Construction Quality Assurance

Ph: 08 8264 5802

Focusing on Quality for the Geomembrane Industry

GEOTEST LEVEL 1 CQA – Assuring Owners of a Quality Product by Helping Lining Companies.

What is CQA?

Construction Quality Assurance (CQA) is the assessment of a contractor's performance by a third party representative.

This is achieved through a series of audits, evaluations, inspections and verification of materials and the completed workmanship.

A properly executed CQA program can identify deficiencies that have occurred in the CQC process.

A Successful Liner Installation Involves

- *Good Design & Specification*
- *Correct selection of materials*
- *Choice of competent installation company*
- ***Use of GSI Certified Geotest CQA inspectors to monitor & prevent problems in the installation***
- *Electrical Leak Detection of the installation*
- *Ongoing monitoring and maintenance of the installation*

Geotest employees are certified and all highly experienced in their roles

The Geotest COA Service

The Geotest CQA Service goes up and beyond. Providing you with GSI certified third party CQA inspectors, using rigorous processes to ensure that installations are completed in accordance with environmental guideline and site specific technical specification.

CQA processes give assurance via damage control systems

These processes include but are not limited to:

- Review of contractor work method statements (WMS).
- Review of Inspection and Test Plans (ITPs).
- Full analysis of all materials, including sample testing and review of manufacturer's information and warranty.
- Site destructive tests undertaken with NATA certified equipment.
- Recorded traceability of materials, including handling, storage, and damage of materials and quarantining of materials not conforming to specifications.
- DTs marked out and organised for laboratory testing including correlation of results.
- Attend scheduled meetings outlining progress and issues requiring resolution.
- Produce programs and productivity records for budgeting.
- Provision of technical support on installation issues.
- Maintain real time database of all field information. This includes trial welds from field seaming and progress tracking of installation and comparison to planned completion time, destructive test selection, defect identification and logging of all repairs.
- Provide an extensive photo history that gives assurance to the principal that the specification and design philosophy has been followed for the project.
- Maintain a presence and monitoring in the field at all times, completing inspections of finished areas for defects and providing a final sign off of lot areas. Review documentation of all installed materials and contractor QA submittals. Report damage and deviations from methods statements or technical specification including non-conformances. Provide daily reports of all works conducted.
- Provision of a final executive summary of the project on completion. This outlines the conformance to the Construction Quality Assurance Plan, the approved manufacturer MQA, deployment completion, conformance to relevant ASTM or GRI standards and other issues encountered during the project.

Although the implementation of CQA may increase the budget for a projects completion, it is low when compared to the possible cost of corrective actions, subsequent remediation and potential environmental contamination as a result of a defective installation. A defective installation may result in premature closure of the facility, create operational problems and present asset value loss.

Geotest Results: CQA in addition to CQC

The table following below is generated from a selection of installations Geotest has electrical leak tested that have been completed with third party CQA. These statistics demonstrate that third party CQA significantly reduces the amount of voids found post installation with electrical leak integrity surveys by up to 14 times in comparison to without CQA. This further reinforces that independent third party CQA completed by Geotest gives the utmost confidence about the quality and compliance of an installation and increases the standard of work completed by a contractor/installer.

Geotest statistics for tested installations with and without CQA.

	No. of installations	Voids	Area (m^2)	Voids per Hectare
Contractor **Without** CQA	12	403	536,600	7.51
Contractor **With** CQA	13	57	1,040,000	**0.55**

Geotest's services are cost effective and flexible in meeting our client's needs on a job specific basis.
Geotest has a proven track record with an increase in installation quality on all projects involved in, providing a full package of CQA services to give confidence in works completed by the contractor.

Geotest is engaged by large institutions and companies as they recognize geomembrane installations are a specialist area that requires expert, up to date knowledge to address concerns. Geotest has the familiarity and experience to effectively identify problems in polymers and installations to ultimately reduce the risk profile to the client.

Geotest Pty Ltd
6 Jennifer Avenue – Ridgehaven – SA - 5097
Phone: 08 8264 5802

admin@geotest.net.au