BOVEMA

TMS-DG

High Capacity Operable Wall Louvre

According EN 12101-2

- Natural ventilation.
- Operable louvre system with horizontal blades.
- Air inlet for daily ventilation systems.
- Air in- or outlet for smoke ventilation systems.

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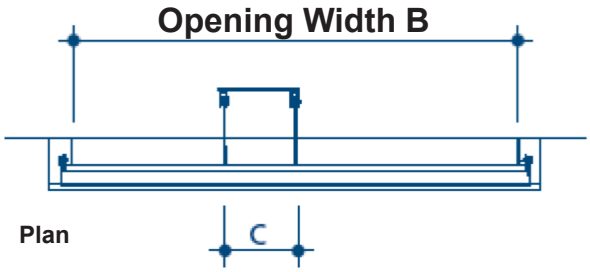
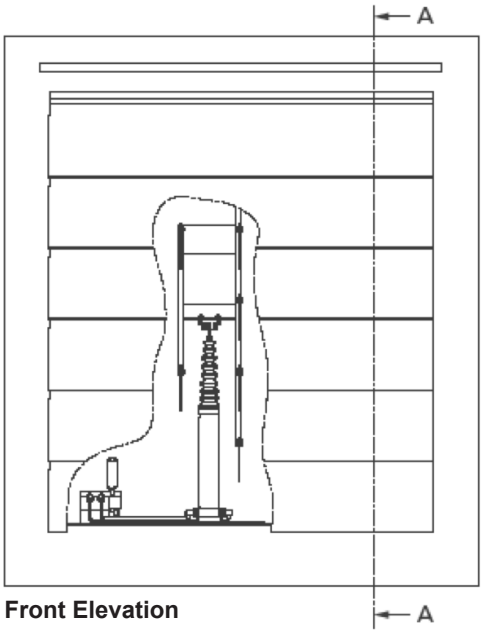
TMS-DG

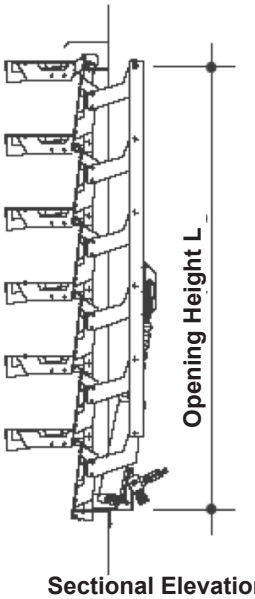
Intersection



Plan



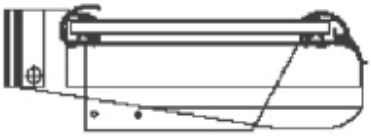
Front Elevation



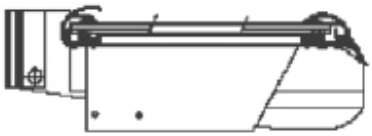
Sectional Elevation A-A

Blade Types

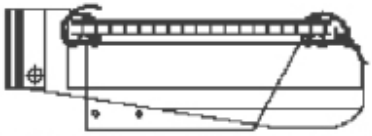
Aluminium 1,5 mm



Aluminium sandwich, 10 mm thermal insulation



Georgian wired, toughened or laminated glass, 6 mm thick.
± 90% light transmission



Translucent polycarbonate, clear or opal with 10 mm insulation,
± 79% - 50% light transmission.

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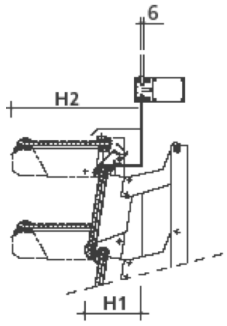
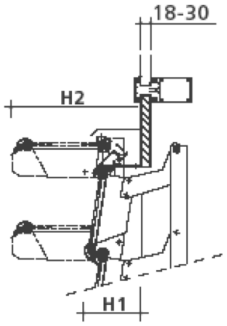
Frames and Installation Flanges



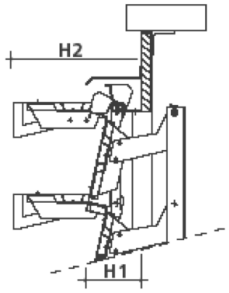
S1

Shallow box, un-insulated for installation into single glazed, glazing system



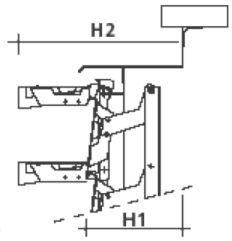
S2

Shallow box, insulated for installation into double glazed, glazing system



S4

Shallow box, insulated for installation into wall construction



S4

Full depth box, un-insulated for installation into wall construction

Blade type/ Box depth	Alu-1	Alu-2	Single Glass	Polycarbonate PC-10	Alutherm
H1 Shallow Box	105*	105*	140	140	140
H2 Shallow Box	280	280	310	310	310
H1 Deep Box	255*	255*	290	290	290
H2 Deep Box	430	430	460	460	460
C	Type < 20 C = 159 20 C = 1000 > 20 C = 1300	Type < 20 C = 159 20 C = 1000 > 20 C = 1300	Type < 17 C = 159 17 + 20 C = 1000 > 20 C = 1300	Type < 17 C = 159 17 + 20 C = 1000 > 20 C = 1300	Type < 17 C = 159 17 + 20 C = 1000 > 20 C = 1300

* Blade type > 20. H1 Shallow Box = 125. H1 Deep Box = 275

Technical information

TMS-DG (high base) single skin aluminium, geometric area Ag (m²)

Type	3	4	5	6	7	8	9	10	11	12	13	14	15	16	B(mm)
6-	0,29	0,39	0,49	0,59	0,68	0,78	0,88	0,98	1,08	1,17	1,27	1,37	1,46	1,56	**500**
8-	0,44	0,59	0,73	0,88	1,02	1,17	1,32	1,46	1,61	1,76	1,90	2,05	2,19	2,34	**750**
11-	0,59	0,78	0,98	1,17	1,37	1,56	1,76	1,95	2,15	2,34	2,54	2,73	2,93	3,12	**1000**
14-	0,76	1,01	1,27	1,52	1,77	2,03	2,28	2,54	2,79	3,04	3,30	3,55	3,80	4,06	**1300**
17-	0,94	1,25	1,56	1,87	2,18	2,50	2,81	3,12	3,43	3,74	4,06	4,37	4,68	4,99	**1600**
20-	1,11	1,48	1,85	2,22	2,59	2,96	3,33	3,71	4,08	4,45	4,82	5,19	5,56	5,93	**1900**
21-	1,17	1,56	1,95	2,34	2,73	3,12	3,51	3,90	4,29	4,68	5,07	5,46	5,85	6,24	**2060**
23-	1,29	1,72	2,15	2,57	3,00	3,43	3,86	4,29	4,72	5,15	5,58	6,01	6,44	6,86	**2200**
25-	1,40	1,87	2,34	2,81	3,28	3,74	4,21	4,68	5,15	5,62	6,08	6,55	7,02	7,49	**2400**
L (mm)	**585**	**780**	**975**	**1170**	**1365**	**1560**	**1755**	**1950**	**2145**	**2340**	**2535**	**2730**	**2925**	**3120**	

L (mm) = Clear Opening Height, B (mm) = Clear Opening Width, Ag (m²) = L (m) x B (m)

Deep Box Lh = L + 140 mm, Bh = B + 100 mm

TMS-DG

Service

BOVEMA offers a comprehensive service covering the specification and installation of our products.

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Description

The TMS-DG Wall Louvre provides an economic means of introducing large quantities of fresh air into a building. As a certified smoke extract ventilator the louvre may also be used for smoke extract in the event of a fire, where wall extract systems are acceptable. The TMS-DG louvre is particularly suitable for industrial and commercial buildings where high levels of ventilation are required and it is commonly used as an operable air inlet for high heat or smoke extract systems, operating in conjunction with roof extract louvres or fans. The TMS-DG louvre is available with solid or glazed blades and is therefore ideal for installations where ventilation plus day lightning is required. The large bladed aesthetically pleasing louvres are manufactured tot NEN-EN-ISO 9001 quality control standards and are designed and tested.

Operating principles

TMS-DG wall louvres are designed to allow large quantities of air into buildings with very little loss in air pressure as the air flows through them when open. They are particularly compatible with natural or powered extract systems for smoke ventilation or high heat industrial systems. When closed the louvres are fully watertight even in driving rain conditions. Partial opening of the louvres can also provide reduced levels of ventilation with limited weather resistance. Various control systems are available and the louvres can be operated in conjunction with other roof extract ventilators to meet various environmental requirements. Specially designed interlocking louvre blades ensure leakage is prevented when the louvres are closed, and the blade hinges are positioned outside of the air stream to allow maintenance free operation.

Applications

Typical applications include:

- High heat producing process buildings
- Industrial buildings
- Warehouses and logistics centres
- Shopping centres and buildings where daily ventilation and/or smoke extraction in the event of a fire are required.

Specifications

Louvres:	1.5 mm single skin aluminium
	10 mm thermal insulated and separated double skin aluminium
	20 mm thermal insulated double skin aluminium
	6 mm single Georgian wired, laminated or toughened glass
	10 mm translucent or opal/insulated double skin polycarbonate
Frame/housing:	Single skin aluminium
	Thermal insulated double skin aluminium

Controls

- Pneumatic control (locked in both opened and closed position) – CO_2
- Fusible link temperature: 68°– 93°– 110°– 140°C
- Electric controls 24 D/C / 230 V A/C
- Fail safe controls both electric and pneumatic
- Cable controls. CO_2 and electric battery back-up systems are available.

Materials

Corrosion resistant aluminium, sheet materials to AlMg3 alloy, extruded aluminium profiles to AlMgSi. 0.5 alloy, all fixings are in stainless steel. All bearings are nylon and require no lubrication.

General

TMS-DG louvre ventilators are supplied fully assembled and each unit is test operated before despatch. The standard unit is manufactured in natural mill finished aluminium but a Polyester Powder Paint finish to any standard RAL colour, selected from the BOVEMA range may be specified for all the aluminium components. Other optional items such as bird screens, insect mesh, sound attenuators and sprinkler shields are also available. The ventilator base and flange units are of fully welded construction, with final flange sizes fabricated to suit individual project requirements.