

B  AVISTA

FIBRE  
GLASS  
WINDOWS

# Fibreglass Windows – Durability and Sustainability

think future, think BOAVISTA!

Boavista Windows is the first European envelope systems brand focused on producing Fibreglass building solutions with great design.

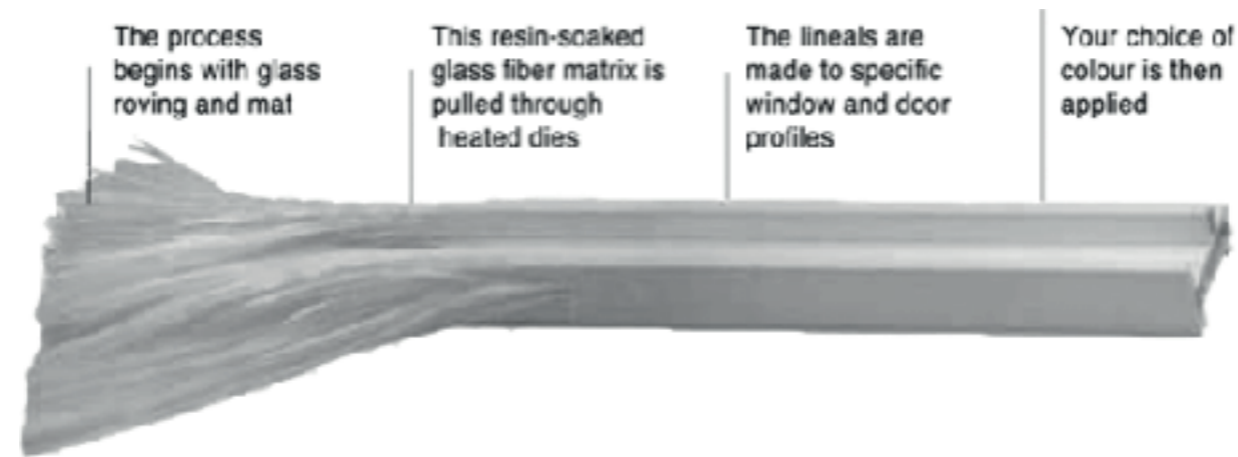




what is fibreglass?



# fibreglass | what is it?

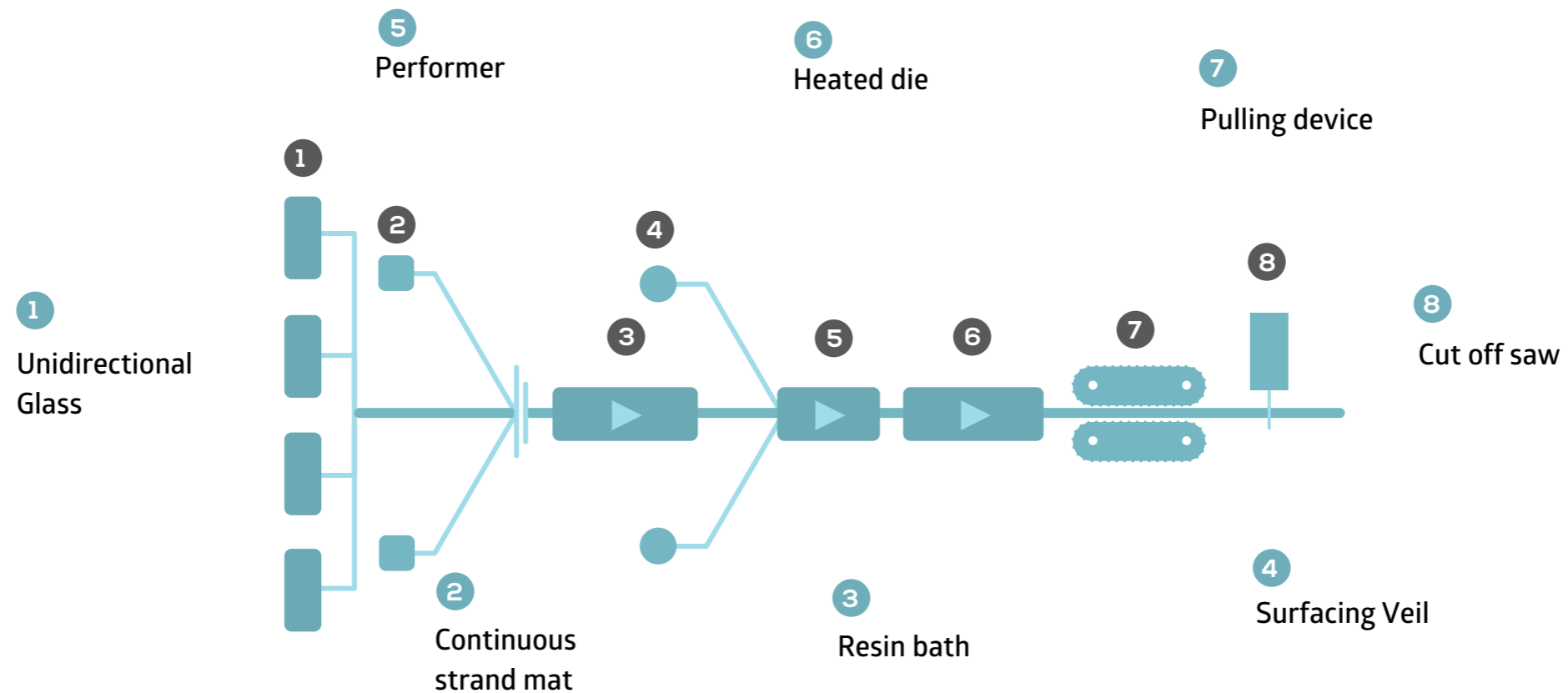


Fibreglass, the common name for GRP (Glass Reinforced Polymers), is a composite material that combines the best properties of each of its individual components.

Well known for its versatility, fibreglass presents a wide application range, from boats to wind turbines.

In the construction industry, fibreglass is used widely when the situation demands a stable, durable and resistant material.

# fibreglass | pultrusion

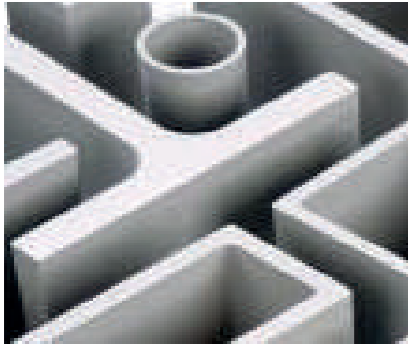


The profiles used by BOAVISTA for its windows and doors are made using a technology called pultrusion.

This technology is a fully automated and continuous process that produces profiles with constant cross section.

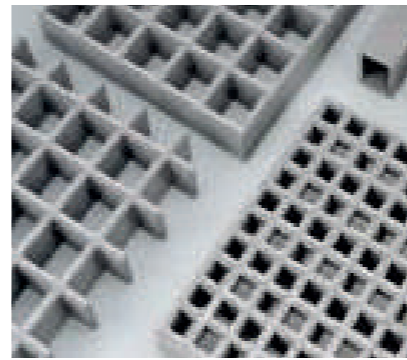
It is also highly efficient for it only consumes 0,07 kW to produce a linear meter of profile (approx. 1kg).

# fibreglass | examples of use



Structural Profiles

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Decks

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Bridge, Kolding Denmark

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Water Treatment Center

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Dessalination Central, Dubai

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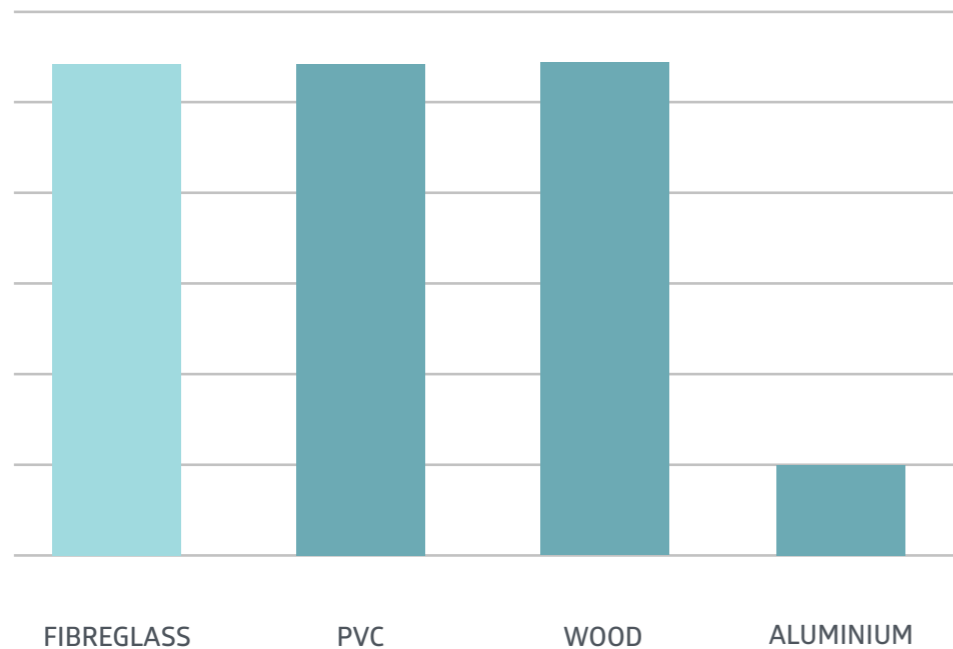


Swimming pool

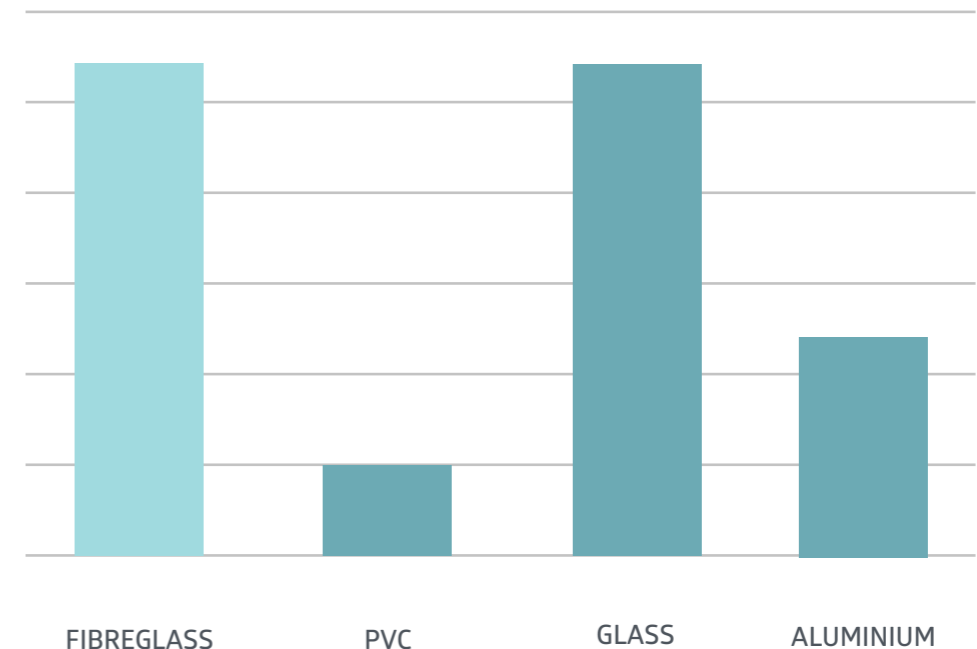
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# fibreglass | pultruded profiles

## Thermal Resistance



## Dimensional Stability

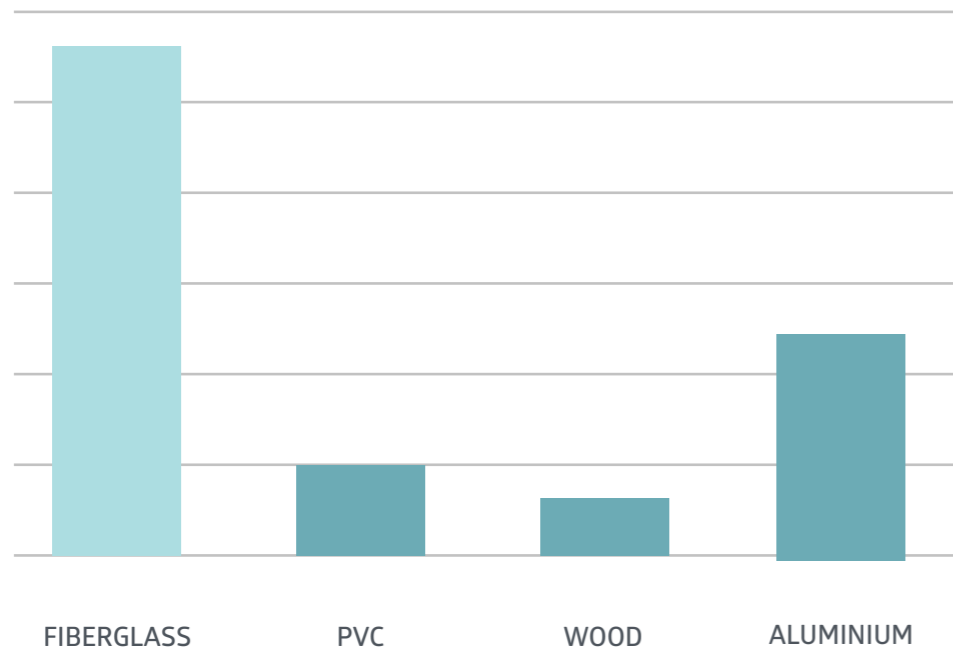


- ✓ low thermal conductivity
- ✓ low electric and acoustic conductivity
- ✓ high dimensional stability very similar to glass
- ✓ not fragile at low temperatures

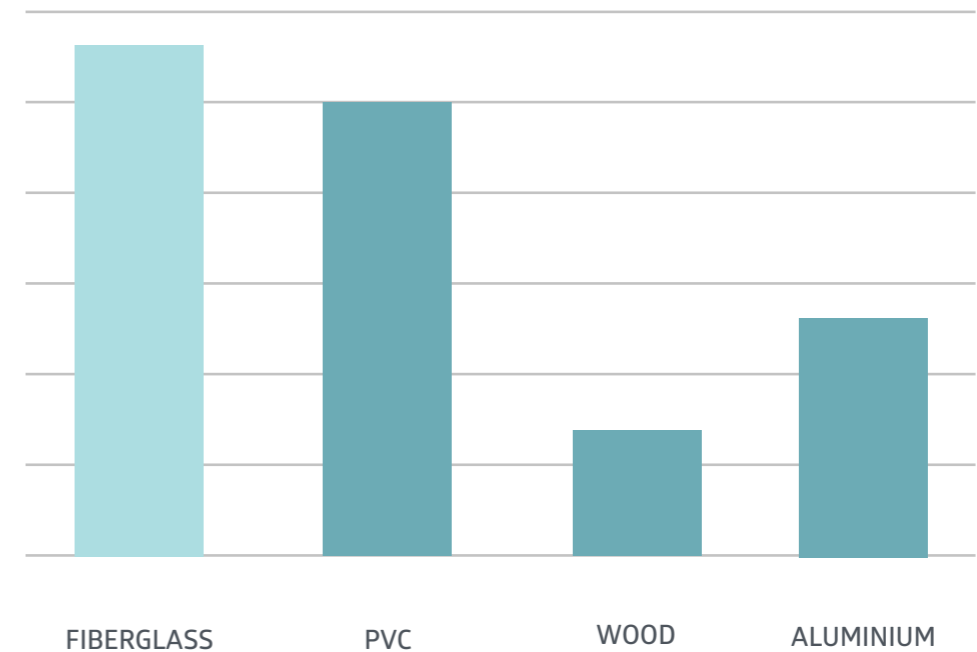


# fibreglass | pultruded profiles

## Resistance/ Weight Ratio



## Resistance to Corrosion/ Rot



- ✓ Excellent resistance/ weight ratio
- ✓ excellent resistance to rot
- ✓ excellent resistance to corrosion
- ✓ excellent mechanical properties

## Boavista Systems

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- BWSL 45 – Sliding
  - BWS 35 – Sash
  - BWTT 60 – Tilt & Turn
  - BWDS 35 – Double Sash
  - BWO 60 – Casement Windows
-

# BWSL 45 Sliding



# boavista Systems

Boavista Windows Sliding 45mm sash width

## BWSL 45 Sliding

- Based on a modular system that allows multiple configurations;
- Sashes up to 250 Kg (ex: 2,2 x 2,85 m);
- Low frame compatible to flush installations;
- Versatile lock upgradable to multi-point locking;

Air Permeability



Wind Load Resistance



Watertightness



Thermal Performance

from 1,09 W/(m<sup>2</sup>.°C)

Acoustic Performance

26 (-1;-2) dB





## BWSL 45 Sliding Door

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Project: Residential project in Oxfordshire, England

System: BWSLD45

Finish: RAL 9005 Textured Black



## BWSL 45 Sliding Door

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Project: Residential project in Southampton, England

System: Sliding

Finish: RAL 7021 – Textured Grey





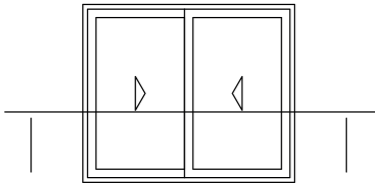
## BWSL 45 Sliding Window

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Project: Residential project in Porto, Portugal

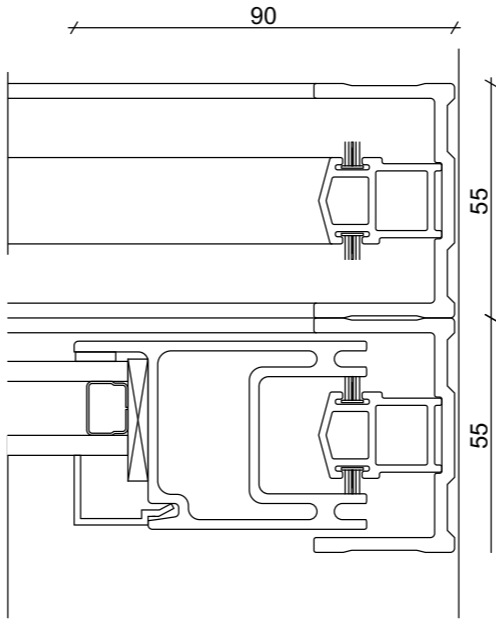
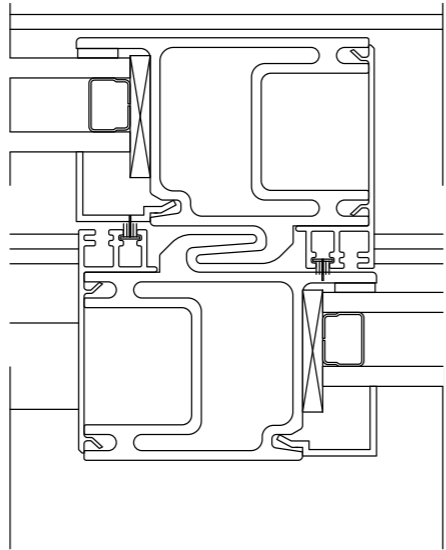
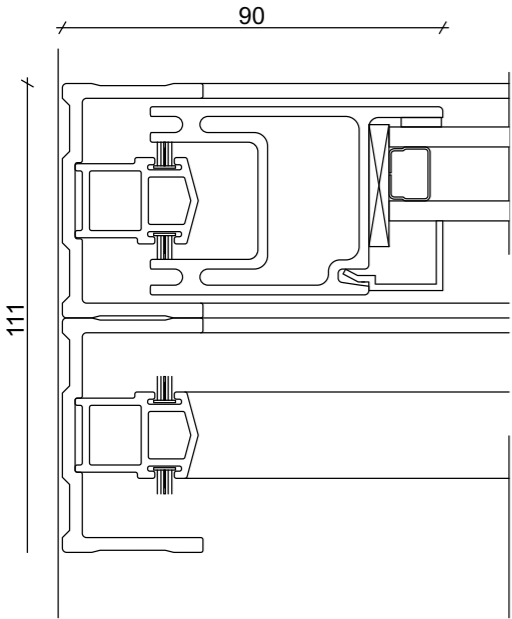
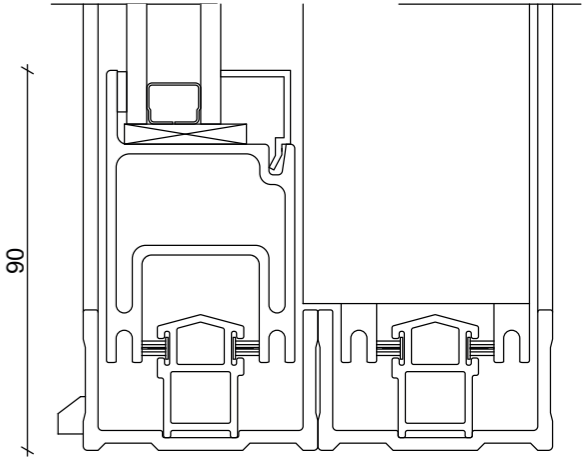
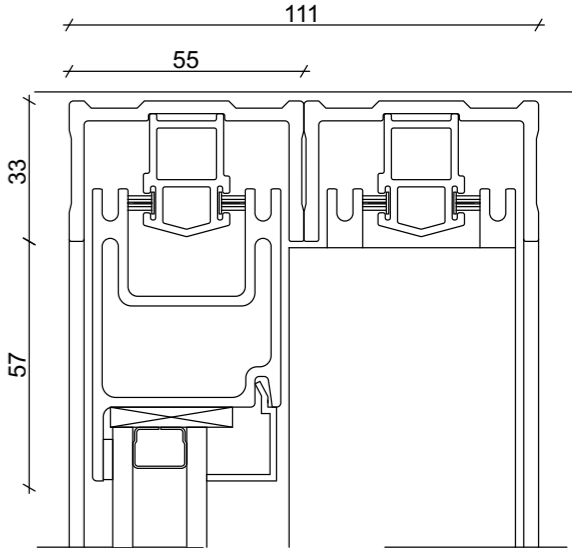
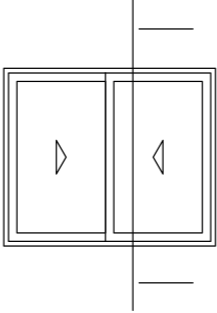
System: Sliding

Finish: RAL 9016 – Matt White



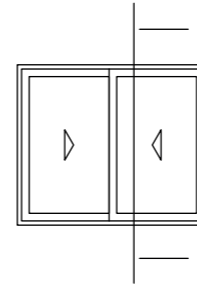
Horizontal Section

Vertical Section

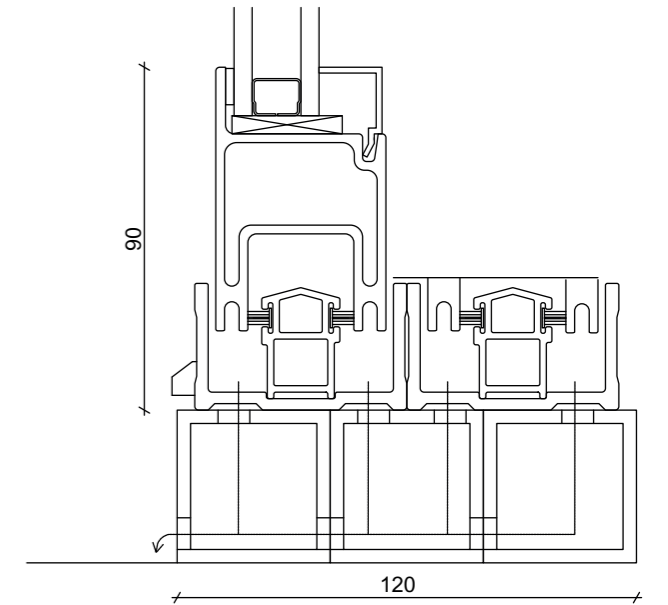
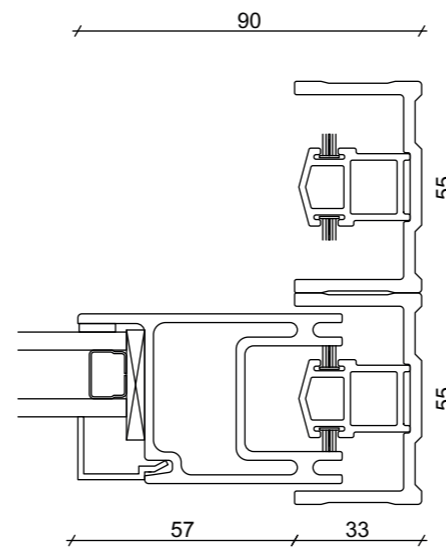
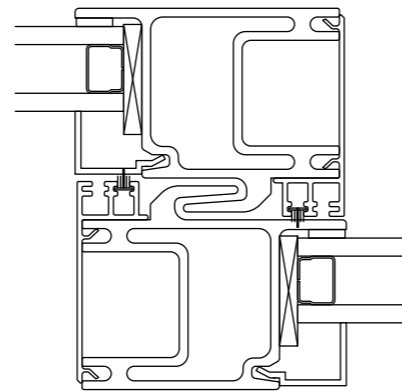
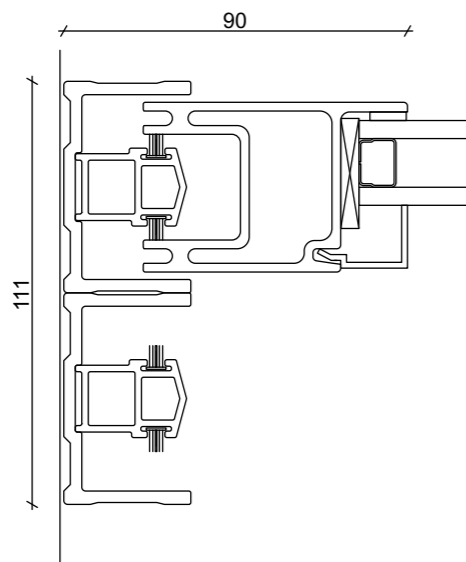
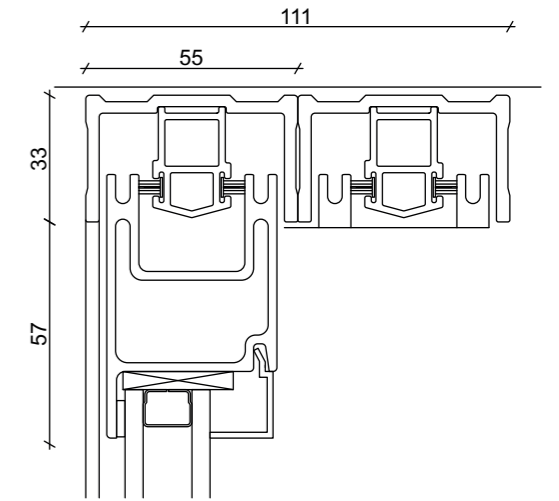
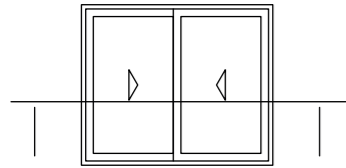


# BWSLD45 - 2R MM

Vertical Section



Horizontal Section





**BWS 35**  
**Sash**

# boavista systems

Boavista Windows Sash 35mm sash width

## BWS 35 Sash

- Window with excellent ITT results, among the best of its class;
- Fixed upper sash and operable lower sash;
- Twin spring system makes it easy to use;
- Operable sash can be tilted for exterior cleaning;

Air Permeability



Wind Load Resistance



Watertightness



Thermal Performance

from 1,23 W / (m<sup>2</sup>·°C)

Acoustic Performance

29 (-1;-2) dB





## BWS 35 Sash Window

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Project: Residential project in Ontario, Canada

System: BWS35

Finish: RAL 9016 – Matt black



## BWS 35 Sash Window

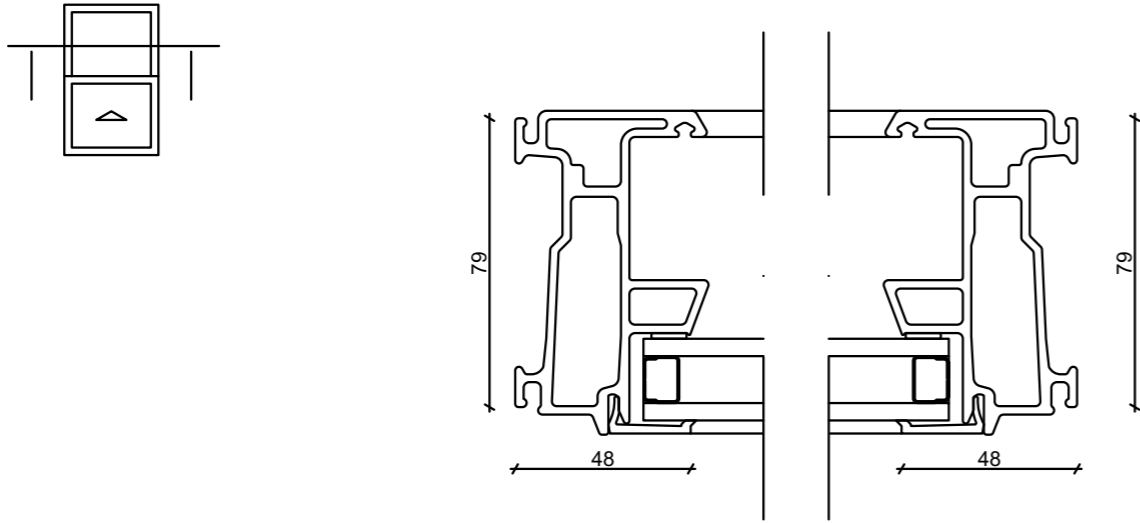
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Project: Refurbishment project in Faro, Portugal

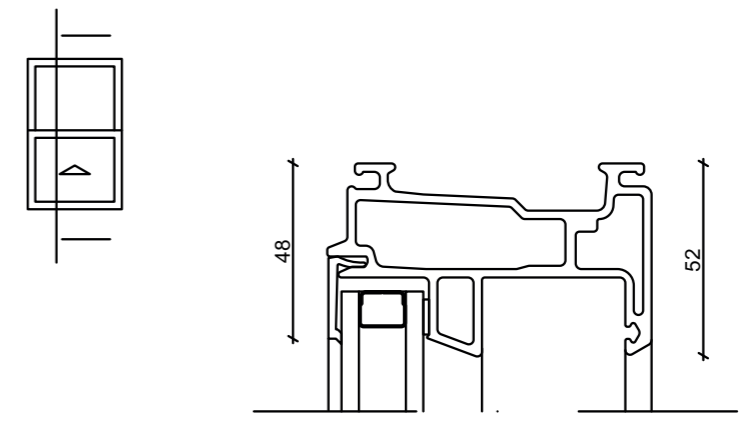
System: BWS35

Finish: RAL 9016 - Matt White

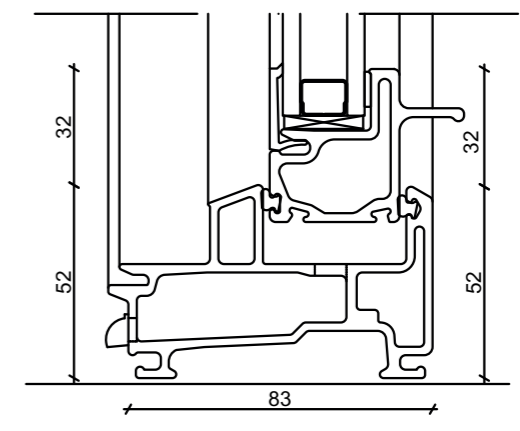
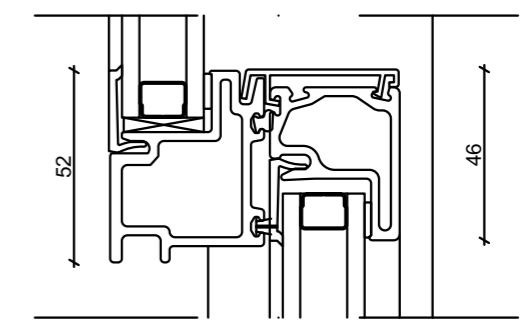
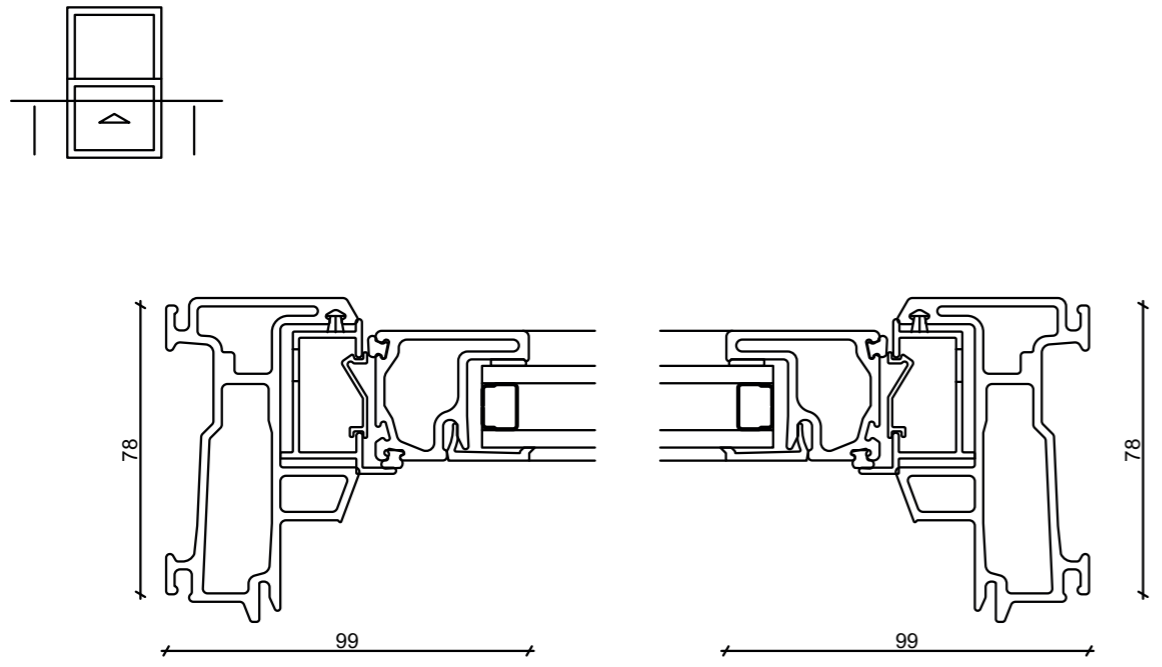
Horizontal Section



Vertical Section



Horizontal Section





**BWTT 60**  
tilt & turn

# boavista systems

Boavista Windows tilt & turn 60mm sash width



## BWTT 60 - tilt & turn

- Most versatile window system with multiple configurations and operating modes;
- Compatible with other BOAVISTA series;
- Standard hidden hinge system: perfect aesthetic and optimum functionality;

Air Permeability



Wind Load Resistance



Watertightness



Thermal Performance

from 0,74 W / (m<sup>2</sup>.°C)

Acoustic Performance

39 (-2;-4) dB





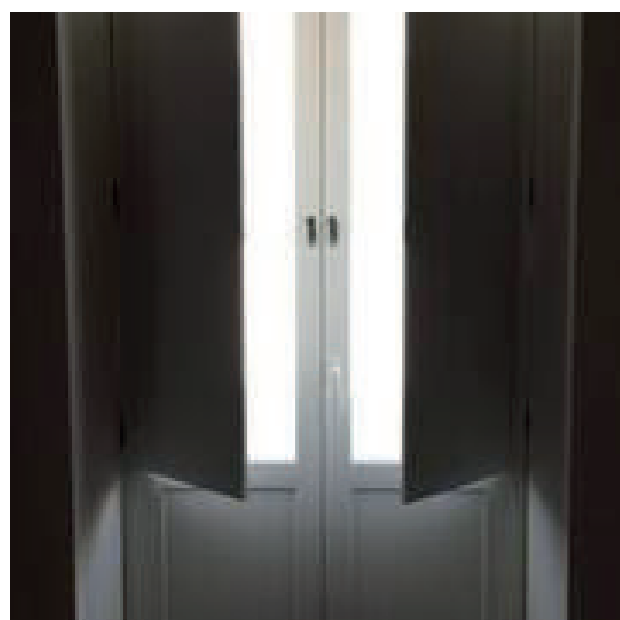
## **BWTT 60** - tilt & turn Window

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**Project:** Residential project in Porto, Portugal

**System:** BWTT60 + BWSL45– Tilt & Turn and Sliding

**Finish:** RAL 9016 – Matt White



## BWTT 60 - tilt & turn Window

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Project: Refurbishment project in Faro, Portugal

System: BWTT60

Finish: RAL 9016 - Matt White



## BWTT 60 - tilt & turn Window

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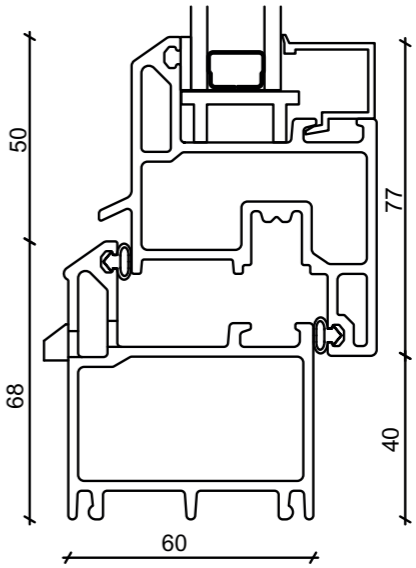
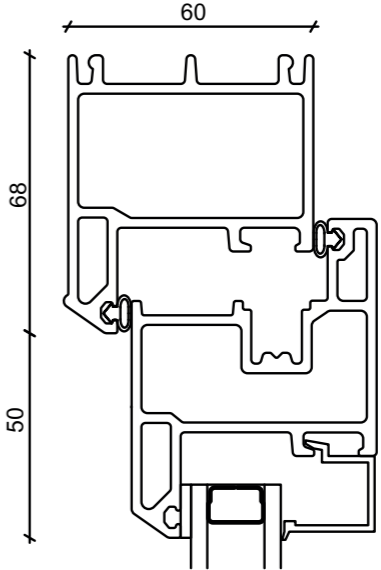
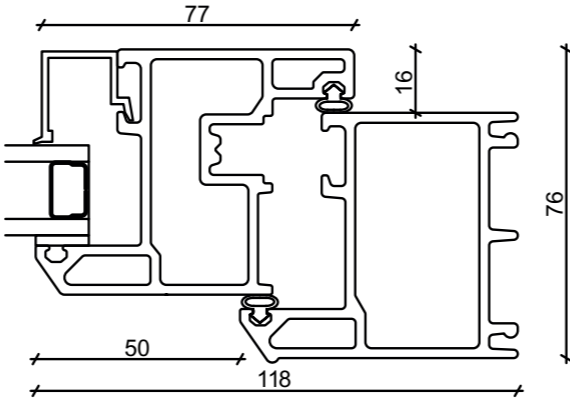
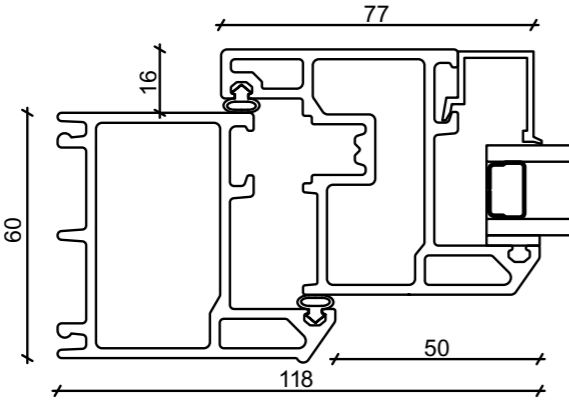
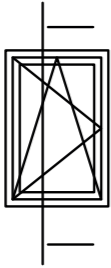
Project: Residential project in Porto, Portugal

System: BWTT60 – Fixed and Tilt & Turn

Finish: RAL 8014 – Matt Brown



Horizontal Section



**BWDS 35**  
**Double Sash Window**

# boavista systems

Boavista Windows Double Sash 35mm sash width



## BWDS 35 - Double Sash Window

- Both panels slide;
- The bottom panel can be used as a balustrade;
- Great minimal looks;

Air Permeability



Wind Load Resistance



Watertightness

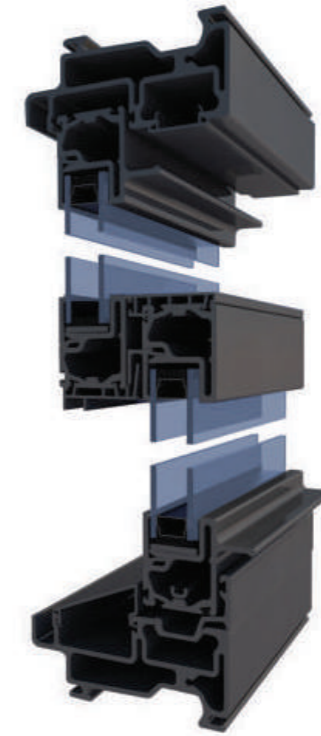


Thermal Performance

from 1,23 W/(m<sup>2</sup>.°C)

Acoustic Performance

29 (-1;-2) dB





## BWDS 35 - Double Sash Window

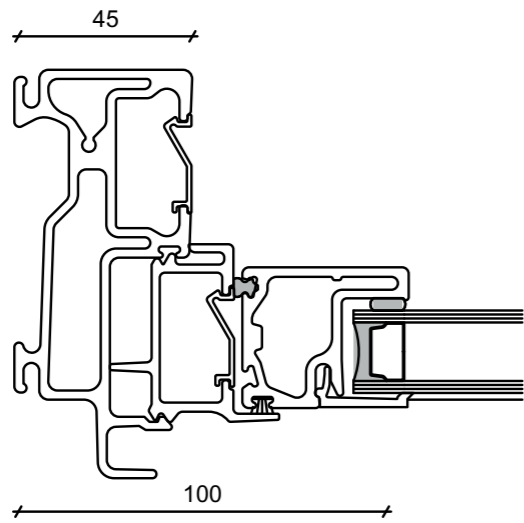
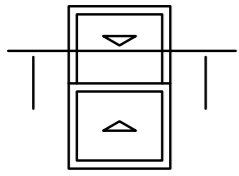
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Project: Commercial project in Oxfordshire, England

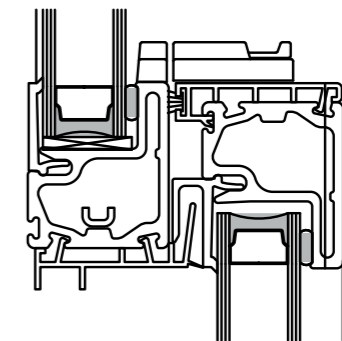
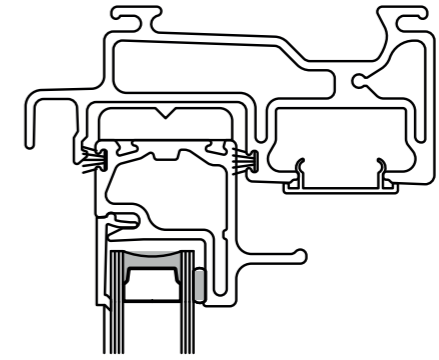
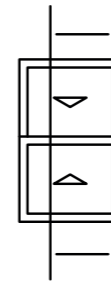
System: BWDS35 – Double Sash Dimensions: 100mm x 2000mm;

Finish: RAL 7021 – Textured grey

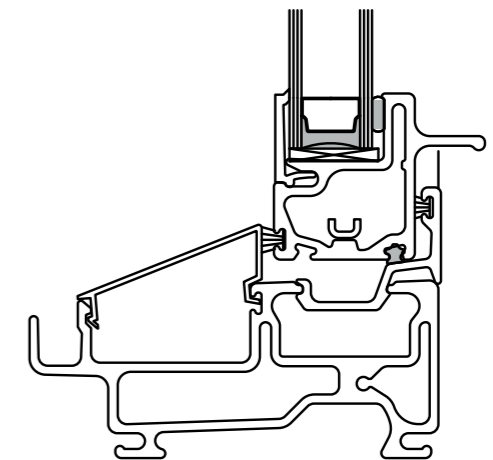
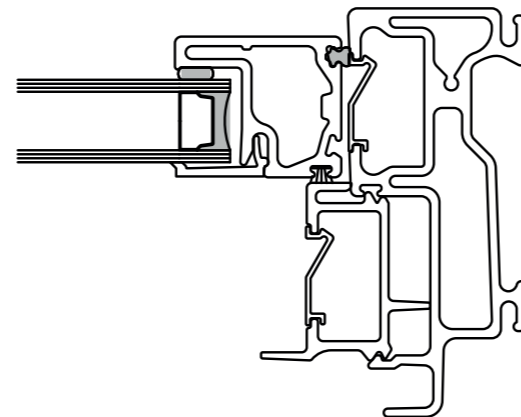
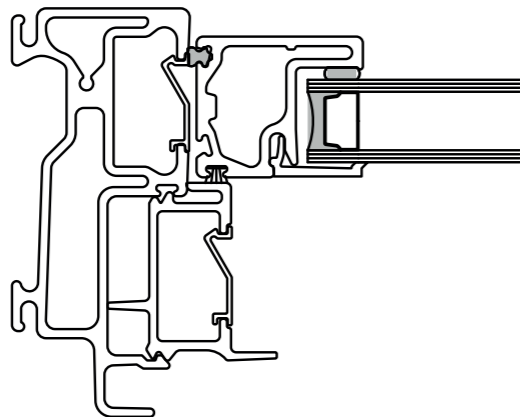
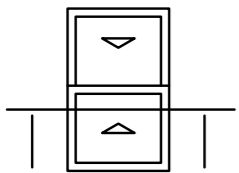
Horizontal Section



Vertical Section



Horizontal Section





**BWO 60**  
**Outward Opening**

# boavista systems

Boavista Windows Outward 60mm sash width



## BWO 60 - Outward Opening Window

- With slim frame, for a minimal look;
- Outward side hung opening or top hung projecting window.

Air Permeability



Wind Load Resistance



Watertightness



Thermal Performance

from 1,20 W/(m<sup>2</sup>.°C)

Acoustic Performance

37 (-1;-4) dB





## BWO 60 - Outward Opening Window

Project: Residential Project, Ontario, Canada

System: BWO60

Finish: RAL 9016 – Matt black



## BWO 60 - Outward Opening Window

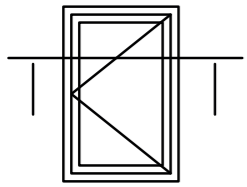
Project: Residential Project, Ontario, Canada

System: BWO60

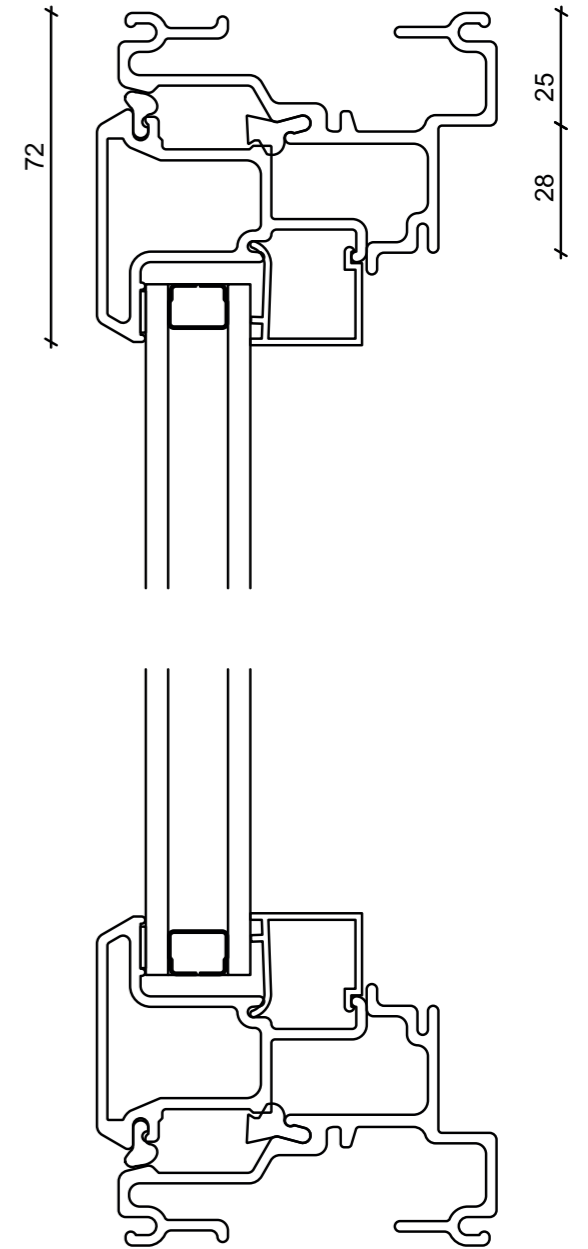
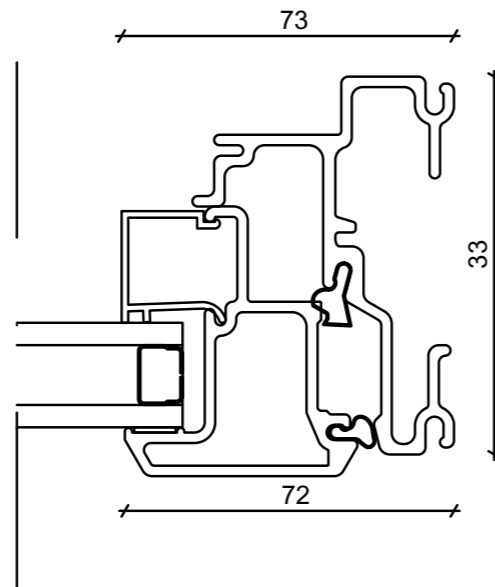
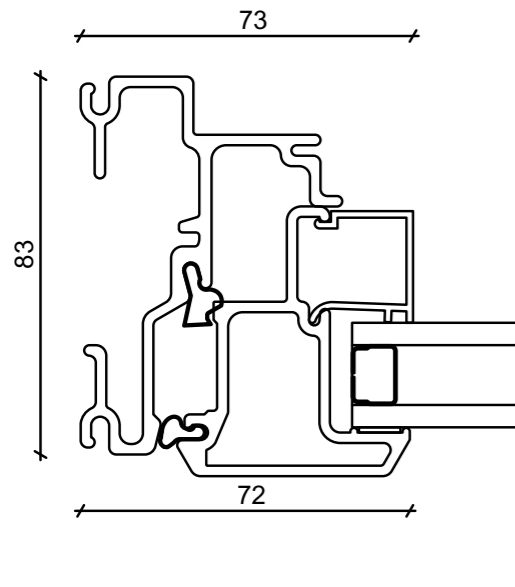
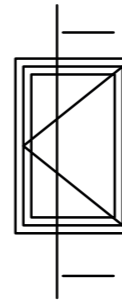
Finish: RAL 9016 – Matt black

**BWO60 - SO**

Horizontal Section



Vertical Section







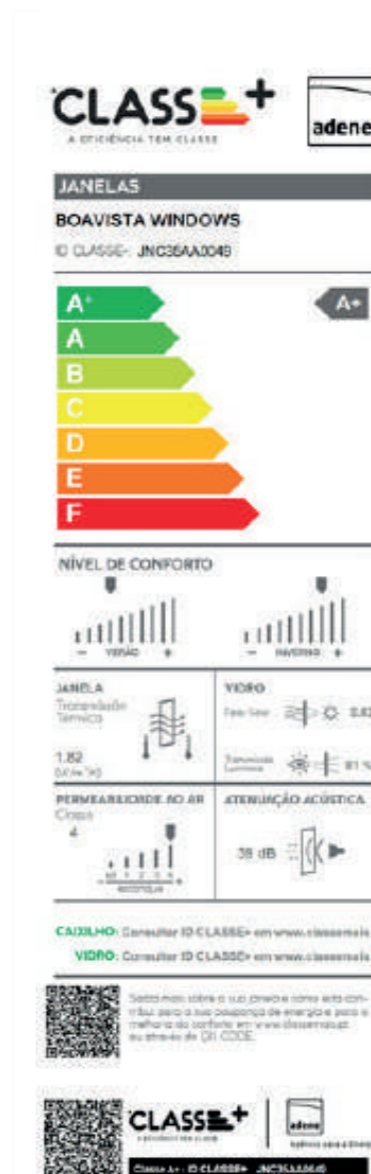
# Energy Rating for windows

## How does it work?

The Window Energy Rating system follows a similar pattern to appliance energy labels, with windows being rated between A or A+ (the best) and G (the worst).

It can be used by consumers and specifiers to compare in a simple and quick way the energy efficiency of a fenestration.

Windows can account for over 25% of a heating bill and a difference in energy saving between an A or B-rated window could be an additional 6.5% on your energy bills.



# Energy Rating for windows

## Certifications

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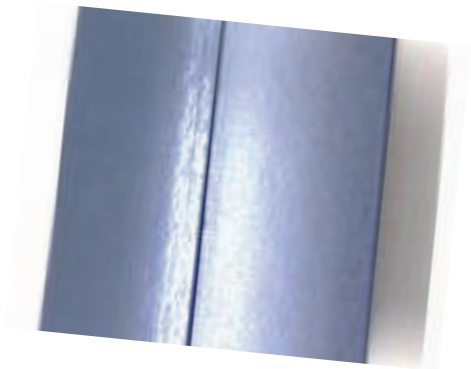


# Finishes

## Available Finishes

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All profiles can be painted matt or  
texturized to any RAL colour, always  
following Qualicoat standards.





The choices we make define  
who we are. Choose smarter,  
think ahead!  
Choose BOAVISTA



Boavista Windows  
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tel/fax +351 222 080 777  
[hello@fwdcomposites.com](mailto:hello@fwdcomposites.com)