



To: Bridger Steel Sales Staff (All)
From: Chris Babcock
CC: Dennis Johnson, Technical Bulletin File
Date: 3/4/2016
Re: TPB #02 Dissimilar Materials and the use of Class B or C Shakes, or composition shingles shakes.

Issue: Customers are seeing corrosion and failure in roofing products using Class B or C Fire Resistant wood shakes or Composition shingles, and topical fire treatment products in combination with metal roofs. Failures are occurring at 2-10 years from the time of installation and are occurring where the shingled roof runs off onto, or is in contact with this material. This includes both Painted galvanized product and Bonderized material, and all bare metal products.

Resolution: We are beginning to see a chemical reaction from the Class B & C shingles and Shakes as well as class composition shingles and shakes on its underlayment, flashings, and subsequent roof run offs from upper roof planes.

Because of proprietary and patented formulas protected by the industry, the chemical compositions of the retardants used for the fire protection of these products have been largely protected. The largest contributor to the chemical composition in fire retardation formulas is Phosphoric acid in the 10-40% range, which is released continually from the product causing the corrosion. This includes pressure treated or topical treatments. With any direct contact, water or snow runoff, the acids are carried and react quickly on any surface areas that have been compromised by micro scratches or abrasions in the installation of the product, or if allowed to sit, act directly on the surface of a protected panel.

Bridger Steel does not recommend the use of any flashings or metal roofing products in painted galvanized metal, galvanized metal, or bare metal products including copper as suggested by the Shake and Shingle Bureau, or any of the Class B or C fire rated products that potentially contain the fire retardant's mentioned in this memo. We are currently investigating the use of stainless steel in this application, but it has not been approved for use at this time. In any case where these dissimilar materials have a direct or indirect contact with either the painted metal product or Bonderized materials, or bare metal product, any applicable warranties on materials provided by Bridger Steel will be voided in these instances. Prior approval of any products with these similar conditions must be made by Bridger Steel to observe any applicable warranties.

Notes: The use of a non-treated roofing material that do not have a chemically applied treatment, are excluded from this. In fact, approved roofing products perform well with the AZ50 and G90 products with approved fasteners and flashings and underlayment's.

Sales Topic

- Be sure you tell your clients or verify this condition on projects that you are sending out. Clients need to know there will be no warranty where this condition exists.
- If in question about dissimilar materials, please consult before the sale of any of these conditions.

Attachment: See the attached photos below that we received from one of our suppliers that was asked to inspect the conditions as described above.

This Photo is of a product claim that shows the effect of accumulated acids that have deteriorate the edge of a Bonderized roofing product. As a result of this, a replacement claim was denied.



This Photo represent the same claim, the valley flashing where the acid has deteriorated the panels to left, and the valley flashing. The panels on the right do not have a roof overflow with the class B fire retardant shingle.

