

# CONSTRUCTION MATERIALS TESTER

ALSO KNOWN AS:

MATERIALS QUALITY CONTROL TECHNICIAN

BUILDING MATERIALS INSPECTOR

CONSTRUCTION PRODUCTS ANALYST

QUALITY ASSURANCE TESTER (CONSTRUCTION)

## ENSURE THE FOUNDATION OF QUALITY IN CONSTRUCTION.

As a Construction Materials Tester in manufacturing, you'll be the gatekeeper of material integrity, rigorously examining and validating the components that build our world. This role combines technical precision with analytical skills to guarantee the safety and durability of construction materials.

### KEY SKILLS

Skills which may benefit anyone considering a job as a construction materials tester include:

- ✔ Analytical skills
- ✔ Attention to detail
- ✔ Data analysis
- ✔ Quality control awareness
- ✔ Technical proficiency

### CAREER PROGRESSION

In this role, you may have the opportunity to progress to other positions. Career progression opportunities include:

- Laboratory Technician
- Additive Engineer
- Composite Engineer
- Senior Composites Technician

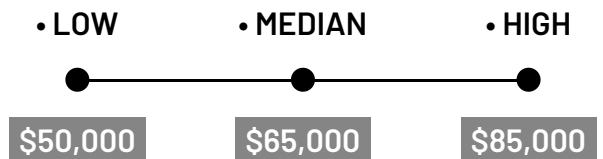
### VALUES & ATTRIBUTES

Values and attributes of anyone considering a job as a construction materials tester include:

- ✔ Precision
- ✔ Integrity
- ✔ Reliable
- ✔ Safety-conscious
- ✔ Continuous learning
- ✔ Investigative – “Thinker”

### SALARY EXPECTATION

The expected salary for a Construction Materials Tester can vary across different areas of manufacturing and may vary as you become more experienced.



## RELATED INDUSTRIES

► General Manufacturing and Engineering ► Polymers, Plastic and Rubber ► Timber and Wood ► Transport Equipment and Machinery

## RECOMMENDED SCHOOL SUBJECTS

- Physics
- Science in Practice

## CORE SCHOOL SUBJECTS

- General Mathematics
- Essential English
- Science(7-10)
- Biology
- Chemistry

## JOB OVERVIEW

Construction Materials Testers in manufacturing play a crucial role in ensuring the quality and reliability of materials used in construction projects. They are responsible for conducting various tests on concrete, steel, asphalt, soil, and other construction materials to verify their strength, durability, and compliance with industry standards and specifications. Their work is essential in maintaining the safety and longevity of buildings, roads, bridges, and other infrastructure.

These professionals utilise a range of testing equipment and procedures, including compression machines, chemical analysis tools, and various non-destructive testing methods. They need a combination of technical knowledge, attention to detail, and analytical skills. A typical day might involve collecting material samples, performing laboratory tests, analysing results, preparing detailed reports, and collaborating with engineers and quality control teams to address any issues identified.

Construction Materials Testers often work in manufacturing facilities that produce construction materials, as well as on-site at construction projects. They play a key role in quality control processes, ensuring that manufactured materials meet or exceed required standards before they are used in construction. Their expertise is crucial in balancing production efficiency with stringent quality and safety requirements in the construction industry.

## WHAT WILL YOU DO?

Your role may include duties as follows:

1. Conduct various tests on construction materials (e.g., compressive strength, chemical composition)
2. Analyse test results and compare them to industry standards and specifications
3. Prepare detailed reports on material properties and test outcomes
4. Calibrate and maintain testing equipment

## HOW TO BECOME A CONSTRUCTION MATERIALS TESTER

Becoming a Construction Materials Tester typically involves a combination of education and hands-on experience. Here are steps to pursue this career:

1. Complete Year 12 with a focus on maths, physics, and chemistry
2. Obtain relevant vocational qualifications in construction, engineering, or materials science
3. Gain practical experience through apprenticeships or entry-level positions in materials testing laboratories
4. Acquire certifications specific to construction materials testing (e.g., concrete testing, soil testing)
5. Pursue ongoing training to stay current with evolving testing methods and industry standards

## VOCATIONAL EDUCATION & TRAINING

Vocational education is a common pathway for Construction Materials Testers. These qualifications provide hands-on skills and theoretical knowledge essential for the role. Relevant VET qualifications include:

- Certificate II in Sampling and Measurement (MSL20122)
- Certificate II in Polymer Processing (PMB20121)
- Certificate III in Laboratory Skills (MSL30122)
- Certificate IV in Laboratory Techniques (MSL40122)
- Diploma of Laboratory Technology (MSL50122)
- Advanced Diploma of Laboratory Management (MSL60122)

The Certificate III in Laboratory Skills (MSL30122) can be undertaken as a traineeship.

As a trainee you will combine work with formal training, allowing you to gain practical skills and knowledge in a specific industry while earning a salary.

**Duration:** Traineeships typically last between 12 to 24 months, depending on the specific program and whether you are working full-time or part-time.

**Work and study combination:** As a trainee you will work either full-time or part-time while receiving formal training from a Registered Training Organisation (RTO).

**Eligibility:** Generally, traineeships do not require formal qualifications to enter, making them accessible to a wide range of individuals, including if you are a school leaver or someone looking to change careers.

**Completion:** On completion you will receive a nationally recognised qualification, showcasing your skill and experience.

## UNIVERSITY & HIGHER EDUCATION

While not always required, higher education can enhance career prospects and lead to more advanced roles. Relevant bachelor's degrees include Civil Engineering, Materials Science and Engineering, or Construction Management. Some universities offer specialised courses in construction materials as part of their engineering programs.

These programs typically cover advanced topics such as material properties, structural analysis, and quality management systems. Graduates develop research and analytical skills that can lead to roles in materials research and development or quality management. Some universities also offer postgraduate courses that can further specialize knowledge in areas such as advanced materials testing or construction project management, enhancing career prospects in specific industries or research roles.