Ponzio®

# ALUMINIUM SYSTEMS

Ponzio®

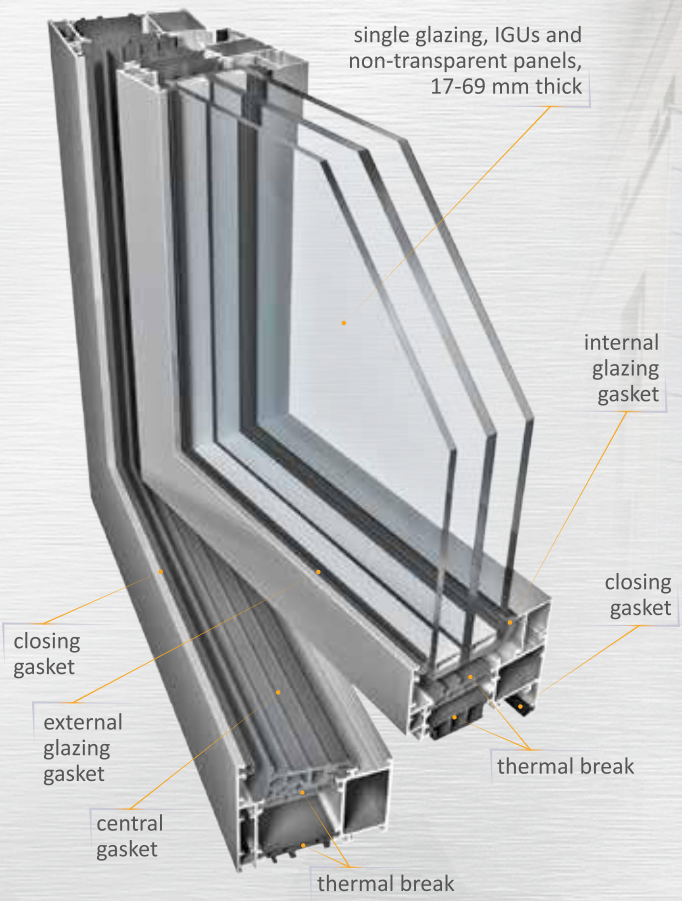
## About Ponzio

The Ponzio Group is one of the leading manufacturers of aluminium profile systems. This position was achieved by implementing a consistent strategy and with the help of a team of professionals which forms the core of our company. Raw materials and components are purchased from internationally renowned suppliers. The whole manufacturing process is handled by top-of-the line, automated machinery and undergoes strict quality control at every stage. We also have our own laboratory which is used for testing the performances of aluminium constructions.

Innovation is one of the main goals of Ponzio. Our aluminium profile systems are designed to fulfill the most stringent requirements. The wide array of system solutions inspire architects to design modern and functional buildings. Many interesting works of architecture located all around the world are the result of our cooperation with designers and investors.

On-time deliveries are coordinated by our advanced logistics centre. Our very own fleet of transport vehicles ensures efficient deliveries to any place in Europe.

# Ponzio PE78N WINDOWS



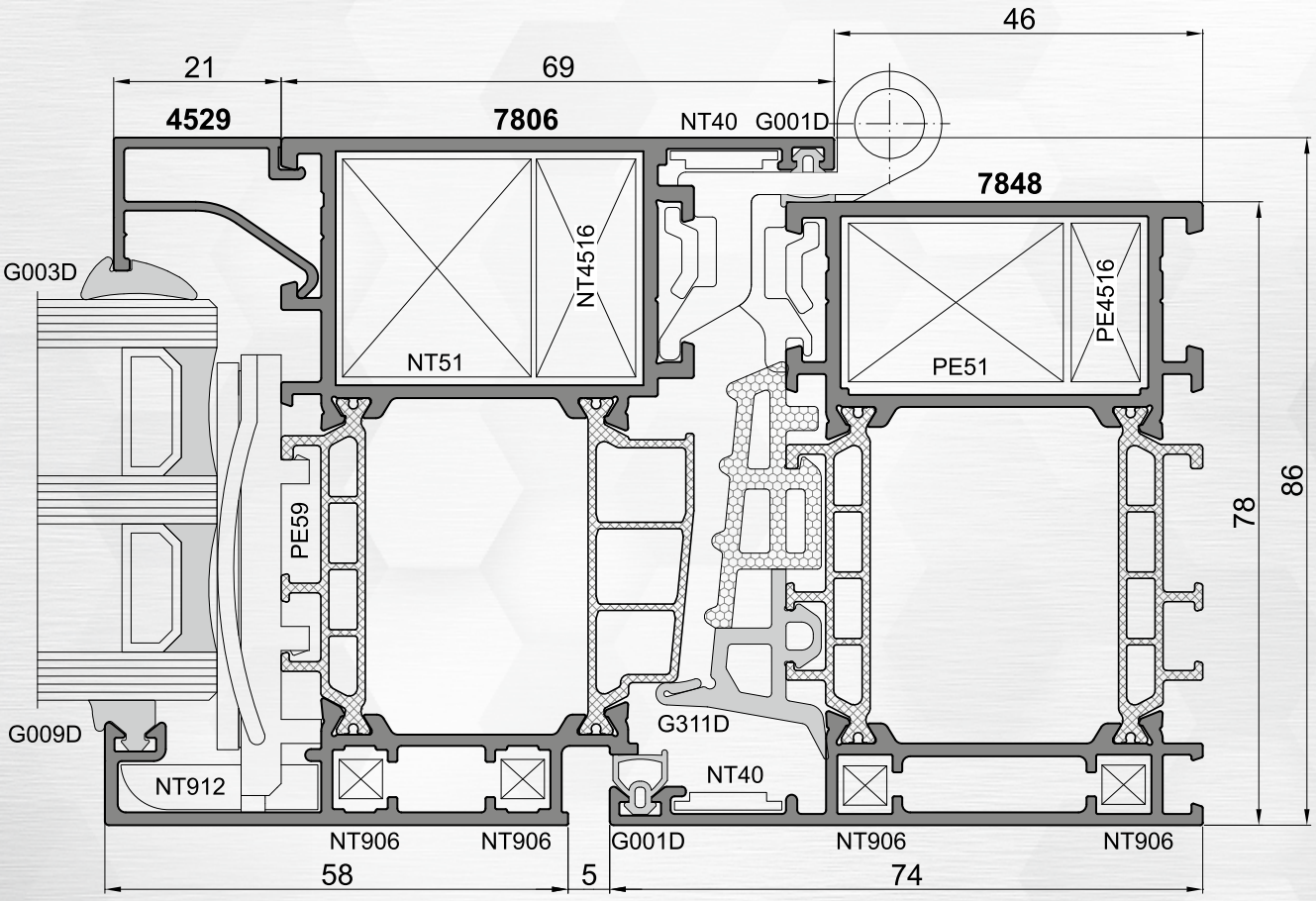

$U_w = 0.88\ W/m^2K$

*reference construction dimensions: L 1480 x H 2180 mm
$U_g = 0.5\ W/m^2K$, triple glazing

An insulated aluminium profile system with the Euro hardware groove as well as the PVC hardware groove in window sash profiles, designed for the construction of very high thermal performance windows.

- *high thermal performance due to the multi-cavity 42 mm thermal break and bi-component central gasket*
- *large-dimension constructions possible*
- *wide range of available hardware*
- *window sashes flush with the frame on the outside*
- *profile bending available*
- *wide variety of corner joint solutions*
- *different thermal insulation variants with different insulation inserts: PE78N+, PE78NHI, PE78NHI+*
- *wide variety of possible constructions: turn-tilt, outward opening, concealed sash etc.*

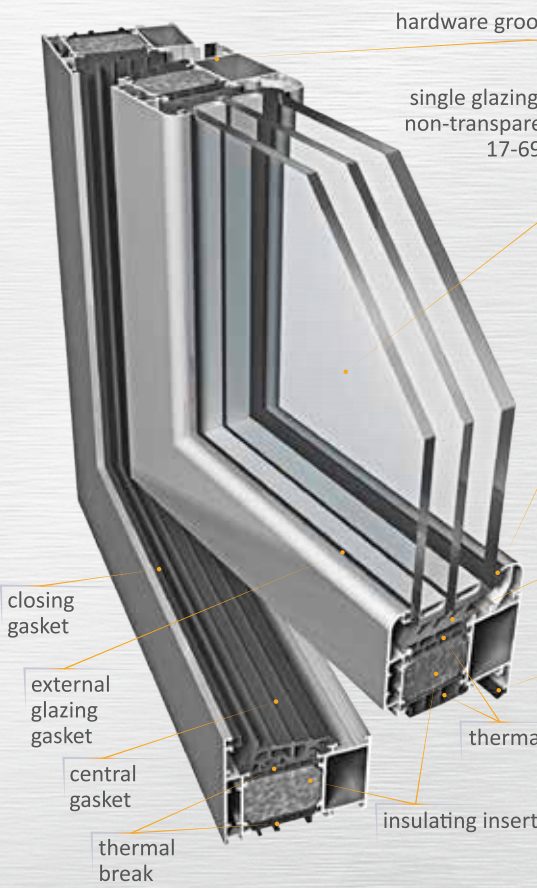
# Ponzio PE78N WINDOWS

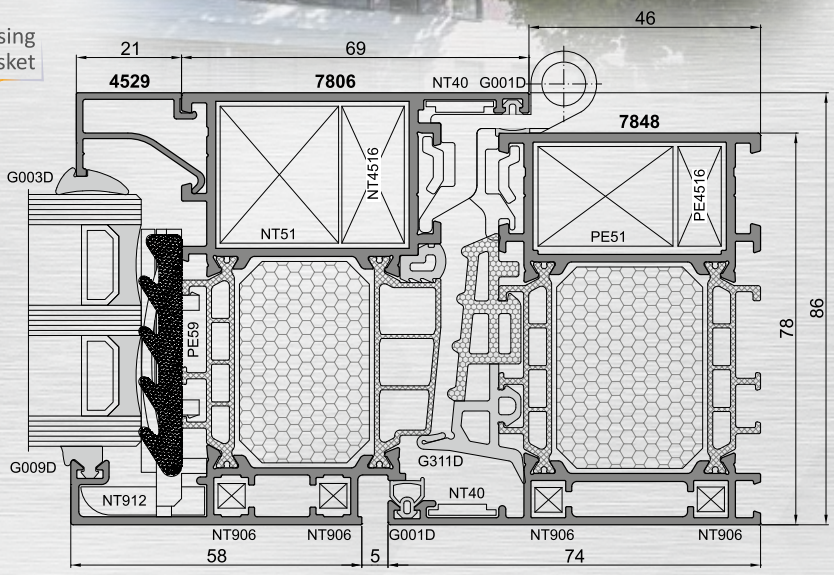



## Technical parameters

| | |
|---|---|
| **Filling thickness** | *frame: 17-61 mm, sash: 25-69 mm* |
| **Frame depth** | *78 mm* |
| **Sash depth** | *86 mm* |
| **Maximum sash dimensions** | *L 1700 x H 2200 mm, L 1300 x H 3000 mm* |
| **Maximum sash weight** | *200 kg* |
| **Air permeability** | *class 4* |
| **Watertightness** | *class E1650* |
| **Thermal insulation** | *frame heat transfer coefficient $U_f$ from 1.7 W/m²K, $U_w$ from 0.88 W/m²K* |
| **Resistance to wind load** | *class C5* |
| **Resistance to burglary** | *class RC2, RC3 in acc. with PN - EN 1627* |
| **Certification** | *ITT in acc. with PN - EN 14351-1 + A1* |

# Ponzio PE78NHI WINDOWS




## Technical parameters

| | |
|---|---|
| **Filling thickness** | *frame: 17-61 mm, sash: 25-59 mm* |
| **Frame depth** | *78 mm* |
| **Sash depth** | *86 mm* |
| **Maximum sash dimensions** | *L 1700 x H 2200 mm, L 1300 x H 3000 mm* |
| **Maximum sash weight** | *200 kg* |
| **Air permeability** | *class 4* |
| **Watertightness** | *class E1650* |
| **Thermal insulation** | *$U_f$ from 0.9 W/m²K, $U_w$ from 0.74 W/m²K* |
| **Resistance to wind load** | *class C5* |
| **Resistance to burglary** | *class RC2, RC3 in acc. with PN - EN 1627* |
| **Certification** | *ITT in acc. with PN - EN 14351-1 + A1* |

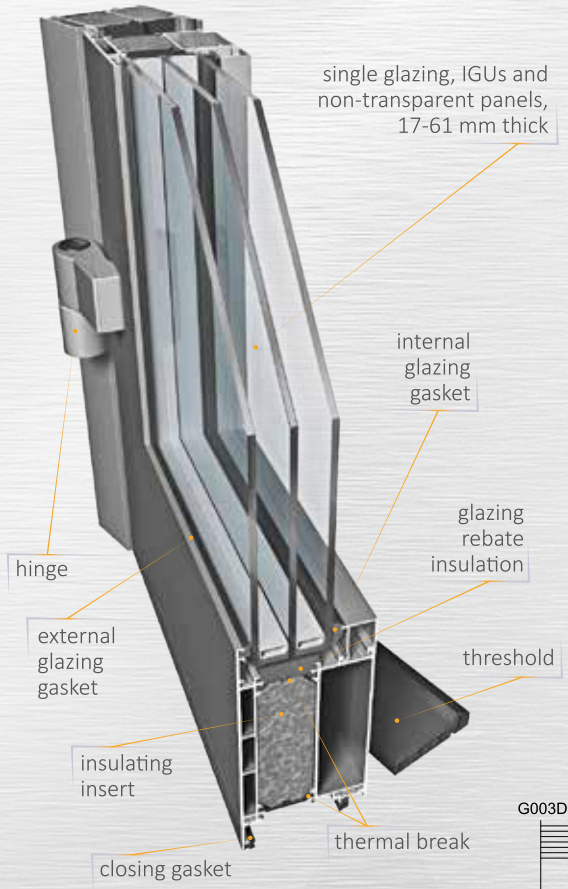
$U_w = 0.74$ W/m²K

*reference construction dimensions: L 1480 x H 2180 mm, $U_g = 0.5$ W/m²K, triple glazing

A variant of the PE78N profile system for exceptionally high thermal performance requirements.

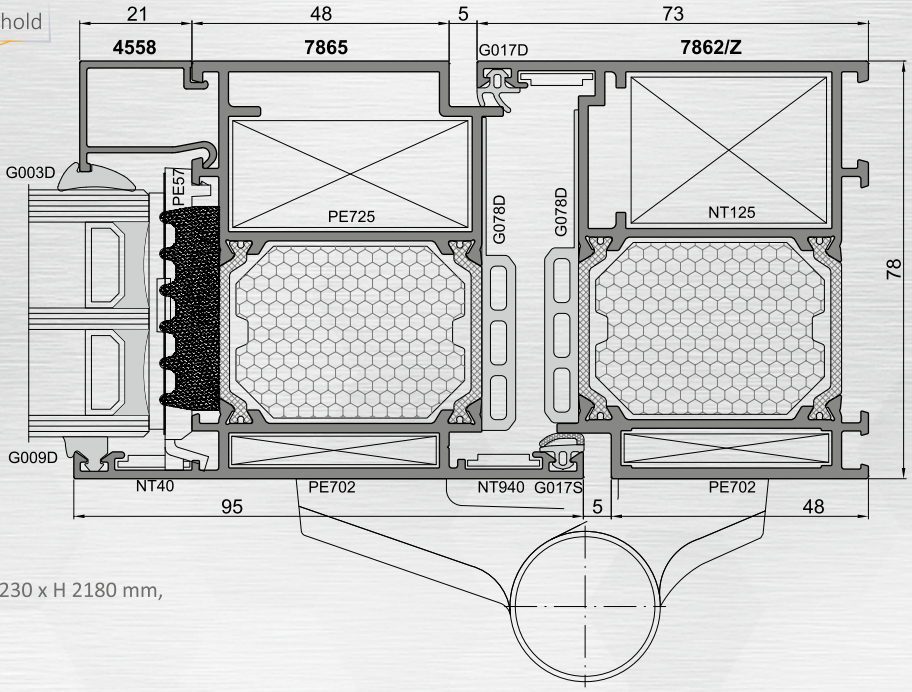
- *the value of the heat transfer coefficient depends on the type of insulating inserts used*
- *the warmer PE78NHI variant features glazing rebate and profile cavity inserts resulting in $U_f$ values as low as 0.9 W/m²K*
- *the warmest PE78NHI+ variant features glazing rebate insulation and aerogel profile cavity inserts resulting in $U_f$ values as low as 0.7 W/m²K*

# Ponzio PE78N/PE78NHI DOORS




An insulated, three-cavity profile system designed for the construction of doors.

- *coplanar construction (frame-leaf gap - 18 mm)*
- *Euro groove glazing beads*
- *profiled 34 mm thermal breaks*
- *doors easily incorporated in window sets due to special modifier profiles*
- *door leafs flush with the frame*
- *large-dimension constructions possible*
- *wide variety of corner joint solutions*
- *profile bending available*
- *wide range of available hardware*
- *different thermal insulation variants with different insulation inserts: PE78N+, PE78NHI, PE78NHI+*




$U_w$ = 0.93 W/m²K

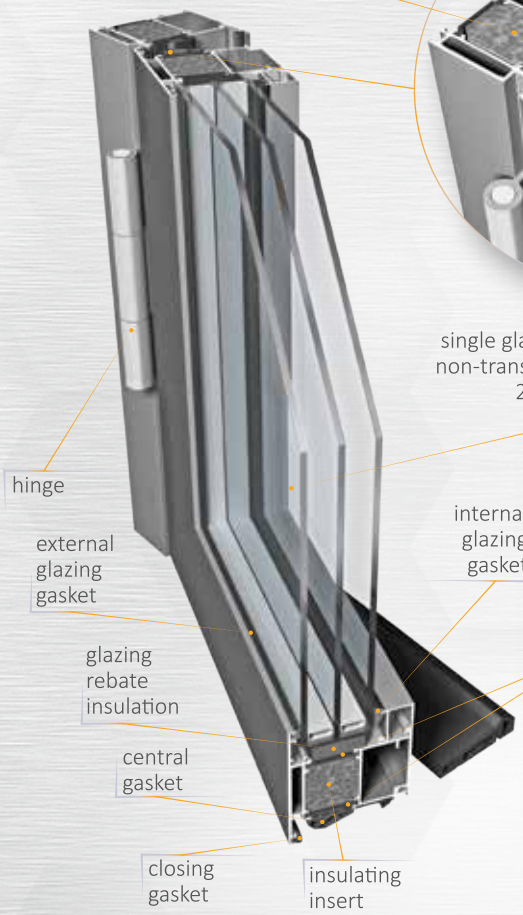
*reference construction dimensions: L 1230 x H 2180 mm, $U_g$ = 0.5 W/m²K, triple glazing

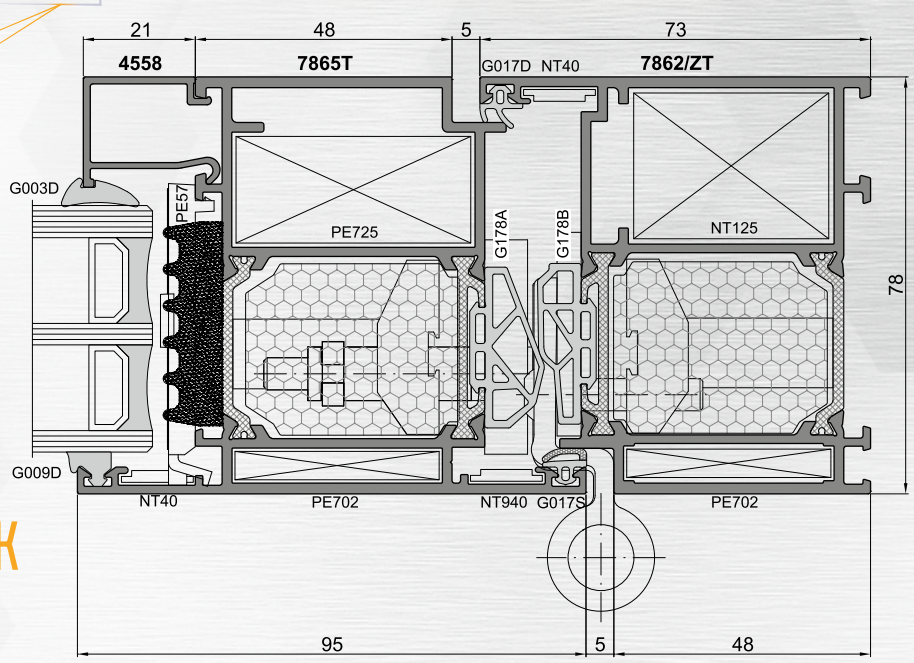
## Technical parameters

| | | | |
|---|---|---|---|
| **Filling thickness** | *leaf: 17-61 mm* | **Thermal insulation** | *PE78N: $U_f$ from 2.1 W/m²K<br>PE78NHI: $U_f$ from 1.5 W/m²K* |
| **Frame and leaf depth** | *78 mm* | **Thermal insulation** | *PE78N: $U_d$ from 1.10 W/m²K<br>PE78NHI: $U_d$ from 0.93 W/m²K* |
| **Maximum leaf dimensions** | *L 1400 x H 3000 mm* | **Resistance to wind load** | *class C2/B3* |
| **Maximum leaf weight** | *210 kg* | **Resistance to burglary** | *class RC2, RC3 in acc. with PN - EN 1627* |
| **Air permeability** | *class 3* | **Certification** | *ITT in acc. with PN - EN 14351-1 + A1* |
| **Watertightness** | *class 9A* | | |

# Ponzio PE78NHI

## DOORS WITH CENTRAL SEALING




$U_w$ = 0.89 W/m²K

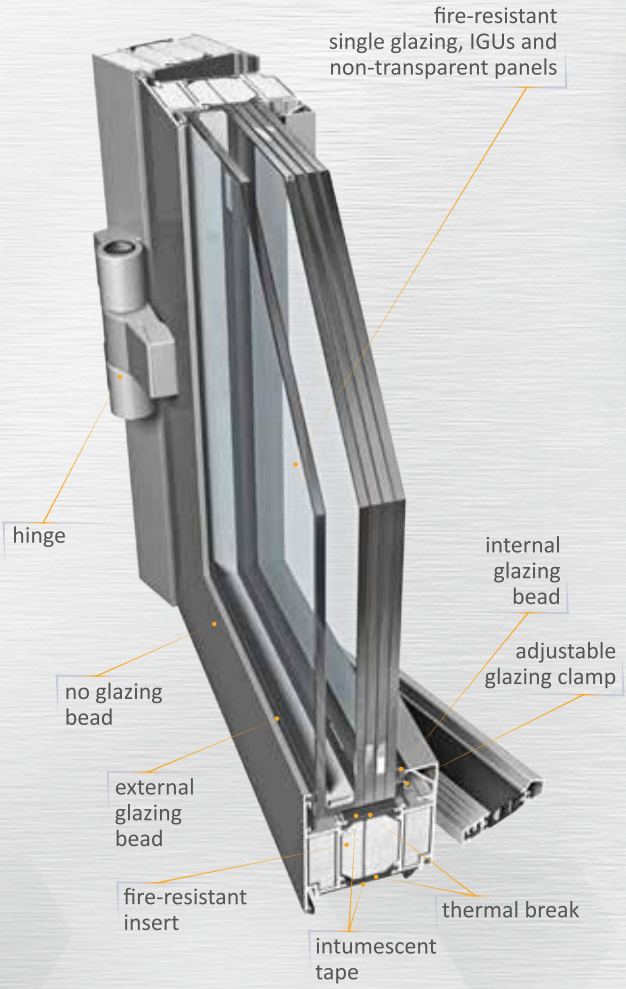
*reference construction dimensions: L 1230 x H 2180 mm, $U_g$ = 0.5 W/m²K, triple glazing

A variant of the Ponzio PE78N system with additional central gaskets resulting in improved Uf values.

- *gasket mounted on a bespoke thermal break (available also in anti-bimetal versions)*
- *special corners for gaskets - easier installation and improved corner sealing*
- *new external closing gasket with a wide range of movement compensates for prefabrication and assembly errors*
- *euro groove glazing beads*
- *large-dimension constructions available*
- *profiled thermal breaks*
- *door leafs flush with frame*
- *doors easily incorporated in window sets due to special modifier profiles*
- *wide variety of corner joint solutions*

# Ponzio PE78EI

EI15, EI30, EI45, EI60, EI90, EI120



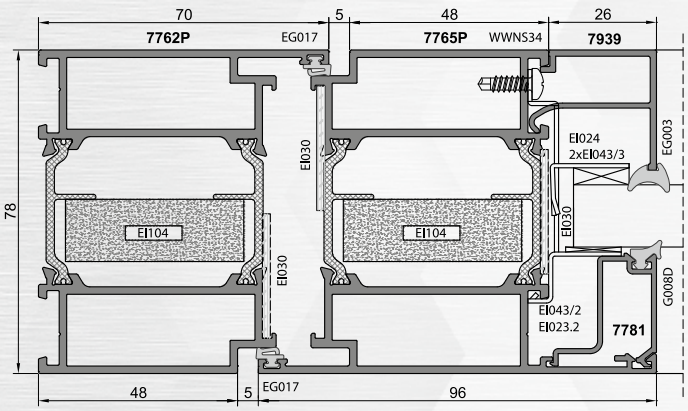

An insulated profile system designed for the construction of internal and external fire-resistant joinery.

- *profiles with special fire-resistant inserts, selection depending on the fire resistance class of the joinery: EI15, EI30, EI45, EI60, EI90, EI120*
- *single and double, inward and outward opening doors with several different threshold solutions as well as partitions up to 4000 mm high available*
- *35 and 46 mm thermal breaks ensuring good thermal insulation*
- *easy hardware and accessories installation shortens construction time*
- *large-dimension constructions available*
- *Design Line system variant (glazing with beads on only one side)*
  *- glazing and profiles form a nearly flush surface*
  *- decreased production and assembly time compared to systems with glazing beads on both sides*
- *interconnected with other Ponzio systems*
- *smoke control doors available*
- *arched constructions available*
- *three types of fire-resistant inserts: gypsum, aluminosilicate and poured*

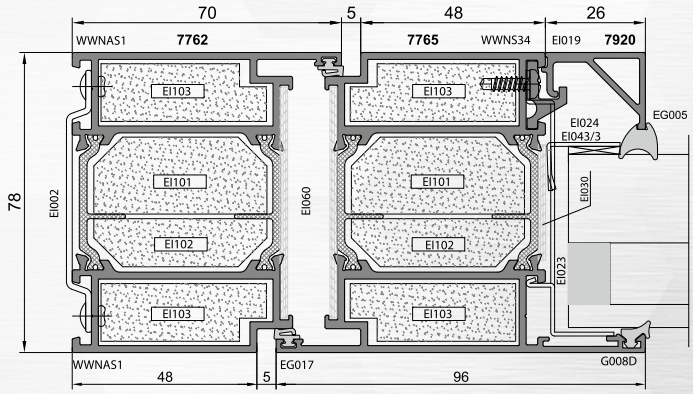
# Ponzio PE78EI

EI15, EI30, EI45, EI60, EI90, EI120

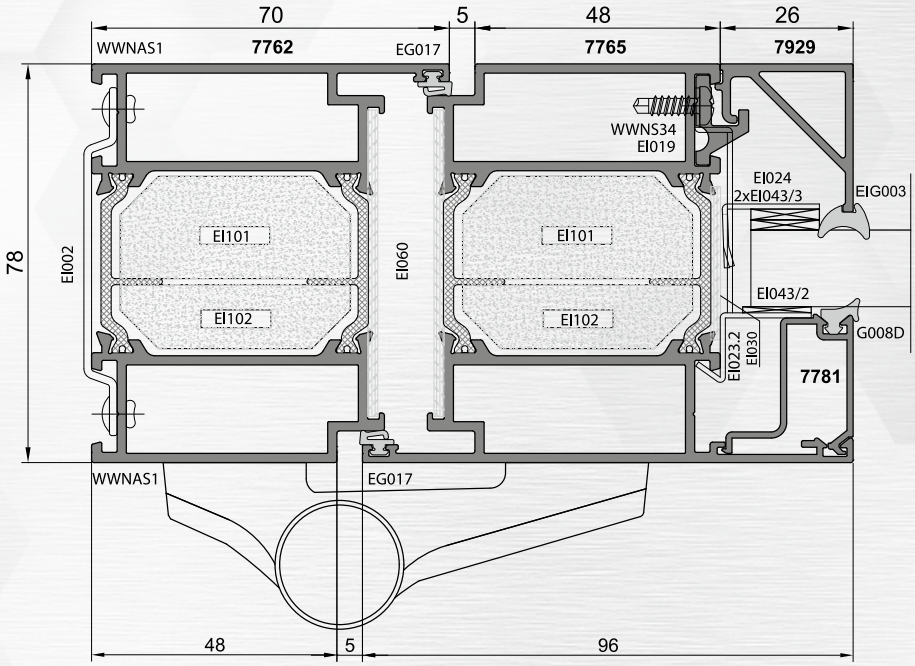
### Class EI30 Design Line, economy version




### Class EI60 Design Line




### Class EI30




## Technical parameters

| | |
|---|---|
| **Filling thickness** | *8 - 62 mm (55 - 73 mm for EI 120)* |
| **Frame and leaf depth** | *78 mm (89 mm for EI120)* |
| **Type of filling** | *fire-resistant single glazing, IGUs: PN-EN1279-1, PN-EN 1279-5 non-transparent panels: in acc. with the Technical Approval or the National Technical Assessment* |
| **Gaskets** | *EPDM, in acc. with PN-EN 12365-1* |
| **Smoke control** | *class $S_a$ and $S_{200}$ in acc. with PN-EN 13501-2* |
| **Sound reduction** | *$R_{A1}$ – 35 dB, $R_{A2}$ – 30 dB, $R_W$ – 37 dB (Swissflam 17 mm fire-resistant single glazing)* |
| **Fire resistance classification** | *EI15, EW30, EI30, EI45, EI60, EI90, EI120* |
| **Technical Approval** | *ITB Technical Approval AT-15-7540/2016 "PONZIO PE78EI fire-resistant doors and internal and external fire-resistant partition kits using aluminium profiles with thermal breaks"* |
| **National Technical Assessment** | *1. ITB-KOT-2017/0351 - "PONZIO PE78EI internal fire-resistant and/or smoke control doors, internal fire-resistant windows and internal and external fire-resistant partition kit using aluminium profiles with thermal breaks"*<br>*2. ITB-KOT-2018/0529 - "PONZIO PE78EI internal fire-resistant full-glass partition kit using aluminium profiles with thermal breaks"* |