Wellington City District Plan – Omnibus Plan Change

Acoustic Insulation Rule Framework

Scope of Proposed change

To amend NOISE-R3 (New building, or alterations / additions to an existing building to be used by a noise sensitive activity), NOISE-S4 (Acoustic insulation – high noise areas), NOISE-S5 (Acoustic insulation – moderate noise areas) and NOISE-S6 (Ventilation requirements) to address issues with the implementation and effectiveness of the rule and standards.

Background

NOISE-R3 (New building, or alterations / additions to an existing building to be used by a noise sensitive activity) is the rule that regulates acoustic insulation of new buildings, and additions and alterations to existing buildings. The rule requires compliance with the acoustic insulation standards NOISE-S4 and NOISE-S5, as well as the mechanical ventilation requirements in NOISE-S6.

A number of issues have been raised with the implementation of this rule and the underlying standards. It is noted that, apart from the reference to the relevant minimum construction schedule and degree of acoustic insulation required, NOISE-S4 and NOISE-S5 are otherwise identical. Where proposed amendments are listed, the same in both standards will be applied to both NOISE-S4 and NOISE-S5, but are only mentioned once to avoid repetition.

Policy direction

NOISE-P4 (Acoustic treatment of buildings used for noise sensitive activities and provision of alternative ventilation) and NOISE-P6 (Development of noise sensitive activities) provide the policy framework[1].

It is noted that NOISE-P4 is subject to an appeal by Wellington International Airport Limited.

Purpose of the rule and standards

These rules and standards are primarily for the purposes of mitigating two effects:

- Reverse sensitivity – effects on the relevant noise emitters in the high and moderate noise areas by new noise-sensitive uses in the areas.
- Residential amenity (internal noise environment) – adverse noise effects on noise-sensitive emitters.

Issue

That NOISE-R3 (New building, or alterations / additions to an existing building to be used by a noise sensitive activity), NOISE-S4 (Acoustic insulation – high noise areas), NOISE-S5 (Acoustic insulation – moderate noise areas) and NOISE-S6 (Ventilation requirements) lack clarity and are therefore ineffective.

[1] WIAL Appeal

This issue has primarily arisen due to the broader language used for the standards, and it not accounting for certain situations. The overall formatting of the NOISE chapter and wording of NOISE-R2 also adds confusion. Further details are provided below.

1.1 The exemptions in NOISE-S4.2/NOISE-S5.2 (Alterations and additions, that don't increase the number of bedrooms, and don't increase floor area by more than 10% are exempt from compliance with the standard) have two issues:

- These exemptions do not apply to the ventilation standard – NOISE-S6. That means to comply with NOISE-R3, landowners would need to meet NOISE-S6 by installing an HVAC unit. This is unnecessary as no insulation works are being undertaken.
- The exemption for additions and alterations in (2), as written, also does not apply. (1) is the general clause requiring insulation but includes *'Except as for provided in (2)*'. However (1) uses the phrase *'new building'*. In effect, (1) only applies to new buildings, so any exemption to (1) relating to existing buildings is moot.
    - It is also noted that this *'new building'* framing means that this standard does not apply to existing buildings at all.

1.2 Additions and alterations that meet the exemption to the standards are not required to maintain the baseline level of acoustic treatment of the building, in effect enabling the *'downgrading'* of habitable rooms where they meet this exemption.

- For example, an apartment built to the high noise area equivalent standard under the 2000 District Plan may be doing an addition to habitable rooms that qualify for this exemption, so the addition does not need to meet the standard. These additions could be built without acoustic treatment, which would downgrade the acoustic insulation of the habitable room that did previously meet the high noise area standard.

1.3 Additions and alterations that don't amend building elements listed in the minimum construction schedules may still require resource consent, as the standard applies to all additions and alterations.

- For example, someone may be making an alteration to internal walls to make a bedroom bigger. This may increase floor area of habitable room by more than 10%, so is not exempt under the standard. However internal walls are not required to be treated under the minimum construction schedules, and are unlikely to increase reverse sensitivity effects, or affect the internal noise environment.
- In practice this alteration would still be subject to NOISE-R3,which would not require the applicant to do anything as they would meet the minimum construction schedule by default. However the rule does introduce a requirement for mechanical ventilation, which significantly increases costs for what are otherwise minor alterations.

1.4 The qualifier for the exemption that *'provided it does not increase the number of bed / sleeping rooms'* lacks clarity and it is not clear how this would be applied in certain situations, outlined below:

- Where an existing non-habitable room is converted to a habitable room, and an existing habitable room is converted to a non-habitable room.
- Where a bed / sleeping room is swapped with another habitable room, in two scenarios:
    - Where the existing habitable room is insulated to the degree required by the plan; and
    - Where the existing habitable room is not insulated to the degree required by the Plan.

1.5 The general format of the NOISE chapter is difficult to follow. The requirements and exemptions for construction of new buildings, and additions and alterations to existing buildings, differ. By having the requirements in the same rule and standard it oversaturates both and makes application difficult.

1.6 NOISE-S4.5/NOISE-S5.5 allow applicants to be exempt from the standard should the site meet the noise measurement levels of the relevant emitter for their area. However as currently written, these clauses lack clarity in three ways:

- The measurements are not tied to their relevant noise area. For example, a rail noise measurement could be taken to be exempt, but the site may not be in a rail noise area.
- As this exemption sits within the *acoustic insulation* standard, it does not technically exempt applicants from compliance with the *ventilation standard*, despite no acoustic insulation being required.

1.7 Applicants submitting plans that need to meet the acoustic insulation standards are often confused on what needs to be submitted to show compliance with the standard.

Assessment of Options

Relevant Options

For the purposes of this evaluation, the following options have been considered:

- **Option 1:** Retain the status quo.
- **Option 2:** Amend the rules and standards.

Cost/Benefit Assessment

Option 1: Retain the status quo

The status quo would retain the broader application of the insulation / mechanical ventilation standards to all residential additions and alterations. In practice the status quo framework has proven difficult for applicants and Council officers to follow. It is unnecessarily convoluted and has unnecessary repetition. The costs and benefits of this option are identified below.

Costs	Benefits
Environmental • The status quo is overly prescriptive due to the application of the insulation and ventilation standard in situations where there are limited or no increases in adverse effects. *Economic* • Resource consent may be required for additions / alterations that are not having material changes to the relevant effects that these standards address. The result may be that the applicant then does not have to do anything, because the rule does not require anything of the nature of the addition or alteration.	*Environmental* • The status quo may increase coverage of acoustically insulated habitable rooms, reducing reverse sensitivity effects. This is considered a negligible benefit as the issue primarily relates to situations that have negligible increase in adverse effects. *Economic* • No economic benefits have been identified. *Social* • No social benefits have been identified. *Cultural* • No cultural benefits have been identified.

• As the status quo does not address the identified discrete issues in application, this requires a lot of work by Council Environmental Noise Officers to decide on an approach, with resultant costs to the applicant. • The status quo will potential require unnecessary insulation and ventilation when there is a negligible increase in the relevant effects. These can be costly measures. *Social* • No social costs have been identified. *Cultural* • No cultural costs have been identified.	

Efficiency and effectiveness

Option 1 is not considered to be an effective method of achieving the policy intent of the NOISE chapter (NOISE-P4) and is inefficient insofar as it imposes resource consent requirements in circumstances where acoustic insulation is unnecessary.

Overall evaluation of option 1

Option 1 is not recommended.

Option 2: Amend the rules and standards

Option 2 would involve the following:

1. Removing additions and alterations from the title and content of NOISE-R3;
2. Creating a new NOISE-R4 specific to additions and alterations;
3. Raising the exemptions listed in the standards into the content of the rules for consistency within the chapter;
4. Combining NOISE-S4 and NOISE-S5 into one standard to eliminate overlap, with amendments to retain the differences in requirements between moderate and high noise areas; and
5. Minor changes in response to the discrete issues with the rules and standards:
    - Within NOISE-R3 (as amended), changing *'Does not increase the number of bed / sleeping rooms'* to say *'It does not create a new bed / sleeping room';* and
    - Within the new NOISE-R4 (additions and alterations rule), adding a qualifier to the exemption for additions and alterations stating that if the habitable room was initially built to a certain acoustic insulation standard, that it must at least maintain that standard;
    - Within the new NOISE-R4, including an exemption for additions and alterations that any works that do not add or alter building elements listed in the minimum construction schedules, with this exemption in the rule rather than the standard;
    - Removal of *'New buildings'* from NOISE-S4 (Acoustic insulation) and NOISE-S6 (Ventilation requirements);
    - Within NOISE-S4, adding in the relevant noise area for the exemption pathways in (5) in the standard.
6. Adding a note to direct the format in which applications insofar as they relate to insulation must be submitted.

The costs and benefits of this option are identified below.

Costs	**Benefits**
Environmental • Clarifying the exemption pathways may mean less habitable rooms are acoustically insulated. However, as the basis for these exemptions is the lack of adverse effects, this environmental cost is considered to be negligible. *Economic* • Requiring additions and alterations, including exempt works, to maintain the baseline acoustic treatment of the room prior to the works, may make it more expensive to undertake these works. The intention with the exemption pathway is to enable small scale additions and alterations with imposing costly insulation and ventilation requirements. *Social* • No social costs have been identified. *Cultural* • No cultural costs have been identified.	*Environmental* • The changes would expand the scope of additions / alterations that are not subject to the insulation and ventilation standards, it may further enable these small scale additions / alterations. • Clarifying that the measurements must be taken within their relevant noise area will that exemptions to the insulation / ventilation standards cannot be achieved through the loophole and ensuring correct application of the standards. • Remedying the error in drafting to ensure that the provision applies to additions and alterations and existing buildings will ensure that the Plan has legal basis for requiring additions and alterations and works in existing buildings to be acoustically insulated. This will provide better environmental outcomes by mitigating reverse sensitivity effects, and adverse effects on the internal noise environment. This benefit will be negligible as in practise this provision has been applying in these situations. by clarifying the exemption pathway in NOISE-S4/NOISE-S5.2 to ensure that *new* bed or sleeping rooms are subject to the standard (As opposed to the 'does not increase the number of bedrooms or sleeping rooms' wording which has issues, identified in the issues section), it will ensure that all new habitable rooms as a result of additions or alterations will be appropriately insulated. • Ensuring that no habitable rooms are downgraded through exempt additions and alterations, it will ensure that existing housing stock does not worsen the adverse noise effects by closing the loophole. • Building elements that require acoustic treatment within the standard, will still be required to meet the standard, ensuring effective noise mitigation for these elements. *Economic* • Reduction of costs associated with unnecessary imposition of insulation and ventilation standards by not requiring compliance when the altered / added building elements do not need to be insulated, and because exempt works do not need to meet the ventilation standard.

	• Clearer wording will reduce complexity and therefore costs associated with preparing and assessing resource consent applications. • Having clarity on how applications should be formatted should make the process more efficient for applications, reducing costs and time. *Social* • Habitable spaces that are safe and healthy, from an environmental noise perspective. *Cultural* • No cultural benefits have been identified.

Efficiency and effectiveness

Option 2 is considered to be an effective way to address the issue as the recommended changes to the NOISE provisions will provide clarity as to how the rules and standards are applied.

Option 2 will result in efficiencies for both developers and Council officers. Notably:

- The construction of new buildings, and additions and alterations to existing buildings, will have different exemptions pathways and qualifiers for each activity status.
- Raising the exemptions into the rules improves clarity and ensures that these apply to both the insulation and the ventilation standards, saving costs by not requiring activities exempt from the insulation to still meet the mechanical ventilation standard.
- Reducing repetition in the two insulation standards by combining them into one but retaining their differences reduces Plan complexity.

Overall evaluation of Option 2

Option 2 is the recommended option as it will provide clarity and improve Plan efficiency.

Risk of acting/not acting

There is sufficient information to analyse the appropriateness of acting or not acting.

By not acting, the District Plan will retain an inefficient rule framework. The risk is ongoing expense to developers and potentially risk of legal challenge.

Consultation

Consultation has been undertaken with officers in the Council's Environmental Noise Team who assess resource consents that are captured by the acoustic insulation rule framework. The feedback primarily related to the application of the rule framework to additions and alterations in discrete scenarios, which fed into the changes supported in this report. The Environmental Noise Team is supportive of these changes.

Through Clause 3 consultation the Council received feedback from three parties. This feedback is summarised below.

Wellington International Airport Limited

WIAL raised that the chapeau of NOISE-R3 has created a potential gap whereby existing buildings that are converted for use by noise sensitive activities are not captured by this rule, or NOISE-R4.

Whilst I believe that additions and alterations alone should adequately cover any conversions, I do not see any harm in strictly including conversions for absolute clarity.

WIAL raised concern that the removal of "Any other noise-sensitive activity" in NOISE-R3.3 creates a potential loophole where any other noise sensitive activities are not captured.

This was removed as it was seen as redundant. Firstly, the rule does not distinguish certain noise-sensitive activities and separate them by activity status – it only categorises by location and number of units. Where these subcategories are not captured by NOISE-R3.1 or R3.2, they will be caught by the catch-all in NOISE-R3.3 statement "The requirements of NOISE-R3 is otherwise not achieved". This necessarily captures all other noise-sensitive activities.

As this is primarily for the purpose of streamlining the provision, I am open to reinstating this.

WIAL raised concern that NOISE-R4 has a focus on bedrooms, not habitable rooms generally.

The term 'bedrooms' only applies in the context of the exemption. The intention of the exemption is to ensure that small scale additions and alterations within high and moderate noise areas do not need a resource consent under the noise chapter, due to the small scale of the effects.

An exception to this is if these additions and alterations result in a new bedroom. A new bedroom implies an increase in the number of residents, which necessarily implies an increase in the scale of the noise-sensitive activity. This should not be exempt because of the increased reverse sensitivity risk.

The rule still otherwise applies to all habitable rooms.

WIAL noted that the incorrect notation for the sound reduction descriptors was used in NOISE-S4.1 and S4.3, not using Dtr, 2m, nT, w + Ctr.

Agreed. This was due to the titles of Tables I & II (Minimum construction tables) using the incorrect notation. As a result I have amended the titles of the minimum construction tables.

WIAL noted that note 4 needed specific reference back to the standard to ensure consistency.

Agreed. As a result the reference to the standard has been tidied.

Kevin Collins on behalf of Design Network Architecture Limited (DNAL)

DNAL provided feedback on provisions that were out of scope of the changes of Plan Change 1 regarding NOISE-S4 and NOISE-S5.

KiwiRail Holdings Limited (KiwiRail)

KiwiRail are generally supportive of the changes to aid in interpretation and implementation.

KiwiRail noted that there is potentially a circular reference in proposed NOISE-R3.3, with the Discretionary Activity status referencing the rule itself.

The intention here is for the Discretionary Activity status to be a catch-all when the requirements of NOISE-R3.2 and NOISE-R3.1 are not met – as a result the rule was amended to make this clear.

KiwiRail noted that proposed NOISE-R4.1 that there no connecting *'and'* between b) and c), which may lead to an interpretation that c) is not required when compliance is met through b).

An *'and'* was added to make this connection clear.

KiwiRail noted that in the 2024 District Plan, the term *'Sleeping rooms'* is used through the standard, and this has been changed to *'bedrooms'*.

This was an intentional change to use more familiar language through the plan to the same effect, as generally the rooms the rule is intending to capture are rooms intended to house permanent sleeping residents which is a potential reverse sensitivity effect.

KiwiRail noted that the drafting of NOISE-R4.1.b.ii is problematic due to the building elements in both tables being the same, and that additions and alterations could be permitted without consideration for ventilation.

Additions and alterations that are permitted through this rule will need to apply ventilation. However, small scale works that meet NOISE-R4.b.ii will not need to provide insulation or ventilation. This was the case under the 2024 District Plan and is carried over. And the reference to Tables I & II is just to ensure that when this permitted pathway is being used, that it applies to both high and moderate noise areas.

KiwiRail noted that the term *'This standard'* is used in NOISE-S4, and that it should directly reference NOISE-S4.

These references have subsequently been amended.

Recommended Option

Following the assessment above, Option 2 is the recommended option. This option addresses the issues in application of the rules and standards, and the reformatting in this option provides for a more efficient rule layout.

Recommended Changes

1. **Amend NOISE-R3**
2. **Create a new NOISE-R3a**
3. **Amend NOISE-S4**
4. **Delete NOISE-S5**

See overleaf.

1. Amend NOISE-R3		
Construction of new buildings~~, or alterations / additions to an existing building~~ to be used by a noise sensitive activity		
	As specified in Rule	1. Activity status: **Permitted** Where compliance with NOISE-S4 (Acoustic Insulation) and NOISE-S6 (Mechanical Ventilation) is achieved: a. ~~Compliance with NOISE-S4 (High Noise Areas) and NOISE-S6 (Ventilation) is achieved~~ ~~w~~Within a High Noise Area for: i. One residential unit on a site in a residential zone. ~~ii. Alteration or addition to an existing habitable room.~~ iii. All residential units within the Commercial and Mixed Use Zones group, unless they are within the Inner Air Noise Overlay. ~~(see APP4), except within the Inner Air Noise Overlay or the Mixed Use Zone.~~ b. Within a Moderate Noise Area for: i. Up to three residential units on a site in a residential zone. ii. All residential units within the Commercial and Mixed Use Zone group. iii. Any other noise sensitive activity. Note: The number of residential units on a site includes any existing residential units.
	~~As specified in Rule~~	~~2. Activity status: **Permitted**~~ ~~Where:~~ ~~a. Compliance with NOISE-S5 (Moderate Noise Areas) and NOISE-S6 (Ventilation) is achieved within a Moderate Noise Area for:~~ ~~i. Up to three residential units on a site in a residential zone.~~ ~~ii. Alteration or addition to an existing habitable room.~~ ~~iii. Any other noise sensitive activity.~~ ~~iv. Residential units the Commercial and Mixed Use Zone Group (see APP4), except within the Mixed Use Zone.~~ ~~Note:~~ ~~1. The number of residential units on a site includes any existing residential units. Unless otherwise restricted by zone or overlay based rules, there is no limit on the number of units per site on land further than 40m from a State Highway that has a posted or maximum variable speed limit equal to or less than 70 km/hour.~~
	As specified in the Rule ~~All Zones~~	~~3.~~ 2. Activity status: **Restricted Discretionary** a. Where compliance with NOISE-S4 (Acoustic Insulation) and NOISE-S6 (Mechanical Ventilation) is achieved: ~~a. Compliance with NOISE-S4 and NOISE-S6 is achieved~~ ~~w~~Within a High Noise Area site for: i. Two residential units on a site in a residential zone. ii. Residential units within both the Inner Air Noise Overlay, and the Commercial and Mixed-Use Zone group. ~~the Mixed Use Zone~~. iii. Visitor accommodation. ~~b. Compliance with NOISE-S5 and NOISE-S6 is achieved~~ W~~w~~ithin a Moderate Noise Area site for: i. Four or more residential units in a residential zone. ~~ii. Residential units in the Mixed Use Zone.~~

		Matters of discretion are: 1. The matters of assessment in NOISE-S4~~, NOISE-S5~~ and NOISE-S6. 2. The ability to achieve acceptable outdoor amenity. 3. Any proposed mitigation of noise, in accordance with a best practicable option approach (e.g., site layout and design, design and location of structures and buildings and outdoor amenity areas). 4. Sensitivity of the activities activity to current and predicted future noise generation from authorised compliant emitters of noise. 5. The risk of reverse sensitivity effects on regionally significant infrastructure. 6. The extent and effect of non-compliance with any relevant standard as specified in the associated assessment criteria for the infringed standard. Note: 1. The number of residential units on a site includes any existing residential units. 2. An operator of regionally significant infrastructure whose project, work or operations generate noise within a High Noise Area, may be considered an affected party for applications in that Area.
	As specified in the rule	~~4.~~ 3. Activity status: **Discretionary** Where: ~~a. Compliance with NOISE-S4 and NOISE-S6 is achieved within a High Noise Area site for:~~ ~~i. Three or more residential units on a site in a residential zone.~~ ~~ii. Alteration or addition to an existing residential unit that increases the existing number of bedrooms.~~ ~~iii. Any noise sensitive activity not otherwise permitted.~~ ~~b. On any site~~ a. Within a High or Moderate noise area: i. Compliance with the requirements of NOISE-R3.1 or NOISE-R3.2 are not ~~otherwise~~ achieved. Note: ~~1. The number of residential units on a site includes any existing residential units.~~ 1. An operator of regionally significant infrastructure whose project, work or operations generate noise within a High Noise Area, may be considered an affected party for applications in that Area.
2. Add new NOISE-R3a		
Additions and alterations to, and conversions of, existing buildings to be used by a noise sensitive activity		
	High Noise Areas Moderate Noise Areas	1. Activity status: **Permitted** a. Where compliance with NOISE-S4 (Acoustic Insulation) and NOISE-S5 (Mechanical Ventilation) is achieved, or: b. Additions and alterations, where no new bedrooms are created, and these additions and alterations: i. Do not increase the floor area by more than 10%; or ii. Do not add or alter building elements listed in the minimum construction tables I & II; and c. Additions and alterations to existing habitable rooms must maintain the level of acoustic insulation of the affected room prior to works being undertaken.

	High Noise Areas Moderate Noise Areas	1. Activity status: **Restricted Discretionary** a. Where compliance with NOISE-R4.1 is not achieved. Matters of discretion are: 1. The matters of assessment in NOISE-S4 (Acoustic Insulation) and NOISE-S6 (Mechanical Ventilation). 2. The ability to achieve acceptable outdoor amenity. 3. Any proposed mitigation of noise, in accordance with a best practicable option approach (e.g., site layout and design, design and location of structures and buildings and outdoor amenity areas). 4. Sensitivity of the activities activity to current and predicted future noise generation from authorised compliant emitters of noise. 5. The risk of reverse sensitivity effects on regionally significant infrastructure. 6. The extent and effect of non-compliance with any relevant standard as specified in the associated assessment criteria for the infringed standard.

3. Amend NOISE-S4

Acoustic insulation ~~— high noise areas~~

As specified in the standard	1. ~~Except as provided for in (2),~~ ~~a~~A~~n~~y habitable room in a building to be used by a noise sensitive activity ~~in a new building~~ must be designed, constructed, and maintained to achieve a minimum external to internal noise reduction for habitable rooms of not less than: ~~35 dB $D_{tr,2m,nT,w} + C_{tr}$.~~ a. In moderate noise areas: 30 dB $D_{tr,2m,nT,w} + C_{tr}$ b. In high noise areas: 35 dB $D_{tr,2m,nT,w} + C_{tr}$. ~~2. Any alteration or addition to a habitable room used by a noise sensitive activity within an existing building, which does not increase the floor area of the affected room by more than 10%, providing that the addition or alteration does not increase the number of bedrooms or sleeping rooms is exempt.~~ ~~3~~. 2. Compliance with ~~this standard~~ NOISE-S4 must be achieved by ensuring habitable rooms are designed and constructed in a manner that accords with: a. For high noise areas: Table II — Minimum construction requirements necessary to achieve an advanced external sound insulation level of 35 dB $D_{tr,2m,nT,w} + C_{tr}$; ~~Minimum construction requirements for external building elements of habitable rooms to achieve an advanced level of acoustic insulation~~; or b. For moderate noise areas: Table I - Minimum construction requirements necessary to achieve a moderate external	Assessment criteria where the standard is infringed: 1. Background noise levels and any special character of noise from any existing activities, the nature and character of any changes to the sound received at any receiving site and the degree to which such sounds are compatible with the surrounding activities; 2. Adverse effects on health and amenity indoors for occupants of buildings containing noise sensitive activities; 3. The ability to achieve acceptable outdoor acoustic amenity; 4. Any mitigation of the noise proposed, in accordance with a best practicable option approach (e.g. site layout and design, design and location of structures, buildings and equipment and the timing of operations); 5. The ability to mitigate adverse effects through

		sound insulation level of 30 dB $D_{tr,2m,nT,w}$ + C_{tr}; or c. Aan acoustic design certificate signed by a suitably qualified and experienced acoustic expert stating the design proposed will achieve compliance with this standard. 3. Acoustic insulation must be assessed in accordance with ISO 717-1:2020 Acoustics — Rating of sound insulation in buildings and of building elements — Part 1: Airborne sound insulation. 4. Works are exempt from compliance with The requirements of (a) NOISE-S4.1 (Acoustic Insulation) and NOISE-S6 (Mechanical Ventilation) above do not apply where an acoustic design certificate signed by a suitably qualified and experienced acoustic expert, confirms the level of noise incident on the most exposed part of the exterior of any habitable room can be shown, under a reasonable maximum use scenario, does not exceed the following outdoor noise limits at all points 1.5m above ground level, and any part of the floor levels above ground: a. less than 55 dB L_{Aeq} (1h) for rail noise in the rail designation setback noise areas; or and b. Less than 57 dB L_{Aeq} (24h) for highway noise in the state highway designation setback noise area; or and c. Less than 57 dB L_{dn} for port noise in the port noise areas. Notes: 1. NOISE-S4 This standard applies in addition to, and does not affect the requirements of, the Building Act 2004. 2. Distances from a state highway or railway corridor shall be measured from the closest habitable room to the closest point of a state highway or railway designation. 3. 'Reasonable maximum use scenario' shall be the level of noise incident on the exterior of the habitable room based on: a. Rail noise — 70 L_{Aeq}(1h) at a distance of 12 metres from the track, then deemed to reduce at a rate of 3 dB per doubling of distance up to 40 metres and 6 dB per doubling of distance beyond 40 metres. b. Highway noise — The current day measured or predicted road traffic noise level L_{Aeq} (24 h) plus 2 dB. c. Port noise — The maximum permitted port noise L_{dn} level based on the location of the Port Noise Control Line. Port noise sources shall be deemed to be operating within wharf areas.	the imposition of conditions such as noise attenuation; and 6. In relation to a heritage building or a contributing building within a heritage area, the extent to which it is practicable to insulate to the required standard without detracting from identified heritage values.

	4. Compliance with NOISE-S4.3.a or NOISE-S4.3.b must be achieved by submitting a set of building plans and specifications, as well as a completed construction table for each habitable room. This must include the material / product name, thickness and mass.	

5. Delete NOISE-S5

~~**Acoustic insulation — moderate noise areas**~~

~~Moderate Noise Areas~~	~~1. Except as provided for in (2), any habitable room in a building used by a noise sensitive activity in a new building must be designed, constructed, and maintained to achieve a minimum external to internal noise reduction for habitable rooms of not less than 30 dB $D_{tr,2m,nT,w} + C_{tr}$.~~ ~~2. Any alteration or addition to a habitable room used by a noise sensitive activity within an existing building, which does not increase the floor area of the affected room by more than 10%, providing that the addition or alteration does not increase the number of bedrooms or sleeping rooms.~~ ~~3. Acoustic insulation must be assessed in accordance with ISO 717-1:2020 Acoustics — Rating of sound insulation in buildings and of building elements — Part 1: Airborne sound insulation.~~ ~~4. Compliance with this standard must be achieved by ensuring habitable rooms are designed and constructed in a manner that accords with:~~ ~~a. Table I — Minimum construction requirements for external building elements of habitable rooms to achieve a moderate level of acoustic insulation; or~~ ~~b. an acoustic design certificate signed by a suitably qualified and experienced acoustic expert stating the design proposed will achieve compliance with this standard.~~ ~~5. The requirements of 3(a) above do not apply where an acoustic design certificate signed by a suitably qualified and experienced acoustic expert, confirms the level of noise incident on the most exposed part of the exterior of any habitable room can be shown, under a reasonable maximum use scenario, does not exceed the following noise limits at all points 1.5m above ground level, and any part of the floor levels above ground:~~ ~~a. Less than 55 dB L_{Aeq} (1h) for rail noise; or~~ ~~b. Less than 57 dB L_{Aeq} (24h) for highway noise; or~~ ~~c. Less than 57 dB L_{dn} for port noise.~~ ~~Notes:~~	~~Assessment criteria where the standard is infringed:~~ ~~1. Background noise levels and any special character of noise from any existing activities, the nature and character of any changes to the sound received at any receiving site and the degree to which such sounds are compatible with the surrounding activities;~~ ~~2. Adverse effects on health and amenity indoors for occupants of buildings containing noise sensitive activities;~~ ~~3. The ability to achieve acceptable outdoor acoustic amenity;~~ ~~4. Any mitigation of the noise proposed, in accordance with a best practicable option approach (e.g. site layout and design, design and location of structures, buildings and equipment and the timing of operations);~~ ~~5. The ability to mitigate adverse effects through the imposition of conditions such as noise attenuation; and~~ ~~6. In relation to a heritage building or a contributing building within a heritage area, the extent to which it is practicable to insulate to the required standard without detracting from identified heritage values~~ -

		1. ~~This standard applies in addition to, and does not affect the requirements of, the Building Act 2004.~~ 2. ~~Distances from a state highway or railway corridor shall be measured from the closest habitable room to the closest point of a state highway or railway designation.~~ 3. ~~'Reasonable maximum use scenario' shall be the level of noise incident on the exterior of the habitable room based on:~~ a. ~~Rail noise — 70 L_{Aeq}(1h) at a distance of 12 metres from the track, then deemed to reduce at a rate of 3 dB per doubling of distance up to 40 metres and 6 dB per doubling of distance beyond 40 metres.~~ b. ~~Highway noise — The current day measured or predicted road traffic noise level L_{Aeq} (24 h) plus 2 dB.~~ c. ~~Port noise — The maximum permitted port noise L_{dn} level based on the location of the Port Noise Control Line. Port noise sources shall be deemed to be operating within wharf areas.~~	

Consequential Amendments

The following consequential amendments are required:

- As a new rule has been added, and two standards have been condensed, consequential renumbering of the underlying rules, standards and references is required. In particular, NOISE-P4 and NOISE-P6 will require amendments.
- The titles of Tables I & II (Minimum Construction Requirements) will amend the acoustic rating notation from $D_{nT,w} + C_{tr} > 35$ dB to $D_{tr,2m,nT,w} + C_{tr}$. This is due to the change in this notation in the reference to these tables in the body of NOISE-S4.3.b.