



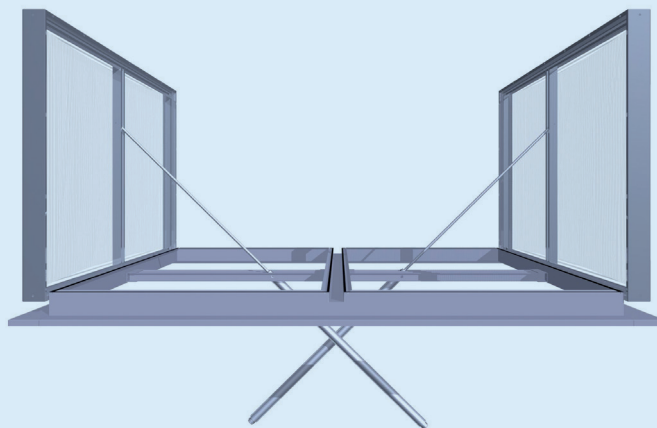
## Brakel® Fumetica



### Double flap ventilator with large extraction capacity

Brakel® Fumetica is an EN 12101-2 certified double flap system suitable for the extraction of smoke and heat, daily ventilation and use as a skylight. Its large dimensions, a geometric surface area up to 7.5 m<sup>2</sup>, makes the Fumetica ideally suited to the effective extraction of significant quantities of (polluted) hot air and smoke. A sophisticated production method enables this flap ventilator, which has fall prevention feature, to be manufactured in any desired dimensions and for every flat build-in application.

Area of application: particularly suitable for distribution centres, storage facilities, production environments and industries where it is important that the product is free of silicones or other harmful substances.



### High performance for a competitive price

Brakel® Fumetica offers a functional solution, whereby reliability, price and guaranteed performance go hand in hand. You can completely rely on the Fumetica for a healthy and (fire) safe indoor climate!

The Brakel® Fumetica is available in different base types, with pneumatic or electric controls, and (un)insulated aluminium or transparent flaps.



EN 12101-2



## Green Building Products

As a leading partner in its field, Brakel endeavours to remain a forerunner in the area of corporate social responsibility. Given that with our products, we let in the best that nature has to offer, it is only natural that we also care greatly for the environment. We therefore seek to integrate sustainable solutions in our working methods, products and services, wherever possible.

We have categorised our highly extensive product range according to the levels of sustainability and comfort applicable. The many energy efficient products and systems in the range can be recognised by the butterfly icons that they bear.

We classify our products, ranging from functional to sustainable, as follows:



functionally applicable in accordance with current qualifications / standards



compliant with raised sustainability requirements




compliant with high sustainability requirements



entirely in keeping with a sustainable solution

## Specifications Fumetica

EN 12101-2 CERTIFIED

Type	Throat size Fumetica width x length (mm)	Geometric surface (A <sub>g</sub> ) in m <sup>2</sup>	Without upstand		With upstand h=350 mm		With conical upstand h=350 mm <sup>1)</sup>		Fumetica (un)insulated		
									 /  /  / 	Weight base and flaps in kg	
			C <sub>w</sub> value	A <sub>g</sub> value in m <sup>2</sup>	C <sub>w</sub> value	A <sub>g</sub> value in m <sup>2</sup>	C <sub>w</sub> value	A <sub>g</sub> value in m <sup>2</sup>	Uninsulated aluminium	Insulated aluminium	Transparent multi-walled polycarbonate Isolux
1010	1000 x 1000	1,00	0,52	0,52	0,51	0,51	0,36	0,52	29	32	26
1015	1000 x 1500	1,50	0,56	0,84	0,55	0,83	0,43	0,88	35	40	31
1020	1000 x 2000	2,00	0,58	1,16	0,57	1,14	0,46	1,21	42	48	37
1025	1000 x 2500	2,50	0,59	1,48	0,59	1,48	0,48	1,56	48	56	42
1030	1000 x 3000	3,00	0,60	1,80	0,60	1,80	0,50	1,92	55	65	47
1510	1500 x 1000	1,50	0,56	0,84	0,55	0,83	0,43	0,88	35	40	31
1515	1500 x 1500	2,25	0,60	1,35	0,60	1,35	0,50	1,45	42	50	37
1520	1500 x 2000	3,00	0,62	1,86	0,62	1,86	0,54	2,02	50	59	43
1525	1500 x 2500	3,75	0,63	2,36	0,63	2,36	0,56	2,57	57	69	49
1530	1500 x 3000	4,50	0,64	2,88	0,64	2,88	0,58	3,16	64	79	55
2010	2000 x 1000	2,00	0,58	1,16	0,57	1,14	0,46	1,21	40	47	36
2015	2000 x 1500	3,00	0,62	1,86	0,62	1,86	0,54	2,02	49	59	42
2020	2000 x 2000	4,00	0,64	2,56	0,64	2,56	0,58	2,81	57	70	49
2025	2000 x 2500	5,00	0,65	3,25	0,65	3,25	0,60	3,56	66	82	56
2030	2000 x 3000	6,00	0,66	3,96	0,66	3,96	0,62	4,36	74	94	62
2510	2500 x 1000	2,50	0,59	1,48	0,59	1,48	0,48	1,56	46	54	40
2515	2500 x 1500	3,75	0,63	2,36	0,63	2,36	0,56	2,57	55	68	48
2520	2500 x 2000	5,00	0,65	3,25	0,65	3,25	0,60	3,56	65	81	55
2525	2500 x 2500	6,25	0,66	4,13	0,67	4,19	0,63	4,59	74	95	62
2530	2500 x 3000	7,50	0,67	5,03	0,68	5,10	0,65	5,62	84	108	70

All dimensions of type 1010 to 2530 are available as standard, intermediate dimensions on request. C<sub>w</sub> values of the Fumetica are tested in combination with a wind baffle. The height of the wind baffle varies per dimension. This can change according to the build-in situation.

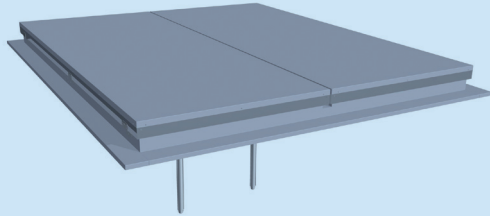
A<sub>g</sub> = C<sub>w</sub> x geometric surface (A)

<sup>1)</sup> Geometric surface in combination with conical upstand = throat size Fumetica + 200 mm



## Versions

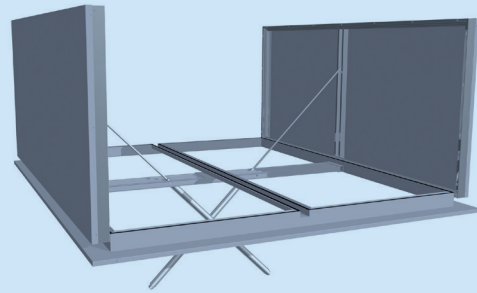
### Aluminium uninsulated



- Base and flaps produced in single-walled aluminium
- Significant flexibility in dimensions and flange type
- Easy installation
- $U = 5.3 - 5.6 \text{ W/m}^2\text{K}$



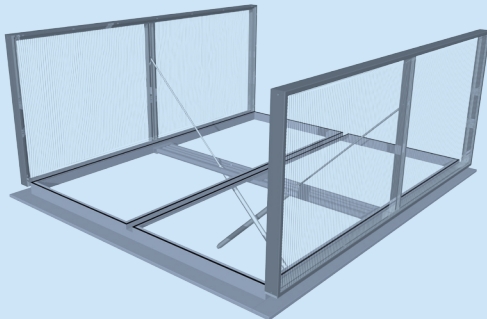
### Aluminium insulated



- Base and flaps produced in double-walled insulated aluminium
- Raised comfort level with  $U = 1.4 - 1.5 \text{ W/m}^2\text{K}$



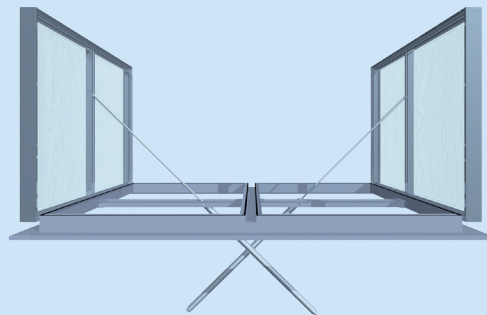
### Isolux 16 mm uninsulated



- Base produced in single-walled aluminium
- Transparent flaps in polycarbonate 16 mm for daylight ingress
- $U = 2.4 - 3.0 \text{ W/m}^2\text{K}$



### Isolux 16 mm insulated



- Base produced in double-walled insulated aluminium
- Transparent flaps in polycarbonate 16 mm for daylight ingress
- $U = 1.8 - 1.9 \text{ W/m}^2\text{K}$



## Material

**Base and flanges:** sea water and corrosion resistant EN AW 5754 (AlMg3) aluminium sheet material. Choice of uninsulated base or 30 mm insulated base.

**Seal:** covered all round with PE tape, which prevents freezing in position and guarantees high air density.

**Hinges:** stainless steel.

**Flaps:** uninsulated or 20 mm insulated aluminium flap, clear or opal multi-walled polycarbonate filling 16 mm.

**Finish:** mill finished, coated in a standard RAL colour or anodized (limited sizes).

## Operation

Natural ventilation:

**P2:** double-acting compressed air operation

**M:** motor operation

Fire ventilation in accordance with EN 12101-2:

**P2B:** double-acting compressed air operation with fire function

**PB-FS:** single-acting compressed air operation with fire function fail safe

**M:** motor operation

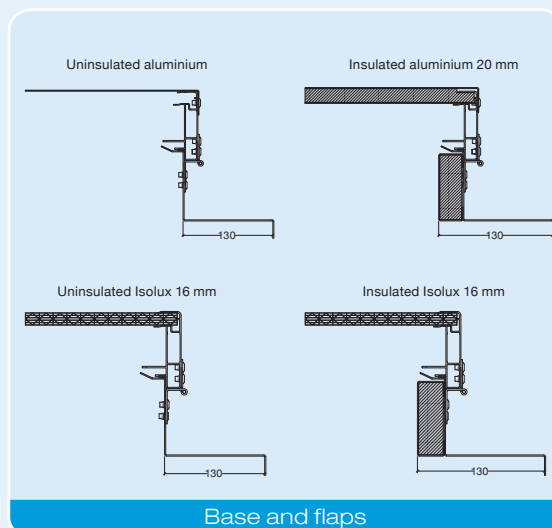
## Accessoires

- Bird or insect screen
- Insulated flanges
- Fall-through safety mesh
- Lifting eyes

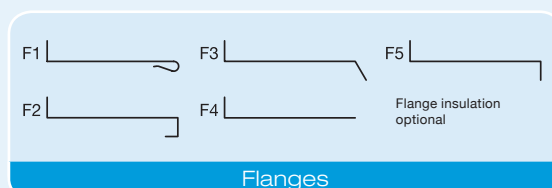
## Test results\*

- EN 12101-2 approved: B300, Re300, WL1500,
  - Type P2B: SL800, T(00) / SL500, T(-15)
  - Type M24V:
    - SL800, T(00) / SL500, T(-15) Isolux flap
    - SL750, T(00) / SL500, T(-15) Aluminium flap
  - Type PBFS: SL500, T(00) / SL250, T(-15)
- U value system = 1.4 – 5.6 W/m<sup>2</sup>K according to EN 10077-2 (depending on dimensions and version)
- Air permeability in underpressure: EN 1026: 600 Pa, EN 12207: class 4
- Watertightness: EN 1027: 600 Pa, EN 12208: class 9A
- Resistance to varying wind loads: class C1, 200 Pa (= P2) deflection < 1/300 in accordance with EN 12210 / EN 12211
- Fall-through safety / impact resistance: SB1200

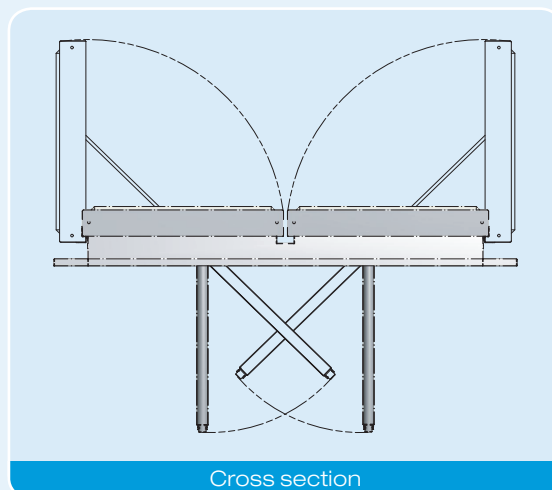
\* WL / SL is based on maximum dimension type 2530.  
If type < 2530 higher WL / SL are possible



Base and flaps



Flanges



Cross section

## Recyclable



The aluminium that is used for the production of the Brakel® Fumetica consists of 80% recycled aluminium. Recycling aluminium produces 60 to 80% less CO<sub>2</sub> emissions than the production of primary aluminium.

