WJE’s fire protection engineers and consultants proactively address structural fire protection issues before they impact the overall design goals of a project. Working together across disciplines, WJE’s engineers, architects, and materials scientists evaluate the structural fire resistance of building elements, components, and assemblies; develop design details for fire and smoke barriers, horizontal assemblies, exterior walls, and facade construction; and address opening protection and fire-stopping of through-penetrations and construction joints.

Our in-depth understanding of fire science, construction materials, standard fire tests, and building design, combined with our state of the art laboratory, enables us to provide valuable insight and identify solutions for numerous constructability problems. WJE professionals use calculations and models to develop economical and technically sound solutions in conjunction with laboratory analysis and fire testing. WJE’s fire and structural modeling capabilities can also be applied to unique building configurations or fire loads not anticipated by the standard fire tests upon which prescriptive fire resistance designs and approved assemblies rely.