

This response sheet is to be used for submitting responses to the National Construction Code (NCC) Public Comment Draft.

## How to use this response sheet

1. Provide your details including name, organisation and contact details.
2. Provide your response(s) to the Public Comment Draft. For each response you should include—
   * the relevant NCC volume(s) that your response relates to by clicking in the appropriate box(es);
   * the “**Clause/Figure/Table**” that you are responding to, e.g. J6D3(1)(a), Housing Provision Figure 7.2.3 or Table C2D2;
   * your “**recommended change to draft**”, e.g. it is recommended that the proposed drafting to J6D3(1)(a) be amended as follows…(*see example*);

If you are not recommending a change, insert “N/A” in this field;

* + your “**comments/reasons for change**”. This should include justification to support your recommended change, e.g. heaters that emit light do not need to be excluded because these heaters have already been exempted by J6D3(3)(d) (*see example*).

If you are including multiple “**comments/reasons**”, use dot points or a numbered list.

1. Submit your response using the online response form on the ABCB website.

**Notes:**

*Completing all relevant fields will help to describe what change in the Public Comment Draft you are commenting on, what your alternative change is and why it should be made.*

*This response form is to only be used for submitting responses to proposed NCC amendments contained within the NCC Public Comment Draft. If you wish to make comments or a submission on documents that have been released with the Public Comment Draft, please follow the instructions accompanying that document.*

*This response form includes a dedicated section for feedback on proposed changes related to energy efficiency.*

# Example

## Your details

**Name:** Alex Smith

**Organisation:** ABC Building and Plumbing

**Email or Phone No.:** easyas@abc.com.au

## Response(s)

**NCC Volume(s):**  One  Two  Three  Housing Provisions  Livable Housing Design Standard

**Clause/Figure/Table:** J6D3(1)(a)

**Recommended change to draft:**

It is recommended that J6D3(1)(a) be amended as follows—

(1) In a *sole-occupancy unit* of a Class 2 building or a Class 4 part of a building—

(a) the *lamp power density* or *illumination power density* of artificial lighting~~,~~ ~~excluding heaters that emit light,~~ must not exceed the allowance of—

(i) 5 W/m2 within ~~the building~~ a *sole-occupancy unit*; and

(ii) 4 W/m2 on a verandah, balcony or the like attached to ~~of the building~~ a *sole-occupancy unit*; and

**Comment/reason for change:**

1. heaters that emit light do not need to be excluded because these heaters have already been exempted by J6D3(3)(d); and
2. replacement of “the building” with “a sole-occupancy unit” clarifies that the provisions only apply to sole-occupancy units and attached verandahs, balconies or the like, and not the entire building.

# Response Sheet (for Energy Efficiency clauses)

**Note:**

*The following section of the response form contains pre-filled references to some of the key changes to energy efficiency clauses. It includes focus questions to help us better understand your views on these proposed changes. The focus questions are for guidance: your feedback is not restricted to the issue raised in these questions.*

*You are not required to provide feedback on all (or any) of the clauses identified in the pre-filled content.*

*For all other clauses not specifically identified in the pre-filled content below, please use the standard response box option at the bottom of the form.*

## Your details

**Name:** *Click here to enter text.*

**Organisation:** *Click here to enter text.*

**Email or Phone No:** *Click here to enter text.*

## Response(s)

**NCC Volume(s):**  One  Two  Three  Housing Provisions  Livable Housing Design Standard

**Clause/Figure/Table:** J1P1

**Focus questions to consider when suggesting any changes:**

What drafting changes (if any) should be made to clarify that embodied carbon is excluded from this Performance Requirement?

**Recommended change to draft:**

*Click here to enter text.*

**Comment/reason for change:**

**NCC Volume(s):**  One  Two  Three  Housing Provisions  Livable Housing Design Standard

**Clause/Figure/Table:** J1P4

**Focus questions to consider when justifying any changes:**

What drafting changes (if any) should be made to clarify what is meant by “the maximum practicable extent” of renewable energy generation equipment? Consider consistency and quantification.

**Recommended change to draft:**

*Click here to enter text.*

**Comment/reason for change:**

**NCC Volume(s):**  One  Two  Three  Housing Provisions  Livable Housing Design Standard

**Clause/Figure/Table:** J1V1

**Note:** The NABERS Administrator is proposing further changes to J1V1 to better align the targets in J1V1 with the increased stringency of the commercial energy efficiency provisions and incorporate decimal NABERS star ratings. Further information is available at www.nabers.gov.au

**Recommended change to draft:**

*Click here to enter text.*

**Comment/reason for change:**

*Click here to enter text.*

**NCC Volume(s):**  One  Two  Three  Housing Provisions  Livable Housing Design Standard

**Clause/Figure/Table:** J1V3, Specification 34, Specificaiton 49 (delete any that do not apply)

**Focus questions to consider when suggesting any changes:**

1. What drafting changes (if any) should be made in J1V3(1)(b) to the three alternative methods of verifying that the thermal performance of a building’s fabric is sufficient to support occupant comfort? Consider ease of use, consistency and robustness of the proposal.
2. What further drafting changes (if any) should be made in J1V3(1)(a)(i) to the requirement for a building’s greenhouse gas emissions to be no more than 90% of the *reference building*, when the building is modelled with the proposed *services*? Consider ease of use and consistency of application.
3. What further drafting changes (if any) should be made to J1V3 and S34C3(1)(d) in relation to future climate files? Consider whether the drafting delivers the objectives, and any unintended consequences of the proposal
4. Would you suggest any further changes to the modelling schedules in Specificaiton 35?

**Recommended change to draft:**

*Click here to enter text.*

**Comment/reason for change:**

*Click here to enter text.*

**NCC Volume(s):**  One  Two  Three  Housing Provisions  Livable Housing Design Standard

**Clause/Figure/Table:** J4D3, Schedule 1

**Focus questions to consider when suggesting any changes:**

1. What further changes (if any) are needed to clarify the requirements for continuous insulation in J4D3(1)?
2. What further changes (if any) are needed to the definition of *envelope* in Schedule 1 to clarify the locations where insulation is required or to avoid poor outcomes (such as insulation in locations where it will not be effective)?

**Recommended change to draft:**

*Click here to enter text.*

**Comment/reason for change:**

*Click here to enter text.*

**NCC Volume(s):**  One  Two  Three  Housing Provisions  Livable Housing Design Standard **Clause/Figure/Table:** J4D4

**Focus question to consider when suggesting any changes:**

How will replacing the solar absorptance requirements for roofs with requirements for total solar reflectance and emittance, or *Solar Reflectance Index,* affect the process to show compliance?

**Recommended change to draft:**

*Click here to enter text.*

**Comment/reason for change:**

*Click here to enter text.*

**NCC Volume(s):**  One  Two  Three  Housing Provisions  Livable Housing Design Standard

**Clause/Figure/Table:** J4D6, Specification 37

**Focus question to consider when suggesting any changes:**

How will the proposed changes, intended to prevent wall-glazing performance trade-offs between between storeys, affect thermal comfort outcomes or the process of showing compliance?

**Recommended change to draft:**

*Click here to enter text.*

**Comment/reason for change:**

*Click here to enter text.*

**NCC Volume(s):**  One  Two  Three  Housing Provisions  Livable Housing Design Standard

**Clause/Figure/Table:** J6D3

**Focus questions to consider when suggesting any changes:**

J6D3 includes changes intended to improve zoning design and reduce energy wasted through simultaneous heating and cooling. Will the proposed drafting have the intended effect? If not, what should change?

**Recommended change to draft:**

*Click here to enter text.*

**Comment/reason for change:**

*Click here to enter text.*

**NCC Volume(s):**  One  Two  Three  Housing Provisions  Livable Housing Design Standard

**Clause/Figure/Table:** J6D5

**Focus questions to consider when suggesting any changes:**

1. Are the proposed exemptions in J6D5(4) and (5), from the fan efficiency requirements, appropriate? If not, what should change?
2. Changes to fan control capability in J6D5(3) are intended for efficient turn down and balancing. Will the proposed drafting have the intended effect? If not, what should change?
3. Changes to J6D5(7) are intended to avoid wasted fan energy from putting multiple flexible duct runs in series. Will the proposed drafting have the intended effect? If not, what should change?
4. J6D5(10) specifies maximum acceptable pressure drops for some common components. Should any additional items to be added and what would the acceptable limits be? Explain how the limits should be identified,

**Recommended change to draft:**

*Click here to enter text.*

**Comment/reason for change:**

*Click here to enter text.*

**NCC Volume(s):**  One  Two  Three  Housing Provisions  Livable Housing Design Standard

**Clause/Figure/Table:** J6D6

**Focus question to consider when suggesting any changes:**

Changes to J6D6 are intended to clarify that ductwork connected to air conditioning equipment covered by Minimum Energy Performance Standards (*MEPS*) still needs to be insulated. Will the proposed drafting have the intended effect? If not, what should change?

**Recommended change to draft:**

*Click here to enter text.*

**Comment/reason for change:**

*Click here to enter text.*

**NCC Volume(s):**  One  Two  Three  Housing Provisions  Livable Housing Design Standard

**Clause/Figure/Table:** J6D8

**Focus question to consider when suggesting any changes:**

Changes to pump volume and pressure control capability are intended to facilitate efficient turn down and balancing. Will the proposed drafting have the intended effect? If not, what should change

**Recommended change to draft:**

*Click here to enter text.*

**Comment/reason for change:**

*Click here to enter text.*

**NCC Volume(s):**  One  Two  Three  Housing Provisions  Livable Housing Design Standard

**Clause/Figure/Table:** J6D10

**Focus questions to consider when suggesting any changes:**

1. This section includes proposed changes that aim to achieve zero carbon-ready space heating. Will the proposed changes be effective in achieving this, including enabling efficient electric heating, and facilitating future replacement of gas heating equipment with electric? If not, what changes are needed to achieve this objective?
2. Do you anticipate any challenges with the process to demonstrate compliance with the air source heat pump water heater requirement?

**Recommended change to draft:**

*Click here to enter text.*

**Comment/reason for change:**

*Click here to enter text.*

**NCC Volume(s):**  One  Two  Three  Housing Provisions  Livable Housing Design Standard

**Clause/Figure/Table:** J6D11, J6D12

**Focus question to consider when sugesting any changes:**

Do you anticipate any challenges in demonstrating compliance with these proposed requirements?

**Recommended change to draft:**

*Click here to enter text.*

**Comment/reason for change:**

*Click here to enter text.*

**NCC Volume(s):**  One  Two  Three  Housing Provisions  Livable Housing Design Standard

**Clause/Figure/Table:** J7, Specification 40

**Focus question to consider when justifying any changes:**

Changes to these sections are intended to simplify the provisions and reduce the level of presecriptiveness by focusing on functional outcomes. Do the proposed changes achieve this, and are any further refinements to the drafting needed?

**Recommended change to draft:**

*Click here to enter text.*

**Comment/reason for change:**

*Click here to enter text.*

**NCC Volume(s):**  One  Two  Three  Housing Provisions  Livable Housing Design Standard

**Clause/Figure/Table:** J8D3 to J8D5

**Focus question to consider when justifying any changes:**

This section includes proposed changes that aim to achieve zero carbon-ready water heating arrangements. Will the proposed changes be effective in achieving this, including facilitating the replacement of gas heating equipment with electric equipment? If not, what should change?

**Recommended change to draft:**

*Click here to enter text.*

**Comment/reason for change:**

*Click here to enter text.*

**NCC Volume(s):**  One  Two  Three  Housing Provisions  Livable Housing Design Standard

**Clause/Figure/Table:** J9D3

**Focus questions to consider when suggesting any changes:**

1. The NCC could include specific requirements on a building’s demand response capabilities and building energy management system. For example, requiring a building to have the capability to automatically increase or decrease its electricity consumption or solar PV production in response to specific grid conditions, or to allow a third party to take control of a building’s key energy using equipment.
2. Would you support such a requirement? Why/why not?
3. What specifically should this entail if written as a Deemed-to-Satisfy Provisions?
4. Should the provisions apply to all buildings or only those of a certain size or energy consumption

**Recommended change to draft:**

*Click here to enter text.*

**Comment/reason for change:**

*Click here to enter text.*

**NCC Volume(s):**  One  Two  Three  Housing Provisions  Livable Housing Design Standard

**Clause/Figure/Table:** J9D4(2)(a)

**Focus question to consider when justifying any changes:**

Should more specific detail be added to the J9D4(2)(a) requirement for dedicated electric vehicle distribution boards to be “equipped with a charging control system”? What requirements would you suggest?

**Recommended change to draft:**

*Click here to enter text.*

**Comment/reason for change:**

*Click here to enter text.*

**NCC Volume(s):**  One  Two  Three  Housing Provisions  Livable Housing Design Standard

**Clause/Figure/Table:** J9D5

**Focus questions to consider when suggesting any changes:**

1. In addition to the proposed requirements for onsite photovoltaics (PV), should there be other requirements to minimise a building’s impact on the grid, such as by maximising on-site use of generated energy and minimising export. If yes:
   1. Should this requirement sit in a different regulatory instrument to the NCC, given it relates to how a building is operated?
   2. What would this entail if written as a Deemed-to-Satisfy Provision?
2. What role do existing regulations or PV system equipment standards play in enabling electricity network operators to manage the impact of commercial building PV systems on the network? Will the proposed NCC changes create a need to change these regulations and standards?
3. In the context of the building approvals process, how should a local building control authority assess issues related to the potential impact of a building’s excess PV generation on the regional or local energy network. Consider:
   1. Timing of the assessment?
   2. Factors to enable the assessment (e.g. skill set)?
   3. Any other issues?
4. What should a local building control authority do when a Distribution Network Service Provider does not allow connection of a system of the required size

**Recommended change to draft:**

*Click here to enter text.*

**Comment/reason for change:**

*Click here to enter text.*

**NCC Volume(s):**  One  Two  Three  Housing Provisions  Livable Housing Design Standard

**Clause/Figure/Table:** J3D5, 13.2.3(7), 13.2.5 (deselect any that do not apply)

**Focus questions to consider when suggesting any changes:**

Do the proposed changes clarify where thermal breaks are needed? Would you suggest any further changes to the drafting to specify the locations of thermal breaks?

**Recommended change to draft:**

*Click here to enter text.*

**Comment/reason for change:**

*Click here to enter text.*

**NCC Volume(s):**  One  Two  Three  Housing Provisions  Livable Housing Design Standard

**Clause/Figure/Table:** J3D14

**Focus questions to consider when justifying any changes:**

Would you suggest any drafting changes to make these provisions clearer or easier to apply? Are there any technologies that are not treated fairly in methodology.

**Recommended change to draft:**

*Click here to enter text.*

**Comment/reason for change:**

*Click here to enter text.*

**NCC Volume(s):**  One  Two  Three  Housing Provisions  Livable Housing Design Standard

**Clause/Figure/Table:** *Click here to enter text.*

**Recommended change to draft:**

*Click here to enter text.*

**Comment/reason for change:**

*Click here to enter text.*