



Building Envelope Inspection and Construction Quality Course

21 – 25 December 2026
Singapore

Building Envelope Inspection and Construction Quality Course

Ref: 509_140199 **Date:** 21 – 25 December 2026 **Location:** Singapore **Fees:** 6500 Euro

Overview

Building Envelope Inspection and Construction Quality Course is a five-day intermediate course for inspectors, engineers, architects, supervisors, and quality teams who leave with a Building Envelope Inspection Plan and Defect Register. Participants connect building envelope inspection, construction quality, control-layer continuity, facade inspection, waterproofing inspection, field testing awareness, and corrective-action verification across commercial and industrial assets. Agile Leaders Training Center presents envelope quality through planned observation and traceable evidence.

Who Should Attend

- Teams responsible for inspecting envelope installation and recording construction quality
- Design professionals responsible for facade, roof, fenestration, and waterproofing interfaces
- Site supervisors responsible for sequencing, access, tolerances, and corrective work
- Quality teams responsible for inspection plans, hold points, evidence, and closeout
- Facilities and owner teams responsible for reviewing moisture and leakage concerns

The course assumes participants already read drawings and specifications; it leaves out regulated inspection authority, laboratory testing, specialist diagnosis, and licensed design approval.

Departments and Industries

The course supports teams delivering and maintaining envelope systems across varied assets.

- Building construction, architecture, and multidisciplinary engineering
- Facade, roofing, waterproofing, glazing, and sealant contractors
- Commercial property, industrial facilities, and logistics buildings
- Quality assurance, project management, and technical consultancy
- Facilities management, asset ownership, and maintenance operations

Learning Objectives

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

- Analyze envelope functions, control layers, details, and interfaces
- Build inspection plans from drawings, specifications, and acceptance criteria
- Evaluate walls, roofs, openings, sealants, and waterproofing installation
- Use mockup, tolerance, and field-test observation checklists
- Diagnose visible defects and prioritize referral or corrective action



- Build traceable defect, punch-list, and verification records

Course Agenda

Day 1: Envelope Functions and Inspection Basis

- Building Envelope Function and Performance-Requirement Map
- Water, Air, Thermal, and Vapor Control-Layer Diagram
- Drawing, Specification, Submittal, and Detail Review Checklist
- Interface, Penetration, Transition, and Termination Risk Register
- Building Envelope Inspection Plan and Hold-Point Matrix

Day 2: Walls Facades and Openings

- Exterior Wall and Facade Assembly Inspection Checklist
- Window, Door, Skylight, and Curtain-Wall Interface Review
- Flashing, Sill, Head, Jamb, and Drainage-Path Verification
- Sealant Joint Geometry, Backing, Adhesion, and Continuity Checks
- Installation Tolerance and Adjacent-Trade Coordination Record

Day 3: Roofs Waterproofing and Moisture Control

- Roof Membrane, Edge, Drain, and Penetration Inspection Method
- Below-Grade and Wet-Area Waterproofing Continuity Checklist
- Insulation, Thermal Bridge, and Condensation-Risk Review
- Air-Barrier Transition and Material Compatibility Assessment
- Moisture Intrusion Indicator and Referral Decision Tree

Day 4: Mockups Tests Defects and Reporting

- Preinstallation Meeting and Mockup Acceptance Record
- Water-Penetration and Air-Leakage Field-Test Observation Plan
- Photographic Evidence, Location Coding, and Traceability Method
- Defect Classification, Punch List, and Priority Matrix
- Corrective-Action Request and Reinspection Verification Workflow

Day 5: Integrated Inspection Practice

- Exercise: Trace Control-Layer Continuity Across Sample Details
- Exercise: Inspect Facade, Opening, Roof, and Waterproofing Evidence
- Exercise: Observe a Mock Field Test and Record Findings
- Exercise: Classify Defects and Verify Corrective Actions
- Capstone Exercise: Building Envelope Inspection Plan and Defect Register



Practical Exercises

The course uses suggested activities based on drawings, images, records, and controlled test scenarios.

- Suggested activity: mark water, air, thermal, and vapor control layers across critical transitions.
- Suggested activity: inspect facade, fenestration, roof, sealant, and waterproofing evidence against project criteria.
- Suggested activity: produce location-coded defect entries with photographs, priorities, and referral decisions.
- Suggested activity: close a corrective-action trail through reinspection evidence and status verification.

FAQs

Who suits the Building Envelope Inspection and Construction Quality Course, and what does it assume?

It suits inspectors, engineers, architects, supervisors, quality teams, and owner representatives who already read construction drawings and specifications.

How does building envelope inspection differ from a general building-condition survey?

Building envelope inspection focuses on installed control layers, interfaces, workmanship, mockups, test observations, defects, and construction acceptance rather than a broad survey of all building systems.

What should a building envelope inspection plan contain?

It should define assemblies, risk interfaces, acceptance references, inspection timing, hold points, evidence requirements, responsible parties, defect handling, referral triggers, and verification records.

How does facade and waterproofing inspection use field testing?

Field testing provides controlled evidence against specified criteria. Inspectors coordinate access, observe conditions and procedures, record results, and refer interpretation or diagnosis to qualified specialists.

Does building envelope inspection training authorize regulated inspections?

No. Project specifications, approved procedures, qualified testing personnel, specialist diagnosis, and licensed design decisions remain controlling.



Conclusion

Participants take back a Building Envelope Inspection Plan and Defect Register connecting performance intent, control layers, systems, interfaces, hold points, evidence, defects, and corrective actions. The package helps teams identify installation risks before concealment and maintain traceable closeout. It supports quality review without replacing project requirements, specialist testing, or licensed approval.