

# Ponzio®

## ALUMINIUM SYSTEMS

## WITH HIGH THERMAL INSULATION

### PONZIO PF 152 HI

Excellent thermal insulation parameters

$$U_{cw} < 0,80 \text{ W/(m}^2 \text{K)}$$

Certified by the German Passive House Institute in Darmstadt

**CERTIFICATE**  
Certified Passive House Component  
Component ID 0623w03 valid until 31st December 2017

Passive House Institute  
Dr. Wolfgang Feist  
64283 Darmstadt  
Germany

Category: Curtain Wall  
Manufacturer: PONZIO POLSKA Sp. z o.o.  
Poland  
Product name: PONZIO PF152HI

This certificate was awarded based on the following criteria for the cool, temperate climate zone

Comfort  $U_{cw} = 0.80 \leq 0.80 \text{ W/(m}^2 \text{K)}$   
 $U_{cw, passive} \leq 0.85 \text{ W/(m}^2 \text{K)}$   
with  $U_g = 0.70 \text{ W/(m}^2 \text{K)}$

Hygiene  $f_{hw,25} \geq 0.70$

cool, temperate climate  
7<sup>phA</sup>  
**CERTIFIED COMPONENT**  
Passive House Institute

Passive House  
efficiency class  
p1E p1D p1C p1B p1A  
www.passivehouse.com

[www.ponziogroup.com](http://www.ponziogroup.com)





## TECHNICAL MARK

- ITB (Poland)
- IRCCOS (Italy)
- GIORDANO (Italy)
- IFT ROSENHEIM (Germany)
- IMP (Poland)
- PZH (Poland)
- QUALICOAT (Switzerland)
- PASSIVHAUS INSTITUT (Germany)



## **Technically advanced solutions**

Ponzio Poland is one of the leading companies in the aluminium suppliers market.

## **High thermal insulation**

Sum of experience gained during 25 years of activity on the Polish market and 75 years of tradition on the European markets, locates Ponzio among the biggest aluminium suppliers.

## **Durability and stability of large dimensions constructions**

Wide range of Ponzio systems allow to apply various interesting solutions from the entire wealth of architectural forms.

## **Modern design**

Highly qualified investments coordinators are at the disposal of the architects at each stage of the object realization: from the consulting, through selection and preparing solutions for the specified realization. Thanks to that cooperation, the projects are conducted faster and more efficiently. What is more, there is a confidence that implemented solutions are optimal and meet the idea of the design.

The potential of Ponzio company will for sure allows you to create and realize many interesting projects.

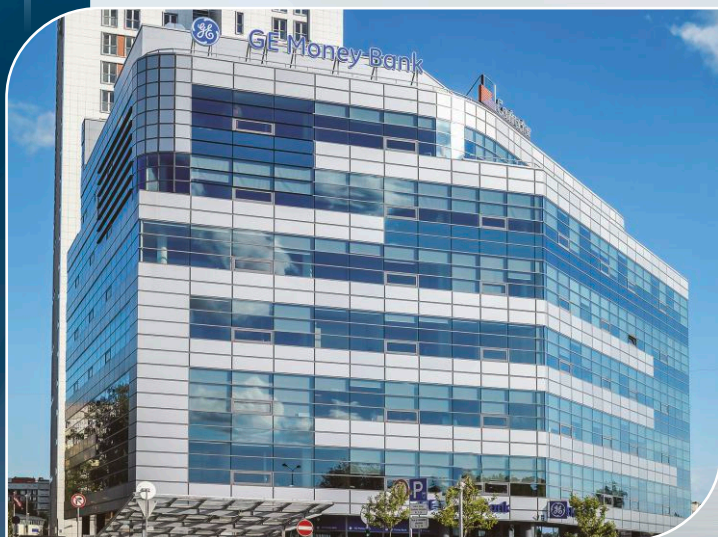
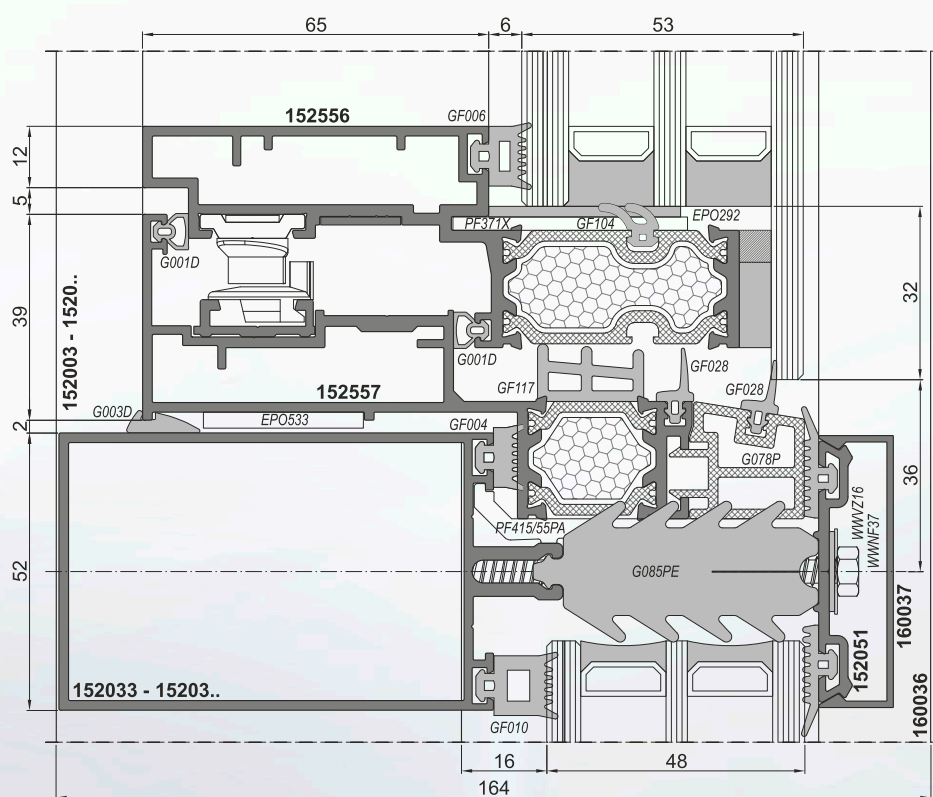
## **ALUMINIUM SYSTEMS**





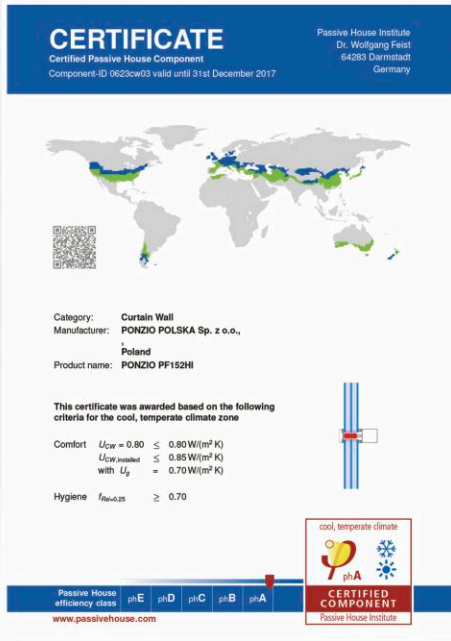
## SYSTEM DESCRIPTION

Post transom curtain wall system with higher thermal insulation is commonly assembled in energy efficient constructions. Specially designed new insulating input, which fills the space between glass panels, has replaced the previous solution based on metalized tape. New thermal insulator, with its shape and characteristics, improves the parameters of the whole construction. The composition of used material provides transom with very good drainage and thanks to its shape the assembly is easy. The assembly of new thermal insulator is possible after glazing. Excellent thermal parameters allow to achieve the  $U_{cw}$  value at the level of  $0,6 \text{ W/m}^2\text{K}$  (for 48 mm fillings).



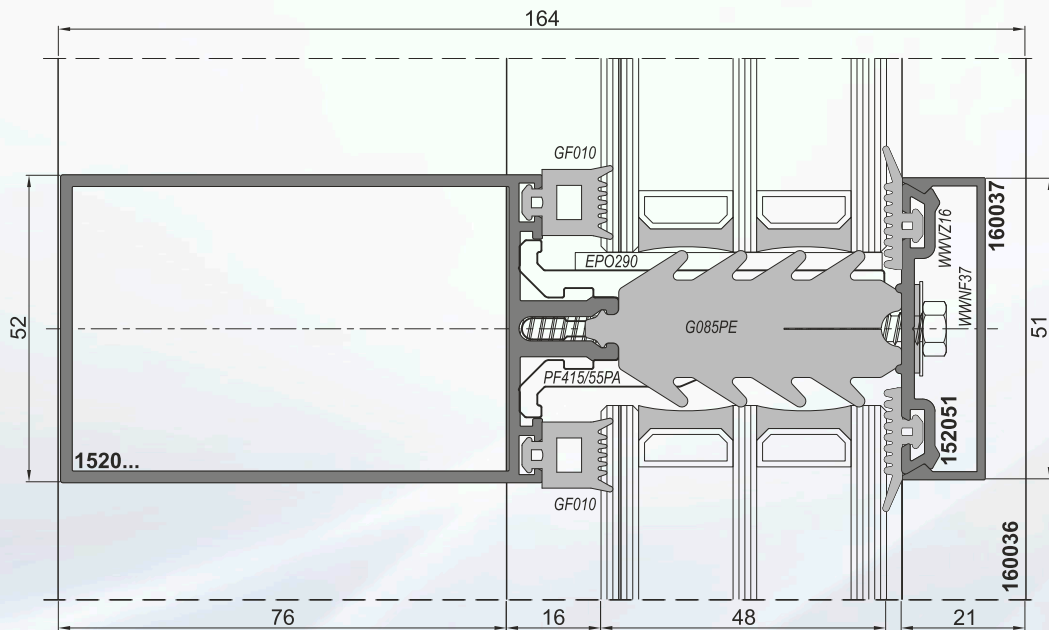
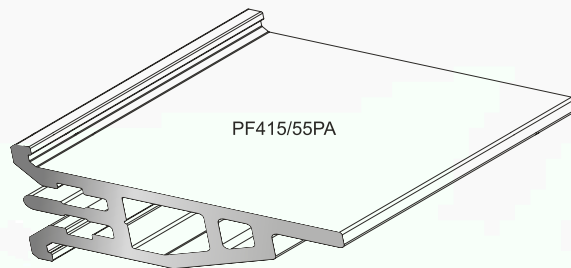


# PF 152 HI PASSIVE



PF 152HI PASSIVE system is more advanced version of PF 152HI facade which was obtained inter alia thanks to the usage of special glazing pad made of insulating plastic material. The system is recommended to accomplish post-transom constructions of curtain walls for the passive objects. PF 152HI Passive system holds a certificate of the Passive House Institute in Darmstadt in high PhA Advanced Components class.

Using special plastic glazing pads limits thermal bridging, which improves overall thermal efficiency when compared with the PF152HI system.

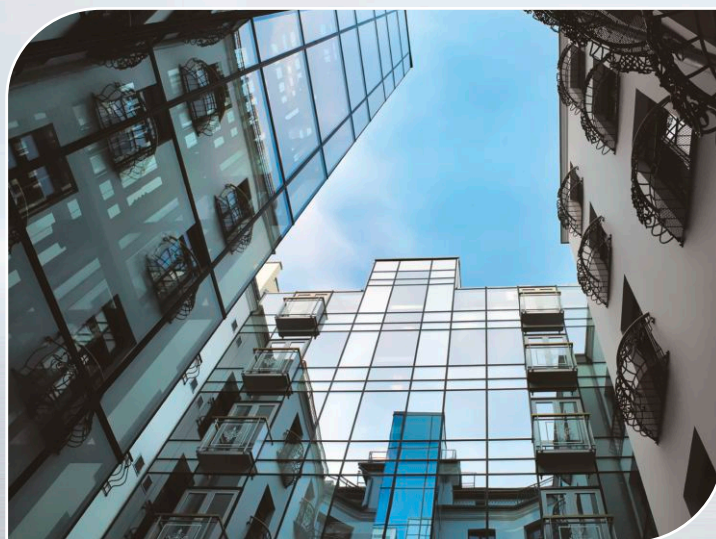
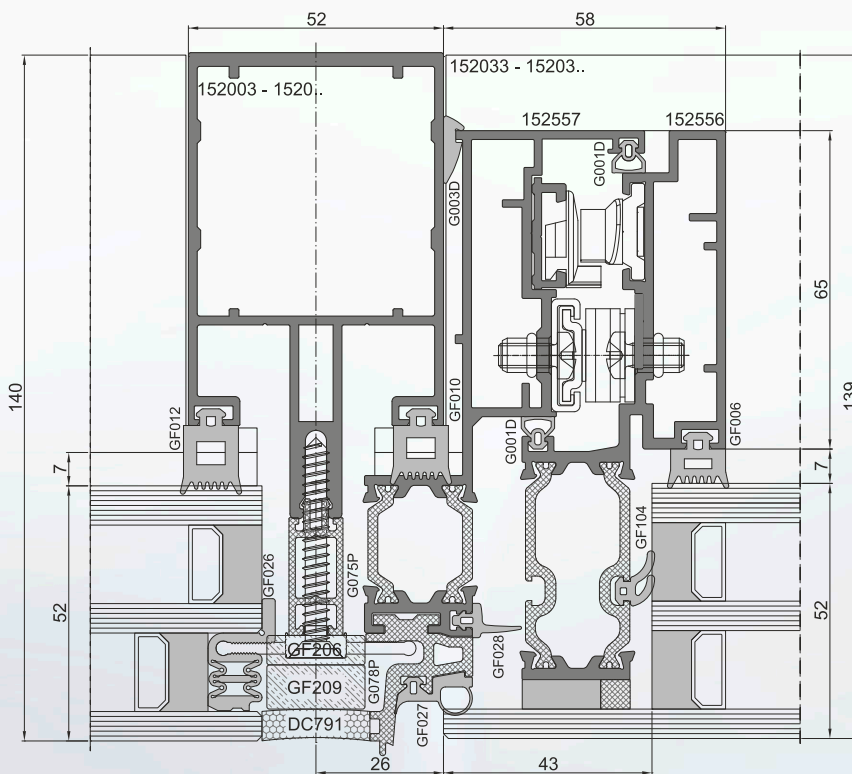




## SYSTEM DESCRIPTION

Non-frame curtain wall with the structural glazing assigned for the realization of lightweight facades and other spacial constructions. The post-transom construction of PF 152 system is used as a load bearing element.

The external side of PF 152ESG is uniform, smooth glass wall divided with vertical and horizontal lines at width 22 mm using weather silicon or at width 28 mm using the closing gasket. There is a possibility of applying double and triple glazing (for the up to 60 mm glazing). In the version with triple glazing the  $U_0$  frame heat transfer coefficient from 1,3 W/m<sup>2</sup>K.





# PE 96 Passive

## SYSTEM DESCRIPTION



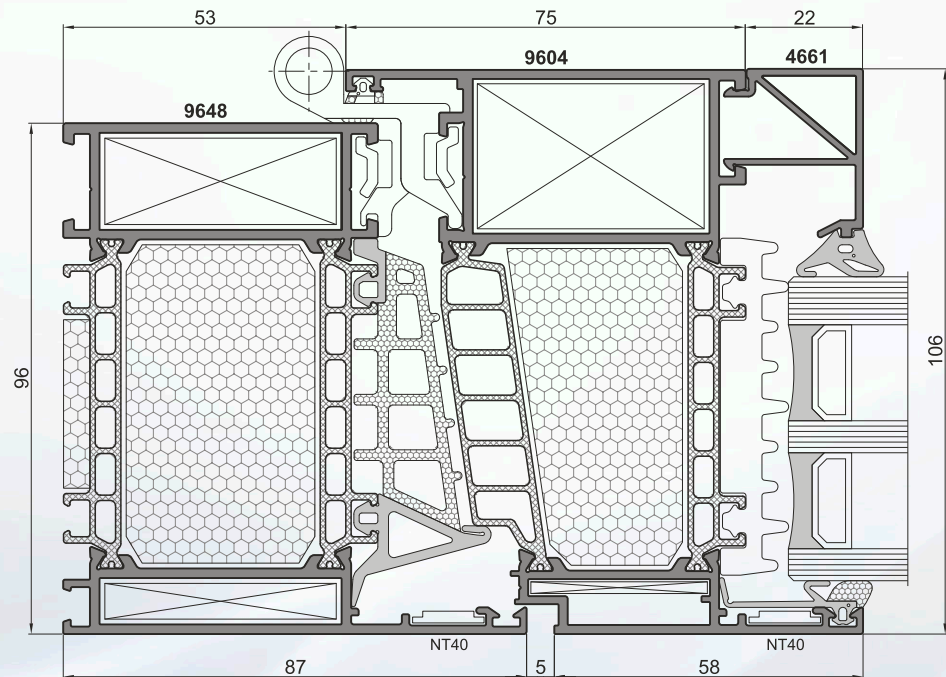
This system features exceptional thermal insulation characteristics ( $U_w < 0,8 \text{ W/m}^2\text{K}$ ) and is therefore ideal for energy-efficient and passive construction.

Profile depth: 96 mm for frames, 106 mm for sashes.

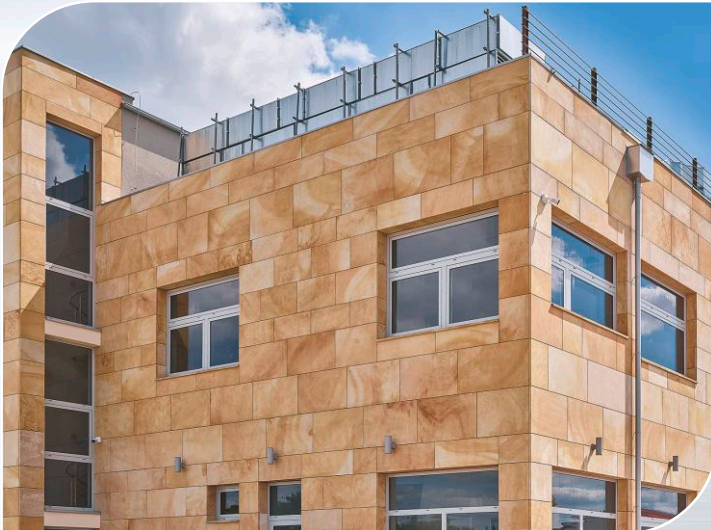
62 mm multi-cavity thermal breaks and two-component central gaskets ensure low thermal transmittance.

Glazing range up to 84 mm.

This system has two variants: Passive and Passive+, used depending on required thermal transmittance levels.



WINDOWS SYSTEM



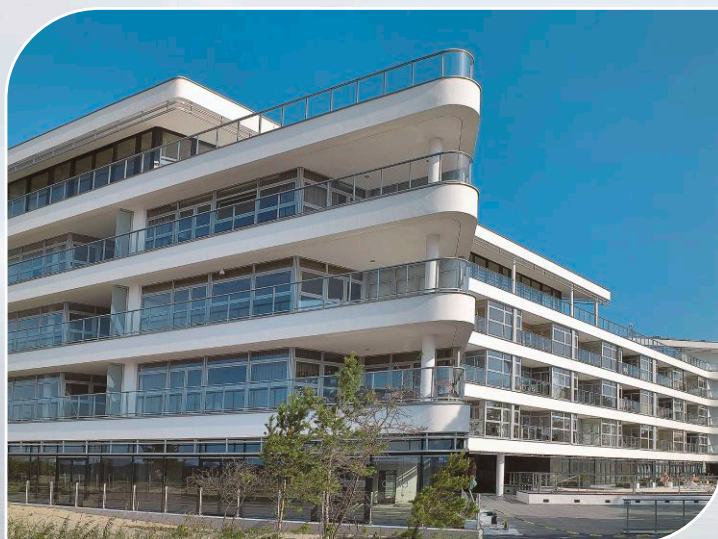
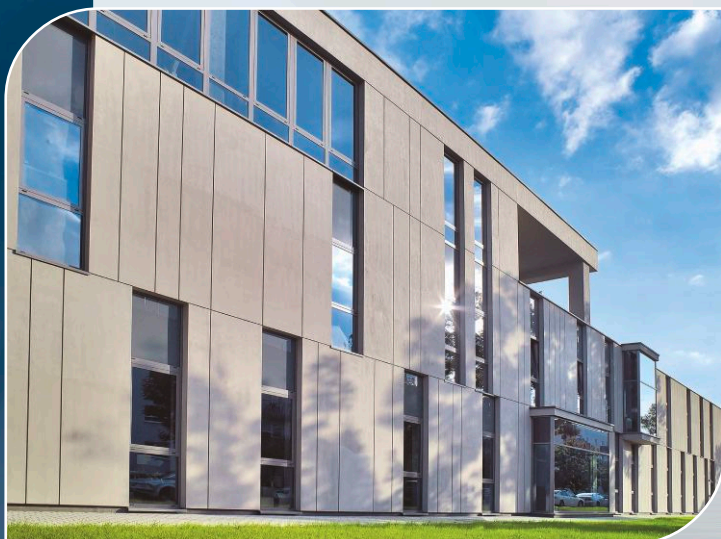
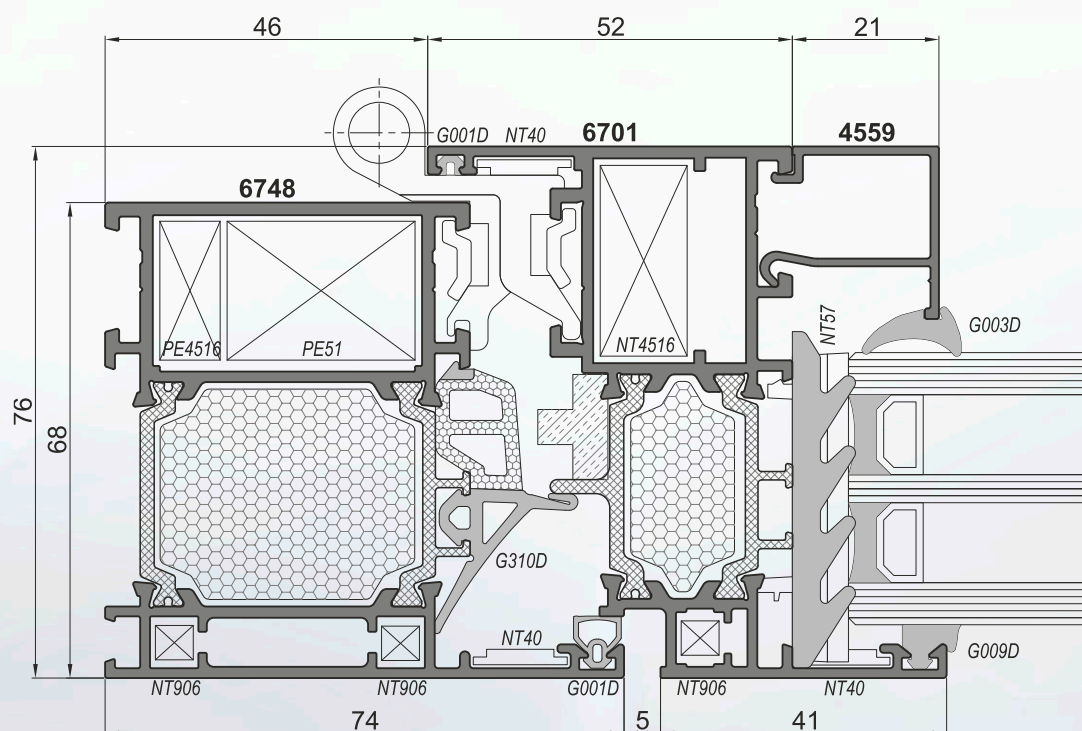


## SYSTEM DESCRIPTION



The three chamber system for the windows with „euro” standard hardware groove and with the groove used in balcony doors and windows made of PVC or wood. The constructional depth of frame is 68 mm, the depth of windows leaf is 76 mm. The system allows to use fillings of 18-59 mm thickness. The additional advantage of the system is higher thermal insulation achieved by the usage of special thermal insulators.

The system reaches various heat transfer coefficient depending on the location of insulating inserts. In the PE 68+ version with closed glass chamber -  $U_i$  value reaches 1,6 W/m<sup>2</sup>K, in more insulated version: PE 68HI+ - with closed glass chamber and special insulating inserts in the profiles' chamber -  $U_i$  value reaches 1,3 W/m<sup>2</sup>K and higher.





# PE 68 HI DOORS

## SYSTEM DESCRIPTION

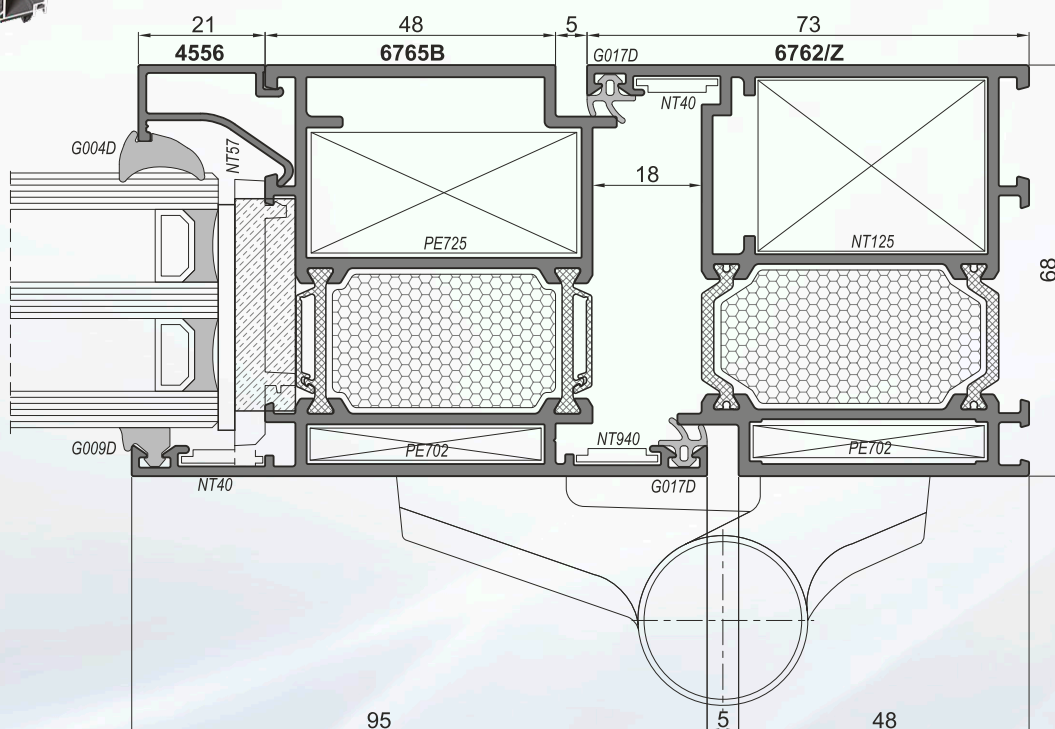


Thermally insulated three chamber system used for doors. The system has a coplanar structure profiles (notch clearance - 18 mm) and a possibility of using glazing beads for the „euro” standard groove.

In the PE 68 system, there were used profiled 24 mm thermal insulators. Specially designed compatible profiles simplify door and windows connection. The structural depth of the profiles for frames and leaves is 68 mm.

There is a possibility of applying double and triple glazing - 51 mm thickness. The frame heat transfer coefficient equals from 1,8 W/m<sup>2</sup>K.

The large number of hardware and door locks can be used. PE 68 allows to make kneaded as well as screwed corners.



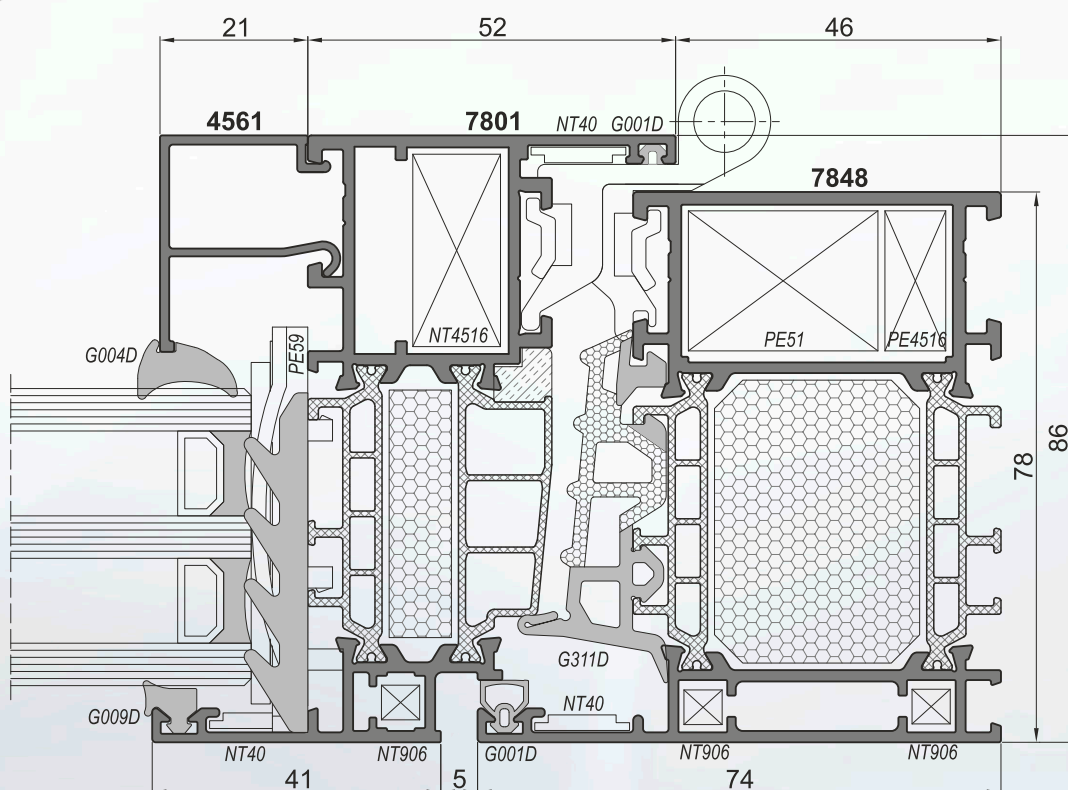


## SYSTEM DESCRIPTION

A variant of PE 78N system intended for the constructions of a particularly high requirements for thermal insulation. Thanks to the special inserts there can be obtained very high thermal insulation.

In more insulated PE 78N HI version - with closed glass chamber and insulating insert, the  $U_f$  frame heat transfer coefficient equals  $0,9 \text{ W/m}^2\text{K}$ .

In the most insulated (PE 78N HI+) version - with closed glass chamber and insulating insert made of aerogel, the frame heat transfer coefficient equals  $0,7 \text{ W/m}^2\text{K}$ .





# PE 78N HI DOORS

## SYSTEM DESCRIPTION

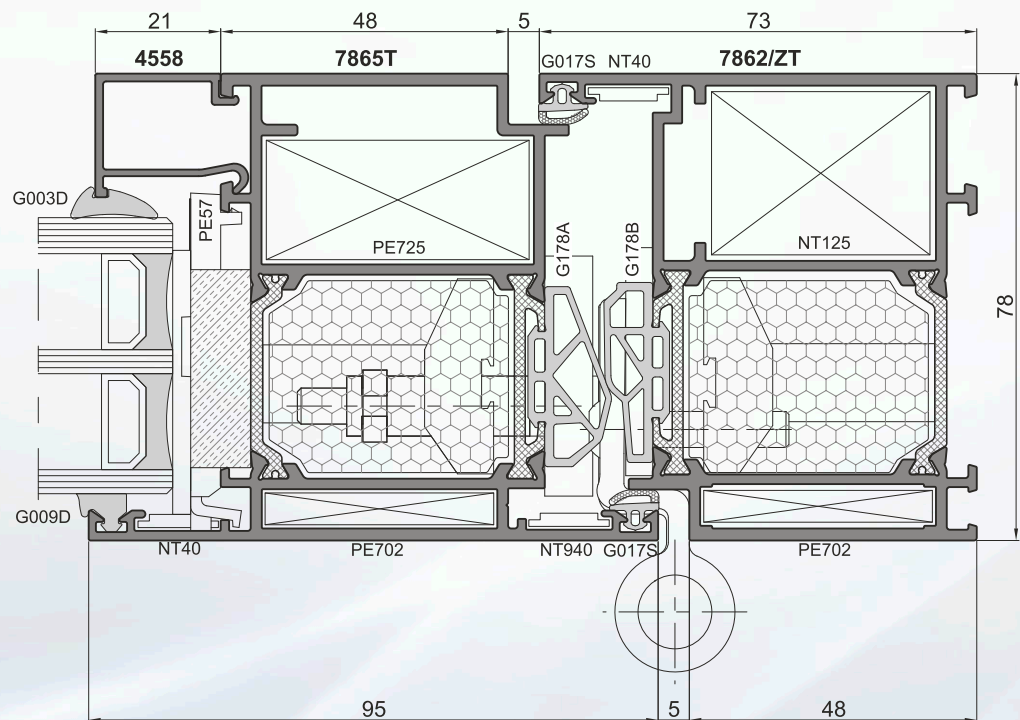


The three chamber system for doors with thermal insulation. The system has a coplanar structure of profiles (notch clearance 18 mm) and possibility of applying glazing beads for the euro standard groove.

In PE 78N there are applied profiled thermal breaks of width 34 mm. Specially designed compatible profiles enable an easy connection between door and window. The constructional depth for frames and sashes equals 78 mm.

The system allows using a wide range of hardware and door locks.

PE 78N allows to make kneaded, as well as screwed corners connection. What is more, there can be applied a variety of threshold solutions (also PVC ) to guarantee the best water and thermal insulation.

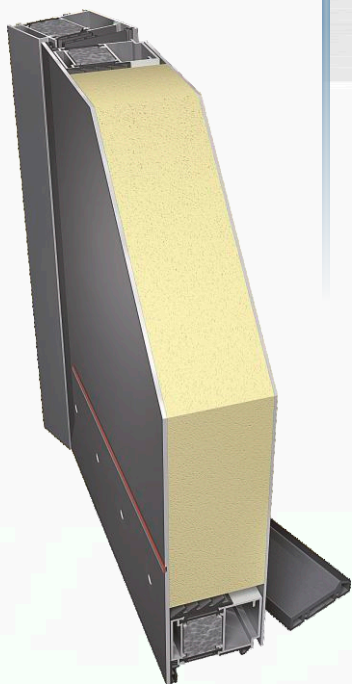


DOORS SYSTEM





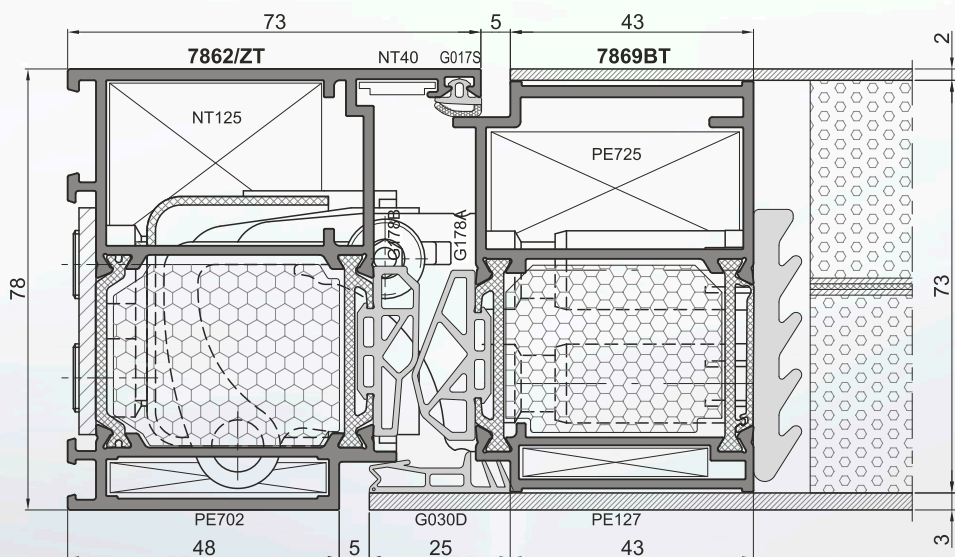
### SYSTEM DESCRIPTION



The construction of the panel doors is based on PE78N insulated aluminium doors (in economic version on PE68 system). This is an excellent product that is characterized by exceptional aesthetics, durability, individual design as well as a very good tightness and thermal insulation.

Thanks to solid construction and modern design, panel doors system is dedicated to energy-efficient constructions and it is designed for the most demanding users. According to the taste of the investor there is a possibility to apply fillings from various producers as well as different variants of constructions.

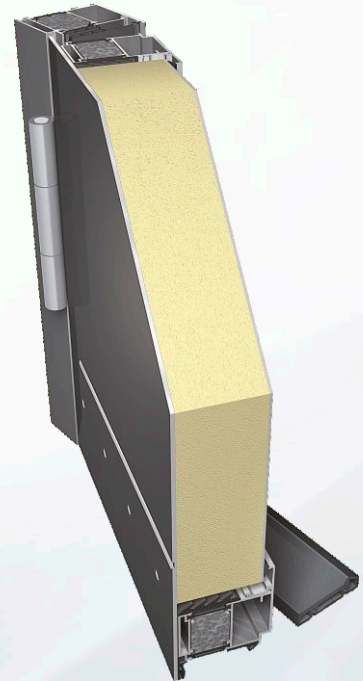
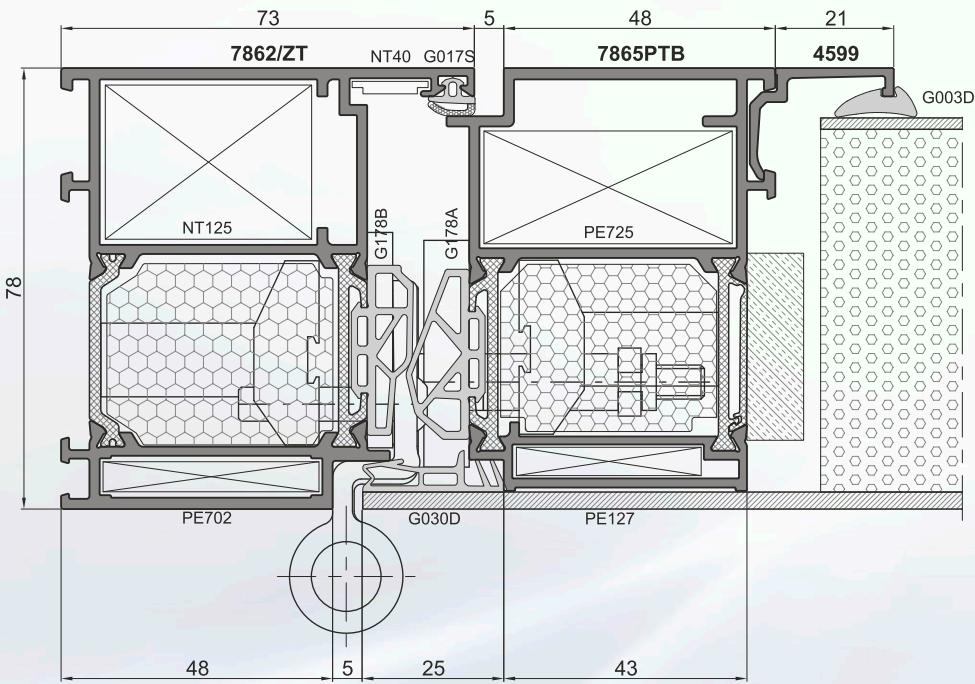
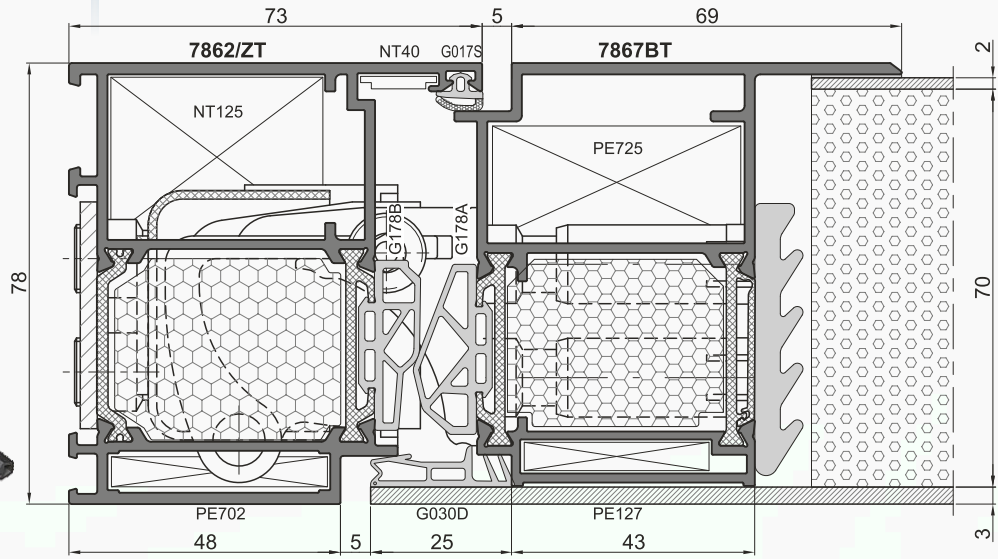
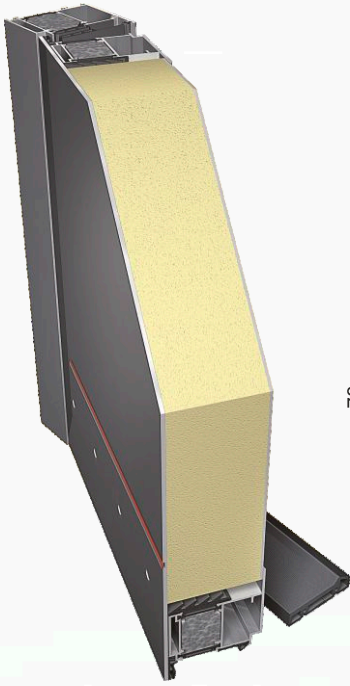
Additionally this product can be equipped with usage support systems, such as: fingerprint reader, code keypads, special systems for opening and closing, as well as many others.



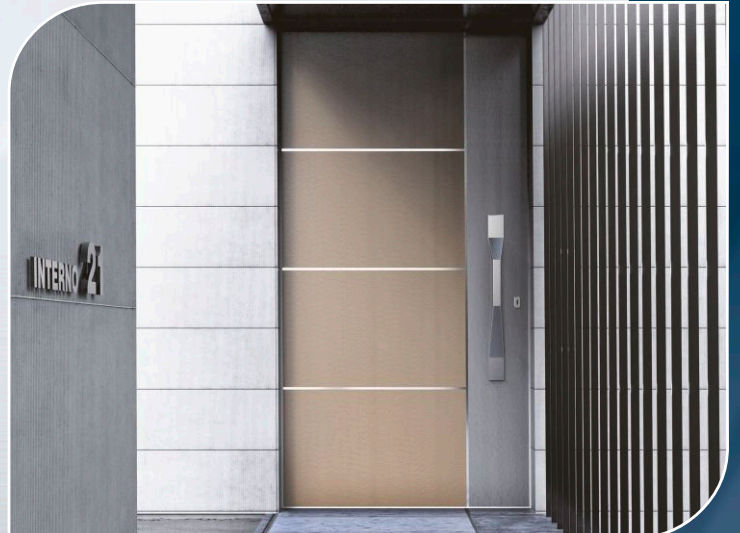


# PE 78N HI

## PANEL DOORS



DOORS SYSTEM





## SYSTEM DESCRIPTION



Thermally insulated lift and slide system intended to accomplish elements of external constructions. The structure allows to make stable constructions of large size, with even six sashes and of very large sash weight.

The constructional depth of profiles equals 67 mm for sashes, 160 mm for double track frames and 247 mm for triple track frames.

The system allows to apply fillings up to 50 mm thick. It's advantage is high resistance to weather conditions. SL 1600tt system has high thermal insulation parameters. It allows to assemble few variants of insulation: version standard, PLUS, HI.

In PLUS version, the  $U_f$  equals 2,1 W/m<sup>2</sup>K and in the top HI variant the frame heat transfer coefficient equals 1,8 W/m<sup>2</sup>K.

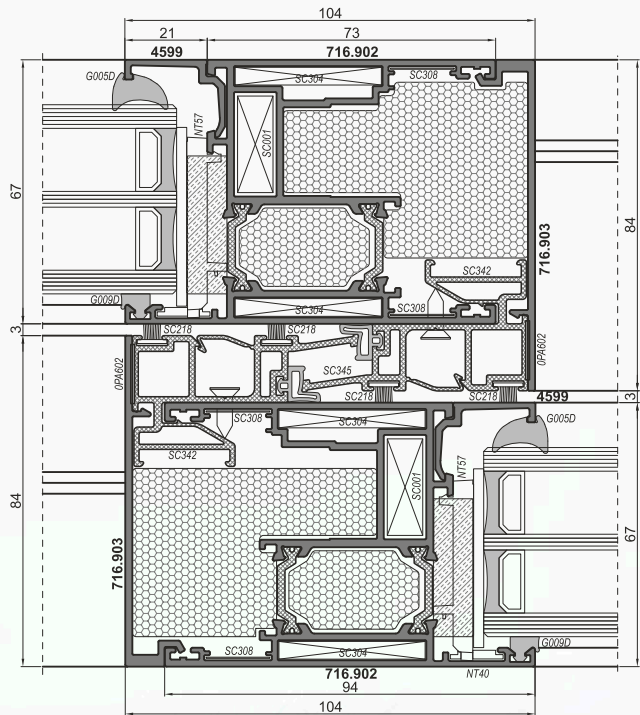
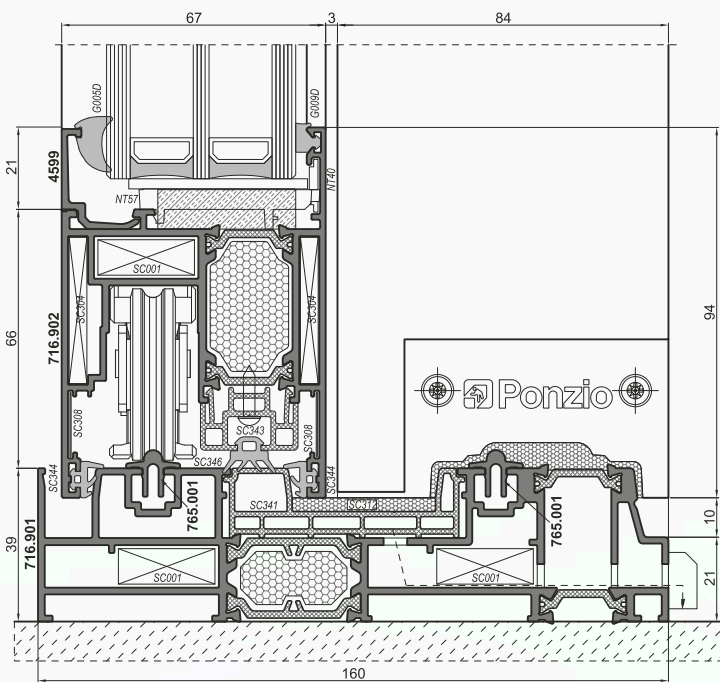
## CHARACTERISTICS OF THE SYSTEM

- possibility of assembling few variants of insulation (standard, PLUS version, HI version)
- high resistance to weather conditions





# SL 1600 tt HI



LIFT AND SLIDE SYSTEM



# Ponzio Systems

*Design of the future*



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## Ponzio<sup>®</sup>

### ALUMINIUM SYSTEMS

## WINDOWS & DOORS SYSTEM PE 78N HI

Exceptionally low thermal transmittance values

$$U_f < 1,0 \text{ W/(m}^2 \text{ K)}$$

