# Inspection checklist items

Invercargill City Council

as of 16 June 2021

## Contents

| Siting and Foundation Checklist | |
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| **Health & Safety** | |
| **Site Safe** | *Check site hazard register board*<br>*Check for dogs*<br>*Undertake visual assessment of site*<br>*Ensure site induction is undertaken if required* |
| **PPE Gear** | *Ensure all appropriate PPE is worn.* |
| **General** | |
| **Work ready** | *Is all in order for an inspection?*<br>*Area to be inspected completed.* |
| **Name and position of contact on site** | *Enter name and position of person on site in the Notes area* |
| **Consent documents sighted** | *It is mandatory to have all stamp approved building consent documentation on site.* |
| **Siting of building** | *Check the siting of the building against approved plans.*<br>*If siting does not conform with the approved plans is an amendment required?* |
| **Finished floor height compliance** | *Check FFL versus unprotected ground considering cladding material.*<br>*Check for E1 requirements in terms of height above road or secondary flow path.*<br>*Check FFL versus city datum if planning requirements noted on plan.* |
| **Has site been filled?** | *Check fill versus overland flow i.e. runoff to neighbours or damming of neighbouring land.*<br>*Has foundation been dug down to beneath this level into existing ground?* |
| **Site Records for site observation of SED elements** | *Have site records been provided by the supervising engineer for the site observation of the construction of the structurally engineered elements?* |
| **Required Documentation:** | *Ensure that all required documentation is listed under the documentation section.* |
| **Foundations** | |
| **Foundation design as per the approved plans/specifications** | *Foundation design as per the approved plans/specifications.* |
| **Bearing capacity** | *Check bearing capacity as noted in approved plans.* |
| **Footing Excavation** | *Check for level excavation and squared base.*<br>*Note:*<br>*Where stepped ensure 450mm overlap is constructed unless covered by SED in which case check SED requirements.* |
| **Footing width and depth** | *Check footing width and depth complies with design requirements in approved plans.*<br>*Specify depth in notes.* |
| **Footing reinforcing placement** | *Check footing reinforcing is as per approved design.*<br>*Is it at correct spacings?* |
| **Footing reinforcing cover** | *For B1/AS1 designs footing reinforcing cover of not less than 75mm to exposed ground, 50mm to formwork and 30mm top cover.*<br>*For SED refer to design requirements.* |
| **Foundation width and height** | *Check foundation width and height is as per approved design requirements.* |

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| **Foundation reinforcing placement** | *Check foundation reinforcing is as per approved design.*<br>*Is it at correct spacings?* |
| **Foundation reinforcing cover** | *Foundation reinforcing to have 50mm minimum cover to formwork or centrally placed in blockwork.* |
| **Reinforcing Type/Grade/Size** | *Check that reinforcing type, grade and size is as per the approved design.* |
| **Reinforcing bends correct radius** | *Check reinforcing is not over bent.* |
| **Reinforcing bars lapped, tied and supported** | *Check required lap.*<br>*Check sufficiently tied.*<br>*Check that bar chairs are in position to avoid displacement prior and during pour.*<br>*Note:*<br>*300 Grade D12 is 400mm lap, D10 is 350mm*<br>*500 Grade D12 is 650mm lap, D10 is 550mm* |
| **DPM lapped and taped** | *Check DPM aligns with that specified in approved plans.*<br>*Note:*<br>*150mm min lap and 50mm pressure tape at joins and around penetrations.* |
| **Notify site contact need for removal of top topsoil/organic matter under slab** | *Check that either the topsoil / organic matter has been removed otherwise discuss the removal of top topsoil/organic matter under slab with the site contact.* |
| **Piled Foundations** | |
| **Pile layout as per plan** | *Check pile layout matches approved plans.*<br>*Check the spacing and number of piles.* |
| **Pile footing bearing capacity** | *Check bearing capacity as noted in approved plans.* |
| **Ordinary pile hole width and depth** | *Check footing aligns for width and depth with approved plan design.* |
| **Driven piles** | *NZS3604:2011 - Check minimum of 4 pile driving sets in various locations as per approved plans, PS3 required from pile driving contractor.*<br>*SED - PS4 and site records to be supplied by supervising engineer.* |
| **Anchor-brace-point load piles** | *Check anchor/brace point piles for width and depth.* |
| **Timber piles/pole sizes/treatment** | *Check size, type and treatment.*<br>*Discuss with builder that piles must be longer than 150mm, max ordinary/anchor pile height of 600mm, max brace pile height of 3m.* |
| **Ground cover** | *Discuss with builder the need for DPM if sub floor ventilation is to be under 3,500mm2 or over 7.5 metres to ventilation.* |
| **Pile DPM** | *Discuss with builder if pile height is to be under 300mm DPM to be fitted between pile and bearer.* |

| Blockwork Checklist | |
|---|---|
| **Health & Safety** | |
| **Site Safe** | *Check site hazard register board*<br>*Check for dogs*<br>*Undertake visual assessment of site*<br>*Ensure site induction is undertaken if required* |
| **PPE Gear** | *Ensure all appropriate PPE is worn.* |
| **General** | |
| **Work ready** | *Is all in order for an inspection?*<br>*Area to be inspected completed.* |
| **Name and position of contact on site** | *Enter name and position of person on site in the Notes area* |
| **Consent documents sighted** | *It is mandatory to have all stamp approved building consent documentation on site.* |
| **Siting of building** | *Has siting been previously checked?*<br>*If not undertake siting inspection.* |
| **Site Records for site observation of SED elements** | *Have site records been provided by the supervising engineer for the site observation of the construction of the structurally engineered elements?* |
| **Required Documentation:** | *Ensure that all required documentation is listed under the documentation section.* |
| **Blockwork** | |
| **Correct size masonry blocks** | *Are blocks per approved design?* |
| **Correct size insulation blocks** | *Are blocks per approved design?* |
| **Wall height** | *Is the wall height as detailed in approved plans and specifications.*<br>*Note:*<br>*225mm min and max of 2 metres except where footing is stepped where may go to 2.6m up to 1.5 in length* |
| **Reinforcing Type/Grade/Size** | *Check that reinforcing type, grade and size is as per the approved plans and specifications.* |
| **Reinforcing bends correct radius** | *Check reinforcing is not over bent.* |
| **Reinforcing bars lapped, tied and supported** | *Check required lap.*<br>*Check sufficiently tied.*<br>*Check that bar chairs are in position to avoid displacement prior and during pour.*<br>*Note:*<br>*300 Grade D12 is 400mm lap, D10 is 350mm*<br>*500 Grade D12 is 650mm lap, D10 is 550mm* |
| **Sub floor ventilation** | *Check ventilation is provided as per the approved plans and specifications.*<br>*Note:*<br>*Vents 750mm from corners and 1.8m centres.*<br>*Check vents are sized as per approved plans.*<br>*Openings over 300mm in any direction require D12 trimming bar all around opening.* |

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| **Ground cover** | *Discuss with builder the need for DPM if sub floor ventilation is to be under 3,500mm2 or over 7.5 metres to ventilation.* |
| **Masonry lintels** | *Check masonry lintels are as per approved plans and additional steel in place.* |
| **Low lift method, no clean outs required.** | *Ensure cavity is clean and clear of debris/rubbish.* |
| **High lift method clean outs required** | *Required in lifts over 1.2m up to 3.6m maximum.*<br>*Ensure footing is clean.* |
| **Control joints installed** | *Check control joints are installed as per approved plans.*<br>*Note:*<br>*Normally 6m max centres.*<br>*Ensure steel is de-bonded as per control joint detail.* |
| **Bearer/plate fixings** | *Discussed with site contact the need for fixings as per approved plans.* |
| **Service ducts** | *Check there is no block fill compromised for the placement of services.*<br>*If so treat as an opening i.e. D12s all around.* |
| **Crawl space** | *Advise site contact of the need to ensure there will be a minimum unobstructed 450mm crawl space beneath floor joists.* |
| **Granular fill** | *Advised site contact that any fill over 600mm will require CPEng engineer certification.*<br>*Advised site contact that fill is to be no larger than 37.5mm sieve.* |
| **Subsoil drainage** | *Has provision for subsoil drainage been provided? Is it required?* |

| Subfloor Framing Checklist | |
|---|---|
| **Health & Safety** | |
| **Site Safe** | *Check site hazard register board*<br>*Check for dogs*<br>*Undertake visual assessment of site*<br>*Ensure site induction is undertaken if required* |
| **PPE Gear** | *Ensure all appropriate PPE is worn.* |
| **General** | |
| **Work ready** | *Is all in order for an inspection and area to be inspected completed.* |
| **Name and position of contact on site** | *Enter name and position of person on site in the Notes area* |
| **Consent documents sighted** | *It is mandatory to have all stamp approved building consent documentation on site.* |
| **Siting of building** | *Has siting been previously checked?*<br>*If not undertake siting inspection.* |
| **Site Records for site observation of SED elements** | *Have site records been provided by the supervising engineer for the site observation of the construction of the structurally engineered elements?* |
| **Required Documentation:** | *Ensure that all required documentation is listed under the documentation section.* |
| **Sub Floor Framing** | |
| **Braced piles** | *Check subfloor bracing system as per the approved plans and specifications.*<br>*Check subfloor bracing system is located as per the approved plans and specifications.* |
| **Sub floor braces** | *Check that 150mm minimum from bottom of brace to ground, angle 10 deg minimum 45 deg maximum.*<br>*Check that it is bolted at top 90 - 150mm from top of pile.*<br>*Brace is to be 100 x 75 up to a maximum of 3.0m length, 100 x 100 up to a maximum 5.0m length.*<br>*Only 1 brace fixed to top of pile* |
| **Stringers** | *Check stringers are sized and bolted as per the approved plans and specifications.*<br>*Ensure that DPC separation achieved.* |
| **6kN pile to bearer** | *Check for 6kN connections in place for ordinary piles as per the approved plans and specifications.* |
| **12kN pile to bearer** | *Check for 12kN connections in place as required for brace/anchor piles as per the approved plans and specifications.* |
| **Bearer size and treatment** | *Check size and treatment of bearers as per the approved plans and specifications.*<br>*Note:*<br>*DPC required between bearer and pile when pile height is between 150mm and 300mm to ground* |
| **Bearer span** | *Check maximum span of bearers is as per the approved plans and specifications.*<br>*Note:*<br>*Bearer to be continuous over 2 spans.*<br>*Ensure landing on piles is ok, minimum 90mm.* |
| **Bearer joints and landing** | *Check Bearers not joined on brace/anchor piles.*<br>*Bearers must have minimum landing of 90mm.* |

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| | *Joints must be 12kn if bearer is one piece or 6Kn if bearer is 2 pieces and one piece is continuous.*<br>*Any packing under bearer should be as durable and incompressible as the bearer itself.* |
| **6kN bearer to joist** | *Check for 6kN fixing to joists each side of brace/anchor piles as per the approved plans and specifications.* |
| **Floor joist size/span/centres/landing** | *Check joists are sized and centres as per the approved plans and specifications.*<br>*Check joist spans as per the approved plans and specifications.*<br>*Check that a 25mm minimum boundary joist is in place as per the approved plans and specifications.*<br>*Check that the joist landing is a minimum of 32mm as per the approved plans and specifications.* |
| **Mid span blocking** | *Check for mid span blocking is installed as per the approved plans and specifications.*<br>*Mid span blocking required when floor joists are 4 times the width thickness in depth and spanning over 2.5 meters.* |
| **Load bearing or brace wall support** | *Check where there is a brace or load bearing wall running parallel to the floor joists that blocking fitted at maximum of 1.2m centres between joists.* |
| **Holes and notches** | *Check that any holes or penetrations through joists are in the middle third of the joist depth and do not exceed one fifth the depth of the joist or 32mm, whichever is the lesser.*<br>*Note:*<br>*If over these diameters, a proprietary stiffener is required.* |
| **Timber treatment and grade** | *Check that timber treatment and grade is as per the approved plans and specifications.* |
| **Mechanical connections** | *Check that all mechanical connections are in place as per the approved plans and specifications.*<br>*Check that S/S fixings used if top of pile is less than 600mm or in exposure zone D.* |
| **Ground cover** | *Check for DPM if sub floor ventilation is to be under 3,500mm2 or over 7.5 metres to ventilation.*<br>*Ensure 150mm lap and 50mm pressure tape.* |
| **Crawl space** | *Ensure that there is an unobstructed minimum 450mm crawl space beneath floor joists.* |
| **Subfloor access** | *Check that provision for sub floor access has been provided.* |
| **Subfloor insulation** | *Check insulation is as per approved plans and specifications.*<br>*Specify R value in notes.* |
| **Subfloor ventilation** | *Ensure vents are sized as per approved plans and specifications.*<br>*Note:*<br>*Vents maximum of 750mm from corners and maximum of 1.8m centres or 20mm spacings between baseboards.* |
| **Subfloor FFR** | *Ensure fire ratings are installed as per the approved plans.*<br>*Specify how this is done in notes.* |

| Underslab Services Checklist | |
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| **Health & Safety** | |
| **Site Safe** | *Check site hazard register board*<br>*Check for dogs*<br>*Undertake visual assessment of site*<br>*Ensure site induction is undertaken if required* |
| **PPE Gear** | *Ensure all appropriate PPE is worn.* |
| **General** | |
| **Work ready** | *Is all in order for an inspection and area to be inspected completed.* |
| **Name of Certifying Plumber or Drainlayer** | *Enter name of the Certifying Plumber or Drainlayer responsible for the work after first ensuring their licence is current.* |
| **Consent documents sighted** | *It is mandatory to have all stamp approved building consent documentation on site.* |
| **Required Documentation:** | *Ensure that all required documentation is listed under the documentation section.* |
| **Fill under slab** | |
| **Vegetation/Topsoil** | *Check that vegetation and topsoil has been removed beneath the fill.* |
| **Fill depth** | *Check fill depth is in accordance with the plans and specifications.*<br>*Note:*<br>*Require a minimum depth of 75mm up to a maximum depth of 600mm, compacted in 150mm layers.*<br>*Fill in excess of 600mm requires a SED to cover underlying soils and compaction, if this was not identified on the approved plans then an amendment is required.* |
| **Fill type** | *Check that the fill type is as per the approved plans and specifications.*<br>*Note: NZS 3604:2011 requires fill material of no larger than 37.5mm sieve.* |
| **Fill material suitable for around pipework** | *Check that fill in contact with pipework is no more than 20mm in size and is not of a type that will damage the pipe.* |
| **Underslab pipework** | |
| **System is as per plan** | *Check fixture layout as per the approved plans and specifications.*<br>*Note:*<br>*If a change of system E.g. G13/AS1 to AS/NZS 3500 or vice versa, an amendment is required.* |
| **Waste Pipe size** | *Check waste pipe sizes comply with the minimum sizes specified on approved plans and specifications.* |
| **Pipe gradients** | *Check that the under floor pipework is installed at the minimum gradients specified on the approved plans and specifications.*<br>*Note:*<br>*1:40 for 40mm, 50mm and 65mm.*<br>*1:60 for 80mm and 100mm* |
| **Primer used on solvent cement joints** | *Check that where jointing method is solvent cement that pipe and socket have been primed before cement applied.* |
| **Testing of pipework** | *Check pipework is under the appropriate test as specified within the approved plans and specifications.*<br>*Ensure that no leaks are identified.* |
| **Sleeving to pipework penetrations** | *Check sleeving of pipework where it passes through concrete. This is to allow for pipework expansion. E.g. Denzo tape, Foam.* |

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| | *Ensure sleeving thickness complies for SED floor systems. (Raft systems required 13mm sleeve)*<br>*Note:*<br>*Water feeds under slab must be fitted in an appropriately sized sleeve so they can be replaced.* |
| **Venting** | *Check venting provisions have been installed as per the approved plans and specifications.*<br>*Check that developed length from the vent to the water seal does not exceed that maximum allowable length.* |
| **Pipe cover** | *Check that underslab pipework has a minimum concrete cover of 50mm.* |
| **Penetrations through slab thickenings/pads** | *Check that no pipework passes through slab thickening's or point load pads.*<br>*Note:*<br>*If pipework passes via thickening's or load points, SED is required to cover the setup.* |
| **Pipes in raft floor slabs** | *Check that specific requirements of the raft slab design have been met.*<br>*Note:*<br>*This will likely include restrictions on where the pipes can be located.* |
| **HWC relief drain pipe** | *Check HWC relief drain is installed as per the approved plans and specifications.*<br>*Note:*<br>*If G12/AS1 nominated then copper TPR drain is installed with discharge to exterior.*<br>*Must discharge in a visible location and to a safe place (not over a access way due to potential slip hazard).*<br>*12m max developed length, each bend adds 1m to length.*<br>*If designed to AS/NZS 3500.2, then relief drain pipe still needs to be fit for purpose (likely copper unless pipe material proven to comply for TPR discharge temperature of 95 degrees Celsius plus).*<br>*Note:*<br>*Must discharge in a visible location and to a safe place (not over a access way due to potential slip hazard).*<br>*12m max developed length, each bend adds 1m to length.* |
| **HWC safe tray drain** | *Check that HWC safe tray drain is installed correctly as per the approved plans and specification.*<br>*Note:*<br>*Ensure discharge is to a visible and safe location (cannot discharge to an access way due to potential slip hazard).*<br>*Discuss the need for vermin proofing of safe tray drain.* |

| Floor Slab Checklist | |
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| **Health & Safety** | |
| **Site Safe** | *Ensure that the site is safe to enter.Check site hazard register board*<br>*Check for dogs*<br>*Undertake visual assessment of site*<br>*Ensure site induction is undertaken if required* |
| **PPE Gear** | *Ensure all appropriate PPE is worn.* |
| **General** | |
| **Work ready** | *Is all in order for an inspection and area to be inspected completed.* |
| **Name and position of contact on site** | *Enter name and position of person on site in the Notes area* |
| **Consent documents sighted** | *It is mandatory to have all stamp approved building consent documentation on site.* |
| **Siting of building** | *Has siting been previously checked? If not undertake siting inspection.* |
| **Site Records for site observation of SED elements** | *Have site records been provided by the supervising engineer for the site observation of the construction of the structurally engineered elements?* |
| **Required Documentation:** | *Ensure that all required documentation is listed under the documentation section.* |
| **Pre-Pour Slab** | |
| **Granular fill compacted** | *Check if this has been reviewed at Underslab services inspection.If fill is in excess of 600mm depth, required to be covered by CPEng engineer for SED.* |
| **Sand blinding** | *. Check that top surface of granular base is formed in a manner that protects the DPM.* |
| **DPM lapped and taped.** | *.Check DPM is installed as per approved plans and specifications.Ensure 150mm lap and 50mm pressure tape.* |
| **Penetrations taped and sleeved.** | *Check that all penetrations through DPM are sealed around and are appropriately sleeved where they are to pass through concrete.* |
| **Mesh size/laps/tied/chairs** | *Check mesh is as per that specified to be used. Check lap to mesh is correct for type.Check mesh is appropriately supported.Check 30mm minimum top cover to mesh and 75mm edge clearance.Check that mesh is appropriately tied.* |
| **Reinforcing bends correct radius** | *.Check reinforcing is not over bent.* |
| **Reinforcing bars lapped, tied and supported** | *Check required lap.Check sufficiently tied.Check that bar chairs are in position to avoid displacement prior and during pour.Note:*<br>*300 Grade D12 is 400mm lap, D10 is 350mm*<br>*500 Grade D12 is 650mm lap, D10 is 550mm* |
| **Starters into slab** | *.Check that starters are minimum of 400mm into slab. If wall starters needed ensure these are located correctly.* |
| **Reinforcing across internal corners** | *Check that any reinforcing detailed at internal corners are installed as per approved plans and specifications.* |
| **Slab thickness** | *Check slab thickness is as per approved plans.Check whether underfloor heating pipes are installed and that slab thickness has been increased to accomodate this.* |
| **Slab thickening** | *Check that thickening's are as per approved plans. Note:*<br>*Check truss plans also in case they call up the need for this.* |

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| **Isolated pads and column supports** | *Check for any additional footings such as front entry and veranda post holes etc.Ensure these are as per approved plans and specifications.* |
| **Free joints/control joints** | *Discuss with builder that control joints are to be located as per approved plans. For any free joints check that these are formed as per approved plans and specifications.* |
| **Cladding rebate** | *Check that correct rebate is formed where required by the cladding material as per approved plans and specifications.* |
| **Door rebates** | *Check that these are formed and that required cover to reinforcing or mesh is still achieved.* |
| **Underfloor insulation** | *Check that underfloor insulation is installed as per approved plans and specifications.* |
| **FFL vs FGL** | *Check that proposed FFL complies with FGL requirements for cladding material.Check that FFL complies with E1.* |
| **Electrical earthing of slab reinforcing** | *. Check for this when the slab has either a shower or bath in it or on top of.* |
| **Wet floor shower** | *Check that shower has been formed correctly or boxed out to be poured later. Check whether SED allows wet area to be poured separately.* |

| Framing / Skeleton Checklist | |
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| **Health & Safety** | |
| **Site Safe** | *Ensure that the site is safe to enter.Check site hazard register board*<br>*Check for dogs*<br>*Undertake visual assessment of site*<br>*Ensure site induction is undertaken if required* |
| **PPE Gear** | *Ensure all appropriate PPE is worn.* |
| **General** | |
| **Work ready** | *Is all in order for an inspection? Area to be inspected completed.* |
| **Name and position of contact on site** | *Enter name and position of person on site in the Notes area* |
| **Consent documents sighted** | *It is mandatory to have all stamp approved building consent documentation on site.* |
| **Layout compliance** | *Check layout of building is as per the approved plans.* |
| **Elevations compliance** | *Check elevations of building are as per the approved plans.* |
| **Fixing Durability** | *Check that fixings are appropriate for corrosion zone. Note:*<br>*If on an open structure structural fixings will require additional protection.* |
| **Site Records for site observation of SED elements** | *Have site records been provided by the supervising engineer for the site observation of the construction of the structurally engineered elements?* |
| **Required Documentation:** | *Ensure that all required documentation is listed under the documentation section.* |
| **Wall Framing and Fixings** | |
| **Floor cuts as per approved plans.** | *Check floor cuts have been undertaken as per approved plans and specifications.* |
| **Bottom plate separation** | *DPC or similar in place between timber bottom plate and concrete slab as per approved plans and specifications.* |
| **Bottom plate fixings** | *Fixings for bottom plate to floor completed as per approved plans and specifications.Check bottom plate fixings are within 150mm of plate joins, plate ends and trimming studs.* |
| **Wall framing** | *Check wall framing is installed as per approved plans and specifications.Check:*<br>*Stud size*<br>*Spacing*<br>*Stress grade*<br>*Height of studs* |
| **Dwangs** | *Check dwangs are installed as per approved plans. Note:*<br>*If direct fixed vertical weatherboards or metal profiled cladding is to be installed dwangs to be at 480mm centres.* |
| **Sill trimmers** | *. Check sill trimmers comply with approved plans. Note:*<br>*90mm x 35mm up to 2 metres*<br>*90mm x 45mm up to 2.4 metres*<br>*90mm x 90mm up to 3 metres*<br>*90mm x 135mm up to 3.6 metres*<br>*Above 3.6 metres is SED* |
| **Lintel size** | *Check size is as per approved plans and specifications.Check truss plan vs architectural.* |

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| **Lintel fixing** | *Check lintels are fixed as per approved plans and specifications.Check fixing requirements on truss plan vs architectural plans. Check fixings at the trimming stud to foundation.* |
| **Lintel support** | *Check trimming studs under lintels.Note:*<br>*One trimming stud required under lintels up to 3.0m span.*<br>*Two required for lintels up to 4.2m span.*<br>*Three trimming studs required for lintels spanning over 4.2m.* |
| **Top plate size** | *Check top plate sized as per approved plans and specifications.Note:*<br>*Where brace lines are spaced between 5 and 6 metres double top plate required.* |
| **Top plate fixings** | *Check top plate fixings are installed as per approved plans and specifications.Check for conflict between truss plans and architectural. Consider lintels and ensure jack studs above are connected to the lintel via nail plate of at least same capacity as top plate fixing. Top plate joints:*<br>*3kN for walls up to 100BUs*<br>*6kN for walls over 100BUs*<br>*6kN for walls attached to ceiling diaphragms* |
| **Gable studs** | *Check approved plan for details on whether gable truss or gable studs at 450mm centres. Check construction against that nominated in approved plans.* |
| **Fire wall framing** | *Check the framing size, spacing and height is as per the approved plans and FRR system manufacturers literature.* |
| **Fire wall stability** | *. Check that the fire wall framing is supported as per approved plans and FFR system manufacturers literature.* |
| **Wall Bracing** | |
| **Bottom plate fixings for bracing elements** | *Check that all bottom plate fixings required by brace elements are installed as per approved plans. E.g. Gib Handibracs within 80mm of brace edge on brace elements nominated with - H.* |
| **Dragon ties** | *Dragon ties installed as shown on bracing plan Correct installation continuous member and fixing on top of plate to go from truss to truss* |
| **RAB** | |
| **R.A.B brace elements** | *Check R.A.B brace elements are of the correct type as per approved plans and specifications.Check R.A.B brace elements are correctly sized as per approved plans and specifications.* |
| **R.A.B brace elements fixing** | *Check R.A.B brace element are fixed as per approved plans and specifications.* |
| **R.A.B top plate fixings** | *Check R.A.B Top plate fixings are installed as per approved plans and manufacturers literature.* |
| **Beams** | |
| **Timber beams** | *Check size, stress grade and treatment are as per approved plans and specifications.Check span, support and fixing as per approved plans and specifications.* |
| **Steel beams and portals** | *Check these are located and sized as per engineer's design contained within the approved plans and specifications.* |
| **Steel beams fixings** | *Check:*<br>*Portal fixings to slab*<br>*Beam to beam connections*<br>*Timber to beam connections* |
| **Mid Floor** | |

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| **Floor joist size/span/centres/landing** | *Check that joists are sized and spaced as per approved plans and specifications. Check that joist spans as per approved plans and specifications.Check that a 25mm minimum boundary joist is installed as per approved plans and specifications.Check that joist landing is a minimum of 32mm.* |
| **Mid span blocking** | *Mid span blocking required when floor joists are 4 times the width thickness in depth and spanning over 2.5m.* |
| **Load bearing or brace wall support** | *.Check where there is a brace or load bearing wall running parallel to the floor joists that blocking fitted at maximum of 1.2m centres between joists.* |
| **Timber treatment and grade** | *Check that timber treatment and grade is as per approved plans and specifications.* |
| **Mechanical connections** | *Check that all mechanical connections are in place as per approved plans and specifications.Check that S/S fixings used if top of pile is less than 600mm or in exposure zone D.* |
| **Holes and notches** | *. Check that any holes or penetrations through joists are in the middle third of the joist depth and do not exceed one fifth the depth of the joist or 32mm, whichever is the lesser. Note:*<br>*If hole or notches are over this then a proprietary stiffener required.* |
| **Floor FFR** | *Check that the FFR floor framed as per approved plans and specifications. Ensure to check requirements for installation contatined within the systems manufacturers literature.* |
| **Truss roof framing** | |
| **Truss layout** | *Check site truss plans are as per approved plans and specifications.Check layout against correct truss plans.* |
| **Truss fixings** | *Check truss fixings are as per approved plans and specifications.* |
| **Purlins** | *Size, spacing, stress grade, treatment and fixings are as per approved plans and specifications.Consider VH and above wind zones hip/ridge purlins need to be set down further for wider capping.* |
| **Bottom cord restraints** | *Bottom cord restraints generally 1.8m centres, refer to as built truss plan.Note:*<br>*Check these are blocked down to all walls.These restraints are not required if the ceiling battens are timber and direct fixed to the truss bottoms.* |
| **Roof space braces** | *Check all roof space braces are installed as per approved plans and specifications.*<br>*E.g. gable end braces.* |
| **Roof plane bracing** | *Check these are installed as per approved plans and specifications.Ensure that strap bracing is fixed correctly at the ends as per the manufacturers literature.One brace per 50m2 light roof, one per 25m2 heavy roof.*<br>*One brace= opposing pair strap bracing, hip or valley rafter.* |
| **Valley construction** | *Check that valley boards have been installed correctly and have sufficient landing/support.* |
| **Internal gutters** | *Check size and fall is as per approved plans and specifications.Check outlets and overflow provision as per approved plans and specifications.* |
| **Parapets** | *Check parapet constructed as per approved plans and specifications.Check,*<br>*Timber size, height, spacing, stress grade, treatment and fixings. Note:*<br>*Ensure provision for slope on top allowed for, discuss with site contact.* |
| **Pitched roof framing** | |
| **Rafters** | *Check, rafter size, span, centres, stress grade, treatment and connections are as per approved plans and specifications.Note:* |

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|---|---|
| | *Birds mouth (32mm min bearing and depth of remaining member must not be less than 80% of actual depth of member or less than 65mm ie. 90mm timber max birdsmouth cut out is 18mm).* |
| **External rafters** | *Check, rafter size, span, centres, stress grade, treatment (H3.2 min) and connections are as per approved plans and specifications.Note:*<br>*Birds mouth (32mm min bearing and depth of remaining member must not be less than 80% of actual depth of member or less than 65mm ie. 90mm timber max birdsmouth cut out is 18mm).* |
| **Ridge beam** | *Check ridge beam size, span, stress grade, fixing and treatment are as per approved plans and specifications.* |
| **Ceiling joists** | *Check ceiling joists are sized and spanned as per approved plans and specifications.* |
| **Purlins** | *Check that the purlins are sized, spacing, stress grade, treatment and fixings as per approved plans and specifications.Consider VH and above wind zones hip/ridge purlins need to be set down further for wider capping.* |
| **Roof space braces** | *Check to ensure all roof space braces are installed as per approved plans and specifications.*<br>*E.g. gable end braces.* |
| **Roof plane bracing** | *Check these are installed as per approved plans and specifications.Ensure that strap bracing is fixed correctly at the ends as per the manufacturers literature.One brace per 50m2 light roof, one per 25m2 heavy roof.*<br>*One brace= opposing pair strap bracing, hip or valley rafter.* |
| **Valley construction** | *Check that valley boards have been installed correctly and have sufficient landing/support.* |
| **Internal gutters** | *Check size and fall is as per approved plans and specifications.Check outlets and overflow provision as per approved plans and specifications.* |
| **Parapets** | *Check parapet constructed as per approved plans and specifications.Check,*<br>*Timber size, height, spacing, stress grade, treatment and fixings. Note:*<br>*Ensure provision for slope on top allowed for, discuss with site contact.* |

| Pre-Cladding - Wrap/Cavity/Batten Checklist | |
|---|---|
| **Health & Safety** | |
| **Site Safe** | *Ensure that the site is safe to enter.Check site hazard register board*<br>*Check for dogs*<br>*Undertake visual assessment of site*<br>*Ensure site induction is undertaken if required* |
| **PPE Gear** | *Ensure all appropriate PPE is worn.* |
| **General** | |
| **Work ready** | *Is all in order for an inspection? Area to be inspected completed.* |
| **Name and position of contact on site** | *Enter name and position of person on site in the Notes area* |
| **Consent documents sighted** | *It is mandatory to have all stamp approved building consent documentation on site.* |
| **Required Documentation:** | *Ensure that all required documentation is listed under the documentation section.For example, PS3 for cladding installations such as STO, Integra.* |
| **Building Wraps** | |
| **Building wrap** | *Check wrap type against approved plans and specifications. Check minimum lap not less than 75mm for horizontal, lap not less than 150mm over studs for vertical joins, extend 35mm below bottom plate or bearer.* |
| **No rips or tears** | *Check wrap for damage.Note:*<br>*May be repaired with flashing tape.* |
| **Wrap returned into openings** | *Dressed around framing within openings through wrap.* |
| **Flashing tape** | *Check openings through wrap taped as required by the manufacturers literature and as per approved plans and specifications.Check all flashing's are taped to wrap as required by manufacturers literature and as per approved plans and specifications.* |
| **Sealer on rebate** | *Check that cladding rebates sealed as per approved plans and specifications.Note:*<br>*Generally for brick veneer but sometimes others. Check approved plans and specifications for cladding type and requirements.* |
| **Seal around penetrations** | *Check that all penetrations through wrap and claddings are flashed around.* |
| **Restraint of wrap required for studs** | *For cavity systems where flexible building wrap is used an intermediate means of stopping underlay and batts bulging into cavities is required where studs exceed 450mm centres.Note:*<br>*Polypropylene tape or wire at 300mm centres horizontally or vertical cavity batten at 300mm centres.* |
| **Sealed at roof space** | *Check eaves are sealed/finished.* |
| **Cladding support** | *Check for additional dwang supports for claddings as required by approved plans and manufacturers literature. E.g. Direct fixed weatherboard and vertical metal profile require 480mm centre dwang support.* |
| **Sill supports** | *Check all sill support bars are installed correctly as per approved plans and specifications.* |
| **Building R.A.B** | |
| **Building R.A.B** | *Check R.A.B type against approved plans and specifications.*<br>*Check installation complies with manufacturers literature.* |
| **R.A.B Fixings** | *Check that R.A.B fixings are in compliance with the manufacturers literature.* |

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| **Flashing tape** | *Check openings through R.A.B taped as required by the manufacturers literature and approved plans.*<br>*Check all flashing's are taped to R.A.B as required by manufacturers literature and approved plans.*<br>*Check all joints of the R.A.B are taped as required by the manufacturers literature.* |
| **Sealer on rebate** | *Check that cladding rebates sealed. Generally for brick veneer but sometimes others. Check plans and specifications for cladding type.* |
| **Seal around penetrations** | *Check that all penetrations through R.A.B and claddings are flashed around.* |
| **Sealed at roof space** | *Check eaves are sealed/finished.* |
| **Cladding support** | *Check for additional dwang supports for claddings as required by approved plans and manufacturers literature.*<br>*I.e. Direct fixed weatherboard and vertical metal profile require 480mm centre dwang support.* |
| **Sill supports** | *Check all sill support bars are installed correctly as per approved plans.* |
| **Cavity Construction** | |
| **Cavity batten** | *Cavity batten correct type and size , note fall when horizontally installed.*<br>*Cavities located in correct positions as shown on elevations/details.* |
| **Batten treatment** | *Check cavity batten treatment is as per approved plans.* |
| **Batten compatibility** | *Ensure that battens are suitable for use with cladding material. If not LSOP treated can't be used with metal claddings without separation.* |
| **Cavity base and/or head ventilation** | *Check cavity closer in place, no gaps greater than 13mm, closer above head flashings.*<br>*Note: If vertical metal profile ensure base flashing is in place for vermin proofing.* |
| **Pipes/services clear from cavity** | *Pipes/services clear from cavity* |
| **Nail fixings of batten** | *Check fixing of battens, if cavity battens are packs only cladding nails must fix into framing.*<br>*If structural cavity battens will require longer fixings at closer centres. Refer to approved plans for details.* |
| **FRR System** | |
| **FRR System in Cavity Space** | *Check for FFR cavity closure provision installed as outlined in the approved plans and specifications.*<br>*Note: For Example H3.2 solid blocking with a char factor that achieves the minimum FRR requirement.* |
| **Flashings** | |
| **Head flashings** | *Opening head flashings, taped to wrap or second layer of wrap over.*<br>*Correct upstand length, fall to flashing , kick out or birds beak.*<br>*Ensure raked window head flashings have an upstand of not less than 30mm minimum at the bottom end.*<br>*Ensure Apex head flashings have been welded.* |
| **Window jambs** | *Check approved plans for any flashings required at jambs.* |
| **Sill flashings** | *. Sills flashed as per approved plans.*<br>*Check for sill tray if cladding is direct fixed. Ensure minimum 8mm upstand is formed and sill tray extends under 20mm packer to window jambs.* |

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| **Other penetrations** | *Check flashings in place for garage doors, meter boxes, gas califonts and any other openings as per approved plans.* |
| **Saddle flashing** | *Where saddle flashings required ensure these are installed as per approved plans.* |
| **Dissimilar cladding junctions** | *Dissimilar cladding junctions flashed as per consented plans/manufacturers specs* |
| **Parapet** | *Parapet flashings as per consented drawings.*<br>*Sloped packer in place, 5 degree min.*<br>*No fixing through top of flashing.* |
| **Diverters** | *Check diverters are in place on apron flashings.* |
| **Roof/wall junction** | *Roof/wall junction flashings are in accordance with approved plans.*<br>*Check height between cladding and roof flashings as per manufacturers literature.*<br>*Check for gutter wall junctions. Ensure all back flashings are in place. Refer to Figure 8b of E2/AS1.* |
| **End clearances/fascias** | *End clearances/fascias, barge, facings, spoutings, etc* |
| **Roof cladding** | |
| **Roof & flashings complete** | *Check that roof and its flashings are completed enough to allow cladding to proceed.* |

| Post Line R.A.B bracing Checklist | |
|---|---|
| **Health & Safety** | |
| **Site Safe** | *Ensure that the site is safe to enter.Check site hazard register board*<br>*Check for dogs*<br>*Undertake visual assessment of site*<br>*Ensure site induction is undertaken if required* |
| **PPE Gear** | *Ensure all appropriate PPE is worn.* |
| **General** | |
| **Work ready** | *Is all in order for an inspection? Area to be inspected completed.* |
| **Name and position of contact on site** | *Enter name and position of person on site in the Notes area* |
| **Consent documents sighted** | *It is mandatory to have all stamp approved building consent documentation on site.* |
| **Required Documentation:** | *Ensure that all required documentation is listed under the documentation section.* |
| **RAB** | |
| **R.A.B brace elements** | *Check R.A.B brace elements are of the correct type as per approved plans and specifications.Check R.A.B brace elements are correctly sized as per approved plans and specifications.* |
| **R.A.B brace elements fixing** | *Check R.A.B brace element are fixed as per approved plans and specifications.* |
| **R.A.B top plate fixings** | *Check R.A.B Top plate fixings are installed as per approved plans and manufacturers literature.* |

| Half-Height Masonry Checklist | |
|---|---|
| **Health & Safety** | |
| **Site Safe** | *Ensure that the site is safe to enter.Check site hazard register board*<br>*Check for dogs*<br>*Undertake visual assessment of site*<br>*Ensure site induction is undertaken if required* |
| **PPE Gear** | *Ensure all appropriate PPE is worn.* |
| **General** | |
| **Work ready** | *Is all in order for an inspection? Area to be inspected completed.* |
| **Name and position of contact on site** | *Enter name and position of person on site in the Notes area* |
| **Consent documents sighted** | *It is mandatory to have all stamp approved building consent documentation on site.* |
| **Required Documentation:** | *Ensure that all required documentation is listed under the documentation section.* |
| **Building Wraps** | |
| **Building wrap** | *Check wrap type is as per approved plans and specifications.Check minimum lap not less than 75mm for horizontal, lap not less than 150mm over studs for vertical joins, extend 35mm below bottom plate or bearer.* |
| **No rips or tears** | *Check wrap for damage. May be repaired with flashing tape.* |
| **Wrap returned into openings** | *Dressed around framing within openings through wrap.* |
| **Flashing tape** | *Check openings through wrap taped as required by the manufacturers literature and as per approved plans and specifications.Check all flashing's are taped to wrap as required by manufacturers literature and as per approved plans and specifications.* |
| **Seal around penetrations** | *Check that all penetrations through wrap and claddings are flashed around.* |
| **Restraint of wrap required for studs** | *For cavity systems where flexible building wrap is used an intermediate means of stopping underlay and batts bulging into cavities is required where studs exceed 450mm centres.Note:*<br>*Polypropylene tape or wire at 300mm centres horizontally or vertical cavity batten at 300mm centres.* |
| **Sealed at roof space** | *Check eaves are sealed/finished.* |
| **Sill supports** | *Check all sill support bars are installed correctly as per approved plans and specifications.* |
| **Building R.A.B** | |
| **Building R.A.B** | *Check R.A.B type is as per approved plans and specifications.Check installation complies with manufacturers literature.* |
| **R.A.B Fixings** | *Check that R.A.B fixings are in compliance with the manufacturers literature.* |
| **Flashing tape** | *Check openings through R.A.B taped as required by the manufacturers literature and as per approved plans and specifications.Check all flashing's are taped to R.A.B as required by manufacturers literature and as per approved plans and specifications.Check all joints of the R.A.B are taped as required by the manufacturers literature.* |
| **Seal around penetrations** | *Check that all penetrations through R.A.B and claddings are flashed around.* |

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|---|---|
| **Sealed at roof space** | *Check eaves are sealed/finished.* |
| **Sill supports** | *Check all sill support bars are installed correctly as per approved plans.* |
| **FRR System** | |
| **FRR System in Cavity Space** | *Check for FFR cavity closure provision installed as outlined in the approved plans and specifications.*<br>*Note: For Example H3.2 solid blocking with a char factor that achieves the minimum FRR requirement.* |
| **Brick Veneer** | |
| **Masonry veneer type** | *Is the masonry veneer as per approved plans and specifications.* |
| **Steps in split floor levels flashed** | *Consider step down for garages, split floor levels as required by the approved plans.Ensure appropriate flashing system is in place at rebate on vertical section of the step down.* |
| **Rebate sealer** | *.Check that cladding rebate has been sealed as per approved plans.Rebate to have either,*<br>*2 coats of bituminous liquid*<br>*1.0mm butyl rubber or bituminous sheet*<br>*.25 polythene or polyethylene DPC* |
| **Veneer overhang** | *Check for a maximum veneer overhang of 20mm.Note:*<br>*If greater than 20mm a SED solution is required.* |
| **Mortar joints** | *Check mortar joints are between 7-13mm.Check mortar joints are raked out a maximum of 6mm max and tooled.Check leveling joint is a maximum of 20mm.* |
| **Weep holes** | *Check that weep holes have been installed as per approved plans and specifications.Note:*<br>*Every 3rd perpend or 800mm max, min 75mm high (min 1000mm2 per lineal metre of wall)*<br>*Consider vents over window lintels* |
| **Masonry Veneer washouts** | *Have washouts been provided to ensure cavity is cleaned appropriately.* |
| **Cavity clean** | *Check the inside face of bricks to ensure that mortar has not built up on ties and no rubbish has been placed within cavity.* |
| **Cavity size** | *Check that cavity is as per approved plans and specifications.*<br>*Generally allowable measurement of between 40mm - 75mm* |
| **Tie durability** | *Check that ties and fixing screws used are acceptable for the corrosion zone. E.g. in Bluff and coastal areas needs to be S/S.* |
| **Tie embedment** | *Embedded at least half the width of the veneer with min 15mm cover to end* |
| **Tie spacings** | *Ties to be as per that specified on approved plans and specifications.* |
| **Tie screws** | *All ties screw fixed.Check length if screwed into rigid backing. Note:*<br>*Require 12 guage tek screws, minimum 35mm embedment into framing.* |
| **Panel size** | *Minimum of 230mm panel required. Ties every second brick* |
| **Openings and ends** | *Must have ties within 200mm of edge of panel* |
| **Control joint** | *Check for concrete masonry that control joints are located as per approved plans (likely 8 metre maximum centres).* |
| **Pipes and services clear of cavity** | *Check these are not running along the cavity.* |

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| **Sill bricks** | *Standard responses available. Discuss the need for sill bricks to be installed with a minimum 15 degree slope unless otherwise specified on the approved plans and speicifcations* |
| **Masonry veneer lintels** | *Check lintels are sized and spanned as per approved plans and specifications.Check lintels are of the correct material for the corrosion zone.Check lintels have the appropriate seating of, 100mm for spans up to 2 metres*<br>*or 200mm for spans above 2 metres.* |
| **Masonry veneer lintel flashings** | *Check that the masonry veneer is flashed back to the building underlay as per approved plans.* |
| **Sealing of penetrations** | *Check that all penetrations are sealed.*<br>*E.g. hose taps, heat pump pipes, wires.* |
| **Max heights** | *Check that the masonry veneer heights are as per the approved plans.*<br>*Generally:*<br>*Max height of 7m above adjacent finish ground*<br>*Max height of panel of 4m*<br>*Max height on a gable end wall of 5.5m* |
| **Flashings** | |
| **Subfoor sealed** | *. Check that masonry veneer cavity is sealed of at the bottom to subfloor space. Ensure this is installed above the means of subfloor ventilation and below the masonry veneer weep holes.* |
| **Head flashings** | *Check opening head flashings, taped to wrap or second layer of wrap over.Check for the correct upstand length, fall to flashing , kick out or birds beak.Ensure raked window head flashings have an upstand of not less than 30mm minimum at the bottom end. Ensure Apex head flashings have been welded.* |
| **Window jamb flashings** | *. Check that jamb flashing's are in place as per approved plans and specifications.Generally DPC/Super course 150mm wide tucked into window extrusion and fixed atop building underlay.* |
| **Sill flashings** | *. Check that sill flashings have been installed and extend 200mm past jambs.Generally DPC/Super course 150mm wide tucked into window extrusion and fixed atop building underlay.Check that 15mm minimum kick out is formed to sill flashing as per approved plans.Generally by installing a packer behind DPC/Super course.* |
| **Other penetrations** | *Check flashings in place for garage doors, meter boxes, gas califonts and any other openings as per approved plans and specifications.* |
| **Saddle flashing** | *Where saddle flashings required ensure these are installed as per approved plans and specifications.* |
| **Dissimilar cladding junctions** | *Dissimilar cladding junctions flashed as per manufacturers literature and approved plans and specifications.* |
| **Parapet** | *Check parapet flashings are installed as per approved plans and specifications.Note:*<br>*Sloped packer in place, 5 degree minimum.Ensure no fixings are installed through top of the flashing.* |
| **Diverters** | *Check diverters are in place on apron flashings.* |
| **Roof/wall junction** | *Roof/wall junction flashing's installed as per approved plans and specifications.Check height between cladding and roof flashing's as per manufacturers literature.Check for gutter wall junctions. Note:*<br>*Ensure all back flashings are in place. Refer to Figure 8b of E2/AS1.* |
| **End clearances/fascias** | *Check that all clearances are maintained as per approved plans and specifications.*<br>*Check,*<br>*End clearances/fascias, barge, facings, spoutings, etc* |

| Roof cladding | |
|---|---|
| **Roof & flashings complete** | *Check that roof and its flashings are completed enough to allow cladding to proceed.* |

| Preline Building Checklist | |
|---|---|
| **Health & Safety** | |
| **Site Safe** | |
| **PPE Gear** | *Ensure all appropriate PPE is worn.* |
| **General** | |
| **Work ready** | *Is all in order for an inspection? Area to be inspected completed.* |
| **Name and position of contact on site** | *Enter name and position of person on site in the Notes area* |
| **Consent documents sighted** | *It is mandatory to have all stamp approved building consent documentation on site.* |
| **Site Records for site observation of SED elements** | *Have site records been provided by the supervising engineer for the site observation of the construction of the structurally engineered elements?* |
| **Required Documentation:** | *Ensure that all required documentation is listed under the documentation section.* |
| **Preline Building** | |
| **Building envelope weather tight** | *Check that the building envelope is sufficiently weather tight to enable internal linings to be installed.E.g. Has cladding systems or R.A.B system been completed.* |
| **Cladding systems** | *. Check that all exterior cladding systems are as per approved plans and specifications.Check,*<br>*Cladding type.*<br>*Cladding system flashings.* |
| **Windows/doors as per approved plans** | *.Check windows are sized and located as per approved plans.* |
| **Window/Door joinery labels** | *. Check for manufacturers labels.Check wind zone constructed for is correct.* |
| **Window/Door glazing thickness** | *.Check that glazing elements are located correctly as per approved plans and specifications.*<br>*E.g. Double or single glazed units.* |
| **Window/Door fixings** | *.Check doors windows fixed correctly.Note:*<br>*E2/AS1 requires fixing at 150mm from corners and 450mm centres pair nailed.Packers are not to be used between top of window reveal and lintel.* |
| **Safety glazing** | *.Check that safety glazed elements have been installed as per approved plans and specifications.Note:*<br>*Consider safety glazing within 2000mm of the floor of wet areas, full windows with no transom bars and glazing on stairs.* |
| **Window restrictors** | *Check that window restrictors are installed in the appropriate locations.E.g. When the fall from the floor to the ground outside is over 1 metre and the opening sill height is 760mm or less above the floor level.* |
| **Air seals to openings in the thermal envelope** | *.Check that PEF rod and foam has been install to air gaps within the thermal envelope.*<br>*E.g. Between framing and window/door reveals.* |
| **Moisture content timber framing and ceiling battens** | *Check moisture content in various locations throughout building. Including wall framing, ceiling battens and upper floor joists.Moisture content to be less than 18 % to install linings.Note:*<br>*Treatments adds approx 4% to readings.* |

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| **Electrical fit-out** | *Ensure that electrical fit-out has been completed.* |
| **Plumbing fit-out** | *Check Plumbing fit-out has been completed.* |
| **Framing notches/holes** | *Check for penetrations through structural members. 90 mm studs: 25mm maximum diameter (can be increased to 35mm maximum as long as no more than 3 consecutive studs are compromised).Top plates: 25mm maximum diameter hole or slot 25mm maximum x 200 maximum length.Note:*<br>*Where penetrations exceed that listed above a proprietary stiffener system is to be used.* |
| **Brace schedule followed** | *Check that all brace elements will be sized correctly and are able to be installed in locations as per approved plans and specifications.* |
| **Bottom plate fixings to brace elements** | *Check that all brace element hold downs have been installed as per approved plans and manufacturers literature.*<br>*E.g. If the brace element type has a -H after it a hold down is required. This could be a GIB handi brac.* |
| **Brace element openings** | *Check that all openings are no greater than 90mm x 90mm within a wall bracing element.Check that all openings are minimum 90mm from brace element edge.* |
| **Ceiling battens** | *Check that ceiling battens are installed at the correct spacings for interior linings as per approved plans and specifications.Note:*<br>*10mm plasterboard requires a maximum 450mm centre battens.*<br>*13mm plasterboard requires a maximum 600mm centre battens* |
| **Diaphragm ceiling supports** | *Check that the perimeter of ceiling supports is a continuous member.Check that ceiling support battens are directly fixed to roof framing.Check for additional requirements from manufacturer of diaphragm system.*<br>*E.g. .55bmt angles on cove ceilings.* |
| **Diaphragm ceiling openings** | *.Check location and size of openings within the ceiling diaphragm.Note:*<br>*Larger openings can be located in middle 1/3 of ceiling ,opening can not exceed 1/3 diaphragm width.Check that no internal walls penetrate the ceiling diaphragm.Check for flue penetration from heating appliance if to be located within ceiling diaphragm.Note:*<br>*There is a GIB detail available for flue penetrations to diaphragm ceilings.* |
| **Wall insulation** | *Check the insulation installed to the walls is the correct R value as per approved plans and specifications.Check the insulation is installed correctly with no gaps or crushing.* |
| **Ceiling insulation** | *Check the insulation installed to the ceilings is the correct R value as per approved plans and specifications.Check the insulation is installed correctly with no gaps or crushing.*<br>*Note 25mm minimum air gap is required between top of insulation and roof underlay in skillion roofs.* |
| **Thermal envelope** | *Check that the thermal envelope has been undertaken as per approved plans and specifications.E.g. insulation is installed between the habitable space and the non habitable space.* |
| **Floor box outs, pre pour** | *Check that where box outs have been undertaken for shower and bath wastes. That they have had DPM reinstated and taped to waste.* |
| **Extraction unit ducting** | *Check provisions for extraction unit ducting are provided as per approved plans and specifications.*<br>*E.g. Ceiling fans and range hoods* |
| **Metal backing angle for tile walls** | *Check that metal angle corners are installed as required by manufacturers literature for tiled walls. Note:*<br>*Fixing is required at 300mm centres with clouts.* |

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| **Stair construction** | *Check that the stair treads, risers, pitch and minimum 2 meter head height are achieved as per approved plans and specifications.* |
| **Landings** | *Check that landings have been provided as required by the approved plans.* |
| **Hand rail provisions** | *Check that provisions have been provided for the installation of handrails where required.*<br>*E.g. solid blocking for fixing.* |
| **Preline FRR** | |
| **FRR layout** | *Check that the fire separations are located as per the approved plans and specifications.* |
| **FRR framing construction** | *Check that FRR framing construction is as per the approved plans and specifications and manufacturers literature.Check framing size, spacings and mid supports are as per the approved plans and specifications.* |
| **FRR stability hold-downs** | *Check that all FRR stability hold-downs have been installed as per the approved plans and specifications and FRR system manufacturers literature.* |
| **FRR solid blocking** | *Check Solid Blocking is installed in required in areas. Consider solid blocking directly beneath roof cladding.* |
| **FRR flush boxes** | *Check that flush boxes installed within FRR wall system are appropriate.* |
| **FRR penetrations** | *Check that the passive fire penetrations will be able to be achieved as required by the approved plans and specifications.* |
| **FRR doors** | *Check that where FRR doors are installed, that they comply with the approved plans and specifications.* |
| **FRR subfloor separation** | *Check that all FRR subfloor separation provisions have been installed as required by the approved plans and specifications.* |
| **FRR Floor separation** | *Check that all FRR floor separation provisions have been installed as required by the approved plans and specifications.* |
| **FRR Roof separation** | *Check that all FRR roof separation provisions have been installed as required by the approved plans and specifications.* |
| **Inter-Tenancy** | |
| **Accoustic rating** | *Check that provisions required by the approved plans and specifications have been provided to ensure that the STC rating is achieved. Generally STC of 55 is required.* |
| **Accessible Facilities** | |
| **Accessible route** | *Check access route complies with the approved plans.Note:*<br>*D1/AS1 requires an minimum 1200mm wide accessible route.* |
| **Accessible doors** | *Check accessible doors complyas per the approved plans and specifications.Check that accessible doors have a minimum 760mm clear opening.Check that where doors swing in both directions, glazing panels are installed.* |
| **Accessible compartment dimensions** | *Check that accessible compartment dimensions are as per the approved plans and specifications.Generally,*<br>*Toilet compartments require a minimum size of 1.6 metres x 1.9 metres*<br>*Toilet and Shower compartments require a minimum size of 2.1 metres x 1.9 metres.* |
| **Accessible shower** | *Check that accessible shower is constructed as required by approved plans and specifications.* |
| **Grab rail dwangs** | *Check provisions for grab rail supports installed. E.g. Solid blocking.* |

| Preline Plumbing Checklist | |
|---|---|
| **Health & Safety** | |
| **Site Safe** | *Ensure that the site is safe to enter.Check site hazard register board*<br>*Check for dogs*<br>*Undertake visual assessment of site*<br>*Ensure site induction is undertaken if required* |
| **PPE Gear** | *Ensure all appropriate PPE is worn.* |
| **General** | |
| **Work ready** | *Is all in order for an inspection and area to be inspected completed.* |
| **Name of Certifying Plumber** | *Enter name of the Certifying Plumber responsible for the work after first ensuring their licence is current.* |
| **Consent documents sighted** | *It is mandatory to have all stamp approved building consent documentation on site.* |
| **Required Documentation:** | *Ensure that all required documentation is listed under the documentation section.For example, PS3 for pressure test or manufacturers data sheet for pipe work such as Fusio Therm.* |
| **Pipework installation** | |
| **Fixture layout** | *. Check that layout is as per the approved plans and specifications.* |
| **Plumbing pipework** | *Check pipe materials are as per the approved plans and specifications.Ensure that materials are all compatible and brand mixing and matching is not happening. Note:*<br>*Name the material and brand in your notes.* |
| **Fire hose reels** | *Ensure that where FHRs are in the building that these are on a dedicated supply. If on the same supply as other fixtures ensure that pipes are metallic where these are above ground.* |
| **Pipe sizing** | *Check that pipes are sized appropriately and as per approved plans and specifications.* |
| **Pipe supports** | *Check that pipes are supported appropriately under floors and in roof spaces. Note:*<br>*Copper, polybutylene, PVC and PPR all have differing requirements.* |
| **Pressure test** | *Check pressure is holding at 1500kPa for a period not less than 15 minutes. Note:*<br>*PPR products like Fusiotherm they have their own test which differs to this.Fusiotherm testing should also be done without insulation applied. PS3 may be provided for small alteration jobs with less than 20 metres of pipework.* |
| **Water supply pipework insulation** | *Check that pipework insulation is fitted to all new hot water pipework and to all new cold water pipework in external walls, under floors and in roof spaces outside the thermal envelope. Note:*<br>*For residential this is a minimum of 13mm closed cell insulation. For commercial refer to designers specifcation.* |
| **Framing notches/holes** | *Check for penetrations through structural members. 90 mm studs: 25mm maximum diameter (can be increased to 35mm maximum as long as no more than 3 consecutive studs are compromised).Top plates: 25mm maximum diameter hole or slot 25mm maximum x 200 maximum length.Note:*<br>*Where penetrations exceed that listed above a proprietary stiffener system is to be used.* |
| **Internal drain or wastepipe vents** | *. Check that internal vents completed and through the roof cladding. Note:*<br>*Top plate stiffener required if vent goes through top plate. Bottom plates where cut out require hold down blots to each side of opening.* |

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| **Waste pipes** | *.Check that waste pipes have been set up correctly and that where these pass though walls these walls have been re-strengthened with an approved propietary stiffener.* |
| **Penetrations through claddings** | *Check that all pipes and hose tap nipples are appropriately flashed through building wrap.* |
| **Backflow prevention** | *Check for any potential cross connections and that these have backflow prevention measures in place.* |
| **Soil stack** | |
| **Soil stack type** | *Check that the soil stack type installed is as per approved plans.E.g. Check they haven't installed a fully vented modified system when a graded discharge stack was specifed.* |
| **Soil stack supports** | *Check that soil stack is adequately supported.* |
| **Specific requirements for stacks** | *Check the following:*<br>*- Gradient*<br>*- Size of pipes*<br>*- Cleaning access*<br>*- Provision for expansion*<br>*- Joints primed before solvent cement applied*<br>*- Vents fitted as required*<br>*- Where AAVs used these are installed in accordance with the manufacturers requirements*<br>*- Pipes are not entering stack in exclusion zones* |
| **Testing of pipework** | *Check soil stack pipework is under the appropriate test as specified within the approved plans and specifications.Ensure that no leaks are identified.* |
| **Sprinkler system** | |
| **Pipe size and layout** | *Check that pipe layout and size is as per plan.Note:*<br>*If length has been increased or extra fittings used, approval will be required from the designer. Due to these can affect flow rates which are critical to correct operation of sprinkler heads.* |
| **Pressure test** | *Check pressure is holding at 1500kPa for a period not less than 15 minutes.* |
| **Flow test** | *Flow test to be undertaken comprising of the most hydraulically disadvantaged sprinkler head and one other selected by the inspector. Volume of water at each point to be measured against minimum requirements of design.* |
| **Sprinkler backflow prevention** | *If not combined with the plumbing pipework then ensure backflow prevention device is fitted to the independent sprinkler system.* |
| **Accessible compartment dimensions** | |
| **Accessible compartment dimensions** | *Check that the accessible compartment internal dimensions comply with the approved plans and specifications.Note:*<br>*NZS 4121:2001 requires,*<br>*Accessible toilet: 1600mmx1900mm minimum*<br>*Accessible bathroom: 1900mmx2100mm minimum* |
| **Accessible shower dimensions** | *Check that the shower is sized as per the approved plans and specifications.Note:*<br>*NZS 4121:2001 requires the shower to be a minimum of 1200mm x 1200mm and a fall to the waste of no less than 1:50* |
| **Accessible compartment fixture fixings** | *Check that fixings for accessible compartment fixtures have been provided. Note:*<br>*Discuss items such as,*<br>*Vanity,*<br>*Toilet roll holder,* |

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| | *Grab rails,*<br>*Mirror,*<br>*Shower seat.* |
| **Internal gutters and downpipes** | |
| **Internal gutters** | *Where internal gutters detailed check size and location are installed as per the approved plans and specifications.Ensure downpipe and overflow installation is as per the approved plans and specifications.* |
| **Internal downpipes** | *Where downpipes are to be concealed these must be tested. Record test details in notes.* |

| Postline interior linings Checklist | |
|---|---|
| **Health & Safety** | |
| **Site Safe** | *Ensure that the site is safe to enter.Check site hazard register board*<br>*Check for dogs*<br>*Undertake visual assessment of site*<br>*Ensure site induction is undertaken if required* |
| **PPE Gear** | *Ensure all appropriate PPE is worn.* |
| **General** | |
| **Work ready** | *Is all in order for an inspection? Area to be inspected completed.* |
| **Name and position of contact on site** | *Enter name and position of person on site in the Notes area* |
| **Consent documents sighted** | *It is mandatory to have all stamp approved building consent documentation on site.* |
| **Site Records for site observation of SED elements** | *Have site records been provided by the supervising engineer for the site observation of the construction of the structurally engineered elements?* |
| **Required Documentation:** | *Ensure that all required documentation is listed under the documentation section.For example, PS4 from the supervising CPEng engineer for structurally designed elements.* |
| **Standard linings** | |
| **Interior lining types** | *Check that all interior linings are located as per approved plans and specifications.Check that these linings are appropriate for the area. E.g. Aqualine GIB to wet areas.* |
| **Non brace element linings fixings** | *Check that all linings are fixed as per manufacturers literature.* |
| **Linings fixed to take tiles** | *Check that areas to be covered with tiles have fixings installed at appropriate centres.*<br>*E.g. GIB requires perimeter and intermediate fixings at 100mm centres.* |
| **Wet area substrate** | *Check that the correct tile substrate is in place for tiled walls as per the approved plans.Note:*<br>*Additional fixings required for plasterboard used as a tile substrate.* |
| **Wall bracing** | |
| **Bracing element type** | *Check that the bracing element is correct as per the approved plans and specifications.* |
| **Bracing element location** | *Check the bracing element is located correctly as per the approved plans and specifications.* |
| **Brace elements located behind showers** | *Check that no brace elements have been installed behind showers.* |
| **Bracing element length** | *Check the brace element length is as per the approved plans and specifications.Note: if increased in length require as built documentation, including plan and brace calculations.* |
| **Brace element fixing type** | *Check that the correct fixing type has been used for the brace element as per the manufacturers literature.* |
| **Brace element fixing pattern** | *Check that fixing pattern is appropriate for brace element type as per manufacturers literature.* |

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| **Brace element condition** | *Check that the fixings have not been installed in a way that they have damaged the brace element.Check that the brace element has no installation damage visible.* |
| **Brace element openings** | *Check that no flush boxes within 90mm of edge of element have been installed.check that no openings within the brace element are greater than 90mm x90mm.* |
| **Ceiling Diaphragm** | |
| **Ceiling diaphragm type** | *Check that the ceiling diaphragm type is as per the approved plans and specifications.* |
| **Ceiling diaphragm fixing** | *Check that the fixing of the element is as per the approved plans and specifications and manufacturers literature.* |
| **Sheet length/Width** | *Check that the ceiling diaphragm is constructed as per the manufacturers literature.*<br><br>*Check width of sheets are over the minimum allowable. Note:*<br>*GIB requires a minimum sheet width of not less than 600mm. Check sheet lengths are over the minimum allowable.Note:*<br>*GIB requires a minimum sheet length of not less than 1800mm shall be used.* |
| **Back-blocking** | *Check that back-blocking is provided at all sheet end joints.Check that back-blocking provided to sheets with a width between 600mm - 900mm and adjacent sheets as required by manufacturers literature.* |
| **Diaphragm ceiling openings** | *.Check location and size of openings within the ceiling diaphragm.Note:*<br>*Larger openings can be located in middle 1/3 of ceiling ,opening can not exceed 1/3 diaphragm width.Check that no internal walls penetrate the ceiling diaphragm.Check for flue penetration from heating appliance if to be located within ceiling diaphragm.Note:*<br>*There is a GIB detail available for flue penetrations to diaphragm ceilings.* |

| Postline Fire rating Checklist | |
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| **Health & Safety** | |
| **Site Safe** | *Ensure that the site is safe to enter.Check site hazard register board*<br>*Check for dogs*<br>*Undertake visual assessment of site*<br>*Ensure site induction is undertaken if required* |
| **PPE Gear** | *Ensure all appropriate PPE is worn.* |
| **General** | |
| **Work ready** | *Is all in order for an inspection? Area to be inspected completed.* |
| **Name and position of contact on site** | *Enter name and position of person on site in the Notes area* |
| **Consent documents sighted** | *It is mandatory to have all stamp approved building consent documentation on site.* |
| **Site Records for site observation of SED elements** | *Have site records been provided by the supervising engineer for the site observation of the construction of the structurally engineered elements?* |
| **Required Documentation:** | *Ensure that all required documentation is listed under the documentation section.For example, PS3 for FRR system installation or a PS4 for SED FRR sytems.* |
| **Fire Resistant requirements** | |
| **FRR layout** | *Check that the fire separations are located as per the approved plans and specifications.* |
| **FRR system type** | *Check that the FRR system used is as per the approved plans and specification.Check that the thickness and number of sheets are correct.* |
| **Fire wall return** | *Check that fire wall return is provided where wall is less than 90 degrees to the boundary as per the approved plans and specifications.* |
| **FRR termination point** | *Check that FRR system terminates appropriately.*<br>*I.e Roof cladding.See approved plans and specifications, along with FRR system manufacturers literature.* |
| **FRR flush boxes** | *Check that flush boxes are appropriated and are installed within FRR wall systems.* |
| **Kao wool fire resistant insulation** | *Check fire resistance insulation installed correctly as per approved plans and specifications.* |
| **FRR penetration proprietary products** | *Check fire collars, flush boxes, intumescent sealants or wraps in place as appropriate.* |
| **PS3 & As built schedule of fire penetrations** | *Check required documentation for building consent. PS3 from an approved author on the SBCG PSA register.Floor plan showing location and schedule stating FRR of element that product is protecting.Schedule of products used on each penetration.* |
| **Total fire separation** | *Check that total fire separation has been achieved as per approved plans and specifications.* |
| **FRR 1st layer walls** | |
| **FRR systems fixings 1st layer** | *Check that the FRR system is fixed with the correct fixing type.Check fixing length and gauge.* |
| **FRR fixing pattern 1st layer** | *Check that fixing pattern is appropriate for FRR system as per manufacturers literature.* |
| **FRR linings condition 1st layer** | *Check that the fixings have not been installed in a way that they have damaged the FRR linings.Check that the FRR linings have no installation damage visible.* |

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| **FRR sheet edge fitment** | *Check manufacturers literature regarding if linings are to be touch fitted.Check manufacturers literature regarding if the linings are to be installed over solid blocking.* |
| **FRR 2nd layer walls** | |
| **FRR systems fixings 2nd layer** | *Check that the FRR system is fixed with the correct fixing type.Check fixing length and gauge.* |
| **FRR fixing pattern 2nd layer** | *Check that fixing pattern is appropriate for FRR system as per manufacturers literature.* |
| **FRR linings condition 2nd layer** | *Check that the fixings have not been installed in a way that they have damaged the FRR linings.Check that the FRR linings have no installation damage visible.* |
| **FRR multiple layers** | *Check manufactures literature for staggered joint requirements.* |
| **FRR 1st layer ceilings** | |
| **FRR systems fixings 1st layer** | *Check that the FRR system is fixed with the correct fixing type.Check fixing length and gauge.* |
| **FRR fixing pattern 1st layer** | *Check that fixing pattern is appropriate for FRR system as per manufacturers literature.* |
| **FRR linings condition 1st layer** | *Check that the fixings have not been installed in a way that they have damaged the FRR linings.Check that the FRR linings have no installation damage visible.* |
| **FRR sheet edge fitment** | *Check manufacturers literature regarding if linings are to be touch fitted.Check manufacturers literature regarding if the linings are to be installed over solid blocking.* |
| **FRR 2nd layer ceilings** | |
| **FRR systems fixings 2nd layer** | *Check that the FRR system is fixed with the correct fixing type.Check fixing length and gauge.* |
| **FRR fixing pattern 2nd layer** | *Check that fixing pattern is appropriate for FRR system as per manufacturers literature.* |
| **FRR linings condition 2nd layer** | *Check that the fixings have not been installed in a way that they have damaged the FRR linings.Check that the FRR linings have no installation damage visible.* |
| **FRR multiple layers** | *Check manufactures literature for staggered joint requirements.* |

| Foul and Stormwater Drainage Checklist | |
|---|---|
| **Health & Safety** | |
| **Site Safe** | *Ensure that the site is safe to enter.Check site hazard register board*<br>*Check for dogs*<br>*Undertake visual assessment of site*<br>*Ensure site induction is undertaken if required* |
| **PPE Gear** | *Ensure all appropriate PPE is worn.* |
| **General** | |
| **Work ready** | *Is all in order for an inspection and area to be inspected completed.* |
| **Name of Certifying Drainlayer** | *<br>*Enter name of the Certifying Drainlayer responsible for the work after first ensuring their licence is current.* |
| **Consent documents sighted** | *It is mandatory to have all stamp approved building consent documentation on site.* |
| **Required Documentation:** | *Ensure that all required documentation is listed under the documentation section.For example: As built Drainage plan* |
| **Foulwater** | |
| **Drainage layout** | *Check that drainage layout matches the approved plans and the means of compliance hasn't changed e.g. from G13/AS2 to AS/NZS 3500.2. Note:*<br>*Amendment required if this has changed.* |
| **Easement requirements** | *Ensure drains are installed in the correct location when proposed to be installed within an easement.* |
| **Boundary trap** | *Check that a boundary trap has been installed as required by ICC Drainage Manager.* |
| **Drain material** | *Check material used is as per approved plans and specifications. Note:*<br>*Check that pipe is identified with appropriate standards mark and SN rating.* |
| **Gradient** | *Check gradient and ensure it is not less than that specified on the approved plans and specifications.* |
| **Primer used on solvent cement joints** | *. Check that where jointing method is solvent cement, ensure pipe and socket have been primed before cement applied.* |
| **Drain bedding** | *Check appropriate granular bedding been provided.* |
| **Cleaning eyes, inspection and rodding points** | *Check complying cleaning eyes, inspection fittings or rodding points have been installed as per the approved plans.* |
| **Manholes** | *Check that manholes are installed either where shown on approved plans or where used to extend distance between cleaning/access points to 100 metres.* |
| **Drain test** | *Check drains are under test at start of inspection. Check again at end of inspection to ensure no loss in pressure.* |
| **ORG gully trap** | *Check that overflow relief gully is located as per approved plans.Note:*<br>*Required in a location where it will best protect the drain from surcharging inside the building in the event of a blockage. Must be 150mm below the overflow point of the lowest fixture.* |
| **Gully traps** | *Check that gully traps are located as per plan.Note:* |

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| | *Gully traps can not be over 600mm high above the water seal.Gully traps are to have concrete under their base as required.* |
| **Inspection chambers** | *Check that inspection chambers are installed where required on common drains.* |
| **Inspection chamber/manhole haunched** | *Check channel has a smooth and continuous flow in direction of travel. Haunching sloped to ensure that chamber/manhole is self cleaning.* |
| **Connection to manhole or inspection chamber** | *Check that rubber ring joints are used each side of manhole or inspection chamber.* |
| **Connection to street connection or existing services** | *Check whether the drain connects to a new street connection or whether it connects to the existing services onsite.* |
| **External grease trap** | *Check this is sized and is of the correct type detailed on the approved plans.* |
| **Pumped discharge** | *Check sizing of pump chamber.Check high level alarm provision.Check also that it is a pump of sufficient head for the discharge pipe length.* |
| **Interceptor trap** | *Check that where an interceptor trap is proposed the size is as per approved plans.Check also that baffles are as per approved plans and that vents to individual chambers are not set up to ventilate into other chambers.*<br>*Note:*<br>*If vents combined then these must not combine unless done 150mm above ground.* |
| **Drain vent** | *Check terminal vent location is as per approved plans.Consider also branch drains over 10 meters and venting of individual WCs where the drain is less than 1:60 gradient.* |
| **Cover to drains** | *.Check cover is not less than 300mm.*<br>*If not achieved, concrete capping or other suitable protection required.Note:*<br>*500mm minimum cover for areas where vehicles may drive.* |
| **Stormwater** | |
| **Drainage layout** | *Check that drainage layout matches the approved plans.Ensure that the means of compliance hasn't changed e.g. from E1/AS1 to AS/NZS 3500.*<br>*Note:*<br>*Amendment required if this has changed. Check all downpipe locations are as per approved plans.* |
| **Easement requirements** | *Ensure drains are installed in the correct location when proposed to be installed within an easement.* |
| **Drain material** | *Check material used is as per approved plans and specifications. Note:*<br>*Check that pipe is identified with appropriate standards mark and SN rating.* |
| **Gradient** | *Check gradient and ensure it is not less than that specified on the approved plans and specifications.* |
| **Primer used on solvent cement joints** | *. Check that where jointing method is solvent cement, ensure pipe and socket have been primed before cement applied.* |
| **Drain bedding** | *Check appropriate granular bedding been provided.* |
| **Cleaning eyes, inspection and rodding points** | *Check complying cleaning eyes, inspection fittings or rodding points have been installed as per the approved plans.* |
| **Manholes** | *Check that manholes are installed either where shown on approved plans or where used to extend distance between cleaning/access points to 100 metres.* |
| **Inspection chambers** | *Check that inspection chambers are installed where required on common drains.* |

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| **Inspection chamber/manhole haunched** | *Check channel has a smooth and continuous flow in direction of travel. Haunching sloped to ensure that chamber/manhole is self cleaning.* |
| **Connection to manhole or inspection chamber** | *Check that rubber ring joints are used each side of manhole or inspection chamber.* |
| **Connection to street connection or existing services** | *Check whether the drain connects to a new street connection or whether it connects to the existing services onsite.* |
| **Pumped discharge** | *Check sizing of pump chamber.Check high level alarm provision.Check also that it is a pump of sufficient head for the discharge pipe length.* |
| **Retention or detention tanks** | *If shown on plans check if retention or detention tanks are correctly installed and sized as per approved plans.* |
| **Sump installation** | *Check that sump size and outlet are correctly sized. Check that sumps are trapped appropriately.Half traps in place* |
| **Cover to drains** | *.Check cover is not less than 300mm.*<br>*If not achieved, concrete capping or other suitable protection required.Note:*<br>*500mm minimum cover for areas where vehicles may drive.* |
| **Firefighting water supplies** | |
| **Water capacity** | *Check that the water capacity provided for fire fighting is correct to the approved plans and specifications.* |
| **Water supply interconnection** | *Check that the water supply is installed appropriately to ensure that the fire fighting water supply will remain available at all time.Check that the water supply is interconnected in a way to ensure draw is provided from each source connected.* |
| **Fire fighting connection** | *Check that the means of fire fighting connection is provided.Note:*<br>*Water tanks to be a maximum of 1 meter out of the ground or a coupling to be supplied.* |
| **Fire fighting connection protection** | *Check that where a coupling is provided that it is supported and protected correctly. E.g. That the coupling is supported to ensure it will not be broken under the weight of a fire hose being connected and protected from stock or vehicle damage.* |

| Effluent Bed/Trench Inspection Checklist | |
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| **Health & Safety** | |
| **Site Safe** | *Ensure that the site is safe to enter.Check site hazard register board*<br>*Check for dogs*<br>*Undertake visual assessment of site*<br>*Ensure site induction is undertaken if required* |
| **PPE Gear** | *Ensure all appropriate PPE is worn.* |
| **General** | |
| **Work ready** | *Is all in order for an inspection and area to be inspected completed.* |
| **Name of Certifying Drainlayer** | *<br>*Enter name of the Certifying Drainlayer responsible for the work after first ensuring their licence is current.* |
| **Consent documents sighted** | *It is mandatory to have all stamp approved building consent documentation on site.* |
| **Required Documentation:** | *Ensure that all required documentation is listed under the documentation section.* |
| **Effluent bed/trench** | |
| **Location and dimensions** | *Check location and the dimensions are as per the approved plans and specifications.If shifted location must be suitable in terms of pump output, soil profile and topography. Notes will need to explain why revised location is suitable.Note the ES rules around locations and setbacks:*<br>*20 metres from water ways*<br>*50 metres from bores*<br>*Discharge pipes require 900mm above seasonal high water table* |
| **Disposal area depth and grade** | *Check that the bed or trench is dug to the correct depth.Check that the bed or trench has been dug level.Note:*<br>*If into clay soil check that the base is not smeared smooth. Must be scarified if smearing has occurred.* |
| **Soil profile** | *Check that the soil profile is in line with the designer's description.* |
| **Surface water management** | *Check location is compliant in terms of surface water run off into the disposal area.* |
| **Ground water management** | *Check that means of ground water management have been installed as required.* |
| **RMA or District Plan requirements** | *Check conditions and advisory notes for any additional requirements set down by the RMA team.* |
| **Septic tank** | |
| **Septic tank size and type** | *.Check that tank is of the correct size and type as per the approved plans and specifications.* |
| **Specific installation requirements** | *Check for any specific installation requirements of tank. Check that rubber ring joint provided on pipe entering the septic tank. Check that where the pump chamber is separate from the septic tank that a rubber ringed joint is fitted on the pipe connecting the two. Note: RX tanks for example require hold downs installed.* |
| **Fresh air inlet** | *Check that the FAI to tank is not within 3 metres of any opening into the building or within 5 metres of any fresh air intake.* |
| **Septic tank risers and lids** | *Check that septic risers are sealed to tank and brought to correct height.* |

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| **Tank relative to foundations** | *Check that tank does not fall within the angle of repose.* |
| **Pump chamber** | *Check that pump chamber is set up correctly. Pump should be as specified and of sufficient operating head.Ensure non return valve is a ball type valve. Spring or swing checks are not acceptable. Ensure there is a mac union and isolating valve set up so that pump can be removed easily for maintenance. Ensure pump activation float is set to correct level.Ensure that a high level alarm float is provided.* |

| Effluent field commissioning Checklist | |
|---|---|
| **Health & Safety** | |
| **Site Safe** | *Ensure that the site is safe to enter.Check site hazard register board*<br>*Check for dogs*<br>*Undertake visual assessment of site*<br>*Ensure site induction is undertaken if required* |
| **PPE Gear** | *Ensure all appropriate PPE is worn.* |
| **General** | |
| **Work ready** | *Is all in order for an inspection and area to be inspected completed.* |
| **Name of Certifying Drainlayer** | *Enter name of the Certifying Drainlayer responsible for the work after first ensuring their licence is current.* |
| **Consent documents sighted** | *It is mandatory to have all stamp approved building consent documentation on site.* |
| **Required Documentation:** | *Ensure that all required documentation is listed under the documentation section.* |
| **Effluent bed/trench construction** | |
| **Fill material** | *Check that fill material is as specified in approved design.Note:*<br>*That the likes of the AES system has very specific requirements around sand type for which evidence is required to prove suitability due to it being a non standard type.* |
| **Distribution pipes** | *Check that distribution pipes are as specified in terms of material and size.Check that pipes are laid level to ensure even distribution. If too much gradient down hill section receives more effluent after pump shut off.Check hole sizes and locations are as per that specified.Note:*<br>*Holes to be in top of pipes for flow test.Joins where pipe comes off manifold to be pushed together instead of glued to allow for this. Pipes to then to be turned down and glued together following flow test.* |
| **Valves** | *Check that all specified valves are in place as per approved design.These may include isolating valves, air emitters and sequencing valves.* |
| **Additional requirements** | *Discuss with the drainlayer the work to be done following inspection such as:- Fill material covering pipes*<br>*- Novaflow pipe sleeves where required*<br>*- Filter cloth*<br>*- Shaping of the field's surface*<br>*- Protection from stock*<br>*- Raising of access or inspection points to surface* |
| **Flow test** | |
| **Pump chamber** | *Check that pump used is the one specified.Check there is sufficient volume of water to enable flow test and that float switch is set up at specifed level.* |
| **Sequencing valve** | *Where there is a sequencing valve have the drainlayer stop and start the test as required to ensure correct functioning of the valve.* |
| **Even distribution and flow** | *Standard responses available.Check that once pump activates that the field quickly disperses effluent evenly. Note:*<br>*Should be discharging through all holes within 10 seconds.Check height of water jets through holes. Note:*<br>*Should be 1 metre minimum except in the case of pressure compensating dripper lines.* |

| Septic tank | |
|---|---|
| **Septic tank size and type** | *.Check that tank is of the correct size and type as per the approved plans and specifications.* |
| **Specific installation requirements** | *Check for any specific installation requirements of tank. Check that rubber ring joint provided on pipe entering the septic tank. Check that where the pump chamber is separate from the septic tank that a rubber ringed joint is fitted on the pipe connecting the two. Note: RX tanks for example require hold downs installed.* |
| **Fresh air inlet** | *Check that the FAI to tank is not within 3 metres of any opening into the building or within 5 metres of any fresh air intake.* |
| **Septic tank risers and lids** | *Check that septic risers are sealed to tank and brought to correct height.* |
| **Tank relative to foundations** | *Check that tank does not fall within the angle of repose.* |
| **Pump chamber** | *Check that pump chamber is set up correctly. Pump should be as specified and of sufficient operating head.Ensure non return valve is a ball type valve. Spring or swing checks are not acceptable. Ensure there is a mac union and isolating valve set up so that pump can be removed easily for maintenance. Ensure pump activation float is set to correct level.Ensure that a high level alarm float is provided.* |

| Street Connection Foul Water Checklist | |
|---|---|
| **Health & Safety** | |
| **Site Safe** | *Ensure that the site is safe to enter.Check site hazard register board*<br>*Check for dogs*<br>*Undertake visual assessment of site*<br>*Ensure site induction is undertaken if required* |
| **PPE Gear** | *Ensure all appropriate PPE is worn.* |
| **General** | |
| **Work ready** | *Is all in order for an inspection and area to be inspected completed.* |
| **Name of Certifying Drainlayer** | *<br>*Enter name of the Certifying Drainlayer responsible for the work after first ensuring their licence is current.* |
| **Approved contractor** | *Is the drainlayer an ICC approved contractor able to work on ICC mains?* |
| **Consent documents and traffic management plan sighted** | *It is mandatory to have all stamp approved building consent documentation on site.*<br>*Confirm these and the safe traffic management plan is onsite.Confirm that safe traffic management practices are being adhered to.* |
| **Required Documentation:** | *Ensure that all required documentation is listed under the documentation section.For example, Drainage information sheet.* |
| **Pipe location, size and stiffness** | |
| **Location** | *Check that lateral location is as per approved plans.* |
| **Lateral pipe size and SN rating** | *Check that the pipe size is as per the approved plans and that the SN rating is as per below:Laterals: SN6 for 100mm, SN4 for 150mm and 225mm.Mains: SN6 for 100mm, SN8 for 150mm and 225mm.* |
| **ICC main size and material** | *Write in notes the pipe size and material if different to that shown on approved plans. This is for our information only.* |
| **Saddle connection** | |
| **Hole in main** | *Saddles may only be used where the ICC main is larger than 150mm due to the size of the hole required for the lateral.Saddle to be fitted under the supervision of the inspector.Check that the hole made is neat and not excessively oversized. Where it is too large a junction will need to be cut in.Check that where the main is reinforced concrete that the reinforcing has been cut away and is not pushed inwards.* |
| **Fixing of saddle** | *Ensure that two pot epoxy mortar has been freshly made and is placed on underside of saddle. Observe the fastening of stainless steel band-it tape around the main and saddle flat. Note this is required on pipe sizes 300mm or less. Over this size other means may be used to fasten the saddle as long as these are suitable and meet durability requirements.Once saddle secured drainlayer must 'tool' off the excess epoxy mortar from the inside of the ICC main and smear it smooth around joint.* |
| **Concrete around saddle** | *Check that drainlayer has rapid set concrete onsite of sufficient strength to place around new connection.* |
| **Junction connection** | |
| **Method of fixing to main** | *Note what fitting type was used to make connection e.g. slip sockets, plumb-quicks or PVC-Earthenware connectors. Ensure method used doesn't lead to excessive gap between pipe stubs out of junction and main.* |
| **Concrete around junction** | *Check that drainlayer has rapid set concrete onsite of sufficient strength to place around new connection.* |

| Manhole connection | |
|---|---|
| **Rubber ring joint** | *Check that a rubber ring joint has been used where pipe enters manhole.* |
| **Dropper** | *Where the lateral drops down manhole wall ensure this is fixed to side of manhole appropriately and with suitably durable fasteners. Ensure pipe terminates into channel in direction of flow and in a manner which does not obstruct manhole maintenance.* |
| **Haunching** | *Where new cut through haunching made check channel has a smooth and continuous flow in direction of travel. Check haunching sloped to ensure that chamber/manhole is self cleaning.* |

| Street Connection Storm Water Checklist | |
|---|---|
| **Health & Safety** | |
| **Site Safe** | *Ensure that the site is safe to enter.Check site hazard register board*<br>*Check for dogs*<br>*Undertake visual assessment of site*<br>*Ensure site induction is undertaken if required* |
| **PPE Gear** | *Ensure all appropriate PPE is worn.* |
| **General** | |
| **Work ready** | *Is all in order for an inspection and area to be inspected completed.* |
| **Name of Certifying Drainlayer** | *Enter name of the Certifying Drainlayer responsible for the work after first ensuring their licence is current.* |
| **Approved contractor** | *Is the drainlayer an ICC approved contractor able to work on ICC mains?* |
| **Consent documents and traffic management plan sighted** | *It is mandatory to have all stamp approved building consent documentation on site.*<br>*Confirm these and the safe traffic management plan is onsite.Confirm that safe traffic management practices are being adhered to.* |
| **Required Documentation:** | *Ensure that all required documentation is listed under the documentation section.For example, Drainage information sheet.* |
| **Pipe location, size and stiffness** | |
| **Location** | *Check that lateral location is as per approved plans.* |
| **Lateral pipe size and SN rating** | *Check that the pipe size is as per the approved plans and that the SN rating is as per below:Laterals: SN6 for 100mm, SN4 for 150mm and 225mm.Mains: SN6 for 100mm, SN8 for 150mm and 225mm.* |
| **ICC main size and material** | *Write in notes the pipe size and material if different to that shown on approved plans. This is for our information only.* |
| **Saddle connection** | |
| **Hole in main** | *Saddles may only be used where the ICC main is larger than 150mm due to the size of the hole required for the lateral.Saddle to be fitted under the supervision of the inspector.Check that the hole made is neat and not excessively oversized. Where it is too large a junction will need to be cut in.Check that where the main is reinforced concrete that the reinforcing has been cut away and is not pushed inwards.* |
| **Fixing of saddle** | *Ensure that two pot epoxy mortar has been freshly made and is placed on underside of saddle. Observe the fastening of stainless steel band-it tape around the main and saddle flat. Note this is required on pipe sizes 300mm or less. Over this size other means may be used to fasten the saddle as long as these are suitable and meet durability requirements.Once saddle secured drainlayer must 'tool' off the excess epoxy mortar from the inside of the ICC main and smear it smooth around joint.* |
| **Concrete around saddle** | *Check that drainlayer has rapid set concrete onsite of sufficient strength to place around new connection.* |
| **Junction connection** | |
| **Method of fixing to main** | *Note what fitting type was used to make connection e.g. slip sockets, plumb-quicks or PVC-Earthenware connectors. Ensure method used doesn't lead to excessive gap between pipe stubs out of junction and main.* |
| **Concrete around junction** | *Check that drainlayer has rapid set concrete onsite of sufficient strength to place around new connection.* |
| **Manhole connection** | |
| **Rubber ring joint** | *Check that a rubber ring joint has been used where pipe enters manhole.* |

| | |
|---|---|
| **Dropper** | *Where the lateral drops down manhole wall ensure this is fixed to side of manhole appropriately and with suitably durable fasteners. Ensure pipe terminates into channel in direction of flow and in a manner which does not obstruct manhole maintenance.* |
| **Haunching** | *Where new cut through haunching made check channel has a smooth and continuous flow in direction of travel. Check haunching sloped to ensure that chamber/manhole is self cleaning.* |

| Heater Free Standing Checklist | |
|---|---|
| **Health & Safety** | |
| **Site Safe** | *Ensure that the site is safe to enter.Check site hazard register board*<br>*Check for dogs*<br>*Undertake visual assessment of site*<br>*Ensure site induction is undertaken if required* |
| **PPE Gear** | *Ensure all appropriate PPE is worn.* |
| **General** | |
| **Work ready** | *Is all in order for an inspection? Area to be inspected completed.* |
| **Installers name and company** | *Enter the installers name and the company name in the notes area* |
| **Certifying Plumber details** | *Enter the plumbers name in the notes area.* |
| **Consent documents sighted** | *It is mandatory to have all stamp approved building consent documentation on site.* |
| **Required Documentation:** | *Ensure that all required documentation is listed under the documentation section.* |
| **Solid Fuel Heater** | |
| **Type of unit** | *Check that the unit make and model is as per the approved plans.Check that the unit is new, if not ensure that a second hand appliance report is part of the approved plans.* |
| **Hearth size** | *Check that hearth size is correct to the approved plans and specifications.* |
| **Insulated hearth** | *Check the manufacturers literature if an insulated hearth is required. If required ensure that it has been installed.* |
| **Seismic restraints** | *Check seismic restraints have been installed.*<br>*Ensure that seismic restraints are of a suitable type and size for the installation.* |
| **Front, side, corners and back clearances** | *Check that all clearances to combustible have been maintained as per the approved plans and specifications.* |
| **Clearances from opening coverings** | *Check that any opening coverings are restrained to ensure they can not encroach within the non combustible area.* |
| **Heat shielding** | *Check that heat shielding has been installed as per approved plans and specifications. Ensure clearances to combustible have been achieved.* |
| **Clearance from top of heater to ceiling** | *Check that the clearance from the top of heater to ceiling linings is as per the approved plans and specifications.Generally 1.5 metres from the top of the appliance to the ceiling linings is required, however check the manufacturers literature.* |
| **Flue guard** | *Check that the correct heat guard has been installed as required by the manufacturers tested literature.* |
| **Ceiling plate** | *Check that the ceiling plate is correct to the flue system on the approved plans and specifications.* |
| **Flue type** | *Check that the flue system installed is as per the approved plans and specifications.* |
| **Flue fixed to spigot on appliance** | *Check that flue is fixed to the spigot on the appliance.Note:*<br>*Fixings are to be S/S not aluminium* |
| **Flue fixing at joints** | *Check that flue is fixed at the joints of the flue system.Note:*<br>*3 fixings required per joint.*<br>*Fixings are to be S/S not aluminium.* |

| | |
|---|---|
| **Flue clearences in the ceiling space** | *Check that all clearances required by the manufacturers literature have been achieved within the ceiling space.* |
| **Flue support's ceiling space** | *Check that flue/liner supports have been installed within the ceiling space.* |
| **Flue flashing** | *Check that the flue penetration has been flashed correctly as per the approved plans and specifications.* |
| **Flue height** | *Check that the flue height is as per the approved plans and specifications. Note:*<br>*If within 3 metres of the roof it must be 600mm higher than the ridge.*<br>*For all other locations flue must be a minimum of 1 metre above the roof and terminate at a height that is over 3 metres horizontally to the roof.* |
| **External flue bracing** | *Check that the flue has been fitted with external braces where required.Generally if over one full length of liner/flue is above the penetration external supports are required.* |
| **Vented cowl fitted** | *Check that the vented cowl is fitted as required by the approved plans and specifications.* |
| **Boxed chimney construction** | *Check that boxed chimney has been set up as per the approved plans and specifications.Check:*<br>*Appropriate flue system.*<br>*Enclosure ventilation.*<br>*Clearences.* |
| **Wetback pipe material/size** | *Check that the wetback flow and return pipes are of copper material.Check for a minimum 25mm diameter pipe.* |
| **Wetback pipework fall** | *Check that the wetback is set up with the appropriate falls as required by the approved plans and specifications.Overall minimum fall required of not less than 1 in 7.*<br>*Minimum fall required of not less than 1 in 20 at any point.* |
| **HWC open vent** | *Check that the HWC the wetback is connected to has a open vent fitted.* |
| **Tempering valve** | *Check that a tempering valve is in place.Check the tempered water is a maximum 55 degrees.* |
| **Smoke alarms** | *Check that smoke alarms are of the correct type.Check that smoke alarms are located within 3 metres of all sleeping spaces and on the escape routes.*<br>*Ensure to test the smoke alarms are working.* |

| Heater Insert appliance first inspection Checklist | |
|---|---|
| **Health & Safety** | |
| **Site Safe** | *Ensure that the site is safe to enter.Check site hazard register board*<br>*Check for dogs*<br>*Undertake visual assessment of site*<br>*Ensure site induction is undertaken if required* |
| **PPE Gear** | *Ensure all appropriate PPE is worn.* |
| **General** | |
| **Work ready** | *Is all in order for an inspection? Area to be inspected completed.* |
| **Installers name and company** | *Enter the installers name and the company name in the notes area* |
| **Consent documents sighted** | *It is mandatory to have all stamp approved building consent documentation on site.* |
| **Required Documentation:** | *Ensure that all required documentation is listed under the documentation section.* |
| **First Inspection** | |
| **Hearth size** | *Check that hearth size is correct to the approved plans and specifications.* |
| **Chimney swept** | *Check that the chimney has been swept and clear of all debris.* |
| **Chimney structure sound** | *Check that the chimney sound both internal and external is sound. Ensure no cracks are visible.* |
| **Register sealed** | *Check that the register has been sealed.* |
| **Low level vent** | *Check the manufacturers literature for the requirement of a low level vent.Check that the vent is formed by a non combustible product.* |
| **Heater testing requirements** | *Check if the appliance is test to appendix E of AS/NZS 2918:2001If appliance is not tested to Appendix E of AS/NZS 2918:2991 then timber must be clear 50mm.* |
| **Non-combustible linings** | *Check manufacturers literature for non-combustible lining zone.Ensure appropriate linings are in place.* |
| **Smoke alarms** | *Discuss the requirements with the site contact for smoke alarm locations.* |

| Heater Insert appliance second inspection Checklist | |
|---|---|
| **Health & Safety** | |
| **Site Safe** | *Ensure that the site is safe to enter.Check site hazard register board*<br>*Check for dogs*<br>*Undertake visual assessment of site*<br>*Ensure site induction is undertaken if required* |
| **PPE Gear** | *Ensure all appropriate PPE is worn.* |
| **General** | |
| **Work ready** | *Is all in order for an inspection? Area to be inspected completed.* |
| **Installers name and company** | *Enter the installers name and the company name in the notes area* |
| **Consent documents sighted** | *It is mandatory to have all stamp approved building consent documentation on site.* |
| **Required Documentation:** | *Ensure that all required documentation is listed under the documentation section.* |
| **Second inspection** | |
| **Type of unit** | *Check that the unit make and model is as per the approved plans.Check that the unit is new, if not ensure that a second hand appliance report is part of the approved plans.* |
| **Hearth size** | *Check that hearth size is correct to the approved plans and specifications.* |
| **Seismic restraints** | *Check seismic restraints have been installed.Ensure that seismic restraints are of a suitable type and size for the installation.* |
| **Flue fixed to spigot on appliance** | *Check that flue is fixed to the spigot on the appliance.Note: Fixings are to be S/S not aluminium* |
| **Mantel clearance** | *Check that the mantel clearances have been achieved.* |
| **Flue/Cap flashing** | *Check that the flue penetration has been flashed correctly as per the approved plans and specifications.* |
| **Vented cowl fitted** | *Check that the vented cowl is fitted as required by the approved plans and specifications.* |
| **Smoke alarms** | *Check that smoke alarms are of the correct type.Check that smoke alarms are located within 3 metres of all sleeping spaces and on the escape routes.*<br>*Ensure to test the smoke alarms are working.* |

| Heater Inbuilt appliance first inspection Checklist | |
|---|---|
| **Health & Safety** | |
| **Site Safe** | *Ensure that the site is safe to enter.Check site hazard register board*<br>*Check for dogs*<br>*Undertake visual assessment of site*<br>*Ensure site induction is undertaken if required* |
| **PPE Gear** | *Ensure all appropriate PPE is worn.* |
| **General** | |
| **Work ready** | *Is all in order for an inspection? Area to be inspected completed.* |
| **Installers name and company** | *Enter the installers name and the company name in the notes area* |
| **Consent documents sighted** | *It is mandatory to have all stamp approved building consent documentation on site.* |
| **Required Documentation:** | *Ensure that all required documentation is listed under the documentation section.* |
| **First Inspection** | |
| **Hearth size** | *Check that hearth size is correct to the approved plans and specifications.* |
| **Flue type** | *Check that the flue system installed is as per the approved plans and specifications.* |
| **Flue fixing at joints** | *Check that flue is fixed at the joints of the flue system.*<br>*Note:*<br>*3 fixings required per joint.*<br>*Fixings are to be S/S not aluminium.* |
| **Flue clearences in the chimney space** | *Check that all clearances required by the manufacturers literature have been achieved within the chimney space.* |
| **Flue support's chimney space** | *Check that flue/liner supports have been installed within the chimney space.* |
| **Low level vent** | *Check the manufacturers literature for the requirement of a low level vent.Check that the vent is formed by a non combustible product.* |
| **Heater testing requirements** | *Check if the appliance is test to appendix E of AS/NZS 2918:2001If appliance is not tested to Appendix E of AS/NZS 2918:2991 then timber must be clear 50mm)* |
| **Zero clearence box** | *Check that the zero clearance box has been installed as per the manufacturers literature.* |
| **Non-combustible linings** | *Check manufacturers literature for non-combustible lining zone.Ensure appropriate linings are in place.* |
| **Smoke alarms** | *Discuss the requirements with the site contact for smoke alarm locations.* |

| Heater Inbuilt appliance second inspection Checklist | |
|---|---|
| **Health & Safety** | |
| Site Safe | *Ensure that the site is safe to enter.Check site hazard register board*<br>*Check for dogs*<br>*Undertake visual assessment of site*<br>*Ensure site induction is undertaken if required* |
| PPE Gear | *Ensure all appropriate PPE is worn.* |
| **General** | |
| Work ready | *Is all in order for an inspection? Area to be inspected completed.* |
| Installers name and company | *Enter the installers name and the company name in the notes area* |
| Consent documents sighted | *It is mandatory to have all stamp approved building consent documentation on site.* |
| Required Documentation: | *Ensure that all required documentation is listed under the documentation section.* |
| **Second inspection** | |
| Type of unit | *Check that the unit make and model is as per the approved plans.Check that the unit is new, if not ensure that a second hand appliance report is part of the approved plans.* |
| Hearth size | *Check that hearth size is correct to the approved plans and specifications.* |
| Seismic restraints | *Check seismic restraints have been installed.*<br>*Ensure that seismic restraints are of a suitable type and size for the installation.* |
| Flue fixed to spigot on appliance | *Check that flue is fixed to the spigot on the appliance.Note:*<br>*Fixings are to be S/S not aluminium* |
| Mantel clearance | *Check that the mantel clearances have been achieved.* |
| Boxed chimney construction | *Check that boxed chimney has been set up as per the approved plans and specifications.Check:*<br>*Enclosure ventilation.* |
| Flue/Cap flashing | *Check that the flue penetration has been flashed correctly as per the approved plans and specifications.* |
| Vented cowl fitted | *Check that the vented cowl is fitted as required by the approved plans and specifications.* |
| Smoke alarms | *Check that smoke alarms are of the correct type.Check that smoke alarms are located within 3 metres of all sleeping spaces and on the escape routes.Ensure to test the smoke alarms are working.* |

| Liquid Fuel Appliance Checklist | |
|---|---|
| **Health & Safety** | |
| **Site Safe** | *Ensure that the site is safe to enter.Check site hazard register board*<br>*Check for dogs*<br>*Undertake visual assessment of site*<br>*Ensure site induction is undertaken if required* |
| **PPE Gear** | *Ensure all appropriate PPE is worn.* |
| **General** | |
| **Work ready** | *Is all in order for an inspection? Area to be inspected completed.* |
| **Installers name and company** | *Enter the installers name and the company name in the notes area* |
| **Certifying Plumber details** | *Enter the plumbers name in the notes area.* |
| **Consent documents sighted** | *It is mandatory to have all stamp approved building consent documentation on site.* |
| **Required Documentation:** | *Ensure that all required documentation is listed under the documentation section.* |
| **Liquid Fuel appliance** | |
| **Type of unit** | *Check that the unit make and model is as per the approved plans and specifications.Check that the unit is new, if not ensure that a second hand appliance report is part of the approved plans.* |
| **Hearth requirements** | *Check if a hearth is required.*<br>*If so,*<br>*Check that hearth size is correct to the approved plans and specifications.* |
| **Seismic restraints** | *Check seismic restraints have been installed.*<br>*Ensure that seismic restraints are of a suitable type and size for the installation.* |
| **Front, side, corners and back clearances** | *Check that all clearances to combustible have been maintained as per the approved plans and specifications.* |
| **Ventilated space** | *Check that the appliance is installed within a ventilated space.* |
| **Smoke alarms** | *Check that smoke alarms are of the correct type.Check that smoke alarms are located within 3 metres of all sleeping spaces and on the escape routes.Ensure to test the smoke alarms are working.* |
| **Flue system** | |
| **Flue type** | *Check that the flue system installed is as per the approved plans and specifications.* |
| **Flue supports at appliance** | *Check manufacturers literature and ensure requirements for flue base supports are achieved.* |
| **Flue guard** | *Check that the correct heat guard has been installed as required by the manufacturers tested literature.* |
| **Ceiling plate** | *Check that the ceiling plate is correct to the flue system on the approved plans and specifications.* |
| **Flue clearences in the ceiling space** | *Check that all clearances required by the manufacturers literature have been achieved within the ceiling space.* |
| **Flue support's ceiling space** | *Check that flue/liner supports have been installed within the ceiling space.* |
| **Flue flashing** | *Check that the flue penetration has been flashed correctly as per the approved plans and specifications.* |

| | |
|---|---|
| **Flue height** | *Check that the flue height is as per the approved plans and specifications. Note:*<br>*If within 3 metres of the roof it must be 600mm higher than the ridge.*<br>*For all other locations flue must be a minimum of 1 metre above the roof and terminate at a height that is over 3 metres horizontally to the roof.* |
| **External flue bracing** | *Check that the flue has been fitted with external braces where required.Generally if over one full length of liner/flue is above the penetration external supports are required.* |
| **Vented cowl fitted** | *Check that the vented cowl is fitted as required by the approved plans and specifications.* |
| **Fire valve** | |
| **Fire valve type** | *Check that the fire valve type is correct to the approved plans and specifications.* |
| **Fire valve location** | *Check that the fire valve is located as required by the approved plans, specifications and manufacturers literature.Fire valve to be located outside.Fire valve to be as close to the tank as possible.BEL Type 2 fire valve requires a minimum 2.133m away from the boiler.* |
| **Fusible link** | *Check that the rope is connected to a fusible link or similar above the appliance.* |
| **Fire valve cord sleeve** | ** Standard response available.Check that the sleeves provided have flared ends to prevent cut off device's nylon cord from fraying.* |
| **Tank** | |
| **Tank as per approved plans** | *Check tank installed is as per the approved plans.* |
| **Tank location** | *Check tank is located as per the approved plans.* |
| **Tank relation to boundary** | *Check tank is located a minimum 380mm from the boundaries.Note:*<br>*If closer than 380mm, then a concrete wall minimum 90mm thick 350mm above the tank with return walls must be installed to conceal the tank.* |
| **Tank relation to window of a habitable space** | *Check tank is located 2.5 meters from any window of any habitable room or kitchen in any building or adjoining property.* |
| **Tank relation to the wall** | *Check tank is located over 100mm away from any combustible material or 20mm away from non combustible material.* |
| **Tank support** | *Check that a concrete base is provided beneath the tank.* |
| **Seismic restraints** | *Check seismic restraints have been installed to the tank legs.Ensure that seismic restraints are of a suitable type, size and durability for the installation.* |
| **Tank bunding** | *Check if the tank required bunding as per the approved plans and specifications .Note:*<br>*Bunding to be capable of storing 110% of tank contents.* |
| **Tank drain tap** | *Check the manufacturers literature in regard to weather the tank requires a drain tap.Note:*<br>*Recommend that the tank be off level and fall towards the drain outlet.* |
| **Tank vent** | *Check that tank filler or vent is no less than 1 meter to any opening into a building or any window, including a fixed glazed window.* |
| **Plumbing setup** | |
| **Pipe work** | *Check that the pipe work from the tank to the boiler is of a metallic material.* |
| **Frost protection** | *Check that any water supply pipe work is adequately frost protected where outside the thermal envelope.Check frost protection material is suitable for outside installation.* |
| **Back flow device** | *Check that the back flow device is installed as per the approved plans and specifications.* |

| Final - Residential Checklist | |
|---|---|
| **Health & Safety** | |
| **Site Safe** | *Check site hazard register board*<br>*Check for dogs*<br>*Undertake visual assessment of site*<br>*Ensure site induction is undertaken if required* |
| **PPE Gear** | *Ensure all appropriate PPE is worn.* |
| **General** | |
| **Work ready** | *Is all in order for an inspection?*<br>*Area to be inspected completed.* |
| **Site contacts name** | *Enter the name of the site contact in the notes area.* |
| **Consent documents sighted** | *It is mandatory to have all stamp approved building consent documentation on site.* |
| **Roading/Footpath condition** | *Check that crossing and footpath is in good condition. If not refer to the Roading department.* |
| **Required Documentation:** | *Ensure that all required documentation is listed under the documentation section.* |
| **Siting** | |
| **Siting of building** | *Has siting been previously checked?*<br>*If not undertake siting inspection.* |
| **Ground heights** | |
| **Ground contours away** | *Check that ground contours away from the building.* |
| **Secondary flow path** | *Ensure that the secondary flow path has not been compromised.* |
| **FFL vs FGL** | *Check that proposed FFL to FGL meets the minimum requirements of the approved plans and specifications.*<br>*E2/AS1 requires, 225mm above unpaved ground, 150mm above paved ground.*<br>*Check that FFL complies with E1.*<br>*E1/AS1 requires, 150mm above crown of the road or 150mm above lowest boundary point.* |
| **Subfloor** | |
| **Subfloor ground cover** | *.Check for DPM if sub floor ventilation is under 3,500mm2 or over 7.5 metres to nearest ventilation provision.*<br>*Ensure 150mm lap and 50mm pressure tape.* |
| **Subfloor ventilation** | *Ensure vents are sized as per the approved plans and specifications.*<br>*Note:*<br>*Vents 750mm maximum from corners and 1.8m maximum centres or 20mm spacings between baseboards.* |
| **Subfloor crawl space** | *. Ensure that there is an unobstructed minimum 450mm crawl space beneath floor joists.* |
| **Subfloor access** | *Check that sub floor access has been provided.* |
| **Sub floor insulation** | *Check insulation is as per approved plans and specifications.Specify R value in notes.* |
| **Subfloor Bracing** | *Check that all subfloor bracing has been completed as per the approved plans and specifications.* |
| **Subfloor FFR** | *Check that all fire ratings are installed as per the approved plans. Specify how this is done in notes.* |

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| **Subfloor durability** | *Check that Subfloor has been constructed with durable materials and connections.* |
| **Building Exterior** | |
| **Elevations compliance** | *Check elevations of building are as per the approved plans.* |
| **Cladding clearance to ground** | *Check the cladding clearance to ground is appropriate as per the approved plans and specifications.* |
| **Strip drains** | *Check that strip drains have been installed as per the approved plans and specifications.* |
| **Site stormwater containment** | *Check that site storm water has been contained as per approved plans and specifications. Note:*<br>*No more than 40m2 catchment from impermeable area can discharge over the road boundary.Sump required if this is exceeded.* |
| **Driveway/Sealed areas** | *Check that the sealed areas are as per the approved plans and specifications.Note:*<br>*If area sealed has been increased refer to planning department.Note:*<br>*D1 requires access to be considered from the street.* |
| **Wall cladding systems** | *Check that wall cladding system type installed are correct as specified on the approved plans and specifications.* |
| **Wall cladding opening flashings** | *Check that all wall cladding openings have been flashed appropriately as per the approved plans, specifications and manufacturers literature.* |
| **Opening Scribers** | *Check that scribers have been installed and sealed appropriately where required by the approved plans, specification and manufacturers literature.* |
| **Masonry veneer sills** | *Check that masonry sills have been installed with a minimum 15 degree slope.* |
| **Masonry veneer overhang** | *Check that masonry veneer has been installed with a maximum overhang of 20mm.*<br>*If over this require a SED solution.* |
| **Masonry veneer top vented** | *Check that vents have been installed to top course of masonry veneer.Note:*<br>*75mm height and at 800mm centres.* |
| **Vertical and horizontal control joints** | *Check control joints have been installed as per the approved plans, specifications and manufacturers literature.* |
| **Penetrations to cladding system are sealed around** | *Check that all penetrations to cladding systems are as per the approved plans and specifications.* |
| **Vermin proofing of cladding** | *Check cladding has been vermin proofed appropriately to the approved plans and specification.Check:*<br>*Brick veneer weep holes. Gaps over 13mm require vermin proofing.*<br>*Garage door reveals with brick veneer.*<br>*Floor level of cladding junctions to floor mounted openings.* |
| **Painting and general finishings** | *Check that all cladding systems have been painted to ensure that durability of the product remains.Check painting to:*<br>*Wall cladding.*<br>*Wall flashing's.*<br>*Opening scribbers.*<br>*Soffits.*<br>*Fascia.*<br>*Exposed untreated or less than H3.1 members.* |
| **Paint colour** | *Check that the painted claddings colour is approved by the manufacturers literature.Note:*<br>*Some cladding systems do not allow for dark colours.* |

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| **Spouting/fascia clearances** | *Check that spouting and fascia clearances are maintained as per the approved plans, specifications and manufacturers literature.* |
| **Paint behind spouting** | *Check that paint or sealer has been applied to fascia / cladding behind the spouting.* |
| **Roof cladding system** | *Check that roof and its flashings are completed as per the approved plans and specifications.* |
| **Rainwater head overflow** | *Check that rainwater heads are provided as per plan and that sufficient sized overflow is installed.* |
| **Internal gutter overflows** | *Check that any internal gutters have overflow provision in place as per the approved plans.* |
| **Internal gutters / hidden valleys** | *Check that all internal gutter / hidden valleys have been installed as per the approved plans and specifications.* |
| **Split valleys** | *Check that split valleys have been installed as per the approved plans and specifications.* |
| **Roof flashing expansion joints** | *Check that roof flashing's have expansion joints installed as per the approved plans and specifications.*<br>*Note:*<br>*12 m for light-coloured steel and stainless steel.*<br>*8 m for dark-coloured steel, copper and aluminium.* |
| **Penetrations to roof cladding system** | *Check that all penetrations to roof cladding system are as per the approved plans and specifications.* |
| **Vent cowls** | *Check that all pipes/flues are fitted with weather cowls. Check:*<br>*Heating appliance flues.*<br>*Terminal Vents.* |
| **Chimney soaker cap** | *Check that the chimney soaker cap has been installed as per the approved plans and specifications.* |
| **Gas califont/bottle location** | *Check locations comply as per the approved plans and specifications.Check:*<br>*Relation to openings.*<br>*Relation to power supply.*<br>*Relation to subfloor vents.*<br>*Bottle restraints.* |
| **Heat pump restraints** | *Check that heat pump exterior unit is seismically restrained to supporting base.* |
| **Plumbing and drainage interior** | |
| **Water pipes** | *Check for water pipes where freezing is likely.*<br>*Feeds to water tanks, pumps located in garages etc.* |
| **Main isolating valve for water supply** | *Check that there is a means of isolating the water supply. Toby at street is sufficient although in a rural setting this needs to be on supply from tank.* |
| **Backflow prevention to shower** | *Where there is a flexible shower hose over a bath or another fixture (e.g. sink or tub with pull out spout) which could be cross-connected ensure adequate means of backflow prevention installed.* |
| **Plumbing fixtures and appliances** | *Check that all fixtures are installed correctly and specific appliance requirements met such as high level bracket to dishwasher waste.* |
| **Safe water temperatures** | *Check water temperatures are set to correct temperatures.Note G12/AS1 stipulates 55 degrees Celsius to personal hygiene fixtures except in old peoples homes, early childhood centres, schools, hospitals and institutions for people with disabilities hot water this shall be maximum of 45 degrees Celsius.* |
| **Backflow prevention** | *Check that all fixtures are protected via an air gap and that where this is not achieved appropriate means of backflow prevention is provided.* |

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| **Soil Stack** | *Where soil stack is located internally check that access for maintenance is provided. Check venting of stack and discharge pipes is as per approved plans. Where an AAV is used on a hidden shower waste ensure this is ventilated and accessible.* |
| **Equipotential bonding** | *Where pipework is metallic and there are metallic fixtures such as shower trays or sink inserts/benches bonding and earthing of the pipework and fixtures is required. Refer to G12/AS1 section 9.* |
| **Hot water system** | |
| **Hot water cylinder** | *Check that type and size is as per approved plans.* |
| **Hot water cylinder access** | *Ensure HWC is accessible for maintenance and replacement.* |
| **Return or circulating system** | *Where the system is a circulating system ensure that the return line comes back at not less than 60 degrees Celsius to prevent the growth of legionella. To check this a temperature gauge is required on the return line.* |
| **Tempering valve** | *Check that this is installed and is set to the right temperature by testing at a personal hygiene fixture.Check also that there is at least one metre of copper pipework between the HWC outlet and the valve unless valve is of the type that is approved to be closer. Check that where fitted on a low pressure open vented system that the tempering valve is not fitted in a way that blocks this.* |
| **Seismic restraints** | *Check that seismic restraints are fitted as required to HWC as per below:2 x straps for water heaters up to 200l*<br>*3 x straps for greater than 200l*<br>*Straps fitted 100mm max from top and bottom of heater.*<br>*25 x 1mm galv straps fixed to framing with 8mm coach screw and washer* |
| **Safe tray** | *Where a safe tray is required check that the drain size is not less than 40mm and discharges to a suitable and visible location.Check that outlet is vermin proofed.* |
| **Tundish** | *Check for 25mm min air break and that*<br>*the relief drain is at least one size larger than HWC outlet.* |
| **PR, TPR and CW expansion valves** | *Check that these are sized and located correctly. For TPR valves the probe must be located i the top 20% of the HWC but not less than 150mm down from the top. Check that the pressure rating of these complies with that required for the HWC rating. Test TPR and CWEV to ensure these don't overflow inside.* |
| **Relief pipe** | *Check that his is made of suitable material for the discharge (Generally copper unless alternative material approved) and has continuous fall.Visible position and does not present a hazard or damage other building elements.* |
| **Open vent** | *Where the HWC is a low pressure open vented type check this is adequately insulated above the standing water level and if necessary is braced.* |
| **Solar HWC** | *Check that the system is located and fixed to roof as per approved design. Check orientation as part of this. Check that a means of getting the water to 60 degrees Celsius is provided for.Solar relief drains need to be copper and discharge where it will not damage other elements such as PVC spouting and down pipes.* |
| **Wetback pipe material/size** | *Check that the wetback flow and return pipes are of copper material.Check for a minimum 25mm diameter pipe.* |
| **Wetback pipework fall** | *Check that the wetback is set up with the appropriate falls as required by the approved plans and specifications.Overall minimum fall required of not less than 1 in 7.*<br>*Minimum fall required of not less than 1 in 20 at any point.* |
| **Wetback open vent** | *Where a wetback is connected check that the HWC has an open vent fitted.* |
| **Gas califont** | *Check that gas califont pipework is insulated for frost protection and that insulation is UV protected.* |

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| **Gas bottles** | *Check that bottles are restrained and supported on a concrete pad or similar. Check also that they are suitable distances from any openings into the building.* |
| **Building Interior** | |
| **Layout compliance** | *Check layout of building is as per the approved plans.* |
| **Floor impervious finishes** | *Check that floor coverings are of impervious type as required by the approved plans and specifications.* |
| **Wall impervious finishes** | *Check that wall coverings are of impervious type as required by the approved plans and specifications.* |
| **Visual awareness** | *Check that sufficient visual awareness is provided to habitable spaces.Note: At least 50% of the glazed area provided for natural light in habitable spaces shall be clear glazed. The clear glazing shall be located in the zone between the levels 900 mm and 2000 mm from floor level.* |
| **Window restrictors** | *Check that window restrictors are installed in the appropriate locations.E.g. When the fall from the floor to the ground outside is over 1 metre and the opening sill height is 760mm or less above the floor level.* |
| **Window/Door joinery labels** | *. Check for manufacturers labels.Check wind zone constructed for is correct.* |
| **Safety glazing** | *.Check that safety glazed elements have been installed as detailed in the approved plans.Note: Consider safety glazing within 2000mm of the floor of wet areas, full windows with no transom bars and glazing on stairs.* |
| **Ventilation to habitable rooms** | *Check that ventilation has been provided to all habitable spaces as per the approved plans and specifications.Note: Openings are required to provide a minimum of 5% of the floor area.* |
| **Ventilation to bathrooms, ensuite, laundry** | *Check that ventilation has been provided as per the approved plans and specifications. Note: If consent was applied for after 01/11/2019 and designed to NZBC G4/AS1 then the wet areas are to be fitted with a mechanical extraction unit ducted to the building exterior.* |
| **Extract fan vented to exterior** | *Check that mechanical ventilation units have been ducted to the exterior.* |
| **Ceiling access** | *Check access to the ceiling space has been provided.Ensure this has not been installed within a ceiling diaphragm unless it is located within the centre third.Check that access to all ceiling spaces is provided.* |
| **Ceiling access size** | *Check that the ceiling access is of an appropriate size as per the approved plans and specifications.* |
| **Ceiling insulation** | *Check that ceiling insulation is in place and neatly fitted.* |
| **Ceiling insulation clear of combustibles** | *Check that ceiling insulation is clear of all combustible surfaces.* |
| **Downlights** | *Check that insulation is set up correctly where down lights are installed.Check down light manufacturers literature for insulation clearance requirements.* |
| **Emergency warning system/Smoke Alarms** | *Check that emergency warning devices have been fitted as per the approved plans and specifications.Ensure that these are located within 3 meters of any sleeping space door and on the escape routes.Check that the emergency warning device is working.* |
| **Fixtures** | *Check fixtures are provided and located as per the approved plans and specifications.* |

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| **WC/bath/basin/ shower/tub/Kitchen bench seals** | *Check that sealant has been installed at junctions between fixtures and wall linings.Check:*<br>*W/C is sealed to floor linings.*<br>*Bath to wall.*<br>*Vanity to wall.*<br>*Top of shower liner.*<br>*Sides of shower liner for leaks.*<br>*Laundry tub to wall.*<br>*Kitchen bench to the wall.*<br>*Base of all melamine fixture carcass to the floor to avoid swelling of carcass due to moisture.* |
| **Shower containment** | *Check that shower has been installed as per the approved plans and specifications.Check:*<br>*Shower containment - via curtain or glass.*<br>*Shower glazing units for safety glass*<br>*Shower leaks.* |
| **Mirror glazing** | *Check that the mirror glazing is compliant. Either to be,*<br>*safety glazed unit or*<br>*glued to a solid backing.* |
| **Heat pump** | *Check heat pump is provided and located as per the approved plans and specifications.* |
| **Heating appliance** | *Check that heating appliance has been inspected.* |
| **Stove/hob clearance** | *Check that a minimum of 750mm min between gas hob and overhead exhaust fan.Any other downward facing surface within 600mm of hob must be protected in accordance with AS/NZS5601 6.10.2, in no case shall this clearance to any surface be less than 450mm.Side clearance-less than 200mm to any vertical combustible surface shall be protected to a height of not less than 150mm above the hob for the full dimension.Not required if a splash back is fitted.* |
| **Electrical fit-out** | *Ensure that electrical fit-out has been completed.* |
| **Dishwasher** | *Check dishwasher is located as per the approved plans and specifications.*<br>*Check that the dishwasher outlet is set up correctly to the manufacturers literature.* |
| **Balustrades** | |
| **Tenancy STC/IIC** | |
| **Fire/smoke separation** | |
| **Plumbing and drainage exterior** | |
| **Boundary trap** | *Check that FAI fitted to boundary trap and that this is not less than 150mm above ground to the vents.* |
| **Sumps** | *Check that these are finished and located correctly. Check inside them to ensure the outlet is sealed around and not leaking.* |
| **Strip drains** | *Check that strip drains have been installed as per the approved plans and specifications.* |
| **Manholes complete** | *Where manholes are used check to see that these are haunched correctly and that they are appropriately sealed.* |
| **Inspection chambers (DIC)** | *Check that inspection chambers are finished correctly as per details on approved plans and are appropriately sealed.* |

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| **Interceptor trap** | *Check that in the case of a wash down area that the amount of surface water discharging to it is what was approved. Check that chambers are vented and that if vents are combined they are connected a minimum of 150mm above ground level.* |
| **Grease trap** | *Check that grease trap or grease converter is finished correctly and accessible. Where a grease converter is used check on means of dosing this, is it automatic? Do they have product onsite for this?* |
| **Cleaning Eyes** | *Check that cleaning eyes are surfaced where required and that these are adequately protected. Note: In grassed areas these do not need to be surfaced. Where under concrete these should be finshed off with cast lids or similar.* |
| **Floor waste** | *Where floor wastes are required ensure floor slopes to these, that they discharge to an appropriate location and are vermin proofed.* |
| **Floor waste gully** | *Where a floor waste gully is installed check for foaming issues and that it is finished off correctly.* |
| **Terminal and branch vent location and sizing** | *Ensure venting is completed, consider location in relation to windows etc.Open vents must be not less than 3 metres from an opening into the building, 5 metres from any fresh air inlet into the building.* |
| **Gully height** | *Check that it is viewable and accessible and is:*<br>*- 150mm below the invert of the lowest fixture where it is an ORG*<br>*- 25mm above paved and 100mm above unpaved (75mm for G13/AS3)*<br>*- Not more than 600mm from top of gully dish to water seal.* |
| **ORG location** | *Check that the ORG is as close to the head of the drain as practicable.* |
| **Gully surrounds & Pipes - sealed** | *Check that surrounds have been appropriately sealed to prevent debris/water entering the gully.Check that wastes have been appropriately sealed around through back of gully dish.* |
| **Exposed waste pipes** | *Check that pipes are clipped or supported appropriately.* |
| **Pipe Penetrations** | *Check vermin proofing of pipe penetrations through claddings.* |
| **Air-admittance valve frost and damage protection** | *For external AAVs check these have been adequately frost protected.* |
| **Site stormwater containment** | *Check that site storm water has been contained as per approved plans and specifications. Note:*<br>*No more than 40m2 catchment from impermeable area can discharge over the road boundary.Sump required if this is exceeded.* |
| **Downpipes/spreaders** | *Check size and locations are as per approved plans.Check fixing of downpipes.Check that downpipes discharging on to a roof have a spreader and are not over the maximum allowable area(25 square metres).* |
| **Rainwater head overflow** | *Check that rainwater heads are provided as per plan and that sufficient sized overflow is installed.* |
| **Internal gutter overflows** | *Check that any internal gutters have overflow provision in place as per the approved plans.* |
| **Soil Stack** | *Where soil stack is located externally check that access for maintenance is provided and that expansion joints are fitted as required. Check venting of stack and discharge pipes is as per approved plans.* |
| **Fire Resistant requirements** | |
| **FRR layout** | *Check that the fire separations are located as per the approved plans and specifications.* |
| **FRR system type** | *Check that the FRR system used is as per the approved plans and specification.Check that the thickness and number of sheets are correct.* |

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| **Fire wall return** | *Check that fire wall return is provided where wall is less than 90 degrees to the boundary as per approved plans.* |
| **FRR termination point** | *Check that FRR system terminates appropriately.*<br>*E.g. Roof cladding.See approved plans and specifications, along with FRR system manufacturers literature.* |
| **FRR flush boxes** | *Check that flush boxes are appropriated and are installed within FRR wall systems.* |
| **Kao wool fire resistant insulation** | *Check fire resistance insulation installed correctly as per approved plans and specifications.* |
| **FRR penetration proprietary products** | *Check fire collars, flush boxes, intumescent sealants or wraps in place as appropriate.* |
| **PS3 & As built schedule of fire penetrations** | *Check required documentation for building consent. PS3 from an approved author on the SBCG PSA register.Floor plan showing location and schedule stating FRR of element that product is protecting.Schedule of products used on each penetration.* |
| **Total fire separation** | *Check that total fire separation has been achieved as per approved plans and specifications.* |
| **Access** | |
| **Access to building** | *Check that access to the building complies with the approved plans and specifications.* |
| **Lighting at the main entry** | *Check that the lighting provided at the main entry complies to NZBC G8.* |
| **Slip resistance - main entry** | *Check that the main entry has been constructed of a slip resistance material and complies with NZBC D1.* |
| **Handrail** | *Check that handrails have been provided as per the approved plans and specifications. Note:*<br>*3 risers or more giving access to or within a residential dwelling require handrails.* |
| **Steps** | *Check that all steps to the building comply with the approved plans and specifications. Where not detailed ensure compliance to NZBC D1 is achieved.* |
| **Stair construction** | *Check that the stair treads, risers, pitch and minimum 2 meter head height are achieved as per approved plans.* |
| **Landings** | *Check that landings have been provided as required by the approved plans.* |
| **Decks and Balconies** | |
| **Decking/Balcony type** | *Check that deck/balcony type is as per the approved plans.* |
| **Timber treatment and grade** | *Check that timber treatment and grade is as per approved plans.* |
| **Timber size, span, spacing and fixing** | *Check that construction of deck complies with the approved plans and specifications.* |
| **Deck cladding clearance** | *Check that the deck to cladding clearance is achieved as detailed on the approved plans.Note:*<br>*Minimum 12mm clear air gap is required.* |
| **Step down from interior** | *Check that step down from interior is provided as per the approved plans and specifications.* |
| **Waterproof membrane** | *Check that membrane is provided as per the approved plans and specifications.* |
| **Deck slope** | *Check that appropriate deck slope from interior is provided as per the approved plans and specifications.* |
| **Deck wash down gap** | *Check that appropriate deck wash down gap is provided as per the approved plans and specifications.* |

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| **Outlet drain** | *Check that appropriate deck outlet drain has been provided as per the approved plans and specifications.* |
| **Overflow drain** | *Check that appropriate deck overflow drain has been provided as per the approved plans and specifications.* |
| **Downpipes discharging clear of deck** | *Check that down pipes discharge clear of the deck.* |
| **Balustrade Height** | *Check that the balustrade height complies with the approved plans and specifications.Where no detail has been provided ensure the balustrades comply with NZBC F4.* |
| **Retaining walls** | |
| **Retaining wall construction** | *Check that retaining wall has been constructed as per the approved plans and specifications. Check:*<br>*Timber treatment.*<br>*Timber sizing.*<br>*Connection locations.*<br>*Connection durability.* |
| **Drainage completed** | *Check that retaining wall drainage has been undertaken as per the approved plans and specifications.* |
| **Retaining wall barrier height** | *Check that the barrier height complies with the approved plans and specifications.Where no detail has been provided ensure the balustrades comply with NZBC F4.* |
| **Fire fighting requirements** | |
| **Water capacity** | *Check that the water capacity provided for fire fighting is correct to the approved plans and specifications.* |
| **Fire fighting connection** | *Check that the means of fire fighting connection is provided.Note:*<br>*Water tanks to be a maximum of 1 meter out of the ground or a coupling to be supplied.* |
| **Fire fighting connection protection** | *Check that where a coupling is provided that it is supported and protected correctly. E.g. That the coupling is supported to ensure it will not be broken under the weight of a fire hose being connected and protected from stock or vehicle damage.* |
| **Hard stand and access** | *Check that a fire fighting hard stand and sufficient access to the hard stand has been provided.* |
| **Onsite wastewater system** | |
| **Septic tank** | *Check that septic tank is finished and that risers are brought up to ground level. Check that these are sealed to the tank and not leaking.* |
| **Pump chamber** | *Check that pump chamber is set up correctly:*<br>*- Ball type non return valve*<br>*- Mac-union*<br>*- Isolating valve*<br>*- High level alarm float* |
| **Effluent field shape** | *Check that design shaped as per approved design e.g. mound system is completed and able to shed surface water.* |
| **Test ports** | *Check that effluent field test points are in place.* |
| **Fencing around effluent field** | *Check that where property can house stock that the effluent field is fenced to prevent damage from stock.* |
| **High level alarm** | *Check that high level alarm is in a readily visible location.* |

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| **Venting** | *Check for high and low level vent in the case of an AES system.* |

| Final - Residential Building Checklist | |
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| **Health & Safety** | |
| **Site Safe** | *Ensure that the site is safe to enter.Check site hazard register board*<br>*Check for dogs*<br>*Undertake visual assessment of site*<br>*Ensure site induction is undertaken if required* |
| **PPE Gear** | *Ensure all appropriate PPE is worn.* |
| **General** | |
| **Work ready** | *Is all in order for an inspection? Area to be inspected completed.* |
| **Site contacts name** | *Enter the name of the site contact in the notes area.* |
| **Consent documents sighted** | *It is mandatory to have all stamp approved building consent documentation on site.* |
| **Roading/Footpath condition** | *Check that crossing and footpath is in good condition. If not refer to the Roading department.* |
| **Required Documentation:** | *Ensure that all required documentation is listed under the documentation section.* |
| **Siting** | |
| **Siting of building** | *Has siting been previously checked? If not undertake siting inspection.* |
| **Ground heights** | |
| **Ground contours away** | *Check that ground contours away from the building.* |
| **Secondary flow path** | *Ensure that the secondary flow path has not been compromised.* |
| **FFL vs FGL** | *Check that proposed FFL to FGL meets the minimum requirements of the approved plans and specifications.E2/AS1 requires, 225mm above unpaved ground, 150mm above paved ground.Check that FFL complies with E1. E1/AS1 requires, 150mm above crown of the road or 150mm above lowest boundary point.* |
| **Subfloor** | |
| **Subfloor ground cover** | *.Check for DPM if sub floor ventilation is under 3,500mm2 or over 7.5 metres to nearest ventilation provision. Ensure 150mm lap and 50mm pressure tape.* |
| **Subfloor ventilation** | *Ensure vents are sized as per the approved plans and specifications.Note:*<br>*Vents 750mm maximum from corners and 1.8m maximum centres or 20mm spacings between baseboards.* |
| **Subfloor crawl space** | *. Ensure that there is an unobstructed minimum 450mm crawl space beneath floor joists.* |
| **Subfloor access** | *Check that sub floor access has been provided.* |
| **Sub floor insulation** | *Check insulation is as per approved plans and specifications.Specify R value in notes.* |
| **Subfloor Bracing** | *Check that all subfloor bracing has been completed as per the approved plans and specifications.* |
| **Subfloor FFR** | *Check that all fire ratings are installed as per the approved plans. Specify how this is done in notes.* |
| **Subfloor durability** | *Check that Subfloor has been constructed with durable materials and connections.* |
| **Building Exterior** | |
| **Elevations compliance** | *Check elevations of building are as per the approved plans.* |

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| **Cladding clearance to ground** | *Check the cladding clearance to ground is appropriate as per the approved plans and specifications.* |
| **Strip drains** | *Check that strip drains have been installed as per the approved plans and specifications.* |
| **Site stormwater containment** | *Check that site storm water has been contained as per approved plans and specifications. Note:*<br>*No more than 40m2 catchment from impermeable area can discharge over the road boundary.Sump required if this is exceeded.* |
| **Driveway/Sealed areas** | *Check that the sealed areas are as per the approved plans and specifications.Note:*<br>*If area sealed has been increased refer to planning department.Note:*<br>*D1 requires access to be considered from the street.* |
| **Wall cladding systems** | *Check that wall cladding system type installed are correct as specified on the approved plans and specifications.* |
| **Wall cladding opening flashings** | *Check that all wall cladding openings have been flashed appropriately as per the approved plans, specifications and manufacturers literature.* |
| **Opening Scribers** | *Check that scribers have been installed and sealed appropriately where required by the approved plans, specification and manufacturers literature.* |
| **Masonry veneer sills** | *Check that masonry sills have been installed with a minimum 15 degree slope.* |
| **Masonry veneer overhang** | *Check that masonry veneer has been installed with a maximum overhang of 20mm.*<br>*If over this require a SED solution.* |
| **Masonry veneer top vented** | *Check that vents have been installed to top course of masonry veneer.Note:*<br>*75mm height and at 800mm centres.* |
| **Vertical and horizontal control joints** | *Check control joints have been installed as per the approved plans, specifications and manufacturers literature.* |
| **Penetrations to cladding system are sealed around** | *Check that all penetrations to cladding systems are as per the approved plans and specifications.* |
| **Vermin proofing of cladding** | *Check cladding has been vermin proofed appropriately to the approved plans and specification.Check:*<br>*Brick veneer weep holes. Gaps over 13mm require vermin proofing.*<br>*Garage door reveals with brick veneer.*<br>*Floor level of cladding junctions to floor mounted openings.* |
| **Painting and general finishings** | *Check that all cladding systems have been painted to ensure that durability of the product remains.Check painting to:*<br>*Wall cladding.*<br>*Wall flashing's.*<br>*Opening scribbers.*<br>*Soffits.*<br>*Fascia.*<br>*Exposed untreated or less than H3.1 members.* |
| **Paint colour** | *Check that the painted claddings colour is approved by the manufacturers literature.Note:*<br>*Some cladding systems do not allow for dark colours.* |
| **Spouting/fascia clearances** | *Check that spouting and fascia clearances are maintained as per the approved plans, specifications and manufacturers literature.* |
| **Paint behind spouting** | *Check that paint or sealer has been applied to fascia / cladding behind the spouting.* |

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| **Roof cladding system** | *Check that roof and its flashings are completed as per the approved plans and specifications.* |
| **Rainwater head overflow** | *Check that rainwater heads are provided as per plan and that sufficient sized overflow is installed.* |
| **Internal gutter overflows** | *Check that any internal gutters have overflow provision in place as per the approved plans.* |
| **Internal gutters / hidden valleys** | *Check that all internal gutter / hidden valleys have been installed as per the approved plans and specifications.* |
| **Split valleys** | *Check that split valleys have been installed as per the approved plans and specifications.* |
| **Roof flashing expansion joints** | *Check that roof flashing's have expansion joints installed as per the approved plans and specifications.*<br>*Note:*<br>*12 m for light-coloured steel and stainless steel.*<br>*8 m for dark-coloured steel, copper and aluminium.* |
| **Penetrations to roof cladding system** | *Check that all penetrations to roof cladding system are as per the approved plans and specifications.* |
| **Vent cowls** | *Check that all pipes/flues are fitted with weather cowls. Check:*<br>*Heating appliance flues.*<br>*Terminal Vents.* |
| **Chimney soaker cap** | *Check that the chimney soaker cap has been installed as per the approved plans and specifications.* |
| **Gas califont/bottle location** | *Check locations comply as per the approved plans and specifications.Check:*<br>*Relation to openings.*<br>*Relation to power supply.*<br>*Relation to subfloor vents.*<br>*Bottle restraints.* |
| **Heat pump restraints** | *Check that heat pump exterior unit is seismically restrained to supporting base.* |
| **Building Interior** | |
| **Layout compliance** | *Check layout of building is as per the approved plans.* |
| **Floor impervious finishes** | *Check that floor coverings are of impervious type as required by the approved plans and specifications.* |
| **Wall impervious finishes** | *Check that wall coverings are of impervious type as required by the approved plans and specifications.* |
| **Visual awareness** | *Check that sufficient visual awareness is provided to habitable spaces.Note:*<br>*At least 50% of the glazed area provided*<br>*for natural light in habitable spaces shall be*<br>*clear glazed. The clear glazing shall be located*<br>*in the zone between the levels 900 mm and*<br>*2000 mm from floor level.* |
| **Window restrictors** | *Check that window restrictors are installed in the appropriate locations.E.g. When the fall from the floor to the ground outside is over 1 metre and the opening sill height is 760mm or less above the floor level.* |
| **Window/Door joinery labels** | *. Check for manufacturers labels.Check wind zone constructed for is correct.* |
| **Safety glazing** | *.Check that safety glazed elements have been installed as detailed in the approved plans.Note:* |

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| | *Consider safety glazing within 2000mm of the floor of wet areas, full windows with no transom bars and glazing on stairs.* |
| **Ventilation to habitable rooms** | *Check that ventilation has been provided to all habitable spaces as per the approved plans and specifications.Note:*<br>*Openings are required to provide a minimum of 5% of the floor area.* |
| **Ventilation to bathrooms, ensuite, laundry** | *Check that ventilation has been provided as per the approved plans and specifications. Note: If consent was applied for after 01/11/2019 and designed to NZBC G4/AS1 then the wet areas are to be fitted with a mechanical extraction unit ducted to the building exterior.* |
| **Extract fan vented to exterior** | *Check that mechanical ventilation units have been ducted to the exterior.* |
| **Ceiling access** | *Check access to the ceiling space has been provided.Ensure this has not been installed within a ceiling diaphragm unless it is located within the centre third.Check that access to all ceiling spaces is provided.* |
| **Ceiling access size** | *Check that the ceiling access is of an appropriate size as per the approved plans and specifications.* |
| **Ceiling insulation** | *Check that ceiling insulation is in place and neatly fitted.* |
| **Ceiling insulation clear of combustibles** | *Check that ceiling insulation is clear of all combustible surfaces.* |
| **Downlights** | *Check that insulation is set up correctly where down lights are installed.Check down light manufacturers literature for insulation clearance requirements.* |
| **Emergency warning system/Smoke Alarms** | *Check that emergency warning devices have been fitted as per the approved plans and specifications.Ensure that these are located within 3 meters of any sleeping space door and on the escape routes.Check that the emergency warning device is working.* |
| **Fixtures** | *Check fixtures are provided and located as per the approved plans and specifications.* |
| **WC/bath/basin/ shower/tub/Kitchen bench seals** | *Check that sealant has been installed at junctions between fixtures and wall linings.Check:*<br>*W/C is sealed to floor linings.*<br>*Bath to wall.*<br>*Vanity to wall.*<br>*Top of shower liner.*<br>*Sides of shower liner for leaks.*<br>*Laundry tub to wall.*<br>*Kitchen bench to the wall.*<br>*Base of all melamine fixture carcass to the floor to avoid swelling of carcass due to moisture.* |
| **Shower containment** | *Check that shower has been installed as per the approved plans and specifications.Check:*<br>*Shower containment - via curtain or glass.*<br>*Shower glazing units for safety glass*<br>*Shower leaks.* |
| **Mirror glazing** | *Check that the mirror glazing is compliant. Either to be,*<br>*safety glazed unit or*<br>*glued to a solid backing.* |
| **Heat pump** | *Check heat pump is provided and located as per the approved plans and specifications.* |
| **Heating appliance** | *Check that heating appliance has been inspected.* |

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| **Stove/hob clearance** | *Check that a minimum of 750mm min between gas hob and overhead exhaust fan.Any other downward facing surface within 600mm of hob must be protected in accordance with AS/NZS5601 6.10.2, in no case shall this clearance to any surface be less than 450mm.Side clearance-less than 200mm to any vertical combustible surface shall be protected to a height of not less than 150mm above the hob for the full dimension.Not required if a splash back is fitted.* |
| **Electrical fit-out** | *Ensure that electrical fit-out has been completed.* |
| **Fire Resistant requirements** | |
| **FRR layout** | *Check that the fire separations are located as per the approved plans and specifications.* |
| **FRR system type** | *Check that the FRR system used is as per the approved plans and specification.Check that the thickness and number of sheets are correct.* |
| **Fire wall return** | *Check that fire wall return is provided where wall is less than 90 degrees to the boundary as per approved plans.* |
| **FRR termination point** | *Check that FRR system terminates appropriately.*<br>*E.g. Roof cladding.See approved plans and specifications, along with FRR system manufacturers literature.* |
| **FRR flush boxes** | *Check that flush boxes are appropriated and are installed within FRR wall systems.* |
| **Kao wool fire resistant insulation** | *Check fire resistance insulation installed correctly as per approved plans and specifications.* |
| **FRR penetration proprietary products** | *Check fire collars, flush boxes, intumescent sealants or wraps in place as appropriate.* |
| **PS3 & As built schedule of fire penetrations** | *Check required documentation for building consent. PS3 from an approved author on the SBCG PSA register.Floor plan showing location and schedule stating FRR of element that product is protecting.Schedule of products used on each penetration.* |
| **Total fire separation** | *Check that total fire separation has been achieved as per approved plans and specifications.* |
| **Access** | |
| **Access to building** | *Check that access to the building complies with the approved plans and specifications.* |
| **Lighting at the main entry** | *Check that the lighting provided at the main entry complies to NZBC G8.* |
| **Slip resistance - main entry** | *Check that the main entry has been constructed of a slip resistance material and complies with NZBC D1.* |
| **Handrail** | *Check that handrails have been provided as per the approved plans and specifications. Note:*<br>*3 risers or more giving access to or within a residential dwelling require handrails.* |
| **Steps** | *Check that all steps to the building comply with the approved plans and specifications. Where not detailed ensure compliance to NZBC D1 is achieved.* |
| **Stair construction** | *Check that the stair treads, risers, pitch and minimum 2 meter head height are achieved as per approved plans.* |
| **Landings** | *Check that landings have been provided as required by the approved plans.* |
| **Decks and Balconies** | |
| **Decking/Balcony type** | *Check that deck/balcony type is as per the approved plans.* |
| **Timber treatment and grade** | *Check that timber treatment and grade is as per approved plans.* |

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| **Timber size, span, spacing and fixing** | *Check that construction of deck complies with the approved plans and specifications.* |
| **Deck cladding clearance** | *Check that the deck to cladding clearance is achieved as detailed on the approved plans.Note:*<br>*Minimum 12mm clear air gap is required.* |
| **Step down from interior** | *Check that step down from interior is provided as per the approved plans and specifications.* |
| **Waterproof membrane** | *Check that membrane is provided as per the approved plans and specifications.* |
| **Deck slope** | *Check that appropriate deck slope from interior is provided as per the approved plans and specifications.* |
| **Deck wash down gap** | *Check that appropriate deck wash down gap is provided as per the approved plans and specifications.* |
| **Outlet drain** | *Check that appropriate deck outlet drain has been provided as per the approved plans and specifications.* |
| **Overflow drain** | *Check that appropriate deck overflow drain has been provided as per the approved plans and specifications.* |
| **Downpipes discharging clear of deck** | *Check that down pipes discharge clear of the deck.* |
| **Balustrade Height** | *Check that the balustrade height complies with the approved plans and specifications.Where no detail has been provided ensure the balustrades comply with NZBC F4.* |
| **Retaining walls** | |
| **Retaining wall construction** | *Check that retaining wall has been constructed as per the approved plans and specifications. Check:*<br>*Timber treatment.*<br>*Timber sizing.*<br>*Connection locations.*<br>*Connection durability.* |
| **Drainage completed** | *Check that retaining wall drainage has been undertaken as per the approved plans and specifications.* |
| **Retaining wall barrier height** | *Check that the barrier height complies with the approved plans and specifications.Where no detail has been provided ensure the balustrades comply with NZBC F4.* |
| **Fire fighting requirements** | |
| **Water capacity** | *Check that the water capacity provided for fire fighting is correct to the approved plans and specifications.* |
| **Fire fighting connection** | *Check that the means of fire fighting connection is provided.Note:*<br>*Water tanks to be a maximum of 1 meter out of the ground or a coupling to be supplied.* |
| **Fire fighting connection protection** | *Check that where a coupling is provided that it is supported and protected correctly. E.g. That the coupling is supported to ensure it will not be broken under the weight of a fire hose being connected and protected from stock or vehicle damage.* |
| **Hard stand and access** | *Check that a fire fighting hard stand and sufficient access to the hard stand has been provided.* |

| Final - Residential Plumbing Checklist | |
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| **Health & Safety** | |
| **Site Safe** | *Ensure that the site is safe to enter.Check site hazard register board*<br>*Check for dogs*<br>*Undertake visual assessment of site*<br>*Ensure site induction is undertaken if required* |
| **PPE Gear** | *Ensure all appropriate PPE is worn.* |
| **General** | |
| **Work ready** | *Is all in order for an inspection, documentation, area to be inspected completed. Cancelled on day.* |
| **Name and position of contact on site** | *Enter name and position of person on site in the Notes area* |
| **Consent documents sighted** | *It is mandatory to have all stamp approved building consent documentation on site.* |
| **Conforms with approved plans** | |
| **Required Documentation:** | *Ensure that all required documentation is listed under the documentation section.* |
| **Plumbing and drainage interior** | |
| **Water pipes** | *Check for water pipes where freezing is likely.*<br>*Feeds to water tanks, pumps located in garages etc.* |
| **Main isolating valve for water supply** | *Check that there is a means of isolating the water supply. Toby at street is sufficient although in a rural setting this needs to be on supply from tank.* |
| **Backflow prevention to shower** | *Where there is a flexible shower hose over a bath or another fixture (e.g. sink or tub with pull out spout) which could be cross-connected ensure adequate means of backflow prevention installed.* |
| **Plumbing fixtures and appliances** | *Check that all fixtures are installed correctly and specific appliance requirements met such as high level bracket to dishwasher waste.* |
| **Safe water temperatures** | *Check water temperatures are set to correct temperatures.Note G12/AS1 stipulates 55 degrees Celsius to personal hygiene fixtures except in old peoples homes, early childhood centres, schools, hospitals and institutions for people with disabilities hot water this shall be maximum of 45 degrees Celsius.* |
| **Backflow prevention** | *Check that all fixtures are protected via an air gap and that where this is not achieved appropriate means of backflow prevention is provided.* |
| **Soil Stack** | *Where soil stack is located internally check that access for maintenance is provided. Check venting of stack and discharge pipes is as per approved plans. Where an AAV is used on a hidden shower waste ensure this is ventilated and accessible.* |
| **Equipotential bonding** | *Where pipework is metallic and there are metallic fixtures such as shower trays or sink inserts/benches bonding and earthing of the pipework and fixtures is required. Refer to G12/AS1 section 9.* |
| **Plumbing and drainage exterior** | |
| **Boundary trap** | *Check that FAI fitted to boundary trap and that this is not less than 150mm above ground to the vents.* |

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| **Sumps** | *Check that these are finished and located correctly. Check inside them to ensure the outlet is sealed around and not leaking.* |
| **Strip drains** | *Check that strip drains have been installed as per the approved plans and specifications.* |
| **Manholes complete** | *Where manholes are used check to see that these are haunched correctly and that they are appropriately sealed.* |
| **Inspection chambers (DIC)** | *Check that inspection chambers are finished correctly as per details on approved plans and are appropriately sealed.* |
| **Cleaning Eyes** | *Check that cleaning eyes are surfaced where required and that these are adequately protected. Note: In grassed areas these do not need to be surfaced. Where under concrete these should be finshed off with cast lids or similar.* |
| **Floor waste** | *Where floor wastes are required ensure floor slopes to these, that they discharge to an appropriate location and are vermin proofed.* |
| **Floor waste gully** | *Where a floor waste gully is installed check for foaming issues and that it is finished off correctly.* |
| **Terminal and branch vent location and sizing** | *Ensure venting is completed, consider location in relation to windows etc.Open vents must be not less than 3 metres from an opening into the building, 5 metres from any fresh air inlet into the building.* |
| **Gully height** | *Check that it is viewable and accessible and is:*<br>*- 150mm below the invert of the lowest fixture where it is an ORG*<br>*- 25mm above paved and 100mm above unpaved (75mm for G13/AS3)*<br>*- Not more than 600mm from top of gully dish to water seal.* |
| **ORG location** | *Check that the ORG is as close to the head of the drain as practicable.* |
| **Gully surrounds & Pipes - sealed** | *Check that surrounds have been appropriately sealed to prevent debris/water entering the gully.Check that wastes have been appropriately sealed around through back of gully dish.* |
| **Exposed waste pipes** | *Check that pipes are clipped or supported appropriately.* |
| **Pipe Penetrations** | *Check vermin proofing of pipe penetrations through claddings.* |
| **Air-admittance valve frost and damage protection** | *For external AAVs check these have been adequately frost protected.* |
| **Site stormwater containment** | *Check that site storm water has been contained as per approved plans and specifications. Note:*<br>*No more than 40m2 catchment from impermeable area can discharge over the road boundary.Sump required if this is exceeded.* |
| **Downpipes/spreaders** | *Check size and locations are as per approved plans.Check fixing of downpipes.Check that downpipes discharging on to a roof have a spreader and are not over the maximum allowable area(25 square metres).* |
| **Rainwater head overflow** | *Check that rainwater heads are provided as per plan and that sufficient sized overflow is installed.* |
| **Internal gutter overflows** | *Check that any internal gutters have overflow provision in place as per the approved plans.* |
| **Soil Stack** | *Where soil stack is located externally check that access for maintenance is provided and that expansion joints are fitted as required. Check venting of stack and discharge pipes is as per approved plans.* |
| **Onsite wastewater system** | |
| **Septic tank** | *Check that septic tank is finished and that risers are brought up to ground level. Check that these are sealed to the tank and not leaking.* |
| **Pump chamber** | *Check that pump chamber is set up correctly:* |

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| | *- Ball type non return valve*<br>*- Mac-union*<br>*- Isolating valve*<br>*- High level alarm float* |
| **Effluent field shape** | *Check that design shaped as per approved design e.g. mound system is completed and able to shed surface water.* |
| **Test ports** | *Check that effluent field test points are in place.* |
| **Fencing around effluent field** | *Check that where property can house stock that the effluent field is fenced to prevent damage from stock.* |
| **High level alarm** | *Check that high level alarm is in a readily visible location.* |
| **Venting** | *Check for high and low level vent in the case of an AES system.* |
| **Hot water system** | |
| **Hot water cylinder** | *Check that type and size is as per approved plans.* |
| **Hot water cylinder access** | *Ensure HWC is accessible for maintenance and replacement.* |
| **Return or circulating system** | *Where the system is a circulating system ensure that the return line comes back at not less than 60 degrees Celsius to prevent the growth of legionella. To check this a temperature gauge is required on the return line.* |
| **Tempering valve** | *Check that this is installed and is set to the right temperature by testing at a personal hygiene fixture.Check also that there is at least one metre of copper pipework between the HWC outlet and the valve unless valve is of the type that is approved to be closer. Check that where fitted on a low pressure open vented system that the tempering valve is not fitted in a way that blocks this.* |
| **Seismic restraints** | *Check that seismic restraints are fitted as required to HWC as per below:2 x straps for water heaters up to 200l*<br>*3 x straps for greater than 200l*<br>*Straps fitted 100mm max from top and bottom of heater.*<br>*25 x 1mm galv straps fixed to framing with 8mm coach screw and washer* |
| **Safe tray** | *Where a safe tray is required check that the drain size is not less than 40mm and discharges to a suitable and visible location.Check that outlet is vermin proofed.* |
| **Tundish** | *Check for 25mm min air break and that*<br>*the relief drain is at least one size larger than HWC outlet.* |
| **PR, TPR and CW expansion valves** | *Check that these are sized and located correctly. For TPR valves the probe must be located i the top 20% of the HWC but not less than 150mm down from the top. Check that the pressure rating of these complies with that required for the HWC rating. Test TPR and CWEV to ensure these don't overflow inside.* |
| **Relief pipe** | *Check that his is made of suitable material for the discharge (Generally copper unless alternative material approved) and has continuous fall.Visible position and does not present a hazard or damage other building elements.* |
| **Open vent** | *Where the HWC is a low pressure open vented type check this is adequately insulated above the standing water level and if necessary is braced.* |
| **Solar HWC** | *Check that the system is located and fixed to roof as per approved design. Check orientation as part of this. Check that a means of getting the water to 60 degrees Celsius is provided for.Solar relief drains need to be copper and discharge where it will not damage other elements such as PVC spouting and down pipes.* |
| **Wetback pipe material/size** | *Check that the wetback flow and return pipes are of copper material.Check for a minimum 25mm diameter pipe.* |

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| **Wetback pipework fall** | *Check that the wetback is set up with the appropriate falls as required by the approved plans and specifications.Overall minimum fall required of not less than 1 in 7.*<br>*Minimum fall required of not less than 1 in 20 at any point.* |
| **Wetback open vent** | *Where a wetback is connected check that the HWC has an open vent fitted.* |
| **Gas califont** | *Check that gas califont pipework is insulated for frost protection and that insulation is UV protected.* |
| **Gas bottles** | *Check that bottles are restrained and supported on a concrete pad or similar. Check also that they are suitable distances from any openings into the building.* |
| **Fire fighting requirements** | |
| **Water capacity** | *Check that the water capacity provided for fire fighting is correct to the approved plans and specifications.* |
| **Fire fighting connection** | *Check that the means of fire fighting connection is provided.Note:*<br>*Water tanks to be a maximum of 1 meter out of the ground or a coupling to be supplied.* |
| **Fire fighting connection protection** | *Check that where a coupling is provided that it is supported and protected correctly. E.g. That the coupling is supported to ensure it will not be broken under the weight of a fire hose being connected and protected from stock or vehicle damage.* |
| **Hard stand and access** | *Check that a fire fighting hard stand and sufficient access to the hard stand has been provided.* |
| **Firefighting signage** | *Ensure that the firefighting facilities are easily recognizable. If required ensure appropriate signage is installed to direct firefighting personnel to facilities.* |

| Final - Commercial Checklist | |
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| **Health & Safety** | |
| **Site Safe** | *Check site hazard register board*<br>*Check for dogs*<br>*Undertake visual assessment of site*<br>*Ensure site induction is undertaken if required* |
| **PPE Gear** | *Ensure all appropriate PPE is worn.* |
| **General** | |
| **Work ready** | *Is all in order for an inspection?*<br>*Area to be inspected completed.* |
| **Site contacts name** | *Enter the name of the site contact in the notes area.* |
| **Consent documents sighted** | *It is mandatory to have all stamp approved building consent documentation on site.* |
| **Roading/Footpath condition** | *Check that crossing and footpath is in good condition.*<br>*If not refer to the Roading department.* |
| **Required Documentation:** | *Ensure that all required documentation is listed under the documentation section.* |
| **Siting** | |
| **Siting of building** | *Has siting been previously checked?*<br>*If not undertake siting inspection.* |
| **Ground heights** | |
| **Ground contours away** | *Check that ground contours away from the building.* |
| **Secondary flow path** | *Ensure that the secondary flow path has not been compromised.* |
| **FFL vs FGL** | *Check that proposed FFL to FGL meets the minimum requirements of the approved plans and specifications.*<br>*E2/AS1 requires, 225mm above unpaved ground, 150mm above paved ground.*<br>*Check that FFL complies with E1.*<br>*E1/AS1 requires,150mm above crown of the road or 150mm above lowest boundary point.* |
| **Subfloor** | |
| **Subfloor ground cover** | *Check for DPM if sub floor ventilation is under 3,500mm2 or over 7.5 metres to nearest ventilation provision.*<br>*Ensure 150mm lap and 50mm pressure tape.* |
| **Subfloor ventilation** | *Ensure vents are sized as per approved plans.*<br>*Vents 750mm maximum from corners and 1.8m maximum centres or 20mm spacings between baseboards.* |
| **Subfloor crawl space** | *Ensure that there is an unobstructed minimum 450mm crawl space beneath floor joists.* |
| **Subfloor access** | *Check that sub floor access has been provided.* |
| **Sub floor insulation** | *Check insulation is as per approved plans and specifications.*<br>*Specify R value in notes.* |
| **Subfloor Bracing** | *Check that all subfloor bracing has been completed as per the approved plans and specifications.* |
| **Subfloor FFR** | *Check that all fire ratings are installed as per the approved plans.*<br>*Specify how this is done in notes.* |

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| **Subfloor durability** | *Check that Subfloor has been constructed with durable materials and connections.* |
| **Building Exterior** | |
| **Elevations compliance** | *Check elevations of building are as per the approved plans.* |
| **Cladding clearance to ground** | *Check the cladding clearance to ground is appropriate as per the approved plans and specifications.* |
| **Strip drains** | *Check that strip drains have been installed as per the approved plans and specifications.* |
| **Site stormwater containment** | *Check that site storm water has been contained as per approved plans and specifications.*<br>*Note:*<br>*No more than 40m2 catchment from impermeable area can discharge over the road boundary.*<br>*Sump required if this is exceeded.* |
| **Driveway/Sealed areas** | *Check that the sealed areas are as per the approved plans and specifications.*<br>*Note:*<br>*If area sealed has been increased refer to planning department.*<br>*Note:*<br>*D1 requires access to be considered from the street.* |
| **Wall cladding systems** | *Check that wall cladding system type installed are correct as specified on the approved plans and specifications.* |
| **Wall cladding opening flashings** | *Check that all wall cladding openings have been flashed appropriately as per the approved plans, specifications and manufacturers literature.* |
| **Opening Scribers** | *Check that scribers have been installed and sealed appropriately where required by the approved plans, specification and manufacturers literature.* |
| **Masonry veneer sills** | *Check that masonry sills have been installed with a minimum 15 degree slope.* |
| **Masonry veneer overhang** | *Check that masonry veneer has been installed with a maximum overhang of 20mm.*<br>*If over this require a SED solution.* |
| **Masonry veneer top vented** | *Check that vents have been installed to top course of masonry veneer.*<br>*Note:*<br>*75mm height at 800mm centres.* |
| **Vertical and horizontal control joints** | *Check control joints have been installed as per the approved plans, specifications and manufacturers literature.* |
| **Penetrations to cladding system are sealed around** | *Check that all penetrations to cladding systems are as per the approved plans and specifications.* |
| **Vermin proofing of cladding** | *Check cladding has been vermin proofed appropriately to the approved plans and specification.*<br>*Check:*<br>*Brick veneer weep holes. Gaps over 13mm require vermin proofing.*<br>*Garage door reveals with brick veneer.*<br>*Floor level of cladding junctions to floor mounted openings.* |
| **Painting and general finishings** | *Check that all cladding systems have been painted to ensure that durability of the product remains.*<br>*Check painting to:*<br>*Wall cladding.*<br>*Wall flashing's.*<br>*Opening scribbers.*<br>*Soffits.* |

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| | *Fascia.*<br>*Exposed untreated or less than H3.1 members.* |
| **Paint colour** | *Check that the painted cladding's colour is approved by the manufacturers literature.*<br>*Note:*<br>*Some cladding systems do not allow for dark colours.* |
| **Spouting/fascia clearances** | *Check that spouting and fascia clearances are maintained as per the approved plans, specifications and manufacturers literature.* |
| **Paint behind spouting** | *Check that paint or sealer has been applied to fascia / cladding behind the spouting.* |
| **Roof cladding system** | *Check that roof and its flashings are completed as per the approved plans and specifications.* |
| **Internal gutters / hidden valleys** | *Check that all internal gutter / hidden valleys have been installed as per the approved plans and specifications.* |
| **Split valleys** | *Check that split valleys have been installed as per the approved plans and specifications.* |
| **Roof flashing expansion joints** | *Check that roof flashing's have expansion joints installed as per the approved plans and specifications.*<br>*Note:*<br>*12 m for light-coloured steel and stainless steel.*<br>*8 m for dark-coloured steel, copper and aluminium.* |
| **Penetrations to roof cladding system** | *Check that all penetrations to roof cladding system are as per the approved plans and specifications.* |
| **Vent cowls** | *Check that all pipes/flues are fitted with weather cowls.*<br>*Check:*<br>*Heating appliance flues.*<br>*Terminal Vents.* |
| **Chimney soaker cap** | *Check that the chimney soaker cap has been installed as per the approved plans and specifications.* |
| **Gas califont/bottle location** | *Check locations comply as per the approved plans and specifications.*<br>*Check:*<br>*Relation to openings.*<br>*Relation to power supply.*<br>*Relation to subfloor vents.*<br>*Bottle restraints.* |
| **Heat pump restraints** | *Check that heat pump exterior unit is seismically restrained to supporting base.* |
| **Plumbing and drainage exterior** | |
| **Boundary trap** | *Check that FAI fitted to boundary trap and that this is not less than 150mm above ground to the vents.* |
| **Sumps** | *Check that these are finished and located correctly.*<br>*Check inside them to ensure the outlet is sealed around and not leaking.* |
| **Strip drains** | *Check that strip drains have been installed as per the approved plans and specifications.* |
| **Manholes complete** | *Where manholes are used check to see that these are haunched correctly and that they are appropriately sealed.* |
| **Inspection chambers (DIC)** | *Check that inspection chambers are finished correctly as per details on approved plans and are appropriately sealed.* |

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| **Interceptor trap** | *Check that in the case of a wash down area that the amount of surface water discharging to it is what was approved.*<br>*Check that chambers are vented and that if vents are combined they are connected a minimum of 150mm above ground level.* |
| **Grease trap** | *Check that grease trap or grease converter is finished correctly and accessible.*<br>*Where a grease converter is used check on means of dosing this, is it automatic? Do they have product onsite for this?* |
| **Cleaning Eyes** | *Check that cleaning eyes are surfaced where required and that these are adequately protected.*<br>*Note: In grassed areas these do not need to be surfaced. Where under concrete these should be finshed off with cast lids or similar.* |
| **Floor waste** | *Where floor wastes are required ensure floor slopes to these, that they discharge to an appropriate location and are vermin proofed.* |
| **Floor waste gully** | *Where a floor waste gully is installed check for foaming issues and that it is finished off correctly.* |
| **Terminal and branch vent location and sizing** | *Ensure venting is completed, consider location in relation to windows etc.*<br>*Open vents must be not less than 3 metres from an opening into the building, 5 metres from any fresh air inlet into the building.* |
| **Gully height** | *Check that it is viewable and accessible and is:*<br>*- 150mm below the invert of the lowest fixture where it is an ORG*<br>*- 25mm above paved and 100mm above unpaved (75mm for G13/AS3)*<br>*- Not more than 600mm from top of gully dish to water seal.* |
| **ORG location** | *Check that the ORG is as close to the head of the drain as practicable.* |
| **Gully surrounds & Pipes - sealed** | *Check that Surrounds have been appropriately sealed to prevent debris entering the gully.*<br>*Check that wastes have been appropriately sealed around through back of gully dish.* |
| **Exposed waste pipes** | *Check that pipes are clipped or supported appropriately.* |
| **Pipe Penetrations** | *Check vermin proofing of pipe penetrations through claddings.* |
| **Air-admittance valve frost and damage protection** | *For external AAVs check these have been adequately frost protected.* |
| **Site stormwater containment** | *Check that site storm water has been contained as per approved plans and specifications.*<br>*Note:*<br>*No more than 40m2 catchment from impermeable area can discharge over the road boundary.*<br>*Sump required if this is exceeded.* |
| **Downpipes/spreaders** | *Check size and locations are as per approved plans.*<br>*Check fixing of downpipes.*<br>*Check that downpipes discharging on to a roof have a spreader and are not over the maximum allowable area.* |
| **Rainwater head overflow** | *Check that rainwater heads are provided as per plan and that sufficient sized overflow is installed.* |
| **Internal gutter overflows** | *Check that any internal gutters have overflow provision in place as per the approved plans.* |
| **Soil Stack** | *Where soil stack is located externally check that access for maintenance is provided and that expansion joints are fitted as required.*<br>*Check venting of stack and discharge pipes is as per approved plans.* |

| Building Interior | |
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| **Layout compliance** | *Check layout of building is as per the approved plans.* |
| **Floor impervious finishes** | *Check that floor coverings are of impervious type as required by the approved plans and specifications.* |
| **Wall impervious finishes** | *Check that wall coverings are of impervious type as required by the approved plans and specifications.* |
| **Visual awareness** | *Check that sufficient visual awareness is provided to habitable spaces.*<br>*Note:*<br>*At least 50% of the glazed area provided*<br>*for natural light in habitable spaces shall be*<br>*clear glazed. The clear glazing shall be located*<br>*in the zone between the levels 900 mm and*<br>*2000 mm from floor level.* |
| **Window restrictors** | *Check that window restrictors are installed in the appropriate locations.*<br>*E.g: When the fall from the floor to the ground outside is over 1 metre and the opening sill height is 760mm or less above the floor level.* |
| **Window/Door joinery labels** | *Check for manufacturers labels.*<br>*Check wind zone constructed for is correct.* |
| **Safety glazing** | *.Check that safety glazed elements have been installed as detailed in the approved plans.*<br>*Note:*<br>*Consider safety glazing within 2000mm of the floor of wet areas, full windows with no transom bars and glazing on stairs.* |
| **Ventilation to habitable rooms** | *Check that ventilation has been provided to all habitable spaces as per the approved plans and specifications.*<br>*Note:*<br>*Openings are required to provide a minimum of 5% of the floor area.* |
| **Ventilation to bathrooms, ensuite, laundry** | *Check that ventilation has been provided as per the approved plans and specifications.*<br>*Note: If consent was applied for after 01/11/2019 and designed to NZBC G4/AS1 then the wet areas are to be fitted with a mechanical extraction unit ducted to the building exterior.* |
| **Extract fan vented to exterior** | *Check that mechanical ventilation units have been ducted to the exterior.* |
| **Ceiling access** | *Check access to the ceiling space has been provided.*<br>*Ensure this has not been installed within a ceiling diaphragm unless it is located within the centre third.*<br>*Check that access to all ceiling spaces is provided.* |
| **Ceiling access size** | *Check that the ceiling access is of an appropriate size as per the approved plans and specifications.* |
| **Ceiling insulation** | *Check that ceiling insulation is in place and neatly fitted.* |
| **Ceiling insulation clear of combustibles** | *Check that ceiling insulation is clear of all combustible surfaces.* |
| **Downlights** | *Check that insulation is set up correctly where down lights are installed.*<br>*Check down light manufacturers literature for insulation clearance requirements.* |
| **Fixtures** | *Check fixtures are provided and located as per the approved plans and specifications.* |

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| **WC/bath/basin/shower/ tub/Kitchen bench seals** | *Check that sealant has been installed at junctions between fixtures and wall linings.*<br>*Check:*<br>*W/C is sealed to floor linings.*<br>*Bath to wall.*<br>*Vanity to wall.*<br>*Top of shower liner.*<br>*Sides of shower liner for leaks.*<br>*Laundry tub to wall.*<br>*Kitchen bench to the wall.*<br>*Base of all melamine fixture carcass to the floor to avoid swelling of carcass due to moisture.* |
| **Shower containment** | *Check that shower has been installed as per the approved plans and specifications.*<br>*Check:*<br>*Shower containment - via curtain or glass.*<br>*Shower glazing units for safety glass*<br>*Shower leaks.* |
| **Mirror glazing** | *Check that the mirror glazing is compliant. Either to be safety glazed unit or to be glued to a solid backing.* |
| **Heat pump** | *Check heat pump is provided and located as per the approved plans and specifications.* |
| **Heating appliance** | *Check that heating appliance has been inspected.* |
| **Stove/hob clearance** | *Check that a minimum of 750mm min between gas hob and overhead exhaust fan.*<br>*Any other downward facing surface within 600mm of hob must be protected in accordance with AS/NZS5601 6.10.2, in no case shall this clearance to any surface be less than 450mm.*<br>*Side clearance-less than 200mm to any vertical combustible surface shall be protected to a height of not less than 150mm above the hob for the full dimension.*<br>*Not required if a splash back is fitted.* |
| **Electrical fit-out** | *Ensure that electrical fit-out has been completed.* |
| **Plumbing and drainage interior** | |
| **Water pipes** | *Check for water pipes where freezing is likely.*<br>*Feeds to water tanks, pumps located in garages etc.* |
| **Main isolating valve for water supply** | *Check that there is a means of isolating the water supply. Toby at street is sufficient although in a rural setting this needs to be on supply from tank.* |
| **Backflow prevention to shower** | *Where there is a flexible shower hose over a bath or another fixture (e.g. sink or tub with pull out spout) which could be cross-connected ensure adequate means of backflow prevention installed.* |
| **Plumbing fixtures and appliances** | *Check that all fixtures are installed correctly and specific appliance requirements met such as high level bracket to dishwasher waste.* |
| **Safe water temperatures** | *Check water temperatures are set to correct temperatures.*<br>*Note G12/AS1 stipulates 55 degrees Celsius to personal hygiene fixtures except in old peoples homes, early childhood centres, schools, hospitals and institutions for people with disabilities hot water this shall be maximum of 45 degrees Celsius.* |
| **Water supply minimum storage** | *For the likes of old peoples homes, hospitals and prisons check that storage of 50 litres per person is maintained.* |
| **Backflow prevention** | *Check that all fixtures are protected via an air gap and that where this is not achieved appropriate means of backflow prevention is provided.* |
| **Soil Stack** | *Where soil stack is located internally check that access for maintenance is provided.* |

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| | *Check venting of stack and discharge pipes is as per approved plans. Where an AAV is used on a hidden shower waste ensure this is ventilated and accessible.* |
| **Equipotential bonding** | *Where pipework is metallic and there are metallic fixtures such as shower trays or sink inserts/benches bonding and earthing of the pipework and fixtures is required. Refer to G12/AS1 section 9.* |
| **Hot water system** | |
| **Hot water cylinder** | *Check that type and size is as per approved plans.* |
| **Hot water cylinder access** | *Ensure HWC is accessible for maintenance and replacement.* |
| **Return or circulating system** | *Where the system is a circulating system ensure that the return line comes back at not less than 60 degrees Celsius to prevent the growth of legionella. To check this a temperature gauge is required on the return line.* |
| **Tempering valve** | *Check that this is installed and is set to the right temperature by testing at a personal hygiene fixture.*<br>*Check also that there is at least one metre of copper pipework between the HWC outlet and the valve unless valve is of the type that is approved to be closer.*<br>*Check that where fitted on a low pressure open vented system that the tempering valve is not fitted in a way that blocks this.* |
| **Seismic restraints** | *Check that seismic restraints are fitted as required to HWC as per below:*<br>*2 x straps for water heaters up to 200l*<br>*3 x straps for greater than 200l*<br>*Straps fitted 100mm max from top and bottom of heater.*<br>*25 x 1mm galv straps fixed to framing with 8mm coach screw and washer* |
| **Safe tray** | *Where a safe tray is required check that the drain size is not less than 40mm and discharges to a suitable and visible location.*<br>*Check that outlet is vermin proofed.* |
| **Tundish** | *Check for 25mm min air break and that*<br>*the relief drain is at least one size larger than HWC outlet.* |
| **PR, TPR and CW expansion valves** | *Check that these are sized and located correctly. For TPR valves the probe must be located i the top 20% of the HWC but not less than 150mm down from the top.*<br>*Check that the pressure rating of these complies with that required for the HWC rating.*<br>*Test TPR and CWEV to ensure these don't overflow inside.* |
| **Relief pipe** | *Check that his is made of suitable material for the discharge (Generally copper unless alternative material approved) and has continuous fall.*<br>*Visible position and does not present a hazard or damage other building elements.* |
| **Open vent** | *Where the HWC is a low pressure open vented type check this is adequately insulated above the standing water level and if necessary is braced.* |
| **Solar HWC** | *Check that the system is located and fixed to roof as per approved design. Check orientation as part of this.*<br>*Check that a means of getting the water to 60 degrees Celsius is provided for.*<br>*Solar relief drains need to be copper and discharge where it will not damage other elements such as PVC spouting and down pipes.* |
| **Wetback pipe material/size** | *Check that the wetback flow and return pipes are of copper material.*<br>*Check for a minimum 25mm diameter pipe.* |
| **Wetback pipework fall** | *Check that the wetback is set up with the appropriate falls as required by the approved plans and specifications.*<br>*Overall minimum fall required of not less than 1 in 7.*<br>*Minimum fall required of not less than 1 in 20 at any point.* |

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| **Wetback open vent** | *Where a wetback is connected check that the HWC has an open vent fitted.* |
| **Gas califont** | *Check that gas califont pipework is insulated for frost protection and that insulation is UV protected.* |
| **Gas bottles** | *Check that bottles are restrained and supported on a concrete pad or similar.*<br>*Check also that they are suitable distances from any openings into the building.* |
| **Decks and Balconies** | |
| **Decking/Balcony type** | *Check that deck/balcony type is as per the approved plans.* |
| **Timber treatment and grade** | *Check that timber treatment and grade is as per approved plans.* |
| **Timber size, span, spacing and fixing** | *Check that construction of deck complies with the approved plans and specifications.* |
| **Deck cladding clearance** | *Check that the deck to cladding clearance is achieved as detailed on the approved plans.*<br>*Note:*<br>*Minimum 12mm clear air gap is required.* |
| **Step down from interior** | *Check that step down from interior is provided as per the approved plans and specifications.* |
| **Waterproof membrane** | *Check that membrane is provided as per the approved plans and specifications.* |
| **Deck slope** | *Check that appropriate deck slope from interior is provided as per the approved plans and specifications.* |
| **Deck wash down gap** | *Check that appropriate deck wash down gap is provided as per the approved plans and specifications.* |
| **Outlet drain** | *Check that appropriate deck outlet drain has been provided as per the approved plans and specifications.* |
| **Overflow drain** | *Check that appropriate deck overflow drain has been provided as per the approved plans and specifications.* |
| **Downpipes discharging clear of deck** | *Check that down pipes discharge clear of the deck.* |
| **Balustrade Height** | *Check that the balustrade height complies with the approved plans and specifications.*<br>*Where no detail has been provided ensure the balustrades comply with NZBC F4.* |
| **Retaining walls** | |
| **Retaining wall construction** | *Check that retaining wall has been constructed as per the approved plans and specifications.*<br>*Check:*<br>*Timber treatment.*<br>*Timber sizing.*<br>*Connection locations.*<br>*Connection durability.* |
| **Drainage completed** | *Check that retaining wall drainage has been undertaken as per the approved plans and specifications.* |
| **Retaining wall barrier height** | *Check that the barrier height complies with the approved plans and specifications.*<br>*Where no detail has been provided ensure the balustrades comply with NZBC F4.* |
| **Fire Resistance requirements** | |
| **FRR layout** | *Check that the fire separations are located as per the approved plans and specifications.* |
| **FRR system type** | *Check that the FRR system used is as per the approved plans and specification.* |

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| | *Check that the thickness and number of sheets are correct.* |
| **Fire wall return** | *Check that fire wall return is provided where wall is less than 90 degrees to the boundary as per approved plans.* |
| **FRR termination point** | *Check that FRR system terminates appropriately.*<br>*E.g. Roof cladding.*<br>*See approved plans and specifications, along with FRR system manufacturers literature.* |
| **FRR flush boxes** | *Check that flush boxes are appropriated and are installed within FRR wall systems.* |
| **Kao wool fire resistant insulation** | *Check fire resistance insulation installed correctly as per approved plans and specifications.* |
| **FRR penetration proprietary products** | *Check fire collars, flush boxes, intumescent sealants or wraps in place as appropriate.* |
| **PS3 & As built schedule of fire penetrations** | *Check required documentation for building consent.*<br>*PS3 from an approved author on the SBCG PSA register.*<br>*Floor plan showing location and schedule stating FRR of element that product is protecting.*<br>*Schedule of products used on each penetration.* |
| **Total fire separation** | *Check that total fire separation has been achieved as per approved plans and specifications.* |
| **Surface finishings** | *Check that the surface finishing's have been installed as specified within the approved plans and specifications.*<br>*Check, Exterior cladding, interior paint and coverings.* |
| **Fire Safety** | |
| **Emergency sprinkler system** | *Check that emergency sprinkler system has been fitted as per the approved plans and specifications.* |
| **Emergency warning system** | *Check that emergency warning devices have been fitted as per the approved plans and specifications.* |
| **Emergecny warning system manual call points** | *Check that the manual call points are located as per the approved plans and specifications.*<br>*Ensure that they are on the escape routes and as close as practicable to exit doors.*<br>*Check that the call points will be clearly visible at all times.* |
| **Emergency warning system visual alerting devices** | *Check that the emergency warning systems visual alerting devices have been fitted as per the approved plans and specifications.* |
| **Emergency lighting system** | *Check that the emergency lighting system has been installed as per the approved plans and specifications.* |
| **HVAC System** | *Check that the HVAC system has been installed as per the approved plans and specifications.*<br>*Ensure that the interconnection to the emergency warning system has been installed where required by the approved plans and specifications.* |
| **Escape route** | *Check that the escape route complies with the approved plans and specifications.*<br>*Check:*<br>*Length,*<br>*Width,*<br>*Height.* |
| **Door swing direction** | *Check that the direction of door swing is correct as shown in the approved plans and specifications.* |
| **Final exits** | *Check that final exits are provided as per the approved plans and specifications.* |

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| | *Ensure these are no closer than 5.0m centres.*<br>*Check a landing has been provided at the final exit.* |
| **Fire and smoke door labels and signage** | *Check that fire/smoke door manufacturers labels have been provided to each door.*<br>*Check that fire/smoke door signage has been provide as required by the approved plans and specifications.* |
| **Fire and smoke door hold open devices** | *Check that all Fire or smoke doors will close when required.*<br>*If a hold open device is fitted ensure that it is interconnected to the emergency warning system to ensure that the doors will shut as required.* |
| **Fire and smoke door closing devices** | *Check that all fire/smoke doors are fitted with closing devices to ensure that they remain closed where required.* |
| **Exit doors operational from the inside without the use of keys** | *Ensure that where a locking device is fitted that it is of normal type and can be opened from the inside without a key.*<br>*Where an unusual locking device is fitted signage to NZBC F8 is required.*<br>*E.g a door release button close by.* |
| **Panic fasteners** | *Check that panic fasteners have been installed as per the approved plans and specifications.*<br>*Note:*<br>*Panic fasteners required on final exits serving more than 100 people.* |
| **Exit signage** | *Check that all exit signage is installed as per the approved plans and specifications.*<br>*Note:*<br>*Exit signs are to be installed to each door giving access to a final exit or exit way and to clearly identify the escape route of travel through to an exitway.* |
| **Fire fighting requirements** | *Check that the fire fighting requirements within the approved plans and specifications have been provided.* |
| **Accessibility** | |
| **Access to building** | *Check that access to the building complies with the approved plans and specifications.* |
| **Accessible car park numbers** | *Check that the number of accessible car parks provided is as per the approved plans and specifications.*<br>*Note:*<br>*Car parks vs accessible car parks*<br>*1-20 require not less than 1*<br>*21-50 require not less than 2*<br>*Additional 50 car parks require additional 1 accessible car park.* |
| **Accessible car park dimensions** | *Check that the width and length of the accessible car park comply.*<br>*Note:*<br>*Size 3500mm wide min x 5000mm min length.* |
| **Accessible car park location** | *Check that the accessible car park spaces are located as per the approved plans and specifications.*<br>*Ensure people do not have pass behind parked cars when moving to the accessible route or building enterance.* |
| **Accessible car park surface** | *Check that the accessible car park surface is constructed of a stable, flat and slip resistant surface.*<br>*Note:*<br>*The accessible car park slope cannot exceed 1:50.* |
| **Accessible car park signage** | *Check that the accessible signage to the car park is located as per the approved plans and specifications.*<br>*Check the accessible car park signage is visible from the entry to site.* |

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| **Accessible route** | *Check that the accessible route complies with the approved plans and specifications.*<br>*Note:*<br>*The accessible route is required to be a minimum of 1.2m wide, have no dangerous projections and door ways with a clear opening of 760mm min* |
| **Accessible route signage, Int. Symbol of Access (ISA)** | *Check that the accessible route signage has been installed as per the approved plans and specifications.*<br>*Ensure that the signage is installed at a height between 1.4 and 1.7m and be positioned/located in a consistent manner.*<br>*Signs shall identify:*<br>*(a) Accessible car parks;*<br>*(b) Accessible entrances;*<br>*(c) Services available in the building;*<br>*(d) Accessible routes through buildings;*<br>*(e) Accessible stairs or lifts;*<br>*(f) Location of accessible toilet facilities;*<br>*(g) Locations of rooms with listening systems.* |
| **Accessible ramps** | *Check that the ramp is constructed as per the approved plans and specifications.*<br>*Consider:*<br>*Width 1.2m min*<br>*Gradient 1:12*<br>*Ramp up stand 75mm min*<br>*Safety rail provided mid height*<br>*Handrail provided (840-900mm both sides of ramp)*<br>*Note: Ramp max 9m then landing required (1.2m min)* |
| **Accessible steps** | *Check that all steps to the building comply with the approved plans and specifications.*<br>*Where not detailed ensure compliance to NZBC D1 is achieved.* |
| **Isolated steps** | *Check that any isolated steps comply with the approved plans and specifications.*<br>*Note:*<br>*No single isolated steps permitted on any routes.* |
| **Accessible stairs** | *Check that the tread and rise is as per the approved plans and specifications.*<br>*Note*<br>*Accessible stairs require a 310mm minimum tread and 180mm maximum riser.* |
| **Stair construction** | *Check that the stair treads, risers, pitch and minimum 2 meter head height are achieved as per approved plans.* |
| **Contrasting of stair nosings** | *Check that the leading edge of each tread is contrasting.* |
| **Landings** | *Check that landings have been provided as required by the approved plans.* |
| **Handrail** | *Check that handrails have been provided as per the approved plans and specifications.* |
| **Slip resistance - main entry** | *Check that the main entry has been constructed of a slip resistance material and complies with NZBC D1.* |
| **Lighting at the main entry** | *Check that the lighting provided at the main entry complies to NZBC G8.* |
| **Main entrance level access** | *Check that the main entry is supplied with level access.*<br>*Note:*<br>*Thresholds <20mm to comply with D1/AS1 or NZS 4121:2001* |

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| **Door clear width** | *Check that the door way clear widths on the accessible route are achieved as specified within the approved plans and specifications.*<br>*Note:*<br>*Clear opening of 760mm minimum required.* |
| **Door swing direction** | *Check that the direction of door swing is correct as shown in the approved plans and specifications.* |
| **Doors closers/hardware** | *Check that the door hardware complies with the approved plans and specifications.*<br>*Note:*<br>*Hardware to be of lever type, note knobs with a twist or turn action do not provide sufficient grip for people with hand impairments.*<br>*hardware to be located between 900mm-1200mm from floor* |
| **Vision strip to doors on accessible route** | *Check that vision strips to doors on the accessible route which are hinged in both direction have been installed.* |
| **Glazing Manifestation** | *Check that manifestation is provided to glazing as per the approved plans and specifications.*<br>*F2/AS1 cites NZS 4223.3:2016 which requires manifestation on any glazing that could be mistaken as a doorway or an unimpeded path of travel. The manifestation is to be located between 800mm - 1200mm from FFL and have a face width of no less than 20mm.*<br>*Note:*<br>*Mainfestation is not required in housing.* |
| **Accessible controls** | *Check that light switches, electrical sockets, window/door controls are all set as per the approved plans and specifications.*<br>*Note:*<br>*Window/door controls between 900mm-1200mm (lever type)*<br>*Light switches between 900mm-1200mm (toggle,rocker, push pad or push button type to project from plate)*<br>*Electrical sockets between 500mm-1200mm and 500mm to any corner.* |
| **Accessible counter** | *Check that an accessible counter has been provided as per the approved plans and specifications.*<br>*Note:*<br>*Width minimum 900mm*<br>*Depth minimum 540mm*<br>*Height underside 675mm minimum*<br>*Height top 755mm maxinimum* |
| **Accessible compartment dimensions** | *Check that the accessible compartment internal dimensions comply with the approved plans and specifications.*<br>*Note:*<br>*NZS 4121:2001 requires*<br>*Accessible toilet: 1600mmx1900mm minimum*<br>*Accessible bathroom: 1900mmx2100mm minimum* |
| **Grab rails** | *Check that grab rails have been installed within the accessible compartments as per the approved plans and specifications.* |
| **Basin height and location** | *Check that the basin location and set up is as per the approved plans and specifications.*<br>*Note:*<br>*Require,*<br>*675mm minimum ot the underside of the basin*<br>*400mm minimum from the centre of the waste to the wall* |

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| | *400mm max from the front of the basin to the wall* |
| **Hot and cold water on correct side on tapware and shower mixer** | *Check that the hot water is set to the left of the cold supply.*<br>*Note: Requirement of NZS 4121:2001.* |
| **Tapware is accessible** | *Check that tapware has sufficient clearance around it and that handles are lever or capstan type.* |
| **Mirror height** | *Check that the mirror height is set as per the approved plans and specifications.*<br>*Note:*<br>*NZS 4121:2001 sets a maximum 1000mm to the bottom of the mirror.* |
| **W/C height and location** | *Check that the WC height and location is as per the approved plans and specifications.*<br>*Note:*<br>*NZS 4121:2001 requires,*<br>*700mm-750mm from the wall to the front edge of the pan*<br>*450mm from the centre line of the pan to the nearest wall*<br>*460mm from the FFL to the top of the pan seat* |
| **Toilet roll holder correct zone** | *Check that the toilet roll holder is placed within the correct zone as required by the approved plans and specifications.*<br>*Note:*<br>*NZS 4121:2001 requires the toilet roll to be located, between the front of the pan and 300mm maximum past the pan front. Height to be between 460mm and 700mm of the FFL.* |
| **Accessible shower dimensions** | *Check that the shower is sized as per the approved plans and specifications.*<br>*Note:*<br>*NZS 4121:2001 requires the shower to be a minimum of 1200mm x 1200mm and a fall to the waste of no less than 1:50* |
| **Accessible shower seat** | *Check that the shower set has been set up as per the approved plans and specifications.*<br>*Note:*<br>*NZS 4121:2001 requires,*<br>*Location to be on the opposite wall to the mixer and rose,*<br>*height to be between 450mm - 550mm of the FFL,*<br>*Size to be 800mm x 450mm minimum* |
| **Auto doors** | *Check that the automatic doors have been installed as per the approved plans and specifications.*<br>*Check:*<br>*Type,*<br>*Size,*<br>*Fail safe,*<br>*location.* |
| **Lifts** | *Check that the lifts have been installed as per the approved plans and specifications.*<br>*Check:*<br>*Type,*<br>*Size,*<br>*location,*<br>*Panel height for accessibility (between 900mm and 1350mm),*<br>*Panel tactile and Braille,* |

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| | *Lift signage,*<br>*Lift handrails (3 required).* |
| **Onsite wastewater system** | |
| **Septic tank** | *Check that septic tank is finished and that risers are brought up to ground level. Check that these are sealed to the tank and not leaking.* |
| **Pump chamber** | *Check that pump chamber is set up correctly:*<br>*- Ball type non return valve*<br>*- Mac-union*<br>*- Isolating valve*<br>*- High level alarm float* |
| **Effluent field shape** | *Check that design shaped as per approved design e.g. mound system is completed and able to shed surface water.* |
| **Test ports** | *Check that effluent field test points are in place.* |
| **Fencing around effluent field** | *Check that where property can house stock that the effluent field is fenced to prevent damage from stock.* |
| **High level alarm** | *Check that high level alarm is in a readily visible location.* |
| **Venting** | *Check for high and low level vent in the case of an AES system.* |

| Final - Commercial Building Checklist | |
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| **Health & Safety** | |
| Site Safe | *Ensure that the site is safe to enter.Check site hazard register board*<br>*Check for dogs*<br>*Undertake visual assessment of site*<br>*Ensure site induction is undertaken if required* |
| PPE Gear | *Ensure all appropriate PPE is worn.* |
| **General** | |
| Work ready | *Is all in order for an inspection? Area to be inspected completed.* |
| Site contacts name | *Enter the name of the site contact in the notes area.* |
| Consent documents sighted | *It is mandatory to have all stamp approved building consent documentation on site.* |
| Roading/Footpath condition | *Check that crossing and footpath is in good condition. If not refer to the Roading department.* |
| Required Documentation: | *Ensure that all required documentation is listed under the documentation section.* |
| **Siting** | |
| Siting of building | *Has siting been previously checked? If not undertake siting inspection.* |
| **Ground heights** | |
| Ground contours away | *Check that ground contours away from the building.* |
| Secondary flow path | *Ensure that the secondary flow path has not been compromised.* |
| FFL vs FGL | *Check that proposed FFL to FGL meets the minimum requirements of the approved plans and specifications.E2/AS1 requires, 225mm above unpaved ground, 150mm above paved ground.Check that FFL complies with E1. E1/AS1 requires,150mm above crown of the road or 150mm above lowest boundary point.* |
| **Subfloor** | |
| Subfloor ground cover | *.Check for DPM if sub floor ventilation is under 3,500mm2 or over 7.5 metres to nearest ventilation provision. Ensure 150mm lap and 50mm pressure tape.* |
| Subfloor ventilation | *Ensure vents are sized as per approved plans.Vents 750mm maximum from corners and 1.8m maximum centres or 20mm spacings between baseboards.* |
| Subfloor crawl space | *. Ensure that there is an unobstructed minimum 450mm crawl space beneath floor joists.* |
| Subfloor access | *Check that sub floor access has been provided.* |
| Sub floor insulation | *Check insulation is as per approved plans and specifications.Specify R value in notes.* |
| Subfloor Bracing | *Check that all subfloor bracing has been completed as per the approved plans and specifications.* |
| Subfloor FFR | *Check that all fire ratings are installed as per the approved plans. Specify how this is done in notes.* |
| Subfloor durability | *Check that Subfloor has been constructed with durable materials and connections.* |
| **Building Exterior** | |
| Elevations compliance | *Check elevations of building are as per the approved plans.* |
| Cladding clearance to ground | *Check the cladding clearance to ground is appropriate as per the approved plans and specifications.* |
| Strip drains | *Check that strip drains have been installed as per the approved plans and specifications.* |

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| Site stormwater containment | *Check that site storm water has been contained as per approved plans and specifications. Note:*<br>*No more than 40m2 catchment from impermeable area can discharge over the road boundary. Sump required if this is exceeded.* |
| Driveway/Sealed areas | *Check that the sealed areas are as per the approved plans and specifications.Note:*<br>*If area sealed has been increased refer to planning department.Note:*<br>*D1 requires access to be considered from the street.* |
| Wall cladding systems | *Check that wall cladding system type installed are correct as specified on the approved plans and specifications.* |
| Wall cladding opening flashings | *Check that all wall cladding openings have been flashed appropriately as per the approved plans, specifications and manufacturers literature.* |
| Opening Scribers | *Check that scribers have been installed and sealed appropriately where required by the approved plans, specification and manufacturers literature.* |
| Masonry veneer sills | *Check that masonry sills have been installed with a minimum 15 degree slope.* |
| Masonry veneer overhang | *Check that masonry veneer has been installed with a maximum overhang of 20mm.If over this require a SED solution.* |
| Masonry veneer top vented | *Check that vents have been installed to top course of masonry veneer.Note:*<br>*75mm height at 800mm centres.* |
| Vertical and horizontal control joints | *Check control joints have been installed as per the approved plans, specifications and manufacturers literature.* |
| Penetrations to cladding system are sealed around | *Check that all penetrations to cladding systems are as per the approved plans and specifications.* |
| Vermin proofing of cladding | *Check cladding has been vermin proofed appropriately to the approved plans and specification.Check:*<br>*Brick veneer weep holes. Gaps over 13mm require vermin proofing.*<br>*Garage door reveals with brick veneer.*<br>*Floor level of cladding junctions to floor mounted openings.* |
| Painting and general finishings | *Check that all cladding systems have been painted to ensure that durability of the product remains.Check painting to:*<br>*Wall cladding.*<br>*Wall flashing's.*<br>*Opening scribbers.*<br>*Soffits.*<br>*Fascia.*<br>*Exposed untreated or less than H3.1 members.* |
| Paint colour | *Check that the painted cladding's colour is approved by the manufacturers literature.Note:*<br>*Some cladding systems do not allow for dark colours.* |
| Spouting/fascia clearances | *Check that spouting and fascia clearances are maintained as per the approved plans, specifications and manufacturers literature.* |
| Paint behind spouting | *Check that paint or sealer has been applied to fascia / cladding behind the spouting.* |
| Roof cladding system | *Check that roof and its flashings are completed as per the approved plans and specifications.* |
| Internal gutters / hidden valleys | *Check that all internal gutter / hidden valleys have been installed as per the approved plans and specifications.* |
| Split valleys | *Check that split valleys have been installed as per the approved plans and specifications.* |

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| Roof flashing expansion joints | *Check that roof flashing's have expansion joints installed as per the approved plans and specifications.*<br>*Note:*<br>*12 m for light-coloured steel and stainless steel.*<br>*8 m for dark-coloured steel, copper and aluminium.* |
| Penetrations to roof cladding system | *Check that all penetrations to roof cladding system are as per the approved plans and specifications.* |
| Vent cowls | *Check that all pipes/flues are fitted with weather cowls. Check:*<br>*Heating appliance flues.*<br>*Terminal Vents.* |
| Chimney soaker cap | *Check that the chimney soaker cap has been installed as per the approved plans and specifications.* |
| Gas califont/bottle location | *Check locations comply as per the approved plans and specifications.Check:*<br>*Relation to openings.*<br>*Relation to power supply.*<br>*Relation to subfloor vents.*<br>*Bottle restraints.* |
| Heat pump restraints | *Check that heat pump exterior unit is seismically restrained to supporting base.* |
| **Building Interior** | |
| Layout compliance | *Check layout of building is as per the approved plans.* |
| Floor impervious finishes | *Check that floor coverings are of impervious type as required by the approved plans and specifications.* |
| Wall impervious finishes | *Check that wall coverings are of impervious type as required by the approved plans and specifications.* |
| Visual awareness | *Check that sufficient visual awareness is provided to habitable spaces.Note:*<br>*At least 50% of the glazed area provided*<br>*for natural light in habitable spaces shall be*<br>*clear glazed. The clear glazing shall be located*<br>*in the zone between the levels 900 mm and*<br>*2000 mm from floor level.* |
| Window restrictors | *Check that window restrictors are installed in the appropriate locations.E.g: When the fall from the floor to the ground outside is over 1 metre and the opening sill height is 760mm or less above the floor level.* |
| Window/Door joinery labels | *. Check for manufacturers labels.Check wind zone constructed for is correct.* |
| Safety glazing | *.Check that safety glazed elements have been installed as detailed in the approved plans.Note:*<br>*Consider safety glazing within 2000mm of the floor of wet areas, full windows with no transom bars and glazing on stairs.* |
| Ventilation to habitable rooms | *Check that ventilation has been provided to all habitable spaces as per the approved plans and specifications.Note:*<br>*Openings are required to provide a minimum of 5% of the floor area.* |
| Ventilation to bathrooms, ensuite, laundry | *Check that ventilation has been provided as per the approved plans and specifications. Note: If consent was applied for after 01/11/2019 and designed to NZBC G4/AS1 then the wet areas are to be fitted with a mechanical extraction unit ducted to the building exterior.* |
| Extract fan vented to exterior | *Check that mechanical ventilation units have been ducted to the exterior.* |

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| Ceiling access | *Check access to the ceiling space has been provided.Ensure this has not been installed within a ceiling diaphragm unless it is located within the centre third.Check that access to all ceiling spaces is provided.* |
| Ceiling access size | *Check that the ceiling access is of an appropriate size as per the approved plans and specifications.* |
| Ceiling insulation | *Check that ceiling insulation is in place and neatly fitted.* |
| Ceiling insulation clear of combustibles | *Check that ceiling insulation is clear of all combustible surfaces.* |
| Downlights | *Check that insulation is set up correctly where down lights are installed.Check down light manufacturers literature for insulation clearance requirements.* |
| Fixtures | *Check fixtures are provided and located as per the approved plans and specifications.* |
| WC/bath/basin/ shower/tub/Kitchen bench seals | *Check that sealant has been installed at junctions between fixtures and wall linings.Check:*<br>*W/C is sealed to floor linings.*<br>*Bath to wall.*<br>*Vanity to wall.*<br>*Top of shower liner.*<br>*Sides of shower liner for leaks.*<br>*Laundry tub to wall.*<br>*Kitchen bench to the wall.*<br>*Base of all melamine fixture carcass to the floor to avoid swelling of carcass due to moisture.* |
| Shower containment | *Check that shower has been installed as per the approved plans and specifications.Check:*<br>*Shower containment - via curtain or glass.*<br>*Shower glazing units for safety glass*<br>*Shower leaks.* |
| Mirror glazing | *Check that the mirror glazing is compliant. Either to be safety glazed unit or to be glued to a solid backing.* |
| Heat pump | *Check heat pump is provided and located as per the approved plans and specifications.* |
| Heating appliance | *Check that heating appliance has been inspected.* |
| Stove/hob clearance | *Check that a minimum of 750mm min between gas hob and overhead exhaust fan.Any other downward facing surface within 600mm of hob must be protected in accordance with AS/NZS5601 6.10.2, in no case shall this clearance to any surface be less than 450mm.Side clearance-less than 200mm to any vertical combustible surface shall be protected to a height of not less than 150mm above the hob for the full dimension.Not required if a splash back is fitted.* |
| Electrical fit-out | *Ensure that electrical fit-out has been completed.* |
| **Decks and Balconies** | |
| Decking/Balcony type | *Check that deck/balcony type is as per the approved plans.* |
| Timber treatment and grade | *Check that timber treatment and grade is as per approved plans.* |
| Timber size, span, spacing and fixing | *Check that construction of deck complies with the approved plans and specifications.* |
| Deck cladding clearance | *Check that the deck to cladding clearance is achieved as detailed on the approved plans.Note:* |

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| | *Minimum 12mm clear air gap is required.* |
| Step down from interior | *Check that step down from interior is provided as per the approved plans and specifications.* |
| Waterproof membrane | *Check that membrane is provided as per the approved plans and specifications.* |
| Deck slope | *Check that appropriate deck slope from interior is provided as per the approved plans and specifications.* |
| Deck wash down gap | *Check that appropriate deck wash down gap is provided as per the approved plans and specifications.* |
| Outlet drain | *Check that appropriate deck outlet drain has been provided as per the approved plans and specifications.* |
| Overflow drain | *Check that appropriate deck overflow drain has been provided as per the approved plans and specifications.* |
| Downpipes discharging clear of deck | *Check that down pipes discharge clear of the deck.* |
| Balustrade Height | *Check that the balustrade height complies with the approved plans and specifications.Where no detail has been provided ensure the balustrades comply with NZBC F4.* |
| **Retaining walls** | |
| Retaining wall construction | *Check that retaining wall has been constructed as per the approved plans and specifications. Check:*<br>*Timber treatment.*<br>*Timber sizing.*<br>*Connection locations.*<br>*Connection durability.* |
| Drainage completed | *Check that retaining wall drainage has been undertaken as per the approved plans and specifications.* |
| Retaining wall barrier height | *Check that the barrier height complies with the approved plans and specifications.Where no detail has been provided ensure the balustrades comply with NZBC F4.* |
| **Fire Resistance requirements** | |
| FRR layout | *Check that the fire separations are located as per the approved plans and specifications.* |
| FRR system type | *Check that the FRR system used is as per the approved plans and specification.Check that the thickness and number of sheets are correct.* |
| Fire wall return | *Check that fire wall return is provided where wall is less than 90 degrees to the boundary as per approved plans.* |
| FRR termination point | *Check that FRR system terminates appropriately.*<br>*E.g. Roof cladding.See approved plans and specifications, along with FRR system manufacturers literature.* |
| FRR flush boxes | *Check that flush boxes are appropriated and are installed within FRR wall systems.* |
| Kao wool fire resistant insulation | *Check fire resistance insulation installed correctly as per approved plans and specifications.* |
| FRR penetration proprietary products | *Check fire collars, flush boxes, intumescent sealants or wraps in place as appropriate.* |
| PS3 & As built schedule of fire penetrations | *Check required documentation for building consent. PS3 from an approved author on the SBCG PSA register.*<br>*Floor plan showing location and schedule stating FRR of element that product is protecting.* |

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| | *Schedule of products used on each penetration.* |
| Total fire separation | *Check that total fire separation has been achieved as per approved plans and specifications.* |
| Surface finishings | *Check that the surface finishing's have been installed as specified within the approved plans and specifications.Check, Exterior cladding, interior paint and coverings.* |
| **Fire Safety** | |
| Emergency sprinkler system | *Check that emergency sprinkler system has been fitted as per the approved plans and specifications.* |
| Emergency warning system | *Check that emergency warning devices have been fitted as per the approved plans and specifications.* |
| Emergecny warning system manual call points | *Check that the manual call points are located as per the approved plans and specifications.Ensure that they are on the escape routes and as close as practicable to exit doors.Check that the call points will be clearly visible at all times.* |
| Emergency warning system visual alerting devices | *Check that the emergency warning systems visual alerting devices have been fitted as per the approved plans and specifications.* |
| Emergency lighting system | *Check that the emergency lighting system has been installed as per the approved plans and specifications.* |
| HVAC System | *Check that the HVAC system has been installed as per the approved plans and specifications. Ensure that the interconnection to the emergency warning system has been installed where required by the approved plans and specifications.* |
| Escape route | *Check that the escape route complies with the approved plans and specifications.Check:*<br>*Length,*<br>*Width,*<br>*Height.* |
| Door swing direction | *Check that the direction of door swing is correct as shown in the approved plans and specifications.* |
| Final exits | *Check that final exits are provided as per the approved plans and specifications.Ensure these are no closer than 5.0m centres.Check a landing has been provided at the final exit.* |
| Fire and smoke door labels and signage | *Check that fire/smoke door manufacturers labels have been provided to each door.Check that fire/smoke door signage has been provide as required by the approved plans and specifications.* |
| Fire and smoke door hold open devices | *Check that all Fire or smoke doors will close when required. If a hold open device is fitted ensure that it is interconnected to the emergency warning system to ensure that the doors will shut as required.* |
| Fire and smoke door closing devices | *Check that all fire/smoke doors are fitted with closing devices to ensure that they remain closed where required.* |
| Exit doors operational from the inside without the use of keys | *Ensure that where a locking device is fitted that it is of normal type and can be opened from the inside without a key. Where an unusual locking device is fitted signage to NZBC F8 is required.*<br>*E.g a door release button close by.* |
| Panic fasteners | *Check that panic fasteners have been installed as per the approved plans and specifications.Note:*<br>*Panic fasteners required on final exits serving more than 100 people.* |
| Exit signage | *Check that all exit signage is installed as per the approved plans and specifications.Note:* |

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| | *Exit signs are to be installed to each door giving access to a final exit or exit way and to clearly identify the escape route of travel through to an exitway.* |
| Fire fighting requirements | *Check that the fire fighting requirements within the approved plans and specifications have been provided.* |
| **Accessibility** | |
| Access to building | *Check that access to the building complies with the approved plans and specifications.* |
| Accessible car park numbers | *Check that the number of accessible car parks provided is as per the approved plans and specifications.Note:*<br>*Car parks vs accessible car parks*<br>*1-20 require not less than 1*<br>*21-50 require not less than 2*<br>*Additional 50 car parks require additional 1 accessible car park.* |
| Accessible car park dimensions | *Check that the width and length of the accessible car park comply. Note:*<br>*Size 3500mm wide min x 5000mm min length.* |
| Accessible car park location | *Check that the accessible car park spaces are located as per the approved plans and specifications. Ensure people do not have pass behind parked cars when moving to the accessible route or building enterance.* |
| Accessible car park surface | *Check that the accessible car park surface is constructed of a stable, flat and slip resistant surface. Note:*<br>*The accessible car park slope cannot exceed 1:50.* |
| Accessible car park signage | *Check that the accessible signage to the car park is located as per the approved plans and specifications.Check the accessible car park signage is visible from the entry to site.* |
| Accessible route | *Check that the accessible route complies with the approved plans and specifications.Note:*<br>*The accessible route is required to be a minimum of 1.2m wide, have no dangerous projections and door ways with a clear opening of 760mm min* |
| Accessible route signage, Int. Symbol of Access (ISA) | *Check that the accessible route signage has been installed as per the approved plans and specifications. Ensure that the signage is installed at a height between 1.4 and 1.7m and be positioned/located in a consistent manner.Signs shall identify:*<br>*(a) Accessible car parks;*<br>*(b) Accessible entrances;*<br>*(c) Services available in the building;*<br>*(d) Accessible routes through buildings;*<br>*(e) Accessible stairs or lifts;*<br>*(f) Location of accessible toilet facilities;*<br>*(g) Locations of rooms with listening systems.* |
| Accessible ramps | *Check that the ramp is constructed as per the approved plans and specifications. Consider:*<br>*Width 1.2m min*<br>*Gradient 1:12*<br>*Ramp up stand 75mm min*<br>*Safety rail provided mid height*<br>*Handrail provided (840-900mm both sides of ramp)*<br>*Note: Ramp max 9m then landing required (1.2m min)* |
| Accessible steps | *Check that all steps to the building comply with the approved plans and specifications. Where not detailed ensure compliance to NZBC D1 is achieved.* |

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| Isolated steps | *Check that any isolated steps comply with the approved plans and specifications. Note:*<br>*No single isolated steps permitted on any routes.* |
| Accessible stairs | *Check that the tread and rise is as per the approved plans and specifications.Note:*<br>*Accessible stairs require a 310mm minimum tread and 180mm maximum riser.* |
| Stair construction | *Check that the stair treads, risers, pitch and minimum 2 meter head height are achieved as per approved plans.* |
| Contrasting of stair nosings | *Check that the leading edge of each tread is contrasting.* |
| Landings | *Check that landings have been provided as required by the approved plans.* |
| Handrail | *Check that handrails have been provided as per the approved plans and specifications.* |
| Slip resistance - main entry | *Check that the main entry has been constructed of a slip resistance material and complies with NZBC D1.* |
| Lighting at the main entry | *Check that the lighting provided at the main entry complies to NZBC G8.* |
| Main entrance level access | *Check that the main entry is supplied with level access.Note:*<br>*Thresholds <20mm to comply with D1/AS1 or NZS 4121:2001* |
| Door clear width | *Check that the door way clear widths on the accessible route are achieved as specified within the approved plans and specifications.Note:*<br>*Clear opening of 760mm minimum required.* |
| Door swing direction | *Check that the direction of door swing is correct as shown in the approved plans and specifications.* |
| Doors closers/hardware | *Check that the door hardware complies with the approved plans and specifications.Note:*<br>*Hardware to be of lever type, note knobs with a twist or turn action do not provide sufficient grip for people with hand impairments.*<br>*hardware to be located between 900mm-1200mm from floor* |
| Vision strip to doors on accessible route | *Check that vision strips to doors on the accessible route which are hinged in both direction have been installed.* |
| Glazing Manifestation | *Check that manifestation is provided to glazing as per the approved plans and specifications.F2/AS1 cites NZS 4223.3:2016 which requires manifestation on any glazing that could be mistaken as a doorway or an unimpeded path of travel. The manifestation is to be located between 800mm - 1200mm from FFL and have a face width of no less than 20mm. Note:*<br>*Mainfestation is not required in housing.* |
| Accessible controls | *Check that light switches, electrical sockets, window/door controls are all set as per the approved plans and specifications.Note:*<br>*Window/door controls between 900mm-1200mm (lever type)*<br>*Light switches between 900mm-1200mm (toggle,rocker, push pad or push button type to project from plate)*<br>*Electrical sockets between 500mm-1200mm and 500mm to any corner.* |
| Accessible counter | *Check that an accessible counter has been provided as per the approved plans and specifications.Note:*<br>*Width minimum 900mm*<br>*Depth minimum 540mm*<br>*Height underside 675mm minimum*<br>*Height top 755mm maxinimum* |
| Accessible compartment dimensions | *Check that the accessible compartment internal dimensions comply with the approved plans and specifications.Note:* |

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| | *NZS 4121:2001 requires*<br>*Accessible toilet: 1600mmx1900mm minimum*<br>*Accessible bathroom: 1900mmx2100mm minimum* |
| Grab rails | *Check that grab rails have been installed within the accessible compartments as per the approved plans and specifications.* |
| Basin height and location | *Check that the basin location and set up is as per the approved plans and specifications.Note:*<br>*Require,*<br>*675mm minimum ot the underside of the basin*<br>*400mm minimum from the centre of the waste to the wall*<br>*400mm max from the front of the basin to the wall* |
| Hot and cold water on correct side on tapware and shower mixer | *Check that the hot water is set to the left of the cold supply.*<br>*Note: Requirement of NZS 4121:2001.* |
| Tapware is accessible | *Check that tapware has sufficient clearance around it and that handles are lever or capstan type.* |
| Mirror height | *Check that the mirror height is set as per the approved plans and specifications.Note:*<br>*NZS 4121:2001 sets a maximum 1000mm to the bottom of the mirror.* |
| W/C height and location | *Check that the WC height and location is as per the approved plans and specifications. Note:*<br>*NZS 4121:2001 requires,*<br>*700mm-750mm from the wall to the front edge of the pan*<br>*450mm from the centre line of the pan to the nearest wall*<br>*460mm from the FFL to the top of the pan seat* |
| Toilet roll holder correct zone | *Check that the toilet roll holder is placed within the correct zone as required by the approved plans and specifications. Note:*<br>*NZS 4121:2001 requires the toilet roll to be located, between the front of the pan and 300mm maximum past the pan front. Height to be between 460mm and 700mm of the FFL.* |
| Accessible shower dimensions | *Check that the shower is sized as per the approved plans and specifications.Note:*<br>*NZS 4121:2001 requires the shower to be a minimum of 1200mm x 1200mm and a fall to the waste of no less than 1:50* |
| Accessible shower seat | *Check that the shower set has been set up as per the approved plans and specifications.Note:*<br>*NZS 4121:2001 requires,*<br>*Location to be on the opposite wall to the mixer and rose,*<br>*height to be between 450mm - 550mm of the FFL,*<br>*Size to be 800mm x 450mm minimum* |
| Auto doors | *Check that the automatic doors have been installed as per the approved plans and specifications.Check:*<br>*Type,*<br>*Size,*<br>*Fail safe,*<br>*location.* |
| Lifts | *Check that the lifts have been installed as per the approved plans and specifications.Check:*<br>*Type,*<br>*Size,* |

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| | *location,*<br>*Panel height for accessibility (between 900mm and 1350mm),*<br>*Panel tactile and Braille,*<br>*Lift signage,*<br>*Lift handrails (3 required).* |

| Final - Commercial Plumbing Checklist | |
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| **Health & Safety** | |
| Site Safe | *Ensure that the site is safe to enter.Check site hazard register board*<br>*Check for dogs*<br>*Undertake visual assessment of site*<br>*Ensure site induction is undertaken if required* |
| PPE Gear | *Ensure all appropriate PPE is worn.* |
| **General** | |
| Work ready | *Is all in order for an inspection, documentation, area to be inspected completed.*<br>*Cancelled on day.* |
| Name and position of contact on site | *Enter name and position of person on site in the Notes area* |
| Consent documents sighted | *It is mandatory to have all stamp approved building consent documentation on site.* |
| Conforms with approved plans | |
| Required Documentation: | *Ensure that all required documentation is listed under the documentation section.* |
| **Plumbing and drainage interior** | |
| Water pipes | *Check for water pipes where freezing is likely.*<br>*Feeds to water tanks, pumps located in garages etc.* |
| Main isolating valve for water supply | *Check that there is a means of isolating the water supply. Toby at street is sufficient although in a rural setting this needs to be on supply from tank.* |
| Backflow prevention to shower | *Where there is a flexible shower hose over a bath or another fixture (e.g. sink or tub with pull out spout) which could be cross-connected ensure adequate means of backflow prevention installed.* |
| Plumbing fixtures and appliances | *Check that all fixtures are installed correctly and specific appliance requirements met such as high level bracket to dishwasher waste.* |
| Safe water temperatures | *Check water temperatures are set to correct temperatures.Note G12/AS1 stipulates 55 degrees Celsius to personal hygiene fixtures except in old peoples homes, early childhood centres, schools, hospitals and institutions for people with disabilities hot water this shall be maximum of 45 degrees Celsius.* |
| Water supply minimum storage | *For the likes of old peoples homes, hospitals and prisons check that storage of 50 litres per person is maintained.* |
| Backflow prevention | *Check that all fixtures are protected via an air gap and that where this is not achieved appropriate means of backflow prevention is provided.* |
| Soil Stack | *Where soil stack is located internally check that access for maintenance is provided. Check venting of stack and discharge pipes is as per approved plans. Where an AAV is used on a hidden shower waste ensure this is ventilated and accessible.* |
| Equipotential bonding | *Where pipework is metallic and there are metallic fixtures such as shower trays or sink inserts/benches bonding and earthing of the pipework and fixtures is required. Refer to G12/AS1 section 9.* |
| **Plumbing and drainage exterior** | |
| Boundary trap | *Check that FAI fitted to boundary trap and that this is not less than 150mm above ground to the vents.* |

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| Sumps | *Check that these are finished and located correctly. Check inside them to ensure the outlet is sealed around and not leaking.* |
| Strip drains | *Check that strip drains have been installed as per the approved plans and specifications.* |
| Manholes complete | *Where manholes are used check to see that these are haunched correctly and that they are appropriately sealed.* |
| Inspection chambers (DIC) | *Check that inspection chambers are finished correctly as per details on approved plans and are appropriately sealed.* |
| Interceptor trap | *Check that in the case of a wash down area that the amount of surface water discharging to it is what was approved. Check that chambers are vented and that if vents are combined they are connected a minimum of 150mm above ground level.* |
| Grease trap | *Check that grease trap or grease converter is finished correctly and accessible. Where a grease converter is used check on means of dosing this, is it automatic? Do they have product onsite for this?* |
| Cleaning Eyes | *Check that cleaning eyes are surfaced where required and that these are adequately protected. Note: In grassed areas these do not need to be surfaced. Where under concrete these should be finshed off with cast lids or similar.* |
| Floor waste | *Where floor wastes are required ensure floor slopes to these, that they discharge to an appropriate location and are vermin proofed.* |
| Floor waste gully | *Where a floor waste gully is installed check for foaming issues and that it is finished off correctly.* |
| Terminal and branch vent location and sizing | *Ensure venting is completed, consider location in relation to windows etc.Open vents must be not less than 3 metres from an opening into the building, 5 metres from any fresh air inlet into the building.* |
| Gully height | *Check that it is viewable and accessible and is:*<br>*- 150mm below the invert of the lowest fixture where it is an ORG*<br>*- 25mm above paved and 100mm above unpaved (75mm for G13/AS3)*<br>*- Not more than 600mm from top of gully dish to water seal.* |
| ORG location | *Check that the ORG is as close to the head of the drain as practicable.* |
| Gully surrounds & Pipes - sealed | *Check that Surrounds have been appropriately sealed to prevent debris entering the gully.Check that wastes have been appropriately sealed around through back of gully dish.* |
| Exposed waste pipes | *Check that pipes are clipped or supported appropriately.* |
| Pipe Penetrations | *Check vermin proofing of pipe penetrations through claddings.* |
| Air-admittance valve frost and damage protection | *For external AAVs check these have been adequately frost protected.* |
| Site stormwater containment | *Check that site storm water has been contained as per approved plans and specifications. Note:*<br>*No more than 40m2 catchment from impermeable area can discharge over the road boundary.Sump required if this is exceeded.* |
| Downpipes/spreaders | *Check size and locations are as per approved plans.Check fixing of downpipes.Check that downpipes discharging on to a roof have a spreader and are not over the maximum allowable area.* |
| Rainwater head overflow | *Check that rainwater heads are provided as per plan and that sufficient sized overflow is installed.* |
| Internal gutter overflows | *Check that any internal gutters have overflow provision in place as per the approved plans.* |

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| Soil Stack | *Where soil stack is located externally check that access for maintenance is provided and that expansion joints are fitted as required. Check venting of stack and discharge pipes is as per approved plans.* |
| **Onsite wastewater system** | |
| Septic tank | *Check that septic tank is finished and that risers are brought up to ground level. Check that these are sealed to the tank and not leaking.* |
| Pump chamber | *Check that pump chamber is set up correctly:*<br>*- Ball type non return valve*<br>*- Mac-union*<br>*- Isolating valve*<br>*- High level alarm float* |
| Effluent field shape | *Check that design shaped as per approved design e.g. mound system is completed and able to shed surface water.* |
| Test ports | *Check that effluent field test points are in place.* |
| Fencing around effluent field | *Check that where property can house stock that the effluent field is fenced to prevent damage from stock.* |
| High level alarm | *Check that high level alarm is in a readily visible location.* |
| Venting | *Check for high and low level vent in the case of an AES system.* |
| **Hot water system** | |
| Hot water cylinder | *Check that type and size is as per approved plans.* |
| Hot water cylinder access | *Ensure HWC is accessible for maintenance and replacement.* |
| Return or circulating system | *Where the system is a circulating system ensure that the return line comes back at not less than 60 degrees Celsius to prevent the growth of legionella. To check this a temperature gauge is required on the return line.* |
| Tempering valve | *Check that this is installed and is set to the right temperature by testing at a personal hygiene fixture.Check also that there is at least one metre of copper pipework between the HWC outlet and the valve unless valve is of the type that is approved to be closer. Check that where fitted on a low pressure open vented system that the tempering valve is not fitted in a way that blocks this.* |
| Seismic restraints | *Check that seismic restraints are fitted as required to HWC as per below:2 x straps for water heaters up to 200l*<br>*3 x straps for greater than 200l*<br>*Straps fitted 100mm max from top and bottom of heater.*<br>*25 x 1mm galv straps fixed to framing with 8mm coach screw and washer* |
| Safe tray | *Where a safe tray is required check that the drain size is not less than 40mm and discharges to a suitable and visible location.Check that outlet is vermin proofed.* |
| Tundish | *Check for 25mm min air break and that*<br>*the relief drain is at least one size larger than HWC outlet.* |
| PR, TPR and CW expansion valves | *Check that these are sized and located correctly. For TPR valves the probe must be located i the top 20% of the HWC but not less than 150mm down from the top. Check that the pressure rating of these complies with that required for the HWC rating. Test TPR and CWEV to ensure these don't overflow inside.* |
| Relief pipe | *Check that his is made of suitable material for the discharge (Generally copper unless alternative material approved) and has continuous fall.Visible position and does not present a hazard or damage other building elements.* |
| Open vent | *Where the HWC is a low pressure open vented type check this is adequately insulated above the standing water level and if necessary is braced.* |

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| Solar HWC | *Check that the system is located and fixed to roof as per approved design. Check orientation as part of this. Check that a means of getting the water to 60 degrees Celsius is provided for.Solar relief drains need to be copper and discharge where it will not damage other elements such as PVC spouting and down pipes.* |
| Wetback pipe material/size | *Check that the wetback flow and return pipes are of copper material.Check for a minimum 25mm diameter pipe.* |
| Wetback pipework fall | *Check that the wetback is set up with the appropriate falls as required by the approved plans and specifications.Overall minimum fall required of not less than 1 in 7.*<br>*Minimum fall required of not less than 1 in 20 at any point.* |
| Wetback open vent | *Where a wetback is connected check that the HWC has an open vent fitted.* |
| Gas califont | *Check that gas califont pipework is insulated for frost protection and that insulation is UV protected.* |
| Gas bottles | *Check that bottles are restrained and supported on a concrete pad or similar. Check also that they are suitable distances from any openings into the building.* |
| **Accessibility** | |
| Access to building | *Check that access to the building complies with the approved plans and specifications.* |
| Accessible car park numbers | *Check that the number of accessible car parks provided is as per the approved plans and specifications.Note:*<br>*Car parks vs accessible car parks*<br>*1-20 require not less than 1*<br>*21-50 require not less than 2*<br>*Additional 50 car parks require additional 1 accessible car park.* |
| Accessible car park dimensions | *Check that the width and length of the accessible car park comply. Note:*<br>*Size 3500mm wide min x 5000mm min length.* |
| Accessible car park location | *Check that the accessible car park spaces are located as per the approved plans and specifications. Ensure people do not have pass behind parked cars when moving to the accessible route or building enterance.* |
| Accessible car park surface | *Check that the accessible car park surface is constructed of a stable, flat and slip resistant surface. Note:*<br>*The accessible car park slope cannot exceed 1:50.* |
| Accessible car park signage | *Check that the accessible signage to the car park is located as per the approved plans and specifications.Check the accessible car park signage is visible from the entry to site.* |
| Accessible route | *Check that the accessible route complies with the approved plans and specifications.Note:*<br>*The accessible route is required to be a minimum of 1.2m wide, have no dangerous projections and door ways with a clear opening of 760mm min* |
| Accessible route signage, Int. Symbol of Access (ISA) | *Check that the accessible route signage has been installed as per the approved plans and specifications. Ensure that the signage is installed at a height between 1.4 and 1.7m and be positioned/located in a consistent manner.Signs shall identify:*<br>*(a) Accessible car parks;*<br>*(b) Accessible entrances;*<br>*(c) Services available in the building;*<br>*(d) Accessible routes through buildings;*<br>*(e) Accessible stairs or lifts;*<br>*(f) Location of accessible toilet facilities;*<br>*(g) Locations of rooms with listening systems.* |

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| Accessible ramps | *Check that the ramp is constructed as per the approved plans and specifications. Consider:*<br>*Width 1.2m min*<br>*Gradient 1:12*<br>*Ramp up stand 75mm min*<br>*Safety rail provided mid height*<br>*Handrail provided (840-900mm both sides of ramp)*<br>*Note: Ramp max 9m then landing required (1.2m min)* |
| Accessible steps | *Check that all steps to the building comply with the approved plans and specifications. Where not detailed ensure compliance to NZBC D1 is achieved.* |
| Isolated steps | *Check that any isolated steps comply with the approved plans and specifications. Note:*<br>*No single isolated steps permitted on any routes.* |
| Accessible stairs | *Check that the tread and rise is as per the approved plans and specifications.Note:*<br>*Accessible stairs require a 310mm minimum tread and 180mm maximum riser.* |
| Stair construction | *Check that the stair treads, risers, pitch and minimum 2 meter head height are achieved as per approved plans.* |
| Contrasting of stair nosings | *Check that the leading edge of each tread is contrasting.* |
| Landings | *Check that landings have been provided as required by the approved plans.* |
| Handrail | *Check that handrails have been provided as per the approved plans and specifications.* |
| Slip resistance - main entry | *Check that the main entry has been constructed of a slip resistance material and complies with NZBC D1.* |
| Lighting at the main entry | *Check that the lighting provided at the main entry complies to NZBC G8.* |
| Main entrance level access | *Check that the main entry is supplied with level access.Note:*<br>*Thresholds <20mm to comply with D1/AS1 or NZS 4121:2001* |
| Door clear width | *Check that the door way clear widths on the accessible route are achieved as specified within the approved plans and specifications.Note:*<br>*Clear opening of 760mm minimum required.* |
| Door swing direction | *Check that the direction of door swing is correct as shown in the approved plans and specifications.* |
| Doors closers/hardware | *Check that the door hardware complies with the approved plans and specifications.Note:*<br>*Hardware to be of lever type, note knobs with a twist or turn action do not provide sufficient grip for people with hand impairments.*<br>*hardware to be located between 900mm-1200mm from floor* |
| Vision strip to doors on accessible route | *Check that vision strips to doors on the accessible route which are hinged in both direction have been installed.* |
| Glazing Manifestation | *Check that manifestation is provided to glazing as per the approved plans and specifications.F2/AS1 cites NZS 4223.3:2016 which requires manifestation on any glazing that could be mistaken as a doorway or an unimpeded path of travel. The manifestation is to be located between 800mm - 1200mm from FFL and have a face width of no less than 20mm. Note:*<br>*Mainfestation is not required in housing.* |
| Accessible controls | *Check that light switches, electrical sockets, window/door controls are all set as per the approved plans and specifications.Note:*<br>*Window/door controls between 900mm-1200mm (lever type)* |

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| | *Light switches between 900mm-1200mm (toggle,rocker, push pad or push button type to project from plate)*<br>*Electrical sockets between 500mm-1200mm and 500mm to any corner.* |
| Accessible counter | *Check that an accessible counter has been provided as per the approved plans and specifications.Note:*<br>*Width minimum 900mm*<br>*Depth minimum 540mm*<br>*Height underside 675mm minimum*<br>*Height top 755mm maxinimum* |
| Accessible compartment dimensions | *Check that the accessible compartment internal dimensions comply with the approved plans and specifications.Note:*<br>*NZS 4121:2001 requires*<br>*Accessible toilet: 1600mmx1900mm minimum*<br>*Accessible bathroom: 1900mmx2100mm minimum* |
| Grab rails | *Check that grab rails have been installed within the accessible compartments as per the approved plans and specifications.* |
| Basin height and location | *Check that the basin location and set up is as per the approved plans and specifications.Note:*<br>*Require,*<br>*675mm minimum ot the underside of the basin*<br>*400mm minimum from the centre of the waste to the wall*<br>*400mm max from the front of the basin to the wall* |
| Hot and cold water on correct side on tapware and shower mixer | *Check that the hot water is set to the left of the cold supply.*<br>*Note: Requirement of NZS 4121:2001.* |
| Tapware is accessible | *Check that tapware has sufficient clearance around it and that handles are lever or capstan type.* |
| Mirror height | *Check that the mirror height is set as per the approved plans and specifications.Note:*<br>*NZS 4121:2001 sets a maximum 1000mm to the bottom of the mirror.* |
| W/C height and location | *Check that the WC height and location is as per the approved plans and specifications. Note:*<br>*NZS 4121:2001 requires,*<br>*700mm-750mm from the wall to the front edge of the pan*<br>*450mm from the centre line of the pan to the nearest wall*<br>*460mm from the FFL to the top of the pan seat* |
| Toilet roll holder correct zone | *Check that the toilet roll holder is placed within the correct zone as required by the approved plans and specifications. Note:*<br>*NZS 4121:2001 requires the toilet roll to be located, between the front of the pan and 300mm maximum past the pan front. Height to be between 460mm and 700mm of the FFL.* |
| Accessible shower dimensions | *Check that the shower is sized as per the approved plans and specifications.Note:*<br>*NZS 4121:2001 requires the shower to be a minimum of 1200mm x 1200mm and a fall to the waste of no less than 1:50* |
| Accessible shower seat | *Check that the shower set has been set up as per the approved plans and specifications.Note:*<br>*NZS 4121:2001 requires,*<br>*Location to be on the opposite wall to the mixer and rose,*<br>*height to be between 450mm - 550mm of the FFL,* |

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| | *Size to be 800mm x 450mm minimum* |
| Auto doors | *Check that the automatic doors have been installed as per the approved plans and specifications.Check:*<br>*Type,*<br>*Size,*<br>*Fail safe,*<br>*location.* |
| Lifts | *Check that the lifts have been installed as per the approved plans and specifications.Check:*<br>*Type,*<br>*Size,*<br>*location,*<br>*Panel height for accessibility (between 900mm and 1350mm),*<br>*Panel tactile and Braille,*<br>*Lift signage,*<br>*Lift handrails (3 required).* |

| Final - Accessory Buildings/Marquees Checklist | |
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| **Health & Safety** | |
| **Site Safe** | *Check site hazard register board*<br>*Check for dogs*<br>*Undertake visual assessment of site*<br>*Ensure site induction is undertaken if required* |
| **PPE Gear** | *Ensure all appropriate PPE is worn.* |
| **General** | |
| **Work ready** | *Is all in order for an inspection?*<br>*Area to be inspected completed.* |
| **Site contacts name** | *Enter the name of the site contact in the notes area.* |
| **Consent documents sighted** | *It is mandatory to have all stamp approved building consent documentation on site.* |
| **Layout compliance** | *Check layout of building is as per the approved plans.* |
| **Elevations compliance** | *Check elevations of building are as per the approved plans.* |
| **Roading/Footpath condition** | *Check that crossing and footpath is in good condition.*<br>*If not refer to the Roading department.* |
| **Required Documentation:** | *Ensure that all required documentation is listed under the documentation section.* |
| **Siting/Floor height** | |
| **Siting of building** | *Has siting been previously checked?*<br>*If not undertake siting inspection.* |
| **Ground contours away** | *Check that ground contours away from the building.*<br>*Ensure that the secondary flow path has not been compromised.* |
| **FFL vs FGL** | *Check that proposed FFL complies with FGL requirements for cladding material.*<br>*Check that FFL complies with E1.* |
| **Wall Framing and Fixings** | |
| **Floor cuts as per approved plans.** | *Check floor cuts done as required at floor slab stage.* |
| **Bottom plate separation** | *DPC or similar in place between timber bottom plate and concrete slab.* |
| **Bottom plate fixings** | *Fixings for bottom plate to floor completed as per the approved plans and specifications.*<br>*Check bottom plate fixings are within 150mm of plate joins, plate ends and trimming studs.* |
| **Wall framing** | *Check:*<br>*Stud size*<br>*Spacing*<br>*Stress grade*<br>*Height of studs* |
| **Dwangs** | *Check dwangs are installed as per approved plans.*<br>*Note:*<br>*If direct fixed vertical weatherboards or metal profiled cladding is to be installed dwangs to be at 480mm centres.* |
| **Sill trimmers** | *Check sill trimmers comply with approved plans.*<br>*90mm x 35mm up to 2 metres*<br>*90mm x 45mm up to 2.4 metres* |

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| | *90mm x 90mm up to 3 metres*<br>*90mm x 135mm up to 3.6 metres*<br>*Above 3.6 metres is SED* |
| **Lintel size** | *Check size is as detailed on approved plans.*<br>*Check truss plan vs architectural.* |
| **Lintel fixing** | *Check lintels are fixed in accordance with plans.*<br>*Check fixing requirements on truss plan vs architectural plans.*<br>*Check fixings at the trimming stud to foundation.* |
| **Lintel support** | *Check trimming studs under lintels.*<br>*Note:*<br>*One trimming stud required under lintels up to 3m span.*<br>*Two required for lintels up to 4.2m span.*<br>*Three trimming studs required for lintels spanning over 4.2m.* |
| **Top plate size** | *Check top plate size complies with approved plans.*<br>*Note:*<br>*Where brace lines are spaced between 5 and 6 metres double top plate required.* |
| **Top plate fixings** | *Check top plate fixings comply with the approved plans.*<br>*Check for conflict between truss plans and architectural.*<br>*Consider lintels and ensure jack studs above are connected to the lintel via nail plate of at least same capacity as top plate fixing.*<br>*Top plate joints:*<br>*3kN for walls up to 100BUs*<br>*6kN for walls over 100BUs*<br>*6kN for walls attached to ceiling diaphragms* |
| **Mechanical fixing durability** | *Check that mechanical fixing durability is appropriate for area installed within.* |
| **Truss roof framing** | |
| **Truss layout** | *Check site truss plans are as per the approved plans and specifications.*<br>*Check layout against correct truss plans.* |
| **Truss fixings** | *Check truss fixings are as per the approved plans and specifications.* |
| **Purlins** | *Check purlin size, spacing, stress grade, treatment and fixings is as per the approved plans and specifications.*<br>*Consider VH and above wind zones hip/ridge purlins need to be set down further for wider capping.* |
| **Bottom cord restraints** | *Bottom cord restraints generally 1.8m centres, refer to as built truss plan.*<br>*Note:*<br>*Check these are blocked down to all walls.*<br>*Not required if the the ceiling battens are timber fixed to the truss bottoms.* |
| **Roof space braces** | *Check to ensure all roof space braces are installed as per approved plans.*<br>*E.g. gable end braces.* |
| **Roof plane bracing** | *Check these are installed as detailed on the roof plan?*<br>*Ensure that strap bracing is fixed correctly at the ends as per the manufacturers literature.*<br>*One brace per 50m2 light roof, one per 25m2 heavy roof.*<br>*One brace= opposing pair strap bracing, hip or valley rafter.* |
| **Mechanical fixing durability** | *Check that mechanical fixing durability is appropriate for area installed within.* |

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| **Pitched roof framing** | |
| **Rafters** | *Check rafter size, span, centres, stress grade, treatment and connections.*<br>*Consider birds mouth (32mm min bearing and depth of remaining member must not be less than 80% of actual depth of member or less than 65mm ie. 90mm timber max birdsmouth cut out is 18mm).* |
| **Purlins** | *Check purlin size, spacing, stress grade, treatment and fixings is as per the approved plans and specifications.*<br>*Consider VH and above wind zones hip/ridge purlins need to be set down further for wider capping.* |
| **Roof plane bracing** | *Check these are installed as detailed on the roof plan?*<br>*Ensure that strap bracing is fixed correctly at the ends as per the manufacturers literature.*<br>*One brace per 50m2 light roof, one per 25m2 heavy roof.*<br>*One brace= opposing pair strap bracing, hip or valley rafter.* |
| **Mechanical fixing durability** | *Check that mechanical fixing durability is appropriate for area installed within.* |
| **Roof/Wall claddings** | |
| **Cladding clearance to ground** | *Check the cladding clearance to ground is appropriate as per the approved plans and specifications.* |
| **Wall cladding systems** | *Check that all exterior cladding systems are as per approved plans.*<br>*Ensure to check:*<br>*Cladding type.*<br>*Cladding system flashings.* |
| **Roof cladding system** | *Check that roof and its flashings are completed as per the approved plans and specifications.* |
| **Penetrations to cladding system are sealed around** | *Check that all penetrations to cladding systems are as per the approved plans and specifications.* |
| **Drainage** | |
| **Drainage system** | *Check previous inspection records regarding the drainage system has been inspected and approved.* |
| **As built drainage plan** | *Check if As built drainage plan has been provided.* |
| **Downpipes** | *Check down pipes are installed as per approved plans and specifications.* |
| **Site stormwater containment** | *Check that site storm water has been contained as per approved plans and specifications.*<br>*Note:*<br>*No more than 40m2 catchment from impermeable area can discharge over the road boundary.*<br>*Sump required if this is exceeded.* |
| **Fire Resistant requirements** | |
| **FRR layout** | *Check that the fire separations are located as per the approved plans and specifications.* |
| **FRR system type** | *Check that the FRR system used is as per the approved plans and specification.*<br>*Check that the thickness and number of sheets are correct.* |
| **Fire wall return** | *Check that fire wall return is provided where wall is less than 90 degrees to the boundary as per approved plans.* |
| **FRR termination point** | *Check that FRR system terminates appropriately.*<br>*E.g. Roof cladding.* |

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| | *See approved plans and specifications, along with FRR system manufacturers literature.* |
| **FRR flush boxes** | *Check that flush boxes are appropriated and are installed within FRR wall systems.* |
| **Kao wool fire resistant insulation** | *Check fire resistance insulation installed correctly as per approved plans and specifications.* |
| **FRR penetration proprietary products** | *Check fire collars, flush boxes, intumescent sealants or wraps in place as appropriate.* |
| **PS3 & As built schedule of fire penetrations** | *Check required documentation for building consent.*<br>*PS3 from an approved author on the SBCG PSA register.*<br>*Floor plan showing location and schedule stating FRR of element that product is protecting.*<br>*Schedule of products used on each penetration.* |
| **Total fire separation** | *Check that total fire separation has been achieved as per approved plans and specifications.* |
| **Access** | |
| **Access to building** | *Check that access to the building complies with the approved plans and specifications.* |
| **Final exits** | *Check that the final exits comply with the approved plans and specifications.* |
| **Exit signs** | *Check that Exit signs are installed as per the approved plans and specifications.* |
| **Egress routes** | *Check that egress route has the width, length and is unobstructed as per the approved plans and specifications.* |
| **Emergency lighting** | *Check that emergency lighting is in place as per approved plans and specifications.* |
| **Ventilation** | |
| **Building ventilation** | *Check that the ventilation of the building complies with the approved plans and specifications.* |
| **Emergency warning system** | |
| **Emergency warning system/Smoke Alarms** | *Check that emergency warning system has been installed where required by the approved plans and specifications.* |

| CPU Checklist | |
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| **Health & Safety** | |
| **Site Safe** | *Check site hazard register board*<br>*Check for dogs*<br>*Undertake visual assessment of site*<br>*Ensure site induction is undertaken if required* |
| **PPE Gear** | *Ensure all appropriate PPE is worn.* |
| **General** | |
| **Work ready** | *Is all in order for an inspection?*<br>*Area to be inspected completed.* |
| **Site contacts name** | *Enter the name of the site contact in the notes area.* |
| **CPU documents sighted** | *It is mandatory to have all CPU documentation on site.* |
| **FENZ evacuation scheme** | *Check that a FENZ approved evacuation scheme contained within CPU documentation.* |
| **Public safety within accessible area** | |
| **Area to be accessible to public** | *Check that the area proposed as accessible to public matches the CPU documentation.* |
| **Restricted area controls** | *Check that all means of restrictive access have been taken as per the CPU documentation.*<br>*E.g. Hoarding's, Fences, Screens, Locked doors.* |
| **Construction hazards** | *Check that all construction hazards have been managed as per CPU documentation.* |
| **Protection from overhead work** | *Check that all means of protection from overhead works have been implemented s per the CPU documentation.* |
| **Safety from falling** | *Check that all safety from falling barriers have been provided as per the CPU documentation.* |
| **Hazardous substances and materials** | *Check that all hazardous substances and materials are contained/stored as per the CPU documentation to ensure no risk to the public.* |
| **Facilities within public access areas** | |
| **Accessible route** | *Check that safe entry into and through the public access areas have been provided as per the CPU documentation.* |
| **Accessible facilities** | *Check that all accessible facilities are provided as per the CPU documentation.* |
| **Personal hygiene** | *Check that all sanitary fixtures are provided as per the CPU documentation.* |
| **Food preparation facilities** | *Check that all food preparation facilities are provided as per the CPU documentation.* |
| **Ventilation** | *Check that all means of ventilation has been provided as per the CPU documentation.* |
| **Electricity** | *Check that all electrical works are complete within public accessible areas.* |
| **Gas supply** | *Check that all gas works are complete within public accessible areas.* |
| **Water supplies** | *Check that all water supplies are complete within public accessible areas.*<br>*Ensure that backflow devices are in place as per the CPU documentation.*<br>*Ensure that safe water temperatures are maintained.* |
| **Life safety features within public access areas** | |
| **Means of escape** | *Check that the escape routes comply with the CPU documentation.*<br>*Ensure no obstructions are present.* |

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| **Emergency sprinkler system** | *Check that the Emergency sprinkler system is in place & certification of operation is provided.*<br>*Ensure no dust covers are covering system devices.* |
| **Emergency warning system** | *Check that the Emergency warning system is in place & operational*<br>*Ensure no dust covers are covering system devices.* |
| **Emergency lighting system** | *Check that the emergency lighting system is installed as per the CPU documentation and is operational.* |
| **Exit signage** | *Check that the exit signage is provided as per the CPU documentation.* |

| Swimming Pool Checklist | |
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| **Health & Safety** | |
| **Site Safe** | *Check site hazard register board*<br>*Check for dogs*<br>*Undertake visual assessment of site*<br>*Ensure site induction is undertaken if required* |
| **PPE Gear** | *Ensure all appropriate PPE is worn.* |
| **General** | |
| **Work ready** | *Is all in order for an inspection?*<br>*Area to be inspected completed.* |
| **Site contacts name** | *Enter the name of the site contact in the notes area.* |
| **Documents sighted** | *It is mandatory to have all stamp approved building consent documentation on site, or*<br>*If existing pool council documentation to be taken.* |
| **Pool/Pond Type** | *Specify the pool/pond type in the comments section* |
| **Pool Area** | |
| **Washing Line** | *Ensure that the pool area does not contain a washing line.* |
| **Play Area & Equipment** | *Ensure that the pool area does not contain a play area or equipment that would result in a use of the area other than for the use of the pool.* |
| **Vehicle Storage** | *Ensure that the pool area does not serve an additional use such a a Garage or Carport for vehicle storage.* |
| **Fencing** | |
| **Fence Height** | *Ensure that the fence height is a minimum of 1.2m high from the outside level of the fence.* |
| **External Climbable Features** | *Ensure that no climbable projections are within 1.2m of the pool fencing.*<br>*Check for climbable fences, structures, trees, ect.* |
| **Horozontial Rails** | *Ensure a minimum of 900mm is provided between each horizontal rail of the fence to prevent the fence from being climbable.* |
| **Fence Gaps** | *Ensure that any gaps between railings or below the fence are no more than 100mm.* |
| **Mesh Fencing** | *Ensure that mesh size is no more than 10mm* |
| **Pool Gate** | |
| **Self-closing / Self-latching** | *Ensure that gate to pool area is self closing and self latching.*<br>*Note: The self closing of a gate is to be from any point of open and released from a stationary position.* |
| **Latch Height / Location** | *Ensure that the latch of the pool gate is situated 1.5m above ground level when on the outside face of the pool gate , or,*<br>*Ensure that the latch of the pool gate is situated 1.2m above ground level when on the inside face of the pool gate.*<br>*Note: When latch is under 1.5m it requires a solid sheild 450mm radius around latch.* |
| **Swing Direction** | *Ensure that the pool gate swings away from the pool.* |
| **Hinged Doors** | |
| **Inward Opening Self Closing** | *Ensure that when the pool door is inward opening towards the pool, it self closes from any point that the door is released from.* |

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| **Outward Opening Self Closing** | *Ensure that when the pool door is outward opening from the pool, it self closes from a point greater than 150mm that the door is released from.* |
| **Audibale Alarm** | *Ensure where the door is not fitted with a self closure device, that an audible alarm is fitted as per NZBC F9/AS1 section 4.2.4.* |
| **Self-latching** | *Ensure that door to pool area is self latching.* |
| **Latch Height** | *Ensure that the latch of the pool door is situated 1.5m above bottom of the door.* |
| **Appropriate signage** | *Ensure that the door has signage adjacent to the handle which reads "Swimming Pool Close the Door".*<br>*The signage is to be situated between 1.2m - 1.5m.* |
| **Sliding Doors** | |
| **Self Closing** | *Ensure that the pool door self closes.* |
| **Audibale Alarm** | *Ensure where the door is not fitted with a self closure device, that an audible alarm is fitted as per NZBC F9/AS1 section 4.2.4.* |
| **Self-latching** | *Ensure that door to pool area is self latching.* |
| **Latch Height** | *Ensure that the latch of the pool door is situated 1.5m above bottom of the door.* |
| **Appropriate signage** | *Ensure that the door has signage adjacent to the handle which reads "Swimming Pool Close the Door".*<br>*The signage is to be situated between 1.2m - 1.5m.* |
| **Windows** | |
| **Sill Heights of Opening Windows** | *Ensure where a opening window sill height is below 1.2m to the ground level, a restrictor is fitted to prevent the window being opened more than 100mm.* |
| **Glazing** | |
| **Safety glazing** | *Consider safety glazing within 2000mm of the floor of wet areas, full windows with no transom bars.* |
| **Small Pools Exempt from Fencing under 5m2** | |
| **Small pool Height** | *Ensure that the pool is a minimum of 760mm above ground level to the top level.* |
| **Pool Climable** | *Ensure that the pool is of smooth sides with no projections over 10mm that could be climbable.* |
| **Pool Lid** | *Ensure that the small pool is fitted with a lid that is capable of withstanding a foreseeable load.* |
| **Lockable** | *Ensure that the pool lid is lockable.* |
| **Appropriate signage** | *Ensure that the spa is fitted with signage which reads "WARNING: This spa pool cover must be kept locked except when under adult supervision".* |
| **Water Supplies** | |
| **Water Supply Inlet Height** | *Ensure that the inlet for filling the pool to be at least 25mm above the level of the pool surround, or through an approved back flow prevention device* |
| **Backflow prevention** | *Check that all fixtures are protected via an air gap and that where this is not achieved appropriate means of back flow prevention is provided.* |
| **New Item** | |
| **Water Supplies** | |
| **Water Supply Inlet Height** | *Ensure that the inlet for filling the pool to be at least 25mm above the level of the pool surround, or through an approved back flow prevention device* |
| **Backflow prevention** | *Check that all fixtures are protected via an air gap and that where this is not achieved appropriate means of back flow prevention is provided.* |
| **Exempt Pool/Pond Decision** | |

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| **Decision** | *If an exemption has been requested, does the pool/pond inspected meet the exemption requirements of NZBC F9/AS1?* |