



CIVRO WINDOWS, DOORS AND FAÇADES SYSTEM

PW80 WINDOW SYSTEM

THE NEXT EVOLUTION IN SLENDER FRAME WINDOW DESIGN



The Enfini Pro PW80IN is CIVRO's groundbreaking slender-frame interior opening window system, designed to redefine modern architectural aesthetics. Combining minimalist elegance with cutting-edge engineering, the PW80IN introduces a new era of sleek, high-performance window solutions that elevate the art of design.

At the core of the PW80IN is its slender profile. With an operable vent face width of just 54mm and a total vent and frame face width of only 67mm, this system achieves an extraordinary balance between refined aesthetics and structural integrity. Even the reinforced mullion maintains a discreet 95mm profile, allowing for expansive, uninterrupted views that flood interiors with natural light while maintaining a solid, reliable structure.

The system's innovative design seamlessly integrates frame and mullion elements, ensuring stability without compromising its slender appearance. The result is a window system that is as robust as it is beautiful. Safety has also been carefully considered; with a 20mm glass rebate depth, the PW80IN accommodates 15mm glass built-in depth + 5mm glass blocks, ensuring secure installation and enhanced protection, even within its slender design.

Modularity and flexibility are key features of the PW80IN. This system offers fully integrated options for glass balustrades and insect screens, which can be easily detached or combined based on your specific needs. The result is a clean, minimalist facade without the bulky protrusions of traditional systems. Additionally, the exterior glazing bead is made from a specially engineered nylon material with aluminum-grade rigidity, resisting heat and preventing deformation over time.

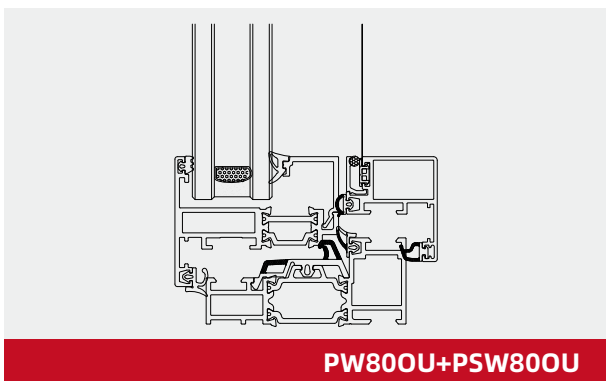
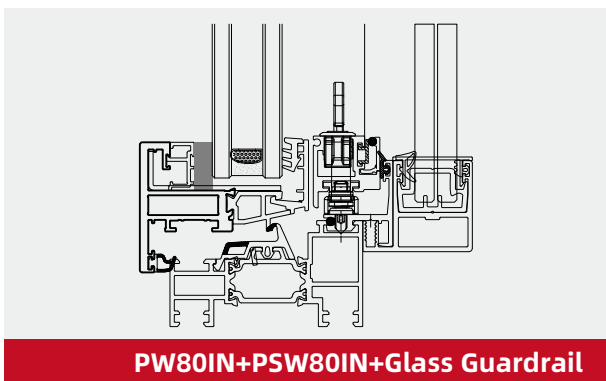
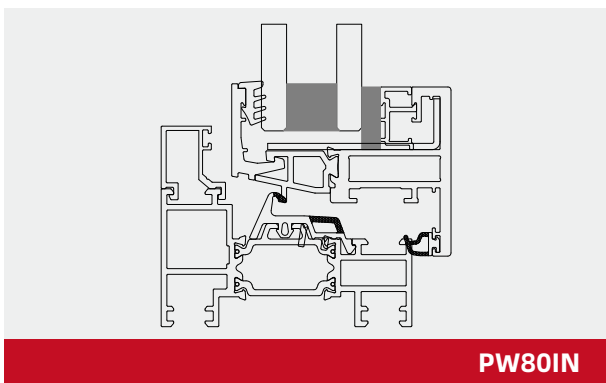
Energy efficiency is another standout feature. With an isothermal cavity design and co-extruded central gaskets, the PW80IN delivers superior thermal insulation, offering excellent U-values that support sustainable building practices.

More than just a functional solution, the PW80IN transforms architectural facades. Its slim profiles and refined design make it a versatile choice for projects ranging from contemporary homes to sleek commercial spaces. By offering unobstructed views and a minimalist aesthetic, it adds a timeless sophistication to any building, complementing and enhancing the overall design vision.

The Enfini Pro PW80IN embodies the next evolution in window design, where aesthetics and performance converge. With its cutting-edge technology and commitment to design excellence, this system empowers architects and designers to push boundaries, creating spaces that are both beautiful and functional. Let the PW80IN redefine what's possible in your next project.

PLANNING HIGHLIGHTS

- Modular design: it can be designed for inward or outward opening. The modular screen and built-in glass guardrail design concept allows for free customization to meet the demands of various scenarios. The PW80OU dedicated screen module is fully integrated into the window frame system, delivering a unified narrow-frame appearance from an outdoor perspective
- Slender sightlines: offers ultra-slim sash and frame visible areas, enhancing the window's minimalist appeal
- Low U-Value of 1.7W/(m²K): meets increasingly stringent insulation requirements, ensuring superior thermal efficiency
- Enhanced structural strength: the vent features a reinforced thickened wall structure (3.5mm), providing exceptional wind resistance and bending strength for the entire window
- Advanced thermal insulation: continuation of isothermal design for thermal breaks, coupled with full-circle co-extruded central gasket, delivering superior thermal insulation performance
- 53mm glazing rebate width: accommodates triple-glazed double-insulated configurations, significantly boosting overall window performance
- Seamless outdoor hidden vent design: ensures a unified aesthetic in both open and closed states, resulting in a cleaner and more elegant window profile
- Performance without compromise: maintains sleek aesthetics while delivering uncompromised performance and configurations



TECHNICAL PERFORMANCE

PROFILE TECHNOLOGY

- The vent profile face width is only 54mm, and the combined sash + frame profile face width is just 67mm, aligning with the slender frames design concept and showcasing a sleek, modern minimalist aesthetic
- Euro standard 6060 T6 profiles with main wall thickness of 1.8mm. According to actual strength requirements, some thicknesses have been increased to 3.5mm
- Vertical isothermal cavity design offers improved frame thermal insulation
- Glazing rebate depth as deep as 20mm, completely subjects to national standards
- Characteristic corner and butt joint connection technology for high rigidity of frames and sashes
- The design of the mullion has been reinforced to leverage the high yield strength of the 6060-T6 material process. This not only enhances the bending strength of the mullion but also maintains the material's excellent toughness
- Exclusive MED (Matte Electro Deposition) coating gives the finest and smoothest tactile impression as well as tough weather resistance

THERMAL INSULATION

- PA66GF25 thermal insulating strip: The CG-type 32mm insulation strip, combined with a custom-designed thermal break structure, is specifically tailored to mitigate thermal bowing deformation in larger-sized products
- The cavity of the thermal break is filled with eco-friendly, flame-retardant, high-polymer insulating material, effectively reducing thermal convection and delivering superior thermal performance

GASKET CONCEPT

- Circumferential EPDM coex central gasket implement around the window perimeter
- EPDM glazing sealing, sealing strip
- The exterior glazing bead is made from a specially engineered nylon material with aluminum-grade rigidity, resisting heat and preventing deformation over time
- Tailored fully vulcanised corner pieces
- European brand adhesive
- Fully vulcanised gaskets and sealing strips

HARDWARE

- Heavy duty system hardware with:
 - Glazing Sash:
 - - Concealed hinges: up to 200Kg
 - - A single set of inward-opening hardware can support up to 6 opening modes (including 90° inward swing, 180° inward swing, tilt & turn, inward tilt, inward tilt lock, and inward swing lock), offering lower costs and a better user experience
 - - Optionally with opening limiter in various adjustable opening range
 - Flyscreen Sash:
 - - Concealed hinges
 - - PET High-transparent screen
- Locking seat and lockcase for inwards opening window are black galvanised
 - - Corrosion resistance: 4
 - - Durability: H3
 Classification as per EN 13126-8:2017
- Tailored Europe-made CIVRO X-Line handle



Black



Sliver

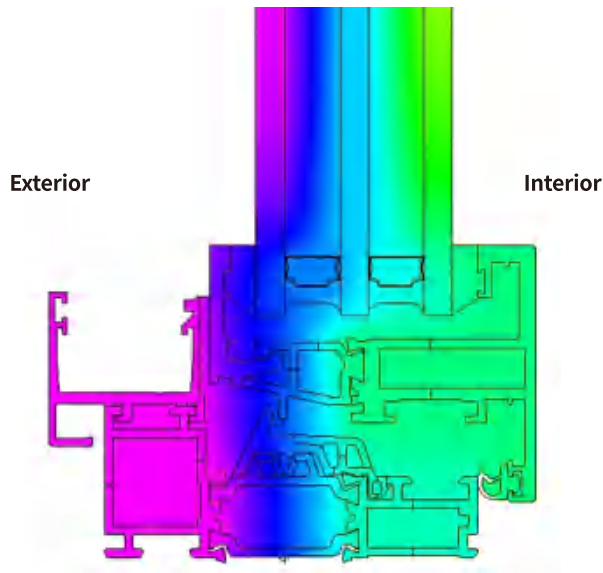
OPENING OPTIONS

- Inwards opening
 - Side-hung, turn/tilt, tilt before turn, tilt
- Outwards opening
 - Side-hung, top-hung

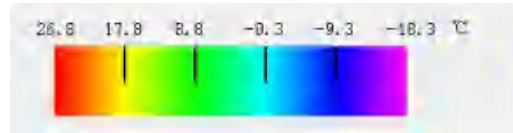
ADD-ONS

- Pluggable inwards opening flyscreen sash
- Built-in integrated glass balustrade

THERMAL COMPUTATION



PW80IN



■ **Uw**

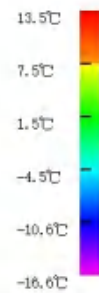
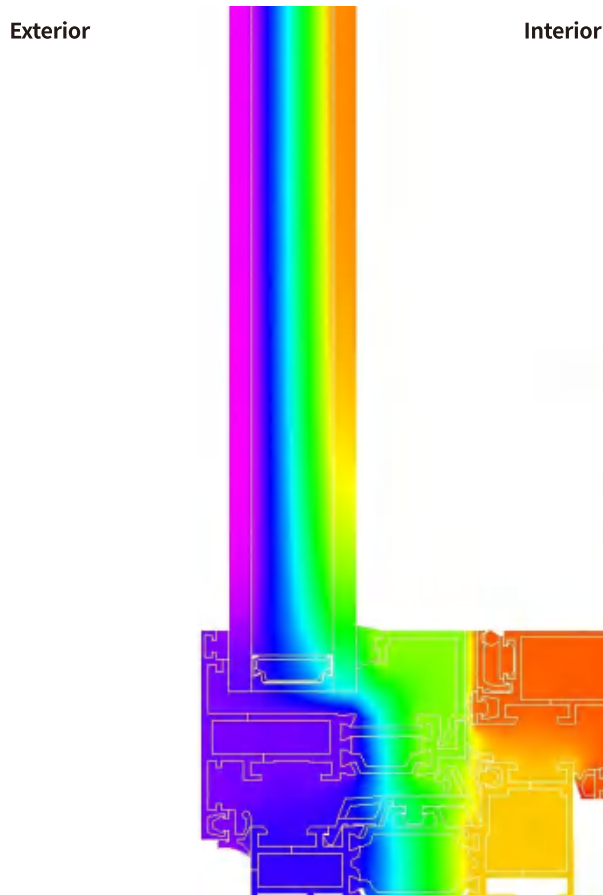
1.7W/(m² · K)

■ **Glass type**

6G+12Ar+Low-E 6G+12A+Low-E 6G

■ **Thermal insulating strip**

CG-type 32mm+ custom design 33mm insulation strip+glazing bead



PW800U

■ **Uw**

1.7W/(m² · K)

■ **Glass type**

6G Low-E+20A+6G (warm edge)

■ **Thermal insulating strip**

CG-type 32mm+ custom design 33mm insulation strip+glazing bead

OVERVIEW OF PW80 WINDOW SYSTEM

PW80IN

| DESIGN | |
|---|--|
| Opening | Inwards opening |
| Opening type | Side-hung, turn/tilt, tilt before turn, tilt |
| Basic depth(mm) | 80 |
| Vent frame depth(mm) | 70 |
| Total face width of vent&frame(mm) | 67(Slender frame) 76.5(Regular frame) |
| Face width of vent frame(mm) | 54 |
| Total face width of vent, frame&mullion(mm) | 84 |
| Face width of reinforcement mullion(mm) | 95 |
| Concealed hinge | ■ |
| Reinforcement mullion | ■ |
| Surface finish | MED, powder coating |
| Modular flyscreen sash | ■ |
| Fixed lights | ■ |

PW80IN

| IMPLEMENT SCENARIO | |
|--|---------------------------|
| Façade insert unit | ■ |
| Conservatory insert unit | ■ |
| PARAMETER | |
| U values in W/m ² k | 1.7 |
| Sound reduction(dB) depending on glazing type | 35 |
| Air permeability(m ³ /(m.h)) | 0.21 |
| Water tightness(Pa) | 900 |
| Wind load resistance(KPa) | ≤5 |
| VENT DATA | |
| Min.-max. leaf height(mm) depending on window type | 600-2600 |
| Min.-max. leaf width(mm) depending on window type | 450-1200 |
| Max. leaf weight(Kg) | 130 |
| Min.-max. glass thickness(mm) | Vent: 16-43, Frame: 16-53 |

PW800U

| DESIGN | |
|---|---------------------|
| Opening | Outwards opening |
| Opening type | Side-hung, top-hung |
| Basic depth(mm) | 80 |
| Vent frame depth(mm) | 65.5 |
| Total face width of vent&frame(mm) | 34.5 |
| Face width of vent frame(mm) | 52 |
| Total face width of vent, frame&mullion(mm) | 84 |
| Face width of reinforcement mullion(mm) | 95 |
| Concealed hinge | ■ |
| Reinforcement mullion | ■ |
| Surface finish | MED, powder coating |
| Pluggable inwards opening flyscreen sash | ■ |
| Fixed lights | ■ |

PW800U

| IMPLEMENT SCENARIO | |
|--|---------------------|
| Façade insert unit | ■ |
| Conservatory insert unit | ■ |
| PARAMETER | |
| U values in W/m ² k | 1.7 |
| Sound reduction(dB) depending on glazing type | 35 |
| Air permeability(m ³ /(m.h)) | 0.21 |
| Water tightness(Pa) | 500 |
| Wind load resistance(KPa) | ≤5 |
| VENT DATA | |
| Min.-max. leaf height(mm) depending on window type | 550-2200 |
| Min.-max. leaf width(mm) depending on window type | 400-900 |
| Max. leaf weight(Kg) | 65 |
| Min.-max. glass thickness(mm) | Vent: 39, Frame: 53 |

SINCE 1993

CIVRO has accumulated over 30 years of experience in the research, development, and production of system doors and windows. Embracing the pioneering concept of global system doors, windows, and curtain walls, CIVRO adapts to the diverse and complex climatic conditions represented by China, covering usage habits across multiple dimensions. Upholding the integrated principles of safety, environmental protection, sustainable development, and aesthetics, Civro is committed to providing superior design inspiration and higher architectural value for global architects, designers, developers, and property owners. It aims to create personalized architectural facade system solutions for global landmark buildings and elite circles, establishing itself as a leading brand in global architectural facades.



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Official Website

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