PERFORMANCE DESIGN TECHNOLOGIES

Mark F. Platfoot, PE
Fire Protection Engineer

Education

B.S., Nuclear Engineering, University of Tennessee – Knoxville, 2014

Registered Professional Engineer (Fire Protection)

States of Tennessee and Kentucky

Professional Experience

April 2015 to Present – Performance Design Technologies, Inc.
Engineer
In his time at Performance Design Technologies, Mr. Platfoot has assisted in assessments of fire protection systems for safety and code compliance in a variety of buildings, including dormitories, industrial buildings, and storage facilities. He has assisted in the testing and verification of several fire protection systems in an industrial facility. He has reviewed documentation for proposed buildings and fire protection systems to check for fire safety, system effectiveness, and code compliance. He performed a third-party review for the fire safety procedures of a nuclear generating station. In February 2018, he passed the International Code Council's exams for Special Inspectors with a focus on spray-applied fire proofing.

Mr. Platfoot has performed fire modeling using both the Consolidated Fire and Smoke Transport Model (CFAST) and Fire Dynamics Simulator (FDS) software packages. This modeling has been used for smoke control, detector response, and egress time applications. He has also modeled population egress to determine egress time and paths from a facility as well as code compliance of egress routes.

Mr. Platfoot spent over a year working on the Preliminary Fire Hazards Analysis (PFHA) for the new Uranium Processing Facility in Oak Ridge. During this time, he was responsible for writing several sections of the document, editing most of the document, creating and editing supporting documents to capture calculations necessary for the PFHA, and managing the status of the document as a whole.

Mr. Platfoot has also assisted in a variety of projects as support by editing and reviewing reports and managing data related to the project.

Areas of Specialization

Special Inspections
Fire Modeling
Engineering Calculations
Report Writing