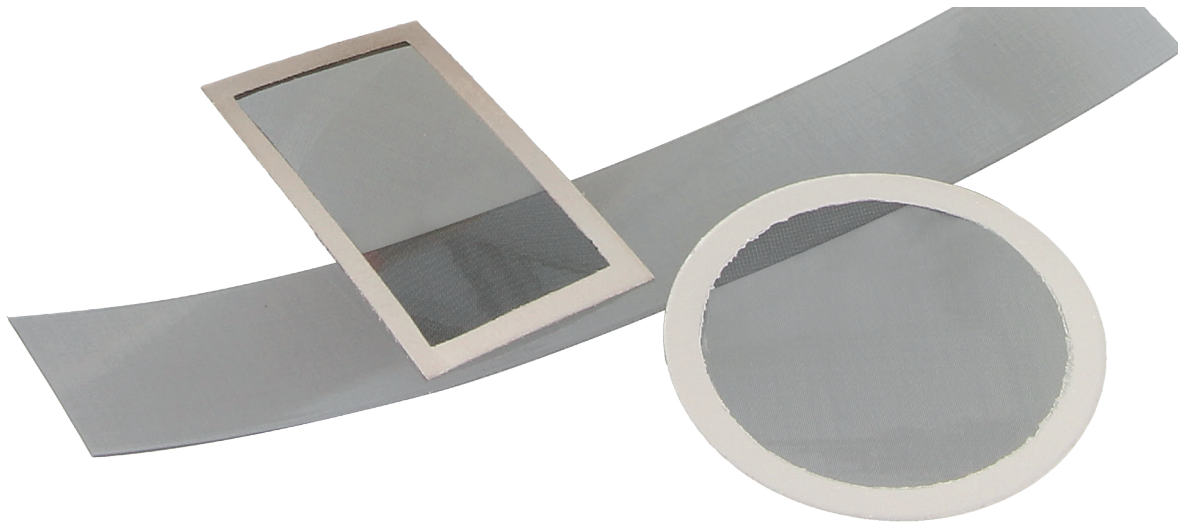


# MESH FOIL 9000 - 9300

Using Mesh foil is the easiest way to create transparent EMI/RFI-shielded windows.



Mesh foil is a very fine electrically conductive wire mesh laminated between two layers of scratch-resistant transparent foil. The wires are so fine that they can hardly be seen with the naked eye. The product is very strong but it still bends easily. It is easy to apply Mesh foil onto glass, acrylic and polycarbonate either by hand or with a laminator. It can be supplied with or without self-adhesive. The foil is available in 3 different sheet styles. The maximum sheet/roll in width is approx 1035 mm.

- **1STD** Mesh foil laminated between two layers of plastic
- **4BTB** Mesh foil with 3-4 mm silver busbar at the top and bottom, laminated between two layers of plastic
- **5BAR** Mesh foil with a 3-4 mm silver busbar all around, laminated between two layers of plastic

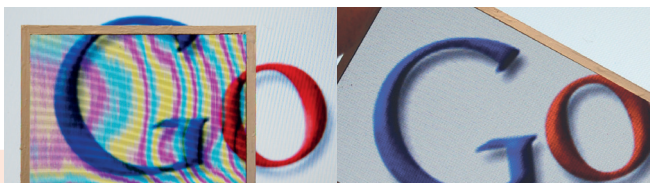
## Turnkey windows

If you are interested in ready-made mesh-foil windows, please take a look at our 9700 series EMI/RFI shielded mesh-foil windows. Here the mesh foil is bonded between two layers of glass or plastic, or a single layer of mesh foil is fixed onto one side of a single glass or plastic window.

## Technical details

Type (wires/inch)	130
Mesh total thickness (mm)	0.086
Nominal aperture (mm)	0.110
Light transmission %	63

## Wire-mesh angle



Mesh foil with moiré effect and without moiré effect

- The wire mesh can be placed at a custom angle to prevent the moiré effect on your display (standard is 0 degrees).
- A custom wire-mesh angle is only available with sheet styles 1 and 5

## Mesh foil applications

Shielding displays, windows, touch screens, monitors, LCD screens, TEMPEST.

## Options (on request)

- Stainless steel wire mesh
- Blackened copper wire mesh
- Phosphorus bronze wire mesh

## Mesh foil options

High performance foil for windows & displays:

- No adhesive 9000 serie
- Transparent adhesive 9100 serie
- Scratch resistance 9200 serie
- Scratch resistance adhesive 9300
- Micro suction silicone adhesive 91SUC

## Micro Suction Silicone adhesive

For easy manual application of the foil we have developed a new Micro Suction Silicone adhesive. This adhesive has a number of advantages that make the film easy to position. Our advise is to use standard adhesive only for laminating machines or very very experienced people. For all else use this Micro Suction Silicone Adhesive

## Benefits

- Reusable / Repositionable
- Never attach permanently
- Easy to apply by hand, less bubbly

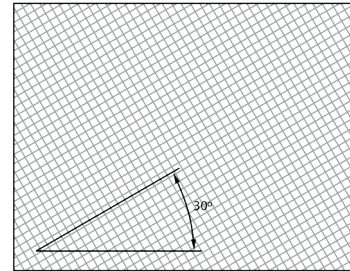
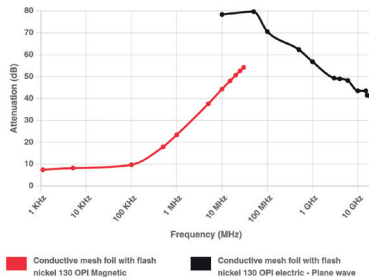
**Please note :** Mesh foil with Micro Suction Silicone adhesive has a thickness of 450 micron / 0.45 mm.

**Please note:** the top layer can be affected by acids, for example from human skin. To protect the conductive layer, you can apply a transparent film or you can have the adhesive side facing out. Max. working temperature 60 °C.

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

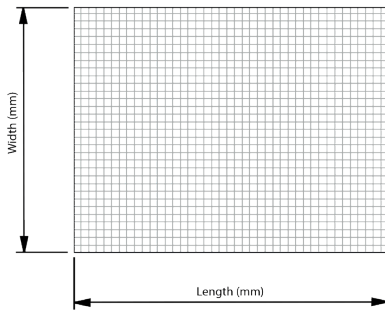
## » MESH FOIL 9000 - 9300

### Shielding performance\* 9000 series - Standard mesh foil



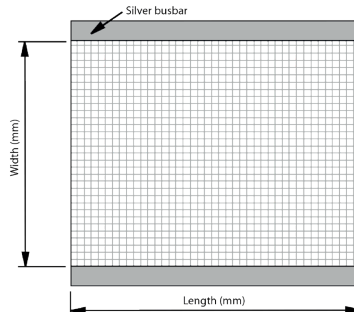
**NOTE:** For LCD displays, 17°, 35° or 45° are used typically. We recommend that you request a sample of the product to determine the proper angle of the wire mesh for your application.

### Mesh foil sheet styles



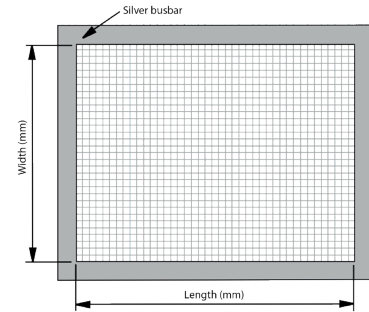
#### 1STD : Standard mesh foil

Mesh foil laminated between two layers of plastic. Available with or without a transparent self-adhesive layer.



#### 4BTB : With silver bar at top and bottom

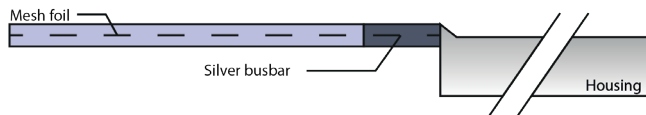
Mesh foil with 3-4mm silver busbar, laminated between two layers of plastic. At the top and the bottom of the mesh foil there is a silver strip (busbar) to make a perfect electrical connection with your enclosure.



#### 5BAR : With silver bar on all sides

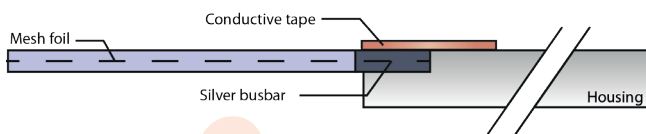
Mesh foil with a 3-4mm silver busbar, laminated between two layers of plastic. On all sides of the mesh foil there is a silver strip (busbar) to make a perfect electrical connection with your enclosure.

### MESH FOIL MOUNTING EXAMPLES



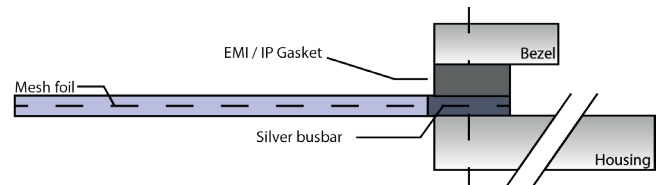
#### Mounting example 1

Mesh foil mounted with Conductive glue 3980 series



#### Mounting example 2

Mesh foil mounted with Conductive tape 3201



#### Mounting example 3

Standard Mesh foil mounted in a clamping construction with an EMI gasket.

A water seal is possible here.

#### \*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.

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 HSS invoice, quotation or order acknowledgment. HSS 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.

### ORDER EXAMPLE

Series	Width (mm)	Length (mm)	Wire angle	Sheet style	Width (mm) Contact edge
<b>90</b> : Standard mesh foil <b>91</b> : Standard mesh foil + Self-adhesive <b>92</b> : Standard mesh foil + Scratch resistant layer <b>93</b> : Standard mesh foil + Scratch resistant layer + Self-adhesive <b>91SUC</b> : Standard mesh foil + Micro suction silicone adhesive	Width of the visible area in mm	Length of the visible area in mm	Angle of the wire mesh in degrees. Standard is 0 degrees.	<b>1STD</b> : Standard mesh foil <b>4BTB</b> : Silver bar at top and bottom <b>5BAR</b> : With silver bar on all sides	Specify the width of the contact edge in mm.