

STARTER EDITION

GCC / KSA

**FREE**  
EBOOK

# QA/QC in Construction

Your first  **24 pages**

Everything a new site engineer or inspector needs to know — short, visual and practical.



 3 levels

 24 pages

 WIR template

 12-question quiz

 Cheat sheet

**Amir Usman**

Construction Manager · GCC / KSA

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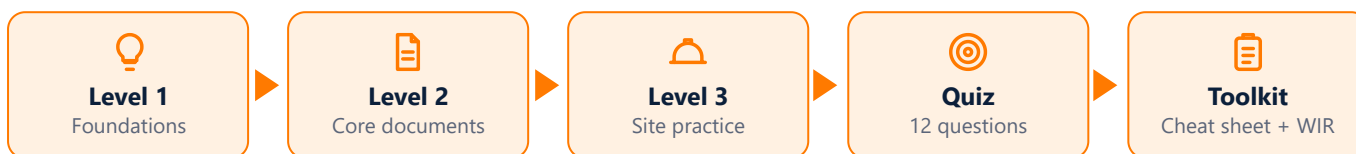


## WELCOME

# Hi, I'm QC Ali.

I'll guide you through the QA/QC basics every site engineer needs: what quality means, the documents that run the site, and what to check on every trade.

## How this book works



### Pro Tip

Short advice that saves time, money or arguments.

### Common Mistake

Errors seen again and again on site — learn them here.

### Checklist

Tick-box lists you can copy into your notebook or ITP.

### Site Story

Short real site stories (names removed).

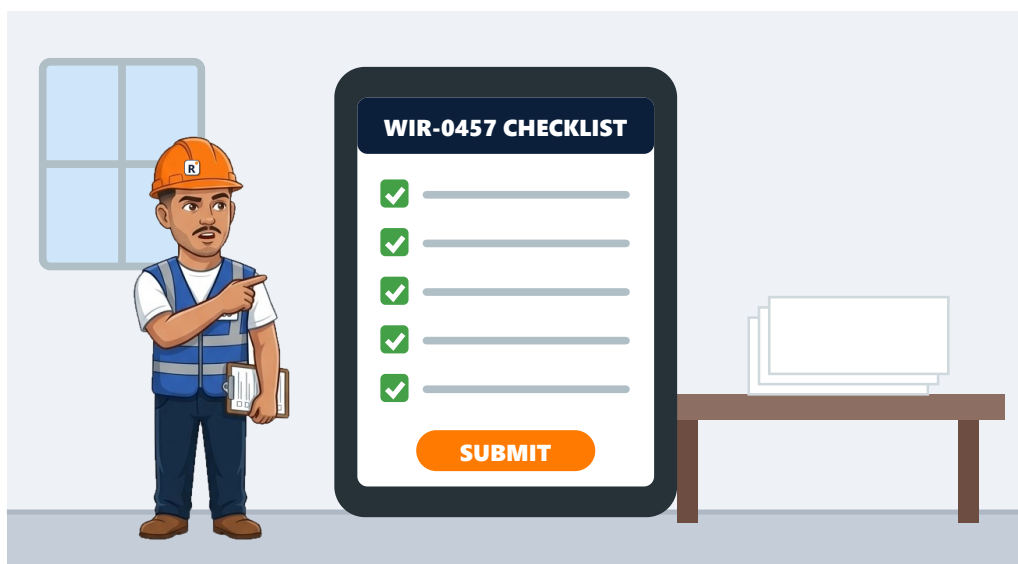
## About the author

**Amir Usman** · Construction Manager, GCC / KSA. This book is the simple QA/QC map he wished he had on his first day on site.

### Free to share

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*Disclaimer: general guidance only. Your contract, specification and the Engineer always decide. Values marked **VERIFY** depend on your project. Want Levels 4–5 (management & expert)? Download the Complete Edition free at [ruzani.com/ebook](https://ruzani.com/ebook).*



Printed forms and a tablet showing a digital WIR on a site table

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Start at Level 1 even if you have experience — the basics are where most NCRs come from!

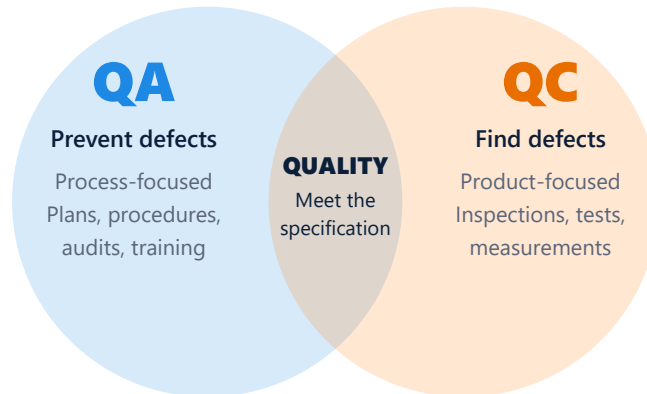
## LEVEL 1 Foundations

What quality means, who does what, and the documents that define "right".

### 1.1

## QA vs QC

QA prevents defects. QC finds them. You need both.



|          | QA — Assurance                                       | QC — Control                             |
|----------|------------------------------------------------------|------------------------------------------|
| Goal     | Prevent defects                                      | Detect and correct defects               |
| Focus    | Process / system                                     | Product / result                         |
| Tools    | PQP, procedures, method statements, training, audits | WIR, MIR, ITP checks, lab tests, surveys |
| Question | "Are we doing it the right way?"                     | "Is the result right?"                   |

### The 1-10-100 rule of thumb

Design / planning

× 1

During construction

× 10

After handover

× 100

### Did you know?

The later a defect is found, the more it costs. Most of the cost of poor quality is **hidden**: delays, re-inspection, disputes, lost trust.

### Common Mistake

- ✗ Thinking QA/QC is only the inspector's job
- ✗ Inspecting after the work is covered
- ✗ No photos — no evidence

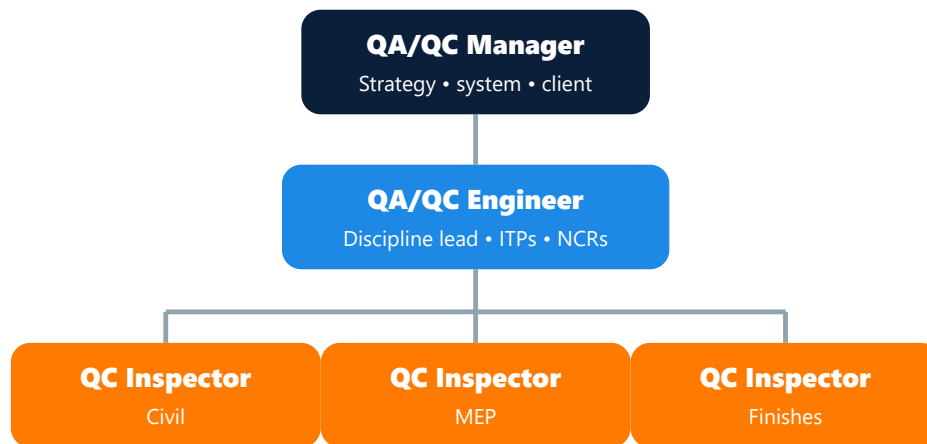


Easy way to remember: **QA is the recipe, QC is tasting the food.**

## 1.2

## Roles: Inspector, Engineer, Manager

Three roles, one team. Know where you fit.



### QC Inspector

- Daily inspections
- Raises / attends WIRs, MIRs
- Checks work vs drawings + ITP
- Records + photos

### QA/QC Engineer

- Prepares ITPs + checklists
- Reviews method statements
- Raises / closes NCRs
- Trains inspectors

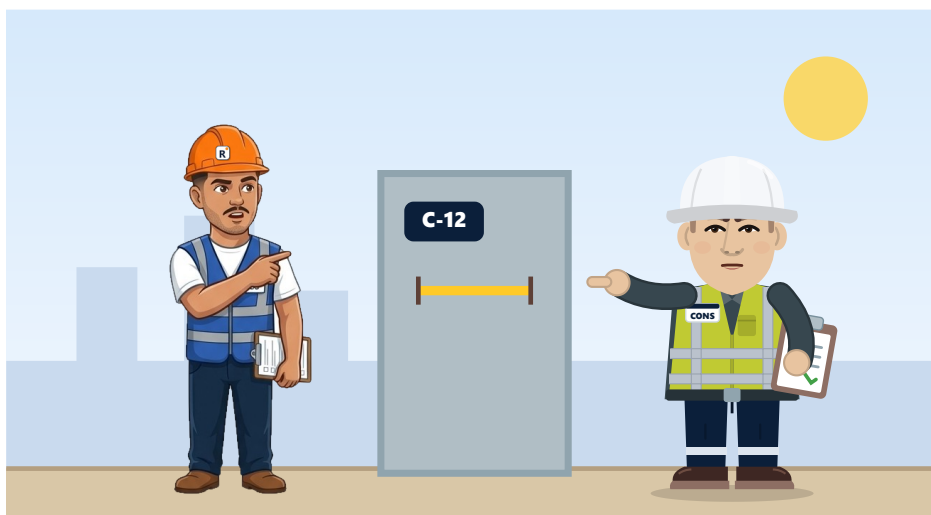
### QA/QC Manager

- Owns the PQP
- Leads audits
- Reports KPIs
- Client / Consultant interface

| Party                       | Role in quality                                                   |
|-----------------------------|-------------------------------------------------------------------|
| Client / Employer           | Owns the project; sets quality expectations in the contract       |
| Consultant / "The Engineer" | Designs and/or supervises; reviews submittals, inspects, approves |
| Main Contractor             | Builds the works; runs the QA/QC system, PQP, ITPs, inspections   |
| Subcontractor / Supplier    | Delivers parts of the work; follows the contractor's QA/QC plan   |
| Third-party lab             | Independent tests (concrete, soil, NDT...)                        |

### Site Story

A new inspector signed a WIR "approved" for the Consultant because "he was busy". The signature was challenged in a later audit. **Only sign for yourself and your company.**



QC inspector and Consultant inspector during a joint inspection

## 1.3

## Drawings, Specs & BOQ

The three documents that tell you what “right” looks like.

|                                                                                      |                                   |                      |                 |
|--------------------------------------------------------------------------------------|-----------------------------------|----------------------|-----------------|
| <b>PROJECT: Residential Tower – Riyadh</b><br>Client • Consultant • Contractor logos |                                   |                      |                 |
| DRAWING TITLE<br><b>Typical Floor – Slab Reinforcement</b>                           |                                   | REVISION<br><b>C</b> |                 |
| SCALE<br><b>1:50 @ A1</b>                                                            | DATE<br><b>2026-03-14</b>         | STATUS<br><b>IFC</b> |                 |
| DRAWING No.<br><b>PRJ-STR-DWG-2105</b>                                               | DRAWN / CHECKED<br><b>AK / MS</b> | SHEET<br><b>05</b>   | OF<br><b>12</b> |

Check drawing number, revision and status before you inspect.

| Status                            | Build from it?     |
|-----------------------------------|--------------------|
| IFA / IFT — for approval / tender | No                 |
| IFC — Issued for Construction     | Yes                |
| Approved shop drawing (code A/B)  | Yes, with comments |
| Superseded                        | Never              |

### Specification: 3 parts

- **Part 1 General** — scope, submittals, QA
- **Part 2 Products** — materials, mixes
- **Part 3 Execution** — installation, **tolerances, field QC** ← your inspection list

#### ✓ Before you inspect

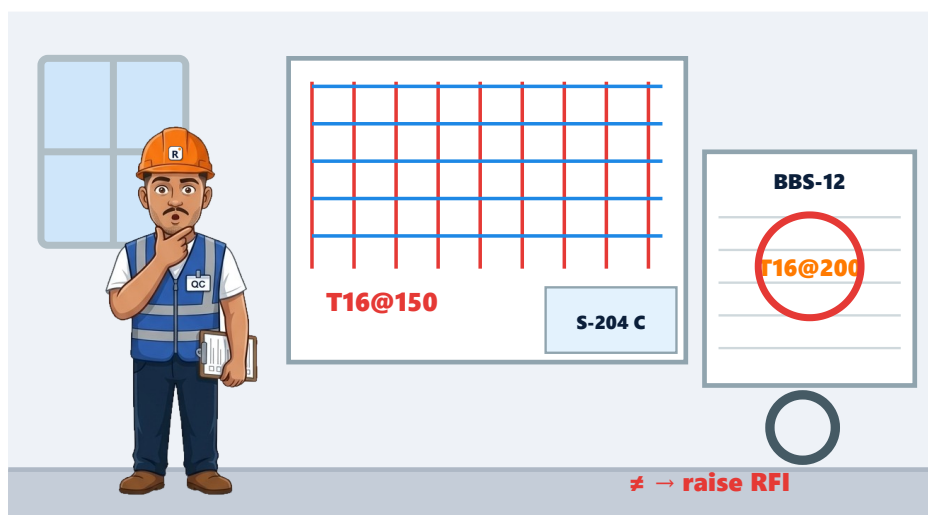
- ☐ Latest revision + IFC status confirmed
- ☐ General notes read
- ☐ Spec Part 3 tolerances noted
- ☐ Conflicts raised by RFI before work

### BOQ + order of precedence

- BOQ items name the spec section and grade — cross-check them
- When documents conflict, the **contract** decides which wins
- Never choose the easy answer — raise an **RFI** in writing

#### ⚠ Common Mistake

- ✗ Building from an old print in the site office
- ✗ Scaling dimensions from a printed drawing
- ✗ Solving conflicts verbally



Engineer comparing a structural drawing with a bar bending schedule on site

## LEVEL 2 Core Documents

The paperwork that runs every site — purpose, who prepares, who approves.

## 2.1

## Planning: PQP, Method Statement, ITP

The plan before the work.

### PQP Project Quality Plan

**Purpose** How quality is managed on this project: organisation, procedures, registers, audits.

**Prepared by** Contractor QA/QC Manager

**Approved by** Consultant / Engineer

### MS Method Statement

**Purpose** Step-by-step how an activity is done safely and to spec, with risk assessment.

**Prepared by** Contractor construction engineer

**Approved by** Consultant / Engineer

### ITP Inspection & Test Plan

**Purpose** Every inspection and test for an activity: criteria, records, and who attends.

**Prepared by** Contractor QA/QC Engineer

**Approved by** Consultant / Engineer

**H****HOLD**

Work STOPS until the inspector releases it

**W****WITNESS**

Inspector invited; work may proceed if they don't attend

**R****REVIEW**

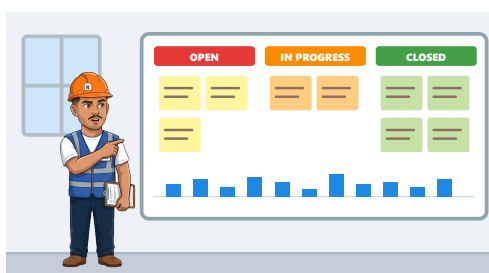
Documents / records checked – no attendance

**S****SURVEILLANCE**

Random spot checks during the work

#### Pro Tip

Write acceptance criteria in the ITP as **numbers** from your spec (e.g. "cover 40 mm –0/+10"), not "as per spec".

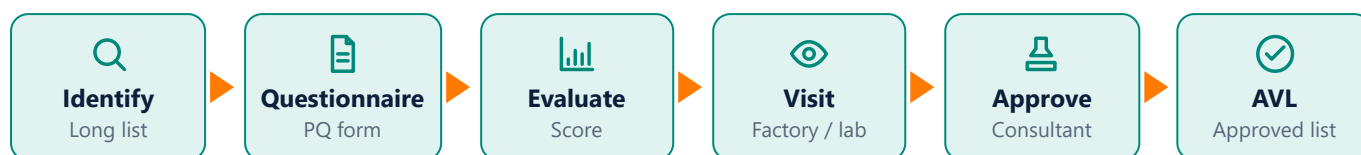


Planning board in the site office showing approved MS and ITP status per activity

## 2.2

## Pre-qualification &amp; AVL

Choose the right subcontractors, suppliers and labs before they start.



| Required document                      | Sub-con | Supplier | Lab |
|----------------------------------------|---------|----------|-----|
| Commercial Registration / licence      | ✓       | ✓        | ✓   |
| Company profile + references           | ✓       | ✓        | ✓   |
| ISO 9001 certificate                   | ✓       | ✓        | ✓   |
| Key staff CVs, equipment + calibration | ✓       | –        | ✓   |
| Product certificates + test reports    | –       | ✓        | –   |
| Accreditation scope (ISO/IEC 17025)    | –       | –        | ✓   |

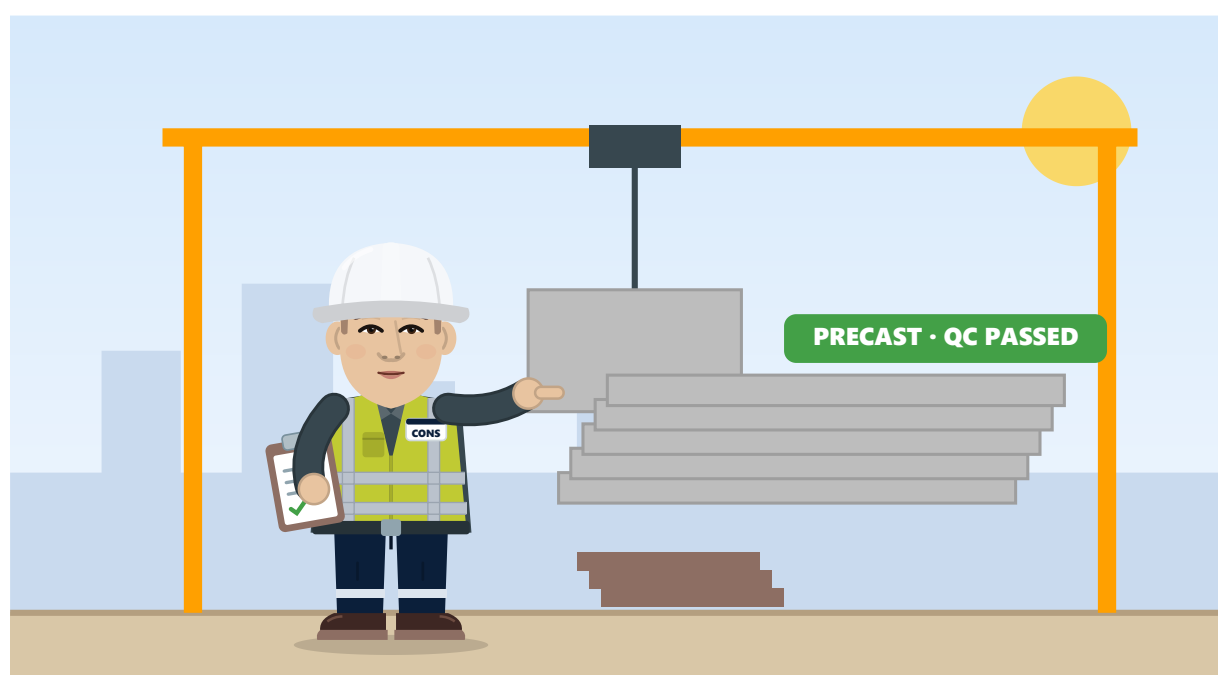
| Criterion (example weights)      | Weight |
|----------------------------------|--------|
| Technical experience             | 25%    |
| Quality system                   | 20%    |
| Key staff                        | 15%    |
| Resources / capacity             | 15%    |
| HSE, financial, past performance | 25%    |

### Site Story

A cheap block supplier had no curing yard. Blocks cracked and failed tests. **Visit the factory before you approve.**

### Common Mistake

- ✗ Choosing on price alone
- ✗ Accepting expired certificates
- ✗ Lab accredited — but not for your test



Factory visit: inspector checking precast elements in the supplier's yard

## 2.3

## Submittals: MAR, Shop Drawings, RFI

Get it approved on paper before you build it in concrete.

### MAR Material Approval Request

**Purpose** Approve a specific product against the spec before ordering.

**Prepared by** Contractor

**Approved by** Consultant

### SD Shop Drawing

**Purpose** Detailed fabrication / installation drawings from the IFC design.

**Prepared by** Contractor / subcontractor

**Approved by** Consultant

### RFI Request for Information

**Purpose** Ask the designer to clarify a conflict or gap.

**Prepared by** Contractor

**Approved by** Answered by the designer

### MU / FAT Mock-up · Factory test

**Purpose** Agree the standard on a sample; test major equipment at the factory.

**Prepared by** Contractor / manufacturer

**Approved by** Consultant / Client

**A****Approved**

Proceed

**B****Approved as noted**

Proceed + include comments

**C****Revise & resubmit**

Do NOT proceed

**D****Rejected**

Start again

**Bad RFI**

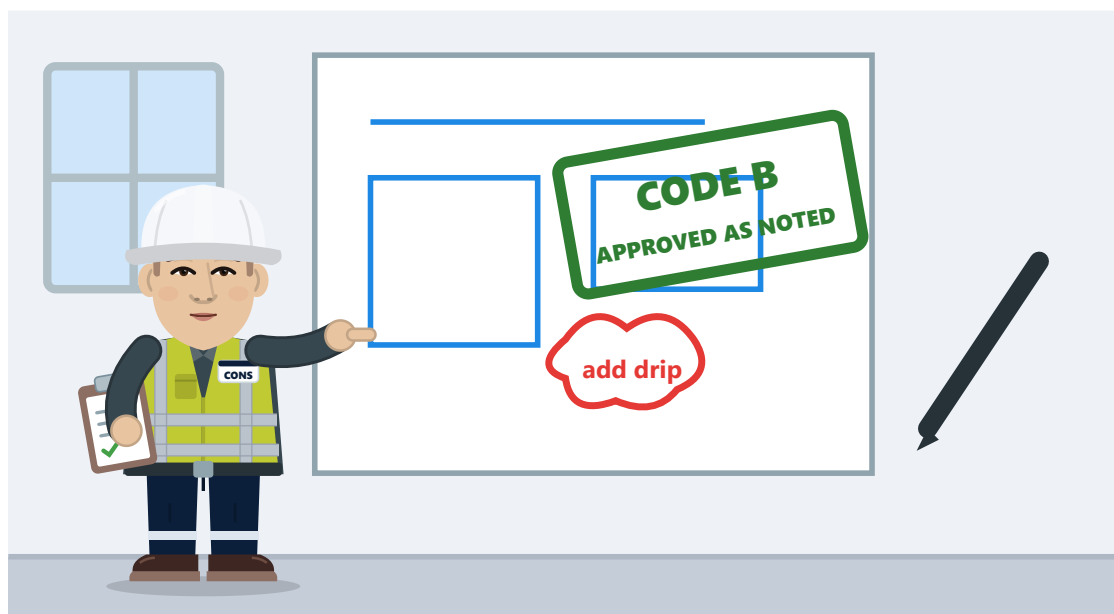
"Please clarify slab details."

**Good RFI**

"Slab S3 L4: S-204 rev C shows T16@150; BBS-12 shows @200. Which governs? Proposed: @150."

**Pro Tip**

Add a **compliance statement** to every MAR: spec clause vs offered product, line by line.



Consultant review stamp (code B) on a returned shop drawing

## 2.4

## Inspections: WIR, MIR, Tests, Calibration

The proof on site.

 **WIR** Work Inspection Request

|                    |                                                          |
|--------------------|----------------------------------------------------------|
| <b>Purpose</b>     | Inspect finished work before the next stage or covering. |
| <b>Prepared by</b> | Contractor QC                                            |
| <b>Approved by</b> | Consultant inspector                                     |

 **MIR** Material Inspection Request

|                    |                                                                 |
|--------------------|-----------------------------------------------------------------|
| <b>Purpose</b>     | Inspect delivered material against the approved MAR before use. |
| <b>Prepared by</b> | Contractor QC / store                                           |
| <b>Approved by</b> | Consultant inspector                                            |

 **TR** Test Report

|                    |                                                            |
|--------------------|------------------------------------------------------------|
| <b>Purpose</b>     | Lab or field test results (concrete, soil, pressure, NDT). |
| <b>Prepared by</b> | Accredited lab                                             |
| <b>Approved by</b> | Reviewed by QA/QC, accepted by Consultant                  |

 **CAL** Calibration Certificate

|                    |                                                       |
|--------------------|-------------------------------------------------------|
| <b>Purpose</b>     | Proves measuring equipment is accurate and traceable. |
| <b>Prepared by</b> | Accredited calibration lab                            |
| <b>Approved by</b> | Reviewed by QA/QC                                     |

**Self-check**  
Own checklist**Raise WIR**With notice **VERIFY****Joint inspection**

With Consultant

**Result**

A / B / rejected

**Close**

Sign, file, photos

 **MIR + calibration**

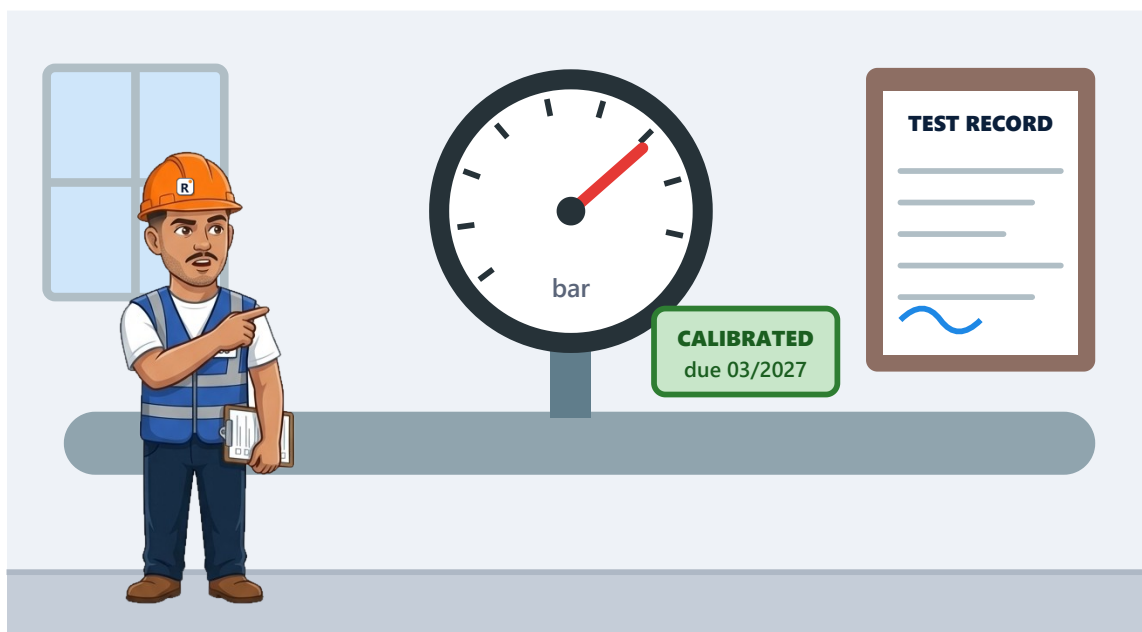
- ☐ Material = approved MAR
- ☐ Certificate / batch attached
- ☐ No damage, within shelf life
- ☐ Gauge calibration valid

 **Site Story**

A pressure test passed — but the gauge calibration had expired. Every test with that gauge was repeated. **Check the sticker first.**



Never call the Consultant to inspect work you haven't **checked yourself**.



Calibrated pressure gauge with valid calibration sticker showing due date

## 2.5

## Non-conformance: SOR, NCR, CAPA

When something is wrong — fix it, then stop it repeating.

### 👁 SOR Site Observation

|                    |                             |
|--------------------|-----------------------------|
| <b>Purpose</b>     | Record a minor issue early. |
| <b>Prepared by</b> | Consultant / QC             |
| <b>Approved by</b> | Closed by contractor action |

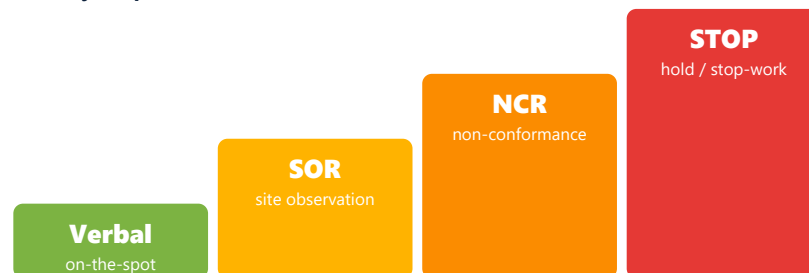
### ⚠ NCR Non-Conformance

|                    |                                                         |
|--------------------|---------------------------------------------------------|
| <b>Purpose</b>     | Work or material not meeting requirements + agreed fix. |
| <b>Prepared by</b> | Consultant / QA/QC                                      |
| <b>Approved by</b> | Disposition approved by Consultant                      |

### 🔄 CAPA Corrective & Preventive

|                    |                                                |
|--------------------|------------------------------------------------|
| <b>Purpose</b>     | Fix the root cause so it doesn't happen again. |
| <b>Prepared by</b> | Contractor QA/QC                               |
| <b>Approved by</b> | QA/QC Manager / Consultant                     |

Severity / repeat issue ↗



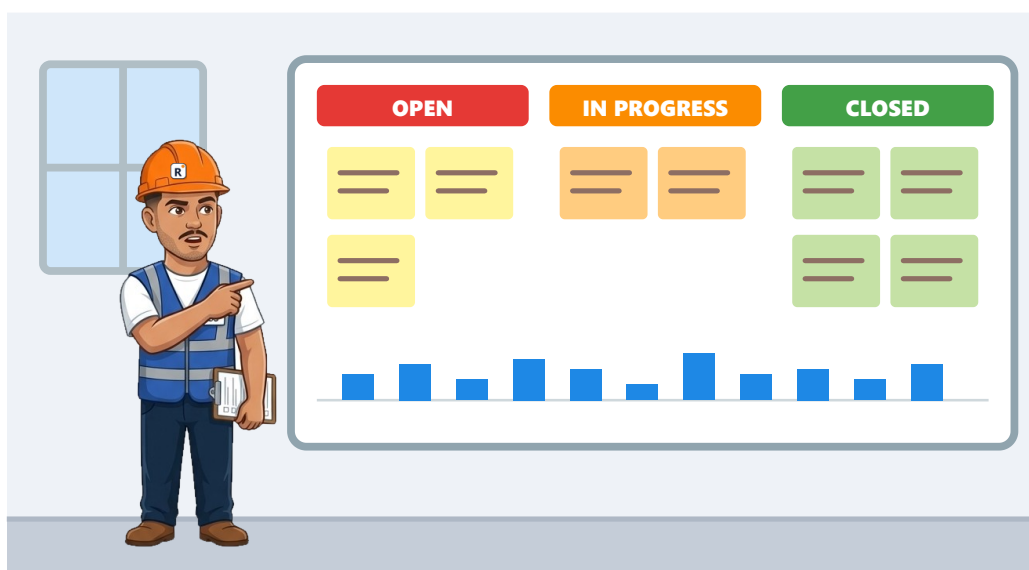
| Disposition | Meaning                                         |
|-------------|-------------------------------------------------|
| Rework      | Make it comply with the original requirement    |
| Repair      | Make it acceptable with an approved method      |
| Use as is   | Accept without change — needs designer approval |
| Reject      | Remove and replace                              |

#### ✅ A strong NCR

- ☐ Facts, location, requirement quoted
- ☐ Photos attached
- ☐ Root cause, not just the fix
- ☐ Closed on site, not only on paper

#### ⚠ Common Mistake

- ✗ Writing NCRs to punish people
- ✗ "Root cause: carelessness"
- ✗ No containment — defect gets covered



NCR board in the site office showing open and closed NCRs by trade

## 2.6

## Close-out: Snags, As-builts, TOC, O&amp;M

Finish strong and hand over first time.

**SNAG** Snag / Punch list

|                    |                                                |
|--------------------|------------------------------------------------|
| <b>Purpose</b>     | Minor defects to fix before or after handover. |
| <b>Prepared by</b> | Consultant / Client (pre-snag yourself first)  |
| <b>Approved by</b> | Verified by Consultant                         |

**ABD** As-built drawings

|                    |                                                     |
|--------------------|-----------------------------------------------------|
| <b>Purpose</b>     | What was actually built, with all approved changes. |
| <b>Prepared by</b> | Contractor                                          |
| <b>Approved by</b> | Consultant                                          |

**TOC** Taking-Over Certificate

|                    |                                                     |
|--------------------|-----------------------------------------------------|
| <b>Purpose</b>     | Works complete enough to take over; starts the DNP. |
| <b>Prepared by</b> | Contractor applies                                  |
| <b>Approved by</b> | The Engineer (FIDIC Cl. 10.1)                       |

**O&M** Operation & Maintenance

|                    |                                          |
|--------------------|------------------------------------------|
| <b>Purpose</b>     | How to operate and maintain each system. |
| <b>Prepared by</b> | Contractor (from suppliers)              |
| <b>Approved by</b> | Consultant / Client FM                   |

**Site Story**

A villa team pre-snagged every room with a tablet checklist. The Consultant's list came back with under a quarter of the usual items. **Snag yourself before anyone snags you.**

**Common Mistake**

- ✗ Copying IFC drawings and calling them as-built
- ✗ Snag lists without locations or photos
- ✗ O&M manuals that are just brochures



Snag tags placed on a wall and door during a joint snagging walk

## LEVEL 3 Site Practice

Boots on — what to check, trade by trade.

## 3.1

## Civil: Earthworks, Rebar, Formwork, Concrete

The backbone of every building.

## Earthworks

- ☐ Approved fill, layer thickness per spec
- ☐ Compact at the right moisture
- ☐ Field density test each layer (sand cone ASTM D1556 / nuclear gauge D6938)
- ☐ Often  $\geq 95\%$  of Modified Proctor MDD **VERIFY**

## Formwork

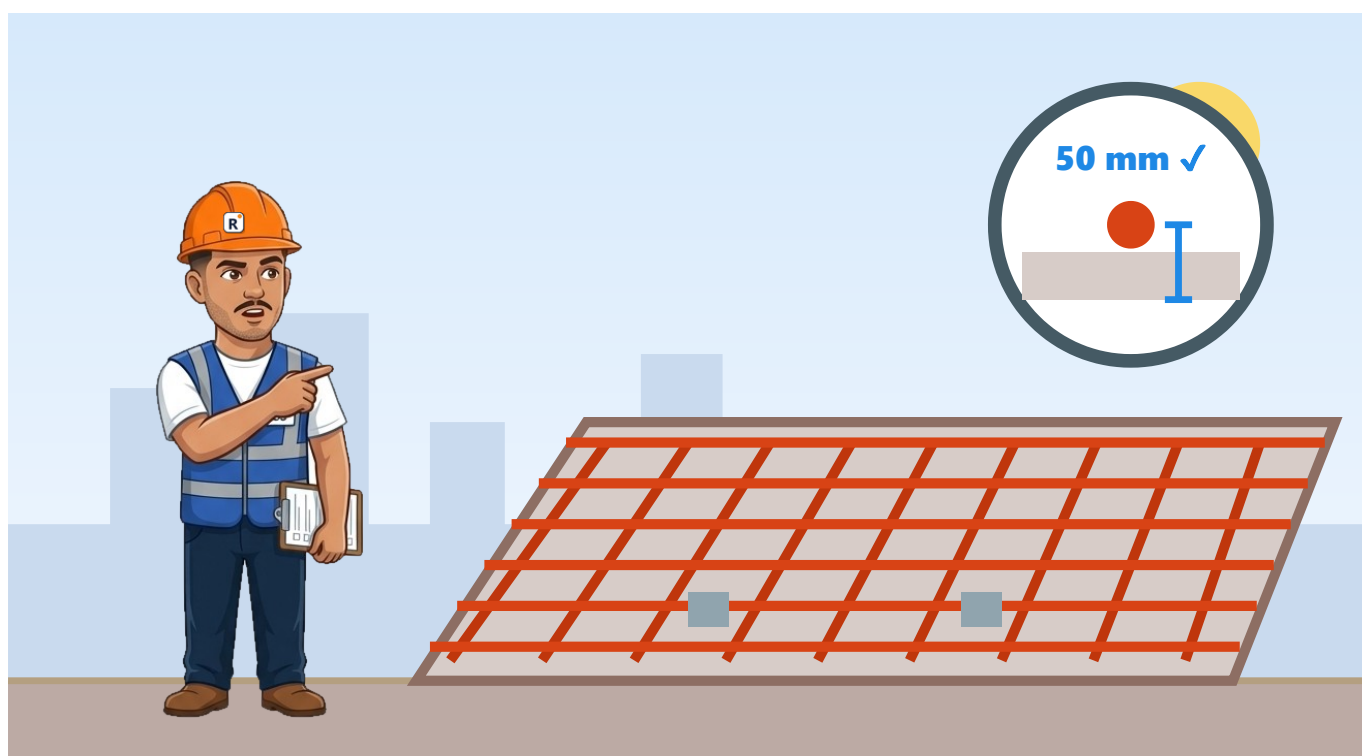
- ☐ Line, level, plumb, dimensions
- ☐ Release agent **before** rebar
- ☐ Props + bracing as designed
- ☐ Openings and sleeves fixed

## Reinforcement

- ☐ Bar size, number, spacing
- ☐ **Cover** — right spacer size
- ☐ Lap length + location
- ☐ Links, hooks, clean bars
- ☐ Stable chairs, tied

## Pouring &amp; curing

- ☐ Check every delivery ticket
- ☐ No water added on site
- ☐ Hot weather: night pours,  $\leq 32^\circ\text{C}$  at placing **VERIFY**
- ☐ Cure immediately, often  $\geq 7$  days **VERIFY**



Slab reinforcement with spacer blocks and chairs, tape measure showing cover

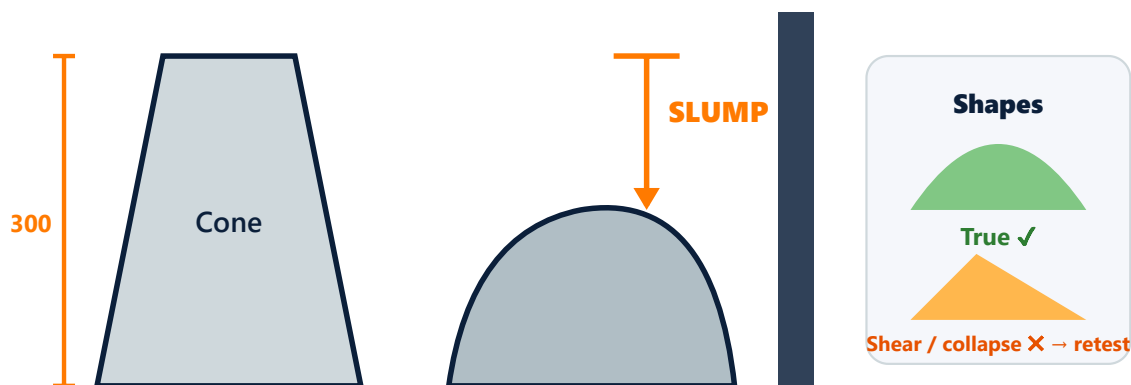
## 🔧 Site Story

A slab poured at 2 pm in August cracked within hours. Pours moved to 2 am with wind breaks — no more cracks. **In the Gulf, the clock is a quality tool.**

## 3.2

## Concrete Tests: Slump, Cubes, Temperature

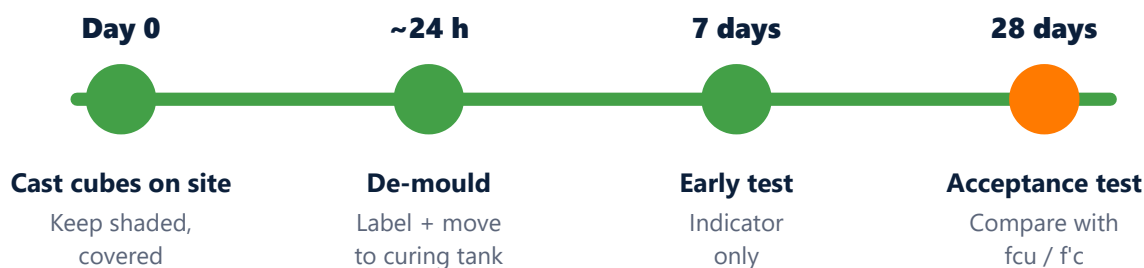
The numbers that decide the pour.



1. Fill in 3 layers, 25 rods each

2. Lift cone, measure drop

Slump test (ASTM C143 / BS EN 12350-2). Cone height 300 mm.



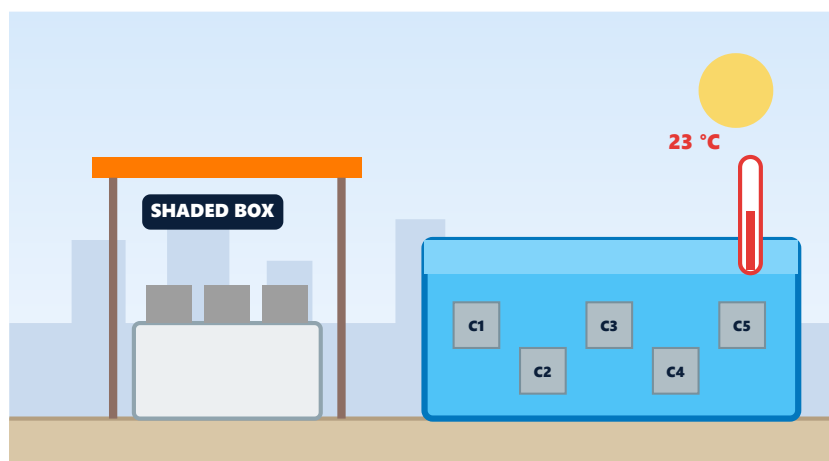
|               | Cylinders (ASTM) | Cubes (BS EN)              |
|---------------|------------------|----------------------------|
| Size          | 150 × 300 mm     | 150 mm                     |
| Test          | ASTM C39         | BS EN 12390-3              |
| Example class | $f'c = 30$ MPa   | C30/37 → 30 cyl. / 37 cube |

#### Did you know?

ACI 318 ( $f'c \leq 35$  MPa): average of 3 consecutive tests  $\geq f'c$ , and no single test below  $f'c - 3.5$  MPa. Use your spec's criteria. **VERIFY**

#### Common Mistake

- ✗ Adding water to pass the slump
- ✗ Specimens left in the sun
- ✗ No ID on the cube — can't trace the element

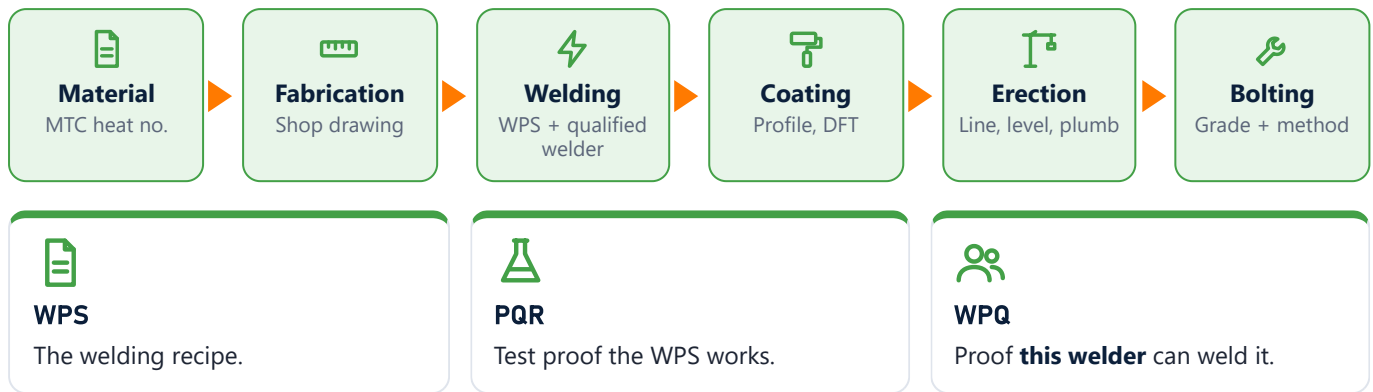


Labelled cubes in a curing tank with temperature log

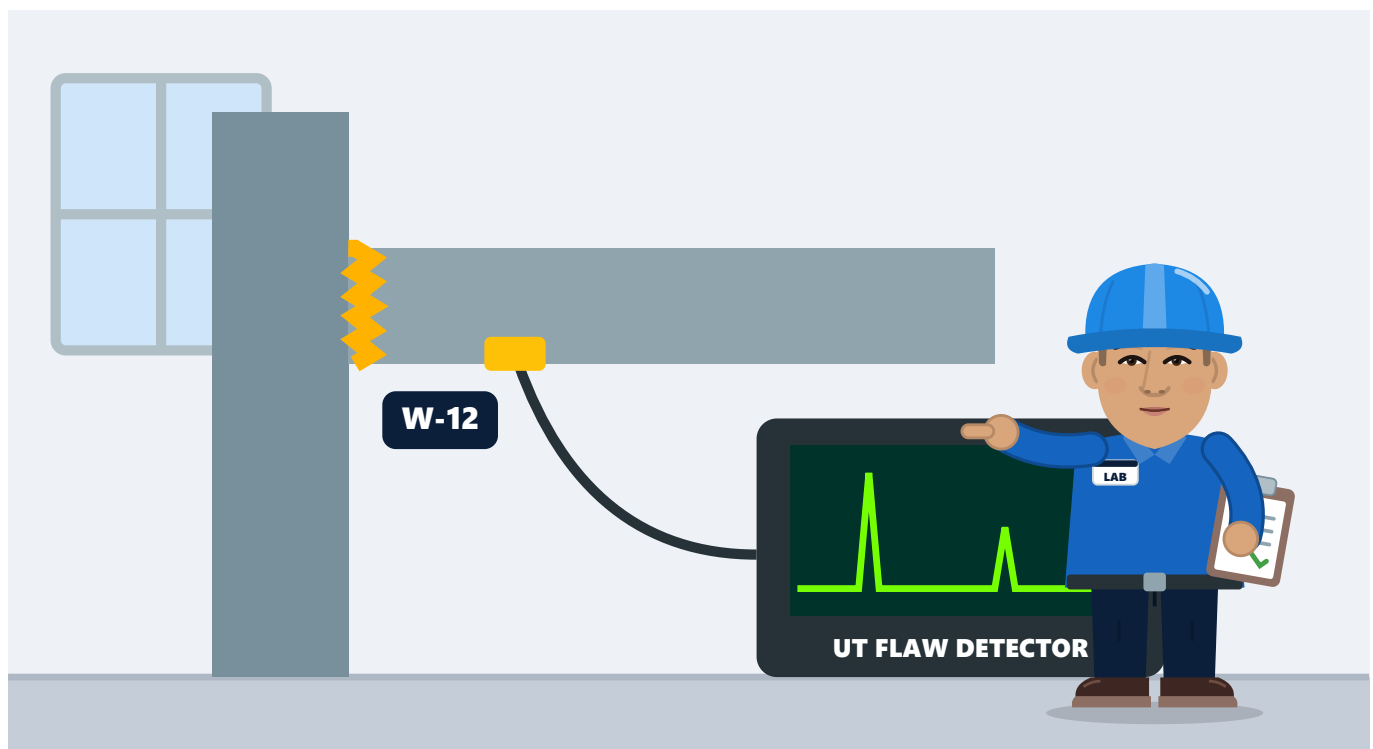
## 3.3

## Steel Structure &amp; Welding

Bolts, welds and NDT — get the connections right.



| NDT              | Finds                  | Note                     |
|------------------|------------------------|--------------------------|
| VT – Visual      | Surface defects, size  | Always first, 100%       |
| PT – Penetrant   | Surface cracks         | Clean surface needed     |
| MT – Magnetic    | Surface + near-surface | Ferromagnetic steel only |
| UT – Ultrasonic  | Internal defects       | Thick full-pen welds     |
| RT – Radiography | Porosity, slag, voids  | Radiation safety zone    |



Weld visual inspection with fillet gauge and welder ID marking

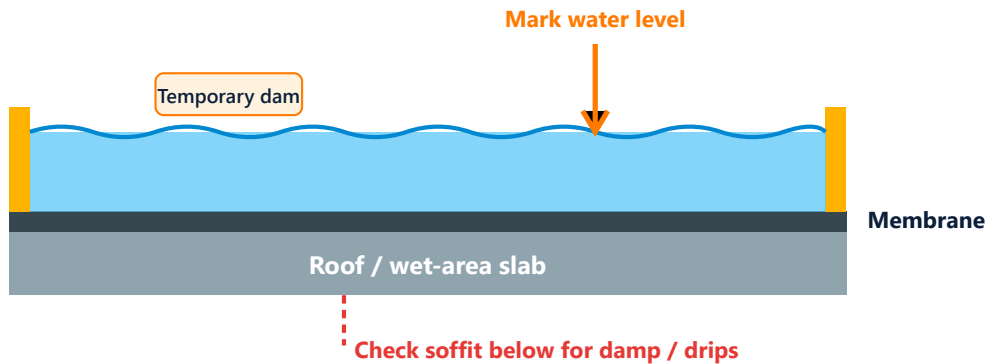
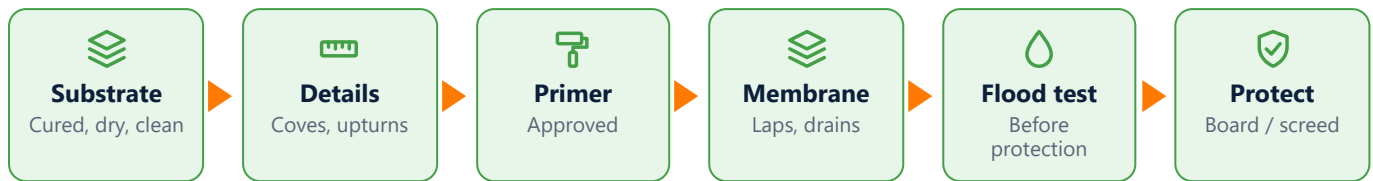
## Site Story

A welder qualified only for flat position was welding overhead. UT found lack of fusion. **Check the welder's card against the joint — every time.**

## 3.4

## Waterproofing &amp; Insulation

Water always finds the mistake. Leave none.



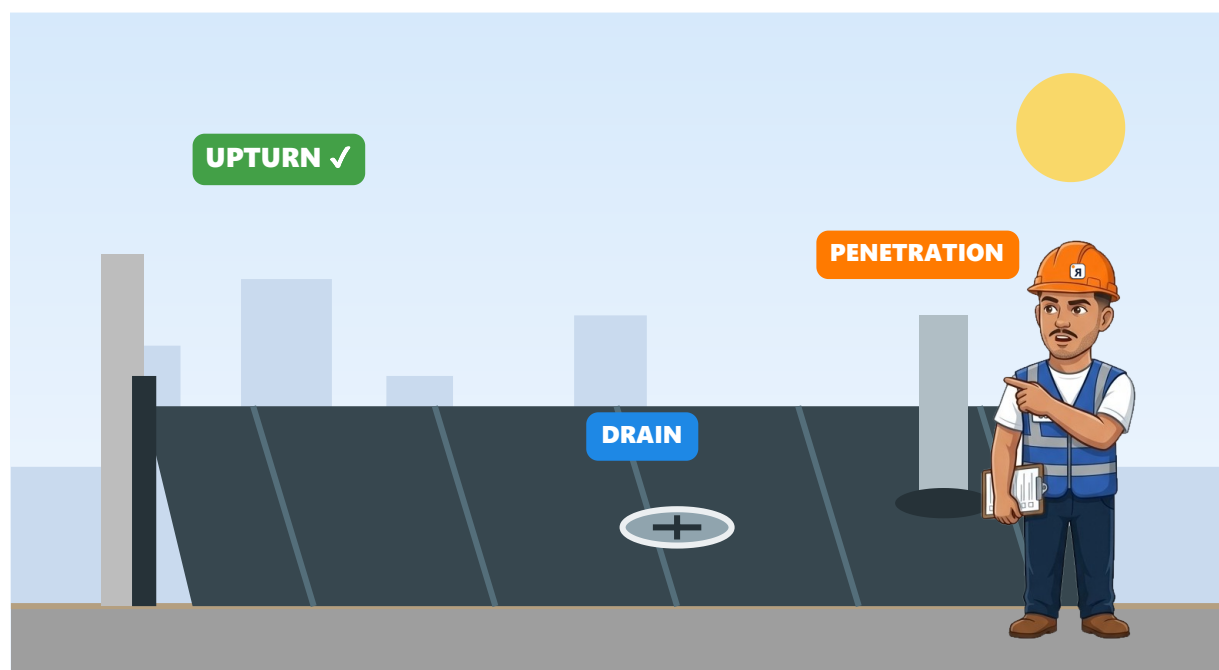
1. Plug drains, build dams at openings
2. Flood to the spec depth (often ~50 mm at the high point) **VERIFY**
3. Mark level, photo, record time
4. Hold 24–48 h per spec **VERIFY**
5. Check the soffit below for damp
6. Consultant witnesses, drain, protect at once

#### Pro Tip

Most leaks are at **details**: drains, penetrations, upturns, thresholds. Photograph each one.

#### Common Mistake

- ✗ Flood test after screed or tiles
- ✗ Insulation left in the sun
- ✗ Puncturing membrane when fixing later

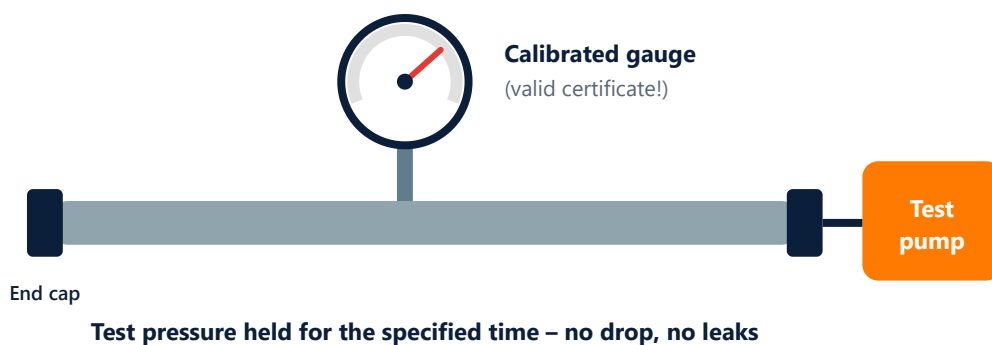


Roof membrane detail around a drain outlet and pipe penetration

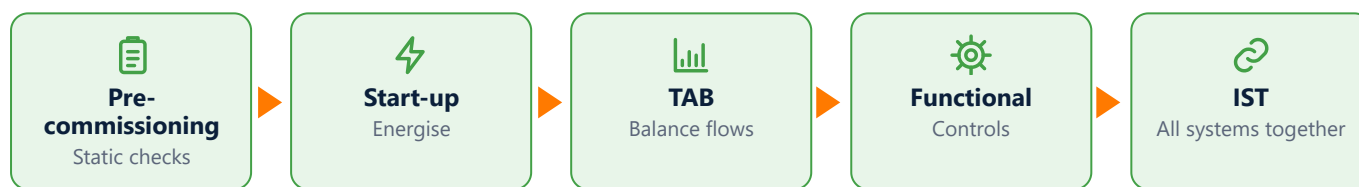
## 3.5

## MEP: Pressure, Cable Tests, Commissioning

Test before you close ceilings and shafts.



| Test                        | Typical requirement (check spec!)                                      |
|-----------------------------|------------------------------------------------------------------------|
| Water supply pipes          | Often $1.5 \times$ working pressure, held for a set time <b>VERIFY</b> |
| Fire sprinklers (NFPA 13)   | Typically 200 psi for 2 h <b>VERIFY</b>                                |
| Cable insulation resistance | Test voltage + min. $M\Omega$ per IEC 60364-6 / BS 7671 <b>VERIFY</b>  |
| Continuity, polarity, RCD   | Before / after energising                                              |

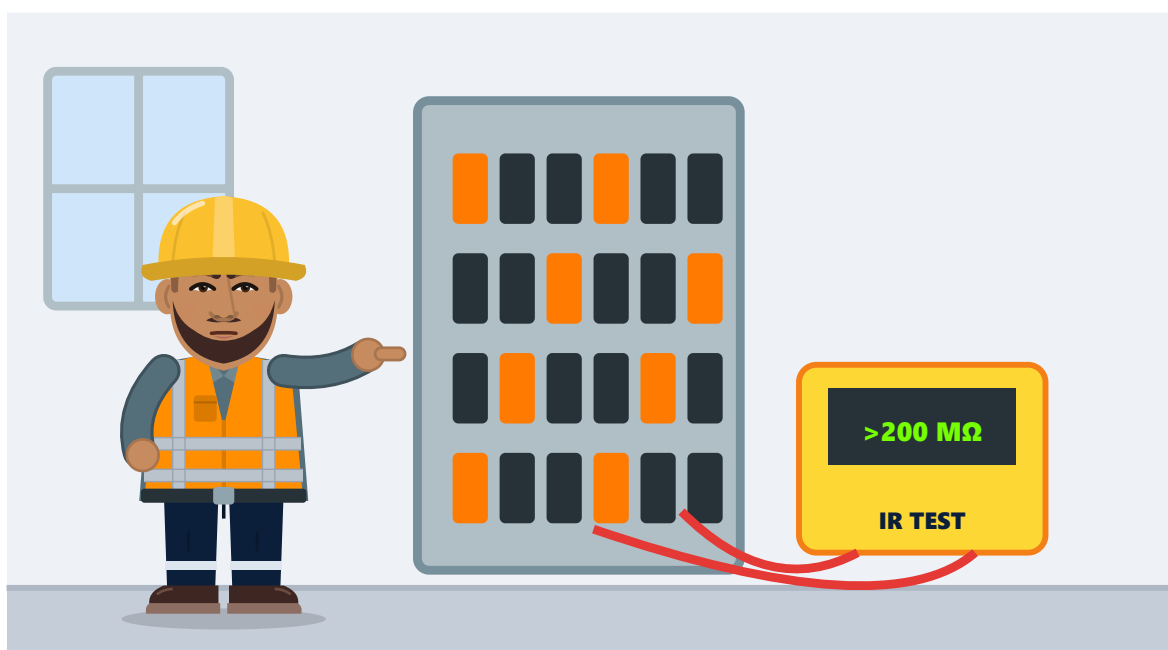


✓ **Before every test**

- ☐ Calibrated gauge + certificate
- ☐ Equipment isolated (list signed)
- ☐ Consultant witness booked
- ☐ Readings + photos at start and end

🎯 **Site Story**

Control valves weren't isolated before a riser test — two actuators were damaged. **Sign an isolation list first.**



Electrician performing an insulation resistance test on a distribution board

## 3.6

## Finishes: Blockwork, Plaster, Tiling, Paint

What the client actually sees.

## Blockwork

- ☐ Approved blocks (MAR + MIR)
- ☐ Full, even joints; plumb + level
- ☐ Ties to columns, deflection gap
- ☐ Lintels with correct bearing

## Plaster

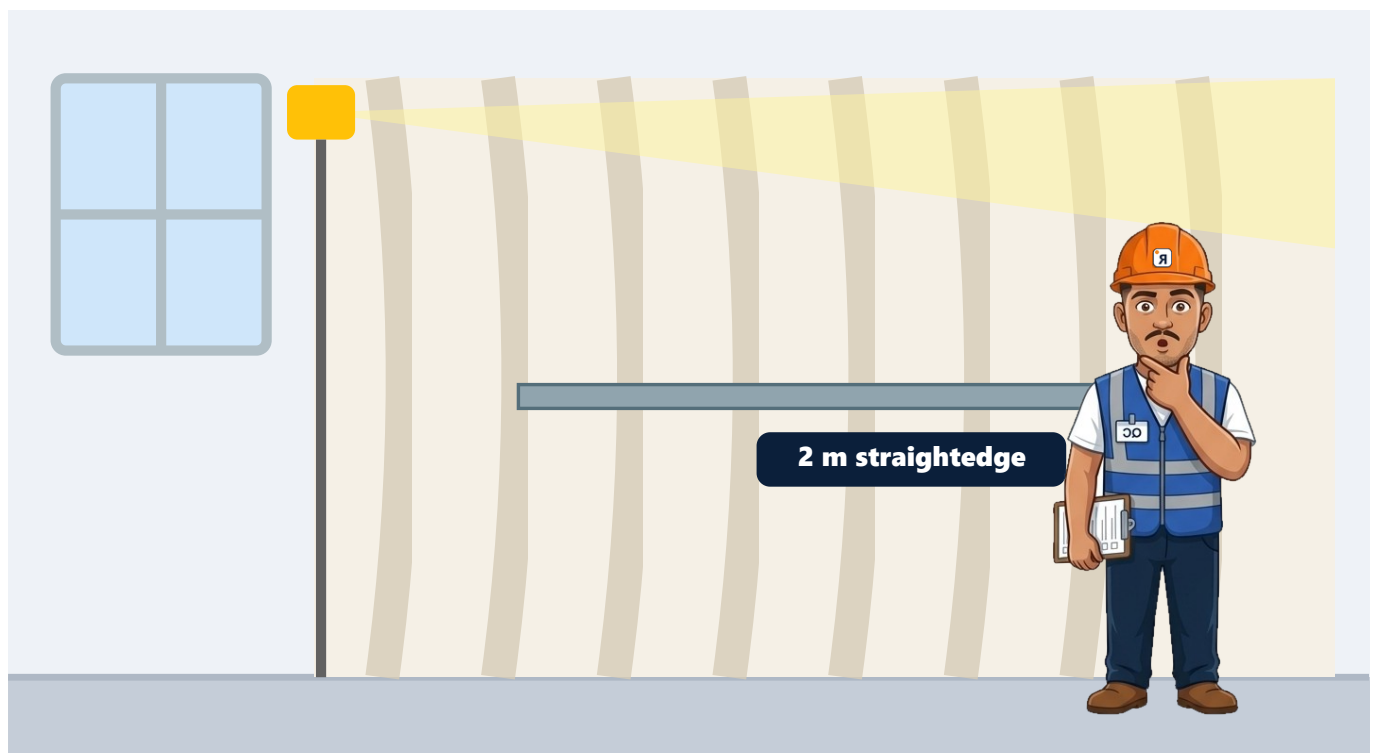
- ☐ Mesh at block-concrete joints
- ☐ Straight beads
- ☐ Flatness with a 2 m straightedge **VERIFY**
- ☐ Tap test for hollowness

## Tiling

- ☐ Same batch/shade as the approved mock-up
- ☐ Adhesive coverage — lift a tile
- ☐ Lippage, joints, falls to drains
- ☐ Movement joints

## Painting

- ☐ Dry, clean, repaired surface
- ☐ Approved primer + coats
- ☐ WFT wet, DFT dry
- ☐ Final coat after other trades finish



Raking light test on a plastered wall showing surface waves

 Site Story

Plaster waves showed under morning sun in a client walk-through — 40 walls re-skimmed. Now every wall gets a **2 m straightedge and raking light** before paint.

## 3.7

## Material Sampling &amp; Lab Testing

Representative samples, accredited labs, traceable results.



| Material    | Common tests                          |
|-------------|---------------------------------------|
| Aggregates  | Grading, fines, chlorides + sulphates |
| Rebar       | Tensile, bend, mass per metre         |
| Blocks      | Compressive strength, absorption      |
| Soil / fill | Proctor, field density, CBR           |
| Welds       | VT, PT, MT, UT, RT                    |

## When a test fails



## SA GCC / KSA Note

Gulf aggregates and water can carry high **chlorides and sulphates** — a major cause of rebar corrosion. These tests matter more here.



A test report you don't read is just expensive paper. **Read every result.**



Lab technician testing aggregate grading with a sieve shaker



## Test yourself – 12 questions



Answers are at the bottom of the cheat sheet (page 22). **9 or more = ready for site!**

### 1 QA mainly focuses on...

- ☐ A Testing concrete
- ☐ B Preventing defects through processes
- ☐ C Writing NCRs
- ☐ D Invoices

### 2 A drawing marked “IFC” means...

- ☐ A Issued for Construction
- ☐ B Information for Client
- ☐ C Issued for Comments
- ☐ D Internal copy

### 3 Field QC requirements are usually in spec...

- ☐ A Part 1
- ☐ B Part 2
- ☐ C Part 3 – Execution
- ☐ D The BOQ

### 4 At a HOLD point...

- ☐ A Work may continue
- ☐ B Work stops until released
- ☐ C Only records are checked
- ☐ D Random visit

### 5 Which document asks the designer to clarify a conflict?

- ☐ A NCR
- ☐ B MIR
- ☐ C RFI
- ☐ D SOR

### 6 Code “C – Revise & resubmit” means...

- ☐ A Proceed
- ☐ B Proceed with comments
- ☐ C Do not proceed
- ☐ D Supplier banned

### 7 Before using delivered material you need an accepted...

- ☐ A WIR
- ☐ B MIR
- ☐ C TOC
- ☐ D CAPA

### 8 Which certificate starts the DNP (FIDIC)?

- ☐ A Performance
- ☐ B Taking-Over
- ☐ C Calibration
- ☐ D Payment

### 9 Field density of fill is tested by...

- ☐ A Slump cone
- ☐ B Sand cone / nuclear gauge
- ☐ C Rebound hammer
- ☐ D Megger

### 10 C30/37 means...

- ☐ A 30 cube / 37 cyl.
- ☐ B 30 cylinder / 37 cube MPa
- ☐ C 30 days / 37 °C
- ☐ D 30 mm cover

### 11 Which NDT is NOT for stainless steel?

- ☐ A VT
- ☐ B PT
- ☐ C MT
- ☐ D UT

### 12 When is a roof flood test done?

- ☐ A After tiles
- ☐ B Before protection / screed
- ☐ C During DNP
- ☐ D Only if it rains

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SK Sara Khan  
QA/QC Manager · admin

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Export to Excel

Import status updates

Search

Q, Number, room, activity, person, status, IT

Type

All types

Discipline

All disciplines

Prepared by

Anyone

Building

All buildings

Date from

Any

Date to

Any

71 documents shown — Export to Excel saves exactly this list (Summary + one sheet per type). Change the orange External Status column there, then Import status updates.

| Number                                | Rev | Type          | Date       | Building / Part / Level          | Room(s)            | Activity                            | Prepared by | Internal QC | External Statu |
|---------------------------------------|-----|---------------|------------|----------------------------------|--------------------|-------------------------------------|-------------|-------------|----------------|
| <a href="#">DT-01-CLR-TA-AR-0001</a>  | C0  | MEP Clearance | 2026-10-11 | Tower A / Block 1 / Ground Floor | Meeting Room (102) | CLG-False Ceiling Grid Installation | Omar Farooq | PENDL...    | NOT YET SENT   |
| <a href="#">DT-01-ABC-WIR-AR-0066</a> | C0  | WIR           | 2026-10-11 | Tower A / Block 1 / Ground Floor | Meeting Room (102) | CLG-False Ceiling Grid Installation | Omar Farooq | PENDL...    | NOT YET SENT   |
| <a href="#">DT-01-ABC-WIR-AR-0061</a> | C0  | WIR           | 2026-10-08 | Tower A / Block 1 / Level 1      | Store (204)        | PNT-Paint Final Coat                | Hassan Ali  | PENDL...    | NOT YET SENT   |



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## Cheat sheet — keep it on site

### Before you...

- Order → approved MAR + AVL vendor
- Start → approved MS + ITP
- Use material → accepted MIR
- Cover / pour → WIR Hold released

### ITP points

- H = Hold — work stops
- W = Witness — invite, may proceed
- R = Review — records only
- S = Surveillance — spot checks

### Review codes

- A = Approved
- B = Approved as noted
- C = Revise & resubmit (don't proceed)
- D = Rejected

### Escalation

- Verbal → SOR → NCR → Stop-work
- Rework · Repair · Use-as-is · Reject
- Close on site, not on paper

### Concrete

- Ticket: mix, time, no added water
- Slump + temp. on first truck
- Specimens 7 + 28 days, labelled, shaded
- Cure immediately; hot = night pours

### Rebar & formwork

- Size, spacing, cover, laps, links
- Release agent before rebar
- Standby vibrator before pour

### Welding & NDT

- WPS recipe · PQR proof · WPQ welder
- VT first · PT/MT surface · UT/RT internal

### MEP & waterproofing

- Calibrated gauge + isolation list
- Test before closing ceilings
- Flood test before protection

### Abbreviations

- MAR material approval · MIR material inspection
- WIR work inspection · ITP inspection & test plan
- NCR non-conformance · SOR site observation
- RFI request for info · TOC taking-over cert.

### Ali's golden rules

- Not recorded = not done
- Check before you cover
- Quality is everyone's job
- When in doubt — RFI in writing

**Quiz answers:** 1-B · 2-A · 3-C · 4-B · 5-C · 6-C · 7-B · 8-B · 9-B · 10-B · 11-C · 12-B

|                                                                                                                                                                                                                                                                                        |                                                                                  |                                                                 |                                                                          |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|-----------------------------------------------------------------|--------------------------------------------------------------------------|
| [COMPANY<br>LOGO]                                                                                                                                                                                                                                                                      | <h2>Work Inspection Request</h2> <p>Request for inspection of completed work</p> |                                                                 | Doc No: PRJ-__-WIR-__<br>Rev: __<br>Date: __ / __ / __<br>Page: __ of __ |
|                                                                                                                                                                                                                                                                                        | WIR No.:                                                                         | Discipline:                                                     |                                                                          |
| Building / zone / level:                                                                                                                                                                                                                                                               | Grid / location:                                                                 |                                                                 |                                                                          |
| Activity:                                                                                                                                                                                                                                                                              | ITP ref. / item:                                                                 |                                                                 |                                                                          |
| Inspection date & time:                                                                                                                                                                                                                                                                | Notice given (date/time):                                                        |                                                                 |                                                                          |
| <b>REFERENCES</b>                                                                                                                                                                                                                                                                      |                                                                                  |                                                                 |                                                                          |
| <b>Drawing / document no.</b>                                                                                                                                                                                                                                                          | <b>Revision</b>                                                                  | <b>Title</b>                                                    |                                                                          |
|                                                                                                                                                                                                                                                                                        |                                                                                  |                                                                 |                                                                          |
|                                                                                                                                                                                                                                                                                        |                                                                                  |                                                                 |                                                                          |
|                                                                                                                                                                                                                                                                                        |                                                                                  |                                                                 |                                                                          |
| <b>CONTRACTOR SELF-INSPECTION</b>                                                                                                                                                                                                                                                      |                                                                                  |                                                                 |                                                                          |
| <input type="checkbox"/> Work complete <input type="checkbox"/> Checklist attached <input type="checkbox"/> Previous stage approved <input type="checkbox"/> Materials approved (MAR/MIR)<br><input type="checkbox"/> Survey / tests attached <input type="checkbox"/> Photos attached |                                                                                  |                                                                 |                                                                          |
| Contractor remarks:                                                                                                                                                                                                                                                                    |                                                                                  |                                                                 |                                                                          |
| <b>Site Engineer</b><br>Name:<br>Signature:<br>Date:                                                                                                                                                                                                                                   |                                                                                  | <b>QC Inspector</b><br>Name:<br>Signature:<br>Date:             |                                                                          |
|                                                                                                                                                                                                                                                                                        |                                                                                  | <b>Subcontractor (if any)</b><br>Name:<br>Signature:<br>Date:   |                                                                          |
| <b>CONSULTANT INSPECTION RESULT</b>                                                                                                                                                                                                                                                    |                                                                                  |                                                                 |                                                                          |
| <input type="checkbox"/> A – Approved <input type="checkbox"/> B – Approved with comments <input type="checkbox"/> C – Rejected, re-inspection required                                                                                                                                |                                                                                  |                                                                 |                                                                          |
| Consultant comments:                                                                                                                                                                                                                                                                   |                                                                                  |                                                                 |                                                                          |
| <b>Consultant Inspector</b><br>Name:<br>Signature:<br>Date:                                                                                                                                                                                                                            |                                                                                  | <b>Contractor QC – received</b><br>Name:<br>Signature:<br>Date: |                                                                          |
|                                                                                                                                                                                                                                                                                        |                                                                                  | <b>Re-inspection date</b><br>Name:<br>Signature:<br>Date:       |                                                                          |



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