

Specification for Class of

MECHANICAL ENGINEER 4

Abolished Initially Effective January 13, 2006

Abolished Final Effective February 10, 2006

Definition: Directs a mechanical engineering unit which is staffed by at least one senior-level registered professional engineer.

Typical Work

Plans, organizes, directs and participates in work of mechanical engineers, engineering aides, job inspectors, and clerical staff engaged in design, construction and remodeling of mechanical and electrical features of State-owned buildings;

Reviews and supervises all work done by consulting engineering and architectural firms on mechanical and electrical appurtenances of State-owned buildings;

Acts as consultant and advisor to professional architects and advance planners, assisting in coordinating architectural and engineering aspects of building construction; makes recommendations to various State departments on boiler plants additions and revisions, water-supply systems, electrical distribution systems, sewage disposal systems, heating, ventilation, air-conditioning, lighting and machine design problems;

Reviews and approves or rejects all change-orders involving mechanical or electrical equipment on State buildings; assists and trains lower-level engineers and architects; passes upon their most difficult problems concerning mechanical and electrical installations;

Interviews contractors, salesmen, and others regarding new mechanical and electrical equipment;

Performs other work as required.

Knowledge and Abilities

Knowledge of: theory, principles, and practices of mechanical engineering, particularly or related to building construction; engineering drafting procedures and equipment; fundamentals of electrical and structural engineering; effectiveness and efficiency of various air conditioning and heating systems, water

and waste-disposal systems, appurtenances to electrical systems, and hardware and other appurtenances adding to convenience, comfort, efficiency, and safety of complex buildings; geometry, calculus, and engineering formulas; fire and building codes; cost estimates for capital outlay requests and for maintenance projects where material and equipment are procured by requisition.

Ability to: use sound judgment on difficult engineering problems; write specifications for mechanical and electrical equipment; understand and interpret written and oral directions, specifications, plans, and drawings; deal tactfully with architects, engineers, inspectors, and State officials; serve as resident inspector on number of small jobs simultaneously; travel frequently to all parts of State.

Minimum Qualifications

Registration as a professional engineer in the branch of mechanical engineering in the State of Washington or another state based on registration requirements equivalent to those in Washington.

AND

One year of experience in supervising registered professional mechanical engineers, registered architects, or equivalent level personnel.

NOTE: Requirements for professional registration as an engineer in the State of Washington are eight years of professional experience (which may include up to four years of college-level engineering education) and successful completion of sixteen hours of professional licensing exams. Applicants qualifying through the licensing equivalency option must achieve professional registration as an engineer in the branch of mechanical engineering in the State of Washington within six months of appointment to this class.

Revised definition: 12-12-80
Revised minimum qualifications: 5-9-86
Revised minimum qualifications: 11-15-91
Revised minimum qualifications: 7-9-99