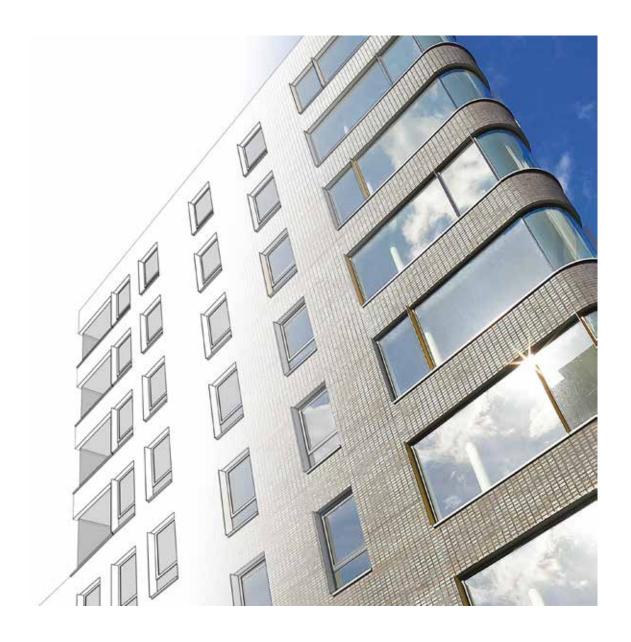
# WINDOW VENTILATORS





# OUR MISSION

#### Creating healthy spaces



Paul Renso

"Renson" specialises in ventilation, sun protection and outdoor. With experience dating back to 1909, and an integrated team of over 1200 employees, we develop systems and solutions which provide consumers with a healthy and comfortable

living and working environment, also taking into account energy efficiency and the use of renewable energy. We develop innovative products and systems, and offer total solutions to make every house into a healthy and comfortable home.

"We also appreciate the aesthetic values of every building, allowing our sun control and ventilation systems to be incorporated invisibly into your home. Our patio covers and aluminium blades for covering façades provide clear accents, offering added value to the architecture. Inside, we ensure that doors are integrated invisibly with no conspicuous frames or visible joints."

Discover how Renson® products can optimise the comfort experience while guaranteeing a contemporary design.

"We develop innovative products and systems allowing for aesthetic integration in every building."



# CONTENTS

OVERVIEW	4	ROLLER SHUTTER FLAP VENTILATOR	
		Transivent <sup>®</sup>	50
INTRODUCTION		SLIDING VENTS	
		THL100 - THL100V	54
Why should you ventilate?	7	T100 - T130 - T150	56
Regulations	8		
i-Flux® technology	11	SLOTVENTS	
		Sonoslot®	62
		Sonoslot® max	64
PRODUCTS		Pyramid	66
		PyrAcoust	68
OVERFRAME FLAP VENTILATORS		Interior Slotvents	70
Invisivent® AIR		Exterior Slotvents	71
Invisivent® AIR Light	15		
Invisivent® AIR Basic	16	COMBINED VENTILATION AND SUN SH	ADING
Invisivent® AIR High	17	OVERFRAME	
Invisivent® COMFORT		Fixvent® Mono AK <sup>EVO</sup>	74
Invisivent® COMFORT Basic	19	Fixvent® Mono UT <sup>EVD</sup>	78
Invisivent® COMFORT High	20		
Invisivent® COMFORT Ultra	21		
Invisivent® AIR / COMFORT options	22	EPILOGUE	
FLAP VENTILATORS GLAZED-IN/AT TRANSON	М	Additional info	82
TC45	26		
TC60	28		
AR60	30		
THK60	32		
AR75	34		
AR90	36		
THK90	38		
THM90 <sup>EVO</sup> /THM90PB <sup>EVO</sup> /THM90TR <sup>EVO</sup>	40		
Sonovent®	42		
Sonovent® Compact	46		

# OVERVIEW TECHNICAL CHARACTERISTICS

	Page	Equivalent Area (mm²/m)	Q at 1 Pa (I/s/m)	Q at 1 Pa (m³/h/m)	Q at 2 Pa (I/s/m)	Q at 2 Pa (m³/h/m)	Q at 10 Pa (I/s/m)	Q at 20 Pa (I/s/m)	Free area (mm²/m)	Sound reduction D <sub>n.e.w</sub> (C;C <sub>tr</sub> ) in open position (dB/m)	U-value (W/m²K)
lverframe flap ventilators											
/ISIVENT® AIR Light	15	13479	10.6	38.1	17.2	62.0	16.4	19.2	14388.5	31 (-1;-2)	2,0
ISIVENT® AIR Basic	16	13429	10.6	38.0	17.2	62.0	17.6	17.3	13975.5	34 (0;-1)	1,8
SIVENT® AIR High	17	11364	8.9	32.2	12.1	43.4	11.9	14.3	10273	40 (0;-2)	1,8
SIVENT® COMFORT Basic	19	4311	3.4	12.2	6.0	21.6	18.8	24.0	3900	35 [-1;-2]	1,8
SIVENT® COMFORT High	20	2936	2.3	8.3	4.7	16.8	12.4	18.2	3606	39 (0;-2)	1.8
SIVENT® COMFORT Ultra	22	2356	1.9	6.7	3.3	11.8	10.0	14.4	3606	42 (0;-2)	1,7
ventilators glazed-in/at transon	n										
	26	10435	8,2	29,5	11,5	41,4	25,8	36,5	11333	27 [0;0]	4,1
0	28	15652	12,3	44,3	17,4	62,6	38,9	55,0	12314	28 (0;0)	3,3
]	30	10427	8,2	29,5	11,8	42,3	19,7	23,9	14900	27 (0;0)	4,5
60	32	11841	9,3	33,5	13,2	47,5	29,6	41,8	14841	27 (0;0)	4,5
5 Small	34	14174	11,1	40,1	15,3	54,9	17,3	14,7	10762	26 [-1;-1]	3,0
5 Medium	34	17409	13,7	49,3	18,8	67,5	21,4	18,9	13531	26 (-1;-2)	3,0
5 Large	34	19034	15,0	53,9	22,6	81,3	24,5	21,7	16171	26 (-1;-2)	3,0
5 Xlarge	34	24301	19,1	68,8	29,0	104,3	31,5	28,0	18431	26 (-1;-1)	3,0
0	36	14252	11,2	40,3	15,6	56,2	11,4	9,1	11070	30 (-1;-2)	3,9
90	38	14736	11,6	41,7	16,1	57,9	34,5	48,0	14120	28 (0;-1)	3,9
90 <sup>EV0</sup>	40	11841	9,3	33,5	13,9	50,0	13,5	15,1	11200	26 (0;0)	3,8
90PB <sup>EV0</sup>	40	11841	9,3	33,5	13,9	50,0	13,5	15,1	11200	26 (0;0)	3,8
90TR <sup>EVO</sup>	40	11841	9,3	33,5	13,9	50,0	13,5	15,1	11200	26 (0;0)	3,8
OVENT® Small 10	42	17756	14,0	50,2	14,0	50,2	15,3	22,9	10000	46 (-1;-5)	4,5
IOVENT® Small 15	42	29593	23,3	83,7	23,3	83,7	25,6	28,5	11000	41 [-1;-2]	4,5
OVENT® Small 20	42	31813	25,0	90,0	25,0	90,0	27,5	29,2	18900	40 (-1;-3)	4,5
DVENT® Small 25	42	33786	26,6	95,6	26,6	95,6	29,2	27,1	22300	37 (-1;-3)	4,5
OVENT® Medium 10	42	17509	13,8	49,5	13,8	49,5	15,1	-	10000	48 (-2;-6)	4,6
OVENT® Medium 15	42 42	26511 33292	20,8	75,0	20,8	75,0 94,2	22,9	-	11000 18900	45 [-2;-6]	4,6 4,6
OVENT® Medium 20 OVENT® Medium 25	42	34032	26,2 26,7	94,2	26,2 26,7	96,3	28,8	27,5	22300	43 (0;-3) 39 (-1;-4)	4,6
DVENT Medium 23	42	16153	12,7	45,7	12,7	45,7	14.0		10000	50 (-2;-6)	4,6
DVENT® Large 15	42	25524	20,1	72,2	20,1	72,2	22,1	-	11000	49 (-2;-7)	4,6
DVENT® Large 20	42	32059	25,2	90.7	25,2	90.7	27,7		18900	44 (-2;-6)	4,6
DVENT® Large 25	42	33416	26,3	94,5	26,3	94,5	28,9	25,0	22300	41 (-2;-6)	4,6
DVENT® XLarge 10	42	14427	11,3	40,8	11,3	40,8	12,5	-	10000	56 [-2;-6]	4,7
IVENT® XLarge 15	42	21578	17.0	61.0	17.0	61.0	18.7	-	11000	53 (-2;-6)	4.7
IVENT® XLarge 20	42	31073	24,4	87,9	24,4	87,9	26,9	-	18900	46 [-2;-6]	4,7
IVENT® XLarge 25	42	32676	25,7	92.4	25,7	92.4	28,2	-	22300	45 (-2;-6)	4,7
OVENT® Compact 10	46	15334	12,1	43,4	16,4	58,9	17,3	17,8	9500	36 (0;-1)	6,0
IVENT® Compact 13	46	19278	15,2	54,5	18,8	67,7	18,8	18,7	12500	35 (0;-1)	6,0
/ENT® Compact 15	46	24687	19,4	69,8	19,9	71,5	18,6	19,1	15000	33 (0;-1)	6,0
shutter flap ventilator											
ent <sup>®</sup>	50	13748	10,8	38,9	15,2	54,6	20,1	19,9	16368	28 (-1;-2)	3,0
ig vents											
.00	54	16759	13,2	47,4	18,7	67,2	41,6	58,9	16200	22 (0;0)	3,9
DOV	54	12770	10,0	36,1	14,2	51,3	32,1	45,5	27950	22 (0;0)	3,9
	56	17326	13,6	49,0	19,5	70,3	43,8	61,9	25342	-	-
	56	24589	19,3	69,6	27,7	99,8	62,1	87,9	38302	-	-
	56	27992	22,0	79,2	31,9	114,8	71,5	101,0	45592	-	-
vents											
slot®, 275 mm	62	1273	1,0	3,6	1,4	5,0	3,2	3,3	1256	38 (0;0)	1,4
slot°, 375 mm	62	1607	1,3	4,5	1,7	6,2	4,0	4,2	1885	37 [0;0]	1,4
slot*, 475 mm	62	2121	1,7	6,0	2,3	8,3	5,3	5,6	2513	36 (0;0)	1,4
slot*, 700 mm	62	3181	2,5	9,0	3,4	12,4	8,0	8,4	3769	34 (0;0)	1,4
slot® Max without damping	64	2298	1,8	6,5	2,7	9,7	6,8	6,9	1871	38 (-1;-2)	-
lot® Max with damping	64	1555	1,2	4,4	1,9	6,8	5,1	7,6	1871	40 (-1;-2)	-
nid 2500	66	2723	2,1	7,6	3,1	10,85	7,0	10,1	2200	36 (0;0)	-
nid 5000	66	5229	4,2	15,1	6,0	21,6	13,6	19,4	4590	33 (-1;0)	-
coust 2500 + 1 acoustic module	68	2749	2,2	7,9	3,2	11,5	7,6	11,1	2496	42 (-1;-2)	-
coust 2500 + 2 acoustic modules	68	2736	2,2	7,9	3,1	11,2	7,5	11,0	2496	45 (-2;-3)	-
coust 5000 + 1 acoustic module	68	5714	4,5	16,2	6,4	23,0	14,4	20,5	4472	39 (-1;-2)	-
coust 5000 + 2 acoustic modules	68	5596	4,3	15,5	6,2	22,3	14,5	20,8	4472	42 (-2;-4)	-
ned ventilation and sun shadin		me									
Mono AK <sup>EVO</sup>	74							es on page 75			
° Mono UT <sup>EVO</sup>	78					See te	conical value	es on page 79			

<sup>\*</sup> not for installation at transom • \*\* other thickness on request • \*\*\* 2000 mm glazed-in installation / 2500 mm installation at transom

	Self- regulating	i-FLux*	Glass reduction (mm)	Glass thickness (mm)	Finish	Maximum length (mm)	
·							Overframe flap ventilators
	yes	yes	0	П.а.	anodised / RAL / dual color	6000	INVISIVENT® AIR Light
	yes	yes	0	n.a.	anodised / RAL / dual color	6000	INVISIVENT® AIR Basic
	yes	yes	0	n.a.	anodised / RAL / dual color	6000	INVISIVENT® AIR High
	yes	yes	0	n.a.	anodised / RAL / dual color	6000	INVISIVENT® COMFORT Basic
	yes	yes	0	n.a. n.a.	anodised / RAL / dual color anodised / RAL / dual color	6000 6000	INVISIVENT® COMFORT High INVISIVENT® COMFORT Ultra
	yes	yes	U	II.d.	allouised / RAL / ddal coloi	8000	Flap ventilators glazed-in/at transom
	no	no	45	20/24/28	anodised / RAL / dual color	2500	TC45
	по	no	60	20/24/28	anodised / RAL / dual color	2500	TC60
	yes	yes	60	20/24/28	anodised / RAL / dual color	2500	AR60
	no	no	60	20/24/28	anodised / RAL / dual color	2500	THK60
	yes	no	75/77	20/24/28/32*/36*/40*/44*	anodised / RAL / dual color	2500	AR75 Small
	yes	no	75/77	20/24/28/32*/36*/40*/44*	anodised / RAL / dual color	2500	AR75 Medium
	yes	no no	75/77	20/24/28/32*/36*/40*/44*	anodised / RAL / dual color	2500	AR75 Large
	yes	no	75/77	20/24/28/32*/36*	anodised / RAL / dual color	2500	AR75 Xlarge
	yes	no	90	20/24/28	anodised / RAL / dual color	2500 (2000 mm for motorised control)	AR90_
	no no	no	90	20/24/28	anodised / RAL / dual color	2500 (2000 mm for motorised control)	THK90
	yes	no	90	20/24/28/33	anodised / RAL / dual color	2500 (2000 mm for motorised control)	THM90 <sup>EVO</sup> THM90PB <sup>EVO</sup>
	yes yes	no no	90	20/24/28 20/24	anodised / RAL / dual color anodised / RAL / dual color	2500 (2000 mm for motorised control) 2500 (2000 mm for motorised control)	THM90TREV0
	yes	no	130/135	20/24/28/32**	RAL / dual color	2000/2500***	SONOVENT® Small 10
	yes	no	130/135	20/24/28/32**	RAL / dual color	2000/2500***	SONOVENT® Small 15
	yes	no	130/135	20/24/28/32**	RAL / dual color	2000/2500***	SONOVENT® Small 20
	yes	no	130/135	20/24/28/32**	RAL / dual color	2000/2500***	SONOVENT® Small 25
	yes	no	130/135	20/24/28/32**	RAL / dual color	2000/2500***	SONOVENT® Medium 10
	yes	no	130/135	20/24/28/32**	RAL / dual color	2000/2500***	SONOVENT® Medium 15
	yes	no	130/135	20/24/28/32**	RAL / dual color	2000/2500***	SONOVENT® Medium 20
	yes	по	130/135	20/24/28/32**	RAL / dual color	2000/2500***	SONOVENT® Medium 25
	yes	no	130/135	20/24/28/32**	RAL / dual color	2000/2500***	SONOVENT® Large 10
	yes	no	130/135	20/24/28/32**	RAL / dual color	2000/2500***	SONOVENT® Large 15
	yes	no no	130/135	20/24/28/32**	RAL / dual color	2000/2500***	SONOVENT® Large 20
	yes	no	130/135	20/24/28/32**	RAL / dual color	2000/2500*** 2000/2500***	SONOVENT® Large 25
	yes	no no	130/135 130/135	20/24/28/32** 20/24/28/32**	RAL / dual color RAL / dual color	2000/2500***	SONOVENT® XLarge 10 SONOVENT® XLarge 15
	yes yes	no	130/135	20/24/28/32**	RAL / dual color	2000/2500***	SONOVENT XLarge 13
	yes	no	130/135	20/24/28/32**	RAL / dual color	2000/2500***	SONOVENT® XLarge 25
	yes	no	78	20/24/28/32/36	RAL / dual color	2000/2500***	SONOVENT® Compact 10
	yes	no	78	20/24/28/32/36	RAL / dual color	2000/2500***	SONOVENT® Compact 13
	ves	no	78	20/24/28/32/36	RAL / dual color	2000/2500***	SONOVENT® Compact 15
						·	Roller shutter flap ventilator
	yes	yes	n.a.	n.a.	anodised / RAL	2200 (1500 mm for cord control)	Transivent®
							Sliding vents
	no	no	129	15*/20/24/28	anodised / RAL / dual color	3500	THL100
	no	no	129	15*/20/24/28	anodised / RAL / dual color	3500	THL100V
	no	no no	n.a.	n.a.	anodised / RAL / dual color	3500	T100_
	no	no	n.a.	п.а.	anodised / RAL / dual color	3500	T130
	no	no	n.a.	n.a.	anodised / RAL / dual color	3500	T150 Slotvents
	yes	yes	n.a.	n.a.	anodised / Renson standard WHITE, 9005, 1247	275	Sonoslot <sup>®</sup> , 275 mm
	yes	yes	n.a.	n.a.	anodised / Renson standard WHITE, 3003, 1247	375	Sonoslot*, 375 mm
	yes	yes	n.a.	n.a.	anodised / Renson standard WHITE, 9005, 1247	475	Sonoslot*, 475 mm
	yes	yes	п.а.	n.a.	anodised / Renson standard WHITE, 9005, 1247	700	Sonoslot°, 700 mm
	yes	no	n.a.	n.a.	Renson standard WHITE / RAL 1247	700	Sonoslot® Max without damping
	yes	no	n.a.	n.a.	Renson standard WHITE / RAL 1247	700	Sonoslot® Max with damping
	no	no	n.a.	n.a.	anodised / Renson standard WHITE, 9005, 7016	n.a.	Pyramid 2500
	no	по	n.a.	n.a.	anodised / Renson standard WHITE, 9005, 7016	п.а.	Pyramid 5000
	no	no	n.a.	п.а.	anodised / Renson standard WHITE, 9005, 7016	п.а.	Pyracoust 2500 + 1 acoustic module
	no	no	n.a.	n.a.	anodised / Renson standard WHITE, 9005, 7016	n.a.	Pyracoust 2500 + 2 acoustic modules
	no	no	n.a.	п.а.	anodised / Renson standard WHITE, 9005, 7016	п.а.	Pyracoust 5000 + 1 acoustic module
	no	no	n.a.	n.a.	anodised / Renson standard WHITE, 9005, 7016	n.a.	Pyracoust 5000 + 2 acoustic modules
				Saa taaha	cal values on page 75	Combined	ventilation and sun shading overframe  Fixvent® Mono AKEVO
					cal values on page 79		Fixvent® Mono UTEvo
				555 (66)111	311 pago 70		13370710 171010 01

n.a. : not applicable • airflow based upon aluminiumsize = 1000 mm (except slotvents)



# WHY SHOULD YOU VENTILATE?

Contrary to what many people think, indoor air quality is significantly worse than outdoor air quality, on average. Cooking, showering, heating, cleaning and even breathing and sweating contribute to polluted air. Too much moisture in the home also leads to odours, condensation and the formation of mould, especially in well-insulated or insufficiently ventilated homes. And then there is the home itself, which, due to the volatile organic compounds in the building materials used, does not exactly have a positive impact on indoor air quality either.

Over the course of time, a poor indoor climate can adversely affect the health of the occupants. Difficulty breathing, dry throats, eye irritation, headaches, allergies, loss of concentration, lack of energy or sleepiness are just a few of the possible consequences. As a result, it is extremely important to ensure sufficient ventilation on a regular basis.

#### **GOOD FOR THE OCCUPANT AND THE HOME**

Many people are convinced that occasionally leaving the windows open is sufficient to achieve the necessary ventilation. However, this only achieves a temporary and localised effect.

Moreover, one cannot achieve controlled ventilation by simply opening windows, and the result is a waste of valuable energy. In addition, open windows also bring in noise and are an open invitation to burglars and annoying insects.

Continuous and controlled ventilation is your only guarantee of a healthy indoor climate. Contaminated indoor air is expelled and continuously replaced by fresh outdoor air. The home is 'rinsed' with fresh air, as it were.

#### RENSON® SENSE: MEASURE THE INVISIBLE



We might not be able to "see" air with our own eyes, but our indoor air quality monitor Sense absolutely can. Six advanced sensors continuously measure the key factors affecting your health, comfort and productivity. The device visually shows when air quality is poor and when something needs to be done about it. Blue means the indoor air quality is good ( $\rm CO_2$  concentration < 800 ppm), orange means the air quality leaves something to be desired ( $\rm CO_2$  concentration between 800 ppm and 1200 ppm) and red means the air quality is downright poor ( $\rm CO_2$  concentration > 1200 ppm).

Sense is much more than a traditional  ${\rm CO_2}$  monitor. And just as well, because the extra parameters it monitors play a crucial role in a healthy and comfortable indoor climate at home or at the office:

- ✓ Well-thought-out, smart design for a healthier home or workplace
- ✓ Immediate visual feedback on the device
- ☑ Connects to a free app to view measurement results and historic values

# **REGULATIONS**

#### Brief guide to UK building regulations, part F - ventilation

#### **DOMESTIC BUILDINGS**

#### New Buildings (with any design air permeability)

Previously ventilation area was shown in free area mm<sup>2</sup> whereas now it is calculated and shown as Equivalent Area [EA] per mm<sup>2</sup> as in the table shown below based upon 2 occupants in the main bedroom and a single occupant in all other bedrooms.

Total floor area (m²)	Number of bedrooms				
	1	2	3	4	5
< 50	35000	40000	50000	60000	65000
51 - 60	35000	40000	50000	60000	65000
61 - 70	45000	45000	50000	60000	65000
71 - 80	50000	50000	50000	60000	65000
81 - 90	55000	60000	60000	60000	65000
91 - 100	65000	65000	65000	65000	65000
> 100	add 7000 mm² for every additional 10 m² floor area				

The minimum equivalent area (EA) for habitable rooms is 5000 mm<sup>2</sup> EA and for any wet room 2500 mm<sup>2</sup> EA

Please contact Renson® UK for more information regarding basements, habitable rooms with non opening windows, modular or portable buildings and acoustic needs for buildings.

#### **Existing Buildings**

Where renovations are being carried out to an existing building then the background ventilation should not be smaller than originally provided, but it must be at least 5000 mm<sup>2</sup> EA for habitable rooms and 2500 mm<sup>2</sup> EA for wet rooms.

Please contact Renson® UK for more information regarding connecting to a conservatory, addition of a wet room or addition of a habitable room.

#### **NON-DOMESTIC BUILDINGS**

#### **New Offices**

10 l/s (litres per second) per person of air supply is needed

#### Existing offices, hotels, ...

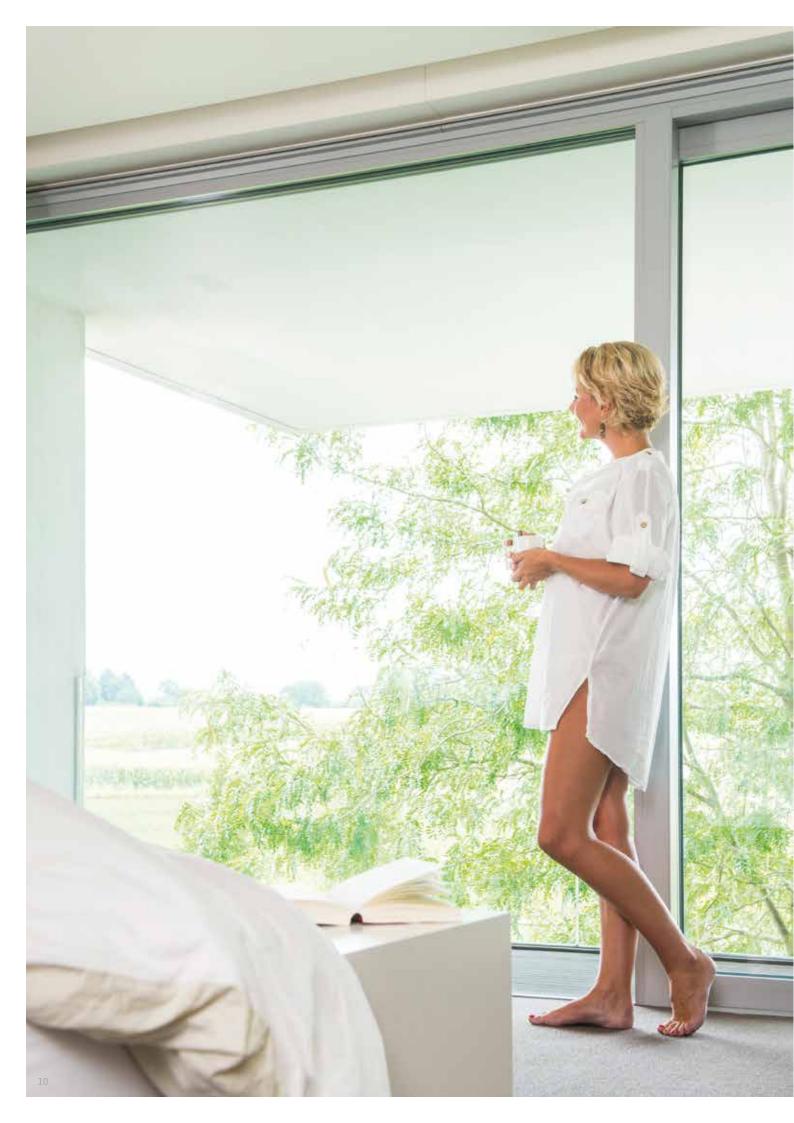
Floor area under 10 m $^2$  - 2500 mm $^2$  EA Floor area over 10 m $^2$  - 250 mm $^2$ /m $^2$  EA Kitchens - 2500 mm $^2$  EA

Bathrooms/showers/WC - 2500 mm² EA per bath, shower or toilet

#### New schools (according to Building Bulletin 101)

8 l/s (litres per second) per person of air supply is needed.

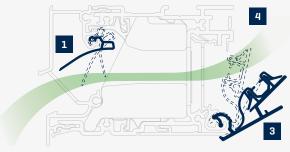




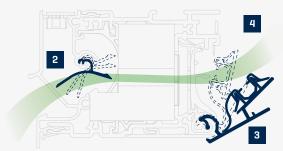
# **PRINCIPLES**



Due to the application of the i-Flux technology, Renson® can quarantee maximum comfort with minimum energy loss with the window vents. i-Flux technology is based on the following three principles:

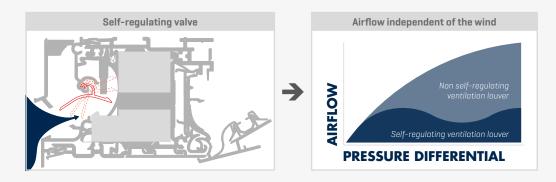






#### 1. AIRFLOW INDEPENDENT OF THE WIND

The use of a self-regulating valve that reacts to changes in pressure makes it possible to maintain a constant airflow even in case of wind gusts, and keeps out draughts. Self-regulation is expressed in different classes, from class PO (not self-regulating) to P4 (excellent selfregulating).



#### 2. MINIMAL ENERGY LOSS DUE TO THE NON-RETURN VALVE

Because the valve of the Invisivent Comfort is a self-regulating non-return valve, any energy loss from the inside out is avoided.

#### 3. AIRFLOW DETERMINED WITH MANUALLY ADJUSTABLE INNER VALVE

The user can determine the desired airflow, e.g. according to the number of people in the room.

#### 4. UPWARD AIRFLOW FOR OPTIMUM COMFORT

The shape of the inner valve conducts the fresh air upwards, leading to optimal air distribution throughout the room and guaranteeing maximum comfort.

# **OVERFRAME FLAP VENTILATORS**

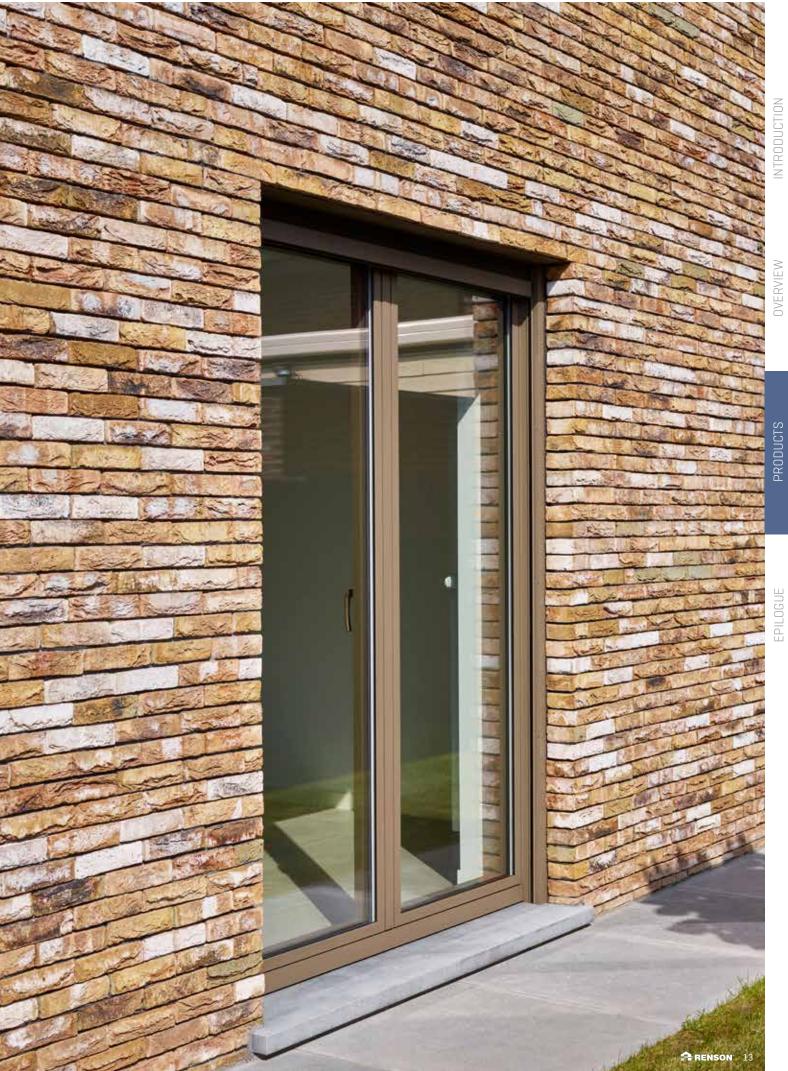






Invisivent® COMFORT

Invisivent® COMFORT



### **INVISIVENT® AIR**

# Discreet and energy-efficient window ventilation for a healthy and comfortable indoor climate

ON WINDOW PROFILE

SELF-REGULATING I-FLUX P3

ACOUSTIC DAMPING

ENERGY-EFFICIENT

HIGH RISE





#### INTRO

Invisivent AIR is an acoustic, thermal, and energy-efficient window ventilation system that can easily be integrated in any project, be it new build or renovation.

This new range is constructed in accordance with the monobloc principle, which means that the products are anchored to the window profile as a stable whole.

In addition, Invisivent AIR can always be combined with an optional design outer cover. This provides additional protection against water and wind load, and also provides an aesthetic benefit as the ensemble can be easily and fully concealed within the structure, rendering it completely invisible.

We also have the ideal solution for wind-loaded applications such as high rise buildings and apartment buildings on the coast.

#### INSTALLATION ON TOP OF THE WINDOW PROFILE

The Invisivent AIR can be placed behind the wall on top of aluminium, wood, or PVC window profiles. As the glass size remains the same, this almost perfectly concealed installation method guarantees maximum daylight.

#### PERFECT AIRTIGHT CONNECTION ON WINDOW PROFILE

A coextruded flexible rubber seal that runs across the entire length of the window ventilation (including the end caps) guarantees a perfectly airtight connection between the Invisivent and the window profile.

#### I-FLUX® WITH NON-RETURN VALVE

Thanks to its self-regulating valve, the Invisivent AIR ensures that fresh and healthy air is supplied without any draught.

Moreover, the manually adjustable inner valve pushes the incoming airflow upwards, ensuring optimal distribution of fresh air in your home.

#### **ACOUSTIC COMFORT**

Even in their narrowest versions, Invisivent AIR window ventilation systems are fitted with acoustic damping material as standard. An acoustic leak to the cavity offers extra-impressive acoustic performance.

In open position: Invisivent AIR Light: 31 (-1;-2) dB

Invisivent AIR Basic: 34 (0;-1) dB Invisivent AIR High: 40 (0;-2) dB

#### **INSECT-PROOF**

The perforated inner profile keeps out mosquitoes, flies, and other unwelcome insects.

#### **BURGLAR PROOF**

The Invisivent AIR range complies with the Class 2 burglar resistance standard, which makes it suitable for a Class WK2 window.

#### **NON-RESIDENTIAL APPLICATION**

For non-residential buildings, we have an alternative model in our range. For more information, please visit the Renson® website: www.renson.eu.

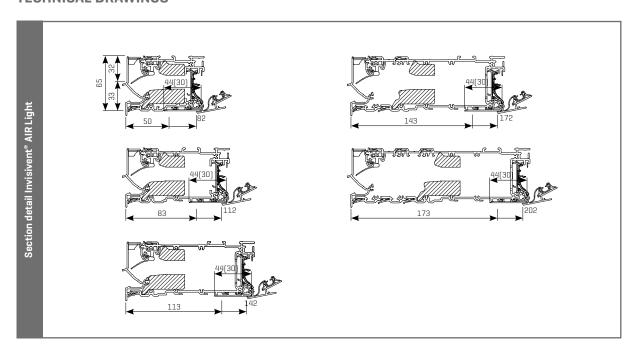
# **INVISIVENT® AIR LIGHT**

#### **TECHNICAL CHARACTERISTICS**

Airflow	
Equivalent area	13479 mm²/m
Q at 1 Pa	10.6 l/s/m
Q at 1 Pa	38.1 m³/h/m
Q at 2 Pa	17.2 l/s/m
Q at 2 Pa	62.0 m³/h/m
Q at 10 Pa	16.4 l/s/m
Q at 20 Pa	19.2 l/s/m
Comfort	
Sound reduction $D_{n,e,w}$ [C;C <sub>tr</sub> ]	
In open position	31 (-1;-2) dB
In closed position	51 (-1;-3) dB
Technical characteristics	
Controllable internal flap	5 positions
Control options internal flap	Motor, manual, cord, rod
U value	2,0 W/m²K
Air leakage at 50 Pa	<15% (in closed position)
Watertightness in closed position, up to	900 Pa
Watertightness in open position, up to	150 Pa - 250 Pa (with design exterior cover)
Dimensions	
Glass reduction	0 mm
Height	65 mm
Depths window frame	50 - 202 mm (or more upon request)
Max. length	6000 mm







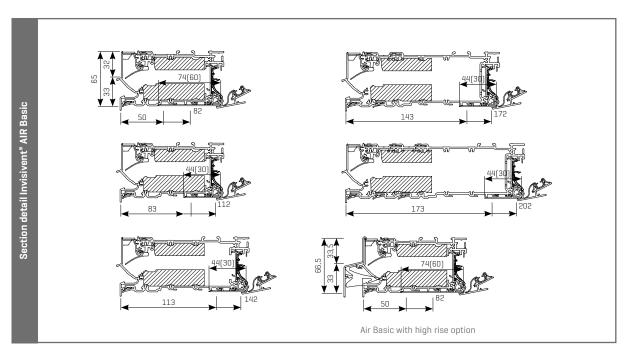
# **INVISIVENT® AIR BASIC**





#### **TECHNICAL CHARACTERISTICS**

Airflow	
Equivalent area	13429 mm²/m
Q at 1 Pa	10.6 l/s/m
Q at 1 Pa	38.0 m³/h/m
Q at 2 Pa	17.2 l/s/m
Q at 2 Pa	62.0 m³/h/m
Q at 10 Pa	17.6 l/s/m
Q at 20 Pa	17.3 l/s/m
Comfort	
Sound reduction $D_{n,e,w}\left[C;C_{tr}\right]$	
In open position	34 (0;-1) dB
In closed position	51 (-1;-3) dB
Technical characteristics	
Controllable internal flap	5 positions
High rise version	16 positions
Control options internal flap	Motor, manual, cord, rod
U value	1,8 W/m²K
Air leakage at 50 Pa	<15% (in closed position)
Watertightness in closed position, up to	900 Pa
High rise version	1200 Pa
Watertightness in open position, up to	150 Pa - 250 Pa (with design exterior cover)
High rise version	250 Pa
Dimensions	
Glass reduction	0 mm
Height	65 mm
High rise version	66.5 mm
Depths window frame	50 - 202 mm (or more upon request)
Max. length	6000 mm



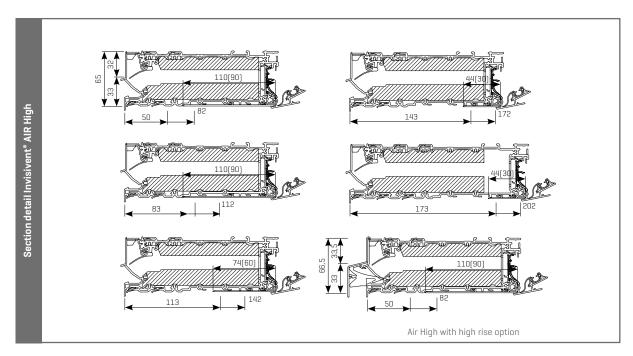
# **INVISIVENT® AIR HIGH**

#### **TECHNICAL CHARACTERISTICS**

Airflow	
Equivalent area	11364 mm²/m
Q at 1 Pa	8.9 l/s/m
Q at 1 Pa	32.2 m³/h/m
Q at 2 Pa	12.1 l/s/m
Q at 2 Pa	43.4 m³/h/m
Q at 10 Pa	11.9 l/s/m
Q at 20 Pa	14.3 l/s/m
Comfort	
Sound reduction $D_{n,e,w}$ [C;C <sub>tr</sub> ]	
In open position	40 (0;-2) dB
In closed position	51 (-1;-3) dB
Technical characteristics	
Controllable internal flap	5 positions
High rise version	16 positions
Control options internal flap	Motor, manual, cord, rod
U value	1,8 W/m²K
Air leakage at 50 Pa	<15% (in closed position)
Watertightness in closed position, up to	900 Pa
High rise version	1200 Pa
Watertightness in open position, up to	150 Pa - 250 Pa (with design exterior cover)
High rise version	250 Pa
Dimensions	
Glass reduction	0 mm
Height	65 mm
High rise version	66.5 mm
Depths window frame	50 - 202 mm (or more upon request)
Max. length	6000 mm







### **INVISIVENT® COMFORT**

#### The ultimate comfort in natural ventilation

ON WINDOW PROFILE

SELF-REGULATING WITH NON-RETURN VALVE

SUPERIOR ACOUSTIC COMFORT

HIGH ENERGY-EFFICIENCY







#### INTRO

Invisivent COMFORT goes one step further than Invisivent AIR and guarantees even greater sound damping and even more thermal and energy comfort thanks to its integrated, self-regulating non-return valve. Just like Invisivent AIR, Invisivent COMFORT can always be combined with a design outer cover. We also have the ideal solution for wind-loaded applications such as high rise buildings and apartment buildings on the coast.

#### INSTALLATION ON TOP OF THE WINDOW PROFILE

The Invisivent COMFORT can be placed behind the wall on top of aluminium, wood, or PVC window profiles. As the glass size remains the same, this almost perfectly concealed installation method guarantees maximum daylight.

#### PERFECT AIRTIGHT CONNECTION ON WINDOW PROFILE

A coextruded flexible rubber seal that runs across the entire length of the window ventilation (including the end caps) guarantees a perfectly airtight connection between the Invisivent and the window profile.

#### I-FLUX® WITH NON-RETURN VALVE

Thanks to its self-regulating valve, the Invisivent COMFORT ensures that fresh and healthy air is supplied without any draught. Because the self-regulating valve in the Invisivent COMFORT comes with a non-return function, any energy loss from the interior towards the outside is prevented.

Moreover, the manually adjustable inner valve pushes the incoming airflow upwards, ensuring optimal distribution of fresh air in your home.

#### SUPERIOR ACOUSTIC COMFORT

Even in their narrowest versions, Invisivent COMFORT window ventilation systems are fitted with acoustic damping material as standard. An acoustic leak to the cavity offers extra-impressive acoustic performance.

In open position: Invisivent COMFORT Basic: 35 (-1;-2) dB

Invisivent COMFORT High: 39 (0;-2) dB Invisivent COMFORT Ultra: 42 (0;-2) dB

#### REPLACEABLE ACOUSTIC FOAM

Thanks to its replaceable acoustic foam, this window ventilation is easy to clean and maintain.

#### **INSECT-PROOF**

The perforated inner profile keeps out mosquitoes, flies, and other unwelcome insects.

#### **BURGLAR PROOF**

The Invisivent COMFORT range complies with the Class 2 burglar resistance standard, which makes it suitable for a Class WK2 window.

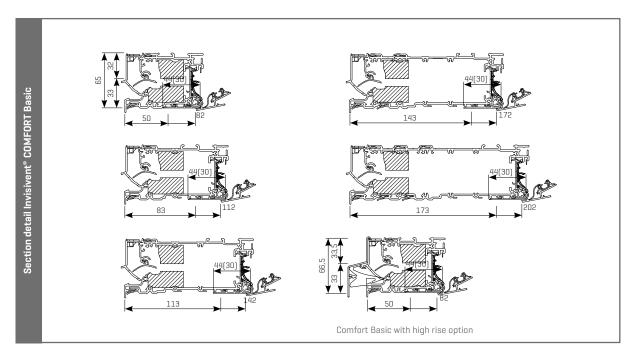
# **INVISIVENT® COMFORT BASIC**

#### **TECHNICAL CHARACTERISTICS**

Airflow	
Equivalent area	4311 mm²/m
Q at 1 Pa	3.4 l/s/m
Q at 1 Pa	12.2 m³/h/m
Q at 2 Pa	6.0 l/s/m
Q at 2 Pa	21.6 m³/h/m
Q at 10 Pa	18.8 l/s/m
Q at 20 Pa	24.0 l/s/m
Comfort	
Sound reduction $D_{n,e,w}$ [C;C <sub>tr</sub> ]	
In open position	35 (-1;-2) dB
In closed position	51 (-1;-3) dB
Technical characteristics	
Controllable internal flap	5 positions
High rise version	16 positions
Control options internal flap	Motor, manual, cord, rod
U value	1,8 W/m²K
Air leakage at 50 Pa	<15% (in closed position)
Watertightness in closed position, up to	900 Pa
High rise version	1200 Pa
Watertightness in open position, up to	150 Pa - 250 Pa (with design exterior cover)
High rise version	250 Pa
Dimensions	
Glass reduction	0 mm
Height	65 mm
High rise version	66.5 mm
Depths window frame	50 - 202 mm (or more upon request)
Max. length	6000 mm







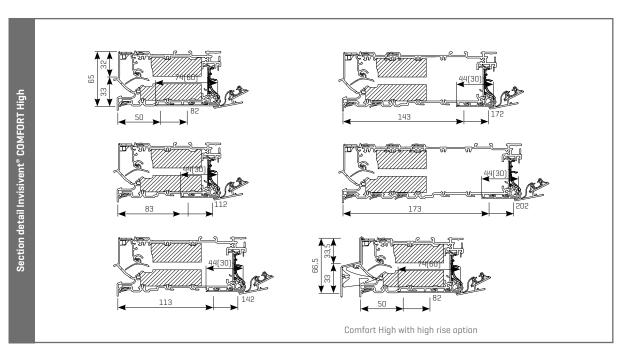
# **INVISIVENT® COMFORT HIGH**





#### **TECHNICAL CHARACTERISTICS**

Airflow	
Equivalent area	2936 mm²/m
Q at 1 Pa	2.3 l/s/m
Q at 1 Pa	8.3 m³/h/m
Q at 2 Pa	4.7 l/s/m
Q at 2 Pa	16.8 m³/h/m
Q at 10 Pa	12.4 l/s/m
Q at 20 Pa	18.2 l/s/m
Comfort	
Sound reduction $D_{n,e,w}\left[C;C_{tr}\right]$	
In open position	39 (0;-2) dB
In closed position	51 (-1;-3) dB
Technical characteristics	
Controllable internal flap	5 positions
High rise version	16 positions
Control options internal flap	Motor, manual, cord, rod
U value	1,8 W/m²K
Air leakage at 50 Pa	<15% (in closed position)
Watertightness in closed position, up to	900 Pa
High rise version	1200 Pa
Watertightness in open position, up to	150 Pa - 250 Pa (with design exterior cover)
High rise version	250 Pa
Dimensions	
Glass reduction	0 mm
Height	65 mm
High rise version	66.5 mm
Depths window frame	50 - 202 mm (or more upon request)
Max. length	6000 mm



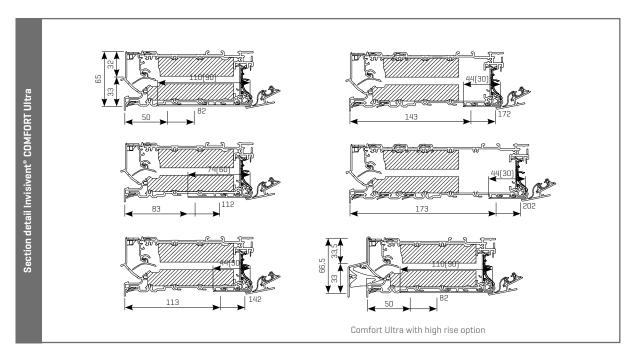
# **INVISIVENT® COMFORT ULTRA**

#### **TECHNICAL CHARACTERISTICS**

Airflow	
Equivalent area	2356 mm²/m
Q at 1 Pa	1.9 l/s/m
Q at 1 Pa	6.7 m³/h/m
Q at 2 Pa	3.3 l/s/m
Q at 2 Pa	11.8 m³/h/m
Q at 10 Pa	10.0 l/s/m
Q at 20 Pa	14.4 l/s/m
Comfort	
Sound reduction $D_{n,e,w}$ [C;C <sub>tr</sub> ]	
In open position	42 (0;-2) dB
In closed position	51 (-1;-3) dB
Technical characteristics	
Controllable internal flap	5 positions
High rise version	16 positions
Control options internal flap	Motor, manual, cord, rod
U value	1,7 W/m²K
Air leakage at 50 Pa	<15% (in closed position)
Watertightness in closed position, up to	900 Pa
High rise version	1200 Pa
Watertightness in open position, up to	150 Pa - 250 Pa (with design exterior cover)
High rise version	250 Pa
Dimensions	
Glass reduction	0 mm
Height	65 mm
High rise version	66.5 mm
Depths window frame	50 - 202 mm (or more upon request)
Max. length	6000 mm





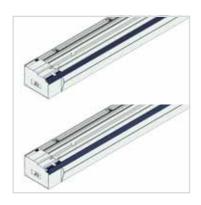


# INVISIVENT® AIR / COMFORT RANGE OPTIONS



#### **CONTROL FLAP**

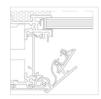
For ease of use or at the customer's request, the control flap is split up for lengths above 3000 mm. A special middle piece [3 mm thick] is inserted between the two flaps to give a peat finish



#### **FINISHING PROFILE**

The Invisivent AIR/COMFORT is designed to provide a perfect finish. There is a cut-out at the top of the vent that takes plasterboard or MDF panels up to 10 mm thick, and which allows the plasterer to integrate the vent discreetly into the plastered surface.



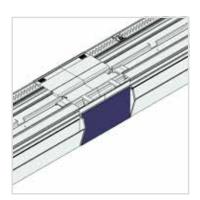






#### **INSTALLATION USING WALL BRACKETS**

The Invisivent AIR/COMFORT has a dowel slot so it can be attached quickly and easily to the unfinished structure by using wall brackets.



#### **SPLIT UP MIDDLE PIECE**

An Invisivent AIR/COMFORT is available in lengths up to 6 meter. However, it is also possible to install several Invisivent AIR/COMFORT vents next to each other, joined by a split up middle piece for a perfect finish.

#### **RAIN CAP**

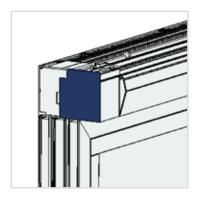
In case of exposure to extreme weather conditions (rain, sand, high wind loads,...), a rain cap can be added to the Invisivent AIR/COMFORT, ensuring high comfort at all times.

Each high rise version is equipped standard with a design exterior cover. Additional clips guarantee that the inner valve operates with the perfect closing force. Each high rise model contains acoustic material that dampens external noises to the greatest extent possible, resulting in increased user comfort. The high rise version is available in 5 different sounddamping levels.



#### SIDE MOUNTING PLATE

The use of side mounting plates is recommended to ensure that the Invisivent AIR/ COMFORT fits securely to the window.



#### **AIRFLOW LIMITERS**

Airflow limiters can easily be clipped into the Invisivent AIR Basic and COMFORT. They close the opening by 100 mm so that the maximum flow can be adjusted to suit your needs.



#### REMOVABLE ACOUSTIC FOAM

The acoustic foam can be removed (and cleaned or substituted) from the Invisivent AIR/ COMFORT through the perforated PVC profile.



# **FLAP VENTILATORS GLAZED-IN/AT TRANSOM**







**AVAILABLE UNTIL END OF STOCK** 

# **TC45**

#### Compact flap vent with a good price/quality ratio

GLAZED-IN

AT TRANSOM

COANDA EFFECT







#### INTRODUCTION

The compact TC45 is a non-selfregulating, thermally broken aluminium glazed-in window vent with a soft-line design outer profile. The internal flap directs the incoming airflow upwards and can be placed in 5 positions.

#### **GLAZED-IN INSTALLATION (OR AT TRANSOM)**

The TC45 can be installed glazed-in, or at transom using the additional transom profiles.

#### THERMALLY BROKEN

No cold air transfer from outside to inside.

#### **COANDA EFFECT**

The interior profile deflects the incoming air upwards, causing an optimal spread of fresh air in the room.

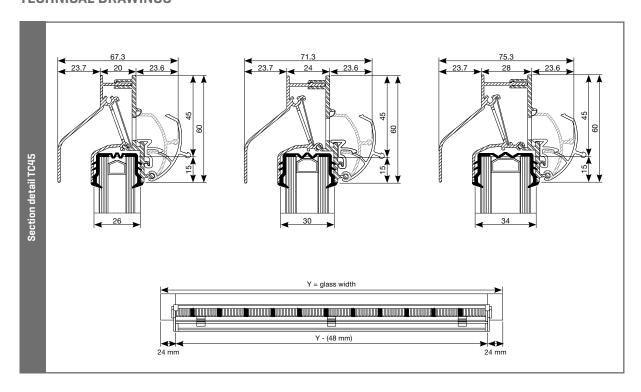
#### **INSECT MESH**

The perforated inside profile acts as an insect mesh.

#### **TECHNICAL CHARACTERISTICS**

Airflow	
Equivalent area	10435 mm²/m
Q at 1 Pa	8,2 l/s/m
Q at 1 Pa	29,5 m³/h/m
Q at 2 Pa	11,5 l/s/m
Q at 10 Pa	25,8 l/s/m
Q at 20 Pa	36,5 l/s/m
Comfort	
Sound reduction $D_{n,e,w}$ [C;C <sub>tr</sub> ]	
In open position	27 (0;0) dB
In closed position	37 (-1;-2) dB
Technical characteristics	
Controllable internal flap	5 stepped positions
Control options internal flap	Manual, cord, rod
U value	4,1 W/m²K
Air leakage at 50 Pa	<15% (in closed position)
Watertightness in closed position, up to	650 Pa
Watertightness in open position, up to	-
Dimensions	
Glass reduction	45 mm
Height	60 mm
Glass thickness	20, 24 or 28 mm
Max. length	2500 mm





# **TC60**

#### Compact flap vent with an excellent price/quality ratio

GLAZED-IN

AT TRANSOM

THERMALLY BROKEN







#### INTRODUCTION

The TC60 is a non-selfregulating, thermally broken aluminium glazed-in window vent with a soft-line design outer profile, having an excellent price/quality ratio. The internal flap directs the incoming airflow upwards and can be continuously controlled.

#### **GLAZED-IN INSTALLATION (OR AT TRANSOM)**

The TC60 has been developed for glazed-in installation, and can be integrated in aluminium, timber and PVC window profiles with a depth of 20, 24 or 28 mm. The TC60 can optionally also be installed at transom, using the additional transom profiles.

#### THERMALLY BROKEN

No cold air transfer from outside to inside.

#### **EXCELLENT PRICE/QUALITY RATIO**

Qualitative and compact window vent, ensuring the supply of fresh air, with an excellent price / quality ratio.

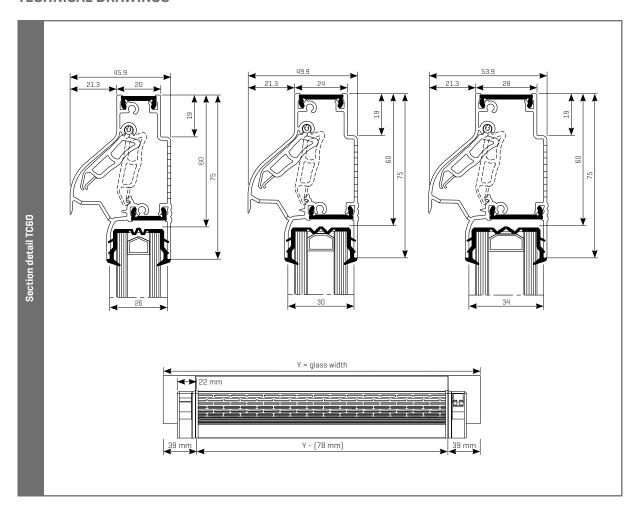
#### **INSECT MESH**

The perforated inside profile acts as an insect mesh.

#### **TECHNICAL CHARACTERISTICS**

Airflow	
Equivalent area	15652 mm²/m
Q at 1 Pa	12,3 l/s/m
Q at 1 Pa	44,3 m³/h/m
Q at 2 Pa	17,4 l/s/m
Q at 10 Pa	38,9 l/s/m
Q at 20 Pa	55,0 l/s/m
Comfort	
Sound reduction $D_{n,e,w}[C;C_{tr}]$	
In open position	28 (0;0) dB
In closed position	42 (0;0) dB
Technical characteristics	
Controllable internal flap	continuous adjustment
Control options internal flap	Manual, cord, rod
U value	3,3 W/m²K
Air leakage at 50 Pa	<15% (in closed position)
Watertightness in closed position, up to	650 Pa
Watertightness in open position, up to	Not product determined
Dimensions	
Glass reduction	60 mm
Height	75 mm
Glass thickness	20, 24 or 28 mm
Max. length	2500 mm





## **AR60**

#### Self-regulating flap vent with external hood for improved weather protection

GLAZED-IN

AT TRANSOM



I-FLUX





#### INTRODUCTION

The interior profile of the AR60 deflects the incoming air upwards so that fresh air is optimally spread in the room. It also has an external hood for additional weather protection. The AR60 is also available with permanently open clips (e.g. for open gas appliances).

#### **GLAZED-IN INSTALLATION (OR AT TRANSOM)**

The AR60 has been developed for glazed-in installation, and can be integrated in aluminium, timber and PVC window profiles with a depth of 20, 24 or 28 mm. The AR60 can optionally also be installed at transom, using the additional transom profiles.

#### THERMALLY BROKEN

No cold air transfer from outside to inside.

#### I-FLUX®

Thanks to its self-regulating flap, the AR60 ensures the supply of fresh and healthy air without draughts. Moreover, the interior profile deflects the incoming air upwards, causing an optimal spread of fresh air in the room.

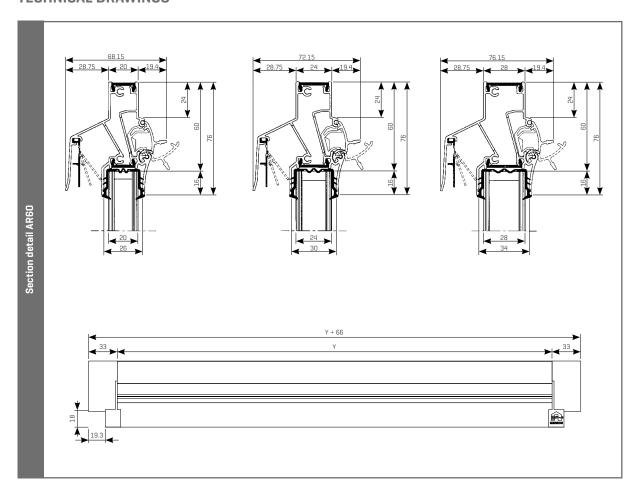
#### **INSECT MESH**

The perforated inside profile acts as an insect mesh.

#### **TECHNICAL CHARACTERISTICS**

Airflow			
Equivalent area	10427 mm²/m		
Q at 1 Pa	8,2 l/s/m		
Q at 1 Pa	29,5 m³/h/m		
Q at 2 Pa	11,8 l/s/m		
Q at 10 Pa	19,7 l/s/m		
Q at 20 Pa	23,9 l/s/m		
Comfort			
Sound reduction D <sub>n,e,w</sub> [C;C <sub>tr</sub> ]			
In open position	27 (0;0) dB		
In closed position	44 (0;0) dB		
Technical characteristics			
Controllable internal flap	5 stepped positions		
Control options internal flap	Manual, cord, rod		
U value	4,5 W/m²K		
Air leakage at 50 Pa	<15% (in closed position)		
Watertightness in closed position, up to	650 Pa		
Watertightness in open position, up to	100 Pa		
Dimensions			
Glass reduction	60 mm		
Height	76 mm		
Glass thickness	20, 24 or 28 mm		
Max. length	2500 mm		





**AVAILABLE UNTIL END OF STOCK** 

# **THK60**

#### Flap vent with external hood for improved weather protection

GLAZED-IN

AT TRANSOM

COANDA EFFECT







#### INTRODUCTION

The THK60 is a thermally broken, slimline glazed-in ventilator for application in aluminium, timber and PVC windows. The internal tip directs the flow of incoming air upwards, and can be placed in 5 positions.

The THK60 is also available with permanently open clips (e.g. for open gas appliances).

#### **GLAZED-IN INSTALLATION (OR AT TRANSOM)**

The THK60 has been developed for glazed-in installation, and can be integrated in aluminium, timber and PVC window profiles with a depth of 20, 24 or 28 mm. The THK60 can optionally also be installed at transom, using the additional transom profiles.

#### THERMALLY BROKEN

No cold air transfer from outside to inside.

#### **COANDA EFFECT**

The interior profile deflects the incoming air upwards, causing an optimal spread of fresh

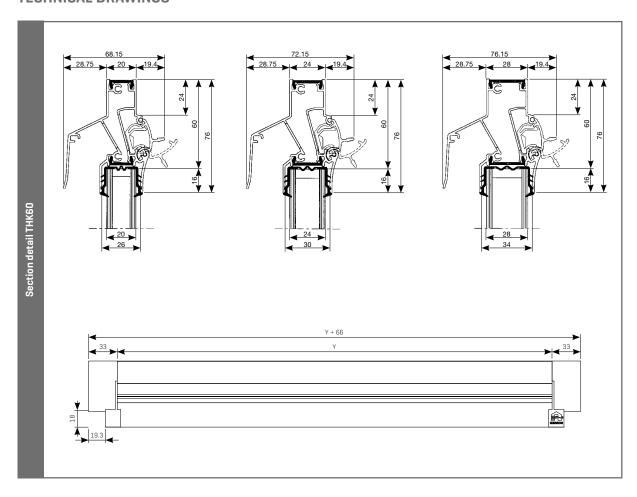
#### **INSECT MESH**

The perforated inside profile acts as an insect mesh.

#### **TECHNICAL CHARACTERISTICS**

Airflow			
Equivalent area	11841 mm²/m		
Q at 1 Pa	9,3 l/s/m		
Q at 1 Pa	33,5 m³/h/m		
Q at 2 Pa	13,2 l/s/m		
Q at 10 Pa	29,6 l/s/m		
Q at 20 Pa	41,8 l/s/m		
Comfort			
Sound reduction $D_{n,e,w}$ [C;C <sub>tr</sub> ]			
In open position	27 (0;0) dB		
In closed position	44 (0;0) dB		
Technical characteristics			
Controllable internal flap	5 stepped positions		
Control options internal flap	Manual, cord, rod		
U value	4,5 W/m²K		
Air leakage at 50 Pa	<15% (in closed position)		
Watertightness in closed position, up to	650 Pa		
Watertightness in open position, up to	100 Pa		
Dimensions			
Glass reduction	60 mm		
Height	76 mm		
Glass thickness	20, 24 or 28 mm		
Max. length	2500 mm		





## **AR75**

#### Excellent self-regulating window vent with 4 different airflows in 1 design

GLAZED-IN

AT TRANSOM



4 AIRFLOWS In 1 Design





#### INTRODUCTION

Due to its unique patented inner mechanism, 4 different airflow levels can be reached while the AR75 visually maintains the same look.

#### **GLAZED-IN INSTALLATION (OR AT TRANSOM)**

The AR75 has been developed for glazed-in installation, and can be integrated in aluminium, timber and PVC window profiles. This vent can also be installed at transom using an additional transom profile.

#### THERMALLY BROKEN

No cold air transfer from outside to inside

#### **SELF-REGULATING**

Thanks to its self-regulating flap, the AR75 ensures the supply of fresh and healthy air without draughts.

#### 4 DIFFERENT AIRFLOW LEVELS WITH 1 SINGLE DESIGN

Due to its internal mechanism, the AR75 can obtain 4 different airflow levels. This allows to use the same vent (visually) in order to provide different rooms, each with their specific ventilation needs, with fresh air.

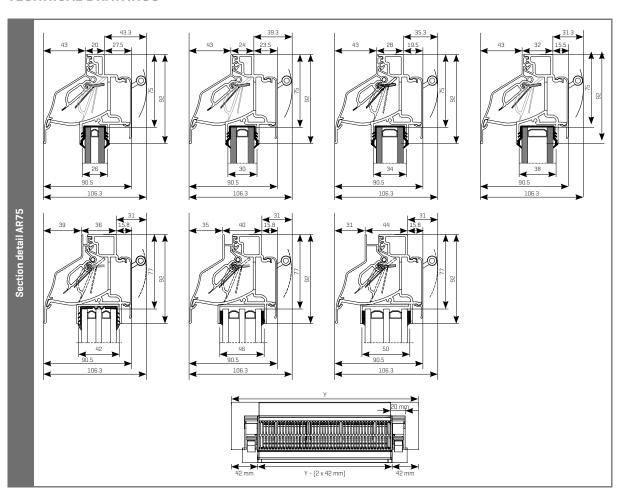
#### **INSECT MESH**

The perforated inside profile acts as an insect mesh.

#### **TECHNICAL CHARACTERISTICS**

	Small	Medium	Large	XLarge	
Airflow					
Equivalent area	14174 mm²/m	17409 mm²/m	19034 mm²/m	24301 mm²/m	
Q at 1 Pa	11,1 l/s/m	13,7 l/s/m	15,0 l/s/m	19,1 l/s/m	
Q at 1 Pa	40,1 m³/h/m	49,3 m³/h/m	53,9 m³/h/m	68,8 m³/h/m	
Q at 2 Pa	15,3 l/s/m	18,8 l/s/m	22,6 l/s/m	29,0 l/s/m	
Q at 10 Pa	17,3 l/s/m	21,4 l/s/m	24,5 l/s/m	31,5 l/s/m	
Q at 20 Pa	14,7 l/s/m	18,9 l/s/m	21,7 l/s/m	28,0 l/s/m	
Comfort					
Sound reduction $D_{n,e,w}$ [C;C <sub>tr</sub> ]					
In open position	26 (-1;-1) dB	26 (-1;-2) dB	26 (-1;-2) dB	26 (-1;-1) dB	
In closed position	43 (-1;-1) dB	43 (-1;-1) dB	43 (-1;-1) dB	43 (-1;-1) dB	
Technical characteristics					
Controllable internal flap	Continuous adjustment				
Control options internal flap	Manual, cord, rod, motor				
U value	3,0 W/m²K				
Air leakage at 50 Pa	<15% (in closed position)				
Watertightness in closed position, up to	650 Pa				
Watertightness in open position, up to	50 Pa				
Dimensions					
Glass reduction	75 mm (glass thickness: 20, 24, 28, and 32 mm) / 77 mm (glass thickness 36, 40 and 44 mm)				
Height	92 mm				
Glass thickness	20, 24, 28, 32*, 36*, 40*, 44* mm 20, 24, 28, 32*, 36*				
Max. length	2500 mm				

<sup>\*</sup> not for installation at transom



## **AR90**

#### Self-regulating flap vent with external hood for improved weather protection

FLAT INTERIOR PROFILE

SELF-REGULATING

GLAZED-IN







#### INTRODUCTION

The AR90 is the self-regulating version of the THK90. A self-regulating flap is integrated, reacting automatically to various wind pressures and thus preventing draughts. As the THK90, the AR90 has an external hood for additional weather protection.

#### **GLAZED-IN INSTALLATION (OR AT TRANSOM)**

The AR90 has been developed for glazed-in installation, and can be integrated in aluminium, timber and PVC window profiles with a depth of 20, 24 or 28 mm. The AR90 can optionally also be installed at transom, using the additional transom profiles.

#### THERMALLY BROKEN

No cold air transfer from outside to inside.

#### **SELF-REGULATING**

Thanks to its self-regulating flap, the AR90 ensures the supply of fresh and healthy air without draughts.

#### **FLAT INTERIOR PROFILE**

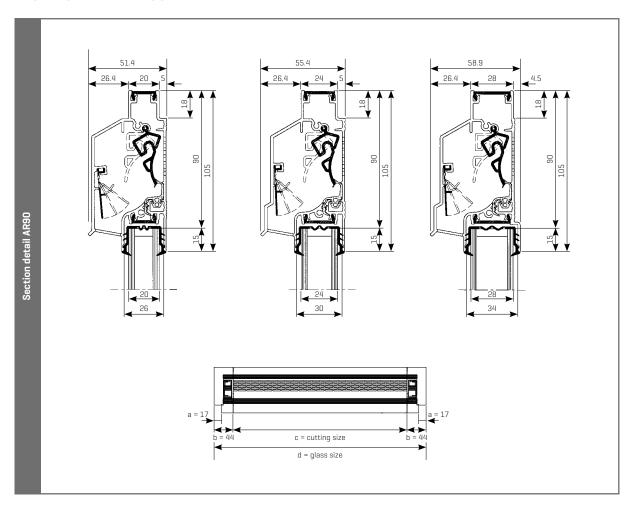
Thanks to its flat interior profile, the AR90 is the ideal solution for integration in the fixed part of sash windows.

#### **INSECT MESH**

The perforated inside profile acts as an insect mesh.

Airflow			
Equivalent area	14252 mm²/m		
Q at 1 Pa	11,2 l/s/m		
Q at 1 Pa	40,3 m³/h/m		
Q at 2 Pa	15,6 l/s/m		
Q at 10 Pa	11,4 l/s/m		
Q at 20 Pa	9,1 l/s/m		
Comfort			
Sound reduction $D_{n,e,w}$ [C;C <sub>tr</sub> ]			
In open position	30 (-1;-2) dB		
In closed position	45 (-1;-3) dB		
Technical characteristics			
Controllable internal flap 5 stepped positions			
Control options internal flap	Manual, cord, rod, motor		
U value	3,9 W/m²K		
Air leakage at 50 Pa	<15% (in closed position)		
Watertightness in closed position, up to	650 Pa		
Watertightness in open position, up to	100 Pa		
Dimensions			
Glass reduction	90 mm		
Height	105 mm		
Glass thickness	20, 24 or 28 mm		
Max. length	2500 mm (2000 mm for motorised control)		





# **THK90**

#### Flap vent with external hood for improved weather protection

FLAT INTERIOR PROFILE

GLAZED-IN



THERMALLY BROKEN





#### INTRODUCTION

The non self-regulating THK90 has a flat interior profile, which makes it a good solution for the integration in the fixed part of sash windows. The THK90 also has an external hood for additional weather protection.

#### **GLAZED-IN INSTALLATION (OR AT TRANSOM)**

The THK90 has been developed for glazed-in installation, and can be integrated in aluminium, timber and PVC window profiles with a depth of 20, 24 or 28 mm. The THK90 can optionally also be installed at transom, using the additional transom profiles.

#### THERMALLY BROKEN

No cold air transfer from outside to inside.

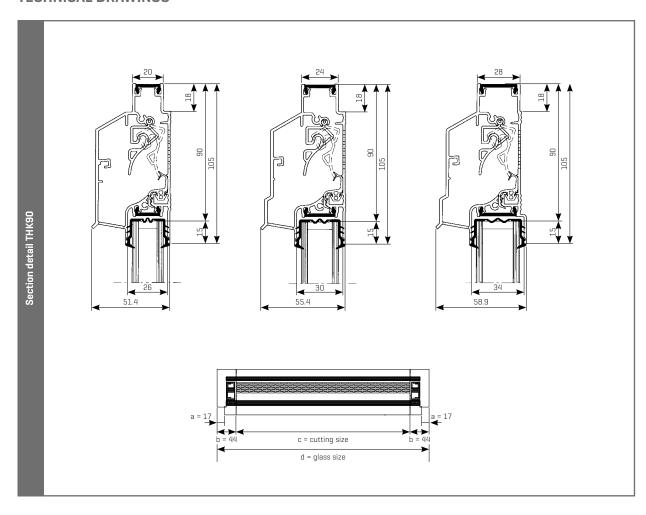
#### **FLAT INTERIOR PROFILE**

Thanks to its flat interior profile, the THK90 is a good solution for integration in the fixed part of sash windows.

#### **INSECT MESH**

Airflow	
Equivalent area	14736 mm²/m
Q at 1 Pa	11,6 l/s/m
Q at 1 Pa	41,7 m³/h/m
Q at 2 Pa	16,1 l/s/m
Q at 10 Pa	34,5 l/s/m
Q at 20 Pa	48,0 l/s/m
Comfort	
Sound reduction $D_{n,e,w}$ [C;C <sub>tr</sub> ]	
In open position	28 (0;-1) dB
In closed position	44 (0;-1) dB
Technical characteristics	
Controllable internal flap	5 stepped positions
Control options internal flap	Manual, cord, rod, motor
U value	3,9 W/m²K
Air leakage at 50 Pa	<15% (in closed position)
Watertightness in closed position, up to	650 Pa
Watertightness in open position, up to	50 Pa
Dimensions	
Glass reduction	90 mm
Height	105 mm
Glass thickness	20, 24 or 28 mm
Max. length	2500 mm (2000 mm for motorised control)





# THM90<sup>EVO</sup>/THM90PB<sup>EVO</sup>/THM90TR<sup>EVO</sup>

#### Self-regulating flush window vent, ideal for sliding doors

ENTIRELY FLAT PROFILES

GLAZED-IN









#### INTRODUCTION

The THM90  $^{\text{EVO}}$  is an entirely flat window vent, which makes this the ideal product for integration in sliding doors. Three different types of THM90  $^{\text{EVO}}$  are available, each for different glass thicknesses: THM90  $^{\text{EVO}}$  for glazed-in installation, THM90PB  $^{\text{EVO}}$  for installation at the bottom of the window, and the THM90TR  $^{\text{EVO}}$  for installation between profiles (at transom).

By combining a THM90PB  $^{EVO}$  in the lower part and a THM90  $^{EVO}$  in the upper part of a conservatory, the THM90  $^{EVO}$  is ideal for natural ventilation by convection.

#### **GLAZED-IN INSTALLATION (OR AT TRANSOM)**

The THM90  $^{\text{EVO}}$  has been developed for glazed-in installation, and can be integrated in aluminium, timber and PVC window profiles. The THM90  $^{\text{EVO}}$  can be installed on glass, at the bottom of the window [THM90PB  $^{\text{EVO}}$ ], and at transom [THM90TR  $^{\text{EVO}}$ ]. The THM90  $^{\text{EVO}}$  should only be used for installation on ground floors.

#### THERMALLY BROKEN

No cold air transfer from outside to inside.

#### **SELF-REGULATING**

Thanks to its self-regulating flap, the THM90  $^{\rm EVO}$  ensures the supply of fresh and healthy air without draughts.

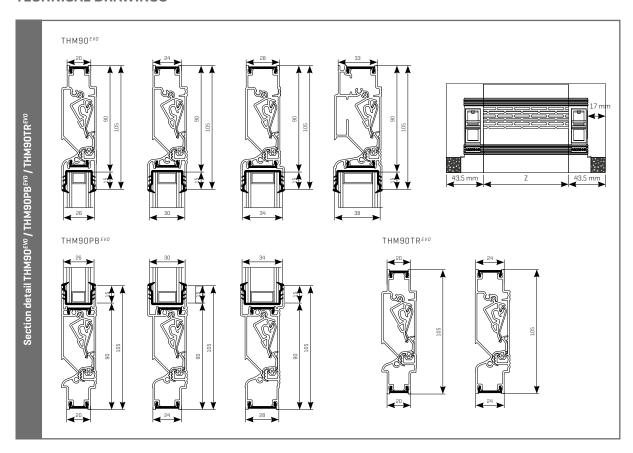
#### **ENTIRELY FLAT PROFILES**

Thanks to its flat profiles, the THM90  $^{\rm EVO}$  is the perfect solution for integration in sash windows.

#### **INSECT MESH**

Airflow		
Equivalent area	11841 mm²/m	
Q at 1 Pa	9,3 l/s/m	
Q at 1 Pa	33,5 m³/h/m	
Q at 2 Pa	13,9 l/s/m	
Q at 10 Pa	13,5 l/s/m	
Q at 20 Pa	15,1 l/s/m	
Comfort		
Sound reduction $D_{n,e,w}$ [C;C <sub>tr</sub> ]		
In open position	26 (0;0) dB	
In closed position	45 (-1;-1) dB	
Technical characteristics		
Controllable internal flap	5 stepped positions	
Control options internal flap	Manual, cord, rod, motor	
U value	3,8 W/m²K	
Air leakage at 50 Pa	<15% (in closed position)	
Watertightness in closed position, up to	650 Pa	
Watertightness in open position, up to	100 Pa	
Dimensions		
Glass reduction	90 mm / 105* mm	
Height	105 mm	
Glass thickness		
THM90 EVO	20, 24, 28 or 33 mm	
THM90PB EVO	20, 24 or 28 mm	
THM90TR <sup>EVO</sup>	20 or 24 mm	
Max. length	2500 mm (2000 mm for motorised control)	
-		





<sup>\*</sup> THM90TR EVO

## **SONOVENT®**

#### Self-regulating flap ventilator with a superior sound absorption

AT TRANSOM

GLAZED-IN













#### INTRODUCTION

Renson® has developed the Sonovent range to meet with two aspects of living comfort:

- physical comfort: fresh and healthy air without draughts
- acoustic comfort: up to 56 dB sound reduction

The Sonovent is an extensive range of self-regulating window vents with a superior air sound insulation. Four types of the Sonovent are available; Small, Medium, Large and Xlarge, each model having 4 different air slot possibilities [10, 15, 20 or 25 mm]. This comes up to 16 alternatives in total, each model with a different airflow and sound reduction. Furthermore, thermal breaks can be positioned differently, depending on the model and installation method. The Sonovent range therefore offers an ideal solution for every situation.

#### **GLAZED-IN, AT TRANSOM OR ROOF INSTALLATION**

The Sonovent is preferably placed at transom. By adding L-profiles to the upper and lower side, the Sonovent can also be placed on glass. The Sonovent can be used for slant roofs with a minimal slope of 22,5° in order to avoid water infiltration.

Importantly, the entire length of the Sonovent for roof installation has to be covered with ventilation tiles.

#### **CURTAIN WALL SYSTEM**

Integration in curtain walls is possible. Our presales team will provide you with the necessary details.

#### THERMALLY BROKEN

No cold air-transfer from outside to inside. Thermal breaks can be positioned differently depending on the model and installation method.

#### **SELF-REGULATING**

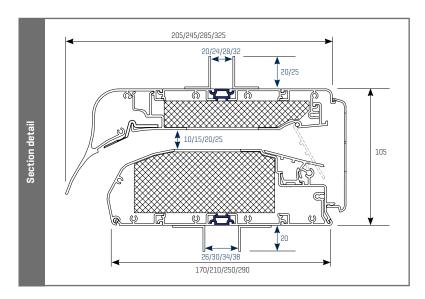
Thanks to its self-regulating flap, the Sonovent ensures the supply of fresh and healthy air without draughts.

#### **SOUND ABSORPTION**

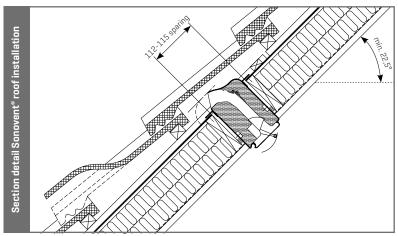
Various sound reduction levels (depending on the type), from 37dB up to 56 dB.

#### **INSECT MESH**

#### **TECHNICAL DRAWINGS**



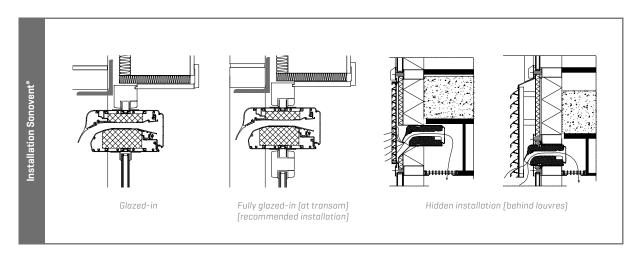




#### **INSTALLATION**

The Sonovent is designed to be installed glazed-in or at transom (preferred installation). Hidden installation behind louvres or in a ventilated panel of a curtain wall system is also possible and commonly applied in offices, schools,  $\dots$ 

By choosing the right model of Sonovent and varying the length, the required airflow together with the necessary acoustic performances can be reached.



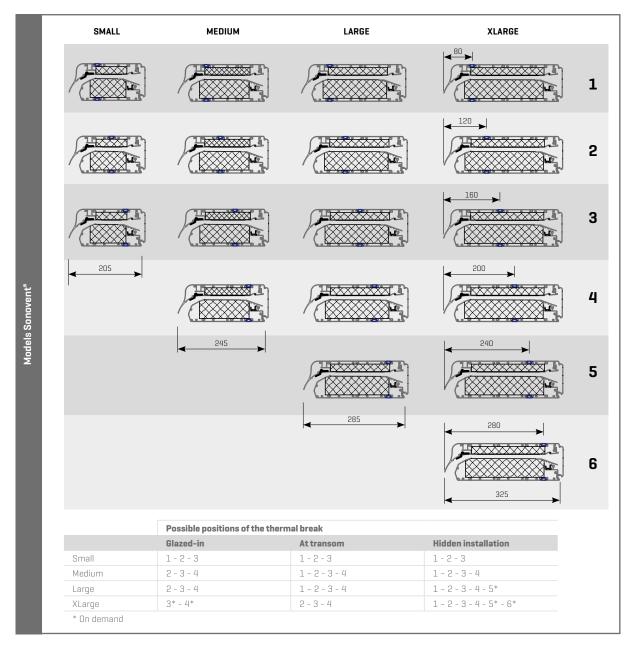
# **SONOVENT®**

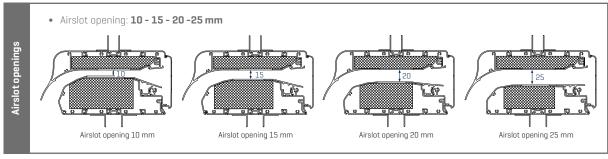
#### Self-regulating flap ventilator with a superior sound absorption

#### THE VERSATILE SONOVENT® - RANGE

4 different models with different positions of the thermal break

- Models: Small Medium Large XLarge (XSmall and XXLarge on demand)
- Thermal break: different positions 1 to 6





.: a	Small	Medium	Large	XLarge		
Airflow						
Equivalent area	17750 07	17500 01	10150 07	1///07		
Air slot 15 mm	17756 mm²/m	17509 mm²/m	16153 mm²/m	14427 mm²/m		
Air slot 20 mm	29593 mm²/m	26511 mm²/m	25524 mm²/m	21578 mm²/m		
Air slot 25 mm	31813 mm²/m	33292 mm²/m	32059 mm²/m	31073 mm²/m		
Air slot 25 mm	33786 mm²/m	34032 mm²/m	33416 mm²/m	32676 mm²/m		
Roof installation		310/0	mm²/m			
Q at 1 Pa Air slot 10 mm	1/I 0 I/o/m	12.0.1/o/m	10.71/o/m	11.2 Uo/m		
Air slot 15 mm	14,0 l/s/m 23,3 l/s/m	13,8 l/s/m 20,8 l/s/m	12,7 l/s/m 20,1 l/s/m	11,3 l/s/m 17,0 l/s/m		
Air slot 20 mm	25,0 l/s/m	26,2 l/s/m	25,2 l/s/m	24,4 l/s/m		
Air slot 25 mm	26,6 l/s/m	26,7 l/s/m	26,3 I/s/m	25,7 l/s/m		
Roof installation	20,01/3/111		I/s/m	L3,7 1/3/111		
O at 1 Pa		۲٦,٦	1/3/111			
Air slot 10 mm	50,2 m³/h/m	49,5 m³/h/m	45,7 m³/h/m	40,8 m³/h/m		
Air slot 15 mm	83,7 m³/h/m	75,0 m³/h/m	72,2 m³/h/m	61,0 m³/h/m		
Air slot 20 mm	90,0 m³/h/m	94,2 m³/h/m	90,7 m³/h/m	87,9 m³/h/m		
Air slot 25 mm	95,6 m³/h/m	96,3 m³/h/m	94,5 m³/h/m	92,4 m³/h/m		
Roof installation	33,0 111 /11/111		n³/h/m	JE,7 III /II/III		
O at 2 Pa		07,311				
Air slot 10 mm	14,0 l/s/m	13,8 l/s/m	12,7 l/s/m	11,3 l/s/m		
Air slot 15 mm	23,3 l/s/m	20,8 l/s/m	20,1 l/s/m	17,0 l/s/m		
Air slot 20 mm	25,0 l/s/m	26,2 I/s/m	25,2 I/s/m	24,4 l/s/m		
Air slot 25 mm	26,6 l/s/m	26,7 l/s/m	26,3 I/s/m	25,7 I/s/m		
Roof installation	28,0 l/s/m					
Q at 10 Pa		20,0				
Air slot 10 mm	15,3 l/s/m	15,1 l/s/m	14,0 l/s/m	12,5 l/s/m		
Air slot 15 mm	25,6 l/s/m	22,9 l/s/m	22,1 l/s/m	18,7 l/s/m		
Air slot 20 mm	27,5 l/s/m	28,8 l/s/m	27,7 l/s/m	26,9 l/s/m		
Air slot 25 mm	29,2 l/s/m	29,4 l/s/m	28,9 I/s/m	28,2 l/s/m		
Roof installation		30,8 l/s/m				
Q at 20 Pa						
Air slot 10 mm	22,9 l/s/m	_	-	-		
Air slot 15 mm	28,5 l/s/m	-	-	-		
Air slot 20 mm	29,2 l/s/m	-	-	-		
Air slot 25 mm	27,1 l/s/m	27,5 l/s/m	25,0 l/s/m	-		
Roof installation		34,8	l/s/m			
Comfort						
Sound reduction $D_{n,e,w}\left(C;C_{tr}\right)$ In open position						
Air slot 10 mm	46 (-1;-5) dB	48 (-2;-6) dB	50 (-2;-6) dB	56 (-2;-6) dB		
Air slot 15 mm	41 (-1;-2) dB	45 (-2;-6) dB	49 (-2;-7) dB	53 (-2;-6) dB		
Air slot 20 mm	40 (-1;-3) dB	43 (0;-3) dB	44 (-2;-6) dB	46 (-2;-6) dB		
Air slot 25 mm	37 (-1;-3) dB	39 (-1;-4) dB	41 (-2;-6) dB	45 (-2;-6) dB		
Roof installation	37 (-1;-3) dB	39 (-1;-4) dB	41 (-2;-6) dB	45 (-2;-6) dB		
Sound reduction $D_{n,e,w}\left[C;C_{tr}\right]$ in closed position			-			
Technical characteristics						
Controllable internal flap		Continuous	adjustment			
Control options internal flap		Manual, cor	d, rod, motor			
U value	4,5 W/m <sup>2</sup> K	4,6 W/m²K	4,6 W/m²K	4,7 W/m <sup>2</sup> K		
Air leakage at 50 Pa			sed position)			
Watertightness in closed position, up to	650 Pa					
Watertightness in open position, up to	50 Pa					
Dimensions						
Height	10	)5 mm (box height) / 155 r	nm (total height with flang	es]		
Roof thickness	170 mm	210 mm	250 mm	290 mm		
Minimal slope	22,5°					
Roof opening	115 mm					
Max. length	1000 mm					

# **SONOVENT® COMPACT**

#### Compact self-regulating acoustic flap ventilator

GLAZED-IN

AT TRANSOM













#### INTRODUCTION

The Sonovent Compact is a self-regulating and acoustic window vent for glazed-in installation (or at transom using an additional transom profile). This compact sound absorbing window vent offers an excellent compromise between acoustic performance and airflow. The Sonovent Compact has 3 different air slot possibilities (10, 13 or 15 mm), so three different airflows can be obtained within a single model.

#### **GLAZED-IN INSTALLATION (OR AT TRANSOM)**

The Sonovent Compact can be installed glazed-in or at transom (using the additional transom profiles).

#### THERMALLY BROKEN

No cold air transfer from outside to inside

#### **SELF-REGULATING**

Thanks to its self-regulating flap, the Sonovent Compact ensures the supply of fresh and healthy air without draughts.

#### THREE DIFFERENT AIRFLOW LEVELS IN ONE MODEL

The Sonovent Compact has 3 different air slot possibilities [10, 13 or 15 mm], so three different airflows can be obtained within a single model.

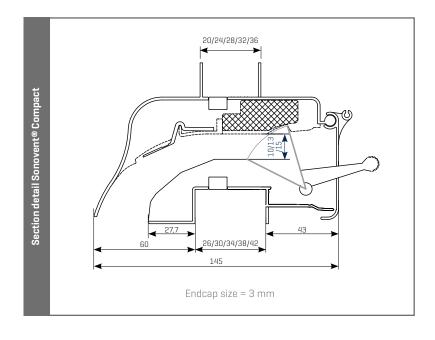
#### **SOUND ABSORPTION**

Various sound reduction levels (depending on the type), from 33 dB up to 36 dB.

#### **INSECT MESH**

Airflow		
Equivalent area		
Air slot 10 mm	15334 mm²/m	
Air slot 13 mm	19278 mm²/m	
Air slot 15 mm	24687 mm²/m	
Q at 1 Pa		
Air slot 10 mm	12,1 l/s/m	
Air slot 13 mm	15,2 l/s/m	
Air slot 15 mm	19,4 l/s/m	
Q at 1 Pa		
Air slot 10 mm	43,4 m³/h/m	
Air slot 13 mm	54,5 m³/h/m	
Air slot 15 mm	69,8 m³/h/m	
Q at 2 Pa		
Air slot 10 mm	16,4 l/s/m	
Air slot 13 mm	18,8 l/s/m	
Air slot 15 mm	19,9 l/s/m	
Q at 10 Pa		
Air slot 10 mm	17,3 l/s/m	
Air slot 13 mm	18,8 l/s/m	
Air slot 15 mm	18,6 l/s/m	
Q at 20 Pa		
Air slot 10 mm	17,8 l/s/m	
Air slot 13 mm	18,7 l/s/m	
Air slot 15 mm	19,1 l/s/m	
Comfort		
Sound reduction $D_{n.e.w}(C;C_{tr})$ In open position		
Air slot 10 mm	36 (0;-1) dB	
Air slot 13 mm	35 (0;-1) dB	
Air slot 15 mm	33 (0;-1) dB	
Sound reduction $D_{n.e.w}$ [C; $C_{tr}$ ] in closed position	-	
Technical characteristics		
Controllable internal flap	Continuous adjustment	
Control options internal flap	Manual, cord, rod, motor	
U value	6,0 W/m²K	
Air leakage at 50 Pa	<15% (in closed position)	
Watertightness in closed position, up to	650 Pa	
Watertightness in open position, up to	150 Pa	
Dimensions		
Glass reduction	78 mm	
Height	75 mm (box height) / 95 mm (total height with flanges)	
Glass thickness	20, 24, 28, 32 or 36 mm	
Max. length	2000 mm (glazed-in) or 2500 mm (at transom	





# ROLLER SHUTTER FLAP VENTILATOR







Transivent<sup>©</sup>

PRODUCTS

Roller shutter flap ventilator

# **TRANSIVENT®**

#### Self-regulating ventilator for installation in roller shutters

FOR ROLLER SHUTTERS

SELF-REGULATING

THERMALLY BROKEN

I-FLUX





#### INTRODUCTION

The Transivent is a self-regulating, thermally broken ventilator with an attractive design, for mounting in a traditional roller shutter housing. The curved aluminium inner profile deflects the incoming air upwards into the room.

#### THE IDEAL SOLUTION FOR RENOVATION

The Transivent, which can be easily integrated in roller shutters, has been developed for situations in which initially no ventilation solution has been foreseen, though in which ventilation is needed.

#### THERMALLY BROKEN

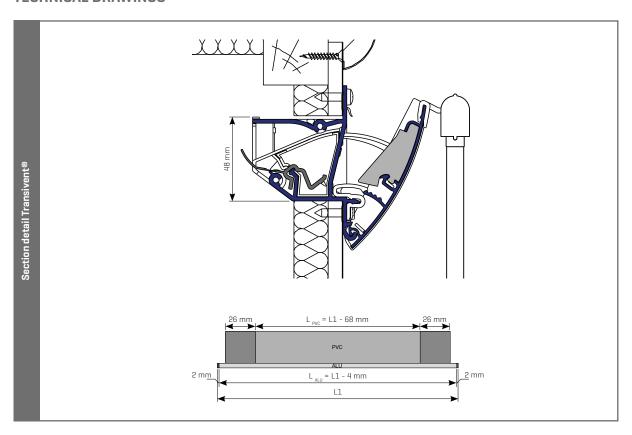
No cold air transfer from outside to inside

#### I-FLUX®

Thanks to its self-regulating flap, the Transivent ensures the supply of fresh and healthy air without draughts. Moreover, the interior profile deflects the incoming air upwards, causing an optimal spread of fresh air in the room.

#### **INSECT MESH**

Airflow		
Equivalent area	13748 mm²/m	
O at 1 Pa	· ·	
	10,8 l/s/m	
Q at 1 Pa	38,9 m³/h/m	
Q at 2 Pa	15,2 l/s/m	
Q at 10 Pa	20,1 l/s/m	
Q at 20 Pa	19,9 l/s/m	
Comfort		
Sound reduction $D_{n,e,w}\left[C;C_{tr}\right]$		
In open position	28 (-1;-2) dB	
In closed position	44 (-1;-2) dB	
Technical characteristics		
Controllable internal flap	5 stepped positions	
Control options internal flap	Manual, cord, rod, motor	
U value	3,0 W/m²K	
Air leakage at 50 Pa	<15% (in closed position)	
Watertightness in closed position, up to	650 Pa	
Watertightness in open position, up to	150 Pa	
Dimensions		
Installation height	91 mm	
Fitted height	48 mm	
Slot height	50 mm	
Depth	60 mm	
Max. length	2200 mm (1500 mm for cord control)	



# **SLIDING VENTS**









# **THL100 - THL100V**

#### **Sliding vent**



AT TRANSOM





#### INTRODUCTION

The THL100 is a thermally broken louvred ventilator, made to measure, installed in a vertical (THL100V) or horizontal (THL100) position.

The THL100V creates a natural air circulation: incoming fresh air at the bottom and outgoing humid warm air at the top of the ventilator.

#### **GLAZED-IN INSTALLATION OR INSTALLATION AT TRANSOM**

THL100 or THL100V for glazed-in installation (glass thickness 15, 20, 24, 28 mm) THL100-TR or THL100V-TR for installation at transom (glass thickness 20, 24, 28 mm) Not suitable for installation in coastal environments or near the beach.



#### THERMALLY BROKEN

No cold air transfer from outside to inside.

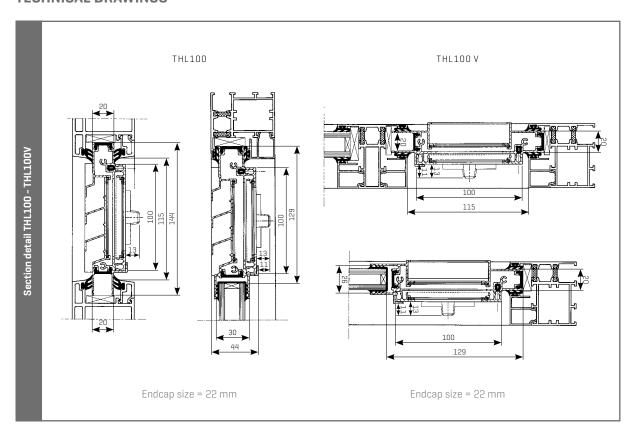
#### LOUVRES AT THE OUTSIDE, A SLIDER AT THE INSIDE

#### **INSECT MESH**

The perforated inside profile acts as an insect mesh.

#### **EASY AND EFFICIENT**

	THL100	THL100V	
Airflow			
Equivalent area	16759 mm²/m	12770 mm²/m	
Q at 1 Pa	13,2 l/s/m	10,0 l/s/m	
Q at 1 Pa	47,4 m³/h/m	36,1 m³/h/m	
Q at 2 Pa	18,7 l/s/m	14,2 l/s/m	
Q at 10 Pa	41,6 l/s/m	32,1 l/s/m	
Q at 20 Pa	58,9 l/s/m	45,5 l/s/m	
Comfort			
Sound reduction $D_{n,e,w}\left[C;C_{tr}\right]$			
In open position	22 [0	;-0] dB	
In closed position	42 (-1;-2) dB		
Technical characteristics			
Controllable internal flap	Continuous adjustment		
Control options internal flap	Manual, cord, r	od, chain, motor	
U value	3,9 W/m²K		
Air leakage at 50 Pa		-	
Watertightness in closed position, up to	400 Pa	-	
Watertightness in open position, up to		=	
Dimensions			
Glass reduction	129 mm		
Height	144 mm		
Glass thickness	20, 24 or 28 mm		
Max. length	3500 mm		



# T100 - T130 - T150

#### Horizontal sliding vents in two parts for installation at transom

AT TRANSOM



#### INTRODUCTION

The T100, T130 en T150 are aluminium sliding vents without thermal break, to be installed at transom. These types are composed of two unattached parts; the outer part is a decorative louvre with inclined blades to ensure rain protection, the inside part is an aluminium slider that can be adjusted to control the airflow.

#### **INSTALLATION AT TRANSOM**

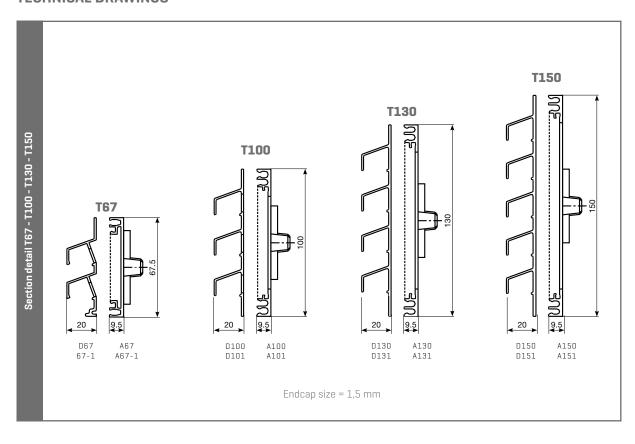
The T100, T130 en T150 can be installed at transom.

Not suitable for installation in coastal environments or near the beach.





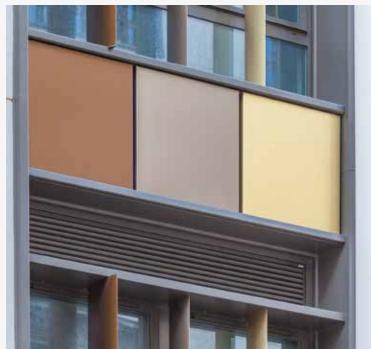
	T100	T130	T150
Airflow			
Equivalent area	17326 mm²/m	24589 mm²/m	27992 mm²/m
Q at 1 Pa	13,6 l/s/m	19,3 l/s/m	22,0 l/s/m
Q at 1 Pa	49,0 m³/h/m	69,6 m³/h/m	79,2 m³/h/m
Q at 2 Pa	19,5 l/s/m	27,7 l/s/m	31,9 l/s/m
Q at 10 Pa	43,8 l/s/m	62,1 l/s/m	71,5 l/s/m
Q at 20 Pa	61,9 l/s/m	87,9 l/s/m	101,0 l/s/m
Comfort			
Sound reduction $D_{n,e,w}[C;C_{tr}]$			
In open position		-	
In closed position		-	
Technical characteristics			
Controllable internal flap		Continuous adjustment	
Control options internal flap		Manual, chain, cord, rod, motor	
U value		-	
Air leakage at 50 Pa	-		
Watertightness in closed position, up to	-		
Watertightness in open position, up to	-		
Dimensions			
Height	100 mm	130 mm	150 mm
Max. length	3500 mm		



# **SLOTVENTS**







Sonoslot





Sonoslot

# **SLOTVENTS**

#### Introduction

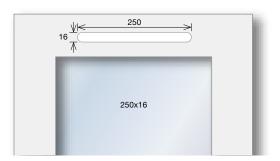


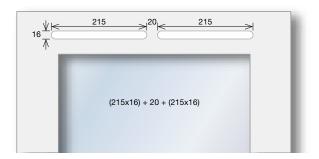
Renson® has developed an extensive range of slotvents. The Renson® slotvents are manufactured in aluminium, this to ensure the highest possible quality and durability. These aluminium slotvents can be powdercoated in any color making a perfect integration possible on wooden, uPVC and aluminium window frames. Renson® proposes some standard lengths for the slotvents but most of the types can be made to measure.

#### **SLOTSIZE OPENINGS**

Slotvents are installed on window frames where a slot [10, 12, 16 or 25 mm] is routed through the frame. For long slotvents, enforcement bridges must be taken into account between the gaps, in order to prevent weakening the window frame.

When combining an exterior and an interior slotvent, use the smallest slotsize opening indicated (airflow might be affected).





# **SONOSLOT®**

#### Self-regulating acoustic slotvent kit

SELF-REGULATING

I-FLUX

SOUND ABSORBING





#### INTRODUCTION

The Sonoslot is a self-regulating, sound absorbing slotvent kit consisting of an external slotvent, internal slotvent and a plastic sleeve with integrated sound absorbing baffle inbetween. The Sonoslot is available in 4 sizes: 275 mm, 375 mm, 475 mm and 700 mm.

The aluminium external slotvent is self-regulating. This keeps the airflow fairly uniform in strong winds and prevents draughts. Moreover, the external slotvent is perforated and also acts as an insect mesh screen. The noise-damping baffle, made of sound absorbing foam, is standard 70 mm thick and the plastic sleeve is standard 90 mm thick, but both can be easily adapted to suit different window frame depths. The small, narrow and discrete aluminium internal slotvent is manually adjustable and deflects the airflow upwards to prevent direct draughts. Optionally, the Sonoslot can also be installed in permanently open position, by clicking a special clip in the interior slotvent.

The Sonoslot is also available with permanently open clips.

#### I-FLUX®

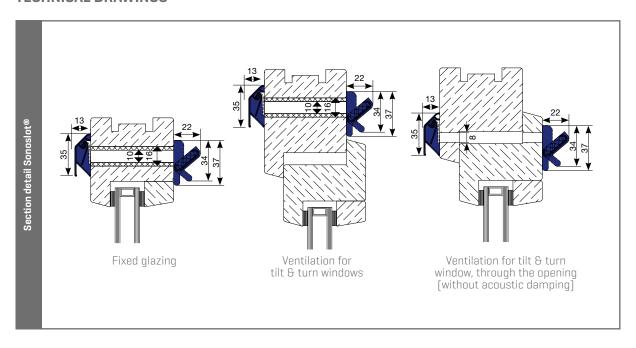
Thanks to the self-regulating flap in its exterior slotvent, the Sonoslot ensures the supply of fresh and healthy air without draughts. Moreover, the interior profile deflects the incoming air upwards, causing an optimal spread of fresh air in the room.

#### **SOUND ABSORBING**

Sonoslot: up to 38 [0;0] dB in open position

#### **INSECT MESH**

	Sonoslot® 275 mm	Sonoslot® 375 mm	Sonoslot® 475 mm	Sonoslot® 700 mn	
Airflow					
Equivalent area	1273 mm²	1607 mm²	2121 mm²	3181 mm²	
Q at 1 Pa	1,0 l/s	1,3 l/s	1,7 l/s	2,5 l/s	
Q at 1 Pa	3,6 m³/h	4,5 m³/h	6,0 m³/h	9,0 m³/h	
Q at 2 Pa	1,4 l/s	1,7 l/s	2,3 l/s	3,4 l/s	
Q at 10 Pa	3,2 l/s	4,0 l/s	5,3 l/s	8,0 l/s	
Q at 20 Pa	3,3 l/s	4,2 l/s	5,6 l/s	8,4 l/s	
Comfort					
Sound reduction D <sub>n,e,w</sub> (C;C <sub>tr</sub> )					
In open position	38 (0;0) dB	37 (0;0) dB	36 (0;0) dB	34 (0;0) dB	
In closed position			-		
Technical characteristics					
Controllable internal flap		Continuous adjustment			
Control options internal flap		Manual			
U value		1,4 W/m².K			
Air leakage at 50 Pa		< 15 % in cla	sed position		
Watertightness in closed position, up to			-		
Watertightness in open position, up to	-				
Dimensions					
Height		35	mm		
Length	275 mm	375 mm	475 mm	700 mm	
Slotsize opening	(105,5 x 16) + 24 + (105,5 x 16)	[105,5 x 16] + 14,3 + [105,5 x 16] + 14,3 + [105,5 x 16]	[105,5 × 16] + 7,5 + [105,5 × 16] + 7,5 + [105,5 × 16] + 7,5 + [105,5 × 16]	[105,5 x 16] + 7,5 + [105,5 x 16]	
Length acoustic foam	2 x 103 mm	3 x 103 mm	4 x 103 mm	6 x 103 mm	
Depth acoustic foam		70 mm			
Depth plastic sleeve		90 mm			



# **SONOSLOT® MAX**

#### Self-regulating slotvent kit with high acoustic damping

HIGH ACOUSTIC DAMPING

SELF-REGULATING

I-FLUX





#### INTRODUCTION

Sonoslot Max is a self-regulating slotvent kit offering a higher sound absorption than the Sonoslot, existing of an external slotvent, an internal slotvent and a plastic sleeve with integrated sound absorbing baffle in-between.

The aluminium external slotvent is self-regulating, which keeps the airflow fairly uniform in strong winds and prevents draughts. Moreover, the external slotvent is perforated and also acts as an insect mesh screen.

The internal slotvent of the Sonoslot Max is permanently open and includes extra acoustic damping. The noise-damping baffle is standard 70 mm thick and the plastic sleeve is standard 90 mm thick, but both can easily be adapted to suit different window frame depths.

This slotvent combination suits for all window depths. It can be used for both new-built and renovation projects.

#### **SELF-REGULATING**

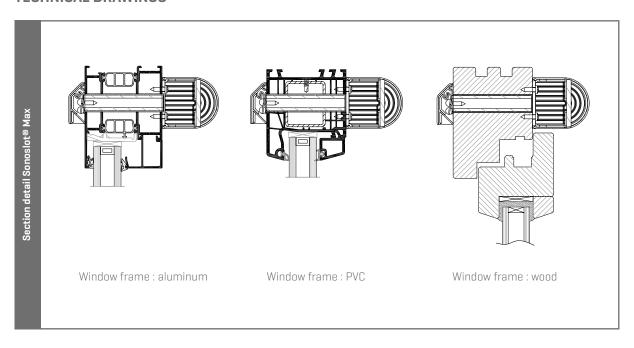
Thanks to the self-regulating flap in its exterior slotvent, the Sonoslot Max ensures the supply of fresh and healthy air without draughts.

#### **SOUND ABSORBING**

Up to 40 (-1;-2) dB in open position.

#### **INSECT MESH**

	Without acoustic foam	With acoustic foam	
Airflow			
Equivalent area	2298 mm²	1555 mm²	
Q at 1 Pa	1,8 l/s	1,2 l/s	
Q at 1 Pa	6,5 m³/h	4,4 m³/h	
Q at 2 Pa	2,7 l/s	1,9 l/s	
Q at 10 Pa	6,8 l/s	5,1 l/s	
Q at 20 Pa	6,9 l/s	7,6 l/s	
Comfort			
Sound reduction $D_{n,e,w}$ [C;C <sub>tr</sub> ]			
In open position	38 (-1;-2) dB	40 (-1;-2) dB	
In closed position	-		
Technical characteristics			
Controllable internal flap	no		
Control options internal flap	n.a.		
U value	-		
Air leakage at 50 Pa	-		
Watertightness in closed position, up to	-		
Watertightness in open position, up to	-		
Dimensions			
Height	35 mm (exterior part) / 4	5 mm (interior part)	
Length	700 mi	m	
Ausschnittmaß	[105,5 x 16] + 7,5 + [105,5 x 16]		
Length acoustic foam	n.a. 6 x 103 mm		
Depth acoustic foam	n.a. 70 mm		
Depth plastic sleeve	90 mm		



### **PYRAMID**

#### Smallest vent on the market that provides 5000 mm<sup>2</sup> EA airflow

HIGH AIRFLOW

COANDA EFFECT

INSECT MESH





#### INTRODUCTION

The Pyramid is a non-self-regulating compact slotvent kit. It is the smallest vent on the market responding to the ventilation regulation Part F (England & Wales) providing an Equivalent Area of 5000 mm2. The Pyramid ventilator is surface mounted on uPVC, Timber and Aluminium windows and is compatible with slot heights from 13 up to 16 mm.

The external canopy offers excellent weather protection and incorporates a stainless steel fly screen. The vent is easy to open and to control.

The internal slotvent deflects, in open position, the incoming air upwards for air optimal spread of fresh air in the room. The Pyramid is available in 2 types: 2500 EA or 5000 EA [other lengths on demand]

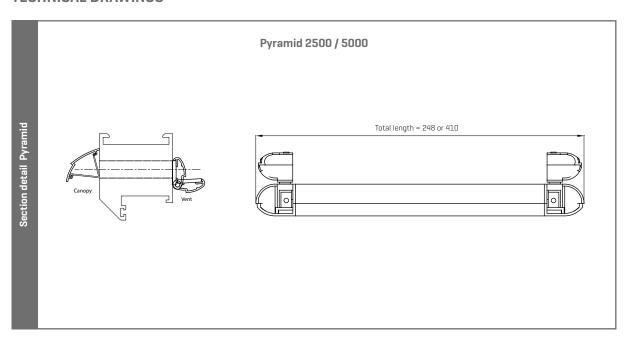
The Pyramid Vent is available in black, grey or white. Other colours on demand.

#### **COANDA EFFECT**

The interior profile deflects the incoming air upwards, causing an optimal spread of fresh air in the room.

	2500	5000	
Airflow			
Equivalent area	2723	5229	
Q at 1 Pa	2,1 l/s	4,2 l/s	
Q at 1 Pa	7,6 m³/h	15,1 m³/h	
Q at 2 Pa	3,1 l/s	6,0 l/s	
Q at 10 Pa	7,0 l/s	13,6 l/s	
Q at 20 Pa	10,1 l/s	19,4 l/s	
Comfort			
Sound reduction $D_{n,e,w}\left[C;C_{tr}\right]$			
in open position	36 (0; 0) dB	33 (-1; 0) dB	
in closed position	51 (-2; -3) dB 51 (-1; -3) dB		
Technical characteristics			
Controllable internal flap	Continuous	adjustment	
Control options internal flap	Manual		
U value	-		
Air leakage at 50 Pa	-	-	
Watertightness in closed position, up to	-	-	
Watertightness in open position, up to	-		
Dimensions			
Height	25 ו	mm	
Length*	248 mm 410 mm		
Slotsize opening	192 x 13	[172 x 13 to 16] + 10 + [172 x 13 to 16]	

<sup>\*</sup> other lengths on demand



# **PYRACOUST**

#### Smallest acoustic window vent providing 2500 mm<sup>2</sup> or 5000 mm<sup>2</sup> EA

SOUND ABSORBING

COANDA EFFECT

INSECT MESH





#### INTRODUCTION

Based on our Pyramid vent, the PyrAcoust is the smallest acoustic window vent (non-self-regulating) providing 2500 mm<sup>2</sup> or 5000 mm<sup>2</sup> Equivalent Area with the best acoustic performances for window ventilators available in the UK: up to 45 dB in open position.

#### **SOUND ABSORBING**

The modularity of the acoustic sets provides flexibility for installation and acoustic performance.

#### Sets comprise of:

- 1 Pyramid (2500 or 5000) + 1 acoustic module (for internal or external installation): providing noise reduction with discreet internal aesthetics
- 1 Pyramid (2500 or 5000) + 2 acoustic modules (for internal and external installation): providing maximum noise reduction

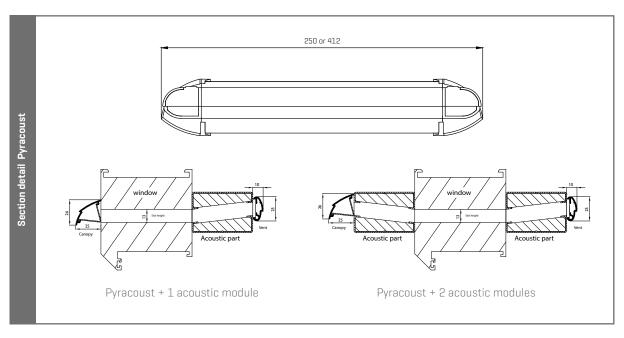
The external canopy offers excellent weather protection and incorporates a stainless steel fly screen. The vent is easy to open and control. The PyrAcoust is designed for use with Timber, uPVC and Aluminium

#### **COANDA EFFECT**

The interior profile deflects the incoming air upwards, causing an optimal spread of fresh air in the room.

	2500 + 1 Acoustic module	2500 + 2 Acoustic modules	5000 + 1 Acoustic module	5000 + 2 Acoustic modules	
Airflow					
Equivalent area (mm²)	2749	2736	5714	5596	
Q at 1 Pa	2,2 l/s	2,2 l/s	4,5 l/s	4,3 I/S	
Q at 1 Pa	7,9 m³/h	7,9 m³/h	16,2 m³/h	15,5 m³/h	
Q at 2 Pa	3,2 l/s	3,1 l/s	6,4 l/s	6,2 l/s	
Q at 10 Pa	7,6 I/S	7,5 l/s	14,4 l/s	14,5 l/s	
Q at 20 Pa	11,1 l/s	11 l/s	20,5 l/s	20,8 l/s	
Comfort					
Sound reduction $D_{n,e,w}\left[C;C_{tr}\right]$					
in open position	42 (-1; -2) dB	45 (-2; -3) dB	39 (-1; -2) dB	42 (-2; -4) dB	
in closed position	48 (-1;-3) dB	50 (-1; -3) dB	47 (-2; -3) dB	49 (-2; -4) dB	
Technical characteristics					
Controllable internal flap		Continuous adjustment			
Control options internal flap		Manual			
U value			-		
Air leakage at 50 Pa			-		
Watertightness in closed position, up to			-		
Watertightness in open position, up to		-			
Dimensions					
Height		40 mm			
Length*	250	250 mm 412 mm			
Slotsize opening	192 x	192 x 13 mm		[172x13] + 10 + [172x13]	

<sup>\*</sup> other lengths on demand



# **SLOTVENTS**

#### Interior

#### 478 - Flat grille

	Length Height		Slotsize opening (mm)	Airflow				
Туре	(mm) (mm)	1 Pa (I/s)		2 Pa (I/s)	2 Pa (m³/h)	Equivalent Area (mm²)		
478/1	275	20	230 x 16	1,9	2,8	9,9	2453	
478/2	375	20	330 x 16	2,8	3,9	14,2	3512	
478/3	475	20	[205 x 16] + 20 + [205 x 16]	3,7	5,4	19,3	4753	
478/4	700	20	(315 x 16) + 25 + (315 x 16)	5,6	8,0	28,8	7119	



#### 485 - Hit and miss vent

	Length Height (mm) (mm)	Height		Airflow				
Туре		_		1 Pa (I/s)	2 Pa (I/s)	2 Pa (m³/h)	Equivalent Area (mm²)	
485/1	275	22	230 x 16	1,2	1,8	6,4	1551	
485/2	375	22	330 x 16	1,9	2,7	9,9	2438	
485/3	475	22	[210 x 16] + 20 + [200 x 16]	2,5	3,6	13,1	3214	
485/4	700	22	[310 x 16] + 20 + [325 x 16]	4,1	6,0	21,6	5203	



#### 488 - Patio grille

	Length Height (mm) (mm)	Height	Slotsize opening	Airflow				
Туре		(mm)	1 Pa (I/s)	2 Pa (I/s)	2 Pa (m³/h)	Equivalent Area (mm²)		
488/1	275	30	250 x 25	3,1	4,3	15,5	3899	
488/2	375	30	[165 x 25] + 20 + [165 x 25]	4,3	5,9	21,4	5423	
488/3	475	30	[215 x 25] + 20 + [215 x 25]	4,5	6,8	24,6	5787	
488/4	700	30	[325 x 25] + 25 + [325 x 25]	8,5	12,1	43,5	10839	



#### 489 - Bar grille

	Length Height	Height	Slotsize opening	Airflow				
Туре	(mm)	(mm)	(mm)	1 Pa (I/s)	2 Pa (I/s)	2 Pa (m³/h)	Equivalent Area (mm²)	
489/1	275	24	237 x 18	1,7	2,5	8,9	5505	
489/2	375	24	337 x 18	2,2	3,2	11,7	2822	
489/3	475	24	[210 x 18] + 17 + [210 x 18]	3,0	4,3	15,3	3807	
489/4	700	24	[320 x 18] + 22 + [320 x 18]	5,1	7,2	25,8	6477	



### 787AK - Tipvent

	Length Height		Slotsize opening	Airflow				
Туре	(mm)	(mm)	(mm)	1 Pa (I/s)	2 Pa (I/s)	2 Pa (m³/h)	Equivalent Area (mm²)	
787AK/1	275	28	245 x 16	3,2	4,6	16,7	4127	
787AK/2	375	28	345 x 16	4,0	5,7	20,5	5108	
787AK/3	475	28	[215 x 16] + 20 + [215 x 16]	5,1	7,3	26,3	6525	
787AK/4	700	28	[325 x 16] + 25 + [325 x 16]	9,0	12,9	46,5	11455	

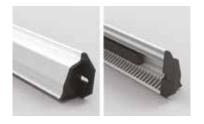


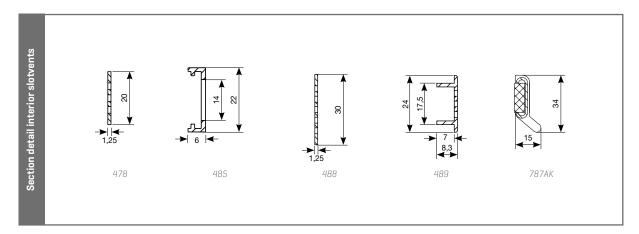
# **SLOTVENTS**

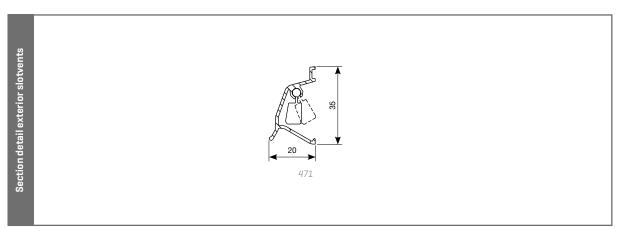
#### **Exterior**

471 - Self regulating canopy

	Length Height (mm) (mm)	Slotsize opening			Airflow		
Туре		(mm)	1 Pa (I/s)	2 Pa (I/s)	2 Pa (m³/h)	Equivalent Area (mm²)	
471/1	275	35	250 x 25	1,4	2,0	7,3	1785
471/2	375	35	350 x 25	2,0	3,0	10,8	2527
471/3	475	35	[215 x 25] + 20 + [215 x 25]	2,3	3,7	13,2	2951
471/4	700	35	[325 x 25] + 20 + [325 x 25]	4,0	6,0	21,5	5055







# COMBINED VENTILATION AND SUN SHADING OVERFRAME







Combined ventilation and sun shading overframe

## FIXVENT® MONO AKEVO

#### The perfect combination of ventilation, windproof sun protection and insect resistance













#### INTRODUCTION

Renson® brings with Fixvent Mono AK EVO an aesthetical and comfortable solution that combines ventilation, windproof sun protection and insect resistance. This product, which is installed as a monobloc, can perfectly be used in both new-built and renovation. Fixvent Mono AK EVO can, thanks to the same 'look & feel', be perfectly combined with Fixscreen Mono AK EVO, combining windproof sun protection and insect resistance in one product.

#### INSTALLATION ON TOP OF THE WINDOW FRAME

Fixvent Mono AK EVO is installed on top of the window frame, with fully finished box. This product can easily be installed on all window profiles (alu, PVC, wood) from 50 up to 215 mm.

#### THERMALLY BROKEN

No cold air transfer from outside to inside

#### I-FLUX®

Thanks to its self-regulating flap, the Fixvent Mono AK  $^{\text{EVO}}$  ensures the supply of fresh and healthy air without draughts. Moreover, the interior profile deflects the incoming air upwards, causing an optimal spread of fresh air in the room.

#### **SOUND ABSORBING**

3 levels of sound reduction in open position:

- Fixvent Mono AK EVO: up to 40 (-1; -4) dB
- Fixvent Mono AK EVO Ultra: up to 45 [-1; -5] dB
- Fixvent Mono AK EVO Extreme: up to 48 (-2; -5) dB

#### CONNECT&GO AND CLICK&SAFE

Thanks to the patented Connect&Go and Click&Safe technology, an easy [dis]mounting of the screen tube can be quaranteed.

#### WINDTIGHT UP TO 130 KM/H

The Fixscreen technology provides a tight and windproof screen up to 130 km/h (screen placed in closed position before a window construction).

#### **SMOOTH AND SILENT**

Thanks to the Smooth technology, which provides the zipper guides of a patented wearresistant layer, the screen goes up and down smoothly and silently.

#### **INSECT MESH**

The perforated inside profile acts as an insect mesh.

#### INTEGRATION IN SYSTEM C+®

This window vent guarantees an optimal indoor air quality in combination with Healthbox

### **TECHNICAL CHARACTERISTICS**

	Small	Medium	Large	X-Large	XX-Large				
Airflow									
Equivalent Area									
Fixvent® Mono AK <sup>EVO</sup>	18324 mm²/m								
Fixvent® Mono AK <sup>EVO</sup> ULTRA			4836 mm²/m						
Fixvent® Mono AK <sup>EVO</sup> EXTREME			2800 mm²/m	2800 mm²/m					
Q at 1 Pa									
Fixvent® Mono AK <sup>EVO</sup>	12,8 l/s/m								
Fixvent® Mono AK <sup>EVO</sup> ULTRA	xvent® Mono AK <sup>EVO</sup> ULTRA			3,7 l/s/m					
Fixvent® Mono AK <sup>EVO</sup> EXTREME	nt® Mono AK <sup>EVO</sup> EXTREME			2,1 l/s/m					
Comfort									
Sound reduction $D_{n,e,w}\left(C;C_{tr}\right)$ in open position	(screen up)								
Fixvent® Mono AK <sup>EVO</sup>	33 (0;-2) dB	35 (0;-3) dB	36 (-1;-4) dB	37 (-1;-4) dB	40 (-1;-4) dB				
Fixvent® Mono AK <sup>EVO</sup> ULTRA	n.a.	38 (0;-2) dB	40 (-1;-4) dB	43 (-1;-4) dB	45 (-1;-5) dB				
Fixvent® Mono AK <sup>EVO</sup> EXTREME	n.a.	43 (0;-3) dB	43 (0;-3) dB	46 (-1;-4) dB	48 (-2;-5) dB				
Technical characteristics									
Self-regulating at 2Pa	Yes								
Thermally broken	Yes								
U-value (W/m²K)									
Fixvent® Mono AK <sup>EVO</sup>	1,47 W/m²K	0,98 W/m²K	0,80 W/m²K	0,77 W/m <sup>2</sup> K	0,72 W/m²K				
Fixvent® Mono AK <sup>EVO</sup> ULTRA	n.a.	0,70 W/m²K	0,55 W/m <sup>2</sup> K	0,46 W/m²K	0,41 W/m²K				
Fixvent® Mono AK <sup>EVO</sup> EXTREME	n.a.	0,62 W/m²K	0,47 W/m <sup>2</sup> K	0,38 W/m²K	0,32 W/m²K				
Airflow leakage in closed position		< 15% at 50 Pa							
Insect mesh	Yes								
Control									
Screen	motor control								
Ventilation flap	manual, rod, motor								
Dimensions									
Box									
Box height (mm)	132 mm								
Box width (mm)	167 mm	197 mm	227 mm	257 mm	287 mm				
Compatible window depths (mm)	50-94 mm	95-124 mm	125-154 mm	155-184 mm	185-215 mm				
Screen: max. WxH [mm]+max. surface									
Single (1 screen - 1 control)		4000 x 3000 (12 m²)							
Coupled (2 parts - 2 motors)		6000 x 3000 mm (18 m²)							
Bottom bar (DxH) (mm)	30 x 57 mm								

## FIXVENT® MONO AK EVO

## The perfect combination of ventilation, windproof sun protection and insect resistance

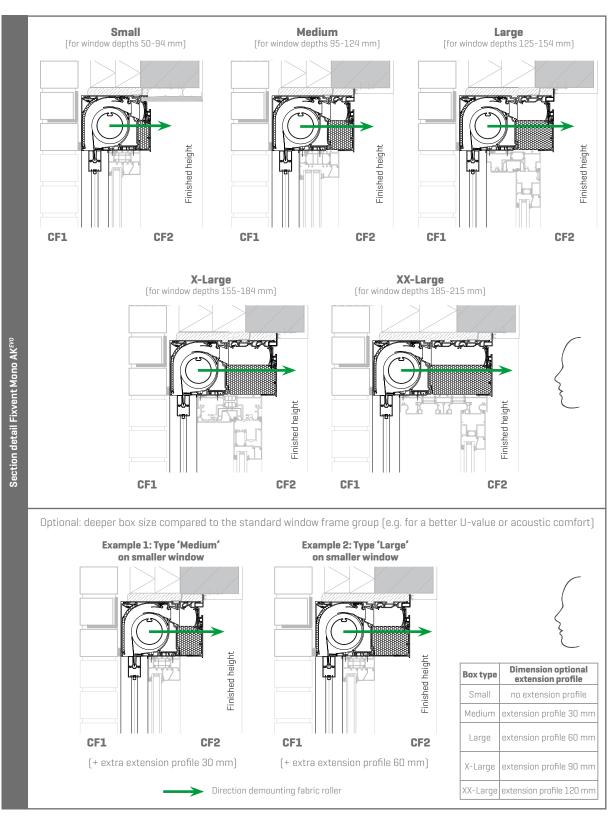
VENTILATION + WINDPROOF SUNPROTECTION



SOUND ABSORBING

OVERFRAME

#### **TECHNICAL DRAWINGS**



Direction demounting fabric roller defines the position of the motor left or right



## FIXVENT® MONO UTEVO

## The perfect combination of ventilation, windproof sun protection and insect resistance for utility













#### INTRODUCTION

Fixvent Mono UT  $^{EVO}$  combines, just as Fixvent Mono AK  $^{EVO}$  does, ventilation, windproof sun protection and insect-resistance in one and the same product. This UT-version has specifically been developped for utility, which makes this the perfect solution for e.g. schools or offices in which large amounts of airflow are required.

#### **UTILITY BUILDINGS**

#### INSTALLATION ON TOP OF THE WINDOW FRAME

Fixvent Mono UT  $^{\text{EVO}}$  is installed on top of the window frame, with fully finished box. This product can easily be installed on all window profiles [alu, PVC, wood] from 50 up to 215 mm.

#### I-FLUX®

Thanks to its self-regulating flap, the Invisivent  $^{\text{EVO}}$  UT ensures the supply of fresh and healthy air without draughts. The self-regulating flap only starts working at a wind pressure of 10 Pa (instead of 2 Pa).

#### **SOUND ABSORBING**

2 levels of sound reduction in open position:

- Fixvent Mono UT  $^{EVO}$ : up to 40 (-1; -4) dB
- Fixvent Mono UT EVO Ultra: up to 45 (-1; -5) dB

#### CONNECT&GO AND CLICK&SAFE

Thanks to the patented Connect&Go and Click&Safe technology, an easy (dis)mounting of the screen tube can be guaranteed.

#### WINDTIGHT UP TO 130 KM/H

The Fixscreen technology provides a tight and windproof screen up to 130 km/h (screen placed in closed position before a window construction).

#### **SMOOTH AND SILENT**

Thanks to the Smooth technology, which provides the zipper guides of a patented wear-resistant layer, the screen goes up and down smoothly and silently.

#### **INSECT MESH**

The perforated inside profile acts as an insect mesh.

#### INTEGRATION IN SYSTEM C+®

This window vent guarantees an optimal indoor air quality in combination with Healthbox 3.0.

### **TECHNICAL CHARACTERISTICS**

	Small	Medium	Large	X-Large	XX-Large			
Airflow								
Equivalent Area								
Fixvent® Mono UT <sup>EVO</sup>	19724 mm²/m							
Fixvent® Mono UT <sup>EVO</sup> ULTRA	4836 mm²/m							
Q at 1 Pa								
Fixvent® Mono UT <sup>EVO</sup>	15,5 l/s/m							
Fixvent® Mono UT <sup>EVO</sup> ULTRA	3,7 l/s/m							
Comfort								
Sound reduction $D_{n,e,w}\left(C;C_{tr}\right)$ in open position	(screen up)							
Fixvent® Mono UT <sup>EVO</sup>	33 (0;-2) dB	35 (0;-3) dB	36 (-1;-4) dB	37 (-1;-4) dB	40 (-1;-4) dB			
Fixvent® Mono UT <sup>EVO</sup> ULTRA	n.a.	38 (0;-2) dB	40 (-1;-4) dB	43 (-1;-4) dB	45 (-1;-5) dB			
Technical characteristics								
Self-regulating at 10 Pa	Yes							
Thermally broken	Yes							
U-value (W/m²K)								
Fixvent® Mono UT <sup>EVO</sup>	1,47 W/m²K	0,98 W/m²K	0,80 W/m²K	0,77 W/m²K	0,72 W/m²K			
Fixvent® Mono UT <sup>EVO</sup> ULTRA	n.a.	0,70 W/m²K	0,55 W/m²K	0,46 W/m²K	0,41 W/m²K			
Airflow leakage in closed position	< 15% at 50 Pa							
Insect mesh	Yes							
Control								
Screen	motor control							
Ventilation flap	manual, rod, motor							
Dimensions								
Box								
Box height (mm)	132 mm							
Box width (mm)	167 mm	197 mm	227 mm	257 mm	287 mm			
Compatible window depths (mm)	50-94 mm	95-124 mm	125-154 mm	155-184 mm	185-215 mm			
Screen: max. WxH (mm)+max. surface								
Single (1 screen - 1 control)	4000 x 3000 [12 m²]							
Coupled [2 parts - 2 motors]	6000 x 3000 mm (18 m²)							
Bottom bar (DxH) (mm)	30 x 57 mm							

## FIXVENT® MONO UT EVO

## The perfect combination of ventilation, windproof sun protection and insect resistance for utility

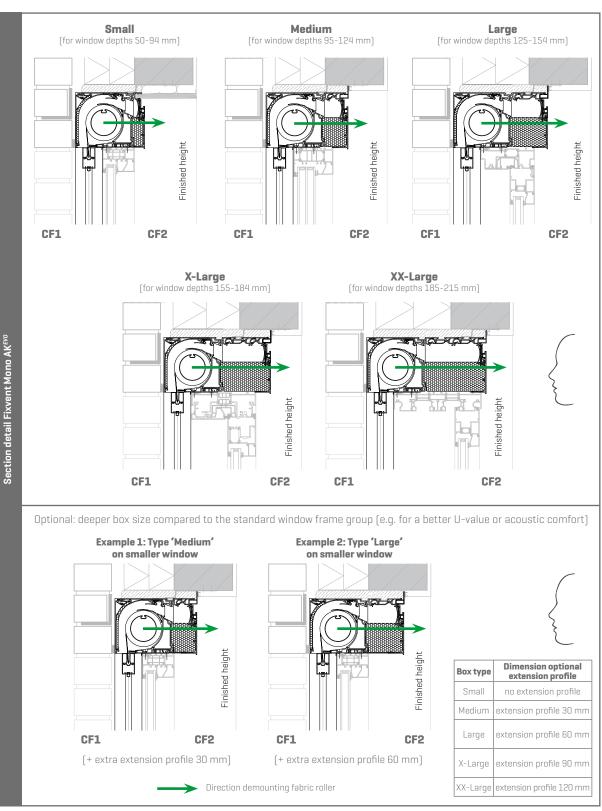
OVERFRAME

SELF-REGULATING I-FLUX

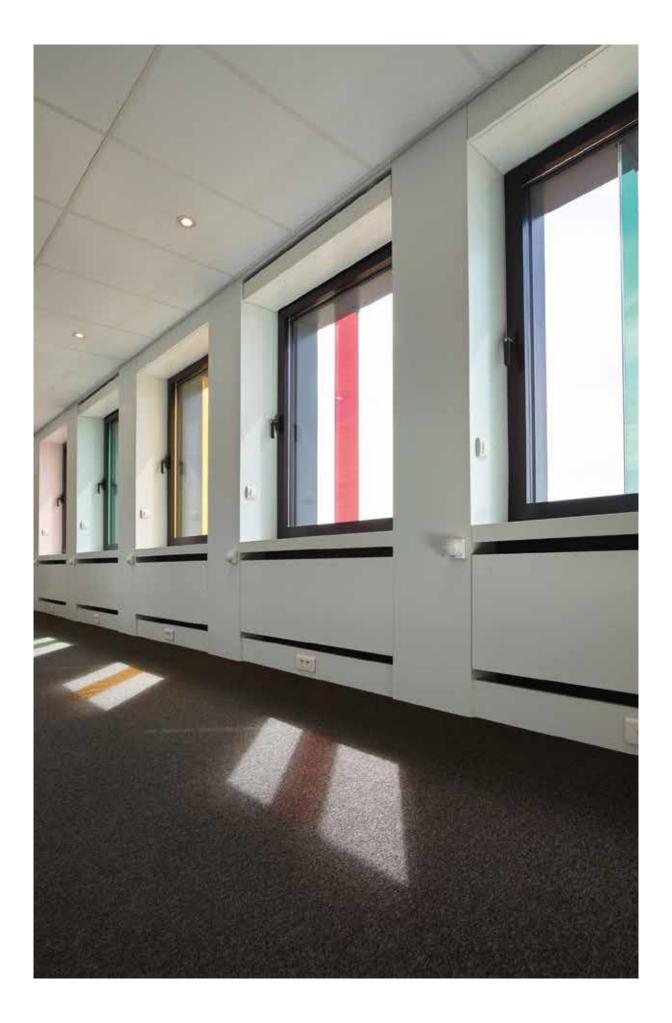
SOUND ABSORBING

VENTILATION + WINDPROOF SUNPROTECTION

#### TECHNICAL DRAWINGS



Direction demounting fabric roller defines the position of the motor left or right

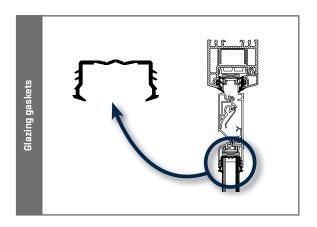


## **EPILOGUE**

#### **GLAZING GASKETS**

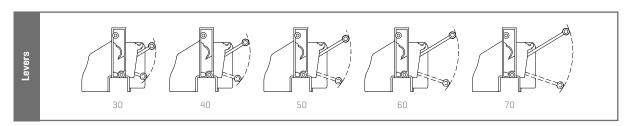
Renson® advises the use of special designed glazing gaskets;

- Nr 019, colour: black, for glass thickness 36 40 44 mm
- Nr 029, colour: black, for glass thickness 28 36 mm
- Nr 034, colour: grey, for glass thickness 20 28 mm
- Nr 039, colour: black, for glass thickness 20 28 mm

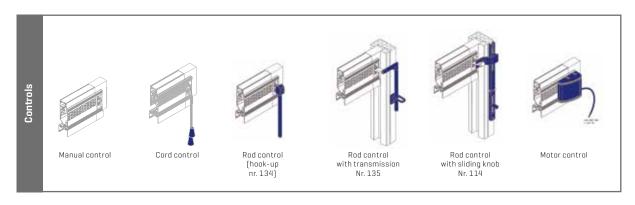


#### **CONTROLS**

• Manual: possible through manually opening/closing of the flap (eg. Invisivent EVO range), knob (e.g. THM90EVO), lever (e.g. AR75). Standard lever is 30 mm, but longer levers (40, 50, 60 and 70 mm) are available upon request.



- Cord: standard length for cord control is 1000 mm, other dimensions are available upon request.
- Rod: standard length for rod control is 1000 mm, other dimensions are available upon request. The rod can be powdercoated in any RAL or Syntha Pulvin colour upon request. Also rod control with hook-up, with transmission and with sliding knob are available for certain vents (e.g. THM90EVO).
- Motor: possible by means of an 'On/Off' or a 'O-10V' (for home automation) switch. Standard cable length: 3 m (except THL100[V), TL67-100-100PB, T67-100-130-150). The position of the cable exit for a Sonovent with motor control can be top left, top right, bottom left or bottom right.
- Not all control options are possible for all vents.



#### **FINISHING**

- Material internal and external profile: extruded AIMqSi 0.5 aluminium (according to EN 12020-2 and EN AW-6063)
- Finishing internal and external profile: bronze or satin anodized [E6/EV1-SAA, except for Oxyvent and Sonovent range] or powdercoated in any RAL or Syntha Pulvin colour (dual colour possible). Pre-treatment is recommended when used in an aggressive (in accordance with the standard Seaside Quality A] or a very aggressive (pre-anodisation) environment like sea-side, chemical industry, ...]
- Thermal bridge: extruded PVC (according to DIN 16941)
- Material end caps: ASA polymer type Luran S (colour-fast, weather- and UV-resistant)
- · Colour end caps:
  - Overframe flap ventilators: available in any colour upon request (dual colour possible), dyed in the mass or painted
  - Other flap ventilators: black or white (and for AR75 also 1013, 1015, 7016, 7021, 7030, 7035, 7039, 8019, 9001, 9007), other colours available upon request
  - Sliding vents: black
  - Slot vents: black or white, depending on the type of slotvent

#### **MAINTENANCE**

Almost all the Renson® window vents have a removable inner part for ease of maintenance.

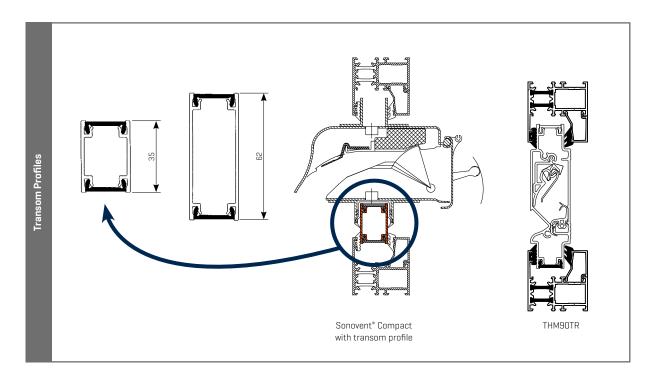
Maintenance must be performed at least once a year. Clean the inside using a vacuum cleaner and/or damp cloth. Remove leaves and other dirt from the outside of the window vent. Clean the outside aluminium part with a damp cloth and a non-abrasive cleaner. Rinse the window vent thoroughly with clean water.

## **EPILOGUE**

#### **TRANSOM PROFILES**

Two different transom profiles (height 35 mm or 62 mm) are available for the ventilators installed at transom. The transom profiles have been developed for easy and swift fabrication from bar lengths and are also available made to measure. These profiles can be satin anodised or powdercoated in any RAL or Syntha Pulvin colour.

For the THM90 $^{\text{EVO}}$  Renson® has developed special types which do not require transom profiles; the THM90PB $^{\text{EVO}}$  for installation at the bottom of a window and the THM90TR $^{\text{EVO}}$  for fully glazed-in installation between profiles (at transom).

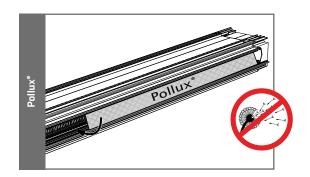


#### POLLUX®: OPTIONAL FINE DUST AND POLLEN FILTER

If you live in a strongly fine dust-loaded environment (such as near a highway or an industrial area), or if you suffer from hay fever (caused by pollen), the supply of fresh and healthy air can still be guaranteed by installing the Pollux in your Renson® window ventilator.

The Pollux can be installed in these Renson® window vents:

- The Invisivent AIR/COMFORT-range
- AR60 / THK60
- AR75
- Sonovent / Sonovent Compact



#### **TECHNICAL SPECIFICATIONS**

Water- and windtightness is tested accordingly to EN 1027 and EN 1026.

The Renson® products are manufactured according to, complies with and/or has been tested according to:

EN ISO 140-10, EN ISO 717-1, EN 1026, EN 1027, EN 13141-1, EN 12020-2, EN AW 6063 T66, NBN D50-001, EN 10077-2, DIN 16491, prEN 1627, prEN 1628, prEN 1629, prEN 1630.

#### PATENTED TECHNOLOGY

Most products in our standard range have unique features protected by patents, trademarks and worldwide intellectual property laws. Imitators and copycats will be prosecuted.

#### **DISCLAIMER**

Syntha Pulvin is a registred trademark of Valspar Powder Coatings Limited.

Renson® Ventilation nv preserves the right to make technical changes without prior notice.

Technical drawings and section details are not represented at scale 1:1.

Colours, photos, technical drawings and specifications may deviate from the actual product. The latest version of this brochure can be downloaded from www.renson.eu.



## WE'D BE HAPPY TO HELP YOU!

Our head office - the elegant building designed by the late architect Jo Crepain, which has been the visiting card of our company for many years now - is now being renovated. The bottom part of the building now has an imposing glass façade. Behind the façade, there is a new 'Customer Centre' with reception rooms for customers, conference rooms, and an auditorium, where large groups of more than 300 people can participate in presentations. In case of smaller groups, this auditorium can also be divided into 3 separate rooms.

The highlight of the project is the new showroom of 1250 m², where professional customers as well as private individuals can be accommodated. Apart from a showroom for Renson®'s various innovative solutions and concepts, it is planned to make this room a knowledge centre, where customers can walk in and ask questions about ventilation, heating, sun protection, ventilative cooling, acoustics, interior, etc, .... In short: everything to provide the home with all the necessary comfort. There is also the possibility to view the solutions in practice in show houses located nearby.

For more information about the network of Renson® ambassadors, please visit our website at: www.renson.eu

# RENSON®: YOUR PARTNER IN VENTILATION, SUN PROTECTION AND OUTDOOR CONCEPTS

#### Creating healthy spaces

From 1909, we've been developing energy efficient solutions assuring a healthy and comfortable indoor climate. Our headquarters – built according to the 'Healthy Building Concept' – is a beautiful example portraying our corporate mission.

#### No speed limit on innovation

A multidisciplinary team of more than 90 R&D employees continually optimize our products and develop new and innovative concepts.

#### Strong in communication

Contact with the customer is of the utmost importance. A group of 100 in-the-field employees worldwide and a powerful international distribution network are ready to advise you on site. EXIT 5 at Waregem gives you the possibility to experience our products on your own and provides necessary training for installers.

#### A reliable partner in business

We can guarantee our customers optimal quality and service thanks to our environmentally friendly and modern production sites (with automated powder coating line, anodisation line, uPVC injection molding machinery and mold making shop) covering an area of 95.000 m².





RENSON® Headquarters Maalbeekstraat 10, IZ 2 Vijverdam, B-8790 Waregem, Belgium Tel. +32 56 30 30 00 info@renson.eu www.renson.eu











