

Form 316
 Technical
 Check Sheet

Commercial – Internal Fitout/Alterations 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
Items to consider				
1	Is earthquake evaluation required? Has it been provided?	B1		
2	Has a comprehensive specification been provided?			
Preliminary				
3	Specific engineer design with supporting documents (calcs & PS)	B1, B2		
4	Peer review required/supplied	B1, B2		
5	Philosophy of fire design included	C		
6	Peer review required/supplied	C		
7	Back flow prevention required at boundary	G12		
8	Ventilation has been designed to meet NZBC G4	G4		
9	Peer review required/supplied	G4		
10	Lifts have been engineered designed with PS1 supplied	D2		
11	Peer review required/supplied	D2		
12	Escalators have been engineered designed with PS1	D2		
13	Peer review required/supplied	D2		
14	Sprinklers have been engineered designed with PS1 supplied	C		
15	Peer review required/supplied	C		
16	Doors have been engineered designed with PS1 supplied	B1		
17	Peer review required/supplied	B1		
18	Personal hygiene meets requirement of NZBC G2	G2		
19	Durability of products considered in design NZBC B2	B2		
20	Compliance schedule (maintenance requirements etc)	BC Hand book		
21	As non load bearing walls (with bracing elements) adequately supported? Refer NZS3604, section 7, C1.7.1.3.5, 7.3.1.6 & Fig 7.5	B1		
22	As non load bearing walls (without bracing elements) adequately supported? Reer NZS3604, Section 7, Fig 7.5	B1		

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23	Are load bearing walls at right angle to joist within 200mm of bearer support? Refer NZS3604 Section 7, Fig 7.3	B1			
24	Are double joists provided under load bearing walls? Refer NZS3604 Section 7, fig 7.3	B1			
25	Do cantilever joist grade, sizes & spans comply? Refer NZS3604, Section 8, fig 7.2	B1			
26	Do cantilever deck hoist connections & set back comply? Refer NZS3604, Section 7, Fig 7.6	B1			
Stringers					
27	Do stringer size, grade, treatment & fixing comply with floor load & durability demands? Refer NZS3604, Section 6, table 6.7 or 14.7 (for kPa loading)	B1			
Flooring					
28	Check relationship between floor load & flooring thickness? Refer NZS3604, Section 7, 7.2 & section 4, 4.3. Check floor loadings, i.e. 1.5-2.0kPa or 3kPa	B1			
29	Does flooring thickness & type comply/ Refer Tables 7.4 & 14.9	B1			
30	Is joist spacing appropriate for flooring type? Refer NZS3604, Section 7, 7.2	B1			
31	Is distance between underside of flooring & subfloor ground levels appropriate for flooring type? Refer NZS3604, Section 4, 4.3, Minimum clearance for particle board above subfloor ground is 550mm, otherwise treated plywood is required.	B2, E2			
Wall Framing					
32	Do stud height, grade, size, spacing, & treatment comply? Refer NZS3604 Table 8.2 Amendment 2 NZS3604 for changes to 'Timber Grades' & call size, now 'Actual Minimum Dried Size'	B1, B2			
33	Is the framing setout appropriate for the cladding system? Refer NZS3604 – C1 11.5.2, i.e. 480mm centres for some vertical shiplap/Board & Batten claddings etc.	B1			
34	Do top & bottom plate grade, size, & treatment comply? Refer 'Amendment 2' NZS3604 for changes to 'Timber Grades' & call size, now 'Actual Minimum Dried Size'	B1			
35	Has additional 150 x 40 ribbon top plates been provided where 6m brace lines are required?	B1			
Stairs/Landings/Handrails					
36	Are handrails specified & correctly located? (required if 2 or more risers). 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.	D1			
37	Are visibility & lighting levels complying? Refer D1, 4.6 'visibility of stair trends', 4.6.1, 4.6.2 & table 8	D1			

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38	Do stairs specified comply for the intended use & area to which they provide access? -Minor private; stairway not on a main thoroughfare, and intended to provide infrequent access to 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 al exterior private stairways.	D1			
39	Does the stair tread & rise construction comply with the stair type? 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)	D1			
40	Do spiral or curved stair winder tread & rise comply? Refer D1, Section 4.4 'Curved & Spiral Stairways'	D1			
41	Do landings provide 400mm clearance in front of door opening onto the landing? Refer D1, Clause 4.3.5, Fig 15	D1			
42	Do the location & size of the landing/s comply? 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	D1			
Kitchen					
43	Is facility provided for washing utensils/food & waste water disposal? Refer G3, Section 1.1 & Fig 1 Preparation Area & Access to Facility Paragraphs 1.1.2 and 1.5	G3			
44	Have impervious, easily cleaned wall finishes been specified? 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.	G3			
Laundry					
45	Have facilities with a laundry tub or space & connections for a washing machine been provided? Refer G2/AS1, Clause 1.0.1, Laundering facilities shall be provided with : a) A laundry tub or b) Space & service connections for a washing machine.	G2			
Wet areas/WCs					
46	Have they provided the correct number of WC's?	G1			
47	If the wet area has a timber floor, is the flooring treatment complying? In wet areas where maintenance of an impervious coating can not be assured plywood or timber flooring that has been treated to a min. of H3.1 shall be used (ref. NZS3602:2003 Section 10.3.1	B2			
48	Has the shower type been specified (tiled or proprietary cubicle). If tiled shower, have construction details been provided for the tiling substrate and waterproofing membrane.	E3			
49	If shower is level access is proposed, has non-slip flooring been specified? Refer D1, Table 2	D1			

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50	If level access shower is proposed, have adequate falls been provided to drain/ Falls required to the floor of a level access shower to the floor drain are to be no less the 1:50. Refer NZS4121:2000, Clause 10.5, 11.3 'Floors'	E3, G1			
51	Has a complying waterproofing membrane been specified? Ensure the specified waterproof membrane has been applied in accordance with the manufacturers technical specification. If required ensure applicator provides installation certification	E3			
Ventilation					
52	Are openings providing natural ventilation to occupied space 5% or more of floor area? Refer G4, Clause 1.2 'Natural Ventilation'	G4			
53	Does the mechanical ventilation to be provided for extracting moisture & other contaminants comply? Refer G4, Clause 1.3 'Mechanical Ventilation'	G4			
54	Does the documentation demonstrate mechanical ventilation ducted to outside air? Refer G4, Clause 1.3 'Mechanical Ventilation'	G4			
Glazing					
55	Do vertical windows in external walls have a window area of not less than 10% of floor area of the room? Refer G7, Clause 1.0.1b	G7			
56	Do vertical windows in external walls have a glazing transmittance of no less than 0.7? Refer G7 Clause 1.01.1a	G7			
57	If reflective surfaces are required, then do they comply? Refer G7 Clause 1.0.3 & 1.0.4 & Tables 1 & 2	G7			
58	Is at least 50% of the glazed area provided for natural light clear glazed? Refer G7 clause 2.0.1 & 2.0.2 It is acceptable for awareness of the outside to be provided via another space.	G7			
Water Supplies					
59	Has a schematic plan been provided for buildings of 2 or more storeys?	G12			
60	Is insulation specified for the potable hot water system complying? Refer H1 Clause 5.0 'Hot water system' & NZS4305:1996 Energy efficiency – domestic type hot water systems.	H1			
61	Are pipe sizes specified adequate Refer G12, Section 5.3 'Water pipe size'	G12			
62	Is the system open vented?	G12			
63	Are pipe/fittings of compatible materials?	G12			
Sanitary Plumbing					
64	Are all ground floor WC's connected directly to the drain?	G13			
65	Has a schematic plan been provided for buildings of 2 or more storeys?	G13			
66	Are discharge stacks of appropriate size Refer Table 4 G13/ASI	G13			
67	Is waste pipe size/length, gradients & venting correct?	G13			
68	Is the discharge pipe size appropriate? Refer Table 2 G13/ASI	G13			

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69	Is the discharge stack serving 3 floors fitted with a relief vent pipe? Refer Fig 7 G13/ASI	G13			
70	Is a floor waste installed? Is it for accidental overflow?	E3, G13			
71	Is more than one fixture discharging to the discharge pipe? Refer Table 4 & 5 for sizing	G13			
72	Is the relief vent connected to the discharge stack and sized correctly? Refer Table 5	G13			
73	Are pipe materials appropriate Refer table 7	G13			

Sanitary Drainage

74	Has the correct lateral been detailed?	G13			
75	Does the lateral have an invert level that allows connection (compare IL to FFL)? Is this shown on the longitudinal?	G13			
76	Is the sizing and gradient of drainage pipes correct? Venting? Ensure all branch drains 10m or > are vented.	G13			
77	Does the drain pas under a building? Is access provided on each side of building?	G13			
78	Does the system incorporate access points, chambers, rodding points & inspection points as appropriate?	G13			
79	Does the drainage layout contain least one overflow relief gully? (ORG)	G13			
80	Is a drainage access area providing for drainage access points located within a building?	G13			
81	Is the grease trap sized correctly?	G13			
82	Effluent disposal? Has design and producer statement been provided?				

C – Means of Escape from Fire

83	Has fire design been supplied?	C			
84	Are dead end travels distances correct? Refer Table 3.3	C			
85	Are number of exits & escape routes correct & shown?	C			
86	Are open path lengths correct?	C			
87	Do doors open in direction of escape?	C			
88	Is escape route width & height correct?	C			
89	Is fire alarm type correct?	C			
90	Is the escape route free of obstructions?	C			

C – Structural Stability During Fire

91	Designed to avoid structural collapse?	C			
92	Has fire service vehicle access been considered?	C			
93	Check Fire Analysis covers all aspects of NZBC “C” Documents.	C			
94	Section 112 of the NZ Building Act (change of Use) requires people with disabilities can carry out normal activities and functions within a building NZS4121	D1, G1, G5			

Ref No		Building Code Clauses	KEY	Comments	Alternative Solutions? Y/N
Toilet					
95	Dimensions and fit out comply with NZBC G1 Figs 6, 7 & 9	G1			
Toilet/Shower (combined)					
96	Dimension and fit out comply with NZBC G1 Figs 5 & 9	G1			
Food Preparation					
97	Applies to camping ground and accessible accommodation in communal residential buildings (see basin)	G3			
Entrances					
98	Maximum slope of 1 in 12 and a 1.2m level landing	D1			
Stairs					
99	Minimum of 900mm clear width	D1			
100	Minimum of 760mm clear opening (no less)	D1			
101	Nosing to be contrasting colours and no slip.	D1			
Doors					
102	Threshold no greater than 20mm height difference and 760mm clear opening width.	D1			
103	Hinged doors to open out, grab rail for closing & a kick plate to base.	D1, G1			
104	Lever handles to doors	D1			
105	Sliding door to be 910mm opening to allow for lever handle & 760mm clear opening.	D1			
Reception Counters					
106	775mm from floor 900mm acceptable in some circumstances	G5			
Corridors					
108	To be 1200mm wide minimum on an accessible route.	D1			
Certificate for Public Use					
109	Certificate for Public Use <input type="checkbox"/> Yes <input type="checkbox"/> No				

Alternative Solutions

Ref #	Brief description of Alternative Solution	Reason for acceptance

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Compliance Schedule

Ref No	Specified System & Feature	KEY	Comments
	Automatic or Manual Emergency Warning Systems for fire or other dangers		
	Electromagnetic or Automatic Doors or Windows (ones that close on fire alarm activation)		
	Emergency Lighting Systems		
	Escape Route Pressurisation Systems		
	Automatic Back-Flow Preventers connected to a potable water supply		
	Automatic systems for fire suppression		
	Mechanical Ventilation or Air Conditioning Systems		
	Laboratory Fume Cupboards		
	Riser mains for fire service use		
	Building Maintenance Units providing access to exterior and interior walls of buildings.		
	Lifts, Escalators, Travelators, or other systems for moving people or goods within the buildings.		
	Audio Loops or Other Assistive Listening Systems		
	Smoke Control Systems		
	Emergency Power Systems for, or signs relating to, a system or feature specified in any of Clauses 1 - 13		

Means of Escape from fire

	Fire Separations		
	Smoke Separations		
	Final Exits		
	Systems for communicating spoken information intended to facilitate evacuation		
	Signs for communicating information intended to facilitate evacuation		