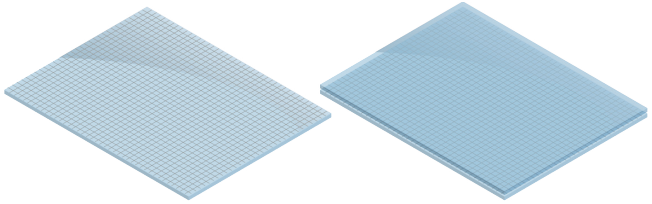
MESH FOIL WINDOWS 9700

Ready to use EMI/RFI shielded mesh foil windows

For the highest possible EMI / RFI shielding performance, a woven electrically conductive microstructure of mesh is bonded between two layers of glass or plastic (**stepped double layered window**). The EVA combined with the mesh will work as reinforcement for the glass. Alternatively, a single layer of Mesh foil 9000 series is fixed onto one side of a single glass or plastic window with self-adhesive (**single layered window**).

This can be done by laminating or edge bonding. The EMI-shielded mesh-foil windows can be provided with a silver bus bar, an electrically conductive gasket or can be supplied with a frame for easy mounting. Windows can optionally be provided with a water seal.

WINDOW TYPES



Single layer: Wire mesh fixed onto one side of a glass or plastic window

Double layer: Wire mesh bonded between two glass or plastic windows

Note that it is also possible to laminate the wire mesh under a custom angle to prevent moiré effect on for example monitors or LCD displays.

LIGHT TRANSMISSION

Opacity of mesh windows is 64.5%. A lack of available light should not be a concern, since an average pair of sunglasses allows less than 9% light to come through.

APPLICATIONS

- LCD displays;
- Membrane switches,
- Touch screens
- Defense / Avionics etc.
- Devices for medical technology
- For test and measuring instruments

WINDOW MATERIALS

EMI/RFI shielded mesh foil windows can be made from your existing windows or can be supplied as a new window made of:

- Polycarbonate (**material code P**)
- Acrylic (**material code A**)
- Glass (**material code G**)
- Polycarbonate scratch resistant (**material code PS**)

mesh foil windows can be produced up to 3 x 1.5m

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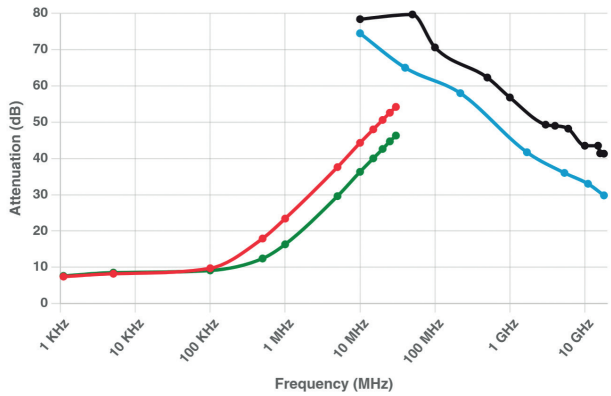
SHIELDING PERFORMANCE*



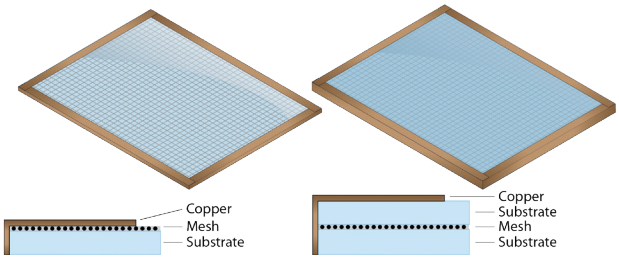
Conductive mesh with flash nickel 130 OPI Magnetic

Conductive mesh with flash nickel 130 OPI electric - Plane wave

Conductive mesh stainless steel 100 OPI magnetic

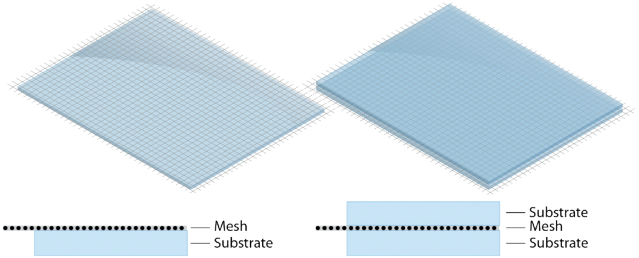
Conductive mesh stainless steel 100 OPI electric + planewave

CONTACT EDGES



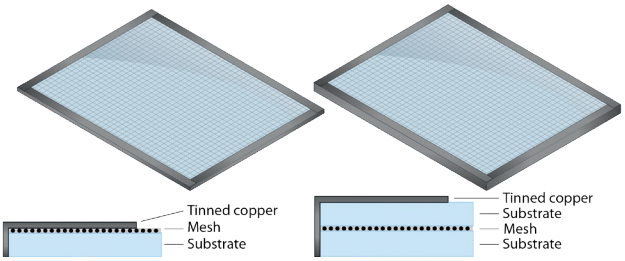
CO : Copper busbar (Single layer)
Wire mesh fixed onto one side of glass or plastic substrate.

CO : Copper busbar (Double layer)
Wire mesh fixed between two layers of glass or plastic substrate.



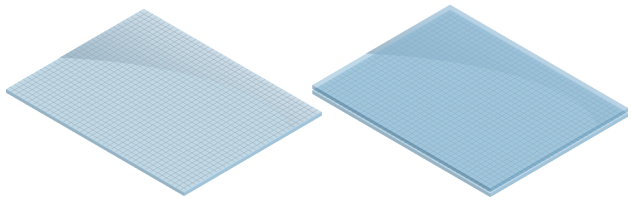
FM : Flying mesh (Single layer)
Wire mesh fixed onto one side of glass or plastic substrate.

FM : Flying mesh (Double layer)
Wire mesh fixed between two layers of glass or plastic substrate.



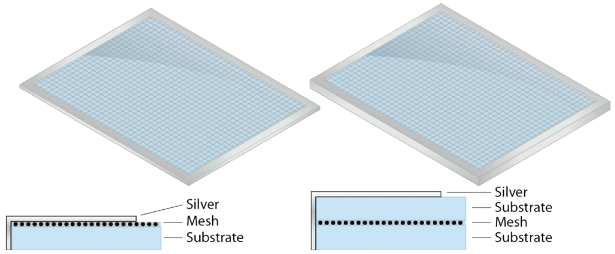
TC : Tinned copper busbar (Single layer)
Wire mesh fixed onto one side of a glass or plastic substrate. With tinned copper edges for easy soldering and grounding.

TC : Tinned copper busbar (Double layer) Wire mesh fixed between two glass or plastic substrate. With tinned copper edges for easy soldering and grounding.



NO : No contact edge (Single layer)
Wire mesh fixed onto one side of glass or plastic substrate.

NO : No contact edge (Double layer)
Wire mesh fixed between two layers of glass or plastic substrate.



SB : Silver busbar (Single layer)
Wire mesh fixed onto one side of glass or plastic substrate.

SB : Silver busbar (Double layer)
Wire mesh fixed between two layers of glass or plastic substrate.

Please note
Top layer can be affected by acid for example from the skin. To protect the conductive layer, you can apply a transparent film or use the adhesive side on top.

Looking for the highest optical quality in transparent EMI shielding? Discover our 9400 Transparent EMI shielding copper grid PET film

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TECHNICAL DETAILS AND SHIELDING PERFORMANCE

Material	Conductive mesh flash nickel (black) (standard)	Conductive mesh flash nickel Standard	Conductive mesh stain-less steel
Wires/inch (OPI)	130	130	100
Mesh total thickness (mm)	0.086	0.086	0.030
Nominal Aperture (mm)	0.110	0.110	0.224
Light Transmission	64.5	64.5	64.5

ORDER EXAMPLE

Series

9700

Width (mm)

Width of the visible area in mm

Length (mm)

Length of the visible area in mm

Window material

P : Polycarbonate (standard)
A : Acrylate
G : Glass
PS : Polycarbonate (scratch Resistance)

Window type

1 : Single layer
2 : Double layer

Thickness

For single layer, **1**, **2**, **3** or **4**mm thickness is standard.
For double layer **2**, **3**, **4, 6**, or **8**mm is standard.
Other thickness on request.

Contact edge

NO : No contact edge
SB : Silver busbar
CO : Copper
TC : Tinned copper
FM : Flying mesh

Width (mm) Contact edge

NO: No contact edge
3: 3 mm
4: 4 mm
5: 5 mm
6: 6 mm
7: 7 mm
8: 8 mm
9: 9 mm
10: 10 mm

Mesh angle

0°: 0 (standard)
17°: 17
35°: 35
45°: 45