Guidelines for the Fabrication of Field Splices Using a Liquid Applied 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 system manufacturer/supplier.

4. Verify a minimum overlap of three inches or a dimension required by the system 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 the 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 cleaning 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 and replaced frequently to achieve a surface free of dirt or talc streaks. Cloths should be approved by the system 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.

10. Primers and/or adhesives 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.

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.
11. Primers, if specified by the system supplier, should be uniformly applied with a clean paint brush, paint roller, or clean, natural fiber cloth in accordance with the systems supplier’s recommendations. Sponges, sponge mops, squeegees, etc. are typically not permitted for primer application.

12. The splice adhesives should be uniformly applied with a clean paint brush or a paint roller only as specified or supplied by the system supplier.

13. Allow the adhesive to dry to a tacky state as described by the system supplier. Typically, the tack/push test is used. The adhesive should be allowed to dry until it is tacky but will not stick or string to a dry finger touch, and will not move when pushed with a dry finger.

    Do not allow adhesive to over-dry because good adhesion may not develop when the splice is assembled. If over-drying occurs, follow the system supplier’s recommendations which would typically involve recoating with splice adhesive following the steps above.

14. If required by the system supplier, apply a bead of in-seam sealant to the splice area before assembling the splice. Follow the system supplier’s recommendations, but typically a minimum ⅛ inch to a maximum ¼ inch diameter bead will be used.

15. Roll the top sheet towards the bottom sheet, then firmly mate together by applying firm hand pressure perpendicular to and along the length of the splice. This will assure maximum contact and minimize entrapped air.

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

17. Follow any special instructions by the system supplier for addressing intersecting field splices (T-joints).

18. After waiting for a time period specified by the system supplier, clean a minimum one inch wide area over the splice edge to prepare for the lap sealant.

19. Lap sealant should be applied in a minimum ¼ inch diameter bead per the system supplier’s instructions. If required by the manufacturer, apply a layer of splicing cement over the cleaned membrane splice edge area prior to the lap sealant application.

20. 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.