WINDOW VENTILATORS





OUR **MISSION** Creating healthy spaces



"RENSON" specialises in ventilation, sun protection and outdoor. With experience dating back to 1909, and an integrated team of over 1000 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."

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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 _{n.e.w} (C;C _{tr}) in open position (dB/m)	U-value (W/m²K)	
Overframe flap ventilators												
INVISIVENT ^{® EVO}	14	13728	10,8	38,8	14,3	51,3	13,1	14,4	15000	27 (-1;-1)	2,8	
INVISIVENT ^{® EVO} HF	16	17942	14,1	50,8	18,5	66,6	16,5	18,0	15100	28 (-1;-2)	2,8	
INVISIVENT ^{e evo} AK Basic	18	13489	10,6	38,2	15,9	57,2	17,9	16,0	12550	34 (0;-1)	2,0	
INVISIVEN I * EVU AK High	20	9349	/,3	26,5	11,6	41,/	14,0	11,8	9765	39 [0;-1]	2,2	
	21	7016	5,5	19,9	9,1	32,8	8,0	9,8	6916	42[0;-2]	2,2	
	2/	//061	1,3	1/10	2,0 5.6	3,3	12.2	3,3	5221	40 (U,-2) 20 (0, 2)	1.7	
INVISIVENT ^{® EVO} AKD May	24	1400	11	4.0	1.7	61	4.0	5.7	1354	47 (-1:-4)	1.2	
INVISIVENT ^{® EVO} HR Basic	26	13489	10.6	38.2	15.9	57.2	17.9	16.0	12550	34 (0:-1)	2.0	
INVISIVENT ^{® EVO} HR High	28	9349	7.3	26.5	11.6	41.7	14.0	11.8	9765	39 (0:-1)	2,2	
INVISIVENT ^{® EVO} HR Ultra	29	7016	5,5	19,9	9,1	32,8	8,0	9,8	6919	42 [0;-2]	2,2	
INVISIVENT ^{® EVO} AKR33-module	30	11818	9,3	33,4	12,9	46,6	11,6	12,9	13000	33 (-1;-2)	3,6	
INVISIVENT ^{® EVO} UT	32	10092	7,9	28,6	12,3	44,2	30,7	33,6	9765	39 (0;-1)	2,2	
Flap ventilators glazed-in/at transom												
1045	38	10435	8,2	29,5	11,5	41,4	25,8	36,5	11333	27 [0;0]	4,1	
1000	40	10/07	12,3	44,3 00 E	11.0	02,0	38,9	00,U	1/1000	28 [U;U]	3,3	
THK60	44	11841	9.3	33.5	13.2	47.5	29.6	41.8	14841	27 (0,0)	4.5	
AR75 Small	46	14174	11.1	40.1	15.3	54.9	17.3	14.7	10762	26 (-1:-1)	3.0	
AR75 Medium	46	17409	13.7	49.3	18.8	67.5	21.4	18.9	13531	26 (-1:-2)	3.0	
AR75 Large	46	19034	15,0	53,9	22,6	81,3	24,5	21,7	16171	26 [-1;-2]	3,0	
AR75 Xlarge	46	24301	19,1	68,8	29,0	104,3	31,5	28,0	18431	26 (-1;-1)	3,0	
AR90	48	14252	11,2	40,3	15,6	56,2	11,4	9,1	11070	30 (-1;-2)	3,9	
IHK90	50	14736	11,6	41,7	16,1	57,9	34,5	48,0	14120	28 (0;-1)	3,9	
	52	11841	9,3	33,5	13,9	50,0	13,5	15,1	11200	26 [0;0]	3,8	
	52	110/11	3,3 0 0	33,5 33 5	13,9	50,0 50.0	13,5 195	15,1	11200	26 [U;U] 26 (0:01	3,8 2 0	
	32 5/J	11041 p.n.d	3,3 0 R	33,3 9 N	11	эu,U Д 1	13,3 2 5	13,1	10RD	20 [U,U] (J7 (D3)	3,0 9 9	
AK80 ^{EV0} /2	54	n.p.u. p.n.d	0,0	3.2	1 7	6.2	5.4	5.8	2080	44 (-1+-41	2.3	
AK80 ^{EV0} /3	54	n.p.d.	1.3	4.7	2.1	7.5	6.6	6.3	2440	41 (-1:-3)	2.3	
AK80 ^{Ev0} /4	54	n.p.d.	4,1	14,8	6,6	23,6	20,5	19,6	5293	33 (-1;-2)	2,1	
AK80/1	56	1488	1,2	4,2	1,6	5,9	3,6	5,0	1280	47 [0;-3]	2,3	
AK80/2	56	2163	1,7	6,1	2,5	9,0	5,8	8,4	2080	44 (-1;-4)	2,3	
AK80/3	56	2545	2,0	7,2	2,9	10,4	7,1	10,4	2440	41 [-1;-3]	2,3	
AK80/4	56	8780	6,9	24,8	9,7	34,9	21,1	29,6	6680	33 (-1;-2)	2,1	
AK80GL/1	58	1488	1,2	4,2	1,6	5,9	3,6	5,0	1280	47 [0;-3]	2,3	
AK8UGL/2	58	2163	1,/	6,1	2,5	9,0	5,8	8,4	2080	44 [-1;-4]	2,3	
AKBUGL/3	58	2545	2,0	7,2	2,9	2/10	/,L 01.1	20.6	2440	41 [-1;-3]	2,3	
SONOVENT [®] Small 10	60	17756	1/1 0	50.2	1/1 0	50.2	15.3	23,0	10000	JJ (-1,-c) //6 (_1,-5)	4.5	
SONOVENT [®] Small 15	60	29593	23.3	83.7	23.3	83.7	25.6	28.5	11000	41 (-1:-2)	4.5	
SONOVENT [®] Small 20	60	31813	25,0	90,0	25,0	90,0	27,5	29,2	18900	40 (-1;-3)	4,5	
SONOVENT [®] Small 25	60	33786	26,6	95,6	26,6	95,6	29,2	27,1	22300	37 [-1;-3]	4,5	
SONOVENT® Medium 10	60	17509	13,8	49,5	13,8	49,5	15,1	n.p.d.	10000	48 (-2;-6)	4,6	
SONOVENT® Medium 15	60	26511	20,8	75,0	20,8	75,0	22,9	n.p.d.	11000	45 (-2;-6)	4,6	
SONOVENT® Medium 20	60	33292	26,2	94,2	26,2	94,2	28,8	n.p.d.	18900	43 (0;-3)	4,6	
SONOVENT® Medium 25	60	34032	26,7	96,3	26,7	96,3	29,4	27,5	22300	39 [-1;-4]	4,6	
SUNUVENT® Large 10	60	16153	12,7	45,7	12,7	45,7	14,0	n.p.d.	10000	50 [-2;-6]	4,6	
SUNUVENT [®] Large 20	60	25524	20,1	/2,2	20,1	/2,2	22,1	n.p.d.	10000	49 [-2;-7]	4,6	
SONOVENT Large 25	00	32039	23,2	90,7	26.3	90,7	28.0	25 N	20300	44 (-2,-0) //1 (_2:_6)	4,0	
SONOVENT® XLarge 10	60	14427	11.3	40.8	11.3	40.8	12.5	n n d	1000	56 (-2'-6)	47	
SONOVENT® XLarge 15	60	21578	17.0	61.0	17.0	61.0	18.7	n.p.d.	11000	53 (-2:-6)	4.7	
SONOVENT® XLarge 20	60	31073	24,4	87,9	24,4	87,9	26,9	n.p.d.	18900	46 [-2;-6]	4,7	
SONOVENT® XLarge 25	60	32676	25,7	92,4	25,7	92,4	28,2	n.p.d.	22300	45 (-2;-6)	4,7	
SONOVENT [®] Compact 10	64	15334	12,1	43,4	16,4	58,9	17,3	17,8	9500	36 (0;-1)	6,0	
SONOVENT [®] Compact 13	64	19278	15,2	54,5	18,8	67,7	18,8	18,7	12500	35 (0;-1)	6,0	
SONOVENT® Compact 15	64	24687	19,4	69,8	19,9	71,5	18,6	19,1	15000	33 [0;-1]	6,0	
SUNUVENT® D Small	66	31070	24,4	87,9	28,0	100,8	30,8	34,8	22300	3/[-1;-3]	4,5	
SUNUVENT [®] D Lease	66	31070	24,4	87,9	28,0	100,8	30,8	34,8	22300	39 [-1;-4]	4,6	
SONOVENT & Large	00 00	10500 1010/U	24,4	87,9 100 1	28,0	172 F	3U,8 1070	34,8 150 //	22300	41[-2;-6] 20(1, 2)	4,b	
SONOVENT® I Medium	00 68	40020 44020	34,2 34 R	120,1 124 R	40,2 48.7	175 9	1071	150 5	35857	JE [-1,-3] 39 [-19]	3,2 5,2	
SONOVENT® LL arge	68	43392	34.1	122.8	48.0	172.8	107.3	151.8	35857	35 (-1+-4)	5.2	
SONOVENT [®] I Xlarge	68	43138	33.9	122.0	48.0	172.8	107.3	151.8	35857	36 [-1:-4]	5.2	
Flap ventilators for conservatories												
Oxyvent [®]	74	15058	11,8	42,6	16,7	60,2	37,4	52,9	19300	27 [-1;-2]	2,8	
Roller shutter flap ventilator					_	_						
Transivent®	78	13748	10,8	38,9	15,2	54,6	20,1	19,9	16368	28 (-1;-2)	3,0	
Sliding vents												
THL100	82	16759	13,2	47,4	18,7	67,2	41,6	58,9	16200	22 (0;0)	3,9	
TRZ	82	1100/	10,0	36,1	14,2	51,3	32,1	45,5	2/950	22 [U;U]	3,9	
167	84	11224	8,8	31,8	12,7	45,7	28,5	40,2	16330	n.p.a.	n.p.a.	
T130	04 9/J	1/32D 2/J590	10 D	43,U R0 R	13,3 977	7 U, 3 QQ P	43,8 69.1	01,3 970	20342	n.p.u.	n.p.u.	
T150	84	27992	22.0	79.2	31.9	114.8	71.5	107,3	45592	n.p.u.	n.p.u.	
Slotvents	01	CIUUL	LL,U	7.0,2	5,20	1, 1, U	ט,ד י	202,0	IGOOL	Topos	n.p.d.	
Sonoslot", 275 mm	90	1273	1.0	3.6	1.4	5.0	3.2	3.3	1256	38 (0:0)	1.4	
Sonoslot", 375 mm	90	1607	1,3	4,5	1,7	6,2	4,0	4,2	1885	37 (0;0)	1,4	
Sonoslot®, 475 mm	90	2121	1,7	6,0	2,3	8,3	5,3	5,6	2513	36 (0;0)	1,4	
Sonoslot", 700 mm	90	3181	2,5	9,0	3,4	12,4	8,0	8,4	3769	34 (0;0)	1,4	
Sonoslot [®] Max without damping	92	2298	1,8	6,5	2,7	9,7	6,8	6,9	1871	38 [-1;-2]	n.p.d.	
Sonoslot® Max with damping	92	1555	1,2	4,4	1,9	6,8	5,1	7,6	1871	40 (-1;-2)	n.p.d.	
Slimline 250	94	2349	1,8	6,6	2,7	9,7	6,6	9,7	1800	n.p.d.	n.p.d.	
Dyramid 2500	94 ac	5034	4,U 0.1	14,2	ට,/ 0 1	20,5 10.05	13,4 7 n	19,4	0086 0000	n.p.a.	n.p.d.	
Pyramid 5000	90 30	5220	C,1 4 2	/,o 151	3,1 6 D	10,00 21 R	7,0 13 R	10,1 10 <i>1</i>	2200 4590	33 (LU,U) 33 (L1:0)	n n d	
Pyracoust 2500 + 1 acoustic module	98	2749	2.2	7.9	3.2	11.5	7.6	11.1	2496	42 (-1:-2)	n.p.d.	
Pyracoust 2500 + 2 acoustic modules	98	2736	2.2	7,9	3,1	11.2	7.5	11.0	2496	45 [-2:-3]	n.p.d.	
Pyracoust 5000 + 1 acoustic module	98	5714	4,5	16,2	6,4	23,0	14,4	20,5	4472	39 (-1;-2)	n.p.d.	
Pyracoust 5000 + 2 acoustic modules	98	5596	4,3	15,5	6,2	22,3	14,5	20,8	4472	42 (-2;-4)	n.p.d.	
Combined ventilation and sun shading	overfra	me										
Hixvent" Mono AK ^{evo}						See technic	cal values on	nage 106				

* 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)	
		-		P. 1000.000.00	0000	Overframe flap ventilators
yes ves	YES	0 n	n.p.d.	anodised/ RAL / dual col	or 6000	INVISIVENT ^{® EVO}
Ves	VES	0	n.o.d.	anodised / RAL / dual col	or 6000	INVISIVENT ^{® EVO} AK Basin
yes	yes	0	n.p.d.	anodised / RAL / dual col	or 6000	INVISIVENT ^{® EVO} AK High
yes	yes	0	n.p.d.	anodised / RAL / dual col	or 6000	INVISIVENT ^{® EVO} AK Ultra
NO	Ves	0	n.p.a. n.n.d	anodised / RAL / dual col anodised / RAL / dual col	or 6000	INVISIVENT® EVG AK EXTREME
yes	yes	0	n.p.d.	anodised / RAL / dual col	or 6000	INVISIVENT ^{® EVD} AKD Max
yes	yes	0	n.p.d.	anodised / RAL / dual col	or 6000	INVISIVENT ^{® EVO} HR Basic
yes	yes	0	n.p.d.	anodised / RAL / dual col	or 6000	INVISIVENT ^{® EVO} HR High
yes	VES	0	n.p.u.	anodised / RAL / dual col	or 6000	INVISIVENT ^{CO} AKR33-module
as from 10 Pa	yes	0	n.p.d.	anodised / RAL / dual col	or 6000	INVISIVENT ^{® EVO} UT
						Flap ventilators glazed-in/at transom
no	no	45	20/24/28	anodised / RAL / dual col	or 2500	TC45
Ves	Ves	60	20/24/28	anodised / RAL / dual col	or 2500	AR60
no	no	60	20/24/28	anodised / RAL / dual col	or 2500	ТНК60
yes	no	75/77	20/24/28/32/36*/40*/44*	anodised / RAL / dual col	or 2500	AR75 Small
yes	no	75/77	20/24/28/32/36*/40*/44*	anodised / RAL / dual col	or 2500	AR75 Medium
Ves	no	75/77	20/24/28/32/36*	anodised / RAL / dual col	or 2500	AR75 Large AR75 Xlarge
yes	no	90	20/24/28	anodised / RAL / dual col	or 2500 (2000 mm for motorised control)	AR90
no	no	90	20/24/28	anodised / RAL / dual col	or 2500 (2000 mm for motorised control)	THK90
yes	no	90	20/24/28/33	anodised / RAL / dual col	or 2500 (2000 mm for motorised control)	THM90EV
yes	no	90	20/24/28	anodised / RAL / dual col	or 2500 (2000 mm for motorised control)	THM90PB-10
as from 8 Pa	yes	n.a.	n.p.d.	anodised / RAL / dual col	or 2000 (1250 mm for cord control)	AK80 ^{EV0} /1
as from 8 Pa	yes	n.a.	n.p.d.	anodised / RAL / dual col	or 2000 (1250 mm for cord control)	AK80 ^{EV0} /2
as from 8 Pa	yes	n.a.	n.p.d.	anodised / RAL / dual col	or 2000 (1250 mm for cord control)	AK80 ^{EV0} /3
as from 8 Pa	yes	n.a.	n.p.u.	anodised / RAL / dual col	or 2000 (1250 mm for cord control)	AK80/1
no	no	n.a.	n.p.d.	anodised / RAL / dual col	or 2000 (1250 mm for cord control)	AK80/2
no	no	n.a.	n.p.d.	anodised / RAL / dual col	or 2000 (1250 mm for cord control)	AK80/3
no	no	n.a.	n.p.d.	anodised / RAL / dual col	or 2000 (1250 mm for cord control)	AK80/4
no	no	108	20/24/28/32/36	anodised / RAL / dual col	or 2000 (1250 mm for cord control)	AKBUGL/1
no	no	108	20/24/28/32/36	anodised / RAL / dual col	or 2000 (1250 mm for cord control)	AKBOGL/2 AKBOGL/3
no	no	108	20/24/28/32/36	anodised / RAL / dual col	or 2000 (1250 mm for cord control)	AK80GL/4
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 PAL / dual color	2000/2500***	SUNUVENT® Small 15 SUNUVENT® Small 20
ves	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
VES	no	130/135	20/24/28/32**	RAL / dual color	2000/2000	SONOVENT Medium 25 SONOVENT® Large 10
yes	no	130/135	20/24/28/32**	RAL / dual color	2000/2500***	SONOVENT® Large 15
yes	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***	SONOVENT® Large 25
yes	no	130/135	20/24/28/32**	RAL / dual color RAL / dual color	2000/2500***	SUNUVENT XLarge 10 SONOVENT® XLarge 15
yes	no	130/135	20/24/28/32**	RAL / dual color	2000/2500***	SONOVENT® XLarge 20
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 RAL / dual color	2000/2500***	SONOVENT Compact 15
yes	no	n.a	n.a	RAL / dual color	1000	SONOVENT® D Small
yes	no	n.a	n.a	RAL / dual color	1000	SONOVENT® D Medium
yes	no	n.a	n.a *****	RAL / dual color	1000	SONOVENT® D Large
no	no	130/135	20/24/28/32**	RAL / QUALCOLOF RAL / dual color	2000/2500***	SUNUVENT® I Medium
no	no	130/135	20/24/28/32**	RAL / dual color	2000/2500***	SONOVENT® I Large
no	no	130/135	20/24/28/32**	RAL / dual color	2000/2500***	SONOVENT® I Xlarge
		010		541 / P 2 2	1500	Flap ventilators for conservatories
no	no	210	28 - 86 (by steps of 2 mm)	RAL / dual color	1500	Uxwent Poller shutter flan ventilator
VES	VES	n.a.	n.a.	anodised / RAL	2200 (1500 mm for cord control)	Transivent®
120						Sliding vents
no	no	129	15*/20/24/28	anodised / RAL / dual col	or 3500	THL100
no	no	129	15*/20/24/28	anodised / RAL / dual col	or 3500	THL100V
no	no	n.a.	n.a.	anodised / RAL / dual col	ar 3500	T100
no	no	n.a.	n.a.	anodised / RAL / dual col	or 3500	T130
no	по	n.a.	n.a.	anodised / RAL / dual col	or 3500	T150
				1. 1/D	2225 4.047	Slotvents
yes	Yes	n.a.	n.a.	anodised / Kenson standard WHITE, anodised / Penson standard WHITE	9005,1247 275 9005,1247 375	Separate 275 mm
yes Ves	Ves	n.a.	n.a.	anodised / Renson standard WHITE,	9005, 1247 475	Sonoslot". 475 mm
yes	yes	n.a.	n.a.	anodised / Renson standard WHITE,	9005, 1247 700	Sonoslot", 700 mm
yes	по	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 9005 7016 8 6	Sonoslot" Max with damping
nn	nn	n.a. n.a.	n.a.	anouiseu / Renson standard WHITE, anodised / Renson standard WHITE	9005, 7016 n.a	Slimline 460
no	no	n.a.	n.a.	anodised / Renson standard WHITE,	9005, 7016 n.a.	Pyramid 2500
по	no	n.a.	n.a.	anodised / Renson standard WHITE,	9005, 7016 n.a.	Pyramid 5000
no	no	n.a.	n.a.	anodised / Renson standard WHITE,	9005, 7016 n.a.	Pyracoust 2500 + 1 acoustic module
110 nn	nn	n a	ri.a.	anouised / Renson standard WHITE, anodised / Renson standard WHITE	9005, 7016 n.a.	Pyracoust 2000 + 2 acoustic modules Pyracoust 5000 + 1 acoustic module
 no	no	n.a.	n.a.	anodised / Renson standard WHITE,	9005, 7016 n.a.	Pyracoust 5000 + 2 acoustic modules
					Combined	ventilation and sun shading overframe
			See techn	ical values on page 106		Fixvent" Mono AK ^{evo}

n.p.d. : no performances determined • n.a. : not applicable • airflow based upon aluminiumsize = 1000 mm (except slotvents)



NEED FOR VENTILATION?

Every day, the indoor air is being polluted by its inhabitants (breathing, sweating), through their activities (cooking, showering, heating and smoking), but also by the building itself and its furnishing (radon, volatile organic compounds, paint, detergents,...). Excessive insulation and inadequate ventilation create a dead and stale air which accumulates mites, molds, viruses, bacteria, as well as moisture and harmful chemicals such as CO₂.

VENTILATION: FOR YOU AND YOUR HOME!

Many people think that opening the window from time to time is sufficient. However, the effect of opening a window is only temporary and ventilation through open windows is uncontrollable (and therefore wasted energy). In addition, opening the window leads to other problems such as noise, the risk of burglary, the intrusion of insects and so on.

Continuous and controlled ventilation is the only effective method to ensure a healthy indoor climate.



A poor indoor climate may cause breathing problems, dry throat, eye irritation, headaches, allergies, impaired concentration, lack of energy, sleepiness, Moreover, excess moisture in the home can cause odors, condensation and mold growth, hence the importance to properly ventilate on a regular basis.

CO₂ MONITOR

The CO_2 concentration is an important indicator for good indoor air quality and can be measured with the Renson[®] CO_2 -monitor. The air quality becomes expressed in CO_2 particles per million air particles. [ppm = parts per million].

The maximum assumed value is 1200 ppm $\rm CO_{e}$. Above this value, people may suffer headache, drowsiness, fatigue or irritation of the mucous membranes at a $\rm CO_{e}$ concentrations above 1000 ppm the concentration ability decreases.



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 mm² whereas now it is calculated and shown as Equivalent Area [EA] per mm² 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 $\rm mm^2$ EA and for any wet room 2500 $\rm mm^2$ 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 mm² EA for habitable rooms and 2500 mm² 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.

New Offices

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

Existing offices, hotels, ...

Floor area under 10m2- 2500 mm2 EAFloor area over 10m2- 250 mm2/m2 EAKitchens- 2500 mm2 EABathrooms/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

Unique, self-regulating flap ventilators: innovative and energy-saving



i-Flux® TECHNOLOGY

By applying the i-Flux Technology, Renson® can guarantee an optimal comfort and minimize energy loss with its ventilators. i-Flux Technology is based upon the following three principles:

i-Flux technology is based on the following three principles:



1. Self-regulating: a self-regulating flap reacts to changes in pressure, ensuring a constant air-flow, that prevents draughts even with windgusts.

2. Manually controlled inner flap: the required air flow can be determined depending for example on the occupancy in the room.

3. Upward air flow: the shape of the inner flap conducts the fresh air upwards resulting in optimal distribution throughout the space and guaranteeing maximum comfort.

OVERFRAME FLAP VENTILATORS







Invisivent® ^{EVO}

Invisivent® EVO AK Basic



INVISIVENT® EVO

The most discrete, self-regulating overframe flap ventilator

OVERFRAME



THERMALLY BROKEN

FULLY INVISIBLE INSTALLATION POSSIBLE



INTRODUCTION

With the Invisivent EVO , RENSON has developed the most discrete self-regulating window ventilator in the world that combines a healthy living comfort with a maximum visual comfort.

INSTALLATION ON TOP OF THE WINDOW FRAME

The Invisivent $^{\epsilon_{VO}}$ is a thermally broken window ventilator that is installed on top of the aluminium, timber or PVC window frame. This almost invisible installation guarantees maximum light penetration as the glass size is not reduced.

THERMALLY BROKEN

No cold air transfer from outside to inside.

I-FLUX®

Thanks to its self-regulating flap, the Invisivent^{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.

INSECT MESH

The perforated inside profile acts as an insect mesh.

BURGLAR PROOF

The Invisivent ^{EVO} range meets the requirements of burglary resistance class 2 according to standard prEN 1627 to 1630, and therefore suits to be used on a window class WK2.

INTEGRATION IN SYSTEM C+®

TECHNICAL CHARACTERISTICS

Airflow			
Equivalent area	13728 mm²/m		
Q at 1 Pa	10,8 l/s/m		
Q at 1 Pa	38,8 m³/h/m		
Q at 2 Pa	14,3 l/s/m		
Q at 10 Pa	13,1 l/s/m		
Q at 20 Pa	14,4 l/s/m		
Comfort			
Sound reduction $D_{n,e,w}$ [C;C _{tr}]			
In open position	27 [-1;-1] dB		
In closed position	49 (-2;-4) dB		
Technical characteristics			
Controllable internal flap	6 stepped positions		
Control options internal flap	Manual, cord, rod, motor		
U value	2,8 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	50 Pa		
Dimensions			
Glass reduction	0 mm		
Height	62 mm		
Depths window frame	50 up to 184 mm (or more upon request)		
Max. length	6000 mm		





INVISIVENT® EVO HF

The most discrete, self-regulating overframe flap ventilator with higher airflow



SELF-

REGULATING

THERMALLY BROKEN

30% MORE AIRFLOW



INTRODUCTION

The Invisivent ^{EVO} HF delivers 30% more airflow than the regular Invisivent ^{EVO}. This version of the Invisivent ^{EVO} has been specifically developed for use in spaces with small windows where sufficient airflow must be achieved, and is ideal for ensuring sufficient fresh air in rooms with high occupancy such as classrooms. In closed position there is no visual difference between the Invisivent ^{EVO} HF and Invisivent ^{EVO}, so both models can be used in the same building.

INSTALLATION ON TOP OF THE WINDOW FRAME

The Invisivent ^{EVO} HF is a thermally broken window ventilator that is installed on top of the aluminium, timber or PVC window frame. This almost invisible installation guarantees maximum light penetration as the glass size is not reduced.



30% MORE AIRFLOW THAN THE REGULAR INVISIVENT® EVO

Invisivent ^{EVO} HF delivers 30% more airflow than the regular Invisivent ^{EVO}, which makes this the ideal solution for spaces with small windows where sufficient airflow must be achieved.

THERMALLY BROKEN

No cold air transfer from outside to inside.

I-FLUX®

Thanks to its self-regulating flap, the Invisiven^{EVO} HF 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.

BURGLAR PROOF

The Invisivent ^{EVD} range meets the requirements of burglary resistance class 2 according to standard prEN 1627 to 1630, and therefore suits to be used on a window class WK2.

INTEGRATION IN SYSTEM C+®

TECHNICAL CHARACTERISTICS

Airflow			
Equivalent area	17942 mm²/m		
Q at 1 Pa	14,1 l/s/m		
Q at 1 Pa	50,8 m³/h/m		
Q at 2 Pa	18,5 l/s/m		
Q at 10 Pa	16,5 l/s/m		
Q at 20 Pa	18,0 l/s/m		
Comfort			
Sound reduction $D_{n,e,w}$ [C;C _{tr}]			
In open position	28 (-1;-2) dB		
In closed position	49 (-2;-4) dB		
Technical characteristics			
Controllable internal flap	5 stepped positions		
Control options internal flap	Manual, cord, rod, motor		
U value	2,8 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		
Dimensions			
Glass reduction	0 mm		
Height	62 mm		
Depths window frame	50 up to 184 mm (or more upon request)		
Max. length	6000 mm		





INVISIVENT® EVO AK

The most discrete, self-regulating and sound-absorbing overframe flap ventilator

OVERFRAME



SOUND Absorbing

REMOVABLE ACOUSTIC FOAM



INTRODUCTION

The Invisivent $^{\mbox{\tiny EVO}}$ AK is the acoustic version of the Invisivent $^{\mbox{\tiny EVO}}.$

Four different Invisivent ^{EVO} AK versions are available (Basic, High, Ultra or Extreme), each representing a different level of sound reduction. For each specific window frame depth, a different PVC profile is used (and special extension profiles are used for some window frame depths) in order to make the Invisivent ^{EVO} AK fit perfectly to the window profile.

 Window depth <110 mm:</td>
 Invisivent ^{Evo} AK Basic + special extension profile

 [>110 mm, an adapted PVC interior profile is used]

 Window depth < 140 mm:</td>
 Invisivent ^{Evo} AK High / Ultra / Extreme + special extension

 profile [>140 mm, an adapted PVC interior profile is used]



INSTALLATION ON TOP OF THE WINDOW FRAME

The Invisivent $^{\epsilon_{VO}}$ AK is a thermally broken window ventilator that is installed on top of the aluminium, timber or PVC window frame. This almost invisible installation guarantees maximum light penetration as the glass size is not reduced.

THERMALLY BROKEN

No cold air transfer from outside to inside

I-FLUX®

Thanks to its self-regulating flap, the Invisivent^{EVO} AK ensures the supply of fresh and healthy air without draughts (Invisivent^{EVO} AK Extreme is not self-regulating). Moreover, the interior profile deflects the incoming air upwards, causing an optimal spread of fresh air in the room.

SOUND ABSORBING

In open position: Invisivent ^{EVO} AK Basic: 34 (0;-1) dB Invisivent ^{EVO} AK High: 39 (0;-1) dB Invisivent ^{EVO} AK Ultra: 42 (0;-2) dB Invisivent ^{EVO} AK Extreme: 48 (0;-2) dB

REMOVABLE ACOUSTIC FOAM

Thanks to its removable acoustic foam, this window vent is easy to clean and maintain.

INSECT MESH

The perforated inside profile acts as an insect mesh.

BURGLAR PROOF

The Invisivent $^{\rm EVO}$ range meets the requirements of burglary resistance class 2 according to standard prEN 1627 to 1630, and therefore suits to be used on a window class WK2.

INTEGRATION IN SYSTEM C+®

INVISIVENT® EVO AK BASIC

TECHNICAL CHARACTERISTICS

Airflow				
Equivalent area	13489 mm²/m			
Q at 1 Pa	10,6 l/s/m			
Q at 1 Pa	38,2 m³/h/m			
Q at 2 Pa	15,9 l/s/m			
Q at 10 Pa	17,9 l/s/m			
Q at 20 Pa	16,0 l/s/m			
Comfort				
Sound reduction $D_{n,e,w}$ [C;C _{tr}]				
In open position	34 [0;-1] dB			
In closed position	57 (-1;-4) dB			
Technical characteristics				
Controllable internal flap	5 stepped positions			
Control options internal flap	Manual, cord, rod, motor			
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			
Dimensions				
Glass reduction	0 mm			
Height	62 mm			
Depths window frame	50 up to 184 mm (or more upon request)			
Max. length	6000 mm			





INVISIVENT® EVO AK HIGH



TECHNICAL CHARACTERISTICS

Airflow	
Equivalent area	9349 mm²/m
Q at 1 Pa	7,3 l/s/m
Q at 1 Pa	26,5 m³/h/m
Q at 2 Pa	11,6 l/s/m
Q at 10 Pa	14,0 l/s/m
Q at 20 Pa	11,8 l/s/m
Comfort	
Sound reduction $D_{n,\text{\tiny B,W}}$ [C;C _{tr}]	
In open position	39(0;-1)dB
In closed position	62 (-2;-6) dB
Technical characteristics	
Controllable internal flap	5 stepped positions
Control options internal flap	Manual, cord, rod, motor
U value	2,2 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
Dimensions	
Glass reduction	0 mm
Height	62 mm
Depths window frame	50 up to 184 mm (or more upon request)
Max. length	6000 mm



INVISIVENT® EVO AK ULTRA

TECHNICAL CHARACTERISTICS

Airflow	
Equivalent area	7016 mm²/m
Q at 1 Pa	5,5 l/s/m
Q at 1 Pa	19,9 m³/h/m
Q at 2 Pa	9,1 l/s/m
Q at 10 Pa	8,0 l/s/m
Q at 20 Pa	9,8 l/s/m
Comfort	
Sound reduction D _{n.e.w} (C;C _{tr})	
In open position	42 [0;-2] dB
In closed position	64 (-1;-4) dB
Technical characteristics	
Controllable internal flap	5 stepped positions
Control options internal flap	Manual, cord, rod, motor
U value	2,2 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
Dimensions	
Glass reduction	0 mm
Height	62 mm
Depths window frame	50 up to 184 mm (or more upon request)
Max. length	6000 mm







Invisivent® EVO AK Basic, High and Extreme

INVISIVENT® EVO AK EXTREME



TECHNICAL CHARACTERISTICS

Airflow	
Equivalent area	2404 mm²/m
Q at 1 Pa	1,9 l/s/m
Q at 1 Pa	6,8 m³/h/m
Q at 2 Pa	2,8 l/s/m
Q at 10 Pa	6,4 l/s/m
Q at 20 Pa	9,3 l/s/m
Comfort	
Sound reduction $D_{n,e,w}$ [C;C _{tr}]	
In open position	48 [0;-2] dB
In closed position	64 (-4;-11) dB
Technical characteristics	
Controllable internal flap	5 stepped positions
Control options internal flap	Manual, cord, rod, motor
U value	1,7 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
Dimensions	
Glass reduction	0 mm
Height	62 mm
Depths window frame	50 up to 184 mm (or more upon request)
Max. length	6000 mm



Attention: Invisivent® EVO AK Extreme is visually identical to the Invisivent® EVO AK High and Invisivent® EVO UT, but is not self-regulating!

INVISIVENT® EVO AKD/AKD Max

The most discrete, self-regulating and superior sound absorbing overframe ventilator

OVERFRAME



SOUND Absorbing

REMOVABLE ACOUSTIC FOAM



INTRODUCTION

The Invisivent $^{\epsilon_{VO}}$ AKD [Max] is a sound absorbing, self-regulating and thermally broken window ventilator that is installed on top of the window frame. This acoustic version of the Invisivent $^{\epsilon_{VO}}$ combines a healthy living comfort with a maximum visual comfort, without losing any acoustic comfort.

Compared to the Invisivent ^{EVO} AK-series, this Invisivent ^{EVO} AKD [Max] has a much better acoustic performance thanks to the extra outer profile. Two different types are available: the Invisivent ^{EVO} AKD and the Invisivent ^{EVO} AKD Max – the latter with an even better acoustic performance than the first.

For each specific window frame depth, a different PVC profile is used (and special extension profiles are used for some window frame depths) in order to make the Invisivent ^{EVO} AKD (Max) fit perfectly to the window profile.

INSTALLATION ON TOP OF THE WINDOW FRAME

The Invisivent ^{EVO} AKD [Max] is a thermally broken window ventilator that is installed on top of the aluminium, timber or PVC window frame. This almost invisible installation guarantees maximum light penetration as the glass size is not reduced.

THERMALLY BROKEN

No cold air transfer from outside to inside

I-FLUX®

Thanks to its self-regulating flap, the Invisivent ^{EVO} AKD (Max) 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

Invisivent ^{EVO} AKD: 39 (0;-2) dB in open position Invisivent ^{EVO} AKD Max: 47 (-1;-4) dB in open position

REMOVABLE ACOUSTIC FOAM

Thanks to its removable acoustic foam, this window vent is easy to clean and maintain.

INSECT MESH

The perforated inside profile acts as an insect mesh.

BURGLAR PROOF

The Invisivent $^{\rm EVO}$ range meets the requirements of burglary resistance class 2 according to standard prEN 1627 to 1630, and therefore suits to be used on a window class WK2.

INTEGRATION IN SYSTEM C+®

TECHNICAL CHARACTERISTICS

Airflow	Invisivent® EVO AKD	Invisivent® EVO AKD Max
Equivalent area	4961 mm²/m	1400 mm²/m
Q at 1 Pa	3,9 l/s/m	1,1 l/s/m
Q at 1 Pa	14,0 m³/h/m	4,0 m³/h/m
Q at 2 Pa	5,6 l/s/m	1,7 l/s/m
Q at 10 Pa	13,3 l/s/m	4,0 l/s/m
Q at 20 Pa	19,3 l/s/m	5,7 l/s/m
Comfort		
Sound reduction $D_{n,e,w}$ [C;C _{tr}]		
In open position	39 (0;-2) dB	47 (-1;-4) dB
In closed position	60 (-1;-4) dB	63 (-1;-4) dB
Technical characteristics		
Controllable internal flap	5 stepped positions	
Control options internal flap	Manual, cord, rod, motor	
U value	1,2 W/m²K (as from window depth 140 mm: 1,0 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	
Dimensions		
Glass reduction	0 mm	
Height	63 mm	
Depths window frame	50 up to 184 mm (or more upon request)	
Max. length	6000 mm	



INVISIVENT® EVO HR

The most discrete, self-regulating and sound-absorbing overframe flap ventilator for high rise applications

OVERFRAME



SOUND Absorbing

FOR WINDIMPACTED APPLICATIONS



INTRODUCTION

The new Invisivent ^{EVO} HR provides the ideal solution for wind-impacted applications such as high-rise buildings and apartment buildings on the coast.

The Invisivent ^{EVO} HR contains acoustic material, that muffles external noises as much as possible [e.g. wind, seagulls, traffic], which increases user comfort. The presence of various types of sound damping foam in the inside profile provides 3 possible levels of sound insulation [Basic, High or Ultra]. In addition to that, the rain cap, which is mounted as standard, ensures perfect water-resistance in even the most extreme conditions. Extra mounting screws and clips guarantee satisfactory stability and sturdiness of the entire window.

The unique Invisivent $^{\rm EVO}$ HR combines its functionality with maximum respect for the architecture since it can be positioned on the window frame, behind the wall.



IDEAL FOR WIND IMPACTED APPLICATIONS (COAST AND HIGH RISE BUILDING SITUATIONS)

INSTALLATION ON TOP OF THE WINDOW FRAME

The Invisivent ^{EVO} HR is a thermally broken window ventilator that is installed on top of the aluminium, timber or PVC window frame. This almost invisible installation guarantees maximum light penetration as the glass size is not reduced.

THERMALLY BROKEN

I-FLUX®

Thanks to its self-regulating flap, the Invisivent ^{EVO} HR 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

In open position: Invisivent ^{EVO} HR Basic: 34 (0;-1) dB Invisivent ^{EVO} HR High: 39 (0;-1) dB Invisivent ^{EVO} HR Ultra: 42 (0;-2) dB

REMOVABLE ACOUSTIC FOAM

INSECT MESH

The perforated inside profile acts as an insect mesh.

BURGLAR PROOF

The Invisivent ^{EVD} range meets the requirements of burglary resistance class 2 according to standard prEN 1627 to 1630, and therefore suits to be used on a window class WK2.

INTEGRATION IN SYSTEM C+®

INVISIVENT® EVO HR BASIC

TECHNICAL CHARACTERISTICS

Airflow	
Equivalent area	13489 mm²/m
Q at 1 Pa	10,6 l/s/m
Q at 1 Pa	38,2 m³/h/m
Q at 2 Pa	15,9 l/s/m
Q at 10 Pa	17,9 l/s/m
Q at 20 Pa	16,0 l/s/m
Comfort	
Sound reduction $D_{n,e,w}$ [C;C _{tr}]	
In open position	34 [0;-1] dB
In closed position	57 (-1;-4) dB
Technical characteristics	
Controllable internal flap	16 stepped positions
Control options internal flap	Manual, cord, rod, motor
U value	2,0 W/m²K
Air leakage at 50 Pa	<15% (in closed position)
Watertightness in closed position, up to	1200 Pa
Watertightness in open position, up to	250 Pa
Dimensions	
Glass reduction	0 mm
Height	65 mm
Depths window frame	50 up to 184 mm (or more upon request)
Max. length	6000 mm





INVISIVENT® EVO HR HIGH



TECHNICAL CHARACTERISTICS

Airflow		
Equivalent area	9349 mm²/m	
Q at 1 Pa	7,3 l/s/m	
Q at 1 Pa	26,5 m³/h/m	
Q at 2 Pa	11,6 l/s/m	
Q at 10 Pa	14,0 l/s/m	
Q at 20 Pa	11,8 l/s/m	
Comfort		
Sound reduction $D_{n,e,w}$ [C;C _{tr}]		
In open position	39(0;-1)dB	
In closed position	62 (-2;-6) dB	
Technical characteristics		
Controllable internal flap	16 stepped positions	
Control options internal flap	Manual, cord, rod, motor	
U value	2,2 W/m²K	
Air leakage at 50 Pa	<15% (in closed position)	
Watertightness in closed position, up to	1200 Pa	
Watertightness in open position, up to	250 Pa	
Dimensions		
Glass reduction	0 mm	
Height	65 mm	
Depths window frame	50 up to 184 mm (or more upon request)	
Max. length	6000 mm	



INVISIVENT® EVO HR ULTRA

TECHNICAL CHARACTERISTICS

Airflow	
Equivalent area	7016 mm²/m
Q at 1 Pa	5,5 l/s/m
Q at 1 Pa	19,9 m³/h/m
Q at 2 Pa	9,1 l/s/m
Q at 10 Pa	8,0 l/s/m
Q at 20 Pa	9,8 l/s/m
Comfort	
Sound reduction $D_{n,e,w}$ [C;C _{tr}]	
In open position	42 (0;-2) dB
In closed position	64 (-1;-4) dB
Technical characteristics	
Controllable internal flap	16 stepped positions
Control options internal flap	Manual, cord, rod, motor
U value	2,2 W/m²K
Air leakage at 50 Pa	<15% (in closed position)
Watertightness in closed position, up to	1200 Pa
Watertightness in open position, up to	250 Pa
Dimensions	
Glass reduction	0 mm
Height	65 mm
Depths window frame	50 up to 184 mm (or more upon request)
Max. length	6000 mm





AKR33-MODULE

Acoustic retrofit module for the Invisivent® EVO

OVERFRAME



SOUND Absorbing

RETROFIT MODULE



INTRODUCTION

Over the years, one's neighbourhood can change dramatically, with for example increasing traffic leading to increasing noise pollution. With the AKR33-module it is possible to upgrade one's previously installed Invisivent ^{EVO} with a minimal sound absorbing module, so that one can enjoy his home again in all comfort.

ACOUSTIC RETROFIT MODULE

RENSON has developed a special acoustic retrofit module that can easily be clicked on a previously installed Invisivent $^{\mbox{\scriptsize EVO}}.$

THERMALLY BROKEN

No cold air transfer from outside to inside.

I-FLUX®

Thanks to its self-regulating flap, the Invisivent ^{EVD} AKR33-module 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

Invisivent ^{EVO} + AKR33-module: 33 [-1;-2] dB in open position

AVAILABLE IN THE SAME COLOR AS THE INVISIVENT® EVO

This acoustic retrofit module is available in exactly the same color as the previously installed Invisivent $^{\rm EVO}$, so that its visual impact remains limited.

INSECT MESH

The perforated inside profile acts as an insect mesh.

BURGLAR PROOF

The Invisivent ^{EVO} range meets the requirements of burglary resistance class 2 according to standard prEN 1627 to 1630, and therefore suits to be used on a window class WK2.

INTEGRATION IN SYSTEM C+®

TECHNICAL CHARACTERISTICS

Airflow	
Equivalent area	11818 mm²/m
Q at 1 Pa	9,3 l/s/m
Q at 1 Pa	33,4 m³/h/m
Q at 2 Pa	12,9 l/s/m
Q at 10 Pa	11,6 l/s/m
Q at 20 Pa	12,9 l/s/m
Comfort	
Sound reduction $D_{n,e,w}$ [C;C _{tr}]	
In open position	33 (-1;-2) dB
In closed position	49 (-2;-4) dB
Technical characteristics	
Controllable internal flap	6 stepped positions
Control options internal flap	Manual, cord, rod, motor
U value	3,6 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

TECHNICAL DRAWINGS

1. Remove the aluminium interior profile from the Invisivent $^{\mbox{\sc evo}}$



2. Click the acoustic AKR33-module onto the PVC-profile of the Invisivent ^{EVO}



3. Insert the aluminium interior profile from the Invisivent ^{Evo} on the acoustic AKR33-module



INVISIVENT® EVO UT

The most discrete, self-regulating and sound-absorbing overframe flap ventilator for utility buildings

OVERFRAME



SOUND Absorbing

FOR UTILITY BUILDINGS



INTRODUCTION

The Invisivent^{EVO} UT is the acoustic version of the Invisivent^{EVO} that has been especially developed for utility buildings. Its self-regulating flap only starts working at a wind pressure of 10 Pa (instead of at 2 Pa as for the other Invisivent^{EVO} vents), ensuring a constant higher level of basic ventilation. This type of window ventilation is only suitable for utility applications in which both the natural supply and mechanical extraction are located in the same room.

Window depth < 140 mm: Invisivent^{EVO} UT + special extension profile [>140 mm, an adapted PVC interior profile is used]

UTILITY BUILDINGS

INSTALLATION ON TOP OF THE WINDOW FRAME

The Invisivent^{EVO} UT is a thermally broken window ventilator that is installed on top of the aluminium, timber or PVC window frame. This almost invisible installation guarantees maximum light penetration as the glass size is not reduced.

THERMALLY BROKEN

No cold air transfer from outside to inside.

I-FLUX®

Thanks to its self-regulating flap, the Invisivent^{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 at 2 Pa). Moreover, the interior profile deflects the incoming air upwards, causing an optimal spread of fresh air in the room.

SOUND ABSORBING

Invisivent^{EVO} UT: 39 (0;-1) dB in open position

REMOVABLE ACOUSTIC FOAM

Thanks to its removable acoustic foam, this window vent is easy to clean and maintain.

INSECT MESH

The perforated inside profile acts as an insect mesh.

BURGLAR PROOF

The Invisivent ^{EVD} range meets the requirements of burglary resistance class 2 according to standard prEN 1627 to 1630, and therefore suits to be used on a window class WK2.

INTEGRATION IN SYSTEM C+®

TECHNICAL CHARACTERISTICS

Airflow	
Equivalent area	10092 mm²/m
Q at 1 Pa	7,9 l/s/m
Q at 1 Pa	28,6 m³/h/m
Q at 2 Pa	12,3 l/s/m
Q at 10 Pa	30,7 l/s/m
Q at 20 Pa	33,6 l/s/m
Comfort	
Sound reduction D _{n.e.w} (C;C _{tr})	
In open position	39 (O;-1) dB
In closed position	62 (-2;-6) dB
Technical characteristics	
Controllable internal flap	5 stepped position
Control options internal flap	Manual, cord, rod, motor
U value	2,2 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
Dimensions	
Glass reduction	0 mm
Height	62 mm
Depths window frame	50 up to 184 mm (or more upon request)
Max. length	6000 mm





INVISIVENT® EVO 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 neat finish.



FINISHING PROFILE

The Invisivent EVD 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 plastered to integrate the vent discount winter the plastered

plasterer to integrate the vent discreetly into the plastered surface. The optional aluminium finishing profile should be used with

traditional wet plastering. The profile should also be used for a perfect finish when installing a roller shutter box, for example, above the Invisivent EVO . This profile is available in the same finish as the inside of the Invisivent EVO .





INSTALLATION USING WALL BRACKETS

The Invisivent $^{\mbox{\tiny EVD}}$ 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 ^{EVO} is available in lengths up to 6 meter. However, it is also possible to install several Invisivent ^{EVO} vents next to each other, joined by a split up middle piece for a perfect finish.

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



SIDE MOUNTING PLATE

The use of side mounting plates is recommended to ensure that the Invisivent $^{\mbox{\tiny EVO}}$ fits securely to the window.



AIRFLOW LIMITERS

Airflow limiters can easily be clipped into the Invisivent $^{\rm EVO}$. They close the opening by 100 mm so that the maximum flow can be adjusted to suit your needs.



The acoustic foam can be removed (and cleaned or substituted) from the Invisivent $^{\mbox{\tiny EVO}}$ through the perforated PVC profile.



FLAP VENTILATORS GLAZED-IN/AT TRANSOM





THM90^{EV0}


TC45 Compact flap vent with a good price/quality ratio



AT TRANSOM

COANDA EFFECT

THERMALLY BROKEN



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

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 _{tr}]	
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	n.p.d.
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



AT TRANSOM

THERMALLY BROKEN

PRICE QUALITY RATIO



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

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	10 Pa
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



AT TRANSOM

SELF-REGULATING

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



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 $D_{n,e,w}$ [C;C _{tr}]	
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





THK60 Flap vent with external hood for improved weather protection





COANDA EFFECT

THERMALLY BROKEN



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 air in the room.

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	13,2 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 _{tr}]	
In open position	27 (0;0) dB
In closed position	44 (0;0) dB
Technical characteristics	
Controllable internal flap	5 posities
Control options internal flap	Manueel, stang, koord
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



SELF-



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

	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 _{tr}]					
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 clo	osed position]		
Watertightness in closed position, up to		65	0 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* n				
Max. length	2500 mm				

* not for installation at transom



AR90 Self-regulating flap vent with external hood for improved weather protection



SELF-REGULATING

GLAZED-IN

AT TRANSOM



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

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 _{tr})	
In open position	30 (-1;-2) dB
In closed position	45 (-1;-3) dB
Technical characteristics	
Controllable internal flap	5 stepped position
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





AT TRANSOM

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 I/s/m
Comfort	
Sound reduction $D_{n,e,w}$ [C;C _{tr}]	
In open position	28 (0;-1) dB
In closed position	44(0;-1)dB
Technical characteristics	
Controllable internal flap	5 stepped position
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^{EVO}/THM90PB^{EVO}/THM90TR^{EVO}

Self-regulating flush window vent, ideal for sliding doors



GLAZED-IN

AT TRANSOM

SELF-REGULATING



INTRODUCTION

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

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

GLAZED-IN INSTALLATION (OR AT TRANSOM)

The THM90 ^{EVO} has been developed for glazed-in installation, and can be integrated in aluminium, timber and PVC window profiles. The THM90 ^{EVO} can be installed on glass, at the bottom of the window (THM90PB ^{EVO}), and at transom (THM90TR ^{EVO}). The THM90 ^{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 ^{EVO} ensures the supply of fresh and healthy air without draughts.

ENTIRELY FLAT PROFILES

Thanks to its flat profiles, the THM90 $^{\mbox{\tiny EV0}}$ 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 $D_{n,e,w}\left[C;C_{tr}\right]$			
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		
Height	105 mm		
Glass thickness			
THM90 ^{EV0}	20, 24, 28 or 33 mm		
THM90PB ^{EVO}	20, 24 or 28 mm		
THM90TR ^{EVO}	20 or 24 mm		
Max. length	2500 mm (2000 mm for motorised control)		





AK80^{EVO} Compact, self-regulating acoustic window vent for installation at transom



SOUND Absorbi<u>ng</u>

SELF-REGULATING

I-FLUX



INTRODUCTION

The AK80^{Evo} is a thermally broken acoustic vent with a pleasing compact design. This ventilator is the self-regulating version of the AK80, and therefore ensures the supply of fresh and healthy air without any draughts.

Four different types are developed, each with their specific airflow and sound absorption. The AK80^{EVO}, which has a high isolation value, is typically installed at transom and suits for all window types (aluminium, wood, PVC).

INSTALLATION AT TRANSOM

The AK80 $^{\mbox{\tiny EV0}}$ should preferably be installed at transom, and is applicable for aluminium, timber and PVC window frame types.



THERMALLY BROKEN

No cold air transfer from outside to inside

I-FLUX®

Thanks to its self-regulating flap, the AK80^{EVO} ensures the supply of fresh and healthy air without draughts. The self-regulating flap only starts working at wind pressure of 8 Pa [instead of at 2 Pa]. Moreover, the interior profile deflects the incoming air upwards, causing an optimal spread of fresh air in the room.

SOUND ABSORBING

Various sound reduction levels (depending on the type), from 33 (-1;-2) dB up to 47 (0;-3) dB in open position.

INSECT MESH

	AK80 ^{EV0} /1	AK80 ^{EV0} /2	AK80 ^{EV0} /3	AK80 ^{EV0} /4
Airflow				
Equivalent area	n.p.d.	n.p.d.	n.p.d.	n.p.d.
Q at 1 Pa	0,6 l/s/m	0,9 l/s/m	1,3 l/s/m	4,1 l/s/m
Q at 1 Pa	2,0 m³/h/m	3,2 m³/h/m	4,7 m³/h/m	19,8 m³/h/m
Q at 2 Pa	1,1 l/s/m	1,7 l/s/m	2,1 l/s/m	6,6 l/s/m
Q at 10 Pa	3,5 l/s/m	5,4 l/s/m	6,6 l/s/m	20,5 l/s/m
Q at 20 Pa	3,7 l/s/m	5,8 l/s/m	6,3 l/s/m	19,6 l/s/m
Comfort				
Sound reduction $D_{n,e,w}$ [C;C _{tr}]				
in open position	47 [0;-3] dB	44 (-1;-4) dB	41[-1;-3]dB	33 (-1;-2) dB
in closed position	51(-1;-3)dB	n.p.d.	n.p.d.	n.p.d.
Technical characteristics				
Controllable internal flap		5 stepper	d positions	
Control options internal flap		Manual, cor	d, rod, motor	
U value	2,3 W/m².K	2,3 W/m².K	2,3 W/m².K	2,1 W/m².K
Air leakage at 50 Pa		<15% (in clo	used position]	
Watertightness in closed position, up to		65	D Pa	
Watertightness in open position, up to	50 Pa			
Dimensions				
Height	80 mm (box height) / 126 mm (total height with flanges)			
Max. length	2000 mm (1250 mm for cord control)			



AK80 Compact non self-regulating acoustic window vent for installation at transom

AT TRANSOM

SOUND Absorbing

> COANDA EFFECT

THERMALLY BROKEN



INTRODUCTION

The AK80 is a thermally broken acoustic vent with a pleasing compact design. Four different types are developed, each with their specific airflow and sound absorption. The AK80 is typically installed at transom.

INSTALLATION AT TRANSOM

The AK80 should preferably be installed at transom, and is applicable for aluminium, timber and PVC window frame types.

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

SOUND ABSORBING

Various sound reduction levels (depending on the type), from 33 (-1;-2) dB up to 47 (0;-3) dB in open position.

INSECT MESH

air in the room.



	AK80/1	AK80 /2	AK80 /3	AK80 /4
Airflow				
Equivalent area	1488 mm²/m	2163 mm²/m	2545 mm²/m	8780 mm²/m
Q at 1 Pa	1,2 l/s/m	1,7 l/s/m	2,0 l/s/m	6,9 l/s/m
Q at 1 Pa	4,2 m³/h/m	6,1 m³/h/m	7,2 m³/h/m	24,8 m³/h/m
Q at 2 Pa	1,6 l/s/m	2,5 l/s/m	2,9 l/s/m	9,7 l/s/m
Q at 10 Pa	3,6 l/s/m	5,8 l/s/m	7,1 l/s/m	21,1 l/s/m
Q at 20 Pa	5,0 l/s/m	8,4 l/s/m	10,4 l/s/m	29,6 l/s/m
Comfort				
Sound reduction D _{n.e.w} (C;C _{tr})				
in open position	47 (0;-3) dB	44 (-1;-4) dB	41 (-1;-3) dB	33 (-1;-2) dB
in closed position	51(-1;-3)dB	n.b.	n.b.	n.b.
Technical characteristics				
Controllable internal flap		5 stepped	positions	
Control options internal flap		Manual, corc	l, rod, motor	
U value	2,3 W/m².K	2,3 W/m².K	2,3 W/m².K	2,1 W/m².K
Air leakage at 50 Pa		<15% (in clos	sed position)	
Watertightness in closed position, up to	650 Pa			
Watertightness in open position, up to	50 Pa			
Dimensions				
Height	80 mm (box height) / 126 mm (total height with flanges)			
Max. length	2000 mm (1250 mm for cord control)			



AK80GL Compact non self-regulating acoustic window vent for glazed-in installation

GLAZED-IN

SOUND Absorbi<u>ng</u>

> COANDA EFFECT

THERMALLY BROKEN



INTRODUCTION

The AK80GL is a thermally broken acoustic vent with a pleasing compact design. Four different types are developed, each with their specific airflow and sound absorption. The AK80GL is available for installation on glass or at transom [using the additional transom profiles].

GLAZED-IN INSTALLATION OR AT TRANSOM

The AK80 is available for glazed-in installation, and can also be placed at transom. This vent is applicable for aluminium, timber and PVC window frame types.

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.

SOUND ABSORBING

Various sound reduction levels (depending on the type), from 33 (-1;-2) dB up to 47 (0;-3) dB in open position.

INSECT MESH

Airflow	AK80GL/1	AK80GL/2	AK80GL/3	AK80GL/4
Equivalent area	1488 mm²/m	2163 mm ² /m	2545 mm ² /m	8780 mm ² /m
O at 1 Pa	1.2 l/s/m	1.7 l/s/m	2.0 l/s/m	6.9 l/s/m
O at 1 Pa	4,2 m ³ /h/m	6,1 m³/h/m	7,2 m³/h/m	24,8 m ³ /h/m
Q at 2 Pa	1,6 l/s/m	2,5 l/s/m	2,9 l/s/m	9,7 l/s/m
Q at 10 Pa	3,6 l/s/m	5,8 l/s/m	7,1 l/s/m	21,1 l/s/m
Q at 20 Pa	5,0 l/s/m	8,4 l/s/m	10,4 l/s/m	29,6 l/s/m
Comfort				
Sound reduction D _{n.e.w} (C;C _{tr})				
in open position	47 (0;-3) dB	44 (-1;-4) dB	41[-1;-3]dB	33 (-1;-2) dB
in closed position	51 (-1;-3) dB	n. b.	n. b.	n. b.
Technical characteristics				
Controllable internal flap		5 stepped	l positions	
Control options internal flap		Manual, coro	d, rod, motor	
U value	2,3 W/m²K	2,3 W/m²K	2,3 W/m²K	2,1 W/m²K
Air leakage at 50 Pa		<15% (in clo	sed position]	
Watertightness in closed position, up to		650) Pa	
Watertightness in open position, up to	50 Pa			
Dimensions				
Glass reduction	108 mm			
Height	80 mm (box height) / 123 mm (total height with flanges)			
Ola sa th'shaasa	20, 24, 28, 32 or 36 mm			
GIASS TRICKRESS		LU, L¬, LU, C		



SONOVENT® Self-regulating flap ventilator with a superior sound absorption

AT TRANSOM

GLAZED-IN

SELF-REGULATING

SOUND <u>Absorp</u>tion



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 OR AT TRANSOM

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.

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,

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
- Thermal break: different positions **1 to 6**
- XSmall and XXLarge on demand



	Small	Medium	Large	XLarge
Airflow				
Equivalent area				
Air slot 10 mm	17756 mm²/m	17509 mm²/m	16153 mm²/m	14427 mm²/m
Air slot 15 mm	29593 mm²/m	26511 mm²/m	25524 mm²/m	21578 mm²/m
Air slot 20 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
O at 1 Pa	,			
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 I/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 I/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
N at 1 Pa	20,0 1/0/11	20,7,1,0,111	20,0 1,0,111	20,7 40,111
Air slot 10 mm	$50.2 \text{ m}^3/\text{h/m}$	49.5 m ³ /h/m	45.7 m ³ /h/m	40.8 m ³ /h/m
Air slot 15 mm	83.7 m ³ /h/m	75 0 m ³ /h/m	72.2 m ³ /h/m	61 0 m ³ /h/m
Air slot 20 mm	90.0 m ³ /h/m	94.2 m ³ /h/m	90.7 m ³ /h/m	879 m ³ /h/m
Air slot 25 mm	95.6 m ³ /h/m	96.3 m ³ /h/m	94.5 m ³ /h/m	92.4 m ³ /h/m
An slot 25 min	55,0 m /m/m	30,3 11 /11/11	57,5111711711	3L, - III / II/III
Air clot 10 mm	1/101/s/m	13.8 l/c/m	1971/c/m	11.31/c/m
Air slot 15 mm	17,01/3/111	20.9.1/s/m	20.1.1/o/m	1701/o/m
Air slot 10 mm	25,51/5/11			17,01/S/III
	23,01/8/11	20,21/5/111	23,21/8/111	24,41/5/11
	20,0 I/S/III	20,71/5/11	20,31/5/11	20,7 1/S/11
Vation Pa	15.01/-/	1 - 1 - /	1/10/1/-/	10 5 1/- /
Air slot 10 mm	15,3 l/s/m	15,1 l/s/m	14,0 I/s/m	12,5 I/s/m
Air slot 15 mm	25,6 I/s/m	22,91/s/m	22,1 I/s/m	18,71/s/m
Air slot 20 mm	27,51/s/m	28,8 l/s/m	27,71/s/m	26,9 l/s/m
Air slot 25 mm	29,2 l/s/m	29,4 l/s/m	28,9 l/s/m	28,2 l/s/m
Q at 20 Pa				
Air slot 10 mm	22,9 l/s/m	n.p.d.	n.p.d.	n.p.d.
Air slot 15 mm	28,5 l/s/m	n.p.d.	n.p.d.	n.p.d.
Air slot 20 mm	29,2 l/s/m	n.p.d.	n.p.d.	n.p.d.
Air slot 25 mm	27,1 l/s/m	27,5 l/s/m	25,0 l/s/m	n.p.d.
Comfort				
Sound reduction $D_{n,e,w}$ [C;C _{tr}] 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
Sound reduction $D_{n,e,w}\left(C;C_{tr}\right)$ in closed position		n.	p.d.	
Technical characteristics				
Controllable internal flap		Continuous	adjustment	
Control options internal flap		Manual, cor	d, rod, motor	
U value	4,5 W/m²K	4,6 W/m²K	4,6 W/m²K	4,7 W/m²K
Air leakage at 50 Pa		<15% (in clo	sed position)	
Watertightness in closed position, up to	650 Pa			
Watertightness in open position, up to		50	l Pa	
Dimensions				
Glass reduction	130 mm (flance 20 mm) 135 mm (flance 25 mm)			
Height	105 mm (total beint with flanges: 145 nr 150 mm)			
Glass thickness	20. 24. 28. 32 [or more upon request]			
Max.length	2000 mm (alazad-in installation) / 2500 mm (installation at transom)			
Depth/Total depth	170/205 mm (Small) 210/245 mm (Medium) 250/285 mm (Larce) or 290/325 mm (VLarce)			
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SONOVENT® COMPACT

Compact self-regulating acoustic flap ventilator

GLAZED-IN



SELF-REGULATING

SOUND Absorption

COMPACT

3 AIRFLOWS WITHIN 1 MODEL



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).

COMPACT



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 m ³ /h/m		
Air slot 15 mm	69.8 m ³ /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 (O;-1) dB		
Air slot 13 mm	35 [0;-1] dB		
Air slot 15 mm	33 [O;-1] dB		
Sound reduction $D_{n,e,w}$ (C;C _{tr}) in closed position	n.p.d.		
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)		





SONOVENT® D

Self-regulating, acoustic ventilator for installation in rooms below slant roofs

IN THE ROOF

THERMALLY BROKEN

SELF-

SOUND



INTRODUCTION

The Sonovent D makes it possible to ventilate rooms below slant roofs, even if no windows are present. Moreover, thanks to its self-regulating flap, the Sonovent D ensures the supply of fresh and healthy air without draughts.

INSTALLATION IN SLANT ROOFS

The Sonovent D has been developed for installation in slant roofs with a minimal slope of 22,5° in order to avoid water infiltration. Importantly, the entire length of the Sonovent D has to be covered with ventilation tiles.

THERMALLY BROKEN

No cold air transfer from outside to inside



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

SELF-REGULATING

SOUND ABSORPTION

Various sound reduction levels (depending on the type), up to 45 (-2;-6) dB.

INSECT MESH

	Small	Medium	Large	XLarge
Airflow				
Equivalent area		31070 mm²/m		
Q at 1 Pa		24,4 I/s/m		
Q at 1 Pa		87,9 m³/h/m		
Q at 2 Pa		28,0 l/s/m		
Q at 10 Pa		30,8 l/s/m		
Q at 20 Pa		34,8 l/s/m		
Comfort				
Sound reduction $D_{_{n,e,w}}\left[C;C_{tr}\right]$				
In open position	37 (-1;-3) dB	39 (-1;-4) dB	41[-2;-6]dB	45 (-2;-6) dB
In closed position		n.p.d.		
Technical characteristics				
Controllable internal flap	Continuous adjustment			
Control options internal flap	Manual, cord, rod, motor			
U value	4,5 W/m²K	4,6 W/m²K	4,6 W/m²K	4,7 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				
Height	105 mm (box height) / 155 mm (total height with flanges)			
Roof thickness	170 mm	210 mm	250 mm	290 mm
Minimal slope		22,5°		
Roof opening		115 mm		
Max. length	1000 mm			



SONOVENT® I

Flap ventilator with a superior sound absorption and increased airflow



GLAZED-IN

THERMALLY BROKEN

SOUND Absorption

VERY HIGH AIRFLOW



INTRODUCTION

The Sonovent I is a Sonovent with an increased airflow specifically designed for offices, commercial buildings and shops. Unlike the Sonovent, the Sonovent I is not self-regulating and the airslot opening is 36 mm resulting in an increased airflow.

INSTALLATION AT TRANSOM (OR GLAZED-IN)

The Sonovent I is preferably placed at transom. By adding L-profiles to the upper and lower side, the Sonovent I can also be placed on glass.

THERMALLY BROKEN

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



SOUND ABSORPTION Various sound reduction levels (depending on the type), from 32 dB up to 36 dB.

VERY HIGH AIRFLOW Up to 48,7 I/s/m [Q at 2 Pa].

	Small	Medium	Large	XLarge
Airflow				
Equivalent area	43520 mm²/m	44029 mm²/m	43392 mm²/m	43138 mm²/m
Q at 1 Pa	34,2 l/s/m	34,6 l/s/m	34,1 l/s/m	33,9 l/s/m
Q at 1 Pa	123,1 m³/h/m	124,6 m³/h/m	122,8 m³/h/m	122,0 m³/h/m
Q at 2 Pa	48,2 l/s/m	48,7 l/s/m	48,0 l/s/m	48,0 l/s/m
Q at 10 Pa	107,8 l/s/m	107,1 l/s/m	107,3 l/s/m	107,3 l/s/m
Q at 20 Pa	152,4 l/s/m	150,5 l/s/m	151,8 l/s/m	151,8 l/s/m
Comfort				
Sound reduction $D_{n,e,w}$ [C;C _{tr}]				
In open position	32 (-1;-3) dB	33 (-1;-3) dB	35 (-1;-4) dB	36 (-1;-4) dB
In closed position	44 (-1;-4) dB	48 (-1;-5) dB	49 (-2;-5) dB	49 (-1;-5) dB
Technical characteristics				
Controllable internal flap	Continuous adjustment			
Control options internal flap	Motor			
U value	5,2 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	130 mm (flange 20 mm), 135 mm (flange 25 mm)			
Height	105 mm (box height) / 145 mm or 150 mm (total height with flanges)			
Glass thickness	20, 24, 28 or 32 (or more upon request)			
Depth	170 mm	210 mm	250 mm	290 mm
Max. length	2000 mm (glazed-in) / 2500 mm (at transom)			





SONOVENT® V

Mechanical ventilator with a superior sound absorption

AT TRANSOM



SOUND Absorbing

MECHANICAL VENTILATOR



INTRODUCTION

Sonovent V is a mechanical ventilator with a compact radial fan which can produce up to 220 m³/h/m, it is designed for non-residential applications. The sonovent V can be used to mechanically supply or extract the room air (not suitable as kitchen or bathroom extractor). The ventilator starts to work automatically when fully opening the inner flap. The inner flap can be controlled manually or can be motorized. Thanks to acoustic insulation within this ventilator, the ventilator will reduce external soundlevels even when the fanmotor is switched on. The mechanical parts and the acoustic insulation are removable from the interior. It is possible to provide group control of up to 4 Sonovents, by wiring the fanmotors in parallel.

INSTALLATION AT TRANSOM

The Sonovent V is designed for installation at transom only (not glazed-in).



THERMALLY BROKEN No cold air transfer from outside to inside.

SOUND ABSORBING 35 (-1;-3) dB in open position

Airflow			
Supply	61,11 l/s/m		
Supply	220 m³/h/m		
Extraction	61,11 l/s/m		
Extraction	220 m³/h/m		
Comfort			
Sound reduction $D_{n,e,w}$ [C;C _{tr}]			
- in open position	35 (-1;-3) dB		
- in closed position	n.p.d.		
Technical characteristics			
Controllable internal flap	Continuous		
Control options internal flap	Manual, cord, rod, motor		
U value	4,5 W/m²K		
Air leakage at 50 Pa	n.p.d.		
Watertightness in closed position, up to	650 Pa		
Watertightness in open position, up to	n.p.d.		
Fanmotor:			
- Powersupply	24 VDC		
- Group control	up to 4 motors		
Dimensions			
Height	105 mm (total height with flange profiles: 155 mm)		
Glass thickness	20, 24, 28, 32 mm (other thicknesses available upon demand)		
Max. length	2500 mm		
Depth / Total depth	170 / 205 mm		



FLAP VENTILATOR FOR CONSERVATORIES



Oxyvent®





Oxyvent®


OXYVENT® Natural extraction for conservatories

GLAZED-IN



BURGLAR Proof

MIN. GRADIENT OF 5°



INTRODUCTION

The Oxyvent is placed in the highest and warmest point of the conservatory's roof. This favours the extraction of hot and humid air using natural convection. Ventilators placed in the lower part of the conservatory assure a natural supply of fresh air. This patented natural extraction system has been designed to prevent water infiltration [in normal conditions].

CONTROL THE TEMPERATURE IN A NATURAL WAY

Thanks to natural convection, cool and fresh air is supplied through vents in the vertical glass wall, while warm and humid air is extracted through the Oxyvent.



GLAZED-IN INSTALLATION OR ON SANDWICH PANELS

The Oxyvent suits for glazed-in installation and installation in structures with sandwich panels (with thicknesses of 28 up to 86 mm, by steps of 2 mm).

SLOPE

The Oxyvent can be mounted on any conservatory roof with a minimum gradient of 5° or on vertical walls.

THERMALLY BROKEN

No cold air transfer from outside to inside.

BURGLAR PROOF

With the Oxyvent one no longer needs to open up windows in order to ventilate the conservatory, which avoids the risk of burglary.

INSECT MESH

The perforated inside profile acts as an insect mesh.

Airflow	
Equivalent area	15058 mm²/m
Q at 1 Pa	11,8 l/s/m
Q at 1 Pa	42,6m³/h/m
Q at 2 Pa	16,7 l/s/m
Q at 10 Pa	37,42 l/s/m
Q at 20 Pa	52,9 l/s/m
Comfort	
Sound reduction $D_{n,e,w}$ (C;C _{tr})	
In open position	27 [-1;-2] dB
In closed position	40 (0;-2) dB
Technical characteristics	
Controllable internal flap	Continuous adjustment
Control options internal flap	Manual, rod, motor
U value	up to 2,8 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	50 Pa
Dimensions	
Glass reduction	210 mm
Height exterior cap	50 mm
Glass thickness	28, 32, 36 mm
Thickness glass / sandwich panel	28 - 86 mm (by steps of 2 mm)
Max. length	1500 mm
Slope	Min. gradient of 5° or on vertical walls



ROLLER SHUTTER FLAP VENTILATOR







Transivent®



TRANSIVENT®

Self-regulating ventilator for installation in 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

The perforated inside profile acts as an insect mesh.



Airflow	
Fouivalent area	13748 mm²/m
N at 1 Pa	10.8 l/s/m
N at 1 Pa	38 9 m³/h/m
N at 2 Pa	15.21/s/m
0 at 10 Pa	20.1 I/s/m
	19.9.1/s/m
Comfort	10,0 1/0/11
Sound reduction D _{accor} (C:C _{re})	
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



THL100V

THL100



THL100 – THL100V Sliding vent



BROKEN



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 $D_{n,e,w}$ [C;C _{tr}]					
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, ro	od, chain, motor			
U value	3,9 W	//m²K			
Air leakage at 50 Pa	n.ŗ	p.d.			
Watertightness in closed position, up to	400 Pa	n.p.d.			
Watertightness in open position, up to	n.p	o.d.			
Dimensions					
Glass reduction	129	mm			
Height	144	mm			
Glass thickness	15*, 20, 24 or 28 mm				
Max. length	3500) mm			

* not for installation at transom



T67 - T100 - T130 - T150

Horizontal sliding vents in two parts for installation at transom





INTRODUCTION

The T67, 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 T67, T100, T130 en T150 can be installed at transom. Not suitable for installation in coastal environments or near the beach.

INSECT MESH

The perforated inside profile acts as an insect mesh.



	T67	T100	T130	T150			
Airflow							
Equivalent area	11224 mm²/m	17326 mm²/m	24589 mm²/m	27992 mm²/m			
Q at 1 Pa	8,8 l/s/m	13,6 l/s/m	19,3 l/s/m	22,0 l/s/m			
Q at 1 Pa	31,8 m³/h/m	49,0 m³/h/m	69,6 m³/h/m	79,2 m³/h/m			
Q at 2 Pa	12,7 l/s/m	19,5 l/s/m	27,7 l/s/m	31,9 l/s/m			
Q at 10 Pa	28,5 l/s/m	43,8 l/s/m	62,1 l/s/m	71,5 l/s/m			
Q at 20 Pa	40,2 l/s/m	61,9 l/s/m	87,9 l/s/m	101,0 l/s/m			
Comfort							
Sound reduction $D_{n,a,w}[C;C_w]$							
In open position		n.	p.d.				
In closed position		n.	p.d.				
Technical characteristics							
Controllable internal flap		Continuous	adjustment				
Control options internal flap	Manual, chain, cord	M	lanual, chain, cord, rod, mo	tor			
U value		n.	p.d.				
Air leakage at 50 Pa		n.	p.d.				
Watertightness in closed position, up to		n.	p.d.				
Watertightness in open position, up to		n.p.d.					
Dimensions							
Height	67 mm	100 mm	130 mm	150 mm			
Max. length		3500 mm					











Sonoslot





Sonoslot

Slotvents

SLOTVENTS



RENSON® 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



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.



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

The perforated inside profile acts as an insect mesh.

	Sonoslot® 275 mm	Sonoslot® 375 mm	Sonoslot® 475 mm	Sonoslot® 700 mm		
Airflow						
Equivalent area	1273 mm ²	1607 mm ²	2121 mm ²	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 $D_{n,e,w}$ [C;C _{tr}]						
In open position	38 (0;0) dB	37 (0;0) dB	36 (0;0) dB	34 (0;0) dB		
In closed position	n.p.d.					
Technical characteristics						
Controllable internal flap		Continuous	adjustment			
Control options internal flap		Ма	nual			
U value		1,4 W	//m².K			
Air leakage at 50 Pa		< 15 % in cl	osed position			
Watertightness in closed position, up to		n.	p.d.			
Watertightness in open position, up to		n.	p.d.			
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 x 16] + 7,5 + [105,5 x 16] + 7,5 + [105,5 x 16] + 7,5 + [105,5 x 16]	$\begin{array}{c} (105,5\times16)+7,5+\\ (105,5\times16)+7,5+\\ (105,5\times16)+7,5+\\ (105,5\times16)+7,5+\\ (105,5\times16)+7,5+\\ (105,5\times16)+7,5+\\ (105,5\times16)\end{array}$		
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



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

The perforated inside profile acts as an insect mesh.

	Without acoustic foam	With acoustic foam			
Airflow					
Equivalent area	2298 mm ²	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 I/s			
Q at 10 Pa	6,8 l/s	5,1 l/s			
Q at 20 Pa	6,9 I/s	7,6 I/s			
Comfort					
Sound reduction $D_{n,e,w}$ [C;C _{tr}]					
In open position	38 [-1;-2] dB	40 (-1;-2) dB			
In closed position n.p.d.					
Technical characteristics					
Controllable internal flap	no				
Control options internal flap	n	.a.			
U value	n.	p.d.			
Air leakage at 50 Pa	n.	p.d.			
Watertightness in closed position, up to	n.r	p.d.			
Watertightness in open position, up to	n.r	p.d.			
Dimensions					
Height	35 mm (exterior part)	/ 45 mm (interior part)			
Length	700	mm			
Ausschnittmaß	[105,5 x 16] + 7,5 + (105,5 x 16] + 7,5 + (105,5 x 16) + 7,5 + (105,5 x 16] + 7,5 + (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				



SLIMLINE

Non-self-regulating slim slotvent with weather hood

COANDA EFFECT





INTRODUCTION

Slimline is a non self-regulating slotvent kit. The external profile has an insect mesh. The internal slotvent deflects, in open position, the incoming air upwards for an optimal spread of fresh air in the room. The slender Slimline can be mounted on all types of windows and is available in any size and finish for slot heights up to 12 mm.

The Slimline is available in black, grey and white. Other colours on demand. The Slimline is available in 2 types: 250 (265 mm) and 460 (475 mm). Other lengths on demand.

COANDA EFFECT

The discrete aluminium internal slotvent can be completely closed and will deflect the airflow upwards to prevent direct draughts when it's opened.



INSECT MESH

The exterior profile has an insect mesh.

	250	460		
Airflow				
Equivalent area	2349	5034		
Q at 1 Pa	1,8 l/s	4,0 l/s		
Q at 1 Pa	6,6 m³/h	14,2 m³/h		
Q at 2 Pa	2,7 l/s	5,7 l/s		
Q at 10 Pa	6,6 l/s	13,4 l/s		
Q at 20 Pa	9,7 l/s	19,4 l/s		
Comfort				
Controllable internal flap Continuous adjustment				
Control options internal flap	Ма	nual		
U value	n.	o.d.		
Air leakage at 50 Pa	n.	o.d.		
Watertightness in closed position, up to	n.	o.d.		
Watertightness in open position, up to	n.	o.d.		
Dimensions				
Height	18	mm		
Length* inside profile	265 mm 475 mm			
Length exterior profile	260 mm	470 mm		
Slotsize opening	200 x 10 to 12	(200 x 10 to 12) + 10 + (200 x 10 to 12)		

* other lengths on demand



PYRAMID

Smallest vent on the market that provides 5000 mm² EA airflow

HIGH AIRFLOW



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 I/s
Q at 1 Pa	7,6 m³/h	15,1 m³/h
Q at 2 Pa	3,1 l/s	6,0 I/s
Q at 10 Pa	7,0 I/s	13,6 l/s
Q at 20 Pa	10,1 l/s	19,4 I/s
Comfort		
Sound reduction $D_{n,e,w}$ [C;C _{tr}]		
in open position	36 (0; 0) dB	33 (-1; O) dB
in closed position	51 (-2; -3) dB	51[-1;-3]dB
Technical characteristics		
Controllable internal flap	Continuous	adjustment
Control options internal flap	Mar	nual
U value	n.ŗ	b.d.
Air leakage at 50 Pa	n.ŗ	b.d.
Watertightness in closed position, up to	n.p	b.d.
Watertightness in open position, up to	n.ŗ	b.d.
Dimensions		
Height	25	mm
Length*	248 mm	410 mm
Slotsize opening	192 × 13	(172 × 13 to 16) + 10 + (172 × 13 to 16)

* other lengths on demand



PYRACOUST

Smallest acoustic window vent providing 2500 mm² or 5000 mm² EA





INSECT MESH



INTRODUCTION

Based on our Pyramid vent, the PyrAcoust is the smallest acoustic window vent (non-self-regulating) providing 2500 mm² or 5000 mm² 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 I/s	6,2 l/s	
Q at 10 Pa	7,6 I/S	7,5 l/s	14,4 I/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 $D_{n,e,w}$ [C;C _{tr}]					
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		Mar	านลไ		
U value		n.p	o.d.		
Air leakage at 50 Pa		n.p	o.d.		
Watertightness in closed position, up to		n.p	o.d.		
Watertightness in open position, up to	n.p.d.				
Dimensions					
Height		40 .	mm		
Length*	250	mm	412	mm	
Slotsize opening	192 x	13 mm	[172x13] + 1	.0 + [172x13]	

* other lengths on demand



SLOTVENTS

Interior

$470\,$ – Sound absorbing box – $\mathsf{D}_{\mathrm{n,e,w}}\left(\mathsf{C;C}_{\mathrm{tr}}\right)$: 39 (-1;-1) dB

	l ength	Height	Slotsize opening			Airflow	
Туре	(mm)	(mm)	(mm)	1 Pa (I/s)	2 Pa (I/s)	2 Pa (m³/h)	Equivalent Area (mm²)
470/30	400	45	(165 x 25) + 20 + (165 x 25)	1,4	2,0	7,3	1727
470/45	700	45	(315 x 25) + 20 + (315 x 25)	2,2	3,2	11,6	2831



478 - Flat grill

	l enath	Height	Slotsize opening (mm)			Airflow	
Туре	(mm)	(mm)		1 Pa (I/s)	2 Pa (I/s)	2 Pa (m³/h)	Equivalent Area (mm ²)
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

	l enath	Height	Slotsize opening			Airflow	
Туре	(mm)	(mm)	(mm)	1 Pa (I/s)	2 Pa (I/s)	2 Pa (m³/h)	Equivalent Area (mm ²)
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



487 - Tipvent

	l enath	Height	Slotsize opening	Airflow				
Type (n	(mm)	(mm)	(mm)	1 Pa (I/s)	2 Pa (I/s)	2 Pa (m³/h)	Equivalent Area (mm ²)	
487/1	275	23	250 x 16	3,3	4,7	17,0	4229	
487/2	375	23	(165 x 16) + 20 + (165 x 16)	4,8	6,8	24,4	6080	
487/3	475	23	(215 x 16) + 20 + (215 x 16)	5,9	8,3	30,0	7496	
487/4	700	23	(325 x 16) + 25 + (325 x 16)	9,8	14,0	50,5	12527	



488 - Patio grille

	l ength	Height	Slotsize opening	Airflow				
Туре	(mm)	(mm)	(mm)	1 Pa (I/s)	2 Pa (I/s)	2 Pa (m³/h)	Equivalent Area (mm ²)	
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 - Bargrille

	l ength	Height	Slotsize opening	Airflow				
Туре	(mm)	(mm) (mm) (mm)	(mm)	1 Pa (I/s)	2 Pa (I/s)	2 Pa (m³/h)	Equivalent Area (mm ²)	
489/1	275	24	237 x 18	1,7	2,5	8,9	2202	
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

	l enath	Height	Slotsize opening	Airflow				
Type (mm	(mm)	(mm)	(mm)	1 Pa (I/s)	2 Pa (I/s)	2 Pa (m³/h)	Equivalent Area (mm ²)	
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	



788P - Tipvent

	Length		Slotsize opening	Airflow					
Туре	(mm)	(mm)	(mm)	1 Pa (l/s)	2 Pa (l/s)	2 Pa (m³/h)	Equivalent Area (mm ²)		
788P/1	275	28	245 x 16	3,2	4,6	16,7	4127		
788P/2	375	28	345 x 16	4,0	5,7	20,5	5108		
788P/3	475	28	(215 x 16) + 20 + (215 x 16)	5,1	7,3	26,3	6525		
788P/4	700	28	(325 x 16) + 25 + (325 x 16)	9,0	12,9	46,5	11455		





SLOTVENTS Exterior

471 - Self regulating canopy

	l ength	Height (mm)	Slotsize opening (mm)	Airflow				
Type (n	(mm)			1 Pa (I/s)	2 Pa (I/s)	2 Pa (m³/h)	Equivalent Area (mm ²)	
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	
471/3	700	35	(325 x 25) + 20 + (325 x 25)	4,0	6,0	21,5	5055	



486 - Canopy

	l enath	Height	Slotsize opening	Airflow				
Туре	(mm)	(mm)	(mm)	1 Pa (I/s)	2 Pa (I/s)	2 Pa (m³/h)	Equivalent Area (mm ²)	
486/1	275	35	250 x 25	1,7	2,4	8,5	2105	
486/2	375	35	350 x 25	2,2	3,2	11,4	2805	
486/3	475	35	(215 x 25) + 20 + (215 x 25)	3,2	4,6	16,5	4125	
486/4	700	35	(325 x 25) + 25 + (325 x 25)	4,4	6,2	22,5	5550	



586 - Canopy

	Length	Height (mm)	Slotsize opening (mm)	Airflow				
Туре	(mm)			1 Pa (I/s)	2 Pa (I/s)	2 Pa (m³/h)	Equivalent Area (mm²)	
586/1	275	28	250 x 25	3,3	4,8	17,2	4249	
586/2	375	28	350 x 25	4,3	6,2	22,4	5520	
586/3	475	28	(215 x 25) + 20 + (215 x 25)	6,4	9,0	32,5	8161	
586/4	700	28	(325 x 25) + 25 + (325 x 25)	8,9	12,8	46,2	11335	



587P - Canopy

	Length		Slotsize opening	Airflow				
Type (mn	(mm)	(mm)	(mm)	1 Pa (I/s)	2 Pa (I/s)	2 Pa (m³/h)	Equivalent Area (mm ²)	
587P/1	275	28	250 x 25	3,4	4,8	17,4	4312	
587P/2	375	28	350 x 25	4,9	6,9	24,8	6210	
587P/3	475	28	(215 x 25) + 20 + (215 x 25)	6,6	9,2	33,2	8354	
587P/4	700	28	(325 x 25) + 25 + (325 x 25)	9,4	13,3	48,0	12015	



59	30	-	Clip	in	canopy
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	Length Hei		ight Slotsize opening	Airflow				
Туре	(mm)	(mm)	(mm)	1 Pa (I/s)	2 Pa (I/s)	2 Pa (m³/h)	Equivalent Area (mm ²)	
590/6	290	28	284 x 16	3,5	5,0	18,1	4498	
590/7	470	28	(222 x 16) + 20 + (222 x 16)	6,1	8,7	31,2	7800	
590/8	565	28	(270 x 16) + 19 + (270 x 16)	7,1	10,1	36,4	9067	



$\textbf{771AK} - \textbf{Acoustic canopy} - \textbf{D}_{n,e,w} [C;C_t]: 39 [-1;-1] dB$

	Length Heigh		t Slotsize opening	Airflow				
Туре	Type (mm)	(mm)	(mm)	1 Pa (I/s)	2 Pa (I/s)	2 Pa (m³/h)	Equivalent Area (mm²)	
771AK/2	415	52	(165 x 25) + 20 + (165 x 25)	2,7	4,0	14,1	3372	
771AK/3	565	52	(240 x 25) + 20 + (240 x 25)	4,8	6,9	24,8	6044	
771AK/5*	565	52	(240 x 25) + 20 + (240 x 25)	4,9	7,0	25,2	6294	



* without self-regulating flap



COMBINED VENTILATION AND SUN SHADING OVERFRAME









FIXVENT® MONO AKEVO

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

OVERFRAME



SOUND Absorbing

VENTILATION + WINDPROOF SUNPROTECTION



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 ^{EVD} 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 ^{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 $^{\mbox{\tiny EVO}}\!\!:$ 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 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 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 3.0.

	Small	Medium	Large	X-Large	XX-Large	
Airflow						
Equivalent Area						
Fixvent® Mono AK ^{Evo}			18324 mm²/m			
Fixvent® Mono AK ^{Evo} ULTRA			4836 mm²/m			
Fixvent® Mono AK ^{EVO} EXTREME			2800 mm²/m			
Q at 1 Pa						
Fixvent® Mono AK ^{Evo}			12,8 l/s/m			
Fixvent® Mono AK ^{EVO} ULTRA			3,7 l/s/m			
Fixvent® Mono AK ^{EVO} EXTREME	2,1 l/s/m					
Comfort						
Sound reduction $D_{n,e,w}$ [C;C _{tr}] in open position	(screen up)					
Fixvent® Mono AK ^{EVO}	33 (0;-2) dB	35 (0;-3) dB	36 (-1;-4) dB	37 (-1;-4) dB	40 (-1;-4) dB	
Fixvent® Mono AK ^{evo} ULTRA	n.a.	38 (0;-2) dB	40 (-1;-4) dB	43 (-1;-4) dB	45 (-1;-5) dB	
Fixvent® Mono AK ^{EVO} 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 ^{EVO}	1,47 W/m²K	0,98 W/m²K	0,80 W/m²K	0,77 W/m²K	0,72 W/m²K	
Fixvent® Mono AK ^{EVO} ULTRA	n.a.	0,70 W/m²K	0,55 W/m²K	0,46 W/m²K	0,41 W/m²K	
Fixvent® Mono AK ^{EVO} EXTREME	n.a.	0,62 W/m²K	0,47 W/m²K	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	manually, 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 AKEVO

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

TECHNICAL DRAWINGS



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


FIXVENT® MONO UT EVO

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

OVERFRAME



SOUND Absorbing

VENTILATION + WINDPROOF SUNPROTECTION



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 ^{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 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 $^{\mbox{\tiny EVO}}$: 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 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 3.0.



	Small	Medium	Large	X-Large	XX-Large
Airflow					
Equivalent Area					
Fixvent® Mono UT ^{EVO}	19724 mm²/m				
Fixvent® Mono UT ^{EVO} ULTRA	4836 mm²/m				
Q at 1 Pa					
Fixvent® Mono UT ^{EVO}	15,5 l/s/m				
Fixvent® Mono UT ^{EVO} ULTRA	3,7 l/s/m				
Comfort					
Sound reduction $D_{n,e,w}$ (C;C _{tr}) in open position	ı (screen up)				
Fixvent® Mono UT ^{EVO}	33 (0;-2) dB	35 (0;-3) dB	36 (-1;-4) dB	37 (-1;-4) dB	40 (-1;-4) dB
Fixvent® Mono UT ^{EVO} 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 ^{EVO}	1,47 W/m²K	0,98 W/m²K	0,80 W/m²K	0,77 W/m²K	0,72 W/m²K
Fixvent® Mono UT ^{EVO} ULTRA	n.a.	0,70 W/m²K	0,55 W/m²K	0,46 W/m²K	0,41 W/m²K
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FIXVENT® MONO UT EVO

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

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. THM90EV0].
- Motor: possible by means of an 'On/Off' or a 'O-10V' (for home automation) switch. Standard cable length: 5m (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 AIMgSi 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 are 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^{EVO} RENSON developed special types which do not require transom profiles; the THM90PB^{EVO} for installation at the bottom of a window and the THM90TR^{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^{EVO}-range
- AR60 / THK60
- AR75
- Sonovent (Compact / I / D)



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.be

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

Renson®, with its headquarters in Waregem (Belgium), is a worldwide trendsetter in natural ventilation, sun control and outdoor.

• 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.



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