INTRODUCTION

Use this installation technique to install RedLINE® into Kemperol® Reflect 2K FR liquid membrane as a tie-in method to PVC/TPO. This process involves setting the fully saturated RedLINE® fleece-flange into a full bed of liquid membrane to the PVC/TPO membrane.

STEP 1: SUBSTRATE PREPARATION
Substrate preparation shall follow membrane manufacturer standard cleaning guidelines, as well as the additional preparation requirements listed below. Ensure that the surface is free of debris, contaminants or any other materials that may interfere with liquid membrane adhesion. Ensure that the RedLINE fleece is clean and completely dry.

STEP 2: LAYING OUT THE JOINT
Dry fit the RedLINE waterproof expansion joint and mark a line, onto the membrane, approximately 3 inches [75 mm] beyond the edge of the RedLINE joint, on each side of the joint, to clearly indicate the areas to receive the Kemperol® Reflect 2K FR liquid membrane.

STEP 3: ADDITIONAL MEMBRANE PREPARATION AND PRIMING
Using a steel wire brush, roughen the surface of the membrane in the marked out area on each side of the joint (approximately 9 inches [230 mm] wide on each side of the joint). Use a soft bristle brush to remove any loose dust. Prior to applying the Kemperol® Reflect 2K FR liquid membrane, prime the prepared area with Kempertex® R Primer following Kemper’s installation instructions and flash off times.

STEP 4: Kemperol® Reflect 2K FR LIQUID MEMBRANE APPLICATION
In addition to the instructions described herein, ensure that Kemper’s membrane installation guidelines are followed.

Prior to adhering the RedLINE joint to the PVC/TPO membrane, the Kemperol membrane must be “worked into” the fleece-surfaced flange of the RedLINE using a roller to ensure full saturation. Subsequently, apply a generous layer of Kemperol liquid membrane to the marked area on the PVC/TPO membrane, which is to receive the RedLINE fleece-flange (approx. 6” [150 mm] on each side of the joint).

It is recommended that one side of the joint is completed at a time to ensure that the tie-in can be done within the allowable cure time for the Kemperol. Then, set the saturated RedLINE fleece-flange into the bed of liquid membrane, ensuring that full contact is made and a wet film is present between the substrate and the RedLINE fleece-flange surface during cure.

Always follow Kemper’s installation instruction for minimum membrane thickness and cure times.
STEP 5: STRIPPING-IN OF SITURA RedLINE FLANGE USING Kemperol® Reflect 2K FR

This process involves stripping in the top of the RedLINE fleece-flange using the Kemperol membrane.

The top coat of the Kemperol membrane over the fleece-flange of the RedLINE requires a two-ply configuration of the Kemperol membrane and reinforcing fabric. Use of masking/painters tape is recommended to create clean lines at the edges of the Kemperol membrane (onto PVC/TPO and RedLINE gland). As in the previous step, the Kemperol membrane must be "worked into" the RedLINE fleece-surfaced using a roller to ensure full saturation of the fleece.

The first top coat of Kemperol membrane should cover the entire exposed RedLINE fleece as well as extend a minimum 3 inches [75 mm] onto the membrane beyond the edge of the RedLINE joint. While this coat is still wet, embed Kemper’s reinforcing fabric into the liquid membrane ensuring that the reinforcing fabric covers a minimum of 3 inches [75 mm] onto the RedLINE fleece and 3 inches [75 mm] onto the PVC/TPO membrane. Use a roller to ensure that the reinforcing fabric is fully saturated into the bed of liquid membrane.

The final coat shall cover the entire RedLINE flange and reinforcing fabric and extend a minimum of a half inch beyond the outer edge of the reinforcing fabric onto the PVC/TPO membrane. Ensure that Kemper’s installation instructions are followed. Allow the entire assembly to cure according to Kemper’s instructions ensuring that no voids are fishmouths are present along the RedLINE joint.

TAKE NOTE...

POINTS TO NOTE WHEN INSTALLING RedLINE IN A LIQUID MEMBRANE

1. Ensure that the RedLINE material fleece is dry. If by chance it is exposed to moisture, dry it out prior to application either by hot air drying or laying it out in the sun.

2. Ensure that the RedLINE fleece is fully encapsulated within the liquid membrane matrix.

3. Apply sufficient quantities of liquid taking into account the absorption of the RedLINE fleece.

4. Depending on project requirements, the use of a flat metal termination bar may be recommended to ensure that the RedLINE joint does not expand/contract while the Kemperol liquid membrane cures. A termination bar is also recommended for seismic joints.

5. Follow all manufacturer’s recommendations as they pertain to the installation of Kemper liquid applied membrane.
RedLINE® APPLICATION TO A PVC/TPO MEMBRANE USING FLUID-APPLIED MEMBRANE

The PVC/TPO membrane at a expansion joint cavity (detail), prior to RedLINE installation.

The RedLINE is unrolled to check for fit, it is positioned over the joint cavity. Note: mark off at this point the extent of the selvage edges.

The membrane with guide lines showing the extent of the RedLINE selvage edges, prior to any liquid membrane application.
Cleaning the PVC/TPO membrane and removing any dust or debris.

Kemper Kempertec® R Primer pack.

Priming the membrane, prior to the RedLINE application, note the dashed guidelines reflecting the extent of the RedLINE selvage edges.
The Kemperol® Reflect 2K FR liquid membrane pack.

Applying the Kemper liquid membrane to the primed membrane with a roller.

The RedLINE expansion joint laid into the Kemper liquid membrane, Note; centering the RedLINE gland over the joint gap.
The RedLINE expansion joint fleece is saturated with the Kemper liquid membrane. Note; no white fleece is visible.

The RedLINE is laid in a bed of Kemper liquid membrane (bottom surfaces). The RedLINE gland is taped over for top surface encapsulation in liquid membrane.

The top surfaces of the RedLINE are being encapsulated in the Kemper liquid membrane. Note; the tape over the gland.
The RedLINE expansion joint is wholly encapsulated in the Kemper liquid membrane.

A reinforcing fabric is being laid into the wet Kemper liquid membrane.

The reinforcing fabric worked into the wet Kemper liquid membrane.
The RedLINE expansion joint fully encapsulated and adhered to the PVC/TPO membrane. The complete installation.

The RedLINE in cross-section indicating complete encapsulation in the Kemper liquid membrane.

END OF SECTION