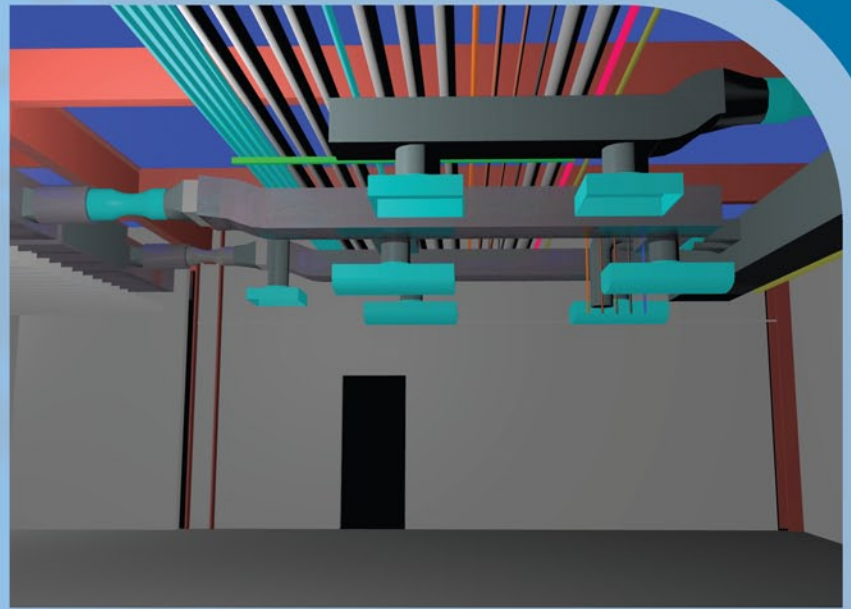
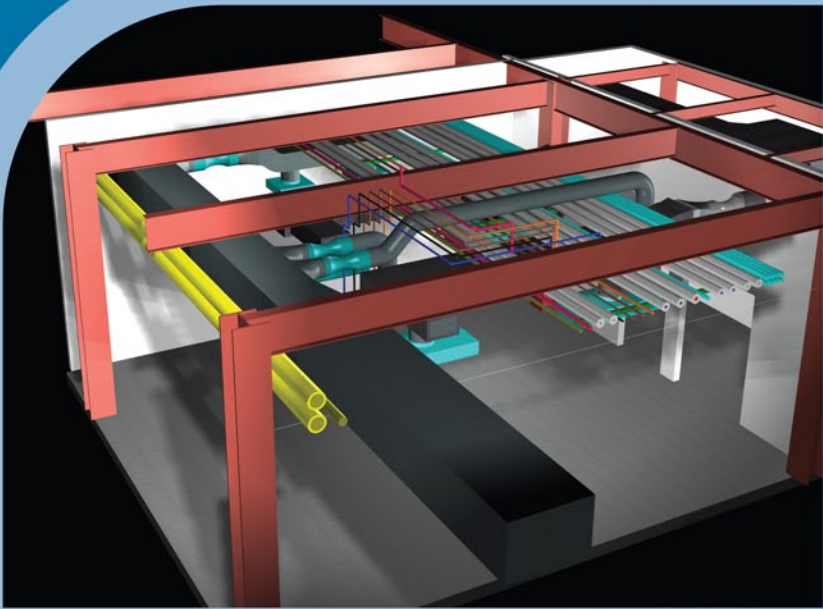


BUILDING WINNER

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BIM FOR BUILDING ENGINEERING

The Biomedical Engineering and Optics building at the University of Rochester is a 95,000 square-foot teaching/research facility. The five-story structure includes laboratories, offices, and lecture halls surrounding an atrium, and its design incorporated a green building methodology for laboratories to enhance performance and efficiency. BIM enabled the complete coordination and redesign of a space-challenged mechanical penthouse with a curved roof structure.

The design team used MicroStation for the modeling of spaces and mechanical systems. The 3D PDFs generated were shared with other team members and contractors for coordination and production of shop drawings. The Bentley Building Mechanical Systems product was used to model the atrium and its associated mechanical systems. These models were integrated into CFD modeling software for analysis of airflow, smoke density and temperature during a simulated atrium fire. Bentley's BIM solutions saved countless hours and greatly improved the documents created.

**BioMed Engineering and Optics
Laboratory Building**

M/E Engineering, P.C.