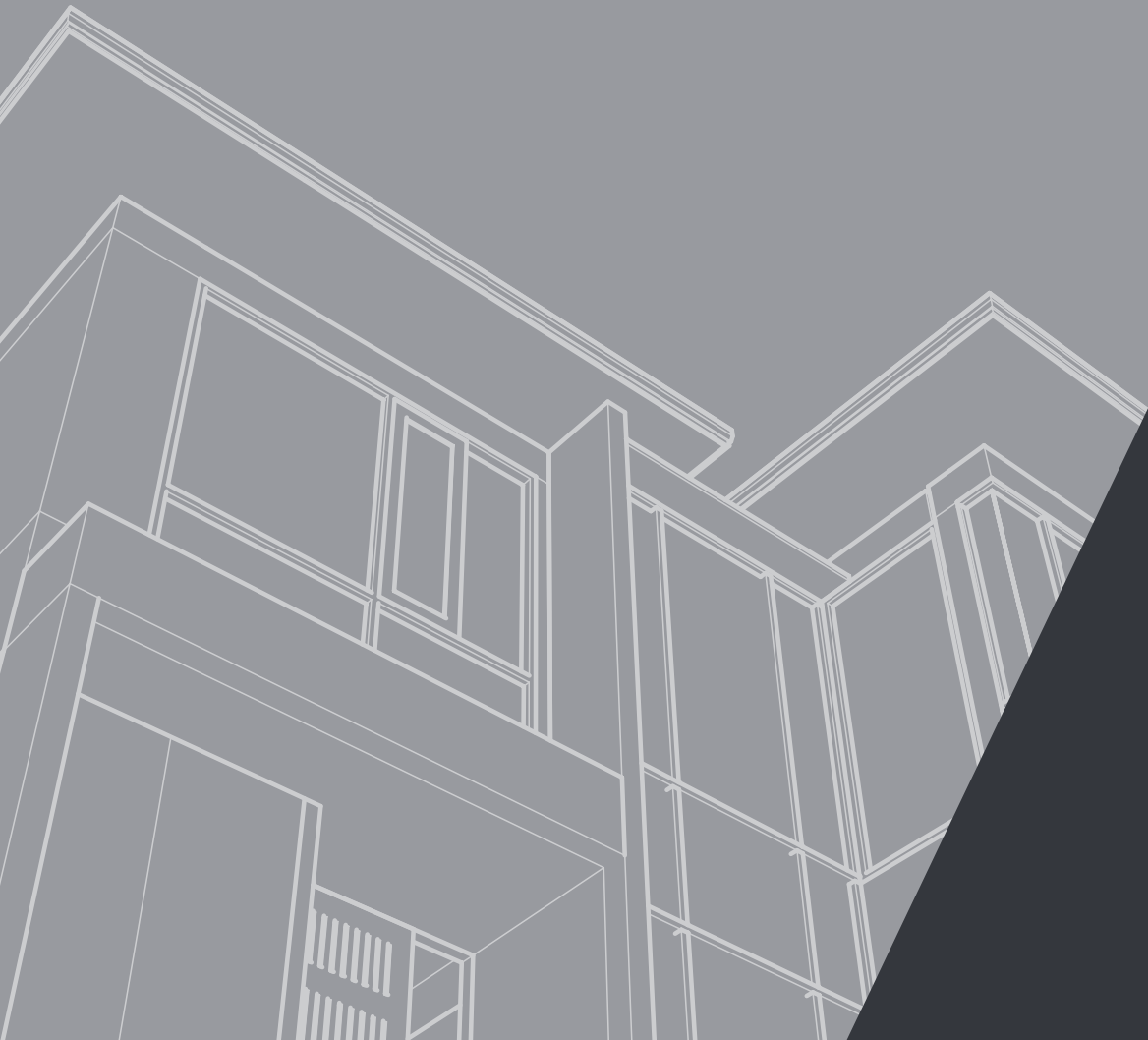


Design Documentation Practice Guide for Class 2 residential buildings

Version 1



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Architects
Registration Board
of Victoria



Australian
Institute of
Architects



Aboriginal Acknowledgement

The VBA respectfully acknowledges the Traditional Owners and custodians of the land and water upon which we rely. We pay our respects to their Elders past, present and emerging. We recognise and value the ongoing contribution of Aboriginal peoples and communities to Victorian life.

We embrace the spirit of reconciliation, working towards equality of outcomes and an equal voice.

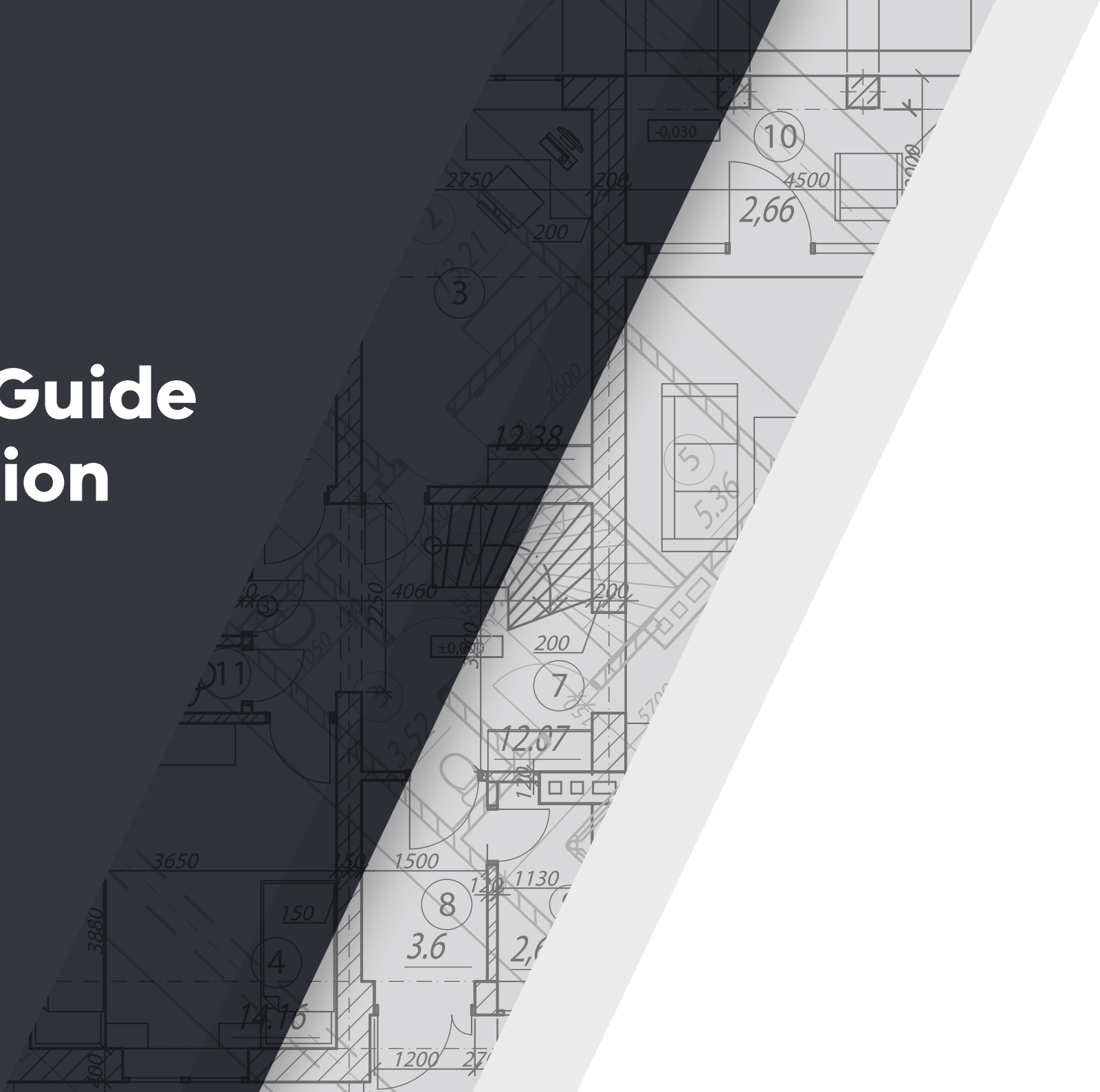


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Practice Guide

Introduction



Introduction

Design documentation is a key component of the building permit documentation package provided to the Relevant Building Surveyor (RBS) when an applicant applies for a building permit under Victorian legislation.

The adequacy of design documentation has been subject to industry scrutiny with findings suggesting a link between poor design documentation and project variations, increased construction costs and potential construction of non-compliant building works.

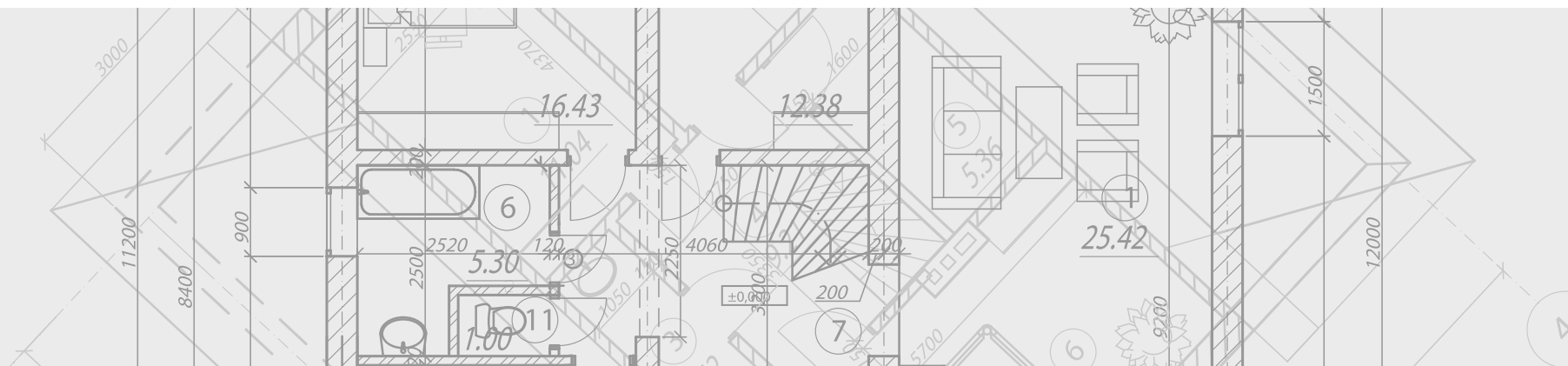
The VBA Compliance & Enforcement reports, Proactive Inspection Program (PIP) and Building Documentation Audit Program (BDAP) reports, Building Confidence Report (BCR) 2018 Recommendation 13-15, as well as incidental and anecdotal feedback from the construction industry provides evidence that supports these findings, in particular within the multi-residential building sector.

Purpose of the Guide

This is an informative guidance document developed to help improve design documentation standards by highlighting the type of information required and how compliance details and supporting information may be documented for building and structural designs.

In the Guide, the term '*building design documentation*' is intended to refer to design documentation prepared by architects and building designers for input into the design of Class 2 buildings.

When applying for a building permit in Victoria, the documentation package provided to the RBS **must contain sufficient information to show that the proposed building work will comply** with the Act and Regulations, pursuant to Regulation 24(4) of the Building Regulations 2018. Furthermore, Regulations 25 and 29 provide other types of documentation and details that must be included or may be required by the RBS. For further Victorian statutory and legislative requirements, refer to Appendix B - Vic Legislative requirements.



Guide users

Primary

- Design practitioners and structural engineers – for the preparation of building and structural design documentation. In this context, the term *'design practitioner'* is intended to refer to those who are preparing building design documentation or providing advice or input into the design of Class 2 buildings. This includes not only building designers, as referred to in the *Building Act 1993 (Vic)*, but also architects as defined in the *Architects Act 1991 (Vic)*.

Secondary

- Building surveyors, builders, and plumbers – for consideration of what should be contained within the design documentation to assess the proposed project compliance, and/or to adequately carry out the proposed building works.
- Other construction related disciplines and/or services such as hydraulic, electrical, civil (other than structural), fire engineers, including other design consultants and trades people, to support improved co-ordination and collaboration of building services during the design documentation, carrying out of proposed building work and commissioning.

Others

- Owners and applicants of proposed developments including Developers, Project Managers, etc – assist in understanding to the nature and extent of the level of details and documentation required as part of the building permit application process. The scope of the project and overall process of compliance is better facilitated when there is awareness and uniformity of understanding from the initial concept of a project, from all relevant stakeholders.
- Manufacturers and/or suppliers – to assist a person or company that produces or supplies building elements/components including products to be used in or part of a building by providing guidance on the nature of documentation required to demonstrate that the building element/component is fit-for-purpose and complies with the NCC and relevant legislation, in Victoria.

Supporting documentation

The Guide aims to address the standard of the information to be included in the design documentation together with the level of detail to satisfy Regulation 24, focusing on Residential Class 2 buildings.

Design documentation typically includes but is not limited to drawings, specifications, computations, technical reports, calculations, product information and specifications, test reports, Certificate of Conformity and/or Certificates of Accreditation, and approved forms. Providing the appropriate supporting documentation allows for the RBS to efficiently assess and determine compliance against the relevant National Construction Code (NCC) requirements and applicable legislative requirements.

Compliance Pathways

The documentation package to be provided must be relevant to the selected NCC compliance pathway for the proposed building design, element, component, and system, i.e., demonstrate compliance with the Performance Requirements through Deemed to Satisfy (DtS) Provisions, Performance Solution, or a combination of both.

¹ *Building Act 1993 (Vic)*, and *Building Regulations 2018 (Vic)* www.legislation.vic.gov.au

² *Victorian Building Authority Reports* www.vba.vic.gov.au/about/vba-reports

³ *Building Confidence Report 2018*, Shergold, P and Weir B

Guide structure

The Guide has two main parts, Part A1.0 and Part A2.0, for building and structural design documentation respectively.

Part A1.0 – Building design documentation, aims to clarify the type of information the building design practitioner should consider when preparing design documentation.

Part A2.0 – Structural design documentation, provides similar information for the structural design engineer. Other sections of the guide address different matters that support overall improvements in the quality of information in building permit application documentation, such as better collaboration of design practitioners.

Each part is presented in a table format consisting of three columns, each nominating the relevant design documentation details, technical requirements and supporting documentation, as nominated below.

- 1 **Drawing type/building matter:**
Nominates the types of drawings and/or the building matters under consideration in the part, including the relevant scale.
- 2 **Design and construction details:**
Nominates specific information required on each drawing to provide a clear understanding of the design, form of construction, relationships between building parts and components, and how compliance matters have been addressed.
- 3 **Technical requirements & supporting compliance documentation:**
This column provides references to the relevant regulatory, NCC & Australian Standards technical requirements that are to be complied with **and** the type of supporting compliance documentation and information that may be used to demonstrate compliance.

<p>1.2.1 Fire safety Scale 1:100, 1:50, 1:20, 1:10, 1:5 and as appropriate</p> <p style="text-align: center; font-size: 24px; font-weight: bold;">1</p>	<p>General building fire safety details</p> <p>The drawings should show all elements that relate to fire safety systems, including the following:</p> <ul style="list-style-type: none"> Locations of all fire and smoke barriers in the format of a compartmentation plan Construction methodology of each compartment/area and its fire-resistance levels (FRLs), including smoke curtains, smoke baffles, and the details of smoke separation systems and characteristics and in the case of a smoke barrier, its designation as a smoke wall/barrier Fire-resisting elements, resistance to incipient spread of fire ceilings, non-combustibility (i.e., external), concrete/masonry The minimum FRLs to be achieved for all fire separating construction Location and materials of shafts – fire isolated exits, lift shafts, risers, and service shafts Fire separation spandrels/horizontal projections, substations and equipment Openings in fire-resisting and bounding construction such as doors, windows and shaft openings <p style="text-align: center; font-size: 24px; font-weight: bold;">2</p>	<p>Supporting compliance documentation and evidence of suitability documentation is required for the following:</p> <p>Building materials nominated as non-combustible Test certificates for non-combustible materials as determined by AS 1530.1 – Combustibility tests for materials</p> <p>All building elements nominated with an FRL</p> <ul style="list-style-type: none"> Documentation demonstrating compliance with Schedule 1 of NCC Volume 1, such as AS 1530.4 fire test certificates <p style="text-align: center; font-size: 24px; font-weight: bold;">3</p>
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Figure 1: Structure of the Design Documentation Practice Guide for residential buildings.

Building permit application framework

The following is a simplification of the building permit process



Figure 2: Building permit application framework.

Building permit approval

To ensure the successful approval of building permits, it is important for applicants and the lead consultant/building designers to engage early with the RBS to understand their statutory functions with respect to the project and to work closely with the design practitioners and other stakeholders involved in contributing to the designing of the project. This will ensure the requirements under the Act and the Regulations relevant to the proposed building are understood and can therefore be subsequently satisfied.

Applicants and building designers are strongly encouraged to approach their responsibilities in the permit application and approval process with a high degree of diligence. Providing accurate and current information to the RBS in a timely manner can significantly enhance the efficiency and progression of their building permit application's approval. Additionally, this assists the RBS in verifying the project complies with all the relevant statutory and legislative requirements. **It is important to note the RBS is prohibited under the Act from contributing to or participating in the design process⁴ – their role is to assess the design presented to them.**

Improved accountability by all stakeholders creates a stronger framework for improving the quality of design documentation and delivering high-quality building standards in Victoria.

⁴ s79(1)(a) Building Act 1993

Demonstrating compliance

Figure 3 is a simplified flow chart that demonstrates how the building permit application approval process relies on varying types of information/ documentation from different stakeholders to demonstrate compliance for assessment by the RBS.

This information and documentation is required to show the NCC performance requirements are met and the proposed materials, products, forms of construction and designs are "fit for purpose".

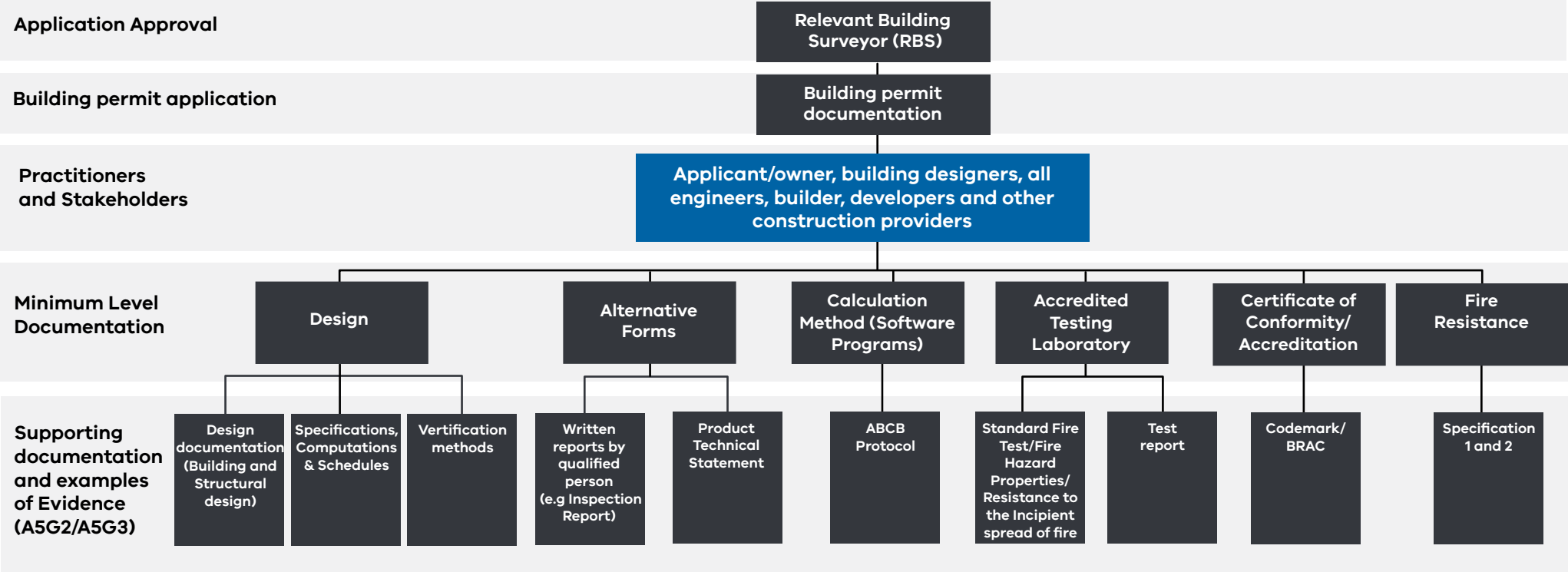


Figure 3: Building permit documentation approval flow chart.

For further information, please see the *Coordination and collaboration* (page 13) section of the Guide which provides reasons and benefits of good coordination and effective collaboration between design practitioners and other stakeholders in a construction project.

Supporting compliance documentation

The type of documentation required to demonstrate compliance with the performance requirements depends on the compliance solution selected as well as the applicable assessment method and the relevant evidence of suitability.

Typically, the more complicated the proposed compliance solution is, the more granular the detail and information that will be required. To support improvements in documentation standards, design practitioners should ensure the following:

- They understand the design documentation they provide to the RBS is acceptable and within the NCC requirements
- The documentation provided is valid and clearly demonstrates that the material, product, form of construction and/or design is suitable for the nominated application in the proposed building i.e., check test report validity, check certificate expiry dates, confirm any specific conditions, and understand limitations on the use of products, systems, and materials.

Supporting compliance documentation example – External wall type

Figure 4 is a simplified example of an approval process and highlights the different types of supporting documentation that may be used to demonstrate compliance subject to **A5G2 and A5G3** for an external wall system nominated in the design.

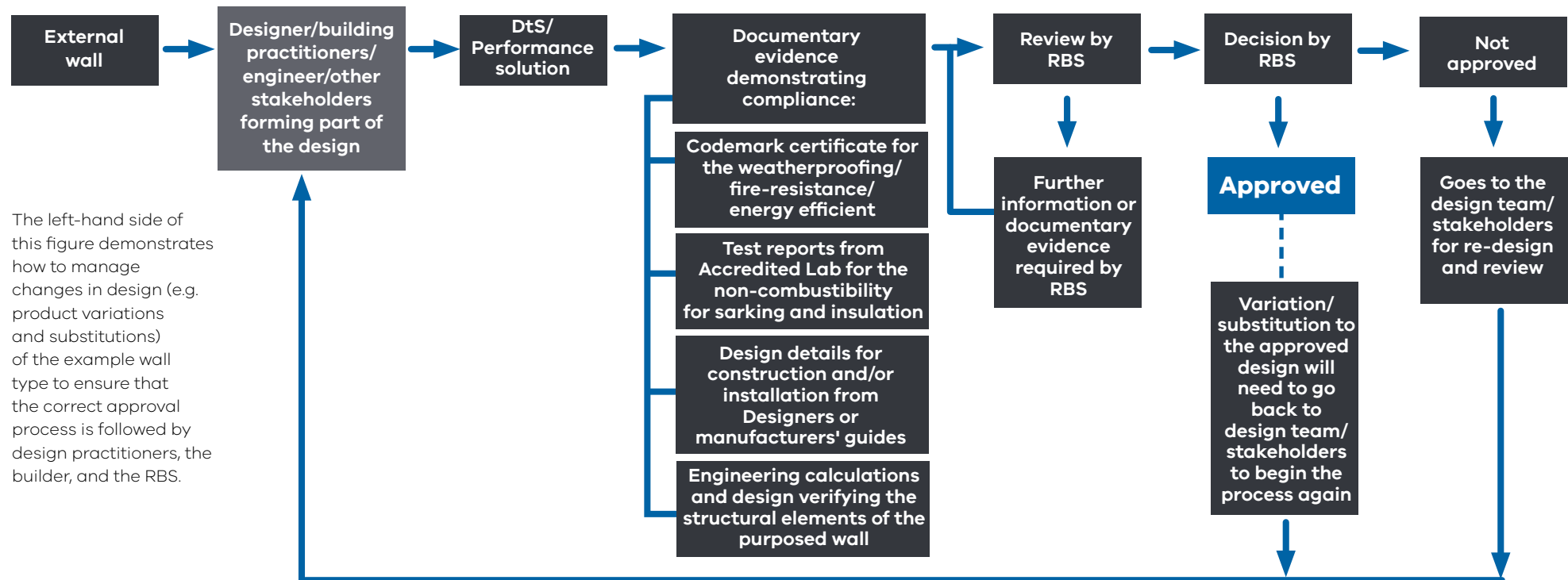


Figure 4: Wall type supporting documentation flow chart.

Evidence of Suitability

Documentation required to satisfy the regulatory, NCC and Australian Standard requirements is to be provided in the form of evidence of suitability as listed under **NCC A5G2** and **A5G3**. Typically, this includes test certificates and reports, CodeMark certificates and product technical statements. Under **NCC A5G2**, the form of evidence must be appropriate for the intended use for the product or the design to which it relates. A certificate that relates to a different type of use of the product cannot be relied upon.

Example 1: In this scenario, a design practitioner selects a DtS compliance solution to satisfy the structural performance requirements in Part B1 of the NCC applicable to stairs and ramps including those in Figure 5, an extract from Part 1 of the Guide. To demonstrate compliance as required by NCC A5G3, the design engineer can provide a certificate or report verifying via calculation or determination of the suitability of the design and referencing compliance with the relevant NCC provisions and loading forces in AS 1170.0 1, 2, 3 and 4, as appropriate.

<p>1.2.4 Balustrades and handrails (barriers) Scale 1:50, 1:10, 1:5 and as appropriate</p>	<p>The design documentation should show the location of all barriers and include the following:</p> <ul style="list-style-type: none"> • Identification of all components of the barrier, including posts, rails, infill panels and base plates • Identification of the building elements supporting the barrier • Details of connection points i.e., showing sufficient offsets from slab edges • Details of type and size of fixings, including references to Australian Standards relevant to fixings • Critical dimensions relating to the heights, openings and climbability • Details of the proposed installation and materials proposed, including relevant Australian Standards applicable to the material and design 	<p>Supporting compliance documentation is required for balustrades and handrails demonstrating the design can withstand loading scenarios in accordance with AS/NZS 1170.1 and, by extension AS/NZS 1170.0 and AS/NZS 1170.2</p>
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Figure 5: Example of technical requirement for stairs and ramps.

Example 2: In this scenario, the design practitioner nominated timber lining products to be installed on the walls and ceiling in the foyer of an apartment building using the DtS compliance solution. To demonstrate compliance with Specification 7 of the NCC, they would need to provide compliance documentation such as a Product Technical Statement or test report, from the manufacturer that details the material group number under the fire hazard properties for the lining product. See Figure 4, an extract from Part 1 of the Guide.

<p>1.1.8 Reflected ceiling plan Scale: 1:100</p>	<p>The reflected ceiling plan should provide details and show location of the following as applicable:</p> <ul style="list-style-type: none"> • Ceiling material and linings such as different ceiling materials or finishes such as plaster, acoustic ceiling tiles, wood, etc. • Ceiling features such as beams, soffits, or access panels • Emergency lighting and exit signs • Any ceiling mounted fire protection systems including fire sprinkler heads and smoke alarms and detectors • Insulation type and extent • Ceiling heights • Ceiling penetrations including smoke and fire dampers (and coordination with service penetration, as applicable) • Light fixtures 	<p>Supporting compliance information should accompany RCP drawings in the form of notes and details to assist determining compliance. This may include the following.</p> <ul style="list-style-type: none"> • Fire hazard properties for ceiling linings in accordance with Specification 7 of the NCC Emergency lights and exit signs to be designed and installed in accordance with AS/NZS 2293.1 and Specification 25 for photoluminescent exit signs • Sound and intercom system for emergency purposes to AS 1670.4
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Figure 6: Example of technical requirement for wall and ceiling linings.

ABCB handbook: Evidence of Suitability

For further information, the Australian Building Codes Board (ABCB) has developed an Evidence of Suitability handbook (available on the ABCB website) which explains the various forms of documentary evidence that can be used to support a claim that a material, product, form of construction or design meets a Performance Requirement or a DtS Provision.

Performance Solutions (including Fire Engineering Reports)

Performance Solutions, including Fire Engineering Reports, should be prepared in accordance with the ABCB, NCC Performance Solution Process – Guidance Document available from the ABCB website. The following applies to materials, products, forms of construction and design, subject to a performance solution:

- They should be clearly identified and integrated into the building and structural design documentation and drawings including any building elements subject to departures from any NCC DtS provision.
- Performance Solution/s are site specific, and proposal will require a specific analysis relevant to its complexity. In order to ensure compliance with the NCC, a Performance Solution should be evaluated according to one or more of the Assessment Methods outlined in the NCC. Any analytical assessment should be completed as agreed in the performance-based design brief (PBDB). (Refer to ABCB guide).
- Where the performance solution provides compliance options, the applicable option should be nominated and consistently documented throughout the building and structural documentation.
- Departures relating to fire safety requirements including required FRLs are to form part of fire safety engineering assessment.

Additional documentation for Performance Solution:

- Section 238 Certificate of compliance must be in the VBA approved form.
- CodeMark Certificates of Conformity:
 - Where a CodeMark is relied upon to meet relevant performance requirements (for a performance solution under A2G2), the designer need not follow the process for performance solutions under A2G2(4). However, they should ensure the CodeMark certificate for the proposed product or system is valid and certifies all relevant performance requirements for the proposed use with the site-specific project.
 - For performance requirements applicable to the project but not covered by the CodeMark, then A2G2(4) will apply.
 - Furthermore, design practitioner should check that all limitations, conditions, and exclusions are satisfied.
- Other forms of evidence of suitability:
 - Certificate of Accreditation
 - Certificate from a certification body
 - Report from accredited testing laboratory
 - Product technical statement
- Where any of the other forms of evidence of suitability are relied on, the certification or report:
 - Must be current
 - Must relate to the proposed use of the product in the current design
 - Must set out details of the basis on which it has been given and the standards that have been relied on to demonstrate compliance
- Regulation 38 determination:
 - Where the building surveyor has accepted the proposed performance solution, a Regulation 38 record determination of the performance solution/s must be included on the building permit and in building permit documents

For more information, refer to Practice Note *PS 01: Performance solution documentation and assessment*, available on the VBA website.

Coordination and collaboration

Residential Class 2 apartment buildings can be considered complex projects that require the appropriate elevated framework, consideration, and resources to be set up from the onset. Critical to a successful project is the allowance for coordination and collaboration as well as the capability and understanding of all parties involved making up the core design team. Typically, this includes the architects/building designers, engineers, and other building consultants relevant to the project.

Why?

This component is crucial to an effective process and the completion of compliant building works. When diligently implemented through the project, from initial concept design, 'for construction' design stage, approval stages, inspection stages, right through to the completion of the works; and at all approval and inspection stages in-between; coordinator and collaboration can reduce or mitigate complexities, delays and costs that may arise through design inconsistency, lack of integration between disciplines, variations, product substitutions, oversight and assumptions that may all lead to non-compliances.

How?

While the legislative framework does not strictly define a singular role or methodology for coordination and collaboration, it is incumbent on the initial setup (by the owner/s or agents) to allow for the building project design teams to implement appropriate mechanisms to facilitate good design coordination and systems for collaboration.

Benefits

Collaboration can ensure consistency in design of multiple building systems and the appropriate integration of fit-for-purpose designs, products, systems, and materials at the relevant stages of the project, to benefit all parties involved in the delivery of the compliant building works. This can offer improved building outcomes for consumers, reduce construction defects, improve timely approval processes, lower unexpected costs or blow-outs for the clients and better adherence to project delivery timeframes.

The scope and nature of these mechanisms may vary based on the project's complexity and at different phases of the project.

For example

During the design phase, the architect may be given the role of lead consultant to coordinate and ensure all other designers and consultants who contribute to design in the project collaborate for permit approvals and potential variations. For consistency and understanding of the design, it is also beneficial to continue the engagement of the lead consultant role throughout construction phase of the project, to continue the coordination and management of the endorsed design documentation and work closely with the nominated builder and their trades. Where an architect or other design practitioner is involved in the project during the construction phase, care should be taken during any product approval process with the builder or during any value management process under a Design and Construct contract, to ensure that any product substitution does not impact the compliance of the design and is approved by the RBS, fire engineer, structural engineer or other relevant consultant.

Conversely, the head contractor may be tasked to principally carry the responsibility of endorsed design documentation coordinator for the project during the construction phase, managing the coordination of the endorsed design documentation used on site and amongst trades. This will depend on the contractual arrangements between the parties. Regard should be had to the contract documents to understand the contractual roles and responsibilities. Design practitioners should pay careful regard to the contractual provisions so they understand who bears the contractual responsibility for design compliance and as-built compliance of the building.

Aside from the contractual arrangements, all practitioners involved in the design have statutory obligations to carry out their work in a competent and professional manner. Depending on the context, carrying out work in a competent and professional manner may necessitate collaboration with other practitioners. In addition to the general obligations to carry out their work competently and professionally, which apply to all design practitioners, architects have additional specific code of conduct obligations which are relevant to how they carry out their work. They should ensure that those requirements are complied with when carrying out the work described in this Guide, including when collaborating with others in the preparation of a class 2 building design.

IMPORTANT: Notwithstanding the building classification limitation of the Practice Guide i.e., new residential Class 2 buildings, the design documentation principles set out in the Practice Guide may be applied to other building classifications, as appropriate.

Part A1.0: Building design documentation

1.1 Working drawings

Drawing category and scale	Design and documentation details	Supporting compliance documentation for DtS solutions/ Regulatory, NCC & Australian Standard requirements																
<p>1.1.1 Cover page</p>	<p>A cover page that identifies the drawings in the set and includes the following site and building details (building particulars):</p> <ul style="list-style-type: none"> • Project location: The full address of the construction site, including the city and state • Client information: Architect/Designer Information • The name, address, contact information, and possibly the logo of the architectural firm or building designer company responsible for the documentation • Project number: A specific number assigned to the project for tracking purposes • Scale: An indicator of the scale at which the drawings should be read • Drawing index: A list of all the drawings included in the set, with sheet numbers for reference. It should indicate the types of drawings such as floor plans, elevations, sections and details • Date and revision history • The date when the plans were issued • Legend/symbol/key • A legend/guide to understanding symbols and abbreviations used in the drawings (if not in a separate drawing) • Land title details <p>The following may be included where relevant and in addition to the above:</p> <ul style="list-style-type: none"> • Other consultant information. Depending on the project, this could include details of other consultants including structural engineer, civil engineer, mechanical, electrical, and plumbing (MEP) engineer, landscape architect and interior designer • Applicable codes and standards: A list of the codes and standards that the project complies with 	<p>The following are key compliance design parameters which inform many of the NCC compliance requirements for the building design. Design practitioners are encouraged to clearly identify these parameters on the cover page:</p> <ul style="list-style-type: none"> • NCC Version • Number of Storeys • Rise In Storeys • Effective Height • Gross Floor Area • Class/Usages • Type of construction A/B/C • Fire Rescue Victoria (FRV) – Report and Consent – Reg 129 Report number • Performance Solution Report number(s) <p><i>Note: Figure 7 below is an extract from an example 'Compliance Design Parameters' table provided in Appendix A.</i></p> <table border="1" data-bbox="1357 895 2080 1302"> <thead> <tr> <th colspan="2">Appendix A: Compliance design parameters</th> </tr> <tr> <th colspan="2">Example compliance design parameters</th> </tr> </thead> <tbody> <tr> <td>NCC Version applicable to design</td> <td>NCC Volume One 2019 Amendment One</td> </tr> <tr> <td>Number of Storeys</td> <td>7</td> </tr> <tr> <td>Rise in Storeys</td> <td>6</td> </tr> <tr> <td>Effective Height (As per NCC)</td> <td>19.2m</td> </tr> <tr> <td>Gross floor area</td> <td>6350m²</td> </tr> <tr> <td>Class / Use</td> <td>Class 2 – Residential Buildings. GF & L1 to L5. Class 6 – Retail café & Restaurant GF Class 7a –Carpark. GF & Basement Level 1 (BL1).</td> </tr> </tbody> </table> <p><i>Figure 7: Extract from Appendix A</i></p>	Appendix A: Compliance design parameters		Example compliance design parameters		NCC Version applicable to design	NCC Volume One 2019 Amendment One	Number of Storeys	7	Rise in Storeys	6	Effective Height (As per NCC)	19.2m	Gross floor area	6350m ²	Class / Use	Class 2 – Residential Buildings. GF & L1 to L5. Class 6 – Retail café & Restaurant GF Class 7a –Carpark. GF & Basement Level 1 (BL1).
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<p>1.1.2 All drawings Scale: 1:200, 1:100, 1:50, 1:20, 1:10 and as appropriate</p>	<p>All drawings should demonstrate or satisfy the following:</p> <ul style="list-style-type: none"> • Coordination with other building services and structural documentation • Relevant elements of performance solutions as necessary and ensure consistent documentation of performance solution across different drawing types • Appropriate notes, annotations, legends and the like specific to the plans set and design • References, tags, and callouts to relevant sections, details, schedules, and specifications • A legend/symbol/key • Title block noting information about the project, client, architect/designer, date, and sheet number • A north point /arrow and grid lines • Sufficient details and dimension to determine compliance • The design drawings should be suitable for construction <p>Note: Where matters are unable to be shown in the drawings, they may be detailed in the relevant specifications See Part 1.4 Specifications or in a schedule format, see Part 1.3 Schedules of the Guide.</p>	
<p>1.1.3 Site plans Scale 1:200, 1:500</p>	<p>The site plan and building details should include the following information, particularly where related to building compliance matters:</p> <ul style="list-style-type: none"> • Proposed building in the context of the site(s), such as location from streets/lane, boundaries and fire source features and reduced levels • Easements as per the title shown on plans with dimensions • Existing structures and adjacent buildings • Legend/symbol/key • A north point/arrow • A site set out plan appropriately dimensioned with grids and survey points • Projections over public areas (footpath/street) or over adjoining property • Access paths, points, and circulation this includes points of entry and exit for vehicles and pedestrians, driveways, egress pathways, internal and external gates, fences • Location and layout of parking areas, where applicable • Site topography indicating changes in level across the site, usually with contour lines • Civil drainage outlets, gutters, and legal points of discharge • Location of grated pits and trench grates. Please note that these elements may not be always shown on the site plan and can be found on other plans i.e., basements/ground floor plans • Underground tanks: such as tanks used for stormwater management (retention or detention), Fuel (LPG or natural), fire water tanks • Safety features details such as location, size, access points, if required, e.g., bollards to protect gas tanks from vehicle impacts • Location of sewer drains and connection point 	<p>Supporting compliance documentation includes the following:</p> <ul style="list-style-type: none"> • Site plan matching the registered and endorsed title plan relevant to the site • Survey plans showing AHD (Australian Height Datum) or RL (Reduced Levels) and including the title boundaries details/ dimensions • Report and consent from the relevant authorities for projection and build over easements • Combined allotment statement, where applicable

	<ul style="list-style-type: none"> Hydrant locations Existing power line and electricity pole locations <p>Note: To ensure all information has been provided and that the plan is not overwhelmed with information, the above information may be provided across more than one document or set of drawings.</p>	
<p>1.1.4 General floor plans Scale: 1:100</p>	<p>Floor plans should include the general layout and elements of each floor of the building including roofs and basements. Floor Plans should show the following:</p> <ul style="list-style-type: none"> The layout of each floor plate, including location of walls, wall thicknesses and types, columns, doors (and door swings), windows and the like The dimensions of elements The layout and location of all shafts, service risers or the like Structural floor levels and finished floor levels. References, tags, and callouts to relevant sections, details, schedules, and specifications Location of services including the following: <ul style="list-style-type: none"> Gas Meter room or cabinet Water Meter room or cabinet Switch gear room Fire services The layout and location of exits including stairways, passageways, ramps, and doors Built-in features: This includes closets, cabinetry, fireplaces, or other similar built-in features 	<p>References to other drawings and documentation such as Australian Standard clauses including Performance Solutions and report and consent from other authorities</p>

**1.1.5 Roof plan
Scale: 1:100**

Roof plan should show the following:

- Roof cladding type and installation requirements
- Roof drainage system design components including the following:
 - o Roof slopes, drainage patterns, and locations of any equipment and penetrations
 - o Parapet wall, gutters, downpipes, and eave locations
 - o Type and location of overflows and sumps
 - o Flashing and capping details
- Overall shape and layout, including features like chimneys, skylights, or vents
- Safety features like guardrails, access routes, or anchor points for safety harnesses
- Solar panels, decking, green roof systems and any rooftop equipment should be clearly indicated and detailed

Coordination and collaboration: Drainage system designs

Roof drainage and storm water drainage systems should be designed, documented, and installed by an appropriately qualified person with the relevant expertise such as a licensed plumber.

The design practitioner should engage or collaborate with the person to ensure the building design and drainage designs are integrated effectively before construction.

The documentation of the design of the systems should be complete at building permit application stage and clearly demonstrate how the design complies with the NCC and Australian Standard requirements, and how the design will be installed on site. This includes ensuring that where drainage performance solutions are required, all supporting documentation for the solution are developed appropriately and provided for the RBSs assessment and approval, prior to issuing the building permit.

Notes and references to the Australian Standard are not considered sufficient in demonstrating compliance and should not be relied upon as evidence of compliance by all practitioners.

The stormwater drainage design should comply with the requirements of AS3500.3 and include sufficient details for construction in the building permit documentation.

Supporting compliance information and documentation for a roof drainage system design include the following:

- Regulation 133 Legal Point of Discharge (LPOD) and other related approval documentation
- Stormwater layout including sizes/details and design to the LPOD
- Design procedure for eave, valley and box gutter design as required by AS 3500.3
- Eaves gutters - overflows and downpipes details specifying the sizes, fall, materials, compatibility, resistant to corrosion, and installation methods
- Box gutter, including use of rainheads or sumps. specifying the sizes, fall, materials, compatibility, resistance to corrosion, installation methods
- Freeboard requirements
- Components for discharge of stormwater from a higher catchment area, i.e., use of rainheads, and spreaders
- Overflow devices design details including operation, eg. rainhead overflows, sump with overflows and hydraulic capacity

For more details refer to *Practice Note SD-01 / Stormwater drainage systems* on the VBA website.

**1.1.6 General elevations
Scale: 1:100**

Elevations should be provided for each external aspect / facade of the building and include the following:

- Proposed external materials and finishes, with consideration for NCC requirements including fire protection, weatherproofing and energy efficiency requirements
- Locations and sizes of window and door openings (including window and door numbers), balconies, balustrades, and other external features such as vents, screenings, and awnings
- Articulation joint locations
- Dimensioned heights of floor levels
- Overall heights including ground levels, floor levels and roof levels
- The slope of the roof and any roof features such as chimneys/flues, skylight and the like
- Location of the following services, and / or doors openings into service rooms on the building facades
 - o Gas meter room or cabinet
 - o Water meter room or cabinet
 - o Switch gear room
 - o Fire services

Supporting compliance information should accompany elevation drawings in the form of notes and details to assist determining compliance. This may include the following.

- General drawing legends and external finishes legends
- References to other drawings and documentation

1.1.7 General sections

Scale: 1:100

Note: Scale to be appropriate to level of construction detail in section.

Section details should be provided for all construction methods that cannot be shown on the floor plans, elevations, or other drawings.

Details in section drawings should include the following:

- Floor/ceiling construction types and details including method of construction and set downs
- Junctions and interfaces between and within key parts of the building including external wall interface with floor slabs and vertical spandrels
- Section through floor voids such as atriums, stair, and lift shafts or similar that connect multiple floors
- Floor, roof, ceiling, and ramp levels where applicable to show concealed spaces, such as under ramps, above ceilings, or under roofs
- Wall type details for differing external and internal wall construction including but not limited to the following:
 - When different wall types intersect (continuous and/or at angles), and
 - When different wall types are located over each other, including cladding materials and fixings at these junctions
- Finishes details for balconies, terraces, and set downs / recesses in floor level
- Location of structural elements
- Location and height dimensions of balustrades, handrails, and screening (vertical and horizontal)
- Overhead storage e.g. in basement parking
- Room/space name
- Include references, tags, and callouts to relevant section details and drawings
- Section through easements and footpath/laneways showing size, depth, offset from property boundary for council assets and other services such as communications, water, sewer, power etc

Note: Sections should be suitable for construction, sufficiently detailed, dimensioned, and show integration and coordination of other relevant service.

Supporting information should accompany sections drawings in the form of notes and details to assist in determining compliance. This may include the following:

- General drawing legends and external finishes legends
- Notes/legends denoting wall, floor, ceiling materials
- References to other drawings and documentation

1.1.8 Reflected ceiling plan
Scale: 1:100

The reflected ceiling plan should provide details and show location of the following as applicable:

- Ceiling material and linings such as different ceiling materials or finishes such as plaster, acoustic ceiling tiles, wood, etc.
- Ceiling features such as beams, soffits, or access panels
- Emergency lighting and exit signs
- Any ceiling mounted fire protection systems including fire sprinkler heads and smoke alarms and detectors
- Insulation type and extent
- Ceiling heights
- Ceiling penetrations including smoke and fire dampers (and coordination with service penetration, as applicable)
- Light fixtures
- Plumbing and civil design
- Air grilles and diffusers
- Mechanical ventilation and exhaust systems
- Smoke management systems including stair pressurization system
- Access panels
- Audio/visual equipment such as speakers, projectors, screens, or other AV equipment that may be ceiling mounted
- Security devices such as cameras or other security devices that are located on the ceiling
- Control and expansion joints for plasterboard, where provided

Note: The details noted in the reflected ceiling plans should be consistent and coordinated within the electrical services drawings and mechanical service drawings. Furthermore, any requirements in any Fire Engineering Reports (FER) should be incorporated in the RCPs, where applicable.

Consultation and collaboration

Design practitioner's and engineers should consult and have a collaborative approach in the design and selection of products, systems and services including their location to ensure they have documented correctly and are fit-for-purpose for their application.

Supporting compliance information should accompany elevation drawings in the form of notes and details to assist determining compliance. This may include the following.

- Fire hazard properties for ceiling linings in accordance with Specification 3 and 7 of the NCC
- Emergency lights and exit signs to be designed and installed in accordance with AS/NZS 2293.1 and Specification 25 for photoluminescent exit signs
- Sound and intercom system for emergency purposes to AS 1670.4
- Air handling systems as required by the NCC to be designed and installed in accordance with AS1668.1
- Automatic smoke detection and alarm system complying with AS 1670 or AS 3786 smoke alarms
- Artificial lighting – Please see Part 1.2.8 *Energy Efficiency of the Guide*

1.2 Building components, parts, systems, and elements

Building components, parts, systems, and elements	Design and documentation details	Supporting compliance documentation for DtS solutions/Regulatory, NCC & Australian Standard requirements
<p>1.2.1 Fire safety Scale 1:100, 1:50, 1:20, 1:10, 1:5 and as appropriate</p>	<p>General building fire safety details</p> <p>The drawings should show all elements that relate to fire safety systems, including the following:</p> <ul style="list-style-type: none"> • Locations of all fire and smoke barriers in the format of a compartmentation plan • Construction methodology of each compartment/area and its fire-resistance levels (FRLs), including smoke curtains, smoke baffles, and the details of smoke separation systems and characteristics and in the case of a smoke barrier, its designation as a smoke wall/barrier • Fire-resisting elements, resistance to incipient spread of fire ceilings, non-combustibility (i.e., external), concrete/masonry • The minimum FRLs to be achieved for all fire separating construction • Location and materials of shafts – fire isolated exits, lift shafts, risers, and service shafts • Fire separation spandrels/horizontal projections, substations and equipment • Openings in fire-resisting and bounding construction such as doors, windows and shaft openings • Protection of penetrations through fire-resisting construction – see Part 1.3.5 Services Penetrations Schedule and documentation • Type of internal and external finishes, linings, and cladding • Means of egress: Clearly show the paths that occupants will take to exit the building in the event of a fire. This includes exit doors, corridors, stairs, ramps, and the external paths leading away from the building to an open space or public road • Nominate smoke lobbies, where provided, and the enclosing construction materials, related FRLs, and details of smoke sealing materials at construction joints, e.g., top of wall and floor slab <p>Plans</p> <ul style="list-style-type: none"> • Layout and location of areas and rooms required to be fire separated including fire services, plant rooms and substations • Location and layout of fire-resisting components including walls, doors and columns • Walls that are required be non-combustible, concrete masonry or fire protected timber • Fire/smoke compartments and bounding construction • Location and types of openings including doors and windows that reference wall construction, e.g., wall type drawings • Signage: Indicate the location of fire safety signs, such as exit signs, including directional exit signs and signs indicating the location of firefighting equipment 	<p>Supporting compliance documentation and evidence of suitability documentation is required for the following:</p> <ul style="list-style-type: none"> • Building materials nominated as non-combustible • Test certificates for non-combustible materials as determined by AS 1530.1 – Combustibility tests for materials <p>All building elements nominated with an FRL:</p> <ul style="list-style-type: none"> • Documentation demonstrating compliance with Schedule 1 of NCC Volume 1, such as AS 1530.4 fire test certificates <p>Building finishes and linings:</p> <ul style="list-style-type: none"> • Evidence of fire hazard properties of finishes and linings such as group numbers and smoke growth rate indices determined in accordance with AS 5637.1 • Rigid and flexible ductwork fire hazard properties in compliance with AS4251.1 and AS 4254.2 <p>Assembly systems used for protection to openings for service installations in building elements</p> <p>Evidence of the FRL must comply with NCC C4D15 which may include, amongst others:</p> <ul style="list-style-type: none"> • Test certificate for the selected assembly evidencing compliance with the FRL in accordance with AS 4072.1 and AS 1530.4 • Documentation evidencing compliance with Specification 13 • Product specifications and installation manuals <p>Fire protection systems</p> <ul style="list-style-type: none"> • Fire hydrants provided as per NCC and installed in accordance AS 2419.1 • Fire hose reels provided as per NCC and installed in accordance with AS 2441 • Sprinklers systems installed in accordance with E1.5 and Specification E1.5a (VIC Variation), where provided as required by the NCC • Portable fire extinguishers provided as required by the NCC and selected, located, and distributed as per AS 2444

Sections

- Horizontal elements such as floor slabs and ceilings
- Vertical elements through fire-resisting construction such as shaft walls
- Junctions between fire resisting construction
- Required fire resistance levels of horizontal and vertical elements
- Cross-sectional elevations through service rises service shafts lift and stair shafts etc. Construction detail at a scale of 1:5 should also be included, such as the method of enclosing the tops and bottoms of shafts

Details

- Junctions between fire resisting construction
- Protection of penetrations (fire stopping) through fire-resisting construction, including information that explains how an FRL will be achieved and maintained where penetrations occur e.g., a fire matrix, reference to specification details. Minimum FRLs to be achieved by building components including walls, floors, and columns
- Openings in fire-resisting construction
- Construction of fire-resting doorsets

Specifications and Schedules

- Details of the methods of protecting each type of penetration through fire-resisting elements
- Details of each proposed wall type, reference to tested systems where applicable and how the FRL's are to be met
- Identifies which service penetrations are to be protected
- Identify doorset types including details of fire/smoke resistance

Coordination and collaboration

The design practitioner should consider the fire safety implications of the integration of many different building services, and their individual compliance requirements.

Coordination and collaboration with other building service providers such as electrical, hydraulic, mechanical and fire engineers ensures a holistic consideration of fire safety requirements. It also draws in relevant expertise to ensure the appropriate compliance measures are based not only on the individual service requirements but the interrelationship between them.

Note: Where a performance solution compliance pathway is nominated for fire safety matters, performance solution documentation evidencing compliance must be provided as required under the NCC.

Refer to 'Performance and Solutions' section of the Guide for further guidance.

For more details refer to *Practice Note EE-03 | PN-07 | Residential Fire Safety Systems* on the VBA website

<p>1.2.2 Building enclosure Scale 1:50, 1:20, 1:10 and as appropriate</p>	<p>Components of the building enclosure include external walls, roofs, and basement construction.</p> <p>Plans, sections, and elevations</p> <ul style="list-style-type: none"> • Construction methods and materials of external walls and wall system • Construction methods and materials of roofs and basement construction including tanking and waterproofing to basement wall construction • References to walls schedule and construction details <p>Details</p> <ul style="list-style-type: none"> • Waterstop details of basement walls and piling • Construction methodology details of waterproofing habitable areas below ground • Site drainage and stormwater system design • Details of fixing of external wall cladding • Slab edge details • Waterproofing of external walls • Details showing insulation, sarking, weepholes, flashings. • Details of external door and windows including weatherproofing and flashings • Details of interface between different external wall building materials • Parapet wall, gutters, and eave details • Location and type of sarking applied, including pliable building membrane supporting condensation management 	<p>Supporting compliance documentation is required for external walls and should demonstrate the following:</p> <p>External Walls</p> <p>The external walls including the windows/glazing and doors comply with the weatherproofing requirements of the NCC</p> <ul style="list-style-type: none"> • The external walls are face sealed or a pressure equalised system • Non-combustible materials in accordance with the NCC are used • The external walls comply with the design thermal targets • The external walls comply with the design acoustic targets • Safe access for maintenance works on the external wall • Compliance documentation for pliable building membrane demonstrating compliance with AS 4200.1 and installation in accordance with AS 4200.2 <p>Roofs</p> <ul style="list-style-type: none"> • For additional information, please see <i>Part 1.1.5 Roof Plan and Part 1.2.3 Waterproofing</i>, of this Guide.
<p>1.2.3 Waterproofing Scale 1:10, 1:5, 1:1 and as appropriate</p>	<p>Details of wet areas within the building.</p> <p>Plans, sections, and elevations</p> <ul style="list-style-type: none"> • Areas that require waterproofing • Specify floor gradients • Location of floor wastes <p>Details</p> <ul style="list-style-type: none"> • Floor and wall construction including substrates • Waterproofing system and extent of coverage • Location and type of water stops • Intersection of walls and floors • Shower screen types • Termination of membrane into floor wastes, and upturns/setdown details • Details of bathtubs and spas • Details of how the waterproofing is to be applied including information about substrate preparation, priming, seam overlaps, termination details, fillet, rebates, upturns and backing to internal corners, puddle flanges etc • These may be represented with detailed cross-section drawings for internal wet areas, including bathrooms etc • Specify any requirements for testing or inspection of the waterproofing 	<p>Supporting compliance documentation showing the following is required for areas to be waterproofed:</p> <p>Internal wet areas</p> <ul style="list-style-type: none"> • Details of selected waterproofing materials, systems, and design methods • Details showing the design and installation of internal waterproofing materials and systems in accordance with AS 3740 • Evidence of internal waterproofing membrane determined in accordance with AS 4858 including the classification of the membrane and minimum joint movement requirements <p>External above-ground areas</p> <ul style="list-style-type: none"> • Details of selected waterproofing membrane system to be specified, including the group classification and exposure of the system in accordance with AS 4654.1 • Details showing the design and installation of external waterproofing membrane system in accordance with AS 4654.2

Note any relevant standards or building regulations that the waterproofing complies with including all parts of the building to which they apply.

External above-ground waterproofing including balconies, roofs, and planter boxes and landscaped areas

Plans that identify:

- The waterproofing membrane
- The balcony and roof gradient
- Location of floor wastes and overflow provisions

Other drawings including sections and elevations that show:

- Extent of waterproofing membrane to balconies, terraces, roofs, and planters including the type of substrate
- Termination of waterproofing membrane
- Overflow details
- Details of how the waterproofing is to be applied including information about substrate preparation, priming, seam overlaps, termination details, etc These may be represented with detailed cross-section drawings for external wet areas, including balconies, roofs etc
- How the waterproofing transitions at junctions including where a balcony meets a wall, or around penetrations like pipes or vents
- Any requirements for testing or inspection of the waterproofing, including curing times and trafficability restrictions

Note any relevant standards or building regulations that the waterproofing complies with.

Consultation and collaboration

Design practitioners should consider consultation with waterproofing consultants/ professionals or waterproofing industry bodies, prior to selection of product or system. A collaborative approach in selection of products or systems ensures they are selected and documented correctly and are fit-for-purpose and application.

Additionally, this provides a detailed understanding of products and systems performance and limitations, in site specific conditions, which when installed correctly, is likely to meet the compliance requirements of the NCC and Australian Standard.

Below ground areas

- There are no DTS provisions or standards for materials, design, and installation of waterproofing below ground
- The performance requirements must be addressed to achieve compliance via any of the assessment methods listed in the NCC

A waterproofing schedule is a recommended means to document details relating to waterproofing such as types of products, locations and substrates.

Please see Part 1.3.6 the Waterproofing Schedule documentation details, of the Guide.

<p>1.2.4 Balustrades and handrails (barriers) Scale 1:50, 1:10, 1:5 and as appropriate</p>	<p>The design documentation should show the location of all barriers and include the following:</p> <ul style="list-style-type: none"> • Identification of all components of the barrier, including posts, rails, infill panels and base plates • Identification of the building elements supporting the barrier • Details of connection points i.e., showing sufficient offsets from slab edges • Details of type and size of fixings, including references to Australian Standards relevant to fixings • Critical dimensions relating to the heights, openings and climbability • Details of the proposed installation and materials proposed, including relevant Australian Standards applicable to the material and design • Waterproofing detail to base of posts in waterproofed areas <p>Holistic design considerations</p> <ul style="list-style-type: none"> • The design of the barrier should consider and not compromise other building elements such as waterproofing and reinforcement in floors and walls • Collaboration with relevant parties such as the design engineers and barrier suppliers to ensure the barrier design complies with the NCC <p>For example, collaborating with the design engineer to ensure the barrier meets relevant loading forces and to ensure supporting elements are located nominated and consistent with the design.</p> <p>Please see to Part A2.3 for requirements for structural design documentation of balustrades and handrails.</p>	<p>Supporting compliance documentation is required for balustrades and handrails demonstrating the design can withstand loading scenarios in accordance with AS/NZS 1170.1 and, by extension AS/NZS 1170.0 and AS/NZS 1170.2</p> <p>Furthermore, wind actions should consider barrier location noting that those located on the corner of the building, or at higher levels, will generally receive higher wind loads.</p> <p>Examples of compliance documentation include specifications and any other technical documents as prescribed in A5G3 of the NCC.</p>
<p>1.2.5 Stairs and ramps Scale 1:100, 1:50 and as appropriate</p>	<p>Plans, sections and construction details should nominate the following details:</p> <ul style="list-style-type: none"> • Riser and going dimensions including the Finished Floor Levels (FFL) • Stairway widths • Landing location, gradients and dimensions • Head clearance dimensions • Dimensions of openings between treads • Materials and finishes of stairs, landings and ramp components • Slip resistance measures applied to stairs and ramps (such as nosing strips) including the size and location of the measures • Location of services within stairways and ramps such as hydrants location and clearances • Door swing • Slope or gradient of ramps • Reduced Levels (RL) at landings • Details demonstrating provisions for access for people with a disability <p>Note: Design practitioners should consider the impact of tolerances on the finished levels at the design stage to avoid common non-compliances associated with stairs riser dimensions.</p>	<p>Supporting compliance documentation is required for the following:</p> <ul style="list-style-type: none"> • Stairway and ramps demonstrating they are designed to take loading forces in accordance with AS/NZS 1170.1 • Test certification for slip-resistance classification of surfaces for treads, nosings, landings and ramps in accordance with AS 4586 • Test certification for luminance contrast of tactile ground surface indicators (TGSIs) to AS 1428.1 • Details demonstrating compliance with AS 1428.1

1.2.6 Lifts
Scale 1:100,
1:50, 1:10 and
as appropriate

Plans, sections and details of lift installations at the appropriate scale should nominate the following general information and details:

- Type of lift with dimensions to determine NCC compliance, e.g., nominating an emergency lift and providing minimum car depth dimensions
- Lift overrun and lift pit dimensions and details in section drawings
- Floor Levels and landing details as required by Parts D2, D3 and D4 of the NCC
- Location of machine room, if applicable
- Lift shaft details showing adequate/separation from the rest of the building
- Doorways in lifts as protected by fire doors
- Provision of lift indicator panels
- Types of floor linings and coverings in lift cars
- Wall and ceiling materials and linings
- Relevant accessibility provisions where lifts are provided in a building required to be accessible
- Provision of emergency protocols, alerts, warnings and signage for the use of the lift
- Provision of stretcher facilities in lifts where applicable
- Provision of fire related services including fire service recall control switches and fire service drive control switches as applicable
- Sumps and cross section details showing waterproofing considerations and drainage

Note: In addition to the above, other requirements for lifts apply under Part D4 Access for people with a disability and other sections of the NCC such as Section J Energy Efficiency.

Supporting compliance documentation is required for the following:

- Shafts are nominated with an FRL with a tested system and compliance of fire doors in accordance with AS 1735.11
- Fire hazard properties, e.g., critical radiant flux, for floor linings and coverings complying with Schedule 7
- Group numbers in accordance with AS 5637.1 for wall linings and ceiling linings of lift cars
- Accessibility provisions, including provision of compliance signage which may be provided in a schedule format

<p>1.2.7 Access and Egress Scale 1:100, 1:50, 1:10 and as appropriate</p>	<p>Details of general building access and egress</p> <p>Exits and path of travel to an exit:</p> <ul style="list-style-type: none"> Nominate all required exits in the building The height and width of all required exits and path of travel are clearly documented <ul style="list-style-type: none"> This may be captured in the plan and section drawings for stairways, corridors, passageways Door schedules can also evidence the heights and widths for exit doors Ensure that travel distances where required have been complied using the method of measuring in the NCC. It is encouraged to include these distances for all exits Identify where enclosures under stairs are provided nominating materials for enclosing walls and doorways and related FRL's Nominate the swings for all exit doors, ensuring they comply with directional and encroachment requirements <p>Access to services</p> <ul style="list-style-type: none"> Ensure that access provisions for ancillary services such as plant rooms and machinery rooms are provided Lift pit access should be provided and where required the related signage provided Ensure door and stairs provided for access to service rooms comply with the relevant Australian Standards i.e., AS 1657 for stairways, ladders fixed platforms, non-habitable rooms such as attics <p>Construction of exits (see to <i>Part 1.2.1 Fire safety details and Part 1.2.5 Stairs and ramps</i> of this Guide for other relevant details)</p> <ul style="list-style-type: none"> Ensure the materiality of stairs and ramps are nominated Provide section drawings showing the stairway, stairwell/stair shaft and any connections and separating construction through all the storeys of the building Provide gradients for all ramps and the related slip resistance as per AS 4568 <p>Installations in exits (see <i>Part 1.3.5 Services Penetrations Schedule and documentation</i>, of this Guide section for other relevant details)</p> <ul style="list-style-type: none"> Nominate the location of all services exits, paths of travel to exits, corridors, hallways, lobbies etc, including gas pipes, rubbish chutes, electrical services infrastructure, and related wiring Provide details of the type of construction enclosing the services 	<p>Ensure all access and egress designs are documented and detailed with supporting documentation complying with the NCC and relevant standards, including the following, where required.</p> <ul style="list-style-type: none"> Building materials nominated as non-combustible. Test certificates for non-combustible materials as determined by AS 1530.1 – Combustibility tests for materials All building elements nominated with an FRL Documentation demonstrating compliance with the nominated FRL as per Schedule 1 NCC Volume 1, such as AS 1530.4 fire test certificates Stairways, ladders fixed platforms, non-habitable rooms such as attics in accordance with AS 1657 Slip resistance classifications in accordance with AS 4568 Design for access and mobility in accordance with AS 1428.1
	<p>Access to buildings for people with a disability</p> <p>Ensure accessways are provided as required by the NCC and relevant standards, typically from the entry to the allotment, from another accessible building and from required accessible carparking on the allotment.</p> <p>This includes the following, amongst other compliance matters:</p> <ul style="list-style-type: none"> Passing spaces, circulation space and turning circles Latch side clearance to doors Door hardware type and location 	<p>See the following Parts of this Guide for details:</p> <ul style="list-style-type: none"> Part 1.2.5 Stairway and ramps Part 1.2.4 Balustrades and handrails Part 1.3.3 Doors and window schedules and documentation Part 1.3.4 Warning Signage schedules and documentation <p>For more details refer to <i>Practice Note AC 01 Access to buildings for people with a disability</i> on the VBA website.</p>

- Switches and outlets
- Design for ramps and stairways including details of handrails, landings, and other features that are designed to assist people with mobility challenges
- Tactile indicators and contrasting nosing strips
- Luminance contrast for doors and door jamb
- Visual indicators on glazing on door and window schedule or however it is deemed appropriate
- Signage, (see to *Part 1.3.4 Signage schedule and documentation* of this Guide)
- Braille and tactile signage
- Designated accessible car parks are clearly marked out with accessible paths from the parking areas to the building
- Swimming pools where provided in common to the occupants, are shown on the plan not less than 1 accessible entry/exit as per D4D11 and Specification 16 of the NCC

Coordination and collaboration

The design practitioner should consider engaging an access consultant or similarly qualified professional to assist or verify that the designs and construction details documented comply with the minimum accessibility requirements for access to buildings and for people with a disability.

Furthermore, consideration for collaboration with other building service and construction professionals such as fire engineers may be beneficial for ensuring compliant documentation for general building access and egress matters.

1.2.8 Energy Efficiency Scale as appropriate

Energy Efficiency documentation requirements

Sole occupancy units (SOUs)

Energy efficiency measures are required to achieve minimum specified thermal performance in the criteria below for Class 2 sole occupancy units.

- Heating, cooling, and thermal energy loads limits
- Energy value of the domestic services

Ancillary areas of the building

- Energy efficiency measures for the Class 2 (Ancillary areas) building including its services, must facilitate the efficient use of energy as required by the NCC

Carpark zones

Energy efficiency measures are prescribed for the following building elements in carpark areas to limit energy consumption.

- Air-conditioning and ventilation systems
- Artificial lighting and power
- Access for maintenance

Design documentation and details (whole building).

The following information at a minimum should be provided in the design documentation for energy efficiency compliance:

- Location and extent of insulation installation (including type and R value) in walls, floors, ceilings, and roofs
- Type of glazing, frames, U Values, SHGC, values, shading, screening and blinds
- Lighting and details of other electrical services
- Location of roof lights
- Air filtration seals to windows and doors
- Exhaust fans with self-closing dampers
- Construction details showing minimisation of air leakage at door windows and wall and floor junctions

Coordination and collaboration

Design practitioners should ensure the following:

- The energy efficiency consultant is advised of any design variations that may affect the buildings energy efficiency performance, prior to lodging building permit documentation, and when design variations occur during the construction stage. This may require remodelling of the building's thermal performance and additional amendments to the design or energy efficiency specifications
- Building components and materials required to satisfy energy efficiency requirements such as the type of insulation, building wrap, glazing, louvres, shading systems etc are nominated and consistently reflected in design documentation and construction details

This helps ensure that the as-built construction performs as intended by the design practitioner and to the energy consultant's specifications

Supporting compliance documentation that demonstrates compliance with the energy efficiency requirements if required include the following:

- NatHERS software or elemental assessment report if following the DtS compliance pathway
- Verification Methods to JV1, JV2 and JV3
- NABERS energy rating assessment and report
- Green Star rating assessment and report
- Calculations, in accordance with the NCC facade, glazing and artificial lighting calculators (refer to the ABCB website).

For more details, refer to *Practice Note EE-03 | Energy efficiency requirements for new residential buildings* on the VBA website

1.3 Schedules

Design and documentation details	Supporting compliance documentation for DtS solutions/ Regulatory, NCC & Australian Standard requirements
<p>1.3.1 Wall type schedule and documentation (including section drawings).</p> <ul style="list-style-type: none"> • Wall type ID • Wall category Wall type location • Acoustic rating • Fire resistance level • Details of internal and external wall linings 	<p>Provide supporting documentation for all nominated wall type:</p> <ul style="list-style-type: none"> • Wall description, including load bearing/non-load bearing • Tested system type/code and other relevant details
<p>1.3.2 Floor/Roof/Ceiling type schedule and documentation (including section drawings).</p> <ul style="list-style-type: none"> • Floor/roof/ceiling type ID • Location of applicable floor/roof/ceiling type • Acoustic rating • Fire resistance level • Details of floor and ceiling linings 	<p>Provide supporting documentation for all nominated floor/roof/ceiling system:</p> <ul style="list-style-type: none"> • Tested system type/code including description and material dimensions
<p>1.3.3 Doors and windows schedule and documentation (including elevation drawings)</p> <ul style="list-style-type: none"> • Door and window numbers/ID • Door and window dimensions (thickness, width, and height), including openable sections and glazed components within doors • Type of door and window hardware such as, hold open devices, window restrictors, self-closing devices • Operation type such as hinged, sliding and awning • Glazing type and decals • Material and finish of doors, windows, and frames • Fire protection measures, including FRLs • Smoke separation measures such as smoke seals (including rating) • Fire safety and door operation signage • Door hardware • Signage on or adjacent to doors such as fire and smoke door <p>Note: Where fire protection measures are required to doors and windows, they must be consistently detailed throughout design documentation.</p>	<p>Provide supporting documentation, nominating the following:</p> <ul style="list-style-type: none"> • A consistent FRL to that nominated in the schedule • Showing fire door types to suit wall types • Door and door hardware requirements in accordance with AS 1428.1

1.3.4 Warning signage schedules and documentation

Ensure signage is nominated as required in the NCC in compliant locations and satisfies the relevant Australian Standards requirements. Depending on the nature of the project, such signage may include, without limitation the following:

- Emergency and safety signage such as exit and directional signs complying with AS 2293.1
- Fire and smoke safety warning signs
- Signs to alert persons to the operation and restriction to the operation of certain doors
- Accessible building signage (including directional signage) in accordance with AS 1428.1 and AS 1428.2 as required
- Braille and tactile signs in accordance with the relevant NCC Specifications
- Photoluminescent signs complying with AS 2293.1 or Specification 25 of the NCC
- Assembly Area Signage not a NCC requirement but should be considered by design practitioners
- Identification and location signage associated with fire services, equipment such as Hydrants, hose reels, portable fire extinguishers

Fire safety, smoke and warning signage

- Implement signage that provides warnings and instructions related to fire and smoke safety, such as "Do Not Use Lifts in the Event of a Fire."
- Clearly mark the locations of fire equipment, such as fire extinguishers, hose reels and hydrants with appropriate signage
- Specify fire doors to have the appropriate signage indicating their function and operation (e.g., "Fire Door Do Not Obstruct")
- Ensure that signs are durable, legible, and adherent to relevant standards
- If applicable warning signs specified for non-required stairway or ramp

Exit signs and directional signage

- Specify exit signs clearly indicating the path of egress
- Implement directional signage to guide individuals towards accessible entrances, facilities, and exits

Emergency and safety signage

- Display emergency procedure signage in prominent locations, such as near exits and in common areas, to guide occupants during an emergency

Assembly area signage – not a NCC requirement but a consideration

- Clearly sign and indicate assembly areas where occupants should gather in the event of an evacuation
- Ensure the path to assembly areas is clear and accessible from all exit points

Coordination and collaboration

Where signage is located near services, it is important to coordinate the location of the services and signage to ensure the NCC visibility requirements are satisfied.

The design practitioner should ensure that signage is not obstructed by services such as mechanical ventilation ducts, pipes, and other services infrastructure or building features that may be present.

Provide supporting documentation ensuring

- All signage complies with the relevant NCC requirements and relevant Australian Standards
- Signs are placed in relevant areas and are easily visible

Evidence of compliance may be in the form of or a combination of the following:

- Drawings nominating signage and clearly depicting locations
- Product specifications
- Test certificates nominating compliance with relevant standards
- Manufacturer's installation manuals

<p>1.3.5 Services penetrations schedule and documentation</p> <p>Documentary evidence should be provided for the proposed materials and methods of installation for building services that penetrate required fire-rated and/or smoke proof walls, floors, and ceilings.</p> <p>Documentation should include the following:</p> <ul style="list-style-type: none"> • Drawing details of the building elements required to be fire resisting including their FRLs <ul style="list-style-type: none"> ◦ Ensure the location of penetrations does not compromise fire compartments and integrity of fire rated elements, such as walls and floors, allowing the FRL to be maintained even where services penetrate them • Details of the type of fire / smoke protection system, its proposed use and any other materials involved <ul style="list-style-type: none"> ◦ Ensure installation location is consistent with, and in accordance with, the referenced test report/regulatory information report/test certificate ◦ Penetration locations are subject to AS4072.1 compliance. Refer to AS 4072.1 Appendix B for example format ◦ Consider the proximity of penetration to combustible materials ensuring appropriate fire-stopping measures • Location of ducts in relation to fire compartments and paths of egress <p>Coordination with other services</p> <ul style="list-style-type: none"> • Ensure that the installation and management of service penetrations are coordinated with other building services and elements, ensuring a holistic approach to compliance and safety • Engage with relevant stakeholders, including Service Engineers, Fire Engineers, and consultant Building Surveyors to ensure that all aspects of service penetrations are managed effectively 	<p>Supporting evidence of compliance may be in the form of a combination of one or more drawings, a schedule, specifications, test certificates and/or manufactures installation details such as:</p> <ul style="list-style-type: none"> • AS 1530.4 and AS 4072.1 test certificates evidencing compliance testing and determination of FRL and installation of penetration sealing systems respectively • Documentation specifying a compliant products that includes sufficient details to assist in confirming that the correct product installation, such as manufacturer’s installation detail • Documentary evidence of compliance with AS 1668.1 for ventilation and air-conditioning ducts or equipment • If a non-tested system is to be used a Performance Solution must be obtained <p>The design practitioner should ensure the following:</p> <ul style="list-style-type: none"> • All service penetrations (i.e., fire services/hydraulic, sanitary, electrical, ventilation etc.), and the associated protection measures used to manage them, comply with the relevant NCC provisions and Australian Standards • Provide documentation of compliance, including any testing reports, specifications, and relevant certificates <p>For more details, refer to <i>Practice Note FS-02 Service penetrations of fire rated and smoke-proof walls</i> on the VBA website.</p>
<p>1.3.6 Waterproofing schedule</p> <p>The following are details that may be included in a schedule of areas that require waterproofing:</p> <ul style="list-style-type: none"> • Location (room/ area) e.g., Balconies, Bathrooms, Laundry / Planter boxes etc. • Type of waterproofing e.g., membrane or flexible sheet, etc. number and thickness of coats required • Substrate e.g., concrete floors, sand and cement screed, PVC puddle flange, aluminium angle, gyprock walls and brand of waterproofing • Type of primer, i.e., porous for concrete / gyprock /screed) or non-porous (e.g., PVC / aluminium) • Bond breaker type • UV stability capacity 	<p>Supporting evidence of compliance for waterproofing materials may be in the form of the following:</p> <ul style="list-style-type: none"> • Specifications, test certificates and / or manufacturer’s installation details • Warranties and any relevant notes to support compliance or installation as required under Part A5 of the NCC

1.4 Specifications

<p>1.4.1 General and specific</p> <p>A written project document, describing the design, materials and procedure of the work agreed upon and to be executed.</p> <ul style="list-style-type: none"> • This can provide additional information that cannot be shown on drawings, schedules, or other documents such as manufacturer’s installation guide and product technical statement via relevant standards demonstrating compliance and/or make reference to the evidence of suitability relied upon. Specifications should refer to specific products, not just to a brand or a type of product. <p>Note: Specifications should be read in conjunction with those documents.</p>	<p>Supporting evidence of compliance may be in the form of a reference specification such as the NATSPEC Class 2 Specification on the NATSPEC website, or any other similar specification document that supports the design and construction details.</p>
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Part A2.0: Structural design documentation

Drawing category	Design and documentation details	Supporting Compliance documentation for DtS solutions/ Regulatory, NCC & Australian Standard requirements
2.1 Concept plans Scale 1: 200	<ul style="list-style-type: none"> Structural systems Typical foundation, column grid and framing systems Proprietary/subcontracted floor/wall systems (including PT and precast) 	
2.2 Design plans and details Scale: 1:100	<p>Detailed structural drawings are required to show location, section, and detail of all structural and loadbearing members, components, and connections.</p> <p>Detailed load drawings outlining the design loads adopted for each floor and roof area, as well as formwork and propping stripping assumptions, including for:</p> <ul style="list-style-type: none"> Foundation plans including any piles and temporary or permanent shoring Flooring plans and structure, including walling plans and framing plan Roof plans and structure – prestressed detailed design drawings Support and lateral resisting structure plans Seismic restraints for all building elements and services with actions determined in B1D2 Provision for lightning protection interfaces, if required, with finials, down conductors, ties to the reo etc Services/infrastructure Balconies/barriers/cantilevered Location and dimensions all set downs such as for wet areas Location of all expansion, movement, and control joints when they are in an element of the building which is exposed to rainwater, groundwater, shower water or garden watering device Joints to be shown on general arrangement drawings 	<p>Supporting evidence in the form of information and documentation demonstrating the design complies with the following:</p> <ul style="list-style-type: none"> Imposed actions such as wind, earthquake and live loads in accordance with the relevant Australian Standards. Building movements including short term and long-term loads Non-combustible materials in accordance with the NCC are used Construction specification to clearly articulate material and testing requirements for construction. The material specified should be a specific product, not just a brand or type of product A summary of assumptions made during the design development. A summary of the assumptions made with respect to adjacent properties including the foundation system assumed and founding level assumed of the adjacent structures A summary of the support provided by ground which extends beyond the boundary and evidence of alternative load path if this support was removed in the future <p>Basement Construction</p> <p>Supporting evidence in the form of information and documentation demonstrating the design can withstand loads in accordance with the relevant Australian Standards</p>
2.3 Design for balustrades and handrails Scale: 1: 100	<p>Structural drawings should show the following:</p> <ul style="list-style-type: none"> Structural design including load category considered and nominated fixings Coordination of the design of the barriers with the substrates, particularly with post tensioned concrete slabs <p>See requirements for design practitioners' documentation for Balustrades and Handrails in Part A12.4 of this Guide.</p>	<p>Supporting documentation demonstrating the design can withstand loading scenarios in accordance with the following:</p> <ul style="list-style-type: none"> Imposed actions for barriers determined in accordance with AS/ NZS 1170.1 being dependent on the type of occupancy/uses for the part of a building in which the barrier is located Relevant wind actions determined in accordance with AS/NZS 1170.2 Provide the design life of balustrades

2.4 Design sections Scale 1:100	<p>The design should be suitable for construction with detailed section drawings outlining the following:</p> <ul style="list-style-type: none"> • Reinforcement detailing • Relationship to external building elements such as Facade cladding • Post tensioning details • Structural connections for Balustrades and other critical elements 	
2.5 Elevations Scale 1:100	<p>Detailed elevation drawings outlining the following:</p> <ul style="list-style-type: none"> • Reinforcement detailing • Relationship to external building elements such as facade cladding <p>All elevations should include the following:</p> <ul style="list-style-type: none"> • The geographical orientation for the project • A 'mini' block plan to cross-reference the location of elevations on plan • Show the aesthetic qualities of the proposed design and should be sufficiently annotated and/or coloured to communicate the external materials and finishes • The movement joints and control joints marked <p>Structural Engineers should ensure for buildings over 10 storeys provide a movement report which includes but not limited to horizontal and vertical movement of building elements, including any differential movements over the life of the building.</p>	
2.6 Design loads Scale 1:100	<p>Documentation and details should be suitable for construction and include the following:</p> <ul style="list-style-type: none"> • Detailed load drawings outlining the design loads adopted for each floor and roof area, as well as formwork and propping stripping assumptions • Earthquake, snow, wind, and cyclone resilience designs • Movement report: Documenting total deflection and inter storey drift • Wind report/air pressurisation details • Environmental exposure category • Design life and importance level • Location of movement/control/construction joints and consideration with areas that require waterproofing and requirements for proposed system. (eg membrane to balcony) 	<p>Supporting documentation evidencing the structure is determined in accordance B1.2 and general design procedures contained AS/NZS 1170.0, and the resistance of a building or structure is determined in accordance B1.4</p>
2.7 Flood hazard area design Scale 1:100	<p>Documentation and details should specify flood resistance requirements including reference to Authority overland flow contours.</p>	<p>Supporting documentation and/or structural design details demonstrating compliance with the following:</p> <ul style="list-style-type: none"> • Regulation 153, Building Regulations 2018 i.e. compliance with report and consent provisions or, where a planning permit is required, with levels specified by the applicable planning scheme • ABCB Standard for Construction of Buildings in Flood Hazard Areas

<p>2.8 Design Fire Resistance Level</p>	<p>Documentation should verify the following:</p> <ul style="list-style-type: none"> • Fire Resistance Level – Structural Adequacy/Integrity/Insulation including an overview in table format • Designs specifying compliance with bushfire requirements in the NCC and AS 3559 Construction of buildings in bushfire-prone areas • Show areas of transitions, eg such as slab step-downs and document compliance pathway 	<p>Supporting documentation evidencing compliance of the nominated FRL for the design of building elements is to be provided as follows:</p> <ul style="list-style-type: none"> • Concrete structures in accordance with AS 3600 • Masonry structures in accordance with AS 3700 • Timber elements in accordance with AS 1720.4 • Steel or composite structures complies with AS/NZS 2327, AS 4100, AS/NZS 4600 • A standard fire test report confirming the FRL of the building elements in accordance with NCC 2022 Specification 1 and 2 for other materials • An alternative method of compliance for bushfire construction elements is to comply with the test criteria of AS 1530 Part 8.1
<p>2.9 Penetration plans coordinated with services Scale 1:50 and as appropriate</p>	<p>Documentation and details should specify the following:</p> <ul style="list-style-type: none"> • Penetration plans should include dimensioned location of services penetrations, shafts and horizontal reticulation • All penetrations requiring fire protection should be clearly documented • Document corridor ceiling zones showing structural fixings including for services and penetrations with fire collars 	<p>Fire Safety details</p> <ul style="list-style-type: none"> • For penetration fire safety supporting documentation details, see <i>Part 1.2.1 Fire safety details and part 1.3.5 Penetrations schedule and documentation</i> sections of this guide, which cover penetrations in fire resisting walls/floor and other building elements. <p>Plumbing penetrations</p> <ul style="list-style-type: none"> • Supporting documentation evidencing plumbing requirements in footings and slabs in accordance with AS 2870
<p>2.10 Section 238 Certificate of compliance – Structural design</p>	<p>The following details must be accurately documented where a s238 Certificate of Compliance certifying compliance of a structural design is provided to an RBS:</p> <ul style="list-style-type: none"> • All relevant performance requirements are nominated on the certificate and method relied upon in determining that the performance requirement complies • Details including the Volume of the NCC, references to Australian Standards, and any relevant documentation are referenced wholly (including the relevant year) and clearly nominated on the certificate • Building characteristic details including the rise in storey, effective height, building classification and type of construction, are accurately documented • All details including the details of the RBS in receipt of the certificate are nominated • The building complexity level (low/medium/high/very high - NCC 2022) • Any performance solutions included in the design (refer to 'Performance Solution' part of this Guide) <p>Any documentation relied on by the engineer such as soil report, working drawings and computation should be specified on the certificate</p>	<p>Where a s238 Certificate of Compliance is provided, it must be by a prescribed registered building practitioner or an endorsed building engineer, in the VBA-approved form.</p> <p>Ensure all assumptions and calculations to be included as part of the specifications and computations and ensure they cover all elements of the design.</p> <p>Ensure all relevant drawings show the correct date and revision.</p>

Appendicies



Appendix A: Compliance design parameters

Example compliance design parameters

NCC Version applicable to design	NCC Volume One 2019 Amendment One
Number of Storeys	7
Rise in Storeys	6
Effective Height (As per NCC)	19.2m
Gross floor area	6350m ²
Class / Use	Class 2 – Residential Buildings. GF & L1 to L5. Class 6 – Retail café & Restaurant GF Class 7a –Carpark. GF & Basement Level 1 (BL1).
Type of Construction	<input checked="" type="checkbox"/> Type A <input type="checkbox"/> Type B <input type="checkbox"/> Type C
Fire Rescue Victoria (FRV) – Report and Consent	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> Document title and No.: FRV Report No. 2205108, Dated issued: 31/10/22.
Performance Solution(s)	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> Document title and No.: Fire Engineering Report No. 223201, Dated issued: 31/10/22 V2.

Appendix B: Victorian legislation requirements and supporting documentation

Statutory/Regulatory matter	Design and documentation details	Supporting documentation and evidence of Suitability
Application for permit to construct	<p>Documentation required for an application for a building permit for a new building is provided under Regulation 25, which includes but is not limited to the following:</p> <ul style="list-style-type: none"> • Planning Permit and relevant referenced documents including endorsed plans • Working drawings and specifications • Structural design • Survey plans • Statement for the use or proposed use of all building shown on the plans • A copy of any computations or reports necessary to demonstrate that the building and building work will comply with the Act and these Regulations <p>Note: The scope of the Guide is limited to new Class 2 buildings, therefore some requirements under Regulation 25 may not be applicable i.e., alterations to existing buildings.</p>	<ul style="list-style-type: none"> • Refer to Minister’s Guideline MG-11 Building permit and planning permit consistency • Planning permit conditions met such as i.e. civil endorsement, etc • Building design items see Part A1.0 of the Guide. • Structural design items see Part A2.0 of the Guide • Survey plans with AHD or RL including title dimensions by licenced surveyor • Refer to compliance parameters Appendix A
Additional information to accompany application for permit	<p>Following information to be included in the application for a building permit but not limited to:</p> <ul style="list-style-type: none"> • Protection of public detail and consent • Documentary evidence to support the use of a material, product, form of construction • Survey plans • Building envelopes on the allotment <p>Details as to whether the allotment is:</p> <ul style="list-style-type: none"> • In a bushfire prone area • In termite prone area • In alpine area • In flood prone area 	<ul style="list-style-type: none"> • Report and consent from the relevant council for public protection refer Regulation 116 • Evidence of suitability as required by A5G2 • Survey plans with AHD or RL including title dimensions by licenced surveyor. • Domestic (MCP, developer’s approval, Section 173 agreement, small lot housing code/ planning) • Property information from relevant council.
Siting for class 10 buildings	<p>Where a building pertaining to class 10 buildings that may be associated to the class 2 building such as the following:</p> <ul style="list-style-type: none"> • Fences • Sheds • Pergolas/verandas • Signage 	<ul style="list-style-type: none"> • Where plans show departures from the requirements, obtain a report and consent from relevant council or a planning permit showing siting matters considered. • Refer to schedule 3 for building work and buildings exempt from the building permit requirements, if applicable.
Projections	<p>Projections over street alignment such as the following:</p> <ul style="list-style-type: none"> • Balconies • Windows • Signs • Service cabinets 	<ul style="list-style-type: none"> • Working drawings and Structural design details demonstrating any projections beyond the street alignment and any required Report and Consent / public protection / protection work.

Protection work	RBS may determine protection work is required. Where protection work is required, the protection work design will usually require additional engineering design. The design should be complete and include sufficient detail to enable adjacent owners to understand and assess the adequacy of the design. Refer to Practice Note PW02 Protection Work process.	<ul style="list-style-type: none"> Working drawings and Structural design details demonstrating building work and proposed protection work
Public protection	<p>Precautions to protect the safety of the public before and during building work may be required by the RBS. Measures to protect the public may include the following:</p> <ul style="list-style-type: none"> Hoarding Gantry Temporary fencing 	<p>Design of public protection measures to be approved by the RBS:</p> <ul style="list-style-type: none"> Design may come from an Engineer. Report and consent or other council approval may be required where the precaution will be over the street alignment (refer to the council's application form for additional requirements)
Fire brigade	<p>Any NCC DtS variations for the following:</p> <ul style="list-style-type: none"> Fire hydrants Fire control centres or fire control rooms Fire precautions during construction Fire mains Control valves Booster assemblies Open space and perimeter vehicular access for emergency vehicles Fire indicator panels Sprinkler and drencher systems Fire services controls in passenger lifts cars Bushfire safety matters (where applicable) Static water supply for firefighting purposes Emergency vehicle access 	<p>Obtaining report and consent from the Chief Officer of FRV for proposed variations by providing the following:</p> <ul style="list-style-type: none"> Performance solution for the variation. Fire service or hydraulic plan/ working drawings showing the departures. <p>Note any conditions on the report and consent to be adhered to.</p>
Build over easements	Drawings should clearly identify any building over easement for council and/or any authority assets.	<ul style="list-style-type: none"> Site plan matching the title/subdivision plan showing the easement location and use. Angle of repose for proposed works near easements. If building over an easement obtain consent from relevant council and/or any authority (refer to their application for additional requirements) <p>Please note the relevant authority may require report and consent for work near their easement.</p>

Stormwater	<p>The following information is to be included in the building permit:</p> <ul style="list-style-type: none"> • Copy relevant council location plan and design parameter/conditions • Stormwater design and layout 	<ul style="list-style-type: none"> • Obtaining stormwater location plan and if applicable council civil design endorsement: • Storm water design demonstrating compliance AS 3500.3 • Match the location on the proposed working drawings to council designation and all conditions are met
Flood risks	<p>Council information under Regulation 51 to advise if the site is either:</p> <ul style="list-style-type: none"> • Liable to flooding as determined by the <i>Water Act 1989</i> identified in the planning scheme, described on the plan of subdivision, designated by Council to be liable to flooding from a waterway or drainage channel • Otherwise determined by Council to be liable to flooding 	<ul style="list-style-type: none"> • Obtain report and consent or planning permit from relevant council (refer to their application for additional requirements) • Conditions of report and consent to be satisfied • Refer to structural - proposed design including structural must consider Part B1D6 and ABCB standard for construction of building in flood hazard areas
Power lines	<p>Electricity Safety Regulations 2009 (Vic)</p> <ul style="list-style-type: none"> • Clearances as required including sag and sway considerations 	<ul style="list-style-type: none"> • See Energy Safe Victoria website for more details.
Services	<p>Obtaining the required connection/disconnection information from the relevant service provider.</p>	<ul style="list-style-type: none"> • For example, details from Before You Dig Australia (BYDA)

Appendix C: Definitions and acronyms

Term/Acronym	Definition
ABCB	Australian Building Codes Board
ARBV	Architects Registration Board of Victoria
BCA	Building Code of Australia
BCR	Building Confidence Report
BDAP	Building Documentation Audit Program
Building design documentation	Design documentation prepared by architects and building designers for input into the design of Class 2 buildings.
Design practitioners	A person preparing building design documentation or providing advice or input into the design of Class 2 buildings. This includes building designers, as referred to in the <i>Building Act 1993 (Vic)</i> , and architects as defined in the <i>Architects Act 1991 (Vic)</i> .
DtS	Deemed-to-Satisfy
Engineers	A professional engineer registered with the Business Licensing Authority (BLA) in the categories of Fire safety, Civil, Structural, Electrical and Mechanical engineering. An engineer must work within their scope.
Evidence of Suitability	Any evidence needed to show that NCC requirements are met, and the solution is "fit for purpose" Refer to Part A5 of the NCC Volumes 1 and 2
FRV	Fire Rescue Victoria
MCP	Memorandum of Common Provisions
NCC	National Construction Code
PBDB	Performance-based design brief
PIP	Proactive Inspection Program
RBP	Registered Building Practitioner
RBS	Relevant Building Surveyor
Regulations	Building Regulations (relevant edition)
VBA	Victorian Building Authority

Appendix D: Referenced VBA Practice Notes

Building access	AC 01 Access to buildings for people with a disability
Compliance Certificates	BP 15 Certificates of Compliance
Timber framing concession	PN 15 Timber Framing Concessions for Class 2 and 3 Buildings
Performance Solutions	PS 01 Documentation and assessment and GE-07 Fire related performance solutions
Residential fire safety	PN-07 Residential Fire Safety Systems
Service penetrations	FS-02 Service penetrations of fire rated and smoke-proof walls.
Storm water drainage	SD-01 Stormwater drainage systems
Swimming pool and barrier compliance	SP 01 and 02: Swimming pool standards and barrier requirements
Energy efficiency	EE 01 Energy efficiency requirements and building analysis for building classes 2, 3 and 5-9 and EE 02 Applying NCC energy efficiency measures to existing Class 2 to 9 buildings
Flood hazard area	FH 01 Building in flood hazard area

Disclaimer

This Guide is neither an exhaustive guidance document nor does it constitute legal advice. Compliance with this Guide should not be taken to mean that design practitioners and construction professionals have met all applicable standards for professional conduct and practice applicable to their registration, when carrying out any work.

Design practitioners remain subject to their duties, responsibilities, contractual obligations, and other professional/organisational policies and guidelines to which they are bound, beyond the requirements under the *Building Act 1993 (Vic)* and *Building Regulations 2018 (Vic)* and for architects, under the *Architects Act 1991 (Vic)* and *Architects Regulations 2015 (Vic)*. This includes other contractual design/delivery matters between the builder/ developer/ owner, and any others.

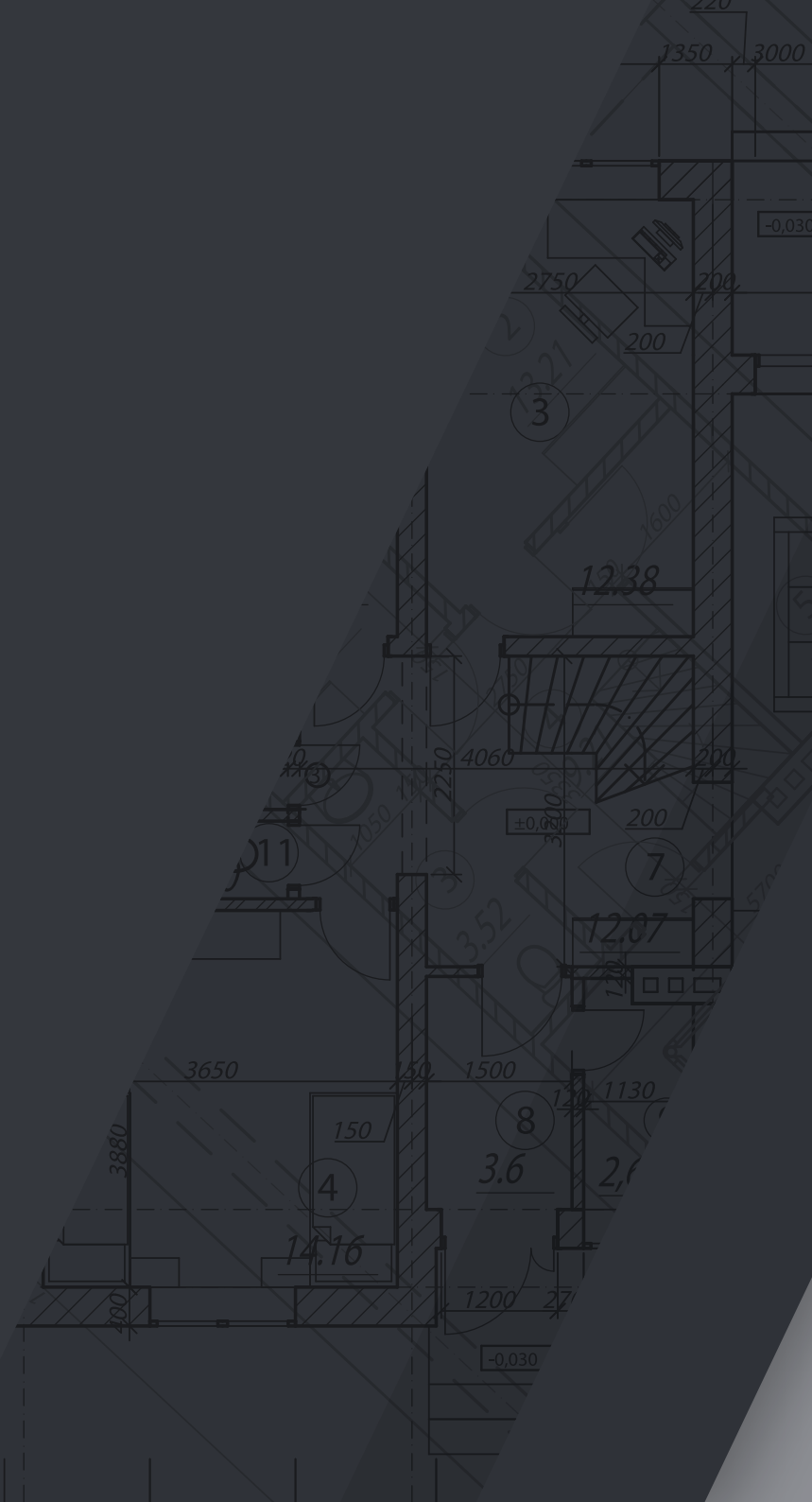
Furthermore, this guide does not exempt the application of other relevant statutory and regulatory requirements that may be applicable including the Safety in Design requirements under the *Occupational Health and Safety Act 2004 (Vic)* for design practitioners.

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