# Builders’ technical quality assurance checklist

Building Services (Compliant Resolution and Administration) Act 2011 (CRA Act)

Building Act 2011 (Building Act)

Building Services (Registration) Act 2011 (BSR Act)

Building Services (Registrations) Regulations 2011 (BSR Regs)

National Construction Code (NCC)

Building Code of Australia (BCA)

## Notes for using the checklists

1. Generally the reference documents will be the approved building permit. Any proposed variations from the approved building permit documentation may require an additional building permit. Advice must be gained from the relevant permit authority prior to making the variations.
2. References provided refer to the Deemed to Satisfy (DTS) provisions of the Building Code of Australia and may not be applicable (i.e. if performance based alternative design has been provided within the approved plans lodged as part of the building permit process).
3. A performance based design/manufacturer’s specifications should be adhered to, however, guidance is provided in TECHNICAL REPORT NO. 62: Static Testing of Batten Connections at University of Western Australia; Cyclone Testing Station, College of Science, Technology & Engineering, James Cook University, December 2015; G.N. Boughton, D.J.Falck et al.
4. References to ‘other’ throughout the document provide for any additional requirements under that specific section.

## Regulatory compliance

|  |  |
| --- | --- |
| Building type |  |
| Building classification |  |
| Number of storeys |  |
| Type of service |  |
| Wind rating |  |
| Approximate distance from breaking surf |  |
| Method of construction |  |
| Roof cladding |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Requirement** | **Compliant** | | **Reference** | **Comment** |
| **Yes** | **No** |
| Does any part of the property fall within a DFES designated bush fire prone zone? |  |  |  |  |
| Construction site sign:   * Prominent position, able to be read by members of the public from outside the site * Reasonable dimensions and written in clearly legible letters and numerals * Contains name (in full and with prefixes as registered) and registration number of contractor * Contains telephone number of contractor * Contains name and registration number of nominated supervisor |  |  | BSR Regs r21 |  |
| Toilet facilities |  |  |  |  |
| Rubbish control |  |  |  |  |
| Power onsite |  |  |  |  |

## Excavation work

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Requirement** | **Compliant** | | **Reference** | **Comment** |
| **Yes** | **No** |
| Unprotected embankment |  |  | NCC Vol 2 |  |
| Other |  |  |  |  |
| Adequate retaining |  |  |  |  |

## Drainage work

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Requirement** | **Compliant** | | **Reference** | **Comment** |
| **Yes** | **No** |
| Water diverted away |  |  | NCC Vol 2 |  |
| Other |  |  |  |  |

## Termite management

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Requirement** | **Compliant** | | **Reference** | **Comment** |
| **Yes** | **No** |
| Durable notice |  |  | NCC Vol 2 |  |
| Other |  |  |  |  |
| Physical barrier placement |  |  | AS 3660.1–2014 |  |

## Slab BCA 3.2 – Finished work

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Requirement** | **Compliant** | | **Reference** | **Comment** |
| **Yes** | **No** |
| Footing excavation, embedment, foundation material |  |  | AS 2870 |  |
| Footings |  |  | AS 2870 |  |
| Cracking (acceptable) |  |  | AS 3660.1 |  |
| Parging |  |  |  |  |
| Alignment |  |  | AS 3600 |  |
| Concrete paving: isolation and control joints |  |  |  |  |

## Slab BCA 3.2 – Preparation work

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Requirement** | **Compliant** | | **Reference** | **Comment** |
| **Yes** | **No** |
| Slab – concrete paving: isolation and control joints |  |  |  |  |
| Clean fill |  |  |  |  |
| Damp-proof membrane (DPM) – placement |  |  |  |  |
| DPM – penetrations |  |  |  |  |
| DPM – other |  |  |  |  |
| Reinforcement bar chairs |  |  |  |  |
| Reinforcement re-entrant |  |  |  |  |
| Reinforcement cover |  |  | [AS 3600](https://www.saiglobal.com/online/Script/Details.asp?DocN=AS0733793479AT) |  |
| Reinforcement steel lap |  |  |  |  |
| Reinforcement other |  |  |  |  |

## Slab BCA 3.2 – Second storey

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Requirement** | **Compliant** | | **Reference** | **Comment** |
| **Yes** | **No** |
| Propping (suspended slab temporary) |  |  |  |  |
| Steel framing (floor trusses) |  |  |  |  |
| Set out (all concrete) |  |  |  |  |
| Slip joints |  |  |  |  |

## Brickwork BCA 3.3 – Workmanship

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Requirement** | **Compliant** | | **Reference** | **Comment** |
| **Yes** | **No** |
| Built in frames – alignment |  |  |  |  |
| Built in frames – attachments |  |  |  |  |
| Built in frames – other |  |  |  |  |
| Weep holes |  |  | AS 3700 |  |
| Lintel – coating and thickness |  |  | AS/NZS 2699.3 |  |
| Utility |  |  | AS 3700 |  |
| Coarse/openings |  |  |  |  |
| Perpends and joints |  |  | AS 4773.1 |  |
| Bonding |  |  |  |  |
| Workmanship – face |  |  |  |  |
| Workmanship – other |  |  |  |  |

## Brickwork BCA 3.3 – Technical

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Requirement** | **Compliant** | | **Reference** | **Comment** |
| **Yes** | **No** |
| Structure |  |  |  |  |
| Cavity – cavity size |  |  | AS 3700 |  |
| Cavity – clean |  |  |  |  |
| Cavity – other |  |  |  |  |
| Insulation |  |  |  |  |
| Damp-proof course (DPC) – liquid |  |  |  |  |
| DPC – physical |  |  |  |  |
| DPC – other |  |  |  |  |
| Flashings – above openings |  |  | AS 4773.2 |  |
| Flashings – below openings |  |  | AS 4773.2 |  |
| Flashings – other |  |  |  |  |
| Wire ties – spacing |  |  | AS 4773.2 |  |
| Wire ties – coating |  |  | AS/NZS 2699.1 |  |
| Wire ties – other |  |  |  |  |

## Roof tie down BCA 3.3

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Requirement** | **Compliant** | | **Reference** | **Comment** |
| **Yes** | **No** |
| Tie down straps – dimensions |  |  | AS 4773.1 |  |
| Tie down straps – corrosion protection type and mass |  |  | AS 4773.1 |  |
| Tie down straps – placement |  |  | AS 4773.1 |  |
| Tie down straps – attachment and appropriate fixings |  |  |  |  |

## Structural steel BCA 3.4.4

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Requirement** | **Compliant** | | **Reference** | **Comment** |
| **Yes** | **No** |
| Steel member – column, roof beams, chamfer, fixings |  |  |  |  |
| Steel member – corrosion protection |  |  |  |  |
| Steel member – tie-downs |  |  |  |  |
| Steel member – other |  |  |  |  |

## Timber wall framing BCA 3.4.3

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Requirement** | **Compliant** | | **Reference** | **Comment** |
| **Yes** | **No** |
| Walls – bracing |  |  |  |  |
| Walls – insulation (within and to frames) |  |  |  |  |
| Walls – bottom plate connection to concrete slab |  |  |  |  |
| Walls – other |  |  |  |  |
| Connections – remainder of roof |  |  |  |  |
| Floor – posts/columns |  |  |  |  |
| Floor – joists |  |  |  |  |
| Floor – connections |  |  |  |  |
| Floor – other |  |  |  |  |

## Timber roof framing BCA 3.4.3

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Requirement** | **Compliant** | | **Reference** | **Comment** |
| **Yes** | **No** |
| Rafter correctly tied down |  |  |  |  |
| Rafter – other |  |  |  |  |
| Timber roof battens in 1200mm edge zone for sheet roofs |  |  |  |  |
| Timber roof batten general area sheet roofs |  |  |  |  |
| Metal roof batten |  |  | See Note 3 |  |
| Connections – remainder of roof |  |  |  |  |
| Struts |  |  | AS 1684.2 |  |
| Underpurlins |  |  | AS 1684.2 |  |
| Collar ties |  |  | AS 1684.2 |  |
| Ridge – rafter to rafter at ridge connection sheeted roof |  |  | AS 1684.2 |  |
| Timber truss correctly tied down |  |  |  |  |
| Tie down of timber roof beams |  |  |  |  |
| Timber roof beams other |  |  |  |  |
| Ceiling joists |  |  | AS 1684.2 |  |
| Other compliance |  |  |  |  |
| Roof – other |  |  |  |  |

## Steel framing BCA 3.4 and 3.5

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Requirement** | **Compliant** | | **Reference** | **Comment** |
| **Yes** | **No** |
| Roof – connections |  |  |  |  |
| Roof – tie down |  |  |  |  |
| Roof – corrosion |  |  |  |  |
| Roof – framing dimensions |  |  |  |  |
| Roof – other |  |  |  |  |
| Walls – framing dimensions bracing |  |  |  |  |
| Walls – insulation/thermal break |  |  |  |  |
| Walls – other |  |  |  |  |
| Floor – other |  |  |  |  |

## Roof cladding BCA 3.5

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Requirement** | **Compliant** | | **Reference** | **Comment** |
| **Yes** | **No** |
| Tiles – other (installation, fixing-centres, corrosion protection, adequate use of pointing material - hip and ridge tiles) |  |  |  |  |
| Roof sheeting – fixing, including ridges and hips |  |  |  |  |
| Roof sheeting – penetrations (flues) |  |  |  |  |
| Roof cladding BCA 3.5 gutters – other |  |  |  |  |
| Downpipes – spacing and size |  |  |  |  |
| Downpipes – location |  |  |  |  |

## Glazing BCA 3.6

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Requirement** | **Compliant** | | **Reference** | **Comment** |
| **Yes** | **No** |
| Window frames – window labelling |  |  | AS 2047 |  |
| Window frames – restricted openings (protection of openable windows) |  |  | NCC Vol 2 Part 3.9.2.5 |  |
| Window frames – other (straps to frames) |  |  |  |  |
| Safety glazing – markings |  |  | AS 1288 |  |
| Safety glazing – other |  |  |  |  |

## Fire separation BCA 3.7

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Requirement** | **Compliant** | | **Reference** | **Comment** |
| **Yes** | **No** |
| External walls – within 900mm (applicable to Class 1) |  |  |  |  |
| External walls – non-combustible materials (applicable to Class 1) |  |  |  |  |
| External walls – other |  |  |  |  |
| Separating walls – underside of roof covering |  |  |  |  |
| Separating walls – other |  |  |  |  |
| Smoke alarms – other |  |  |  |  |

## Bushfire area requirement BCA 3.7

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Requirement** | **Compliant** | | **Reference** | **Comment** |
| **Yes** | **No** |
| General – probe check |  |  | [AS 3959](https://www.saiglobal.com/online/Script/Details.asp?DocN=AS141253829368) |  |
| General – other |  |  |  |  |
| Bushfire shutters |  |  | [AS 3959](https://www.saiglobal.com/online/Script/Details.asp?DocN=AS141253829368) |  |
| Subfloor supports |  |  | [AS 3959](https://www.saiglobal.com/online/Script/Details.asp?DocN=AS141253829368) |  |
| Floors |  |  | [AS 3959](https://www.saiglobal.com/online/Script/Details.asp?DocN=AS141253829368) |  |
| External walls |  |  | [AS 3959](https://www.saiglobal.com/online/Script/Details.asp?DocN=AS141253829368) |  |
| External glazed elements/assemblies and external doors |  |  | [AS 3959](https://www.saiglobal.com/online/Script/Details.asp?DocN=AS141253829368) |  |
| Roofs – roof mounted evaporative cooler |  |  | [AS 3959](https://www.saiglobal.com/online/Script/Details.asp?DocN=AS141253829368) |  |
| Roofs – general |  |  | [AS 3959](https://www.saiglobal.com/online/Script/Details.asp?DocN=AS141253829368) |  |
| Verandahs, steps, decks and landings |  |  | [AS 3959](https://www.saiglobal.com/online/Script/Details.asp?DocN=AS141253829368) |  |
| Water and gas supply pipes |  |  | [AS 3959](https://www.saiglobal.com/online/Script/Details.asp?DocN=AS141253829368) |  |

## Wet area and external waterproofing BCA 3.8

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Requirement** | **Compliant** | | **Reference** | **Comment** |
| **Yes** | **No** |
| Waterproofing – waterproofed areas (wet areas includes balconies) |  |  |  |  |
| Waterproofing – floor wall junctions |  |  |  |  |
| Waterproofing – penetrations in shower |  |  |  |  |
| Waterproofing – bath to wall |  |  |  |  |
| Waterproofing – floor wastes |  |  |  |  |
| Waterproofing – other |  |  |  |  |

## Wall and floor finishes BCA 3.8

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Requirement** | **Compliant** | | **Reference** | **Comment** |
| **Yes** | **No** |
| Wall and floor tiling – workmanship |  |  |  |  |
| Wall and floor tiling – other |  |  |  |  |
| Floor tiling – correct falls to washes |  |  |  |  |

## Ventilation BCA 3.8.5

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Requirement** | **Compliant** | | **Reference** | **Comment** |
| **Yes** | **No** |
| Ventilation – exhaust fan (ducted to outside air) |  |  |  |  |
| Ventilation – other |  |  |  |  |

## Safe movement and access BCA 3.9

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Requirement** | **Compliant** | | **Reference** | **Comment** |
| **Yes** | **No** |
| Stairs – riser and going dimensions |  |  |  |  |
| Balustrades – structure and handrails |  |  |  |  |
| Balustrades – height and spacings |  |  |  |  |
| Balustrades – other |  |  |  |  |
| Swimming pool – barrier (access, pre 2005?) |  |  |  |  |
| Swimming pool – climbable gate and latch |  |  |  |  |
| Swimming pool – other |  |  |  |  |

## Energy efficiency BCA 3.12

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Requirement** | **Compliant** | | **Reference** | **Comment** |
| **Yes** | **No** |
| Insulation – roof foil installed correctly |  |  |  |  |
| Insulation – ceiling insulation |  |  |  |  |
| Insulation – wall insulation |  |  |  |  |
| Insulation – other |  |  |  |  |
| Building sealing – building a conditioned space |  |  |  |  |
| Building sealing – other |  |  |  |  |

## Internal render/plaster

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Requirement** | **Compliant** | | **Reference** | **Comment** |
| **Yes** | **No** |
| Internal float – render |  |  |  |  |
| Internal float, set – hardness, curing and workmanship |  |  |  |  |
| Internal float, set – other |  |  |  |  |
| Internal – fixings |  |  |  |  |
| Linings – workmanship |  |  |  |  |
| Linings – other |  |  |  |  |

## External render/plaster

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Requirement** | **Compliant** | | **Reference** | **Comment** |
| **Yes** | **No** |
| External render – ground level finish |  |  |  |  |
| External render – other |  |  |  |  |
| External acrylic – ground level finish |  |  |  |  |
| External acrylic – workmanship |  |  |  |  |
| External acrylic – other |  |  |  |  |

## Ceilings

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Requirement** | **Compliant** | | **Reference** | **Comment** |
| **Yes** | **No** |
| Linings – fixings |  |  |  |  |
| Linings – back blocking |  |  |  |  |
| Linings – workmanship |  |  |  |  |
| Linings – other |  |  |  |  |
| Cornices – other |  |  |  |  |

## Painting

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Requirement** | **Compliant** | | **Reference** | **Comment** |
| **Yes** | **No** |
| Internal walls |  |  |  |  |
| Ceilings |  |  |  |  |
| Doors – top and bottom edges |  |  |  |  |
| Door frames |  |  |  |  |
| Window frames |  |  |  |  |
| Skirting |  |  |  |  |
| Architraves |  |  |  |  |
| External wall |  |  |  |  |
| Eaves |  |  |  |  |
| Fascia |  |  |  |  |
| Gutters and downpipes |  |  |  |  |

## Fixtures

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Requirement** | **Compliant** | | **Reference** | **Comment** |
| **Yes** | **No** |
| Cupboards – penetration sealing |  |  |  |  |
| Fixtures – cupboards (support and joists, heat source proximity) |  |  |  |  |
| Cupboards – workmanship |  |  |  |  |
| Cupboards – bench top sealing |  |  |  |  |
| Cupboards – other |  |  |  |  |
| Fixing carpentry – other |  |  |  |  |
| Internal doors – sanitary compartment (including lift off hinges) |  |  |  |  |
| Internal doors – door to frame gaps/alignment |  |  |  |  |
| Internal doors – furniture |  |  |  |  |
| Internal doors – other |  |  |  |  |

## General comments

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| --- |
|  |

Disclaimer: The above is a risk based approach to auditing taking into consideration obligations and responsibilities under the building service Acts. It is not an exhaustive tool that ensures full compliance with the building service Acts and should not be relied upon as legal advice. The Building Commission and its officers do not accept any liability for action taken in reliance on this audit checklist and disclaim all liability arising from any errors or omissions contained in this checklist.