

Clarence Brown Theatre Roof Repair & Replacement The University of Tennessee Knoxville, Tennessee



Roof Replacement21Construction Cost\$Cost/s.f.\$Thru-Wall Flashings\$Completion Date\$

21,179 s.f. \$319,855 \$15.10 \$27,278 2014



The Clarence Brown Theatre for the Performing Arts at the University of Tennessee Knoxville Campus is used primarily for educating students and the community in the theatrical arts profession. In addition to studying acting, stagecraft, play interpretation, and directing; the facility is also used for stage performances and has been used as a large-scale movie house. The building had been leaking at various locations over the years and the facility had been reroofed on numerous occasions since its original construction in 1970. Architects Weeks Ambrose McDonald, Inc. was retained by the University to develop a plan for replacing the latest roofing system installed on the facility and to investigate why the previous roofing system failed to perform.



Clarence Brown Theatre Roof Plan

The investigation and historical background of the previous roofing systems failure indicated water had been entering the building, not only at some of the roof penetrations, but at some of the masonry walls. In particular, it was noted the existing thru-wall flashings around the proscenium stage roof were below the roof flashing heights and no damp proofing or weep holes were present in the original construction.



The scope of work identified for the roof replacement included a complete roof system tear-off of the existing EPDM membrane roof system and replacing it with a new cold-applied 2-ply SBS modified bitumen roof with new tapered insulation. Additional work identified in the documents included the installation of five new wall mounted ladders, new prefinished metal copings and fascias, wall drain modifications, and thru-wall masonry flashing remediation around the proscenium stage roof.



Masonry Thru-Wall Flashing Detail



Work in Progress over the Theatre Laboratory