

Certified Installer of Onsite Wastewater Treatment Systems

Exam Content Outline

There are 75 questions on the basic level exam, and 125 questions on the advanced level exam. All questions are written in multiple choice format. You will have 2 hours to complete the basic level exam and 3 hours to complete the advanced level exam. The CIOWTS exam is based upon the following content areas. Next to each subject area the approximate percentage of questions in that content area on the exam. The content areas and approximate percentages of exam questions are the same for both the basic level and the advanced level. The advanced level exam includes more questions and questions of greater difficulty.

PLAN ASSESSMENT 10%

- Knowledge of site plans; basic surveying; topography; site features
- Knowledge of materials requirements; standards and specifications; soil profile descriptions; pump performance; treatment and dispersal technologies
- Ability to conceptualize an installation activity
- Ability to make mathematical calculations of area, volume, elevation, rates, measures and weights

JOB STAGING 20%

- Knowledge of installation plans; elevations; topography
- Ability to transfer designer's plan to site; reconcile variations; identify conflicts
- Knowledge of equipment needs and limitations; materials and supplies; soil characteristics
- Ability to make mathematical calculations
- Ability to identify subcontractor and homeowner needs and potential conflicts

SITE DEVELOPMENT/ INSTALLATION 70%

- Knowledge of soil characteristics; ability to recognize soil characteristics in the field
- Knowledge of specifications and installation techniques for tanks, baffles, filters and screens, piping and fittings, aggregate and fill material, proprietary treatment components, pumps and siphons, liner materials, valves, switches and tubing
- Knowledge of electrical requirements
- Knowledge of gravity and pump/siphon dosed system requirements
- Knowledge of timers and remote monitoring
- Knowledge of bedding, testing, pipe connection methodologies
- Knowledge of pump performance specifications; total dynamic head in pressurized systems
- Ability to make mathematical calculations, conversions