



Stepped mesh windows

Cast/Mesh windows

For the highest shielding performance a woven microstructure of mesh is bonded between two layers of glass/plastic (stepped window) or a single layer of mesh foil is fixed onto one side of the window with self-adhesive (single window). This can be done by laminating or edge-bonding.

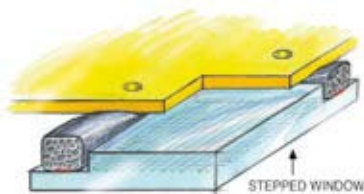
The windows can be provided with a silver bus bar, a gasket or be supplied with a frame for easy mounting. Windows can optionally be provided with water seal.

Light transmission

Opacity of mesh windows is 64,5%. A lack of available light need 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 etc.
- Defence / Avionics



Shielding performance of mesh windows

Material	Stainless steel				Phosphor Bronze		Copper		Conductive Coating
Type (wires/inch)	70	80	100	250	100	250	70	100	-
Wire diameter (mm)	0.076	0.050	0.050	0.035	0.097	0.035	0.076	0.050	-
Nominal aperture (mm)	0.287	0.267	0.204	0.067	0.157	0.067	0.287	0.204	-
Light Transmission %	62.6	71	64.5	43.5	38.2	43.5	62.6	64.5	65-95%

Attenuation (dB)									
Field Type	Frequency	dB	dB	dB	dB	dB	dB	dB	dB
H	10 kHz	20	21	22	22	20	24	22	-
H	100 kHz	21	23	23	22	42	39	35	-
H	1000 kHz	30	33	29	37	61	40	58	54
E	1 MHz	90	104	101	114	120	105	111	73
E	10 MHz	89	86	75	91	110	100	99	65
E	100 MHz	69	75	68	78	96	86	95	64
P	1 GHz	66	60	64	75	79	66	72	20
P	10 GHz	33	32	35	46	60	34	45	-

See guarantee



Faraday cage window

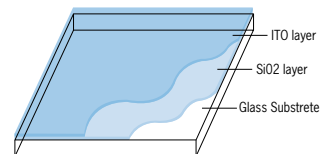
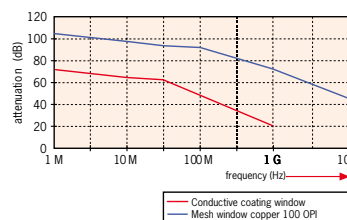
Faraday cage MRI window

We also manufacture ready to install Faraday cage windows. These windows guarantee high shielding performance. Faraday cage windows can be manufactured in every dimension.

Conductive coating window

For small areas a transparent polyester foil with a highly conductive coating is commonly used. The foil is available with self adhesive or can be laminated onto glass, acrylic, polycarbonate or any other flat surface. The light transmission is 65-95%, depending on electrical conductivity (20-5 Ohm/sq). For the best chemical and mechanical durability and transparency the transparent conductive coating is sputtered directly onto glass or polycarbonate. However, a mesh foil window provides higher shielding performance than a coated window.

Shielding performance conductive coating window



Window with step, silver bus bar and protection foils