Guidelines for the Fabrication of Field Splices Using a Tape Adhesive for Vulcanized EPDM Sheets Used in Roofing Applications

PRECAUTIONARY NOTE:

Adhesives, cleaners, primers and sealants may contain petroleum distillates, and as such may be extremely flammable. Do not breathe vapors. Do not use near heat, spark or flame. Do not smoke while applying. Avoid contact with eyes and skin by using safety glasses and protective clothing. Contact the manufacturer for additional material safety information.

1. Sheets used for roofing applications shall conform to the requirements of ASTM D4637.

2. Unroll and position the sheets.

3. Allow the sheets to relax for a minimum of 30 minutes before assembling the splice, or as required by the manufacturer/supplier.

4. Verify a minimum overlap of three inches or a dimension required by the systems supplier. Reposition if necessary.

5. The splice should be shingled where possible so as not to restrict water flow.

6. Fold the top sheet back to prepare splices for cleaning or priming procedure. Broom or wipe the splice area to remove excessive dirt and dust. If necessary, scrub the splice area with a cleaner/primer recommended by the system supplier to remove dust, dirt or other contaminates.

7. The area to be spliced may need to be cleaned following a procedure required by the system supplier. Extra care should be taken to clean factory splice step-offs and other areas where dusting agents may have accumulated.

8. Cloths used to apply the cleaner should be absorptive material and not contain oil, silicone wax, etc. that could contaminate the splice area. Cloths should be turned to expose a clean surface free of dirt or talc streaks. Cloths should be approved by the systems supplier. Sponges, sponge mops, squeegees, brushes, rollers, etc. are typically not permitted for cleaning.

9. Lay the top sheet back over the bottom sheet to assure that the cleaning, if necessary, has extended a minimum of one inch beyond what will be the finished splice edge. Any areas that have not been cleaned should be cleaned at this time. This step is not necessary for sheets supplied with factory-applied tape (and the tape is applied to the bottom sheet edge).

Disclaimer

SPRI has prepared these specifications for use only as a guideline. The guide is not intended to be used verbatim as an actual specification. Specific installation instructions and procedures for each particular job must be obtained from the manufacturer supplying the materials. SPRI, its Members and Employees do not warrant that this guide is proper and applicable under all conditions.
10. Mark the bottom sheet with a visible dust-free guideline ½ inch (± ¼ inch) away from the top sheet edge to guide installation of the tape. (This step is necessary to insure that a small amount of tape will be exposed after the splice is assembled.)

11. Fold the top sheet back.

12. Primer, if specified, by the systems supplier, shall be stirred with a clean wooden paddle until uniformly mixed. Typical time for stirring is 5 minutes, but this should be confirmed by the manufacturer. Stir periodically during use to prevent settling.

13. The primer should be uniformly applied with a clean paint brush, paint roller, or clean, natural fiber cloth, or primer application tool supplied by the manufacturer, in accordance with the systems supplier’s recommendations. Remark the guidelines mentioned in Step 10 above after priming, if necessary.

14. Splice tape should be a minimum width of 2 inches or as specified by the systems supplier.

15. For sheets supplied with factory-applied tape, skip to item 16.

Unroll 2 – 3 feet of splice tape (release liner still in place). Position the tape so that the release liner edge is parallel to and just touches the line that was made in Step 10 above. DO NOT INSTALL TAPE OVER THE GUIDELINE. Continue this procedure along the entire length of the bottom sheet using firm even hand pressure to assure maximum contact and minimize entrapped air.

NOTE: The splice tape shall be overlapped a minimum of 1 inch at the end laps or as specified by the systems supplier.

16. Lay the top sheet over so it rests on the bottom sheet. The top sheet will be resting on the release liner of the tape. Check for correct alignment of the top sheet with the tape. The release liner should be exposed a minimum of ¼ inch and a maximum of ¾ inch. (This step is necessary to insure that a small amount of tape will be exposed after the splice is assembled.) If this tolerance is not met, follow the systems supplier’s recommendations for correction.

17. Remove the release liner by pulling it from the splice area, parallel with the roof surface and approximately perpendicular to the splice direction.

18. Firmly mate the top sheet to the tape by applying firm hand pressure perpendicular to and along the length of the splice. This will assure maximum contact and minimize entrapped air.

19. Immediately roll the splice perpendicular to its long axis with a maximum 2 inch wide roller specified by the systems supplier.

20. Follow any special instructions by the systems supplier for addressing intersecting field splices (T-joints) or tape laps.

21. If lap sealant is required, clean a minimum of 1 inch wide area over the splice edge (typically no waiting period is necessary). Apply the lap sealant in a minimum of ¼ inch diameter bead per the system supplier’s instructions. As an alternate to lap sealant, a splice edge overlay of tape may be required by the systems supplier.

22. Visually inspect the completed field splices for fishmouths, bubbles, blisters and wrinkles. Repairs, if necessary, should be completed by cutting out the affected area and overlaying with a piece of the same material following the guidelines above.