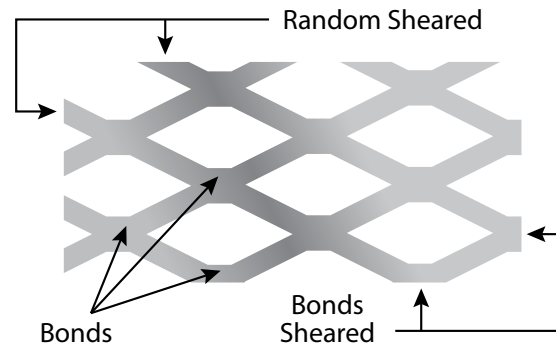


Expanded Metal Shearing



Expanded Metal Shearing

Bond shearing creates segments with equal, closed diamond configurations on all four sides. Random shearing creates segments with partial diamonds on up to all four sides which often possess sharp, exposed partial strands that should be protected by finish framing or U edging. Close attention should be paid to bond and margin requirements when shearing expanded metal. Pieces can be "Bond Sheared" or "Random Sheared" subject to manufacturing tolerances. Marco has a complete fabrication department that has the capacity and will gladly shear expanded and perforated metals to your specification.

Sheared expanded metal has many uses in:

- **Building projects:** architecture, infill panels, fencing, grates, stair treads, plastering and outdoor furniture
- **Industries:** automotive industry, construction industry and mining industry

Side Shearing

Side shearing is the process of cutting a sheet of expanded metal parallel to the diamond's long dimension.

- **Random Side Shearing:** Side shearing is achieved through a cut made parallel to the LWD, or long way of the diamond, dimension of the sheet, usually leaving open diamonds. Standard tolerances on the SWD, or short way of the diamond, dimension is plus or minus 1/16" when both sides are sheared.
- **Bond Side Shearing:** This cut is made along the length of the sheet on the center line of the bond over specified width. In most cases it is not practical to attempt to bond side shear either regular or flattened expanded metal due to camber.

- **Balance Shearing:** Balance shearing starts in LWD dimension and can be expanded into the SWD dimension, this sheet can be cut with closed diamonds or open diamonds to achieve the desired length.
- **Center-line Shearing:** Center-line shearing consists of a finished, symmetrical piece around a row of open diamonds located at the centerpiece.

End Shearing

The process of cutting a piece of expanded metal parallel to the short way of the diamond.

- **End Random Shearing:** The process of shearing a piece of expanded metal to a specified length (LWD). This cut normally leaves open diamonds at both ends but accomplishes close tolerance (plus or minus 1/16") when both are sheared.
- **End Bond Shearing:** The process of shearing a piece of expanded metal to a specified length (LWD). A plus or minus 1/16" tolerance applies when both ends are sheared. One end is out on the bond parallel to the SWD the other end usually has open diamonds. Note: When end bond shearing is requested for both ends the sheet is sheared at the center line of the bond over the specified length with the tolerance of plus or minus ½ diamond.

Squareness

The maximum tolerance of a sheet will be increased or decreased by 1/16" per foot of width when all four sides of the sheet are sheared.

Note: Bond shearing provides closed diamonds the facilitate handling and safety but frequently result in higher cost and always require greater dimensional tolerance. Random shearing is normally less costly except where the scrap ("drop-off") is excessive. Also, random shearing is more difficult to handle and presents a safety risk due to the sharp edges left on the open diamond.