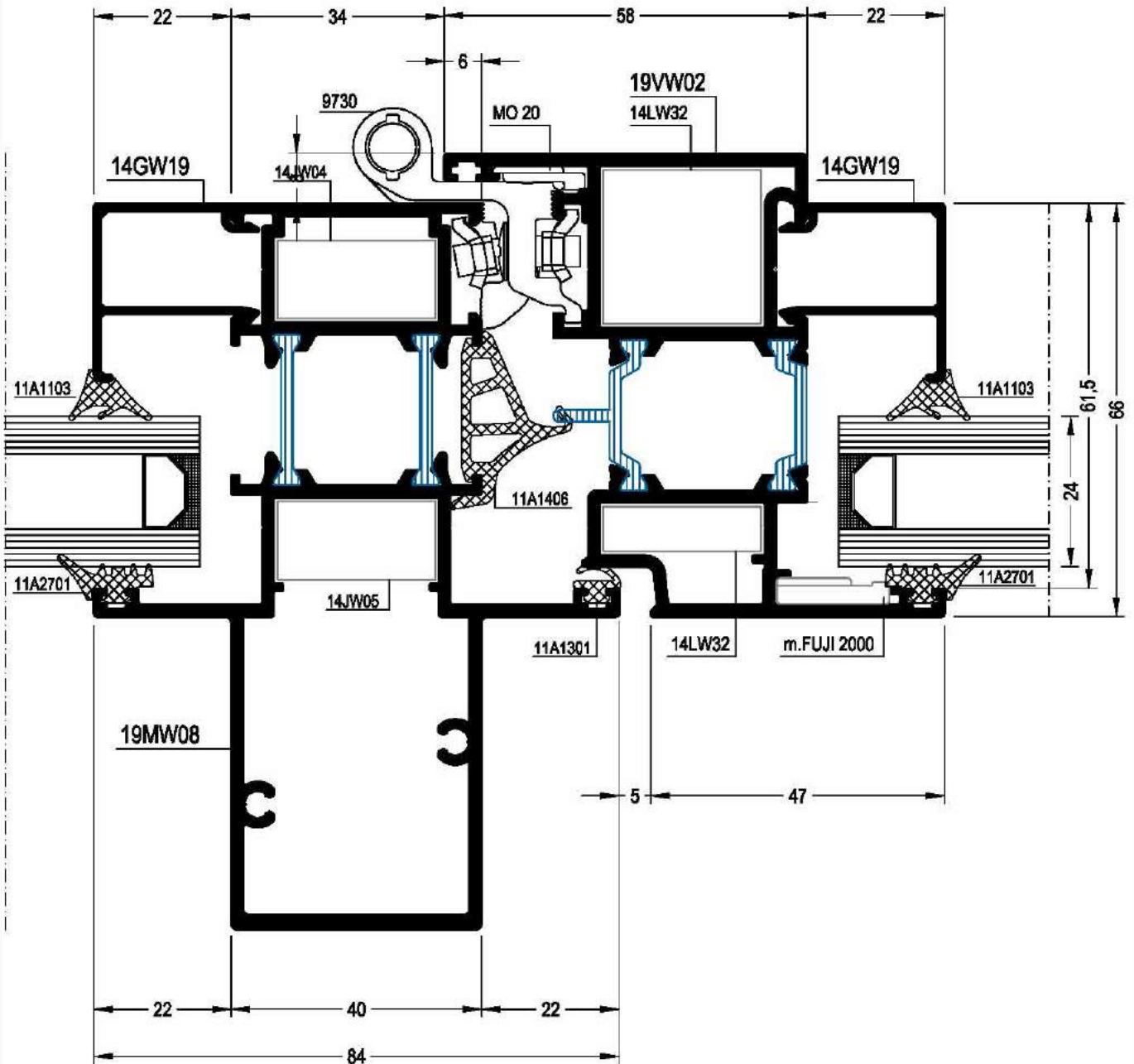
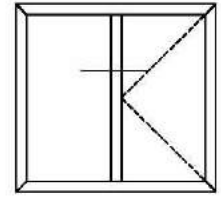
TURNING WINDOW



TURNING WINDOW

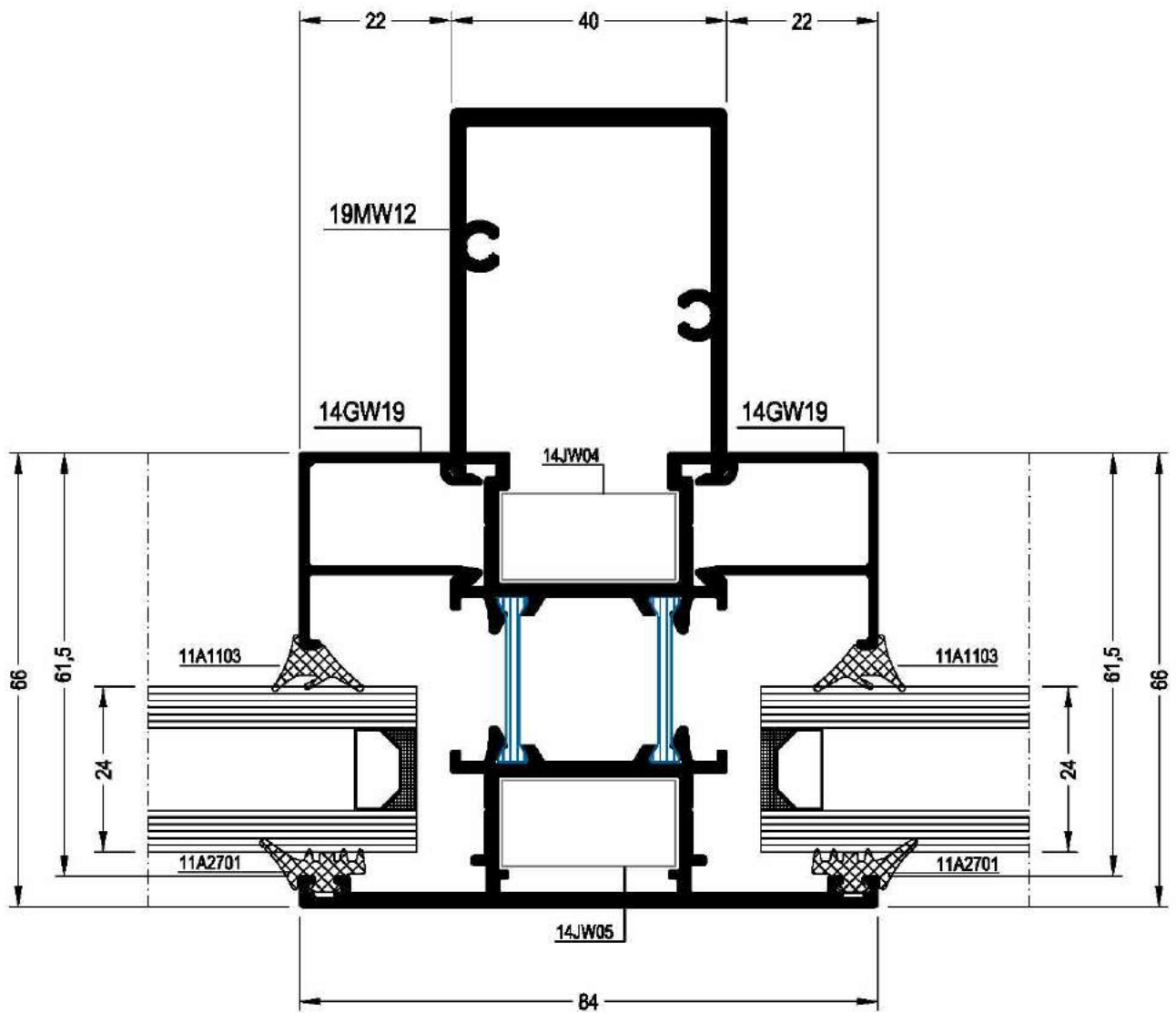
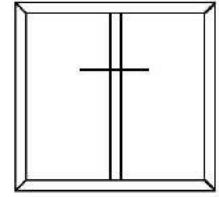


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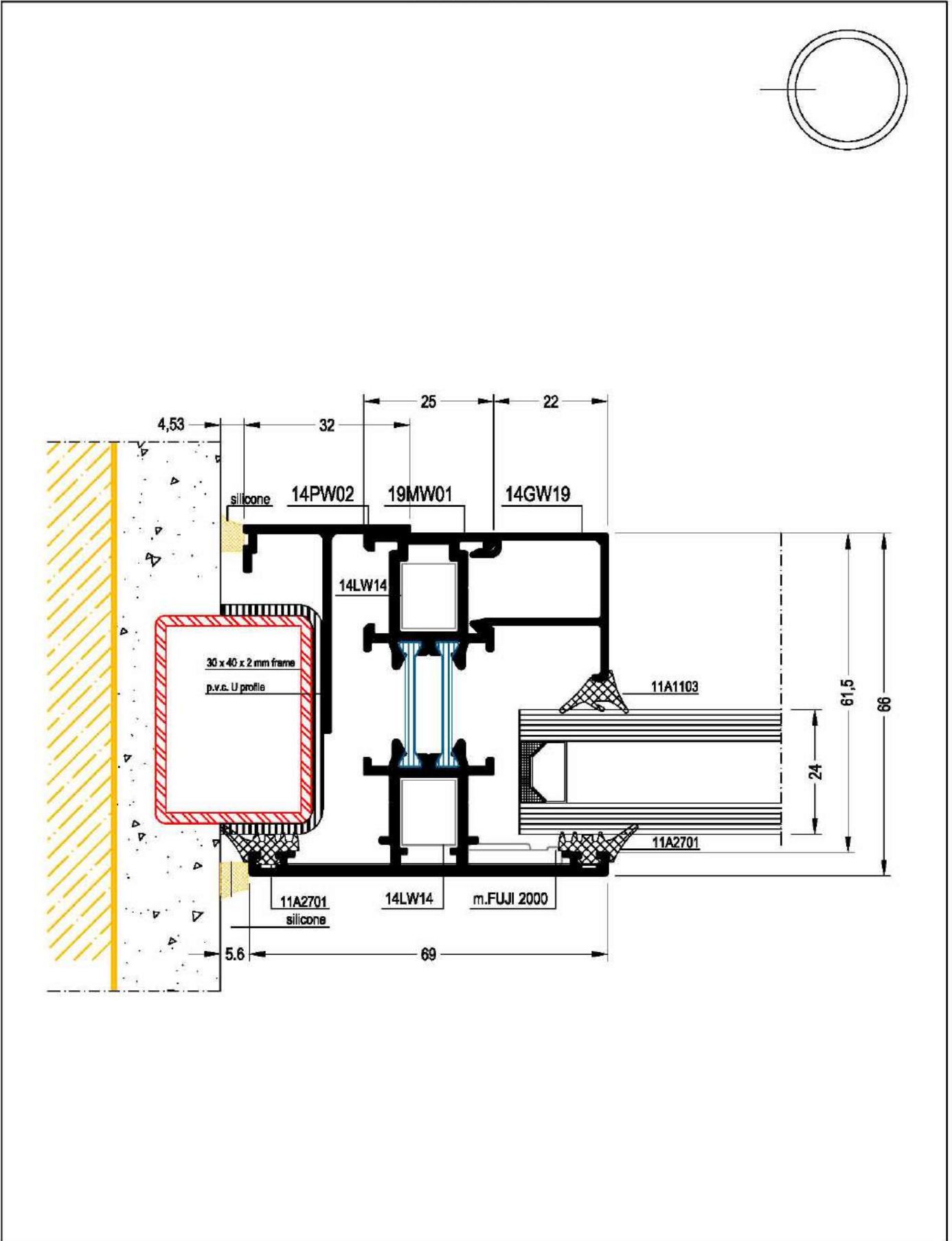




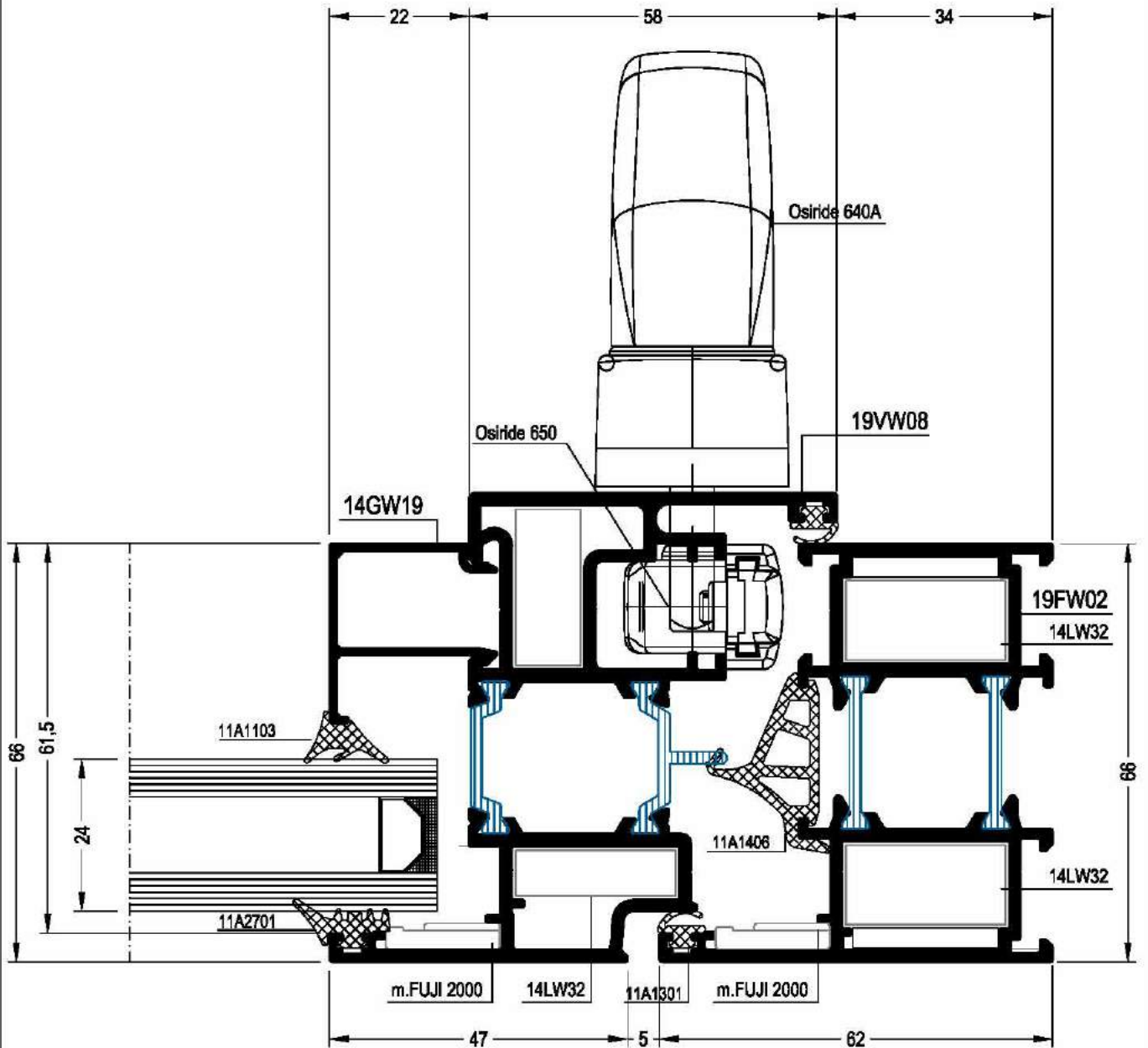
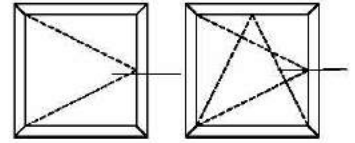
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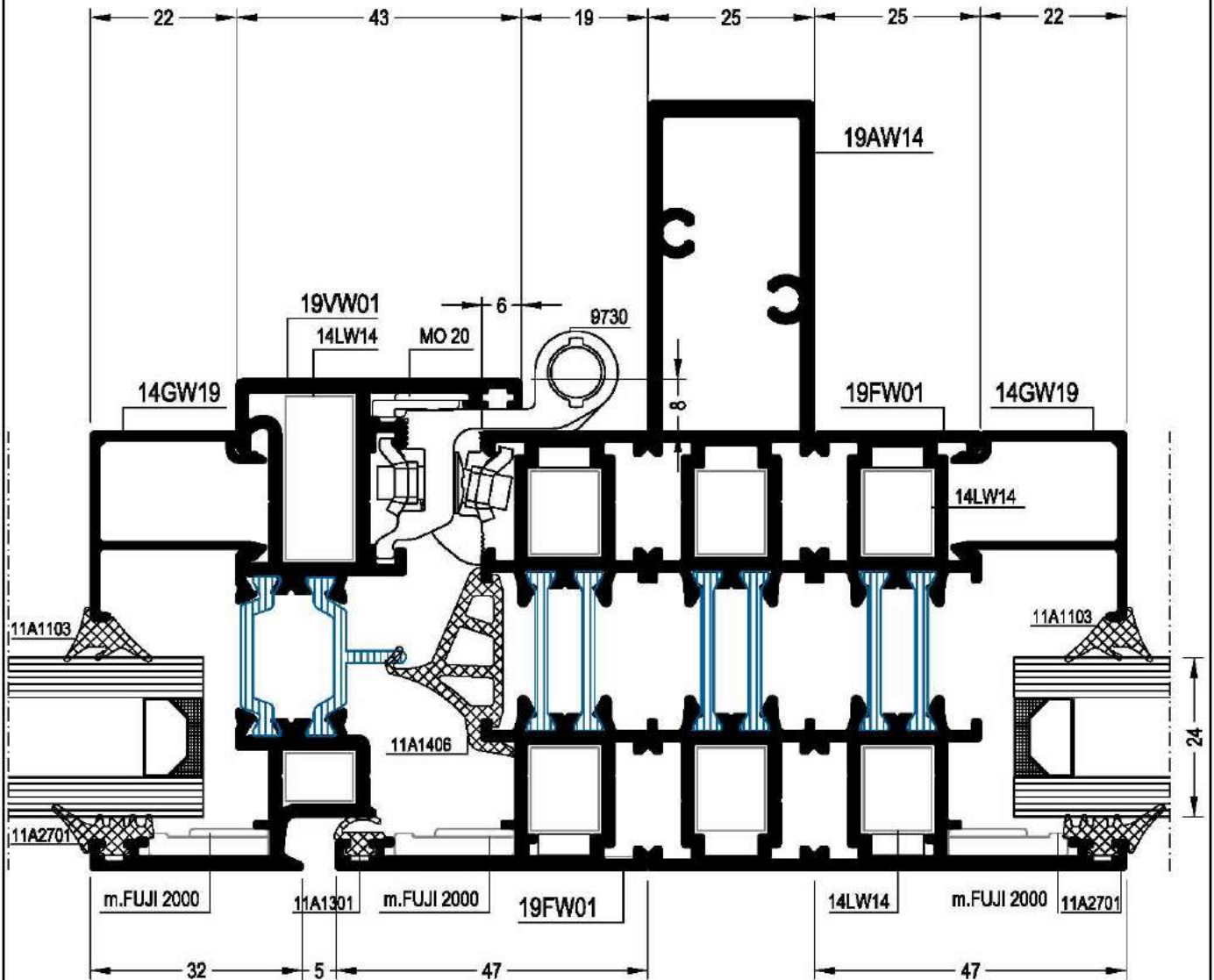
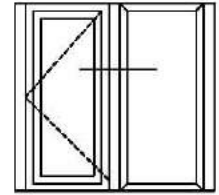
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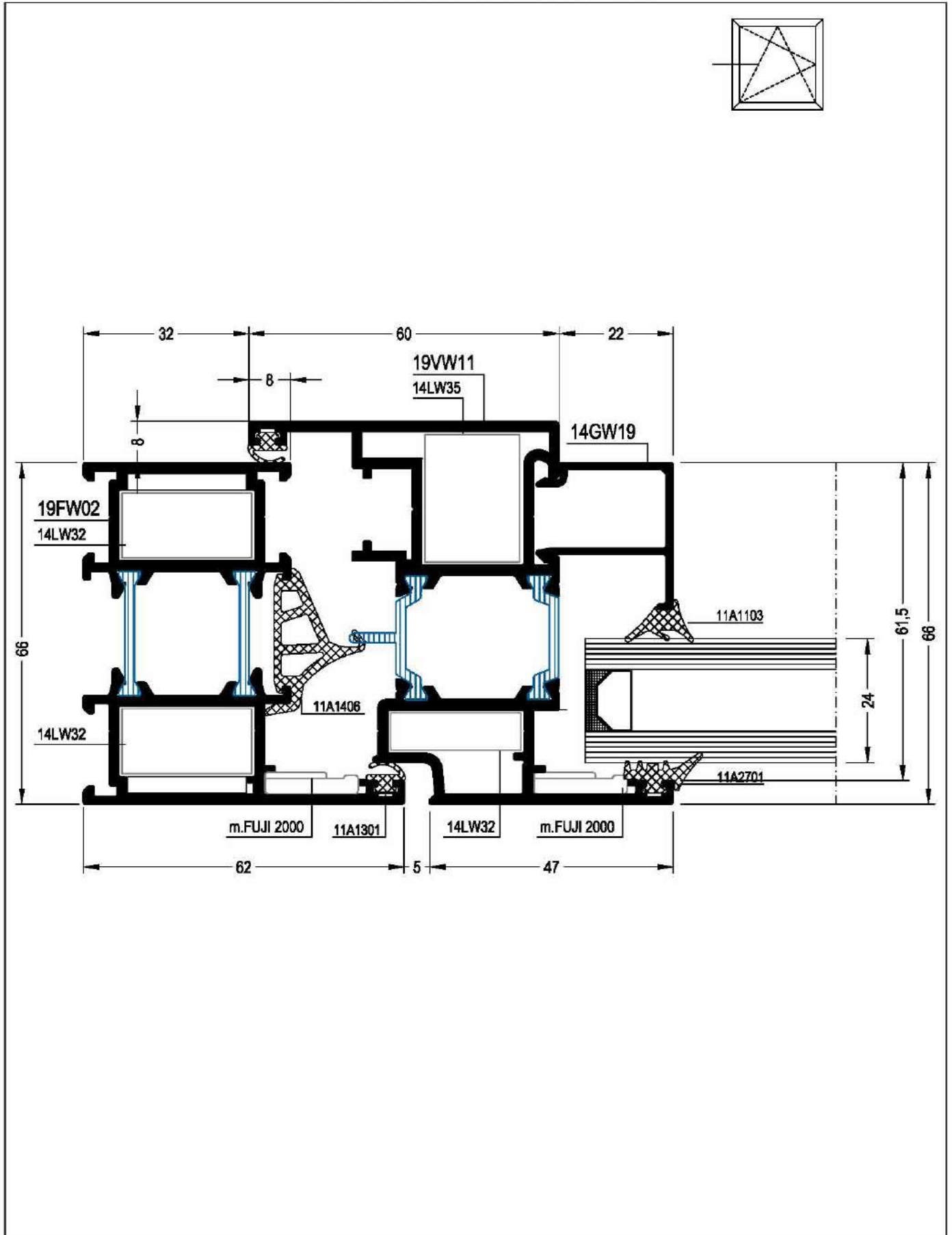
TURNING WINDOW



TURNING WINDOW

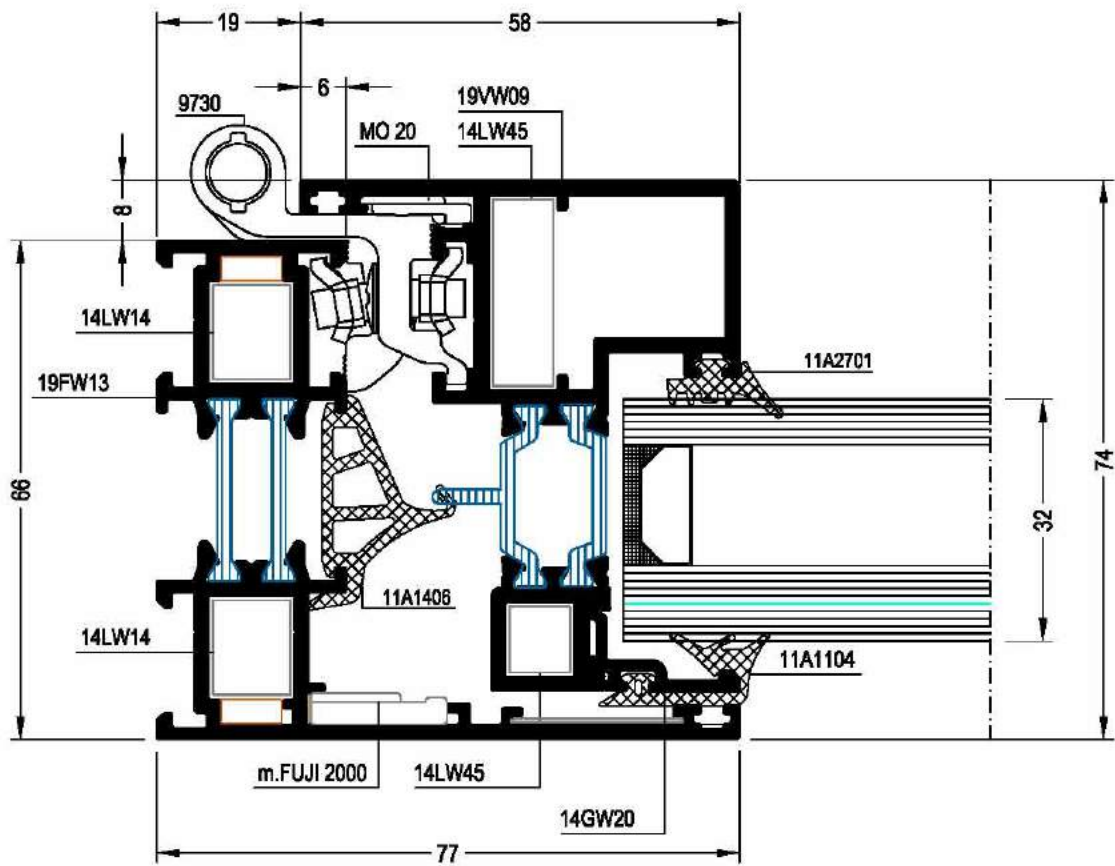
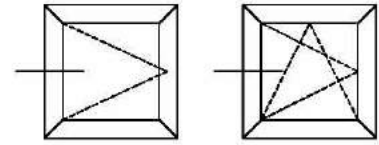


TURNING WINDOW FOR P.V.C. ACCESSORIES



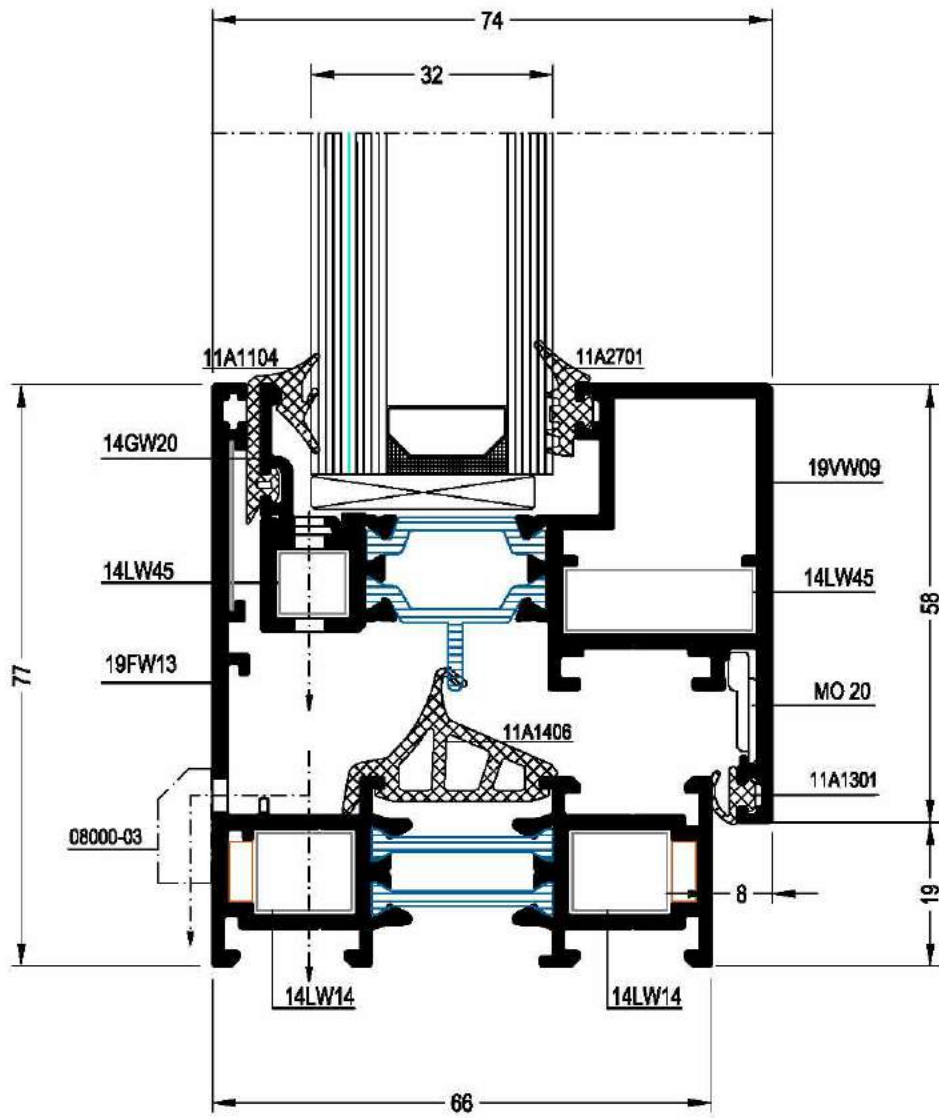
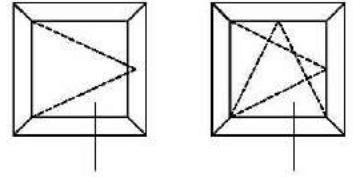


TURNING WINDOW

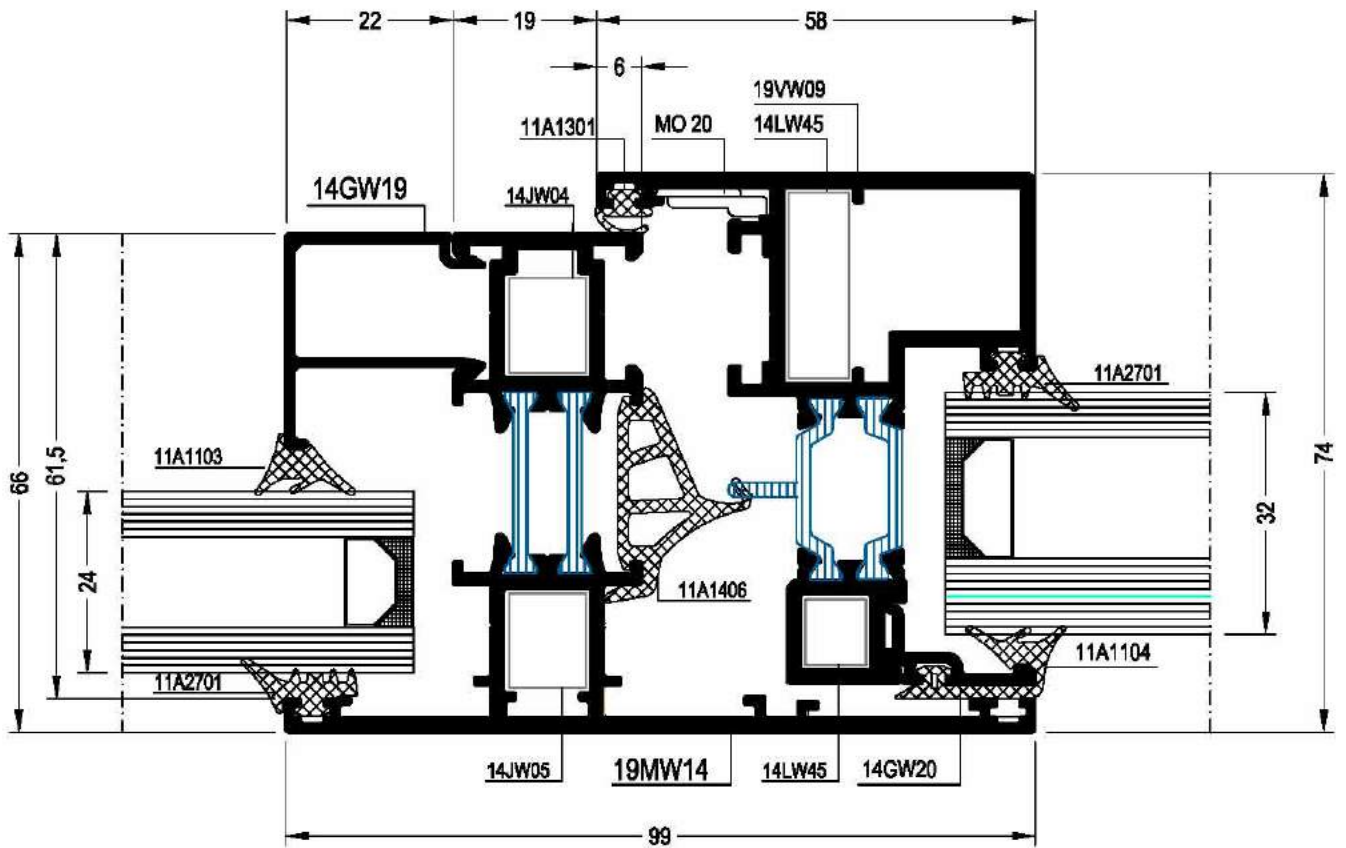
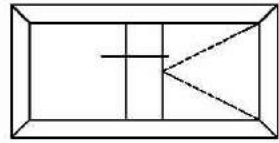




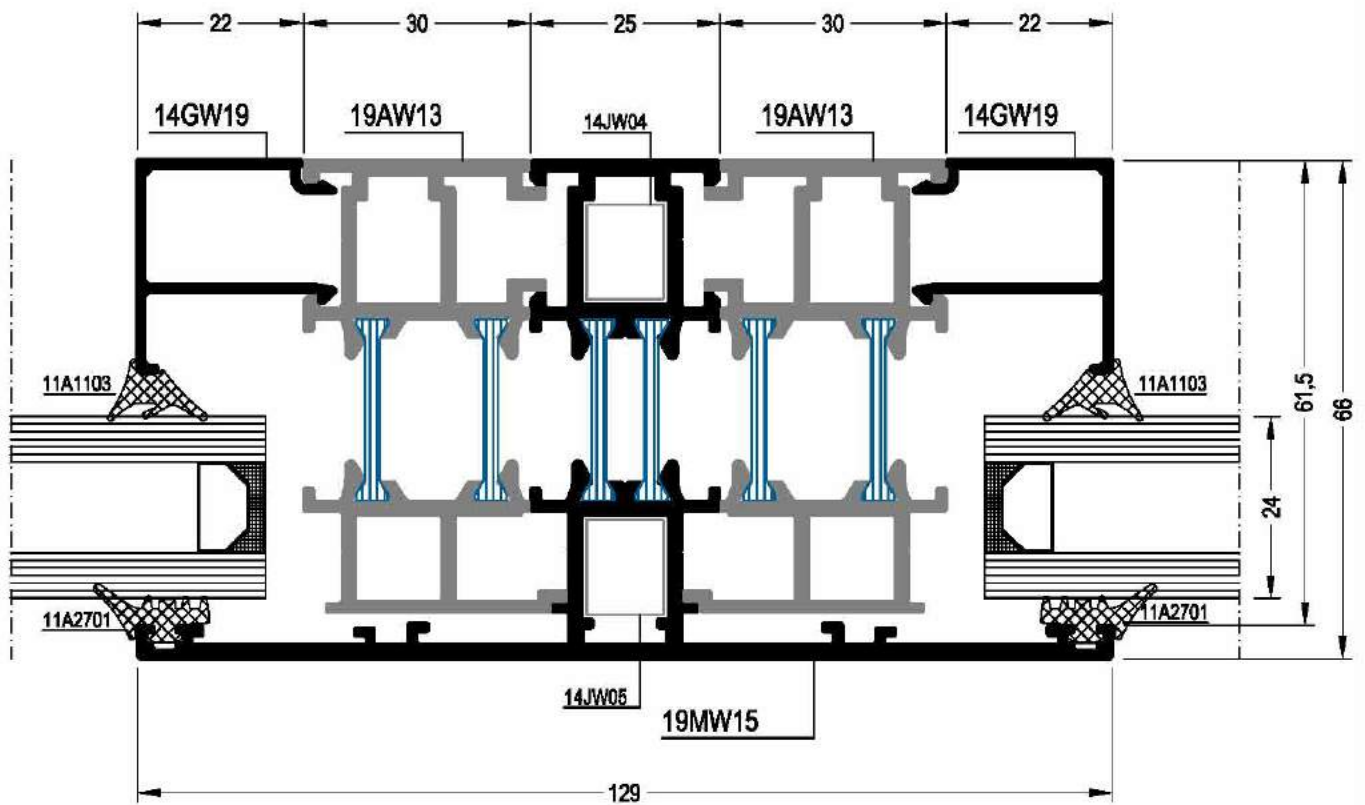
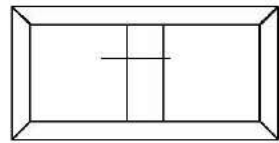
TURNING WINDOW



TURNING WINDOW

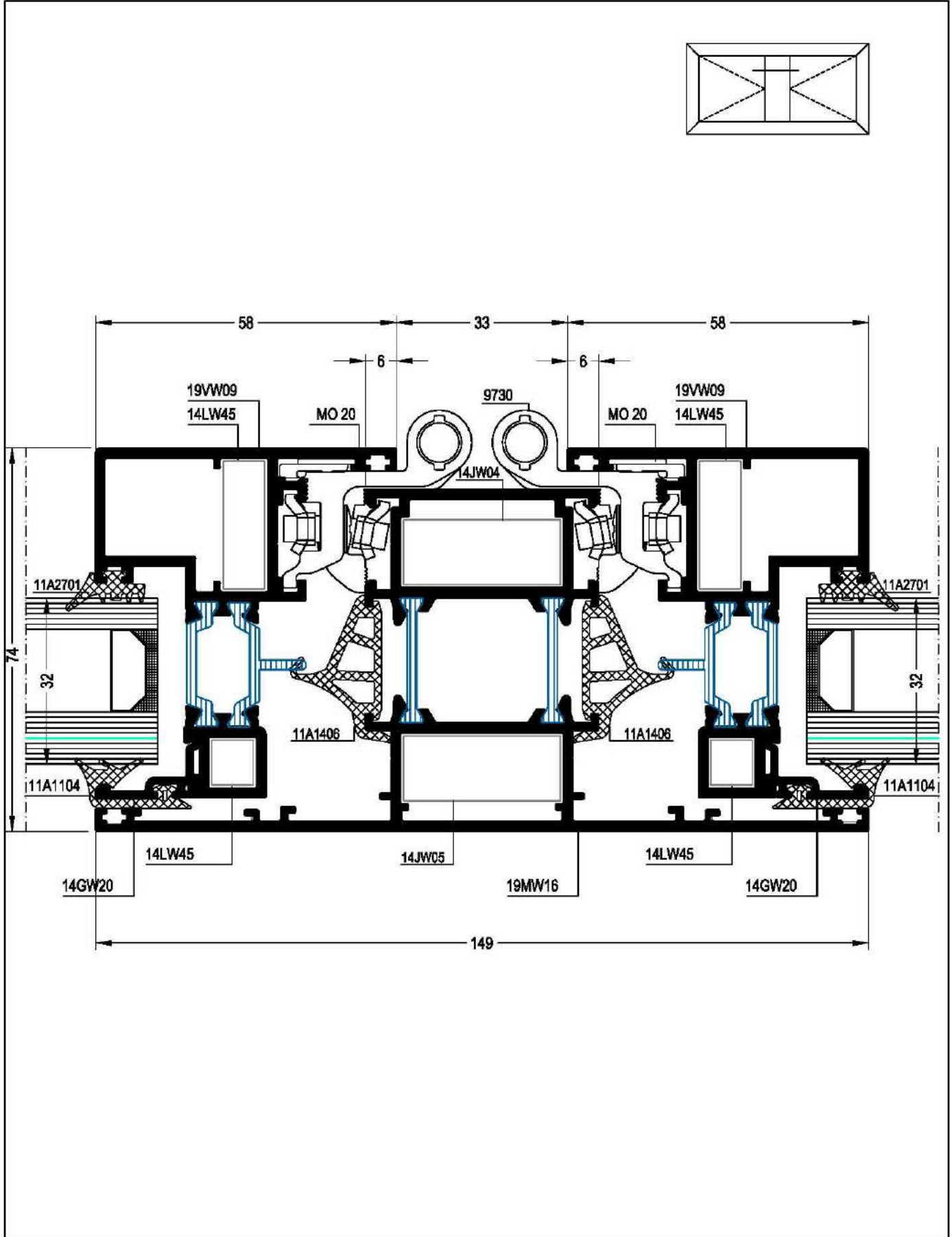


TURNING WINDOW

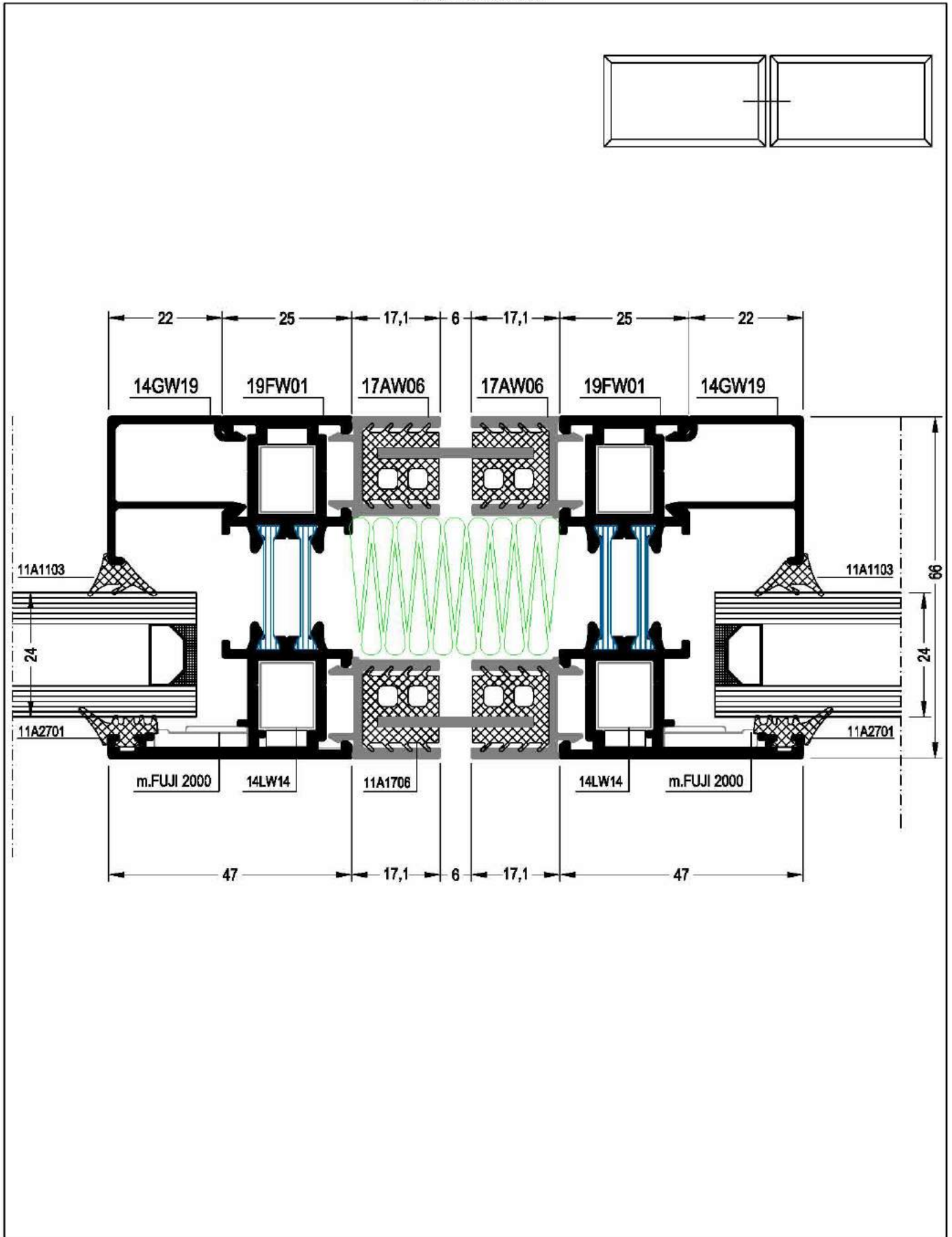




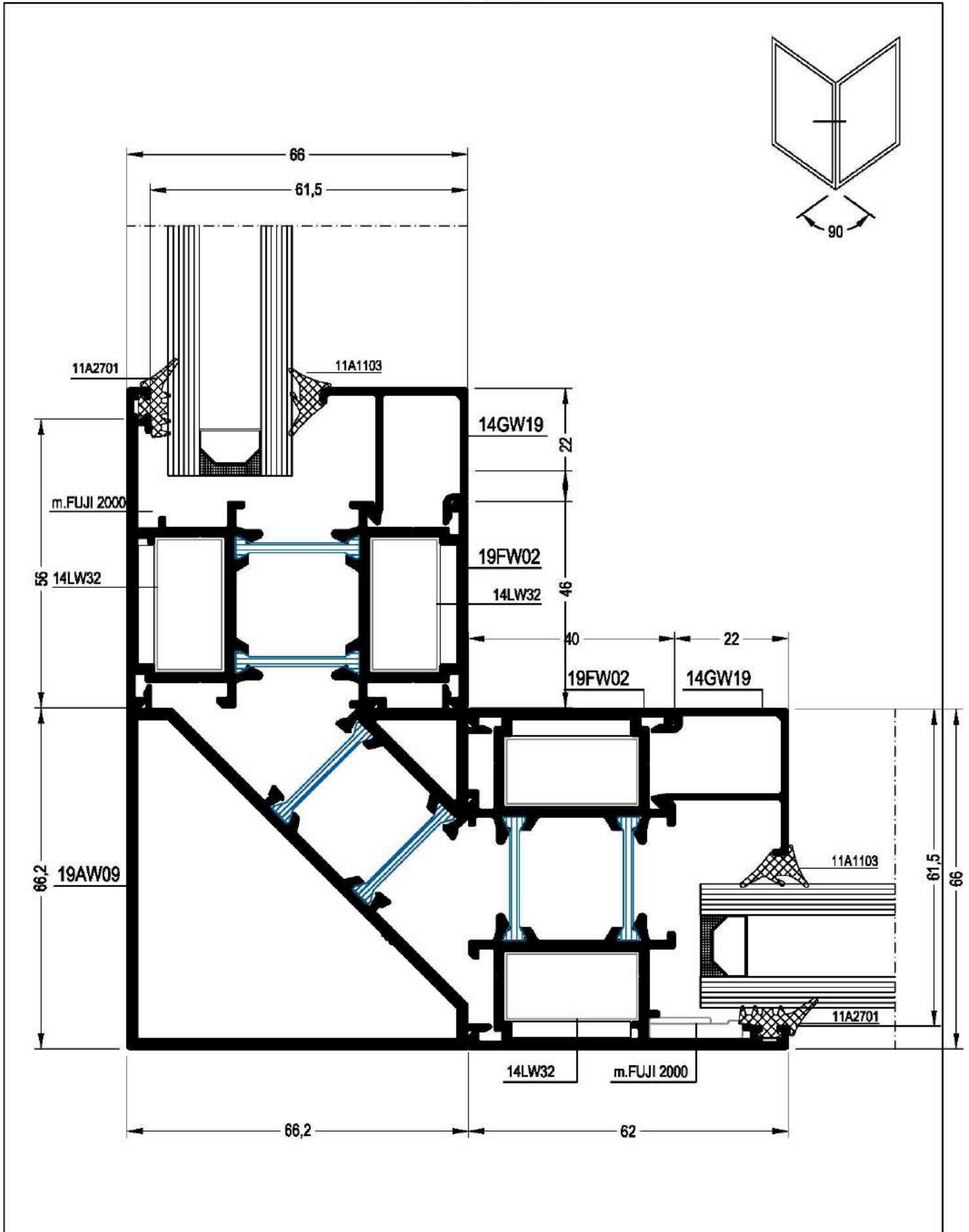
TURNING WINDOW



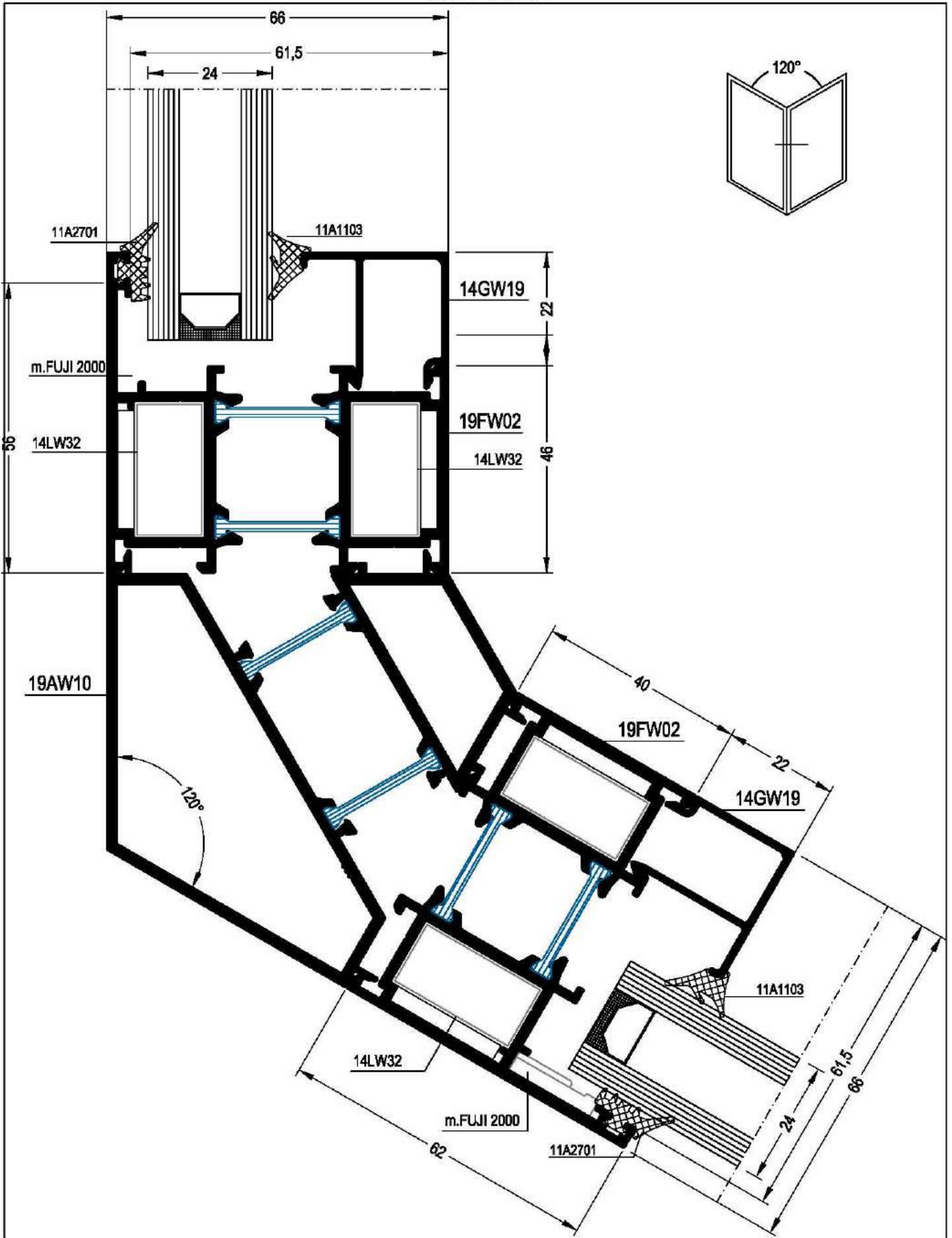
TURNING WINDOW



TURNING WINDOW

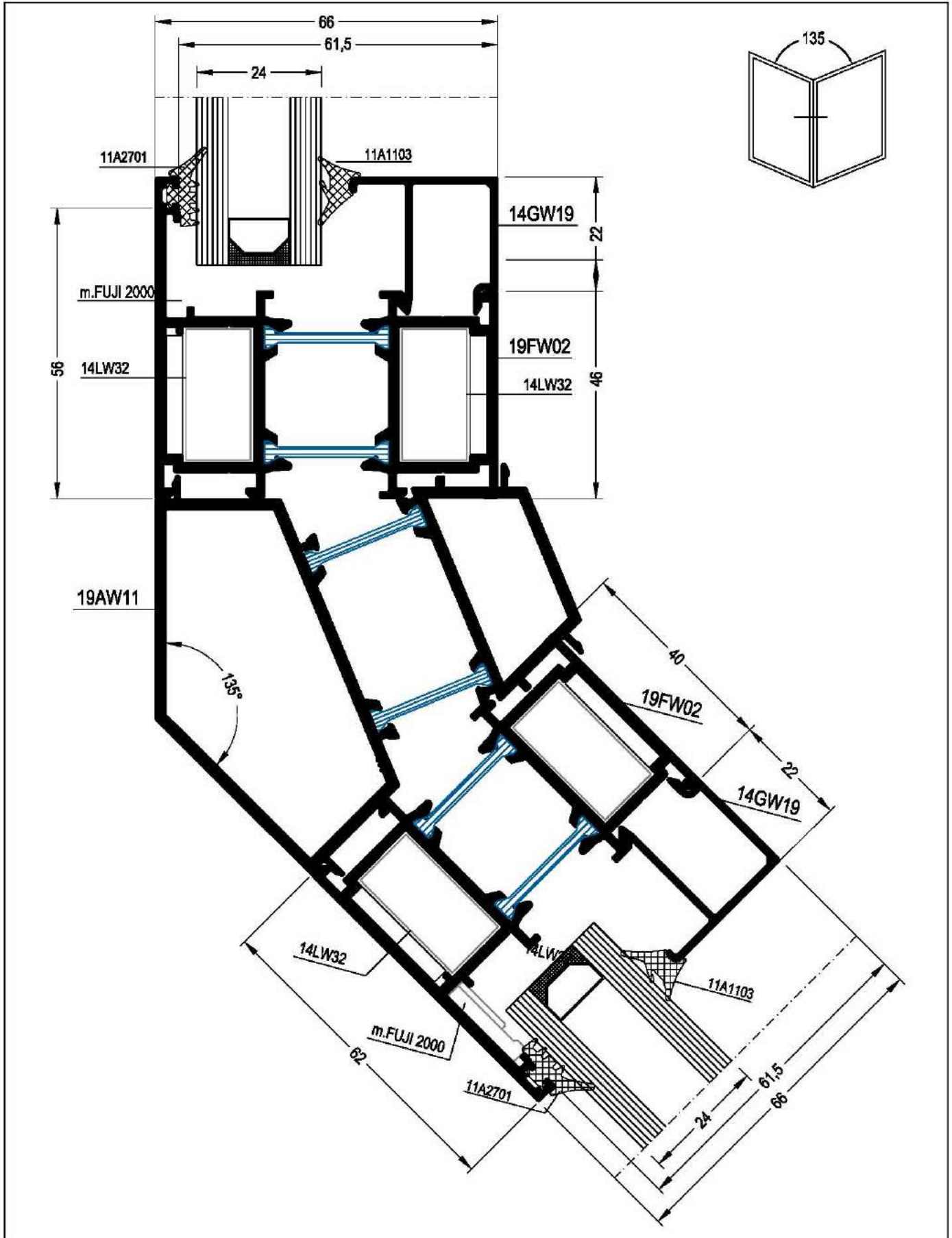


TURNING WINDOW



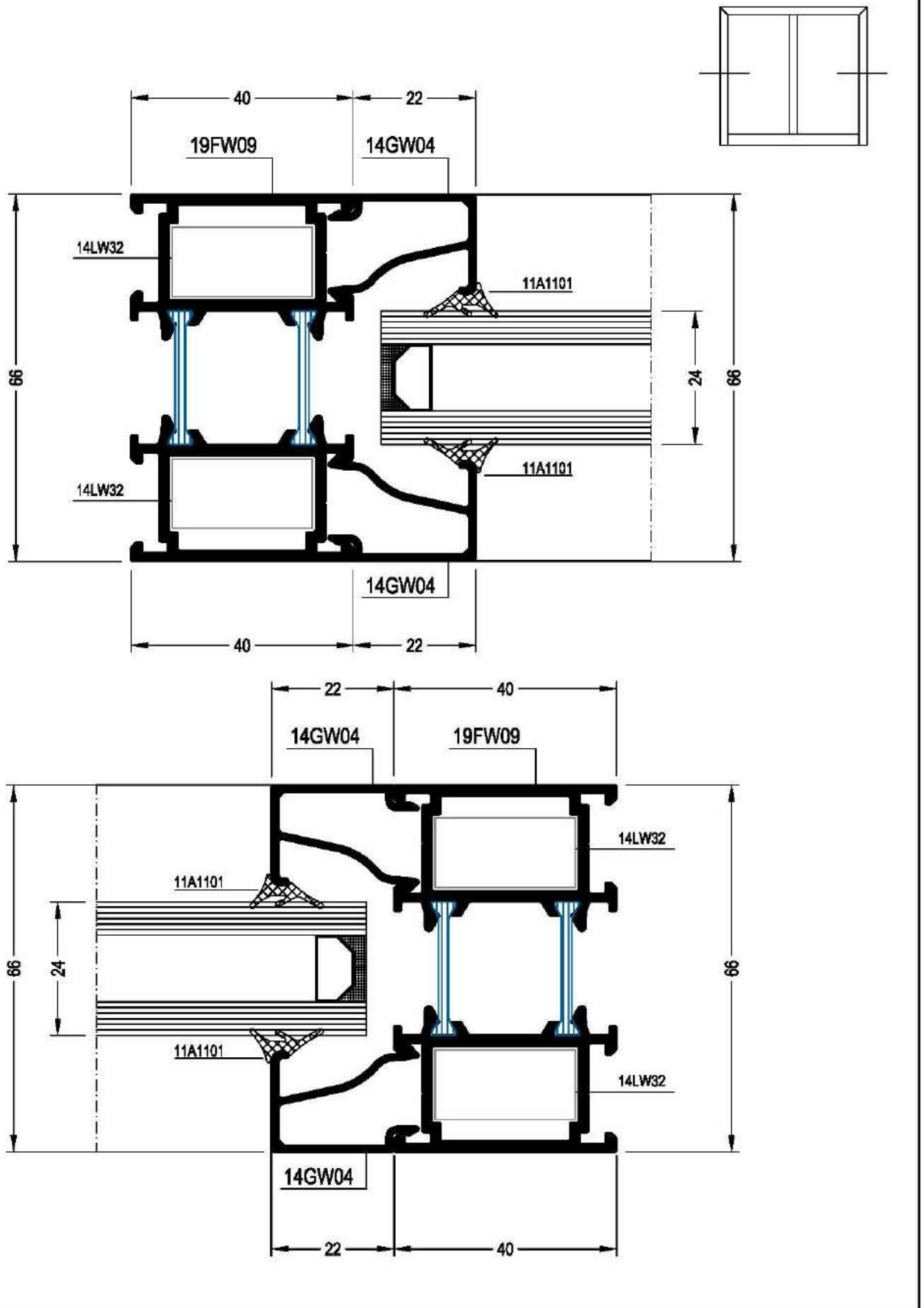


TURNING WINDOW

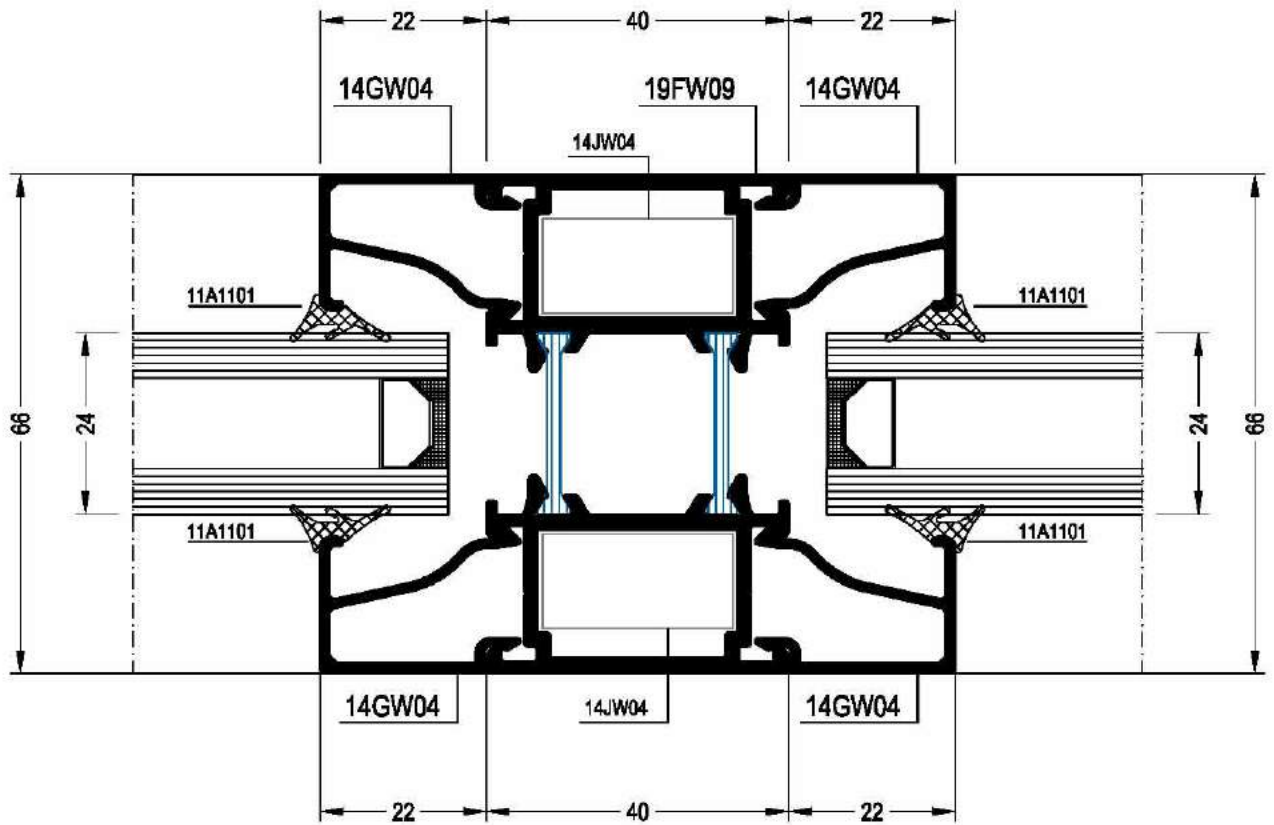
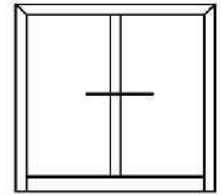




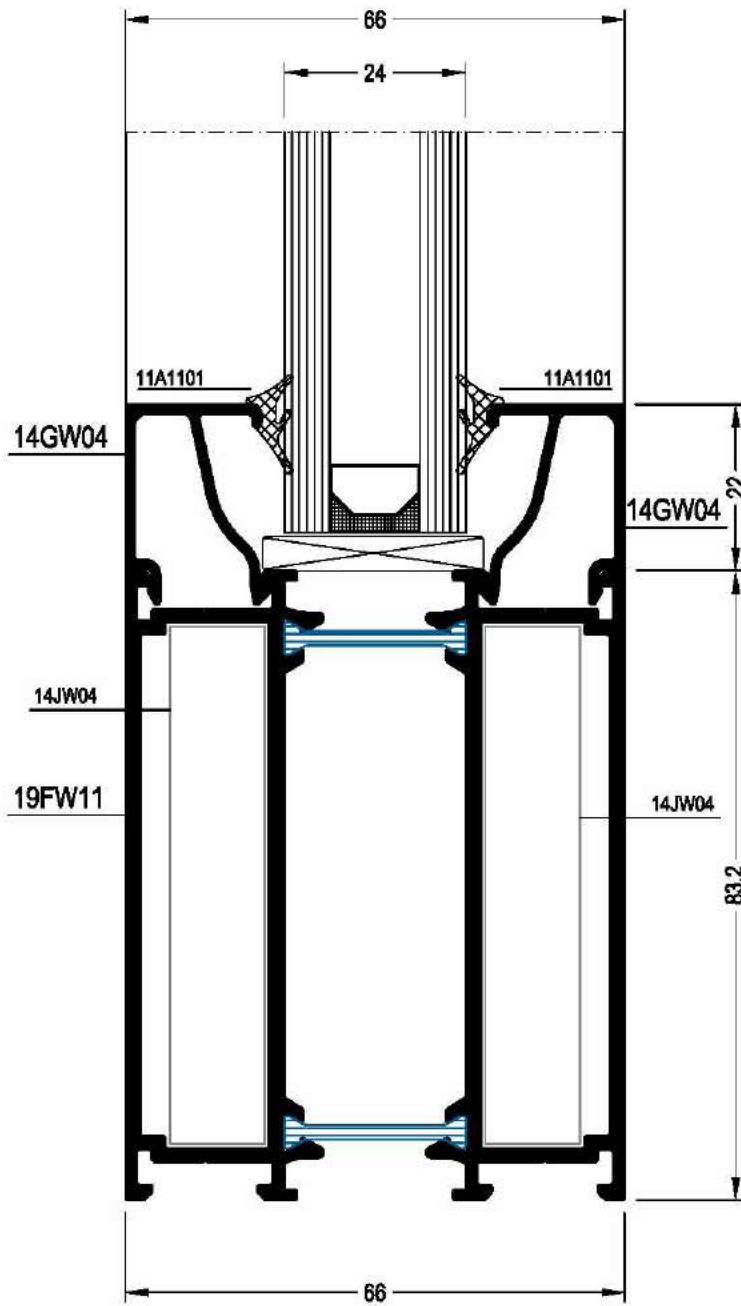
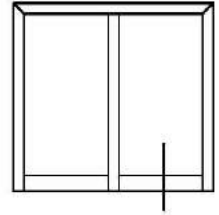
TURNING WINDOW



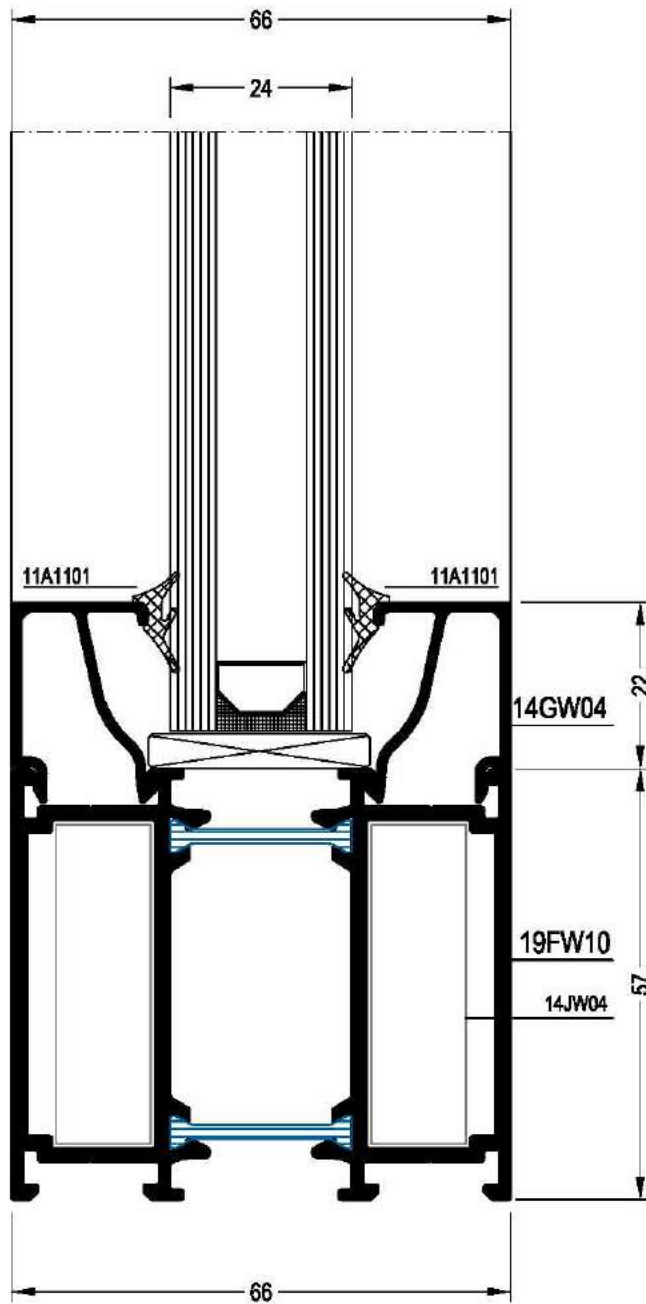
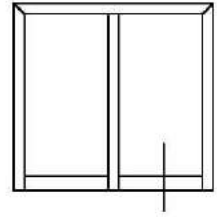
TURNING WINDOW



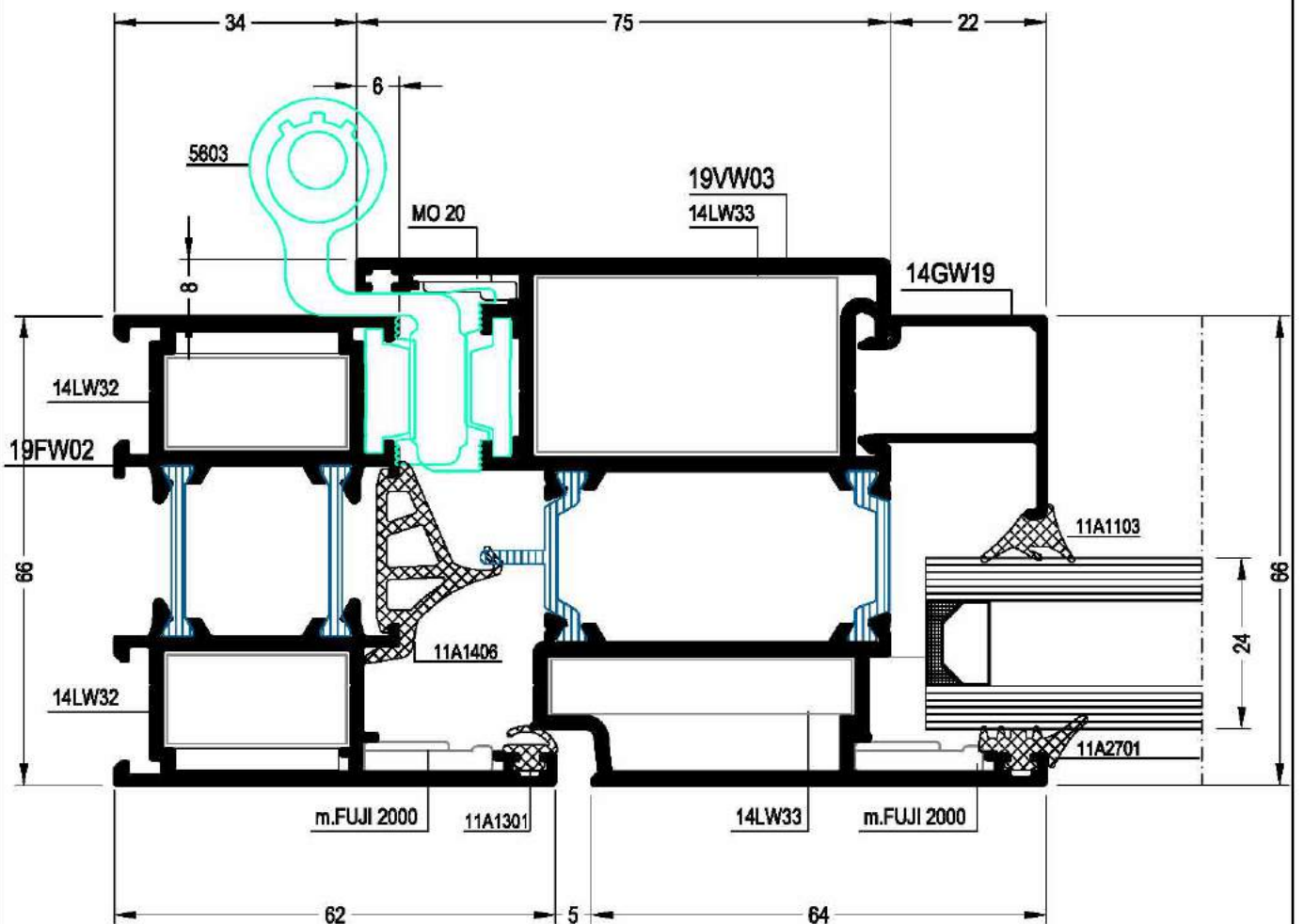
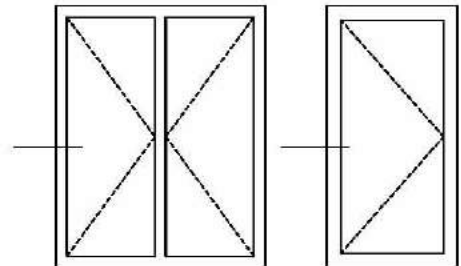
TURNING WINDOW



TURNING WINDOW

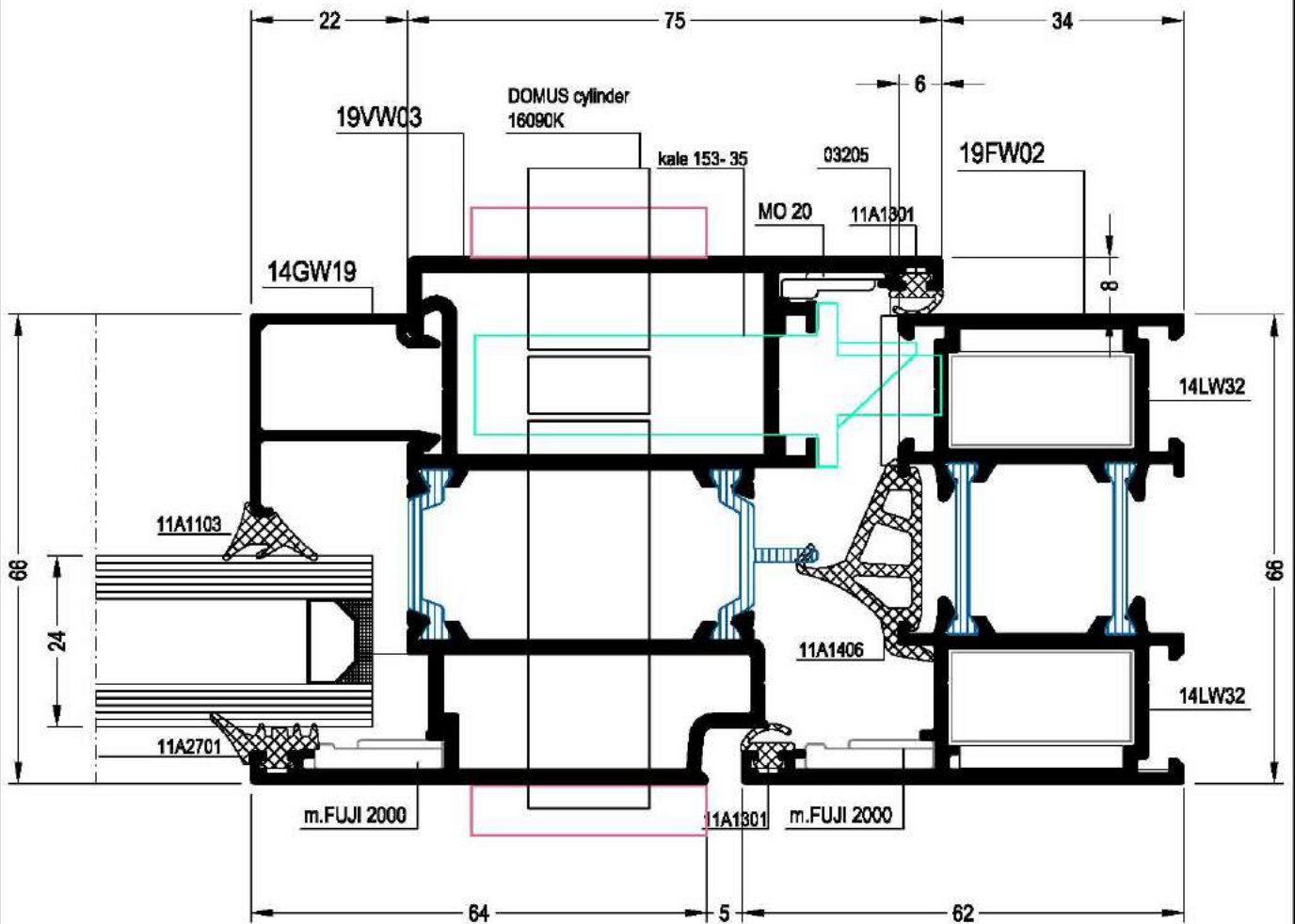
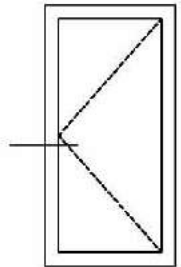


INSIDE OPENING DOOR

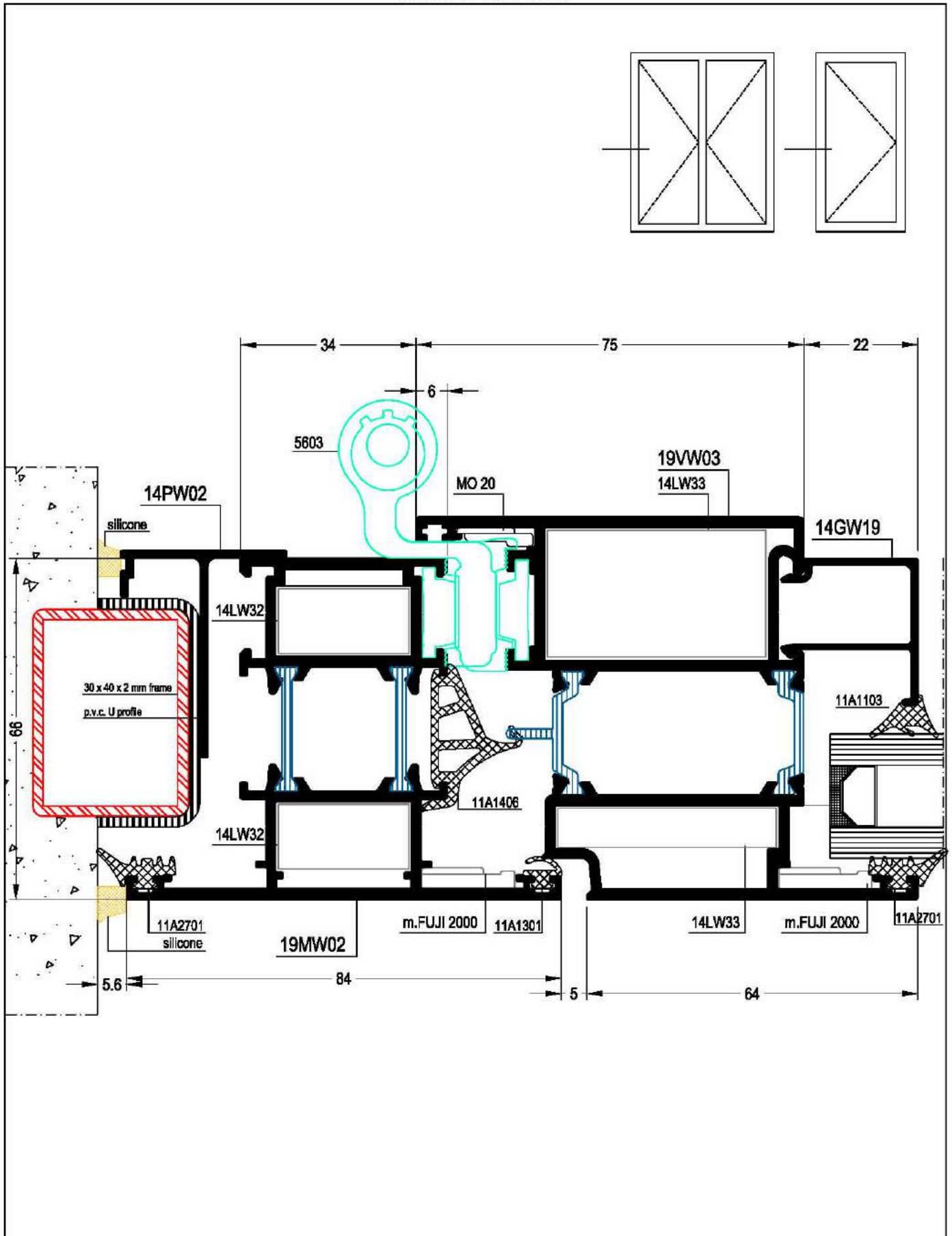




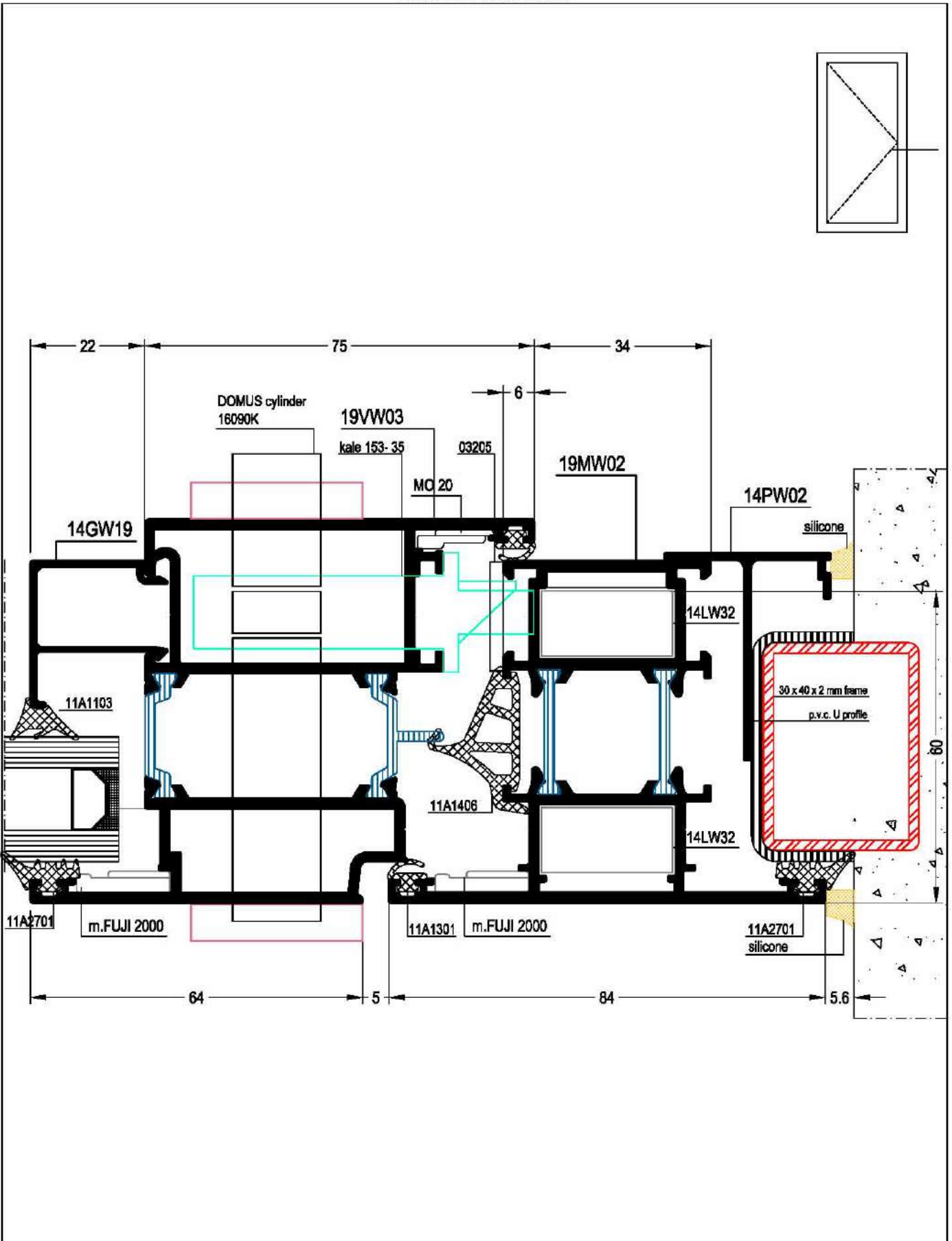
INSIDE OPENING DOOR



INSIDE OPENING DOOR



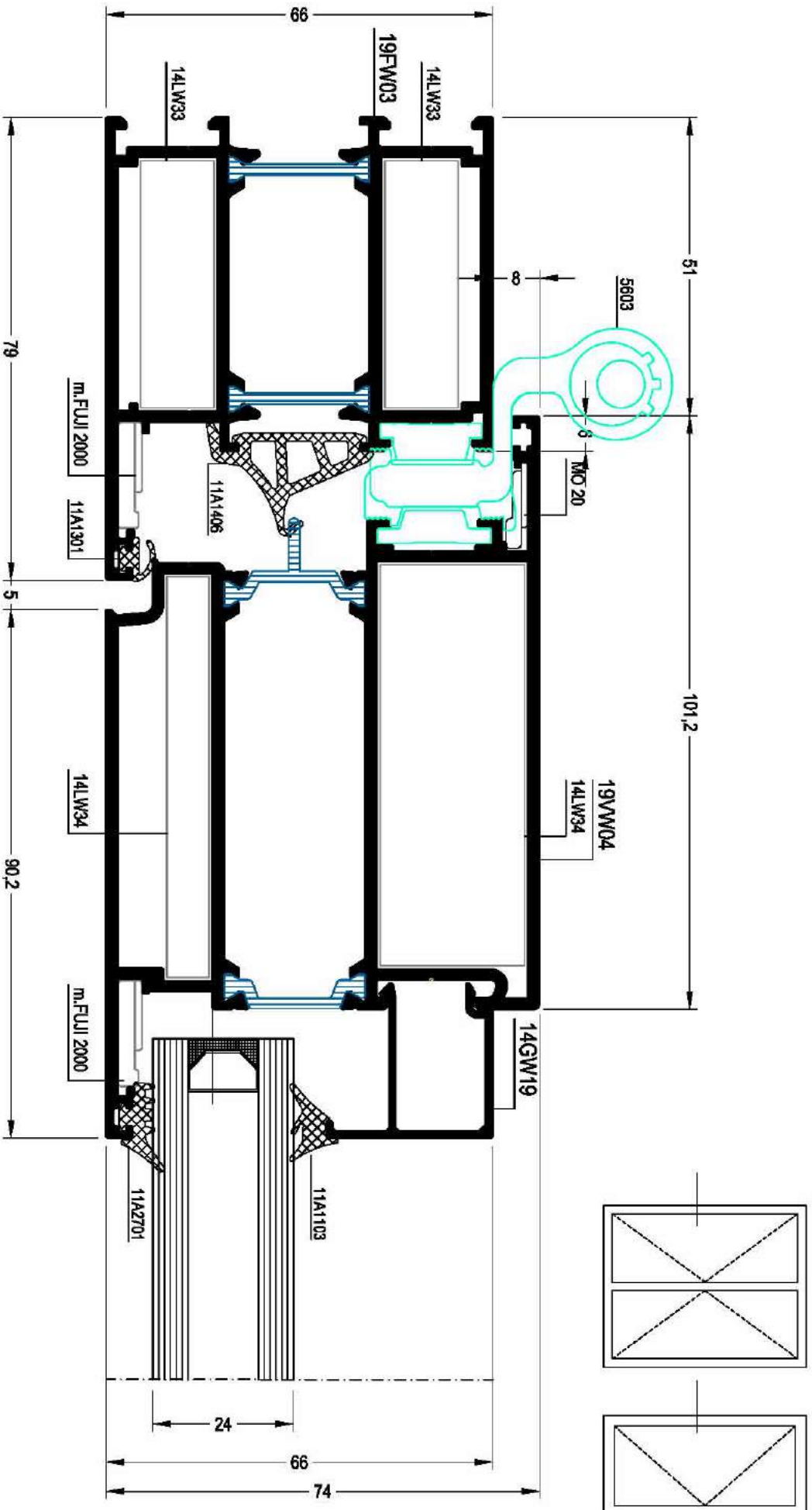
INSIDE OPENING DOOR



**SYSTEM CASTLE 1966 W+**

**DETAILS**

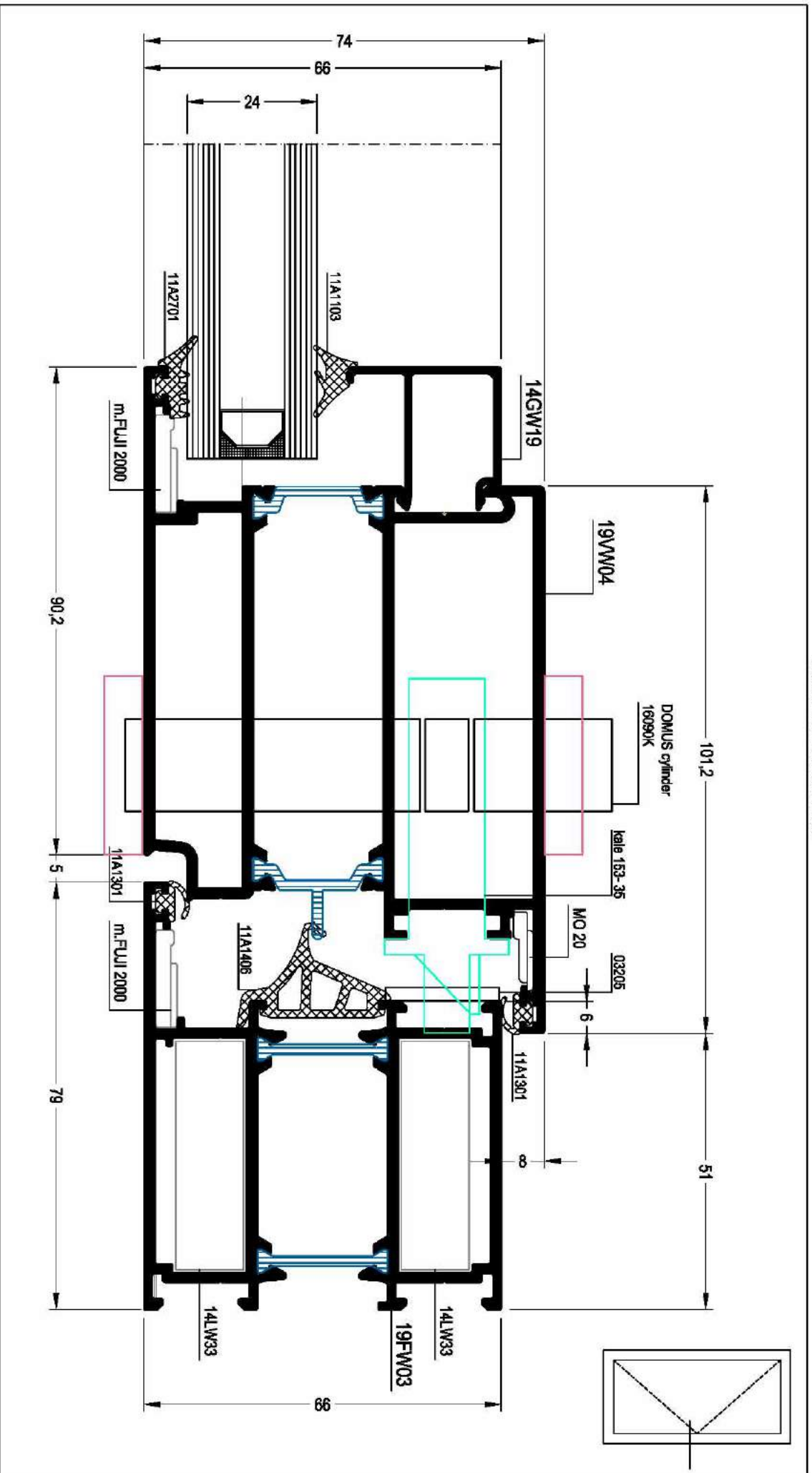
**INSIDE OPENING DOOR**



**SYSTEM CASTLE 1986 W+**

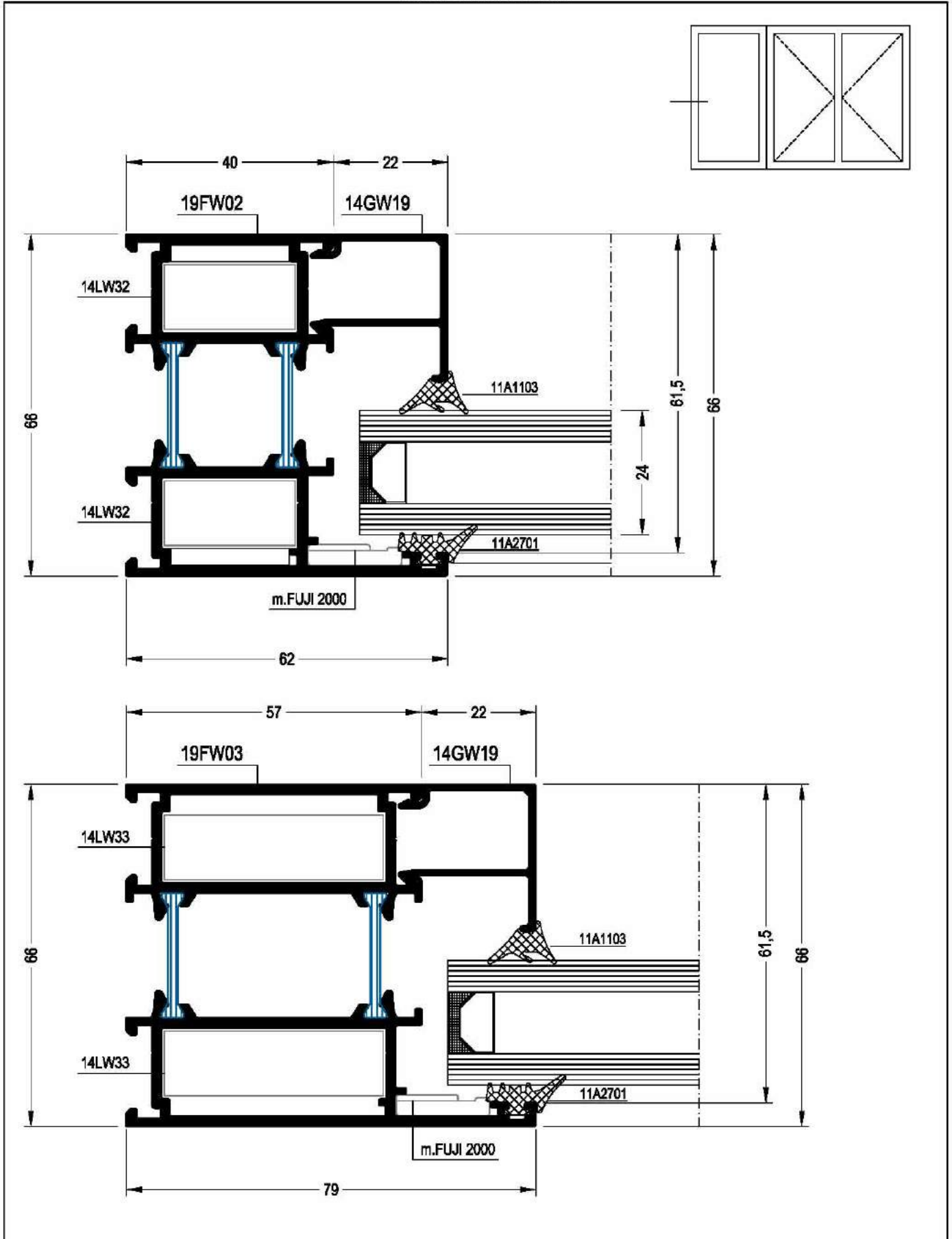
**DETAILS**

**INSIDE OPENING DOOR**

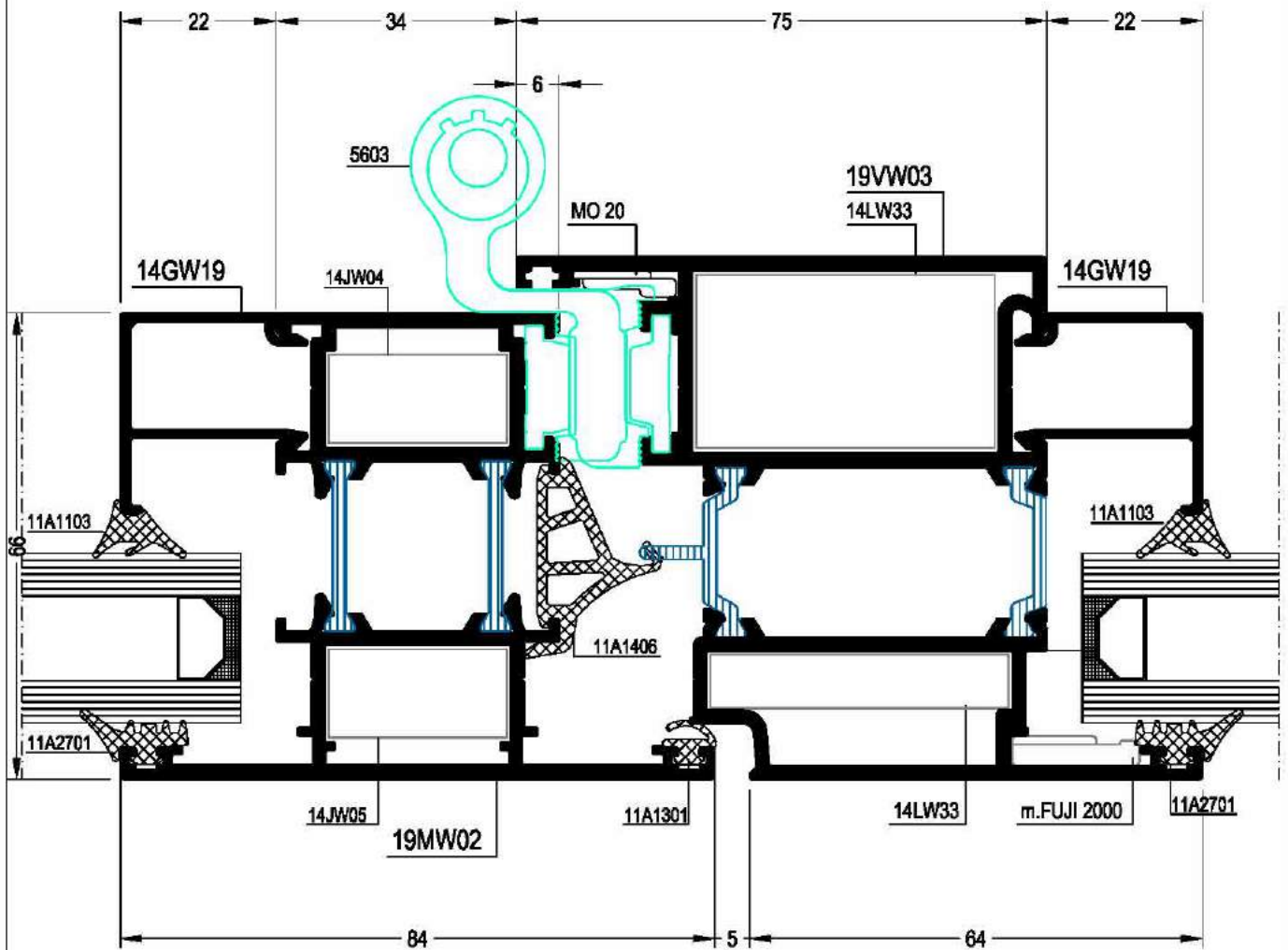
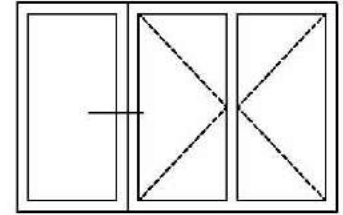




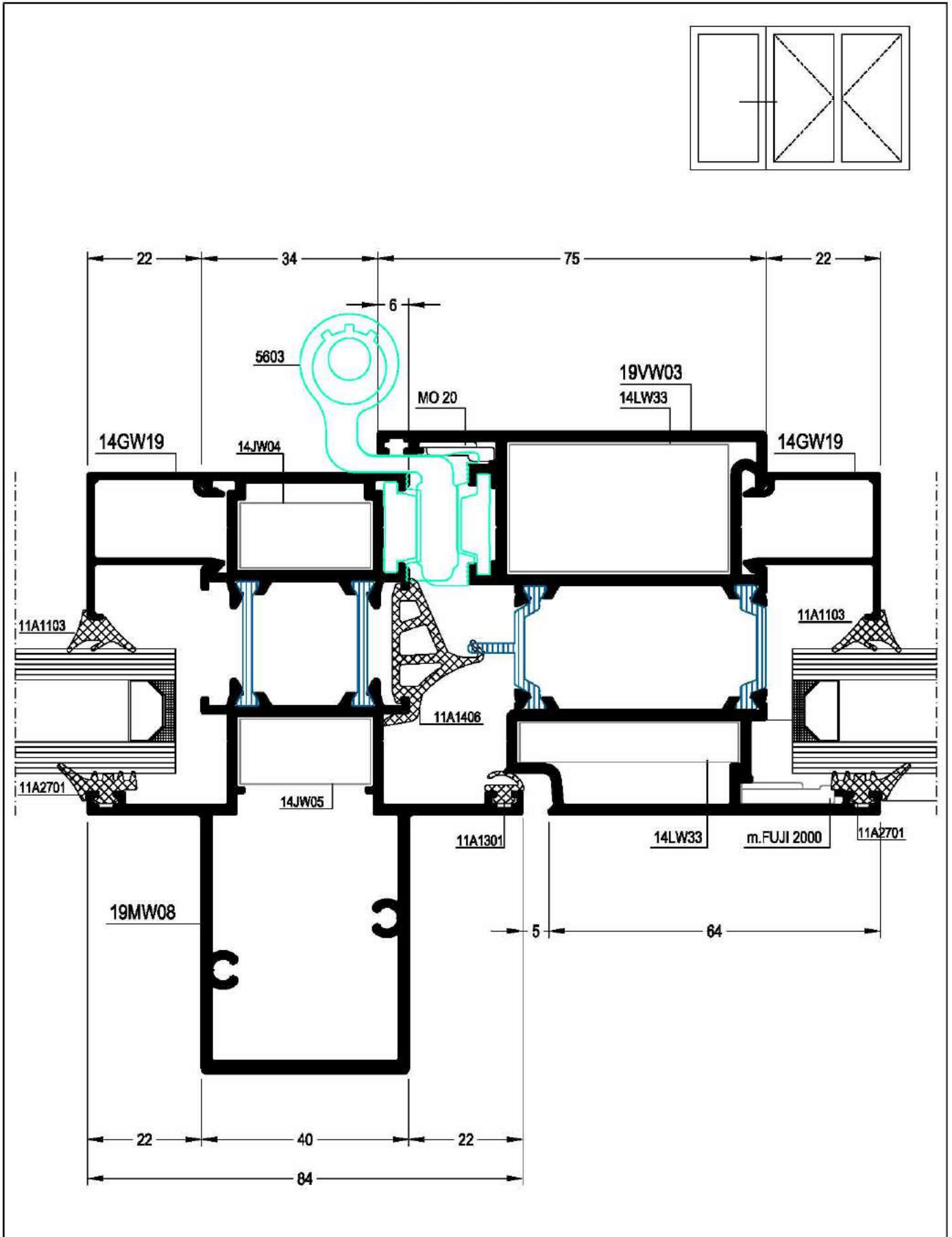
INSIDE OPENING DOOR



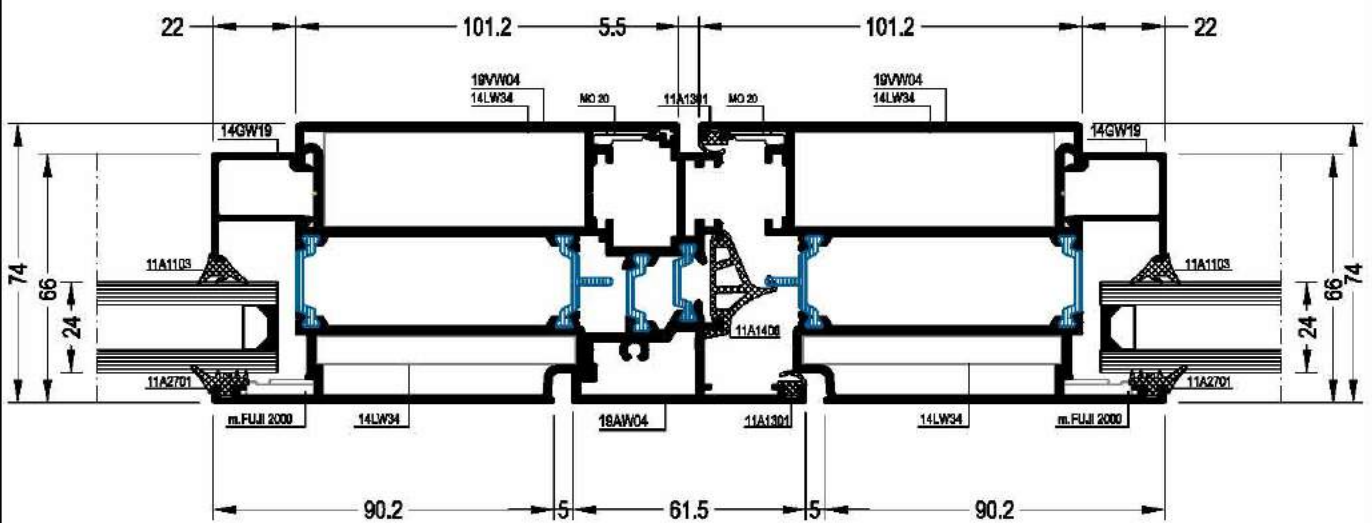
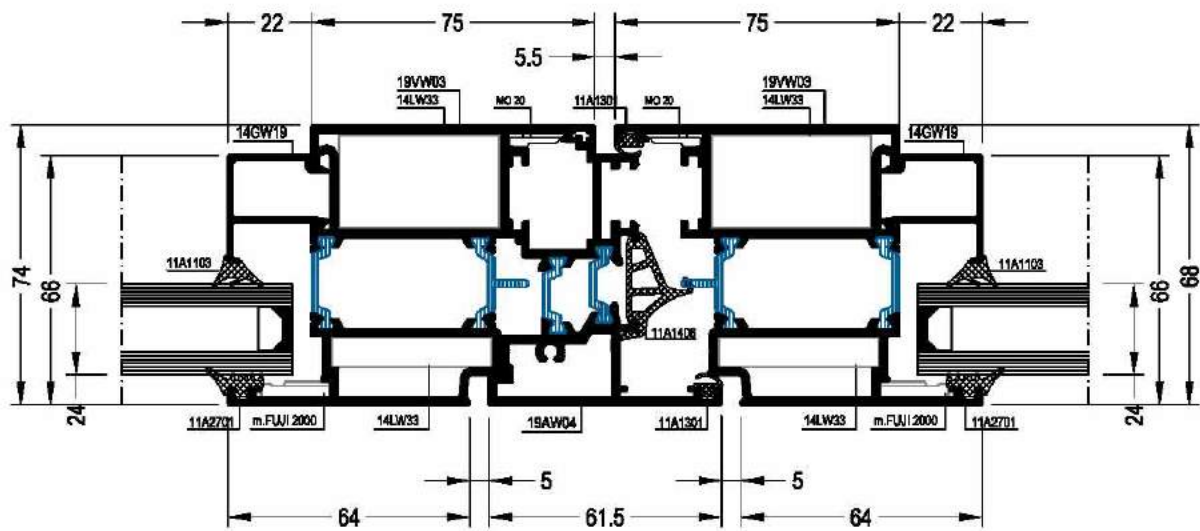
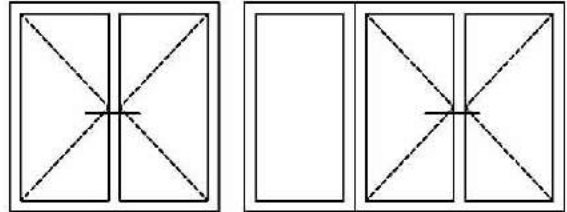
INSIDE OPENING DOOR



INSIDE OPENING DOOR



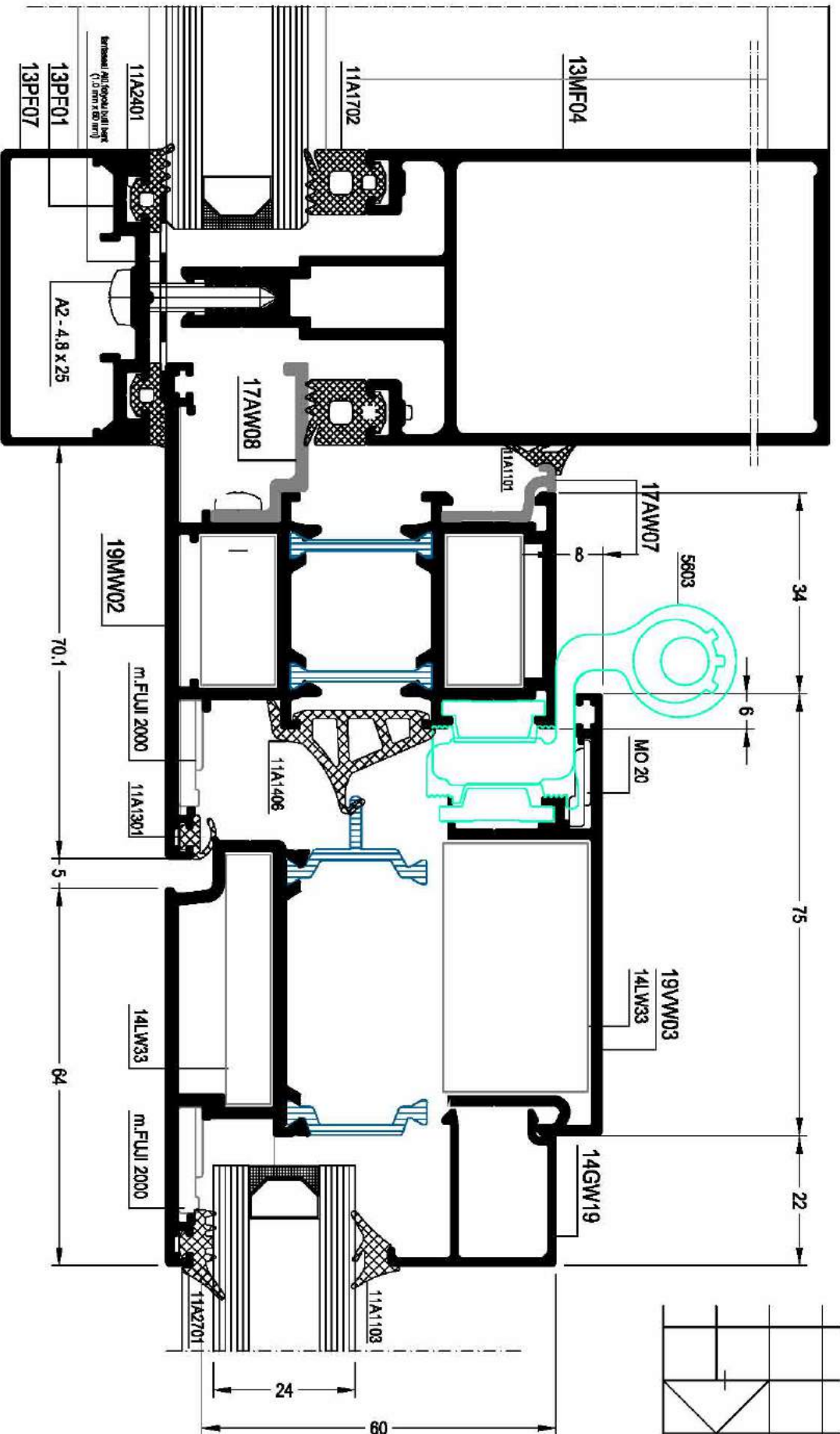
INSIDE OPENING DOOR



SYSTEM CASTLE 19/66 W+

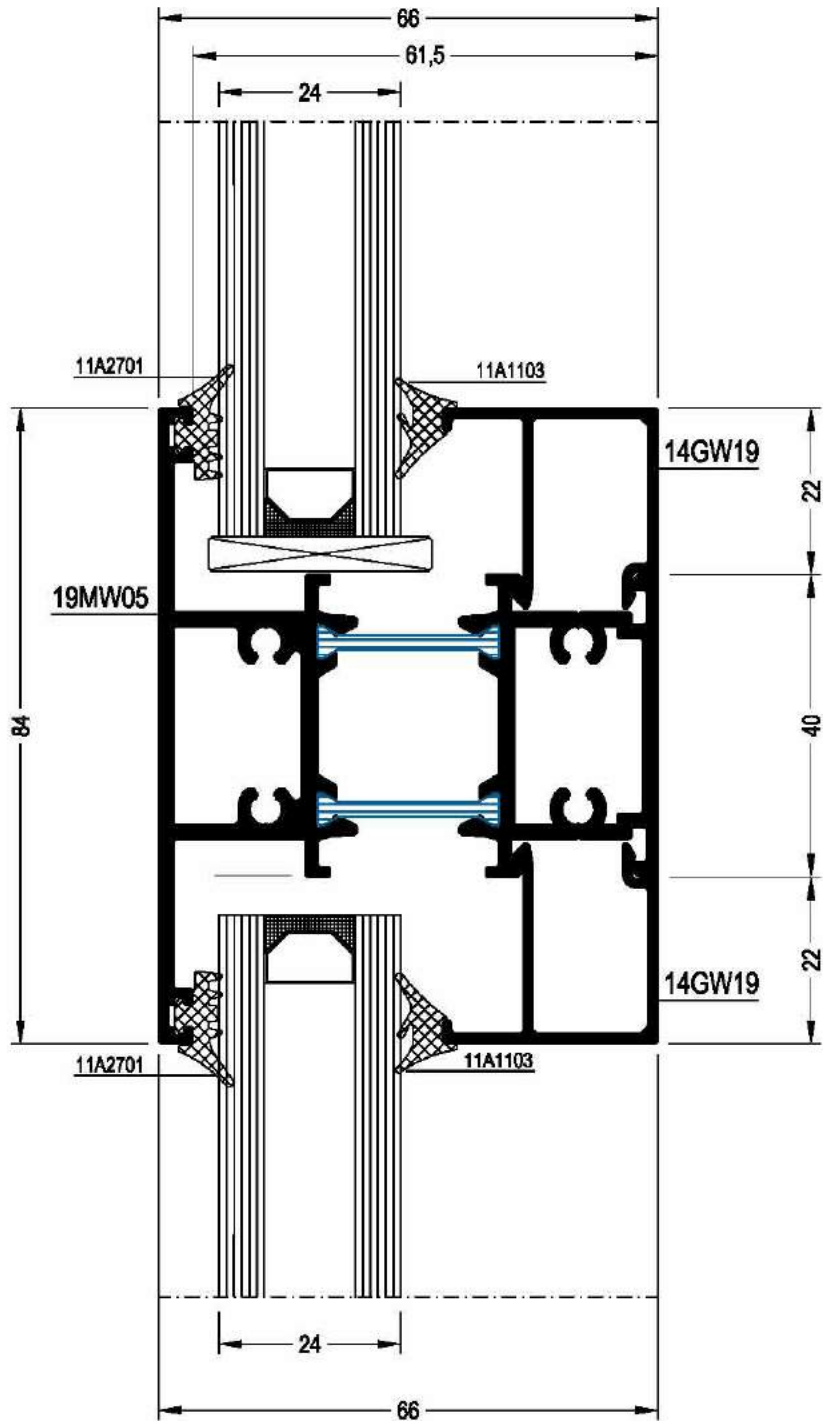
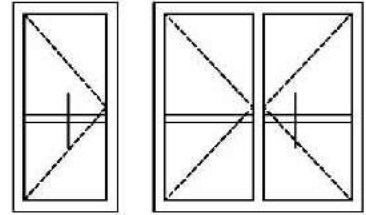
DETAILS

INSIDE OPENING DOOR

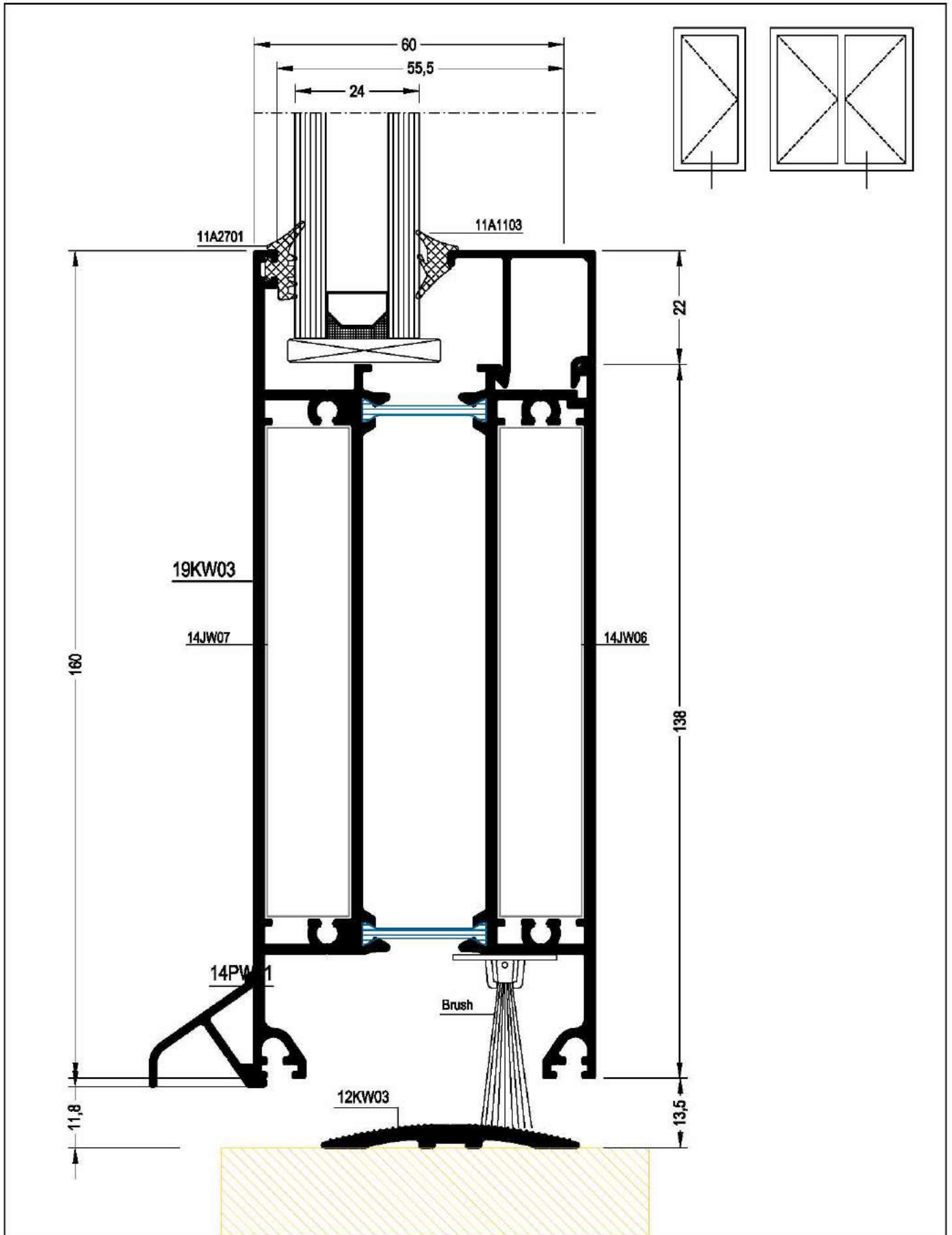




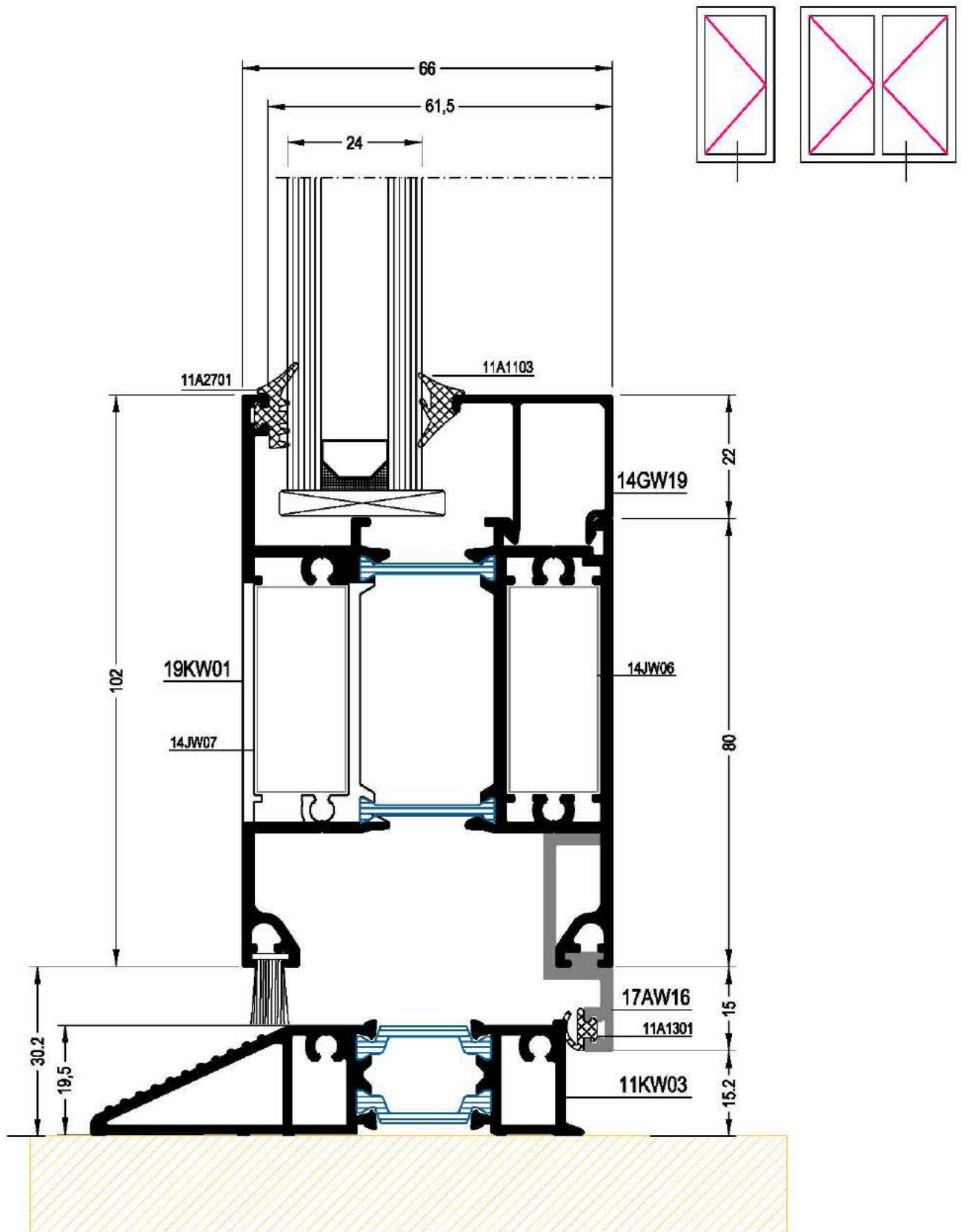
INSIDE OPENING DOOR



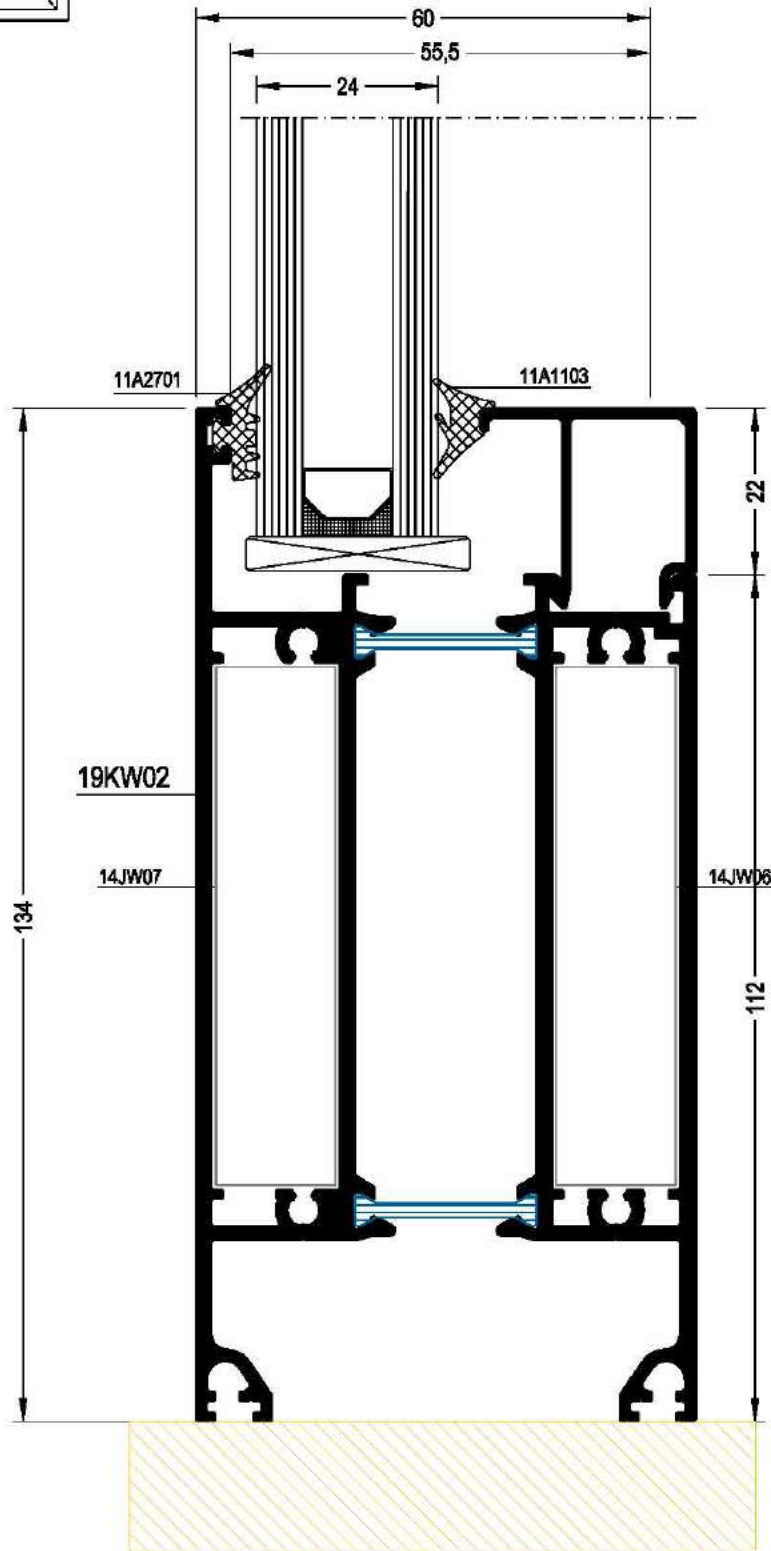
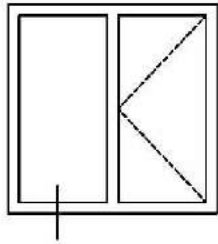
INSIDE OPENING DOOR



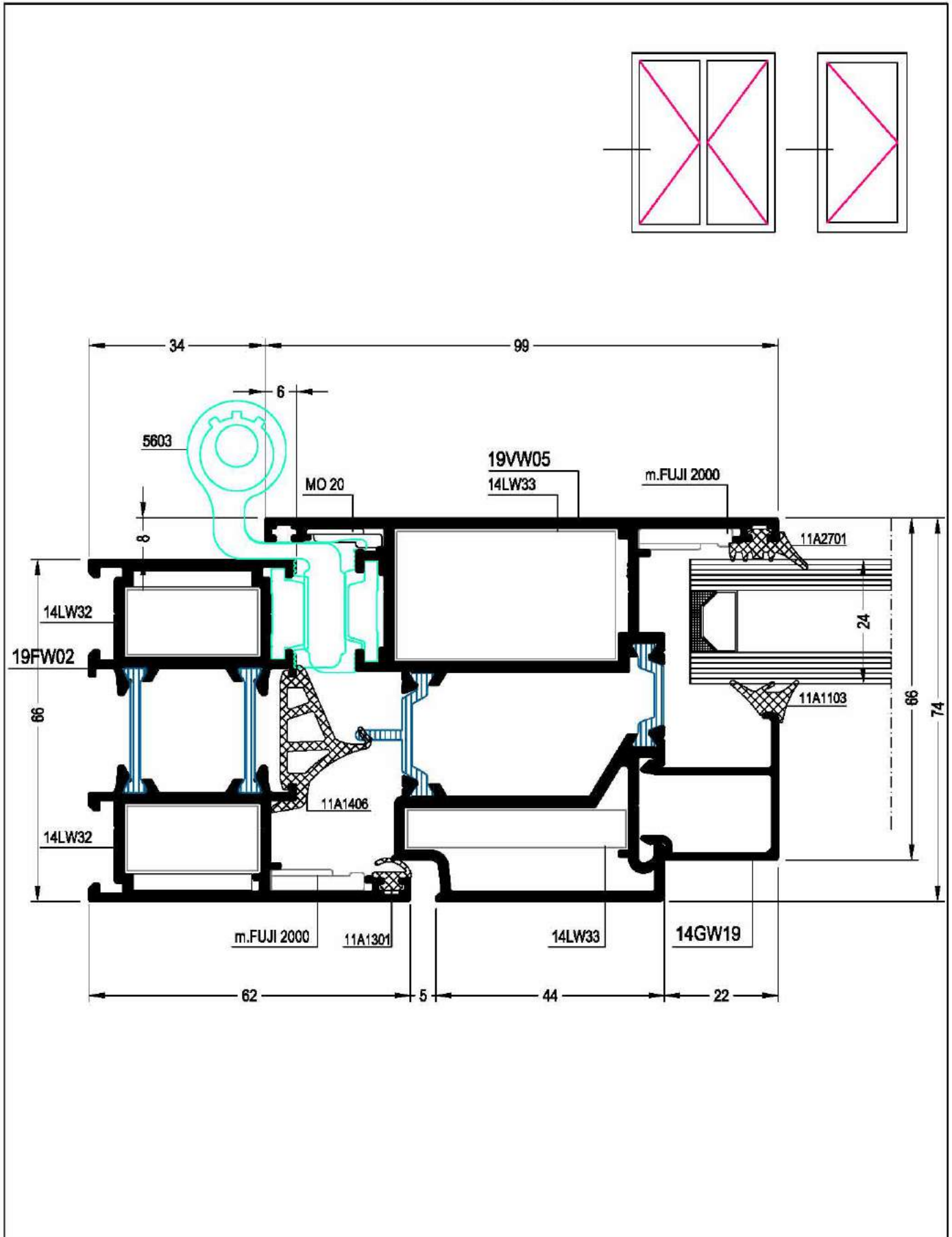
INSIDE OPENING DOOR



INSIDE OPENING DOOR

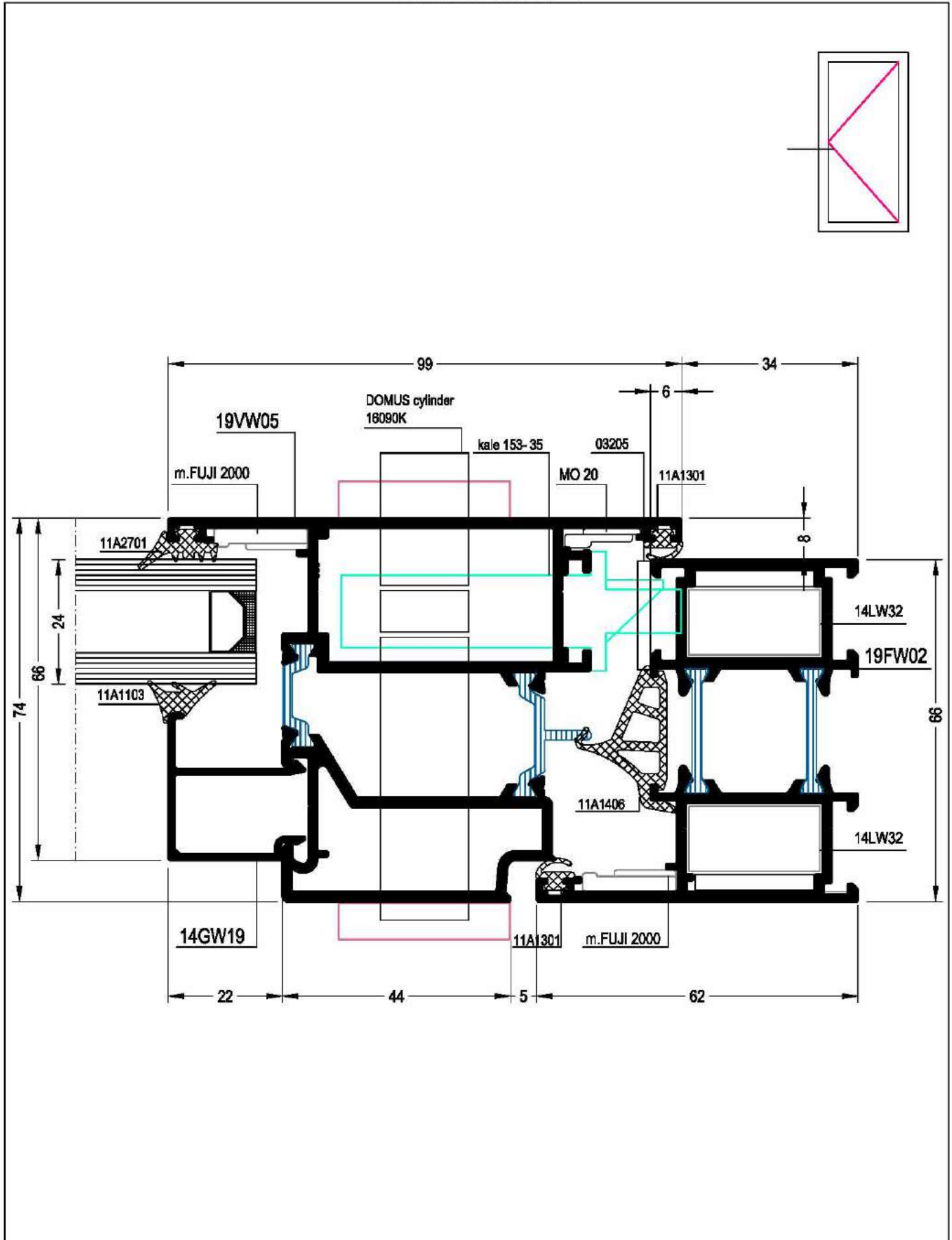


OUTSIDE OPENING DOOR

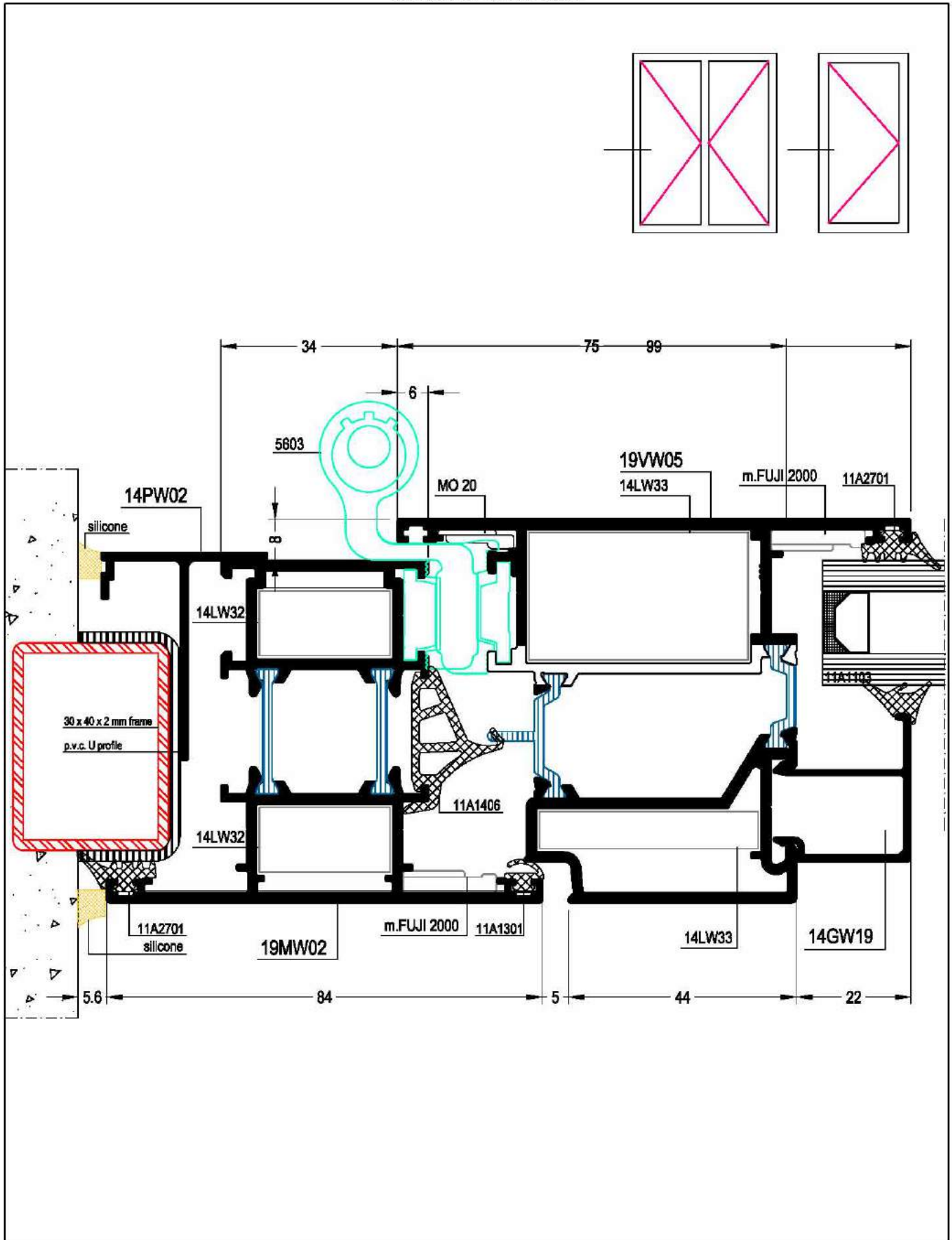




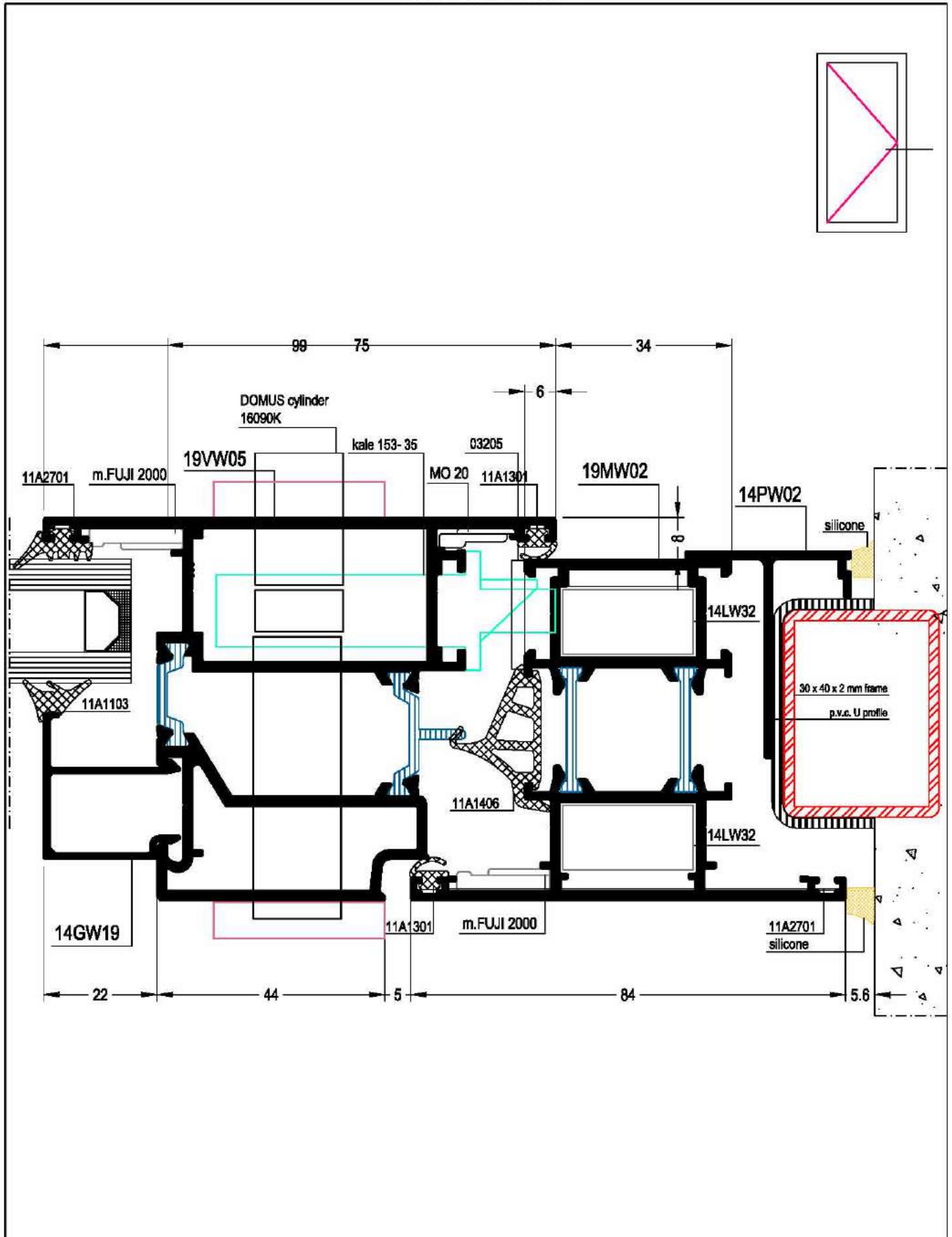
OUTSIDE OPENING DOOR



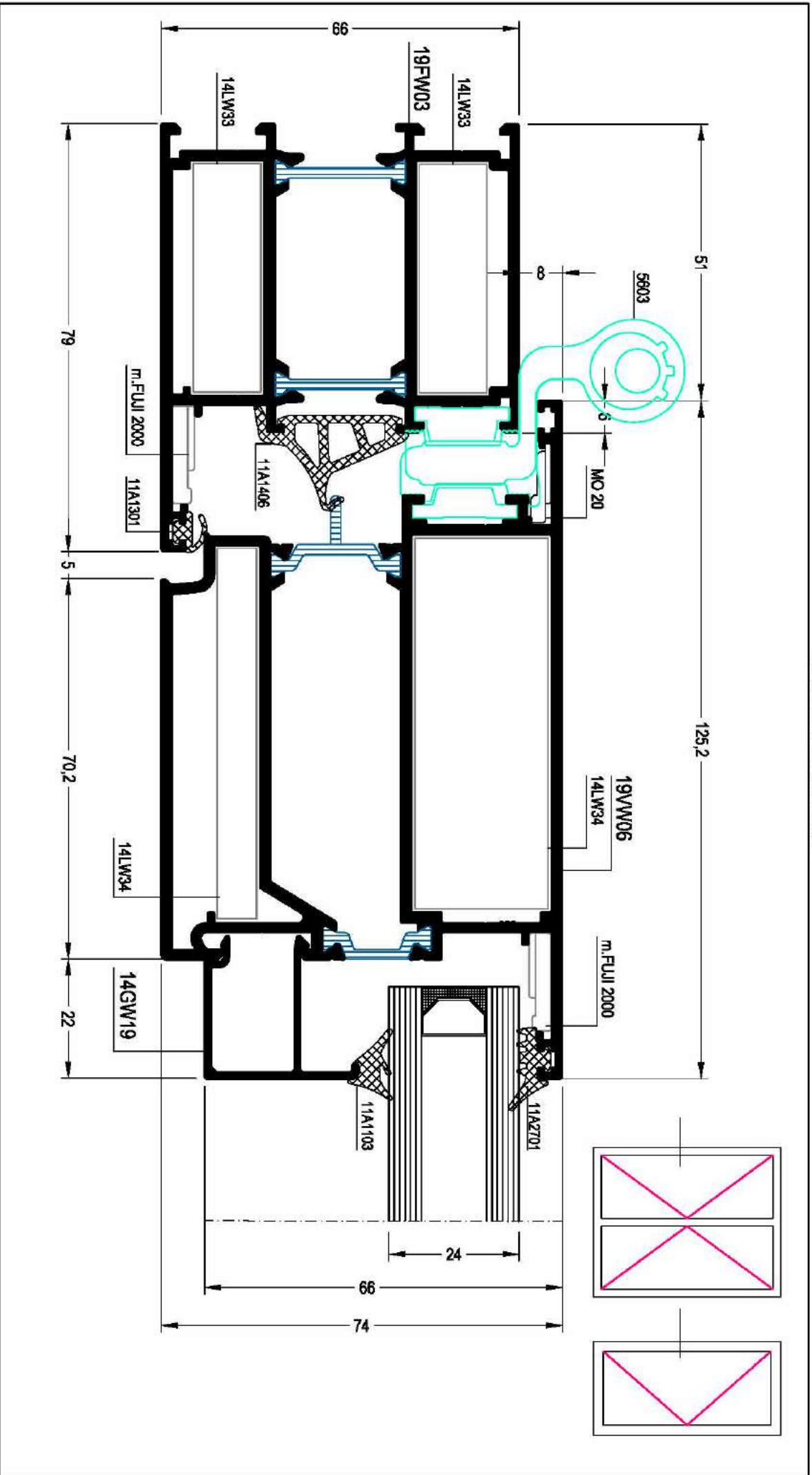
OUTSIDE OPENING DOOR



OUTSIDE OPENING DOOR



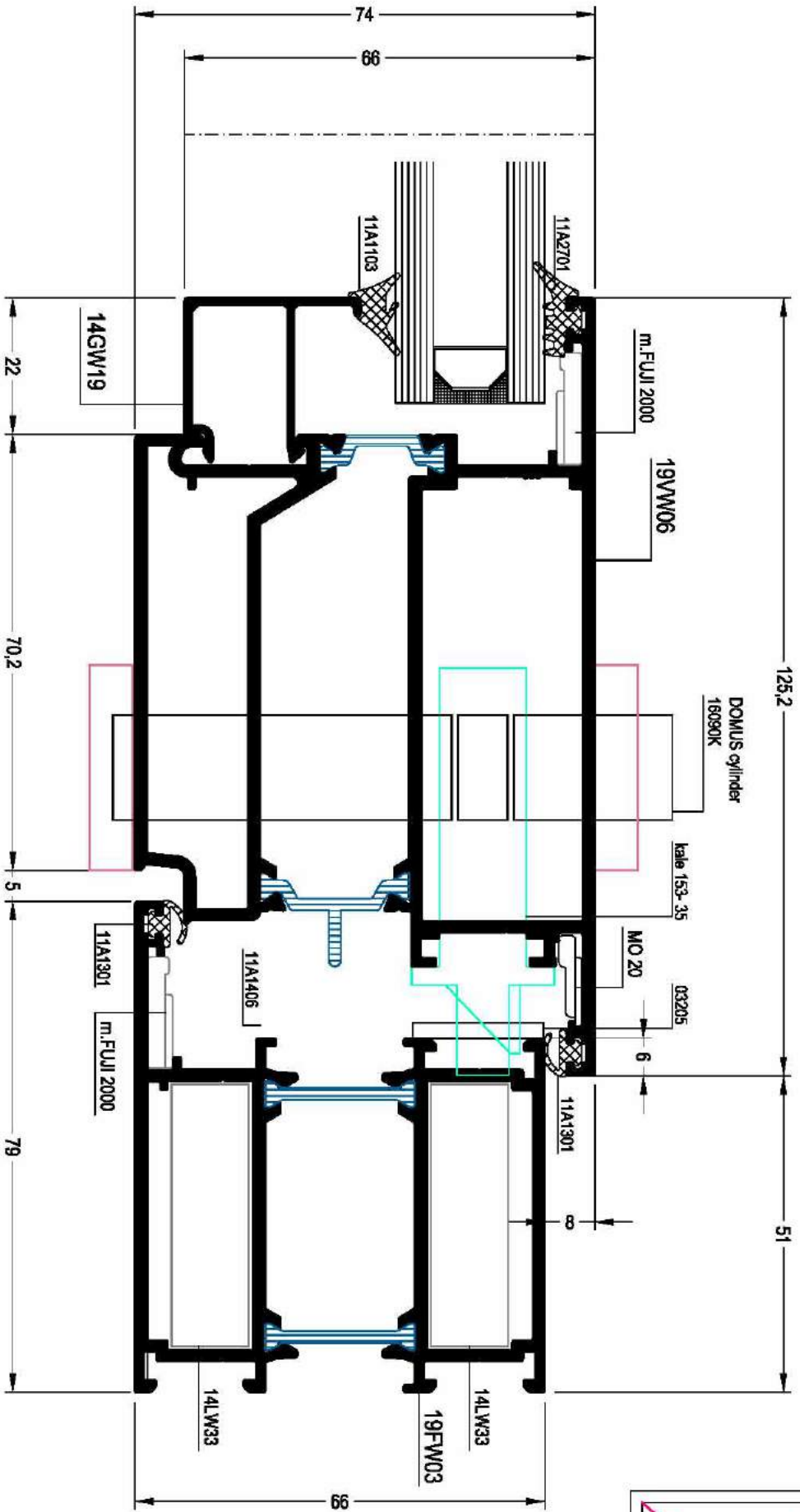
OUTSIDE OPENING DOOR



**SYSTEM CASTLE 19'66 W+**

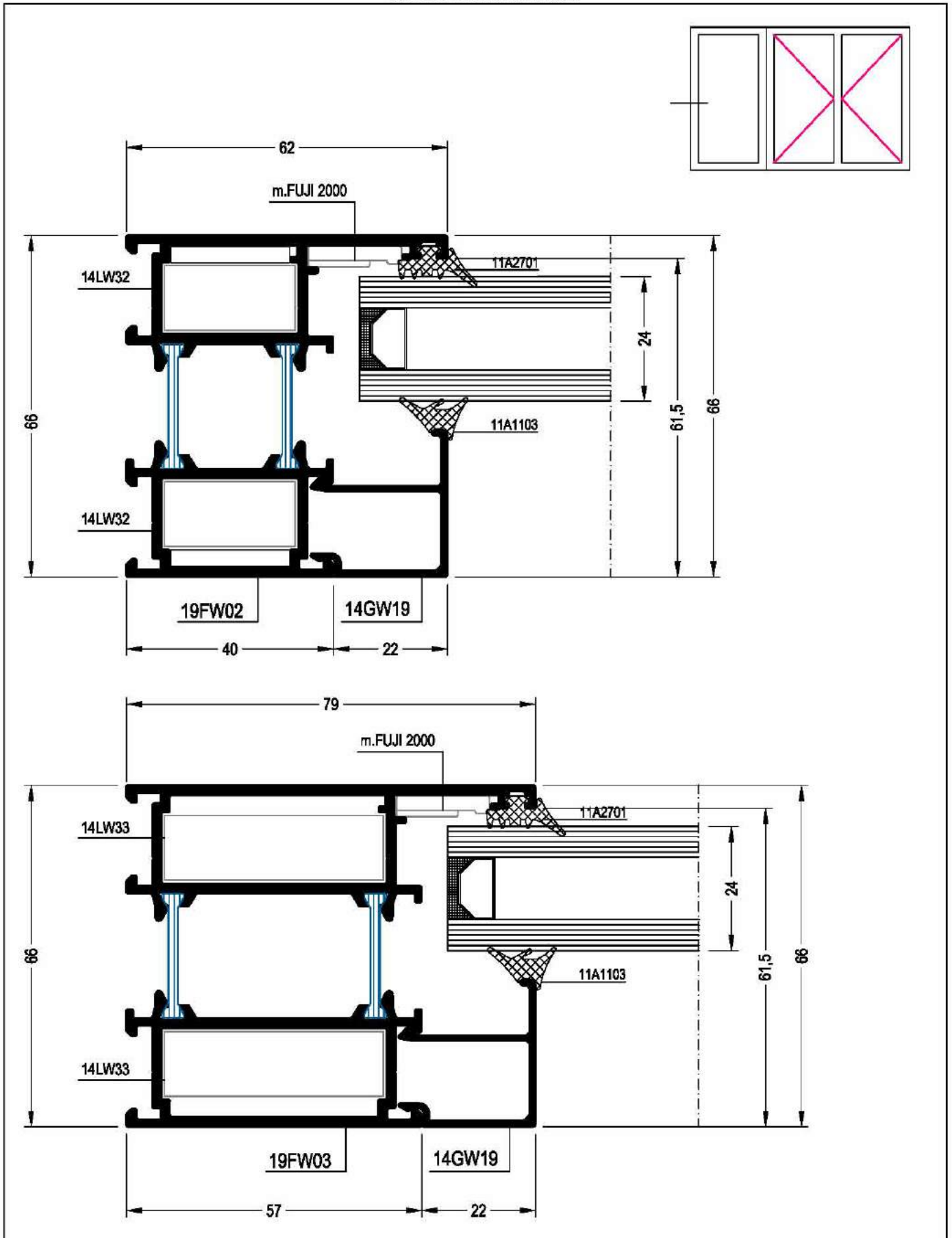
**DETAILS**

**OUTSIDE OPENING DOOR**

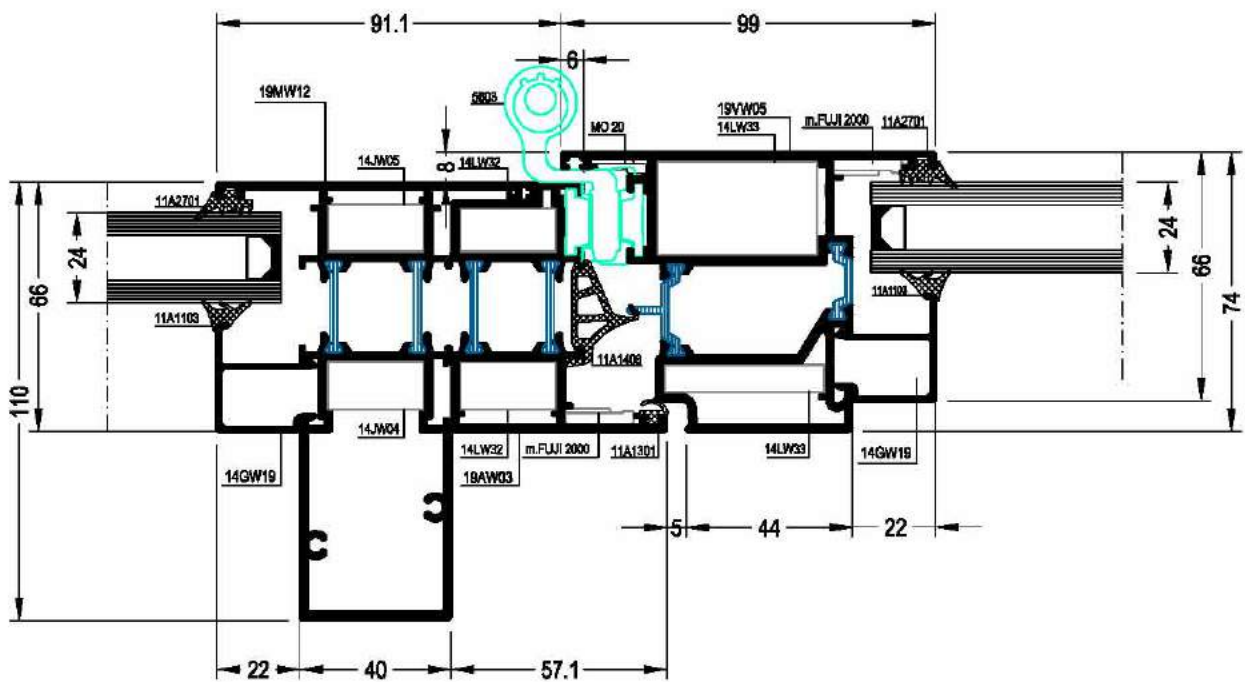
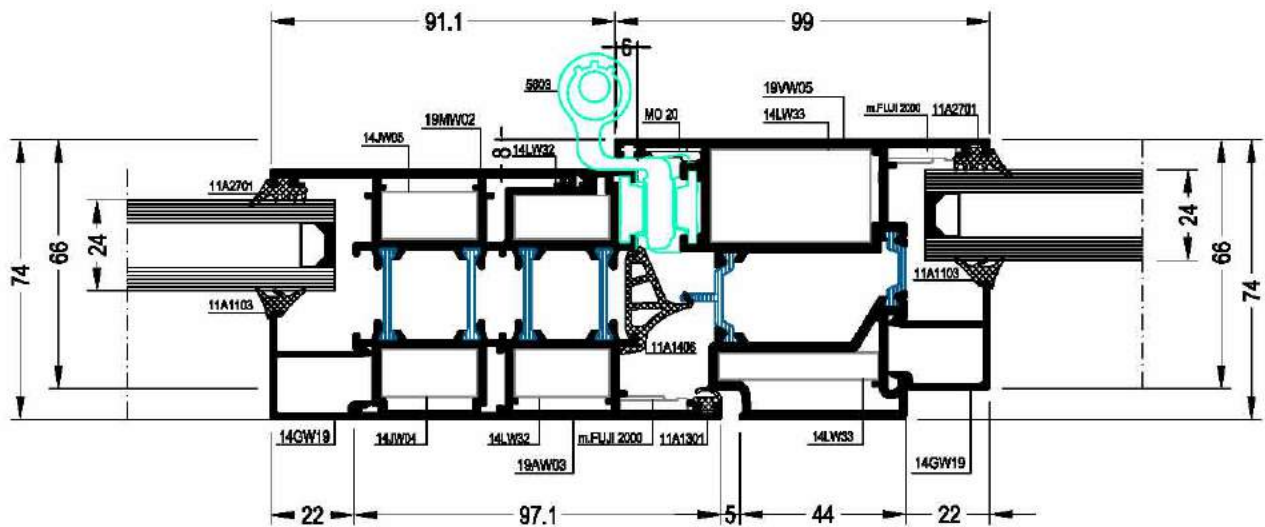
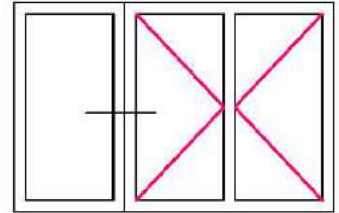




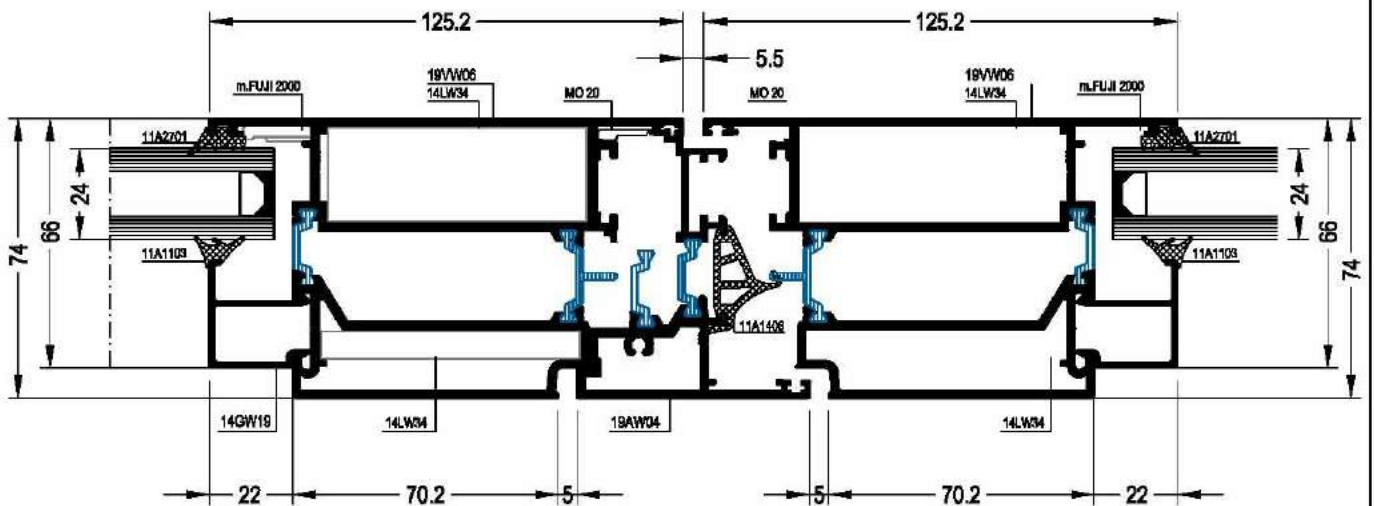
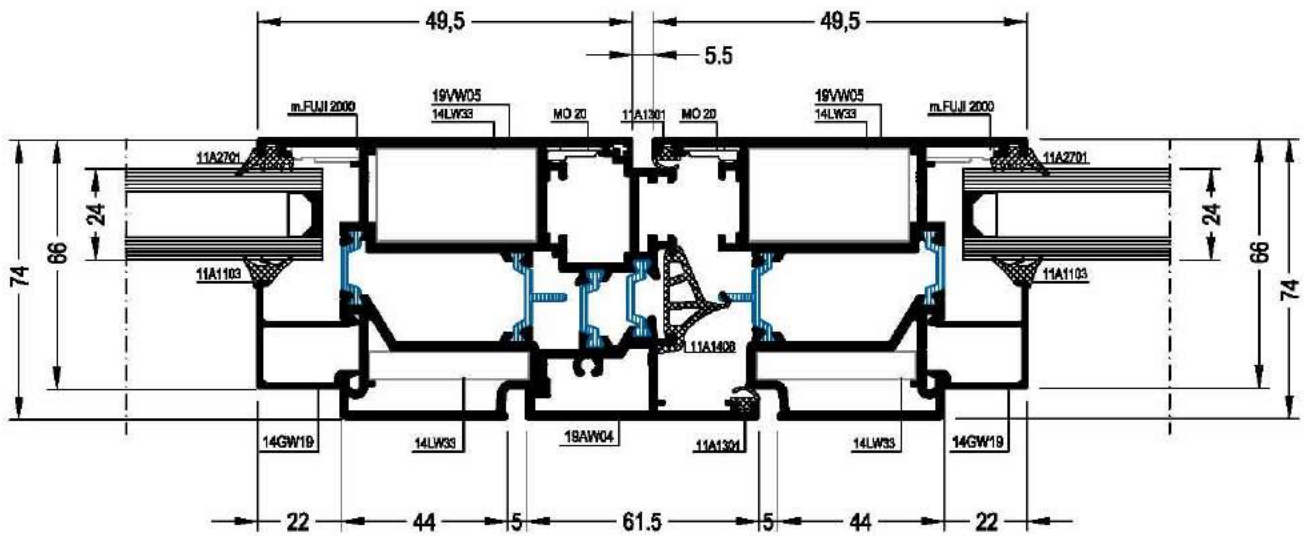
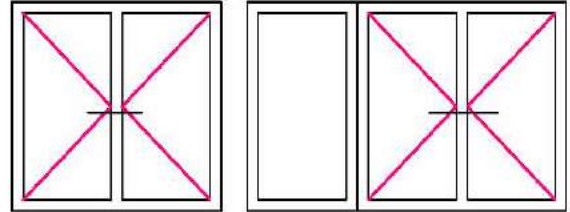
OUTSIDE OPENING DOOR



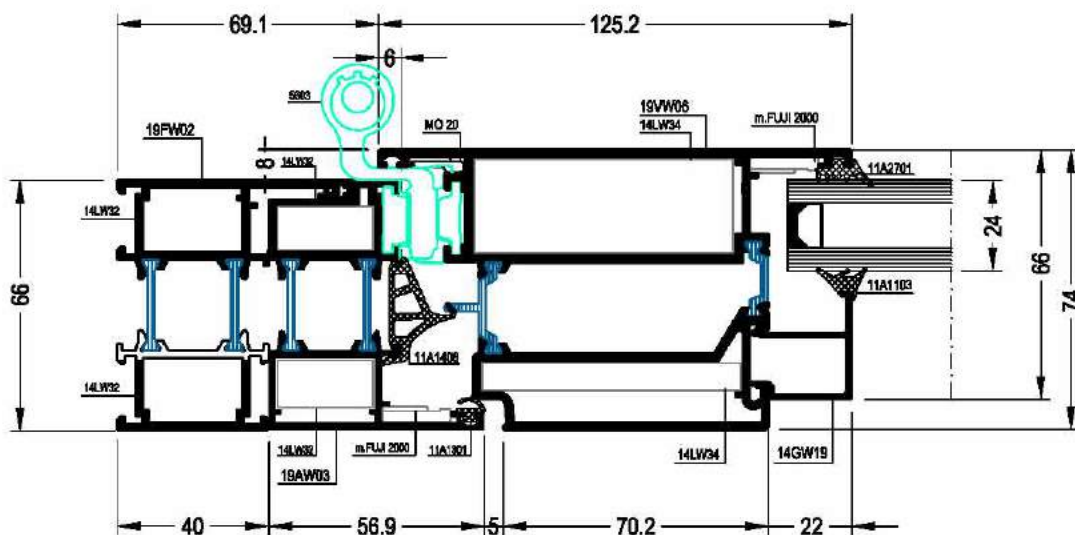
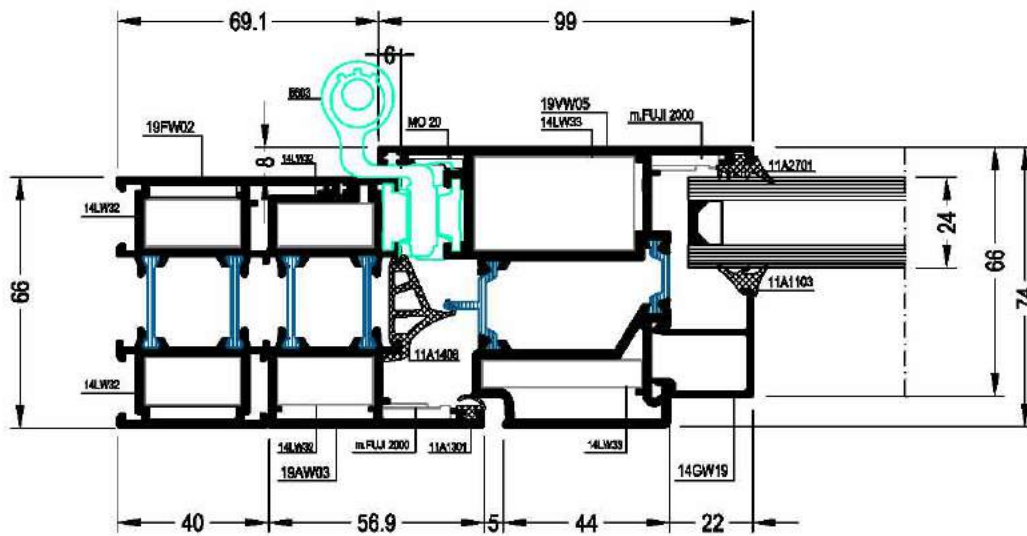
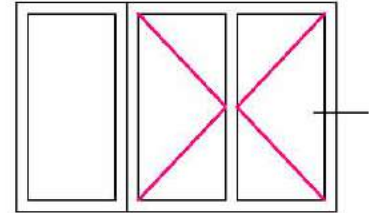
OUTSIDE OPENING DOOR



OUTSIDE OPENING DOOR



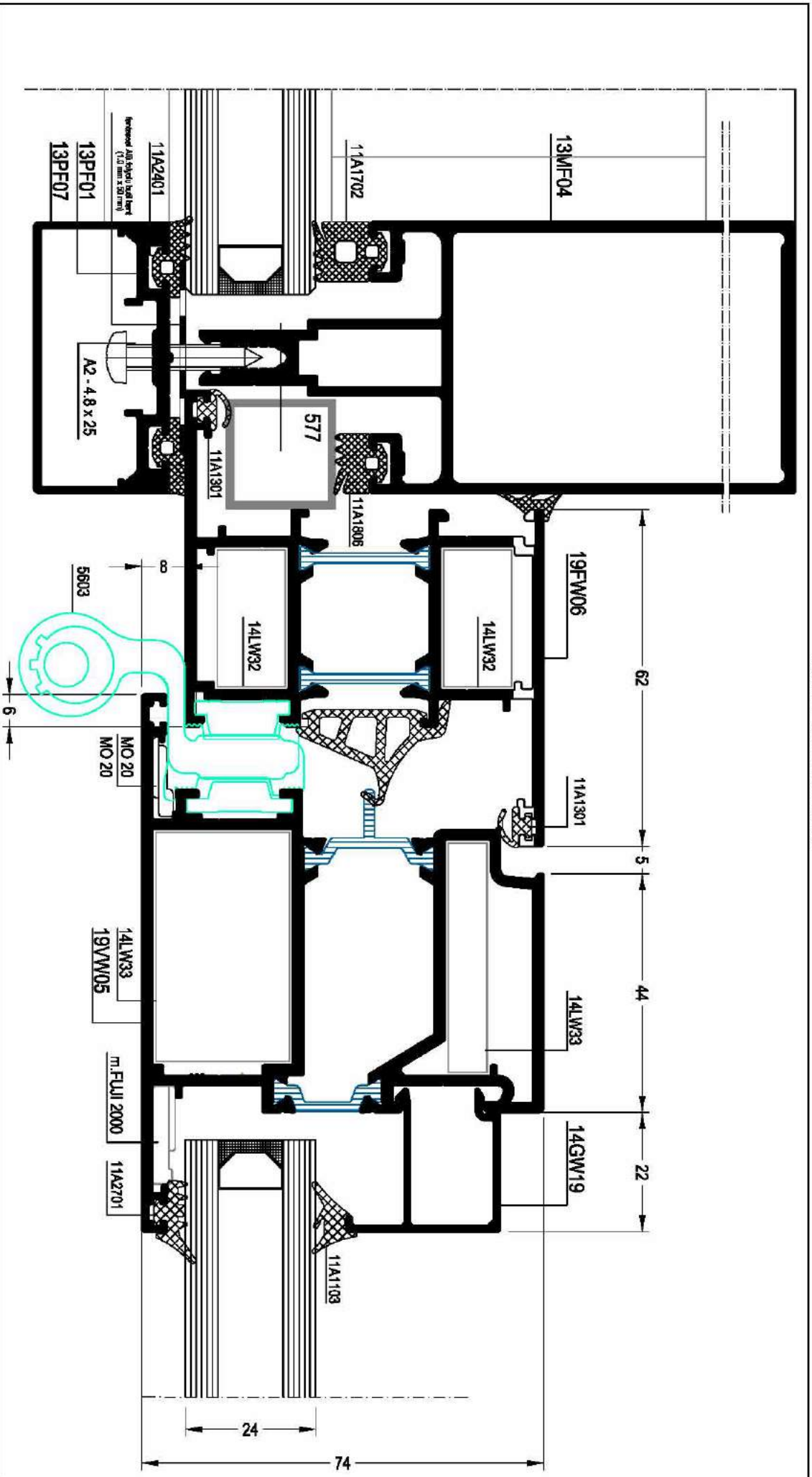
OUTSIDE OPENING DOOR



**SYSTEM CASTLE 1966 W+**

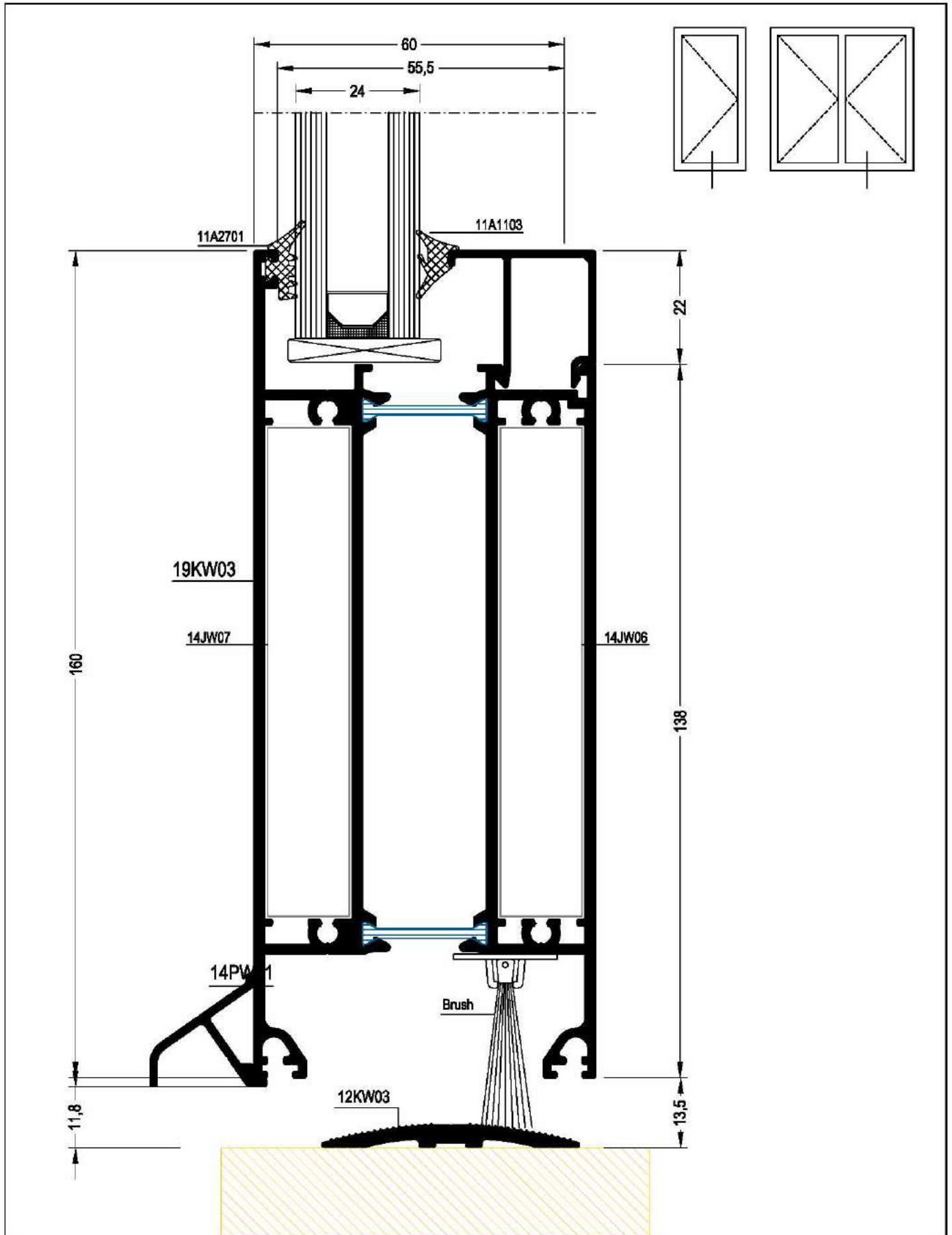
**DETAILS**

**OUTSIDE OPENING DOOR**

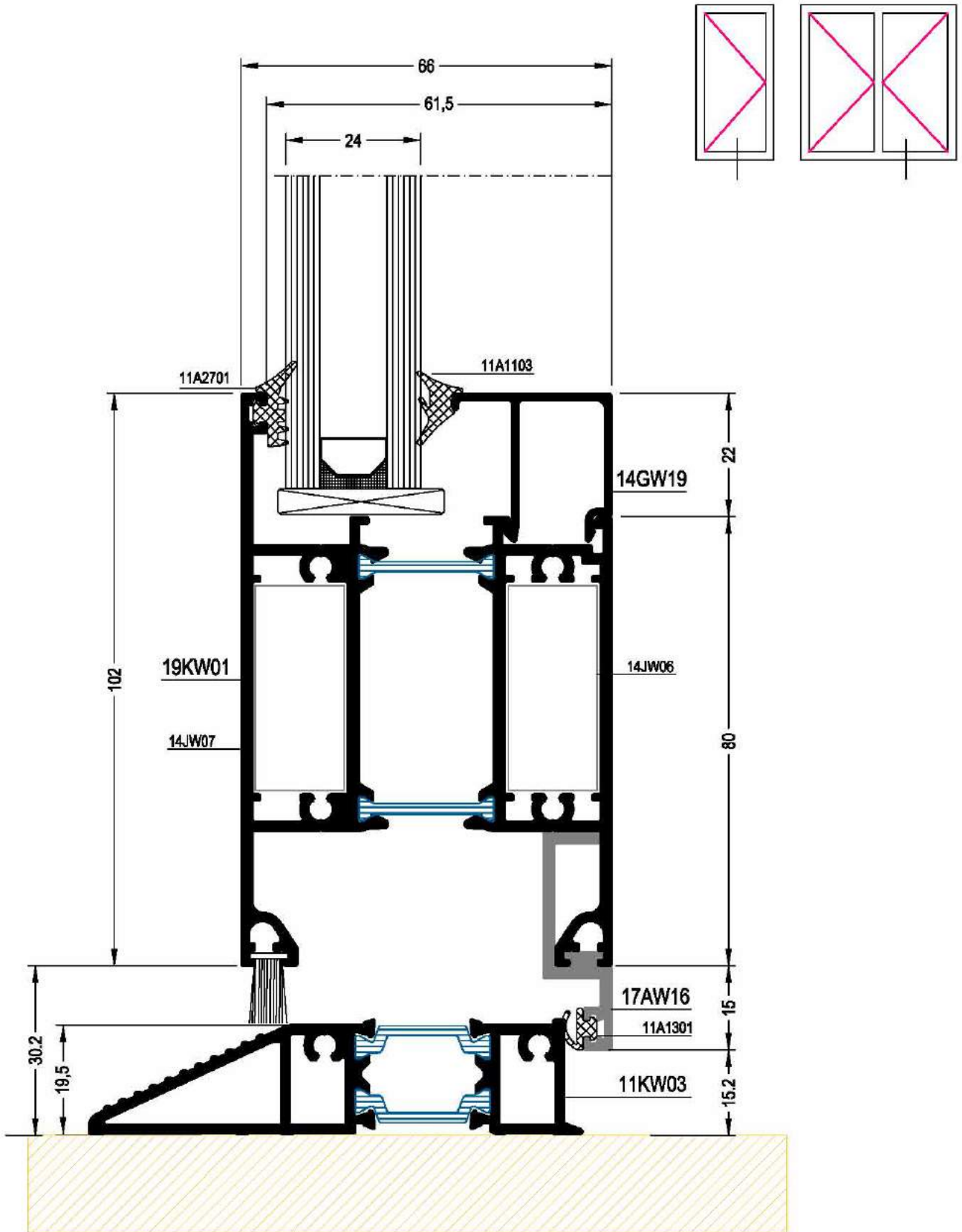




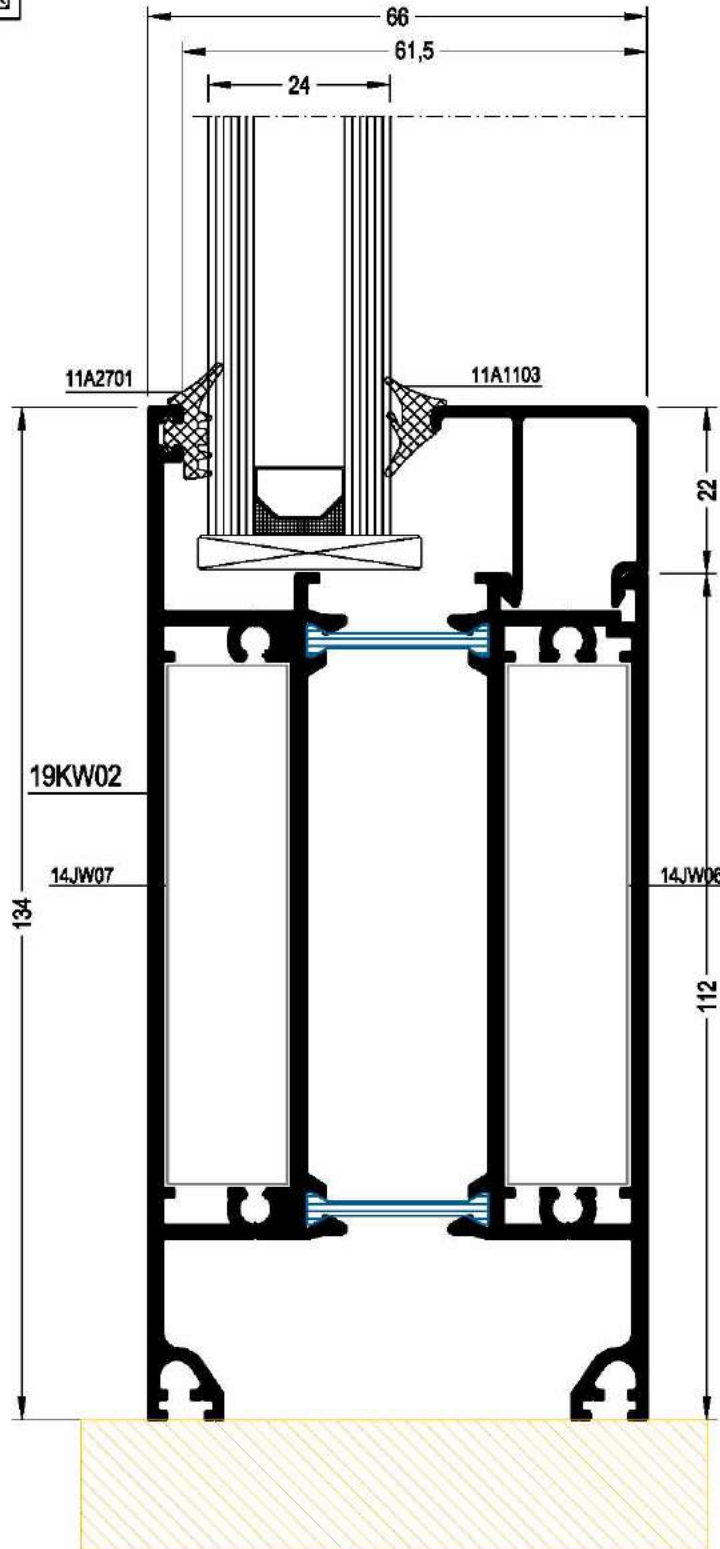
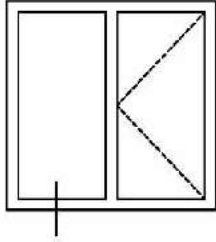
INSIDE OPENING DOOR



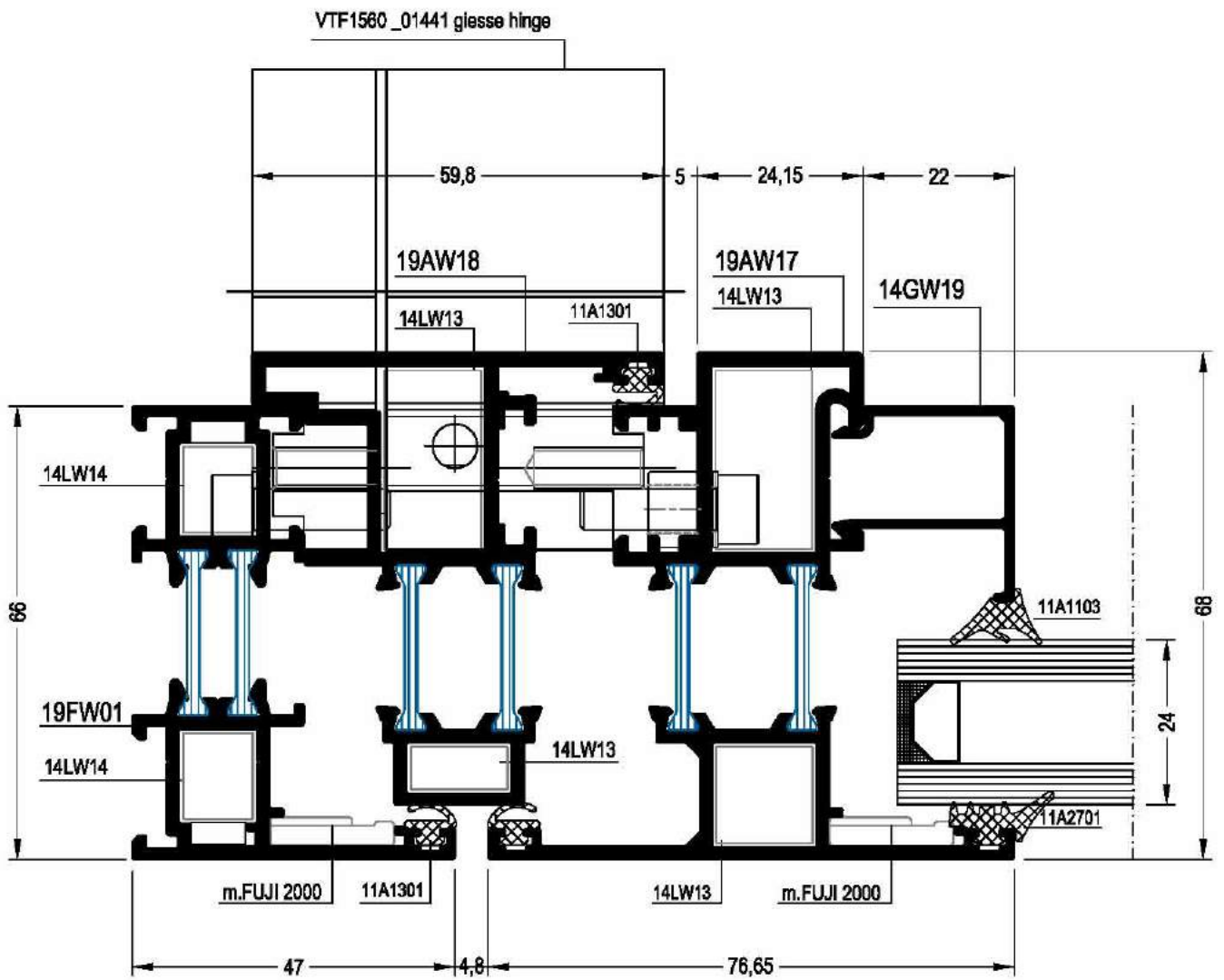
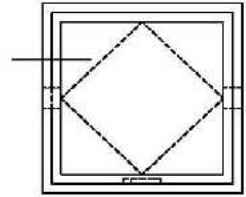
INSIDE OPENING DOOR



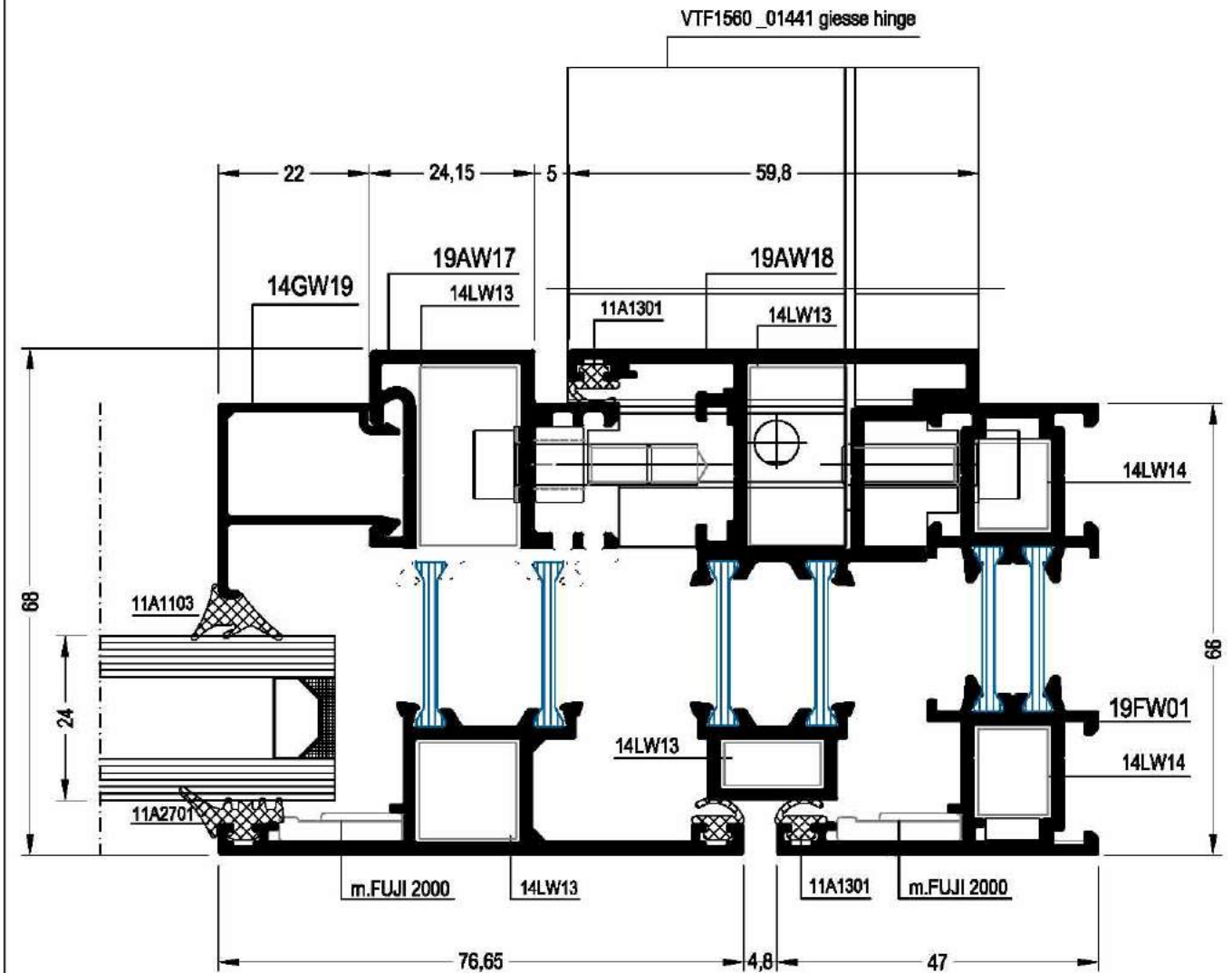
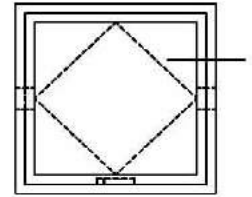
INSIDE OPENING DOOR



PIVOT WINDOW

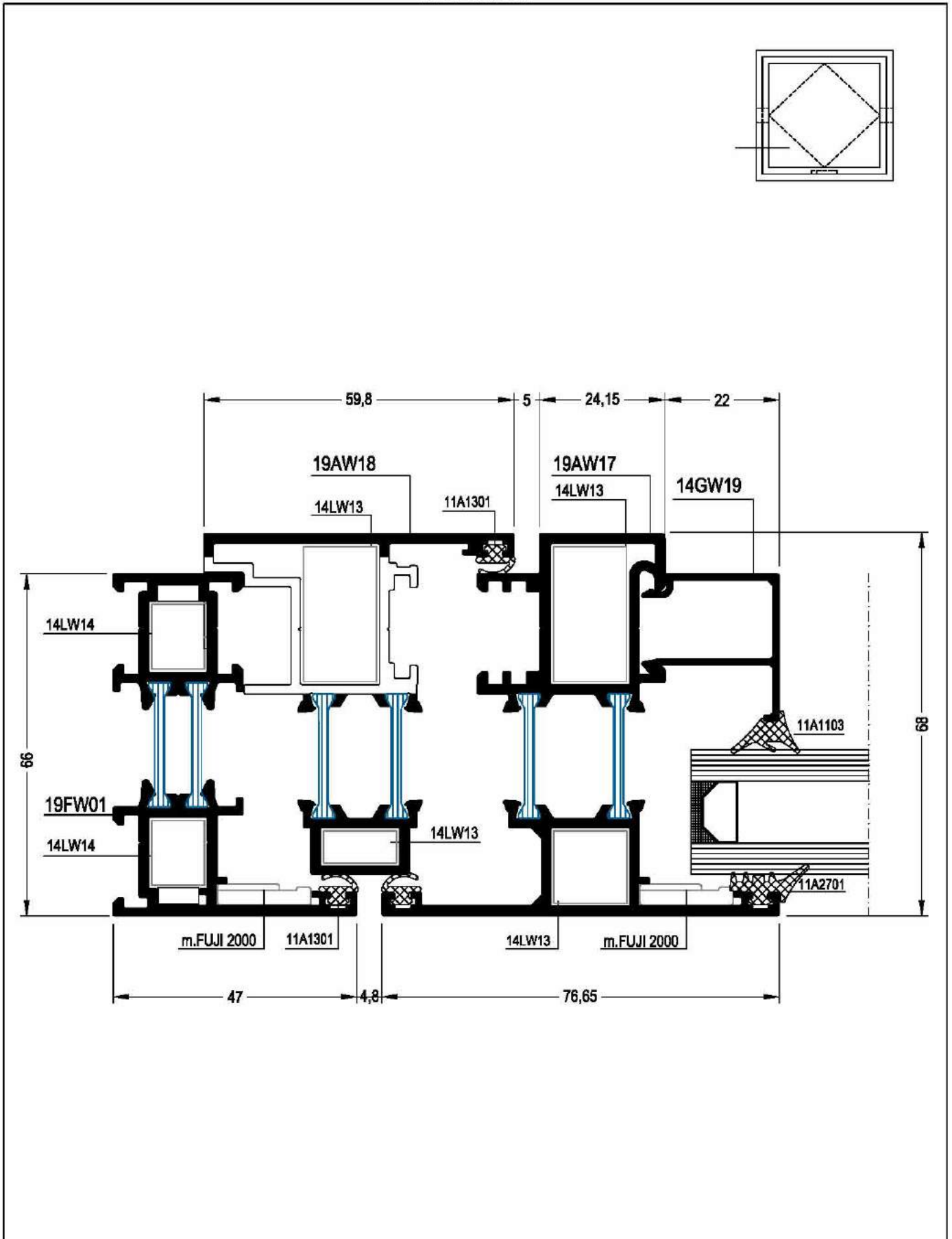


PIVOT WINDOW

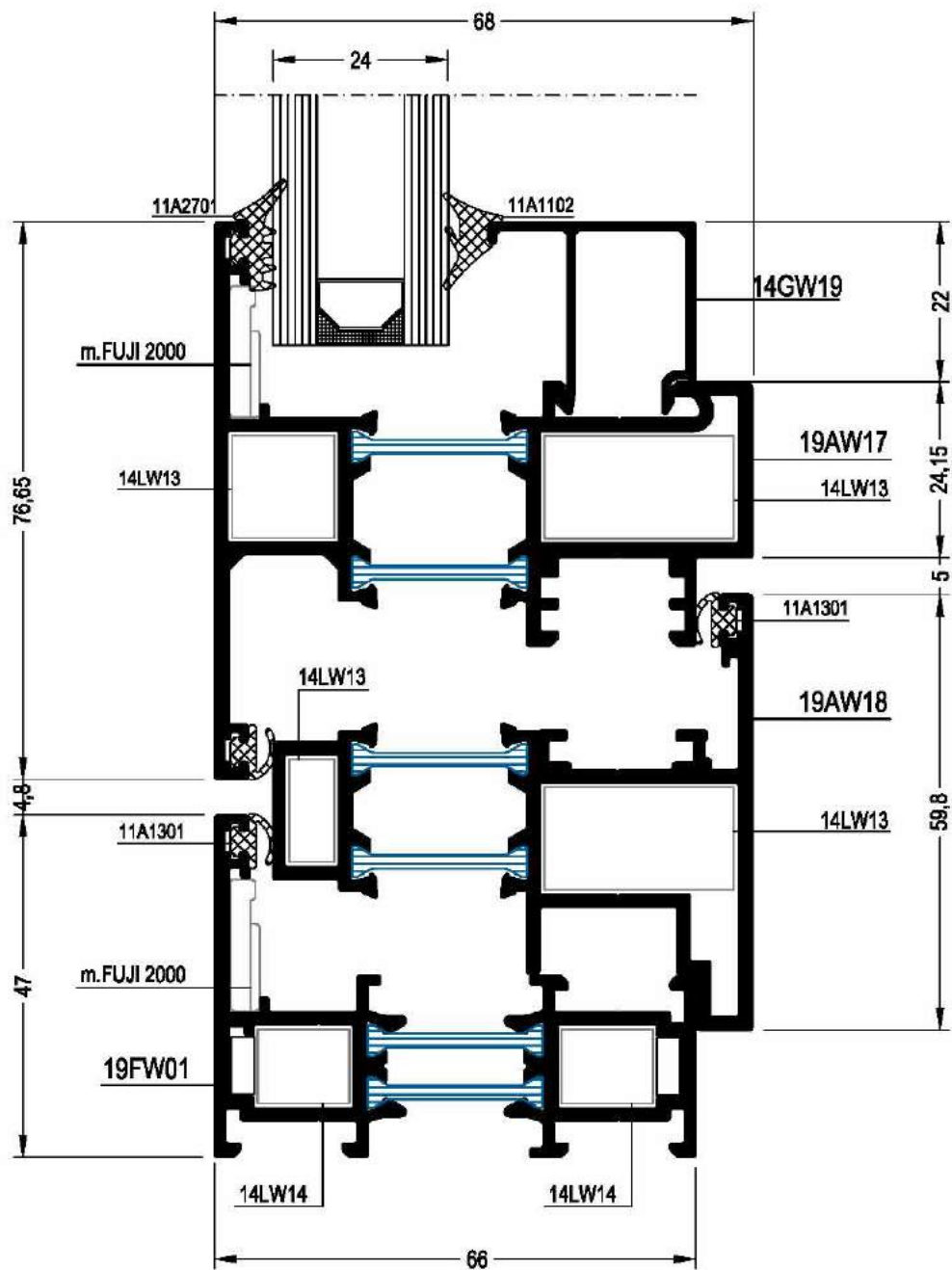
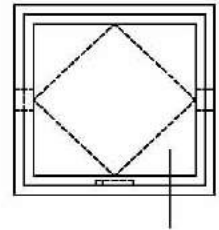




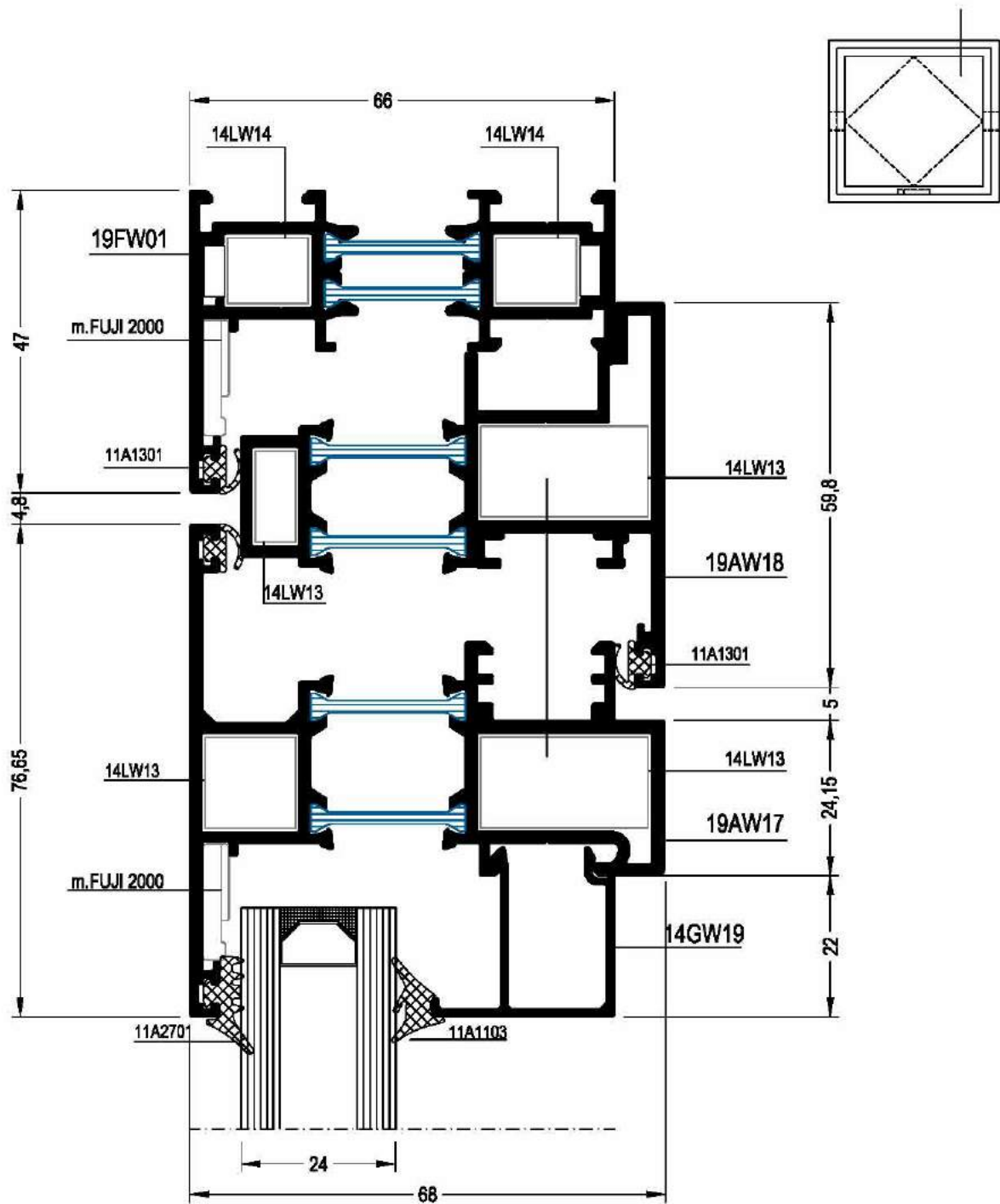
PIVOT WINDOW



PIVOT WINDOW



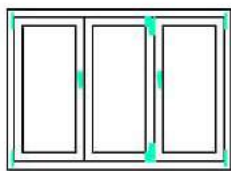
PIVOT WINDOW



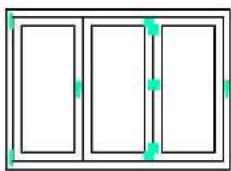
FOLDING DOOR

vw : Vent Width

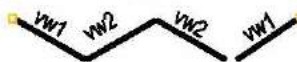
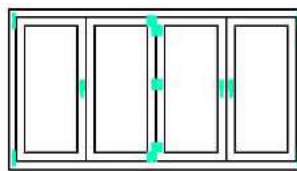
TYPE 321



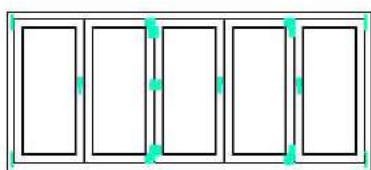
TYPE 330



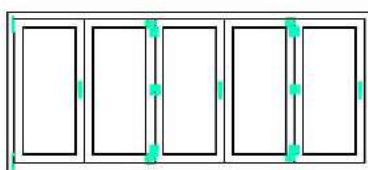
TYPE 431



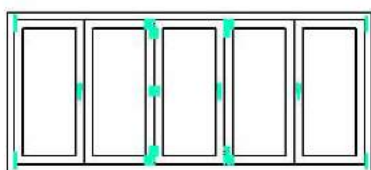
TYPE 541



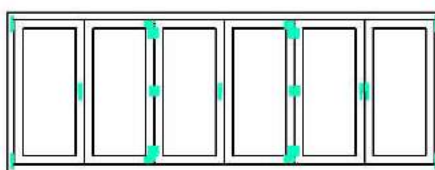
TYPE 550



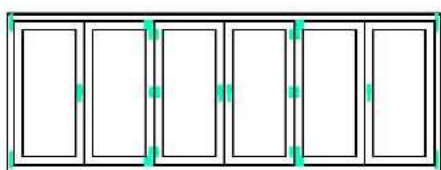
TYPE 532



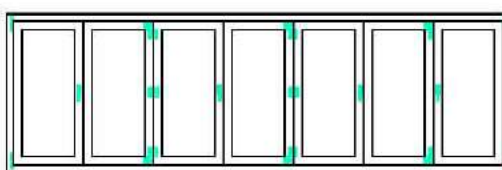
TYPE 651



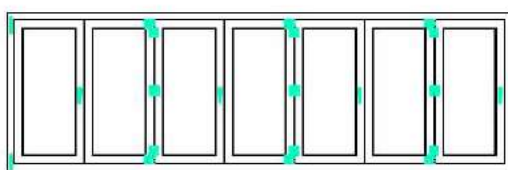
TYPE 633



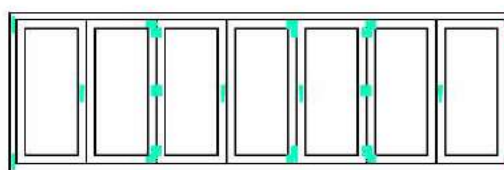
TYPE 761



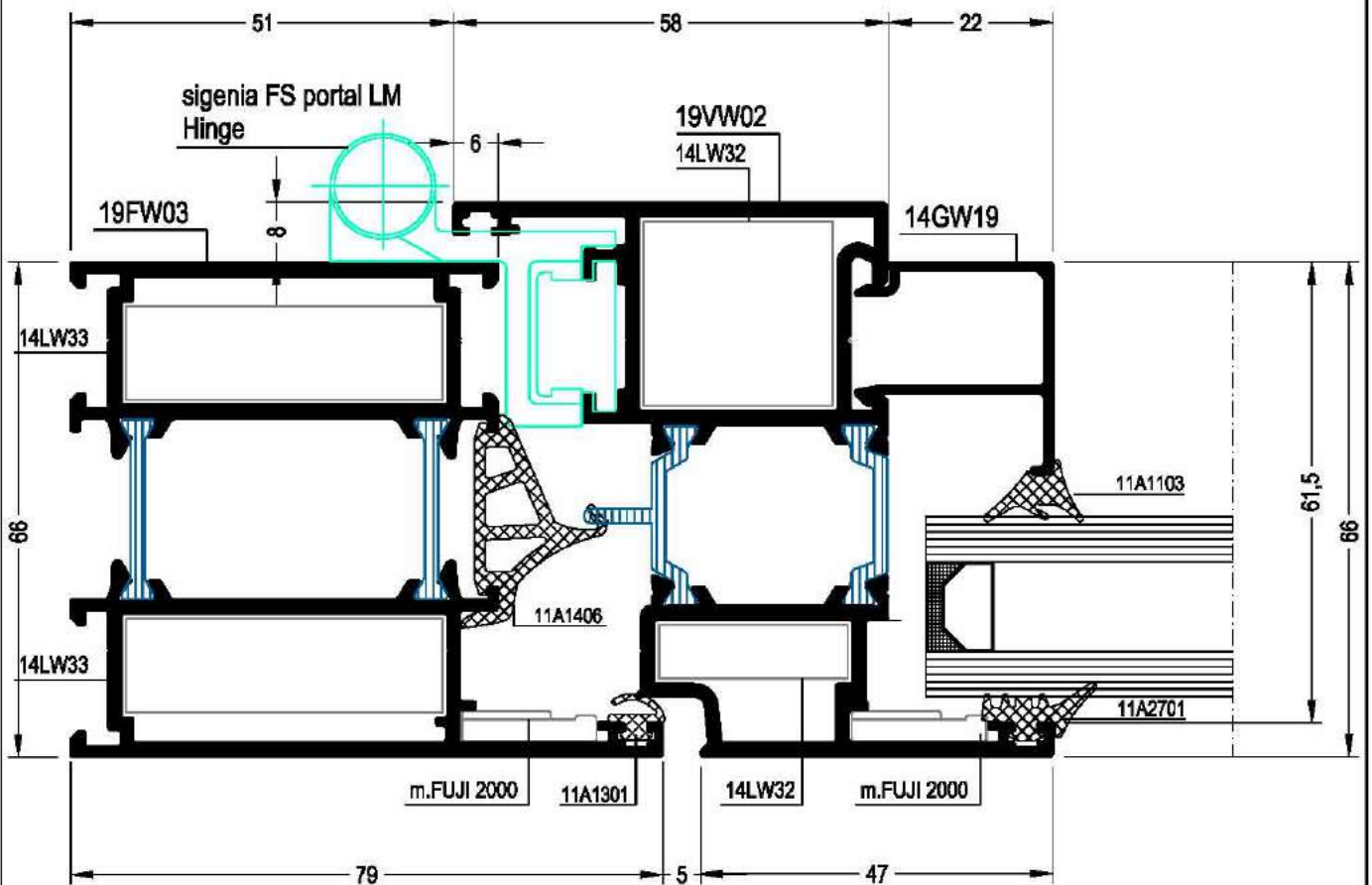
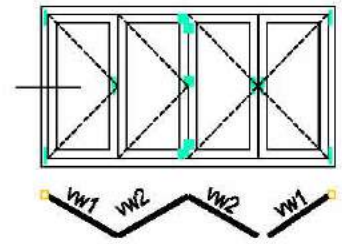
TYPE 770



TYPE 743

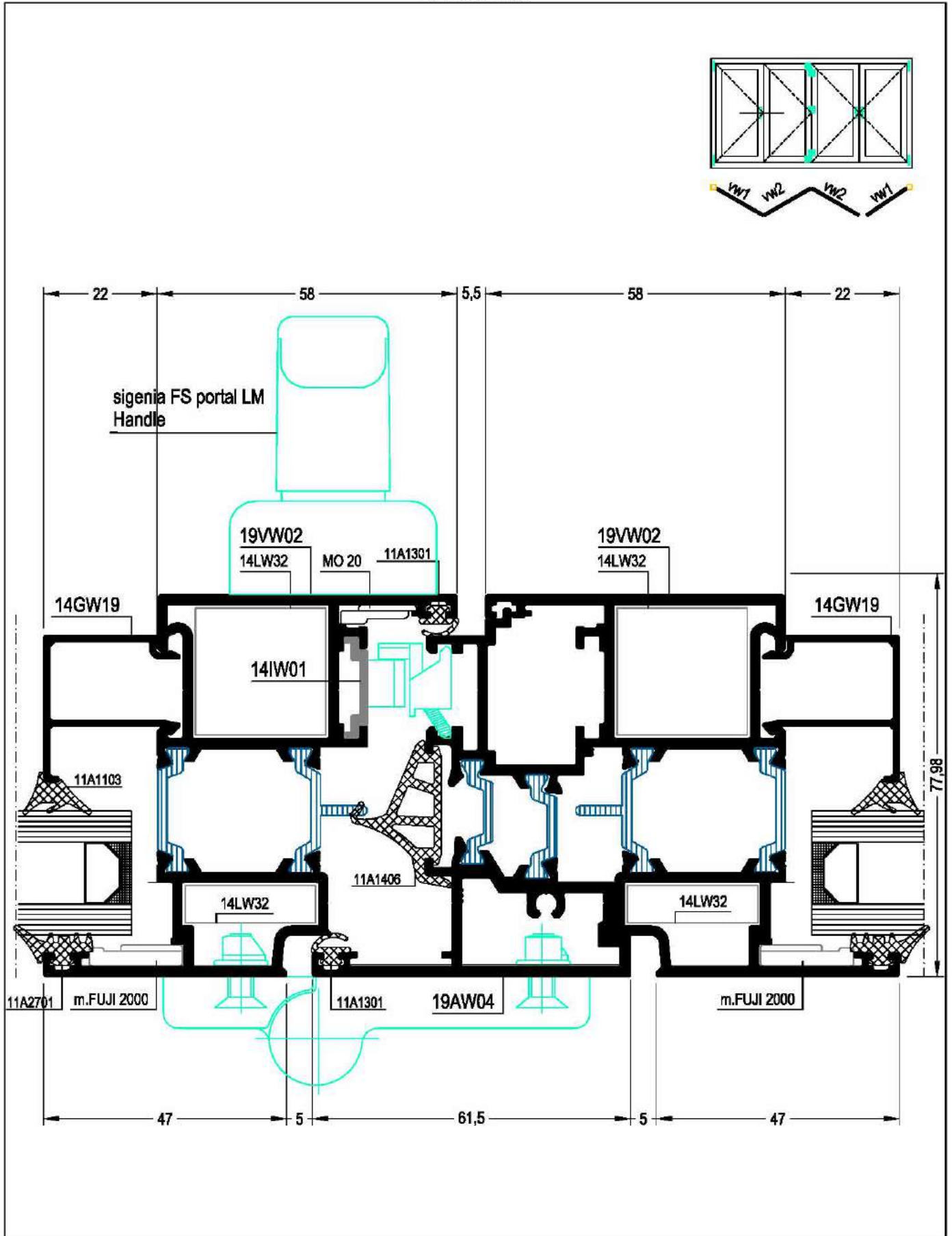


FOLDING DOOR

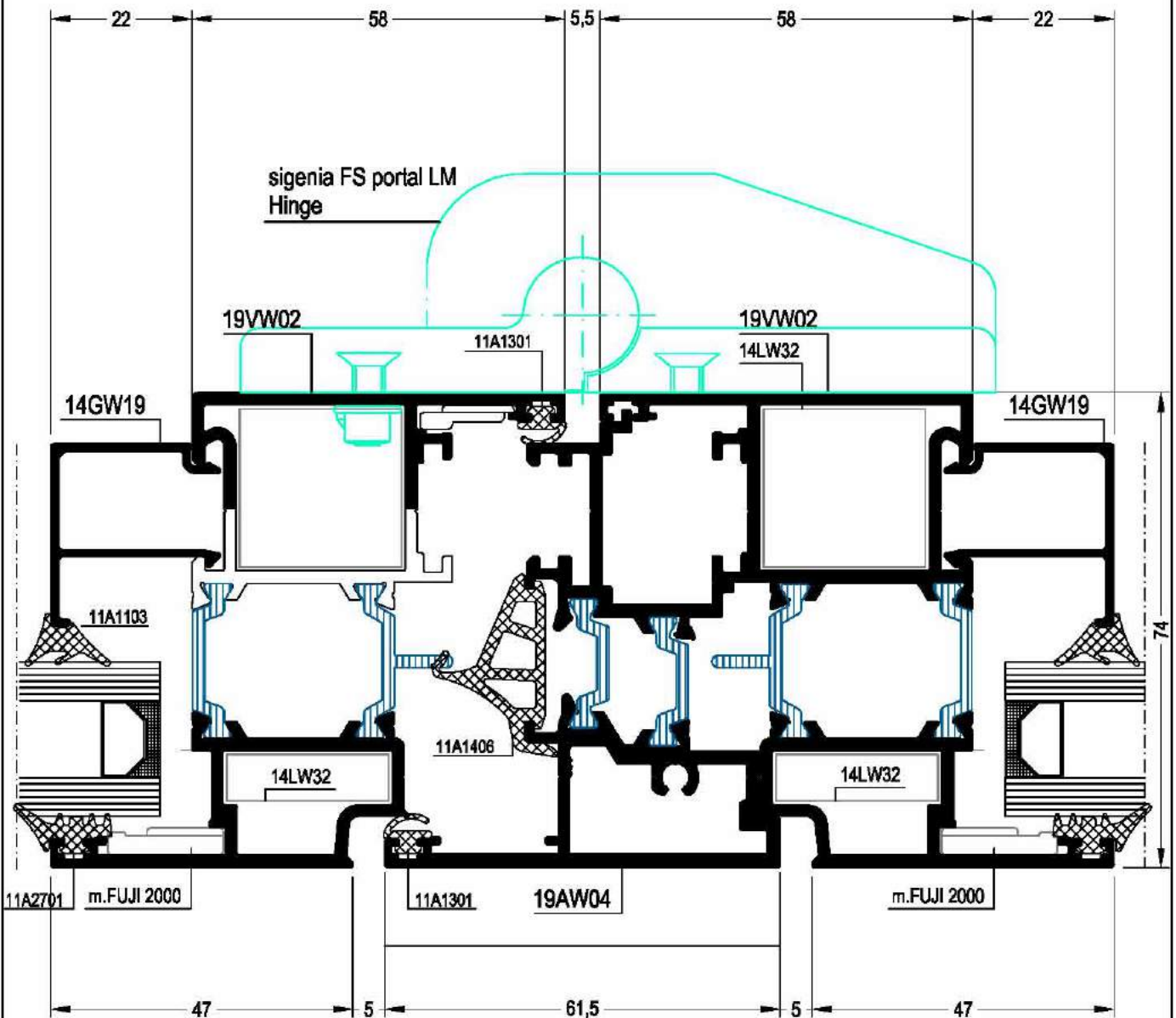
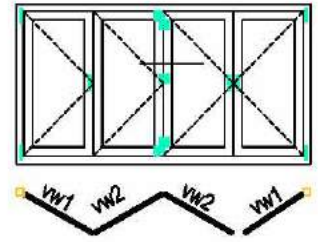




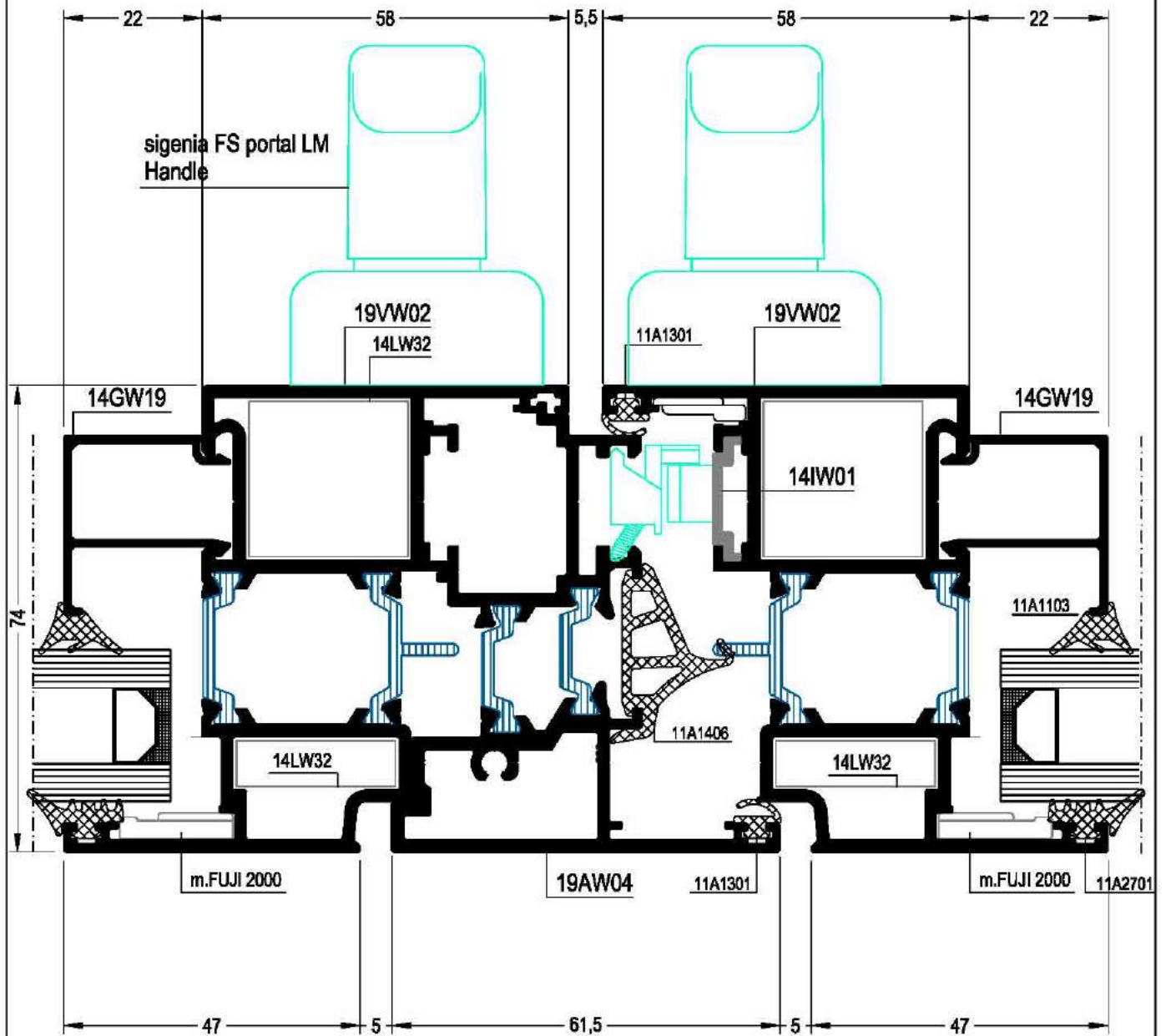
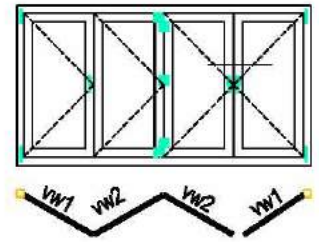
FOLDING DOOR



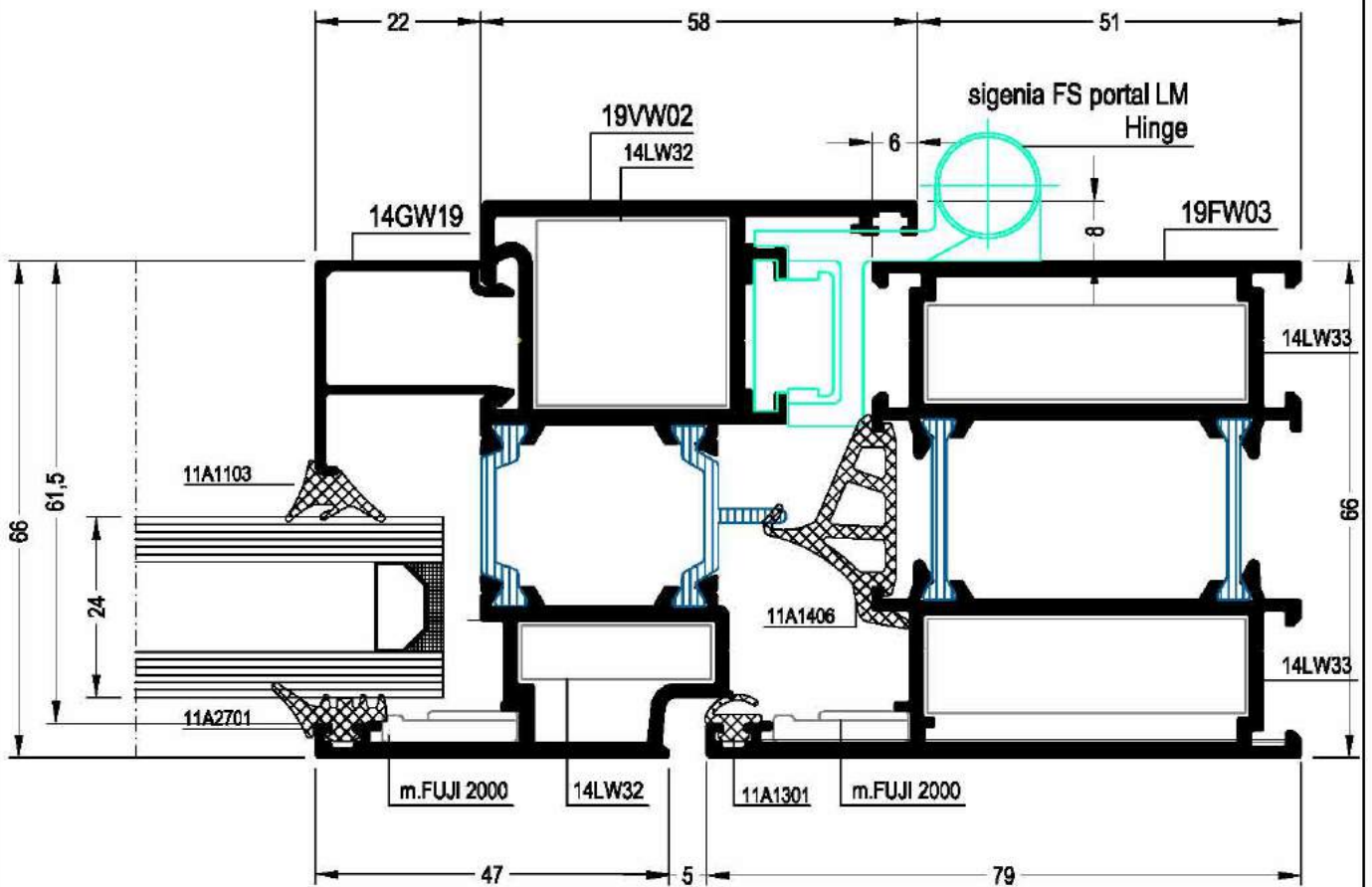
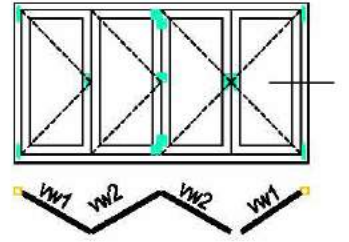
FOLDING DOOR



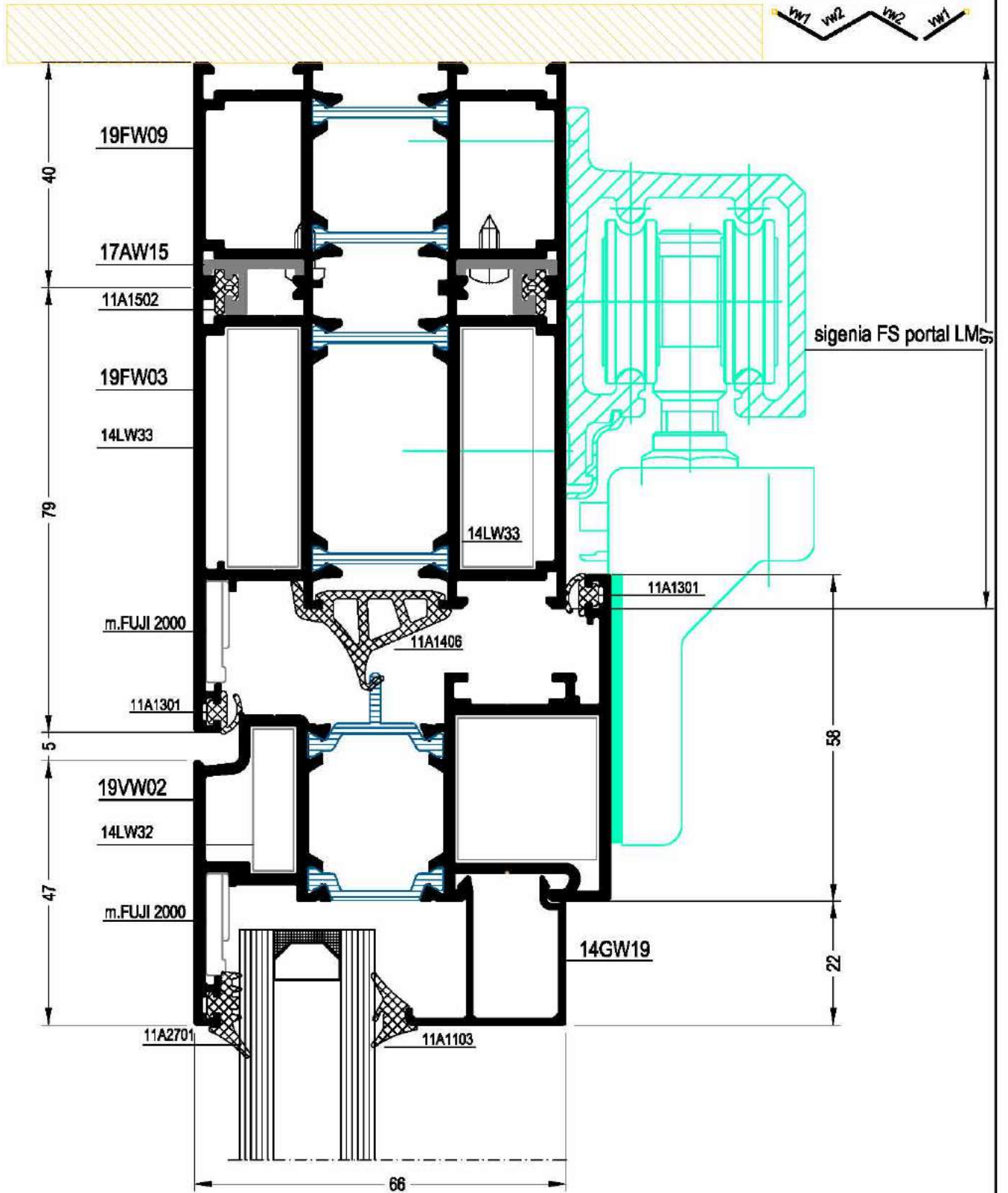
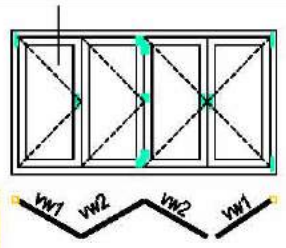
FOLDING DOOR



FOLDING DOOR

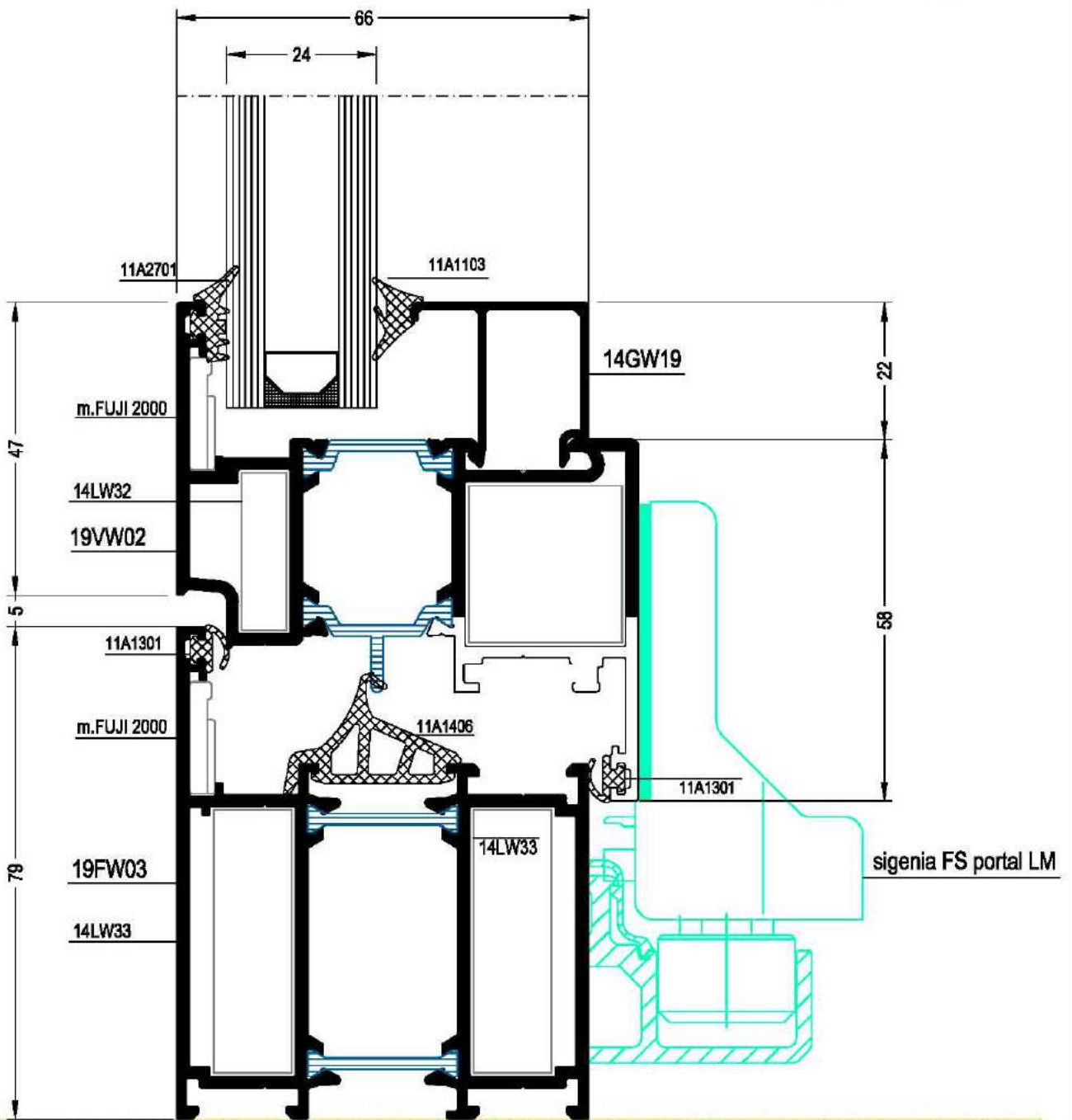
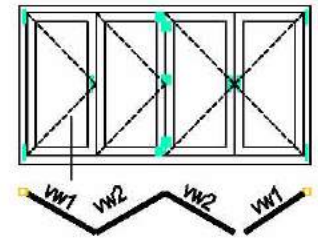


FOLDING DOOR





FOLDING DOOR





FOLDING DOOR

