

How to specify Woven Wire

Woven wire can be identified, and therefore specified using a combination of aperture or mesh count and the wire diameter (gauge).

Useful terminology

MESH

1. The number of openings per lineal inch, in both warp and weft, measured from the centre to centre of parallel wires, e.g. 10 openings each way per lineal inch is known as 10 mesh. 40 openings per lineal inch each way is called 40 mesh. See sketch below.
2. The lineal measurement in both warp and weft from centre to centre of adjacent parallel wires, e.g. $\frac{1}{2} \times \frac{1}{2}$ " ; $\frac{5}{8} \times \frac{5}{8}$ " . See sketch below.

APERTURE

- The space, hole or opening between adjacent parallel wires. Normally expressed in fractions of an inch or millimeters. See sketch below

GAUGE

- The name given to describe wire of a certain diameter. There are many different wire gauges throughout the world; however in Australia the British Standard Wire Gauge (S.W.G.) is universally used. This can also be expressed in millimeters.

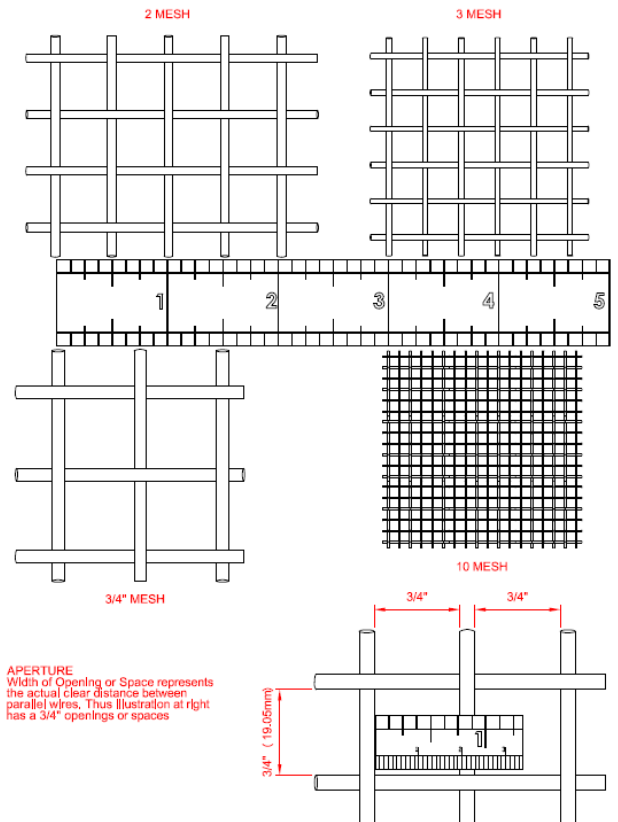
WARP WIRES OR BEAM WIRES -

- Wires which run longitudinally in the cloth when woven

WEFT WIRES or SHOOT WIRES -

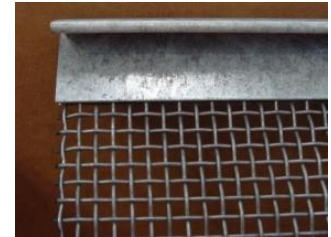
- Wires which run transversely in the cloth when woven

Note: In describing cloth, the Warp Mesh and wire precede in their respective positions, the Weft Mesh and Wire e.g. 6 x 4mesh by 18 x 16 gauges indicates the Warp is 6 mesh using 18 gauge wire and the Weft is 4 mesh using 16 gauge wire.



EDGES -

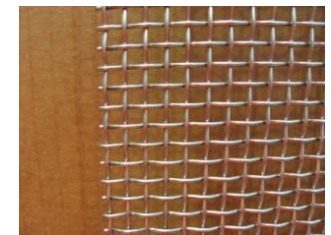
Hooked edges are edges which have been folded to a predetermined angle to provide a holding section for tensioning apparatus.



Selvedge edge is where the Weft wire loops around the outer Warp wire prior to returning across the weave, providing finished edges, which prevent unraveling.



Raw edge is where there is no retaining loop of the Weft wire around the outer edge of the weave. This typically occurs in meshes where the crimp is sufficient of itself to prevent unraveling and also in intermediate crimp specifications.



Mixed edges are when the weave has a Selvedge and raw edge. This will occur when the mesh is woven with a Selvedge edge and then the width is cut down.

Reinforced Selvedge edges occur when the edge of the weave during manufacturing is strengthened by either an extra Warp wire, a higher tensile or different material Warp wire or a combination of both.