

# UBLO

redefines ventilation through perforated glass,  
eliminating operable frames and preserving clarity.

The minimalist form maintains unobstructed views,  
while 150mm vents ensure safe, natural airflow  
free from rain or intrusion.

Every installation is custom-designed,  
adapting the number and position of the vents  
to the unique conditions of each project.





# Minimalist Window

By eliminating unnecessary frames and railings,  
it reduces costs, enhances energy performance,  
and lowers carbon emissions.

Less is more  
— redefining windows for a carbon-neutral future.





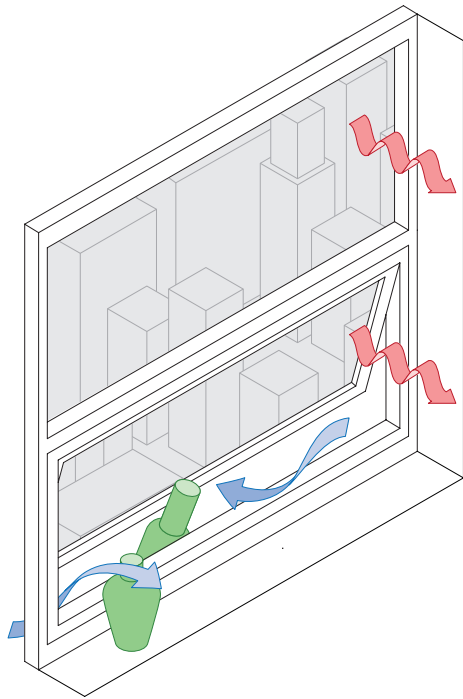
# Smart Ventilation

Ventilation has evolved from pure natural airflow to intelligent systems, with heat recovery units or solar-powered air quality sensor fans inserted into perforated glass.

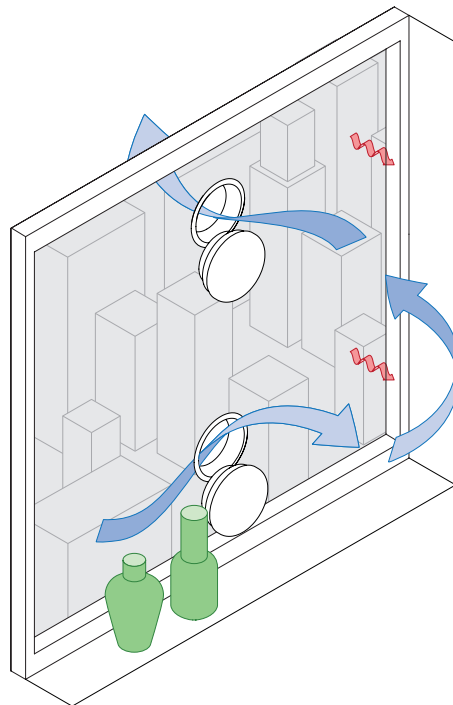
Designed for both new and existing buildings, it offers an elegant solution where installing traditional ducted systems is difficult.



# Features



Standard Window



UBLO

## An Unobstructed Window

Offering a clear, uninterrupted view, free from unnecessary handrails or horizontal frames.

## A Safe Window

Mitigating concerns about falling accidents or external intrusions, making it ideal for users such as children.

## A Breathing Window

Enabling continuous efficient natural \*ventilation through the vents with their number and position matched to the space.

## A Low Carbon Window

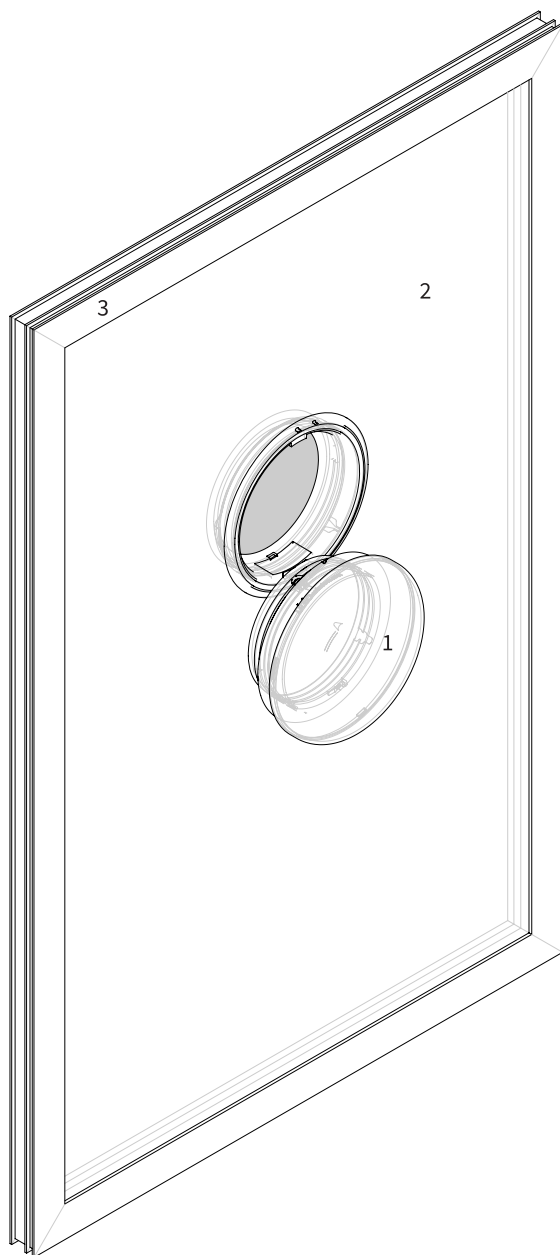
Lowering both embodied and operational emissions while improving cost efficiency through a minimalist structure. Less frame, less \*\*carbon.

\* Vertically aligned vents harness buoyancy-driven airflow, while placement on multiple façades enhances cross-ventilation for maximum natural efficiency. For further details, refer to the technical brochure on ventilation.

\*\* Reducing material use optimizes energy performance and minimizes the carbon impact of production and transport. Details are available in our carbon footprint research documentation.



# Components



## UBLO

Composed of vents, glass with circular apertures, and a window frame.

### 1 Vent

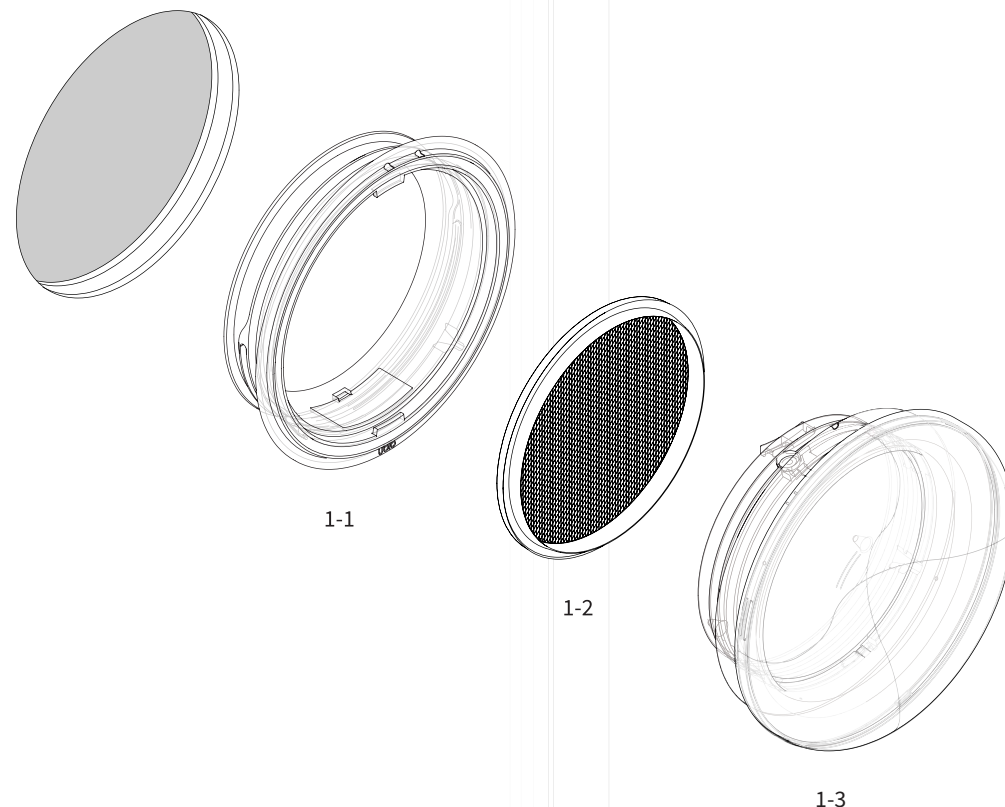
Including an inset frame, filter, and lid.

### 2 Glass with Circular Aperture

Manufactured and supplied by us to ensure quality.

### 3 Window Frame

Similar to those used in conventional windows.



### 1-1 Inset Frame

Installed within the aperture, enabling attachment and removal of the lid and filter.

### 1-2 Filter

Preventing the entry of dust and pests, and attached or removed as needed.

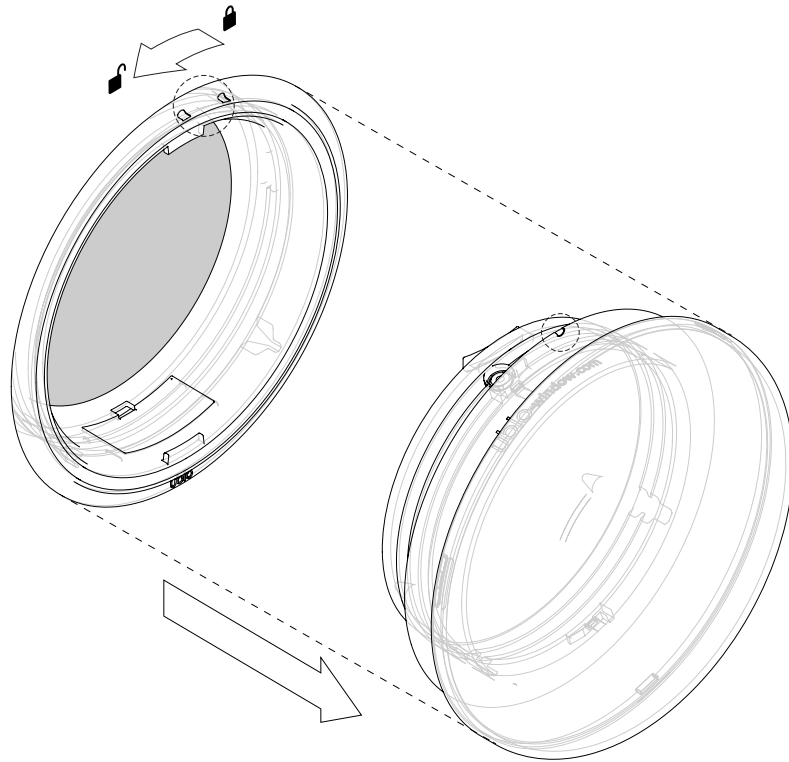
### 1-3 Lid

A range of options to suit customers' functional preferences and aesthetics.

# How to use

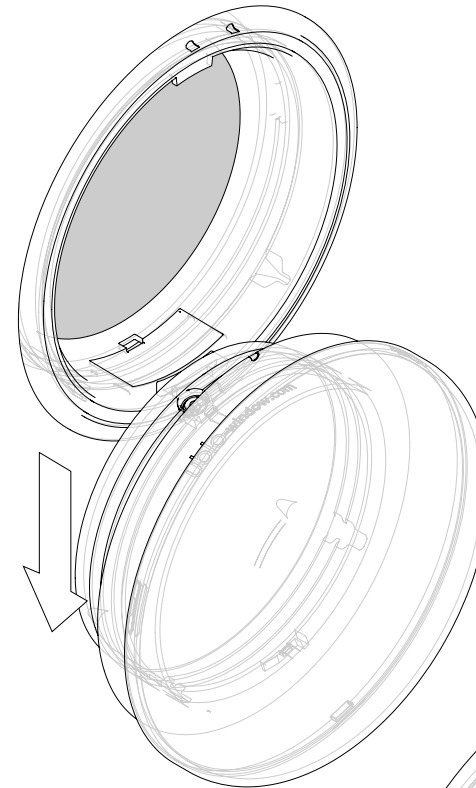


User's Manual



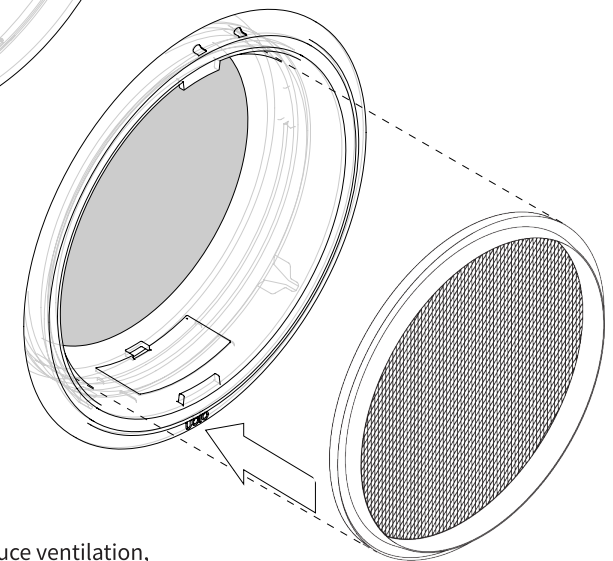
## Operation

Place the lid into the inset frame and turn it clockwise to close the window.  
To open, turn it counterclockwise and remove the lid.



## Storing the lid

During ventilation, the lid can be hung on the lower hook of the inset frame using the latch on the inside.

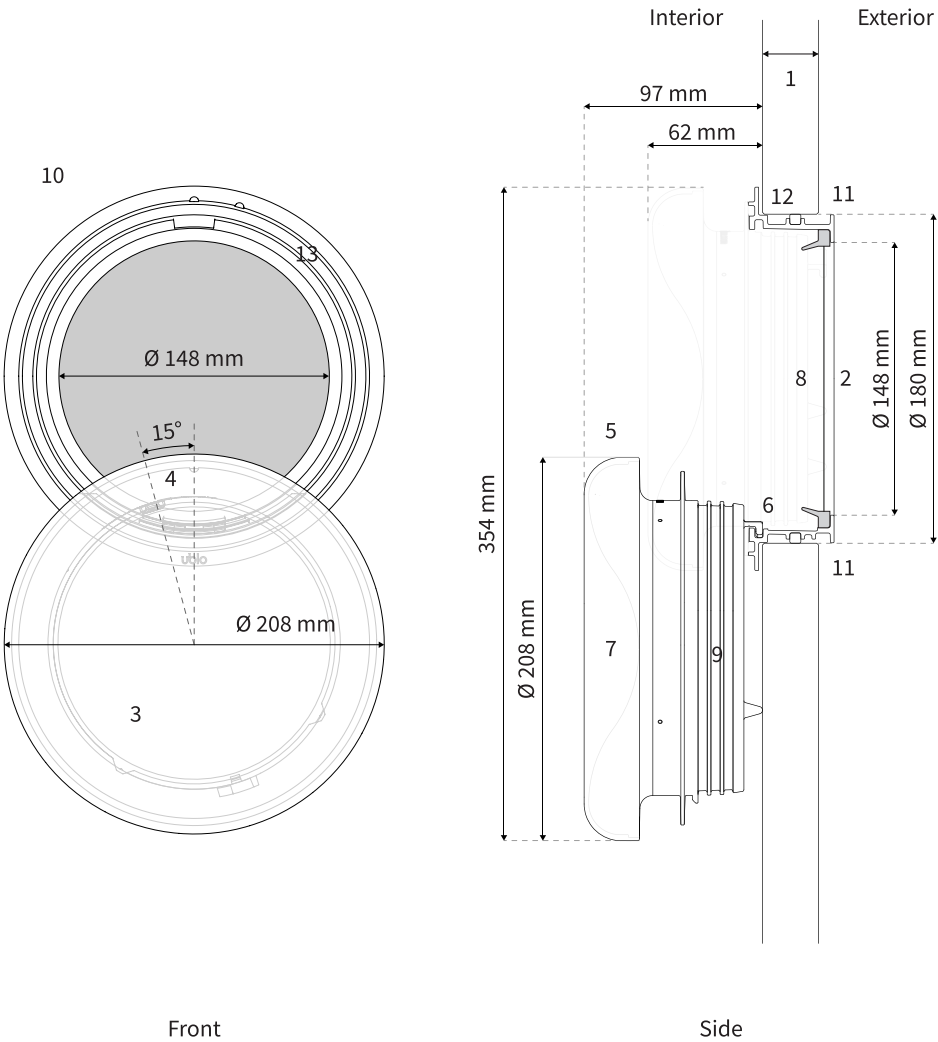


## Filter Attachment

To control insects and dust or reduce ventilation, simply attach the filter.



# Specifications



- 1

The system, suitable for glass thickness of 8-48mm.
- 2

Standardized 148mm diameter opening in the inset frame, preventing falls and intrusion.
- 3

Polycarbonate material with high insulation and durability.
- 4

Structure for easy opening and closing with 15-degree counterclockwise and clockwise rotation.
- 5

Ergonomically designed lid
- 6

Built-in latch and hook for hanging the lid on the inset frame during ventilation.
- 7

Lid offering a range of functional and material options according to user preferences.
- 8

Detachable filter, preventing pests and capturing fine dust using static electricity.
- 9

Double air layer inside the lid, forming an insulating layer, with optional high-performance translucent insulation material Aerogel.
- 10

Design considering wind pressure and fixed load of the vents.
- 11

Drainage design, minimizing inflow of external rainwater and pollutants.
- 12

Dual waterproofing and equal-pressure space design, ensuring optimal airtightness and watertightness.
- 13

Dry installation system, allowing easy indoor installation and replacement.

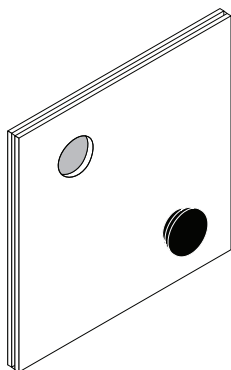
	Glass	Size		Weight	Material
Inset Frame	Single/Double glazed	Ø 208 mm	THK 47mm	135g	Polycarbonate
	Triple glazed	Ø 208 mm	THK 63mm	160g	
Lid	Single/Double/Triple glazed	Ø 208 mm	THK 97mm	385g	

# Sales Type



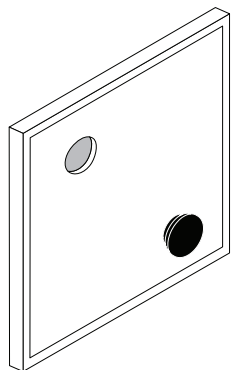
## A. Vent

Have you installed single perforated glass to fit the vent specifications? Use the provided manual for easy indoor installation.



## B. Vent + Glass with Circular Aperture

Are you interested in installing the vents on insulated glass? Do you already have a window frame for the glass, or is the decision yet to be made? Consider purchasing vents with insulated glass, that ensures both performance and safety.



## C. Vent + Glass with Circular Aperture + Window frame

Do you want to install windows engineered to fit in your space? Collaborate with our façade experts to bring your creative and functional space to life.

# From Order to Install

We offer a variety of products and services in different forms based on the project’s context, conditions, and client preferences. Take a glimpse into the planning process.

- A. Vent
- B. Vent + Glass with Circular Aperture
- C. Vent + Glass with Circular Aperture + Window frame

	A	B	C
Purchase Inquiry	o	o	o
Installation Environment Assessment	o	o	o
Frame Engineering Consultation	x	x	o
Glass Engineering Consultation	x	o	o
Vent Layout Recommendation	x	o	o
Selection of Vent Quantity and Options	o	o	o
Quotation and Purchase	o	o	o
Frame Installation	x	x	o
Installation of Glass with Circular Aperture	x	o	o
Vent Installation	o	o	o
Delivery of Lids and Filters	o	o	o



# Lid



## Wood

Walnut

## Wind

Transparent, Polycarbonate

## Earth: Plant Pot

Cork

## Cloud

Aerogel Insulation

## Earth: Circular

Cork

## Fog

Opaque, Polycarbonate



# Performance and Certification

## Technical Performance (EN)

 Report No. EUFI29-24004680-T4-EN 1/0	 Report No. EUFI29-24004680-T2 2/0	 Report No. EUFI29-24004680-T3-EN 1/0
<b>DETERMINATION OF AIRBORNE SOUND REDUCTION INDEX OF FIXED WINDOW WITH UBLO VENT</b>  Requested by: UBLO Inc. 1 Bulevarje 6-8 10000 Seoul, Republic of Korea mailto:ublo@ublo.com Order ref.: VUZPT240002-04 Contact person: Eurofins Expert Services Oy Mika Lahti Tel: +358 9 2510 2000 Email: mikka.lahti@eurofins.com  Assignment: Determination of airborne sound reduction index of fixed window with UBLO vent.  Sample details: The customer supplied 20 11 2024 Eurofins Expert Services Oy an 36 fixed window assembly. The width of the window was 1200 mm and the height was 1400 mm. The window was made of white PVC frame and double glazed glass. The window was tested in accordance with EN ISO 12913-2 and EN ISO 12913-3. The results of the test are presented in Appendix 1.  Installation and measuring: The window was installed in the test room. The window was tested in accordance with EN ISO 12913-2 and EN ISO 12913-3. The results of the test are presented in Appendix 1.  Methods: The sound reduction index of the window was determined by means of two standard methods: the sound reduction index (Rw) and the sound reduction index (Rw+K). The results of the test are presented in Appendix 1.  Results: The results of the measurements are presented in Table 1. The sound reduction index (Rw) is 36 dB. The sound reduction index (Rw+K) is 36 dB.	<b>CALCULATION OF THE U- AND G-VALUES OF UBLO VENT WINDOW</b>  Requested by: UBLO Inc. 1 Bulevarje 6-8 10000 Seoul, Republic of Korea mailto:ublo@ublo.com Order ref.: VUZPT240002-04 Contact person: Eurofins Expert Services Oy Mika Lahti Tel: +358 9 2510 2000 Email: mikka.lahti@eurofins.com  Assignment: Calculation of the U- and G-values of UBLO vent window.  Sample details: The customer supplied Eurofins Expert Services Oy an 36 fixed window assembly. The width of the window was 1200 mm and the height was 1400 mm. The window was made of white PVC frame and double glazed glass. The window was tested in accordance with EN ISO 12913-2 and EN ISO 12913-3. The results of the test are presented in Appendix 1.  Installation and measuring: The window was installed in the test room. The window was tested in accordance with EN ISO 12913-2 and EN ISO 12913-3. The results of the test are presented in Appendix 1.  Methods: The U-value and G-value of the window were determined by means of two standard methods: the U-value and the G-value. The results of the test are presented in Appendix 1.  Results: The results of the measurements are presented in Table 1. The U-value is 0.87 W/m²K. The G-value is 0.87 W/m²K.	<b>TESTING THE AIR PERMEABILITY, WATERTIGHTNESS AND WINDLOAD RESISTANCE OF FIXED WINDOW WITH UBLO VENT</b>  Requested by: UBLO Inc. 1 Bulevarje 6-8 10000 Seoul, Republic of Korea mailto:ublo@ublo.com Order ref.: VUZPT240002-04 Contact person: Eurofins Expert Services Oy Mika Lahti Tel: +358 9 2510 2000 Email: mikka.lahti@eurofins.com  Assignment: Testing the air permeability, watertightness and windload resistance of window with UBLO vent. The test force was testing the performance of the UBLO vent.  Specimen: The customer supplied Eurofins Expert Services Oy an 36 fixed window assembly. The width of the window was 1200 mm and the height was 1400 mm. The window was made of white PVC frame and double glazed glass. The window was tested in accordance with EN ISO 12913-2 and EN ISO 12913-3. The results of the test are presented in Appendix 1.  Installation and measuring: The window was installed in the test room. The window was tested in accordance with EN ISO 12913-2 and EN ISO 12913-3. The results of the test are presented in Appendix 1.  Methods: The air permeability, watertightness and windload resistance of the window were determined by means of two standard methods: the air permeability, watertightness and windload resistance. The results of the test are presented in Appendix 1.  Results: The results of the measurements are presented in Table 1. The air permeability is Class 4. The watertightness is Class 4. The windload resistance is Class 4.
 This report is only valid for the test specimen. This report may be published in its entirety, only with a written permission by Eurofins. Eurofins Expert Services Oy, VAT: FI220701020	 This report is only valid for the test specimen. This report may be published in its entirety, only with a written permission by Eurofins. Eurofins Expert Services Oy, VAT: FI220701020	 This report is only valid for the test specimen. This report may be published in its entirety, only with a written permission by Eurofins. Eurofins Expert Services Oy, VAT: FI220701020

Sound Insulation  
No. EUFI29-24004680-T4-EN  
Performance: Rw= 36 dB

Thermal Insulation  
No. EUFI29-24004680-T2  
Performance: 0.87 W/m²K

Airtightness / Watertightness  
/ Wind Pressure Resistance  
No. EUFI29-24004680-T3-EN  
Performance: Class 4 / Class  
E1200 / Class 4(3500Pa)

## Patents



US  
No. 11,725,452 B2

CHINA  
No. 110847769 B

KOREA  
No. 10-2142451,2  
No. 10-2178112



Condensation (KR)  
No. CT21-049856K

UV Resistance (KR)  
No. CT21-041063K

## Certifications



Seoul Living Design Award  
: Best Product



Good Design Korea  
Excellent Industrial Design  
Award



Public Procurement  
Service

Venturenara

\* A online platform where  
public businesses and governments  
can buy items



# Frequently Asked Questions



FAQ

## Q. What is UBLO?

A. It is a ventilation system that integrates perforated glass, eliminating operable frames and preserving clarity — its name inspired by the word “hublot,” which refers to the round windows found on ships and airplanes.

## Q. What is the reason for using UBLO?

A. It provides effective ventilation without obstructing the views, ensuring safe airflow without the risk of falls or intrusion, while keeping fresh air flowing indoors.

## Q. Can the size of the vents be customized?

A. The vents’ openings are sold in a single standard size with a diameter of 148 mm (glass perforation diameter 180 mm).

## Q. Do the vents provide effective airtightness and watertightness?

A. Yes. The vents are designed with a dual-sealing structure and a gas-tight compression gasket, facilitating excellent airtightness and watertightness.

\* Performance: Airtightness Lv.1 / Watertightness Lv. 50 (Tested and certified by KS accredited testing facilities)

## Q. Can existing glass be used?

A. Drilling holes in the existing glass poses a risk of breakage, and for optimal performance in terms of wind pressure resistance, insulation, airtightness, and watertightness, new glass needs to be manufactured.

## Q. Can the vents be installed on double or triple glazing?

A: Yes. The vents can be installed on double- or triple-glazed glass up to 48mm thick. We provide glass that meets the site’s wind pressure and insulation conditions.

## Q. Who handles installation?

A. The glass is installed by the window contractor you specify, with installation by us available if needed. A manual is provided if you choose to install the vents yourself.

## Q. Can I have the glass made by a third-party company?

A. To ensure quality, we manufacture and supply the glass. For single glazed glass, you may choose to have it produced by another glass company to match the aperture size.

## Q. Is it possible to buy just the vents without the glass?

A. For single glazed glass, you have the option to purchase the vents alone.

## Q. How many vents need to be installed for ventilation?

A. The recommended minimum number of the vents for installation is two, and it’s advised to have at least one vent per 20m<sup>3</sup> of room volume. Keep in mind that ventilation capacity decreases by 50% when using the filter.

## Q. Can the vents be installed on non-glass walls?

A. The vents can be installed on smooth surfaces (glass, polycarbonate, coated wood, or metal panels) with a thickness of 8–48 mm. Airtightness may be difficult to ensure on rough surfaces, such as concrete walls.

## Q. Does the vents not change color to yellow overtime?

A. The vents are made from highly robust and durable polycarbonate material, LG LUPOY 1303, which includes UV inhibitors. Although there might be a slight color change overtime, there are no concerns regarding its durability or functionality.

# Projects

We offer a variety of products and services according to specific situations, conditions of the project, and client preferences. Specific details are determined through discussion. For more information, please refer to our website and key cases.

Key Projects	Designer · Client	Program	Location	Construction	Sales Type		
					Vent	Glass with Circular Aperture	Window Frame
A 35th Floor APT	Leeform	Residential	Siheung	Remodeling	o	o	o
Townhouse	Younglim&Forestry	Residential	Yongin	Remodeling	o	o	o
BaekHyun APT	Yellow Plastic	Residential	Pangyo	Remodeling	o	o	x
Jeongbalsan House	J Construction	Residential	Goyang	Remodeling	o	o	x
KEPCO	KEPCO	Office	Seoul	Remodeling	o	o	o
Basic-s	Liso Architects	Office	Goyang	New	o	o	x
Livescape	Livescape	Office	Seoul	Remodeling	o	o	x
Hanok Hyusim	Hyusim	Accommodation	Gangneung	New	o	o	x
Surak Hyu	office 53427	Accommodation	Seoul	New	o	o	o
Hana Daycare Center	ODDs & ENDS	Education	Namwon	New	o	o	x
Sinteuri Play Café	GUBO Architects	Education	Seoul	New	o	o	x
Library Peach	See-art	Education	Seoul	Remodeling	o	o	o
Funground	Shin Architects	Education	Namyangju	New	o	o	x
School Library	ODDs&ENDS	Education	Pocheon	New	o	o	x
Marshall&Lily	818 Architects	Commercial	Goyang	Remodeling	o	x	x
Kokku.C	Lunade	Commercial	Busan	Remodeling	o	o	x
Depot	LLL Space	Commercial	Seoul	Remodeling	o	o	x
Training Center	Munhwagonggan	Commercial	Seongnam	Remodeling	o	o	o
Philates Studio	A.Line Studio	Commercial	Seoul	Remodeling	o	x	x
EV Charging Station	Case Architects	Commercial	Gongju	New	o	o	x
Mondrian Hotel	Blobee	Commercial	Seoul	New	o	x	x
Screening Clinic	Woori Architects	Medical	Suncheon	New	o	o	x
Clinica Dental	Estudioperiferia	Medical	Spain	New	o	x	x
Won Buddhism	MASS STUDIES	Religion	Seoul	Remodeling	o	o	x



## A 35th Floor Apartment

#Visibility #Safety #Insulation

**Construction Type** | Remodeling

**Program** | Residential

**Location** | Siheung

**Space Design** | Leeform

**Product Type** | C. Vent + Glass with Circular Aperture + Window Frame

**Glass** | Double Glazed Laminated Low-E Glass

The existing confined and partitioned double windows were replaced with panoramic windows to provide an unobstructed view of the sea. The vents, designed with user safety and the aesthetics of the space in mind, are ideal for high-rise buildings where strong winds and the risk of falling make it difficult to open conventional windows.

**Before**



**After**





## Townhouse - Courtyard

#Visibility #ContinuousVentilation

**Construction Type** | Remodeling

**Program** | Residential

**Location** | Yongin

**Space Design** | Younglim & Forestry Interiors

**Product Type** | C. Vent + Glass with Circular Aperture + Window Frame

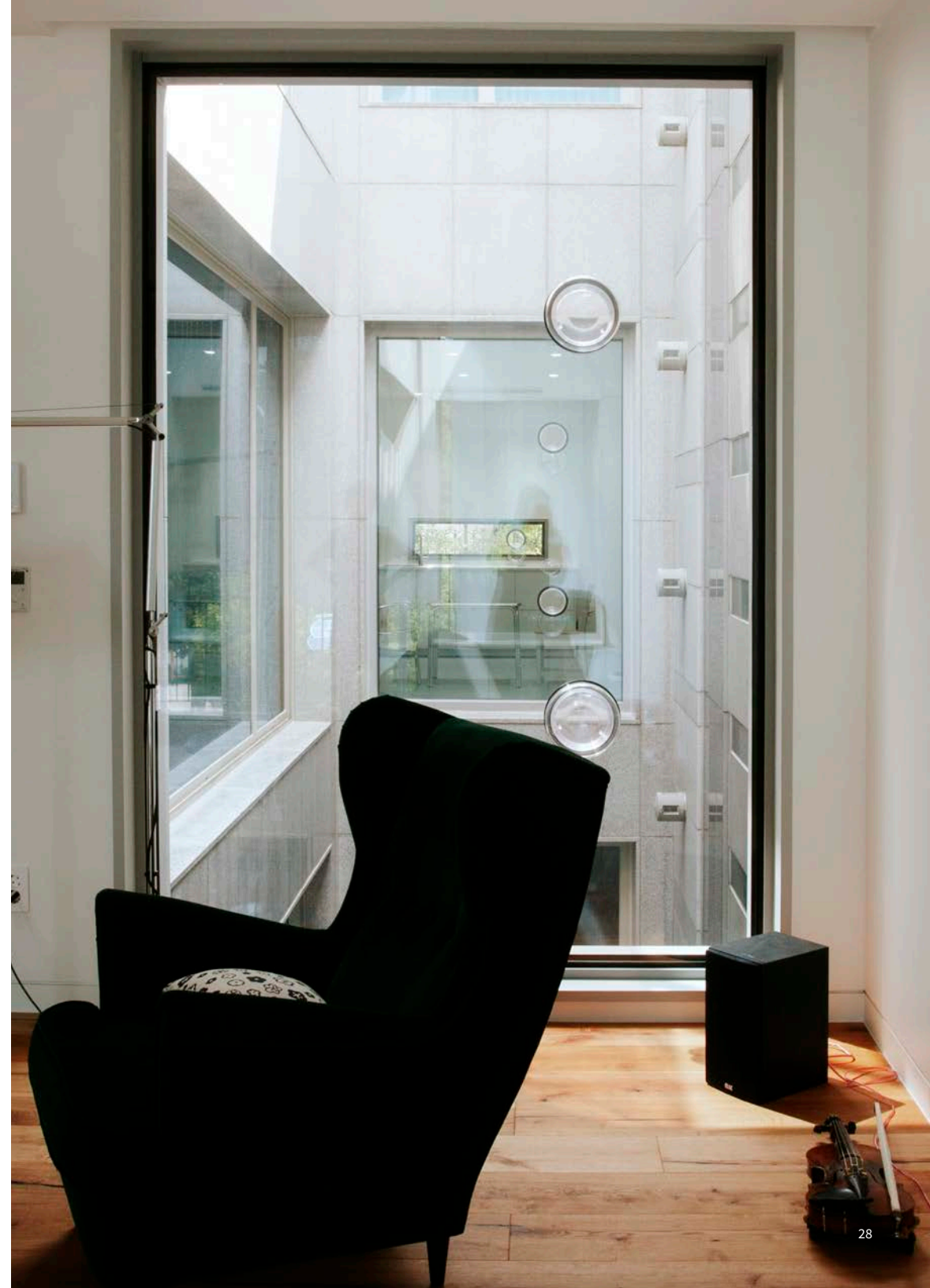
**Glass** | Double Glazed Low-E Glass

The previously confined PVC tilt-and-turn windows in the courtyard were replaced with aluminum double glazed insulated UBLO, resulting in a much more open and inviting space.

Before



After



## Townhouse - Kitchen

#Visibility #ContinuousVentilation

**Construction Type** | Remodeling

**Program** | Residential

**Location** | Yongin

**Space Design** | Younglim & Forestry Interiors

**Product Type** | C. Vent + Glass with Circular Aperture + Window Frame

**Glass** | Double Glazed Low-E Glass

The previously confined PVC windows in the kitchen were replaced with aluminum double glazed insulated UBLO, resulting in a much more open and inviting space.

Before



After





## Hana Public Kindergarten

#Safety #ContinuousVentilation #Visibility

**Construction Type** | New

**Program** | Education

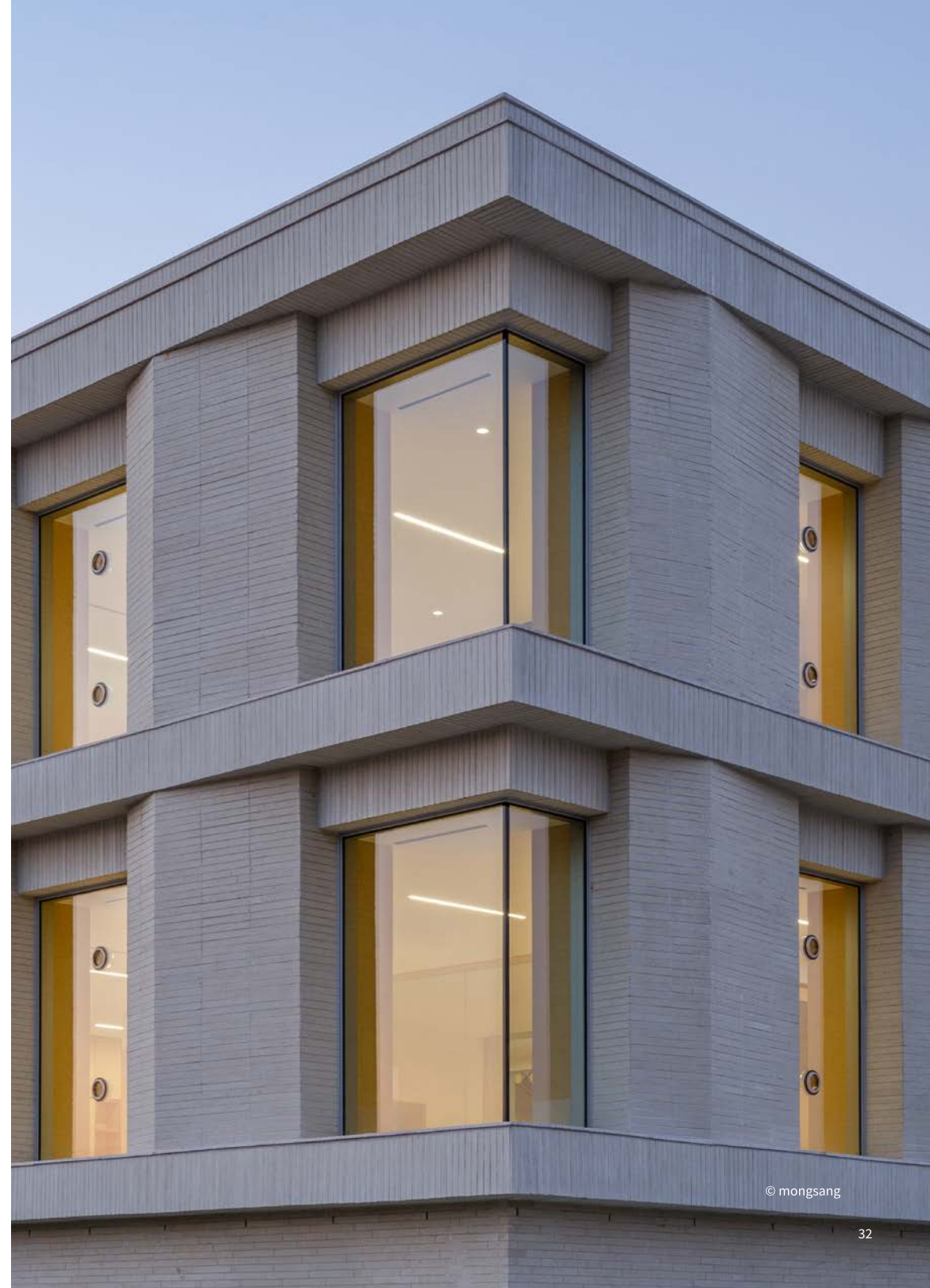
**Location** | Namwon

**Architectural Design** | ODDs&ENDs Architects

**Product Type** | B. Vent + Glass with Circular Aperture

**Glass** | Double Glazed Low-E Glass

Natural ventilation through small openings keeps the indoor air comfortable without worrying about falls or intrusion. With no railings or horizontal frames, the view is unobstructed, while teachers and guardians can keep an eye on the children from the outside.



## Sinteuri Play Cafe

#Safety #ContinuousVentilation #Visibility

**Construction Type** | New

**Program** | Education

**Location** | Seoul

**Architectural Design** | GUBO Architects

**Product Type** | B. Vent + Glass with Circular Aperture

**Glass** | Double Glazed Low-E Glass

Designed with universal accessibility in mind, the space is inclusive and can be enjoyed by children using assistive devices such as wheelchairs.





## Korea Electric Power Corporation

#Visitbility #Insulation #ContinuousVentilation

**Construction Type** | Remodeling

**Program** | Office

**Location** | Seoul

**Architectural Design** | KEPCO (Korea Electric Power Corporation)

**Product Type** | C. Vent + Glass with Circular Aperture + Window Frame

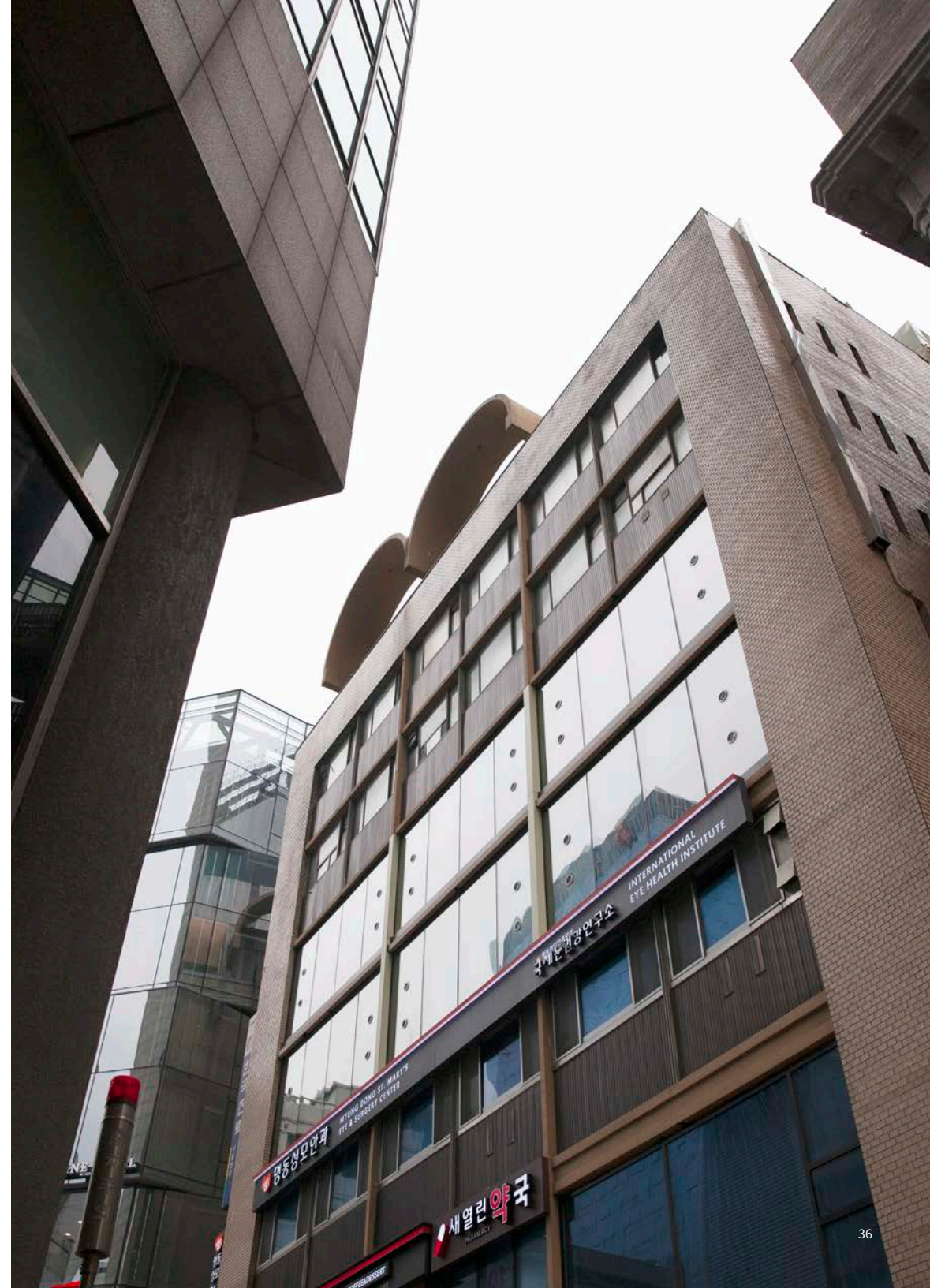
**Glass** | Double Glazed Low-E Glass

The old facade, built in the 1960s, has been transformed into a design that allows exterior views while offering excellent insulation performance. The interior space, used as a call center, maintains a comfortable indoor air quality through continuous ventilation provided by the vents.

Before



After





## Marshall&Lily

#ComplexGeometricWindow #Design #Visibility

**Construction Type** | Remodeling

**Program** | Commercial

**Location** | Goyang

**Architectural Design** | 818 Architects

**Product Type** | A. Vent

**Glass** | Single Tempered Glass

A French restaurant where the stylish interior and transparent windows blend seamlessly as one. The changing scenery throughout the seasons promises a captivating view.



## Baekhyeon Village Apartments

#Design #Visibility #ContinuousVentilation

**Construction Type** | Remodeling

**Program** | Residential

**Location** | Pangyo

**Architectural Design** | Yellow Plastic

**Product Type** | B. Vent + Glass with Circular Aperture

**Glass** | Double Glazed Low-E Glass

The “Earth” plant-pot lid blends harmoniously with the pine trees visible through the glass, creating a sense of living in harmony with nature.





## Hanok Hyusim

#Visibility #Insulation #PassiveHouse

**Construction Type** | New

**Program** | Accommodation

**Location** | Gangneung

**Architectural Design** | Hyusim

**Product Type** | B. Vent + Glass with Circular Aperture

**Glass** | Triple Glazed Low-E Glass

Hyusim, located near Gyeongpo Beach in Gangneung, was destroyed by a fire in 2023 and rebuilt as the world's first "Passive Hanok" after 1 year and 9 months of preparation. The space combines the traditional charm and aesthetics of a Hanok with passive building technologies, creating a comfortable environment





## Surak Hyu

#Design #Visibility #ContinuousVentilation

**Construction Type** | New

**Program** | Accommodation

**Location** | Seoul

**Architectural Design** | Office 53427

**Product Type** | C. Vent + Glass with Circular Aperture + Window Frame

**Glass** | Double Glazed Low-E Glass

A total of 23 window sets were installed at Surakhyu, the Suraksan Dongmakgol Natural Recreation Forest operated by Nowon-gu office. The project prioritized skylights that allow unobstructed views of the starry night sky. We handled all engineering and construction, including structural calculations for the non-standard skylights and the vents.





## Jeongbalsan-dong House

#Design #ContinuousVentilation #Insulation

**Construction Type** | Remodeling

**Program** | Residential

**Location** | Goyang

**Construction** | J Construction

**Product Type** | B. Vent + Glass with Circular Aperture

**Glass** | Double Glazed Low-E Glass

An arched window was installed in the house. The vents can be fitted on complex geometric windows where operable frames are difficult to install, providing both ventilation and aesthetic appeal.





## Library Peach

#ComplexGeometricWindow #Design #Visibility

**Construction Type** | Remodeling

**Program** | Education

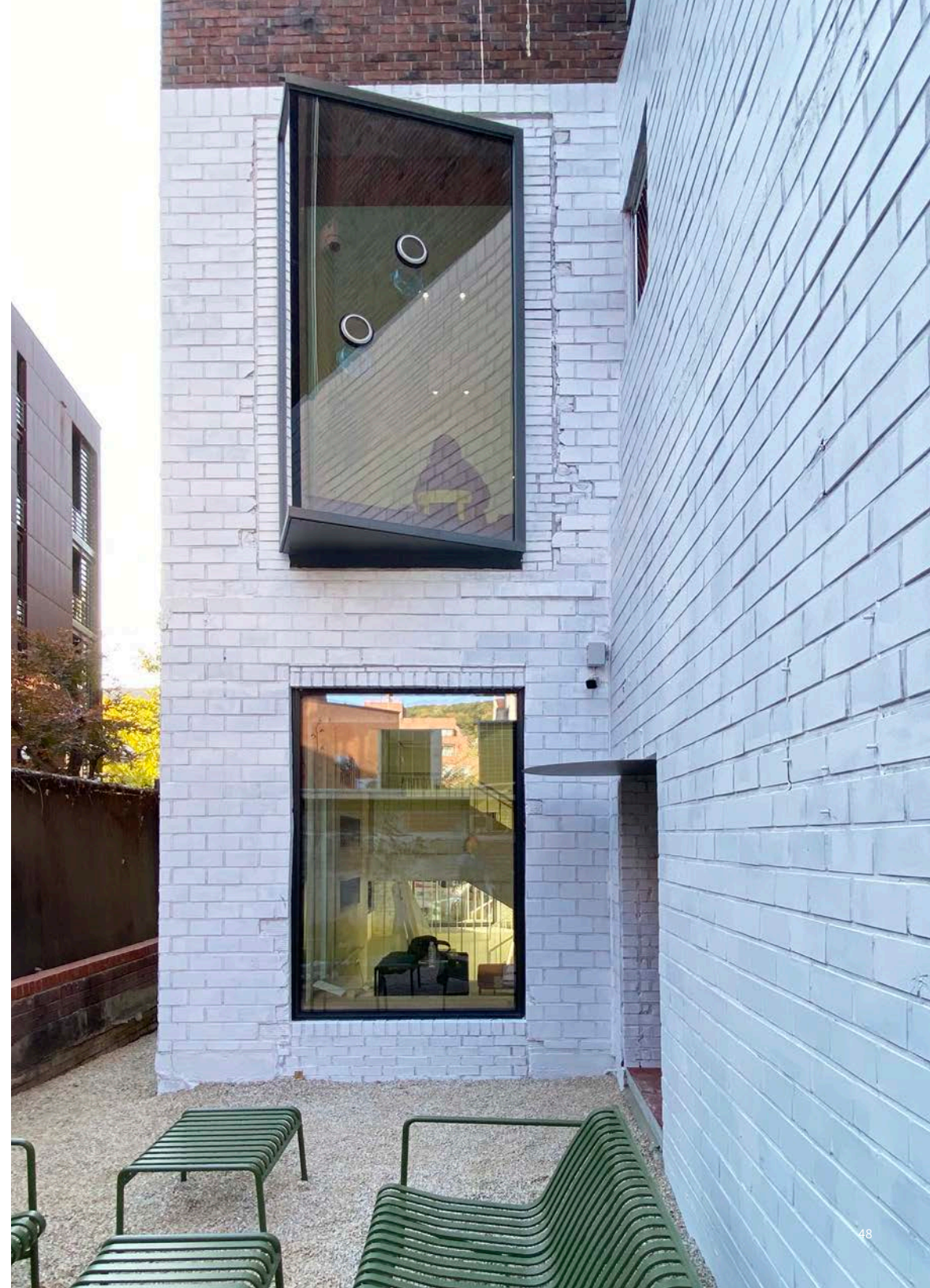
**Location** | Seoul

**Architectural Design** | PRDTV + Blue Architects

**Product Type** | C. Vent + Glass with Circular Aperture + Window Frame

**Glass** | Double Glazed Laminated Low-E Glass

Library Peach, one of the projects planned by the Book Culture Foundation See-art, is a library for slow learners. A triangular window (Bow Window) was created as a design feature. We handled design, engineering, fabrication, and installation.





## UBLO Inc

We make minimalist windows with the planet and people in mind, and aim to reduce both embodied and operational carbon emissions by simplifying the component to minimize the use of frames and creating energy efficient windows.

We pursue repairability and long-term usage, avoiding single-use packaging, unnecessary prints, and marketing that encourages over-consumption.

Founded in 2018 by Korean architect Naree Kim and Dutch architect Robert-Jan van Santen, who previously worked together at a façade engineering office. Supported by investment from Infobank and technical guidance from VS-A, UBLO Inc. continues to enhance product performance and technological capabilities through government-backed R&D programs.

