

Touch up and repair

Which repair method allowed by ASTM A 780 do you prefer? Why do you feel your choice is the best? What materials do you use? Which brand do you prefer? Why?

No matter how well we galvanize a piece of steel, occasionally it is necessary to make a repair to the surface.

Under ASTM A 123 section 4.6, it is permissible to repair a section that is "(a) 1 in. or less in its narrowest dimension, and (b) totalling 1/2 of 1% of the surface area to be coated, or 36 in² per ton of weight, whichever is less".

"The thickness of the repair shall be 50% greater than the thickness of the galvanized coating required for the type of galvanized surface but not greater than 4.0 mils."

ASTM A 780 is also designated in this section as the Practice to be used for the repair. A 780 defines three primary practices in section 3. These are zinc-based solders, zinc-rich paints and sprayed zinc.

Only the section on zinc-rich paint gets specific about the material to be used. It requires a paint that delivers a "minimum 94% zinc dust by weight" in the dried film.

Research work released by ILZRO discusses the pros and cons of each method, and in a recent release suggests a new formulation for the zinc-based solder. ILZRO published information specifies a new solder formula that is lead free, but is simple to use. If you would like a copy of this paper, please contact the AGA office.

The AGA also maintains a list of products and manufacturers that can be used for repair. You can obtain a copy by calling the office. Additions to the list are encouraged.