

Technical Product Bulletin

Doc Number: TSB001
To: All Sales Staff
From: Chris Babcock
CC: Dennis Johnson
Date: 2/18/2016
Re: **Single lap vs. Double lap on 3/4 and 7/8 Corrugated**

Issue: **Concerning the issue regarding single lap vs. Double lap. Previously discussed was the issue of siphoning caused by the single lap.** *“Per our conversation about the 7/8 corrugated concerning a single rib dual rib overlap. I spoke with an engineer about the idea brought up of going with a single rib overlap vs dual rib overlap. The concern he has with a single rib overlap is with snow and ice sitting on the roof and weeping in-between the overlap causing syphoning over the underlap rib.*
After discussing the engineers concerns with Dennis he decided to continue using the dual rib overlap on roof applications and single rib overlap on the wall application. With this all of our current documentation will remain in effect.”

Resolution: **A single lap can be used on a pitch 4/12 or greater provided A.) the installation includes the use of a minimum 3/8” Butyl tape at the peak of the first rib, and B.), you must include Stitching at 24” o.c. along the panel joint with a #12 x 3/4” fasteners (painted head) or a #14 x 2” stainless for the A606 panels. This is to break the weeping or siphon effect as well as protect the rib from wind driven or water driven force.**

Notes:

- 1. In the condition of a 3/12 or less pitch, the double lap and mastic combination must still be observed, NO EXCEPTIONS.**
- 2. This may add to the cost of installation from both a labor and additional materials standpoint. Additionally, the mastic material has a life span to consider as well.**
- 3. Be advised this will also potentially cause minor gapping at the adjoining seams edge. See “Sales Topic #1” in this bulletin for tips on avoiding this concern.**
- 4. The use of any bituminous or silicon product would be advised against due to product telescoping in extreme heat and creating an appearance issue as well as potential early failure.**
- 5. A form is in development for your sales order and obtain a signature from your customer at the time of sale if they choose this product option to acknowledge this application and to avoid any warranty issue. Contractors signatures will be kept on file acknowledging this change.**

Sales Topic

- 1. Bridger Steel has two features including a 5° Overbend on the outside rib that helps the overlap and seaming of each panel, and Bridger Steels exclusive Anti-Syphon groove on each panel giving the product additional assurance against failures due to the elements.**
- 2. Our suggestion is to maintain the double rib overlap if there is any question or uncertainty regarding this option.**

Attachment: Marco Butyl Tape Sealant cut Sheet

Technical Product Bulletin

Doc Number: TSB001
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From: Chris Babcock
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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

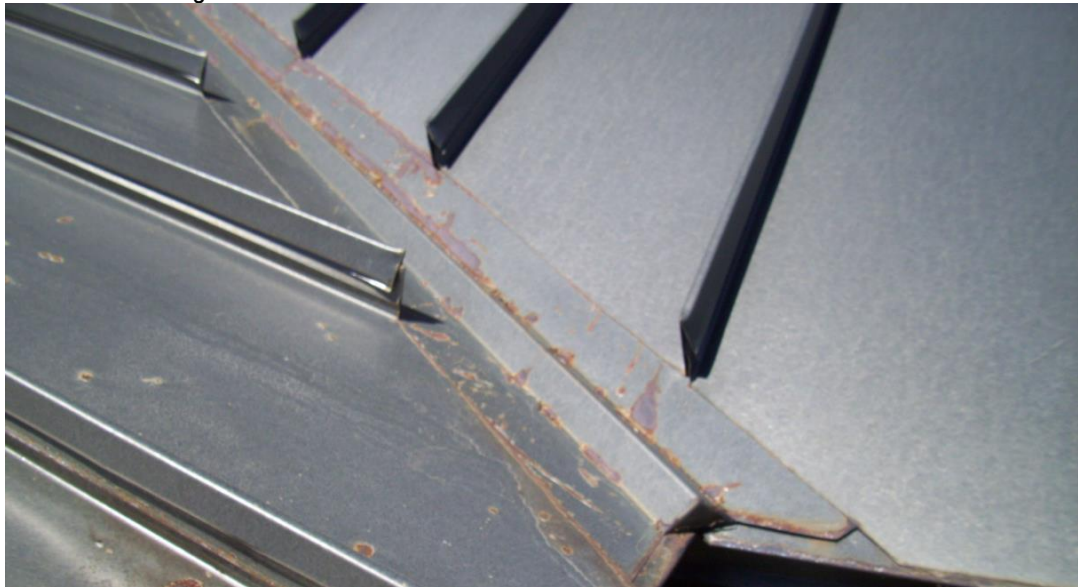
- Be sure you tell your clients or verify this condition on projects that you are sending out. Clients need to know there will be no warranty where this condition exists.
- If in question about dissimilar materials, please consult before the sale of any of these conditions.

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.



Technical Product Bulletin

To: Bridger Steel Sales Staff (All)
From: Chris Babcock
CC: Dennis Johnson, Technical Bulletin File
Date: 3/8/2016
Re: TPB #03 S-5® Clamps on bare metal products or Truten™ Products.

Issue: Inside Sales brought an interesting question to the table. Does the cast aluminum block in the S-5® Blocks for mounting snow breaks onto roofing panels have a dissimilar metal reaction on our Truten™ material?

Resolution: The answer from S-5® Technical Support is NO, this product does not create a degrading or significant chemical reaction from the two dissimilar materials. While this is contrary to our stance on the review of dissimilar materials, the findings are stated below.

The S-5® Aluminum block acts as a 'sacrificial anode when attached to a steel product. The 'nobility of the two metals is such a low variance that while there is some 'galvanic reaction, the result is one of two items when attached to bare metal or Truten™ product; 1: Some appearance of white rust will be evident where the block contacts the material, but will not continue to degrade. 2. There is some rusting that will occur where the stainless steel set screw dimples the rib it is attached to, but is negligible as the product itself rusts. To summarize, the product will not degrade during the lifespan of the roofing product. 'A dielectric paste can be applied under the block prior to installation to ensure the separation of the two materials.

The S-5® product is completely compatible with painted or unpainted G-90 galvanized steel, bare or painted Aluminized, Galvalume and, Zinalume. Of course, they are also compatible with aluminum (painted, bare or anodized) and also compatible with titanium-zinc products.

The only product that S-5® does not recommend for use with the aluminum block is copper. This will cause a rapid deterioration of the Block and copper panel. There is a Brass block made by them in a few selected profiles only.

Notes: 1. For additional information of the Sacrificial Anodes, the Nobility of materials, Galvanic Reaction, or the use of dielectric paste, please contact Product Support.

Sales Topic) Please carefully review the correct S-5® Block to match Bridger Steels panel profiles which include corrugated material.
) Review your project carefully to inspect any additional conflicts with dissimilar materials issues that conflict.

Attachment: See the profiles available from S-5® to make sure you match the correct block to our panel profiles.



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No matter what the profile, S-5! has the solution!

Introduction

Applications/Uses

S-5!® Clamps

Introduction

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- [S-5-KHD](#)
- [S-5-K Grip](#)
- [S-5-K Grip Snow](#)
- [S-5-N](#)
- [S-5-N 1.5](#)
- [S-5-T2](#)
- [S-5-R465](#)

Flanged Clamps

FAQs

VersaBracket™

VersaGard™

CorruBracket™

CorruBracket™ 100T

TopFix CorruBracket-AU™

ProteaBracket™

RibBracket™

Product Catalog

Load Test Results

Panasonic Assembly Tools

Installation

FAQs

Design Your ColorGard® Project

See How Easy S-5! is to install!

How Strong is S-5? Load Test Results



S-5!® clamps attach to the panel seam by the tightening of two "bullet-nosed" stainless steel setscrews against the seam material. (This is usually done with an industrial grade screwgun.) The round point setscrews compress the seam material against the opposite wall of the clamp. They will "dimple" the seam material, but will not penetrate it. Threaded holes in the clamp (stainless hardware is provided) enable the easy attachment of various ancillary items to the clamps.