

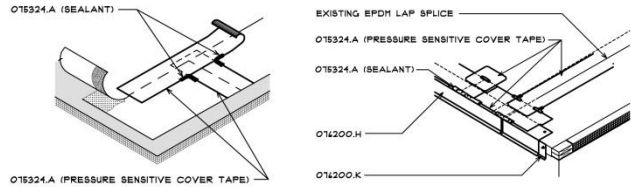


**Fleming Warehouse
Roof Repair & Replacement
The University of Tennessee
Knoxville, Tennessee**

Roof Replace (East)	95,218 s.f.
Roof Restore (West)	98,371 s.f.
Construction Cost	\$1,483,734
Cost/s.f.	\$7.66
Completion Date	2014



The west end of the warehouse was bid as an acceptable alternate and this work consisted of repairing the existing EPDM membrane lap splices at all locations, replacing the existing roof edge metal with new metal fascia anchored to meet wind uplift requirements, and venting the remaining moisture from the existing roof insulation.



Unique challenges on the project included identifying the damaged metal decking from the underside before the existing roofing system was removed. Approximately 35% of the metal decking was eventually replaced with new metal decking because of structural deterioration.

The existing warehouse is a large open storage facility on the outskirts of the University of Tennessee Knoxville Campus that is used primarily for storage of surplus goods and materials. An infrared thermal moisture survey was conducted on the roof by a third party entity which revealed almost a complete water saturation of the existing roof insulation on the east end of the building (where an existing 4-ply built-up roof with gravel surfacing exists) and a partial water saturation of the existing roof insulation on the west end of the building (where an existing 45 mil thick mechanically attached EPDM roof system exists).



Existing Roof



Deck Replacement



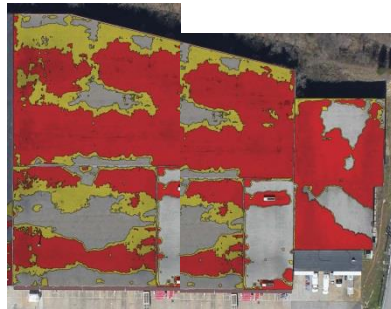
Before



After



West End



East End

The scope of work identified in the base bid included a complete roof system tear-off of the existing 4-ply built-up roof on the east end of the warehouse and replacing it with a new cold-applied 2-ply SBS modified bitumen roof with new tapered insulation. Additional work identified in the base bid included damaged deck replacement, abandoned equipment removal, CMU repairs, new metal siding, new metal fascia, new gutters/downspouts, new wall mounted ladders, and painting of the loading dock canopies.



Fleming Warehouse – New Roof (East End)