



Transparent Cu Mesh

EMI Sheilding:

Woven Meshes for shielding windows, apertures & displays where an Electronic enclosure requires shielding from Electro Magnetic Interference (EMI) or is emitting electromagnetic energy which may cause interference with another system but requires high level of visible light transmission or image clarity

Product Range:

- Blackened 100 opi Copper is a rugged mesh that is recommended for standalone use.
- Mesh is the proprietary mesh optimized for optical performance without sacrificing EMI Performance. This is only supplied in finished window formats Sigma & Ultra.
- Micromesh is an subtractive copper grid matrix with higher light transmission and optical clarity. This is only supplied in fully laminated windows
- Conventional plated and blackened stainless steel metal mesh are also available

Material	Light %	Surface Resistivity Ω /Sq. Inch	Format
Mesh	80	0.030	Fully laminated Sigma or Ultra Window
MicroMesh	89	0.050	Fully laminated glass window only
50opi 0.050 μ m Blk Cu plated S/S	75	0.025	Sheets 450 X 600 mm
80opi 0.050 μ m Blk Cu plated S/S	65	0.020	Sheets 450 X 600 mm
100opi 0.050 μ m Blk Cu plated S/S	53	0.020	Sheets 450 X 600 mm
100opi 0.050 μ m OFL Blk Copper	60	0.010	Sheets from 600 mm sq up to rolls 2000mm wide
100opi 0.050 μ m unblk Copper	60	0.010	Rolls 1200 mm wide
EMI – ITO 15 Film	82	15	Sheets from 350 mm sq upto rolls 762 mm wide

Material		Copper	
Type (wire/inch)		70	100
Wire Diameter (mm)		0.076	0.050
Nominal Aperture (mm)		0.287	0.204
Light Transmission %		72.6	74.5
Field Type	Frequency	Shielding Effectiveness	
H	10 KHz	24	22
H	100 KHz	39	35
H	1000 KHz	58	54
E	1 MHz	105	111
E	10 MHz	100	99
E	100 MHz	86	95
P	1 GHz	66	72
P	10 GHz	60	68

Blackening:

To eliminate light reflections the mesh is blackened. The proprietary blackening system is highly conductive and enhances shielding effectiveness at frequencies below 10 GHz. The stainless steel meshes are copper plated before blackening.