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**buildingsystem**

ARCHITECTURAL ALUMINIUM SOLUTIONS

# AVANTIS 55

Aluminium Windows and Doors





# AVANTIS 55

## Aluminium Windows and Doors

Avantis 55 is a high performance thermally broken, three-chamber system with a building depth of 55 mm. The system offers a wide range of inward and outward opening possibilities for windows and doors while guaranteeing a very good price-quality level.

The Avantis 55 meets thermal insulation standards and is a comprehensive solution for commercial, residential and industrial projects.

### System features

- The performing Avantis 55 is a complete system with a solution for all standard window and door applications.
- It is compatible within its profile and hardware range, as well as other Sapa Building System products such as our curtain wall and conservatory systems.
- The system accommodates glazing of 4 - 39,5 mm for frame and 4 - 50,5 for vent. For plates, the infill thickness can start from 2 mm.
- The combination of multipoint locking, safety glass and special hardware ensures a high resistance against forced entry. Internal tubular glazing beads prevent unclipping from the outside.  
Resistance class: ENV 1627 – 1630 class 2
- A wide range of locking and non-locking handles are integrated in to the system.
- All standard shade and ventilation systems can easily be integrated in Avantis 55.



# AVANTIS 55

## Aluminium Windows and Doors

### Design

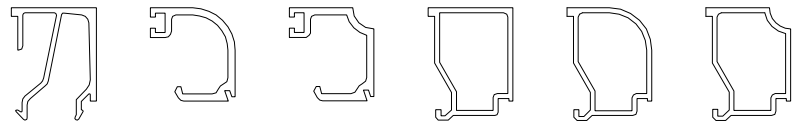
- » Avantis 55 is available in 2 designs: Classic and Softline.
- » Hidden drainage to avoid the requirement for cover caps.
- » Doors can be flush or overlapping, single or double, in- and outward opening.
- » A comprehensive range of supplementary finishing profiles allows the fenestration to be integrated perfectly into the building.
- » Vent, frame and transom profiles are available in a range of dimensions to meet the needs of stability and design requirements.
- » A wide choice of hinges, handles and hardware finalise your specific needs.



Classic: straight on the inside



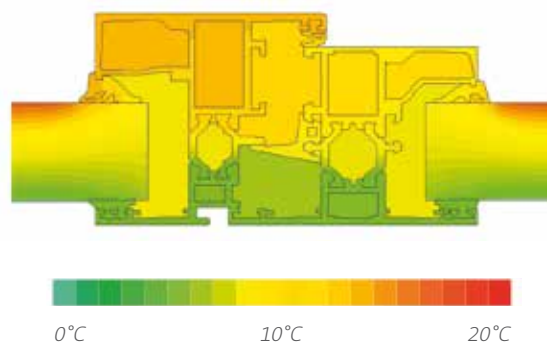
Softline: rounded on the inside




Glazing beads are available in different designs.

### Insulation

- Avantis 55 profiles have 3 chambers, coupled with 20 mm omega shaped, glass fibre reinforced polyamide strips, which reduce thermal conduction. The result is that Avantis 55 achieves a high thermal performance level and improved total insulation, leading to lower total energy consumption, a positive benefit to the environment.
- Inward opening vents have a solid central gasket for enhanced thermal and acoustic performance.



  $U_f = 1,9 - 3,3 \text{ W/m}^2 \text{ K}$

## Resistance

- » Avantis 55 includes several weather barriers by means of specially designed gaskets, a large decompression chamber and internal drainage to assure perfect weather resistance.
- » Effective water evacuation is ensured via punched drain holes.
- » Special finishing profiles provide additional building drainage.
- » Acoustic performance is greatly enhanced with multiple gaskets.



Architect: Architectenbureau A.G.E. Engineering, Liège



Architect: Jaspers-Eyers & Partners

## Fabrication

- » Avantis 55 belongs to the Eurosystem range, it is complementary to other Eurosystem series and results in modularity between systems, allowing fabricators to offer maximum service without increasing stock levels.
- » The Euronut groove accommodates all standard hardware.
- » A wide range of integrated reinforced mullions and transoms, for higher stability on larger spans.
- » Three methods of connections are available. Frame and vent use the same corner connector for the Softline design.
- » Punching tools specifically designed for the Avantis series ensure fast and accurate assembly.
- » Sapa Building System offers its software SapaLogic, an open concept for automation, to fabricators who have a CNC machining center.





## Environment

- All profiles are easily cleaned.
- Aluminium does not rust, rot or tear and the shape will not deform.
- Aluminium is a “green” product: it can be recycled infinitely without quality loss.

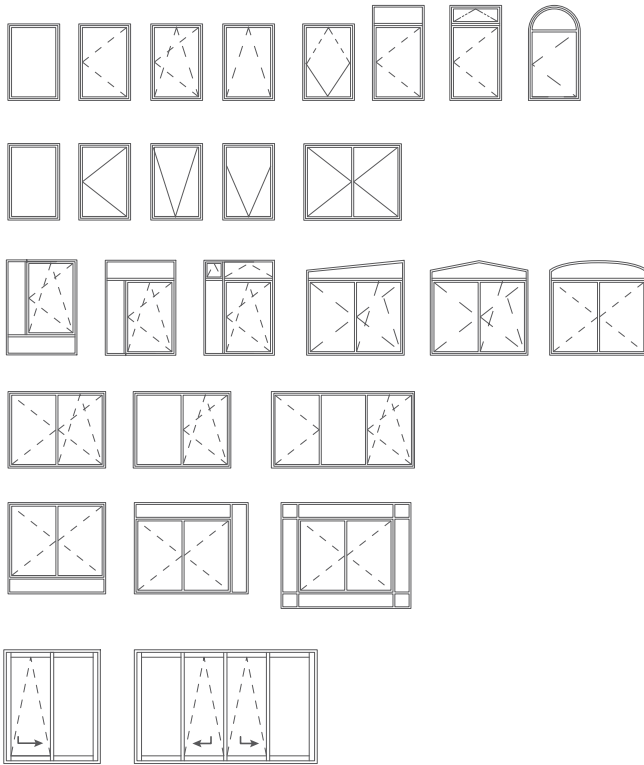
## Finishes

- Over 400 powder coated paint colors in matt, glass or satin.
- Unique wood effect, textured and textured metallic ranges are available.
- Anodised finish is also an option.
- Accessories can be supplied in corresponding colors to match the profiles.
- The polyamide thermal break allows bi-color finishes. As a result, the exterior building requirements do not infringe the interior design requests.
- Our surface finishes meet the highest standards of Qualicoat or Qualanod.



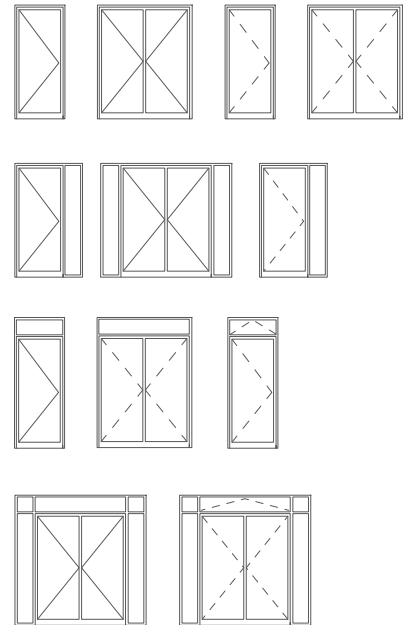
# AVANTIS 55 APPLICATIONS

## Windows



outward opening    ————    inward opening    - - - - -

## Doors



Architect: Architectes Somville-Presciutti & Partners

## Project assistance

- Sapa Building System's experienced Project Team will advise you on the best product solutions.
- We can help you with pricing, strength calculations, building connections, thermal simulations, etc.
- Specific project solutions can be developed.
- Samples, catalogues, technical specifications and digital drawings are available.

# CHARACTERISTICS

## Dimensions

Min. sightline fixed frame	50 mm
Min. sightline window with inward opening vent	89 mm
Min. sightline window with outward opening vent	99 mm
Min. sightline inward/outward opening door	129 mm
Min. sightline transom	72 mm
Profile depth frame / building depth	55 mm
Profile depth vent	65 mm
Max. window (width x height)	1400 x 2200 mm
Max. door (width x height)	1100 x 2300 mm

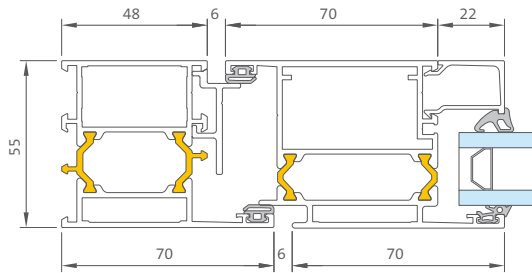
## Glazing

Rebate height	22 mm
Infill thickness fixed frame	2 - 39,5 mm
Infill thickness vent frame	2 - 50,5 mm
Glazing method	dry glazed with EPDM gaskets or silicon

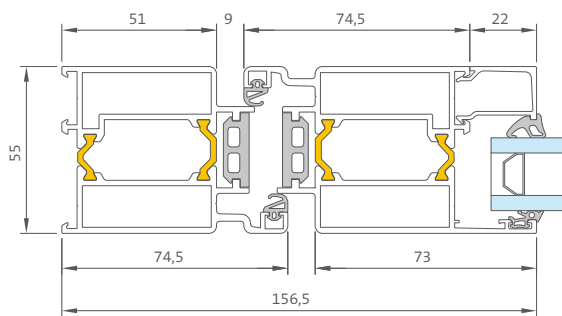
## Performances

Thermal break	20 mm omega shaped polyamides PA6.6 GF25	
Thermal insulation	$U_f = 1,0 - 2,2 \text{ W/m}^2\text{K}$	EN ISO 10077-2
Air permeability	4 - 600 Pa	EN 12207
Watertightness	E1500 - 1500 Pa	EN 12208
Windresistance, securitytest	C4 - 1600 Pa, security 2400 Pa	EN 12210
Acoustical insulation	$R_{w}(C;C_{tr}) = 40 (-2;-4) \text{ dB (44.2A/15/10)}$	EN ISO 717/1
Forced entry resistance	Class 2	ENV 1627 - 1630

# AVANTIS 55 DOORS

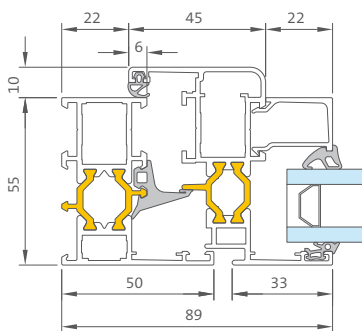


Flush door

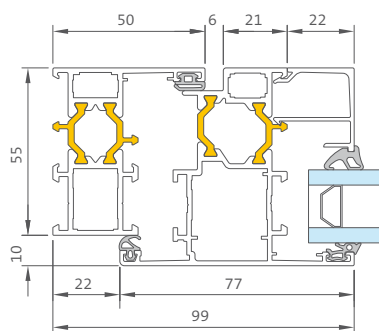


GTI door

# AVANTIS 55 WINDOWS



Inward opening window



Outward opening window

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Your local Sapa Building System fabricator

## SAPA BUILDING SYSTEM

Service, from design to installation

Sapa Building System, is one of the largest suppliers of aluminium building systems in Europe and is part of the Norwegian group Sapa. The core business is the development and distribution of aluminium profile systems. Sapa Building System aims for well-developed systems and project solutions offering a tangible added value to fabricators, architects, investors and home-owners.

**Windows, Doors, Sliding Systems, Curtain Walls, Conservatories, Balustrades, Gates, Solar Shading and BIPV**

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