Thermal Welding Field Seams Means Added Strength

In 1990 EPI began thermal welding PVC Geomembrane field seams. The original goal was to extend the liner construction season in Michigan by developing a welding technique for PVC that could be used in cooler weather. This would allow earlier spring start ups and delay shut down until late fall.

This technique would also eliminate the extended curing time for chemical welded seams in cooler temperatures and provide superior quality control in less than ideal weather conditions.

EPI has used thermal hot air welding throughout the United States on various PVC projects including: canals, landfills, and water features.

EPI has compiled qualitative test results and statistically analyzed the data. We have found through this process peel strength of the seams is stronger and the seams can be verified for conformance in minutes, rather than days, after production. And added benefit is that air channel testing can be used for seam continuity testing and can be used to verify seam peel strength.

The histogram of field seam peel tests on 516 specimens of 30 and 40 Mil PVC shows that 80% of the results are between 20 and 45 pounds per inch width, with peak values as high as 55 lbs/in/width.

EPI’s thermal welding of field seams assures you that the PVC seam strength will exceed all minimum quality standards.

Preserving water resources for future generations