

sapa:

Avantis 95

Passive windows





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Avantis 95

Aluminium passive windows.

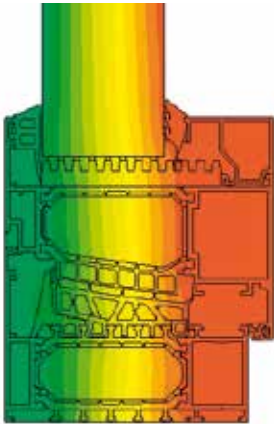
Avantis 95 combines the highest thermal insulation levels with unparalleled weather performances, which makes it the perfect aluminium profile system for low energy, passive and sustainable architecture.

| | |
|----------------------------------|----------------------------------------------|
| Outstanding thermal performance: | $U_w \leq 0,8 \text{ W/m}^2\text{K}$ |
| Very high water tightness: | 1950 Pa |
| Air permeability: | class 4 - 600 Pa |
| Wind resistance: | class C5 |
| Extreme low air infiltration: | 0,18 m ³ /hm ² (50 Pa) |



Avantis 95

Intelligent functionality



- Maximum thermal insulation: Passive House Suitable Component according to Passive House Institute and IFT with certificate.
- Avantis 95 is a robust system: weight vents up to 170 kg
- Only 95 mm frame depth which is extremely low for a passive window.
- Large size windows are possible: vents up to 2400 mm height and 1600 mm wide
- Triple glazing up to 62 mm
- Multifunctional in connection details and use of components: plenty of possibilities with limited number of components
- Wide range of solutions and configurations:
 - › turn, turn and tilt, tilt and turn, bottom hung and fixed windows.
 - › combination windows



The Passive House Institute (PHI) is an independent research center that has played an especial crucial role in the development of the passive House concept- the World only performance-based energy standard in construction. The Passivhaus-Institut is responsible for promoting and maintaining the Passive House - Passivhaus building program.



ift Rosenheim is an internationally acting scientific service provider for manufacturers of windows, curtain walls, glass, pedestrian, industrial and commercial doors and gates and all accessories. ift Rosenheim performs tests for the fitness for use of building components and various materials depending on their field of application.

Advanced energy saving for a sustainable environment



- Avantis 95 High weather performance system:
 - › Water tightness 1950 Pa
 - › WWA classification: C5, E1950, 4 (EN12210 /12208 /12207)
 - › extreme low air infiltration of 0,18m³/hm² at a pressure of 50 Pa (blowerdoor test) where the highest European test claims a value lower than 1,89 m³/hm² so a 10 times better result !
- Thermal value: $U_w \leq 0,8 \text{ W/m}^2\text{K}$ (1,23 m x 1,48 m, triple glass Ug 0.7, TBT)
- Mechanical strength: class 4, operating forces: class 1 (EN13155)
- Avantis 95 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.

Avantis 95

“Avantis 95 is as easy to fabricate as any normal aluminium window system. No special accessories, tools or techniques are required.”

- The Avantis 95 system is based on the classical window design principle and doesn't require any additional fabrication steps. It can be constructed as a normal window, resulting in smooth, fast and easy implementation in your production.
- Fast and traditional on-site installation
- Limited number of profiles and accessories but endless combinations
- Crimp, pin or eccentric cleats
- Standard or hidden hardware
- Several components used out of the Avantis range
- Modular punch tool system: dedicated punching tools for all machining
- CNC programming available in Sapalogic

Enhanced 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.
- Anti-burglary: class 2 (certification ongoing)
- A wide range of locking and non-locking handles are integrated in to the system.

Attractive design

- The slim sightline and modern look make the Avantis 95 a particular attractive system
- When it comes to design, there are no limits the way architectural demands can be met
- Optimum proportion between stability and sightline
- Hidden drainage or coated drainage caps possible
- 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.

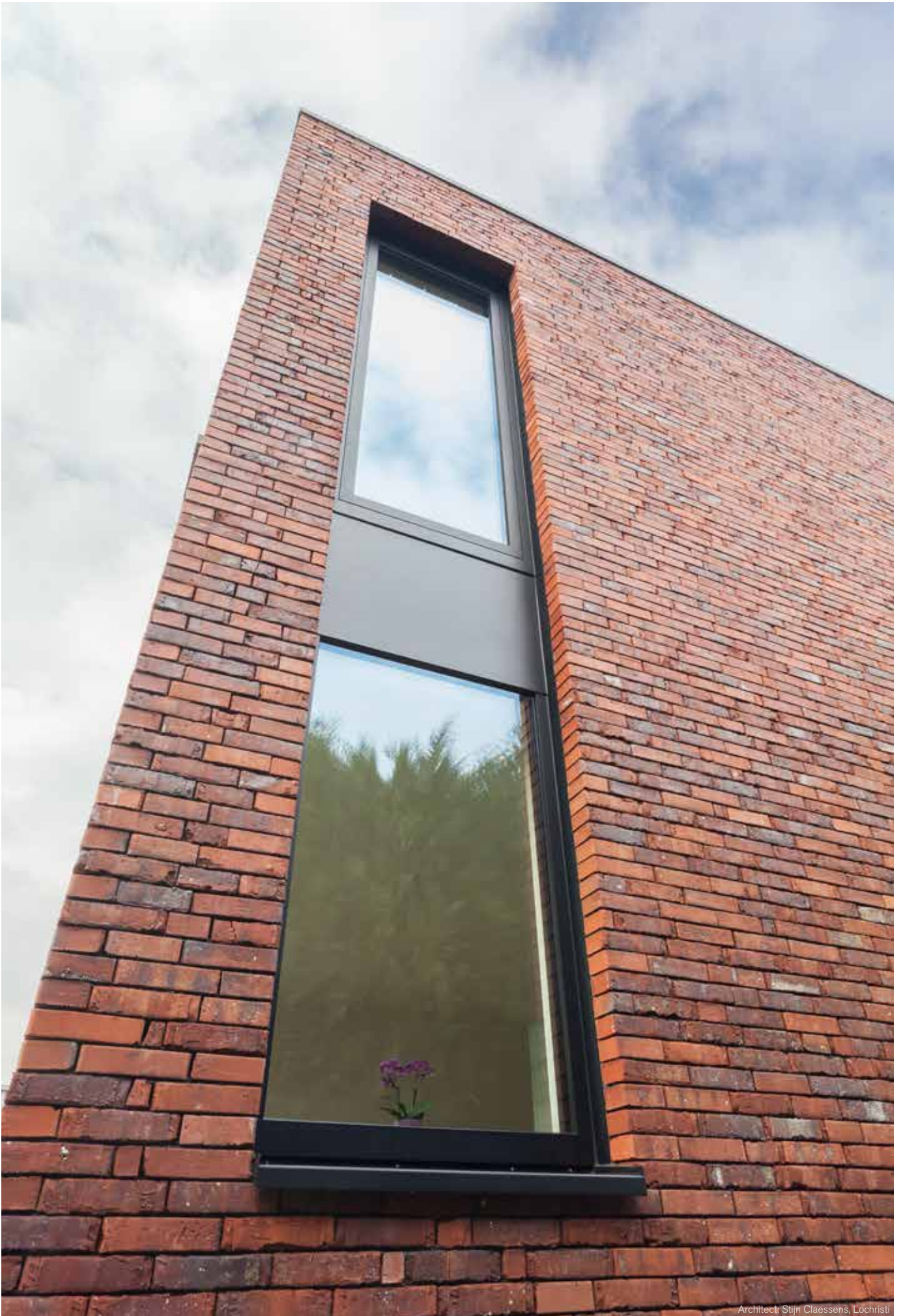


Project support & service

- 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.

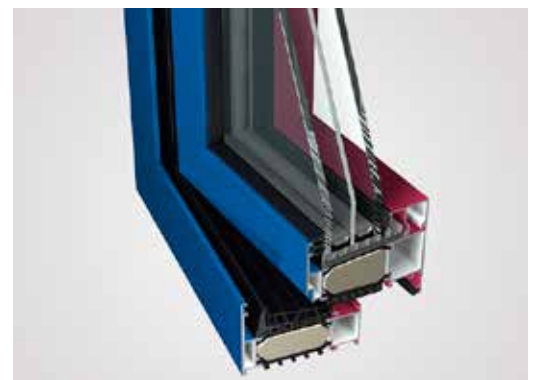


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Finishes

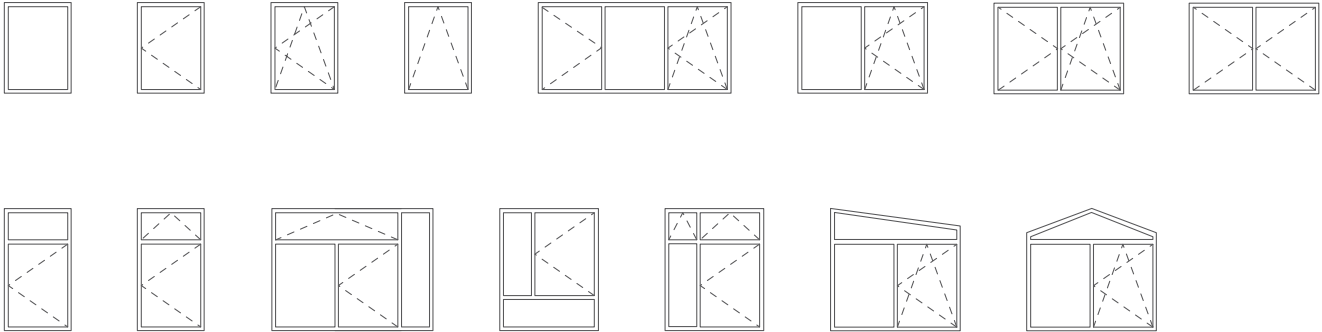
- Over 400 powder coated paint colors in matt, gloss or satin.
- Unique wood effect, textured and textured metallic ranges are available.
- Anodised finish is also an option.
- Accessories can be supplied in corresponding colors to match the profiles.
- Our surface finishes meet the highest standards of Qualicoat or Qualanod.

“The polyamide thermal break allows bi-colour finishes. As a result, the exterior building requirements do not infringe interior design requests.”

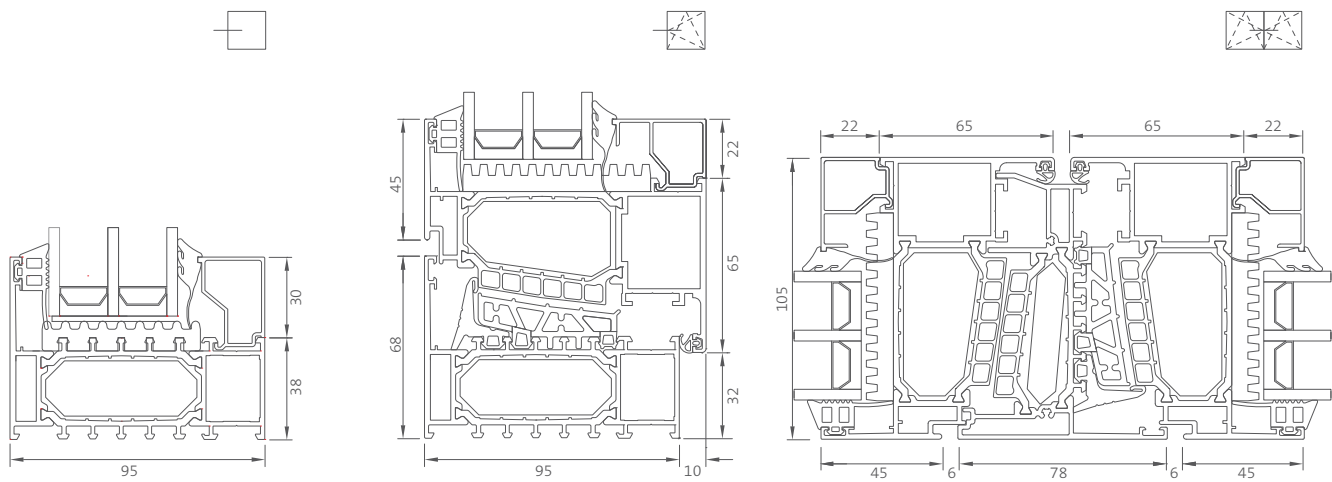


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Configurations Avantis 95 windows



Typical sections





Dimensions

| | |
|-----------------------------------------------|----------------|
| Min sightline fixed frame | 68 mm |
| Min sightline window with inward opening vent | 119 mm |
| Min sightline transom | 98 mm |
| Profile depth frame / building depth | 95 mm |
| Profile depth vent | 105 mm |
| Max window dimensions | 1600 x 2400 mm |

Glazing

| | |
|----------------------------|-----------------------------------------|
| Rebate height vent / frame | 22 / 30 mm |
| Infill thickness | 36 - 62 mm |
| Glazing method | dry glazed with EPDM gaskets or silicon |



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

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