

The Performance-Based Design Process

Performance-based design (PBD) leverages engineering tools to develop fire protection solutions in buildings. Since there is no one-size-fits-all approach to buildings, strictly adhering to prescriptive codes isn't always the best option. PBD proves you can design a solution to overcome any challenge without sacrificing fire protection or life safety for occupants. Below is a general overview of the PBD process.

PRE-ANALYSIS STAGE →

- 1 Hold an initial consultation to understand the situation.
- 2 Assess the prescriptive means of code compliance.
- 3 Determine the technical basis of a PBD approach.
- 4 Discuss potential implications with the design team.



ANALYSIS STAGE →

- 5 Prepare letter of intent for AHJ approval of PBD approach.
- 6 Prepare and review design brief with AHJ.
- 7 Prepare a fire and egress model and run simulations.
- 8 Evaluate the results and relay design requirements to the team.



POST-ANALYSIS STAGE →

- 9 Prepare the final PBD report.
- 10 Respond to any final comments from stakeholders and AHJ.
- 11 Obtain final approval, including a sign-off of the approach and basis.
- 12 Review design documents to ensure proper PBD implementation.

