



University of Colorado at Boulder  
Department of Facilities Management

Mechanical Engineering Division

## **Design-Development Document Requirements Mechanical**

### Narrative

Updated narrative from the one included in the Schematic-Design documents.

### Plumbing & Piping

1. Plans of each floor, noting fixture locations and types. Indicate routing of main distribution lines with tentative sizes.
2. General arrangement of all piping systems (piping, heating and cooling, and FP).
3. Location of water, sanitary sewer, storm sewer and sprinkler services to the building.
4. Tentative fixture schedule.
5. Location, sizes and types of water heaters, heat exchangers, and flues if required.
6. Provide a fixture-count calculation sheet.

### HVAC

1. Plans of each floor, showing single-line duct layouts, equipment location, and typical heating and cooling devices (e.g., a VAV-box and branches with diffusers, BBR, CUHs and UHs).
2. Equipment schedules with tentative sizes, capacities, features, etc.
3. Mechanical-room drawings, showing locations and sizes of fans, pumps, compressors, heat-exchangers, etc.. Show elevations or cross-sections to ascertain that equipment fits vertically.
4. HVAC load calculations.

### Specifications

Outline specifications are not required. It is expected that the mechanical consultant will provide an informal review set of drawings and specifications at the 70% level of mechanical design.