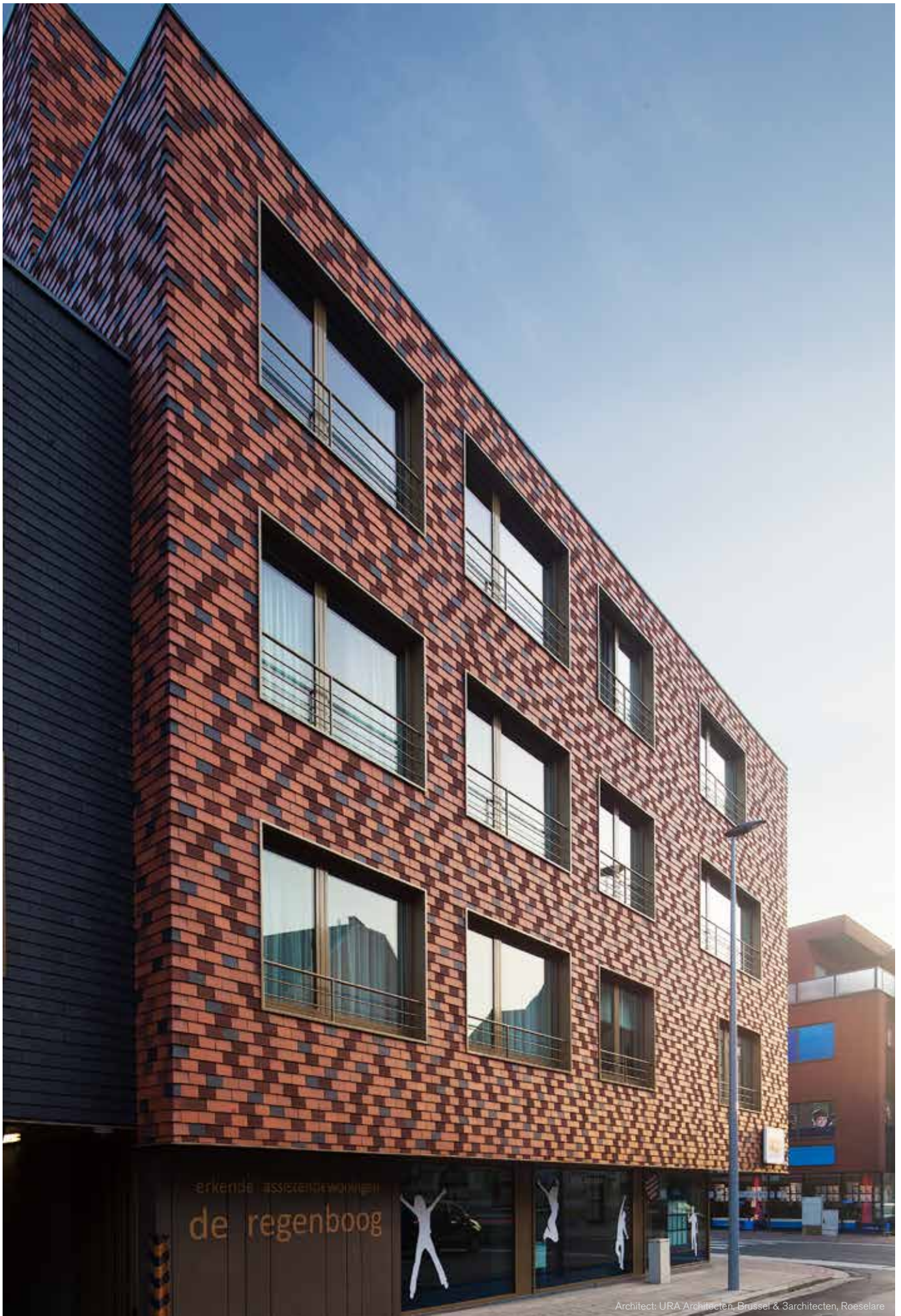


sapa:

Avantis 75

Aluminium Windows and Doors





Architect: URA Architecten, Brussel & 3architecten, Roeselare

Avantis 75

Aluminium Windows and Doors

Avantis 75 is a thermally broken three-chamber window and door system, which sets at the highest standards of thermal insulation and stability. Avantis 75 is the ideal solution when very high performance and quality are major requirements.

Advanced energy saving

- Avantis 75 profiles have 3 chambers, coupled with 40 mm tubular shaped, glass fibre reinforced polyamide strips, which drastically reduce thermal conduction. The result is that Avantis 75 achieves a very high thermal performance level and improved total insulation, leading to lower total energy consumption, a positive benefit to the environment.
- The system accommodates glazing up to 60,5 mm for frame and 70 mm for vent, the infill thickness can start from 4 mm.
- Inward opening vents have a coextrusion central gasket for enhanced thermal and acoustic performance.
- All standard shade and ventilation systems can easily be integrated in Avantis 75.

Profile combinations with value U_f (EN ISO 10077-2)

Avantis 75 Basic	1,99 W/m ² K - 2,53 W/m ² K
Avantis 75 I	1,82 W/m ² K - 2,31 W/m ² K
Avantis 75 SI	1,03 W/m ² K - 2,03 W/m ² K
Avantis 75 SHI	0,92 W/m ² K - 1,95 W/m ² K



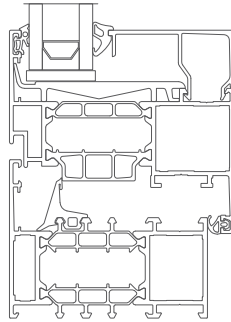
Thermal values in 4 modular levels

Avantis 75 Basic

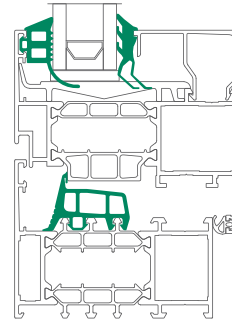
- $U_f = 1,99 \text{ W/m}^2\text{K} - 2,53 \text{ W/m}^2\text{K}$

Avantis 75 I

- $U_f = 1,82 \text{ W/m}^2\text{K} - 2,31 \text{ W/m}^2\text{K}$
- Improved thermal glazing gaskets
- Improved thermal central gasket



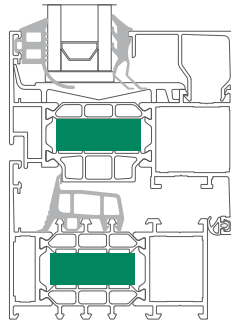
Basic: $U_f = 2,16 \text{ W/m}^2\text{K}$



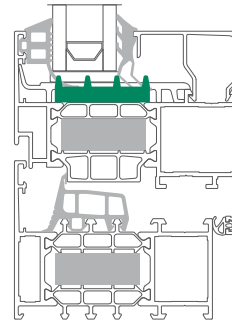
Insulated: $U_f = 1,97 \text{ W/m}^2\text{K}$

Avantis 75 SI

- $U_f = 1,03 \text{ W/m}^2\text{K} - 2,03 \text{ W/m}^2\text{K}$
- Improved thermal glazing gaskets & central gasket
- PE inserts in frame and vent profile



Super Insulated: $U_f = 1,68 \text{ W/m}^2\text{K}$



Super High Insulated: $U_f = 1,53 \text{ W/m}^2\text{K}$

Avantis 75 SHI

- $U_f = 0,92 \text{ W/m}^2\text{K} - 1,95 \text{ W/m}^2\text{K}$
- Improved thermal glazing gaskets & central gasket
- PE inserts in frame and vent profile
- PE insert thermal improved glazing unit



Avantis 75

Performance

- Avantis 75 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.

Security

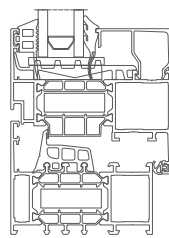
- The combination of safety glass and special hardware such as multipoint locking ensures a high resistance against forced entry. Internal tubular glazing beads prevent unclipping from the outside. Resistance class EN 1627 – 1630 class 2
- A wide range of locking and non-locking handles are integrated in to the system.



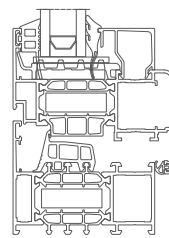


Design

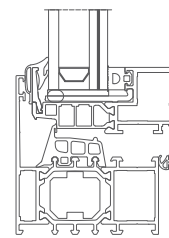
- Avantis 75 is compatible within its profile and hardware range, as well as other Sapa Building System products such as our curtain wall and conservatory systems.
- Available designs: Classic, Softline, Rustic and Hidden Vent.
- Hidden drainage to avoid the requirement for cover caps.
- Doors of existing Excellence 75 SI are fully compatible.
- 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.
- Designer glazing beads add extra finish.



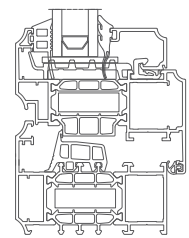
Classic



Softline



HV



Rustic



Fabrication

- Avantis 75 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 greater stability on larger spans.
- Four methods of connection are available.
- Punching tools specifically designed for the Eurosystem series, ensure fast and accurate assembly.
- Sapa Building System offers its software SapaLogic (or Orgadata, MAP), an open concept for automation, to fabricators who have a CNC machining center.



Finishes

- Over 400 powder coated paint colors in matt, gloss 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.

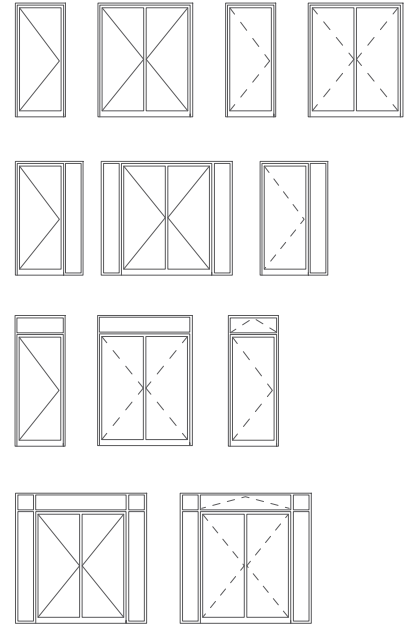
Avantis 75 applications

Windows



outwards opening ——— inwards opening - - - - -

Doors



Project support & service

- 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.

SapaLogic (or Orgadata, MAP) is a user-friendly calculation program for fast, efficient and complete calculation of windows, doors, structures, curtain walls and conservatories. SapaLogic is very much complete but modular still: the different versions can be adapted to your company's needs.

SapaThermic is detailed thermal simulation software for doors, windows, sliding systems and curtain walls. It can either be linked to SapaLogic or act as a stand-alone version.

Avantis 75 technical data

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 opening door	129 mm
Min. sightline outward opening door	129 mm
Min. sightline transom	72 mm
Profile depth frame / Building depth	75 mm
Profile depth vent	85 mm
Max. window (width x height)	1600 x 2400 mm
Max. door (width x height)	1300 x 2500 mm

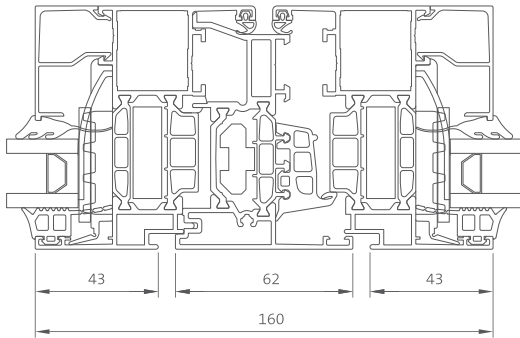
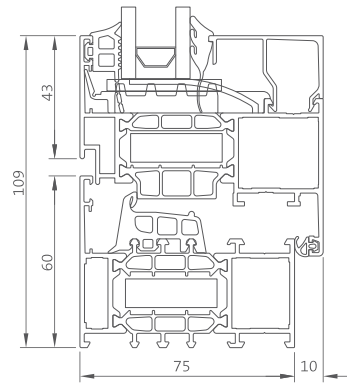
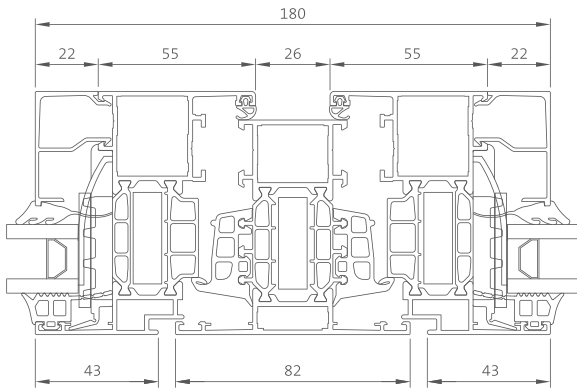
Glazing

Rebate height	22 mm
Infill thickness fixed frame	4 - 60 mm
Infill thickness vent frame	10 - 70 mm
Glazing method	dry glazed with EPDM gaskets or silicon

Performances

Thermal break	40 mm tubular shaped polyamides PA 6.6 GF25		
Thermal insulation			
	Basic:	$U_i = 1,99 - 2,53 \text{ W/m}^2\text{K}$	EN ISO 10077-2
	I:	$U_i = 1,82 - 2,31 \text{ W/m}^2\text{K}$	EN ISO 10077-2
	SI:	$U_i = 1,03 - 2,03 \text{ W/m}^2\text{K}$	EN ISO 10077-2
	SHI:	$U_i = 0,92 - 1,95 \text{ W/m}^2\text{K}$	EN ISO 10077-2
Air permeability	4	600 Pa	EN 12207
Water tightness	E1200	1200 Pa	EN 12208
Wind resistance, security test	C5	2000 Pa, security 3000 Pa	EN 12210
Acoustic insulation	$R_w (C;Ctr) = 50 (-2;-4) \text{ dB} (88.2/15/66.2)$		EN ISO 717/1
Forced entry resistance	class 2		EN 1627 – 1630

Avantis 75 drawings



sapa:

Sapa offers architects, specifiers, metal fabricators, investors and home-owners worldwide an extensive range of innovative, reliable and aesthetically pleasing aluminium systems for curtain walling, doors, windows and building integrated photovoltaics. Sapa is one of the largest suppliers of aluminium building systems in Europe and is part of the global aluminium company Hydro.

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

Sapa Building Systems nv

Industrielaan 17,
BE-8810 Lichtervelde
T +32 (0)51 72 96 66
F +32 (0)51 72 96 89
E info.be@sapagroup.com
www.sapabuildingsystem.com