TREMCO
Roofing & Building Maintenance

TECHNICAL BULLETIN

Rev. 06/17/26

Metal Roof End Lap Repairs – Recommended Repair Techniques

INTRODUCTION

The following document has been developed as a general guide for repairing standing-seam metal roof end overlap conditions. It is only meant as a conceptual reference, and with prior Tremco review and authorization, may be used as the basis for any job-specific repairs of this nature. As such, it is not meant to address all possible conditions or job types; please always consult Tremco Roofing & Building Maintenance ("TRBM") before proceeding with any repairs.

ASSESSMENT & PREPARATION

1. Ensure that proper safety protcols and/or considerations are made prior to initating the repair(s), while work is underway, and when returning these areas to service. These areas will need to be cordoned off in accordance with prevailing safety rules and practices governing the project. An adequate number of personnel must also be present, as the repair technique described herein requires a team of at least 2-3 competent individuals.

2. Identify end overlap(s) to be repaired. For each repair area, ensure the overlap(s) in question are accessible, free of any debris, standing water, or rooftop obstructions that may prevent unimpeded access to the seam(s). This includes (but isn't limited to) cleaning, drying, and decommissioning rooftop equipment in the area of the repair(s) where necessary to ensure a free and open work area.

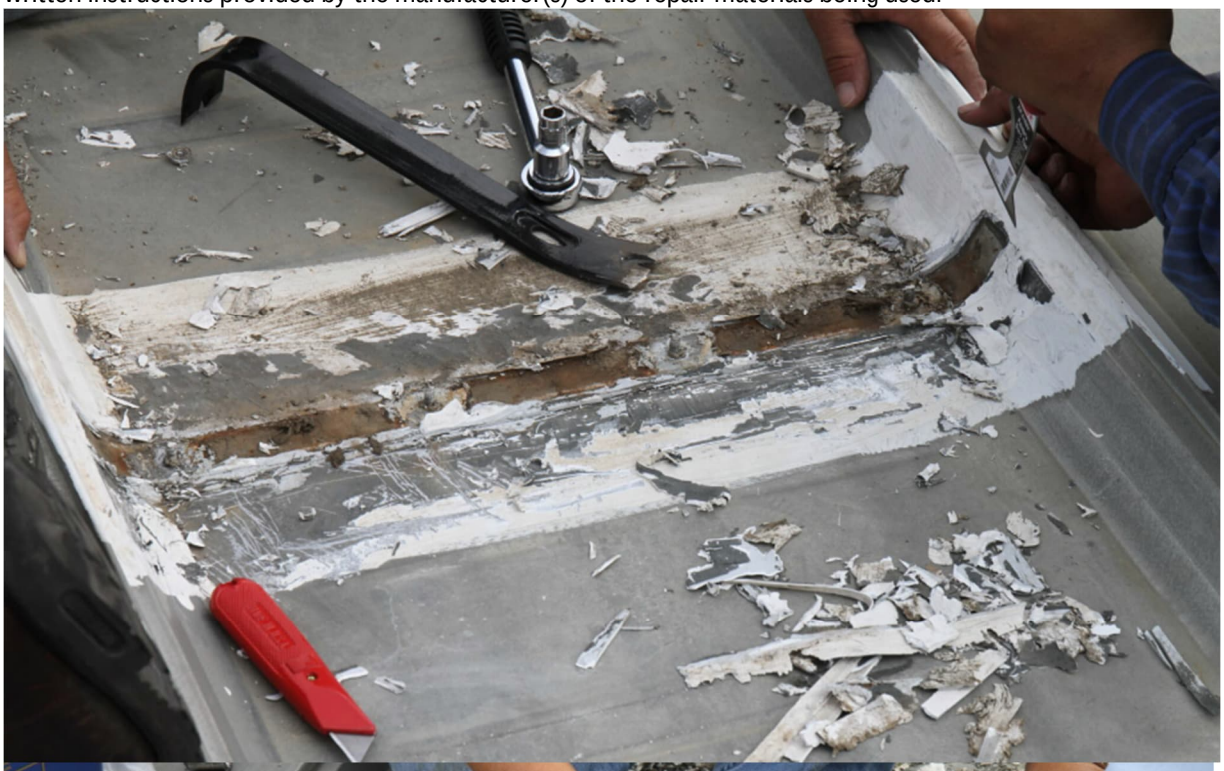
3. After confirming existing roof system anatomy, carefully remove all existing layers of mastics and/or sealants that may be covering the overlap seam, including fluid-flashing, coatings, sheet metal, or other superficial materials in order to expose the bare metal to metal connection(s). Removal of these materials may require varying approaches or techniques which are beyond the scope of this document; please consult TRBM if questions about removing pre-existing materials arise.

INSPECTION

4. Carefully inspect the area(s) that have been revealed to ensure that the standing seam metal roof panels are in sound, reusable condition; the efficacy and longevity of the repair(s) is heavily dictated by the existing substrate conditions, and will not correct for substandard underlying metal roof conditions.

SURFACE PREPARATION & OVERLAP REPAIR

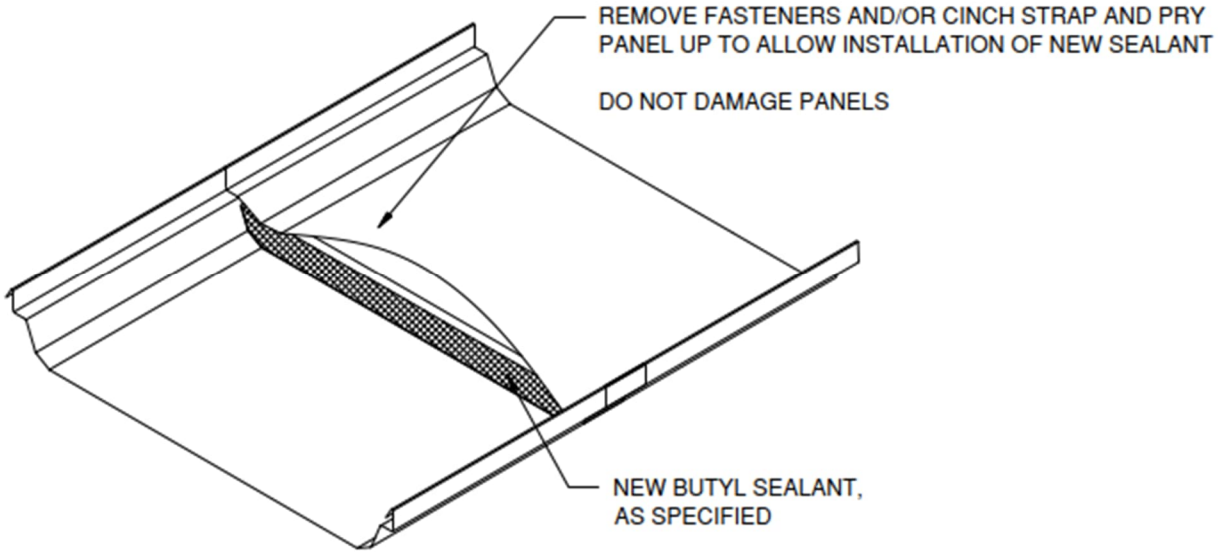
5. Once the area(s) has been carefully inspected and deemed repair-worthy, the surfaces directly over top of, and approximately 6-8" on either side of the overlap seam between the two abutting standing seam metal roof panels, need to be thoroughly surface-prepared and cleaned. Surface preparation and cleaning methods should be in accordance with the written instructions provided by the manufacturer(s) of the repair materials being used.



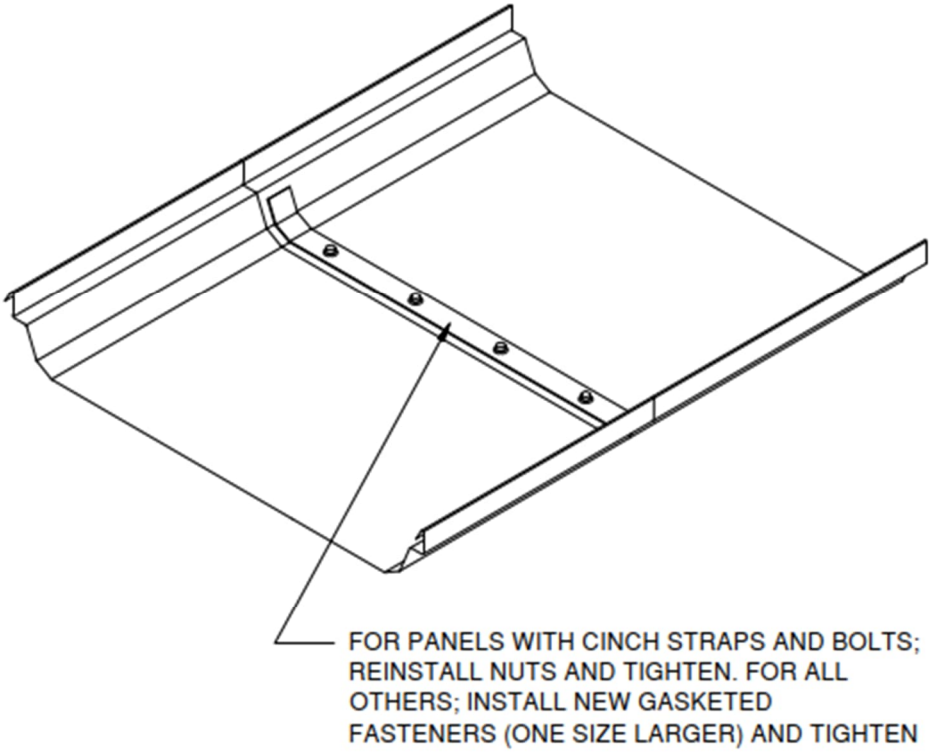
6. If present, remove any mechanical fasteners to allow the overlap seam to be opened up. Using flat pry bars, carefully pry the top metal sheet upwards. A piece of lumber may be used to prop the seam open for subsequent operations. Take care to ensure that the seam is not over-pryed, as this risks popping and/or possibly damaging the metal roof panel longitudinal standing seams and/or interlocking flanges on either side of the overlap seam.

7. With the overlap seam pryed open, ensure any pre-existing sealant materials are completely removed, and that the two mating surfaces are prepped in accordance with step 5 above

8. Determine what type of seam sealing material will be used; typically, these overlaps are sealed with either gunnable butyl sealant, butyl tape, or possibly a combination of both. Ensure that TRBM is aware of, has reviewed, and has approved the repair material(s) being used. Following the manufacturer's written application instructions, carefully install the seam sealing material centered and within the panel overlap area.



9. After seam sealing material has been installed, remove the temporary seam prop if present (see step 6 for information), taking care not to damage or disturb the seam sealing material. Close the overlap seam by pressing the top metal panel down onto the bottom metal panel and seam sealing material. When reinstalling the fasteners, take care to apply pressure to the upper panel; this will ensure that fasterner threads do not contact or disturb the seam sealing materials, which could possibly compromise the seal. Ensure adequate, intimate contact between the two panels, and make sure that proper material wetout/compression has been achieved within the overlap seam. Re-install any mechanical fasteners if applicable according to manufacturer's written application instructions.



10. Use painters or other suitable tape to mask off a permiter extending a minimum of 6” outward on all sides of the overlap seam; when done correctly, the area centered on and directly over the overlap seam will be 12” wide total, with 6” minimum end margins where possible. This is the area that will receive an additional fluid applied coating to ensure the system repair is completed.

11. After masking the area(s) off, repeat correct surface preparation as described in step 5 above (especially if the previously prepared area has been left out, exposed to the elements for any extended period of time). Immediately afterwards, apply Tremco Alumination 301 (or other coating, only when specified in writing by TRBM) coating at a thickness in accordance with the manufacturer’s written appliation instructions (or other procedure, only when specified in writing by TRBM), and ensure that any masking material is carefully removed. Allow the coating material to fully cure according to the manufacturer’s written application instructions before returning to service.