

Technical Bulletin

SPANGLE OF GALVANIZED METAL

Please be aware that for the past decade the spangle of Galvanized material has been changing and the spangle is getting smaller and smaller. There is nothing wrong with this spangle free material. This is the direction the steel mills are going in the future. The spangles that we are all used to seeing were originally caused by lead and other heavy metal impurities in the zinc coating. After it was legislated that lead was to be removed from our environment wherever possible the mills began removing lead and substituting antimony to produce a spangle. Antimony, unfortunately, is also a heavy metal and its use is also being reduced wherever possible. As a result, galvanized material with a spangle will be phased out over time. The exact timing is dependent on the steel company supplying the material and the mill from which it is produced. This change is an aesthetic change only. The performance of Galvanized steel will not be reduced by this change. It does, however, make it very difficult to maintain consistency of appearance on Galvanized material. If a consistent look is required on a project, painted material should be used.

On a positive note, this spangle free galvanized material offers the following:

- 1 There is no reduction in service life with this material. In fact, I have read that corrosion normally begins at the intersection of the spangle flowers (called intergranular corrosion) and the lack of spangle may actually make the material more resistant to corrosion.
- 2 The surface is smoother and will be more readily paint-able.
- 3 We will have a safer environment without the heavy metals.