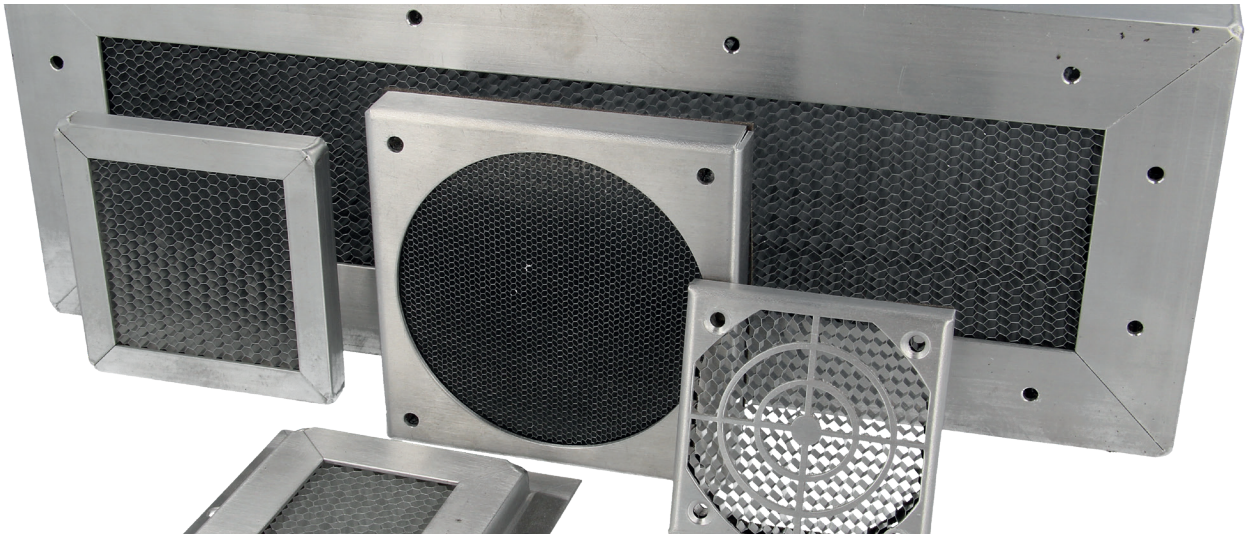
Honeycomb vents 9500



Honeycomb vents are used to shield openings for ventilation or acoustic/visual contact. We can make these vents according to your drawing within a few days, or you can use our standard range from stock.

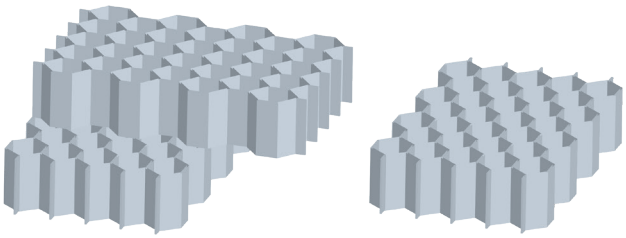
We can supply Honeycomb vents with frames, pre-drilled with fasteners, or with flow-drilled thread holes. The standard material is aluminium which can be given a nickel finish (other finishes on request, if feasible)

If high shielding levels are required, the use of cross-cell honeycombs is recommended. These are constructed from multiple sections of 6.35 mm or 12.7 mm or 26 mm thick honeycombs within a single frame. The shielding performance will improve as airflow is decreased, but not eliminated.

For military applications we make a heavy hot-dip galvanized mild-steel version. Please contact us for more information.

Honeycombs are also frequently used as flow straighteners to create a laminar flow.

Standard and cross-cell versions



Standard honeycomb & Cross-cell honeycomb
(for higher shielding performance)

Benefits

- Light-weight
- High shielding performance
- Low air-flow resistance
- Reduction of turbulence

Options

- Cross-cell honeycomb for extra high shielding performance
- Slant honeycomb 30°, 45°, 60° for outdoor rainproof applications
- 45° degrees is the most common implementation
  Please note, slant honeycombs are available on request
- Polyurethane filter for dust protection
- Kick plate for mechanical protection
- Stainless steel, mild steel or brass versions
- Cell sizes 1.6 mm, 3.2 mm, 6.4 mm, 9.5 mm, 12.7 mm, or 19 mm (standard 3.2 mm)
- Gaskets for firm connections

Approximately 95% of the honeycomb vents we produce are made to customer specifications.

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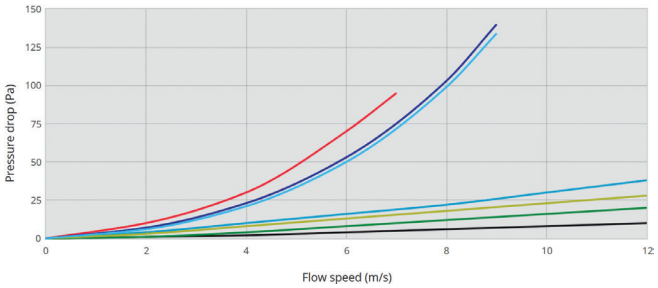
Shielding effectiveness

9500 series - Honeycomb ventilation panels



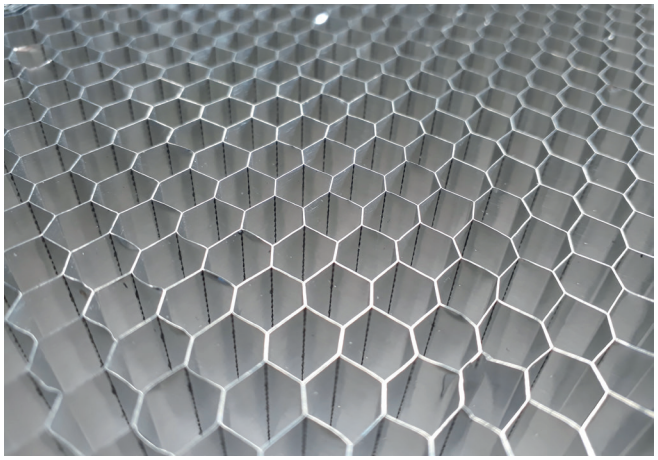
- 9520 - EMC Woven mesh ventilation panel
- 9500 - Honeycomb ventilation panel (1 layer 3.2 cell x 6.35 mm thick honeycomb)
- 9500 - Honeycomb ventilation panel (2 layers 3.2 cell x 3.2 mm thick honeycomb)
- 9500 - Honeycomb ventilation panel (1 layer 1.6 cell x 6.35 mm thick honeycomb)
- 9500 - Honeycomb ventilation panel (1 layer 3.2 cell x 12.7 mm thick honeycomb)
- 9500 - Honeycomb ventilation panel (1 layer 3.2 cell x 6.35 mm thick honeycomb + 1 layer 45° slant 3.2 cell x 6.35 mm thick honeycomb for water protection)
- 9500 - Honeycomb ventilation panel (1 layer 45° slant 3.2 cell x 6.35 mm thick honeycomb for water protection)

Shielding performance* (dB)

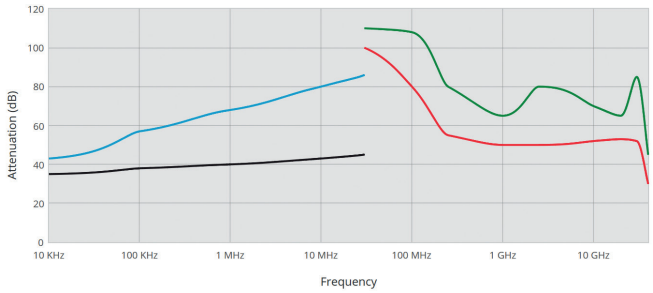
Frequency	Field	Single-layer 6.35mm thick honeycomb material Frames B, C, D, G, L	Cross-cell 6.35mm thick honeycomb material Frame H	Single-layer 12.7mm thick honeycomb material Frames E, F	Cross-cell 54mm thick honeycomb material Frame K
200 kHz	H	39	71	78	85
100 MHz	E	80	105	100	110
500 MHz	P	55	93	55	95
2 GHz	P	52	94	96	98
10 GHz	P	61	82	80	90

These values were measured under laboratory conditions and with proper gasket material used. In other situations, results may differ. Please read our Guarantee.

Please note these dimensions are only indicative, hole spacing also depends on the frame type, and exact layout is up to our discretion. When needed, we can send an approval drawing before we start production.



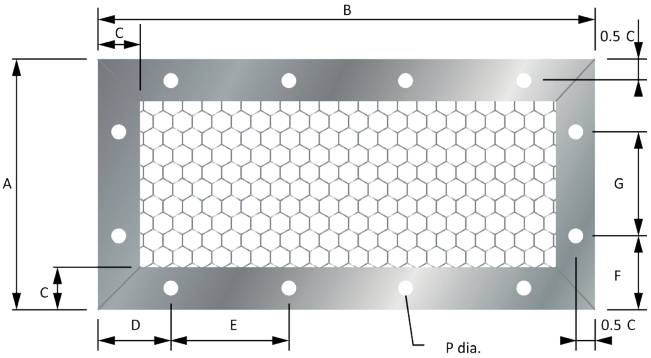
Airflow characteristics



- Honeycomb 400 x 400 mm single 3,2 mm cell 12,7 mm thick electric
- Honeycomb 400 x 400 mm single 3,2 mm cell 12,7 mm thick magnetic
- Honeycomb 400 x 400 mm cross 3,2 mm cell 26 mm thick electric
- Honeycomb 400 x 400 mm cross 3,2 mm cell 26 mm thick magnetic

Standard dimensions

Our Honeycomb ventilation panels are usually custom made for our client. However, some common dimensions are in stock. In the standard dimensions table below some common types of Honeycomb ventilation panels are specified to illustrate the required information. Hole diameter P is standard 3.5mm, with other dimensions possible on request. Also available with screw apertures or inserts.



Outer dimensions		Mounting holes horizontal			Mounting holes vertical		
A	B	No	D	E	No	F	G
75	150	2	40	70	1	37.5	-
100	100	1	50	-	1	50	-
100	200	3	20	80	1	50	-
125	125	2	20	85	1	62.5	-
125	250	3	30	95	1	62.5	-
150	150	2	25	100	2	25	100
150	300	4	30	80	2	25	100
175	175	2	40	95	2	40	95
175	350	4	40	90	2	40	95
200	200	3	20	80	3	20	80
200	400	5	30	85	3	20	80
250	250	3	30	95	3	30	95
300	300	4	30	80	4	30	80
300	600	7	30	90	4	30	80

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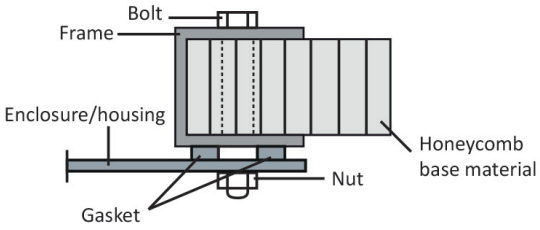
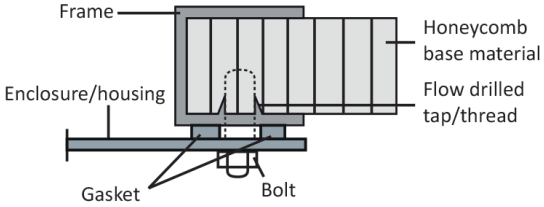
Mounting options



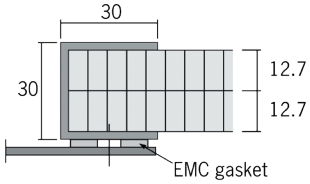
Option 1 : Through hole/bolt



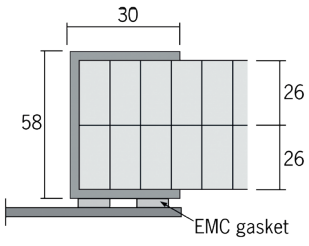
Option 2 : Flow-drilled tap/thread

Frame options

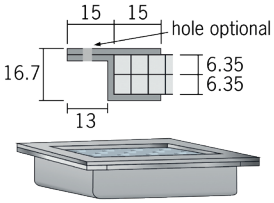
Cross-cell honeycombs



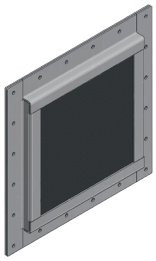
Frame A
(Cross cell honeycomb)



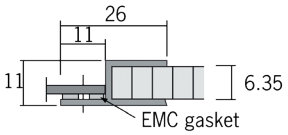
Frame K
(Cross cell honeycomb)



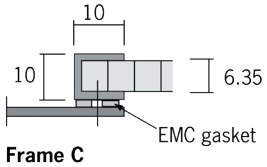
Frame H
(Cross cell honeycomb)



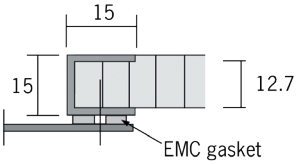
Single-layer honeycombs



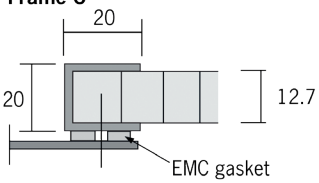
Frame B



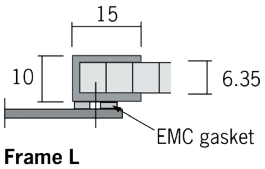
Frame C



Frame E



Frame F



Frame L

Gasket material

Our 9500 series framed Honeycomb ventilation panels are generally supplied with a 6800 series Amucor gasket.

This is a EMC gasket with an aluminium alloy. Suitable for most applications. However, due to galvanic corrosion for some applications, the Honeycombs can also be supplied with a 1200 series Metal knit gasket.

Order example

Series	Height (mm)	Width (mm)	Frame	Drill pattern	Gasket material
9500					
	Specify the height dimension in mm	Specify the width dimension in mm	**A :** Frame A **B :** Frame B **C :** Frame C **D :** Frame D **E :** Frame E **F :** Frame F **G :** Frame G **H :** Frame H **K :** Frame K **L :** Frame L	**DS :** Standard drill pattern **DC :** Custom drill pattern **N :** No holes	**A :** Amucor (standard) **K :** Knitted wire mesh **N :** No gasket

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