



Advanced ACI CODE-562-25 Concrete Assessment and Repair Training Course

1 – 5 February 2027
Singapore

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Ref: 1116_182420 **Date:** 1 – 5 February 2027 **Location:** Singapore **Fees:** 6500 Euro

Overview

Advanced ACI CODE-562-25 Concrete Assessment and Repair Training Course is a one-week course for engineering, inspection, asset and construction teams, who leave with an Existing Concrete Assessment and Repair Plan. Participants apply existing concrete structure assessment, concrete distress investigation, structural repair design, durability assessment and repair quality assurance to evidence-based intervention decisions. The course connects field findings, analysis, repair objectives, construction documents and closeout while preserving licensed engineering judgment. Agile Leaders Training Center develops ACI CODE-562-25 concrete assessment and repair capability.

Who Should Attend

- Teams responsible for structural assessment and repair design
- Teams responsible for condition surveys and material testing
- Teams responsible for facilities and concrete asset performance
- Teams responsible for repair construction and site coordination
- Teams responsible for inspection, quality control and documentation
- Teams responsible for rehabilitation projects and technical decisions

The course assumes participants can read structural drawings, interpret concrete test evidence and contribute to engineering decisions, and it leaves out licensed design authorization and jurisdiction-specific approval advice.

Departments and Industries

The course supports departments and industries responsible for existing concrete buildings and repair work.



- Structural engineering and technical consulting
- Facilities management and asset integrity
- Construction, contracting and repair services
- Property, infrastructure and industrial operations
- Inspection, testing and quality management
- Project management and capital works

Learning Objectives

By the end of this course, participants will be able to:

- Apply ACI CODE-562-25 scope and compliance pathways
- Build investigation, survey and test plans
- Diagnose distress and deterioration mechanisms
- Evaluate load paths, capacity and durability evidence
- Compare repair, rehabilitation and strengthening options
- Build repair documents, controls and closeout records



Course Agenda

Day 1: Code Basis and Investigation

- ACI CODE-562-25 Scope and Compliance Map
- Existing Structure Information Review Checklist
- Investigation Scope and Site Safety Plan
- Condition Survey and Distress Mapping Sheet
- Sampling and Material Test Program Matrix

Day 2: Evaluation and Diagnosis

- Damage and Deterioration Mechanism Diagnostic
- Material Property Evidence Register
- Geometry and Reinforcement Verification Plan
- Structural Load Path and Capacity Review
- Assessment Findings and Uncertainty Log



Day 3: Repair Strategy and Design

- Repair Objective and Acceptance Criteria Matrix
- Repair-versus-Rehabilitation Decision Framework
- Concrete Removal and Interface Design Plan
- Repair Material Compatibility Selection Matrix
- Strengthening and Load Transfer Concept Review

Day 4: Durability and Quality Documents

- Durability Exposure and Service-Life Assessment
- ACI 563 Repair Specification Coordination Checklist
- Construction Document and Repair Detail Register
- Surface Preparation and Concrete Surface Profile Plan
- Quality Assurance, Inspection and Test Plan

Day 5: Assessment and Repair Practice

- Exercise: Diagnose a Concrete Distress Case
- Exercise: Build an Investigation and Test Plan
- Exercise: Select a Repair System and Interface Strategy
- Exercise: Review Repair Documents and Quality Evidence
- Capstone Exercise: Existing Concrete Assessment and Repair Plan



Practical Exercises

The course uses suggested activities to connect investigation evidence with repair decisions.

- Suggested activity: map cracking, spalling, corrosion indicators and uncertainty on a condition-survey record
- Suggested activity: reconcile test findings, load-path evidence and durability exposure in an assessment register
- Suggested activity: compare repair materials, removal limits, interface preparation and acceptance criteria
- Suggested activity: present a repair plan with quality hold points, monitoring actions and closeout evidence

FAQs

Who suits ACI CODE-562-25 concrete assessment and repair training, and what does it assume?

Engineering, inspection, asset, contractor and quality teams suit the training. It assumes experience with structural drawings, concrete construction and technical evidence.

How does ACI CODE-562-25 concrete repair training differ from new-construction concrete design training?

ACI CODE-562-25 training focuses on existing structures, condition evidence, assessment, repair and rehabilitation decisions; new-construction design training focuses on requirements for new structural concrete work.

What evidence supports an existing concrete structure assessment?

An existing concrete structure assessment combines records, visual surveys, distress maps, geometry checks, reinforcement information, material tests, exposure conditions, load paths, analysis assumptions and documented uncertainty.

How are concrete repair materials and methods selected?

Concrete repair materials and methods are selected against the repair objective, substrate condition, compatibility, exposure, load transfer, constructability, preparation requirements, quality controls and intended service performance.



What should repair quality assurance document?

Repair quality assurance should document responsibilities, submittals, substrate acceptance, material controls, inspection points, testing, nonconformities, corrective actions, monitoring and closeout evidence.

Conclusion

Participants take back an Existing Concrete Assessment and Repair Plan containing investigation records, diagnostic evidence, option matrices, repair requirements and quality controls. The plan makes assumptions and decisions traceable across engineering and construction teams. It supports coordinated assessment, repair delivery, monitoring and closeout for existing concrete assets.