



Product Overview

Steel honeycomb air ventilation panels are designed for high performance applications, where high attenuation is required particularly in the H (magnetic) field.

Steel honeycomb air ventilation panels consist of a steel honeycomb foil soldered in to a rigid mounting frame. The steel foil is formed and laminated into a series of honeycomb cells that are welded at the join, ensuring a conductive path at each join.

The frame can be supplied with an integral or separate EMI/RFI gasket, and can be treated with a variety of finishes to provide corrosion protection or improve conductivity.

Applications

Ventilation panels are designed for use in electronic enclosures where good air flow is required for cooling and ventilation but where EMC compliance must be ensured.

Typical applications are:

- Screened Rooms
- Military Air Conditioning Units
- High performance Communication shelters
- EMP installations.

Availability

All panels are individually built to your specification, Size, Honeycomb configuration, frame style, fixing method and finish.

Frames can be supplied with fixing holes to aid mounting.

Design Considerations

Any environmental conditions such as moisture and dust control including:

- Air Flow requirement
- External louvres for rain protection
- Drain holes
- Any additional gasketing.

Constructional requirements and finishes including:

- Rigidity of vent frame and enclosure
- Fixing options e.g. holes, Soldering
- Type of gasket if required
- Frame style
- Corrosion, electrical conductivity etc, (see Finishes section).

Production Capabilities

Kemtron manufacture its range of EMC vent panels using the latest technology and, with the exception of painting and electro less plating, all processes are kept in house, giving us flexibility and total control over quality. Kemtron has invested heavily in this area making us the market leaders for price, delivery, quality and availability.

In addition to vent panels, Kemtron manufactures a huge range of EMI shielding products, including conductive elastomers, oriented wire, knitted wire mesh, connector gaskets.

Finishes

Vent panels can be supplied with a range of finishes including:

- Painted
- Electro less plated Tin or Nickel
- Hot tin dipped.

We are also able to offer a comprehensive range of painted finishes to complement our standard finish. Using industry leading wet paint solutions from Trimite, we offer full painting and preparation to DEF STAN specifications including matt and gloss finishes. In addition we can also offer Infra Red Reflecting (IRR) matt finishes complying with DEF STAN 00-23, 80-166 and STANAG 2338.

For less critical/commercial applications requiring a protected finish we recommend polyester powder coating. This is tough material that offers excellent resistance to fresh and saltwater, petrol, linseed and penetrating oils, along with limited resistance to various acids. We are happy to advise on specific examples if required. As the epoxy process is an electrostatic method, it offers excellent penetration of the honeycomb cells, further aiding resistance to corrosion. With both processes, we are able to offer a full range of colours to RAL/BS charts.

Tolerances

- Standard tolerances for overall finished vent dimensions are $\pm 0.8\text{mm}$.
- Standard tolerances on hole centres are $\pm 0.4\text{mm}$.

Notice

Information supplied in these data sheets is based on independent and laboratory tests which Kemtron believes to be reliable. Kemtron has no control over the design of customer's product which incorporates Kemtron's products, therefore it is the responsibility of the user to determine the suitability for his particular application and we recommend that the user make his own test to determine suitability.

The product described in this data sheet shall be of standard quality, however the products are sold without warranty of fitness for a particular purpose, either expressed or implied, except to the extent expressly stated on Kemtron's invoice, quotation or order acknowledgement. Kemtron does not warrant that products described in this data sheet will be free of conflict with existing or future patents of third parties. All risks of lack of fitness, patent infringement and the like are assumed by the user.