

Restoration Engineer

General Characteristics

A Restoration Engineer is experienced in restoration, construction, or existing building renovation design in most, if not all, structural systems or building types. This position requires a practical knowledge of construction procedures and structural engineering design theory. The knowledge and expertise required for this level of work results from progressive experience.

The Restoration Engineer works on all types of existing deteriorated concrete and masonry structures, most commonly precast, cast-in-place and post-tensioned concrete parking structures. Types of concrete restoration includes structural and non-structural repairs, sealants, expansion joints, waterproof membranes, epoxy injection, urethane grouting, FRP strengthening. Types of masonry restoration includes partial or full masonry rebuild, mortar joint tuckpointing, joint sealants, topical water-repellants.

A minimum of 10 years of relevant experience is required.

Direction Received

The Restoration Engineer performs tasks assigned by the Restoration Manager. It is expected that the restoration specialist is able to take a job from start to finish with relatively minor direction from the Restoration Manager.

Typical Duties & Responsibilities

The Restoration Engineer is responsible for field work, design & development of construction documents, and construction administration services.

The Restoration Engineer should have a thorough understanding of all project schedules and requirements and be able to multi-task several projects simultaneously. The Restoration Engineer should take a proactive role in communicating / coordinating internally among all parties and externally with clients and contractors.

- Field work, condition assessments, quantity take offs
- Directing destructive and non-destructive testing
- Construction Document development (plans & specifications)
- Structural calculations
- Detailed knowledge of analysis and plan production software
- Perform full range of construction administration tasks: construction contract changes, submittal review, site observation visits, field verifications of completed work
- Assist restoration manager and associates/PMs with administrative and development assignments as requested/directed
- Collaborate with staff engineers and technicians as required to complete assignments.
- Responsible charge of major projects from the technical, financial, and schedule perspectives
- Assist in proposal development
- Primary vehicle for communication with clients
- Assist in training/mentoring of junior staff

Responsibilities for Direction of Others

A Restoration Engineer supervises, coordinates, and reviews the work of Engineers, Designers, and Technicians on their projects. They are responsible for estimating workforce needs and schedules, and assign work to meet completion dates. Restoration Engineers will also be responsible for fostering the technical and professional development of Restoration Specialists, Engineers, Designers, and Technicians assigned to them.

Education

Bachelor's Degree in engineering from an ABET accredited curriculum or equivalent, plus appropriate continuing education. Master's Degree encouraged. Experience in concrete / masonry construction or restoration trades is beneficial.

Registration

Registered Professional Engineer (PE). SE encouraged.

Typical Professional Attainments

Member of professional society (Member grade).
Member of technical committees.

