# **MESH FOIL WINDOWS 9700**

Ready to use EMI/RFI shielded mesh foil windows

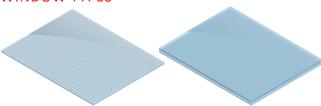




For the highest possible EMI / RFI shielding performance, a woven electrically conductive microstructure of mesh is bonded between two layers of glass or plastic (**stepped double layered window**). The EVA combined with the mesh will work as reinforcement for the glass. Alternatively, a single layer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

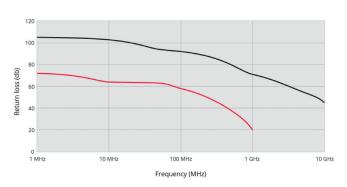
EMI/RFI shielded mesh foil windows can be made from your existing windows or can be supplied as a new window made of:

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



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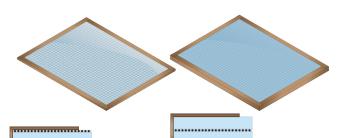
#### SHIELDING PERFORMANCE\*



Conductive coating window

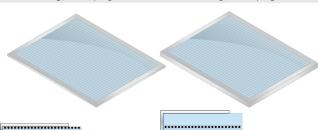
■ Mesh window copper 100 OPI

# **CONTACT EDGES**



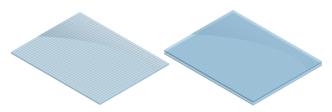
CO: Copper busbar (Single layer) Wire mesh fixed onto one side of a glass or plastic window. Copper busbar all around to make an electrical contact with the housing / Faraday cage.

CO: Copper busbar (Double layer) Wire mesh fixed between two glass or plastic windows. Copper busbar all around to make an electrical contact with the housing / Faraday cage.



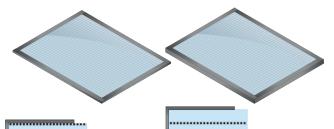
SB: Silver busbar (Single layer)
Wire mesh fixed onto one side of a
glass or plastic window. Silver busbar
all around to make an electrical contact
with the housing / Faraday cage.

SB: Silver busbar (Double layer) Wire mesh fixed between two glass or plastic windows. Silver busbar all around to make an electrical contact with the housing / Faraday cage.



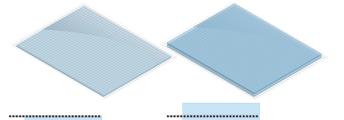
NO: No contact edge (Single layer) Wire mesh fixed onto one side of a glass or plastic window. NO: No contact edge (Double layer) Wire mesh fixed between two glass or plastic windows.





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

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



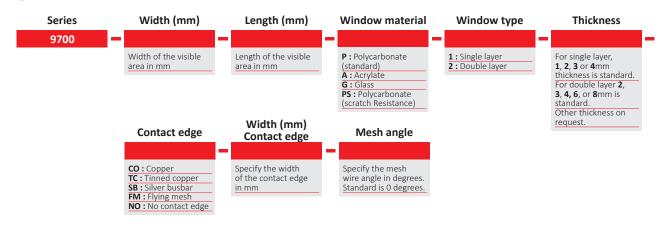
FM: Flying mesh (Single layer) Wire mesh fixed onto one side of a glass or plastic window. Flying mesh all around to make an electrical contact with the housing / Faraday cage. FM: Flying mesh (Double layer) Wire mesh fixed between two glass or plastic windows. Flying mesh all around to make an electrical contact with the housing / Faraday cage.

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#### TECHNICAL DETAILS AND SHIELDING PERFORMANCE

Material	8901	8902	8903	Copper	
		Standard			
Wires/inch (OPI)	130	130	100	70	100
Mesh total thickness (mm)	0.086	0.086	0.030	0.076	0.050
Nominal Aperture (mm)	0.110	0.110	0.224	0.287	0.204
Light Transmission	64.5	64.5	64.5	62.6	64.5

## ORDER EXAMPLE



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.

Small optical defects are allowed in this product. If you require a product that has absolutely no optical defect then contact us for the "superior selected quality". Please realize that by the extreme caution act in production these products can be several times more expensive.

#### \*Notice

Information supplied in these data sheets is based on independent and laboratory tests which Holland Shielding Systems BV, hereafter referred to as HSS believes to be reliable. HSS has no control over the design of customer's product which incorporates 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.

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