

# *Light* and Ventilation Window Shutter

Versatile for wooden and concrete construction, new and renovated building and replacing old shutter

Crime and disaster prevention, air permeable,  
health- and eco-friendly solution without the need  
of shutter case with smooth opening and closing

Awarded by the Incentive Award  
of the Director-General of the  
Science and Technology Agency

Awarded by the International  
Home Show Pearl Award

Won the Tokyo Invention Show  
Prize

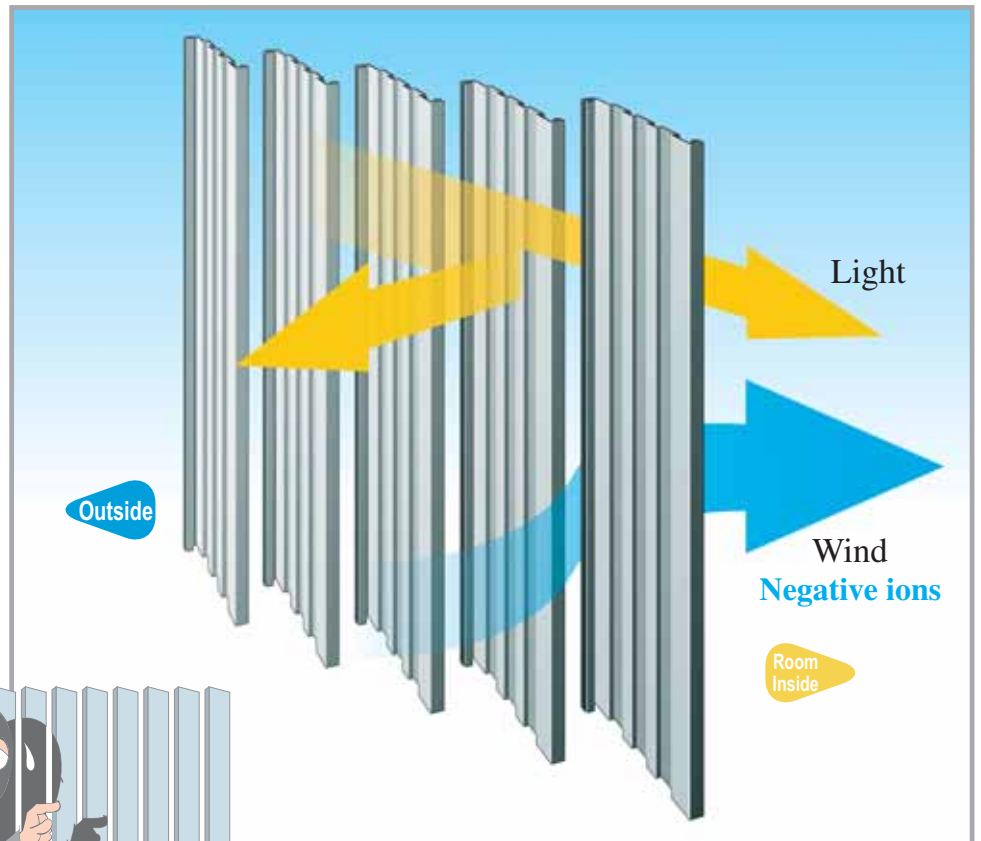
Awarded by the Tokyo Chamber  
of Commerce and Industry  
Award



Finely adjust natural wind throughout all seasons to help creating a pleasant atmosphere.



The blind blocks out strong sunlight and allows for cross ventilation for comfort during the summer.



Anticrime measures  
Privacy protection

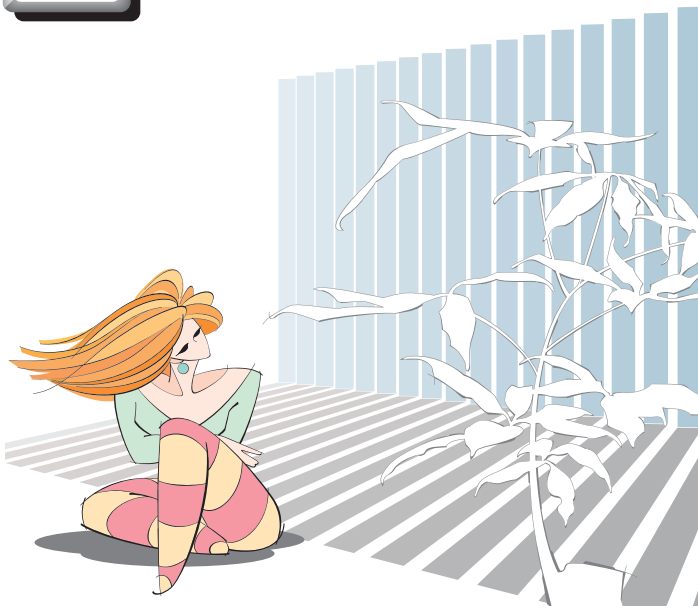
**Touei's light and ventilation window shutter offers the following features:**

- Blind-type window shutter permits natural light and ventilation under lock and key.
- Good thermal insulation offers space heating with effective dew condensation prevention.
- Accordion-type shutter offers a space saving solution to store vanes simply by windows. The vanes can be interfolded when a shutter is open fully.
- Upper shutter rail has a rain visor (option) to keep out rain.
- Rail frames and vanes are made of aluminum-type material to offer excellent weather proof.
- Upper roller bearings offer smooth and noiseless opening and closing.
- Its fully-versatile feature offers easy installation at any building regardless of new or renovated.
- Its robust design protects against typhoon to offer safeness and security. (Since 2005, our product has been adopted in Okinawa)
- Maintenance is rarely necessary. Just add a lubricator once a year.
- We also have a punched version of Comodo (new product).
- Use as a blind to permit an entry of negative ions under lock and key.

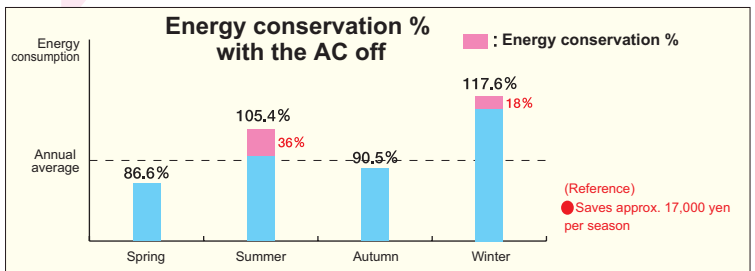
# The Blind-Type Ventilation Window Shutter (Wind) Makes Better Use of Space

**Health-  
Eco-  
friendly**

Convert strong sunlight and wind into low light and breeze to create a comfortable environment in your room.



Turn the air conditioning off at an unpleasant night and let in natural wind into your room. Health-friendly window shutter.



**Dew condensation prevention  
Thermal insulation**

Prevents a window draft during the winter to provide excellent thermal insulation and increase heater efficiency. Effective for dew condensation prevention



**100% aluminum  
Robust design**

**Made with 100% aluminum with great tenacity**  
Never worry about being blown off by a strong wind of typhoon. Blocks out a noise of strong wing and nearly noiseless.

**(Approx. 20 years of achieved service life)**



Our window shutter provides crime prevention, durability, heat retention during the winter and dew condensation prevention. Rubber-made slides offer a noiseless operation.

**Easy  
Installation**

Its versatility makes installation possible on any type of building, whether new or existed.

**Project  
Examples**

Approx. 150 shutters have been delivered to family housings of the public office.

Toue's light and ventilation window shutter offers an easy installation.





This label is the symbol of our products.

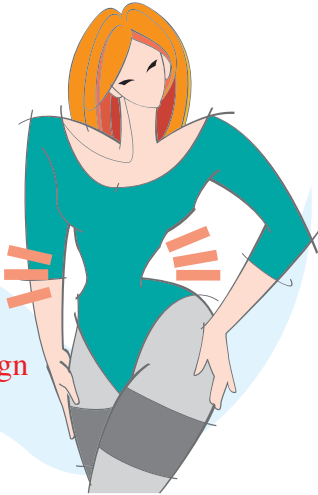
House made with aluminum  
Designed by Toyo Ito & Associates, Architects



Exterior with the aluminum shutter closed



Installation available on buildings without space for a shutter case



Slim design



Blind

Use the shutter as a blind to prevent sunlight during the day, admitting negative ionic breeze on hot summer night through a locked shutter.



Fully opened

Installation available anywhere without the need of extra space on top and side for shutter case



Using as a blind



### Creates a pleasurable space in any settings



Garage



I had a hard time with heavy shutters but now I can easily open and close shutters.

Remodeling



We have been delivering our products to the public office for the past 30 years.

Awarded various prestigious awards  
Highly-esteemed company with the excellent techniques and reliabilities

We are the No. 1 provider of window shutters.

### Main customers

- Family housings for the Kanto regional bureau of the Ministry of Finance
- Family housings for the Tokai regional bureau of the Ministry of Finance
- Family housings for the Bank of Japan (121 housings across the country)
- Family housings for courthouses (12 housings in Osaka)
- Family housings for the Osaka High Court
- Bachelor quarters of the Tokyo Metropolitan Police Department
- Family housings of the Indian Embassy (Kudan)
- Aluminum house in Sakura Josui (Designed by Toyo Ito & Associates, Architects)
- Entrance gate at Toraya in Tokyo Midtown (Designed by Naito Architect & Associates)
- Family housings of companies (NTT, the Kagoshima Bank and Development Bank of Japan, etc.),
- Public housings and apartment houses (throughout Japan)
- Shrines and temples (throughout Japan)

# Multifunction, reliabilities and achievements

## [Comodo]

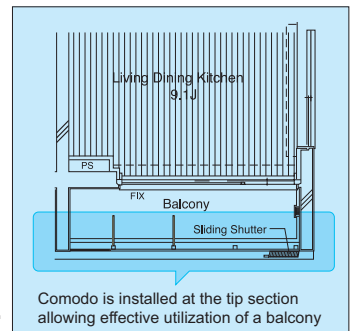
Comodo installed entirely on the balconies of a condominium, Dynac Kichijoji, has won a great popularity.



Designed by N+T ARCHITECTS INC.



**Comodo** features punched vanes that allow natural light and breeze through a completely closed blind. While maintaining security, Comodo can let in natural breeze into a balcony and interior.



## New product 「Tolvie」 (Utility model patent pending)

Add a **healthy** solution to the traditional shutters that offer crime prevention and eco-friendly solutions and ventilation.

By painting inside of a vane with deodorant, the **industry's first paint** for **negative ions** emission, you can feel a **negative ion** breeze while you are out in the daytime and during the hours of sleep at night when a breeze runs through a blind with the shutter locked securely.

There are positive ions harmful to humans filled in a room, which are emitted from TV, PC and AC. This healthy window shutter emits a large amount of negative ions important for human health. (100,000 negative ions are emitted per vane) Tolvie can purify the air and create a comfortable environment.



The amount of negative ions before installing a deodorant      The amount of negative ions after installing a deodorant

**Difference of negative ions generation before and after installing a deodorant**

**Vanes contain natural ores to realize semi-permanent effects of negative ions.**

### Healthy solutions Freshen up with the effects of negative ions! Too many positive ions cause an adverse effect to humans

#### Major generation sources of positive ions in a room

- TV ●Office automation equipment ●Fluorescent lights ●PC ●Electrical products such as mobile phones (electromagnetic waves are not safe either) ●Power lines ●AC and heater ●Statics from chemical fiber clothes ●Adhesive of new building materials ●Insect killer ●Smoke from cigarettes ●Commodities and other products made with various organic phosphorous chemicals

#### Effects of positive ions [Hyper positive ion syndromes]

- Psycho-related symptoms: Difficulty sleeping, grumpiness, problem concentrating, anxiety, headache and stiff shoulder, etc.
- Respiratory system: Lung cancer and asthma
- Other symptoms: Atopic dermatitis, pollen allergy, fatigue of the eye, high blood pressure, diabetes, cancers and heart disease
- Reasons: Increase of active oxygen and poor blood flow (sticky blood), ciliary motility disorder of mucous membrane of the trachea and high blood pressure caused by hyper sensitive sympathetic nerves.

**The measured values of major positive ion sources in a room**  
(Measured by an atmospheric ionometer)  
(Unit: piece/1 cc)

Audio product increases 1,000 to 2,000 ions.

AC increases 250 to 400 ions.

Stove burner increases 1,100 ions.

Cigarettes increase 3,000 to 5,000 ions per cigarette.

# Touei's fully-versatile light and ventilation window shutter offers crime prevention and health- and eco-friendly solutions

Measurement table for a light and ventilation window shutter (We provide an estimate on a case-by-case basis for measurement not shown in the table and different finished dimensions)

## ■ Double sliding shutter

(Number of left and right panels can be changed freely on the total numbers)

(Unit: millimeters)

Light and Ventilation Window Shutter W	Available opening W	Num. of vanes		Width of folded vanes		Width of a rail		Total width of folded vanes	
		Left	Right	Left	Right	Left	Right	Left	Right
1870	1484	7	7	98+20	98+20	75	75	193	193
2110	1696	8	8	112+20	112+20	75	75	207	207
4040	3402	16	16	224+20	224+20	75	75	319	319
6200	5310	25	25	350+20	350+20	75	75	445	445

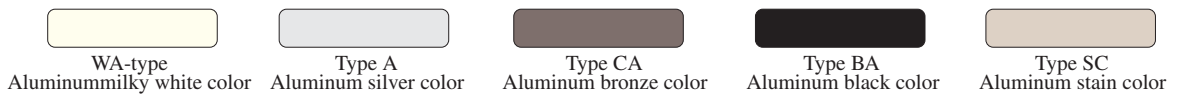
## ■ Single sliding shutter

Light and Ventilation Window Shutter W	Available opening W	Num. of vanes	Width of folded vanes		Width of a rail		Total width of folded vanes	
			One side only	One side only	One side	One side		
1780	1469	14	196+20	75	291	20		
2020	1681	16	224+20	75	319	20		
3940	3377	32	448+20	75	543	20		
6100	5285	50	700+20	75	795	20		

Material	
Frame	Aluminum JIS 6063T5
Roller	Die casting brass Stainless bearing
Accordion	Stainless SUS-304
Panels	JIS H4100-1970 (A6063-T) Board thickness: 1.3 millimeters, 1.5 millimeters, electrodeposition coating ED.
WA-type	Aluminum milky white color
Type A	Aluminum silver color
Type CA	Aluminum bronze color
Type BA	Aluminum black color
Type SC	Aluminum stain color

## ■ Color samples

Customized color (stain color, etc) available.

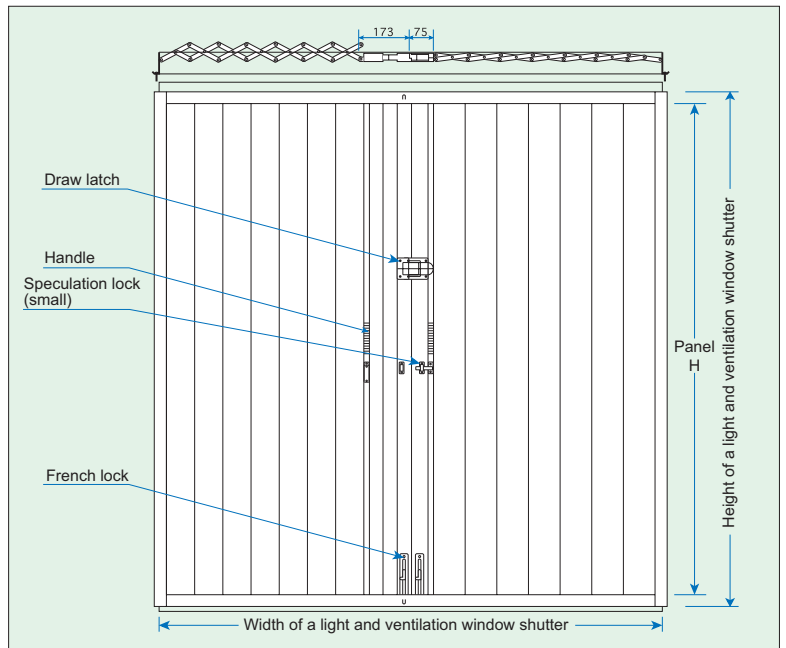
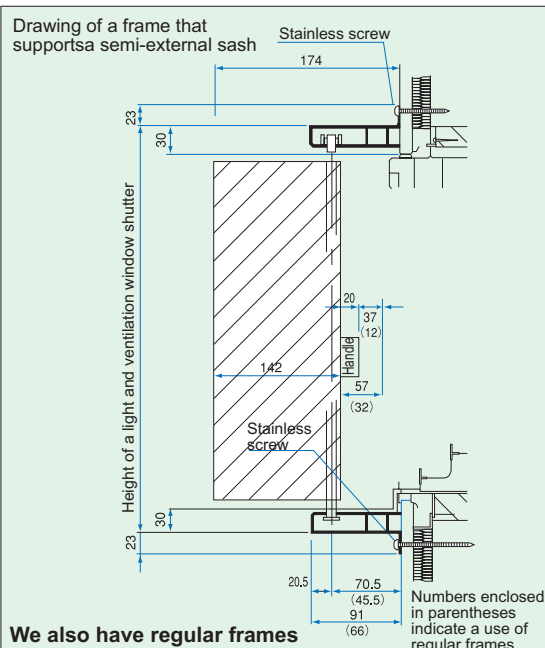
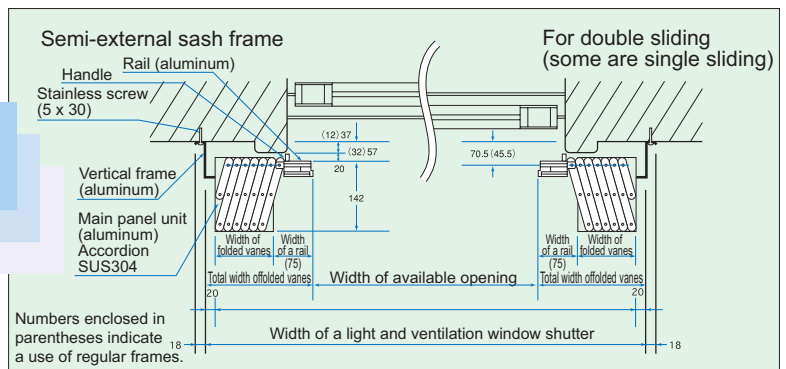


Touei's air permeable window shutter allows smooth opening and closing.

Rollers help smooth opening and closing with a gentle slide.



- Top rollers (Bearing rollers also available)
- Bottom rollers



◎We also have a separated type rain visor. (Frame with a rain visor is an option)

◎Shutter with the left side is used as a blind. The right side is closed (Both sides can be used as a blind)



Manufactured and distributed by  
**Touei Sangyo Co. Ltd.**

4-8-17 Nihonbashi Hon-cho, Chuo-ku, Tokyo 103-0023  
Telephone: +81-3-3278-8404 (main switchboard),  
FAX: +81-3-3278-8408

<http://www.touei-sangyo.co.jp>

**Distributor**