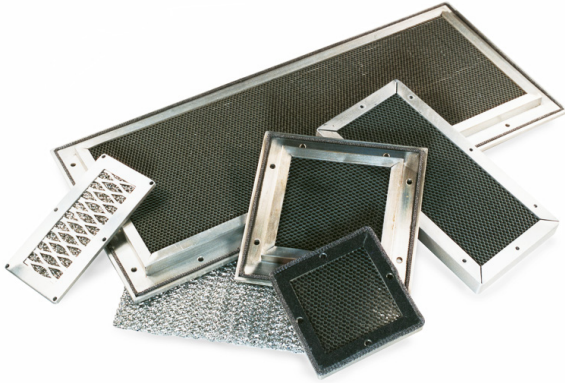




9500 - Honeycomb vents



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.

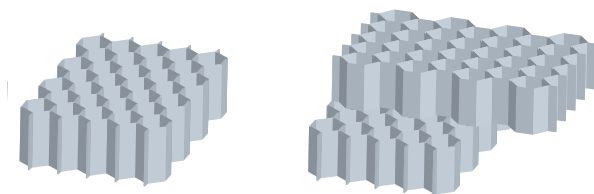
We can supply Honeycomb vents with frames, pre-drilled with fasteners or with flow-drilled thread holes. The standard material is aluminium which can be given a nickel finish (or any other finish you choose).

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 26.3 mm thick honeycombs within a single frame. The shielding performance will improve as air flow is decreased, but not eliminated.

For military applications we make a heavy hot-dip galvanised 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

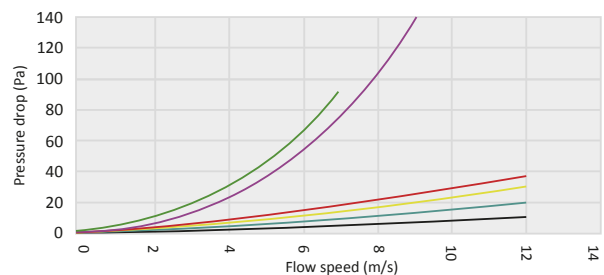
- Cross-cell honeycomb for extra high shielding performance
- Slant honeycomb 30°, 45°, 60° for outdoor rainproof applications
- Polyurethane filter for dust protection
- Kickplate for mechanical protection
- Stainless steel, mild steel or brass versions
- Cell sizes 1.6 mm, 3.2 mm, 6.4 mm, 9.5 mm, 12.7 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.

Material specifications

Extrusion	Aluminium alloy 6063-T1 QQ-A-200/9
Filter media	Aluminium alloy 5056, per RR-W-365
Honeycomb	Aluminium alloy MIL-C-7438
Grilles	Aluminium alloy 3003-H-14 per QQ-A-359
Finish	Chem film to MIL-C-5541 Class 1A standard) Also available: Bright tin, Electroless nickel or Chem film - Class 3
EMI (optional) / RFI gasket	Amucor shield 6800 or Knitted wire mesh.

Airflow characteristics

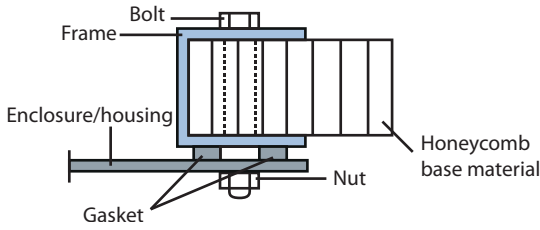


- 9520 - EMC Woven mesh ventilation panel
- 9500 - Honeycomb ventilation panel (1 layer 3.2 cell x 6.35 mm thick honeycomb)
- 9500 - Honeycomb ventilation panel (2 layers 3.2 cell x 3.2 mm thick honeycomb)
- 9500 - Honeycomb ventilation panel (1 layer 1.6 cell x 6.35 mm thick honeycomb)
- 9500 - Honeycomb 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)

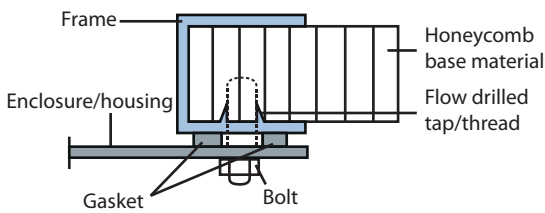
Please note : These values are measured under laboratory conditions. Results may vary in other situations; please read our [Guarantee](#).

9500 - Honeycomb vents

Mounting options



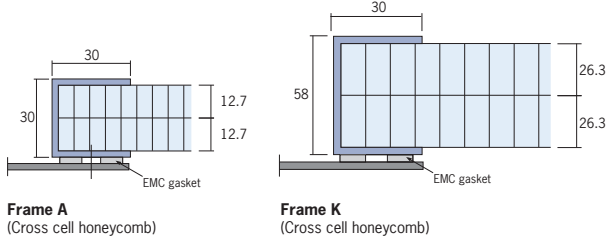
Option 1 : Through hole/bolt



Option 2 : Flow-drilled tap/thread

Frame options

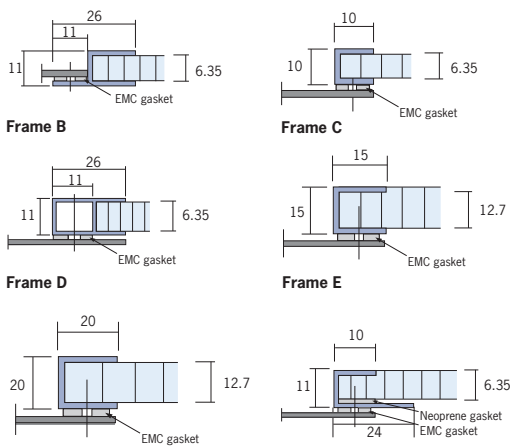
Cross-cell honeycombs



Frame A (Cross cell honeycomb)

Frame K (Cross cell honeycomb)

Single-layer honeycombs



Frame B

Frame C

Frame D

Frame E

Frame F

Frame G

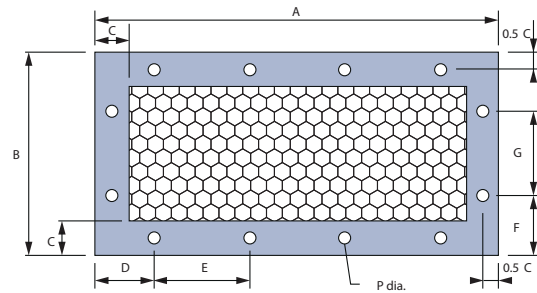
Shielding performance (dB)

Frequency	Field	Single-layer 6.35 mm thick honeycomb material	Cross-cell 6.35 mm thick honeycomb material	Single-layer 12.7 mm thick honeycomb material	Cross-cell 54 mm thick honeycomb material
		Frames B, C, D, G	Only custom frames	Frames E, F	Frame K
200KHz	H	39	71	78	85
100MHz	E	80	105	100	110
500MHz	P	55	93	55	95
2GHz	P	52	94	96	98
10GHz	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 [Guarantees](#).

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.



EMI shielding Honeycomb ventilation panels technical drawing

Outer dimensions		Mounting holes horizontal			Mounting holes vertical		
A	B	no	D	E	no	F	G
150	75	2	40	70	1	37.5	-
100	100	1	50	-	1	50	-
200	100	3	20	80	1	50	-
125	125	2	20	85	1	62.5	-
250	125	3	30	95	1	62.5	1
150	150	2	25	100	2	25	100
300	150	4	30	80	2	25	100
175	175	2	40	95	2	40	95
350	175	4	40	90	2	40	95
200	200	3	40	60	3	40	60
400	200	5	30	85	3	20	80
250	250	3	30	95	3	30	95
300	300	4	30	80	4	30	80
600	300	7	30	90	4	30	80



9500 - Honeycomb vents

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 aluminum 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](#).

How to order

Most of the honeycomb ventilation panels are made according to customer specifications. For standard part number see table in page 2. When ordering honeycomb vents, the following information should be provided.

Part number	Height (mm)	Width (mm)	Frame	Drill patern	Gasket material
9500	100 Please Specify the outer dimension in mm	100 Please Specify the outer dimension in mm	A A : Frame A B : Frame B C : Frame C D : Frame D E : Frame E F : Frame F G : Frame G K : Frame K	DS DS : Standard drill patern DC : Custom drill patern N : No holes	A A : Amucor (standard) K : Knitted wire mesh N : No gasket