

Mardome Trade Smoke Vent

Consult Brett Martin Daylight Systems early in the design process as we can provide in-depth assistance with design and specification.

Mardome Trade Smoke Vent is an EN12101-2 certified dual purpose smoke and comfort ventilator.

It is supplied fitted with a 24V transverse actuator mounted to the PVC kerb designed to open to 140° for smoke ventilation, and less for comfort ventilation, in accordance with the EN12101-2 standard. Options include a control panel, with accessories such as smoke detector, fire switch and fireman's priority switch. Optional wind deflectors are also available for enhanced aerodynamic performance. For full range of Cv values and aerodynamic free ventilation area for each size, see Table on page 2.

- Contemporary low-rise profile (dome and pyramid options).
- Constant separation of glazing skins across full width of dome including fixing flange on triple skin glazing avoids cold spots and minimises condensation risks.



Providing excellent insulation, triple skin Mardome rooflights achieve a centre pane U-value of 1.8 W/m²K with a U_a-value which ranges from 1.37 W/m²K to 1.49 W/m²K depending on size.

	Centre Pane U-Value (W/m ² K)	U _a -Value (W/m ² K)	
		1050x1050mm	1800x1800mm
Double Skin Polycarbonate	2.70	1.80	2.04
Triple Skin Polycarbonate	1.80	1.37	1.49

¹ Centre pane U-value is a measure of the thermal efficiency of the glazing type.

² U_a-value is thermal efficiency of the developed rooflight unit (calculated in accordance with NARM Technical Document NTD2 (2009)).

Consult Brett Martin Daylight Systems technical literature for further details.

See table below for light transmission options:

Tint	Lighting Effect	Light Transmission (%) DIN 5036	
		Double Skin	Triple Skin
Clear	High Visibility	85%	78%
Textured	Privacy	78%	72%
Bronze	Solar Control	39%	36%
Opal	Diffused Light & Solar Control	35%	32%

Full NBS Specification clause on Page 3



Daylight Systems



NBS152

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Available Sizes and Free Ventilation Area (Aa)											
Smoke Vent Size (mm)	Daylight Size (mm)	Mardome Smoke Vent on 100mm Vertical Direct Fix Kerb					Mardome Smoke Vent on 365mm Sloped Kerb				
		Roof opening area (m ²)	Aerodynamic values				Roof opening area (m ²)	Aerodynamic values			
			Standard		With Wind Deflectors			Standard		With Wind Deflectors	
			C _v	A _a (m ²)	C _v	A _a (m ²)		C _v	A _a (m ²)	C _v	A _a (m ²)
1050 x 1050	900 x 900	0.81	0.48	0.39	0.61	0.49	1.10	0.44	0.49	0.62	0.68
1200 x 1050	1050 x 900	0.95	0.46	0.43	0.61	0.58	1.26	0.42	0.53	0.63	0.79
1200 x 1200	1050 x 1050	1.10	0.47	0.52	0.61	0.67	1.44	0.44	0.63	0.62	0.90
1350 x 1050	1200 x 900	1.08	0.44	0.48	0.61	0.66	1.42	0.40	0.57	0.64	0.90
1350 x 1200	1200 x 1050	1.26	0.45	0.57	0.61	0.77	1.62	0.42	0.68	0.63	1.02
1350 x 1350	1200 x 1200	1.44	0.4	0.67	0.61	0.88	1.82	0.43	0.78	0.63	1.14
1500 x 1050	1350 x 900	1.22	0.42	0.51	0.61	0.74	1.58	0.39	0.61	0.64	1.01
1500 x 1200	1350 x 1050	1.42	0.43	0.61	0.61	0.86	1.80	0.40	0.72	0.64	1.15
1500 x 1350	1350 x 1200	1.62	0.44	0.72	0.61	0.99	2.03	0.41	0.83	0.64	1.29
1500 x 1500	1350 x 1350	1.82	0.45	0.83	0.60	1.09	2.25	0.42	0.95	0.63	1.42
1650 x 1050	1500 x 900	1.35	0.40	0.54	0.61	0.82	1.73	0.37	0.64	0.65	1.13
1650 x 1200	1500 x 1050	1.58	0.41	0.65	0.61	0.96	1.98	0.38	0.75	0.65	1.28
1650 x 1350	1500 x 1200	1.80	0.42	0.76	0.61	1.10	2.23	0.39	0.87	0.64	1.43
1650 x 1500	1500 x 1350	2.03	0.38	0.76	0.60	1.22	2.48	0.37	0.92	0.64	1.58
1650 x 1650	1500 x 1500	2.25	0.44	0.99	0.60	1.35	2.72	0.42	1.14	0.64	1.73
1800 x 1050	1650 x 900	1.49	0.38	0.56	0.61	0.91	1.89	0.35	0.66	0.66	1.25
1800 x 1200	1650 x 1050	1.73	0.39	0.68	0.61	1.06	2.16	0.36	0.78	0.66	1.42
1800 x 1350	1650 x 1200	1.98	0.40	0.79	0.61	1.21	2.43	0.37	0.91	0.65	1.58
1800 x 1500	1650 x 1350	2.23	0.41	0.91	0.60	1.34	2.70	0.39	1.04	0.65	1.75
1800 x 1650	1650 x 1500	2.48	0.42	1.04	0.60	1.49	2.97	0.40	1.18	0.64	1.91
1800 x 1800	1650 x 1650	2.72	0.43	1.17	0.60	1.63	3.24	0.41	1.33	0.64	2.07

*Aerodynamic Free Vent Area of NSHEV in accordance with EN12101-2 : 2003 Annex B
Test Report No. 1368-CPR-T-040/2017-B

Mardome Trade Smoke Vent

Manufacturer:	Brett Martin Daylight Systems Ltd., Sandford Close, Aldermans Green Industrial Estate, Coventry, CV2 2QU. Tel: 024 7660 2022 Fax: 024 7660 2745. Email: daylight@brettmartin.com Web: www.daylightsystems.com
Product ref:	Mardome Trade-SV Smoke Vent Rooflight
Type:	Sleek, contemporary aesthetics inside and out: [Low rise curved profile glazing / Low rise pyramid profile glazing]
Size:	Rooflight size in mm (equals roof opening size when supplied with tall kerb or overall external kerb dimension of builders upstand if supplied with direct fix kerb): [1050 x 1050 / 1200 x 1050 / 1200 x 1200 / 1350 x 1050 / 1350 x 1200 / 1350 x 1350 / 1500 x 1050 / 1500 x 1200 / 1500 x 1350 / 1500 x 1500 / 1650 x 1050 / 1650 x 1200 / 1650 x 1350 / 1650 x 1500 / 1650 x 1650 / 1800 x 1050 / 1800 x 1200 / 1800 x 1350 / 1800 x 1500 / 1800 x 1650 / 1800 x 1800]
Frame:	Rigid PVC frame.
Kerb:	Rigid Multiwall PVC kerb, designed to fit directly to roof structural element (by others). The tall kerb incorporates integrated roof covering clamp for ease of installation: [Direct Fix (DF) kerb (for mounting to 200mm high builders upstand) / Tall kerb (for mounting at roof surface level).]
Glazing Details:	Constant separation of glazing skins across full width of dome including fixing flange on triple skin glazing avoids cold spots and minimises condensation risks. Outer glazing to be 3mm Marlon FSX Polycarbonate glazing with co-extruded UV protection Thermal Options: [Double Skin / Triple Skin] Tint options: [Clear / Textured / Bronze / Opal] See table for U-values and light transmission levels. Fire rating: Class B-s1,d0 to BS EN 13501-1:2002
Other Requirements:	Certified to EN12101-2. 10 year commercial products warranty available on Mardome range. Specialist control options are available.
Fixing:	In accordance with Brett Martin Daylight Systems' fixing recommendations.