

PREPARING GALVANIZED METAL

1. DOMESTICALLY MANUFACTURED GALVANIZED METAL:

New rolled galvanized metal usually has an oily surface film which must be removed to allow adhesion of the primer to the substrate. When galvanized metal is used on the exterior, this oily film will weather away in approximately six months, making the surface paintable with minimal preparation (simply removing dust or dirt from the surface readies the metal for priming). When galvanized metal is used inside or in sheltered areas protected from weathering, the surface oil must be removed manually before priming. This may be accomplished through the use of a solvent which itself contains a minimal oil content (naphtha and lacquer thinner are examples of solvents containing minimal amounts of oil; mineral spirits contains more oil than is safe for using to prepare galvanized metal). Some commercially available degreasers may be employed when using solvents is not practical, although most commercial degreasers require thorough rinsing with water which is often impractical indoors.

2. IMPORTED GALVANIZED METAL:

Galvanized metal which arrives from overseas as deck cargo on ships usually has been coated with a protective passivator film to protect the metal from corrosion in the salt environment. When used outside, this passivator film will usually weather away after about six months exposure in Florida. When galvanized metal is used inside or in protected areas away from weathering this passivator must be removed by etching the surface with a solution containing phosphoric acid. This procedure must then be followed by a complete and thorough rinse of the surface to remove traces of acid residue, which in itself can be as detrimental to adhesion as the passivator film itself.

Whether using imported or domestic galvanized metal, inside or out, it is always best to apply test areas of primer to the surface and check adhesion before coating the surface completely.

Test by allowing the primer to dry at least overnight, then score the film by cutting an "X" through the primer with a razor knife. Apply a strip of wide masking tape to the primer over the scored area and press down firmly. Pull up one end of the tape and pull the tape quickly away from the primer. If no primer releases from the metal surface and comes off on the tape, the surface is properly prepared in that area.