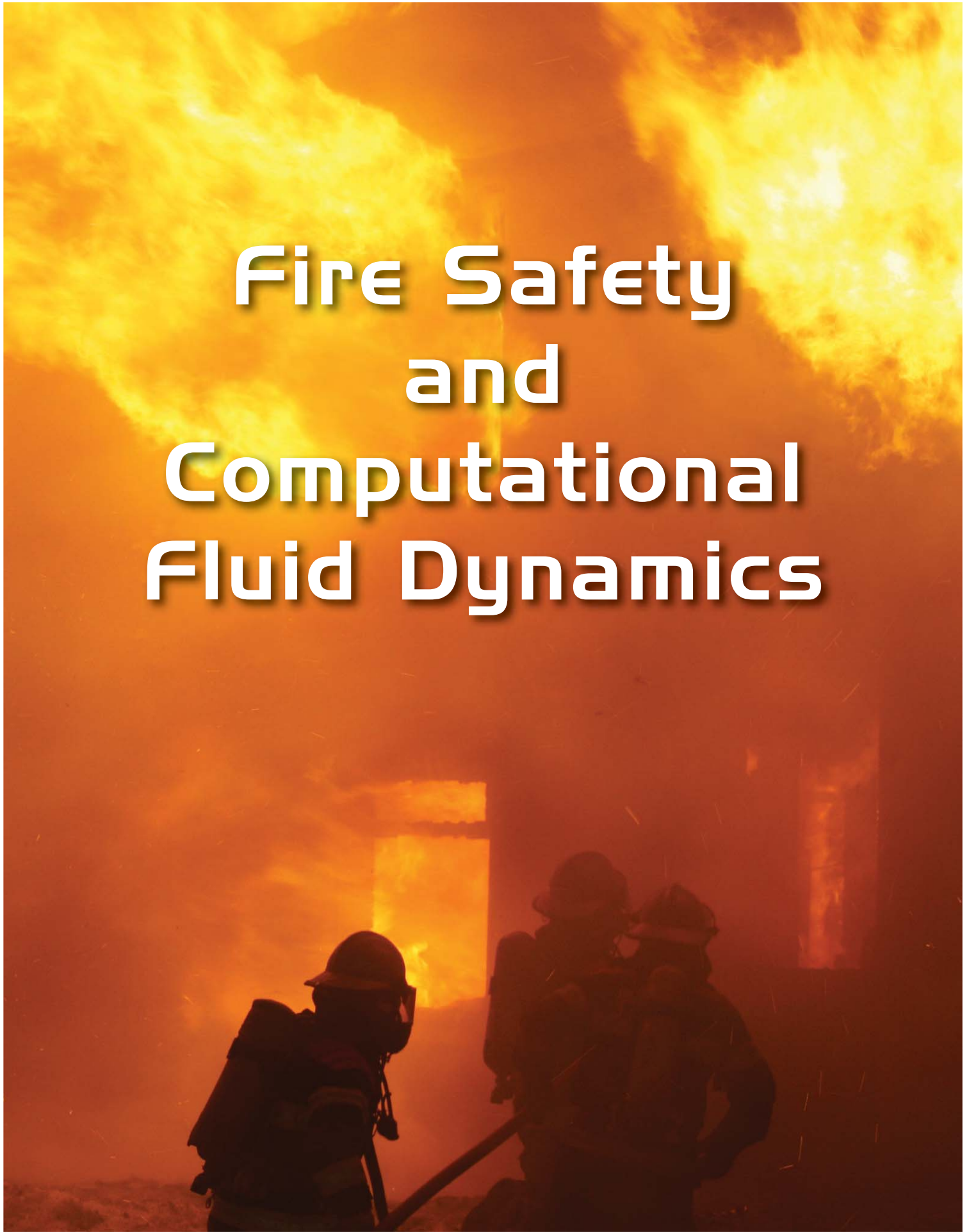


Fire Safety and Computational Fluid Dynamics

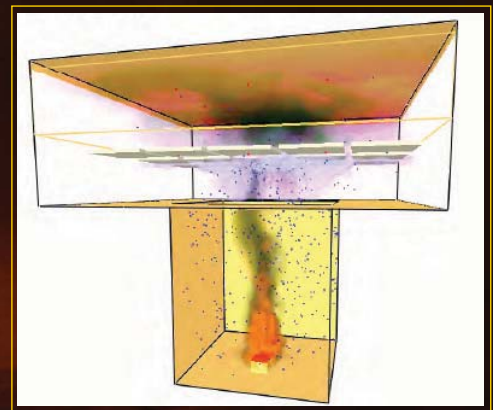
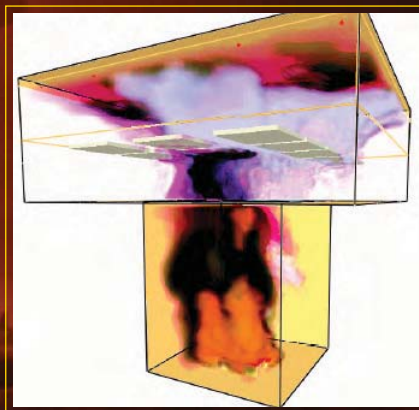


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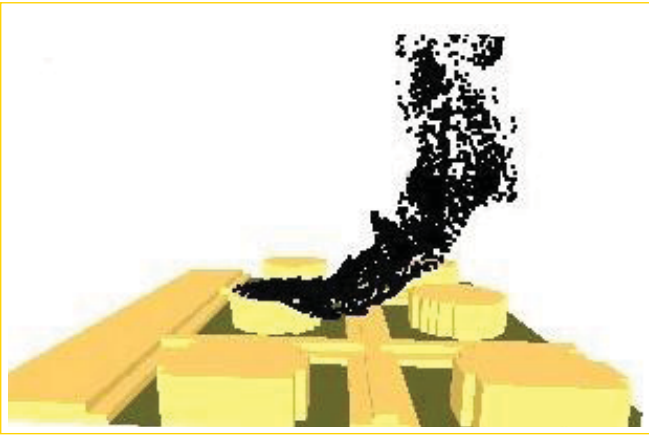
CFD simulations at Mannvit

Mannvit's Fire Safety team has a unique knowledge of Computational Fluid Dynamics (CFD). CFD is a very advanced and useful tool that uses numerical methods and algorithms to solve and analyze problems involving fluid flows. Programs based on CFD are used in various engineering disciplines such as aeronautics, meteorology, fire safety, mechanical engineering, geothermal science, hydrodynamics and combustion modeling.

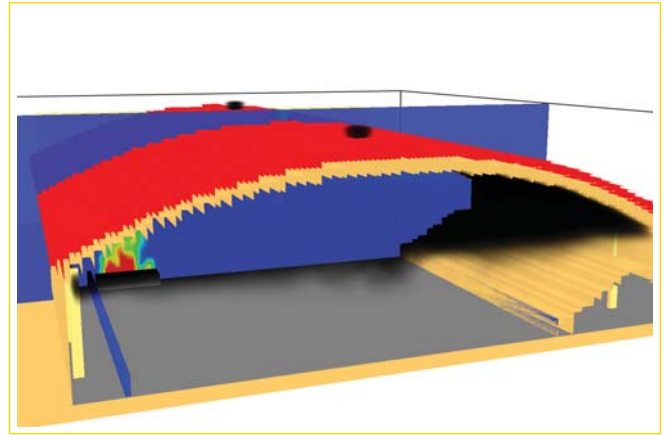
With our expertise in CFD, we are capable of solving complex problems and contribute to improving designs in various engineering applications. Following are only a few examples of the kinds of problems we can solve:



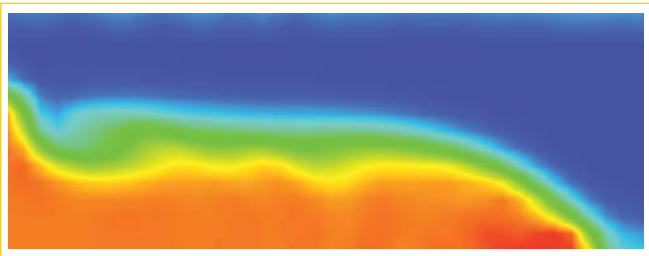
Sprinklers system simulation - fire growth controlled by sprinklers above vs. above and below a suspended tile ceiling



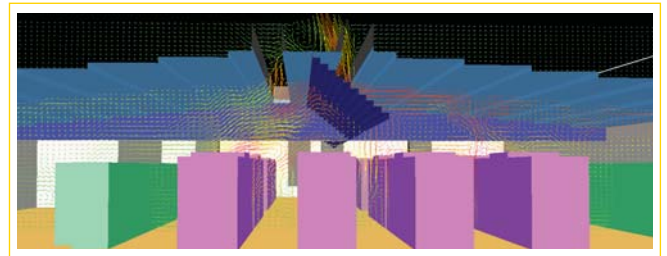
Atmospheric gas dispersion - Fire in oil tanks



Fire and smoke spread - Evaluation of critical time in a sport arena



Density driven flows - mixing of fresh water into sea for environmental assessment



Air flow in buildings - Modeling of heat dispersion



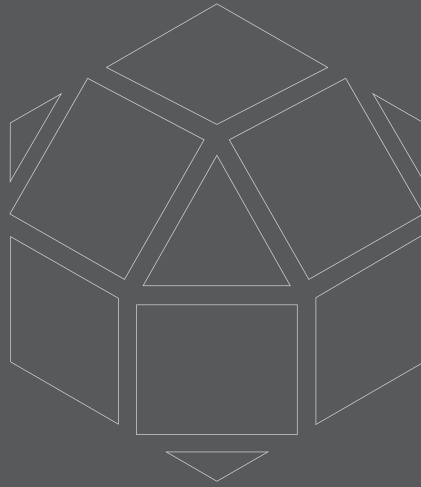
Plume simulation - Smoke, gas and vapor plumes in the open



Additional information:

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Mannvit Engineering

Mannvit provides fire safety consulting to architects, contractors and real estate companies and conducts fire-safety evaluations of buildings, particularly in connection with the renovation of older structures, ensuring code compliance with all current laws and regulations.

There are many facets to consider in fire safety design. Examples include, flammability characteristics of building materials, sectioning of buildings into fire and smoke zones, escape routes, structural heat tolerances, predicting fire spread, fire warning systems and fire extinguishing equipment.

Our fire safety engineers provide evaluations for building and planning, as well as industrial processes and transportation, applying their experience and expertise to diverse and challenging projects.



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KNOWLEDGE - EXPERIENCE & EXPERTISE

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