Pre-Pour Slab Inspection Checklist

The full 17-category checklist Adam Gates runs on every pre-pour inspection. Print this. Take it to site the day before your pour.

Job address:		**Date:**	
Builder:		**Pour scheduled:**	
Slab size (m2):		**Inspector:**	

How to use: Walk the site the day before the pour. Tick items as you verify them. Any unchecked item = raise with your builder or inspector before the trucks arrive. 3+ red flags = book an independent inspection.

1. Site Preparation & Reduced Level

- ■ Site scraped to correct reduced level (RL) per engineer's drawings
- ■ All topsoil + organic material removed to min. 150mm depth
- ■ Subgrade proof-rolled - no soft spots
- ■ Natural subgrade compacted to min. 70% density index (AS 3798)
- ■ Cut + fill lines match structural drawings
- ■ No standing water in trenches or on the pad
- ■ Site graded 50mm fall away from building over first metre (AS 2870 App B2.3)

■ ***Red flag:*** *Standing water the day before pour = weakened concrete or hidden voids.*

2. Fill Material & Compaction

- ■ Fill material CBR min. 15%
- ■ Compaction test reports on site (each layer)
- ■ Sand fill compacted to min. 7 blows / 300mm DCP (AS 1289.F3.3)
- ■ Controlled fill extends min. 1m past footing beam
- ■ Fill battered back at max. 1:2 slope

■ ***Red flag:*** *No compaction test reports = differential settlement + cracked walls in 2-5 years.*

3. Formwork

- ■ Formwork outside dimensions match foundation plan (tape measured)
- ■ External edge beam width min. 310mm
- ■ Garage edge beam 440mm with 350x15mm rebate
- ■ Formwork straight + true - no bowing (AS 3610)
- ■ Slab depth spec correct (waffle raft typically 400mm overall, 100mm top)
- ■ Step-downs at showers (70mm) + garages correct location
- ■ Formwork braced + secured - no flex under load

■ ***Red flag:*** *Formwork that flexes when pushed will bulge or move during pour.*

4. Waffle Pods

- ■ Pod depth correct (typically 300mm main, 225mm at shower recesses)
- ■ Pod layout matches plan at 1200mm rib spacing
- ■ All pods seated firmly - no rocking
- ■ No mortar or debris bridging between pods + formwork
- ■ Re-entrant steel at all internal corners (typically 3-L11TM x 2000mm)

■ ***Red flag:*** *Missing re-entrant steel at internal corners = visible slab cracking within 2-3 years.*

5. Reinforcement - Top Slab Fabric

- SL92 fabric throughout top slab (no substitution to SL72/SL62)
- Fabric laps min. 225mm at all edges
- Fabric on chairs - 25mm top cover maintained (AS 3600)
- Bottom fabric in position with 40mm external footing cover
- Fabric free of heavy rust, mud + contaminants (AS/NZS 4671)

■ ***Red flag:*** *Mesh sitting on pods or vapour barrier without chairs = zero cover = corrosion in years.*

6. Reinforcement - Edge Beam Steel

- Bottom reo: 2 x 3-L11TM trench mesh OR 3-N16
- Top reo: 2-N16 continuous
- Trench mesh lapped min. 500mm at all splices
- L-bars at all beam intersections - 500mm laps
- 1-N16 corner lap bars at all external corners

■ ***Red flag:*** *Bars ending at a corner without proper lap = weak corner.*

7. Reinforcement - Internal Rib Steel

- Each internal rib has 1-N16 bottom reinforcement
- Internal rib width min. 110mm
- Bar chairs max. 600mm (fabric) / 900mm (bars >=16mm) (AS 3600)

■ ***Red flag:*** *Any bar cut on site to clear a penetration = insist on additional reinforcement across the area.*

8. Reinforcement - Chairs, Cover & Cleanliness

- Cover to external footings: 40mm min.
- Cover to internal ribs: 30mm min.
- Cover to top mesh: 25mm min.
- All bars free of rust, mud, contaminants (AS/NZS 4671)
- Tie wires cut back from formwork
- Concrete cover blocks used at edge beams (not timber/scraps)

■ ***Red flag:*** *Bar chairs too far apart = mesh sags to pods = permanent low cover.*

9. Piers (If Applicable)

- 350mm bored piers at all locations on plan
- Founded min. 300mm into natural ground through any rolled fill
- Pier starter bars correct position + embedment depth
- N16 additional top steel - 1m each direction over fill piers

■ ***Red flag:*** *Piers shallower than spec = get engineer sign-off in writing before pour.*

10. Ground Beams (ST1 / ST2 etc.)

- Location matches foundation plan
- Depth typically 600mm x 350mm wide (verify per drawing)
- 3-bar top + 6-bar bottom at ST1
- 3-L12TM top + bottom with R10 ligs @ 600 crs
- R10 starters @ 600 crs in ST1 beams

■ ***Red flag:*** *Ground beams built to edge-beam dimensions when engineer specified deeper - measure them.*

11. Vapour Barrier

- 0.2mm polythene installed across full slab area (AS 2870)
- Joints lapped + taped - no gaps
- Vapour barrier turned up at edges
- Not punctured by reinforcement chairs
- Pipe penetrations sealed with closed-cell polyethylene lagging
- 50mm min. sand bed under membrane

Red flag: *Tears, unsealed penetrations, or chair punctures = moisture wicks up forever.*

12. Drains

- All drainage pipes in correct position per slab plan
- Pipe penetrations sleeved through edge beams (closed-cell lagging)
- Kitchen island conduits in position (commonly missed)
- No penetrations, chases or embeds > 150mm dia. outside structural drawings
- Cast-in conduits spaced min. 2x larger conduit dia. from parallel reo

Red flag: *Any drain 'we'll add that after' = jackhammer work post-pour. Insist it goes in now. (Note: in QLD this stage is 'drains', not 'rough-in' - rough-in is later, in the wall frame.)*

13. Termite Management (AS 3660.1:2014)

- Termite barrier installed + continuous under all slab perimeters
- 75mm min. inspection zone around slab perimeter (kept clear + visible)
- Barrier not damaged or punctured by services
- Chemical barrier: spray records + applicator certificate on site
- Physical barrier (Kordon/Termimesh): installer compliance cert on site
- Physical barrier at all pipe penetrations + slab edges - no gaps

Red flag: *No visible barrier at pipe penetrations = termites in year 1 = $15,000+ later.*

14. Concrete Mix (Check the Docket)

- MPa grade matches engineer's spec (typically N25 or N32 residential)
- Larger/engineered slabs may specify N40+ per engineer
- Slump 80mm +/- 10mm (verified on delivery)
- Max. aggregate size 20mm typical
- No calcium chloride
- No admixtures without written engineer approval

Red flag: *Never accept lower MPa grade than engineer's spec. Slump < 60mm or > 100mm = reject the load.*

15. Pour Day Requirements

- Concrete mechanically vibrated (poker vibrator on site + in use)
- All beams vibrated - not just top slab (AS 2870 Cl. H2)
- Curing method ready - compound sprayed within 1hr, or wet burlap for 7 days
- Saw joints cut within 8hrs (4hrs if > 32C)
- No water added to surface during finishing
- Steel trowel finish only after bleed water evaporates

Red flag: *No vibrator on site = honeycombing + weak zones you'll never see.*

16. Site Access, Setup & Weather

- ■ Concrete truck access - driveway suitable for 25-tonne truck
- ■ No overhead wire clashes
- ■ Concrete pump booked (if required)
- ■ Property boundary setback verified against title
- ■ Downpipe + stormwater tie-ins installed (if required pre-pour)
- ■ 24hr weather forecast checked - no heavy rain forecast

■ ***Red flag:*** *Rain forecast + builder wants to proceed = push for reschedule. Cost is minimal compared to defective slab.*

17. Documentation On Site

- ■ Foundation plan - current revision
- ■ Structural engineering drawings - current revision, all sheets
- ■ Architectural working drawings - current revision
- ■ Termite treatment certificate OR barrier installer certificate
- ■ Drainage signed off by licensed plumber
- ■ Compaction test results for fill
- ■ Surveyor / engineer pre-pour setout confirmation
- ■ Truss manufacturer plan (for internal load-bearing wall positions)

■ ***Red flag:*** *Missing termite certificate = legal non-compliance. Non-negotiable.*

30 Red Flags - If You See ANY, Call an Inspector

Any 3+ = book an independent inspection immediately. Any 10+ = stop the pour.

- 1. Standing water in trenches, on pods, or on the pad
- 2. Missing termite management certificate
- 3. Damaged termite barrier at pipe penetrations
- 4. Rusty or damaged mesh with heavy scale or pitting
- 5. Missing re-entrant steel at any internal corner
- 6. Mesh sitting directly on pods or vapour barrier with no chairs
- 7. Torn or unsealed vapour barrier
- 8. Fill placed without compaction test results
- 9. Waffle pods rocking or unseated on the sand bed
- 10. Bars cut on site to clear penetrations (not just displaced)
- 11. Formwork that flexes when pushed
- 12. Formwork not braced against pour loads
- 13. Missing termite barrier at slab edges
- 14. Missing compaction test reports for fill
- 15. Concrete docket showing wrong MPa (under 32 for slab)
- 16. Slump test over 100mm or under 60mm
- 17. No vibrator on site for the pour
- 18. Rain forecast > 5mm on pour day and builder wants to proceed
- 19. Missing drains or conduits at fit-out positions
- 20. Missing kitchen island conduit
- 21. Vapour barrier punctured by reinforcement chairs
- 22. Bar chairs too far apart (mesh sagging)
- 23. Wrong cover blocks (timber or scrap instead of concrete)
- 24. Pier depth shallower than engineer's spec
- 25. Ground beams built to edge-beam dimensions when engineer specified deeper
- 26. Missing surveyor setout confirmation
- 27. Foundation plan not on site
- 28. No engineer sign-off on setout
- 29. Concrete pump not booked when pour requires one
- 30. Truck access not confirmed (overhead wires, narrow driveway, etc.)

Book Your Pre-Pour Inspection

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