

Technical Bulletin

FIELD CUTTING METAL ROOFING AND SIDING SHEETS

Periodically Sentrigard has received requests for information on how to field cut aluminum and steel sheets. The purpose of this bulletin is to provide information that can be relayed to our customers. Hopefully, this will answer most questions.

I. ALUMINUM

To make a cut in the direction of the rib or corrugation, simply score the metal deeply with a sharp knife and bend the sheet toward or away from the cut. The metal will break evenly along the cut.

For horizontal cuts across the ribs or corrugations, there are several methods available. One method is to use an electric saw with a metal blade. Two alternative blades are a fine tooth blade for cutting hardwood, or a standard wood-cutting rip-blade reversed in the saw. Light oil or soap on the blade will make cutting easier. Several sheets may be cut at once. Care must be taken, however, when sawing sheets because chips from the saw may embed themselves into painted sheets. To prevent this it is recommended that the pre-painted sheets be turned over while being cut so that the chips will fall on the inside surface, which can be protected with a plastic sheet.

Another method available is to use metal snips. Care must be taken with the snips however, for they have a tendency to spread the rib or corrugation along the cut line so that all sheets will not necessarily be uniform.

Portable contour shears which permit cutting sheets on the job are the best method available for horizontal cuts. Their only disadvantage is that if a contractor is using two or more different profiles on a job, he will need a different shear for each profile. Portable shears are available through:

Swenson Shear Co.
P.O. Box 190
Keyes, California 95328
(209) 537-8988

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II. GALVANIZED STEEL

As with the aluminum, a portable contoured shear is especially recommended for across-the-profile cutting of galvanized steel. The shear provides the "cleanest" cut without damaging the sheet.

When a shear is not available or the sheet is to be cut along a corrugation, the use of a nibbler or a steel-cutting blade is possible. Do not use self-consuming abrasive blades. When using a saw or nibbler to cut steel sheets, care must be taken to prevent chips of metal from sticking to the sheet surface or becoming embedded in the paint film. These chips rust and form unsightly red spots on the painted surface that may become larger than the original chip. To prevent the problem with chips, it is recommended that the pre-painted sheets be turned over and covered with a plastic sheet before being cut. If chips should become embedded, they should be dislodged mechanically by brushing with a stiff fiber brush. Care should be taken by workmen to avoid stepping on or exerting pressure against any steel chips which would tend to further embed them in the paint film.

Metal snips are sometimes used, but as with aluminum, uniformity is difficult.