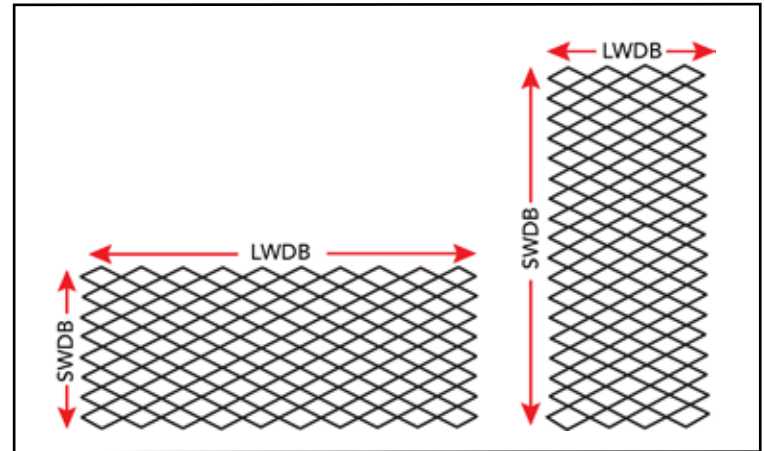
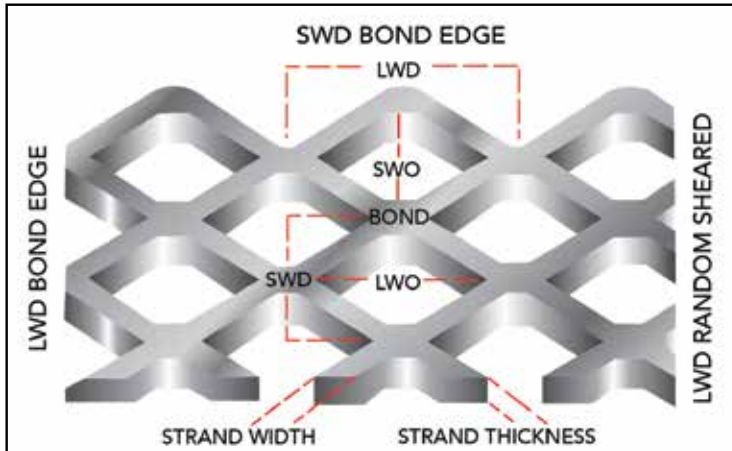


TECHNICAL GUIDELINES AND GENERAL TOLERANCES



Glossary of Expanded Metal Terms

SWD – Short Way of Diamond of a single diamond.

LWD – Long Way of Diamond of a single diamond.

SWDB – Nominal Dimension, **Short Way of Diamond** Design for an expanded metal **Blank**.

LWDB – Nominal Dimension, **Long Way of Diamond** Design for an expanded metal **Blank**.

SWO – Short Way of Opening of a single diamond.

LWO – Long Way of Opening of a single diamond.

Strand Width – The dimension associated with the width of one strand.

Strand Thickness – Gauge thickness of base metal when in the unflattened state. Approximately **10% - 15%** less than base metal thickness when in flattened state.

BOND – The solid intersection of two strands.

BOND Edge – Manufactured closed perimeter diamond.

Sheared Edge – Manufactured random cut diamond. May leave prolong or jagged edges.

Flattened Expanded Metal – Expanded metal that has been cold-rolled after expansion, to provide a smooth, flat, and level sheet. Flattening reduces the thickness of the base metal by approximately 10% - 15%.

Unflattened Expanded Metal – Expanded metal as it comes from the press. The strands and bonds are set at a uniform angle to the plane of the sheet.

Blank to Size – Custom sized expanded metal part based on the customer's dimensional requirements.

Coil Product – Expanded metal product provided as one continuous coil rather than in individual parts.

Percent Open Area – The total open area of an expanded metal blank or coil. **To calculate Percent Open Area:** take two times the strand width, divide by the SWD and then take the inverse number.

Expanded Metal Processing Considerations

- The untreated surface condition of the expanded metal will exhibit raw material and processing oils and residue.
- The four end diamonds of a rectangular sheet of flattened expanded metal will normally exhibit a reduced SWD dimension.
- The only way to achieve an expanded metal blank with perfect squareness is to re-shear the blank on all four sides.
- Strand width and thickness can be varied to create different diamond openings, this changes the open area percentage in a pattern. The width of the strand should exceed the thickness of the strand. Ideally, the strand width dimension should be approximately two times the strand thickness dimension.
- Coil product is normally produced in 1000 to 3000 linear foot coils.
- Large blanks will normally have some camber along the SWD dimension of the blank. Camber is measured as the deviation from SWD edge of a part to a corresponding straight edge surface.

General Tolerance Guidelines

LWDB TOLERANCE

RANDOM EDGES

0"to 48"($\pm 1/16"$)

48"to 72"($\pm 1/8"$)

BONDED EDGES

0"to 48"($\pm 1/8"$)

48"to 72"($\pm 1/4"$)

SWDB TOLERANCE

RANDOM EDGES

0"to 48"($\pm 1/16"$)

48"to 72"($\pm 1/8"$)

BONDED EDGES

0"to 48"($\pm 3/16"$)

48"to 72"($\pm 1/2"$)

UNFLATTENED

THICKNESS TOLERANCE

GAUGE TOLERANCE

20 to 26 ($\pm .004$)

14 to 18 ($\pm .006$)

6 to 13 ($\pm .009$)

FLATTENED

THICKNESS TOLERANCE

GAUGE TOLERANCE

20 to 28 ($\pm .002$)

14 to 18 ($\pm .003$)

6 to 13 ($\pm .005$)

SHEAR CUT TOLERANCE

Random Edge 96"or less ($\pm 1/16"$)

SPECIAL CUT-TO-LENGTH TOLERANCE

Random Edge ($\pm 1/32"$)

EXPANDED COIL WIDTH TOLERANCE

RANDOM EDGES

BONDED EDGES

Consult your Spantek sales professional regarding your individual application.

RAW COIL WIDTH TOLERANCE

– Standard Widths

COIL WIDTH

36", 48", 60"

TOLERANCE

($\pm 3/8"-1/8"$)

– Slit Widths

COIL WIDTH

Customer Designates

TOLERANCE

($\pm .005"$)

These tolerances are to be used as a reference.
Please review your individual tolerance
requirements with your Spantek sales professional.