

Form 308
 Technical
 Check Sheet

Domestic Dwelling Consent Processing Check Sheet

Key: **P = Pass** (ie Compliance with Building Code) **F = Fail** (ie Non compliance with Building Code) **N/A = Not Applicable**
Alternative Solutions = Notes are to be recorded at the end of this checklist

Building Consent No. _____ Date: _____

Property Address: _____

BC Official: _____ Signature _____

Ref No	Building Code Clauses	Key	Comments	Alternative Solutions? Y/N
Ground Works / Siting / Site Preparation				
1	Does the site plan demonstrate distances to boundaries & other buildings on the site? <i>Recommend min. of 2 dimensions be provided.</i>	NA		
2	Are the boundary or building separation distances in relation to spread of fire correct? <i>Consider spread of fire provisions.</i>	C		
3	Have special features of land or ground conditions been considered? <i>Check T/A records for indications of fill, vegetation, overland flow, slips, ponding, gradients, excavation, erosion etc. If present then obtain engineering & or geotechnical input.</i>	B1		
4	Is wind zone correctly specified for the site? <i>Refer Tables 5.1, 5.2 fig 5.1 NZS 3604</i>	B1		
5	Will proposed excavations affect or impact on other buildings / properties? <i>Consider easements, gradients, & provisions required to retain surcharge.</i>	B1		
6	Is the nominated durability / corrosion zone correct for the site? <i>ref. Section 4 - 3604 Fig & Table 4.1</i>	B2		
7	Are floor levels & datum provided? <i>Request these if they are not provided.</i>	E1 E2		
8	Do minimum floor levels apply? <i>If so then specify location of datum & determine if floor levels specified are appropriate.</i>	E1 E2		
9	Are there any specific engineering design requirements? <i>If there are then apply condition or request further information.</i>	B1		

Ref No		Building Code Clauses	Key	Comments	Alternative Solutions? Y/N
Footing/Foundation					
10	Do special features of land require consideration in regard to footings/ foundations? <i>ref: NZS 3604 - 3.4 Bearing NB: Does Council have knowledge / record of poor ground bearing / flooding on the site of the proposed work or adjoining site?</i>	B1			
11	Have effects of sloping ground been considered? <i>Steps in footings per: NZS3604 - Section 6, Cl 6.11.2 & .4, fig 6.12</i>	B1			
12	Has a comprehensive footing / foundation specification been provided? <i>Ensure the specification provides appropriate reference to: Standards, Workmanship, Materials, Durability, & Reinforcement.</i>	B1 B2			
13	Are footing and foundations correctly detailed for the proposed floor loads/ cladding / # of story's? <i>NZS 3604 – Cl. 6.11 & Table 6.4., Cl. 7.5 & Fig. 7.12 - 7.15</i>	B1			
14	Are all pad / post footing locations detailed & correctly sized? <i>Ref. Sec.9- 3604 - ensure all load paths have been considered.</i>	B1			
15	Does any aspect of the footing / foundation design require checking by a structural engineer? <i>If so, then send to engineer for checking. If an engineer is to be retained to undertake site observation then apply a condition to this effect.</i>	B1			
16	Are masonry blockwork details provided? <i>Is a Registered Qualified Mason required to undertake structural blockwork? NZS 4210 & 4229. If so ensure that a condition is applied to this affect.</i>	B1			
17	Do foundations require tanking? <i>Ensure complying tanking details are provided ref. E2/AS1 Section 12: Basements - Obtain manufacturer specification for tanking system.</i>	E2			

Ref No		Building Code Clauses	Key	Comments	Alternative Solutions? Y/N
Piles					
18	Does pile size & layout comply with floor load requirements? <i>Ref. NZS3604:1999, Sec 6 & Sec 14 for 3 kPa.</i>	B1			
19	Are subfloor bracing calculations correct & does framing setout meet floor load demand? <i>Check sub-floor bracing schedule 1.5 kPa / 3 kPa, & pile centres are correct for the bearer & joist spans?</i>	B1			
20	Are pile footings size & connection details provided? <i>Anchor - 900 x 350 x 350 Brace - 450 x 350 x 350 Driven - Obtain specification (NZS 3604 or SED)</i>	B1			
21	Is timber pile grade & treatment correctly specified? <i>Refer 'Amendment 2' NZS 3604 for changes to 'Timber Grades'</i>	B1 B2			
22	Do pile heights comply? <i>Min 150mm timber pile, consider min. floor level (550 mm timber floor) Max. 1.2m Cant. Max. 3m timber pile & 1.5m conc. ref. Sec 6 NZS 3604.</i>	B1 B2			
23	Has Driven Pile specification been provided? <i>Refer NZS3604:1999 Sec 6, Cl 6.6.</i>	B1			
24	If SED have calculations & details been provided? <i>Forward to Engineer for review.</i>	B1			
Bearers					
25	Are bearer spans, grade, spacing, fixings & treatment specified? <i>If 'No', suspend & request information.</i>	B1 B2			
26	Are bearer/ pile & bearer / joist fixings details provided? <i>Check Cl 6.12 & Fix 6.6- NZS 3604</i>	B1 B2			
27	Have load paths been considered? <i>Load bearing partitions within 200 mm of bearers</i>	B1			

Ref No		Building Code Clauses	Key	Comments	Alternative Solutions? Y/N
Floor Joists					
28	Do joist grade, treatment, size, span, spacing, fixings & blocking comply with floor load demand? <i>Refer 'Amendment 2' NZS 3604 for changes to 'Timber Grades' & call size, now 'Actual Minimum Dried Size' Consider 1.5 or 3 kPA Floor load</i>	B1 B2			
29	Is lateral support, blocking & midspan-blocking correct? <i>Refer NZS3604, section 7.1.2.2 & 7.1.2.3.</i>	B1			
30	Have load paths been considered? <i>Ensure all point loads are adequately supported.</i>	B1			
31	Has direction of services been considered? <i>Check services plan layout.</i>	B1 G13			
32	Do trimmer joists comply? <i>Refer NZS3604, Section 7.1.6 & fig 7.7</i>	B1			
33	Are non-load bearing walls (with bracing elements) adequately supported? <i>Refer NZS3604, Section 7, Cl.7.1.3.5, 7.3.1.6 & figure 7.5</i>	B1			
34	Are non-load bearing walls (without bracing elements) adequately supported? <i>Refer NZS3604, Section 7, Fig 7.5.</i>	B1			
35	Are load bearing walls at right angle to joist within 200mm of bearer support? <i>Refer NZS3604, Section 7, Fig 7.3</i>	B1			
36	Are double joists provided under load bearing walls? <i>Refer NZS3604, Section 7, Fig 7.3</i>	B1			
37	Do cantilever joist grade, sizes & spans comply? <i>Refer NZS3604, Table 7.2</i>	B1			
38	Do cantilever deck joist connections & set back comply? <i>Refer NZS3604, Section7, Fig 7.6</i>	B1			
Stringers					
39	Do stringer size, grade, treatment & fixing comply with floor load & durability demands? <i>Refer NZS3604, Section 6, Table 6.7 or 14.7 (for 3 kPa loading)</i>	B1 B2			

Ref No		Building Code Clauses	Key	Comments	Alternative Solutions? Y/N
Flooring					
40	Check relationship between floor load & flooring thickness? <i>Refer NZS3604, Section 7, 7.2 & Section 4, 4.3. Check floor loadings, i.e. 1.5-2.0kPa or 3kPa.</i>	B1			
41	Does flooring thickness & type comply? <i>Ref. Tables 7.4 & 14.9</i>	B1			
42	Is joist spacing appropriate for flooring type? <i>Refer NZS3604, Section 7, 7.2</i>	B1			
43	Is distance between underside of flooring & subfloor ground levels appropriate for flooring type? <i>Refer NZS3604, Section 4, 4.3, Minimum clearance for particle board above subfloor ground is 550mm, otherwise treated plywood is required.</i>	B2 E2			
Subfloor spaces					
44	Is subfloor ventilation provided? <i>If not specified request details</i>	B2 E2			
45	Is a damp proof ground cover to be used?	B2 E2			
46	Is subfloor insulation provided, appropriate & correct?	H1			
Concrete floor					
47	Is floor height above finished ground level correct? <i>NZS 3604, Section 7, Fig 7.10.</i>	B2 E2			
48	Is hard fill detailed & correct? (< 600 mm in depth) <i>ref 7.5.3, If >600mm in depth obtain a geotech assessment report on the underlying ground conditions.</i>	B1			
49	Is DPM detailed?	B2 E2			
50	Are slab thickenings required & if so are they detailed & complying? <i>ref. 7.5.11</i>	B1			
51	Does reinforcing comply (is it detailed & is edge, top & bottom cover & supplementary bar detail provided)? <i>ref. 7.5.8.6.4</i>	B1 B2			

Ref No		Building Code Clauses	Key	Comments	Alternative Solution? Y/N
Flooring					
52	Does slab thickness comply? <i>ref. 7.5.8.2</i>	B1			
53	If specific engineering design (SED), is Engineer detail provided? <i>Obtain PS 1</i>	B1			
Wall Framing					
54	Is design within scope of the acceptable solutions? <i>If 'No' obtain SED.</i>	B1			
55	Do stud height, grade, size, spacing, & treatment comply? <i>Refer 'Amendment 2' NZS 3604 for changes to 'Timber Grades' & call size, now 'Actual Minimum Dried Size'</i>	B1 B2			
56	Is the framing setout appropriate for the cladding system? <i>NZS 3604 - Cl 11.5.2, i.e. 480 mm centres for some vertical shiplap / Board & Batten claddings, etc</i>	B1			
57	Are top & bottom plate fixings / connections specified &/ or detailed? <i>Cl. 7.5.12 (bot plate)Cl. 8.7.3</i>	B1 B2			
58	Do top & bottom plate grade, size, & treatment comply? <i>Refer 'Amendment 2' NZS 3604 for changes to 'Timber Grades' & call size, now 'Actual Minimum Dried Size'</i>	B1 B2			
59	Is wall framing moisture content correctly specified? <i><24% for non insulated buildings, <20% for insulated buildings, or wall lining manufacturers specifications.</i>	B2 E2			
60	Has additional 150 x 40 ribbon top plates been provided where 6m brace lines are required?	B1			
61	Have Nogs been installed behind apron flashing up stand to roof, deck, etc?	B1			
62	If the design contains SED, has this been peer reviewed / approved by engineer? <i>If not send to engineer for peer review.</i>	B1			
Bracing					
63	Are wall bracing elements & fixings detailed & correct?	B1			
64	Are wall bracing elements clear of showers?	B1 B2			

Ref No		Building Code Clauses	Key	Comments	Alternative Solutions? Y/N
65	Is wall bracing schedule calculations & distribution of elements correct? <i>Refer manufacturer specs.</i>	B1			
66	Is a floor diaphragm required & if so does it comply? <i>Refer NZS3604, Section 7, 7.3</i>	B1			
Lintels & Sills					
67	Is lintel and sill span, size, grade, treatment correct? <i>ref. NZS 3604 Table 8.8 - 8.15</i>	B1 B2			
68	Is lintel support correct? (roof, roof /wall)	B1			
69	Are Trimmer Stud Sizes correct? <i>ref. Fig 8.5 NZS 3604</i>	B1			
70	Are lintel fixings specified & correct?	B1 B2			
71	Do lintels support point loads? <i>Check roof truss layout and girder truss point loads. Refer to relevant manufacturers specifications (if applicable) for specific criteria relating to point loads,</i>	B1			
72	If SED, have calculations been provided?	B1			
Posts & Beams					
73	Do beams sizes & treatment comply?	B1 B2			
74	Do beam / post connections comply? <i>Check corrosion zone & durability requirements for exposed connections.</i>	B1 B2			
75	Are beams properly supported? <i>Have load paths been considered?</i>	B1			
76	Do post / footing connections comply?	B1 B2			
77	Does post footing size comply? – (consider uplift)	B1			
78	Are beams & connections SED?	B1 B2			
Trussed Roof					
79	Are roof truss fixings details specified and do they comply with wind zone & corrosion zone provisions? <i>ref. NZS 3604 Cl. 10.21</i>	B1 B2			
80	Are roof truss layout details correct?	B1			
81	Is roof truss span >12m? if so request specific design <i>Although roof trusses with spans <12m are also outside the scope of NZS 3604 they can be specifically designed in accordance with NZS 3603.</i>	B1			
82	Is the truss design criteria & certificate from approved fabricator provided	B1			

Ref No		Building Code Clauses	Key	Comments	Alternative Solutions? Y/N
83	Is the timber grade and treatment for truss members correctly specified?	B1 B2			
Framed Roof & Roof Bracing					
84	Does roof bracing comply? <i>Check that bracing is appropriate for roof weight (heavy/ light), and locations of bracing is correctly demonstrated . May need diaphragm ceiling/dragon ties. NZS 3604 Section 8.3.3.4</i>	B1			
85	Has plan bracing been detailed? <i>NZS 3604 10.3 and 10.14</i>	B1			
86	Has roof space bracing been detailed? <i>NZS 3604 10.3 and 10.14</i>	B1			
87	Do heavy hip roofs have ceiling plane bracing in accordance with NZS 3604 10.3.3.3	B1			
Rafters					
88	Do rafter spacing, spans, size, grade, treatment, & connections comply? <i>Check wind zone, roof loads - ref. NZS 3604 Sec. 10</i>	B1 B2			
Ridge Beams					
89	Are ridge beam, spans, supports & fixings clearly detailed and complying? <i>ref. NZS 3604 sec 10.13</i>	B1 B2			
90	Have load paths been correctly addressed? <i>Check that the load path from ground to beam support is properly considered.</i>	B1			
Collar Ties & Cleats					
91	Are collar tie & cleat details provided and are they complying? <i>ref. NZS 3604 10.13 / 14</i>	B1			
Ceiling Joists					
92	Does ceiling joist spacing, size, span, grade, & treatment comply?	B1 B2			
Ceiling Runners (Strong backs)					
93	Does ceiling runner (strong back) spacing, span, size, grade, & treatment comply? <i>Ref Table 10.5 NZS 3604 Section 10</i>	B1 B2			

Ref No		Building Code Clauses	Key	Comments	Alternative Solutions? Y/N
94	Do ceiling runner dimensions comply with Table 10.5?	B1			
Valley Boards					
95	Does valley board size, treatment, grade, comply? <i>Must be min. 25mm thick and wide enough to support valley gutter. Min. H3.1 - NZS 3602 - Table 1. 1D.4</i>	B1 B2 E2			
Underpurlins					
96	Do underpurlin size, span, fixing, grade, and treatment comply? <i>ref. Tables 10.3 & 15.7 - consider .5 kPa snow loads</i>	B1 B2			
Strutting Beams					
97	Do strutting beam spans, dimensions, fixings & support comply with Fig 10.10?	B1 B2			
Purlins					
98	Do purlin spacing's, span, size, grade, treatment comply? <i>Ref 3602, Table 1, Section E, H1.1 min. or Section D, if skillion roof - H1.2 min. or Flat roof - H3.1 min. respectively for roof framing & associated members.</i>	B1 B2			
99	Are purlin fixings clearly & correctly detailed? <i>Table 10.9 & 10.10 Consider periphery fixings - Fig 10.16</i>	B1 B2			
Ceiling Battens					
100	Do ceiling batten spacing, span, size & grade comply? <i>ref. Table 13.1</i>	B1 B2			
Roof Cladding					
101	Is the roof cladding within the limitations of E2/AS1 <i>Refer E2/AS1, Paragraph 3.2</i>	E2			
102	Has a comprehensive & relevant 'Roofing' specification been provided? <i>Ensure the specification provided is comprehensive, relevant & has appropriate reference to: Standards(NZS4206,AS2049,NZS4217,etc),Workmanship, Materials, Durability, MRM Code of Practice,</i>	B1 B2 E2			
103	Does the roof pitch comply? <i>Refer E2, Section 8.2, cl 8.2.3 & Table 10.</i>	E2			
104	Have details & flashings been provided for the hips, ridges, valleys, aprons & barges? <i>Refer E2, section 8.2, cl 8.2.6 & figures 23-28.</i>	B1 B2 E2			

Ref No		Building Code Clauses	Key	Comments	Alternative Solutions? Y/N
105	Have relevant flashings, stop ends & turn-downs details been provided? <i>Refer E2, section 8.4, cl 8.4.11 - 8.4.14 & figures 41-49</i>	E2			
106	Do roof penetration comply? <i>Refer E2, Section 8, cl 8.1.7 'Roof penetrations'</i>	E2 B2			
107	Is the method of flashing pipe penetrations through roof specified? <i>Refer E2, section 8.4, cl 8.4.17 & figures 53-55.</i>	E2 B2			
108	Do the proposed masonry tiles specified meet the profile criteria? <i>Refer E2, Section 8.2, cl 8.2.1.1</i>	B1 B2 E2			
109	Is the proposed design within pressed metal tile limitations? <i>Maximum length from eaves to ridge of 12 metres ,No internal gutters(except hidden gutters & valley gutters as detailed in figure 37)</i>	B1 B2 E2			
110	Is the proposed design within profiled metal limitations. <i>This acceptable solution is limited to profiled metal roofing</i> a) <i>Profiled as outlined in paragraph 8.4.4</i> b) <i>without valley that change direction is plan form</i> <i>with sheets no more that 18m in length</i>	E2			
111	Has roofing profile and thickness been specified? <i>Refer E2, Section 8.4, cl 8.4.4.</i>	E2			
112	Are the proposed flashing, gutter & fixing compatible? <i>Refer E2, section 8.2, cl 8.2.4, & Tables 20, 21 & 22.</i>	B2			
113	Are projecting eaves or verges closed in? <i>Refer E2, 8.1.3.1 'Projecting eaves'</i>	E2			
114	Is roof underlay required, if 'yes' has it been correctly specified? <i>Refer E2, Section 8, cl 8.1.5 & 8.1.5.1 & for masonry tiles refer Table 10, for metal roofing refer Table 23.</i>	E2 B2			
115	Is underlay specified where a spreader discharges over a concrete tile roof?	E2 B2			
116	Are anti-ponding boards specified for roof pitches <17 degrees (masonry tiles) <i>Refer E2, Section 8.2, cl 8.2.5. Anti-pondng boards shall be treated in accordance with NZS 3602.</i>	E2 B2			

Ref No		Building Code Clauses	Key	Comments	Alternative Solution? Y/N
117	Are details provided demonstrating how 'Gutters, Barges, aprons & Fascias' terminate against finished cladding? <i>Refer E2, section 8.3, cl 8.3.9 'Gutters, Barges & Fascias' shall terminate so as to leave a gap of 10mm from the finished cladding.</i>	E2			
118	Are gutters, downpipes and spreaders correctly detailed? <i>Refer E1, Table 5 for down pipe sizing & figures 15 & 16 for size of roof gutter. Refer E2, Section 8, cl 8.1.6 'Gutters'</i>	E1			
119	Does the purlin setout provide adequate provision for support & fixing of the roof cladding? <i>Refer E2, section 8.4, cl 8.4.6 'Structure' & Tables 11, 12 & 13.</i>	B1			
120	Does the specified method & setout of the fixings of the roof cladding comply? <i>Refer E2, For Corrugated & Trapezoidal roof cladding, section 8.4, cl 8.4.8 & 8.4.8.1 'Fixings & fixing requirements' & Tables 14 & 15, and for Trough roof cladding refer, section 8.4, cl 8.4.9 & 8.4.9.1 'Fixings & fixing requirements' & figure 40.</i>	B1 E2			
121	Do the details provided for the internal, valley &/or hidden gutters comply? <i>Refer E2, section 8.4, cl 8.4.16 - 8.4.16.3 & figures 50 - 52.</i>	B1 B2 E2			
Membrane Roofs					
122	Is the proposed design within membrane roof limitations? <i>Refer E2, Section 8.5, cl 8.5.1 'Limitations'</i>	B1 B2 E2			
123	Is the substrate grade, thickness & treatment compatible with the proposed membrane? <i>Refer E2, Section 8.5, cl 8.5.3, 'Plywood substrates'.</i>	B1 B2 E2			
124	Does the specified installation of the substrate & membrane comply? <i>Refer E2, Section 8.5, cl 8.5.5 - 8.5.5.2, 'Installation'.</i>	E2 B1 B2			
125	Is the proposed membrane Butyl rubber or EPDM rubber? <i>Refer E2, Section 8.5, and cl 8.5.4, 'Butyl & EPDM'.</i>	E2			
126	Is the roof constructed with complying falls, drainage & gutters? <i>Refer E2, Section 8.5, cl 8.5.6, 'Roof & deck drainage' & figures 56, 63 & 64.</i>	E2			

Ref No		Building Code Clauses	Key	Comments	Alternative Solution? Y/N
127	Has overflow relief been provided for enclosed roofs? <i>Refer E2, Section 8.5, cl 8.5.10, 'Gutters' & figure 64. Overflow relief shall have a cross-sectional area of 1.5 times the cross-sectional area of the calculated discharge down pipe.</i>	E2			
128	Are the wall junctions & verge details provided? <i>Refer E2, Section 8.5, cl 8.5.8, 'Junctions' & figures 57, 58, 61, 62, & 63.</i>	E2			
Drained Cavity					
129	Building wrap specified appropriate & compatible with cladding. <i>Refer E2, Table 23.</i>	B2 E2			
130	Have construction details been provided for the drained cavity system? <i>Ensure all relevant details are in accordance with the details provided in E2.</i>	E2 B1			
131	Have drainage paths been detailed?	E2			
132	Have details been provided for the batten grade, treatment, size, spacing & fixing? <i>Ensure all relevant details are in accordance with the details provided in E2.</i>	B1 B2 E2			
133	Flashing details provided for window & door openings? <i>Ensure all window & door opening details are in accordance with E2.</i>	B2 E2			
134	Are junctions with dis-similar materials detailed?	B2			
Exterior Cladding					
135	Has a product specific specification been supplied?	B1 B2 E2			
136	Does the cladding require a drainage cavity system. Has a risk matrix from NZBC E2 been supplied? <i>Refer to E2 Risk matrix. Risk score; 0-6, may be direct fixed, 7-12, must be installed on a 20mm drained cavity, 13-20, must be installed on a 20mm drained cavity.</i>	E2			
137	Is the proposed design within the limitations of E2? <i>Refer E2, 9.7.1 & 9.7.1.1.</i>	B1 B2 E2			

Ref No		Building Code Clauses	Key	Comments	Alternative Solution? Y/N
138	Have the construction details been provided for the cavity system? <i>Ensure the cavity system details contain the, Timber batten size, fixing requirements, spacing, treatment (H3.1 min), blocking requirements etc</i>	B1 B2			
139	Full flashing details provided for window & door openings <i>Refer E2, Refer E2, 9.1.10, 9.1.10.1-9.1.10.7 & figures 115 & 116, or manufacturers specifications.</i>	B1 B2 E2			
140	Cladding materials are clearly identified on plans?	E2			
141	Is the cladding an approved system?	E2 B2			
142	Internal and external corner details are provided?	E2 B1 B2			
143	Junctions between differing claddings are detailed?	B2 E2			
144	Joints in materials are in accordance with manufacturers details or comply with NZBC E2?	B1 E2			
145	Have manufacturer's installation/fixing details been supplied?	B1 B2			
146	Has the correct wrap/air barrier been specified for walls?	E2 B2			
147	Has the correct wrap/air barrier been specified for unlined walls or gabled ends <i>NZBC E2 9.1.4</i>	E2 B2			
148	Have parapets/enclosed deck barrier junctions/flashings been detailed?	B1 B2 E2			
149	Is the structure appropriate for the proposed cladding? <i>Studs at 400cc for stucco on non-rigid backing?</i>	B1 B2			
150	Have appropriate wall/soffit junctions been detailed?	E2			
151	Have durability requirements been met (particularly where certain materials drain on to flashings/roof)?	B2 E2			
152	Are brick lintels correctly sized and have appropriate treatment?	B1 B2			
153	Is brick cavity the correct size?	E2			
154	Are all fixings relevant for corrosion zone? <i>(eg galv or stainless steel?)</i>	B2			
155	Any battens/boards have appropriate weather grooves?	E2			
156	All plaster/coating systems are a complete and approved system (tested by an approved testing body)?	E2 B2			

Ref No		Building Code Clauses	Key	Comments	Alternative Solution? Y/N
157	Framing requirements for 'Expressed joints' or 'Sealant joints' clearly detailed. <i>Refer E2, figure 103 & 106, double stud required behind joints for sheet fixing.</i>	E2 B1			
Enclosed decks					
158	Is the correct timber treatment, grade, size span & spacing specified for the deck framing? <i>Refer NZS3604 & NZS 3602</i>	B1 B2 E2			
159	Is the timber substrate specified & correct treatment? <i>Refer NZS3602</i>	B1 B2			
160	Have threshold details been provided	E2			
161	Has details for stormwater drainage & overflow relief been provided?	E1			
162	Have details been provided for the barrier/wall junction	B2 E2			
163	Is the membrane specified butyl Rubber or EPDM <i>If not the application is an alternative solution</i>	B2 E2			
164	Does the deck membrane extend up face of exterior wall and barrier min 150mm?	E2			
165	Have correct falls been specified to the deck area & tops of the barriers?	E2			
Kitchen					
166	Is facility provided for washing utensils / food & waste water disposal? <i>G3, Section 1.1 & Figure 1: Preparation Area and Access to Facility Paragraphs 1.1.2 and 1.5</i>	G3			
167	Are facility provided for cooking? <i>A cooker with an oven and a hot plate, or a wall oven and a separate hob, shall be provided for cooking.</i>	G3			
168	Is space provided for food preparation <i>G3.2.1</i>	G3			
169	Have impervious, easily cleaned wall finishes been specified? <i>Wall linings adjacent to appliances and facilities shall have surfaces that can be easily maintained in a hygienic condition. Stainless steel, decorative high pressure laminate, tiles, wallboards with painted or applied impervious coatings or films, are examples of suitable materials for these surfaces.</i>	G3 E3			

HDC Building Consent Authority	Responsibility Quality Manager	Date issued 050210	Version No 5
FRED 392145	Location BCA Quality Manual	Review date 050212	Page 14 of 23

Ref No		Building Code Clauses	Key	Comments	Alternative Solution? Y/N
Laundry					
170	Are laundering facilities required? <i>Laundering facilities are not required for detached dwelling with less than 2 people.</i>	G2			
171	Have facilities with a laundry tub or space & connections for a washing machine been provided? <i>been provided G2/AS1,cl 1.0.1 Laundering facilities shall be provided with: a) A laundry tub, or b) Space and service connections for a washing machine.</i>	G2			
172	Are service connections to be provided? <i>A min of a cold water supply provided for tub or cold water and electric power supply to a washing machine?</i>	G2 G12 G9			
173	Has splash protection been specified for floor and wall linings? <i>E3/AS1 cl 3.1.1 'Floors' & 3.1.2 'Walls'. Floor and Wall linings and finishes must satisfy the performance for impervious and easily cleaned surfaces in areas exposed to water splash.</i>	E3 G2			
Wet areas / WCs					
174	If the wet area has a timber floor, is the flooring treatment complying? <i>In wet areas where maintenance of an impervious coating cannot be assured plywood or timber flooring that has been treated to a min. of H3.1 shall be used (ref. NZS 3602: 2003 sec. 10.3.1)</i>	B2 E3			
175	If shower is level access is proposed, have adequate falls been provided to the floor drain? <i>Falls required to the floor of a level access shower to the floor drain are to be no less than 1:50. Refer NZS 4121: 2000, 10.5.11.3 'Floors'.</i>	E3 G1			
176	Has a complying waterproofing membrane been specified? <i>Ensure the specified waterproof membrane has been applied in accordance with the manufacturer's technical specification. If required ensure applicator provides a Producer Statement - Construction (PS3)</i>	B2 E3			

Ref No		Building Code Clauses	Key	Comments	Alternative Solution? Y/N
177	Have complying floor & wall linings been specified (i.e. tiled, vinyl, wet wall linings, etc) <i>If tiled on wooden floor ensure a waterproof membrane has been specified and manufacturers' technical specification provided.</i>	E3			
178	Has the shower type been specified (tiled or proprietary cubicle) <i>If tiled shower, have construction details been provided for the tiling substrate and waterproofing membrane.</i>	E3			
179	Has the glazing been specified (shower screens & windows) NZS 4223	F2			
180	Has provision been made to contain accidental overflow damage to adjoining household units? If multi-unit dwelling, Refer E3, section 2.0 'Overflow'.	E3			
181	Has provision been made to temper the hot water to all personal hygiene fixtures? Refer, G12 'Water Supplies' G12.3.6	G12			
Ventilation					
182	Are openings providing natural ventilation to occupied space 5% or more of floor area? <i>Refer, G4, Clause 1.2 'Natural Ventilation'.</i>	G4			
183	Does the mechanical ventilation to be provided for extracting moisture & other contaminants comply? <i>Refer, G4, Clause 1.3 'Mechanical Ventilation'</i>	G4			
184	Does the documentation demonstrate mechanical ventilation ducted to outside air? <i>Refer G4, clause 1.3 'Mechanical Ventilation'.</i>	G4			
Insulation					

Ref No		Building Code Clauses	Key	Comments	Alternative Solution? Y/N
185	Is floor, wall and ceiling insulation correctly specified? <i>Refer BRANZ Home Insulation Guide, NZS 4218, AS/NZS 2918.</i>	H1			
186	Is insulation provided to masonry walls in habitable spaces? <i>200 series block generally requires insulation. Refer to BRANZ Home Insulation Guide - and BRANZ Bulletin 357.</i>	H1			
187	Is a 25 mm separation provided between the top of the insulation and the underside of the skillion roof underlay? Ensure 25mm gap is specified between insulation & building paper, refer 'BRANZ Home Insulation Guide'.	E3 H1			
188	Is sub-floor insulation protection required? <i>Subfloor insulation in exposed locations such as under raised floor of a pole house may require protection.</i>	B2 H1			
189	Do the glazed areas exceed 30% of the wall area? <i>(Calculation method required NZS 4218)</i>	H1			
Glazing					
190	Do vertical windows in external walls have a window area of not less than 10% of the floor area of the room? <i>Refer G7, clause 1.0.1 a).</i>	G7			
191	Is at least 50% of the glazed area provided for natural light clear glazed? <i>(G7 2.0.1 & .2)It is acceptable for awareness of the outside to be provided via another space.</i>	G7			
192	Is glazing specified to comply with NZS 4223 Part 3	F2			
Window & Doors					
193	Window / door schedule	B1 B2 F2 G4 G7 H1			
194	Weather tightness details to NZBC E2/AS1 WENZ / Alternative Solution	E2			

Ref No		Building Code Clauses	Key	Comments	Alternative Solution? Y/N
Water Supplies					
195	Has a comprehensive specification been provided?	G12			
Sanitary Plumbing (NZBC G13)					
196	Do the plans & specifications provide adequate information to enable compliance to be properly assessed? <i>If information is not adequate then suspend the application and request further information from the applicant.</i>	G12			
197	Has a specification been provided for the proposed sanitary plumbing work? <i>Ensure the specification is relevant and provides reference to appropriate & current standards, materials, workmanship, durability, fittings, & fixtures.</i>	B1 B2 G12			
198	Has a schematic plan been provided for dwellings of 2 or more storey's?	G13			
199	Are discharge stacks of appropriate size? (Refer Table 2)	G13			
200	Is waste pipe size / length & venting correct?	G13			
201	Is the discharge pipe size correct? (Refer Table 1)	G13			
202	Is a floor waste installed? Is it for accidental overflow (required on multi-unit dwellings)?	G13			
203	Is more than one fixture discharging to the discharge pipe? (Refer Table 4 & 5 for sizing)	G13			
204	Is the relief vent connected to the discharge stack and sized correctly?(Refer Table 3)	G13			
205	Is the gradient appropriate for the pipe size? (Refer 4.2)	G13			
Sanitary Drainage					
206	Has the correct lateral been detailed?	G13			
207	Does the lateral have an invert level that allows connection (compare IL to FFL)?	G13			
208	Are drainage pipes correctly sized?	G13			

Ref No		Building Code Clauses	Key	Comments	Alternative Solution? Y/N
209	Does the drain pass under a building? Is access provided on each side of the building?	G13			
210	Does the drainage layout contain least one overflow relief gully? (ORG)	G13			
211	Does the system incorporate access points, chambers, rodding points & inspection points as appropriate?	G13			
212	Has confirmation been provided that adequate council services are available? (Refer to PIM)	G13			
213	Is a drainage access area providing for drainage access points located within a building?	G13			
214	Is the drain gradient specified correct? (Refer Table 2)	G13			
215	Are drains correctly vented? <i>Ensure all branch drains 10m or > are vented.</i>	G13			

Stormwater Drainage

216	Adequate downpipes provide (see E1)?	E1			
217	Are drain invert levels provided?	E1			
218	Are drain sizes correct?	E1			
219	Are sump details provided (E1 surface water control for hardstand areas)?	E1			
220	Is alignment & gradient of drains correct?	E1			
221	Overflow relief provided?	E1			
222	Roof gutters correctly sized?	E1			

Chimney

223	Does chimney design comply? (Brick, pumice, concrete, precast) consider wall thickness, foundation size, breast size, reinforcing, restraints, bracing calculations etc.).	B1			
224	If SED, have calculations been provided?	B1			
225	Is cantilever less than 2.4 m?	B1			
226	Is height less than 9m?	B1			

Ref No		Building Code Clauses	Key	Comments	Alternative Solution? Y/N
Stairs / Landings / Handrails					
227	Are handrails specified & correctly located? <i>Refer D1, section 6.0 'Handrails' Clause 6.0.1, All stairways with a width less than 2.0m or less shall have a handrails on at least one side</i>	D1			
228	Are visibility & lighting levels complying? <i>Refer D1, 4.6 'Visibility of stair treads', 4.6.1, 4.6.2 & Table 8.</i>	D1			
229	Do stairs specified comply for the intended use & area to which they provide access? <i>-Minor private: stairway not on a main thoroughfare, and intended to provide infrequent access to a single room which is not a living area or kitchen.-Secondary private: stairway other than a main or minor private stairway, intended to provide access to another floor containing only bedrooms, bathroom or similar accommodation.-Main private: intended to provide access to and between frequently used spaces such as living areas, kitchens and garages, and includes all exterior private stairways.</i>	D1			
230	Does the stair tread & rise construction comply with the stair type? <i>Minor Private: Max rise 220mm/Min tread 220mm, Secondary Private: Max rise 200mm/Min tread 250mm,Main Private: Max rise 190mm/Min tread 280mm. (Main private includes exterior stairs)</i>	D1			
231	Do spiral or curved stair winder tread & rise comply? <i>Refer D1, section 4.4 'Curved & spiral stairways'</i>	D1			
232	Is handrail provided if there is 4 or more risers? <i>Refer D1, section 6.0 'Handrails', clause 6.0.1.</i>	D1			
233	Do landings provide 400mm clearance in front of door opening onto the landing? <i>Refer D1, clause 4.3.5, Fig.15</i>	D1			
234	Do the location & size of the landing/s comply? <i>Refer D1, section 4.3.1, 'Landings required', 4.3.2, 'Maximum rise', 4.3.3, 'Landing width' & 4.3.4, 'Landing length', 4.3.5 'Obstructions', also refer figures 14,15,& 25.</i>	D1			

Ref No		Building Code Clauses	Key	Comments	Alternative Solution? Y/N
Decks / Balconies / Barriers					
235	Are fixings correct & does compatibility / durability comply?	B1 b2			
236	Does design comply? – (Top rails, balusters, bottom rails, palings, boundary joist (NZBC B1)	B1 F4			
237	Does timber treatment comply with NZS 3602?	B2			
238	Is deck more than 3 m high if so SED?	B1			
239	Does deck bracing comply? <i>Refer NZS 3604, Section 7, cl 7.2 'Timber Decks. All decks which project >2m from the building shall be provided with subfloor bracing at half the light/light/light cladding calculated from Table 5.8.</i>	B1			
240	Are the subfloor piles & bearers the correct grade, treatment, size, spacing & span correct? <i>All timber piles for decks are to be a minimum of 125x125mm H5.</i>	B1 B2			
241	Do deck joist sizes, grade, treatment, span & spacing comply? <i>Refer 'Amendment 2' NZS 3604 for changes to 'Timber Grades' & call size, now 'Actual Minimum Dried Size'</i>	B1 B2			
242	Does decking material comply for the joist spacing? <i>Refer NZS 3604, section 7, cl 7.4.3 'Decking '32mm for joists @ 600mm center's, or 19mm for joists @ 450mm centers.</i>	B1 B2			
243	Does decking material comply for slip resistance? <i>If the deck surface provides access to the main entrance of the building, slip resistance must be considered in accordance NZS 3604, section 7, cl 7.4.4, & D1, cl 2.1 'Slip resistance'.</i>	D1 B2			
244	Is the substrate specified for the balcony waterproofing membrane appropriate? <i>Check the manufacturer's technical literature to ensure the products are compatible.</i>	B2 E2			
245	Is specialist information provided? <i>Has the manufacturer's technical literature demonstrating compliance with the NZ building Code been provided with the application?</i>	B2 E2			

HDC Building Consent Authority	Responsibility Quality Manager	Date issued 050210	Version No 5
FRED 392145	Location BCA Quality Manual	Review date 050212	Page 21 of 23

Ref No		Building Code Clauses	Key	Comments	Alternative Solution? Y/N
246	Do stringer size & connections comply? <i>Refer NZS 3604, section 6, cl 6.3, table 6.7 & E2, Section 7, cl 7.2.1.1 & figure 15, Note: stringers spaced off cladding by 12mm.</i>	B1 B2 E2			
247	Do the thresholds specified for the deck comply? <i>Refer E2, Section 7, cl 7.1.1 & figure 14.</i>	E2			
Verandah					
248	Do concrete post footings specified provide adequate resistance against uplift? <i>Refer NZS 3604, section 9 'Posts', clause 9.2.2</i>	B1			
249	Do top & bottom connections of posts provide required kN capacity to resistance against uplift? <i>Refer NZS 3604, section 10, cl 10.2.1.12 & table 10.8, (For snow loads refer table 15.8.) & NZS 3604, section 9, cl 9.3 & tables 9.1 & 9.2, figures 9.2 & 9.3.</i>	B1 B2			
250	Does the verandah beam treatment, grade, size & span comply? <i>Refer NZS 3602 for treatment requirements. Refer NZS 3604 for grade, size & span requirements.</i>	B1 B2			
Effluent Disposal Systems					
251	Has Regional Council approval been granted?	G14 VM1			
252	Has a full engineering site investigation been provided <i>Site report provided stating soil categories, water table, etc.</i>	G13 G14 VM1			
253	Has a design specification & producer statement been provided?	B1 B2			
254	Does the design information provided specify the design criteria? <i>The design criteria should include; Capacity based on bedroom numbers, Loading calculation, site evaluation, soil profile, site characteristics.</i>	G13 G14 VM1			
Means of Escape from Fire					
255	Are domestic smoke alarms correctly specified and correctly located? (<i>refer NZBC F7</i>)	C F7			
Structural Stability During Fire					
256	Designed to avoid structural collapse (fire wall when within 1m of boundary)?	B1 C			

Ref No		Building Code Clauses	Key	Comments	Alternative Solution? Y/N
Electrical Installations					
257	Has an electrical plan been provided Weather tightness of meter boxes, wiring penetrations through cladding, exterior mounted lights.	B2 E2 G2 G8 G9			

Alternative Solutions

Ref #	Brief description of Alternative Solution	Reason for acceptance