Understanding the NCC

Architects Accreditation Council of Australia
Presenter: Jenna Rowe, Registered Architect NSW 10335

About the Presenter

Jenna Rowe

FRAIA, Registered architect NSW 10335

Jenna is an architect working in Sydney, graduating from her Master of Architecture from the University of Tasmania with First Class Honours in 2011. Jenna has spent the last ten years working in both the public and the private sectors, the latter for prominent Australian architectural practices – prior to working for herself as a sole practitioner in 2019. Jenna also tutors Professional Practice, Construction, and is a studio leader in both undergraduate and postgraduate subjects at the University of Technology Sydney and the University of New South Wales.

In 2014 Jenna was awarded a position on the coveted Dulux Study Tour and has given a lot of her time to the Institute. She sat as an elected Chapter Councillor in NSW for two terms, and previously sat on the NSW education committee, and was a Co-Chair of both EmAGN NSW and EmAGN TAS. Jenna has been a PALS presenter and tutor since 2017, and was most recently elevated to Fellow of the Australian Institute of Architects in 2021.

Who are the AACA?

AACA is the national voice for architect registration boards around Australia. AACA owns the National Standard of Competency for Architects.

The National Standard underpins all assessment processes including the accreditation of architecture programs leading to registration as an architect in Australia.

The Role of the ABCB

We'd like to thank and acknowledge the Australian Building Codes Board, responsible for writing the National Construction Code.

2021 NSCA Performance Criteria Relevant to the NCC

PC 12: Provide independent, culturally responsive and objective advice in accordance with relevant building codes, standards, technical specifications and guidelines, and planning regulations, including climate change implications, across all aspects of architectural practice.

PC 20: Be able to assess project budget and timeframe against project requirements and objectives, relevant legislation, statutory planning requirements, building codes and standards.

PC 45: Be able to nominate and integrate quality and performance standards with regard to selected materials, finishes, fittings, components and systems, considering the impact on Country and the environment, and the whole life carbon impact of the project. This includes integrating life cycle

PC 46: Be able to produce project documentation that meets the requirements of the contract and procurement process and complies with regulatory controls, building standards and codes, and conditions of construction and planning approvals.

PC 58: Complete documentation – including specifications, drawings, schedules, reports, certification and approvals – and other project information for issue to the client and relevant authorities, as required under the construction contract and relevant building and planning codes.

To get started…

1. Go to ncc.abcb.gov.au
2. Open up NCC online

Version 1.0 Published Oct 2022

What to expect from this presentation

1. Understanding the NCC (Volume One, Two and Three)
2. Understanding the performance-based nature of the NCC
3. Understanding its building classifications
4. Understanding NCC Volume One (commercial)
5. Understanding NCC Volume Two (residential).

1. Understanding The NCC

Version 1.0 Published Oct 2022

1.0 - What you will learn

- What the NCC is and what it contains
- How the NCC is organised
- Important terms used in the NCC
- Contents of common sections of the NCC's three volumes
- How the NCC is maintained and the role of the Australian Building Codes Board (ABCB)

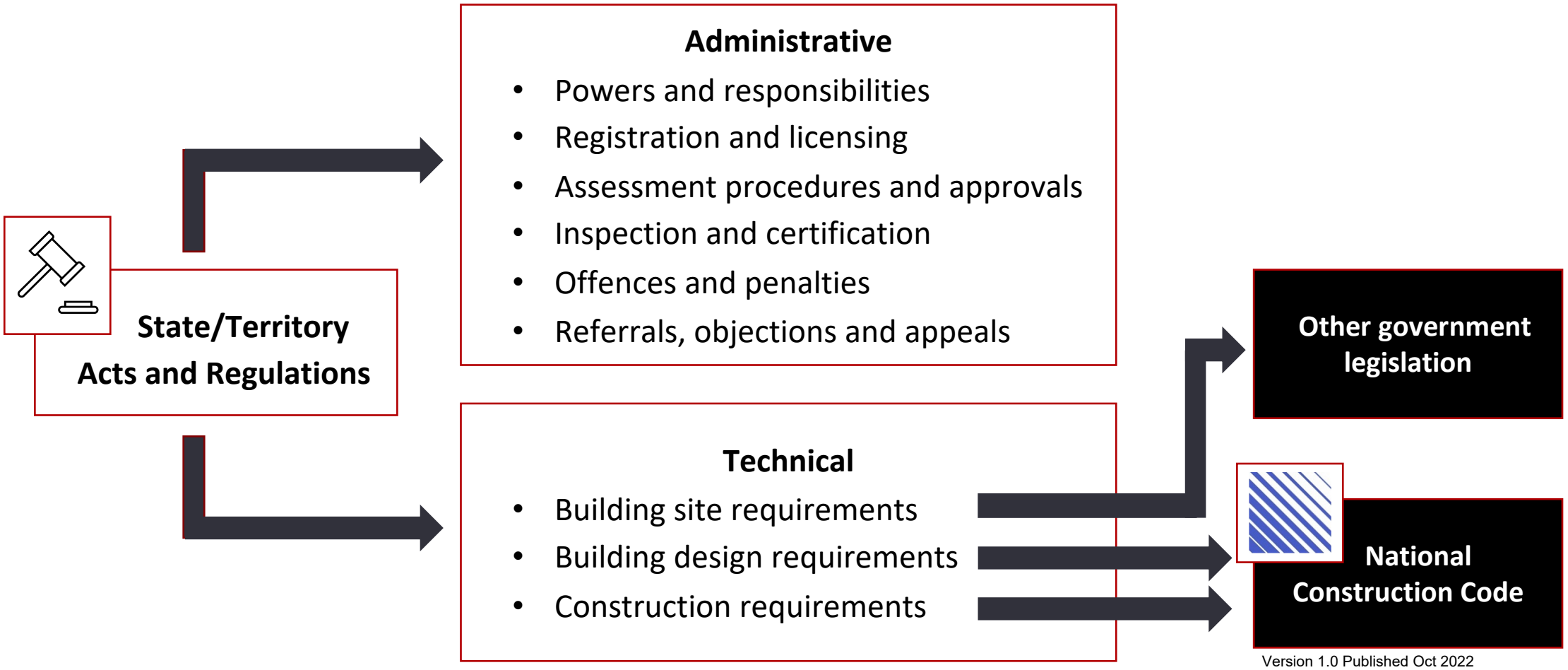
1.1 - What is the National Construction Code (NCC)?

- A national regulatory code for building and construction throughout Australia

- Provides:
  - The technical basis for design and construction of most types of buildings
  - A performance-based code
  - A single source for most on-site construction requirements
- Establishes **minimum necessary standards** for:
  - Safety, including structural safety and safety from fire
  - Health
  - Amenity
  - Accessibility
  - Sustainability

- Can be accessed or downloaded from the ABCB website - https://www.abcb.gov.au/

1.2 - How does the NCC help to regulate building and construction in Australia?

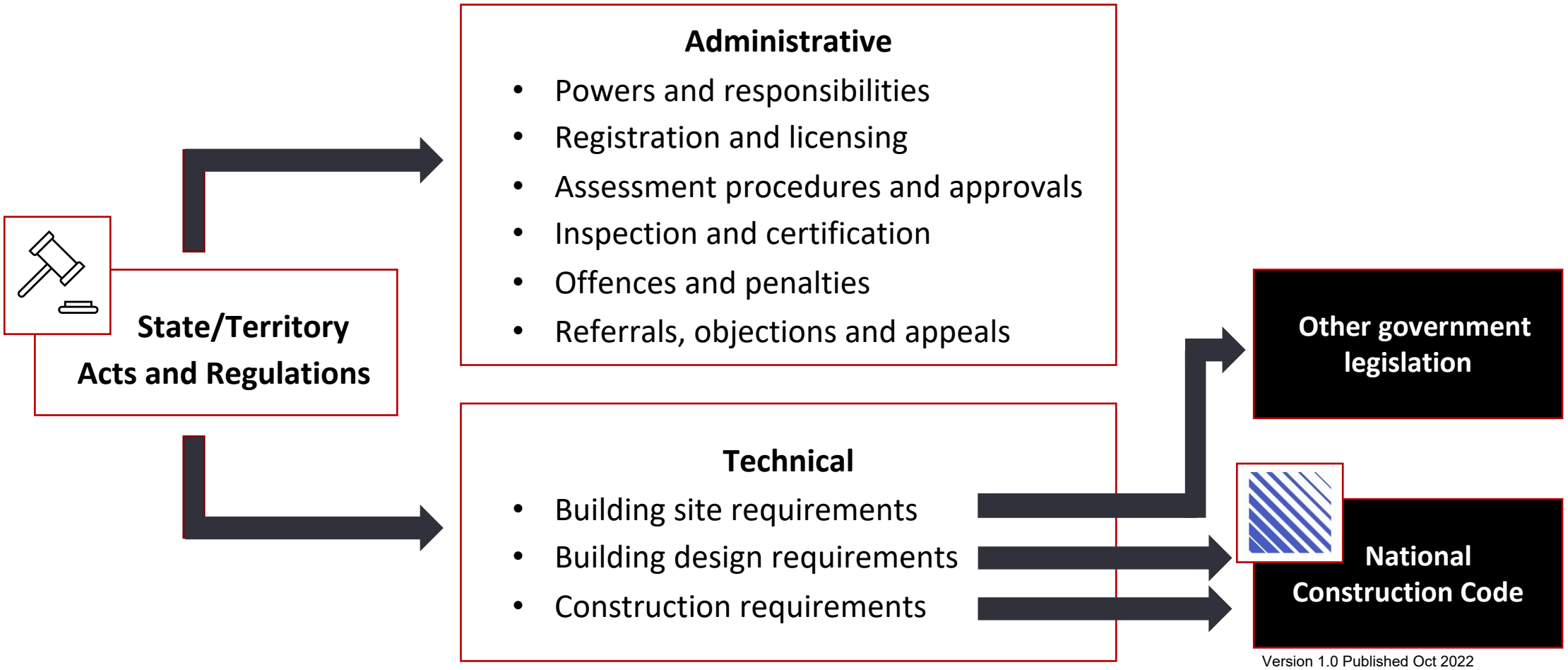


Version 1.0 Published Oct 2022

1.3 - Why do we regulate building + plumbing work in Australia?

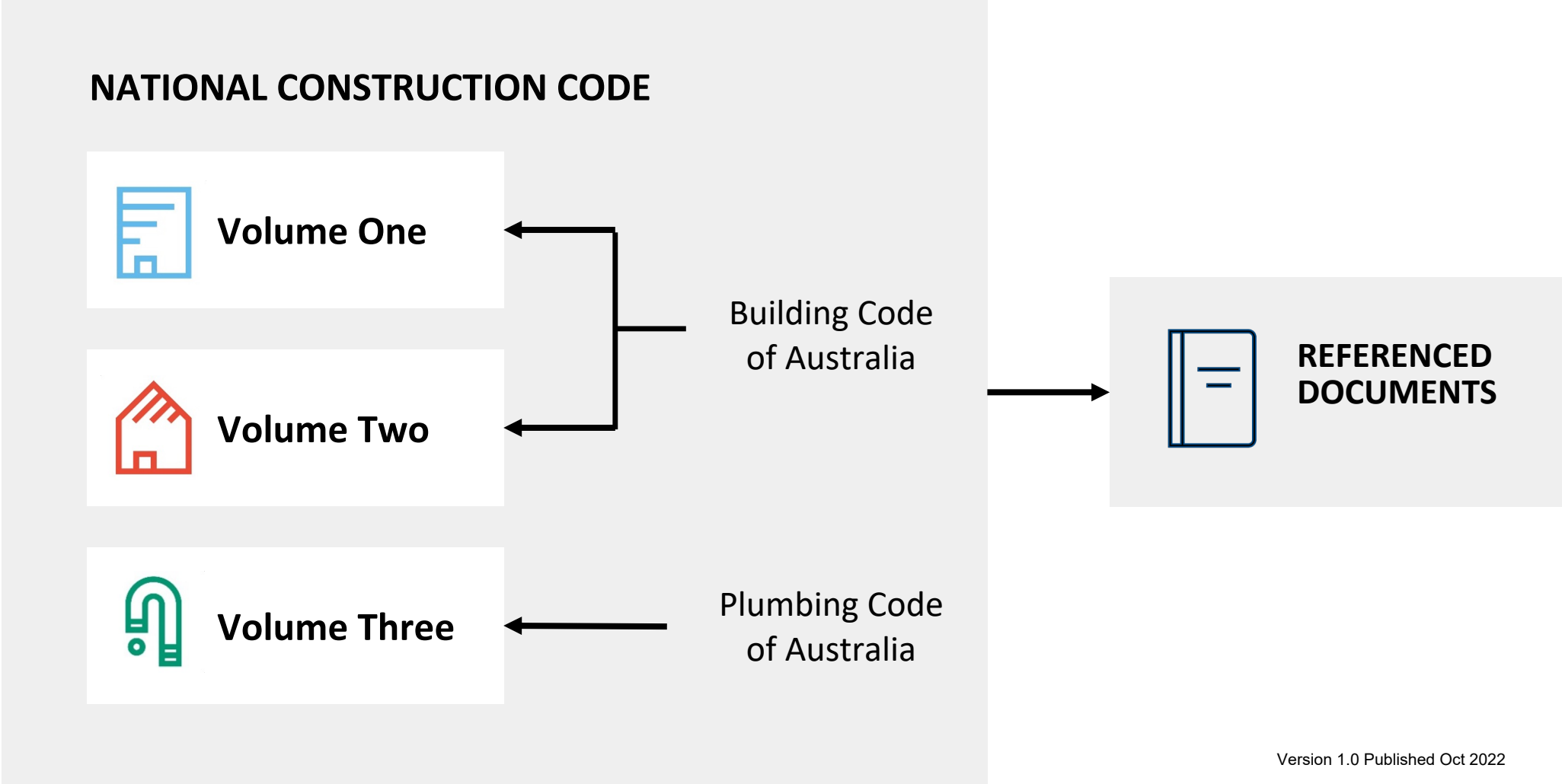
- The primary purpose is to protect people
- Regulation of building + plumbing work can mitigate risks
- Increases resilience of buildings to extreme weather events
- Regulation also aids government in facilitating acceptable levels of risks
- The regulations also enable the establishment of minimum necessary standards

Going back to the diagram…



Version 1.0 Published Oct 2022

1.4 - How is the NCC organised?



Version 1.0 Published Oct 2022

1.5 - Key terms used in the NCC

Performance Requirements specify a level to which some aspect of the design, construction or installation of the building, its plumbing or its drainage must perform in order to be compliant.

For example:

- The building structure must be able to resist winds up to a certain force.
- A cold water service must avoid failure or uncontrolled discharge.

A **Performance Solution** is a method of complying with the Performance Requirements other than by a Deemed-to-Satisfy (DTS) Solution.

A builder can use a solution other than a DTS Solution, provided that the Performance Solution complies with the relevant Performance Requirements.

Assessment Methods are used to demonstrate the compliance of the Performance Solution.

Deemed-to-Satisfy (DTS) Solutions specify acceptable ways of meeting the Performance Requirements.

They often reference Australian Standards or other standards and make use of common and well accepted building practices.

Testing and/or evidence may be required during construction to verify that the DTS Solution has been installed correctly.

Assessment Methods are used to demonstrate this compliance.

1.5 - Key terms used in the NCC cont.

Assessment Methods are methods that can be used to determine that a Performance Solution or Deemed-to-Satisfy (DTS) Solution complies with the Performance Requirements.

Assessment Methods are:

- Evidence of suitability
- Verification Methods, including methods described in the NCC and other acceptable methods
- Expert Judgement
- Comparison with DTS Provisions.

Explanatory information is non-mandatory information provided for guidance purposes only.

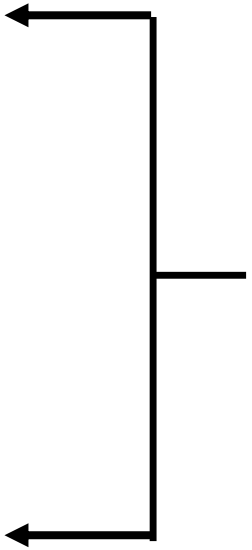
It should be read in conjunction with the technical provisions of the NCC.

It is not called up in state and territory legislation, and never overrides the NCC provisions.

It appears in shaded boxes in the NCC to distinguish it from the mandatory provisions.

1.6 - How are the Volumes of the NCC organised?

Governing Requirements	Contains information on the operation and application of the NCC
Various other Sections	Contain all Performance Requirements, Verification Methods, and Deemed-to-Satisfy Provisions in each volume
Schedules	Contain additional information e.g. State & Territory variations, Definitions



Identical content across all volumes

1.7 - What do the Governing Requirements contain?

- **Part A1 Interpreting the NCC**
- **Part A2 Compliance with the NCC**
- **Part A3 Application of the NCC in States and Territories**
- **Part A4 NCC Referenced Documents**
- **Part A5 Documentation of Design and Construction**
- **Part A6 Building Classification**
- **Part A7 United Buildings**
- **Specifications**

Part A7 United buildings

- Multiple buildings may be treated as united buildings if they are:
  - Connected through openings in the walls dividing them, and
  - Used as a single building.
- Together they must comply with all the requirements of the NCC as though they are a single building
- This has implications for a range of Performance Requirements, in particular around fire safety, access and egress, and health and amenity
- Part A7 provides discussion of united buildings and examples of different treatments

Specifications

- There are 3 Specifications in the Governing Requirements:
  - Specification 1 Fire-resistance of building elements – sets out the procedures for determining the Fire Resistance Level (FRL) of building elements
  - Specification 2 Description of elements referred to in Specification 1
  - Specification 3 Fire hazard properties

As An Architect, How Will You Use The NCC?

Version 1.0 Published Oct 2022

As an architect, how will you use the NCC?

- Development of a project brief for approval by a client and relevant stakeholders
- Iterative development of the design through, conceptual, schematic, detailed design stages to final documentation stage
- Acting as the lead consultant or project manager, including coordination of input from professional engineers and other practitioners
- Cost estimates and project planning
- Obtaining approval for the design from the client and relevant stakeholders, including relevant regulatory authorities
- Selection of procurement methods and appropriate contractors
- Acting as the project superintendent to ensure compliance of the project and appropriate documentation is in place. This may include undertaking and / or coordinating an inspection program, overseeing commissioning, and project handover
- Post-occupancy evaluation.

Roles and Responsibilities…

Roles and Responsibilities

- Act ethically and comply with relevant ethical codes applicable to their profession
- Comply with all relevant regulations that apply to the work they are undertaking
- Not act outside the extent of their competence
- Ensure their building designs are fit for purpose
- Ensure measures are in place so that the constructed building is compliant
- Ensure measures are in place so that compliance of the building is maintained throughout the building's life.

Which takes precedence - the NCC or a referenced document, if there is a difference?

Which takes precedence – the NCC or a referenced document, if there is a difference?

The NCC always takes precedence over a referenced document.

What do the Schedules contain?

Schedule 1

Definitions

- Schedule 1 contains a list of defined terms, and contains a list of abbreviations and symbols used in the NCC with their meanings.
- A defined term has a precise meaning in the NCC, which may not be exactly the same as what it means when used for other purposes.
- Defined terms are *italicised* in the text of the NCC.
- Includes maps and tables of alpine areas, climate zones and wind classes, and some illustrative diagrams
- The list of defined terms and definitions is exactly the same in all volumes.

Schedule 2

Referenced Documents

- Schedule 2 contains a table that lists:
  - All the Australian Standards, ABCB Protocols, ABCB Standards and other documents referenced in the NCC
  - Where each document is referenced in each volume
- Documents are listed in the following order:
  - Australian/New Zealand/ISO Standards, in number order
  - Other referenced documents, in alphabetical order
- The list of referenced documents is exactly the same in all volumes.

Schedule 3

Commonwealth of Australia

- This Schedule outlines a number of Commonwealth legislative instruments that practitioners may need to be aware of.
- These instruments include Acts, regulations, codes and standards that may affect the design, construction and/or performance of buildings.
- The content of this Schedule is the same in all volumes.

Schedule 4 to 11

State and Territory Additions & Variations

- These Schedules contains the details of additions and variations to the provisions within the NCC.
- There is a schedule for each State or Territory.
- Details of changes are given, including additions, deletions, and changes to wording.
- In all volumes, the body of the document provides a reference to the variations or additions, but does not contain the actual text of the variation or addition.
- In the ABCB Housing Provisions Standard, the above also applies.

Version 1.0 Published Oct 2022

Navigating the Governing Requirements to its contents…

- Part A1 Interpreting the NCC
- Part A2 Compliance with the NCC
- Part A3 Application of the NCC in States and Territories
- Part A4 Referenced Documents
- Part A5 Documentation of Design and Construction
- Part A6 Building Classification
- Part A7 United Buildings

Version 1.0 Published Oct 2022

True or False?

Compliance with the provisions within the Governing Requirements is mandatory.

How is the NCC maintained?

- Amended and reissued on a three year cycle by the Australian Building Codes Board (ABCB)
- Occasionally amended ‘out-of-cycle’
- Last major edition = NCC 2019 Amendment 1
- New NCC edition introduced from Oct 2022
- Next major NCC edition is due in 2025

- The ABCB authors and maintains the NCC
- The Board and its technical committees consist of Government and industry representatives
- Administers the CodeMark and WaterMark Product Certification Schemes

Summary

NCC Volume One	NCC Volume Two	NCC Volume Three
Section A Governing Requirements	Section A Governing Requirements	Section A Governing Requirements
Other Sections: Provisions for Class 2-9 Buildings	Section H: Class 1 and 10 Buildings	Other Sections: Plumbing and drainage provisions for all building classes
Schedules	ABCB Housing Provisions Standard	Schedules
	Schedules	

Version 1.0 Published Oct 2022

Key Points

NCC	Maintained by the ABCB Re-issued regularly Access or download from the ABCB website
Governing Requirements	Are mandatory Same content across all three Volumes
Schedules	State and Territory appendices, definitions, referenced documents Same content across all three Volumes
Various other Sections	Mandatory Performance Requirements Verification Methods DTS Provisions

2. Understanding Performance-Based Code

2.0 Understanding Performance-Based Code - What you will learn

- What ‘performance-based’ means
- Why we have a performance-based code
- Elements of the performance-based code
- Understanding:
  - Performance Requirements
  - Deemed-to-Satisfy Solutions
  - Performance Solutions
  - Assessment Methods

2.1 - What does ‘performance-based’ mean?

Compliance level

PERFORMANCE REQUIREMENTS

Compliance solutions

PERFORMANCE SOLUTION and/or **DEEMED-TO-SATISFY SOLUTION**

Evidence of compliance

ASSESSMENT METHODS

2.2 - Why do we have a performance-based code?

- Provides flexibility to industry
- Allows design of tailor-made buildings – there is no “one size fits all” approach
- Promotes innovation in building design and construction
- Improves cost-effectiveness
- Increases constructability

- Greater flexibility reduces the need to:
  - Apply for a modification or variation to the code
  - Lodge objections to regulations
  - Appeal the decisions of approval authorities

2.3 - Understanding Performance Solutions

- Means of meeting the Performance Requirements that **doesn't** use the DTS Provisions
- Gives flexibility to do things differently
- Must provide the minimum level required by the relevant Performance Requirements

- Must demonstrate compliance using one or more Assessment Method/s
- Compliance is assessed by the appropriate authority
- Discuss which Assessment Method/s will be used with the appropriate authority **before** developing a Performance Solution

2.4 - Understanding Assessment Methods

Verification Method

- Test, inspection, calculation, or other method that determines whether a Performance Solution complies with the relevant Performance Requirements
- Some Verification Methods are listed in the NCC
- Can use a method listed in the NCC, or any other acceptable method

Evidence of suitability

- Report from professional engineer or recognised expert
- Certificate from a certification body
- Report from an Accredited Testing Laboratory
- Other documentary evidence
- A complete copy of the original certificate, report or document

Comparison with DTS Provisions

- Compares a Performance Solution with a Deemed-to-Satisfy Provision
- Common for minor variations

Expert Judgement

- "… the judgement of an expert who has the qualifications and experience to determine whether a Performance Solution or Deemed-to-Satisfy Solution complies with the Performance Requirements"
- Expert must have demonstrated knowledge of technical issues and peer recognition

2.4.1 - Verification Method

- A test, inspection, calculation, or other method that determines whether a Performance Solution complies with the relevant Performance Requirements.
- In formulating a Performance Solution using a VM, a designer can choose to use a VM that is listed in the NCC, or they can use another method that is not listed in the NCC.
- The final decision on whether any Verification Method is acceptable resides with the appropriate authority.
- Used for Performance Solutions only.

2.4.2 - Evidence of Suitability

- Concept is introduced in Part A2, but details of acceptable evidence is found in Part A5 Documentation of design and construction in all NCC volumes.
- The same evidence of suitability is acceptable for Volumes One and Two (the BCA), but there are different evidence requirements for Volume Three (the PCA).
- Volume One + Two: Documentary evidence may come from an appropriately qualified person who may provide test results or relevant information demonstrating the suitability of the building solution

2.4.3 - Comparison with DTS Solutions

- A Performance Solution can be compared to a current DTS Provision to highlight how it will achieve compliance with the Performance Requirements.
- In comparison to the other Assessment Methods, this may be a more straightforward methodology, as a benchmark has been set against which the proposed solution can be compared.
- As with other Assessment Methods, the final decision on whether a comparison with DTS Provisions is acceptable resides with the appropriate authority.
- Used for Performance Solutions only.

2.4.4 - Expert Judgement

- The NCC defines ‘Expert Judgement’ as the judgement of an expert who has the qualifications and experience to determine whether a Performance Solution or DTS Solution complies with the Performance Requirements.
- The expert needs to have a demonstrated knowledge of the technical issues involved, supported by peer recognition.
- The use of Expert Judgement is very much dependent upon the situation.
- The final decision on whether an Expert Judgement is acceptable resides with the appropriate authority.
- Used for Performance Solutions and DTS Solutions.

Summary

- The performance-based code establishes the performance criteria that a building and its elements must meet
- Provides options for **how** this is achieved
- Ensures buildings and building elements perform as needed
- Allows flexibility
- Allows innovation
- Reduces costs

- **Performance Requirements** specify how a building and its elements must perform
- **Compliance solutions** describe how a building and its elements will meet the Performance Requirements

Key Points

- Three options for compliance solutions:
  - Deemed-to-Satisfy Solution
    - May use referenced documents or established building practices
    - Straightforward way of complying but may lack flexibility
  - Performance Solution
    - Allow for flexibility and innovation
    - Must demonstrate that the solution meets the Performance Requirements
  - Combination of both

- Assessment Methods are used to demonstrate compliance:
  - Verification Method
  - Expert Judgement
  - Evidence of suitability
  - Comparison with DTS Provisions

3. Understanding Building Classifications

3.0 - Understanding Building Classifications - What we will discuss

- Where to find information about building classifications
- The 10 building classifications in the NCC
- Building classifications for mixed use buildings and buildings with more than one classification
- Applying this to different types of buildings

3.1 - So, what are the NCC building classifications?

Volume One

Class 2	Apartments
Class 3	Hotels/Motels
Class 4	Single dwelling - Class 5-9 Building
Class 5	Offices
Class 6	Retail Shops
Class 7a	Carparks
Class 7b	Storage/Display Warehouse
Class 8	Laboratory or Factory
Class 9a	Health-care Building
Class 9b	Assembly Building
Class 9c	Residential Care Building

Volume Two

Class 1a	Single Dwelling/House
Class 1b	Small Guest/Boarding House
Class 10a	Non-Habitable Building, e.g. a carport or garage
Class 10b	Other Structure, e.g. swimming pool or fence
Class 10c	Private Bushfire Shelter

https://ncc.abcb.gov.au/resources/category/understanding-ncc

Version 1.0 Published Oct 2022

3.2 - What about Volume Three?

Volume One
covers Class 2-9 buildings.

Volume Two
covers Class 1 and 10 buildings.

Volume Three
covers plumbing and drainage requirements for **all** building classifications.

Version 1.0 Published Oct 2022

3.3 - Mixed use buildings

The 10% rule **generally** applies:

- <10% of floor area of a storey means the primary classification applies to the whole building.
- Doesn't apply to some spaces where safety and amenity considerations are paramount, such as:
  - Laboratories.
  - Sole occupancy units in Class 2, 3 or 4 buildings.
  - Class 9b early childhood centre.

3.4 - Can a whole building have multiple classifications?

Yes, it's possible, if the building is designed to serve multiple purposes. For example, a building with spaces that could be used for offices, or retail sales or storage.

Must be designed to meet:

- All **specific** Performance Requirements for any class, **and**
- The **most stringent** Performance Requirements of all applicable classes.

3.5 - What if a building's classification isn't obvious?

If the most appropriate classification for a building is not clear, the appropriate authority must classify the building as belonging to the class it most closely resembles.

The appropriate authority means, "The relevant authority with the statutory responsibility to determine the particular matter."
(NCC, Schedule 1, Definitions, in any Volume.)

A boarding house or hostel could be a Class 1b building or a Class 3 building. What key factor/s determines its class?

Height in storeys. A Class 3 building is typically a high-rise building while a Class 1b building is typically a low-rise building.

Who will live/stay there. A Class 3 building is designed to accommodate unrelated people while a Class 1b building may accommodate related or unrelated people.

How many people it can accommodate and total floor area.
A Class 1b building would normally not accommodate more than 12 people, and would have a total floor area of no more than 300 m^2. If bigger than this, it would be classed as a Class 3 building.

Version 1.0 Published Oct 2022

True or False?

A Class 1a residence cannot be built over or under another building or structure of any other class, except for a private garage.

Summary

Volume One

- Covers Class 2-9 buildings.
- “Commercial” Provisions

Volume Two

- Covers Class 1 and 10 buildings.
- “Housing” Provisions
- Volume One disability access provisions may also apply

Volume Three

- Covers plumbing and drainage requirements for all building classifications.

Version 1.0 Published Oct 2022

Key Points

- Building classifications are found in the Governing Requirements, Part A6 in all Volumes.
- An entire building can have more than one classification, if it is designed or intended for more than one potential purpose.
- A mixed use building may have parts that have different classifications. The “10% rule” usually applies.
- If building classification is unclear, refer to the appropriate authority in the relevant state or territory.

4. Using NCC Volume One

Version 1.0 Published Oct 2022

4.0 - What we will discuss

- What NCC Volume One contains
- Where to get guidance on using Volume One
- How NCC Volume One is organised and where to find information within it
- Key concepts in Volume One
- Hot to interpret the different sections of Volume One

4.1 - What does Volume One of the NCC contain?

- Design and construction requirements for Class 2-9 buildings
- Some provisions also apply to some:
  - Class 1b buildings
  - Class 10a and 10b buildings
- Commercial, industrial, multi-residential and institutional buildings
- Examples:
  - Apartments
  - Hotel, motel
  - Office building
  - Shopping centre
  - Factory
  - Hospital
  - School

4.1 - What does Volume One of the NCC contain?

- Part of the Building Code of Australia (BCA)
- Also referred to as ‘BCA Volume One’

4.2 - How is Volume One of the NCC organised?

Governing Requirements	Contains information on the operation and application of the NCC
Sections B - J	Contain all Performance Requirements, Verification Methods, and Deemed-to-Satisfy Provisions for Volume One
Schedules	Contain additional information e.g. State & Territory variations, Definitions

← Identical content across all volumes

Version 1.0 Published Oct 2022

4.3 Key Concepts
4.3.1 - Rise In Storeys

4.3 Key Concepts
4.3.1 - Rise In Storeys

In NCC Volume One, the **rise in storeys** of a building generally means:

- The number of storeys above natural ground level, and
- Any storeys within the roof space.

NCC Definition: Rise in storeys

Rise in storeys: The greatest number of *storeys* calculated in accordance with C2D3 of Volume One.

NCC Definition: Storey

Storey: A space within a building which is situated between one floor level and the floor level next above, or if there is no floor above, the ceiling or roof above, but not—

(a) a space that contains only—

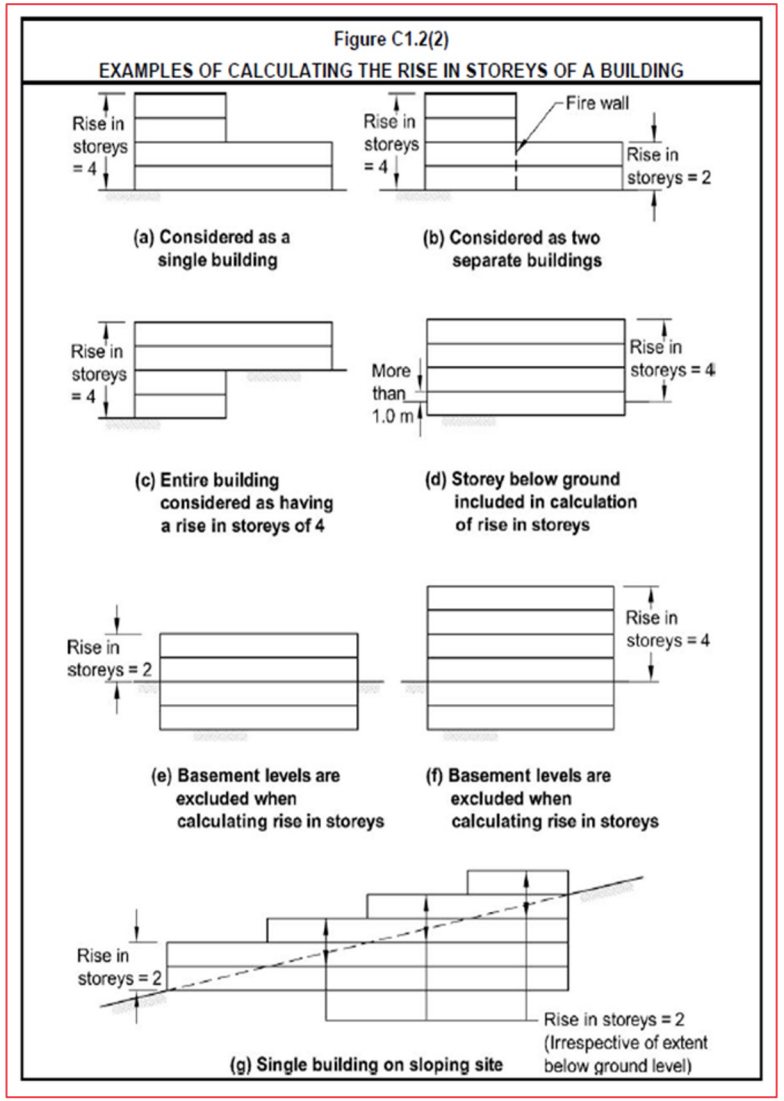
(i) a lift *shaft*, stairway or meter room; or

(ii) a bathroom, shower room, laundry, water closet, or other *sanitary compartment*, or

(iii) accommodation intended for not more than 3 vehicles; or

(iv) a combination of the above; or

(b) a *mezzanine*.



Version 1.0 Published Oct 2022

4.3 Key Concepts
4.3.1 - Rise In Storeys

NCC Volume One: Part C2D3

C2D3 Calculation of rise in storeys

[2019: C1.2]

(1) The *rise in storeys* is the sum of the greatest number of *storeys* at any part of the *external walls* of the building and any *storeys* within the roof space—

  (a) above the finished ground next to that part; or

  (b) if part of the *external wall* is on the boundary of the allotment, above the natural ground level at the relevant part of the boundary.

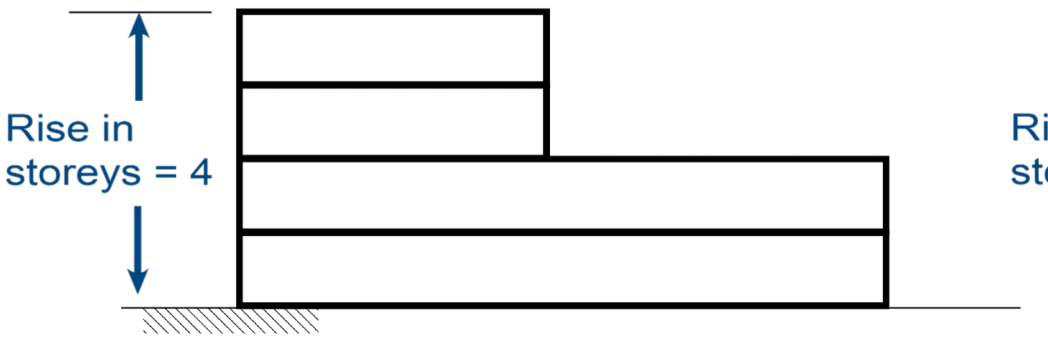
(2) A *storey* is not counted if—

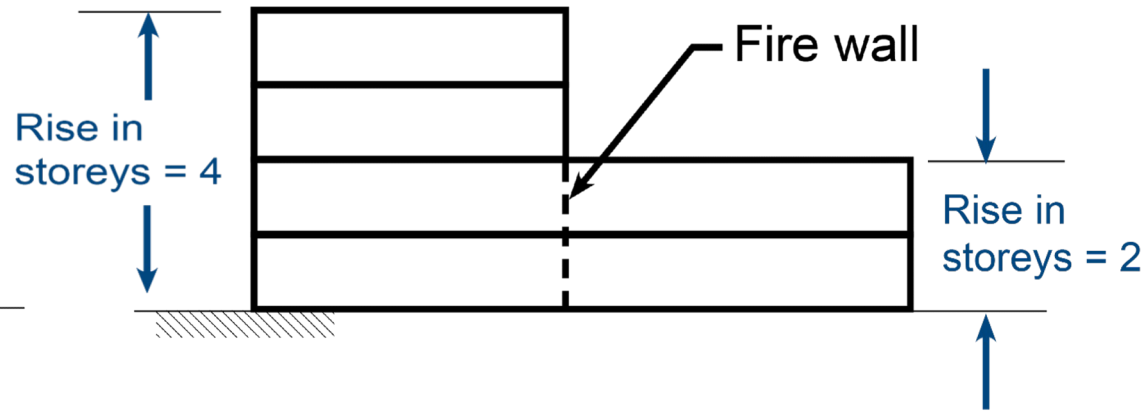
  (a) it is situated at the top of the building and contains only heating, ventilating or lift equipment, water tanks, or similar service units or equipment; or

  (b) it is situated partly below the finished ground and the underside of the ceiling is not more than 1 m above the average finished level of the ground at the *external wall*, or if the *external wall* is more than 12 m long, the average for the 12 m part where the ground is lowest.

4.3 Key Concepts
4.3.1 - Rise In Storeys - Calculating the rise in storeys

What difference does a firewall make to the calculation of the rise in storeys for this multi-unit development?





Version 1.0 Published Oct 2022

4.3 - Key Concepts
4.3.2 - Type of Construction

Version 1.0 Published Oct 2022

4.3 - Key Concepts
4.3.2 - Type of Construction

The type of construction required for a building depends on the building's:

- classification, **and**
- rise in storeys.

Type A: **Most fire resistant** – 'non-combustible' construction.

Type B: **Less fire resistant**.

Type C: **Least fire resistant** – 'combustible' construction.

Table C2D2: Type of construction required

Rise in storeys	Class of building 2, 3, 9	Class of building 5, 6, 7, 8
4 or more	A	A
3	A	B
2	B	C
1	C	C

4.3 - Key Concepts
4.3.3 - Fire Compartments

Version 1.0 Published Oct 2022

4.3 - Key Concepts
4.3.3 - Fire Compartments

The maximum allowed size of fire compartments in a building depends on **both** the:

- Building classification, **and**
- Type of construction.

Fire compartment: Either—

(a) the total space of a building; or

(b) when referred to in—

(i) the *Performance Requirements* — any part of a building separated from the remainder by barriers to fire such as walls and/or floors having an appropriate resistance to the spread of fire with any openings adequately protected; or

(ii) the *Deemed-to-Satisfy Provisions* — any part of a building separated from the remainder by walls and/or floors each having an FRL not less than that *required* for a *fire wall* for that type of construction and where all openings in the separating construction are protected in accordance with the *Deemed-to-Satisfy Provisions* of the relevant Part.

Table C3D3: Maximum size of fire compartments or atria

Classification	Type A construction	Type B construction	Type C construction
5, 9b or 9c	Max *floor area*—8 000 m^2	Max *floor area*—5 500 m^2	Max *floor area*—3 000 m^2
	Max *volume*—48 000 m^3	Max *volume*—33 000 m^3	max *volume*—18 000 m^3
6, 7, 8 or 9a (except for *patient care areas*)	Max *floor area*—5 000 m^2	Max *floor area*—3 500 m^2	Max *floor area*—2 000 m^2
	Max *volume*—30 000 m^3	Max *volume*—21 000 m^3	Max *volume*—12 000 m^3

Table Notes

See C3D6 for maximum size of compartments in *patient care areas* in Class 9a *health-care buildings*.

4.4 - What do Sections B – J contain?

- **Section B Structure**
- **Section C Fire Resistance**
- **Section D Access and Egress**
- **Section E Services and Equipment**
- **Section F Health and Amenity**
- **Section G Ancillary Provisions**
- **Section I Special Use Buildings**
- **Section J Energy Efficiency**

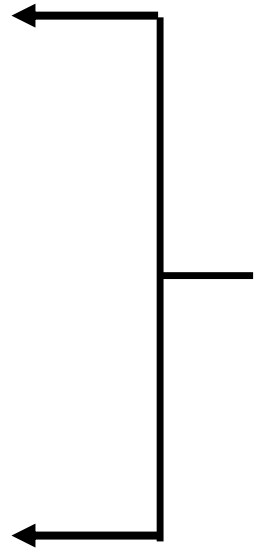
- The provisions in Section B are applicable to **all classes** of buildings.
- Sections C, D, E, F, G, I and J specify provisions for particular classes and types of buildings. These may have limitations based on other criteria, e.g. building height.
- Section H is not listed because it is used for Volume 2 NCC 2022.
- Each section covers one area but you need to apply the provisions in different sections **holistically**.

How do we use Volume One?

1. Identify the building's classification, rise in storeys and required type of construction.
2. Identify the applicable Performance Requirements, Verification Methods and DTS Provisions in Sections B-J.
3. Check definitions and note exceptions, limitations and state/territory variations to any Performance Requirements, Verification Methods or DTS Provisions.
4. Decide on use of a DTS Solution, Performance Solution or a combination of the two.

Summary

Governing Requirements	Contains information on the operation and application of the NCC
Sections B - J	Contain all Performance Requirements, Verification Methods, and Deemed-to-Satisfy Provisions for Volume One
Schedules	Contain additional information e.g. State & Territory variations, Definitions



Identical content across all volumes

Version 1.0 Published Oct 2022

Key Points

- Section B Structural provisions apply to all building classes.
- Sections C-J provisions generally apply to particular classes and types of buildings, but may have limitations
- Key concepts in Volume One:
  - Rise in storeys
  - Type of construction
  - Fire compartments
- Different sections are organised in different ways
- May have Parts which group Performance Requirements, Verification Methods and DTS Provisions under topic areas
- The following documents on the ABCB website provide additional, non-mandatory guidance:
  - Guide to NCC Volume One
  - Other handbooks on specific topics

Version 1.0 Published Oct 2022

5. Using NCC Volume Two

Version 1.0 Published Oct 2022

5.0 Using NCC Volume 2
What we will discuss

- How NCC Volume Two is organised and where to find information within it
- Performance Provisions and Verification Methods in NCC Volume Two
- Deemed-to-Satisfy (DTS) Provisions in NCC Volume Two
- ABCB Housing Provisions Standard

5.1 How is Volume Two of the NCC organised?

Governing Requirements	Contains information on the operation and application of the NCC
Sections H Class 1 & 10 Buildings	Contains all Performance Provisions and Verification Methods. Contains some DTS Provisions that reference where and how to use the ABCB Housing Provisions Standard and other referenced documents.
Schedules	Contain additional information e.g. State & Territory variations, Definitions

Identical content across all volumes

ABCB Housing Provisions Standard

Contains the majority of Deemed-to-Satisfy Provisions for Volume Two

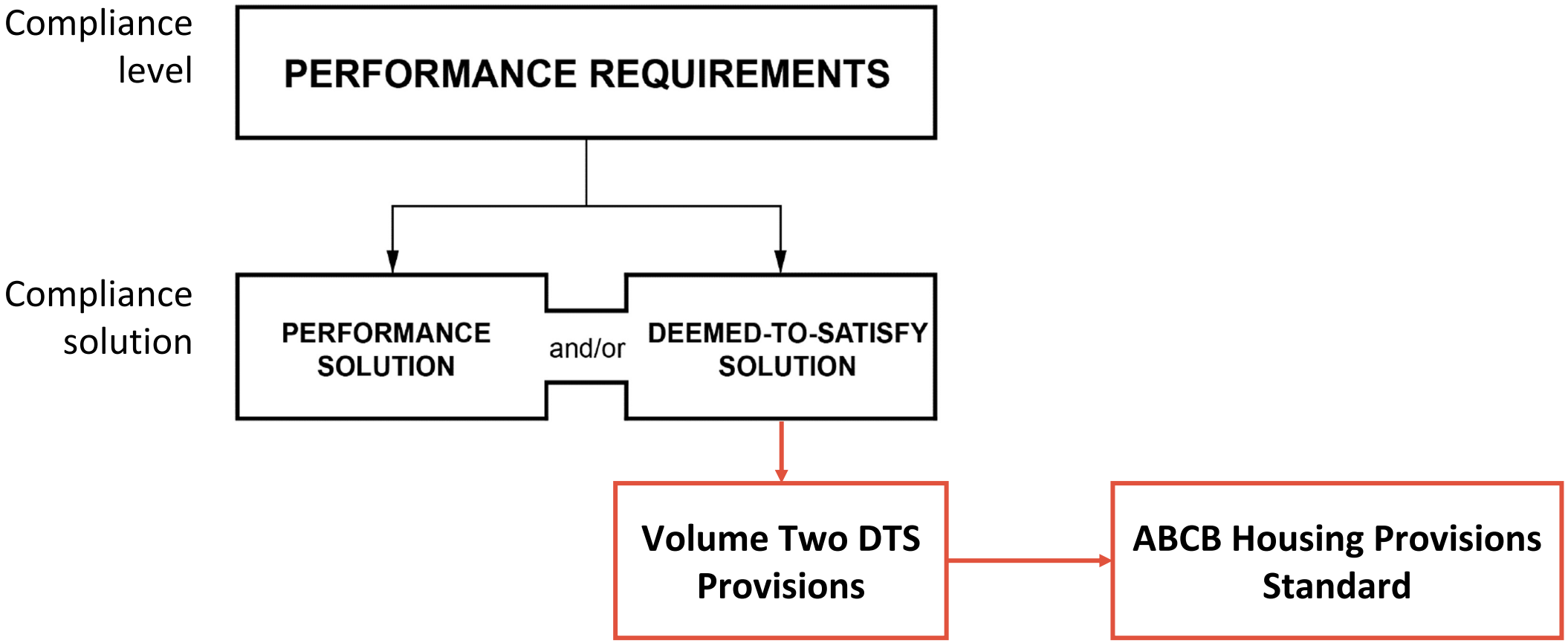
5.2 How is Section H Class 1 and 10 buildings organised?

- Part H1 Structure
- Part H2 Damp and Weatherproofing
- Part H3 Fire Safety
- Part H4 Health and Amenity
- Part H5 Safe Movement and Access
- Part H6 Energy Efficiency
- Part H7 Ancillary Provisions and Additional Construction Requirements
- Part H8 Liveable Housing Design
- Specifications

5.4 - What is in the Housing Provisions?

- Is the ABCB Standard relevant to the DTS Provisions in Volume Two, which calls it up.
- If a DTS Provision in Volume Two does not reference the Housing Provisions, then the Housing Provisions cannot be used for that particular DTS Provision.
- Organised into sections that resemble the logical construction sequence of a building.
- Each section provide builders with the DTS requirements to build a NCC compliant building.
- Each section contains a scope statement, and one or more parts that contain the technical provisions.
- The Housing Provisions cannot be used as a complete manual for house building.

5.5 - Compliance solutions in Volume Two



5.7 - How are the Housing Provisions organised?

- Part 2 Structure
- Part 3 Site Preparation
- Part 4 Footing and Slabs
- Part 5 Masonry
- Part 6 Framing
- Part 7 Roof and Wall Cladding
- Part 8 Glazing
- Part 9 Fire Safety
- Part 10 Health and Amenity
- Part 11 Safe Movement and Access
- Part 12 Ancillary Provisions
- Part 13 Energy Efficiency

How do we use Volume Two effectively?

1. Look up the applicable Performance Requirements in Section H.
2. Check definitions, notes, exceptions, limitations, etc. and state/territory variations to any Performance Requirements.
3. Look up possible DTS Provisions relating to the Performance Requirements in Section H and the Housing Provisions.
4. Decide on use of a DTS Solution, Performance Solution or a combination of the two.
5. If using a DTS Solution, determine which reference document is used (i.e. Housing Provisions or another referenced document if available).

Summary

Governing Requirements	Contains information on the operation and application of the NCC	←	Identical content across all volumes
Sections H Class 1 & 10 Buildings	Contains all Performance Provisions and Verification Methods. Contains some DTS Provisions that reference where and how to use the ABCB Housing Provisions Standard and other referenced documents.	→ **ABCB Housing Provisions Standard**	Contains the majority of Deemed-to-Satisfy Provisions for Volume Two Not a standalone manual for Class 1 and 10 Buildings
Schedules	Contain additional information e.g. State & Territory variations, Definitions	←	Identical content across all volumes

Version 1.0 Published Oct 2022

Key Points

- NCC Volume Two contains the Performance Requirements, Verification Methods and Section H Class 1 and 10 buildings.
- DTS provisions in the Housing Provisions need to be referenced by Volume Two before they can be applied.
- You need to refer to Volume Three for plumbing and drainage provisions.
- You may need to refer to Volume One for disability access provisions for Class 1b buildings.

Thank you

Architects Accreditation Council of Australia

Gadigal Country
Suite 3, Level 5, 75 Castlereagh Street
SYDNEY NSW 2000

+61 (2) 8042 8930 | mail@aaca.org.au