Shield Screen

The mesh is fully integrated (embedded) into the PVC sheet, and it is protected by a scratch-resistant layer. It is available with an adhesive to facilitate the installation on the support. It can be applied to glass, acrylic and/or polycarbonate manually or automatically. The Shield Screen covers the frequency band from 10 kHz to 30 Ghz. The tighter the mesh, the more efficient it is in high frequencies, but with a greater loss of optical transparency. The recovery of mass/ ground is most often by drilling, with recovery by the fixing screws. Different finishes also allow a mass repise directly on the mesh or on a busbar. Our new "micro adhesive" solution facilitates manual application by limiting the appearance of bubbles, we advise to use the standard adhesive exclusively in automatic installation by rolling mill.

General Information:

Available in roll width 1 meter maximum
Length: from 1 to several meters
Cutting according to plan possible
Possibility to have different finishes (see below)
With or without adhesive
NEW: Solution "micro adhesive"
• Ideal for a maunelle pose • Repositionable • Control of the appearance or no bubbles

Applications:

- Windows and shielded screens
- Shielded touch screens
- Shield monitors
- LCD shield
- Tempest

Technical features:

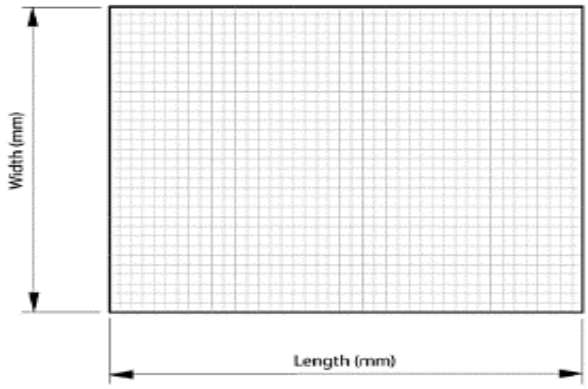
Features	Units	Values	Tolerances
Base material	/	Acier inoxydable	/
Type de fils/inch	/	100	/
Mesh diameter	mm	0.05	/
Nominal opening	mm	0.204	± 0,5
Optical transmission	%	64.5	± 1

Shielding performance								
Field	**H**	**H**	**H**	**E**	**E**	**E**	**P**	**P**
Frequences	10 kHz	100 kHz	1 MHz	1 MHz	10 MHz	100 MHz	1 GHz	10 GHz
Attenuations (dB)	22	23	29	101	75	68	64	35

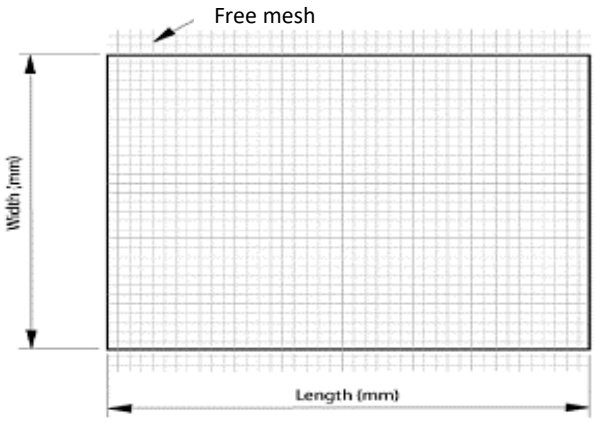
Shield Screen

Finishes:

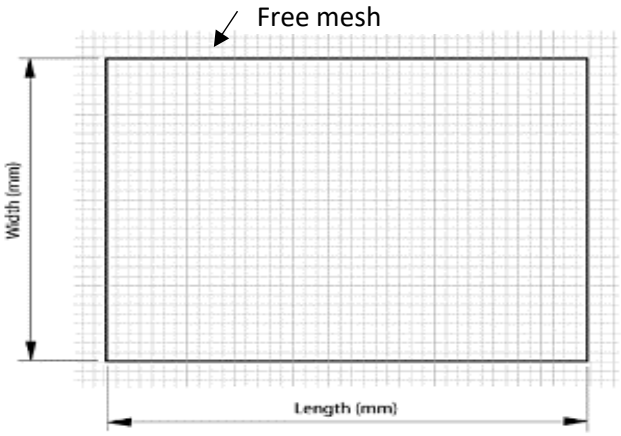
- **A** : rolled metal mesh
  between two transparent sheets



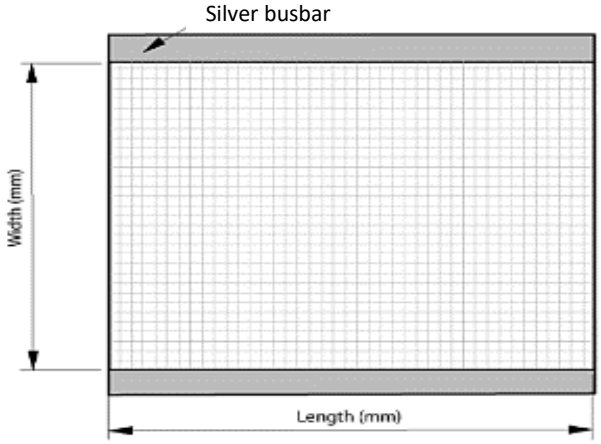
- **B1** : A finish + a free mesh area on the top and bottom of the Shield Screen



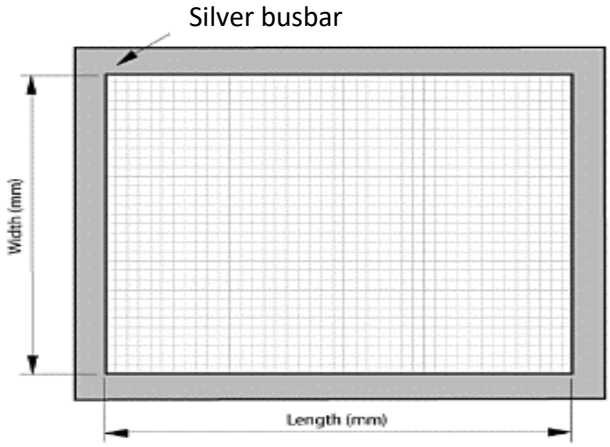
- **B2** : A finish + a free mesh area all around the Shield Screen



- **C1** : A + silver busbar finish on the top and bottom of the Shield Screen.



- **C2** : finish A + silver busbar all around the Shield Screen.



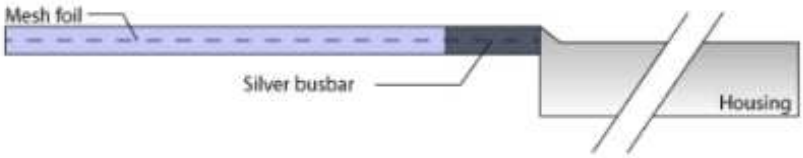
Shield Screen

Recommendations for use:

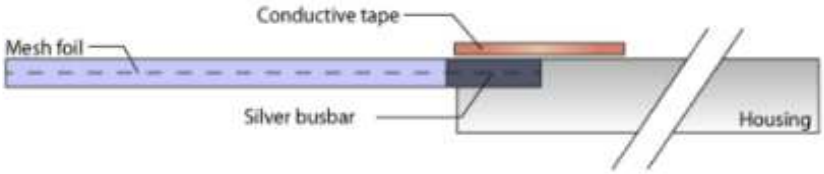
- The substrate must be clean and degreased (neutral PH cleaner) before applying the adhesive.
- For optimal efficiency, it is important to minimize the appearance of bubbles during installation, whether automatic or manual. We advise to iron the Shield Screen several times using a rolling mill until a perfect bonding is obtained.
- **IMPORTANT:** the connections to the ground must be made by specialized persons who master the phenomena of flow to the ground and will ensure the good continuity of the grounding with the adapted instruments.
  In addition to these recommendations, all valid national standards (or standards) and regulations of technical and safety standards (standards) must be observed.

Examples of implementation:

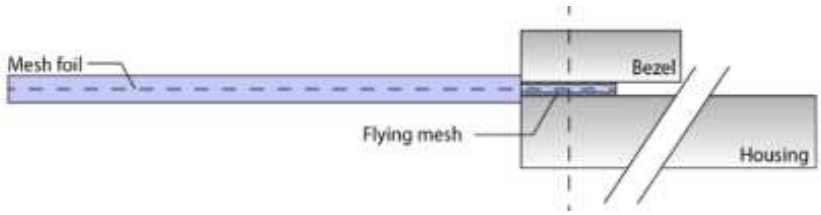
- Shield Screen with busbar and conductive glue



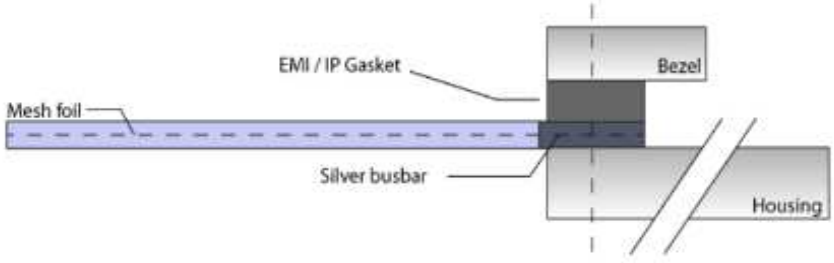
- Shield Screen with busbar and driver tape



- Shield Screen with free mesh trapped in the holder



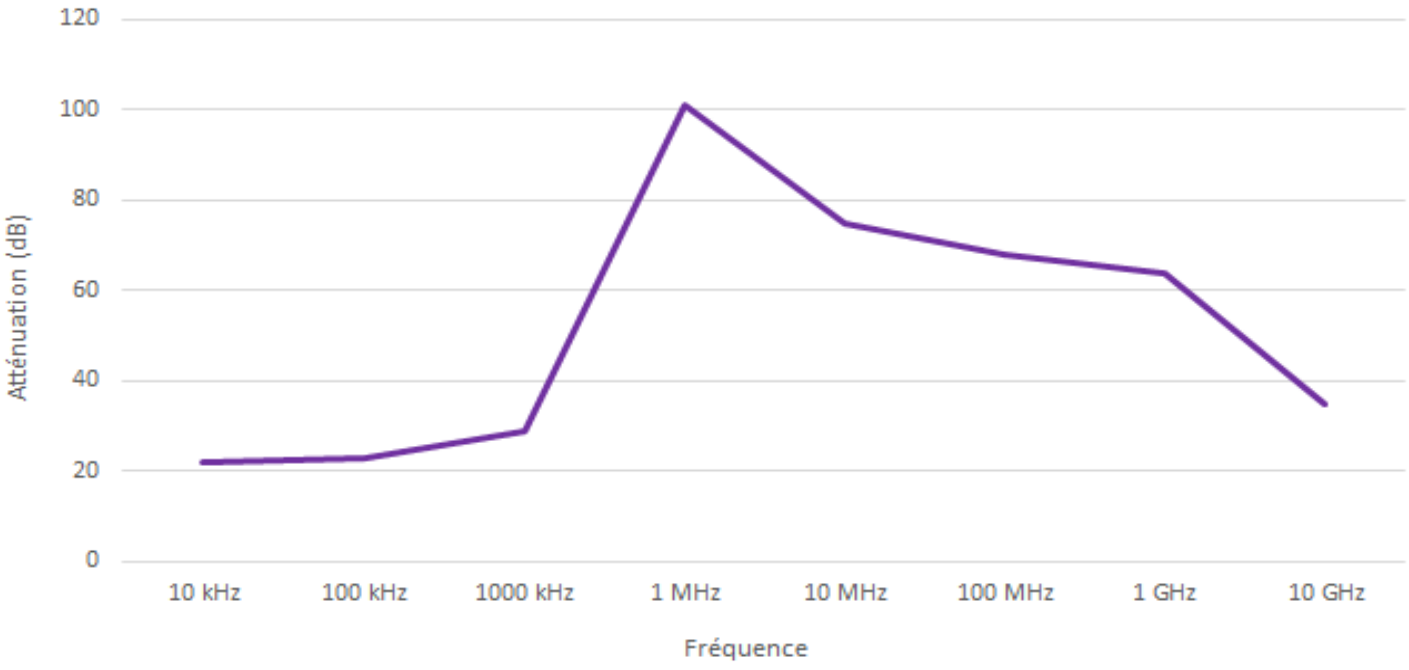
- Shield Screen with busbar and EMC/IP seal



Shield Screen

Example of loss of transmition

Shielding performance graph:



The results were obtained under laboratory conditions and should be considered only as an indication. As AB2E has no control over its customers' equipment and many other factors, it is the user's responsibility to carry out its own tests to ensure that the product corresponds to its needs.