

TROUBLESHOOTING

PAINT DEFECT/ISSUE:

MOTTLING

Consistency is critical during the application of metallic paints. For aluminum flake to work properly in a finished metallic paint film, it must be applied evenly. The coating must be applied “wet” enough to allow the aluminum to settle properly. Where these paints are applied too “dry,” the paint will appear lighter than the color standard and areas where a sufficient wet coat was applied.

APPEARANCE:

Uneven distribution of material when applying a metallic paint causes a striped, spotted or streaked appearance in the finished surface. Also called tiger stripe, spotting, floating.

CULPRITS:

There are several reasons why mottling occurs, causing a newly applied metallic paint material to appear uneven. They are:

Inconsistent spray pattern: Inexperienced painters and those with poor technique will find metallic paints much more difficult to apply than solid colors. This is because any inconsistency in the distribution of material is amplified by characteristics of the aluminum flake used to achieve the metallic appearance. Some key factors in the proper technique of applying metallic paints are as follows:

- Distance and position of the gun tip relative to the panel. If these do not remain consistent (i.e. paint applied in wide sweeping arcs) a pattern of alternating light and dark spots or stripes may appear.
- Speed of pass. If the gun travels the distance of the panel at one rate of speed, then another on the next pass, a pattern of alternating light and dark spots or stripes may appear.
- Degree of overlap. Unless the overlap pattern remains consistent from one pass to the next, alternating light and dark spots or stripes may appear.

Too much/too little reducer: Using too much reducer may cause the paint material to go on too wet in some spots (causing a darker than expected effect). Conversely, using too little reducer may cause the paint material to be applied too dry in some spots (causing lighter than expected patterns).

TO FIX:

If paint film has cured completely, properly abrade surface and reapply paint. Final coat may be fogged as necessary to set metallic pattern evenly. If using Kirker’s ULTRA-GLO 2.8 VOC Single-Stage Urethane paint, consider adding ULTRA-LOCK Metallic Effect Stabilizer/Base Converter (UA-2400) at a 3:1:1 mix ratio.