

Residents' perspectives of maintaining medium-density housing

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Preface

This study report is part of BRANZ's medium-density housing (MDH) programme, which aims to inspire the building and construction industry to design, build and deliver quality MDH that meets the needs of New Zealanders. The project's purpose is to understand MDH residents' experiences of home maintenance. Research of this kind is important because understanding barriers to MDH maintenance from the perspectives of residents may help BRANZ address gaps in knowledge for owners and bodies corporate around the maintenance requirements of MDH buildings.

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- All survey participants who gave time to respond to the survey.

Disclaimer

This research presents the views of the research participants, which do not necessarily represent the views of BRANZ.

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Residents' perspectives of maintaining medium-density housing

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Abstract

This report investigates residents' experiences of maintaining medium-density housing (MDH). The study presents different perspectives of MDH from those commonly heard – one that represents views generated from lived experience. Research of this kind is important because understanding barriers to MDH maintenance from the perspectives of residents may help BRANZ address gaps in knowledge for owners and bodies corporate around the maintenance requirements of MDH buildings.

During the study, BRANZ researchers sought to identify how maintenance needs are perceived by residents within three different MDH typologies. Residents of stand-alone houses were included in the survey as a control group, providing a benchmark from which BRANZ could establish whether there are certain maintenance issues more commonly experienced by MDH residents. This was investigated on two fronts: challenges relating to the physical structure of the dwelling and challenges relating to the dependencies between stakeholders during the formation of maintenance decisions.

Keywords

Medium-density housing, MDH, maintenance, quality, defects, bodies corporate.



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Executive summary

This report investigates the perspectives of residents (owners and renters) of home maintenance within medium-density housing (MDH). It addresses a gap in the literature that has mainly reported on MDH performance and maintenance issues from the perspectives of developers and bodies corporate. The study therefore presents different perspectives of MDH from those often heard – representing views of individual residents rather than from common industry sources. Research of this kind is important because understanding barriers to MDH maintenance from the perspectives of residents may help BRANZ address gaps in knowledge for unit owners and bodies corporate about the maintenance needs of MDH buildings.

The findings of this research are the result of an online survey of MDH residents within Auckland, Tauranga, Wellington, Christchurch and Queenstown. Residents of stand-alone housing were also included, with their responses used as a baseline from which to gauge whether MDH residents experience disproportionately high levels of maintenance issues. This was investigated on two fronts: challenges relating to the physical structure of MDH and challenges relating to the dependencies between stakeholders involved in making maintenance decisions.

Key findings

The study suggests that residents of stand-alone housing within our research sample have more areas of identifiable home maintenance need than their MDH counterparts. This was evident in relation to most dwelling components investigated. It is posited that this could be because homeowners are more financially invested in their properties than renters and are therefore more cognisant of maintenance issues. However, as our data showed, it is also possible that this owes to the relatively older age of stand-alone dwellings compared to that of MDH within our sample, meaning that such dwellings typically have higher maintenance needs.

A proportion of survey respondents from each typology also indicated that several components of their respective properties are never maintained. This was reflected to varying degrees in responses across all housing features and likely indicates the influence of barriers to home maintenance that are independent of housing type. This view is reinforced by survey feedback suggesting that limited financial means, a lack of time and a lack of maintenance knowledge are key barriers to MDH home maintenance. These are issues that can affect all people. However, a key finding of the study is that a lack of maintenance knowledge and accessibility issues relating to building height appear to disproportionately affect residents of MDH.

The study also established that residents of MDH within our sample generally exhibit much greater uncertainty about maintenance frequency and that this uncertainty is largely proportional to increased living density.

Reliance on landlords and bodies corporate who hold greater decision-making influence was also found to be a barrier to maintenance for some residents of MDH. Compared to owner-occupiers within stand-alone housing, MDH residents appear to have less autonomy regarding some maintenance decisions. For some owners, this is often because their maintenance needs relate to shared building features, which must be deferred to a body corporate or body corporate manager who may not view maintenance requests with the same urgency. As the study suggests, this tension can be amplified for renters within MDH settings where the decision-making structure can



involve both landlords and bodies corporate. This is pertinent in cases where renters perceive inaction by landlords or bodies corporate in response to raised maintenance concerns. Ownership status is therefore important within the context of our analysis because it demonstrates degrees of responsibility for home maintenance and the extent to which research participants rely on other parties for decisions about maintenance to be made.

This tension was reflected in survey responses indicating concern that raising maintenance issues with landlords or bodies corporate could result in eviction or an increase in rent or body corporate fees. This suggests that landlords or bodies corporate may in some cases be unaware of maintenance issues owing to some residents' reluctance to communicate the existence of problems.

These research findings suggest that the marginalisation of residents' perspectives risks leading to the repetition of building performance issues. In the context of this study, this raises questions about how MDH residents, especially renters, can be supported to have their maintenance concerns better heard and acted upon by more influential stakeholders.



1. Introduction

1.1 Context

This paper explores residents'¹ experiences of maintaining the medium-density housing (MDH) typologies in which they live. It addresses a gap in the literature that has mainly reported on MDH performance and maintenance issues from the perspectives of developers and bodies corporate. In these discussions, MDH residents have been a missing voice, leaving conversations about MDH maintenance and repair largely in the hands of individuals who may not speak from the perspective of lived experience.

Research of this kind is important for several reasons. On a broad level, understanding barriers to MDH maintenance may help the building industry consider how it can better enable residents of MDH to take care of their homes. As with all dwellings, neglecting or deferring MDH maintenance impacts building performance and risks the need for urgent and costly repairs. At scale, this could result in widespread dereliction of MDH units, further undermining the quality of New Zealand's housing stock and potentially reinforcing negative perceptions of this typology. By understanding MDH residents' perspectives of home maintenance, this study could help identify knowledge gaps for MDH residents, leading to new resources that could empower unit owners and bodies corporate to take better care of their properties. It may also help identify recurring maintenance issues affecting residents that could be omitted in future MDH design.

Surveying the views of MDH residents is also valuable because this stakeholder group seldom has a platform from which to share maintenance concerns. In some cases, this may relate to a power imbalance between MDH residents, bodies corporate and developers. As detailed in the MDH literature (for example, Palmer, 2014), the marginalization of residents' perspectives regarding MDH issues can lead to the repetition of status quo design and construction methodologies and restrict knowledge and influence to actors with the greatest political capital. This is relevant to the present study because facts about MDH maintenance problems are commonly sourced from a limited number of 'official' sources. This potentially allows discussions around MDH maintenance to be dominated by individuals who have a different set of interests to those who live in such dwellings, which in turn raises doubt about the extent to which residents' concerns about MDH maintenance are heard by developers, bodies corporate and design professionals. As detailed in the study, this is especially relevant for renters who comprise over 50% of MDH residents nationally while having limited influence on decisions affecting such developments (Statistics New Zealand, 2020).

The research responds to success criteria three (SC3) within the BRANZ MDH research programme, specifically question 3d: What are the gaps in knowledge for owners and residents around maintenance requirements for MDH buildings and how can these be closed? By answering this question, the aim of the study is to provide new knowledge to the building industry around problems associated with MDH that could be avoided or changed to deliver better outcomes for residents.

The first piece of research completed under SC3 was Study Report SR386 *Maintenance and common repair issues in medium-density housing* (Duncan & Page, 2017). This report focused on the maintenance of MDH from the perspectives of bodies corporate. The current project builds on the gaps identified in the report by gathering data from

¹ Residents includes both owners and renters of MDH residential units.



residents living within MDH typologies about their maintenance experiences. It seeks to identify and compare how maintenance needs are perceived by residents and what the barriers are for maintenance within different housing typologies.

The findings of this research are the result of a survey of MDH residents within Auckland, Tauranga, Wellington, Christchurch and Queenstown. Residents of stand-alone housing were also included in the survey as a control group, with their responses used as a baseline from which to gauge whether residents of MDH experience specific maintenance issues.

1.2 Definition and terms

There is no universal definition of MDH. However, there is general agreement that attached low-rise dwellings are the principal type of buildings that comprise the category (Allen & Bryson, 2018). This project uses the definition of MDH developed in an earlier BRANZ study (Bryson & Allen, 2017): multi-unit dwellings up to 6 storeys high. This earlier study also identified the three major forms or typologies of MDH in New Zealand including:

- 1–2-storey attached houses (defined in this report as terraced housing)
- 2–4-storey attached houses (defined in this report as low-rise apartments)
- apartments up to 6 storeys (defined in this report as high-rise apartments).

This definition generally aligns with the MDH typologies of focus in the present study.

For the purposes of this research, maintenance is defined as regular or routine building work to ensure that homes continue to be warm, weathertight and generally well functioning. It may involve the replacement or repair of components subject to wear or damage. It includes:

- minor work (such as fixing leaking windows or washing down a home's external surfaces)
- major capital works (such as replacing a roof or fixing foundations).

However, the definition excludes building work (such as renovations) for the sole purpose of changing appearances to suit personal tastes.



2. Methodology

2.1 Research aims

The research addressed the following question: What are residents' experiences of maintaining the MDH typologies in which they live? This connects to the broader question within the BRANZ MDH research programme: What are the gaps in knowledge for owners and residents around the maintenance requirements for MDH buildings and how can these be closed?

This paper details what research participants across New Zealand have told us.

2.2 Literature review

A literature review was first undertaken to confirm what body of information (if any) exists that explores residents' experiences of maintaining the MDH typologies in which they live. The search terms focused on identifying MDH maintenance issues as experienced by MDH residents within both domestic and international contexts.

As detailed in section 3, this resulted in the identification of a limited number of articles that detail maintenance issues associated with MDH from the perspectives of residents. However, the review also uncovered literature that suggests that the sidelining of residents' perspectives regarding MDH risks leading to the repetition of building performance issues. This potentially allows discussions about MDH maintenance to be dominated by stakeholders who may have different concerns to those who live in such dwellings. By focusing on residents' experiences of maintaining MDH, researchers for this study aimed to capture a different perspective.

2.3 Data collection

Data was collected via an online survey² accessed by research participants by visiting the BRANZ-owned website maintainingmyhome.org.nz.³ The purpose of the survey was to reach MDH residents who have experienced maintenance issues related to their dwelling. Participants were identified via random sampling of addresses within areas of Auckland, Tauranga, Wellington, Christchurch and Queenstown identified as having a high proportion of MDH.

MDH-rich areas were identified through a database of meshblocks obtained from Statistics New Zealand. The data was filtered to show meshblocks within each city where MDH forms 75–85% of total residential dwellings. This enabled researchers to identify ideal survey locations where BRANZ was likely to recruit research participants representing each of the four housing typologies of interest.⁴

Once meshblocks that met our criteria were identified, researchers provided a database of these to NZ Post's direct marketing service to obtain a random sample of postal addresses from within these areas. The address data was also weighted relative to each city's population based on the 2013 Census in order to ensure that the data was proportionate to the size of each city (Table 1).

² Researchers opted to conduct the survey online because experience suggests that it would result in a higher response rate and be less costly than a paper survey.

³ The website contained a link to a survey held on the SurveyMonkey platform.

⁴ Stand-alone housing, terraced housing, low-rise apartments and high-rise apartments.

**Table 1. Sampling method.**

Region	% of total New Zealand population (2013 Census)	% of survey invitations	Number of dwellings sent a survey invitation
Auckland	33.4%	67%	13,300
Tauranga	2.7%	5.4%	1,120
Wellington	4.5%	9%	1,800
Christchurch	8.0%	16%	3,220
Queenstown	1%	2%	400

This process enabled researchers to obtain a total of 19,840 individual addresses. Although researchers were interested in residents' perspectives of maintenance relating to MDH, residents of stand-alone properties were also targeted to participate in the survey as a control group and made up approximately 25% of all the addresses provided by NZ Post. Survey data obtained from this group provided a benchmark from which BRANZ could establish whether there are certain maintenance issues more commonly experienced by MDH residents.

To recruit survey participants, BRANZ printed 19,840 individual survey invitations on postcards using the addresses supplied by NZ Post. Each postcard explained the purpose of the study and listed the maintainingmyhome.org.nz URL to enable participants to access the online survey. These were then sent through the post to recipients on 24 June 2019. To encourage participation, BRANZ offered the incentive of winning an Apple iPad Pro or a \$1,000 Prezzy card.

The survey initially ran for 4 weeks from 24 June to 30 August 2019. The overall response rate for the survey was 1.8% (365 individual responses).

See Appendix A for a link to the survey.

2.4 Ethics

This research has ethical approval from BRANZ's external human ethics advisor, in accordance with BRANZ's human ethics policy.



3. Literature review

3.1 MDH design and construction

Existing MDH research is broad and covers such topics as the reasons for its increasing prevalence and issues associated with its performance. In the context of heightened demand for housing and market pressure caused by limited land supply, the growth of MDH is seen to reflect New Zealand's turn to increased urban intensification to better maximise the utility of buildable land (Dunbar & McDermott, 2011). Some studies (for example, Allen, 2016) also suggest that a growing number of people are choosing MDH because they want to downsize to low-maintenance typologies where less time is spent tending to gardens and mowing lawns.

Despite its appeal, MDH residents are broadly acknowledged to experience challenges with their properties. This includes the frequent occurrence of technical problems, such as weathertightness failure and poor acoustics (Nuth & Duncan, 2019). There is also stigma associated with MDH, with negative perceptions of MDH being linked to concerns about poor-quality materials, inadequate design, and the belief that MDH requires more frequent maintenance than other types of housing (Syme, McGregor & Mead, 2005; Bryson, 2017; Easthope, Randolph & Judd, 2015). MDH dwellings also have a reputation for being inherently difficult to maintain, owing to issues relating to height and access (Duncan & Page, 2017). Naturally, this would make the upkeep of such dwellings challenging for residents.

3.2 Ownership and management structures

MDH maintenance is a responsibility shared by different parties. This is delineated between unit owners, who are responsible for maintaining their individual dwellings, and bodies corporate, who hold responsibility for common spaces and shared services. Accordingly, the complications associated with the upkeep of MDH can extend beyond its physical form because it often requires negotiation between people with sometimes conflicting interests. To proceed with maintenance, in many cases, joint decision making and compromise between stakeholders is required. This differs for owners of stand-alone housing who are typically free to make unilateral decisions. Owing to how section 138 of the Unit Titles Act 2010 (UTA) specifies the management of common space, unit owners must defer to their body corporate when maintenance needs pertain to shared building features. Since maintenance of MDH often concerns commonly owned parts of the building (such as roofing, water, wastewater and the external structure), it is the body corporate who must agree to such work and arrange for its completion.

Third parties can also play a role in MDH maintenance, which adds further complexity to the shared responsibility model. According to the UTA, a body corporate can outsource maintenance services to a professional body corporate manager to undertake its maintenance responsibilities (Unit Title Services, 2019). Although body corporate managers are not regulated by the UTA, they are increasingly employed by bodies corporate of larger MDH developments (Duncan & Page, 2017).

The extent to which MDH residents understand the shared responsibility model and the role of third parties in MDH maintenance is questionable, and past studies suggest that the delineation of responsibility between unit owners and bodies corporate can be a grey area. For instance, a study investigating causes of concern regarding the



management of major repairs and routine maintenance in New South Wales residential strata (Easthope, Randolph & Judd, 2009) found that, in addition to concerns about ongoing building defects since construction, residents were frequently uncertain about how responsibilities for the management of major repairs and low-level maintenance are demarcated, including their own obligations.

3.3 Decision-making influence within MDH

MDH residents' experience of maintaining their dwellings may be further influenced by the degree in which they are included or excluded from how such dwellings are designed and constructed. Palmer (2014) addressed this within the context of MDH in Australia and found that, unlike traditional low-density housing, where owners can choose preferred design features, occupants of MDH are typically excluded from the housing production system. In Palmer's view, this leaves fundamental decisions about housing design, amenity and usability in the domain of developers, who typically prioritise exchange value over use value. Without a platform for MDH residents to participate in decisions around design and quality, Palmer maintains that status quo design and construction methodologies typically continue unopposed, leaving developers with almost complete power over final housing outcomes.

Blandy, Dixon and Dupuis (2006) made similar findings in relation to multi-owned residential developments in New Zealand and England. Focusing on residents' experiences of the processes involved in developing and managing multi-owned residential sites, the authors found that individual owners within both countries often expressed feelings of powerlessness, a lack of knowledge about the ongoing roles of developers within MDH and uncertainty about the roles of professional managing agents. Further, they found that MDH residents were generally unaware of or confused by the legal structure of the development they bought into and about their own rights and responsibilities.

Conflicting interests and battles for power can reign within bodies corporate themselves. Researching strata developments in Australia, Easthope et al. (2015) noted that the interests of owners within bodies corporate often dominate those of renters in the formation of body corporate decisions. This inequity is further exacerbated when the body corporate is formed by a higher proportion of one type of owner. As Easthope explains, body corporate membership in Australia is commonly overrepresented by retirees, who are typically less interested than people from younger age groups to invest in the long-term maintenance and improvement of common areas. Easthope found that, in many cases, this was because retirees were not able to pay for repairs, even if they wished to do so, while maintenance was more often the choice of younger owners, especially those interested in capital gains.

This review of the MDH literature suggests that maintaining MDH dwellings often involves degrees of complexity in excess of what residents of stand-alone housing typically experience. This is reflected in both the physical form of the building (such as the larger size of MDH buildings), which can impede maintenance by limiting access to various components and features, and in the organisation of how such buildings are managed, with negotiation and compromise required by different parties during the process of joint decision making. It is therefore likely that MDH residents have different sets of barriers and needs relating to home maintenance than occupants of stand-alone housing. Our research sought to test this.



4. Data analysis

4.1 Housing typologies of survey participants

To investigate the maintenance experiences of research participants within the four housing types of interest, BRANZ researchers targeted a balanced ratio of responses (25% per housing typology) via issuing 75% of survey invitations to residents of MDH compared to 25% of residents within stand-alone housing.⁵ Although researchers had little control over who would respond, an approximate balance of responses between housing types was achieved, with residents of MDH representing approximately 70% of all those who completed the survey (Figure 1).

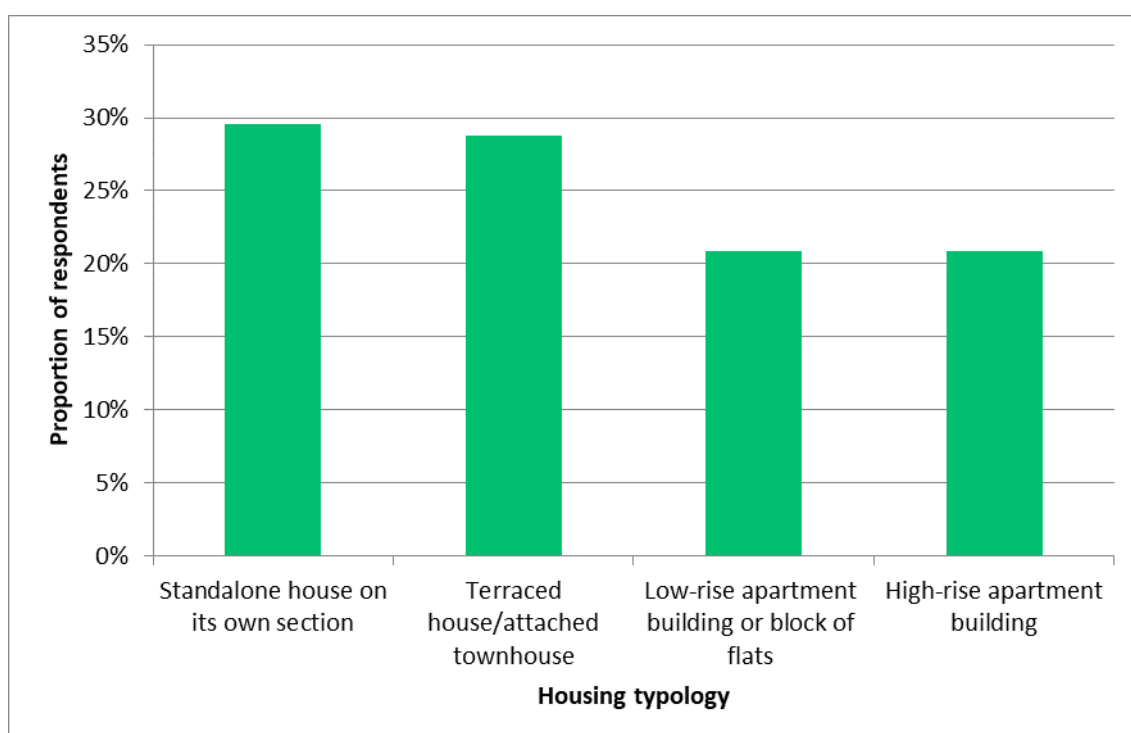


Figure 1. Housing typologies of survey participants.

Terraced house/attached townhouse was the most represented MDH typology at 28.8%, followed by 20.8% each for low-rise and high-rise apartment buildings (Table 2). Residents of stand-alone housing comprised just under 30% of total responses.

Table 2. Housing typologies of survey participants.

Typology	Percentage of sample	Proportion of sample
Stand-alone houses on their own section	29.6%	108
Terrace houses/attached townhouses	28.8%	105
Low-rise apartment buildings or blocks of flats	20.8%	76
High-rise apartment buildings	20.8%	76

⁵ Stats NZ and NZ Post data did not provide enough specificity to enable researchers to delineate which MDH addresses belonged to the three MDH typologies of interest. Accordingly, researchers selected addresses within MDH-rich meshblocks at random, aiming to get as close as possible to an even balance of responses between housing types.



4.2 Ownership status

Ownership status is important within the context of our analysis because it demonstrates degrees of responsibility for home maintenance and the extent that research participants rely on other parties for decisions about maintenance to be made. Within the survey sample, owners comprised 54% of all completed survey responses, while renters comprised 37%. The remainder belonged to a shared ownership or rent to buy scheme (3%), opted to not answer the question about ownership status (1.5%) or answered 'none of the above' – most went on to explain that they lived within a retirement village and had a right to occupy (Figure 2).

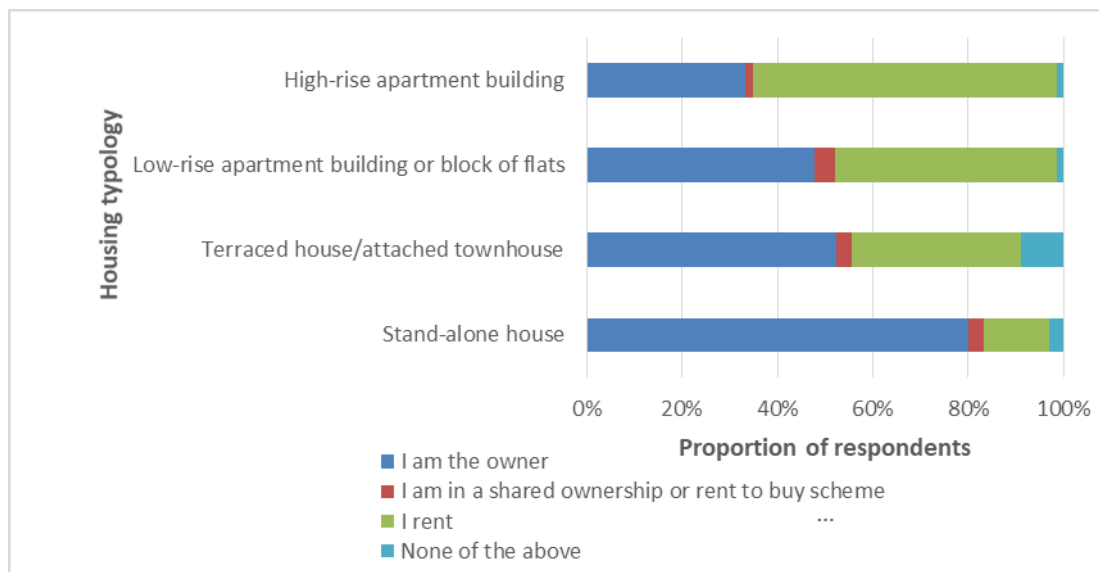


Figure 2. Ownership status of survey participants.

Looking specifically at the ownership status of MDH residents, owners comprised 103 individual survey participants (46% of total MDH residents within the study) compared to 121 individual renters (54% of total MDH residents within the study).⁶ This suggests that just over half of MDH residents who participated in the study have to defer to both landlords and bodies corporate when it comes to decisions around home maintenance. These figures closely reflect nationwide ownership figures from the 2018 Census that show that 53.1% of residents within joined dwellings between 1–6 storeys rent their dwelling (Statistics New Zealand, 2020).

While the ratio of owners to buyers within the sample was relatively even for low-rise apartments, renters made up a significant proportion of residents of high-rise apartments (62%). This suggests that this group has even less autonomy than others within the sample with regards to maintenance decisions. Owners made up a slightly larger share of people living within terraced housing (52%).

Of the 108 survey participants who said that they live in stand-alone housing, nearly 80% said that they own the dwelling in which they reside. Accordingly, fewer individuals within this group contend with landlords when maintenance needs arise.

⁶ 15 participants said that they did not want to answer this question or selected 'none of the above'.



4.3 House condition

To gauge any difference between how residents of MDH experience home maintenance compared to residents of stand-alone housing, researchers first sought to understand how proactive survey participants (or other parties that they rely on such as landlords and bodies corporate) are towards ensuring the upkeep of their homes. This was initially assessed by asking survey participants to describe their home's overall condition, both inside and out, when the first moved into it (to form a baseline). This was followed by a question asking participants to describe the condition of their home at the time they completed the survey (as a point of comparison).

The condition score presented in Figure 3 is based on a five-point scoring system: 1 = very poor, 2 = poor, 3 = average, 4 = good, 5 = excellent. Responses show a perception of general improvement in housing condition across all typologies. This indicates that those who participated in the survey (or the parties that manage maintenance issues on their behalf) are largely proactive regarding home maintenance.

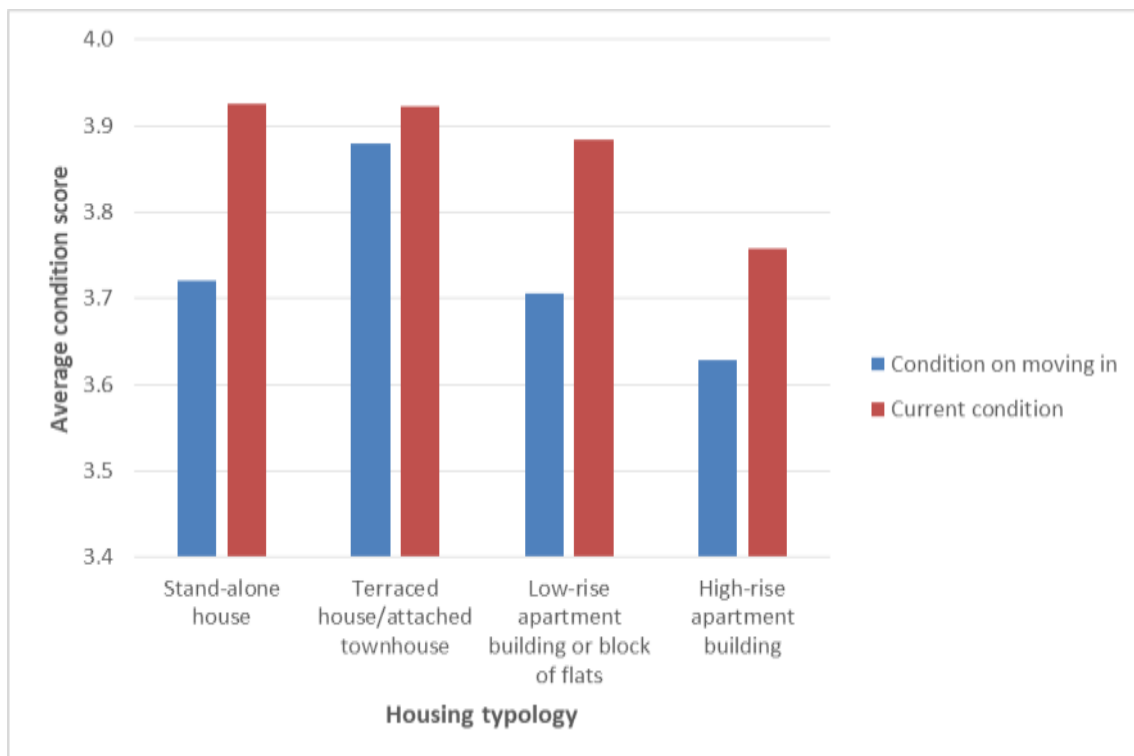


Figure 3. Condition of home (inside and out) before survey participants moved in.

The data shows a general increase in the number of dwellings considered in excellent or good condition between when research participants first moved into their home (Table 3) and now (Table 4). However, going against this trend was a slight decrease in the number of people within terraced homes who felt that the condition of their home in the present day is excellent compared to when they first moved in.

Further indicating that research participants perceived a general improvement in the condition of their homes over time, the data also shows a general decline in the number of people in each typology who felt that the condition of their homes was average, poor or very poor.

**Table 3. Condition of home when first moved in.**

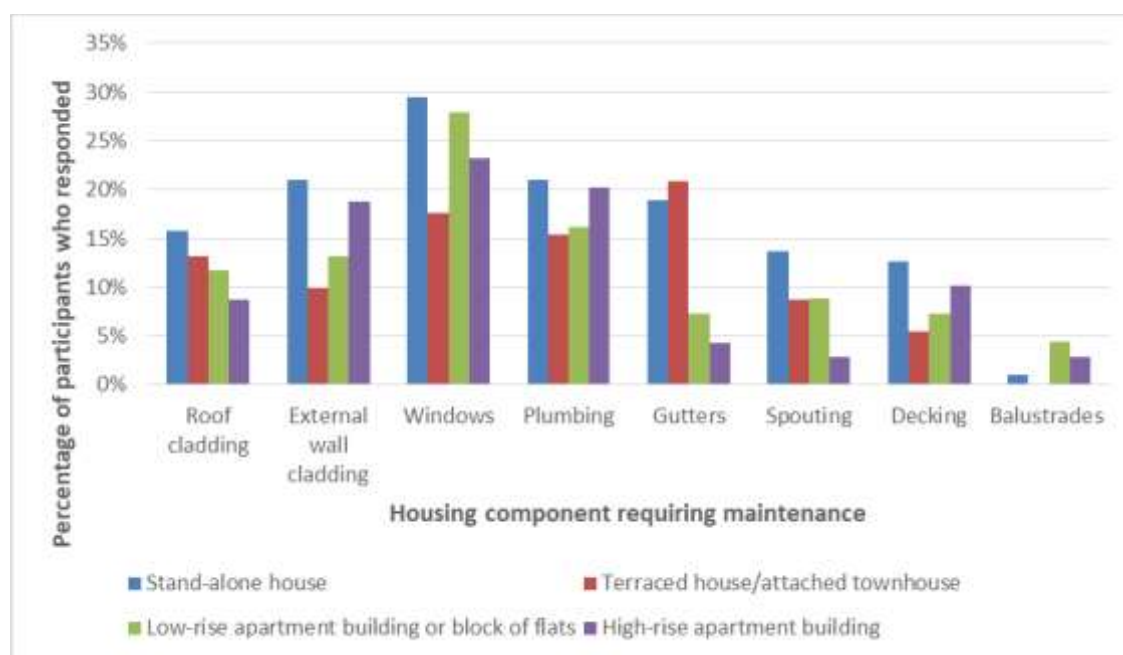
Typology	Excellent	Good	Average	Poor	Very poor
Stand-alone houses on their own section	28	30	22	7	6
Terrace houses/attached townhouses	30	31	22	5	3
Low-rise apartment buildings or blocks of flats	10	33	21	3	1
High-rise apartment buildings	16	21	27	3	3

Table 4. Current condition of home.

Typology	Excellent	Good	Average	Poor	Very poor
Stand-alone houses on their own section	28	36	25	5	0
Terrace houses/attached townhouses	24	43	19	3	2
Low-rise apartment buildings or blocks of flats	13	37	17	2	0
High-rise apartment buildings	17	26	22	3	2

4.4 Areas of current home maintenance need

Although there was a general trend showing improvement in housing condition across all housing typologies, responses to the question 'Are any of the following areas of your home currently in need of maintenance? (tick all that apply to you)' shows some points of difference in the perspectives of MDH and stand-alone housing residents (Figure 4 and Figure 5).

**Figure 4. Percentage of participants reporting external housing components currently in need of maintenance.**

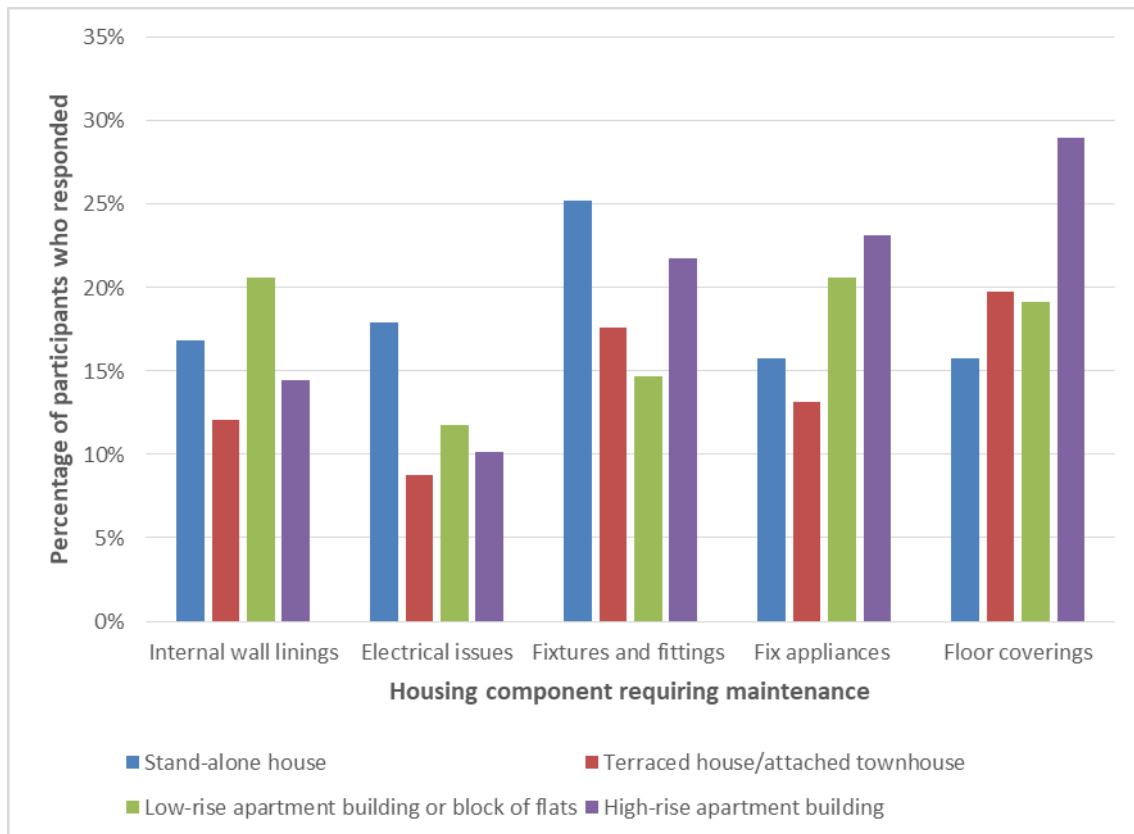


Figure 5. Percentage of participants reporting internal housing components currently in need of maintenance.

In general terms, responses demonstrated that residents of stand-alone housing had more areas of home maintenance need than their MDH counterparts. This was apparent in almost all housing components highlighted in the survey other than balustrades, fixed appliances and floor coverings. Between 12–15% of respondents from each typology also selected 'other' as a response. While residents of stand-alone housing who elaborated on this response identified remediation to features such as piles, external paving and reticulated gas, residents of MDH tended to identify commonly shared building features as requiring maintenance. Examples given include foundation repairs, repairs to shared basements and garages, external painting, fire escapes, external cladding, balcony rails and building air conditioning.

4.4.1 Age of dwelling

The greater current home maintenance need for stand-alone houses may reflect their advanced age in our sample compared to those of MDH (Figure 6). Of the 365 individuals who participated in the study, 75% said that they live within dwellings aged 11 years or older, while 28% said that they live in dwellings aged 31 years or older. Only 14% said that they live in dwellings aged 0–10 years. In addition, 22% of survey participants within stand-alone housing indicated that their dwelling is aged 61 years or over, which is a higher proportion than other housing typologies within the study.⁷ It is possible people within this group would have higher maintenance needs owing to a longer duration of environmental exposure and general wear and tear.

⁷ This compares to 5.4% for terraced housing, 12.9% for low-rise apartments and 4.2% for high-rise apartments.

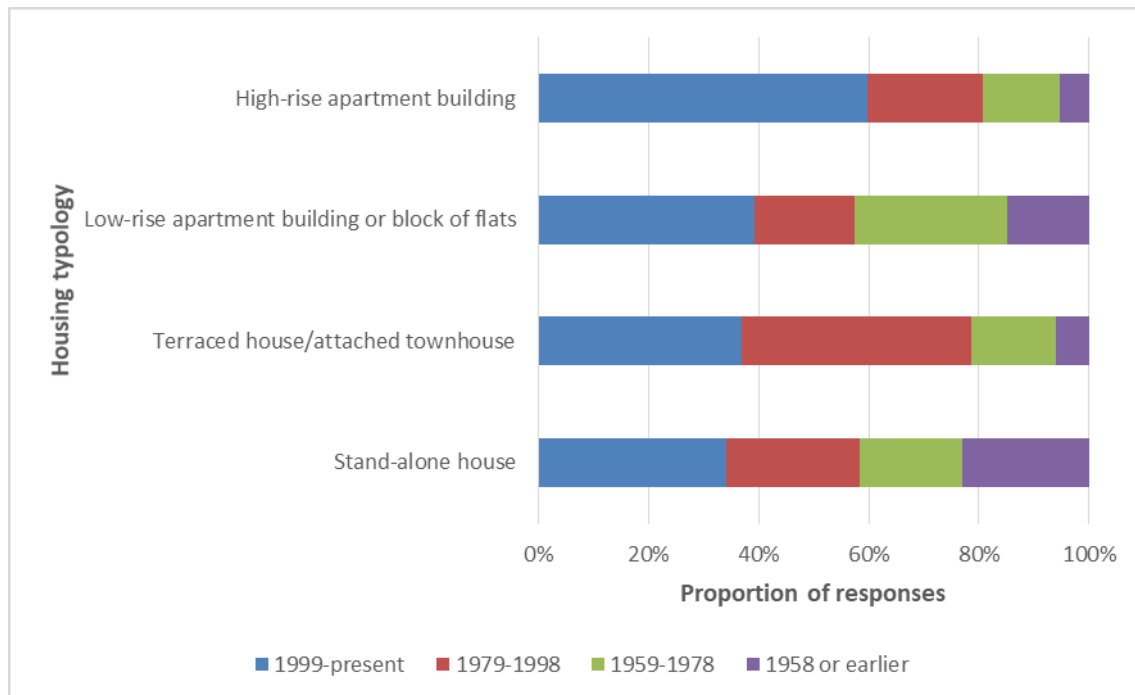


Figure 6. Percentage of homes in each age range by typology.

4.5 Frequency of home maintenance

To obtain a deeper understanding of residents' experiences of home maintenance, our survey asked participants 'How frequently are the following features of your house maintained (by you or someone else)'. The intention of this question was to identify whether there were certain components of MDH that stand out as being more commonly neglected than others.

Responses highlighted several issues that appear unique to residents of MDH. Most noticeable was the appearance of greater uncertainty amongst MDH residents regarding the frequency of home maintenance compared to residents of stand-alone housing. Figures 7–19 show that this uncertainty appears to be proportional to increased living density. This is possibly reflective of the higher proportion of renters within MDH compared to stand-alone housing within the sample (which is also reflected in nationwide statistics) who may accordingly pay less attention to maintenance frequency than owners. This finding may also reflect that some residents within MDH (whether they be owners or renters) feel disengaged from body corporate decisions about maintenance, especially in complexes with many residential units. It may also demonstrate that MDH residents are broadly unaware of their body corporate's long-term maintenance plan or that bodies corporate are legally obligated under the UTA to have developed one.⁸

A notable finding within the data is the proportion of people within each housing typology who reported that maintenance is never performed.

⁸ Under section 116 of the UTA, a body corporate must establish and regularly maintain a long-term maintenance plan covering a period of at least 10 years. The purpose of the plan is to identify future maintenance requirements and estimate the costs involved. It is also used to provide guidance to the body corporate when making annual maintenance decisions.



Figures 7–19 present results regarding how frequently participants or someone else maintains different dwelling components.

4.5.1 External housing features

Roof and external wall cladings

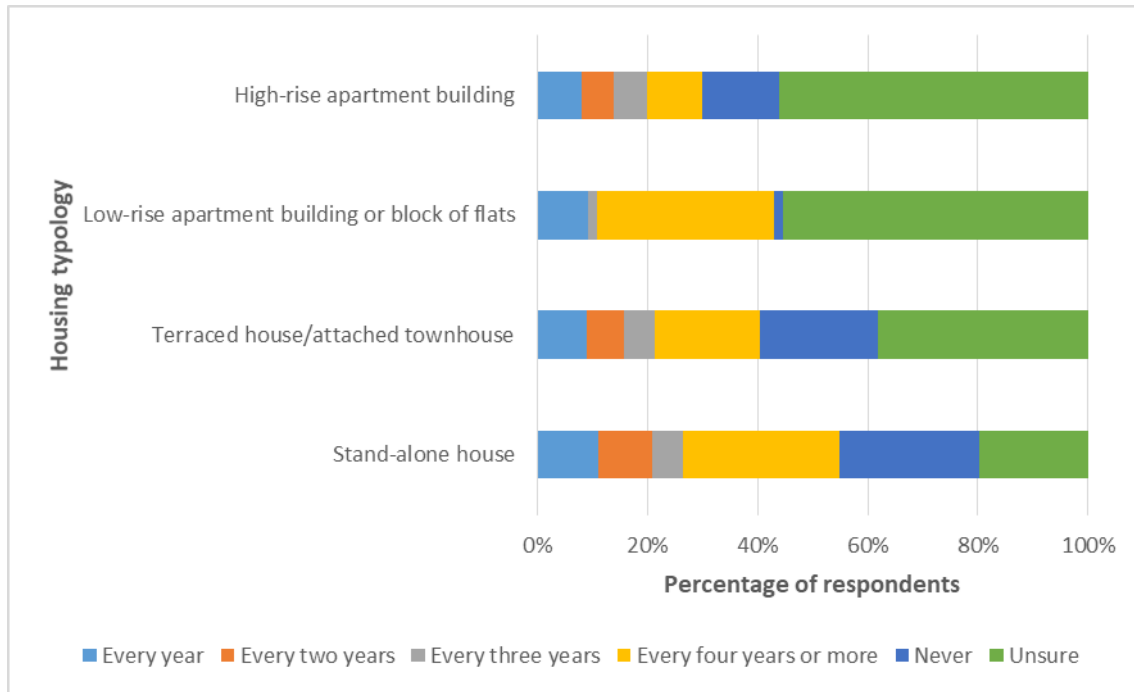


Figure 7. Frequency of roof cladding maintenance reported by participants.

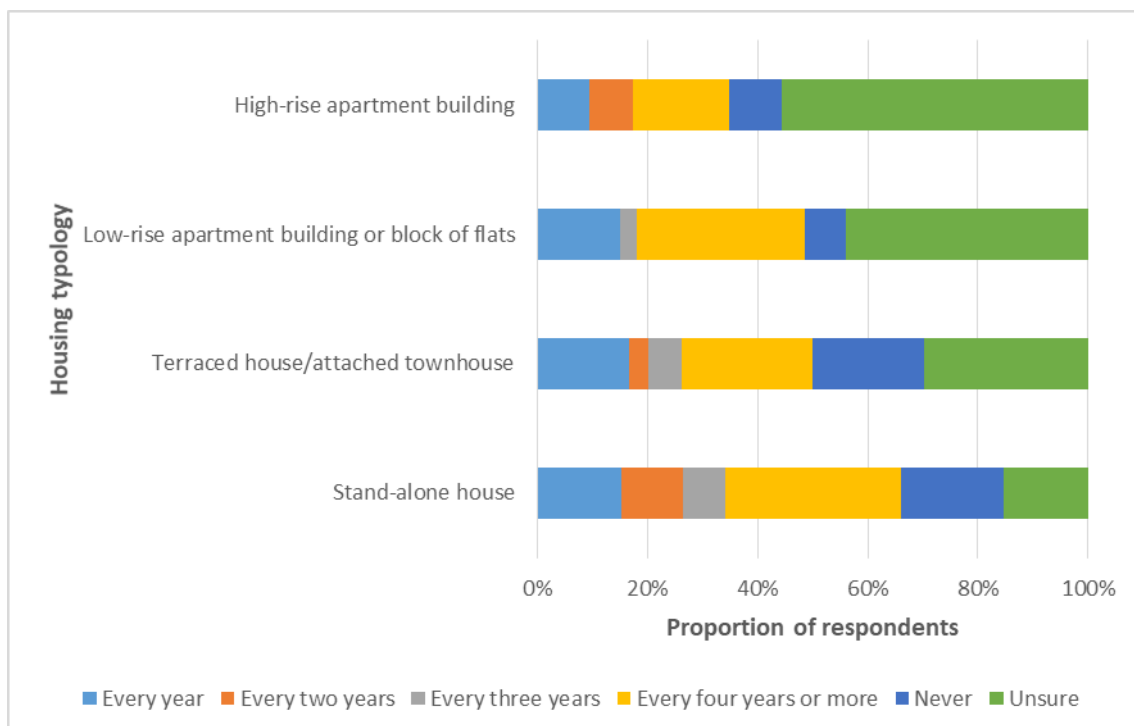


Figure 8. Frequency of external wall cladding maintenance reported by participants.



Decking and balustrades

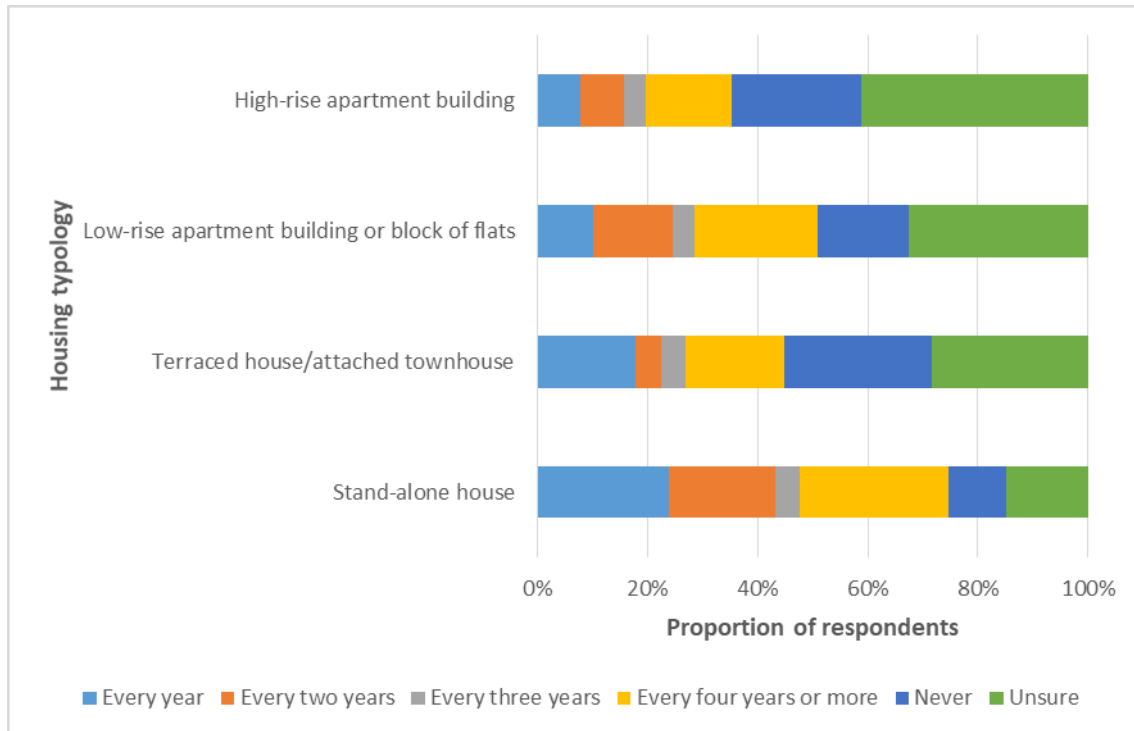


Figure 9. Frequency of deck maintenance reported by participants.

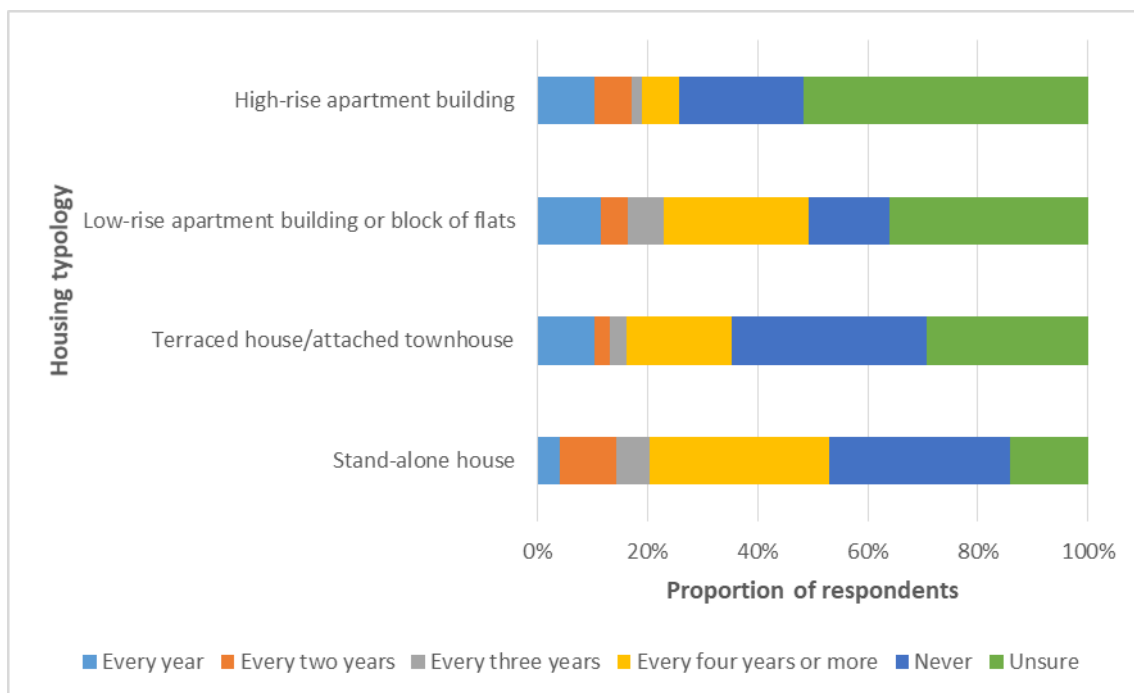


Figure 10. Frequency of balustrade maintenance reported by participants.



Gutters and spouting

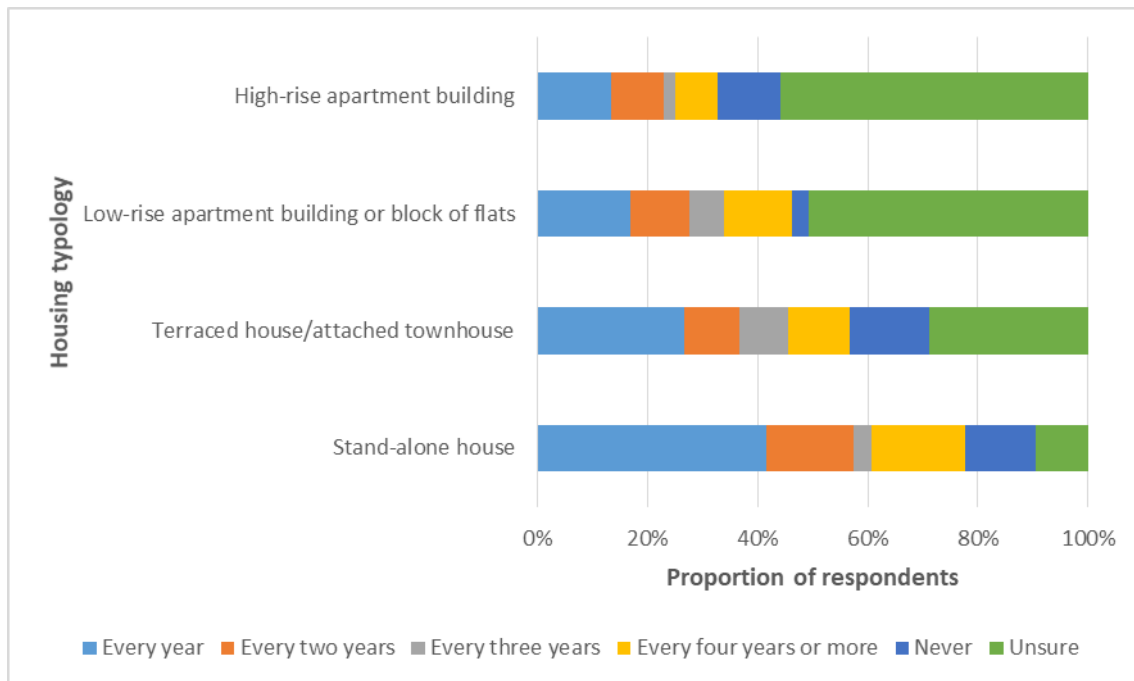


Figure 11. Frequency of gutter maintenance reported by participants.

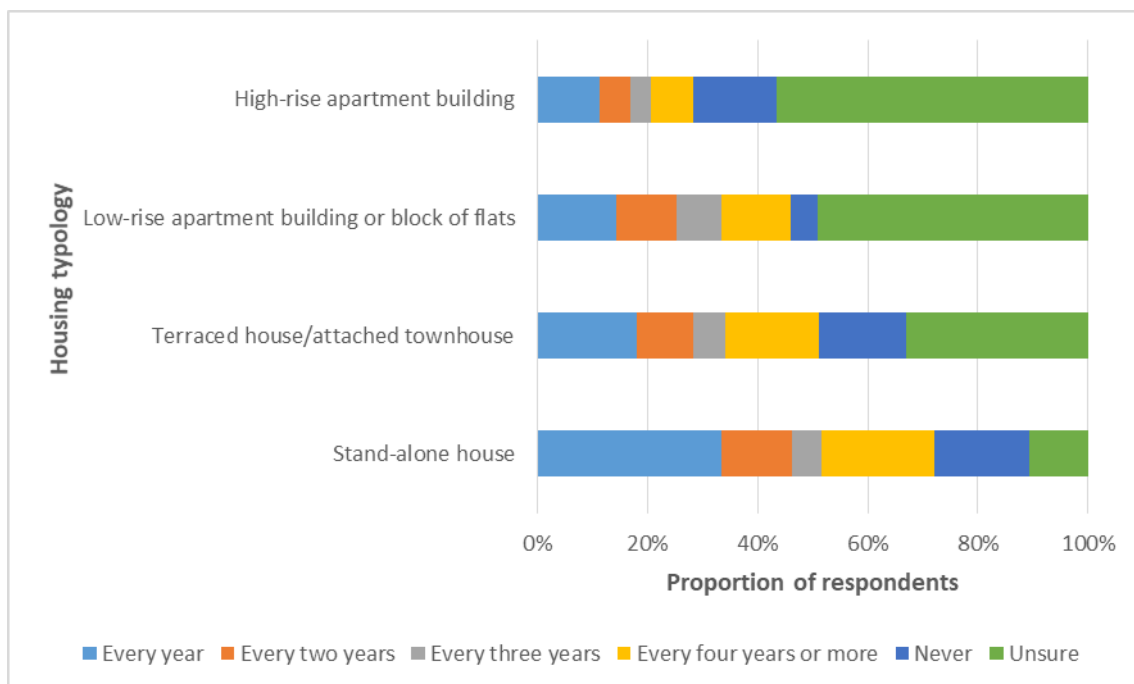


Figure 12. Frequency of spouting maintenance reported by participants.



Plumbing

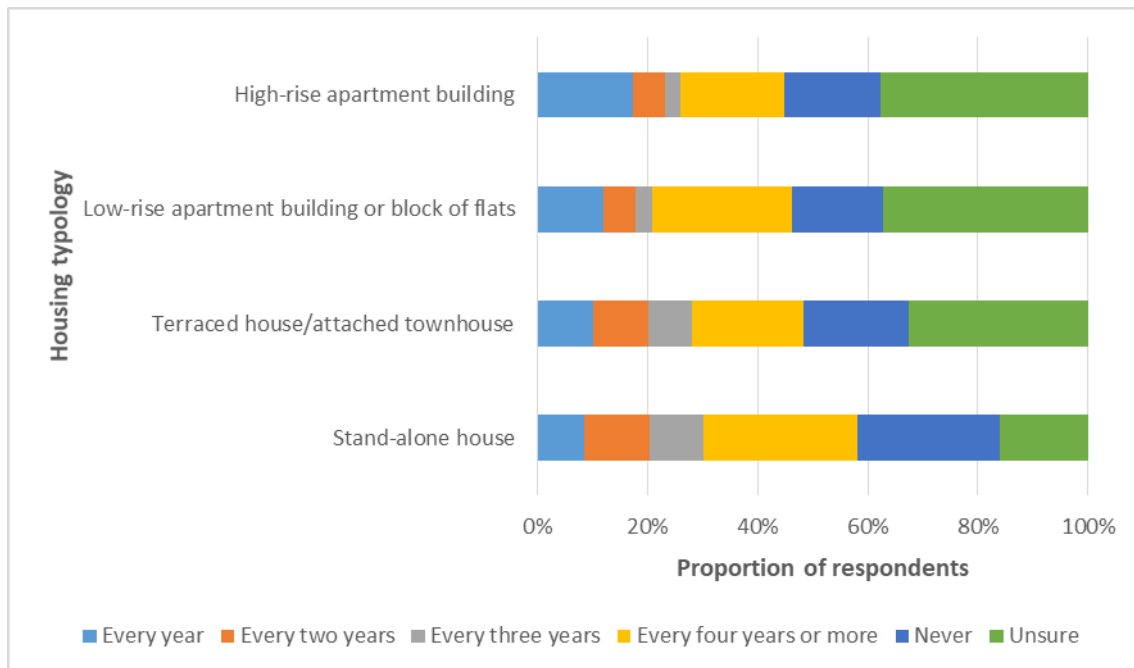


Figure 13. Frequency of plumbing maintenance reported by participants.

Windows

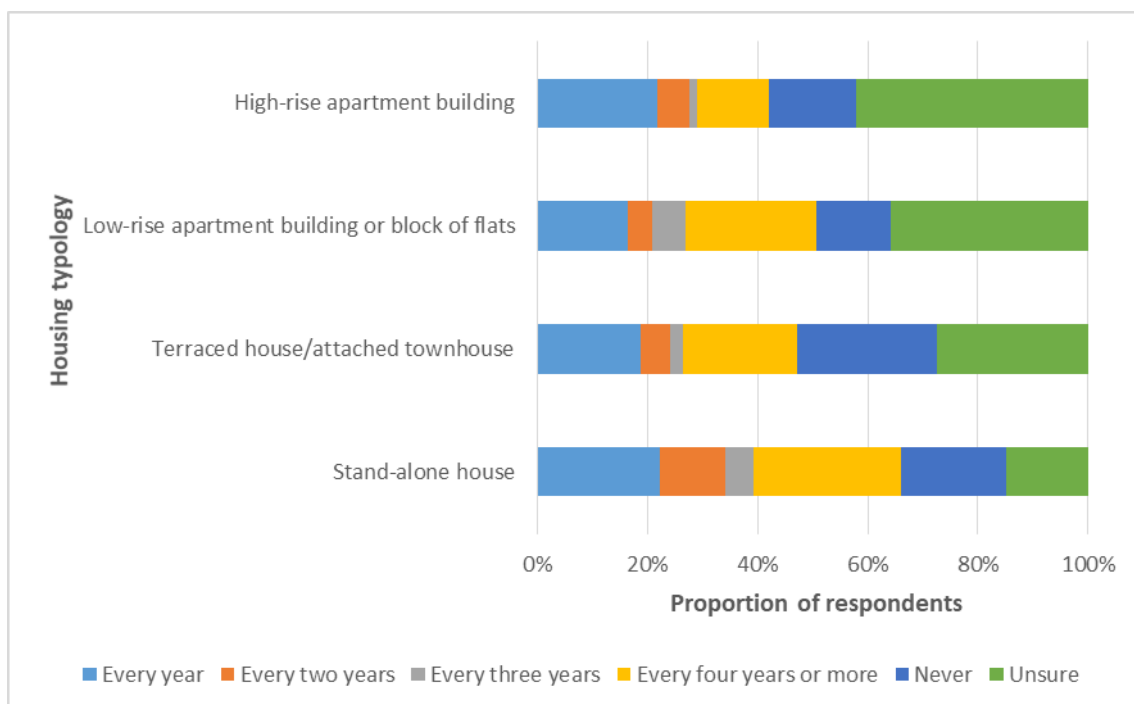


Figure 14. Frequency of window maintenance reported by participants.



4.5.2 Internal housing features

Internal wall linings

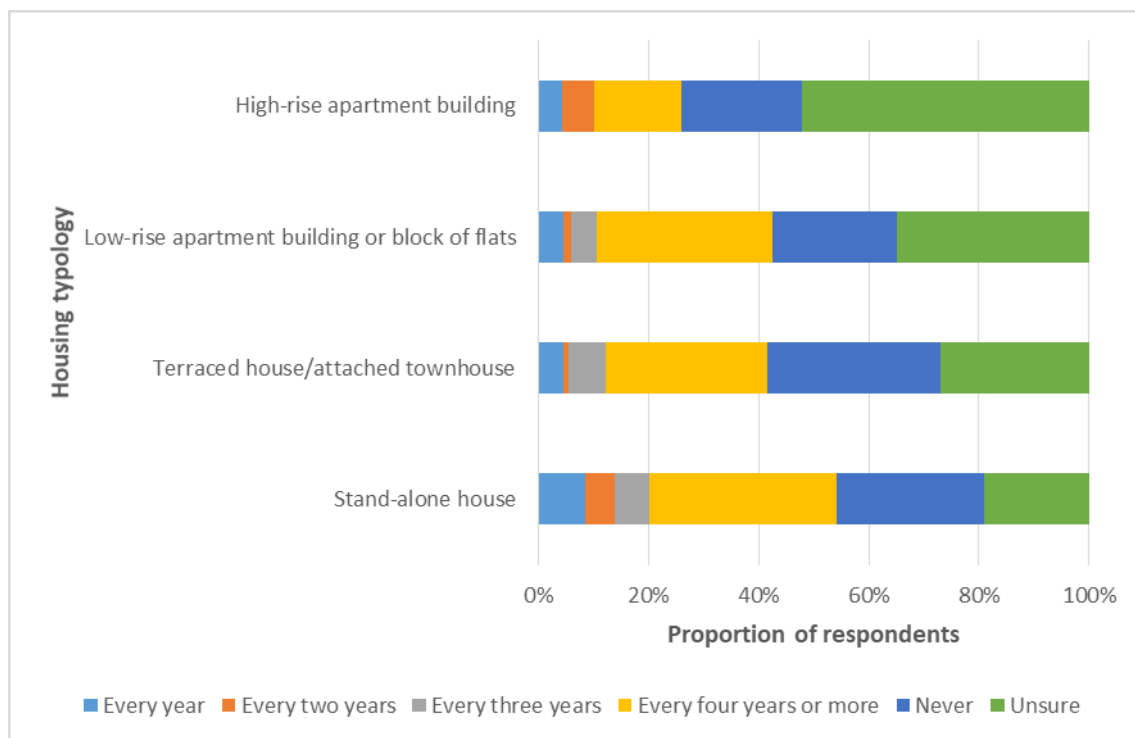


Figure 15. Frequency of internal wall lining maintenance reported by participants.

Fixed appliances, fixtures and fittings

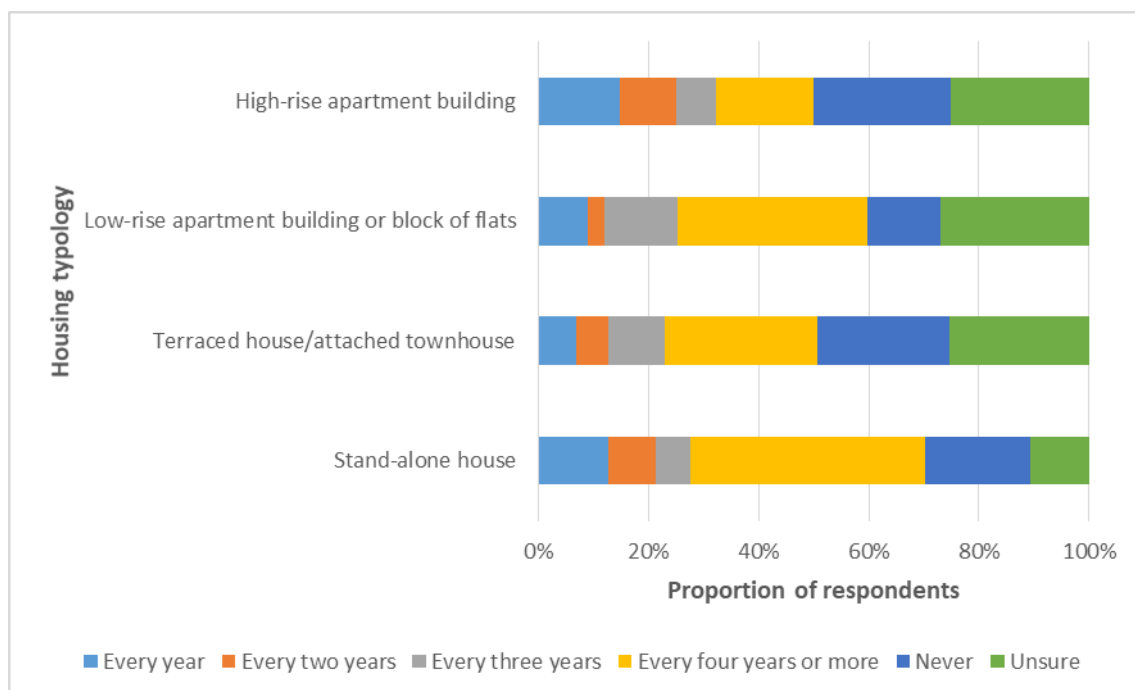


Figure 16. Frequency of maintenance to fixed appliances reported by participants.

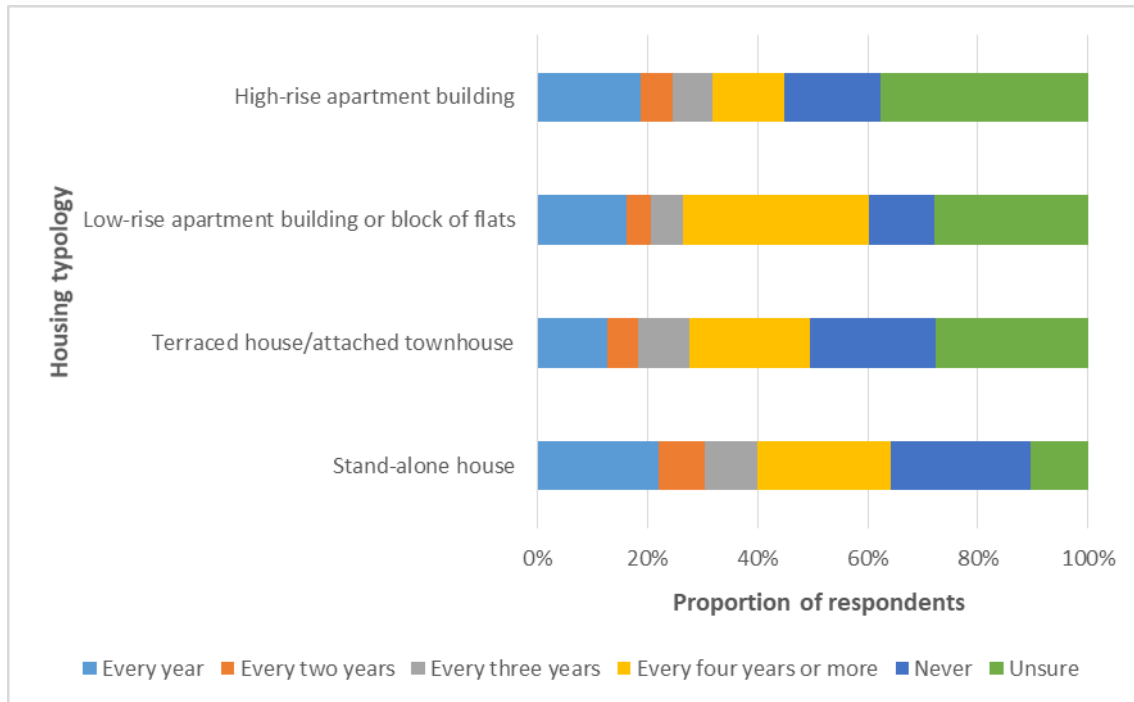


Figure 17. Frequency of maintenance to fixtures and fitting reported by participants.

Electrical issues

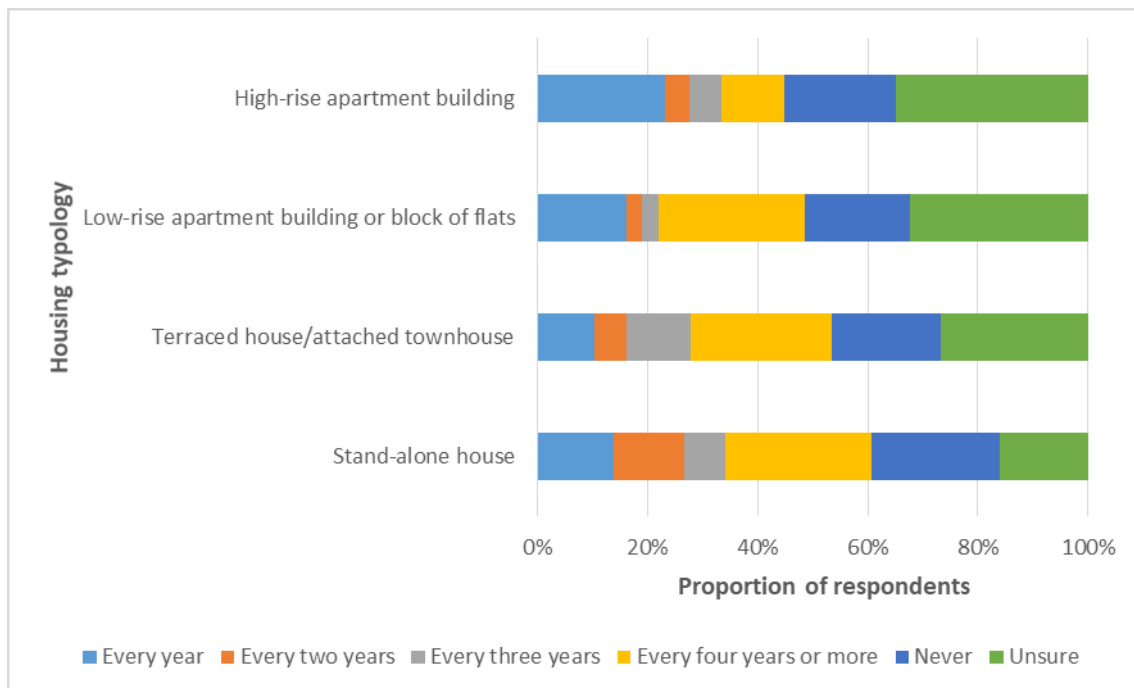


Figure 18. Frequency of maintenance to resolve electrical issues reported by participants.



Floor coverings

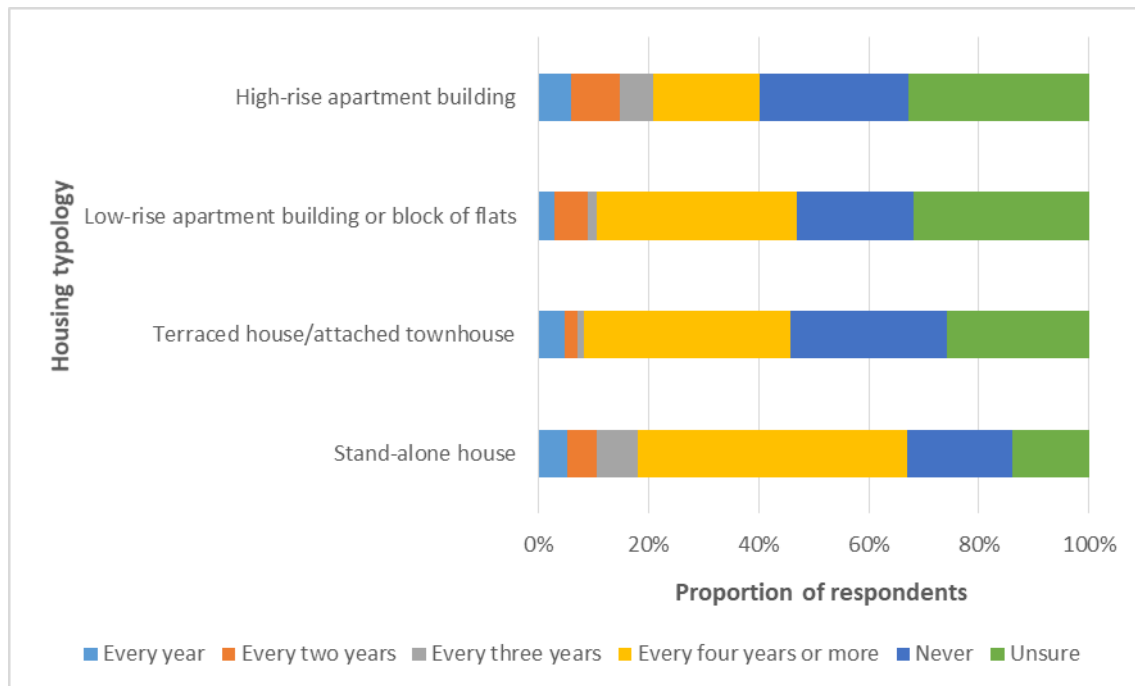


Figure 19. Frequency of maintenance to floor coverings reported by participants.

4.5.3 Understanding the data

While survey responses to questions about maintenance frequency did not necessarily highlight certain components of MDH that stand out as being difficult to maintain, it is insightful that uncertainty about maintenance frequency appears proportional to the degree of residential density. The green sections of the bars in Figures 7–19 show the percentage of participants who did not know how often that component of their home was maintained. In all graphs, the highest percentage of unsure participants was in the higher-density housing typologies. It is possible that this finding is explained by the higher proportion of renters within MDH compared to stand-alone housing within the sample (54% for MDH and 20% for stand-alone housing) who may be less invested in noting maintenance frequency than owners. This finding may also reflect a level of detachment amongst some MDH residents (whether they are owners or renters) from body corporate decisions about maintenance (particularly in larger complexes) because such decisions are less likely to have a direct impact.

Another possible explanation for this finding relates to the duration of occupational tenure for the different segments of our sample. When survey participants were asked how long they had lived in their home, residents of stand-alone housing were the most intransient, with 45% of this group stating they had resided in their homes for 7 years or more (Figure 20). In comparison, MDH residents generally reported living in their dwellings for much shorter durations. This was especially so for residents of high-rise apartments, who were more likely than any other typology to have resided in their dwelling for 0–4 years. The data also indicates that housing transience within the sample is proportional to intensification, with the length of tenure declining relative to housing density. This suggests that uncertainty about maintenance frequency amongst residents of MDH may also be explained by this group's shorter occupational tenure, understandably making it difficult for them to identify how frequently certain components of their dwelling undergo maintenance.

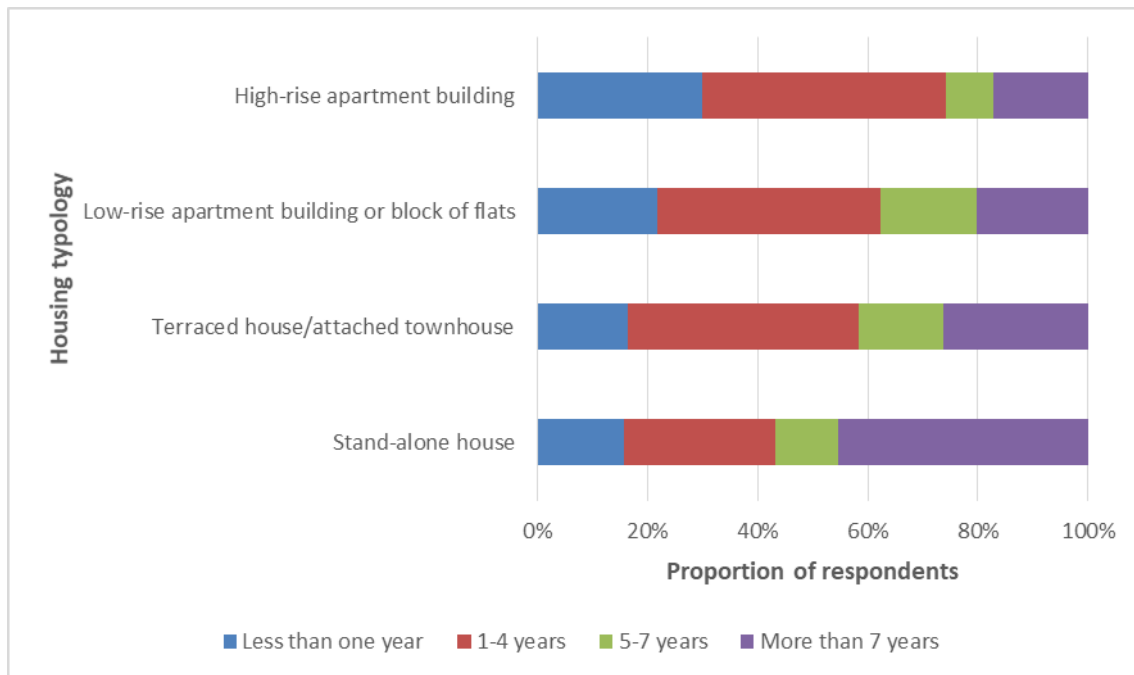


Figure 20. Occupational tenure per typology.

This explanation is consistent with past BRANZ research (Bryson, 2017), which showed a strong preference amongst a sample of the general population to live within stand-alone housing as opposed to MDH typologies. This might indicate that MDH is seen as a temporary housing option for many people during their adult lives, with stand-alone housing being the end goal. Further consideration of the data indicates that older age groups aged 35+ within the sample are more prevalent within lower-density dwellings, while low-rise and high-rise apartments are more commonly dominated by people aged 18–34 (Figure 21).

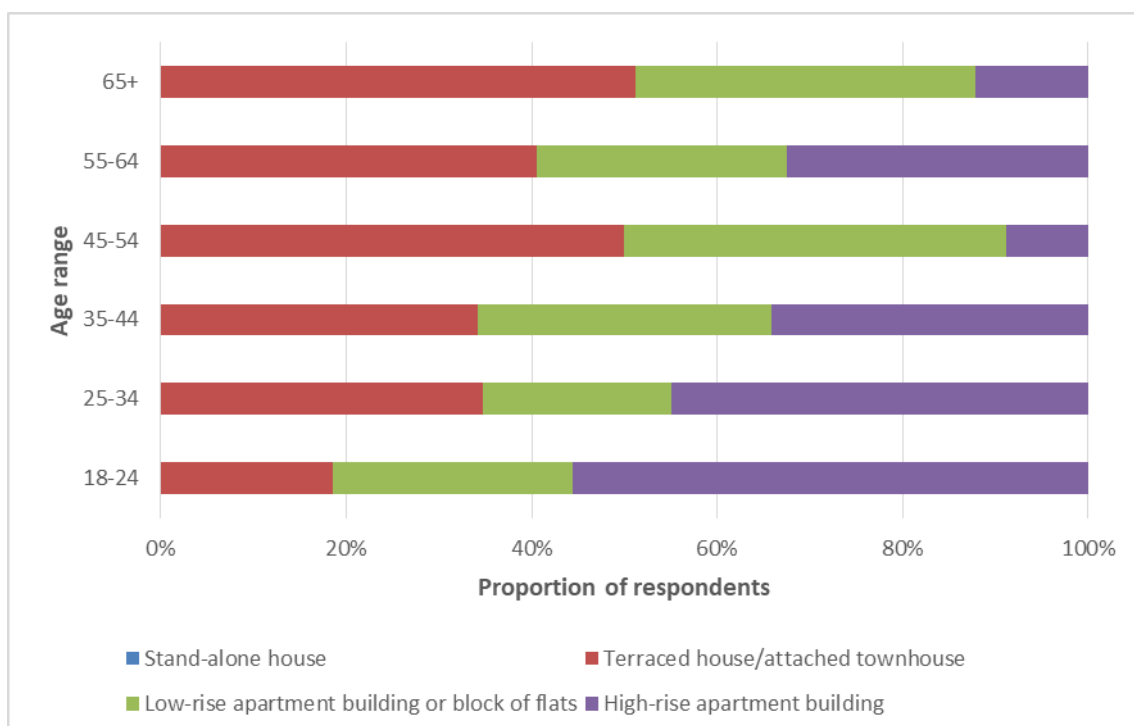


Figure 21. Percentage of participants in each age range by housing typology.



Coupled with data regarding ownership status and duration of tenure, this paints a picture of the typical inhabitants of higher-density dwellings within this study as relatively young, mainly renters and unlikely to remain as an occupant of their home for long periods (meaning that they possibly have less knowledge about their apartment's maintenance history). Compared to the generally older, more established occupants of lower-density homes within the sample, this group may have less agency regarding home maintenance and be more dependent on landlords and bodies corporate when maintenance is required. With housing data from the 2018 Census showing that renters also comprise the majority of MDH residents within in 1–6-storey MDH buildings, such dependency on others to make maintenance decisions is likely to be generalisable across the New Zealand population.

Data regarding maintenance frequency also indicates a sizeable proportion of people within each housing typology who report that maintenance on some components of their home is never performed. This is reflected to varying degrees in responses across all housing components, which could indicate the presence of barriers to home maintenance that transcend housing type.

4.6 Barriers to home maintenance

4.6.1 What stops people from maintaining their homes?

To understand the barriers to home maintenance for people within MDH, survey participants were asked 'What stops you from maintaining your home?' Barriers to home maintenance are shown in Figure 22. For participants who responded to this question, limited financial means was the main explanation given and was a common response for people across all housing typologies. 'Too busy' and 'lack of maintenance knowledge' were also common explanations. However, lack of maintenance knowledge appears to disproportionately affect residents of MDH within the sample. This is an interesting finding and appears to correspond with survey data indicating that residents of MDH have a strong interest in accessing more freely available information about home maintenance (see Appendix B). Poor health also registered as a constraint to home maintenance but was not as common for people within MDH than those within stand-alone housing.

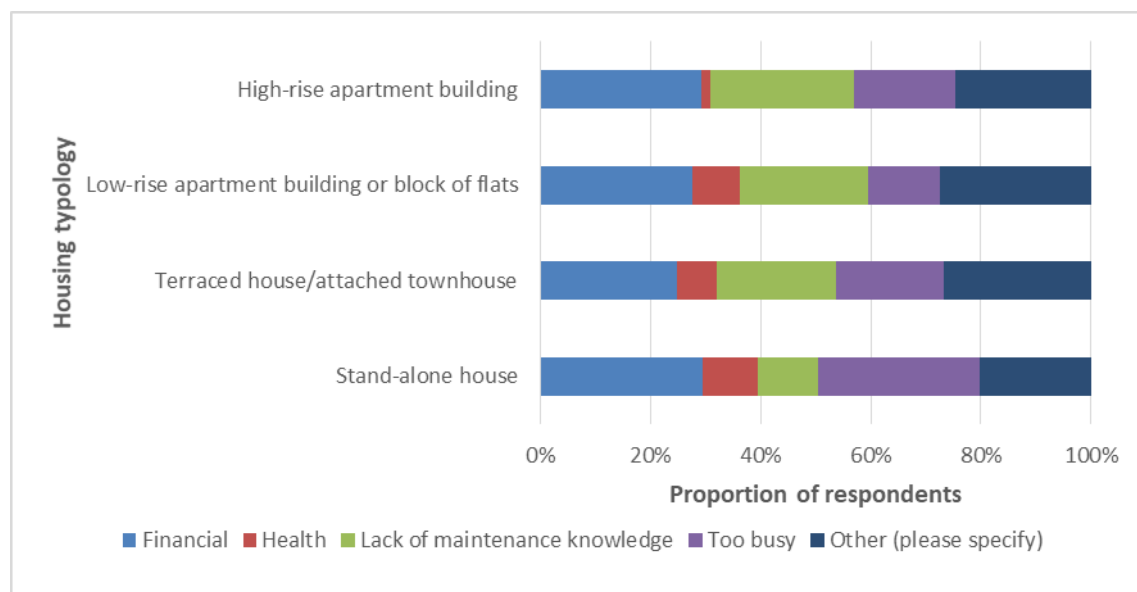


Figure 22. Barriers to home maintenance reported by participants.



Outside of the four barriers to home maintenance described, nearly 87 people within the sample (24% of participants) chose 'other'. Within this category, residents from stand-alone housing noted that difficulties finding a tradesperson to undertake home maintenance was a common problem. Others from this typology considered home maintenance to be too much of a chore and accordingly gave it a low priority compared to other problems that competed for their money and attention.

Residents of MDH who chose 'other' as their response typically elaborated issues associated with accessibility, cost and health and safety. This was exemplified in responses that expressed that building height can be an impediment to external building maintenance. For some, this related to the prohibitive costs associated with the health and safety requirements for external contractors who often need vast scaffolding structures and edge protection to be erected before they undertake their work.

Some also blamed bodies corporate as a barrier to home maintenance. Several comments alluded to bodies corporate being dysfunctional and lacking the organisation required to facilitate the maintenance of shared building features.

4.6.2 Awareness of maintenance costs

To further understand potential barriers to home maintenance, participants were asked 'Did you consider home maintenance costs before purchasing your home?' While most participants did consider the cost of maintenance, an important minority did not.

This reinforces the view that financing home maintenance can be problematic for some MDH residents, as well as residents of stand-alone housing, because it represents a cost that extends beyond their budget (Figure 23).

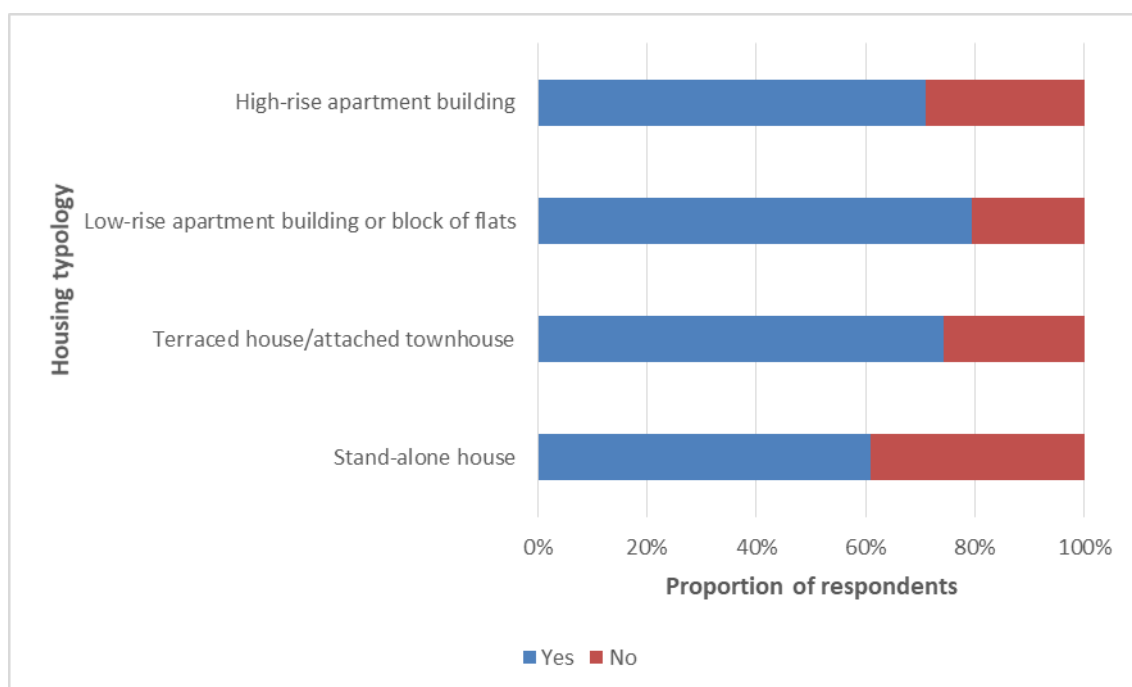


Figure 23. Proportion of respondents who considered maintenance costs prior to purchasing their home.



4.7 Residents' perceptions of landlords and bodies corporate

4.7.1 Understanding of maintenance responsibilities

Some residents of MDH have minimal autonomy regarding maintenance decisions, regardless of their financial position. This may be because they rent their dwelling from someone else or because many of their maintenance needs must be deferred to a collective decision-making body for the residential complex in which they live.

Accordingly, maintenance of MDH dwellings can be impacted by the relationships between occupants of MDH units and those with broader decision-making powers. Under the UTA, these relationships are structured by responsibilities specific to each party, which give landlords and bodies corporate specific decision-making powers beyond those of tenants.

This management structure and the distribution of power within it raises questions about whether residents of MDH are aware of the extent of their personal agency and the responsibilities held by other parties. Seeking to understand this, survey participants were asked 'If you have a landlord or body corporate, are you aware of what their maintenance responsibilities are?' (Figure 24).

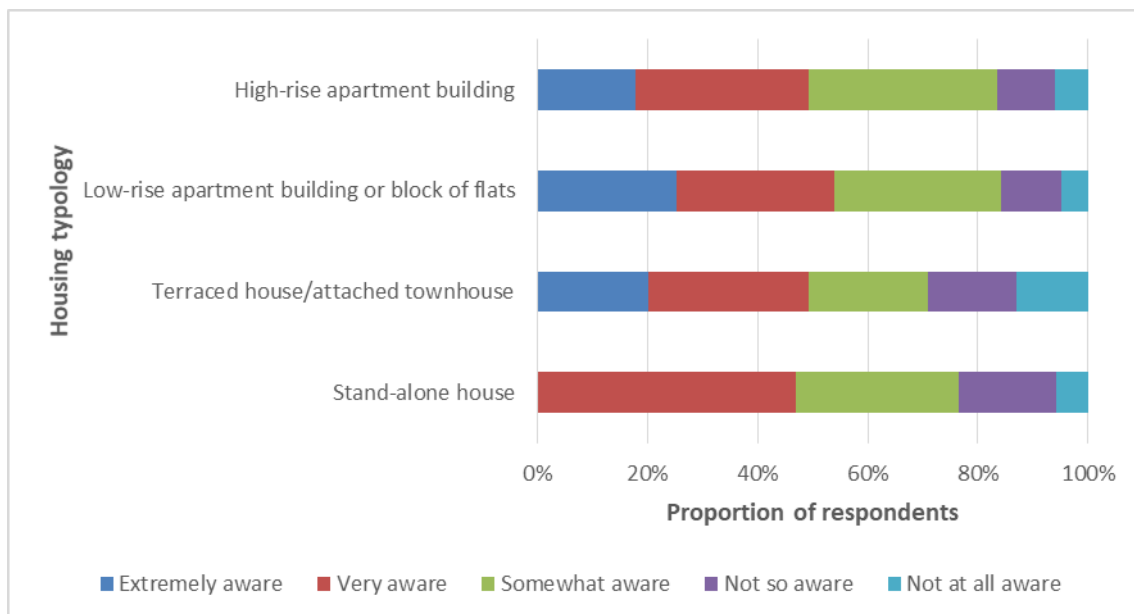


Figure 24. Landlord or body corporate maintenance responsibilities.

Although this question was not applicable to many participants (especially those who own their own stand-alone home), most survey participants who answered responded that they are aware, very aware or extremely aware of their landlord or body corporate's maintenance responsibilities. However, a small portion were not confident in their knowledge, with the largest portion of these residing within terraced housing.⁹ This is consistent with previous MDH research (see section 3) that suggests that MDH residents can be uncertain about how responsibilities for the management of repairs and low-level maintenance is demarcated.

⁹ It is important to note that not all terraced housing will have a body corporate.



4.7.2 Reluctance to contact landlords or bodies corporate when maintenance is required

Research participants were also asked whether they contact their landlord or body corporate straight away when maintenance is required.

Of those who responded,¹⁰ most (61%) stated that they do contact their landlord or body corporate straight away and that they are quick to respond (Figure 25). However, a smaller percentage of participants from each housing typology (27%) also said that, while they do contact their landlord or body corporate, they are slow to respond. 12% of those who responded to this question said that they do not contact their landlord or body corporate either out of fear of being evicted, because it would result in additional costs or simply because it would be too much hassle. Residents of MDH dominated these responses.

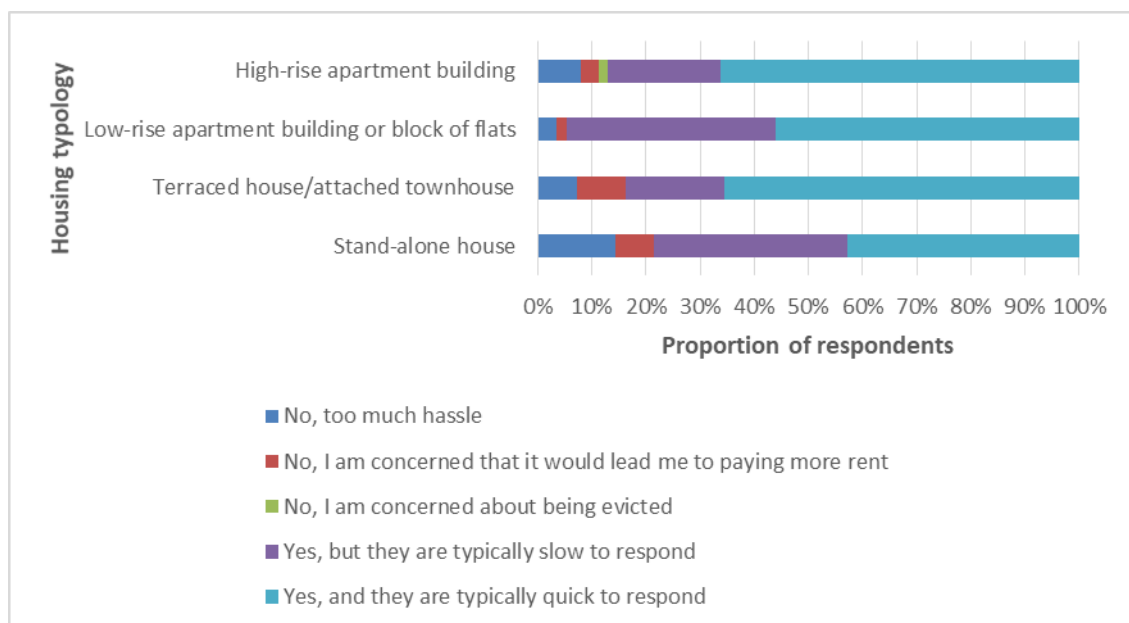


Figure 25. Do you contact your landlord or body corporate straight away when maintenance is required?

4.7.3 Landlord and body corporate effectiveness

Research participants who had a landlord or body corporate were also asked for their views on whether their landlord or body corporate effectively maintained the property in which they live. While most participants who answered this question felt that their landlord or body corporate effectively maintained their dwelling, a moderate proportion replied to the contrary. This included 15–20% of residents within MDH (Figure 26).

¹⁰ Survey participants who are owners of stand-alone housing were able to skip this question.

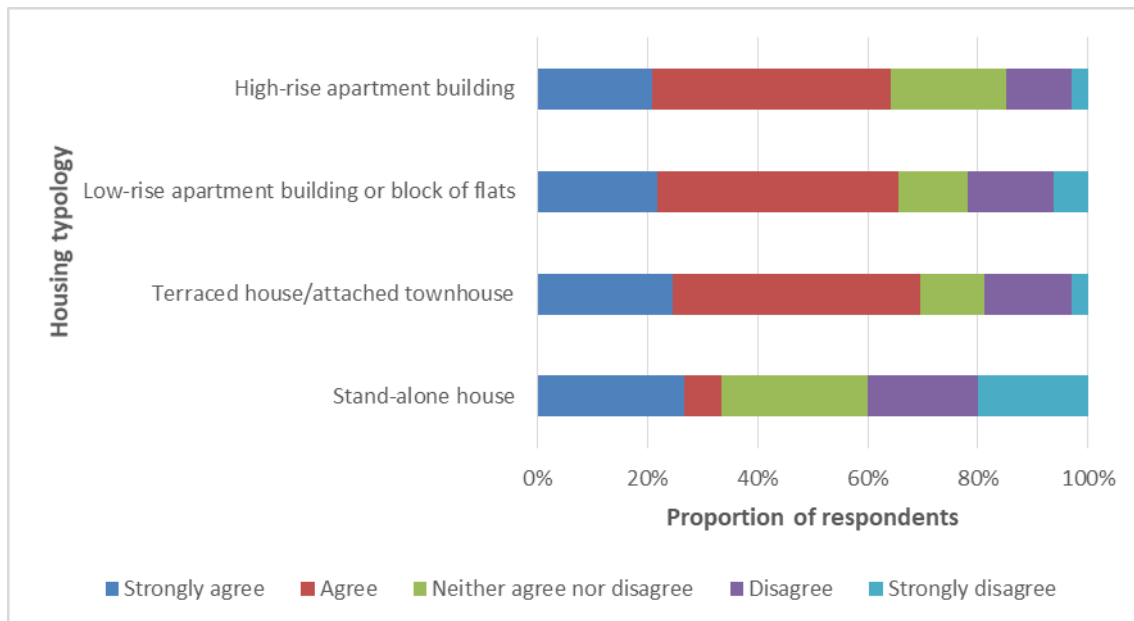


Figure 26. My landlord or body corporate effectively maintains the building I live in.

These figures provide insight into the perspectives of residents who rely to some degree on the actions of other parties for home maintenance to be performed. While a large proportion of participants felt their landlord or body corporate does effectively maintain the dwelling in which they live (57% of total participants who responded to this question), a smaller percentage (24% of total participants who responded to this question) disagreed or strongly disagreed with this statement.

This suggests that a small proportion of our research sample who either rely entirely on external parties to undertake maintenance or who share this responsibility with their body corporate feel that they are unable to depend on others to adequately fulfil their maintenance duties.

This reflects a challenge for some MDH residents where responsibility for home maintenance is shared between residents and bodies corporate or is owned entirely by other parties (i.e. a landlord and body corporate). Consistent with the literature, this shows that complications associated with the upkeep of MDH can extend beyond its physical form because, in some cases, effective maintenance of these buildings requires agreement between different stakeholder groups. This clearly forms a barrier to maintenance for some MDH residents who depend on others for maintenance decisions and reflects a degree of powerlessness in the face of another party's ineffectiveness.



5. Conclusion

This report investigated MDH residents' experiences of home maintenance. The study sought to present different perspectives of MDH from those previously heard – one that represents views generated from lived experience. Research of this kind is important because understanding barriers to MDH maintenance from the perspectives of residents may help BRANZ address gaps in knowledge for owners and bodies corporate around the maintenance requirements of MDH buildings.

Undertaking this exercise, BRANZ researchers sought to identify how maintenance needs are perceived by residents within three different MDH typologies. Residents of stand-alone houses were included in the survey as a control group, providing a benchmark from which BRANZ could establish whether there are certain maintenance issues more commonly experienced by MDH residents.

The intention of this research was to establish whether residents of MDH experience a specific set of home maintenance issues. This was investigated on two fronts: challenges relating to the physical structure of the dwelling and challenges relating to the dependencies between stakeholders during the formation of maintenance decisions.

5.1 Summary of findings

5.1.1 Comparing MDH and stand-alone housing responses

Regarding challenges relating to the physical structure of MDH, an analysis of survey responses suggests that residents of stand-alone housing within our sample reported more areas of identifiable home maintenance need than their MDH counterparts. This was evident in relation to most dwelling components investigated. This may be because homeowners are more likely to be aware of their property's maintenance needs. However, as our data indicates, it is also possible that this partly owes to the relatively older age of stand-alone dwellings compared to that of MDH within our sample, which means they are likely to experience greater deterioration from environmental exposure.

However, the research did establish that residents of MDH generally exhibit much greater uncertainty about how often maintenance is being performed and that this uncertainty is largely proportional to increased living density. This may indicate that some residents within MDH (whether they own or rent their dwelling) feel disengaged from body corporate decisions about maintenance because they are not directly relevant to their everyday lives. However, this may additionally owe to the difference in demographic between residents of MDH and stand-alone housing within the sample. MDH residents within the sample were generally young, relatively transient and generally rented their dwelling (and therefore potentially less cognisant of some maintenance needs), while residents of stand-alone housing were generally older, owned their property and had a longer housing tenure.

A small proportion of survey participants from each typology also indicated that components of their property are never maintained. This might suggest the influence of barriers to home maintenance that are independent of housing type. This is reinforced by survey feedback suggesting that limited financial means, a lack of time and a lack of maintenance knowledge are key barriers to MDH home maintenance, which are issues that can affect all people.



Although there appear to be universal barriers to maintenance within our sample, there appear to be barriers more commonly experienced by residents of MDH. For instance, survey responses suggest that a lack of maintenance knowledge disproportionately affects MDH residents compared to those within stand-alone housing. Some residents also commented that issues associated with accessibility, cost and health and safety also act as specific barriers to maintenance within MDH typologies and that this relates to the costs associated with the health and safety requirements for external contractors to work at height.

Survey responses also suggest that home maintenance within MDH can be complex because of the dependencies that exist between stakeholder groups. Compared to owner-occupiers within stand-alone housing, MDH residents appear to have less autonomy regarding some maintenance decisions. For unit owners, this is often because their maintenance needs relate to shared building features, which must be deferred to a body corporate or body corporate manager who may not perceive the maintenance requests with equal urgency. As this study suggests, this tension can be amplified for renters within MDH settings where the decision-making structure is tiered. While this structure necessitates negotiation and compromise for unit owners, it creates an especially challenging environment for tenants who are often twice removed from maintenance decisions, resulting in less personal agency and greater reliance on others. This is pertinent in cases where there is perceived inaction by other parties in response to raised issues.

Such concerns were reflected in responses where residents identified bodies corporate and landlords as barriers to maintenance of MDH, especially in situations where residents fear raising their maintenance concerns would result in eviction or an increase in living costs (from an increase in rent or in body corporate fees). In turn, this suggests that landlords and bodies corporate may in some cases be unaware of maintenance issues owing to residents or tenants failing to communicate the existence of problems. Such challenging relationships point to obstacles to MDH home maintenance that extend beyond its physical form.

5.1.2 Relevance of the research findings to the MDH literature

This finding parallels aspects of the existing MDH literature. In Australia, Palmer (2014) posits that the marginalisation of residents' perspectives regarding MDH issues risks leading to the repetition of building performance issues and restricts knowledge and influence to industry stakeholders with the greatest political capital. In her view, this potentially allows discussions around MDH maintenance to be dominated by individuals who have a different set of interests to those who live in such dwellings.

This is relevant to the present study because renters, who have less agency in maintenance decisions than owner-occupiers, are highly represented within our MDH sample and are shown within Census 2018 housing figures to comprise the majority of MDH residents nationwide. This suggests that, while this group is disproportionately affected by maintenance decisions, they have less influence on the formation of these decisions and the urgency of their enactment. Renters within MDH are therefore vulnerable to the inaction of others and to their needs being subjugated by stakeholders with different priorities.



5.2 Recommendations

Digital information guides for MDH unit owners

This study raises questions about how residents of MDH can be better enabled to take care of their homes. The research findings suggest that there are several obstacles to maintenance that residents of MDH face and that a lack of maintenance knowledge is the most substantial amongst them.

To gauge interest in whether residents of MDH seek further information about MDH home maintenance, a question was included in the survey asking study participants whether they would like more freely available information about how to maintain their home. Out of the 228 MDH residents who answered this question, 61% answered yes. Of these, the majority stated that they would like this information to be communicated digitally, either through a dedicated website or an online app (see Appendix B).

This suggests that there may be value in BRANZ or another provider of building information further developing its digital profile regarding MDH home maintenance advice.

The research also found that renters within MDH can be vulnerable to landlord or body corporate maintenance inaction. Accordingly, providing freely available and easily accessible information to renters within MDH about their rights and the obligations of landlords and bodies corporate in relation to maintenance might empower them to be proactive in raising their concerns.

More research understanding the maintenance concerns of MDH tenants

This research has also established a risk of disconnect between decision makers (MDH unit owners and bodies corporate) and residents (unit owners and tenants) about maintenance needs within MDH and the urgency afforded to them. There is greater risk for this disconnect to be more pronounced for renters because they must navigate a tiered decision-making structure. As discussed, tenants may also be fearful of raising maintenance concerns owing to fear of reprisal.

This suggests that there is an opportunity for further research that gives renters within MDH a greater voice about their maintenance concerns. There is scope for the findings of such research to be disseminated among bodies corporate and landlords so they, as key decision makers, become more aware of tenants' common maintenance concerns and their barriers to reporting maintenance issues.



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Appendix A: Survey

Download a PDF of the [New Zealand Home Maintenance Survey](#).



Appendix B: Demand for information regarding MDH home maintenance

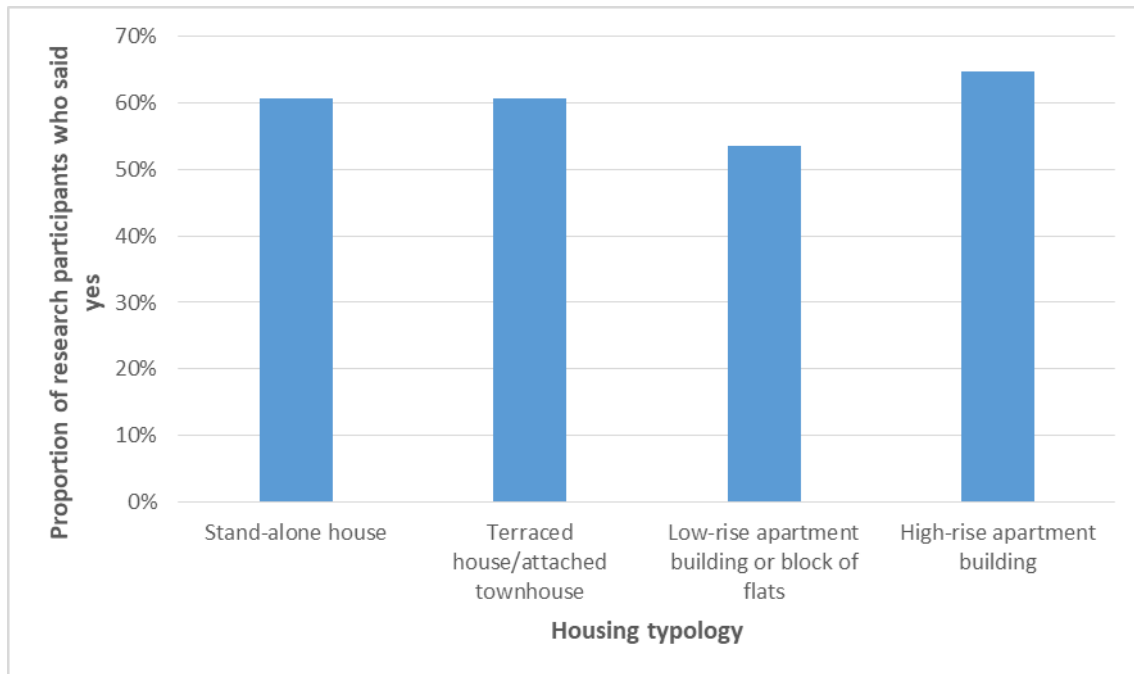


Figure 27. Proportion of research participants who indicated they would like more freely available information about how to maintain their home.

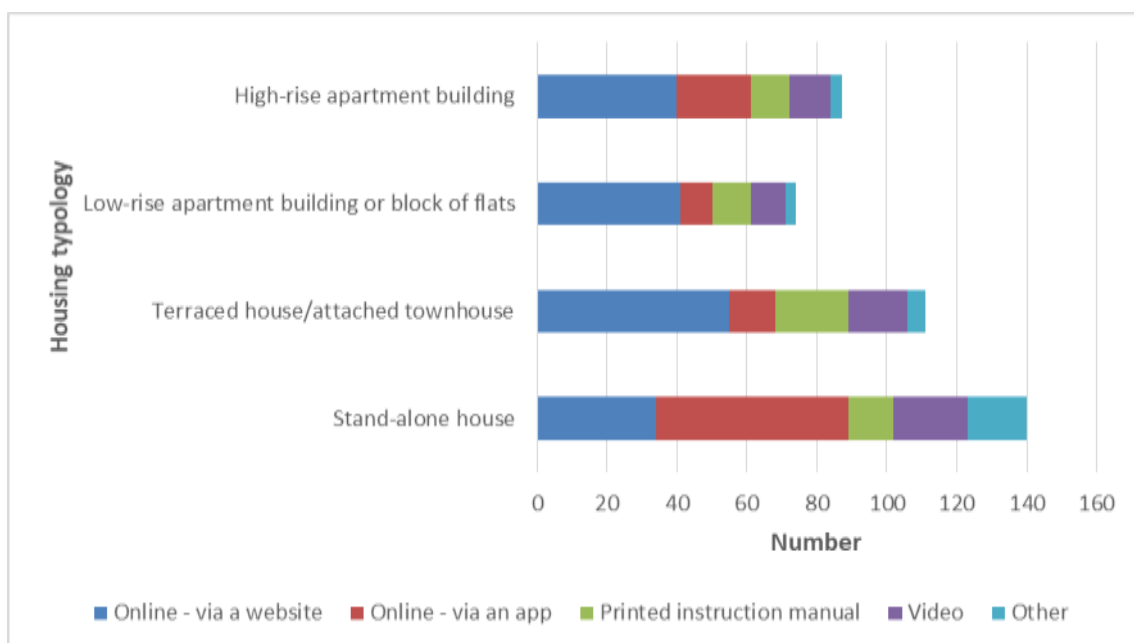


Figure 28. Forms in which research participants would like this information to be communicated.