



Louvre panels & grilles

Contents

INTRODUCTION

Contents	2
RENSON® Corporate Identity	3
General	4
Service	5
Louvre selector guide	6
Watertightness tests	8
Definitions	10
Options	11

BUILT-IN WALL LOUVRES ALUMINIUM

411	Wall louvre, standard series, pitch 33	12
412	Wall louvre with chevron section blades, pitch 20	14
421	Wall louvre, heavy-duty series, pitch 50	15
422	Wall louvre with chevron section blades, heavy-duty series, pitch 33	16
425	Wall louvre, extra-heavy-duty series, pitch 95	17
427	Wall louvre, extra-heavy-duty series, with adjustable blades	18
451	Wall louvre, heavy-duty series, pitch 66	20
453	Wall louvre, heavy-duty series, with aluminium coil blades, pitch 65	21
468 SA	Sand trap louvre	22
480	High-airflow wall louvres, pitch 60	23
481	Wall louvre, heavy-duty series, pitch 50	24
511	Wall louvre, galvanised steel, pitch 34	25
521	Wall louvre, heavy-duty series, galvanised steel, pitch 50	26
621	Wall louvre, stainless steel, pitch 50	27

WEATHERABLE LOUVRES ALUMINIUM

450	Extreme weatherable louvre	28
452	Wall louvre, heavy-duty series with chevron section blades, pitch 66	29
452V	Wall louvre, heavy-duty series with vertical chevron section blades, pitch 66	30
475	Louvre with excellent weatherability properties, ideal for discharge applications	31
475GL	Glazed-in louvre with excellent weatherability properties, ideal for discharge applications	32
491	"Storm" wall louvre, pitch 33	33

SURFACE-MOUNTED LOUVRES ALUMINIUM

431	Surface-mounted wall louvre, pitch 33	34
432	Surface-mounted, glazed-in louvre with frame	36
433	Pressure-relief damper	38

GLAZED-IN LOUVRES ALUMINIUM

414	Glazed-in louvre, pitch 33	39
414VA	Controllable louvre	41
414THF	Thermally insulated window grille	42
415	Glazed-in louvre with chevron section blades, pitch 20	43
415VA	Controllable louvre with chevron section blade	44
424	Glazed-in louvre, heavy-duty series, pitch 50	45
428	Glazed-in louvre with chevron section blades, heavy-duty series, pitch 33	46
483	High-airflow glazed-in louvre, pitch 60	47
484	Glazed-in louvre, heavy-duty series, pitch 50	48
494	Glazed-in "storm" louvre, pitch 33	49
425GL	Glazed-in louvre, extra-heavy-duty series	50
427GL	Glazed-in louvre with adjustable blades, extra-heavy-duty series	51

ACOUSTIC LOUVRES ALUMINIUM

445/86	Acoustic wall louvre, pitch 60	52
446/150	Acoustic wall louvre, pitch 150 mm	54
446/225	Acoustic wall louvre, pitch 150 mm	54
446/300	Acoustic wall louvre, pitch 150 mm	54
447/150	Acoustic wall louvre, pitch 170 mm	56
447/225	Acoustic wall louvre, pitch 170 mm	56

BURGLARPROOF LOUVRES ALUMINIUM

421RC2	Burglarproof louvre class RC2, pitch 50	58
424RC2	Burglarproof built-in louvre class RC2, pitch 50	59
431RC2	Burglarproof louvre class RC2, pitch 33	60
423RC4	Burglarproof louvre class RC4, pitch 50	61

LOUVRE BOX ALUMINIUM

440	Turret	63
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CONTROLLABLE CAVITY WALL LOUVRES ALUMINIUM

442	Cavity wall ventilator	64
441	Register with frame	65
4032	Register to fix	66
XD	Stylish extraction louvre	67

CIRCULAR PUNCHED GRILLES ALUMINIUM

435R	Circular built-in punched grille	68
436	Punched grille	69
436-M	Punched grille with insect screen	69
437	Punched grille with frame	70
438	Punched grille, stainless steel	71
439	Punched grille, edge-raised	71

VENTILATION GRILLES ALUMINIUM

381	Built-in ventilation grille	72
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FLOOR GRILLES ALUMINIUM

311	Convactor grille	73
371	Floor grille, heavy-duty series	74

LINEAR BAR GRILLES ALUMINIUM

392	Linear bar grille	75
394	Linear bar grille for self-assembly	76

DOOR GRILLES ALUMINIUM

461	Door grille	77
461AK Silendo®	Acoustic door grille for residential sector	78
Invisido® 469	Acoustic door grille for residential sector	79
468AK/1	Interior acoustic wall louvre	80
468AK/2	Internal acoustic door grille	81

FIRE-RESISTANT LOUVRES

Incendo® 464	Fire-resistant louvre with angled blades	82
465	Fire-resistant louvre with angled blades	83
466	Fire-resistant louvre with horizontal blades	84

ROUND LOUVRES ALUMINIUM

411R	Round wall louvre	86
412R	Round wall louvre with chevron section blades	87
421R	Round wall louvre, heavy-duty series	88
431R	Round louvre without frame	89
414R	Round glazed-in louvre	90
415R	Round louvre with chevron section blade	91

Why choose Renson® louvres?

- Renson® innovates. Having an in-house R&D team
- Renson® widens. Offering the widest range of louvres
- Renson® integrates. through vertical integration
- Renson® specializes. Since 1909 and is represented worldwide

The acoustic properties of the Renson®-blades have been tested by the internationally recognized laboratory, IFT Lab Rosenheim (Germany)

Water resistance tested by BSRIA laboratories.



Material

All louvres in this brochure have been manufactured from aluminium profiles **AlMgSi 0,5** (according EN 12020-2).

Light, strong & durable

Aluminium is a very light metal, about one third of the weight of steel. This evolves in a lighter product, more efficient use of transport, high loading capacity, lower material usage...

100% recyclable

Aluminium is 100% recyclable without loss of quality.

The energy used to fuse the product takes only about 5% of the energy used to produce the original product.

Did you know that 75% of the produced aluminium is still circulating the world?



Finishing

By nature, aluminium generates a natural oxide coating and it is very corrosion resistant. And aluminium has resistance against UV radiation from sunlight and can easily resist to temperature variations. Various types of surface treatments improve its corrosion resistance even further.

Anodizing: Our louvers can be anodized to look natural or in a bronze colour, with a 20-micron layer.

Powder coating: Our louvers are available with powder coating in all possible RAL colours, with a layer thickness of 60-80 µm. There should be a pre-treatment, depending on the environment of application.

Seaside Quality A pre-treatment

We recommend a pre-treatment in accordance with Seaside Quality A for applications in aggressive environments (e.g. coastal regions, in industrial atmospheres, etc.). This halves the risk of filiform corrosion under the paint in comparison with standard coated profiles.

Pre-treatment before anodizing

For applications in highly aggressive environments (e.g. coastal regions, on the coastline, in industrial atmospheres, etc.), we recommend pre-treatment before anodizing. This halves the risk of filiform corrosion under the paint in comparison with standard coated profiles.

Finishing RENSON® standard WHITE

RENSON® offers a standard finishing in WHITE, according to powder code AXALTA AE9001914 8021 (denomination BEL 9010).

Gloss:

Powdercoating available in:

RAL: gloss of 70%

MAT: gloss of 30%.

Maintenance

The only maintenance required is cleaning the louvre.

Warranty

RENSON® NV provides the installers with a warranty valid on the goods delivered to them for 2 years from the date of production covering all defects that may occur during normal use and maintenance of the delivered goods. The guarantee for colourfast of the aluminium powder-coated parts is 10 years. A warranty of 5 years applies to the gloss of the coated profiles.

Packing

Louvres will be packed in a transparent plastic foil. In case the louvre is larger than 500 mm on one side, expanded polystyrene will be added on the framework as protection. For very large louvres, an additional cardboard packaging ensures the correct protection.

How to select the correct louvre for your application?

The tools and data below provide you an overview of the available services to select the correct louvre and required information.

Website

On the website you can find an overview of all louvres including technical drawings, leaflets and product summaries.



- Selection and calculation software
- Selection and calculation of the right louvre making use of the louvre software available on www.rensoulouvres.eu

In order to calculate a made-to-measure louvre, please provide at least two of the following parameters:

- Surface of the opening
- Pressure drop over the louvre in Pa
- Required airflow in m³/h

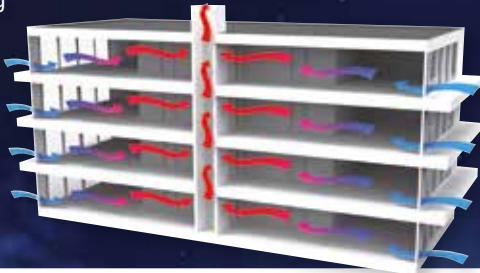


Specific louvre characteristics

Nightcooling

By ventilating with large amounts of natural fresh air through the building at night, the indoor climate and building mass will cool down. In daytime the indoor temperature remains stable, as the building mass can heat up. Nightcooling

can be achieved by placing specific louvres at the suction and discharge side. Type 432 is advised for suction, type 440 for discharge.



Test reports

Louvres with specific requirements have been tested according to EN norms. Test reports for IP-classification, burglar-proof, acoustic damping and weatherability are available on request.



Burglarproof: louvre tested according to official RC classification



Acoustic damping: louvre equipped with acoustic mineral wool for noise reduction



Water-proof: louvre with high classification (*ref page 9*)



Stick-proof: this louvre has been IP certified (EN 60529)


















Louvre selector guide < Introduction



Family					Airflow				Page
Blade type Linus	Louvre type	Product type	Blade pitch	Physical free area	K-factor (supply)	K-factor (discharge)	Coeffi- cient C _e	Coeffi- cient C _d	
V20-blade	Built-in wall louvres	412	20	39	33,8	33,8	0,172	0,172	14
V20-blade	Built-in wall louvres	412R	20	39	33,8	33,8	0,172	0,172	87
V20-blade	Glazed-in louvres	415	20	39	33,8	33,8	0,172	0,172	43
V20-blade	Controllable glazed-in louvres	415/VA	20	n.a.	n.a.	n.a.	n.a.	n.a.	44
V20-blade	Round glazed-in louvres	415R	20	39	33,8	33,8	0,172	0,172	91
L.033.01	Built-in wall louvres	411	33,3	45	23,56	25,51	0,206	0,198	12
L.033.07	Built-in wall louvres	411R	33,3	40,5	23,56	25,51	0,206	0,198	86
L.033.01	Glazed-in louvres	414	33,3	45	23,56	25,51	0,206	0,198	39
L.033.07	Round glazed-in louvre	414R	33,3	40,5	23,56	25,51	0,206	0,198	90
L.033.01	Glazed-in louvres	414/D	33,3	n.a.	n.a.	n.a.	n.a.	n.a.	41
L.033.01	Controllable glazed-in louvre	414/VA	33,3	n.a.	n.a.	n.a.	n.a.	n.a.	41
L.033.01	Glazed-in louvres	414THF	33,3	45	23,56	25,51	0,206	0,198	42
L.033.01	Surface-mounted louvres	431	33,3	45	23,56	25,51	0,206	0,198	34
L.033.01	Surface-mounted louvres	431R	33,3	40,5	23,56	25,51	0,206	0,198	89
L.033.01	Surface-mounted louvres	432	33,3	45	23,56	25,51	0,206	0,198	36
L.033.01	Louvre box	440/11	33,3	45	23,56	25,51	0,206	0,198	63
L.033.08	Built-in wall louvres	491	33,3	26	123,5	118,1	0,09	0,092	33
L.033.08	Glazed-in louvres	494	33,3	26	123,5	118,1	0,09	0,092	49
L.033V	Built-in wall louvres	422	33,3	43	66,10	66,10	0,123	0,123	16
L.033V	Glazed-in louvres	428	33,3	43	66,10	66,10	0,123	0,123	46
L.050.00	Built-in wall louvres	421	50	49	13,42	9,35	0,273	0,327	15
L.050.00	Round built-in wall louvres	421R	50	47	13,42	9,35	0,273	0,327	88
L.050.00	Louvre box	440/21	50	49	13,42	9,35	0,273	0,327	63
L.050.00	Glazed-in louvres	424	50	49	13,42	9,35	0,273	0,327	45
L.050HF	Built-in wall louvres	481	50	60	9,41	9,47	0,326	0,325	24
L.050HF	Glazed-in louvres	484	50	60	9,41	9,47	0,326	0,325	48
L.050W	Built-in wall louvres	450	50	57	10,47	16,50	0,310	0,246	28
L.060HF	Built-in wall louvres	480	60	76	5,03	4,96	0,446	0,449	23
L.060HF	Glazed-in louvres	483	60	76	5,03	4,96	0,446	0,449	47
L.066.01	Built-in wall louvres	451	66	49	12,71	11,77	0,280	0,291	20
L.066V	Built-in wall louvres	452	66	41	66,1	79,7	0,123	0,112	29
L.066V	Built-in wall louvres	452v	66	41	60,1	79,9	0,129	0,114	30
L.065AL	Built-in wall louvres	453	65	55	13,92	17,22	0,268	0,241	21
Vertical blade	Built-in wall louvres	468SA	85	29	115,62	115,62	0,093	0,093	22
L.075W	Built-in wall louvres	475	75	53	10,89	10,41	0,303	0,310	31
L.075W	Glazed-in louvres	475GL	75	53	10,89	10,41	0,303	0,310	32

Remark: test results according to louvres including mesh



Family					Airflow				Page
Blade type Linius	Louvre type	Product type	Blade pitch	Physical free area	K-factor (supply)	K-factor (discharge)	Coeffi- cient C _e	Coeffi- cient C _d	
L.095.01	Built-in wall louvres	425	95	55	11,41	11,65	0,296	0,293	17
L.095.01	Glazed-in louvres	425/GL	95	55	11,41	11,65	0,296	0,293	50
mouvable blade	Built-in wall louvres	427	100	53	11,41	11,65	0,296	0,293	18
mouvable blade	Glazed-in louvres	427/GL	100	53	11,41	11,65	0,296	0,293	51
L.060AC	Acoustic louvres	 445/86	60	34	9,22	13,29	0,329	0,274	52
L.150ACS.01	Acoustic louvres	  446/150	150	34,3	38,46	34,48	0,161	0,169	54
L.150ACL.01	Acoustic louvres	  446/225	150	34,3	37,3	41,9	0,164	0,15	54
L.150ACS.01	Acoustic louvres	  446/300	150	34,3	45,93	45,93	0,148	0,148	54
L.150ACS.01	Acoustic louvres	 447/150	170	37	25,46	25,15	0,198	0,200	56
L.150ACL.01	Acoustic louvres	 447/225	170	37	28,58	30,88	0,187	0,180	56
acoustic	Acoustic louvres	 468AK	85	29	86,85	89,35	0,107	0,106	80
floor grille	Floor grilles	311	16,5	76	n.a.	n.a.	n.a.	n.a.	73
floor grille	Floor grilles	371	20,5	61	n.a.	n.a.	n.a.	n.a.	74
punched	Ventilation grilles	381	n.a.	80	n.a.	n.a.	n.a.	n.a.	72
bar blade	Linear bar grilles	392	13	76	n.a.	n.a.	n.a.	n.a.	75
bar blade	Linear bar grilles	394	16,5	59	n.a.	n.a.	n.a.	n.a.	76
punched	Punched grilles	435R	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	68
slide blade	Controllable internal louvres	4032	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	66
slide blade	Controllable internal louvres	441	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	65
slide blade	Controllable internal louvres	442	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	64
door blade	Door grilles	 461	20	39	33,8	33,8	0,172	0,172	77
extractor	Surface-mounted louvres	433	37 or 99	n.a.	n.a.	n.a.	n.a.	n.a.	38
door blade	Door grilles	 469 Invisido	n.a.	n.a.	17,03	17,03	0,24	0,24	79
door blade	Door grilles	 461AK Silendo	n.a.	27	6,13	6,13	0,40	0,40	78
burglarproof blade	Burglarproof louvres	 421RC2	50	43	13,82	12,85	0,269	0,279	58
burglarproof blade	Burglarproof louvres	 424RC2	50	43	13,82	12,85	0,269	0,279	59
L.033.07	Burglarproof louvres	 431RC2	33,3	40,5	23,56	25,51	0,206	0,198	61
burglarproof blade	Burglarproof louvres	 423RC4	50	22	27,06	27,28	0,193	0,192	60
fire blade	Fire blade	464 Incendo	20	51	10,27	10,27	0,312	0,312	82
fire blade	Fire blade	465	17,5	57	8,16	8,16	0,350	0,350	83
fire blade	Fire blade	466	20	70	6,80	6,80	0,383	0,383	84
galvanised blade	Built-in wall louvres	511	33,3	43	92,13	84,73	0,104	0,109	25
galvanised blade	Built-in wall louvres	521	50	54	11,97	11,72	0,289	0,292	26
stainless blade	Built-in wall louvres	621	50	54	11,97	11,72	0,289	0,292	27
controllable	Controllable internal louvres	XD	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	67

Watertightness tests < Introduction

Method for watertightness testing

RENSON® louvres are subjected to European testing (according to EN 13030: 2011) by the internationally accredited corporation BSRIA Ltd. During these tests, a louvre of 1 m², equipped with stainless steel mesh is exposed to downpours at a rate of 75 litres per hour at a wind speed of 13 m/second. The classification is based on the obtained results, i.e. the quantity of water infiltrating through the louvre.

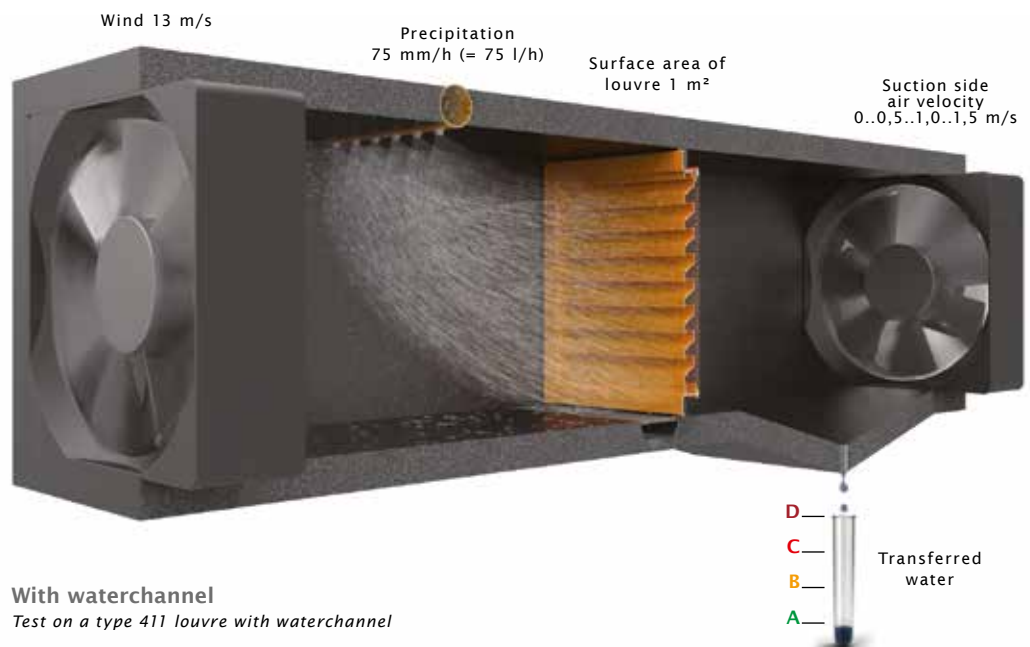
Attention: The “air speed” reference always indicates the air speed at the suction side. If a louvre is assigned to a watertightness, the class suction side air speed has to be indicated. The outside wind speed is fixed to 13m/s and is therefore never mentioned.

Remark:

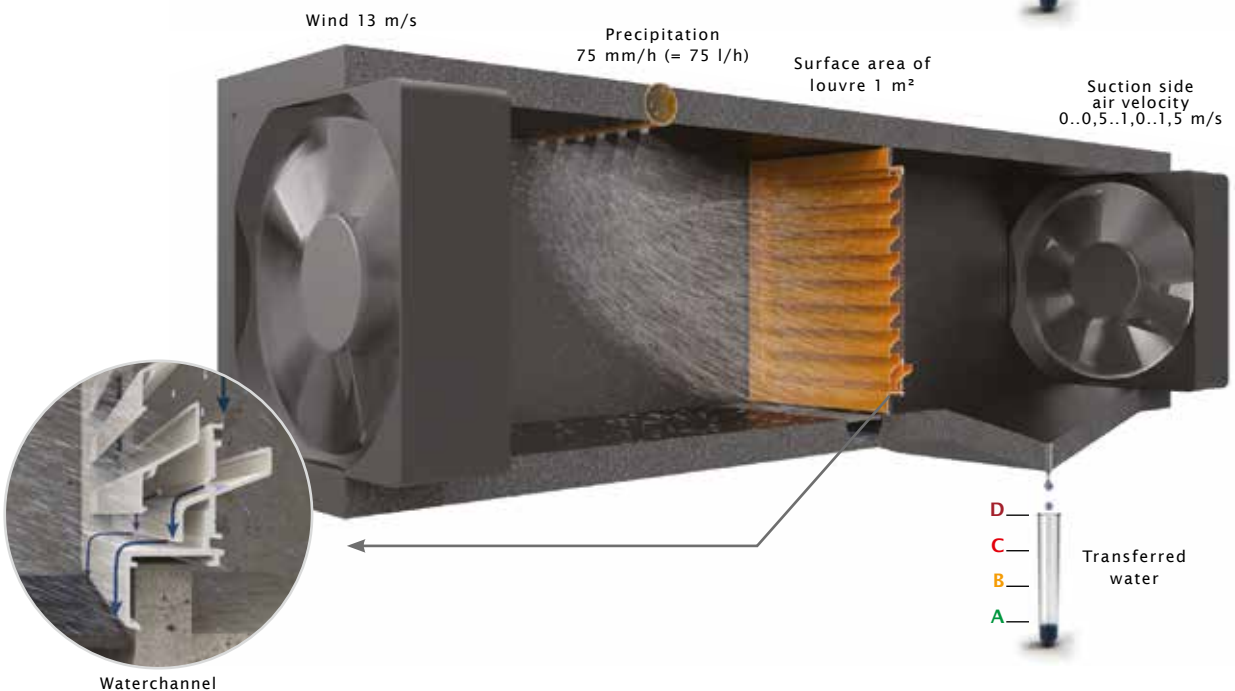
In case a weatherable louvre is used in extreme weather conditions RENSON® advises to seal the seams of the frame. Additionally, applying a water channel will guarantee an even better weatherability.



Without waterchannel
Test on a standard type 411 louvre



With waterchannel
Test on a type 411 louvre with waterchannel



Introduction > Watertightness tests

		Class	% water infiltration		Air resistance class		
Very good rain protection		A	0 - 1 %		C _e > 0,4: 1		
Good rain protection		B	1,1 - 5 %		0,3 < C _e < 0,4: 2		
Average rain protection		C	5,1 - 20 %		C _e : 0,2 - 0,299: 3		
Low rain protection		D	> 20 %		C _e < 0,199: 4		
Type of louvre	Insect screen (mm)	Suction air speed (m/s)	Tested with water channel		Tested without water channel		Suction air resistance class (C _e -coefficient)
			Class	%	Class	%	
450 L.050W	2,3 x 2,3 mm	0,0	A	0,0			2
		0,5	A	0,0			2
		1,0	A	0,0			2
		1,5	A	0,0			2
		2,0	A	0,1			2
		2,5	A	0,1			2
		3,0	A	0,8			2
<i>Standard equipped with water channel</i>							
475/475GL L.075W	2,3 x 2,3 mm	0,0	A				2
		0,5	B				2
		1,0	B				2
		1,5	C				2
		2,0	D				2
<i>Standard equipped with water channel</i>							
452V L.066V	2,3 x 2,3 mm	0,0	A	0,0			4
		0,5	A	0,0			4
		1,0	A	0,0			4
		1,5	A	0,3			4
		2,0	C	19,8			4
		2,5	D	> 20			4
		3,0	D	> 20			4
<i>standaard met watergoot</i>							
452 L.066	6 x 6 mm	0,0	A	0,0			4
		0,5	A	0,1			4
		1,0	A	0,4			4
		1,5	B	5,0			4
		2,0	D	43,1			4
		2,5	D	> 20			4
		3,0	D	> 20			4
<i>Option water channel</i>							
491/494 L.033.08	6 x 6 mm	0,0	A	0,0			4
		0,5	A	0,3			4
		1,0	C	8,4			4
		1,5	D	49,9			4
		2,0	D	> 20			4
		2,5	D	> 20			4
<i>Option water channel</i>							
422/428 L.033V	6 x 6 mm	0,0	A	0,1	A	0,7	4
		0,5	A	0,5	B	1,9	4
		1,0	B	3,1	C	6,6	4
		1,5	C	12,1	C	12,5	4
		2,0	D	37,8	D	40,0	4
		2,5	D	78,0	D	75,0	4
		3,0	D	81,9	D	82,1	4
411/414/431 L.033.01	2,3 x 2,3 mm	0,0	A	0,4	B	3,3	4
		0,5	A	0,9	B	5,0	4
		1,0	B	2,7	C	6,7	4
		1,5	D	20,9	D	> 20	4
451 L.066.01	2,3 x 2,3 mm	0,0	B	2,0	C	9,0	3
		0,5	B	3,9	C	10,7	3
		1,0	C	5,8	C	12,9	3
		1,5	C	10,5	C	18,4	3
		2,0	C		D	29,3	3
451 L.066.01	6 x 6 mm standard	0,0	C	8,0	C	14,6	3
		0,5	C	9,9	C	16,4	3
		1,0	C	11,8	D	> 20	3
		1,5	C	16,5			3
		2,0	C				3
421/424 L.050.00	2,3 x 2,3 mm standard	0,0	B	3,1	C	9,4	3
		0,5	B	4,4	C	12,3	3
		1,0	C	6,3	D	> 20	3
		1,5	C	11,0	D	> 20	3
		2,0	C				3
421/424 L.050.00	6 x 6 mm	0,0	C	5,8	C	15,8	3
		0,5	C	8,2	C	19,0	3
		1,0	C	10,5	D	> 20	3
		1,5	C	14,3			3
		2,0	C				3
425 L.095.01	2,3 x 2,3 mm	0,0	B	3,4	C	18,0	3
		0,5	C	6,1	D	25,2	3
		1,0	C	9,3	D	> 20	3
		1,5	C	16,5	D	> 20	3
		2,0	D	23,7	D	> 20	3
425 L.095.01	6 x 6 mm standard	0,0	C	8,7	C	6,7	3
		0,5	C	11,7	C	12,3	3
		1,0	C	14,9	C	17,3	3
		1,5	D	20,6	D	>20	3
412/415 V20.blade	2,3 x 2,3 mm	0,0	A	0,1			4
		0,5	A	0,3			4
		1,0	A	0,8			4
		1,5	B	4,4			4
		2	C	12,5			4
		2,5	D	>20			4
412/415 V20.blade	6 x 6 mm standard				C	9,6	4
					C	13,4	4
					D	>20	4

Geometric terms for louvres

Visual free area = determined by the ratio of the visual distance between two blades (A) to the blade pitch (C).

Physical free area = determined by the ratio of the smallest gap between two blades (B) to the blade pitch (C). Owing to peripheral effects and assembly, a maximum deviation of 5% must be considered.

Remark: The top and bottom blades are not taken into account in the two free area definitions.

All louvre characteristics can be calculated making use of free software on the website www.rensonlouvres.eu

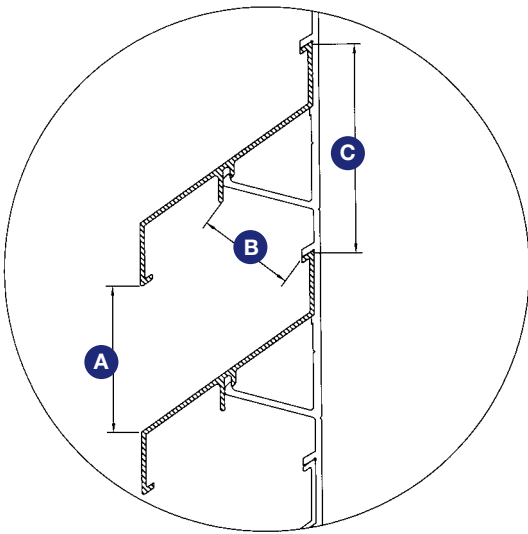
Airflow

K-factor = a value describing aerodynamic resistance to airflow.

Contrary to the free area, this value describes the link between the airflow through the louvre and the pressure drop over it.

C_e = entry loss coefficient = a value describing the aerodynamic channelling of the airflow on entry. This value represents the ratio of the actual airflow to the theoretical airflow.

C_d = discharge loss coefficient = a value describing the aerodynamic channelling of the airflow on discharge. This value represents the ratio of the actual airflow to the theoretical airflow.



Acoustic terms

dB(a) = the decibel (dB) in this brochure is used to characterize the noise reduction of a louvre. The A-weight (dB(a)) shows that the acoustic tests have been taken out according to the sensitivity of the human sound spectrum.

$D_{n,e,w}$ = weighted element-normalized sound level difference, used to characterise a single element like a louvre.

R_w (C;Ctr) = weighted sound reduction index, used to characterise glazing, brick walls, wall louvres, etc.

C = spectrum correction term for pink noise, always added to R_w or $D_{n,e,w}$ when the source of the noise is, for example, fast-moving traffic.

C_{tr} = spectrum correction term for traffic noise, always added to R_w or $D_{n,e,w}$ when the source of the noise is, for example, urban traffic.

Frequency = pitch expressed in Hertz (Hz), or the number of vibrations per second.

Remark: in order to select the correct louvre for your application please refer to local building regulations.

Technical terms

IP-class = international protection rating, protection rate to classify intruding objects and water penetration. The distance to the electrical installation is measured from the outside surface of the louvre.

The IP-class of a louvre is determined according to EN 60529.

Building technical terms

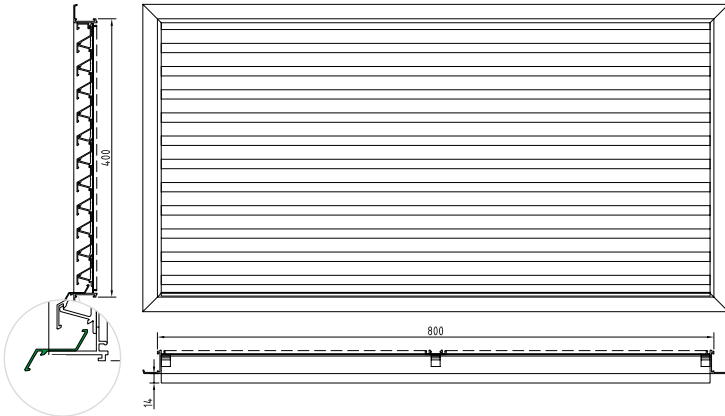
Wall anchor = aluminium bar used to mount and fix louvre to the wall.

Flange = part of the frame profile visible from the front.

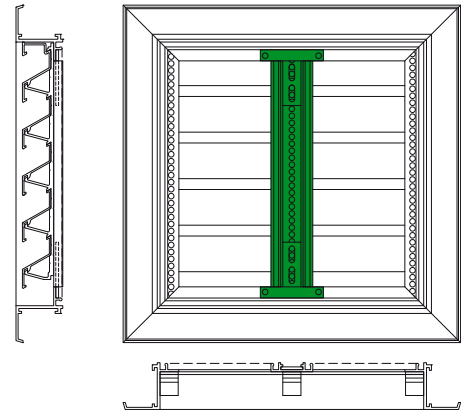
Aluminium extrusion = technique to shape an aluminium element by pressing it through a mold.

Drainage profile

This profile is designed for all types of aluminium rectangular wall louvres

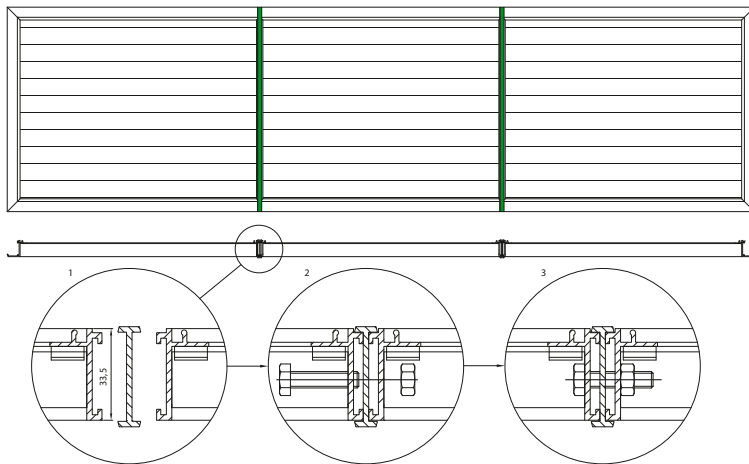


Louvre with strengthening support



Remark: a strengthening support will be provided for a louvre wider than 700mm.

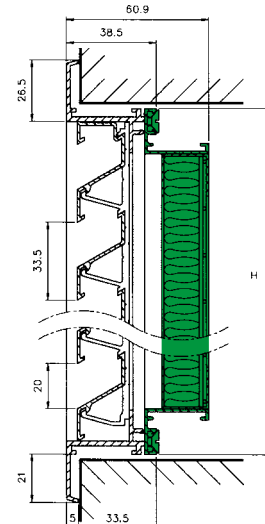
Coupled louvres



- Louvres can be coupled both vertically and horizontally
- Standard vertical

Dust filter

- This profile is designed for all louvre types
- Equipped with dust filter class G4



Removable insect mesh 401

Material

- Pick-up angle (non-visible) in polyamide
- Mesh in stainless steel 304
6x6 mm
2.3x2.3 mm

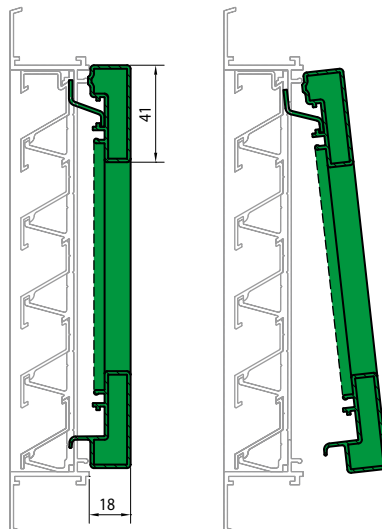
Dimensions

- Minimum dimensions:
190x190 mm
- Maximum dimensions :
1500x1200 mm

Advantages

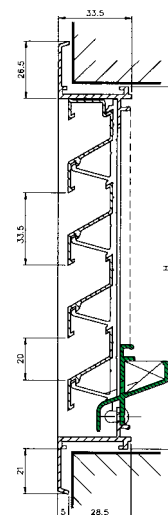
- Integrated water channel
- Aesthetical mesh
- No technical details visible
- Applicable to louvres with water channel

Remark: not applicable to surface-mounted louvres



Water channel

- This profile is designed for many louvre types
- It collects any water infiltration and channels it outside



411 < Built-in wall louvres



411 with thermal insulation panel



Wall louvre, standard series, pitch 33

Material

- Made from aluminium sections: AlMgSi 0.5 (according to EN 12020-2)
- Stainless steel 304 insect screen (2.3 x 2.3 mm) or mesh (6 x 6 mm) on request
- Finishing: anodized in satin/bronze colour (20 micron) or powder-coated in any RAL or Syntha Pulvin colour (40 micron)

Dimensions

- Blade pitch: 33,3 mm
- Depth to fit: 29 mm
- Flange size: 21 mm
- Minimum dimensions: 100 x 100 mm

Fixing

- Brackets ref. 418
- Spring clips ref. 419 available on request (small dimensions)
- For louvres larger than approx. 3 m², a reinforcing mullion is required to suit span and windload

Options (page 11)

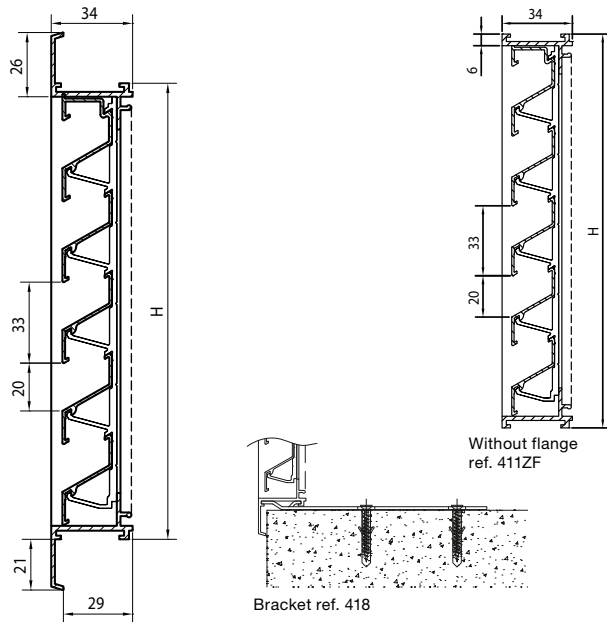
- Water channel
- Drainage profile
- Removable insect mesh
- Backframe
- Filter
- Special shape (see next page)
- Controllable (see next page)
- Without flange (see next page)
- Glazed-in louver 414 (ref. page 39)

Typical applications

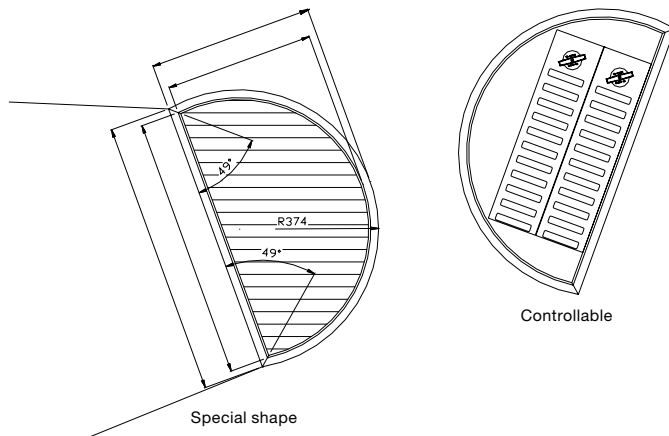
- Every application without specific needs

Stock models				
Dimensions (W x H) mm	Satin anodised	Renson standard WHITE	RAL 7016	Airflow at 2Pa (m ³ /h)
200 x 200	•	•	•	54
300 x 200	•			81
300 x 300	•	•		122
400 x 200	•	•		108
400 x 300	•	•		162
400 x 400	•	•		217
500 x 300	•			203
500 x 400	•			271
500 x 500	•	•		338
600 x 300	•			244
600 x 400	•			325
600 x 600	•	•		487
700 x 700	•			663
1000 x 500	•			677
1000 x 1000	•			1354
142 x 142	•			27

Cross-sections

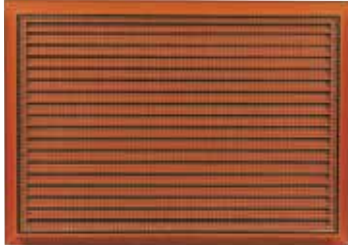
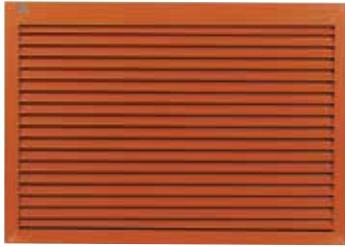


Options



Technical specifications	411
Airflow	(EN 13030)
K-factor (supply)	23,56
K-factor (discharge)	25,51
C _e coefficient	0,206
C _d coefficient	0,198
Technical data	
Visual free area	59 %
Physical free area	45 %
IP class (louvre with mesh; electrical installation at least 100mm from louvre)	IP2XD

412 < Built-in wall louvres



412 with dust filter

Stock models		
Dimensions (W x H) mm	Satin anodised	Airflow at 2Pa (m ³ /h)
200 x 200	•	45
300 x 300	•	102
400 x 300	•	136
500 x 300	•	170
600 x 400	•	271



Wall louvre with chevron section blades, pitch 20

Material

- Made from aluminium sections: AlMgSi 0.5 (according to EN 12020-2)
- Stainless steel 304 mesh (6 x 6 mm) or insect screen (2.3 x 2.3 mm) on request
- Finishing: anodized in satin/bronze colour (20 micron) or powder-coated in any RAL or Syntha Pulvin colour (40 micron)
- Equipped with earthing lug

Dimensions

- Blade pitch: 20 mm chevron
- Depth to fit: 29 mm
- Flange size: 21 mm
- Minimum dimensions: 100 x 100 mm

Fixing

- Brackets ref. 418
- Spring clips ref. 419 available on request (small dimensions)
- For louvres larger than approx. 3 m², a reinforcing mullion is required to suit span and windload

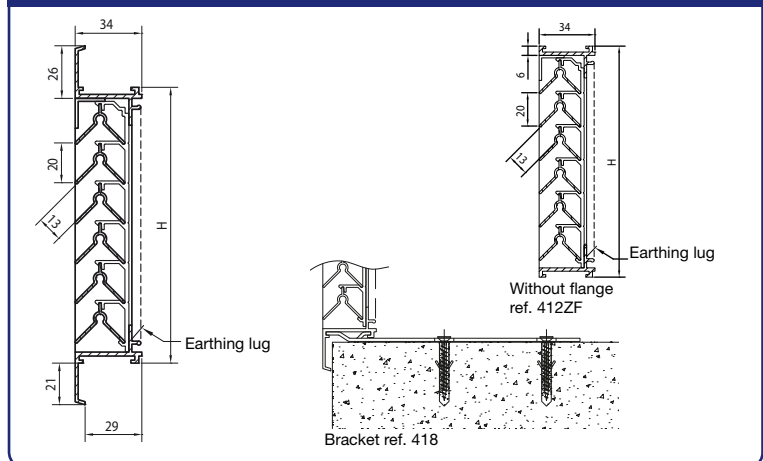
Options

- Water channel
- Drainage profile
- Removable insect mesh
- Backframe
- Filter
- Without flange
- Glazed-in louvre 415 (ref. page 43)

Typical applications

- High-voltage stations
- IT rooms

Cross-sections



Technical specifications	412
Airflow	(EN 13030)
K-factor (supply)	33,80
K-factor (discharge)	33,80
C _e coefficient	0,172
C _d coefficient	0,172
Technical data	
Visual free area	93 %
Physical free area	39 %
IP class	IP2XD

Wall louvre, heavy-duty series, pitch 50

Material

- Made from aluminium sections: AlMgSi 0.5 (according to EN 12020-2)
- Stainless steel 304 insect screen (2.3 x 2.3 mm) or mesh (6 x 6 mm) on request
- Finishing: anodized in satin/bronze colour (20 micron) or powder-coated in any RAL or Syntha Pulvin colour (40 micron)

Dimensions

- Blade pitch: 50 mm
- Depth to fit: 46 mm
- Flange size: 40 mm
- Minimum dimensions: 150 x 150 mm

Fixing

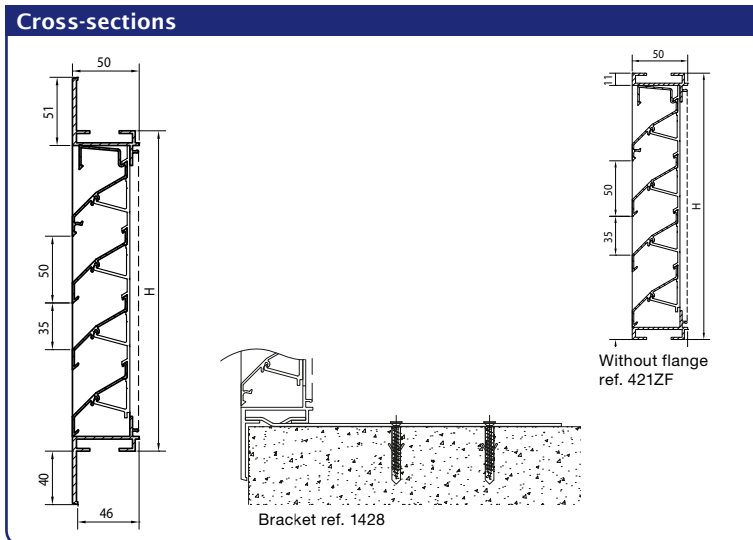
- Brackets ref. 1428
- For louvres larger than approx. 3 m², a reinforcing mullion is required to suit span and windload

Options

- Water channel
- Drainage profile
- Removable insect mesh
- Filter
- Without flange
- Glazed-in louvre 424 (ref. page 45)
- Burglarproof louvre 421RC2 (ref page 58)

Typical applications

- Applications where aesthetics and strength are key parameters



Technical specifications	421
Airflow	(EN 13030)
K-factor (supply)	13,42
K-factor (discharge)	9,35
C _e coefficient	0,273
C _d coefficient	0,327
Technical data	
Visual free area	70 %
Physical free area	49 %
IP class (louvre with mesh; electrical installation at least 100mm from louvre)	IP2XD



422 < Built-in wall louvres



Wall louvre with chevron section blades, heavy-duty series, pitch 33

Material

- Made from aluminium sections: AlMgSi 0.5 (according to EN 12020-2)
- Standard stainless steel 304 insect screen (6 x 6 mm) or mesh (2.3x 2.3 mm) on request
- Finishing: anodized in satin/bronze colour (20 micron) or powder-coated in any RAL or Syntha Pulvin colour (40 micron)

Dimensions

- Blade pitch: 33 mm
- Depth to fit: 46 mm
- Flange size: 40 mm
- Minimum dimensions: 150 x 150 mm

Fixing

- Brackets ref. 1428
- For louvres larger than approx. 3 m², a reinforcing mullion is required to suit span and windload

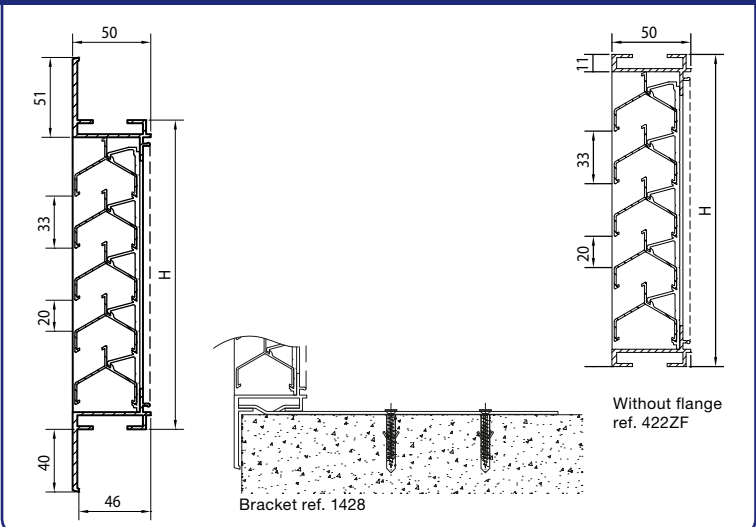
Options

- Water channel
- Drainage profile
- Removable insect mesh
- Filter
- Without flange
- Glazed-in louvre 428 (ref. page 46)

Typical applications

- Applications where extreme strength and stick-proof are key parameters

Cross-sections



Technical specifications

Technical specifications	422
Airflow	(EN 13030)
K-factor (supply)	66,10
K-factor (discharge)	66,10
C _e coefficient	0,123
C _d coefficient	0,123
Technical data	
Visual free area	59 %
Physical free area	43 %
IP class	IP2XD

Wall louvre, extra-heavy-duty series, pitch 95

Material

- Made from aluminium sections: AlMgSi 0.5 (according to EN 12020-2)
- Stainless steel 304 mesh (6 x 6 mm) or mesh (2.3 x 2.3 mm) on demand
- Finishing: anodized in satin/bronze colour (20 micron) or powder-coated in any RAL or Syntha Pulvin colour (40 micron)

Dimensions

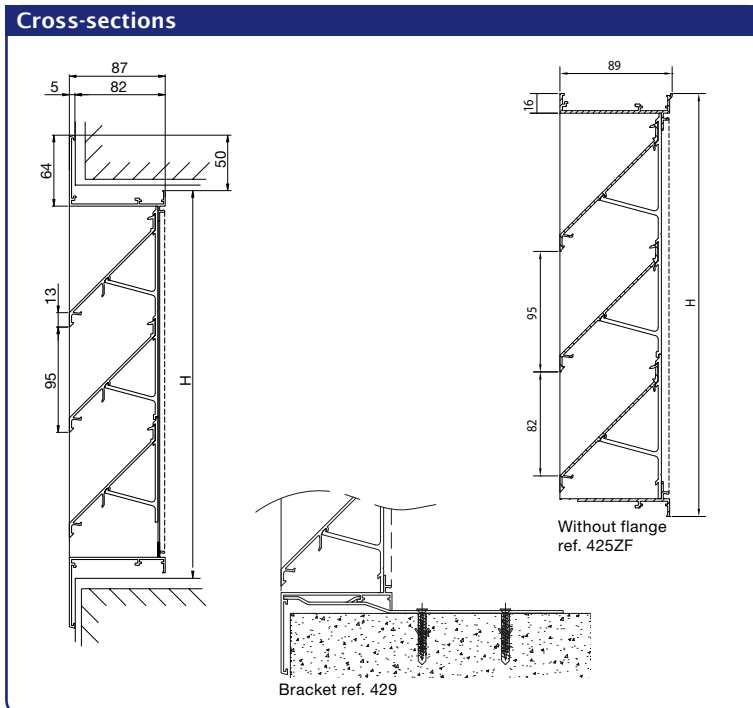
- Blade pitch: 95 mm
- Depth to fit: 81,5 mm
- Flange size: 50 mm
- Minimum dimensions: 300 x 300 mm

Fixing

- Brackets ref. 429
- For louvres larger than approx. 3 m², a reinforcing mullion is required to suit span and windload

Options

- Water channel
- Drainage profile
- Removable insect mesh
- Filter
- Without flange
- Glazed-in louvre 425GL (ref. page 50)



Technical specifications	425
Airflow	(EN 13030)
K-factor (supply)	11,41
K-factor (discharge)	11,65
C _e coefficient	0,296
C _d coefficient	0,293
Technical data	
Visual free area	86 %
Physical free area	55 %



427 < Built-in wall louvres



Type 427/1

427/1 - 427/2 - 427/3 - 427/4 - 427/5
Wall louver, extra-heavy-duty series,
with adjustable blades

Material

- Made from aluminium sections: AlMgSi 0.5 (according to EN 12020-2)
- Stainless steel 304 mesh (6 x 6 mm) or mesh 304 (2.3 x 2.3 mm) on demand
- Finishing: anodized in satin/bronze colour (20 micron) or powder-coated in any RAL or Syntha Pulvin colour (40 micron)

Dimensions

- Depth to fit: 82 mm
- Maximum width in one piece: 1300 mm
- Minimum dimensions: 300 x 290 mm
- Flange size: 50 mm
- Preferred height = (multiple of 100) + 290 mm

Remark: the minimum height is dependant of the control option (see next page).

Fixing

- Brackets ref. 429

Options

- Without flange
- Glazed-in louver 427GL (ref. page 51)

Control options

- 427/1 Manual
- 427/2 Cable
- 427/3 Ultraflex
- 427/4 Motor 230 - 24V / Spring-return actuator 24V
- 427/5 Air pressure

Typical applications

- Powers stations
- High buildings
- Controlled ventilation
- Production halls



Type 427/2



Type 427/3



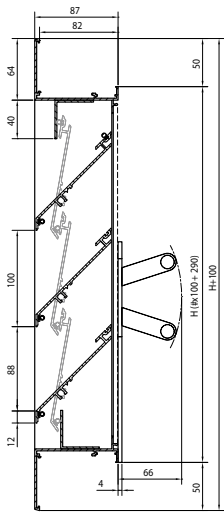
Type 427/4



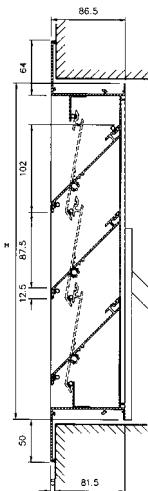
Type 427/5

Technical specifications	427
Airflow (in open position)	(EN 13030)
K-factor (supply)	11,41
K-factor (discharge)	11,65
C _e coefficient	0,296
C _d coefficient	0,293
Technical data	
Visual free area	88 %
Physical free area	53 %

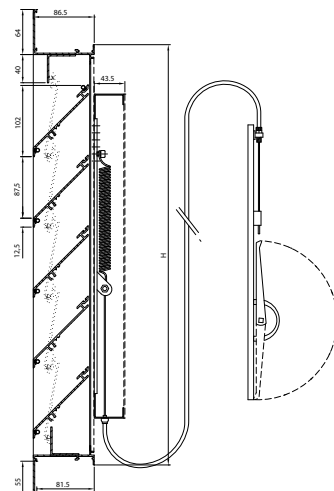
Cross-sections



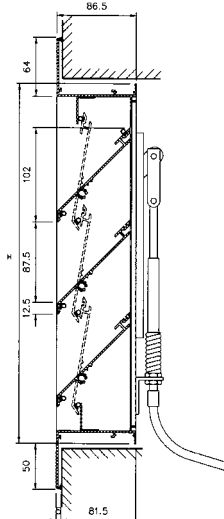
Type 427/1
Manual control
Minimum louvre
height: 290 mm



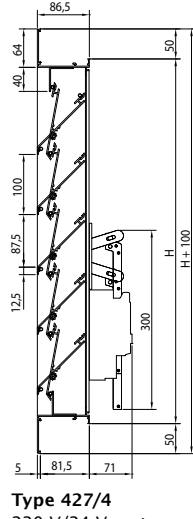
Type 427/2
Cable control up to 2250 mm
Minimum louvre
height: 390 mm



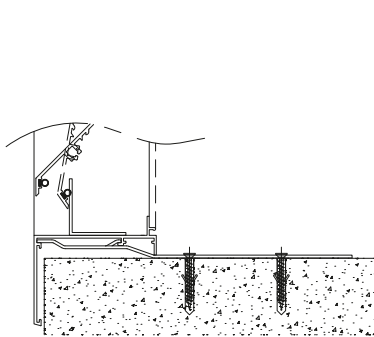
Type 427/3
Ultraflex control up
to max. 7 m
Minimum louvre
height: 390 mm



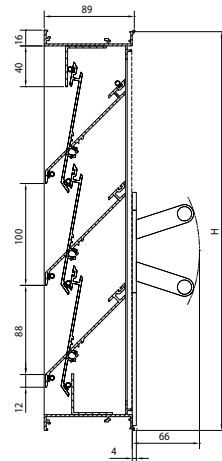
Type 427/4
220 V/24 V motor
control
Minimum louvre
height: 390 mm



Type 427/5
Air pressure control
Minimum louvre
height: 390 mm



Bracket ref. 429



Without flange
ref. 427ZF



451 < Built-in wall louvres



Wall louvre, heavy-duty series, pitch 66

Material

- Made from aluminium sections: AlMgSi 0.5 (according to EN 12020-2)
- Stainless steel 304 mesh (6 x 6 mm) or insect screen (2.3 x 2.3 mm) on request
- Finishing: anodized in satin/bronze colour (20 micron) or powder-coated in any RAL or Syntha Pulvin colour (40 micron)

Dimensions

- Blade pitch: 66 mm
- Depth to fit: 60 mm
- Flange size: 25 mm
- Minimum dimensions: 300 x 300 mm

Fixing

- Brackets ref. 429
- For louvres larger than approx. 3 m², a reinforcing mullion is required to suit span and windload

Options

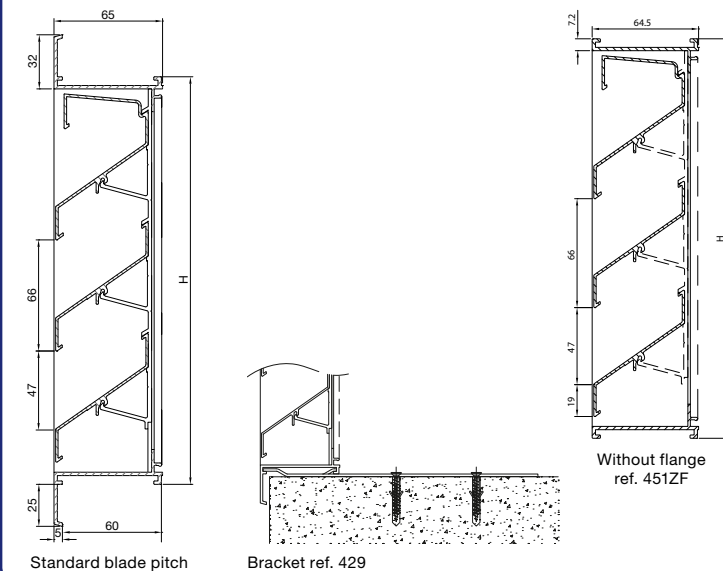
- Water channel
- Drainage profile
- Removable insect mesh
- Filter
- Without flange

Typical applications

- Industrial, commercial with large blade pitch



Cross-sections



Technical specifications

Technical specifications	451
Airflow	(EN 13030)
K-factor (supply)	12,71
K-factor (discharge)	11,77
C _e coefficient	0,280
C _d coefficient	0,291
Technical data	
Visual free area	70 %
Physical free area	49 %

Wall louvre, heavy-duty series,
with aluminium coil blades, pitch 65

Material

- Frame made from aluminium sections: AlMgSi 0.5 (according to EN 12020-2)
- Roll-formed aluminium coil blades
- Stainless steel 304 mesh (6 x 6 mm) or insect screen (2.3 x 2.3 mm) on request
- Finishing: powder-coated in any RAL or Syntha Pulvin colour (40 micron)

Dimensions

- Blade pitch: 65 mm
- Depth to fit: 60 mm
- Flange size: 25 mm
- Minimum dimensions: 300 x 300 mm

Fixing

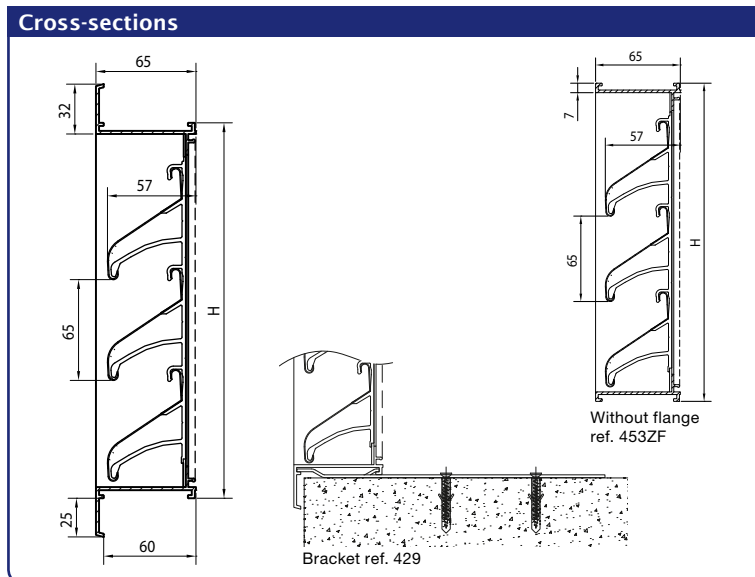
- Brackets ref. 429
- For louvres larger than approx. 3 m², a reinforcing mullion is required to suit span and windload

Options

- Water channel
- Drainage profile
- Filter
- Without flange

Typical applications

- Aesthetical



Technical specifications	453
Airflow	(EN 13030)
K-factor (supply)	13,92
K-factor (discharge)	17,22
C _e coefficient	0,268
C _d coefficient	0,241
Technical data	
Visual free area	69 %
Physical free area	55 %

468 SA < Built-in wall louvres



Sand trap louver

Material

- Made from aluminium sections: AlMgSi 0.5 (according to EN 12020-2)
- Stainless steel 304 insect mesh (2.3 x 2.3 mm) or mesh (6 x 6 mm) on request
- Finishing: anodized (20 micron) or powdercoated in any RAL or Syntha Pulvin colour (40 micron)
- Vertically mounted blades. No rivets visible from the front.
- Standard equipped with sand rejection sill, finished in the same colour as the louver

Note: when anodised, slight colour difference between sand rejection sill and louver

Dimensions

- Blade pitch: 85 mm
- Depth to fit: 60 mm
- Flange size: 25 mm
- Minimum dimensions: 185 x 185 mm
- Width = (multiple of 42,5) + 185mm
*Remark : - symmetric louver when the multiple is even
 - asymmetric louver when the multiple is odd*
- Maximum dimensions: 2012,5 x 1200 mm
Remark : at a maximum wind load of 2kN/m²

Fixing

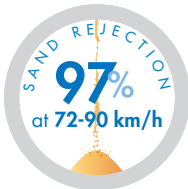
- Brackets ref 429 included

Options

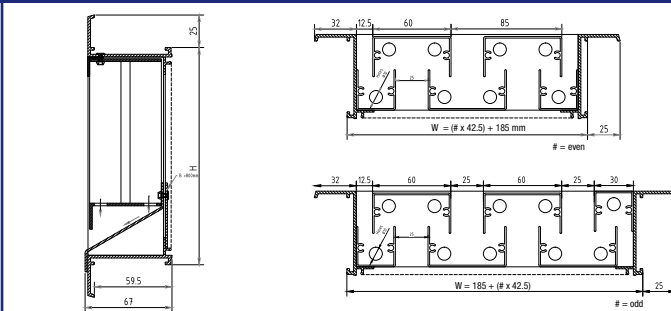
- Anti-dust filter cassette class G4
- Controllable airflow modules mounted on backside (type / VA)
- Without flange

Typical applications

- Coastal area
- Dusty & polluted areas
- HVAC
- Power stations & high-voltage stations.



Cross-sections



Technical specifications	468 SA
Sand rejection	(EN 13181)
Suction air velocity	
0 m/s	97%
0,5 m/s	94%
Airflow	(EN13030)
K-factor (supply)	115,62
K-factor (exhaust)	115,62
C _e coefficient	0,093
C _d coefficient	0,093
Technical Data	
Physical free area	29%
Visual free area	29%
IP class (louver with mesh)	IP2XD

High-airflow wall louvres, pitch 60

Material

- Made from aluminium sections: AlMgSi 0.5 (according to EN 12020-2)
- Stainless steel 304 mesh (6 x 6 mm) or insect screen (2.3 x 2.3 mm) on request
- Finishing: anodized in satin/bronze colour (20 micron) or powder-coated in any RAL or Syntha Pulvin colour (40 micron)

Dimensions

- Blade pitch: 60 mm
- Depth to fit: 82 mm
- Flange size: 50 mm
- Minimum dimensions: 300 x 300 mm

Fixing

- Brackets ref. 429
- For louvres larger than approx. 3 m², a reinforcing mullion is required to suit span and windload

Options

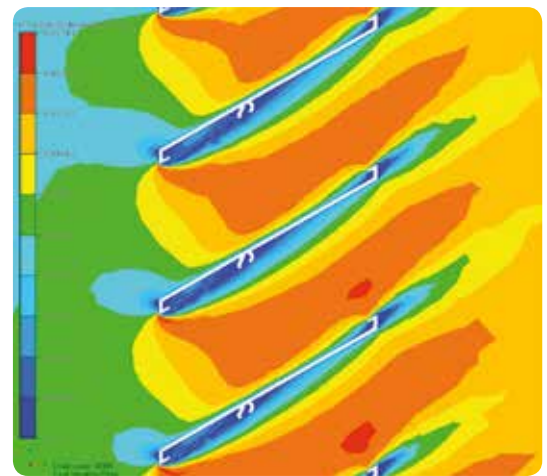
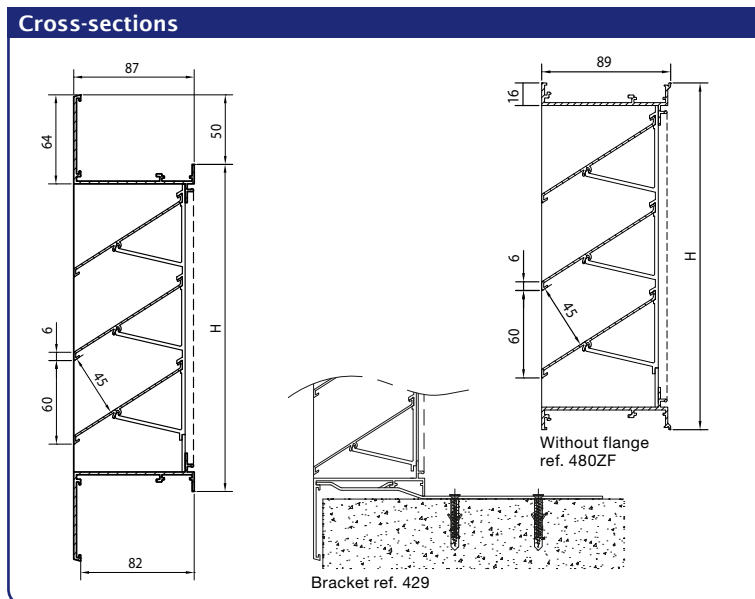
- Water channel
- Drainage profile
- Removable mesh
- Filter
- Without flange
- Glazed-in louvre 483 (ref. page 47)

Typical applications

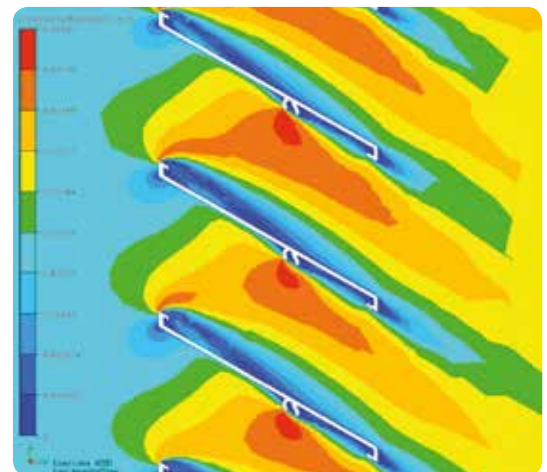
- Underground parkings
- Industrial applications



AIRFLOW



Supply



Discharge

Technical specifications	480
Airflow	(EN 13030)
K-factor (supply)	5,03
K-factor (discharge)	4,96
C _e coefficient	0,446
C _d coefficient	0,449
Technical data	
Visual free area	90 %
Physical free area	76 %
IP class (louvre with mesh; electrical installation at least 180mm from louvre)	IP2XD

481 < Built-in wall louvres



Wall louvre, heavy-duty series, pitch 50

Material

- Made from aluminium sections: AlMgSi 0.5 (according to EN 12020-2)
- Stainless steel 304 insect screen (2.3 x 2.3 mm) or mesh (6 x 6 mm) on request
- Finishing: anodized in satin/bronze colour (20 micron) or powder-coated in any RAL or Syntha Pulvin colour (40 micron)

Dimensions

- Blade pitch: 50 mm
- Depth to fit: 46 mm
- Flange size: 40 mm
- Minimum dimensions: 150 x 150 mm

Fixing

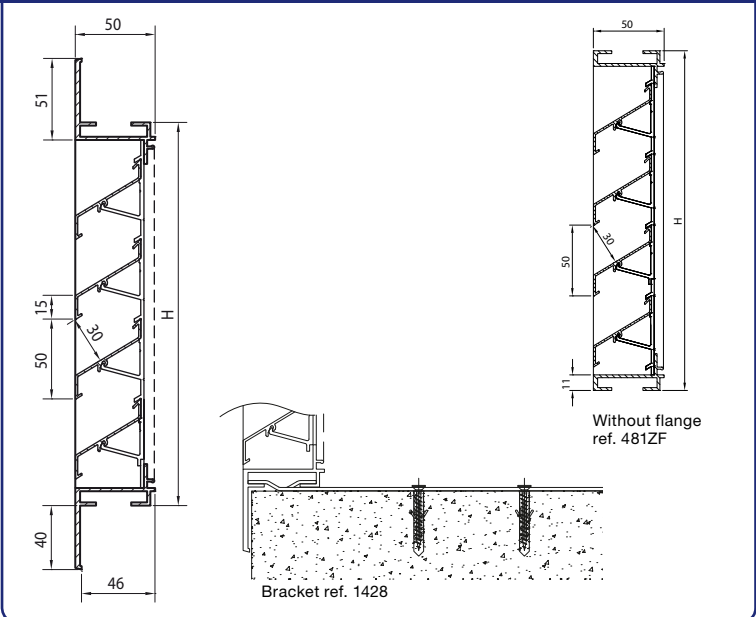
- Brackets ref. 1428
- For louvres larger than approx. 3 m², a reinforcing mullion is required to suit span and windload

Options

- Water channel
- Drainage profile
- Removable mesh
- Filter
- Without flange
- Glazed-in louvre 484 (ref. page 48)



Cross-sections



Technical specifications	481
Airflow	(EN 13030)
K-factor (supply)	9,41
K-factor (discharge)	9,47
C _e coefficient	0,326
C _d coefficient	0,325
Technical data	
Visual free area	70 %
Physical free area	60 %
IP class (louvre with mesh; electrical installation at least 105mm from louvre)	IP2XD

Wall louvre, galvanised steel, pitch 34

Material

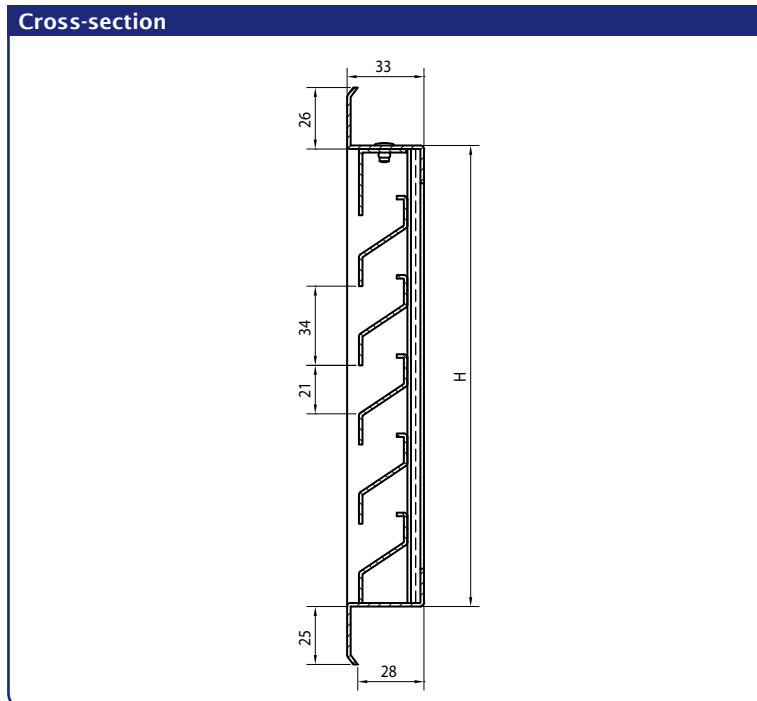
- Made from steel plate
- Electroplating: 10 micron FeZn12C
- Steel mesh (5 x 5 mm)
- Finishing: no powder-coating possible

Dimensions

- Blade pitch: 34 mm
- Depth to fit: 28 mm
- Flange size: 25 mm
- No made to measure

Typical applications

- Basic louvre
- Economical solution
- No power-coating possible
- Stronger than aluminium
- Anti-vandalism
- Sports centre



Stock models	
Dimensions (W x H) mm	Galvanised steel
200 x 200	•
300 x 300	•
400 x 200	•

Remark: only available in above mentioned sizes.

Technical specifications	511
Airflow	(EN 13030)
K-factor (supply)	92,91
K-factor (discharge)	84,73
C _e coefficient	0,104
C _d coefficient	0,109
Technical data	
Visual free area	61 %
Physical free area	43 %

521 < Built-in wall louvres



Wall louvre, heavy-duty series, galvanised steel, pitch 50

Material

- Made from steel plate
- Electroplating: 10 micron FeZn12C
- Finishing: powder coating in any RAL or Syntha PulvinR colour (min 40 microns)
- Steel mesh (13 x 13 mm)

Dimensions

- Pitch: 50 mm
- Depth to fit: 43 mm
- Flange size: 40 mm
- Minimum dimensions: 200 x 200 mm
- Maximum dimensions: 2000 x 2000 mm

Fixing

- Brackets pre-fitted to the frame

Typical applications

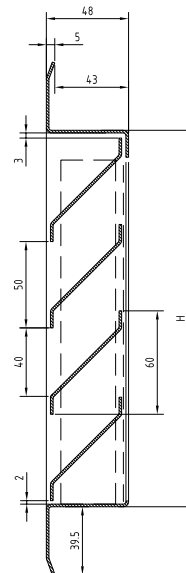
- Basic louvre
- Economical solution
- Containers

Stock models

Dimensions (W x H) mm	Galvanised steel
400 x 400	•
500 x 500	•
600 x 600	•
1000 x 1000	•

Remark: available in standard sizes and made-to-measure.

Cross-section



Technical specifications	521
Airflow	(EN 13030)
K-factor (supply)	11,97
K-factor (discharge)	11,72
C _e coefficient	0,289
C _d coefficient	0,292
Technical data	
Blade pitch	50 mm
Visual free area	79 %
Physical free area	54 %

Wall louvre, stainless steel, pitch 50

Material

- Made from stainless steel 316 L
- Stainless steel 304 mesh (6 x 6 mm)

Dimensions

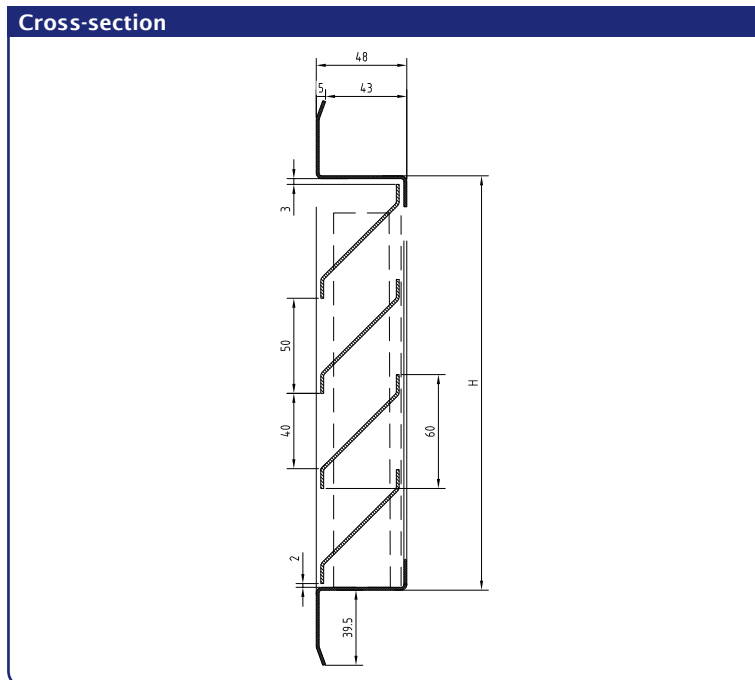
- Pitch: 50 mm
- Depth to fit: 43 mm
- Flange size: 40 mm
- Minimum dimensions: 200 x 200 mm
- Maximum dimensions: 2000 x 2000 mm

Fixing

- Brackets pre-fitted to the frame

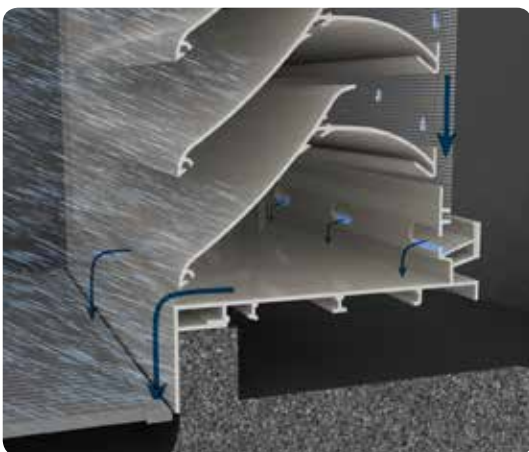
Typical applications

- Food sector
- Chemical sector
- Hospitals
- Environment with high corrosion



Technical specifications	621
Airflow	(EN 13030)
K-factor (supply)	11,97
K-factor (discharge)	11,72
C _e coefficient	0,289
C _d coefficient	0,292
Données techniques	
Blade pitch	50 mm
Visual free area	79 %
Physical free area	54 %

450 < Weatherable louvres



Water channel

Extreme weatherable louvre

Louvre 450 delivers the best performance on watertightness combined with a very high airflow.

Material

- Made from aluminium sections: AlMgSi 0.5 (according to EN 12020-2)
- Stainless steel 304 insect mesh (2.3 x 2.3 mm) or mesh (6 x 6 mm) on request
- Finishing: anodized in satin / bronze colour (20 micron) or powder coated in any RAL or Syntha Pulvin colour (40 micron),
- Fitted with a water channel at top and bottom to enhance drainage

Dimensions

- Blade pitch: 50 mm
- Depth to fit: 159 mm
- Flange size: 38 mm
- Minimum dimensions: 200 x 230 mm
- Preferred height: (multiple of 50) + 230 mm

Fixing

- Brackets ref. 1428 included
- For louvres wider than 2395mm, a reinforcing mullion is required to suit span and wind load subject to design

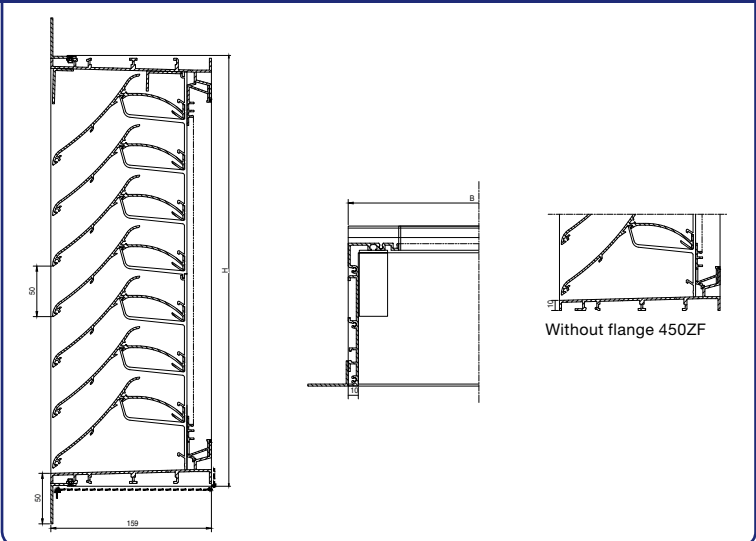
Option

- Without flange
- Glazing-in louvre available on request.
- In combination with the L.050.WS dummy blade

Typical applications

- Data and IT centres
- Power stations
- Sub stations
- Coastal applications

Cross-sections



Technical specifications	450
Weatherability	(EN 13030)
Class (details page 9)	A2 (3m/s)
Airflow	(EN13030)
K-factor (supply)	10,47
K-factor (discharge)	16,52
C _e coefficient	0,309
C _d coefficient	0,246
Technical Data	
Physical free area	57%
IP class	IP2XD

Wall louver, heavy-duty series with chevron section blades, pitch 66

Material

- Made from aluminium sections: AlMgSi 0.5 (according to EN 12020-2)
- Stainless steel 304 mesh (6 x 6 mm) or insect screen (2.3 x 2.3 mm) on request
- Finishing: anodized in satin/bronze colour (20 micron) or powder-coated in any RAL or Syntha Pulvin colour (40 micron)

Dimensions

- Blade pitch: 66 mm
- Depth to fit: 82 mm
- Flange size: 50 mm
- Minimum dimensions: 300 x 310 mm

Fixing

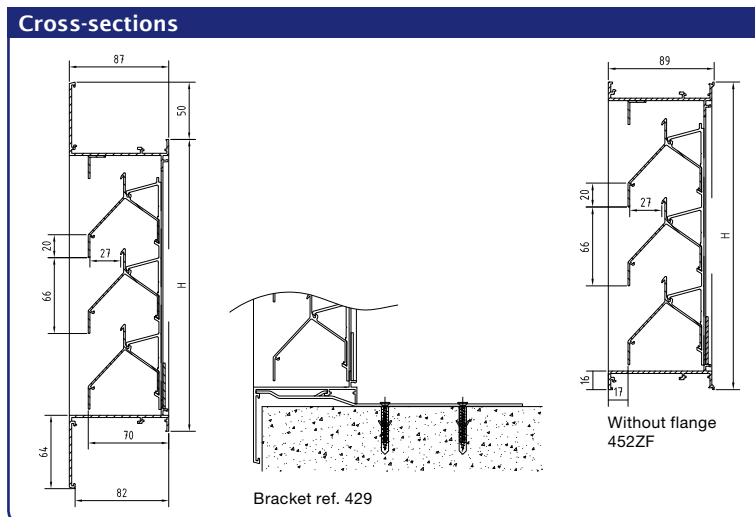
- Brackets ref. 429
- For louveres taller than approx. 3 m², a reinforcing mullion is required to suit span and windload

Options

- Water channel, drainage profile, removable insect mesh, filter, without flange
- Glazed-in louvre available on request

Typical applications

- Application where strength, stick-proof and excellent weatherability are important selection criteria
- High-voltage cabins
- HVAC
- No see-through



Technical specifications	452
Weatherability	(EN 13030)
Class (details page 9)	A (1 m/s)
Airflow	(EN13030)
K-factor (supply)	66,1
K-factor (discharge)	79,7
C _e coefficient	0,123
C _d coefficient	0,246
Technical data	
Visual free area	70 %
Physical free area	41 %
IP class (louvre with mesh)	IP2XD

452V < Weatherable louvres



Vertical blades - 452V



Wall louvre, heavy-duty series with vertical chevron section blades, pitch 66

Material

- Made from aluminium sections: AlMgSi 0.5 (according to EN 12020-2)
- Insect screen (2.3 x 2.3 mm) or stainless steel 304 mesh (6 x 6 mm) on request
- Finishing: anodized in satin/bronze colour (20 micron) or powder-coated in any RAL or Syntha Pulvin colour (40 micron)
- Standard equipped with water channel

Dimensions

- Blade pitch: 66 mm
- Depth to fit: 82 mm
- Flange size: 50 mm
- Minimum dimensions: 310 x 300 mm

Fixing

- Brackets ref. 429
- For louvres taller than approx. 3 m², a reinforcing mullion is required to suit span and windload

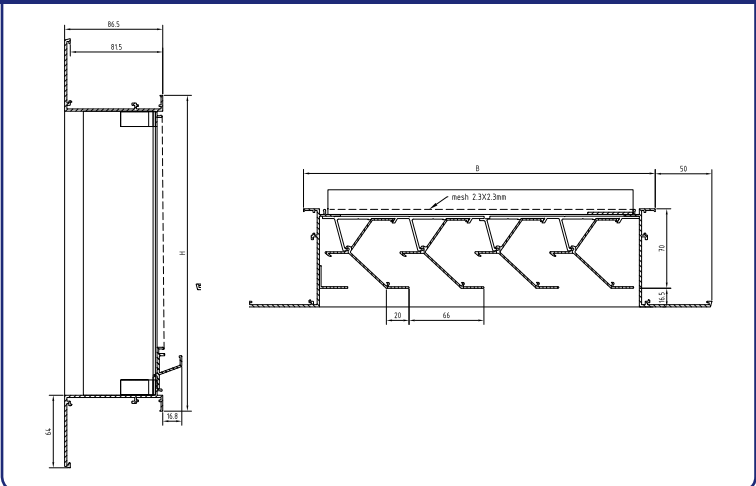
Options

- Drainage profile, removable insect mesh, filter, without flange
- Glazed-in louvre available on request

Typical applications

- Application where strength, stick-proof and excellent weatherability are important selection criteria
- High-voltage cabins
- HVAC
- No see-through

Cross-sections



Technical specifications	452V
Weatherability	(EN 13030)
Class (details page 9)	A (1,5m/s)
Airflow	(EN13030)
K-factor (supply)	60,1
K-factor (discharge)	79,9
C _e coefficient	0,129
C _d coefficient	0,114
Technical data	
Visual free area	70 %
Physical free area	41 %
IP class (louvre with mesh)	IP2XD

Louvre with excellent weatherability properties, ideal for discharge applications

Material

- Made from aluminium sections: AlMgSi 0,5 (according to EN 12020-2)
- Stainless steel 304 insect mesh (2,3 x 2,3 mm)
- Finishing: anodized in satin / bronze colour (20 micron) or powder coated in any RAL or Syntha Pulvin colour (40 micron)
- Fitted with a water channel to enhance drainage

Dimensions

- Blade pitch: 75 mm
- Depth to fit: 82 mm
- Flange size: 50 mm
- Minimum dimensions: 230 x 295 mm
- Maximum dimension: 4000 mm (L or H) with $S_{max.} = 3,5 \text{ m}^2$
- Preferred height: (multiple of 75) + 295 mm

Fixing

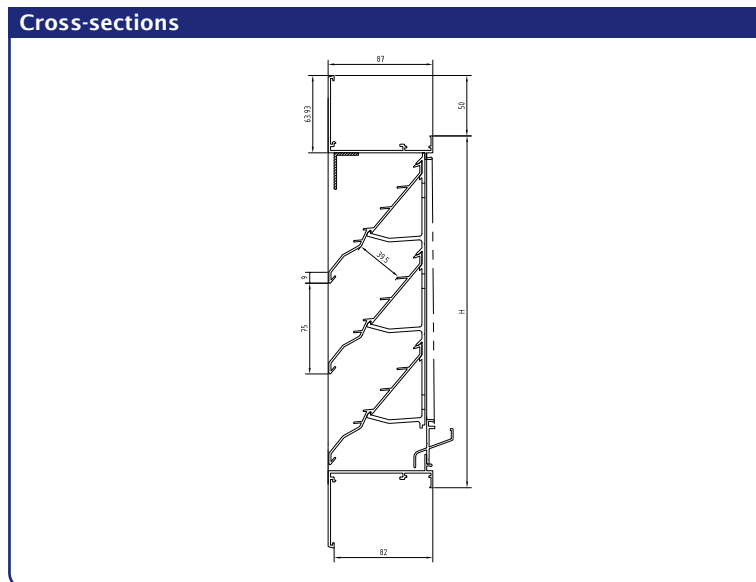
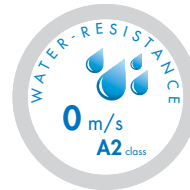
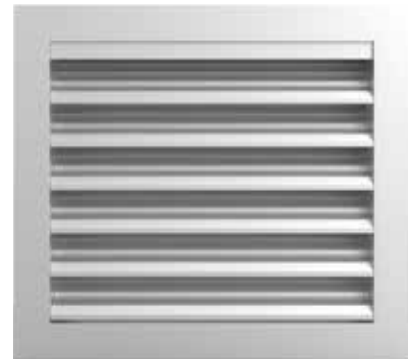
- Brackets ref. 429 included

Options

- Stainless steel 304 insect mesh – 6 x 6 mm (remark, this influences the properties)
- Drainage profile
- Removable insect mesh
- Filter
- Without flange
- Glazed-in louvre available on request: see page 32

Typical applications

- Industrial applications where a good ventilation needs to be combined with an excellent weatherability



Technical specifications	475
Weatherability	(EN 13030)
Weatherability class (details see page 9)	A2 (0 m/s)
Airflow	(EN 13030)
K-factor (supply)	10,89
K-factor (discharge)	10,41
C _e coefficient	0,303
C _d coefficient	0,310
Technical data	
Physical free area	53 %

475GL < Weatherable louvres



Glazed-in louvre with excellent weatherability properties, ideal for discharge applications

Material

- Made from aluminium sections: AlMgSi 0,5 (according to EN 12020-2)
- Stainless steel 304 insect mesh (2,3 x 2,3 mm)
- Finishing: anodized in satin / bronze colour (20 micron) or powder coated in any RAL or Syntha Pulvin colour (40 micron)
- Fitted with a water channel to enhance drainage

Dimensions

- Blade pitch: 75 mm
- Frame thickness: 24 mm (thicknesses from 8 till 50 mm upon request)
- Minimum dimensions:
 - 475GL/24: 330 x 380 mm
 - 475GL/8-50: 330 x 395 mm
- Maximum dimension: 4000 mm (L or H) with $S_{max} = 3,5 \text{ m}^2$
- Preferred height:
 - 475GL/24: (multiple of 75) + 380 mm
 - 475GL/8-50: (multiple of 75) + 395 mm

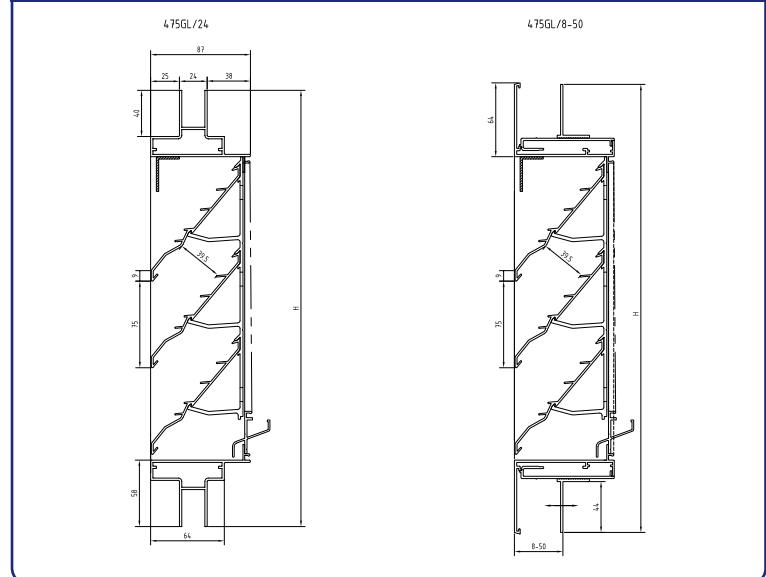
Fixations

- Suitable for 24 mm glazing sections. Other thicknesses on request

Options

- Stainless steel 304 insect mesh – 6 x 6 mm (remark, this influences the properties)
- Drainage profile
- Removable insect mesh
- Filter

Cross-sections



Technical specifications	475GL
Weatherability	(EN 13030)
Weatherability class (details see page 9)	A2 (0 m/s)
Airflow	(EN 13030)
K-factor (supply)	10,89
K-factor (discharge)	10,41
C_e coefficient	0,303
C_d coefficient	0,310
Technical data	
Physical free area	53 %

“Storm” wall louvre, pitch 33

Material

- Made from aluminium sections: AlMgSi 0.5 (according to EN 12020-2)
- Stainless steel 304 mesh (6 x 6 mm) or insect screen (2.3 x 2.3 mm) on request
- Finishing: anodized in satin/bronze colour (20 micron) or powder-coated in any RAL or Syntha Pulvin colour (40 micron)

Dimensions

- Blade pitch: 33 mm
- Depth to fit: 29 mm
- Flange size: 21 mm
- Minimum dimensions: 100 x 100 mm

Fixing

- Brackets ref. 418
- Spring clips ref. 419 available on request (small dimensions)

Options

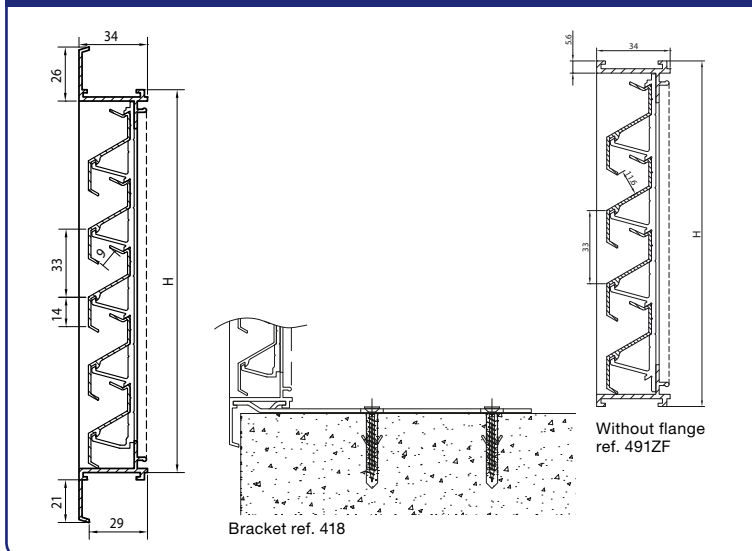
- Water channel
- Drainage profile
- Removable mesh
- Filter
- Without flange
- Welded blades on frame (only RAL finish)
- Glazed-in “storm” louvre 494 (ref. page 49)

Typical applications

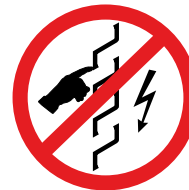
- Good weatherability combined with low airflow, applications with a lot of wind, coastal area
- Snow resistant



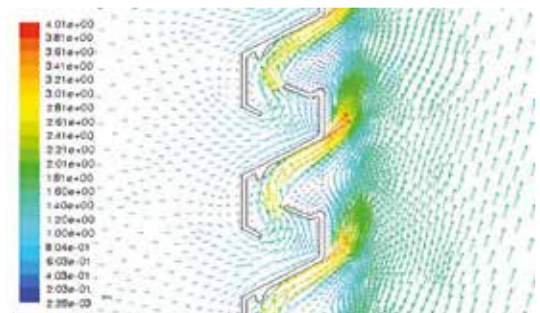
Cross-sections



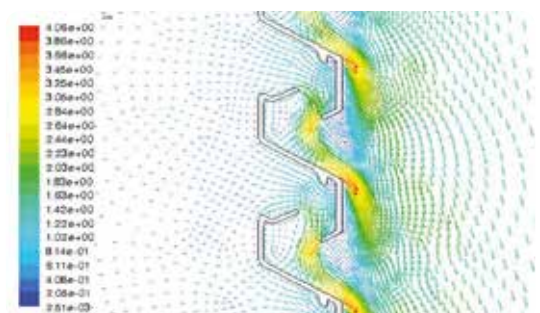
Technical specifications	491
Weatherability	(EN 13030)
Class (details page 9)	A (0,5m/s)
Airflow	(EN13030)
K-factor (supply)	123,5
K-factor (discharge)	118,1
C _e coefficient	0,090
C _d coefficient	0,092
Technical data	
Visual free area	57 %
Physical free area	26 %
IP class (louvre with mesh)	IP2XD



AIRFLOW



Supply



Discharge

431 < Surface-mounted louvres



Surface-mounted wall louvre, pitch 33

Material

- Made from aluminium sections: AlMgSi 0.5 (according to EN 12020-2)
- Stainless steel 304 insect screen (2.3 x 2.3 mm) or mesh (6 x 6 mm) on request
- Finishing: anodized in satin/bronze colour (20 micron) or powder-coated in any RAL or Syntha Pulvin colour (40 micron)

Dimensions

- Blade pitch: 33 mm
- Thickness: 29 mm
- Minimum dimensions: 120 x 120 mm

Fixing

- Screws and plugs are included
- Louvre 432 is the removable version of louvre 431 (*pag. 36*)

Options

- Burglarproof louvre 431RC2 (*ref page 60*)

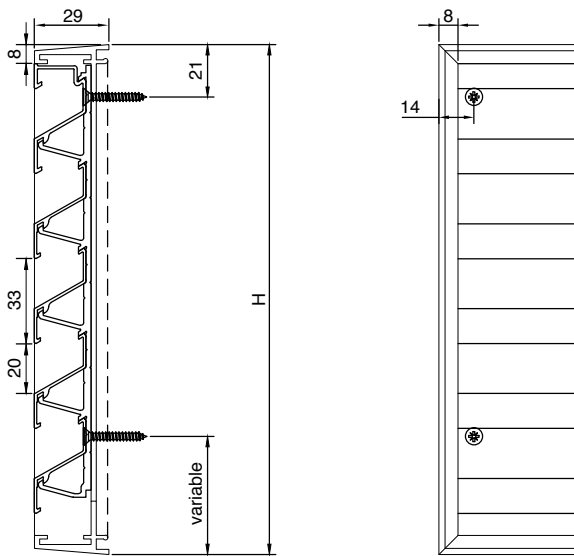
Typical applications

- Fixed louvre
- Nightcooling
- Standard surface-mounted louvre



Nightcooling

Cross-section



Technical specifications	431
Airflow	(EN 13030)
K-factor (supply)	23,56
K-factor (discharge)	25,51
C _e coefficient	0,206
C _d coefficient	0,198
Technical data	
Visual free area	59 %
Physical free area	45 %
IP class (louvre with mesh; electrical installation at least 100mm from louvre)	IP2XD

Stock models				
Dimensions (W x H) mm	Satin anodised	Renson standard WHITE	RAL 7016	Airflow at 2 Pa (m ³ /h)
165 x 165	•	•	•	29,4
225 x 225	•	•	•	56,8
325 x 325	•	•		143
425 x 425	•			245
525 x 525	•			373



432 < Surface-mounted louvres



Surface-mounted, glazed-in louvre with frame

Material

- Made from aluminium sections: AlMgSi 0.5 (according to EN 12020-2)
- Stainless steel 304 insect screen (2.3 x 2.3 mm) or mesh (6 x 6 mm) on request
- Finishing: anodized in satin/bronze colour (20 micron) or powder-coated in any RAL or Syntha Pulvin colour (40 micron)
- Consists of a screwfixed frame and a removable louvre

Dimensions

- Blade pitch: 33 mm
- Thickness: 40 mm
- Minimum dimensions: 136 x 136 mm
- Maximum surface: 2.25 m²

Fixing

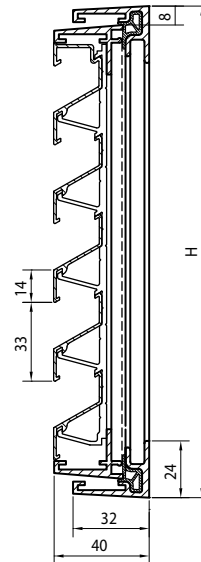
- Screws and plugs are included

Typical applications

- Nightcooling
- Removable louvre: to entrance indoor brightness and facilitate maintenance



Cross-section



Technical specifications	432
Airflow	(EN 13030)
K-factor (supply)	23,56
K-factor (discharge)	25,51
C _e coefficient	0,206
C _d coefficient	0,198
Technical data	
Visual free area	59 %
Physical free area	45 %



Cross-section

The diagram shows a cross-section of the window and louver assembly. On the left, a vertical section of the louver is shown with a dimension of 29. Below it is the label "Grille amovible". In the center, a horizontal section shows the louver being inserted into the window frame. Below this section is the label "Cadre auxiliaire". On the right, a vertical section shows the window frame with a handle. Below it is the label "Fenêtre". The word "Verrous" is written vertically between the louver and the window frame, indicating the locking mechanism. Arrows point from the louver section to the window frame section.

The screwfixed frame is surface mounted. The removable louver is installed from the outside and secured from the inside out by means of deadbolts. By unlocking these deadbolts the louver can easily be removed.

433/S / 433/L < Surface-mounted louvres



Pressure-relief damper

Material

- Made from aluminium sections: AlMgSi 0.5 (according to EN 12020-2)
- Finishing: anodized in satin colour (20 micron) or powder-coated in any RAL or Syntha Pulvin colour (40 micron)
- Extractor hood louvres: the blades open at the same time
- Pressure-relief louvres: the blades open individually
- Without insect screen
- Opening pressure: 10 Pa standard, 20 Pa with enhanced blade

Dimensions pressure-relief damper 433/L

- Height: (multiple of 100) + 328 mm
- Minimum dimensions: 300 x 328 mm
- Thickness: 29 mm
- In length, the blades are in one piece up to 800 mm

Dimensions extractor hood louvre 433/S

See stock models (*below page*)

Fixing

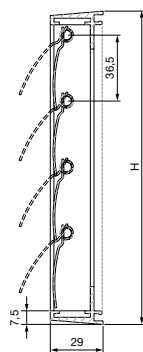
- Invisible fixing
- Screws and plugs are included

Typical applications

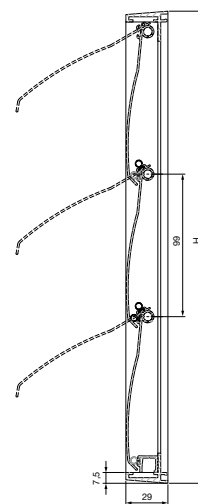
- Extractor hood
- Drying cabinet

Cross-sections

Renson® Technology
extractor hood louvre 433/S



Pressure-relief louvre 433/L



Stock models

Dimensions (W x H) mm	Satin anodised	Renson standard WHITE	RAL 8019	RAL 7016
Extractor hood louvres 433/S				
173 x 173	•	•	•	•
210 x 210	•	•	•	•
246 x 246	•	•	•	
Pressure-relief louvres 433/L				
328 x 328	•			
428 x 428	•			
528 x 528	•			

Glazed-in louvre, pitch 33

Material

- Made from aluminium sections: AlMgSi 0.5 (according to EN 12020-2)
- Stainless steel 304 insect screen (2.3 x 2.3 mm) or mesh (6 x 6 mm) on request
- Finishing: anodized in satin/bronze colour (20 micron) or powder-coated in any RAL or Syntha Pulvin colour (40 micron)

Dimensions

- Blade pitch: 33,3 mm
- Frame thickness: 24, 28 or 32 mm
- Minimum dimensions: 130 x 130 mm
- Specify on ordering: width x height in mm (overall dimensions)

Fixing

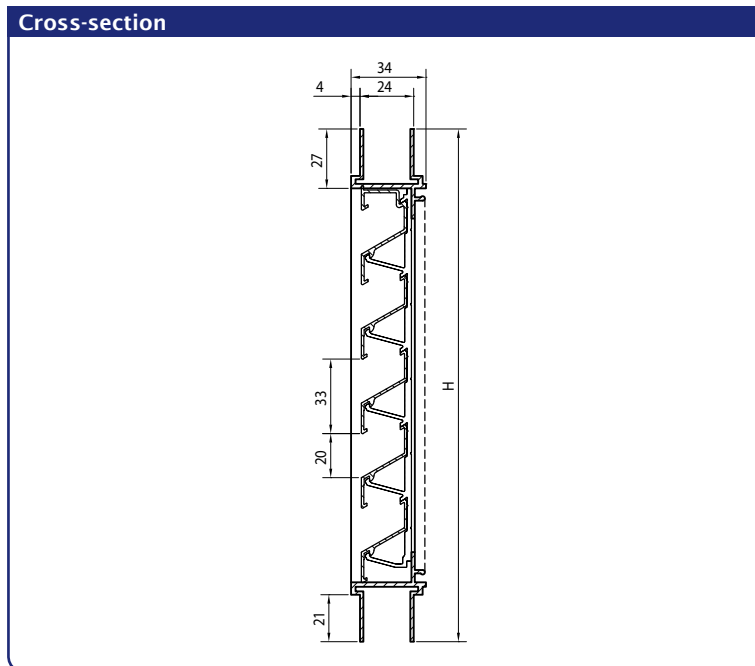
- Suitable for 24, 28, 32 mm glazing sections. Other thicknesses on request.

Options

- Water channel
- Removable mesh
- Filter
- Pressure-relief louvre

Typical applications

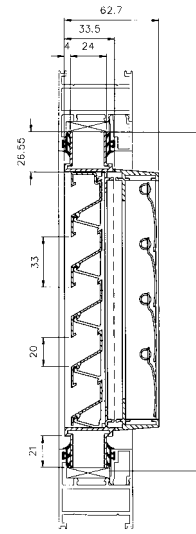
- Nightcooling



Technical specifications	414
Airflow	(EN 13030)
K-factor (supply)	23,56
K-factor (discharge)	25,51
C _e coefficient	0,206
C _d coefficient	0,198
Technical data	
Visual free area	59 %
Physical free area	45 %
IP class (louvre with mesh; electrical installation at least 100mm from louvre)	IP2XD

Pressure-relief grille

Combination of a pressure-relief louvre type 433 and a louvre type 414



Controllable louvre

Material

- Made from aluminium sections: AlMgSi 0.5 (according to EN 12020-2)
- Stainless steel 304 mesh (2.3 x 2.3 mm) or insect screen (6 x 6 mm) on request
- Finishing: anodized in satin/bronze colour (20 micron) or powder-coated in any RAL or Syntha Pulvin colour (40 micron)

Dimensions

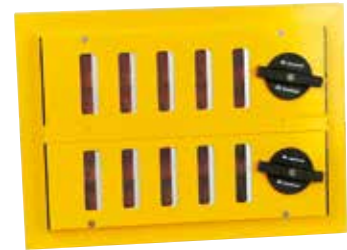
- Blade pitch: 33,3 mm
- Frame thickness: 24, 28 or 32 mm
- Minimum dimensions: 200 x 130 mm
- Specify on ordering: width x height in mm (overall dimensions)
- Controllable in combination with 100, 130 and 150 mm hit-and-miss ventilators or with insulated aluminium door (414/D) (max size 800 x 800 mm)

Fixing

- Suitable for 24, 28, 32 mm glazing sections. Other thicknesses on request.

Controloptions (1 controlpanel per module)

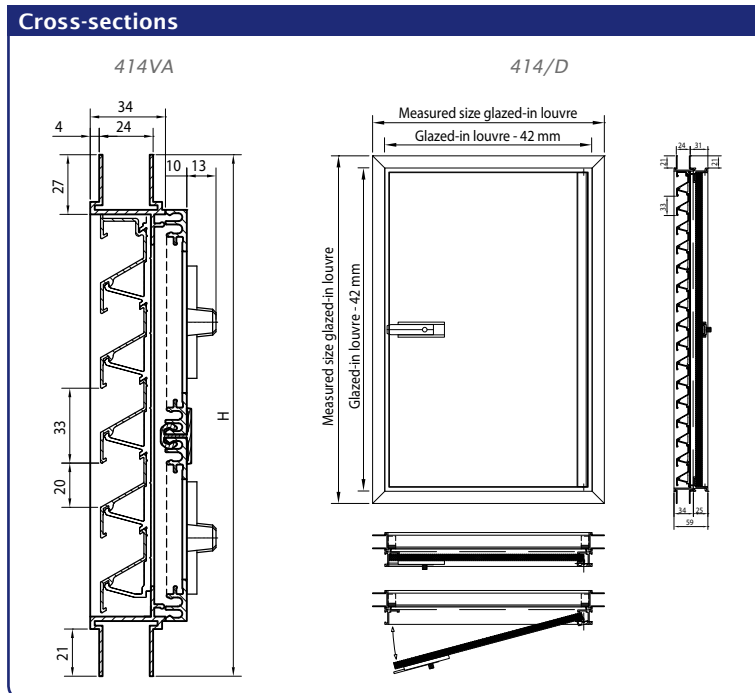
- Knob control (standard)
- Rod
- Cord
- Motor



414VA



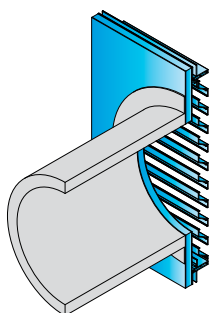
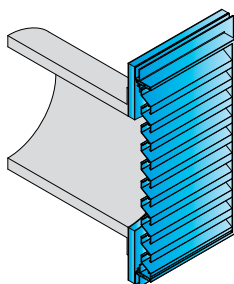
414/D



Technical specifications	414VA
Airflow	(EN 13030)
K-factor (supply)	28,13
C _e coefficient	0,189
<i>(For combination with 130 and 150 mm vents)</i>	



414THF < Glazed-in louvres



Thermally insulated window grille

Material

- Made from aluminium sections: AlMgSi 0.5 (according to EN 12020-2)
- Finishing: anodized in satin/bronze colour (20 micron) or powder-coated in any RAL or Syntha Pulvin colour (40 micron)
- Thermal insulation panel with PUR foam composite
- Sandwichpanel can also be powdercoated on both sides

Dimensions

- Blade pitch: 33,3 mm
- Minimum size: 130 x 130mm
- Flange width: 24, 28 and 32

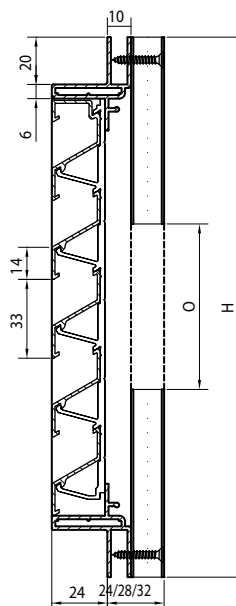
Fixing

- Suitable for 24, 28, 32 mm glazing sections. Other thicknesses on request.

Typical applications

- Curtain walls
- Thermally insulated air duct

Cross-section



Technical specifications

(for cut-out part of thermal insulation)

414THF

Airflow	(EN 13030)
K-factor (supply)	23,56
K-factor (discharge)	25,51
C _e coefficient	0,206
C _d coefficient	0,198

Technical data

Visual free area	59 %
U-value	1,1 W/m ² K

Glazed-in louvre with chevron section blades, pitch 20

Material

- Made from aluminium sections: AlMgSi 0.5 (according to EN 12020-2)
- Stainless steel 304 mesh (6 x 6 mm) or insect screen (2.3 x 2.3 mm) on request
- Finishing: anodized in satin/bronze colour (20 micron) or powder-coated in any RAL or Syntha Pulvin colour (40 micron)

Dimensions

- Blade pitch: 20 mm
- Frame thickness: 24, 28 or 32 mm
- Minimum dimensions: 130 x 130 mm
- Specify on ordering: width x height in mm (Overall dimensions)

Fixing

- Suitable for 24, 28, 32 mm glazing sections. Other thicknesses on request.

Opties

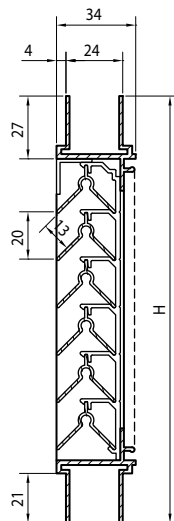
- Water channel
- Drainage profile
- Removable mesh
- filter

Typical applications

- Window Louvre with no look-through and stick-proof



Cross-section



Technical specifications	415
Airflow	(EN 13030)
K-factor (supply)	33,80
K-factor (discharge)	33,80
C _e coefficient	0,172
C _d coefficient	0,172
Technical data	
Visual free area	93 %
Physical free area	39 %
IP class	IP2XD



415VA < Glazed-in louvres



Controllable louvre with chevron section blade

Material

- Made from aluminium sections: AlMgSi 0.5 (according to EN 12020-2)
- Stainless steel 304 mesh (6 x 6 mm) or insect screen (2.3 x 2.3 mm) on request
- Finishing: anodized in satin/bronze colour (20 micron) or powder-coated in any RAL or Syntha Pulvin colour (40 micron)

Dimensions

- Blade pitch: 20 mm
- Frame thickness: 24, 28 or 32 mm
- Specify on ordering: width x height in mm (overall dimensions)
- Controllable in combination with 100, 130 and 150 mm hit-and-miss ventilators or with insulated aluminium door (415/D)
- Minimum dimensions: 200 x 130 mm (max. 400 x 400 mm)

Fixing

- Suitable for 24, 28, 32 mm glazing sections. Other thicknesses on request.

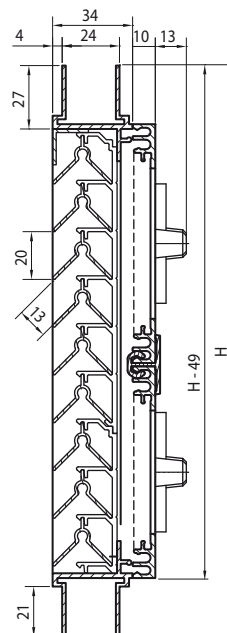
Control options (1 control panel per module)

- Standard: knob control
- Rod
- Cord
- Motor

Typical applications

- Classrooms

Cross-section



Technical specifications	415VA
Airflow	(EN 13030)
K-factor (supply)	34,24
C _e coefficient	0,171
<i>(For combination with 100, 130 and 150 vents)</i>	
Technical data	
IP class	IP2XD

Glazed-in louvre, heavy-duty series, pitch 50

Material

- Made from aluminium sections: AlMgSi 0.5 (according to EN 12020-2)
- Stainless steel 304 insect screen (2.3 x 2.3 mm) or mesh (6 x 6 mm) on request
- Finishing: anodized in satin/bronze colour (20 micron) or powder-coated in any RAL or Syntha Pulvin colour (40 micron)

Dimensions

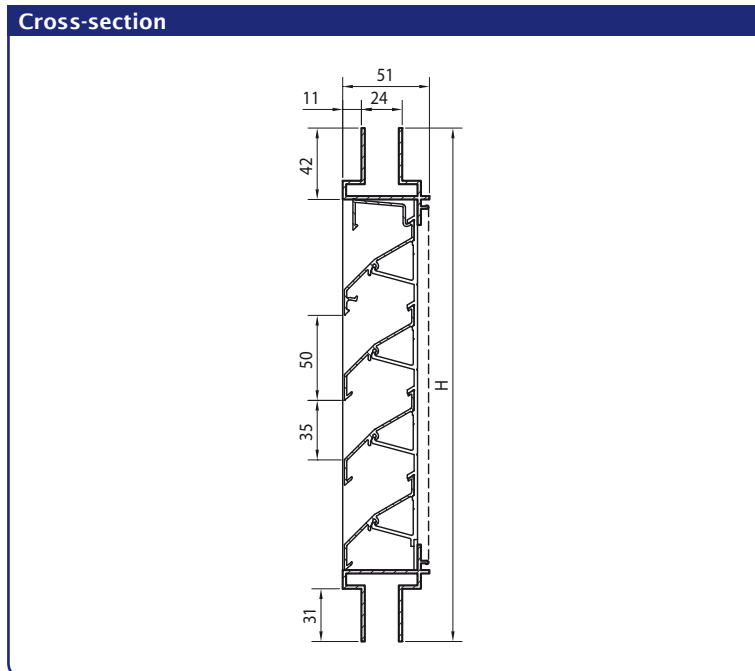
- Blade pitch: 50 mm
- Frame thickness: 24 or 28 mm
- Specify on ordering: full width x height in mm
- Minimum dimensions: 220 x 220 mm

Fixing

- Suitable for 24, 28, 32 mm glazing sections. Other thicknesses on request.

Options

- Water channel
- Drainage profile
- Removable mesh
- Filter



Technical specifications	424
Airflow	(EN 13030)
K-factor (supply)	13,42
K-factor (discharge)	9,35
C _e coefficient	0,273
C _d coefficient	0,327
Technical data	
Visual free area	70 %
Physical free area	49 %
IP class (louvre with mesh; electrical installation at least 105mm from louvre)	IP2XD



428 < Glazed-in louvres



Glazed-in louvre with chevron section blades, heavy-duty series, pitch 33

Material

- Made from aluminium sections: AlMgSi 0.5 (according to EN 12020-2)
- Standard stainless steel 304 insect screen (2.3 x 2.3 mm) or mesh (6 x 6 mm) on request
- Finishing: anodized in satin/bronze colour (20 micron) or powder-coated in any RAL or Syntha Pulvin colour (40 micron)

Dimensions

- Blade pitch: 33,3 mm
- Frame thickness: 24 or 28 mm
- Specify on ordering: full width x height in mm
- Minimum dimensions: 220 x 220 mm

Fixing

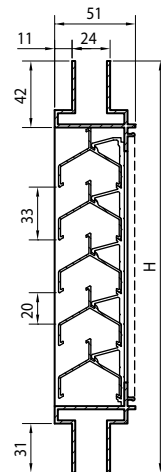
- Suitable for 24, 28, 32 mm glazing sections. Other thicknesses on request.

Options

- Water channel
- Drainage profile
- Removable mesh
- Filter
- Controllable louvre 428/VA



Cross-section



Technical specifications	428
Airflow	(EN 13030)
K-factor (supply)	66,10
K-factor (discharge)	66,10
C _e coefficient	0,123
C _d coefficient	0,123
Technical data	
Visual free area	59 %
Physical free area	43 %
IP class	IP2XD

High-airflow glazed-in louvre, pitch 60

Material

- Made from aluminium sections: AlMgSi 0.5 (according to EN 12020-2)
- Standard stainless steel 304 mesh (6 x 6 mm) or insect screen (2.3 x 2.3 mm) on request
- Finishing: anodized in satin/bronze colour (20 micron) or powder-coated in any RAL or Syntha Pulvin colour (40 micron)

Dimensions

- Blade pitch: 60 mm
- Frame thickness: 24 mm (frame thickness of 8 to 50 mm on request)
- Specify on ordering: full width x height in mm
- Minimum dimensions: 385 x 385 mm

Fixing

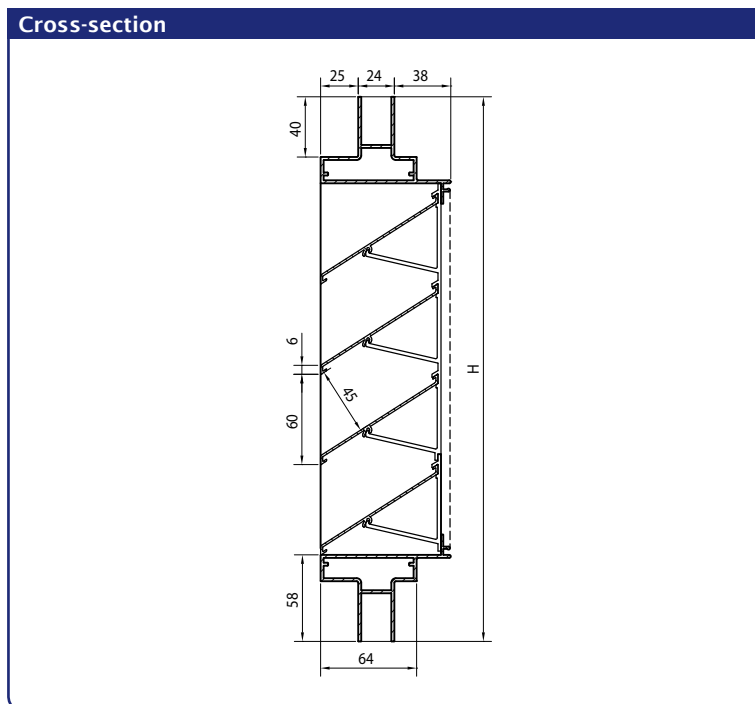
- Suitable for 24, 28, 32 mm glazing sections. Other thicknesses on request.

Options

- Water channel
- Drainage profile
- Removable mesh
- Filter

Typical applications

- Applications with request for high air-flow



Technical specifications	483
Airflow	(EN 13030)
K-factor (supply)	5,03
K-factor (discharge)	4,96
C _e coefficient	0,446
C _d coefficient	0,449
Technical data	
Visual free area	90 %
Physical free area	76 %

484 < Glazed-in louvres



Glazed-in louvre, heavy-duty series, pitch 50

Material

- Made from aluminium sections: AlMgSi 0.5 (according to EN 12020-2)
- Stainless steel 304 insect screen (2.3 x 2.3 mm) or mesh (6 x 6 mm) on request
- Finishing: anodized in satin/bronze colour (20 micron) or powder-coated in any RAL or Syntha Pulvin colour (40 micron)

Dimensions

- Blade pitch: 50 mm
- Frame thickness: 24 or 28 mm
- Specify on ordering: full width x height in mm
- Minimum dimensions: 220 x 220 mm

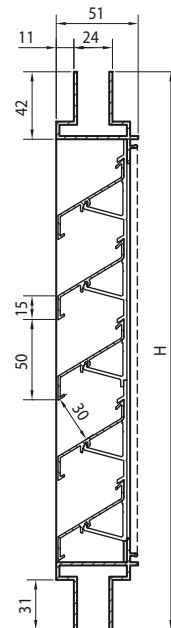
Fixing

- Suitable for 24, 28, 32 mm glazing sections. Other thicknesses on request.

Options

- Water channel
- Removable mesh
- Filter
- Controllable type 484/VA - same build as type 414/VA

Cross-section



Technical specifications	484
Airflow	(EN 13030)
K-factor (supply)	9,41
K-factor (discharge)	9,47
C _e coefficient	0,326
C _d coefficient	0,325
Technical data	
Visual free area	70 %
Physical free area	60 %
IP class (louvre with mesh; electrical installation at least 100mm from louvre)	IP2XD

Glazed-in "storm" louvre, pitch 33

Material

- Made from aluminium sections: AlMgSi 0.5 (according to EN 12020-2)
- Stainless steel 304 mesh (6 x 6 mm) or insect screen (2.3 x 2.3 mm) on request
- Finishing: anodized in satin/bronze colour (20 micron) or powder-coated in any RAL or Syntha Pulvin colour (40 micron)

Dimensions

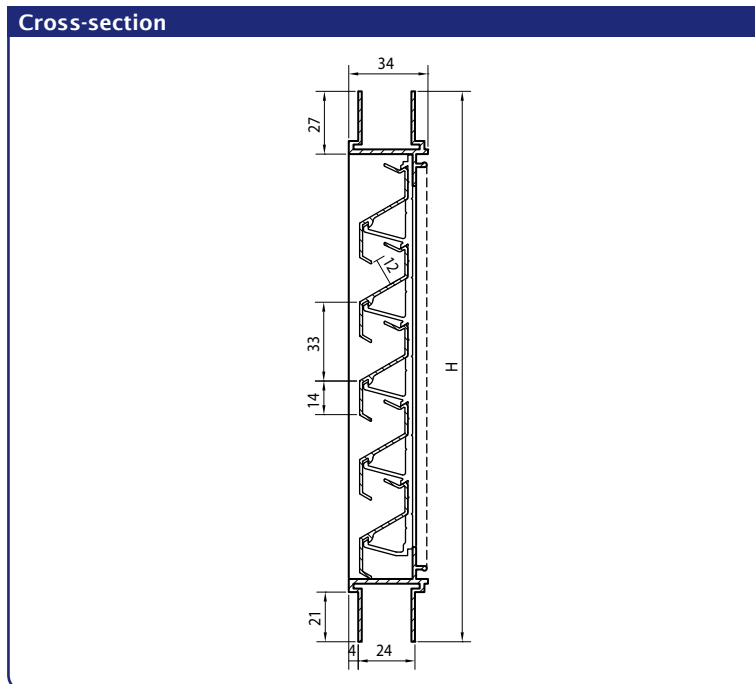
- Blade pitch: 33,3 mm
- Frame thickness: 24, 28 or 32 mm
- Specify on ordering: full width x height in mm
- Minimum dimensions: 130 x 130 mm

Fixing

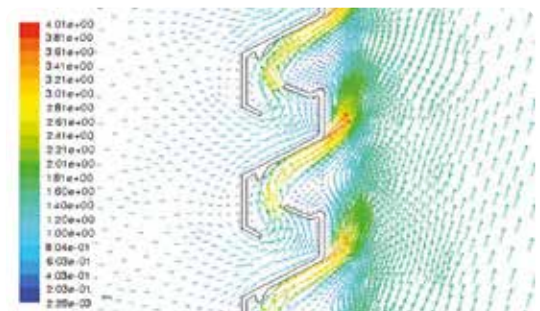
- Suitable for 24, 28, 32 mm glazing sections. Other thicknesses on request.

Options

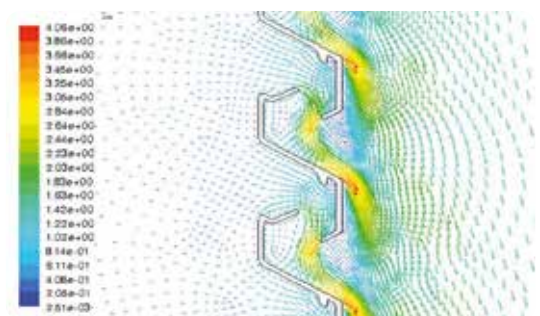
- Water channel
- Drainage profile
- Removable mesh
- Filter
- Welded blades on frame (only RAL finish)



AIRFLOW



Supply



Discharge

Technical specifications	494
Airflow	(EN 13030)
K-factor (supply)	123,5
K-factor (discharge)	118,1
C _e coefficient	0,090
C _d coefficient	0,092
Technical data	
Visual free area	57 %
Physical free area	26 %
IP class (louvre with mesh)	IP2XD

425GL < Glazed-in louvres



Glazed-in louvre, extra-heavy-duty series

Material

- Made from aluminium sections: AlMgSi 0.5 (according to EN 12020-2)
- Stainless steel 304 mesh (6 x 6 mm) or insect screen (2.3 x 2.3 mm) on request
- Finishing: anodized in satin/bronze colour (20 micron) or powder-coated in any RAL or Syntha Pulvin colour (40 micron)

Dimensions

- Blade pitch: 95 mm
- Depth to fit: 81.5 mm
- Frame thickness: 24 mm (frame thickness of 8 to 50 mm on request)
- Specify on ordering: full width x height in mm
- Minimum dimensions: 385 x 385 mm

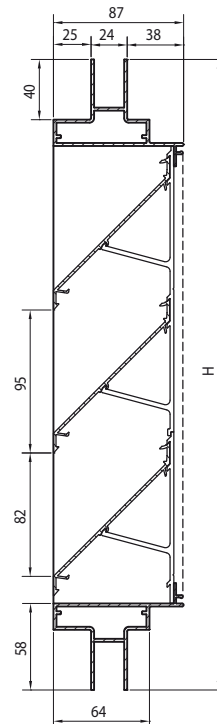
Fixing

- Suitable for 24, 28, 32 mm glazing sections. Other thicknesses on request.

Options

- Water channel
- Drainage profile
- Removable mesh
- Filter

Cross-section



Technical specifications	425GL
Airflow	(EN 13030)
K-factor (supply)	11,41
K-factor (discharge)	11,65
C _e coefficient	0,296
C _d coefficient	0,293
Technical data	
Visual free area	86 %
Physical free area	55 %

Glazed-in louvre with adjustable blades, extra-heavy-duty series

Material

- Made from aluminium sections: AlMgSi 0.5 (according to EN 12020-2)
- Stainless steel 304 mesh (6 x 6 mm) or insect screen (2.3 x 2.3 mm) on request
- Finishing: anodized in satin/bronze colour (20 micron) or powder-coated in any RAL or Syntha Pulvin colour (40 micron)

Dimensions

- Blade pitch: 100 mm
- Maximum width in one piece: 1300 mm
- Frame thickness: 24 mm (frame thickness of 8 to 50 mm on request)
- Specify on ordering: full width x height in mm
- Minimum dimensions: 377 x 377 mm
- Preferred height = (multiple of x 100) + 377 mm
Remarque: the minimum height is dependant of the control option.

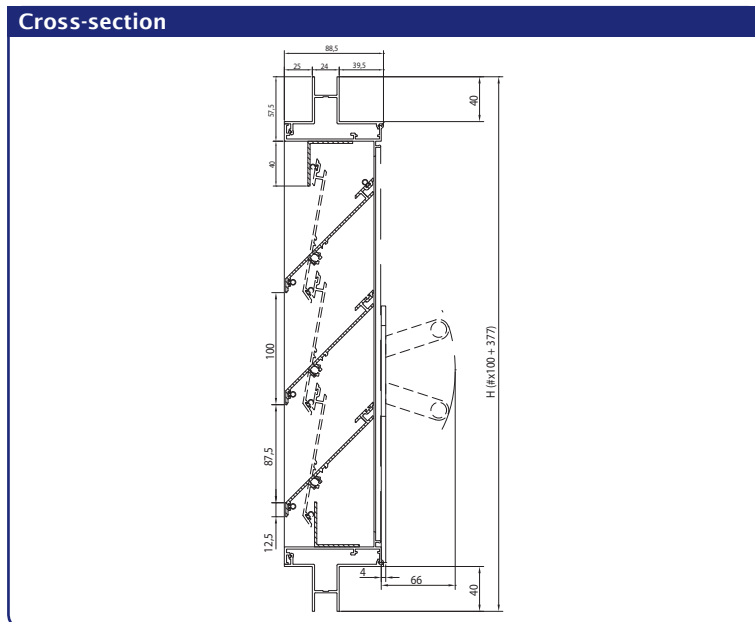
Fixing

- Suitable for 24, 28, 32 mm glazing sections. Other thicknesses on request.

Control options

- 427/1 Manuel: minimum height 377 mm
- 427/2 Cable: minimum height 477 mm
- 427/3 Ultraflex : hauteur minimum 777 mm
- 427/4 Motor (220V - 24V) / spring-return actuator (24V): minimum height 477 mm
- 427/5 Air pressure: minimum height 477 mm

For more information on the different control modes, please refer to page 18.



Technical specifications	427GL
Airflow	(EN 13030)
K-factor (supply)	11,41
K-factor (discharge)	11,65
C _e coefficient	0,296
C _d coefficient	0,293
Technical data	
Visual free area	88 %
Physical free area	53 %



Acoustic wall louvre

Material

- Made from aluminium sections: AlMgSi 0.5 (according to EN 12020-2)
- Stainless steel 304 mesh (6 x 6 mm) or insect screen (2.3 x 2.3 mm) on request
- Finishing: anodized in satin/bronze colour (20 micron) or powder-coated in any RAL or Syntha Pulvin colour (40 micron)
- 100% stainless

Dimensions

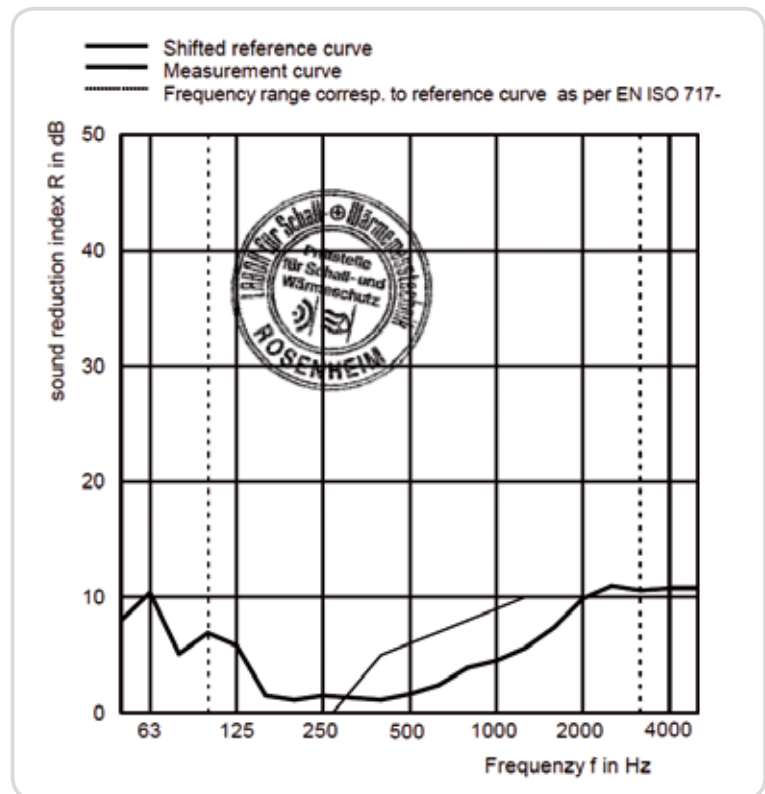
- Blade pitch: 60 mm
- Dimensions: depth to fit: 81.5mm
- Frame thickness: 50mm
- Height in steps of 60 mm (space between blades)
- Minimum dimensions: 200 x 200 mm

Fixing

- Brackets ref. 429

Options

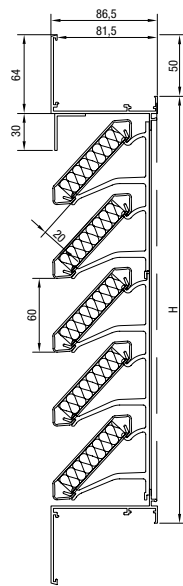
- Water channel
- Drainage profile
- Removable mesh



The acoustic properties of the RENSON®-blades have been tested by the internationally recognized laboratory, IFT Lab Rosenheim (Germany)



Cross-section



Technical specifications	445/86
Airflow	(EN 13030)
K-factor (supply)	9,22
K-factor (discharge)	13,29
C _e coefficient	0,329
C _d coefficient	0,274
Comfort	(EN ISO 140-10, EN ISO 717-1)
Sound reduction R _w (C;C _v)	6 (-1;-2) dB
Technical data	
Visual free area	77 %
Physical free area	34 %
Depth to fit	86 mm

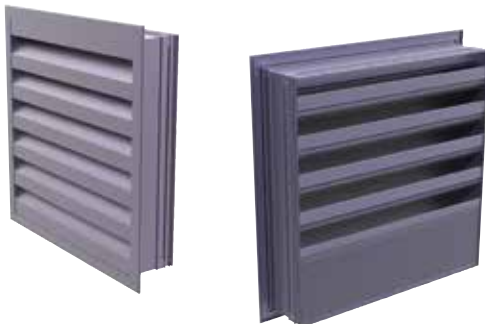
Sound reduction in dB per frequency	445/86
f in Hz	R in dB
63	10,4
125	5,8
250	1,5
500	1,6
1000	4,5
2000	9,9
4000	10,8

446/150, 446/225, 446/300 < Acoustic louvres

Acoustic wall louvre, blade pitch 150 mm



446/150



446/225



446/300

Material

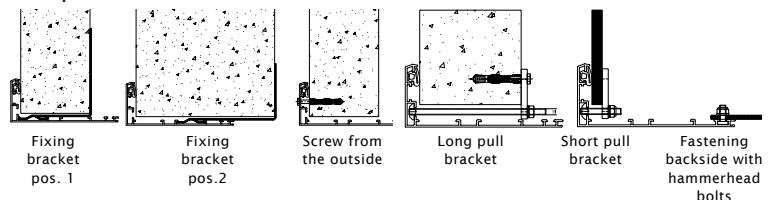
- Aluminum profiles AlMgSi 0,5 (according to EN 12020-2)
- Acoustic insulation material: non-flammable mineral wool
- Stainless steel mesh 304 6x6mm
- Finishing: anodized in satin/bronze colour (20 micron) or powder-coated in any RAL or Syntha Pulvin colour (40 micron)
- 100% stainless

Dimensions

- Blade pitch: 150 mm
- Depth to fit: 446/150: 143 mm
446/225: 218 mm
446/300: 293 mm
- Frame thickness: 55mm
- Height in steps of 150 mm (space between blades)
- Minimum dimensions: 446/150: 300 W x 410 H
446/225: 300 W x 410 H
446/300: 311 W x 421 H

Fixing

- Fixing bracket: installation with bracket no. 1428 possible
 - position 1: up to 100 mm wall thickness
 - position 2: for wall thickness up to 200 mm
- Screws: Fix the screws from the outside through the flange (screw holes upon request)
- Pull bracket: fixation with a long pull bracket and expander bolts for wall mounting or a short pull bracket for connection to a ventilation channel (pull bracket rod optional)
- Fixation on the backside: by screwing a hammerhead bolt to a structural backframe
- For louvres 446/300 larger than 3m², a backframe structure is required

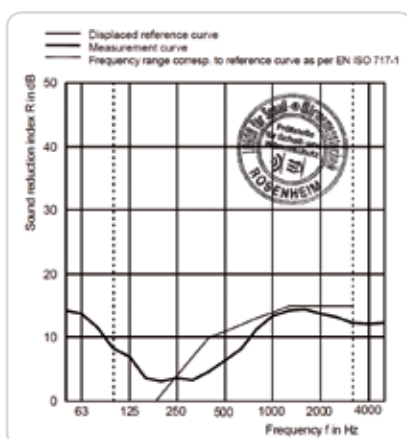


Sealing possibilities

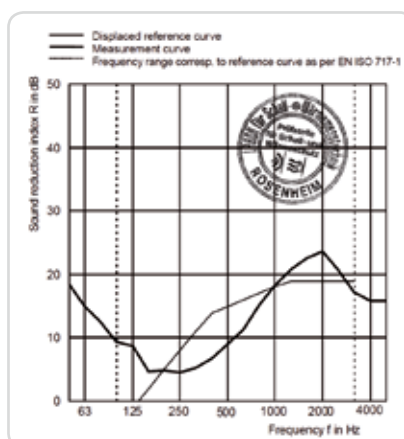
- Sealing gasket: suitable for reduction of contact sounds (option sealing gasket)
- PU sealing tape: against water infiltration (option PU sealing tape)
- Silicone seal: seal the flange on the outside with silicone (option silicone)

Options

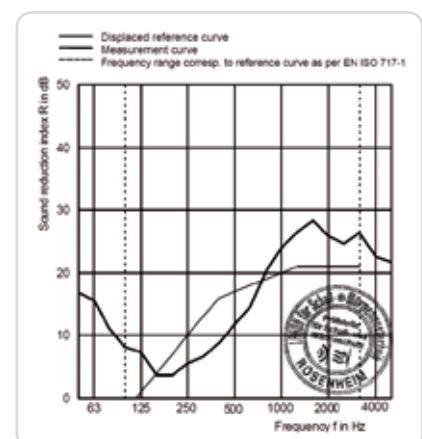
- Drainage profile



446/150



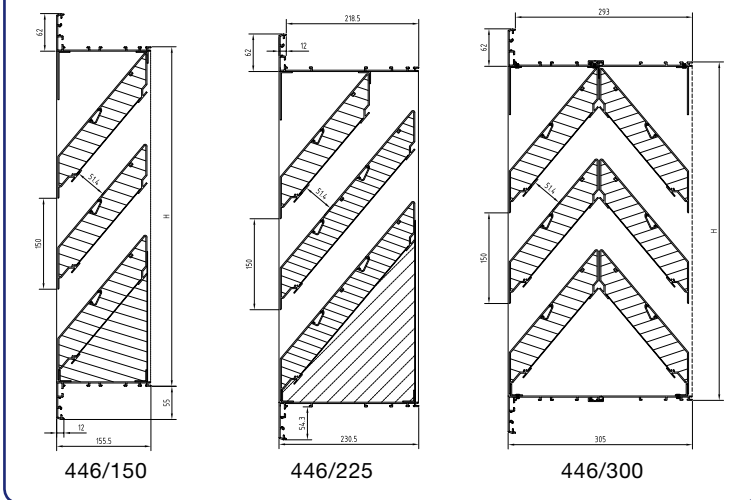
446/225



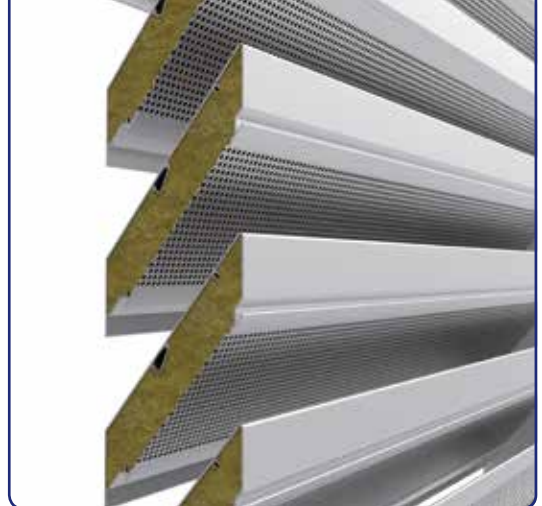
446/300

Acoustic louvres > 446/150, 446/225, 446/300

Cross-sections



Cross-section



Technical specifications	446/150	446/225	446/300
Airflow		(EN 13030)	
K-factor (supply)	38,46	37,30	45,93
K-factor (discharge)	34,48	41,90	45,93
C _e coefficient	0,161	0,164	0,148
C _d coefficient	0,169	0,150	0,148
Comfort	(EN ISO 140-10, EN ISO 717-1)		
Sound reduction R _w (C;C _{tr})	11 (-1;-2) dB	15 (-1;-4) dB	17 (-1;-4) dB
Technical data			
Visual free area	54 %	54 %	54 %
Physical free area	34 %	34 %	34 %
Watertightness	A (1 m/s)	A (1 m/s)	A (1 m/s)
Depth to fit	150 mm	225 mm	300 mm

Sound reduction in dB per frequency	446/150	446/225	446/300
f in Hz	R in dB	R in dB	R in dB
63	13,8	15,0	15,7
125	6,9	8,7	7,3
250	3,6	4,5	5,5
500	6,4	9,1	11,8
1000	13,4	18,2	24,0
2000	13,8	23,7	25,9
4000	12,1	15,8	22,6

The acoustic properties of the RENSON®-blades have been tested by the internationally recognized laboratory, IFT Lab Rosenheim (Germany)



Water resistance tested by BSRIA laboratories.



447/150, 447/225 < Acoustic louvres



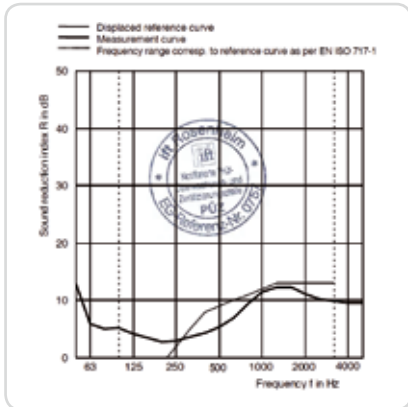
Acoustic wall louvre, blade pitch 170 mm

Material

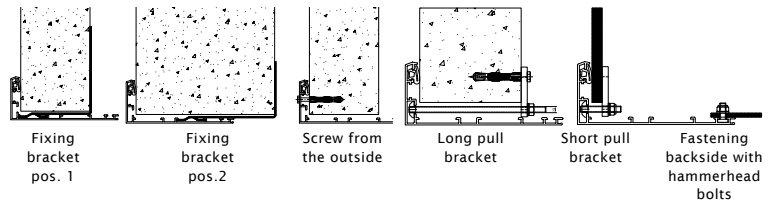
- Aluminum profiles AlMgSi 0,5 (according to EN 12020-2)
- Acoustic insulation material: non-flammable mineral wool
- Stainless steel mesh 304 6x6mm
- Finishing: anodized in satin/bronze colour (20 micron) or powder-coated in any RAL or Syntha Pulvin colour (40 micron)
- 100 % stainless

Dimensions

- Blade pitch: 170 mm
- Depth to fit: 447/150: 143 mm
447/225: 218 mm
- Frame thickness: 55mm
- Height in steps of 150 mm (space between blades)
- Minimum dimensions: 447/150: 300 W x 430 H
447/225: 300 W x 430 H
- Fixing bracket: installation with bracket no. 1428 possible
 - position 1: up to 100 mm wall thickness
 - position 2: for wall thickness up to 200 mm
- Screws: Fix the screws from the outside through the flange (screw holes upon request)
- Pull bracket: fixation with a long pull bracket and expander bolts for wall mounting or a short pull bracket for connection to a ventilation channel (pull bracket rod optional)
- Fixation on the backside: by screwing a hammerhead bolt to a structural backframe.



447/150

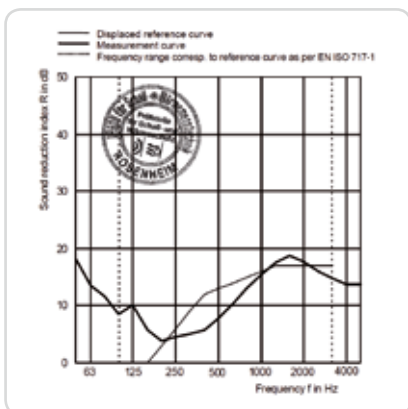


Sealing possibilities

- Sealing gasket: suitable for reduction of contact sounds (option sealing gasket)
- PU sealing tape: against water infiltration (option PU sealing tape)
- Silicone seal: seal the flange on the outside with silicone (option silicone)

Options

- Drainage profile



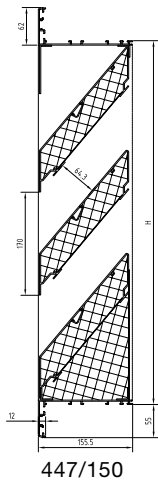
447/225



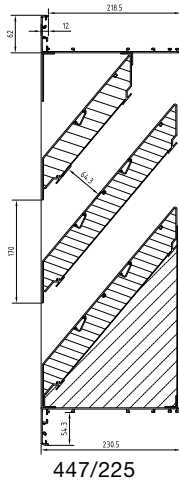
The acoustic properties of the RENSON®-blades have been tested by the internationally recognized laboratory, IFT Lab Rosenheim (Germany)



Cross-sections

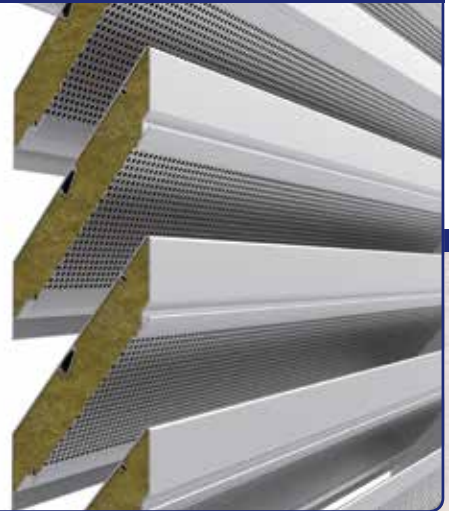


447/150



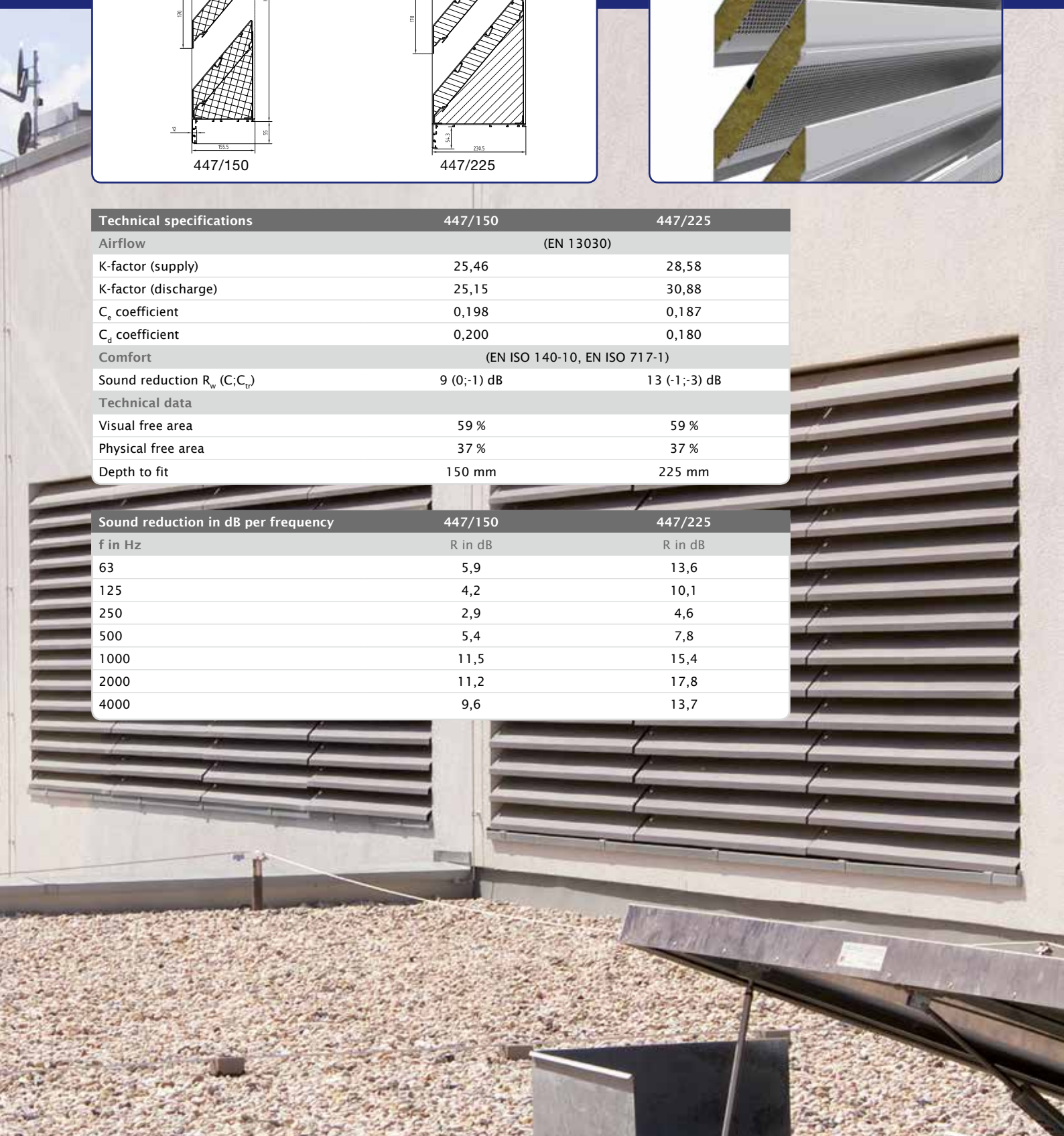
447/225

Cross-section



Technical specifications	447/150	447/225
Airflow	(EN 13030)	
K-factor (supply)	25,46	28,58
K-factor (discharge)	25,15	30,88
C _e coefficient	0,198	0,187
C _d coefficient	0,200	0,180
Comfort	(EN ISO 140-10, EN ISO 717-1)	
Sound reduction R _w (C;C _r)	9 (0;-1) dB	13 (-1;-3) dB
Technical data		
Visual free area	59 %	59 %
Physical free area	37 %	37 %
Depth to fit	150 mm	225 mm

Sound reduction in dB per frequency	447/150	447/225
f in Hz	R in dB	R in dB
63	5,9	13,6
125	4,2	10,1
250	2,9	4,6
500	5,4	7,8
1000	11,5	15,4
2000	11,2	17,8
4000	9,6	13,7



421RC2 < Burglarproof louvres



Burglarproof louvre class RC2

Material

- Made from aluminum profiles AlMgSi 0.5 (according to EN 12020-2)
- Stainless steel insect mesh 304 - 2.3 x 2.3 mm or stainless steel mesh 304 - 6 x 6 mm upon request
- Finishing: anodized in satin/bronze colour (20 micron) or powder-coated in any RAL or Syntha Pulvin colour (40 micron)

Dimensions

- Blade pitch: 50 mm
- Depth: 46 mm
- Flange size: 40 mm
- Minimum dimensions: 250 x 250 mm

Options

- Waterchannel
- Drainage profile
- Removable insectmesh
- Filtre

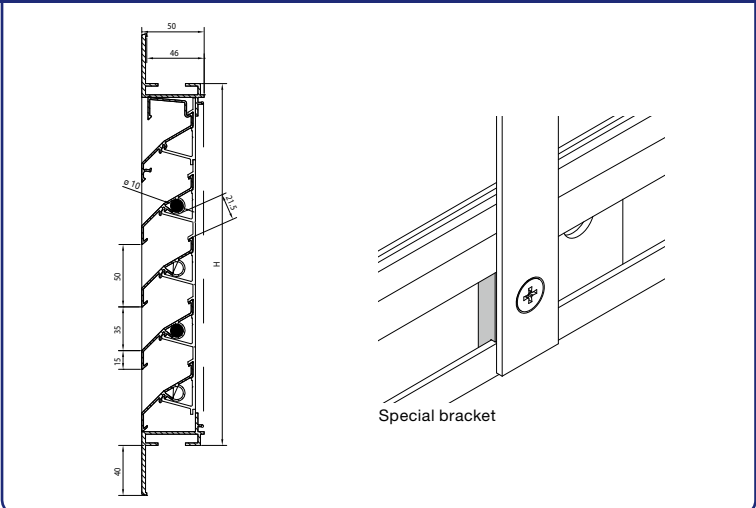
Features

- Aesthetical and functional high-quality louvre
- Burglarproof according to class RC2, certificate surface 0.44 <math>< 0 < 1.225 \text{ m}^2</math>, in accordance to EN 1627 up to 1630 and including (Sept. 2011)
- Easy to install using brackets
- 100% stainless:
 - Entirely assembled of aluminum profiles
 - All connecting pieces in aluminum and stainless steel

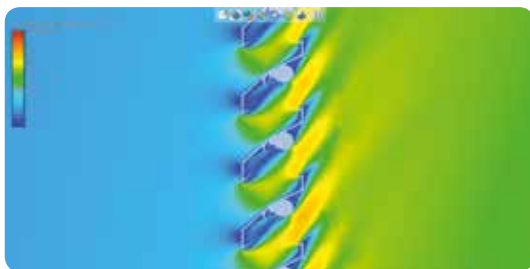
Typical applications

- Schools
- Shops
- Apartments

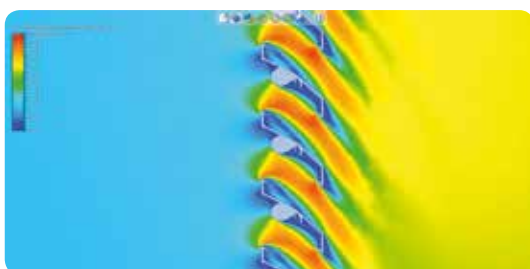
Cross-sections



AIRFLOW



Supply



Discharge

Technical specifications	421RC2
Airflow	(EN 13030)
K-factor (supply)	13,82
K-factor (discharge)	12,85
C _e coefficient	0,269
C _d coefficient	0,279
Technical data	
Visual free area	70 %
Physical free area	43 %
IP class (louvre with mesh; electrical installation at least 100mm from louvre)	IP2XD
Aesthetically identical to the standard louvre 421	

Burglarproof built-in louvre class RC2 (WK2)

Material

- Made from aluminium sections: AlMgSi 0,5 (according to EN 12020-2)
- Stainless steel 304 insect mesh (2,3 x 2,3 mm)
- Finishing: anodized in satin / bronze colour (20 micron) or powder coated in any RAL or Syntha Pulvin colour (40 micron)

Dimensions

- Blade pitch: 50 mm
- Minimum dimensions: 220 x 220 mm
- Flange size: 24 or 28 mm

Fixing

- Suitable for 24 or 28 mm glazing sections

Features

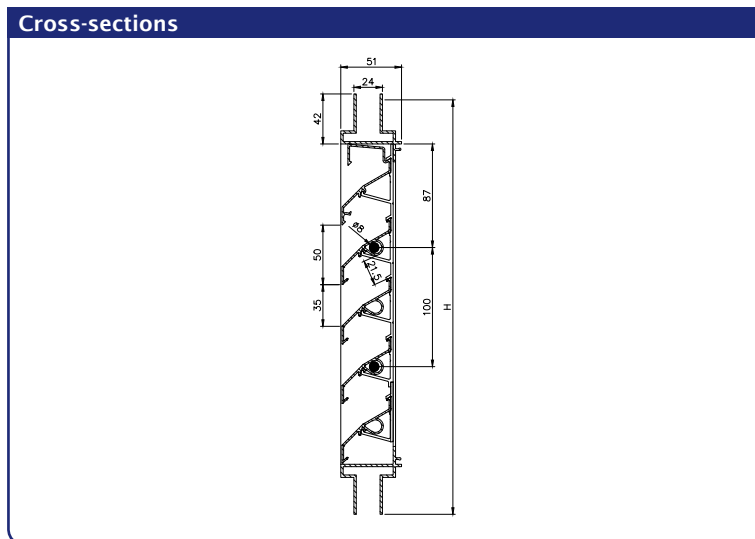
- Aesthetical and functional high-quality louvre
- Burglar proof according to class RC2 (WK2) according to EN 1627 - 1630 (sept.2011) for surfaces $0,481 < A < 4,68 \text{ m}^2$; official test report WTCB available upon request
- 100% stainless:
 - Entirely assembled of aluminium profiles
 - All connecting pieces in aluminium and stainless steel

Options

- Drainage profile
- Water channel
- Removable insect mesh
- Filter

Typical applications

- Schools
- Shops
- Nightcooling



Technical specifications	424RC2
Airflow	(EN 13030)
K-factor (supply)	13,82
K-factor (discharge)	12,85
C _e coefficient	0,269
C _d coefficient	0,279
Technical data	
Visual free area	70%
Physical free area	43%
IP class (louvre with mesh; electrical installation at least 105 mm from louvre)	IP2XD

431RC2 < Burglarproof louvres



Burglarproof louvre class RC2

Material

- Made from aluminum profiles AlMgSi 0.5 (according to EN 12020-2)
- Stainless steel insect mesh 304 - 2.3 x 2.3 mm or stainless steel mesh 304 6 x 6 mm upon request
- Finishing: anodized in satin/bronze colour (20 micron) or powder-coated in any RAL or Syntha Pulvin colour (40 micron)

Dimensions

- Blade pitch: 33,3 mm
- Thickness: 31 mm
- Minimum dimensions: 170 x 170 mm

Fixing

- Surface mounted by means of burglarproof screws type Secu-Fast® Pin Hexagon diam. 4,2 x 38 mm A2 (included)
- Distance between screwholes:
 - Horizontal side = maximum 240 mm (Y, Z)
 - Vertical side = maximum 266 mm (X = variable distance to the lowest screwhole on the vertical side)



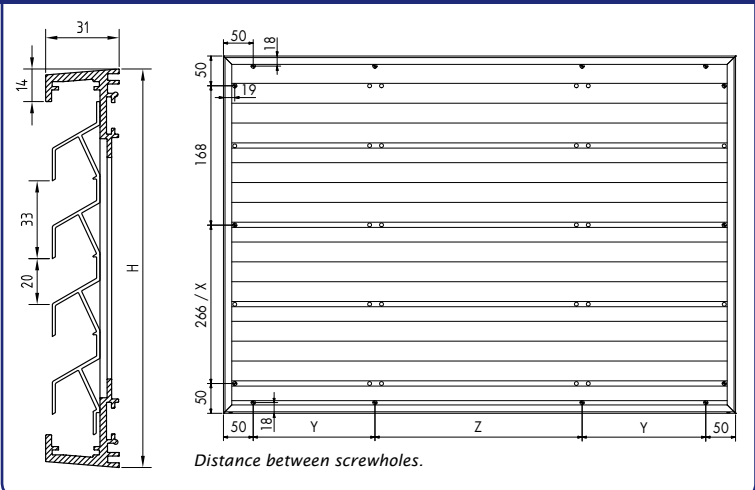
Features

- Aesthetical and functional high-quality louvre
- Burglarproof according to class RC2, certificate surface $0.27 < \sigma < 2.075 \text{ m}^2$, in accordance with EN 1627 up to 1630 and including (Sept. 2011)
- 100% stainless:
 - Entirely assembled of aluminum profiles
 - All connecting pieces in aluminum and stainless steel

Typical applications

- Schools
- Shops
- Nightcooling

Cross-section



Technical specifications	431RC2
Airflow	(EN 13030)
K-factor (supply)	23,56
K-factor (discharge)	25,51
C _e coefficient	0,206
C _d coefficient	0,198
Technical data	
Visual free area	59 %
Physical free area	40,5 %
Aesthetically identical to the standard louvre 431	

Burglarproof louvre class RC4

Material

- Made from aluminum profiles AlMgSi 0.5 (according to EN 12020-2)
- Stainless steel insect mesh 304 - 2.3 x 2.3 mm or stainless steel mesh 304 6 x 6 mm upon request
- Finishing: anodized in satin/bronze colour (20 micron) or powder-coated in any RAL or Syntha Pulvin colour (40 micron)
- Every second blade has an inox steel bar of diam. 20 mm

Dimensions

- Blade pitch: 50 mm
- Depth: 50 mm
- Frame without flange
- Minimum dimensions: 250 x 250 mm
- Maximum width: 2800 mm

Fixing

- The steel bars of the louvre need to be built into the wall.
- Frame without flange

Options

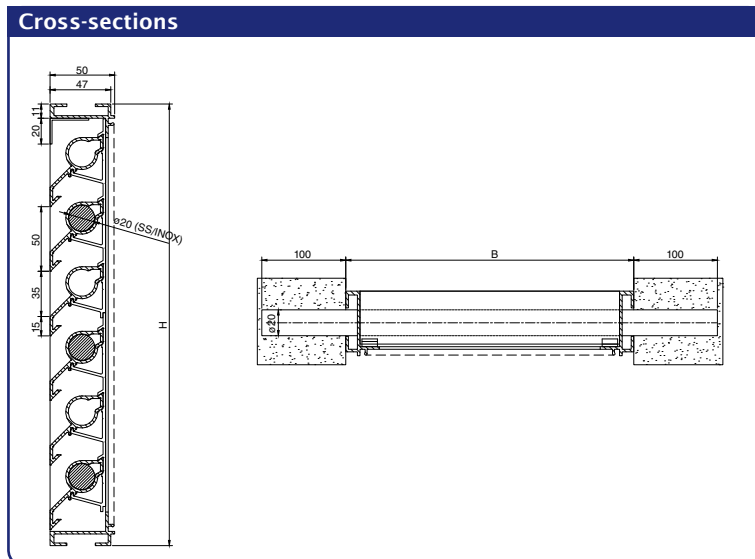
- Water channel
- Drainage profile
- Filter

Features

- Aesthetical and functional high-quality louvre
- Burglarproof class RC4, in accordance with EN 1627 up to 1630 and including (Sept. 2011)
- Official test report No. DE78A982

Typical applications

- Banks, IT rooms, museums and jewellers.



Technical specifications	423RC4
Airflow	(EN 13030)
K-factor (supply)	27,06
K-factor (discharge)	27,28
C _e coefficient	0,193
C _d coefficient	0,192
Technical data	
Visual free area	70 %
Physical free area	22 %
IP class	IP2XD



Turret

Material

- Made from aluminium sections: AlMgSi 0.5 (according to EN 12020-2)
- Finishing: anodized in satin/bronze colour (20 micron) or powder-coated in any RAL or Syntha Pulvin colour (40 micron)
- Cover plate
 - In aluminium sheet
 - Acoustic version optional

Dimensions

- Maximum dimensions in one piece till 900 mm width, 1900 mm long and 1000 mm height
- Larger sizes possible on request

Types

All blade types possible, for example:

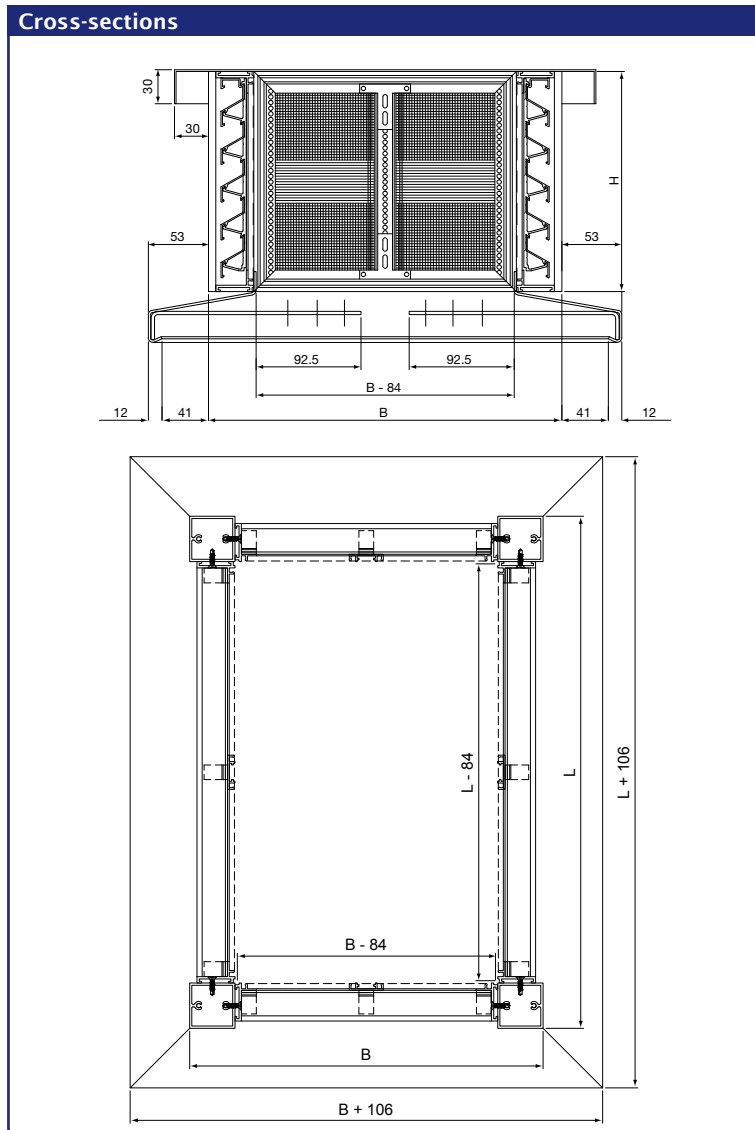
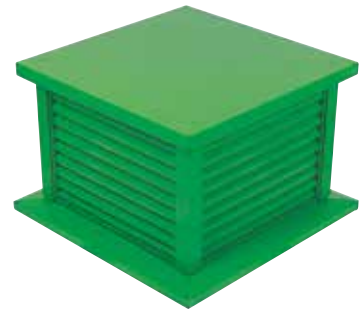
- 440/11: with blade n° 8 of louvre 411 (blade pitch 33 mm)
- 440/21: with blade n° 17 of louvre 421 (blade pitch 50 mm)

Options

- Waterchannel

Typical applications

- Office ventilation (Nightcooling)
- Manufacturing plants



442 < Controllable cavity wall louvres



Cavity wall ventilator

Material

- Made from aluminium sections: AlMgSi 0.5 (according to EN 12020-2)
- Stainless steel 304 insect screen (2.3 x 2.3 mm)
- Finishing: anodized in satin/bronze colour (20 micron) or powder-coated in any RAL or Syntha Pulvin colour (40 micron)
- Connecting sleeve made from galvanised steel

Dimensions

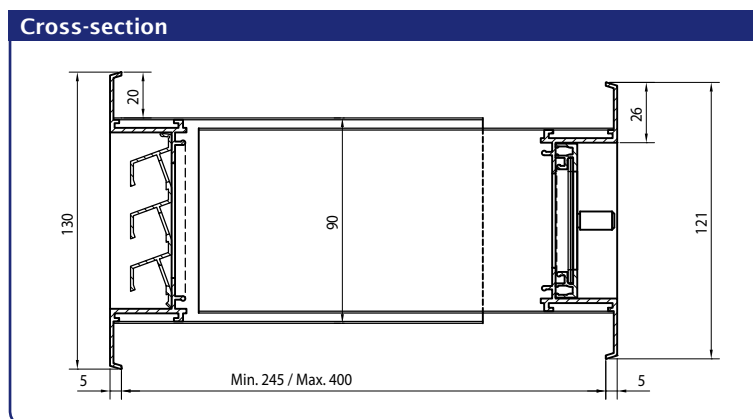
- Size to fit: 265 x 90 mm (L x H)
- Flange size: 21 mm
- Controllable internal louver
- Adjustable sleeve for wall thickness of 245 till 400 mm

Options

- Optional sound absorbing material

Fixing

- Spring clips are included



Stock models					
Dimensions (W x H) mm	Satin anodised	Renson standard WHITE	Airway opening (cm ²)	Airflow at 2 Pa (m ³ /h)	Airflow at 20 Pa (m ³ /h)
265 x 90	•	•	38	15	49,4

Register with frame

Material

- Made from aluminium sections: AlMgSi 0.5 (according to EN 12020-2)
- Stainless steel 304 insect screen (2.3 x 2.3 mm)
- Finishing: anodized in satin/bronze colour (20 micron) or powder-coated in any RAL or Syntha Pulvin colour (40 micron)

Dimensions

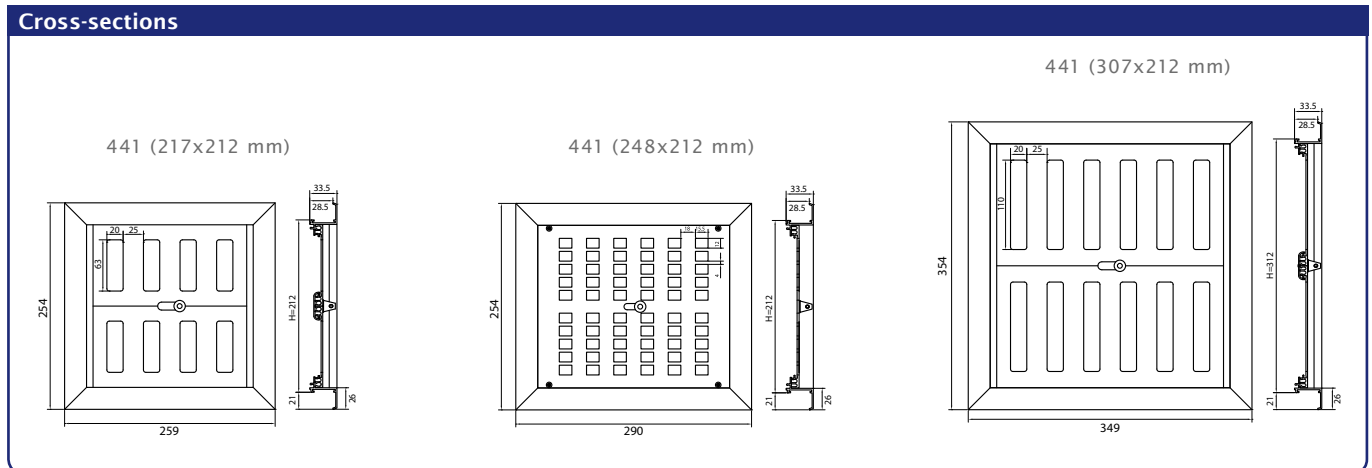
- Depth to fit: 28.5 mm
- Flange size: 21 mm
- Rotating knob for louvre lengths of 500 mm and above (possibility of pull-cord or rod operation)

Fixing

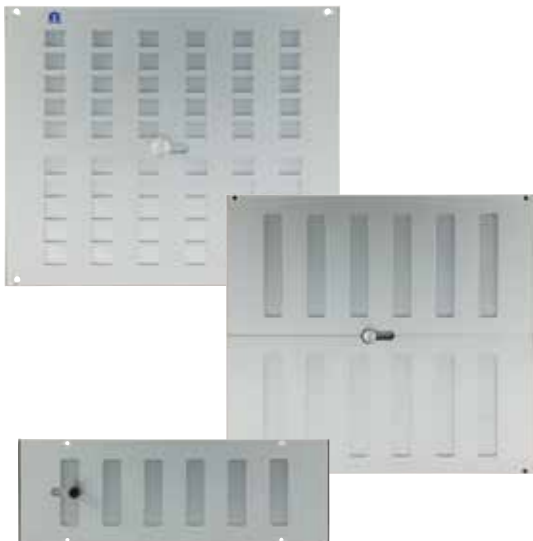
- Spring clips available on request



Stock models				
Dimensions (W x H) mm	Satin anodised	Renson standard WHITE	Airway opening (cm ²)	Airflow at 2 Pa (m ³ /h)
217 x 212	•	•	113	45
248 x 212	•	•	140	63,1
307 x 212	•	•	260	114,7



4032 < Controllable cavity wall louvres



Register to fix

Material

- Made from aluminium sections: AlMgSi 0.5 (according to EN 12020-2)
- Stainless steel 304 insect screen (2.3 x 2.3 mm)
- Finishing: anodized in satin/bronze colour (20 micron) or powder-coated in any RAL or Syntha Pulvin colour (40 micron)

Dimensions

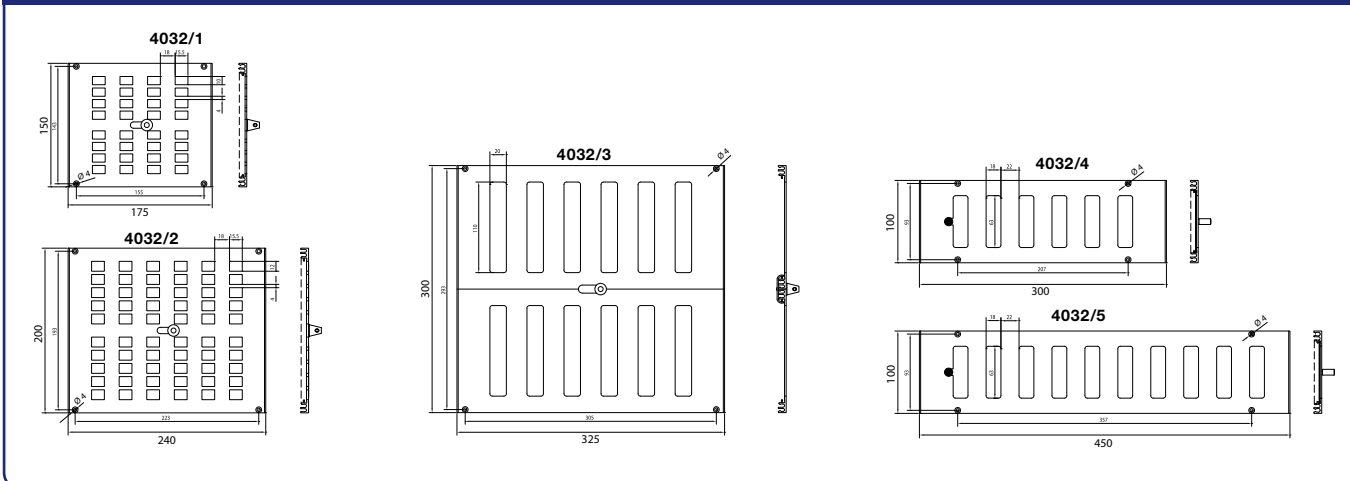
- Slide knob control
- Rotating knob for louvre lengths of 500 mm and above (possibility of pull-cord operation)
- Special heights on request
- The louvre height must fit within 100, 130 or 150 mm modules

Fixing

- Screws and plugs are included

Stock models				
Dimensions (W x H) mm	Satin anodised	Renson standard WHITE	Airway opening (cm ²)	Airflow at 2 Pa (m ³ /h)
4032/1: 175 x 150	•	•	49	22,1
4032/2: 240 x 200	•	•	113	51,0
4032/3: 325 x 300	•	•	260	114,7
4032/4: 300 x 100	•	•	68	30,0
4032/5: 450 x 100	•	•	113	49,9

Cross-sections



Stylish extraction louvre

Material

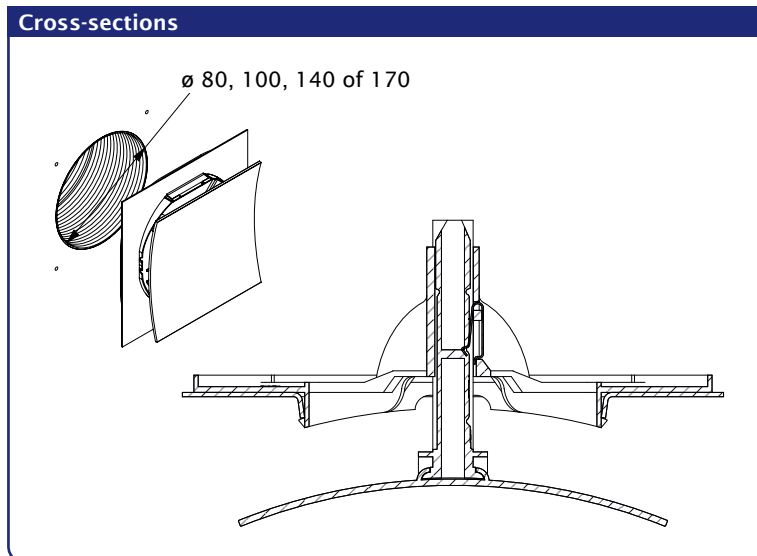
- Cover plate: aluminium AlMgSi 0.5 (according to EN 12020-2)
- Finishing: powder coating in any RAL or Syntha Pulvin® colour (40 microns)
- Base and sliding part: POM (polyoxymethylene)

Dimensions

- XD1: 152 x 152 mm
- XD2: 188 x 188 mm
- XD3: 233 x 233 mm
- Depth (in closed position): 79 mm

Typical applications

- Aesthetical internal louvre for wall or ceiling



Technical specifications	XD1	XD2	XD3
Use	System C all wet areas	System A Toilet Closed area ≤ 14 m ²	System A Openspace kitchen Close area ≤ 14 m ²
Airflow	(EN 13141-1)		
	<i>Position I:</i> not possible <i>Position II:</i> 22 m ³ /h at 2 Pa	<i>Position I:</i> 39,2 m ³ /h at 2 Pa <i>Position II:</i> 50,4 m ³ /h at 2 Pa	<i>Position I:</i> 63,0 m ³ /h at 2 Pa <i>Position II:</i> 87,1 m ³ /h at 2 Pa
Duct diameter	80 mm (max ø 140 mm)	100 mm, 140 mm (max ø 160 mm)	140 mm, 170 mm (max ø 200 mm)
Colors			
RAL 9006	•	•	•
Renson standard WHITE	•	•	•
<i>(other colors on demand)</i>			

435R < Circular Punched grilles



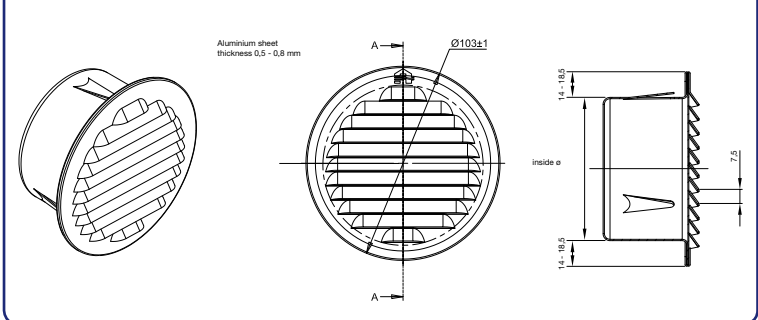
Circular built-in punched grille

Material

- Made from punched aluminium sheet
- Finishing: powder-coated in white (RAL 9010), brown (RAL 8019) and aluminium (RAL 9006) colours
- Insect mesh included

Cross-sections

Stock model - Ø 80 mm



Stock models							
Diameter mm	Renson standard WHITE	RAL 8019	RAL 9006	RAL 7016	Airway opening in cm ²	Airflow at 2 Pa (m ³ /h)	
Ø 80	•	•	•	•	27	8,3	
Ø 100	•	•	•	•	51	15,2	
Ø 115	•	•	•	•	75	23,6	
Ø 145	•	•	•	•	119	35,2	
Ø 190	•	•	•	•	204	53,1	
Ø 245	•	•	•	•	339	74,0	

Punched grille

Material

- Punched aluminium sheet
- 436: without insect mesh
- 436-M: with insect mesh

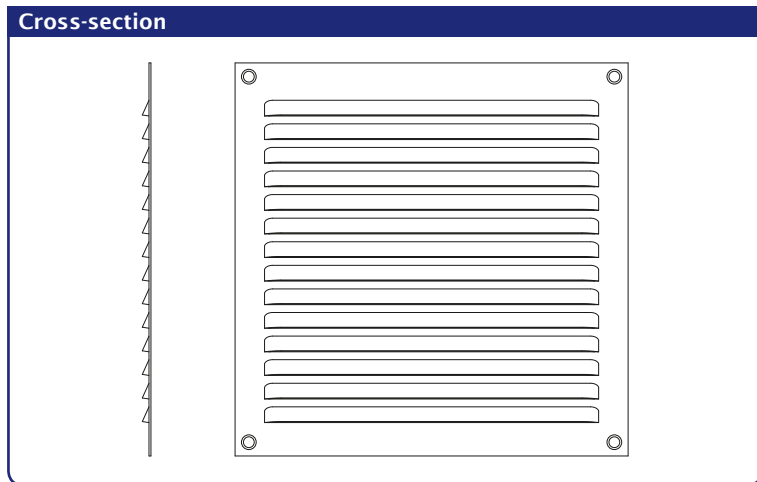
Remark: standard dimensions only, not possible made-to-measure.

Fixing

- Screw-mounted (screws and plugs not provided)

Technical specifications

- Physical free area: 28 %



Stock models - 436				
Dimensions (W x H) mm	F1	Renson standard WHITE	RAL 8019	Airflow at 2 Pa (m³/h)
150 x 150	•	•	•	16
150 x 200	•	•	•	21,9
200 x 100	•	•	•	12
200 x 200	•	•	•	22,1
200 x 250	•	•	•	36,7
250 x 100	•	•	•	18,5
250 x 250	•	•	•	46,6
300 x 100	•	•	•	20,2
300 x 300	•	•	•	73,5
400 x 100	•	•	•	28,8
400 x 400	•	•	•	86,4
500 x 500	•	•	•	125,9

Stock models - 436-M				
Dimensions (W x H) mm	F1	Renson standard WHITE	RAL 8019	Airflow at 2 Pa (m³/h)
150 x 150	•	•	•*	15,2
150 x 200	•	•	•	20,8
200 x 100	•	•		11,4
200 x 200	•	•	•*	21,0
200 x 250	•	•		34,9
250 x 100	•	•		17,6
250 x 250	•	•	•	44,3
300 x 100	•	•	•	19,2
300 x 300	•	•		69,8
400 x 100	•	•		27,4

* Available while stock lasts

437 < Punched grilles



Punched grille with frame

Material

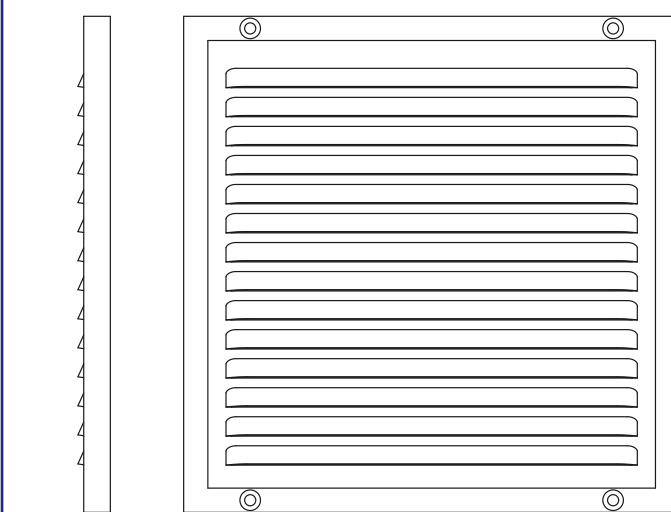
- Punched aluminium sheet with frame
- With insect mesh

Remark: standard dimensions only, not possible made-to-measure.

Fixing

- Screw-mounted (screws and plugs not provided)

Cross-section



Stock models

Dimensions (W x H) mm	F1	Renson standard WHITE	RAL 8019	RAL 7016	Airflow at 2 Pa (m ² /h)
150 x 150	•	•	•	•	16
200 x 100	•	•	•*		12
200 x 200	•	•	•	•	22,1
200 x 250	•	•	•		36,7
300 x 300	•	•	•		73,5
400 x 400	•	•	•		86,4
500 x 500	•	•	•		125,9

* Available while stock lasts

Punched grille, stainless steel

Material

- Punched stainless steel sheet
Remark: standard dimensions only, not possible made-to-measure.

Fixing

- Screw-mounted (screws and plugs are not provided)



Stock models		
Dimensions (W x H) mm	Colour	Airflow at 2 Pa (m ³ /h)
200 x 100	inox	12,3
250 x 100	inox	16,2
300 x 100	inox	18,4
400 x 100	inox	23,1
150 x 150	inox	15,8
150 x 200	inox	18,8
200 x 200	inox	21,3
200 x 250	inox	29,7
250 x 250	inox	40,7
300 x 300	inox	56,9

Punched grille, edge-raised

Material

- Punched aluminium sheet
Remark: standard dimensions only, not possible made-to-measure.

Fixing

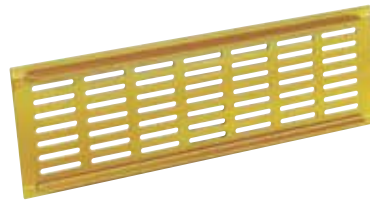
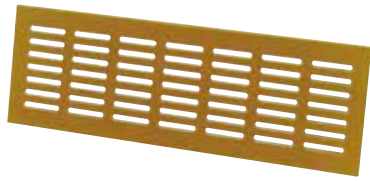
- Screw-mounted (screws and plugs are not provided)



Mesures standard				
Dimensions (W x H) mm	F1	Renson standard WHITE	RAL 8019	Airflow at 2 Pa (m ³ /h)
370 x 40	•*	•*	•*	12,8
130 x 90	•*	•*	•*	8,5
180 x 90	•*	•*	•*	10,7
300 x 90	•*	•*	•*	17,4
155 x 155	•	•	•	15,9
195 x 195	•	•	•	21,6
245 x 195	•	•	•	31,4
215 x 150	•	•	•	20,3

* Available while stock lasts

381 < Ventilation grilles



Built-in ventilation grille

Fixing

- Made from aluminium sections: AlMgSi 0.5 (according to EN 12020-2)

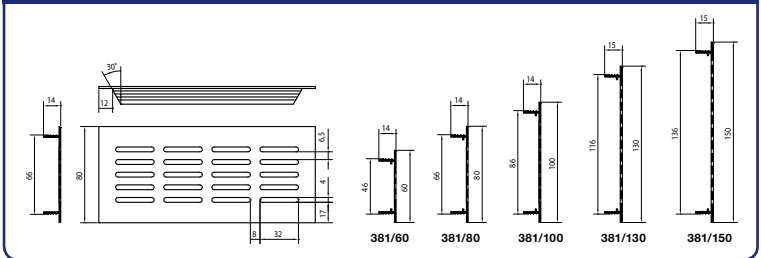
Typical applications

- Kitchens, refrigerators, counters

Packaging quantity: 10 pieces



Cross-sections



Mesures standard							
Dimensions (W x H) mm	Satin anodised	Gold anodised	Renson standard WHITE	RAL 8022	RAL 9005	Net free area cm ²	Airflow at 2 Pa (m ³ /h)
400 x 60	•		•	•		44	17,0
500 x 60	•		•	•		59	22,8
2000 x 60	•		•	•*		244	94,4
300 x 80	•	•	•	•		43	17,6
400 x 80	•	•*	•	•	•*	56	22,4
500 x 80	•	•	•	•	•*	74	29,6
600 x 80	•	•*	•	•*		87	33,6
1000 x 80	•		•	•*		149	57,6
2000 x 80	•	•*	•*	•*		305	117,9
300 x 100	•		•	•*		61	23,6
400 x 100	•	•*	•	•		78	30,2
500 x 100	•	•*	•	•		104	40,2
600 x 100	•		•	•		122	47,2
1000 x 100	•		•	•*		209	80,8
2000 x 100	•	•*	•	•*		427	165,1
500 x 130	•		•	•*		149	57,6
1000 x 130	•		•	•*		298	115,2
2000 x 130	•		•	•*		610	235,9
500 x 150	•		•	•*		179	69,2
2000 x 150	•	•*	•	•*		732	283,1

Other finishes and dimensions are available upon request, only for large quantities.

* Available while stock lasts.

Convactor grille

Material

- Made from aluminium sections: AlMgSi 0.5 (according to EN 12020-2)
- Finishing: anodised in satin colour (20 microns) or powder-coated in any RAL or Syntha PulvinR colour (40 microns)
- The frame is lined with a rubber gasket to guarantee a reduced noise level

Dimensions

- Bar spacing: 12.5 mm
- Grille section: 20 x 4 mm
- 311/1 - 311/2
 - Length floor grille: min. 100 mm - max. 3500 mm (from 1300 mm multiple grille lengths)
 - Width floor grille: min. 100 mm - max. 1215 mm
- 311/3
 - Length frameless floor grille: min. 85 mm - max. 1300 mm
 - Width frameless floor grille: min. 85 mm - max. 1200 mm

Remark: If the floor grille width > 650 mm, then an underlying support structure must be provided.

- Effective opening = length and width - 50 mm
- Bars arranged crosswise

Fixing

- Brackets ref. 231

Typical applications

- Ground heating



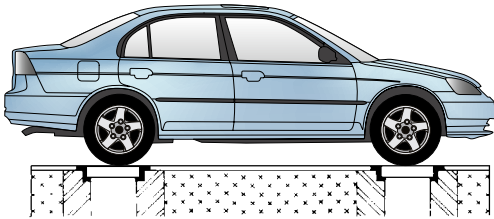
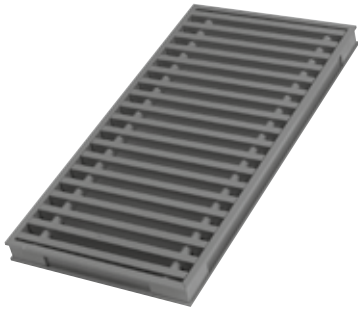
Cross-sections

- 311/1: Floor grille or convactor cover with flangeless "L" frame
- 311/2: Floor grille or convactor cover with flanged "Z" frame
- 311/3: Frameless floor grille or convactor cover



Technical specifications	311
Technical data	
Visual free area	76 %
Physical free area	76 %

371 < Floor grilles



Floor grille, heavy-duty series

Material

- Made from aluminium sections: AlMgSi 0.5 (according to EN 12020-2)
- Finishing: anodized in satin/bronze colour (20 micron) or powder-coated in any RAL or Syntha Pulvin colour (40 micron)
- The frame is lined with a rubber gasket to guarantee a reduced noise level

Dimensions

- Bar spacing: 12.5 mm
- Grille section: 20 x 8 mm
- 371/1 - 371/2
 - Length floor grille: min. 135 mm - max. 3500 mm (from 1200 mm multiple lengths)
 - Width floor grille: min. 135 mm - max. 915 mm

Remark: frame must be fully supported

- 371/3
 - Length frameless floor grille: min. 120 mm - max. 1200 mm
 - Width frameless floor grille: min. 120mm - max. 900 mm

Remark: If the floor grille width > 650 mm, then an underlying support structure must be provided.

- Effective opening = length and width – 50 mm
- Bars arranged crosswise

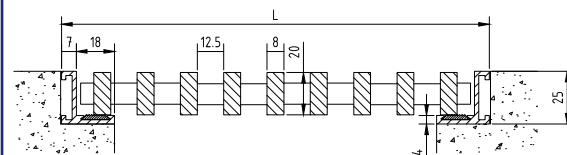
Fixing

- Brackets ref. 231

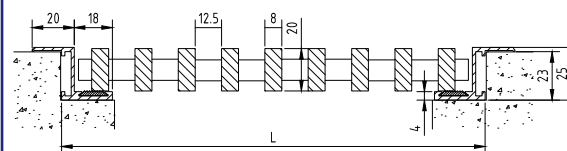
Typical applications

- Grilles for swimming pool drains, cellars, garages, car parks, abattoirs, etc
- To cover underfloor wiring ducts in computer rooms

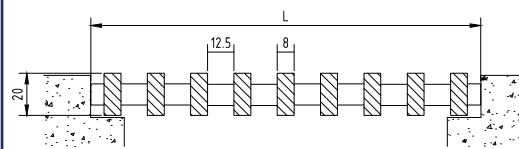
Cross-sections



- 371 /1: Floor grille with flangeless "L" frame



- 371 /2: Floor grille with flanged "Z" frame



- 371 / 3: Frameless floor grille

Technical specifications	371
Technical data	
Visual free area	61 %
Physical free area	61 %

Linear bar grille

Material

- Made from aluminium sections: AlMgSi 0.5 (according to EN 12020-2)
- Finishing: anodized in satin/bronze colour (20 micron) or powder-coated in any RAL or Syntha Pulvin colour (40 micron)

Remark: Grille not to be walked on.

Dimensions

- Bar spacing: 10 mm
- Grille section: 16 x 3 mm
- 392/2:
 - Length linear bar grille: min. 130 mm - max. 3500 mm (from 1600 mm multiple grille elements)
 - Width linear bar grille: min. 55 mm - max. 311 mm
- 392/3:
 - Length linear bar grille without frame: min. 120 mm - max. 1600 mm
 - Width linear bar grille without frame: min. 45 mm - max. 300 mm
- Minimum dimensions: 100 x 60 mm
- Effective opening = length and width - 50 mm
- Deflection: 15°
- Bars arranged lengthwise

Fixing

- No fasteners

Options

- Linear bar grille with flangless 'L' frame

Typical applications

- Radiator frame

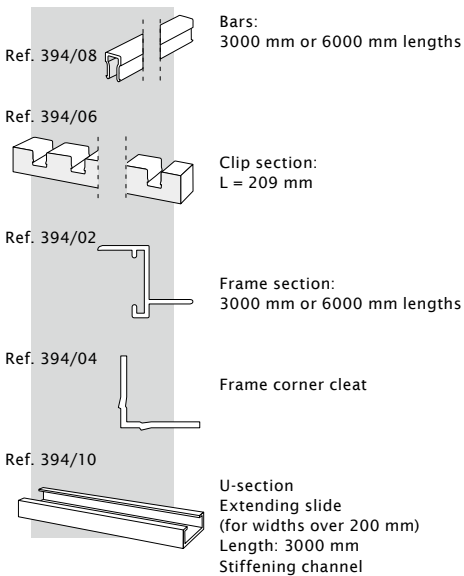


Cross-sections

- Option: Linear bar grille without flanged "Z" frame
- 392/2: Linear bar grille with flanged "Z" frame
- 392/3: Frameless linear bar grille

Technical specifications	392
Technical data	
Visual free area	76 %
Physical free area	76 %

394 < Linear bar grilles



Linear bar grille for self-assembly

Material

- Made from aluminium sections: AlMgSi 0.5 (according to EN 12020-2)
- Finishing: anodized in satin/bronze colour (20 micron) or powder-coated in any RAL or Syntha Pulvin colour (40 micron)

Remark: Grille not to be walked on.

Dimensions

- Bar spacing: 9.5 mm
- Section length: 3 or 6 metres
- 394/2
 - Length linear bar grille: min. 110 mm - max. 3510 mm
 - Width linear bar grille:
 - Per grille element: min. 55 mm - max. 220 mm
 - Coupled: max. 1055 mm
- 394/3 :
 - Length linear bar grille without frame: min. 100 mm - max. 3500 mm
 - Width linear bar grille without frame:
 - Per grille element: min. 45 mm - max. 209 mm
 - Coupled: max. 1045 mm
- Clip length: 209 mm
- Bars arranged lengthwise

Fixing

- No fasteners

Number of clip sections/length

- 300 – 500 mm: 2 pieces
- 501 – 900 mm: 3 pieces
- 901 – 1300 mm: 4 pieces
- 1301 – 1700 mm: 5 pieces
- 1701 – 2100 mm: 6 pieces
- 2101 – 2600 mm: 7 pieces
- 2601 – 3000 mm: 8 pieces

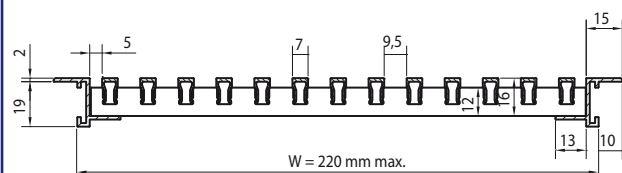
Elements

- Simple clip assembly

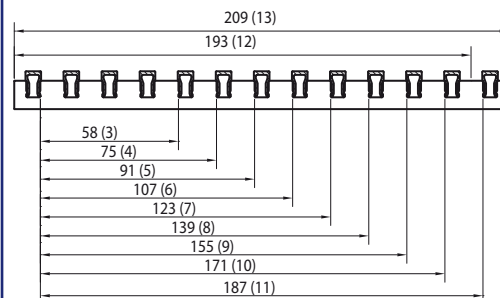
Typical applications

- Counters, radiator frame

Cross-sections



- 394/2: linear bar grille with flanged 'Z' frame



- 394/3: flangeless linear bar grille

Technical specifications	394
Technical data	
Visual free area	59 %
Physical free area	59 %

Door grille

Material

- Made from aluminium sections: AlMgSi 0.5 (according to EN 12020-2)
- Finishing: anodized in satin/bronze colour (20 micron) or powder-coated in any RAL or Syntha Pulvin colour (40 micron)
- Opaque grille with backframe and fixing screws

Dimensions

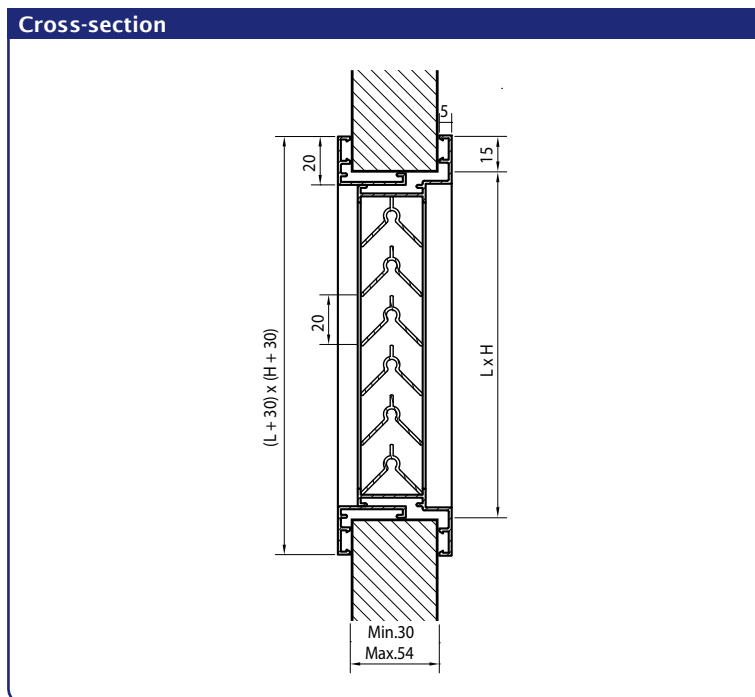
- Blade pitch: 20 mm
- Door thickness: 30 to 54 mm
- Maximum width (in one piece): 800 mm

Options

- Controllable version (type 463) on request
- Frame for 55 to 80 mm thickness

Fixing

- Screws are included



Stock models							
Dimensions (W x H) mm	Satin anodised	Renson standard WHITE	RAL 8019	Airflow at 2 Pa (m ³ /h)	Airflow at 20 Pa (m ³ /h)	Visual free area	Physical free area
200 x 100	•			19,3	61,1	93%	39%
400 x 200	•	•	•	83,8	264,9	93%	39%
400 x 300	•			127,9	404,3	93%	39%
500 x 300	•			160,7	508,0	93%	39%
600 x 400	•			260,1	822,6	93%	39%
425 x 76	•	•	•	31,0	97,9	93%	39%

461AK Silendo® < Door grilles



Acoustic door grille for residential sector

Material

- Made from aluminium sections: AlMgSi 0.5 (according to EN 12020-2)
- Sound absorbing material: synthetic foam
- End caps: in Luran S ASA polymer (colourfast, weatherproof and UV-resistant)
- End caps: available in grey, black or white

Dimensions

- Length: 425 mm
- Height: 48 mm
- Door thickness: 37 to 43 mm

Available models

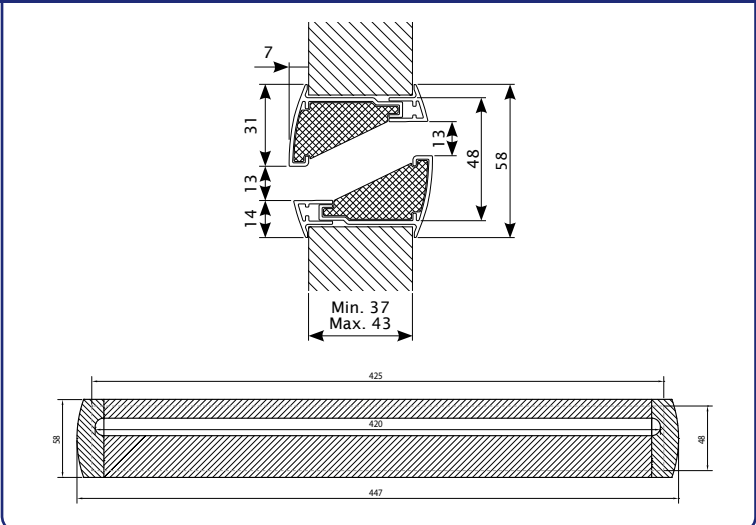
- The Silendo R is available in a standard 425 x 48 mm size in the following standard colours: Renson standard WHITE (with matching white end caps), RAL 8019 (black end caps) and natural colour (grey end caps)
- Other lengths and colours available on request

Typical applications

- offices, commercial buildings, toilet doors



Cross-sections



Technical specifications	Silendo®
Airflow	(EN 13141-1)
Q at 1 Pa	17,7 m³/h
Q at 2 Pa	25,1 m³/h
Q at 10 Pa	56,1 m³/h
Q at 20 Pa	79,4 m³/h
Comfort	(EN ISO 140-10, EN ISO 717-1)
Sound reduction $D_{n,e,w}$ (C;C _{tr})	32 (0;-2) dB
Technical data	
Visual free area	27%
Physical free area	27%
Colours	
Natural	•
Renson standard WHITE	•
RAL 8019	•

Acoustic door grille for residential sector

Material

- Sound absorbing material: synthetic foam
- End caps: in Luran S ASA polymer (colourfast, weatherproof and UV-resistant)
- End caps: available in grey, black, cream or white; other colors available on demand

Dimensions

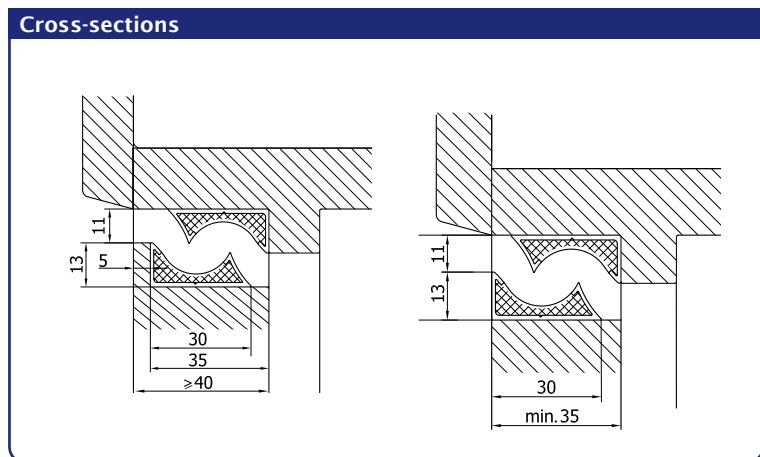
- Maximum length: 2000 mm
- Standard length: 725 mm (type 730), 825 mm (type 830), 925 mm (type 930)
- Door thickness: 35 mm

Fixing

- Screws included

Typical applications

- No look-through
- Residential, aesthetical
- In combination with Renson system C+ and System C+EVO



Technical specifications		Invisido® type 469			
Airflow		(EN 13141-1)			
Q at 1 Pa		17,6 m³/h (4,9 dm³/s)			
Q at 2 Pa		25,3 m³/h			
Q at 10 Pa		58,8 m³/h			
Q at 20 Pa		84,7 m³/h			
Comfort		(EN ISO 140-10, EN ISO 717-1)			
Sound reduction $D_{n,e,w}$ (C;C _{tr})		28 (-1;0) dB			
Dimensions (L)		Natural	Renson standard WHITE	RAL 9005	RAL 1015
725 mm		•	•	•	•
825 mm		•	•	•	•
925 mm		•	•	•	•



468AK/1 < Door grilles



468AK/1 - front view



468AK/1 - rear view



Interior acoustic wall louvre

Material

- Made from aluminium sections: AlMgSi 0.5 (according to EN 12020-2)
- Finishing: anodized in satin/bronze colour (20 micron) or powder-coated in any RAL or Syntha Pulvin colour (40 micron)
- Sound absorbing material: synthetic foam
- Labyrinth type blades

Dimensions

- Minimum dimensions: 200 x 180 mm
- Maximum dimensions: 800 x 775 mm
- Height in 85 mm steps (blade pitch)
- Depth to fit: 48 mm
- Flange size: 30 mm

Options

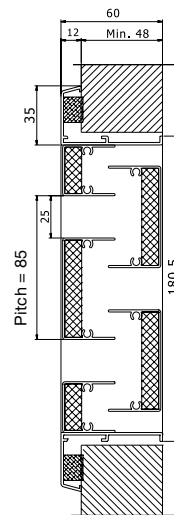
- Frame 468 AK/2 (see next page)

Typical applications

- Schools
- Hospitals
- Elderly homes

Remark: for internal use only!

Cross-section



Technical specifications		468AK/1	
	(EN 13030)	(EN ISO 140-10, EN ISO 717-1)	
Airflow		Comfort Sound reduction	
K-factor (supply)	86,85		
K-factor (discharge)	89,35	R_w (C;C _v): 8 (-1;-2) dB	
C _e coefficient (supply)	0,107		
C _d coefficient (discharge)	0,106		
	(EN 130141-1)		
Dimensions (W x H)	Airflow at 2 Pa in m ³ /h	Sound reduction D _{n,e,w} (C;C _{tr})	
Q at 2 Pa - louvre 292 x 180 mm	25 m ³ /h	30 (-1;-2) dB	
Q at 2 Pa - louvre 382 x 265 mm	50 m ³ /h	28 (-1;-2) dB	
Q at 2 Pa - louvre 432 x 350 mm	75 m ³ /h	26 (-1;-2) dB	
Q at 2 Pa - louvre 452 x 435 mm	100 m ³ /h	25 (-1;-2) dB	
Technical data			
Visual free area		29 %	
Physical free area		29 %	
IP class (louvre with mesh)		IP2XD	

Internal acoustic door grille

Material

- Made from aluminium sections: AlMgSi 0.5 (according to EN 12020-2)
- Finishing: anodized in satin/bronze colour (20 micron) or powder-coated in any RAL or Syntha Pulvin colour (40 micron)
- Sound absorbing material: synthetic foam

Dimensions

- Minimum dimensions: 200 x 193 mm H
- Maximum dimensions: 800 x 788 mm H
- Height in 85 mm steps (blade pitch)
- Door thickness: from 37.5 to 92 mm

Available models

- The 468 AK/2 is available in Renson standard WHITE in the following standard sizes: 292 x 193 mm, 382 x 278 mm, 432 x 363 mm and 452 x 448 mm
- Other sizes and colours available on request

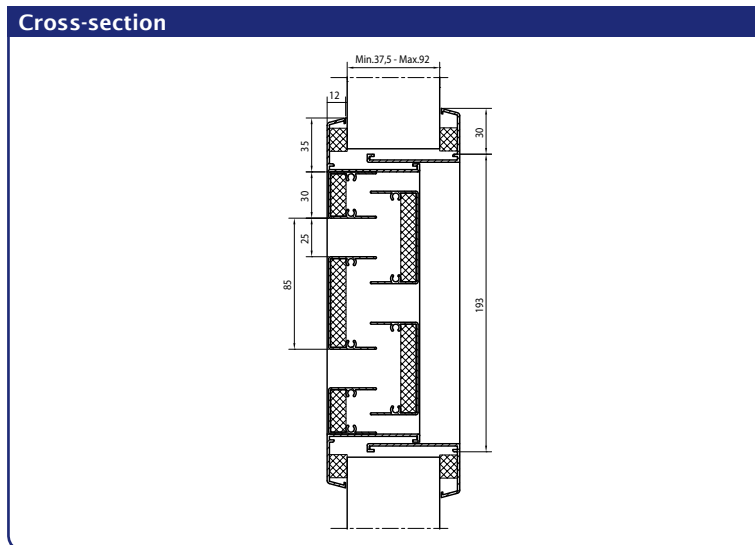
Fixing

- Screws included

Typical applications

- Schools, dressing rooms, garagedoors, central heating system rooms, hospitals

Remark: for internal use only!



Technical specifications		468 AK/2	
Airflow	(EN 13030)	Comfort - D _{n,e,w} (C;C _{tr})	
K-factor (supply)	86,85		
K-factor (discharge)	89,35		
C _e coefficient	0,107		
C _d coefficient	0,106		
Q at 2 Pa - grille 292 x 193 mm	25 m ³ /h	30 (-1;-2) dB	
Q at 2 Pa - grille 382 x 278 mm	50 m ³ /h	28 (-1;-2) dB	
Q at 2 Pa - grille 432 x 363 mm	75 m ³ /h	26 (-1;-2) dB	
Q at 2 Pa - grille 452 x 448 mm	100 m ³ /h	25 (-1;-2) dB	
Comfort		(EN ISO 140-10, EN ISO 717-1)	
Sound reduction in open position R _w (C;C _{tr})		8 (-1;-2) dB	
Technical data			
Visual free area		29 %	
Physical free area		29 %	
IP class (louvre with mesh)		IP2XD	

Incendo® 464 < Fire-resistant louvres



Fire-resistant louvre with angled blades, fire-resistance 60'

Material

- Blades filled with intumescent material
- Outer frame in Polystyrene
- Available in RAL 7024 (anthracite grey), RAL 9016 (traffic white) en RAL 9022 (pearl light grey)

Dimensions

- Built-in depth: 40 mm min.
- Blade pitch: 20 mm
- Maximum dimension: 800 x 400 mm
- Minimum dimensions: 100 x 100 mm
- 464/1: with frame, 464/2: with frame and adjustable counterframe

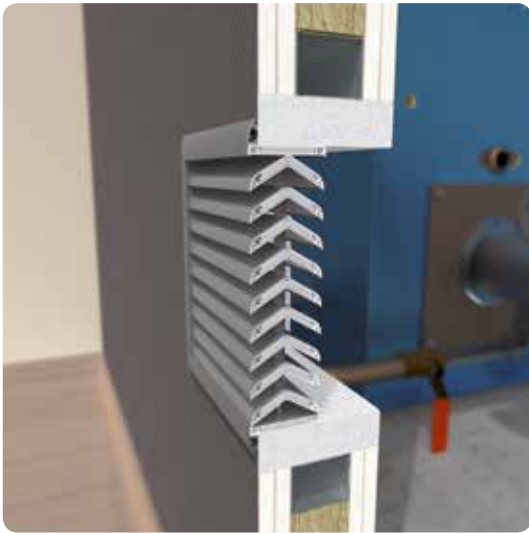
Fixing

- With sealant and adhesive neoprene mastic

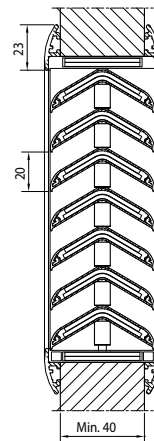
Typical applications

- Aesthetic finish, no visible vertical posts
- Tested according to EN1634-1, EN1364-1 and EN1364-2
- Fire resistance EI 60 (Integrity and thermal insulation for 1 hour) according to EN13501-2
- Suitable for installation in a wooden door panel, flexible wall, massive wall, floor or ceiling
- No visual see through

Remark: avoid contact with water, for indoor use only



Cross-section



Technical specifications	Incendo® 464
Airflow	(EN 13030)
K-factor (supply)	10,27
K-factor (discharge)	10,27
C _e coefficient	0,312
C _d coefficient	0,312
Technical specifications	
Visual free area	61 %
Physical free area	51 %
IP class	IP2XD
Fire resistance (EN 13501-2)	
Massive (concrete) wall (100 mm)	EI 60/ EW 90 (ve i<->o)
Massive (concrete) floor (100 mm)	EI 60 (ho i<->o)
Flexible wall (metal stud gypsum plasterboard 100 mm)	EI 60 (ve i<->o)
(Wooden) doorpanel (50 mm)	EI 60 / EW 60 (ve i<->o)
(Wooden) doorpanel (40 mm)	EI 30 / EW 30 (ve i<->o)

Fire-resistant louvre with angled blades, fire-resistance 60'

Material

- Blades filled with intumescent materials (PALUSOL)
- Protection by grey-coloured synthetic sheath
- Outer frame in satin anodised aluminium (20 microns)
- Other framecolors on request.

Dimensions

- Maximum dimensions: 600 x 300 mm
- Special dimensions on request
- 465/2: door thickness min. 45 mm - max. 55 mm

Purpose

- Ventilation between two adjacent rooms
- In case of fire, cuts off the airflow and fulfils a firebreak function

Applications

- Fire-resistant constructions
- Fire-resistant conduit
- Fire doors

Remark: for indoor use only, avoid contact with water

Function

- At a temperature of 120°C, the blades swell to close the vent
- Forms a static fire valve for 60 minutes

Fixing

- Secure the louvre in the opening
- Fill the gap between the louvre and the door/wall with fire-resistant mortar

Option

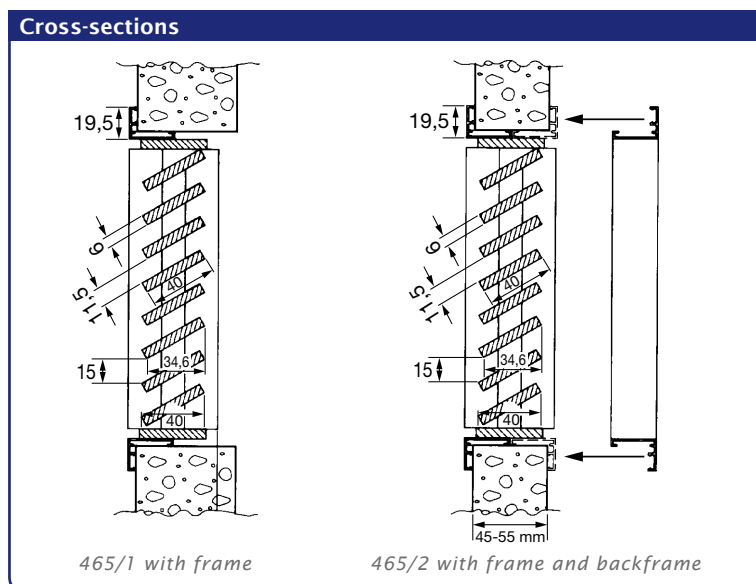
- Frame for 55 to 80 mm thickness

Typical applications

- Fire door apartments



Stock models		
Dimensions (W x H) mm	465/1 (with frame)	465/2 (with frame and backframe)
200 x 200	•	
300 x 300	•	
400 x 200	•	•
500 x 200	•	



Technical specifications	465
Fire resistance	Rf 1 hour
Testreport on request (Belgian BBRI test)	
Technical specifications	
Visual free area	74 %
Physical free area	57 %

466 < Fire-resistant louvres



Fire-resistant louvre with horizontal blades

Material

- Blades filled with intumescent materials (PALUSOL)
- Protection by grey-coloured synthetic sheath
- Outer frame in satin anodised aluminium (20 microns)
- Other framecolors on request.

Dimensions

- Maximum dimensions: 600 x 400 mm
- Dimensions on request
- 466/2: door thickness min. 45 mm - max. 55 mm

Purpose

- At normal temperature, guarantees ventilation between two adjacent rooms
- In case of fire, cuts off the airflow and fulfils a firebreak function

Applications

- Fire-resistant constructions
- Fire-resistant conduit
- Fire doors

Remark: for indoor use only, avoid contact with water

Function

- At a temperature of 120°C, the blades swell to close the vent
- Forms a static fire valve for 60 minutes

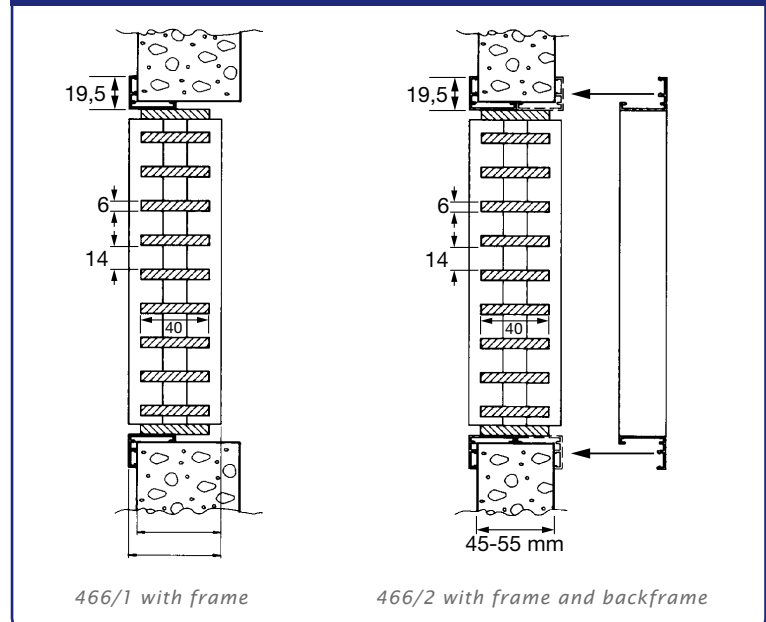
Fixing

- Secure the louvre in the opening
- Fill the gap between the louvre and the door/wall with fire-resistant mortar

Option

- Frame for 55 to 80 mm thickness

Cross-sections



Technical specifications

Technical specifications	466
Fire resistance	Rf 1 hour
Testreport on request (Belgian BBRI test)	

Technical specifications

Visual free area	70 %
Physical free area	70 %

Round louvres



411R < Built-in wall louvres



Round wall louvre (with frame)

Material

- Made from aluminium sections: AlMgSi 0.5 (according to EN 12020-2)
- Stainless steel 304 insect screen (2.3 x 2.3 mm) or mesh (6 x 6 mm) on request
- Finishing: anodised in satin/bronze colour (20 micron) or powder-coated in any RAL or Syntha Pulvin colour (40 micron)
- Frame assembled by a single weld

Dimensions

- Blade pitch: 33,3 mm
- Depth to fit: 28 mm
- Flange size: 23 mm
- Minimum diameter: 300 mm
- Maximum diameter:
 - 1400 mm if anodised in satin colour
 - 1500 mm if powder-coated in RAL or Syntha Pulvin colour
 - Over 1500 mm: in two parts

Fixing

- Brackets pre-fitted to the frame

Option

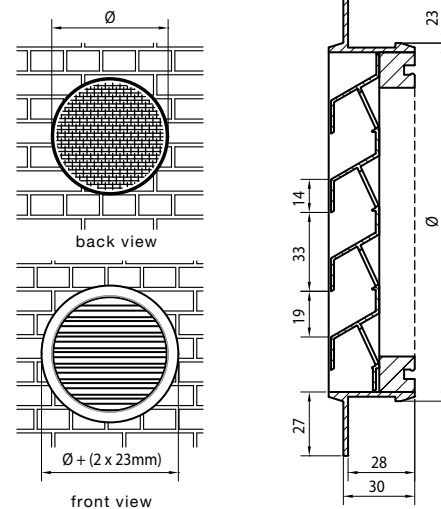
- Glazed-in louvre 414R (see page 90)

Typical applications

- Every application without specific needs



Cross-sections



Technical specifications	411R
Airflow	(EN 13030)
K-factor (supply)	23,56
K-factor (discharge)	25,51
C _e coefficient	0,206
C _d coefficient	0,198
Technical data	
Visual free area	59 %
Physical free area	40,5 %
IP class (louvre with mesh; electrical installation at least 100mm from louvre)	IP2XD

Round wall louvre with chevron section blades

Material

- Made from aluminium sections: AlMgSi 0.5 (according to EN 12020-2)
- Stainless steel 304 mesh (6 x 6 mm) or insect screen (2.3 x 2.3 mm) on request
- Finishing: anodized in satin/bronze colour (20 micron) or powder-coated in any RAL or Syntha Pulvin colour (40 micron)
- Frame assembled by a single weld

Dimensions

- Blade pitch: 20 mm chevron
- Depth to fit: 34 mm
- Flange size: 23 mm
- Minimum diameter: 300 mm
- Maximum diameter:
 - 1400 mm if anodised in satin colour
 - 1500 mm if powder-coated in RAL or Syntha Pulvin colour
 - Over 1500 mm: in two parts

Fixing

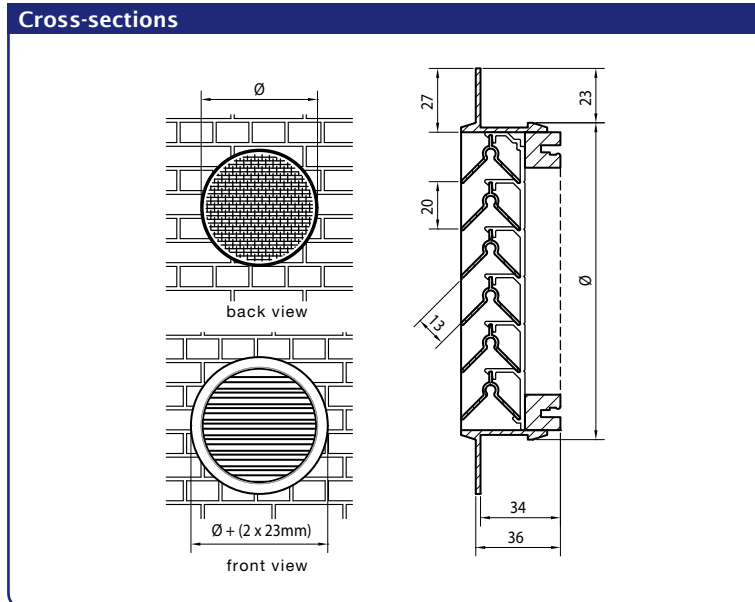
- Brackets pre-fit to the frame

Option

- Glazed-in louvre 415R (see page 91)

Typical applications

- High-voltage stations
- IT rooms



Technical specifications	412R
Airflow	(EN 13030)
K-factor (supply)	33,80
K-factor (discharge)	33,80
C _e coefficient	0,172
C _d coefficient	0,172
Technical data	
Visual free area	93 %
Physical free area	39 %
IP class	IP2XD

421R < Built-in wall louvres



Round wall louvre, heavy-duty series

Material

- Made from aluminium sections: AlMgSi 0.5 (according to EN 12020-2)
- Finishing: anodised in satin colour (20 microns) or powder-coated in any RAL or Syntha PulvinR colour (40 microns)
- Stainless steel 304 insect screen (2.3 x 2.3 mm) or mesh (6 x 6 mm) on request
- Frame assembled by a single weld

Dimensions

- Blade pitch: 50 mm
- Depth to fit: 57 mm
- Flange size: 22 mm
- Minimum diameter: 400 mm
- Maximum diameter:
 - 1400 mm if anodised in satin colour
 - 1500 mm if powder-coated in RAL or Syntha Pulvin colour
 - Over 1500 mm: in two parts

Fixing

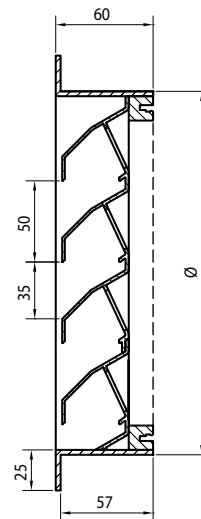
- Brackets pre-fit to the frame

Typical applications

- Applications where aesthetics and strength are key parameters



Cross-section



Technical specifications	421R
Airflow	(EN 13030)
K-factor (supply)	13,42
K-factor (discharge)	9,35
C _e coefficient	0,273
C _d coefficient	0,327
Technical data	
Visual free area	70 %
Physical free area	47 %
IP class (louvre with mesh; electrical installation at least 100mm from louvre)	IP2XD

Round louvre without frame

Material

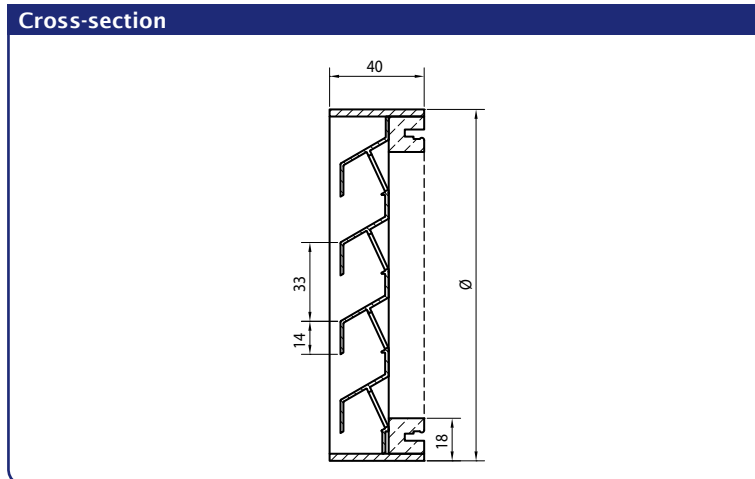
- Made from aluminium sections: AlMgSi 0.5 (according to EN 12020-2)
- Stainless steel 304 insect screen (2.3 x 2.3 mm) or mesh (6 x 6 mm) on request
- Finishing: anodized in satin/bronze colour (20 micron) or powder-coated in any RAL or Syntha Pulvin colour (40 micron)

Dimensions

- Blade pitch: 33,3 mm
- Depth to fit: 40 mm
- Minimum diameter: 300 mm
- Maximum diameter:
 - 1400 mm if anodised in satin colour
 - 1500 mm if powder-coated in RAL or Syntha PulvinR colour
 - Over 1500 mm: in two parts

Fixing

- Screws included



Technical specifications	431R
Airflow	(EN 13030)
K-factor (supply)	23,56
K-factor (discharge)	25,51
C _e coefficient	0,206
C _d coefficient	0,198
Technical data	
Visual free area	59 %
Physical free area	40,5 %
IP class (louvre with mesh; electrical installation at least 100mm from louvre)	IP2XD

414R < Glazed-in louvres



Round glazed-in louvre

Material

- Made from aluminium sections: AlMgSi 0.5 (according to EN 12020-2)
- Stainless steel 304 insect screen (2.3 x 2.3 mm) or mesh (6 x 6 mm) on request
- Finishing: anodized in satin/bronze colour (20 micron) or powder-coated in any RAL or Syntha Pulvin colour (40 micron)

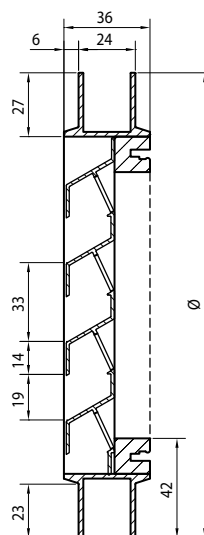
Dimensions

- Blade pitch: 33,3 mm
- Frame thickness: 24 mm
- Minimum diameter: 340 mm
- Maximum diameter:
 - 1400 mm if anodised in satin colour
 - 1500 mm if powder-coated in RAL or Syntha PulvinR colour
 - Over 1500 mm: in two parts

Fixing

- Suitable for 24, 28, 32 mm glazing sections. Other thicknesses on request.

Cross-section



Technical specifications	414R
Airflow	(EN 13030)
K-factor (supply)	23,56
K-factor (discharge)	25,51
C _e coefficient	0,206
C _d coefficient	0,198
Technical data	
Visual free area	59 %
Physical free area	40,5 %
IP class (louvre with mesh; electrical installation at least 100mm from louvre)	IP2XD

Round louvre with chevron section blade

Material

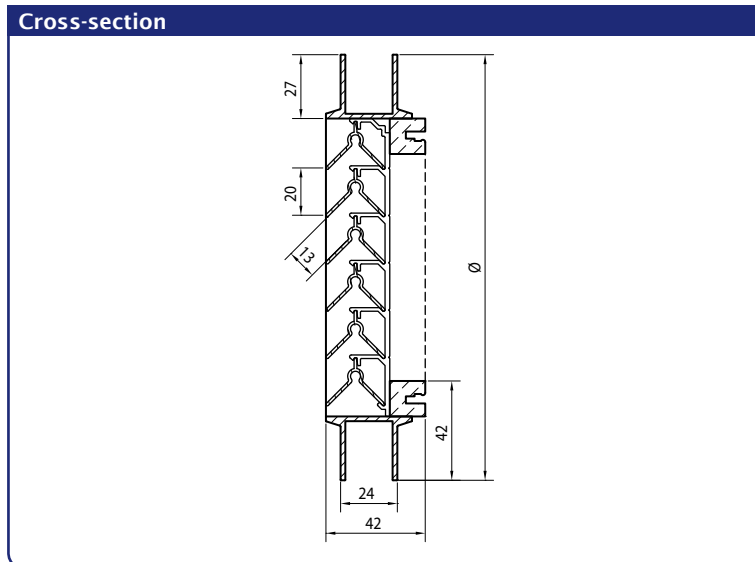
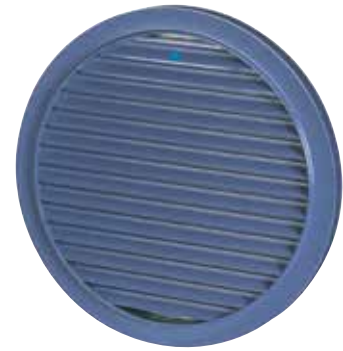
- Made from aluminium sections: AlMgSi 0.5 (according to EN 12020-2)
- Stainless steel 304 mesh (6 x 6 mm) or insect screen (2.3 x 2.3 mm) on request
- Finishing: anodized in satin/bronze colour (20 micron) or powder-coated in any RAL or Syntha Pulvin colour (40 micron)
- Frame assembled by a single weld

Dimensions

- Blade pitch: 20 mm
- Frame thickness: 24 mm
- Minimum diameter: 340 mm
- Maximum diameter:
 - 1400 mm if anodised in satin colour
 - 1500 mm if powder-coated in RAL or Syntha Pulvin colour
 - Over 1500 mm: in two parts

Fixing

- Suitable for 24, 28, 32 mm glazing sections. Other thicknesses on request.



Technical specifications	415R
Airflow	(EN 13030)
K-factor (supply)	33,80
K-factor (discharge)	33,80
C _e coefficient	0,172
C _d coefficient	0,172
Technical data	
Visual free area	93 %
Physical free area	39 %
IP class	IP2XD



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RENSON®, headquartered in Waregem (Belgium), is a trendsetter in Europe in natural ventilation and sun protection.

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Our remarkable 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 80 R&D employees continually optimize our products and develop new and innovative concepts.

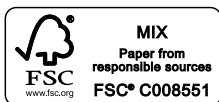
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Dealer



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Creating healthy spaces

