

# Building Performance Solutions PS 01 | Performance Solutions | NCC

## Audience

- |   |   |
|---|---|
| <input checked="" type="checkbox"/> Architects / Building Designers | <input checked="" type="checkbox"/> Owner Builders                  |
| <input checked="" type="checkbox"/> Builders                        | <input checked="" type="checkbox"/> Plumbers                        |
| <input checked="" type="checkbox"/> Building Surveyors / Inspectors | <input type="checkbox"/> Real estate management agents              |
| <input checked="" type="checkbox"/> Engineers                       | <input type="checkbox"/> Trades and Maintenance (inc. Electricians) |
| <input checked="" type="checkbox"/> Homeowners                      |   |

## Purpose

The purpose of this Practice Note is to provide guidance to industry on the NCC requirements and any specific Victorian legislation, it will include the following topics:

- NCC – Governing Requirements
- Performance Solution – Fundamentals
- RBS and Stakeholder Roles and Responsibilities
- Performance Solution – Development and record
- RBS – Reliance on Certificate of Compliance
- Evidence of Suitability – Use of CodeMark or BRAC Accreditation

## Abbreviations & Definitions

The abbreviations and definitions set out below are for guidance only. They are not intended to vary those set out in the Building Act 1993 or the Building Regulations 2018 or the National Construction Code.

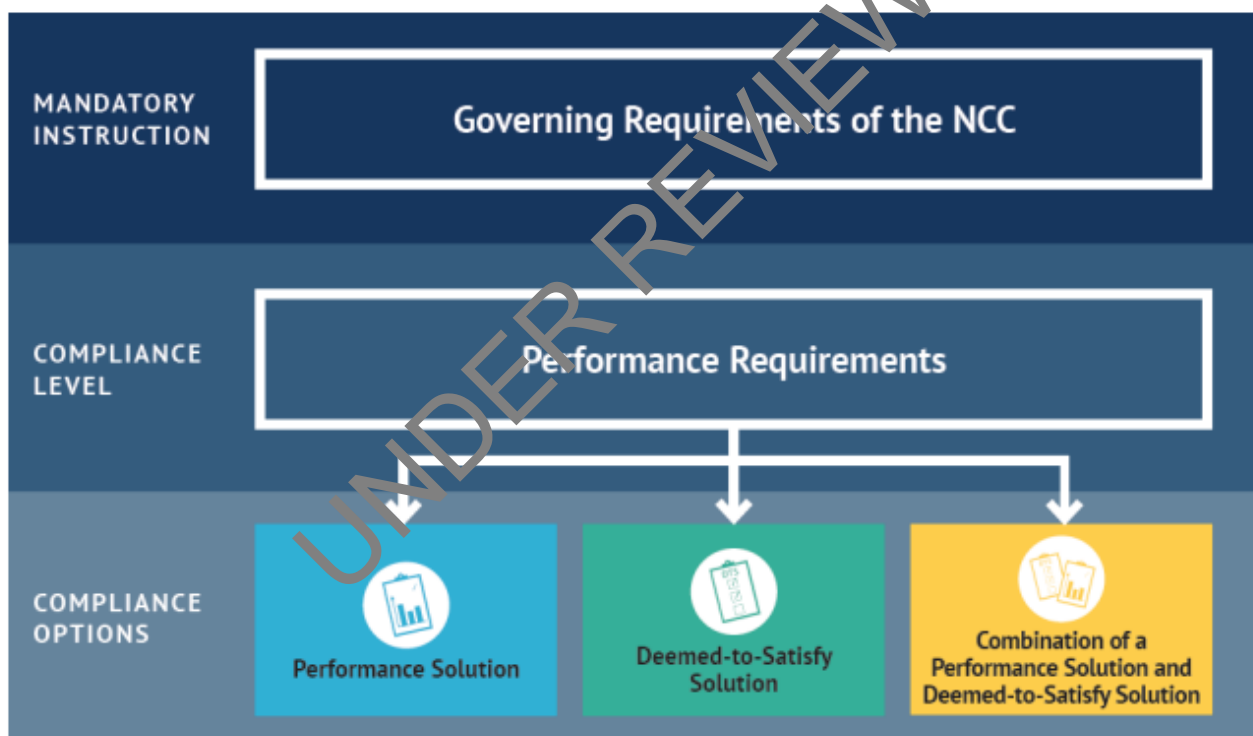
- **Act** – Building Act 1993
- **BCA** – Building Code of Australia (NCC Volumes 1 and 2)
- **DtS** – Deemed-to-Satisfy (Deemed to have met the Performance Requirements of the BCA)
- **Deemed-to-Satisfy Provisions** – A method that satisfies the Deemed-to-Satisfy Provisions.
- **Deemed-to-Satisfy Solution** – A method of satisfying the Deemed-to-Satisfy Provisions.
- **Performance-based design brief (PBDB)** – The document that defines the scope, technical basis, and acceptance criteria for performance-based analysis, developed in consultation with stakeholders.
- **Performance Requirement (PR)** – The minimum level of performance a Performance Solution or Deemed-to-Satisfy Solution must achieve.
- **Performance Solution (PS)** – A method of complying with the Performance Requirements other than by a Deemed-to-Satisfy Solution.



- **NCC** – National Construction Code
- **Regulations** – Building Regulations 2018
- **RBS** – Relevant Building Surveyor
- **Verification Method** – A test, inspection, calculation, or other method to confirm compliance with the Performance Requirements

## NCC – The Governing Requirements

To meet the minimum construction and design requirements of the NCC, both the Governing Requirements and the Performance Requirements must be met. The Governing Requirements provide the rules and instructions for using and complying with the Performance Requirements, which establish the minimum acceptable standards.



**Figure 1 – NCC compliance framework extract from the Australian Building Codes Board (ABCB)**  
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## Performance Solutions - Fundamentals

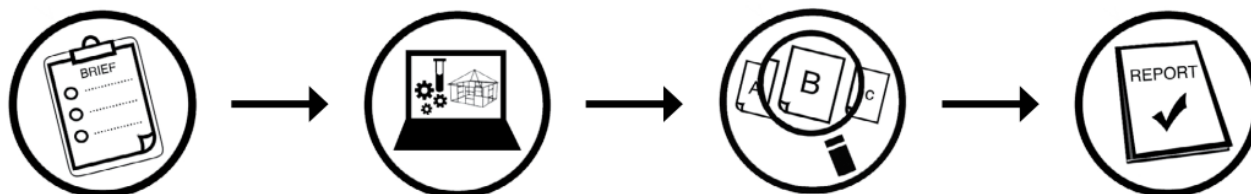
The performance criteria outlined in a Deemed-to-Satisfy (DtS) provision of the NCC provide an established, tested method that ensures a clear level of compliance and certainty. When a Performance Requirement is to be satisfied through a Performance Solution rather than direct compliance with a DtS provision, there is a greater responsibility to ensure that the assessment method, evidence, and documentation align with the Governing Requirements of NCC Part A2.

When implementing a Performance Solution (PS), particularly if it involves a product or design being trialled for the first time, it is crucial to manage the solution carefully. This includes considering the building's complexity and any factors that may increase the risk of non-compliance, especially where non-compliance could have significant safety or health consequences.



If a PS is proposed or identified, the process of demonstrating compliance begins with creating a Performance-Based Design Brief (PBDB), developed in consultation with stakeholders. The PBDB requirements are outlined in the four steps detailed in NCC Part A2 (A2G2).

### Performance-based design brief



**Step 1** - Developing a brief requires project stakeholders to collaborate and agree on a pathway for the design process to follow which includes the acceptance criteria. This includes selecting which of the assessment methods as outlined in the BCA is to be used. This step is critical as it sets the agreed acceptance criteria used to assess the solution against the NCC Performance Requirement.

**Step 2** - Analysis or testing. This step involves analysis, modelling or testing to meet the agreed acceptance criteria set out in the brief.

**Step 3** - Evaluation. Once the analysis, modelling or testing is complete the results are collated and evaluated to determine if the acceptance criteria have been met. If they are not met, then Step 2 may need to be repeated until the acceptance criteria are satisfied.

**Step 4** - Reporting. The final report should demonstrate that compliance with the NCC Performance Requirement has been achieved based on all the previous steps.

In addition to NCC Part A2 requirements, where applicable, practitioners must also be mindful of ensuring compliance with the NCC Victoria variation - A2G2(5) which aligns with the current VBA Advisory Note dated 1 February 2021 that revoked MG-14 issued 13 March 2018.

This variation prohibits certain high-risk cladding products for specific buildings, and therefore must also be considered by implementing the following NCC Vic Variation A2G2(5) requirement:

*“(5) A Performance Solution cannot be used to satisfy a relevant Performance Requirement for the installation of a combustible cladding product in an external wall of a—*

*(a) Class 2, 3 or 9 building with a rise in storeys of 2 that does not comply with C2D6; and Class 2, 3, 5, 6, 7, 8 or 9 building with a rise in storeys of 3 or more”.*

If the private building surveyor (PBS) has been or is to be appointed the RBS then the PBS or RBS can only provide advice on the requirements in the Building Act, the Regulations or the NCC, leaving the design team to make decisions about how their design will achieve compliance.

Advice on deemed-to-satisfy solutions can be given and the concept of performance solutions can be discussed but the actual preparation of a performance solution and any supporting documents, including choosing who undertakes that task, must be independent of the RBS.



Impact of the Minister’s declaration on existing building permits and Building Appeals Board applications – MG-14: “Issue of Building Permits where Building Work Involves the use of certain cladding products”.



Notwithstanding the NCC Victoria Variation, practitioners must remember that the Minister's declaration in respect of an application for a building permit or an existing building permit does not apply to the use of a prohibited external wall cladding product in buildings required to be of Type A or Type B construction under a permit in the following circumstances:

- where the application for a building permit was made to the relevant building surveyor before 1 February 2021
- an application to the Building Appeals Board in respect of an application for a building permit made to the relevant building surveyor before 1 February 2021.

### Use of a Performance Solution – Building Permits

Essentially a PS is site specific and should not be used as a pseudo Deemed-to-Satisfy Solution or as a last-minute fix to accommodate poor design or inadequate construction. A Performance Solution is not a mechanism for accepting non-compliance with building standards rather it is a pathway for demonstrating compliance with the Performance Requirements of the BCA based on the merits of the individual case and a PS must be assessed and issued as part of an application for a building permit to the RBS.

Unless the RBS has instigated the following procedural steps (1 to 4), a PS may not be provided and or the process for a PBDB instigated after the building permit or staged building permit has been issued:

1. Caused an inspection under Part 12 of the Building Regulations 2018;
2. Issued a Written direction to fix (DTF) upon the builder or owner builder during a mandatory inspection in accordance with section 137a(2) of the Building Act 1993; or
3. Where a DTS provision has not been complied with, or a DTS solution is not appropriate or possible, the RBS can issue a building notice and/or building order upon the owner in accordance with section 118A of the Act.
4. A determination from the Building Appeals Board has been received allowing the use of the PS.

In the event Step 3 occurs subject to the discretion of the RBS, a PS that demonstrates compliance can be submitted to the RBS to support the cancellation of the BN or Order. Where a variation to a building permit has occurred or is proposed or where step 3 occurs that requires a PS then consideration must be given to the development of a PBDB by the applicant. Note: it is important a client/owner is involved in discussions with the development of any PS.

### RBS and Stakeholder

Stakeholders commonly involved in preparing the design of a Performance Solution may, but are not limited to, include:

- Consultant building surveyors (excluding the RBS issuing the building permit)
- An endorsed engineer (in accordance with the Professional Engineers Act 2019, in the areas of civil, mechanical, electrical and fire safety)
- Building Designers (previously known as Draftspersons)
- Architects (Registered with the Architects Registration Board of Victoria)
- A VBA registered (prescribed) building practitioners (per Schedule 9 of the Regs)
- A subject matter expert or other appropriately qualified person with suitable insurance, experience, training, knowledge, and qualifications related to the subject matter. For instance, a DDA Access consultant



- Fire Rescue Victoria (FRV) - Pursuant to NCC Volume 1 Part A2.2(4)(a) / A2G2(4)(a) and in relation to applications relating to Fire Safety matters outlined by Regulation 187 (Reporting authorities for occupancy permit) and/or Regulation 129 (Requirements for permits involving fire safety matters).
- Builder
- Owner of the property and or building (including agent of owner and or the developer)

### Expert judgement

Expert judgement is one of four assessment methods under the NCC, typically where physical criteria is unable to be tested or modelled by calculation, the opinion of an expert may be accepted as a method to demonstrate compliance with the NCC. This is referred to as the use of expert judgement, from a person who has the qualifications and experience necessary to determine whether a Performance Solution or DTS Solution complies with the Performance Requirements. In some instances, expert judgement can be used in combination with other Assessment Methods.

Under the NCC, when developing performance solutions, expert judgement can be used to demonstrate compliance in combination with any other Assessment Methods. When using this method, an expert is a person who can make a judgement relating to NCC compliance. For instance, the expert may be a suitably qualified and registered engineer engaged in the building industry who must be registered with the Business Licence Authority as a endorsed engineer.

The Act is silent on whether it is mandatory for experts to be registered with the VBA, or a state accreditation body or association. Despite this however, ultimately, the RBS is the responsible authority who determines whether a person providing expert judgement as an assessment method or a subject matter expert (SME) who provides an opinion on a specific matter is an expert.

In view of the above, when a performance solution from a SME is proposed the RBS can consider, the engineering or scientific expertise of the expert which must be directly relevant to the performance solution. An SME may have the knowledge and experience to provide expert opinion on a specific matter or for instance a professional entomologist may have the knowledge to provide an expert opinion on termite matters.

It is possible that a combination of experts will be needed based on the situation or case. For example, in termite management, the expertise may be required on various aspects of termite biology; termite management; construction practices and engineering. Each situation is different and the capacity of the expert to provide credible evidence in relation to the issue must be assessed on an individual basis.

In addition, the performance solution must consider future impact on owners, taking the termite example specifically, any post construction maintenance or management requirements must be practical and include a mechanism that would bring it to the attention of all future owners and occupiers as necessary. For a class 1 dwelling, this would also include the provision of a durable notice permanently fixed in a conspicuous location in accordance with NCC Volume 2 Housing Provisions Part 3.4.3.



“Expert judgement” the RBS must consider the judgement of an expert who has the qualifications and experience in the specific field to determine whether a Performance Solution complies with the Performance Requirements.

### RBS - Role and conduct

Based on the quality and completeness of the documentation received, and in accordance with Section 24A and Division 4 of the *Building Act 1993*, the Relevant Building Surveyor (RBS) must not issue a building permit unless they are satisfied that the building work and permit comply with the Act, Regulations, and any binding determinations related to the work.



During the Performance-Based Design Brief (PBDB) process, if the RBS does not accept the proposed acceptance criteria, they should provide guidance and explain, in a general and routine manner, the areas where the design falls short.

While the RBS plays a key role in the process, they must not participate in the design preparation of any Performance Solution or suggest compliance solutions, as they are responsible for determining whether the Performance Solution demonstrates compliance. This ensures impartiality and prevents conflicts of interest, in line with the Victorian Building Authority (VBA) Code of Conduct for Building Surveyors and Section 79 of the Act.

Additionally, Regulation 265(b) requires that if a conflict of interest arises or is likely to arise between the building practitioner and the client, the RBS must immediately inform the client in writing.

### Poor practice – Scenario

The RBS becomes aware that the building work they are overseeing does not comply with the Deemed-to-Satisfy (DtS) requirements of the NCC as outlined in the building permit. Instead of requiring rectification or amended design documents, the RBS agrees with the builder to treat the non-compliance as a Performance Solution without proper assessment.

Furthermore, the RBS takes no action to inform the property owner of the non-compliance or the decision not to require rectification or updated design documentation.

### Improper conduct – Scenario

An owner applies to the RBS for a building permit to construct a four-storey, 15-unit development with a basement car park. The designer contacts the RBS to ask if sprinklers are required in the basement. In response, the RBS provides the designer with a copy of a fire engineering report from a different project, which permitted a basement without sprinklers as part of a previously approved Performance Solution.

In this scenario, the RBS has acted improperly by sharing documentation from another project rather than independently assessing the need for sprinklers based on the specifics of the current project.

Once the final report for a proposed Performance Solution is submitted, it is the RBS's responsibility to ensure that the solution complies with the relevant performance requirements. The RBS must also evaluate the objectivity, impartiality, and professional competence of those who prepared the design for the Performance Solution.

### RBS – Previously engaged, appointed, or has issued a Building Permit

In situations where the RBS has previously been engaged or issued a building permit, the RBS must not participate in or give advice on the development of designs or performance solutions for proposed building work before or after accepting an engagement to be the RBS for that building work.

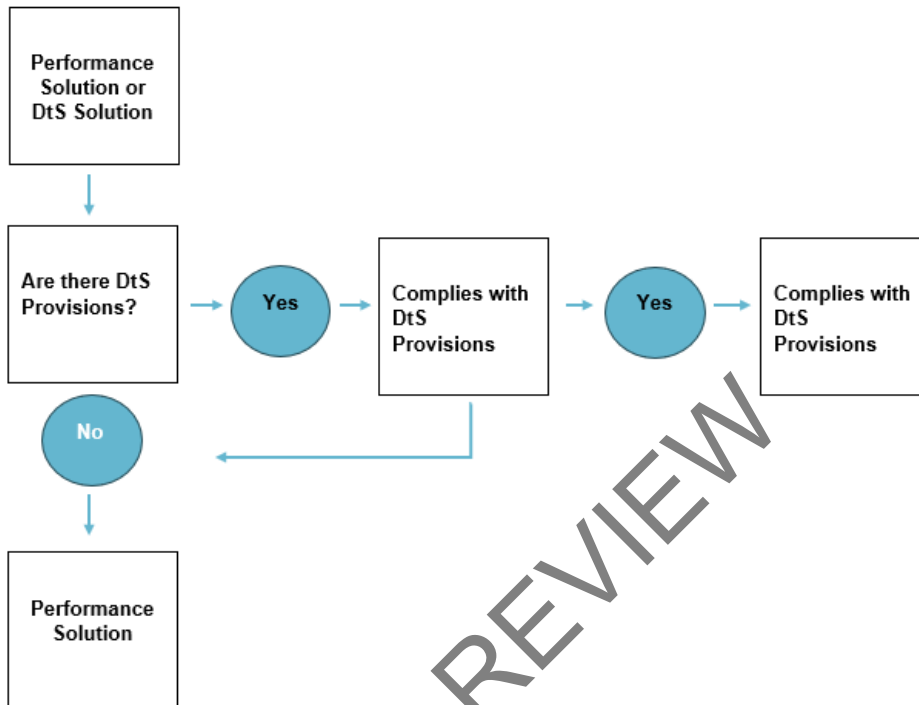
If the RBS has already been involved in the design process or provided advice on design solutions on a project, then the RBS must not accept appointment as the RBS for that project. Noting Section 79(1) of the Building Act which makes it an offence to carry out any functions set out in sections 76 or 77 if the private building surveyor or a related person:

- (a) prepared the design of the building or building work, or
- (b) is, or within the prescribed period was (which is 12 months), employed or engaged by the person or body which prepared the design of the building or building work other than the appointment to carry out a function under section 76, or
- (c) has a direct or indirect pecuniary interest in the body which prepared the design of the building or building work.



## Performance Solution – Development and record

The following flow chart can be used to assist in determining if a building solution is either performance based or Deemed-to-satisfy:



### Acceptable construction manuals – NCC referenced Australian Standard

When an Australian Standard is referenced as an Acceptable Construction Manual (ACM), it is considered Deemed-to-Satisfy (DtS) under the National Construction Code (NCC). For example, Figure 3 illustrates the use of NCC Volume 2, Clause H1D5 (Masonry), where an ACM serves as an acceptable method of compliance.

The DtS clause references *AS 3700 Masonry Structures* or *AS 4773.1 Masonry for Small Buildings (Design)*, and *AS 4773.2 masonry for Small Buildings (Construction)*, which provide the detailed design and construction requirements for masonry structures.

<b>H1D5</b>	<b>Masonry</b>	[2019: 3.3.1-3.3.3, 3.3.5-3.3.6]
<p>(1) <i>Performance Requirement H1P1</i> is satisfied for masonry veneer if it is designed and constructed in accordance with—</p> <ul style="list-style-type: none"> <li>(a) AS 3700; or</li> <li>(b) AS 4773.1 and AS 4773.2; or</li> </ul>		

**Figure 2 - BCA NCC Volume 2 extract from the ABCB**

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When reading the DtS provision, practitioners must be mindful that standards are not interchangeable. For instance, AS 3700 cannot be used alongside AS 4773.2 or vice versa.



Occasionally there are unique situations in the BCA that do not have a DtS provision or acceptable construction manual that can be followed. In cases like this a Performance Solution may be required to demonstrate the product, construction or design meets the Performance requirements.

### Weatherproofing - An example NCC Volume 1 Performance Requirement F3P1

NCC 2022 includes a new provision for Volume One, F3D5, that introduces DTS Provisions for demonstrating compliance with F3P1 for certain wall cladding types. Among these is F3D5(c), that provides a DTS compliance pathway for solid metal sheeting in the same manner that H1D7(5) does for Volume Two.

It is common for wall cladding systems for Class 2-9 buildings to incorporate solid metal panels, laminated metal panels or composite metal panels. As Australian Standard AS 1562.1 is an acceptable construction manual that applies to solid metal cladding, therefore this standard may be considered as a DTS compliance pathway for solid metal wall cladding panel systems.

However, on account of AS 1562.1 being developed primarily for solid metal sheet roof and wall cladding, many other metal, wall cladding panel systems may not meet the requirements of AS 1562.1. For example, a laminated or composite cladding panel's base metal thickness may not meet the minimum dimension specified in AS 1562.1. Systems that do not comply with AS 1562.1, may have evidence of suitability, such systems may require compliance with F3P1 to be demonstrated through a Performance Solution.

A roof and external wall (including openings around windows and doors) must prevent the penetration of water, F3P1 Weatherproofing specifies the PR for external walls and roofs. There are limitations however that require judgement on whether there is a necessity to comply or not. For instance, the PR does not apply to a Class 7 building, like a car park, however the judgement needs to consider whether exempting the car park is reasonable if F3P1 (a) and (b) are required to be met.

Where no DtS provision exists or compliance cannot be met, a Verification Method can form the evidential basis for a PS. For façade cladding, this method would require evidence that demonstrates compliance with:

- A calculation of the risk score determined in accordance with F3V1 and Table F3V1, to demonstrate that the Verification Method is suitable to use for this scenario.
- Façade drawings demonstrating that the wall cladding type is a direct fixed cladding wall as per the NCC defined term, because this will dictate the testing specimen characteristics and test procedure required under F3V1.
- Test report detailing results of the proposed façade system tests which verify that the façade system meets the test requirements of F3V1.

To correctly apply the assessment method under verification, a test specimen of a completed façade system, including a wall junction, a window, doorway and footer and header termination system is required. This test specimen can be used as an accurate representative of the façade system's intended application in the proposed project as verified by the stakeholder group during the PBDB.

In addition, a testing organisation may need to be engaged to undertake testing of the typical façade system in accordance with F3V1(4)(c)(i) for a direct fix cladding wall, including a 100% positive and negative serviceability wind pressure test, static pressure test and a cyclic pressure test. It may be the case that during the first test the test specimen showed some presence of water on the inside surface of the façade. As per F3V1(6)(a), compliance is met only if no water is present on the inside surface of the façade.

At this point, two options to proceed were available:

- Modify the cladding to resist water penetration; or



- Modify the design to become a cavity construction. The area where water was present was examined and modifications were made to the façade system to rectify the problem. A second test specimen was manufactured and tested. After the second test it was noted that no water had penetrated through to the inside skin of the façade.

Performance Requirements	
<b>F3P1</b>	<b>Weatherproofing</b>
	[2019: FP1.4]
A roof and <i>external wall</i> (including openings around <i>windows</i> and doors) must prevent the penetration of water that could cause—	
<ul style="list-style-type: none"> <li>(a) unhealthy or dangerous conditions, or loss of <i>amenity</i> for occupants; and</li> <li>(b) undue dampness or deterioration of building elements.</li> </ul>	
<b>Limitations</b>	
F3P1 does not apply to—	
<ul style="list-style-type: none"> <li>(a) a Class 7 or 8 building where in the particular case there is no necessity for compliance; or</li> <li>(b) a garage, tool shed, <i>sanitary compartment</i>, or the like, forming part of a building used for other purposes; or</li> <li>(c) an <i>open spectator stand</i> or <i>open-deck carpark</i>.</li> </ul>	

**Figure 3 - BCA NCC Volume 1 extract from the ABCB**

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### Use of a pre-approved, generic or blanket performance solution

It is generally not acceptable for the RBS to pre-approve Performance Solutions, as this could lead to a breach of section 79(1)(a) of the Act. Typically, the PBDB is typically prepared during the early stages of the design process or when proposing alternative solutions to meet the performance requirements of the NCC. In order to safeguard the owner and to provide greater transparency prior and during the construction process, it is highly unlikely a blanket performance solution can be used as a PBDB cannot be signed off after the performance solution report has already been written.

### Consultant Building Surveyors

For specific building façades where a Consultant Building Surveyor uses expert judgment as the sole assessment method to demonstrate compliance with PR F3P1 Weatherproofing, expert judgment alone would not satisfy the requirements of NCC A2G2(3) and A2G4(3).

As a result, a PS may not be accepted by the RBS without additional evidence that demonstrates compliance. For instance, the performance requirement for weatherproofing F3P1 may also require a performance solution from an endorsed engineer, typically with expertise in building design, construction, or facade engineering. In addition and alongside expert judgement, where the DtS provisions of F3D2 to F3D5 cannot be demonstrated, then it would be reasonable to also use the verification criteria of F3V1 as an additional method of compliance.

### Deemed-to-Satisfy Solutions

Where a Deemed-to-Satisfy Solutions (DTS) is proposed there are two assessment methods to demonstrate compliance, and they are:

- Evidence of Suitability in accordance with BCA Part A5 and / or
- Expert Judgement, or a combination of both.



Conversely, instances where a design, or method of construction does not demonstrate compliance with the Performance requirements, or the respective prescriptive DTS provisions, or occasions when a DTS provision does not exist then the option to formulate and provide a Performance Solution must be undertaken to demonstrate compliance with the BCA. A PS can be achieved in one or a combination of the following two ways:

#### The first method:

The use of a direct comparison against the PR. Often the BCA Performance Requirements are qualitative in nature, which could discourage practitioners from using them for Performance Solutions. Quantifying them provides objective levels of performance for practitioners to target. This encourages increased and competent use of performance when using Performance Solutions. It also helps ensure a level playing field and reduce the risk of misinterpretation.

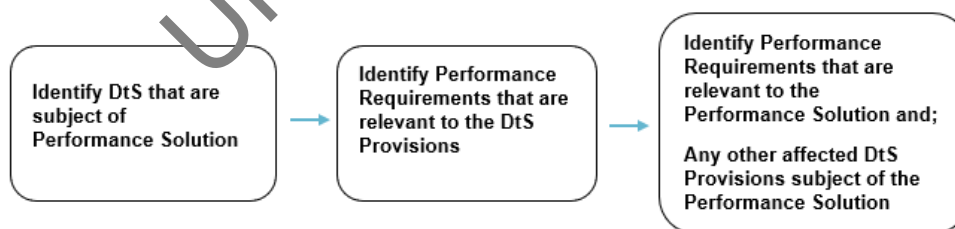
For instance, the requirements for Fire safety in BCA Volume Two are fully quantified, in that the requirement to prevent *Fire spread*, H3P1 is quantified with the inclusion of a design heat flux and applicable duration and automatic warning that includes efficacy and reliability in terms for smoke detection devices.

#### The second method:

An alternative method allows a combination or one or more of evidence of suitability which is available under DtS and, or the use of Expert Judgement, and the pathway chosen will depend on the building complexity of the solution proposed, the stringency of the DtS provisions and the nature of the PR, dependent on whether they are written in qualitative or quantitative terms. Often there may be scenarios where a combination of solutions, are used to achieve compliance with the PR, this can include multiple PRs or individual PRs.

The BCA prescribes identifying the DtS provisions that are subject to a PS, then looking at the PRs that are relevant to the DtS provisions, checking which DtS provision aligns with the respective PR and lastly there is a requirement to correctly identify any other DtS provision and or PR which may be affected that influences the required level of safety, health, or amenity.

The basis of this process is shown in the flow chart shown in Figure 4:



**Figure 4 – How to identify a Performance Solution**

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## RBS responsibilities and reliance on a Certificate of Compliance

### RBS – record of a Performance Solution

In addition to the BCA requirements, Regulation 38 also requires that the RBS document a determination of a performance solution on the building permit. This must be documented to include:

- (a) the NCC performance requirement with which the performance solution complies; and
- (b) details of;
  - assessment methods used.
  - any expert judgement used.



- details of tests or calculations.
- details of any standards or;
- and any other information that was used to rely upon.

Performance solutions must be listed on the building permit, and either the Occupancy Permit and, or the Certificate of Final (whichever is relevant and applicable). This also includes listing a CodeMark certificate when CodeMark certificates have been provided used and relied upon as Evidence of suitability.

Practitioners should be aware that written determination applies despite reliance on a certificate given under reg 122 or 123 from another registered practitioner (building surveyor) or endorsed engineer (civil, mechanical, electrical or fire safety) who have certified compliance under section 238 of the Building Act.

Similarly to Regulation 38, Regulation 124 must also be followed by the registered practitioner who must also document performance solutions in their Certificate of Compliance. The performance solution determination must also be included in the package provided to council as part of the building permit lodgement requirements under section 30 of the Act and the OP/CFI requirements under regulation 203(j).

If expert judgement was relied upon, the RBS should record specific information relating to the extent the RBS relied on the judgment and the qualifications of the expert. This will help substantiate and document how the RBS was satisfied, keeping records of qualifications, or otherwise documenting how the RBS has determined that the person the RBS has relied on, is competent to issue the certificate.

In deciding whether to rely on a certificate of compliance the RBS must also consider the information provided in MG-04 Certification of engineering designs and have regard to the complexity of the design which may determine that any such certificate be by a registered building practitioner in the category of engineer, other than the one who prepared the design.

### **RBS – Fire performance requirements - performance solutions**

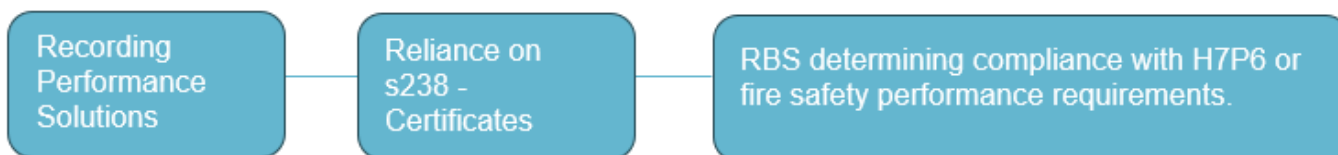
In instances where regulation 121 sub clauses (c) to (h) are applicable, a performance solution that refers to a fire safety performance requirement, the RBS cannot determine that a performance solution complies with a fire performance requirement of the BCA unless the RBS holds a Graduate Certificate in Performance-Based Building & Fire Codes from Victoria University; or holds a qualification that the Victorian Building Authority considers is equivalent to that Certificate.

Alternatively, before relying on a certificate issued under section 238 (under reg 121(e)), the RBS must satisfy themselves that it is appropriate to rely on the certificate of compliance by ensuring that:

- the certificate of compliance is issued by a registered building practitioner or endorsed building engineer prescribed by regulation 122; and
- for fire performance requirements, the certificate of compliance has been issued by a registered fire safety engineer or registered building surveyor (holding relevant qualification) who did not prepare the design pursuant to regulation 121(d) and (e) and
- the practitioner or endorsed building engineer has adequate experience and knowledge; and
- the certificate certifies the correct performance requirements and has not left out any relevant performance requirements.



Before determining a performance solution relating to a private bushfire shelter under regulation 165, the RBS is not required to hold qualifications as outlined by reg 121, and instead can allow a certificate issued under s238 by a fire safety engineer or accept the provision of a determination from the Building Appeals Board (BAB), BRAC or a Certificate of Conformity for the shelter.



### Immunity for building surveyor relying on certificate – Section 128

In unique situations that relate to fire-fighting water services or wet fire safety systems where Performance Requirements are located across all NCC Volumes then the RBS must ensure the performance solution adequately references all applicable performance requirements.

In summary, the RBS can only assess and approve a performance solution prepared by others in accordance with the BCA and the legislation, and where the RBS holds the appropriate qualifications for the assessment and approval of those performance solutions.



Immunity for building surveyor relying on certificate – section 128. The RBS has a duty of care to undertake proper inquiry. The RBS should not blindly accept a certificate as providing immunity. The ‘good faith’ test requires that the person accepting the certificate has made a proper enquiry about, and has no reason to doubt, the competence and experience of the person issuing the certificate and its content.

The RBS should also have regard to MG-04 Certification of Engineering Designs – the complexity of design may necessitate the RBS to require peer review and an independent s238 certificate from someone other than the person who prepared the design of the performance solution.

## Evidence of suitability – Use of CodeMark or BRAC Accreditation

### Use of CodeMark

A Deemed-to-Satisfy Solution is achieved by following all appropriate Deemed-to-Satisfy Provisions in the NCC. They include materials, components, design factors, and construction methods that, if used, are deemed to meet the Performance Requirements.

A Deemed-to-Satisfy Solution may be verified using Evidence of suitability, this is when a certificate may attest compliance with relevant Performance Requirements based on compliance with Deemed-to-Satisfy (DTS) Provisions or based on compliance with a Performance Solution or a combination of both. When a CodeMark Certificate is used to demonstrate compliance with a Performance Requirement, the following steps need to be undertaken by practitioners:

1. Check that the CodeMark Certificate for the building product or system proposed to be used is valid. The JAS-ANZ website contains a [register](#) of all valid CodeMark Certificates.
2. Check that the CodeMark Certificate certifies the relevant building product or system against all relevant Performance Requirements for the proposed use within the site-specific project.
3. For any relevant Performance Requirements proposed to be met by a Performance Solution that are not covered by the CodeMark Certificate, undertake the process in A2G2(4) referencing the CodeMark Certificate and considering the proposed use of the product or system holistically.



4. Check any limitations or exclusions set out in the CodeMark Certificate against the proposed use of the building product or system in the site-specific project to ensure they have been met.

### BRAC Accreditation – Victoria product accreditation

A certificate of building product accreditation issued by the Building Regulations Advisory Committee (BRAC) is proof that a product meets the performance requirements of the Regulations or the BCA. Under section 15 of the Building Act 1993, a building surveyor must accept the product, method, design, component, or system if the use complies with the accreditation. A2G2 of the NCC must still be complied with as relying on a Certificate of Accreditation is a performance solution. A2G2(4) requires a performance-based final report to confirm that the product, method, design, component or system complies with the accreditation including any limitations or conditions of the accreditation.

### Wall cladding systems – Scenario

Under the BCA there are no DtS provisions for plastic or foam-based cladding products or systems, which means that the use of a CodeMark Certificate to support the use of a system or product will require a PBDB and a PS. In these instances, the PBDB will not require 'Step 2' (Carry out analysis, modelling, or testing) if the CodeMark certificate has already qualified that the product complies with the PR. If the CodeMark does not demonstrate compliance, then all the relevant PBDB steps will need to be undertaken prior to the formulation of the PS. Practitioners should be aware however that in contrast there are cladding systems that can be used under BRAC. For a full comprehensive list, please refer to the VBA.

### Certificates of final inspection & occupancy permits

The prescribed forms for an occupancy permit (Form 16) and the certificate of final inspection (Form 17) requires that the RBS must include any new relevant performance requirements of the BCA and details of the performance solution determination. In the interest of comprehensive clarity, it is suggested to include all relevant performance solution determinations, including those previously listed on the building permit, including any staged building permits.



## Related Documentation

- Building Act 1993
- Building Regulations 2018
- Minister's Guidelines MG-04 Certification of Engineering Designs
- Minister's Guidelines MG-14 Issue of building permits where building work involves the use of certain cladding products
- VBA Advisory Note Prohibition of high-risk cladding products (dated 1 February 2021)
- Performance Solution Process Handbook ABCB
- VBA Code of Conduct for Building Surveyors

## List of Amendments

- Changes to reference new NCC 2022 version
- Further clarification on documenting determinations under Regulation 38
- Update format and content review

## Document history

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