

FALE TUPU

An Indigenous Toolkit for Designing Culturally Grounded Living
Environments with Pasifika Communities in Aotearoa

Amelia Lee Chee | 2025

An exegesis submitted to Auckland
University of Technology in partial
fulfillment of the requirements for the
degree of Masters of Architecture
(Professional).



Figure 1: Entering pilot site. Car park being used for a social gathering.

Abstract

Fale Tupu is a design resource developed to address the enduring gap between Pasifika housing aspirations and the limited tools available to translate them into built form. It emerges as the primary output of this practice-led research project that reimagines how community housing for Pasifika families can be culturally grounded, adaptable and regenerative. Designed for use within the social housing sector, *Fale Tupu* provides a design toolkit through which cultural values can be directly embedded into design and delivery.

The toolkit comprises four interconnected tools that guide housing providers and practitioners from principle to practice. The Maumoana Framework establishes a cultural–ecological compass, ensuring each project stage is grounded in reciprocity, kinship and care for place. *Fale* (house) Typologies, the incremental housing model, enables homes to expand and contract over time, reflecting the dynamic needs of multigenerational families. The Material Palette supports design decisions through affordable, durable, and low-maintenance options, alongside regenerative alternatives where budgets allow. Finally, Communal Wellbeing Spaces illustrate how homes may adapt and evolve over time to fit the needs of our *aiga* (families). Together, these tools translate *Te Moana-nui-a-Kiwa* (the Great Pacific Ocean) values into practice-ready design instruments for housing providers.

Situated within the context of Pasifika housing providers (PHPs), *Fale Tupu* responds to a sector that operates at the intersection of cultural knowledge and state regulation. PHPs deliver social housing and wraparound wellbeing services yet remain constrained by policy, funding, and a lack of culturally specific design resources. This research directly addresses the absence of a design resource by offering tools that PHPs can use to guide architects, planners, and contractors while maintaining cultural integrity and community accountability.

At a broader level, *Fale Tupu* contributes to both architectural research and practice by operationalising a Moananui-centred methodology. It advances the academic discourse on Indigenous regenerative design by demonstrating how theory can be transformed into actionable tools, bridging methodological innovation with spatial application. In practice, it offers a replicable framework through which housing providers can advocate for, design, and deliver culturally aligned, future-focused homes. *Fale Tupu* ultimately reframes housing as a living system, one that sustains identity, nurtures intergenerational relationships, and restores balance between people, place and environment.

Table of Contents

Abstract	04
Attestation of Authorship	10
List of Figures	12
Acknowledgments	16
Dedication	18
01 Introduction	22
Research Motivation	23
Research Question and Objectives	24
Methodological Framing	25
Key Precedents	25
Positionality Statement	26
Exegesis Structure	26
Research Significance	26
Pasifika Housing Providers - Penina Trust	28
Fale Tupu	28
Pilot Project - Testing Fale Tupu	29
Conclusion	30
02 Context	32
03 Methodology and Methods	38
Positionality	39
Methodological Sequencing and Spheres of Influence	39
Overarching Methodology: Maumoana	40
Early-phase Visual Making (Artefacts)	42
Regenerative Method: Talanoa	44
Structuring Talanoa Sessions	45
Ethics, Cultural Accountability, and Integration	45
Contribution and Forward Path	46

04 Research Process and Toolkit Development	48
Methodological Underpinning	49
Key Themes from Talanoa	49
How Engagement Shaped Fale Tupu	52
Thematic Insights Across the Research	53
Conclusion	53
05 Fale Tupu: The Pasifika Housing Toolkit	54
How the Toolkit is Organised and Used	56
Tool One: Maumoana Framework	58
Critical Commentary	59
Tool Two: Fale Typologies	62
Critical Commentary	63
Tool Three: Material Palette	68
Critical Commentary	69
Tool Four: Communal Wellbeing Spaces	72
Critical Commentary	73
Integration and Reflection	80
Governance and Form	80
Form and Material	80
Material and Lived Practice	80
Closing the loop	81
Future Directions and Refinements	82
Conclusion	83
06 Fale Tupu Application and Testing	84
Penina Trust	85
Application of Tool One: Maumoana Framework	90
Application of Tool Two: Fale Typologies	96
Application of Tool Three: Material Palette	98
Application of Tool Four: Communal Wellbeing Spaces	106
Reflection	110
Conclusion	111

07 Conclusion	112
Key Takeaways	113
Relevance to Stakeholders	113
Contribution to Knowledge	113
Limitations	114
Further Considerations and Future Research	114
Final Reflection	116
References	120
Appendices	126
Appendix A Housing Inequities	127
Appendix B Policy Frameworks	128
Appendix C Case Studies	129
Appendix D International Comparison	132
Appendix E Method Loop: Maumoana, Talanoa, Visualisation, Toolkit	134
Appendix F Talanoa and Engagement Log	135
Appendix F1 Example of Talanoa Documentation and Analysis Process	145
Appendix G New Zealand Institute of Architecture - Resene Student Design Awards	146
Appendix H Early Regenerative Systems and Communal Spaces	148
Appendix I Fale Tupu: The Pasifika Housing Toolkit	152

Attestation of Authorship

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor used artificial intelligence tools or generative artificial intelligence tools (unless it is clearly stated, and referenced, along with the purpose of use), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.

Amelia Lee Chee

December 2025

List of Figures

Figure 1	Entering pilot site. Car park being used for a social gathering.	02
Figure 2	Converging relationships. The relationship between the Moana, Malae, Fale, Mauga, and Mana Whenua.	20
Figure 3	Umu and food preparation at rear of pilot site.	31
Figure 4	Context visualisation focusing on issues and problems faced by Pasifika people.	36
Figure 5	Context visualisation focusing on opportunities and aspirations with in the Pasifika housing landscape.	37
Figure 6	Context visualisation focusing on values to be translated into the Pasifika housing landscape.	43
Figure 7	Context visualisation focusing on values to be translated into the Pasifika housing landscape.	47
Figure 8	Pasifika student finalists at the NZIA Student Design Awards (Tantrum, 2025).	51
Figure 9	NZIA Student Design Awards exhibition booth, showing selected toolkit components and interactive mass models (Tantrum, 2025).	55
Figure 10	Breakdown of the Fale Tupu toolkit, presented tool by tool.	57
Figure 11	Personal interpretation of the core values of Maumoana's sub-frameworks.	60
Figure 12	Fale tahi/ toru floorplan and elevation.	64
Figure 13	Fale tahi/ toru floorplan and elevation.	64
Figure 14	Fale rua/ whā floorplan and elevation.	65
Figure 15	Fale rua/ whā floorplan and elevation.	65
Figure 16	Fale toru/ whā floorplan and elevation.	66
Figure 17	Fale whā/ rima floorplan and elevation.	66
Figure 18	Fale whā/ ono floorplan and elevation.	67

Figure 19	Paepae material palette.	70
Figure 20	Tupu material palette.	71
Figure 21	An open-air space to host kogai (gatherings).	74
Figure 22	Partially enclosed to protect from wind and rain.	74
Figure 23	Lower open-air area for a workshop and making space.	75
Figure 24	A sleep out with an exterior space for food preparation.	75
Figure 25	An enclosed interior with additional space for music and dance.	76
Figure 26	Two additional rooms with an internal courtyard for socialising.	76
Figure 27	Fully enclosed marae-style interior.	77
Figure 28	An enclosed greenhouse/ conservatory for a seed nursery.	77
Figure 29	An enclosed interior with additional space for recreation.	78
Figure 30	Lower open-air area for a ceremonial practices.	78
Figure 31	Penina Trust team (P. T., n.d.).	87
Figure 32	Visualisations of Penina Trust core attributes, values and visions.	88
Figure 33	Site application of Vā Moana.	92
Figure 34	Site application of Mauri Moana.	92
Figure 35	Site application of Mana Moana.	93
Figure 36	Site application of Vanua Moana.	93
Figure 37	Site application of Ara Moana.	94
Figure 38	Site application of Wao Moana.	94
Figure 39	Site application of Mau Moana.	95
Figure 40	Pilot site communal garden.	97

Figure 41	Pilot site interior perspective.	99
Figure 42	Sectional perspective of the pilot site units.	100
Figure 43	Pilot site ground floor plan.	102
Figure 44	Pilot site level 1 floor plan.	104
Figure 45	Pilot site lower communal wellbeing space being used for food preparation.	107
Figure 46	Pilot site upper communal wellbeing space being used as a more private space.	108
Figure 47	Pilot site upper communal wellbeing space being used as a communal rooftop terrace.	109
Figure 48	Pasifika students and staff at the NZIA Student Design Awards celebrating the historic achievement of three Pasifika students receiving all major prizes (Tantrum, 2025).	115
Figure 49	Amelia Lee Chee in NZIA Student Design Awards exhibition booth (Tantrum, 2025).	118
Figure 50	Initial site analysis.	136
Figure 51	Concept design presentation pin-up.	139
Figure 52	Developed design pin-up.	140
Figure 53	Detailed design pin-up.	141
Figure 54	Examination pin-up.	144
Figure 55	Fale Tupu mass models at NZIA Student Design Awards.	146
Figure 56	Fale Tupu presentation booth at NZIA Student Design Awards.	147
Figure 57	Fale Tupu presentation booth at NZIA Student Design Awards.	147
Figure 58	Early regenerative system drawings.	149
Figure 59	Early communal spaces drawings.	150
Figure 60	Early communal spaces drawings.	151

Acknowledgements

This work sits on the shoulders of many.

My work ethic, the smile on my face, and constant desire to make this world a better place all came from you, Dad. Everything I do is for you. I hope I make you proud so you can continue to smile ear to ear up there, watching over me.

My deepest gratitude goes to my supervisors. To Amanda Yates, thank you for always encouraging me to hold fast to the essence of Te Moana-nui-a-Kiwa in everything I create, and for pushing me to speak from the oceanic centre of this work. To Tuputau Lelaulu, thank you for dedicating yourself to the betterment of Indigenous people. You have carved the pathway for Pasifika architecture that I now have the privilege to walk upon. Your mentorship has shaped not only this project, but the direction of my practice.

To my aiga and friends, you have grounded me throughout my life and especially during this year, so I thank you for your patience, your kind words, support, and all the hugs. To my whare wānanga whānau, the studio companions who shared late nights, laughter, snacks, and chats, I could not have reached this point without your company.

I am grateful to all the teachers, mentors, and generous people in the academic and professional worlds who have nurtured me, challenged me, and guided me over the years. Who would have thought I would one day be here, writing an exegesis?

Finally, I acknowledge all those who have fought for Pasifika architecture long before this project existed. Your advocacy, courage, and vision created the conditions for this work to be possible. I hope this contribution honours your legacy and continues the movement toward the recognition Pasifika design has always deserved.

Fa'afetai tele lava and all the alofa!

Dedication

This work is dedicated to my Pasifika and Indigenous communities.

I offer it with the hope that it brings even a small measure of positive impact, and that it may be shaped, adapted, and carried forward by all my Indigenous brothers and sisters. Our knowledge, skills, and ways of living hold immense wisdom — grounded in collective care, connection, and resilience.

May this work contribute to the wider movement that continues to show Aotearoa, and the world, the value of our perspectives, our practices, and our alofa.

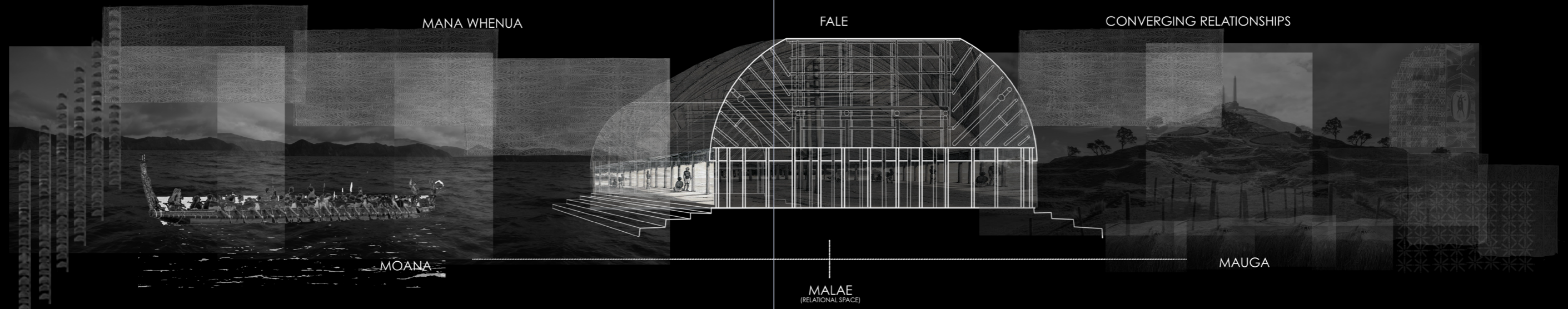


Figure 2: Converging relationships. The relationship between the Moana, Malae, Fale, Mauga, and Mana Whenua

01

Introduction

This exegesis investigates how Indigenous-led design systems can support Pasifika Housing Providers (PHPs) to deliver culturally grounded, regenerative housing in Aotearoa. Centred on the development of *Fale Tupu*, the research bridges a long-standing gap between policy aspiration and built outcomes. It argues that architecture, when grounded in *Te Moananui-a-Kiwa* (the Great Pacific Ocean) worldviews, can move beyond transactional delivery to become an instrument of cultural regeneration.

Research Motivation

The migration of Pasifika people from across Te Moananui-a-Kiwa to Aotearoa during the mid-twentieth century was marked by hope and resilience, a search for opportunity in what was often called “the land of milk and honey”. Settling largely in urban centres, these communities contributed significantly to Aotearoa’s social, cultural and economic fabric. Yet, housing systems built on Eurocentric assumptions failed to reflect Pasifika living patterns grounded in intergenerational care, collective ownership and relational space.

As the population density in Aotearoa’s cities increased, Pasifika families were increasingly confined to housing stock designed for nuclear families, models that fragmented communal life and erased the spatial expression of kinship. Overcrowding, displacement, and housing insecurity became enduring features of Pasifika urban experience (Ministry for Pacific Peoples [MPP] et al., 2022). These issues were not simply economic but epistemological as they stemmed from a continued privileging of Western definitions of home that excluded Indigenous ways of living.

Key policy and research documents such as *Fale mo Aiga: Pacific Housing Strategy and Action Plan 2030*, Kāinga Ora’s (2023) *Modernising Pasifika Housing in Māngere (MPH) initiative*, and the *Alalaga* research document (Alalaga Research Document, 2024) have each sought to address these enduring inequities. While *Fale mo Aiga* articulates strong policy goals, *MPH* remains project-specific and lacks transferability beyond its context, and *Alalaga* provides foundational thinking in typology but lacks application in practice. Together, they reveal the ongoing need for design approaches that move beyond aspiration toward implementation, bridging policy, culture and the built environment.

Research Question and Objectives

PHPs play a vital role in Aotearoa’s housing ecosystem. They are more than just community housing landlords; they are community anchors that deliver wraparound services extending beyond the physical home. Their work is deeply relational, grounded in faith, reciprocity and service. Led by Pasifika professionals with lived cultural understanding, PHPs bridge between policy frameworks, government funders and families, translating bureaucratic requirements into community outcomes.

However, despite their expertise, PHPs face structural barriers that limit their ability to influence design decisions. Housing developments are often driven by architects, planners or funders unfamiliar with Pasifika worldviews. PHPs therefore operate within a constrained system, responsible for delivering culturally meaningful homes while navigating Western planning, regulatory and financial mechanisms. What they lack are practical, design ready tools that speak both languages – those of community and of industry.

The central question guiding this exegesis is: *How can Indigenous-led design systems support Pasifika housing providers to deliver resilient, culturally responsive housing in Aotearoa?*

In addressing this question, the research has four objectives:

- Develop a practical, culturally responsive housing toolkit for PHPs and wider housing actors.
- Apply Indigenous ecological knowledge and Moananui design principles to enable regenerative and resilient housing strategies.
- Propose context-specific alternatives to mainstream housing models.
- Test and evaluate the toolkit through application to a pilot site made available by Penina Trust, a leading PHP.

Methodological Framing

This research adopts Maumoana, a regenerative design methodology that deliberately moves beyond Eurocentric architectural frameworks. Developed by Lelaulu (2024), Maumoana centres Moananui knowledge systems, embedding identity, resilience and self-determination into design. Its six sub-frameworks provide a regenerative structure that links built form with ecological flows, ancestral narratives and collective wellbeing. This approach enables the integration of “resilience, self-determination, and hope for Moananui communities” into architectural outputs (Lelaulu, 2024, p.41).

Alongside this framework, the research employs *talanoa* (see chapter three) as a regenerative method and visual artefact-making as an analytical and relational practice, ensuring cultural accountability and iterative translation into design.

Key Precedents

Two key precedents underpin this research. The first is *Fale mo Aiga* (MPP et al., 2022), which establishes the policy foundation for Pasifika housing aspirations. The second is *Alalaga*, an emerging research document that lays the conceptual and cultural groundwork for Pasifika-led design (Alalaga Research Document, 2024). Both advocate for Indigenous self-determination and housing, yet neither extends into operational tools for application. Complementary case studies, including *Our Whare Our Fale*, *Villa Verde*, *Living House*, *Modernising Pacific Housing in Māngere*, and Penina Trust’s multigenerational housing project, *Redhill* (see Appendix C) further informed the development of *Fale Tupu*, highlighting diverse approaches to materiality, adaptability and Pasifika values. Each case study reinforced the need for a structured, practice-ready resource capable of translating these principles of self-determination, cultural continuity, and community wellbeing into action.

Positionality Statement

I identify as both Samoan and Pākehā, and my mixed heritage shapes my worldview. It compels me to approach this research with humility and accountability, recognising both insider and outsider privileges in Pasifika housing situations. As a Pasifika descendant, my position is inextricably tied to the methodology of this study. I participate from within, influenced by my cultural background and community commitments. Ontologically, I see land and water as kin entities that require reciprocal care, and epistemologically, I prioritise lived and relational methods of knowledge accessible through talanoa (Fa'avae et al., 2016; Vaioleti, 2006). Talanoa is seen as a reciprocal discourse grounded in cultural activity, rather than a method of extraction. This lens establishes communities as experts in their own lived experiences, ensuring that design outcomes are collaborative and culturally appropriate.

Exegesis Structure

The exegesis reflects a practice-led structure. Following this Introduction chapter; Chapter 2 traces the historical and political context of Pasifika housing in Aotearoa and critically reviews key literature and policy; Chapter 3 introduces the methodological frameworks; Chapter 4 summarises the research findings; Chapter 5 presents the toolkit; and Chapter 6 applies it through the pilot project. Chapter 7 concludes the exegesis.

Research Significance

Pasifika Housing Providers – Penina Trust

Following the structural overview outlined above, it is necessary to locate this research within the specific context of PHPs. PHPs function as catalysts in the provision of housing, specifically for our Pasifika families in Aotearoa, combining the delivery of social housing with wraparound services that extend well beyond the built form. Their strength lies not only in providing shelter but also in the deep-rooted relationships they maintain with their communities. PHPs are embedded in their contexts, and are led by Pasifika people who hold lived knowledge of community needs and aspirations. For this reason, there was no requirement for me to approach the broader Pasifika community directly, as engagement with PHPs offered immediate access to trusted networks and to voices that already hold authority and accountability.

While PHPs share similarities with community housing providers (CHPs), their mandate is uniquely centred on Pasifika families. This distinction is critical. PHPs not only address the urgent housing inequities facing Pasifika peoples but also bring cultural depth to the design and delivery process. Their intimate knowledge of Pasifika lifestyles positions them as ideal partners for applying the Moananui-centred framework embedded in this research. Although the toolkit is primarily designed for PHPs, its principles and resources are adaptable for CHPs more broadly, provided there is cultural facilitation (ideally led by Pasifika voices) to ensure alignment with Indigenous values and protocols.

Early in the research, Penina Trust, New Zealand's first and largest PHP, offered access to one of their sites to use as a pilot and shared professional insights through informal discussions. These exchanges provided valuable context about the realities of community housing delivery in Aotearoa through ongoing talanoa throughout the project. At each milestone, I presented my work to Penina, receiving both affirming feedback and insights that shaped the trajectory of both the toolkit development and the pilot project design. These exchanges consistently revealed nuggets of gold, insights grounded in lived reality that could not have been accessed through literature or abstract analysis alone.

The significance of this engagement is evident throughout the research and can be understood across three layers. For housing providers, testing the toolkit against a live case study informed by Penina Trust's housing project demonstrated how PHPs could use such a resource to guide consultants and contractors, ensuring that community needs remain central to delivery. For Pasifika families, the pilot context reinforced how culturally responsive and healthy housing, designed to reflect collective wellbeing and identity, can better support intergenerational life. For Aotearoa more broadly, the application of the toolkit within this professional context highlights how delivering not merely more homes but the right homes—dwellings that embody cultural values—can contribute meaningfully to addressing the national housing crisis.

The use of Penina Trust's pilot project established the toolkit's practical relevance and legitimacy within real industry conditions. This professional engagement provided an opportunity to evaluate how the toolkit performs in practice, setting the stage for the following section, which introduces its structure and function as a transferable, practice-ready design resource.

Research Significance

Fale Tupu

Building on professional engagement with Penina Trust, the research advanced toward the development of *Fale Tupu*, the central practice-based outcome of this research. *Fale Tupu* is conceived as a flexible, practice ready design resource that supports Pasifika housing providers in delivering culturally grounded, regenerative housing solutions.

The toolkit comprises four interconnected tools that directly respond to insights from the *Fale mo Aiga* strategy (MPP et al., 2022), *Alalaga* (Alalaga Research Document, 2024) and the *MPH* project (Kāinga Ora, 2023). Across these references, the need for culturally resonant, multigenerational housing emerged as the defining distinction from prevailing Western topologies. *Fale Tupu* builds upon these lessons, translating policy aspirations and community values into design resources that reflect lived Pasifika realities. The first tool, the Maumoana Framework, provides the overarching regenerative methodology. It ensures that every project stage, from project initiation to the homes being lived in, is grounded in Moananui values and sustained through ongoing relationships between families, PHPs and place. The second tool, *Fale* (house) Typologies, offers a growth-based housing model that adapts to ever-changing family needs, allowing homes to expand or contract over time with PHP support. The third tool, the Material Palette, emerged from talanoa with Penina Trust, emphasising affordability, durability and low-maintenance options, while also including regenerative alternatives for use when financially feasible. The fourth tool, Communal Wellbeing Spaces, offers a suite of inspirational examples that illustrate how families might expand their dwellings to create adaptable spaces to fulfil their needs.

Together, these tools form a culturally resonant, practice-ready resource that PHPs can adapt across projects. They not only respond to pressing housing needs but also empower providers and families to reassert cultural agency in shaping their built environments.

Research Significance

Pilot Project - Testing Fale Tupu

The development of the toolkit was further strengthened through its application in a live pilot project, made available by Penina Trust. This opportunity provided a practical context for testing the toolkit's relevance within real development conditions. While Penina shared professional insights through informal discussions, their role was primarily to provide feedback that affirmed the alignment of design decisions with the needs commonly faced by housing providers. Working in parallel with Penina's appointed architect offered a comparative perspective, reinforcing the toolkit's value as a culturally aligned resource capable of supporting PHPs in bridging between policy, practice and lived experience.

However, the pilot also revealed that the most significant barrier to actioning the toolkit is not cultural alignment but financial feasibility, with key decision-makers maintaining tight control over funding pathways. These economic constraints highlight the structural challenges PHPs face, underscoring the need for policy and financial frameworks that enable the cultural and practical innovations demonstrated here to be realised.

The pilot project also revealed gaps and redundancies within the toolkit's initial scope which addressed seven key areas related to design and usage, offering critical insights for refinement. These redundancies related to the initial separation of seven tools: design principles, typologies, spatial strategy, communal spaces, family wellbeing spaces, regeneration, and application, which were later consolidated into three cohesive tools to streamline their interconnections and with the addition of a material palette as the fourth tool. More than a testing ground, the pilot site provided an ongoing point of engagement with Penina, whose insights and feedback significantly strengthened the research's cultural and structural grounding.

Conclusion

In summary, this introduction has positioned *Fale Tupu* as both a scholarly and practice-ready contribution. By situating the research within the historical and structural inequities of Pasifika housing, grounding it in Moananui methodologies, and testing it through real-world application, the study demonstrates how Indigenous-led design can inform systemic transformation. The toolkit offers PHPs a tangible resource to guide consultants and policy actors and embed cultural accountability across the housing process. Ultimately, this research contributes to the broader academic and professional discourse by asserting that housing is not merely shelter, but a living system that sustains identity, community, and ecological reciprocity.

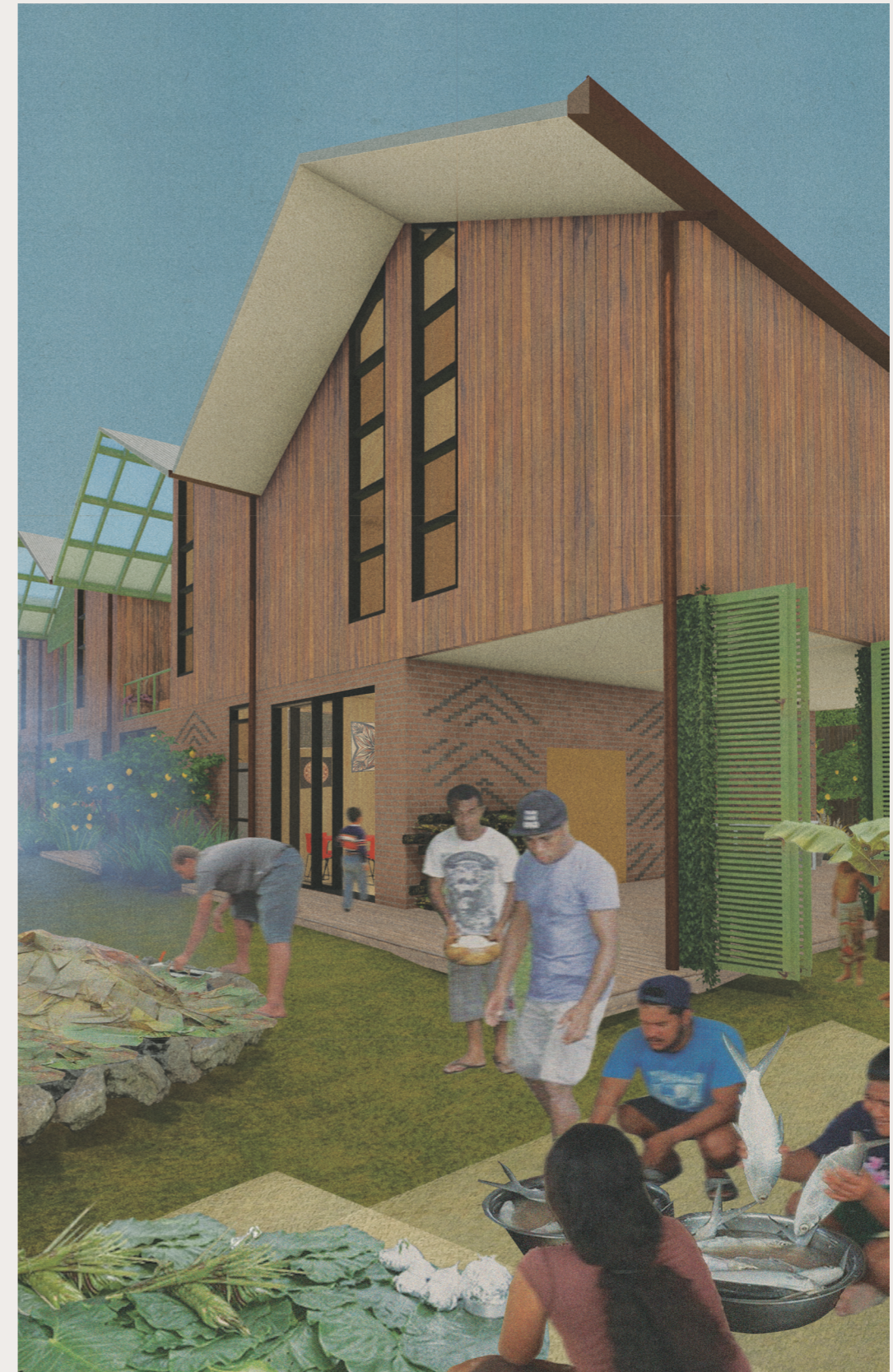


Figure 3: Umu and food preparation at rear of pilot site.

02

Context and Literature Review

This chapter traces the socio-political and cultural context of Pasifika housing in Aotearoa and critically reviews key literature, policy frameworks and case studies. It highlights where aspirations and analysis are strong and where spatial translation is absent – a gap that the toolkit addresses. Further details on statistics, policy gaps, and case study reviews are provided in Appendices A–D.

Pasifika housing experiences in Aotearoa are shaped by post-war migration, cultural continuity, systemic exclusion, and policy oversight (MPP et al., 2022). Migration intensified through labour schemes that concentrated Pasifika families in urban centres, yet available state housing rarely aligned with Pasifika social structures, privileging nuclear-family layouts over extended, flexible living (Koloto & Associates, 2007). Urbanisation has compounded inequities through redevelopment and market-led planning, driving displacement and eroding cultural connection (Johnson et al., 2016; Tanielu, 2019). Since 2006, home ownership among Pasifika households has fallen, while overcrowding and substandard conditions persist (Baker et al., 2012; Joynt et al., 2016). The dominant housing discourse often conflates multigenerational living with overcrowding, overlooking the distinction between cultural choice and material constraint. While overcrowding reflects inadequate space or resources, multigenerational living embodies intentional, interdependent care structures central to Pasifika ways of life. This misclassification obscures cultural values and perpetuates mismatches between lived realities and housing provision. This literature demonstrates the scale of change needed but does not yet translate these shifts into design strategies, an agenda this exegesis takes up.

Policy frameworks articulate strong aspirations but lack clear spatial pathways. *Fale mo Aiga* (developed through talanoa with over 2,500 participants) prioritises quality, ownership and culturally grounded support (MPP et al., 2022), but offers limited design guidance. Earlier, the *Orama Nui* document (Housing New Zealand Corporation, 2009) likewise emphasised engagement and tenure over typological translation, while *Pasifika Aotearoa: Lalanga Fou* recorded persistent gaps around collective living, intergenerational wealth, and holistic health (MPP, 2018), and the *Pacific Aotearoa: Rebuilding Together, Wellbeing Budget* reinforced housing's centrality without embedding delivery mechanisms (MPP, 2020). Despite robust consultation, Pasifika design leadership is often absent at implementation. Statistics mirror this: overcrowding rates remain highest for Pasifika families, reflecting stock that does not support extended living (Tanielu, 2019), while affordability pressures and displacement intensify (Joynt & Lysnar, 2016). These findings underscore the need for culturally anchored, systemically integrated design tools.

Indigenous design literature provides a regenerative counter-frame. Maumoana embeds Pasifika spatial logics, ecological knowledge, and collective values within Moananui living systems, positioning the built environment as a living network of kinship and reciprocity (Lelaulu, 2024). Alignment with Te Aranga Māori Design Principles strengthens Pasifika–Māori solidarities and values-led practice (Hoskins et al., 2019; Kake & Paul, 2018). Pasifika housing experiences further evidence housing as a means of identity, belonging and intergenerational continuity (Mila-Schaaf et al., 2022). Together, these works argue for design grounded in spiritual-ecological care and communal urbanism (Hoskins et al., 2019), aligning with the concepts of *vā* (relational space), *aiga* and *fale*. As Wilson (2008) reminded us, knowledge itself is relational, and research is a form of ceremony, meaning that design too must be accountable to the relationships that give it purpose.

Case studies demonstrate both promise and limits. The *Our Whare Our Fale* programme, led by the Central Pacific Collective in partnership with Ngāti Toa rangatira, provides a notable Pasifika-led precedent. Within it, the *Mua i Malae* project pilots leasehold and shared-equity models alongside communal layouts and financial capability initiatives (Central Pacific Collective, n.d.; Reti & Potaka, 2024). More broadly, the programme combines shared equity, leasehold tenure, and village-inspired design to deliver affordable, culturally grounded homes. The *MPH* project, referenced in this thesis introduction as a catalyst for the research, tested how small-, medium-, and large-scale redevelopment could embed Pasifika cultural values through extensive *talanoa* and collaborative design (Kāinga Ora, 2023). While influential, it underscored the gap between policy aspiration and practice-ready tools, reinforcing the need for resources that PHPs can operationalise directly. The emerging *Alalaga* research document (Alalaga Research Document, 2024) advances Pasifika-led design by proposing incremental housing typologies and a policy-aligned conceptual basis; however, it stops short of operationalisation.

This thesis extends that work by translating incremental logics into a practice-ready toolkit that PHPs can apply directly in real projects. *Tūranga ki te Marae* illustrates tikanga-led papakāinga providing a toolkit for marae-based housing developments within urban contexts (Hoskins et al., 2019), while Aravena’s *Villa Verde* offers incremental “half-a-house” pragmatism applicable under funding constraints (Rethinking The Future, n.d.; Zilliacus, 2016). The *Living House* by RTA Studio demonstrates how affordability, construction efficiency, and carbon-zero ambitions can be balanced within mainstream delivery, directly informing aspects of the material palette in this research (The Living House New Zealand, n.d.). Penina Trust’s multigenerational housing project in South Auckland, *Redhill*, likewise evidences how PHPs can embed cultural alignment and intergenerational living within mainstream delivery systems (MPP, 2024). Collectively, these precedents reinforce

the importance of Indigenous governance, affordability, innovation, and cultural integrity in housing provision, while underscoring the need for a structured, adaptable toolkit that consolidates lessons for PHPs use across sites.

International Indigenous housing frameworks offer valuable parallels. Australian and North American initiatives demonstrate advances in governance, co-design, and accountability; see, for example, the *Flexible Guidelines for the Design of Remote Indigenous Community Housing* (Fien et al., 2007), the *South Australian Aboriginal Housing Strategy 2021–2031* (Government of South Australia, 2021), and the *City of Vancouver UNDRIP Action Plan 2024–2028* (City of Vancouver, 2023). Yet, despite embedding cultural integrity within policy and planning systems, these concepts remain largely confined to strategic guidance rather than spatial application. *Fale Tupu* builds on these precedents by translating similar Indigenous governance principles into a tangible design resource, and converting aspirational frameworks into practice-ready tools that embed cultural, ecological, and collective accountability within the built environment.

In summary, this literature review reveals consistent aspirations but a delivery gap; precedent projects that inspire but do not scale. This chapter therefore positions the toolkit as a necessary bridge between policy vision, cultural practice and built form. It leads to the next chapter’s methodological account of how Maumoana, *talanoa*, and visual methods are mobilised to deliver that bridge in practice.

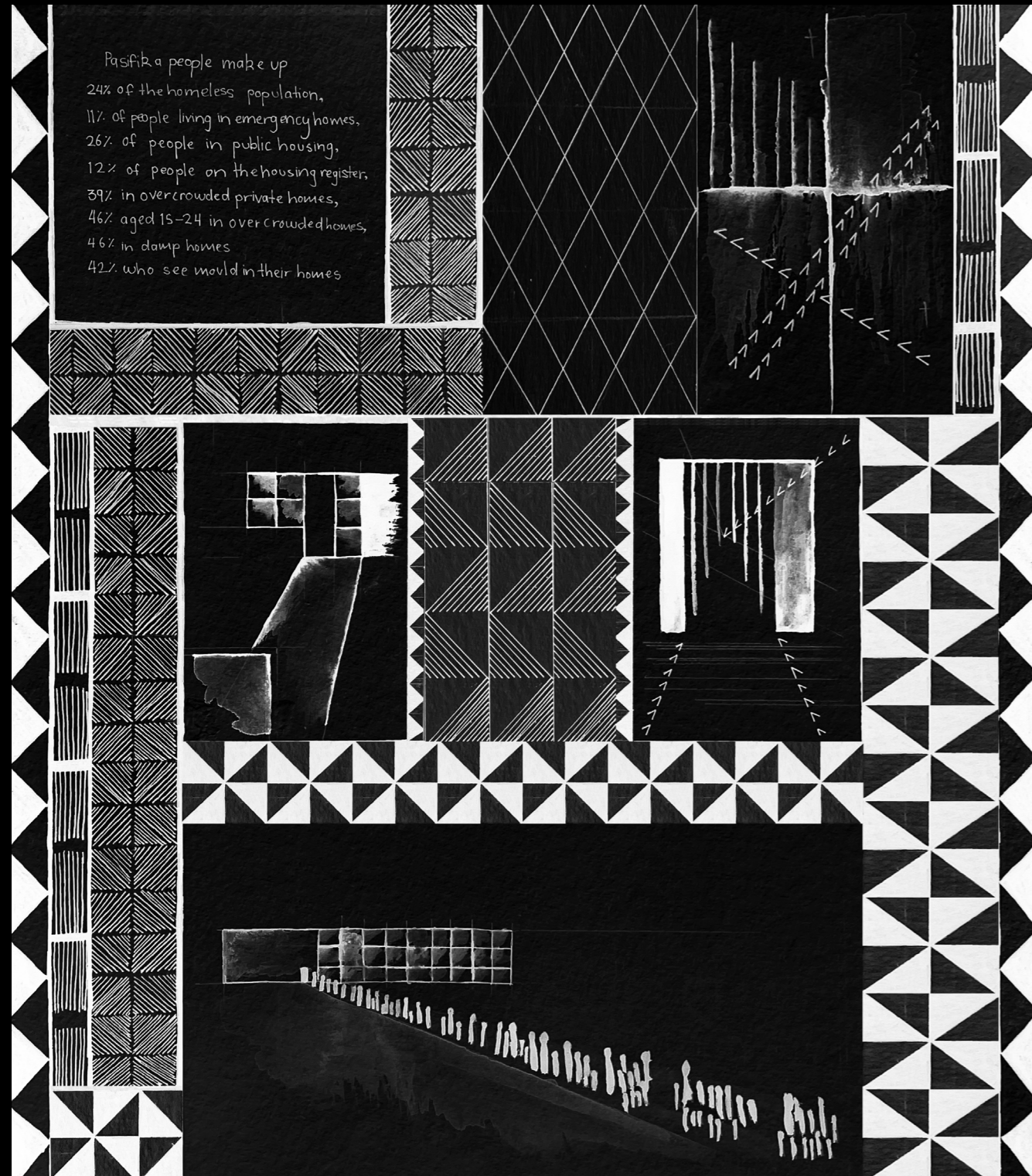


Figure 4: Context visualisation focusing on issues and problems faced by Pasifika people.



Figure 5: Context visualisation focusing on opportunities and aspirations with in the Pasifika housing landscape.

03

Methodology and Methods

As noted in Chapter 2, Indigenous research is ceremony, a cyclical and relational act in which knowledge is created and validated through respect, reciprocity and responsibility (Wilson, 2008). This perspective foregrounds the methodological orientation of this research, positioning the process not as a neutral technique but as an ongoing commitment.

This chapter outlines the methodological framework guiding *Fale Tupu* and demonstrates how Indigenous Pasifika knowledge systems, specifically the Maumoana framework and talanoa, inform both the process and outcomes. Grounded in my positionality as a Pasifika/Pākehā designer-researcher, the chapter introduces the methods employed (Maumoana, visual artefact-making, talanoa), explains their sequencing, and demonstrates how they interrelate to uphold a regenerative, place-based research process. Together, they formed the ethical and epistemological foundation for the work that is reported here.

Positionality

My positionality is complex: I whakapapa to Samoa while also identifying as Pākehā/Pālagi. This dual heritage positions me both as an insider, carrying familial ties and cultural obligations, and as an outsider, holding the privileges of Pākehā identity. Acknowledging this requires humility and accountability, ensuring the research remains reciprocal rather than extractive. My positionality is inseparable from method. I participate from within, informed by cultural inheritance and a lived understanding of the built environment as relational rather than purely functional. This standpoint compels place-based accountability and co-constructed knowledge, positioning architecture as a practice that must evolve from the lived realities of those it seeks to serve.

Methodological Sequencing and Spheres of Influence

The approach was deliberately sequenced to secure cultural accountability and design integrity. Maumoana provided the structural and values-based foundation from the outset; an early phase of visual making deepened engagement with existing knowledge without advancing premature proposals; talanoa then became the regenerative, community-led process through which directions were developed and iteratively tested. This sequencing reflects what has already been referred to as the ceremonial nature of research (Wilson, 2008).

Three interlinked spheres oriented the decision-making:

- What is it? A comprehensive toolkit comprising a culturally grounded framework, adaptable typologies, a material palette, and dwellings with growth capability.
- Who is this for? PHPs as primary users working with consultants and contractors.
- What is the greater good? Pasifika communities and Aotearoa's housing crisis more broadly.

These spheres linked Maumoana's structure to practical outputs, keeping each step grounded in cultural and spatial integrity.

Overarching Methodology: Maumoana

Maumoana operates as an Indigenous design methodology and spatial strategy anchoring all decisions in Te Moana-nui-a-Kiwa that are centred on values and way of life (Lelaulu, 2024). Its interrelated sub-frameworks provide a regenerative model that embeds housing within Moananui epistemologies and reframes the built environment as a living system, rejecting extractive urban logics and advancing futures rooted in sovereignty, continuity and co-existence. In this research, Maumoana directly informed the way in which relationships were formed, information was understood, and that information then translated into a tangible tool. Later, in Chapter Four, Maumoana reappears not as a methodological compass but as a design framework, guiding spatial strategies and principles within *Fale Tupu*. Here, however, it is introduced in its primary role as a regenerative research methodology shaping relationships, interpretation and accountability.

Each sub-framework offers a distinct practice lens:

Vā Moana

Centering on nurturing and sustaining relational space. It draws on concepts such as *teu le vā* (caring for relationships), *tauhi vā* (maintaining them), and *tā-vā* (the interplay of time and space). It highlights that relationships are dynamic, requiring continual care, respect and adaptation.

Mauri Moana

Focusing on life force, vitality and spiritual essence. It integrates Indigenous ecological knowledge with contemporary practice to regenerate people-place relationships. It promotes reciprocity, renewal and resilience, ensuring environmental and cultural vitality is sustained.

Mana Moana

Embodying spiritual and cultural authority through the balance of *tapu*, *noa*, and *tupu* (the sacred, the common and the growth). It affirms accountability and sovereignty while extending the idea of *Mana Whenua* to the ocean, recognising shared heritage as a unifying force for regeneration and collective empowerment.

Vanua Moana

Affirming genealogical ties between people, land, and sea. It emphasises custodial obligations and stewardship, sustaining cultural landscapes and local governance. It insists that development be rooted in place-based knowledge, safeguarding both ecological and cultural continuities.

Ara Moana

Embodying pathways and navigation. It guides sequencing, adaptability and unfolding changes. By drawing on oceanic navigation, it provides a framework for responding to change and uncertainty with resilience and foresight, ensuring there are things in place to future-proof the development outcome.

Wao Moana

Envisioning ridge-to-reef ecological integration. It stresses biodiversity, resilience, and stewardship across scales, ensuring that upland, coastal, and marine systems are designed as interdependent and regenerative.

Collectively, these sub-frameworks embed cultural, ethical and ecological commitments within design, aligning with Indigenous co-design principles that privilege ontological pluralism and community-led agendas, while challenging Western-centric frameworks and advancing socially just, environmentally sustainable outcomes (Parsons et al., 2016).

In this research, Maumoana functioned in two complementary but distinct ways. As a research methodology, it shaped the process of engagement and accountability: guiding how relationships were formed and sustained through talanoa, how reciprocity and responsibility were upheld, and how cultural protocols informed decision-making. It ensured the research was not extractive, but iterative and developed with PHPs at the heart, embedding ethical rigour in every stage of inquiry. As a framework within the toolkit, Maumoana operates differently. Here, its sub-frameworks are translated into spatial strategies and design principles that PHPs can actively apply in practice. Relationships are formed between key stakeholders, which enables sequencing in decision-making, anchoring design in cultural and ecological values and ensuring built outcomes remain regenerative. This dual role is central: first, Maumoana secured cultural integrity in the research process; second, it provides PHPs with a transferable, practice-ready framework that can guide housing design across diverse sites and contexts.

Early-phase Visual Making (Artefacts)

Visual making preceded my own talanoa engagements as an ethical pause, deepening connection to prior dialogues without asserting solutions. In this phase, visualisation functioned as inquiry rather than mere representation, drawing inspiration from John Pule's layered, symbolic practice (Asia Society & Asia Society Museum, 2004; "Interview: John Pule," 2018). Such work aligns with Indigenous arts-based methodologies in which creative practice generates knowledge and sustains cultural narratives through embodied, iterative making (Hammond et al., 2018). As Lopesi (2018) argued, Pasifika art operates as a decolonial act that reclaims narrative sovereignty, while Thomas (1995) highlighted how Oceanic art embeds ancestral stories and cosmologies, resisting reduction to surface aesthetics. These insights position visual artefacts not as illustrative add-ons but as a tool that carries cultural authority. The use of black and white was a deliberate act of resistance, referencing the Black Panther Party uniform as a symbol of clarity, opposition and solidarity (Taylor, 2022). These outputs formed a culturally resonant platform from which later talanoa-informed designs could emerge.



Figure 6: Context visualisation focusing on values to be translated into the Pasifika housing landscape.

Regenerative Method: Talanoa

Flowing from Maumoana, talanoa enacted the framework in lived practice. It functioned less as an extractive method and more as a culturally-embedded process of reciprocal accountability and dialogue. By creating spaces of reciprocity, talanoa brought cultural and ecological principles to life through shared interpretation and situated insight. Sessions often resonated with Maumoana's dimensions: sustained relationships (Vā Moana); ecological dialogues (Wao Moana); wellbeing (Mauri Moana); authority and accountability (Mana Moana); genealogical ties (Vanua Moana); and sequencing and adaptability (Ara Moana). In this way, talanoa was not simply a technique, but a regenerative mechanism that continuously tested and deepened Maumoana's application. It offered a decolonial stance against detached research practices, privileging lived knowledge and trust over extractive models of inquiry. In this sense, talanoa may also be understood as ceremony in action, consistent with Wilson's (2008) assertion that research is inseparable from the relationships and communities within which it is held.

Talanoa is a culturally grounded, pan-Pacific methodology rooted in collective dialogue, storytelling, and collective knowledge production. Rather than functioning as a structured interview technique, it operates as an open, adaptive process shaped by trust, reciprocity, and vā (relational space), enabling knowledge to emerge through shared experience and lived realities (Vaiotei, 2006; Fa'avae et al., 2016). In this research, talanoa was enacted as an ongoing, iterative engagement with Pasifika housing providers, industry professionals, and community voices, embedded within the Maumoana framework. Sessions were informal yet purposeful, allowing conversations to unfold responsively while maintaining cultural protocols. In this way, talanoa operated as an iterative, design-generative process, translating dialogue into culturally grounded architectural outcomes.

This approach reflects Pasifika ontologies that recognise place as living and relationships as central to knowledge-making. By emphasising care, reciprocity, and teu le vā, talanoa created conditions in which spiritual and experiential insight could shape design. These dimensions, typically excluded from conventional housing and planning, became central to this approach. Because knowledge emerged from within Pasifika contexts rather than being externally imposed, talanoa ensured that community aspirations were sustained through dialogue rather than overwritten. Enacting talanoa from the outset ensured that values such as vā, intergenerational care, and communal wellbeing were not only articulated but materially translated into the toolkit, maintaining cultural accountability throughout.

Structuring Talanoa Sessions

Talanoa sessions were framed as reciprocal conversations grounded in cultural connectedness and trust. Open-ended dialogue replaced predetermined questioning, allowing the discussion to flow naturally and emphasise shared reflection. This fluid exchange produced layered insights, emotional, spiritual, and practical, rooted in collective understanding. Rather than functioning as a process of data collection, talanoa operated as a space of co-shaping, where ideas were refined through dialogue and mutual accountability. It foregrounded reciprocity and care, sustaining relationships through shared accountability and collective responsibility.

Ethics, Cultural Accountability, and Integration

Ethical commitments were embedded throughout. Maumoana provided the values-based structure, visual making enabled early cultural engagement, and talanoa sustained iterative, community-led interpretation. This sequence avoided premature design, foregrounded accountability, and enabled continuous scrutiny through the Maumoana lens. The cyclical movement between framework, dialogue, and output ensured the toolkit evolved as a living, adaptive resource shaped within Indigenous epistemologies and reciprocal trust.

This integrated approach directly informed design outcomes through a structured yet adaptive process of documentation and synthesis. Talanoa sessions were recorded through reflective note-taking, diagrammatic mapping, and post-engagement synthesis, enabling collective and narrative insights to be retained rather than reduced. Each session was interpreted through the Maumoana framework, with key themes organised across its dimensions which ensured cultural and ecological coherence. Recurring priorities, such as intergenerational living, affordability, and communal space, were identified through iterative reflection across engagements, then translated into spatial strategies and visual tools that informed the development of the toolkit. This process reflects a tui kakala approach, where knowledge is gathered (*toli*), woven through interpretation (*tui*), and returned through design outcomes (*luva*) (Vaiotei, 2006). Analysis was therefore embedded and cyclical. Further documentation on talanoa can be found in Appendix F and F1.

04

Research Process and Toolkit Development

This chapter summarises the research journey, highlighting how the methodological frameworks and engagements introduced in Chapter 3 were enacted in practice to shape *Fale Tupu*. Rather than narrating each talanoa or event in detail (these are provided in Appendix F), this chapter distils the key themes, insights, and outcomes of the research process. The aim is to demonstrate how Maumoana, talanoa, and visual making operated as interconnected methods, and how feedback cycles with PHPs, academic peers, and industry professionals directly informed the development of *Fale Tupu's* four tools. See Appendix E for supporting information.

Methodological Underpinning

The methodological approach followed a cyclical sequence in which Maumoana provided the structural and cultural foundation, talanoa enacted these values through lived dialogue, and visual making translated insights into tangible forms. This iterative loop was neither linear nor static; each cycle built upon the last, while the process remained open to new insights as engagements unfolded.

Maumoana offered the ethical and regenerative framework, ensuring that all design decisions were anchored in Moananui principles of reciprocity, kinship and ecological care. Talanoa then brought these principles into lived practice, enabling conversations that were reciprocal and iterative rather than extractive. Visualisation provided the bridge between dialogue and design, transforming narratives and priorities into diagrams, typologies and speculative drawings. This iterative loop sustained accountability throughout the project and positioned the toolkit as a culturally responsive, practice-ready outcome.

Key Themes from Talanoa

A series of informal talanoa provided opportunities to reflect on and iterate the emerging toolkit. These dialogues were not structured research sessions, but professional and collegial exchanges that offered contextual and practical perspectives. Insights drawn from these discussions informed reflective decision-making, ensuring that *Fale Tupu* remained culturally grounded, feasible and aligned with sector realities.

The sequence of discussions was as follows:

Academic and Peer Feedback

Early presentations confirmed the project's alignment with regenerative Indigenous methodologies but emphasised the need for cultural concepts to be translated into spatial and experiential form.

Penina Trust Talanoa 1

This talanoa established site-specific responsiveness, with priorities around affordability, intergenerational typologies, communal space, and low-maintenance and durable materials. This engagement grounded the toolkit in lived realities from the outset.

Concept Design Symposium

Feedback highlighted that incremental housing must be communicated simply, through diagrams accessible to non-architectural audiences, reinforcing visual accessibility of the toolkit as a guiding principle.

Penina Trust Talanoa 2

This talanoa introduced refinements to naming conventions, spatial layouts and affordability. Value proposition analysis at this stage clarified the relative importance of each tool in meeting community needs.

Developed Design Symposium

The symposium consolidated the toolkit to four tools, confirming its scope as focusing on the toolkit as a practice-ready resource.

Detailed Design Symposium and Penina Talanoa 3

This engagement finalised the material palette and wellbeing spaces, while raising questions of operationalisation, ensuring the toolkit could transition from research to practice.

Final Design Symposium: New Zealand Institute of Architecture (NZIA) Student Design Awards (SDA)

The final presentation of the year at the national SDA confirmed the validity of *Fale Tupu*. The NZIA judging panel questions when this would be the reality of not only Pasifika social housing, but all social housing across the country. The project won Highly Commended.

Together, these engagements revealed recurring themes: the need for cultural clarity, the balance between aspiration and affordability, and the imperative for the toolkit to become operational rather than theoretical.



Figure 8: Pasifika student finalists at the NZIA Student Design Awards (Tantrum, 2025).

How Engagement Shaped the Toolkit

The iterative process, described in the previous section, directly shaped the toolkit's four components:

Tool One

The Maumoana Framework was formalised into a step-by-step guide, ensuring its cultural and ecological principles could be clearly applied by PHPs across projects.

Tool Two

The Fale Typologies evolved from Penina's emphasis on flexible, intergenerational housing. These typologies were clarified through diagrams and refined layouts, allowing for a balance between cultural responsiveness and fitting within the requirements of funding and regulatory authorities.

Tool Three

The Material Palette was shifted from a technical specification list to an accessible palette that PHPs could use at the conceptual stages (for both base build and future personalisations). It highlights affordable, low-maintenance options while incorporating regenerative alternatives where budgets permit.

Tool Four

The Communal Wellbeing Spaces tool was developed to inspire both PHPs and families with visual scenarios of adaptable spaces for various activities. These examples position communal life as central to Pasifika housing futures.

An expanded example of how talanoa informed Tool Two: Fale Typologies can be seen through the iterative talanoa sessions undertaken with Penina Trust. Early discussions with Penina's CEO and Housing Development Manager established the need for incremental housing approaches that could respond to intergenerational living, affordability constraints, and changing family structures. Stakeholders prioritised adaptable layouts, efficient footprints, and low-cost delivery within existing funding limitations, informing the first round of typological testing and visualisation. Subsequent talanoa and design reviews further refined the layouts, with feedback focusing on the clarity of growth strategies for funders and families. Discussions also prompted the re-framing of 'multi-use spaces' as communal wellbeing spaces, foregrounding wellbeing within delivery contexts where such spaces are often treated as non-essential. Incremental growth strategies were then developed to enable the fale to adapt alongside evolving family and financial needs.

Through this process, talanoa translated lived housing realities into a spatially adaptable and operationally viable design tool.

Thematic Insights Across the Research

Several cross-cutting themes emerged through the engagements:

- **Accessibility:** Toolkit components were simplified and visualised to ensure non-specialist audiences, including PHPs and families, could use them confidently.
- **Operationalisation:** Feedback from Penina reinforced the view that the toolkit must be actionable, guiding real projects rather than remaining an academic exercise.
- **Cultural Integrity:** Ongoing talanoa sustained accountability, ensuring tools reflected lived knowledge and Pasifika ways of being.
- **Sector Relevance:** Academic and professional reviews confirmed the toolkit's resonance across different audiences, strengthening its legitimacy.
- **Balance of Affordability and Aspiration:** Iterations highlighted the challenge of reconciling PHP budget constraints with regenerative ambitions, prompting the toolkit to offer staged options rather than prescriptive solutions.

These themes collectively ensured that the toolkit was not only methodologically rigorous but also practically relevant and culturally grounded.

Conclusion

This chapter has outlined how the methodological spine, engagements, and visual processes collectively informed *Fale Tupu*. Maumoana anchored the cultural and ecological framework, talanoa enacted it through reciprocal practice, and visualisation translated insights into design tools. Through iterative cycles of feedback, the toolkit was refined into four clear, practice-ready tools that directly respond to PHP needs while maintaining cultural accountability. The following chapter presents the toolkit in full, demonstrating how these research processes materialised into a resource that is simultaneously scholarly, culturally resonant and operational for PHPs.

05

Fale Tupu: The Pasifika Housing Toolkit

Guided by the research question, *How can Indigenous-led design systems support Pasifika Housing Providers to deliver resilient, culturally responsive housing in Aotearoa?*, this chapter translates prior insights into a practice-ready toolkit. Each tool operationalises a distinct dimension of that enquiry: governance and decision-making (Maumoana), spatial form (Fale Typologies), early-phase implementation choices (Material Palette), and lived use (Communal Wellbeing Spaces). Developed through an iterative cycle of Maumoana, talanoa, and visualisation, the toolkit addresses the well-documented gap between Pasifika housing aspirations articulated in policy and consultation, and the limited design resources available to PHPs. See Appendix I for entire toolkit.



Figure 9: NZIA Student Design Awards exhibition booth, showing selected toolkit components and interactive mass models (Tantrum, 2025).

How the Toolkit is Organised and Used

Fale Tupu is made up of four interconnected tools that can be used independently or collectively to guide design and delivery processes:

- Tool One: Maumoana Framework.
- Tool Two: Fale Typologies.
- Tool Three: Material Palette.
- Tool Four: Communal Wellbeing Spaces.

Designed as a living resource rather than a prescriptive manual, *Fale Tupu* empowers PHPs to select and adapt tools based on their unique cultural and operational contexts. It acknowledges that each provider serves distinct Pasifika communities and therefore requires flexibility rather than a fixed structure. A value proposition lens was used during development, and this analysis showed each tool demonstrates tangible benefits: creating gains, reducing challenges, and adding practical and cultural value for both PHPs and the wider Pasifika community.

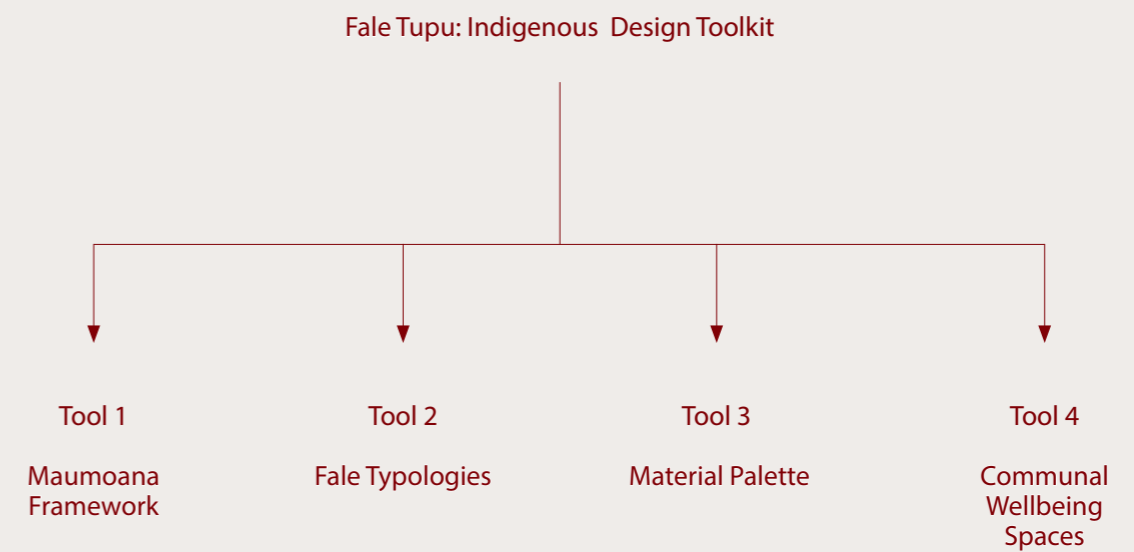


Figure 10: Breakdown of the Fale Tupu toolkit, presented tool by tool.

Tool One: Maumoana Framework

What it is

Maumoana provides a Moananui lens for decision-making, grounding design in oceanic genealogies, cultural protocols and ecological relationships. Applied as a seven-step process, it converts values into spatial strategies and design principles that are responsive to a specific site and community.

Origins and rationale

Emerging from doctoral research on Indigenous design for regenerating Moananui living systems, Maumoana guides this thesis methodologically and practically. It is underpinned by the twin ideas of *mau*, perseverance and cultural continuity, and *moana*, the oceanic identity of Pasifika peoples. Together, they embody the resilience, interconnection, and collective heritage that Maumoana seeks to regenerate within contemporary housing practice (Lelaulu, 2024). Ongoing talanoa with Penina affirmed the need for a framework that mediated between Indigenous worldviews and the demands of architectural practice, addressing gaps in existing guides where Pasifika values and relationships to place are insufficiently addressed.

Spatial logic and regenerative link

The framework operationalises interconnectedness, accountability, and co-evolution between people and place. In practice, it serves as both a philosophical compass and a spatial method, ensuring decision-making remains culturally accountable and ecologically responsive. By embedding cultural and ecological reciprocity at the heart of decision-making, Maumoana frames regeneration as the starting point rather than an outcome, enabling housing processes that restore relationships between people, place, and the wider living systems of Moananui.

Application

The tool provides sector-readable visual template mapping the seven-step co-design process. The sequence is intentionally adaptable, allowing PHPs to tailor the emphasis to local cultures, ecologies and aspirations.

Service / gain / pain / contribution

Translating PHP aspirations into a visual language that is legible to architects, planners and contractors, this framework strengthens PHP agencies' presence in design conversations and establishes clear pathways to regenerative goals.

Limitations and scope

Maumoana does not deliver complete solutions on its own. It requires facilitation, interpretation, and coupling with the three other tools to convert values into buildable outcomes. Where Pasifika expertise is limited, external cultural facilitation may be needed. It is a directional compass, not a universal template.

Critical Commentary

The significance of the Maumoana framework lies in its reframing of housing development as a question of governance rather than merely design. By positioning PHPs as stewards of cultural and ecological knowledge, the framework shifts authority from external agencies towards community-centred leadership. The framework represents a fundamental shift in how housing development is usually delivered, where providers and families are consulted late and asked to respond to predetermined designs. With Maumoana, the sequence is reversed: cultural logics guide the very first decisions, shaping all subsequent stages. This shift creates the conditions for housing to be not just responsive but regenerative.

However, the framework also highlights the challenges of integrating Indigenous worldviews into sectors structured by Western bureaucracies. PHPs often work within compliance-driven environments where housing is evaluated in terms of financial or technical feasibility. Maumoana challenges that paradigm by introducing Moananui concepts as core decision criteria. While this empowers providers, it also requires a cultural fluency that may be uneven across practice contexts. For some PHPs, this is a natural extension of lived knowledge; for others, it may demand external facilitation to maintain integrity.

Despite this challenge, the framework establishes a governance compass that other tools depend upon. Without it, the incremental typologies risk being reduced to flexible plans rather than cultural strategies, and the Material Palette could be seen as easy options rather than an opportunity for ecological care. In this sense, Maumoana is not just one tool among others but the central orientation device for the whole toolkit. Its introduction marks a decisive attempt to elevate governance from aspiration into practice, embedding Pasifika worldviews as the foundations of housing development rather than optional additions.

Maumoana: Core Principles

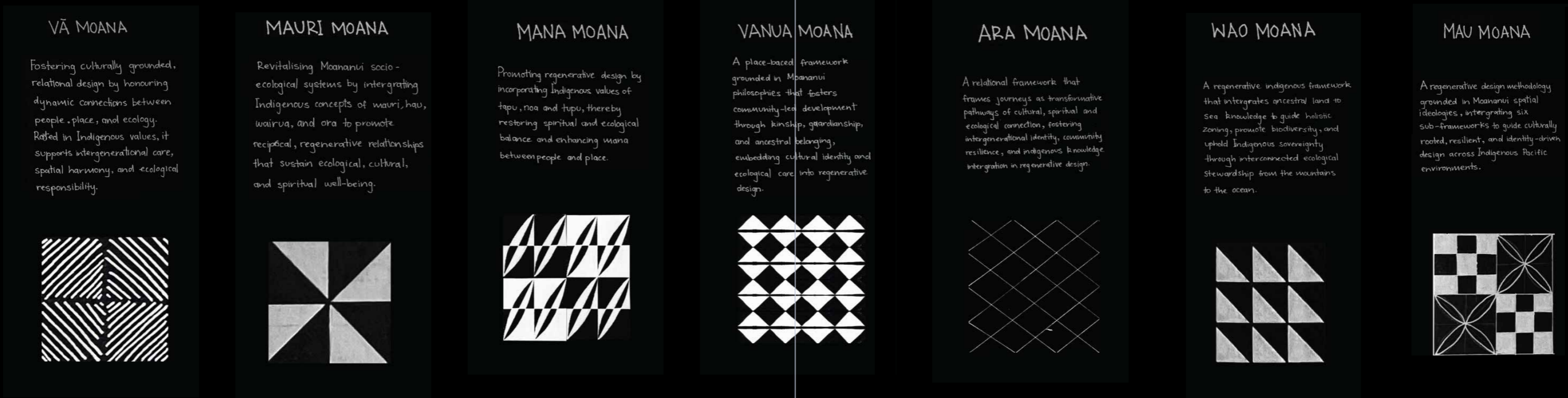


Figure 11: Personal interpretation of the core values of Maumoana's sub-frameworks.

Tool Two: Fale Typologies

What it is

Fale typologies provides growth-based typologies that allow dwellings to expand or contract as family size, cultural practice, and intergenerational responsibilities change, reflecting everyday practices aligned with Pasifika lifestyles.

Origins and rationale

Talanoa with PHPs, academic and industry professionals identified the limits of current rigid housing. The typologies adapt incremental precedents to Pasifika contexts and current practice settings, aligning with local planning and delivery realities, and addressing transferability and design-translation gaps.

Spatial logic and regenerative link

While the typologies are not inherently ecological, their integration with Maumoana supports regenerative outcomes when paired with sustainable materials and regenerative systems. They uphold cultural continuity while contributing to resilience.

Diagrams/plans

Seven typologies with mapped growth pathways provide templates for site-specific adaptation.

Application

Introduced at Maumoana's step five, Ara Moana, the typologies are chosen based on the needs in the area and potential future community aspirations.

Service / gain / pain / contribution

The typologies convert community-voiced needs into flexible forms that counter rigid, nuclear-oriented layouts. Gains include dignity, agency, and long-term adaptability; PHPs gain concrete, design-ready options that align with cultural practices.

Limitations and scope

Incremental growth depends on time, resources and rules. Planning constraints, funding mechanisms, and construction costs may slow or limit expansion. The typologies require skilled facilitation and do not, on their own, resolve land scarcity, under-funding, or broader market inequities.

Critical Commentary

Fale Tupu's incremental typologies represent a practical challenge to the dominance of static, Western models of housing provision. By allowing dwellings to grow, contract and adapt, they centre the lived dynamics of Pasifika families, whose households often expand through extended kin obligations and shared caregiving, and on account of cultural ceremonies. Flexibility becomes more than an architectural convenience; it becomes a cultural necessity. The ability to reconfigure spaces for events such as funerals, celebrations, or spiritual needs signals a recognition that housing must serve both everyday life and special occasions.

The critical value of these typologies lies in how they operationalise continuity. Families are not forced to leave their homes when circumstances change, but can evolve their dwellings over time. Such adaptability directly challenges the economic and emotional disruption created by rigid housing forms. However, the typologies also confront real-world barriers.

Incremental expansion is resource-intensive, requiring both financial capacity and regulatory permission. Local planning rules can limit the ability to stage growth, while construction costs and funding pathways often assume fully complete houses at the point of delivery. PHPs therefore face a tension: the typologies empower families in principle, but systemic structures can constrain their practical uptake if the future-proofing of consents is not undertaken.

Nevertheless, these typologies represent a significant cultural intervention. They redefine adequate housing not as meeting a static standard but as sustaining adaptability across generations. In doing so, they shift the focus of housing design from compliance toward cultural relevance and long-term resilience. As templates, they are not prescriptive but instead provoke new forms of dialogue between PHPs, families and practitioners about what is possible. By embedding adaptability into the design DNA, they enable a house to become a living system that can grow with its people rather than confine them.

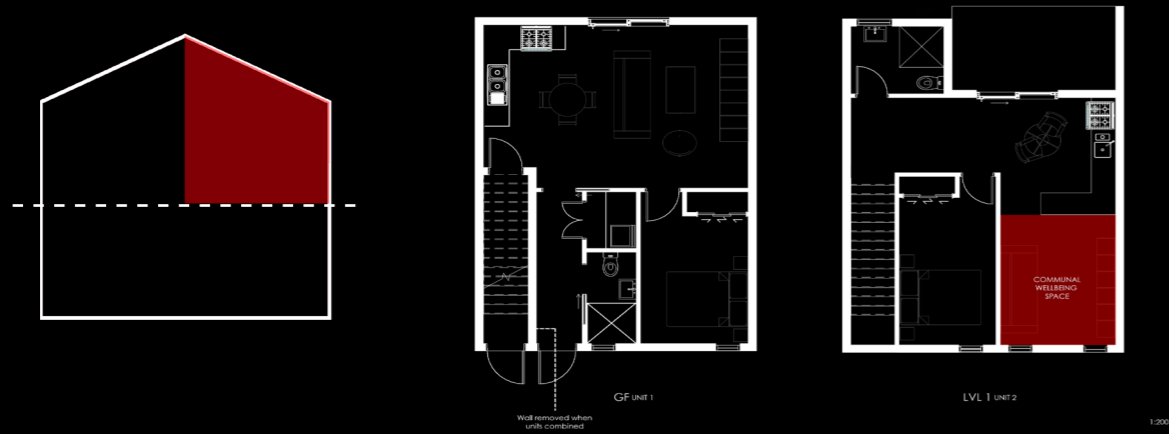


Figure 12: Fale tahi/ toru floorplan and elevation.



Figure 13: Fale tahi/ toru floorplan and elevation.

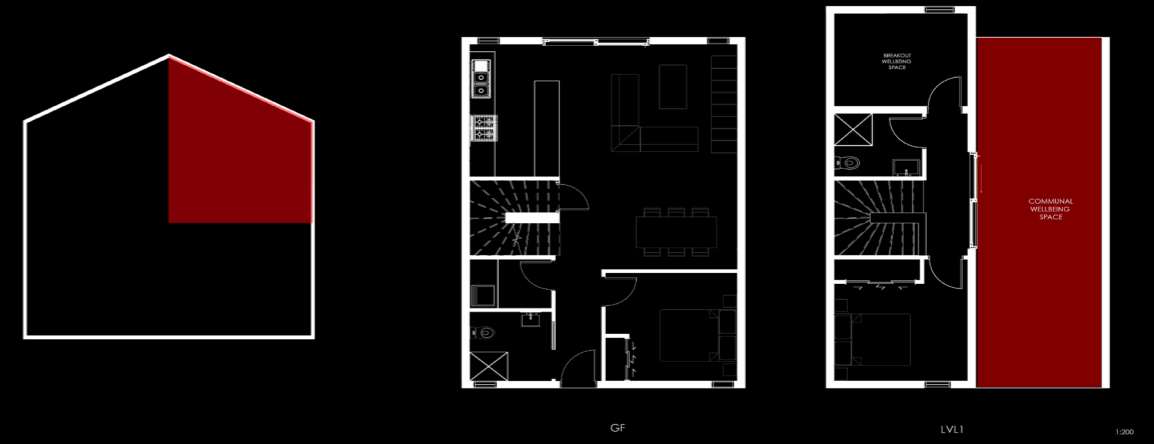


Figure 14: Fale rua/ whā floorplan and elevation.

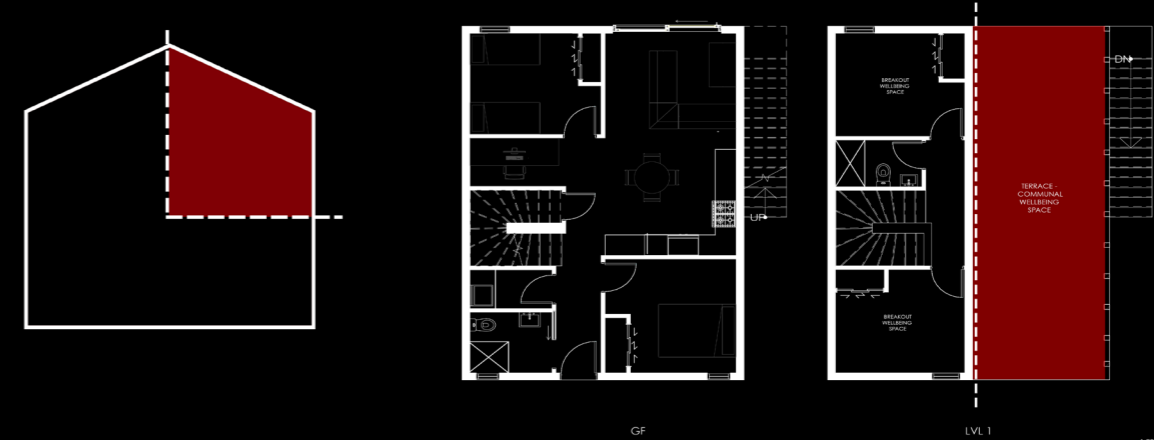


Figure 15: Fale rua/ whā floorplan and elevation.



Figure 16: Fale toru/ whā floorplan and elevation.



Figure 18: Fale whā/ ono floorplan and elevation.

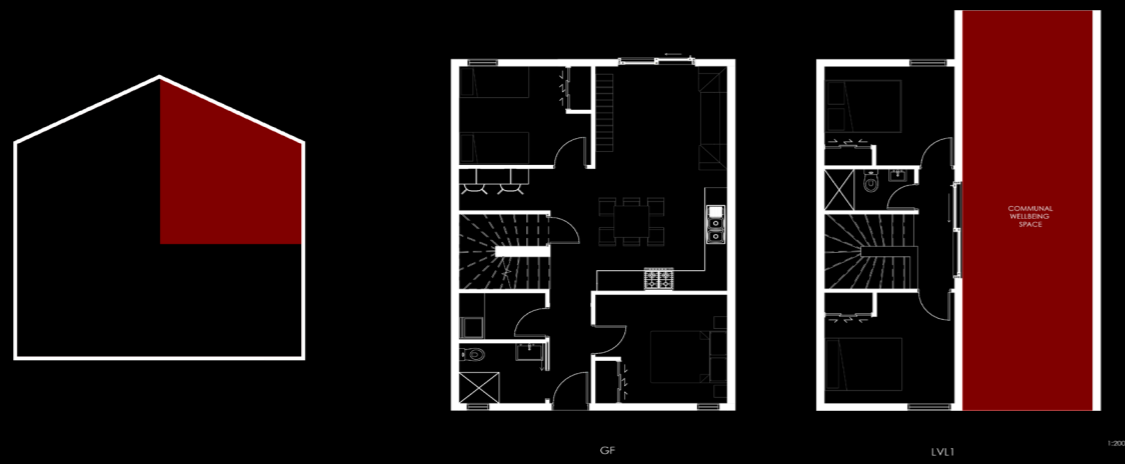


Figure 17: Fale whā/ rima floorplan and elevation.

Tool Three: Material Palette

What it is

The Material Palette is an indicative concept-phase resource. It offers base-build options (foundations, flooring, interior lining, cladding, roofing, and structure) and a Tupu palette of materials that can enable different forms of personalisation (e.g., greenhouse-like rooms, enclosed interior options, open-air spaces, and workshops). Previous iterations of the Material Palette included options for regenerative practices, including solar integration, hydrological strategies, sustainable material selection, and planting systems (found in Appendix H).

Origins and rationale

Early toolkit iterations and talanoa revealed that PHPs lacked accessible early-phase resources that convert cultural and regenerative aspirations into tangible, material strategies. The palette was reframed from a specification list to a readable menu aligned to concept-stage decisions, with regenerative prompts drawn from one of Maumoana's subframeworks, Vanua Moana, ecological emphasis.

Spatial logic and regenerative link

The materials palette embeds ecological intent within culturally fit choices, aligning ridge-to-reef thinking and wellbeing priorities. Its role is to bring environmental intelligence forward in the design sequence.

Visual references

The Paepae Palette presents base-build material selections, accompanied by the Tupu Palette, illustrating a suite of options fit for families and PHPs to personalise the communal wellbeing space.

Application

Multiple options per system allow PHPs to balance cost, durability and maintenance. Regenerative prompts are non-prescriptive starting points that can be refined collaboratively through the concept stage and developed into a design.

Service / gain / pain / contribution

The palette addresses the recurrent pain of ecological features arriving too late (and being cut). Gains include earlier, better-informed trade-offs and clearer advocacy with design teams and funders.

Limitations and scope

The Material Palette is not a complete specification: technical assessments, costing, and compliance remain the remit of architects and engineers. Budget constraints may limit the uptake of higher-cost, environmentally friendly systems. Not all suggested materials meet the strictest sustainability standards; the palette reflects what is currently available and affordable to procure, aiming for informed choice and incremental improvement rather than unattainable ideals.

Critical Commentary

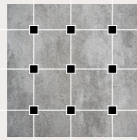
The material palette introduces ecological decision-making at the earliest design stage, disrupting the tendency for regenerative practices to appear only as costly add-ons. Making ecological choices visible from the outset gives PHPs the agency to advocate for outcomes that align with cultural priorities and environmental goals before budgets and compliance frameworks narrow the field of possibilities. This early intervention represents a subtle but significant redistribution of design power, ensuring that cost-driven compromises do not sideline ecological intelligence.

However, the palette also exposes the structural inequities of the construction sector. Many of the most sustainable materials remain financially out of reach or are not available within existing procurement networks accessible to PHPs. As such, the palette includes options that are not fully aligned with the most rigorous sustainability benchmarks. This is not a failure of the tool but a reflection of the systemic constraints PHPs must navigate. It reveals how affordability and feasibility often force compromises that would be unnecessary in more resource-rich contexts.

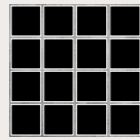
By presenting a menu of options rather than prescriptive standards, the palette invites incremental improvement rather than unattainable ideals. It encourages providers to make the best choices available to them, while leaving space for ecological ambition where funding allows. In this way, it functions both as a pragmatic guide and as an advocacy resource, equipping PHPs to argue for better procurement and funding pathways. Its contribution lies not in achieving perfect sustainability but in shifting conversations so that cultural fit, durability and ecological flows are considered together, even in contexts where systemic barriers remain unresolved.

Paepae Palette

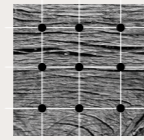
FOUNDATIONS



RAFT SLAB



QPOD

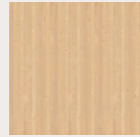


TIMBER PILE

FLOORING



CARPET



SEALED CLT

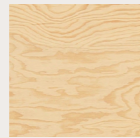


COLOURED VINYL

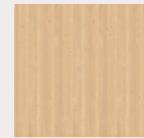
INTERIOR LINING



PAINTED GIB BOARD

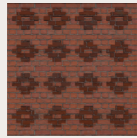


EXPOSED PLY



EXPOSED CLT

LOWER CLADDING

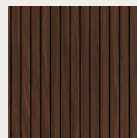


CUSTOM BRICK VENEER



CONCRETE BLOCK

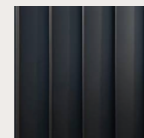
UPPER CLADDING



TONGUE AND GROOVE TIMBER BATTEN



COMPRESSED FIBRE CEMENT BOARD



TRAY CLADDING (CUSTOM COLOUR)

ROOF

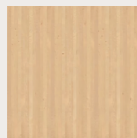


LONG-RUN ROOFING

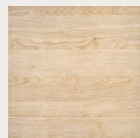


CORRUGATED COLOUR STEEL

STRUCTURE



CLT



LEVEL TIMBER FRAME



STEEL PORTAL + TIMBER INFILL

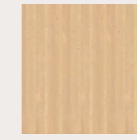
Figure 19: Paepae material palette.

Tupu Palette

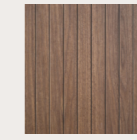
FLOORING



CARPET

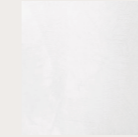


SEALED CLT

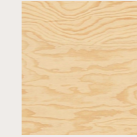


DECKING

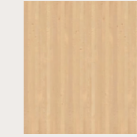
INTERIOR LINING



PAINTED GIB BOARD

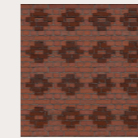


EXPOSED PLY



EXPOSED CLT

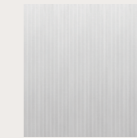
LOWER CLADDING



CUSTOM BRICK VENEER

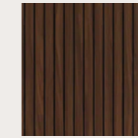


CONCRETE BLOCK

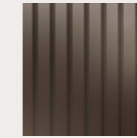


TWIN-WALL POLY-CARBONATE

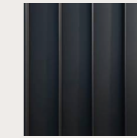
UPPER CLADDING



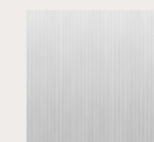
TONGUE AND GROOVE TIMBER BATTEN



CORRUGATED COLOUR STEEL



TRAY CLADDING (CUSTOM COLOUR)

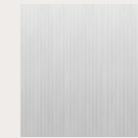


TWIN-WALL POLY-CARBONATE

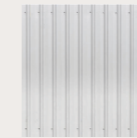


COMPRESSED FIBRE CEMENT BOARD

ROOF



TWIN-WALL POLY-CARBONATE

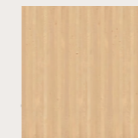


LONG-RUN ROOFING

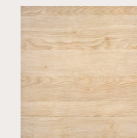


CORRUGATED COLOUR STEEL

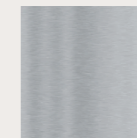
STRUCTURE



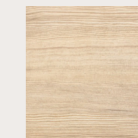
CLT



LEVEL TIMBER FRAME



STEEL PORTAL + TIMBER INFILL



LIGHT-WEIGHT TIMBER STRUCTURE

Figure 20: Tupu material palette.

Tool Four: Communal Wellbeing Spaces

What it is

Ten speculative illustrations show how families might personalise the fourth quarter of their home. The intent is to inspire, not prescribe, how materials and spatial choices could support diverse cultural practices and everyday life.

Origins and rationale

Through sustained dialogue, it became clear that envisioning incremental growth is challenging without accessible visuals, especially for individuals who struggle to read architectural drawings. The illustrations, therefore, provide an inclusive visual language that makes incremental living legible to non-specialists and usable in engagement and funding conversations.

Spatial logic and regenerative link

The tool activates the incremental ethos of *Fale Tupu*. It aligns with collective wellbeing in Maumoana's cultural logic, demonstrating that incremental housing is as much a cultural and lived experience as it is a structural one.

Illustrations

Variations include open-air gatherings, enclosed living spaces, greenhouse-like rooms, and multipurpose family spaces, prompting discussion while avoiding a single solution.

Application

Families, PHPs, funders, and practitioners can use the images to co-imagine staged adaptations over time, with or without architectural literacy.

Service / gain / pain / contribution

The tool alleviates misalignment with nuclear-oriented models by presenting tangible, culturally resonant options. Gains include agency, imagination, and funding advocacy, where PHPs gain a communication device for engagement with families and funding actors.

Limitations and scope

The 10 scenarios are illustrative, not exhaustive, and implementation will depend on funding and the phasing of projects. Nevertheless, they can strengthen cases for investment by demonstrating credible, community-centred possibilities.

Critical Commentary

The communal wellbeing spaces address perhaps the most persistent barrier to cultural alignment in housing: accessibility of design communication. Architectural drawings and technical documents are often illegible to those outside the profession, leaving families with limited ability to shape outcomes. By providing speculative illustrations that depict how incremental spaces might evolve, this tool democratises design literacy. Families can see themselves in the images, sparking dialogue about how their homes might adapt to their specific practices and aspirations.

The power of this tool lies in its ability to transform abstract architectural options into tangible scenarios. It bridges the gap between technical representation and everyday imagination. Families are not asked to interpret floor plans or technical diagrams; they are invited to visualise how spaces could function for gatherings, workshops or leisure.

The use of illustrative scenarios not only supports the agency of families but also enables PHPs to advocate for cultural design outcomes in conversations with funders and contractors, where tangible visuals often carry more persuasive weight than abstract principles.

Limitations remain. The 10 illustrations are indicative, not exhaustive, and the ability to realise them depends on funding and phasing. However, this limitation is also part of the tool's strength: by showing what is possible, even if not immediately achievable, it fuels aspiration and strategic advocacy. Importantly, it positions housing not as a fixed product but as a platform for ongoing cultural expression. By prioritising accessibility and imagination, the Communal Wellbeing Spaces make cultural agency a visible part of the housing process, challenging the dominance of standardised models and ensuring that design literacy is not restricted to professionals alone.

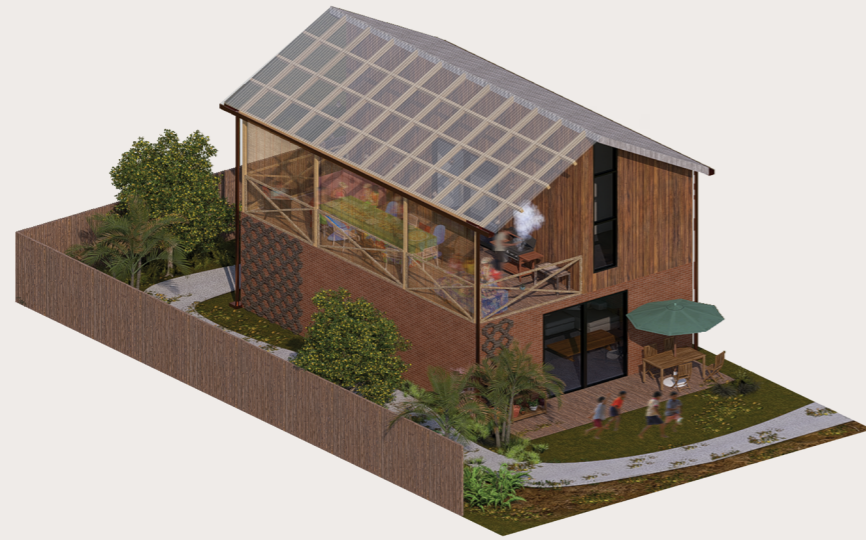


Figure 21: An open-air space to host kogai (gatherings).

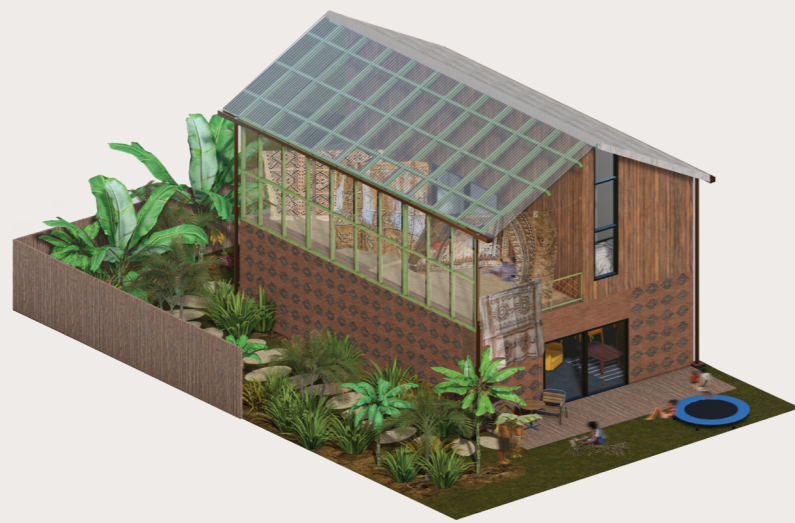


Figure 22: Partially enclosed to protect from wind and rain.



Figure 23: Lower open-air area for a workshop and making space.



Figure 24: A sleep out with an exterior space for food preparation.



Figure 25: An enclosed interior with additional space for music and dance.



Figure 27: Fully enclosed marae-style interior.



Figure 26: Two additional rooms with an internal courtyard for socialising.

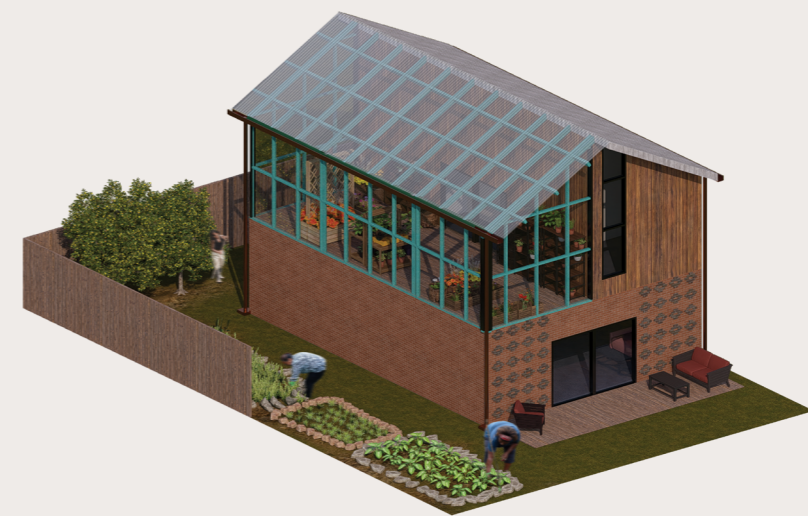


Figure 28: An enclosed greenhouse/ conservatory for a seed nursery.

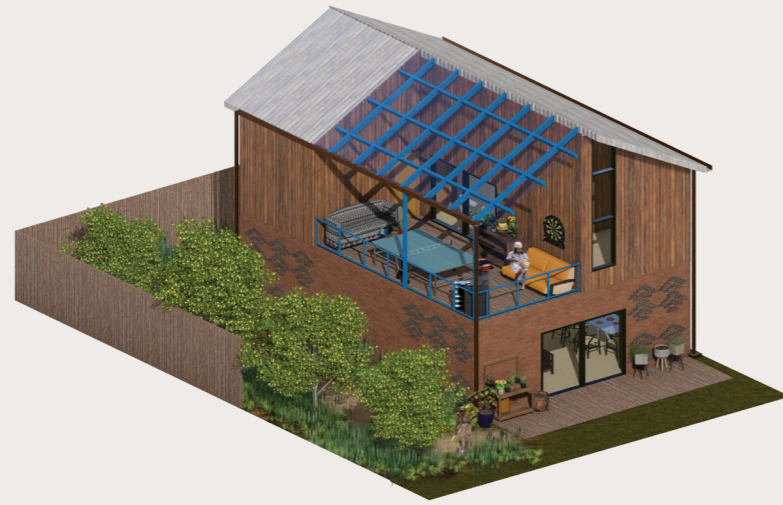


Figure 29: An enclosed interior with additional space for recreation.



Figure 30: Lower open-air area for a ceremonial practices.

Integration and Reflection

While each tool is presented individually, the value of each tool lies in its interdependence with other tools. The toolkit is not a set of isolated instruments but a system that moves from governance through form and materials into lived practice, addressing the precise gaps identified earlier, where policy voiced aspirations without spatial translation and consultation surfaced needs without implementable guidance.

Governance and Form

Maumoana provides the decision-making architecture that keeps processes culturally grounded, accountable and regenerative. Fale Typologies then extends this governance into practice, translating principles into adaptable housing layouts that support multigenerational living and the Pasifika way of life. Governance becomes visible as a form.

Form and Material

Fale Tupu's feasibility depends on practical material and ecological strategies. The Material Palette anchors this connection, offering sector-readable options that can be delivered within financial and technical constraints. Without the palette, the typologies risk remaining speculative; without the typologies, the palette lacks a brief. Addressed together, they align spatial intent with buildability and long-term performance.

Material and Lived Practice

The palette connects directly to everyday life through the Communal Wellbeing Spaces. Materials cease to be abstract selections and become the enablers of lived use – spaces for gathering, caring, working and celebrating. The illustrative scenarios improve accessibility, helping families and providers to envision possibilities beyond standardised models.

Closing the Loop

Together, the four tools create a continuous loop from values to lived practice. The Maumoana Framework anchors governance; Fale Typologies gives it form; the palette supplies feasible, regenerative means; and the communal spaces bring outcomes into daily life. Such interconnection mirrors the research methodology and methods (Maumoana, talanoa, and visualisation) working iteratively to shape the outputs. The toolkit is therefore both a resource and a process, reframing housing as a living system.

The Maumoana Framework is also the integrative mechanism that activates the other tools. Ara Moana clarifies sequencing and adaptability, shaping the Fale Typologies to meet unfolding needs. Wao Moana grounds material choices in ecological flows, informing the palette and regenerative prompts. Vā Moana sustains relationships between tenants and providers, enabling the “fourth quarter” to be realised in ways that are culturally meaningful and operationally viable. In this sense, the toolkit expresses Maumoana’s sub-frameworks as a coherent practice pathway.

Future Directions and Refinements

The toolkit is an evolving resource that should continue to be tested, refined, and reactivated with PHPs and their communities. Immediate next steps include:

- **Operationalisation:** Develop concise user manuals and short training modules that guide PHPs through applied scenarios. Consider creating an interactive digital version to adapt diagrams, test typology options, and map material choices in real-time, thereby embedding the toolkit within planning and design workflows.
- **Funding pathways:** Utilise the toolkit as an advocacy tool – clear visuals, structured frameworks, and culturally grounded principles can strengthen cases for funders, agencies and philanthropic organisations. Mapping typical cost and phasing scenarios alongside the tools will further support feasibility conversations.
- **Pilot project:** Apply the complete toolkit on a live site to evidence impact, surface challenges and capture community feedback. Lessons learned should be incorporated into revised diagrams, decision guides, and facilitation notes, thereby enhancing replicability while maintaining flexibility.
- **Iterative growth:** Continue talanoa to track changing needs, policy conditions, and project delivery realities; add tools or reconfigure existing ones as required. Maintain cultural accountability by keeping relationships at the centre of revision cycles.

To strengthen future iterations, *Fale Tupu* should explicitly navigate the tension between aspiration and affordability by specifying robust baseline options alongside staged pathways to higher-performance, regenerative upgrades as funding permits.

My positionality as a Samoan–Pākehā designer necessitates a reflexive approach to interpreting talanoa. Should the research progress and *Fale Tupu* be further developed, decisions should be carefully documented to distinguish analytical interpretation from community voice, with independent cultural facilitation sought where appropriate. Such measures will help maintain feasibility for PHP delivery while safeguarding cultural integrity and regenerative ambition. Ultimately, refinement is as much a collective and iterative process as it is a technical one. By embedding Indigenous values in everyday housing practices, the toolkit can challenge prevailing norms, empower PHPs, and contribute to more equitable and regenerative housing futures in Aotearoa.

Conclusion

This chapter has translated the research into a practice-ready Pasifika housing toolkit that directly addresses the gaps surfaced earlier: strong policy aspirations, limited spatial guidance, and the absence of accessible design tools for PHPs. The toolkit consists of:

Tool One

The Maumoana Framework closes the policy–practice gap by transforming cultural and ecological values into a sequenced decision-making process, enabling PHPs to steward projects with Indigenous authority and environmental accountability.

Tool Two

Fale Typologies addresses the absence of design for multigenerational living by converting community-voiced needs into adaptable forms that expand or contract over time within real planning and delivery constraints.

Tool Three

Material Palette addresses the implementation gap at the concept stage, introducing ecological thinking and practical options—when performance and cost trajectories are established—while facilitating informed trade-offs.

Tool Four

Communal Wellbeing Spaces resolves a communication gap by making incremental living legible to non-specialists, supporting family agency, PHP engagement, and funding advocacy through tangible, culturally resonant visuals.

Taken together, the four tools move from values to form, to materials, to lived use, giving PHPs an integrated pathway from aspiration to action. They are intentionally flexible and non-prescriptive, designed to be adapted across sites, budgets and community priorities.

In summary, the toolkit reframes Pasifika housing as a culturally grounded, ecologically responsive and practically achievable endeavour. It shifts conversations from abstract aspirations to concrete, adaptable strategies that providers and families can implement in authentic contexts, reimagining housing as a living system that sustains culture, strengthens community and restores relationships with the environment.

06

Fale Tupu Application and Testing

This chapter examines the application of *Fale Tupu* through a live pilot project made possible by a site provided by Penina Trust. As New Zealand's first and largest PHP, Penina offered professional context and sector insight that helped situate the project within real housing conditions. Their role was not participatory but advisory, ensuring that the toolkit was considered against authentic operational settings and community needs. This contextual grounding enabled the toolkit to be tested conceptually within a live environment, bridging research and practice.

Penina Trust

Penina Trust is a Pasifika-led non-government organisation that has operated in South Auckland since 2001. Established by Chief Executive Officer Roine Lealaialoto, the organisation was founded on the recognition that Pasifika families require services that honour cultural integrity, collective ways of being, and holistic understandings of wellbeing. What began as a health and social service provider has since expanded into housing, with Penina becoming the first dedicated PHP in Aotearoa. Today, Penina provides transitional and long-term housing, alongside wraparound services that support individuals and families beyond the provision of shelter.

At the heart of Penina's philosophy is Fa'a Pasifika, the Pasifika way. This ethos emphasises compassion, reciprocity, dignity, and respect, values that guide the delivery of services across housing, health, and wellbeing. Rather than treating housing as an isolated intervention, Penina embeds it within broader systems of care, recognising that secure and culturally aligned shelter is inseparable from social, spiritual, and economic resilience. Their approach is also deeply relational: services extend to the wider aiga and community networks, reflecting Pasifika traditions of collective responsibility.

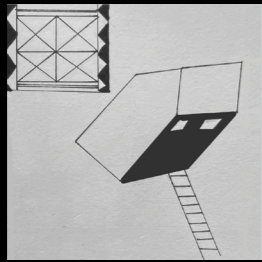
Penina's work is also distinguished by its respect for Mana Whenua and its commitment to Te Tiriti o Waitangi. The organisation continues to build meaningful partnerships with iwi in South Auckland, ensuring that housing initiatives recognise shared custodianship of land and affirm Indigenous sovereignty. In this sense, Penina positions itself not only as a service provider but also as a bridge between Pasifika families, Māori communities, and the wider housing sector.

Governance of the trust rests with a skilled board of trustees, with expertise spanning governance, finance, health, and lived experience. Under Roine's leadership, Penina has grown a diverse and professional team that combines housing development and social wellbeing, underpinned by strong cultural fluency. Many staff carry lived knowledge of the very challenges their clients face, bringing empathy and accountability into practice. This combination of cultural grounding, professional skill, and community trust enables Penina to operate with integrity in spaces where mainstream providers often fall short.

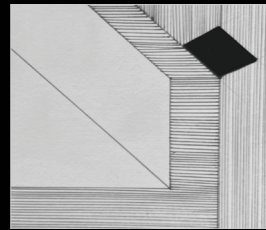
For this research, Penina's role as an industry reference point was pivotal. Their openness to informal professional dialogue provided valuable contextual understanding of community housing realities, helping to ensure that the toolkit remained grounded in practice rather than abstract assumptions. The Papakura pilot project drew on this professional context, using the site as a means to conceptually test how the toolkit operates within real delivery conditions and sector frameworks.



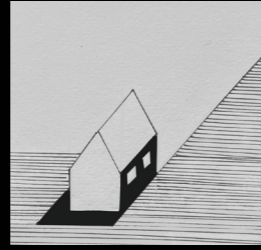
Figure 31: Penina Trust team (P. T., n.d.).



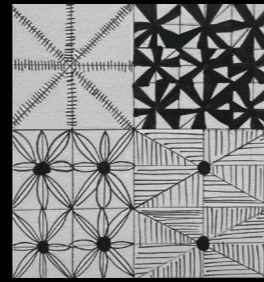
Aotearoa's first Pasifika Housing Provider, delivering culturally grounded housing and wraparound support services since 2001.



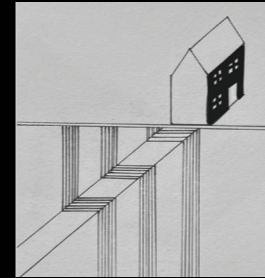
Guided by Faa Pasifika, their work is anchored in compassion, dignity, and reciprocity to uphold cultural and collective wellbeing.



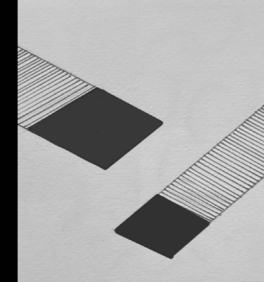
Penina provide transitional and permanent housing, health and wellbeing services, and financial literacy programmes helping families into pathways towards homeownership.



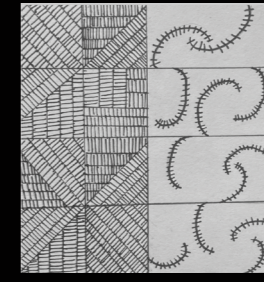
They embed housing within holistic care systems, prioritising multigenerational needs, cultural safety, and trusted relationships with families and communities.



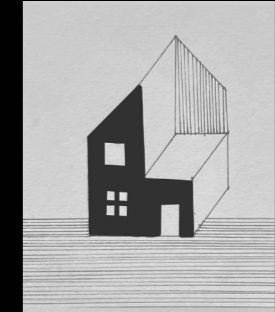
Delivering both small-scale urban infill and multigenerational developments, designed to evolve with family needs and cultural obligations.



Penina aim to expand their housing portfolio by ten units annually, with ongoing growth guided by community.



Penina aspires to develop bespoke housing to fit Pasifika needs and be a part of the national progressive home ownership scheme.



Respect for Mana Whenua, always aligning with Te Tiriti o Waitangi, and building partnerships with local iwi.

Figure 32: Visualisation of Penina Trust's core values.

Application of Tool One: The Maumoana Framework

The application of the toolkit on the Papakura pilot site began with Tool One: Maumoana Framework, which grounds every decision in cultural and ecological integrity. Each sub-framework informed distinct design moves, ensuring that the site developed as a living system responsive to people, place, and environment.

Vā Moana grounded the project by establishing and nurturing the relationship with Penina Trust. The relationship was informed by mutual trust and accountability. Vā Moana also required attentiveness to context in recognising planning regulations, surrounding residential conditions, and neighbouring activities as part of the relational space that the project inhabits. These considerations ensured the design began with respect for both people and place.

Mauri Moana guided spatial navigation by embedding vitality and wellbeing into the site's organisation. Mapping surrounding Māori landscapes and cultural markers informed the positioning of the *malae* (central ceremonial ground) at the centre, conceived as the heart of the community. This act placed wellbeing not at the margins but at the core of spatial strategy, giving the development a spiritual and cultural anchor point.

Mana Moana shaped the site's structure through orientation and natural forces. Attention to solar gain and prevailing winds guided the division of the site into tapu, tupu, and noa zones. Housing was placed in the tapu domain, areas for future growth were concentrated in the tupu zone, and collective activities were designated as noa. This zonal ordering embedded authority and accountability in the site plan, creating a spatial ethic aligned with Indigenous cosmologies.

Vanua Moana identified the communal spaces most suited to the site. The car park was recognised not only as a space for vehicles but also as a potential site for gatherings. A rooftop terrace, oriented to the northeast, offered another communal point that could receive sunlight all day. At the rear of the site, provision for an umu extended these communal functions into cultural practice, linking cooking and gathering to the ancestral rhythms of daily life.

Ara Moana defined sequencing and adaptability. Within the tapu zone, the housing need was clearly identified: two- to four-bedroom dwellings, with the capacity to grow as family needs evolved. Tool Two, Fale Typologies, addressed this requirement. Each home can expand to four or five bedrooms without requiring structural alterations, thanks to the efficiency of the gridded structural system, ensuring adaptability without compromising structural integrity. The tupu zone, or growth space, became an area of ecological and cultural regeneration. Here, communal gardens were proposed, planted with traditional vegetables, medicinal plants, and native species. Colourful and edible planting reinforced the garden's role as both a source of sustenance and a cultural expression, enabling the environment itself to grow alongside the community.

Wao Moana guided the material and regenerative strategies, emphasising the interconnectedness of land, ocean, and people. The design incorporated Q-pod slab tank foundations, which integrate stormwater retention within the structure. Flooring was specified as vinyl, sealed cross-laminated timber (CLT) and carpet in different zones, with a CLT structure and exposed interior linings forming the core. Externally, customised brick veneer panels and timber cladding articulated the base build, while corrugated Coloursteel roofing offered durability and economy. Solar panels, permeable pavers, native vegetation, and edible gardens reinforced the regenerative ethos of ridge-to-reef thinking, ensuring that ecological flows informed material and landscape decisions.

Finally, Mau Moana brought all elements together. Housing, communal gardens, material strategies, and shared cultural spaces were aligned into a resilient living system. Mau Moana ensured that the project was not fragmented into separate components, but rather understood as a coherent whole, where people, place, and housing coexist in balance.

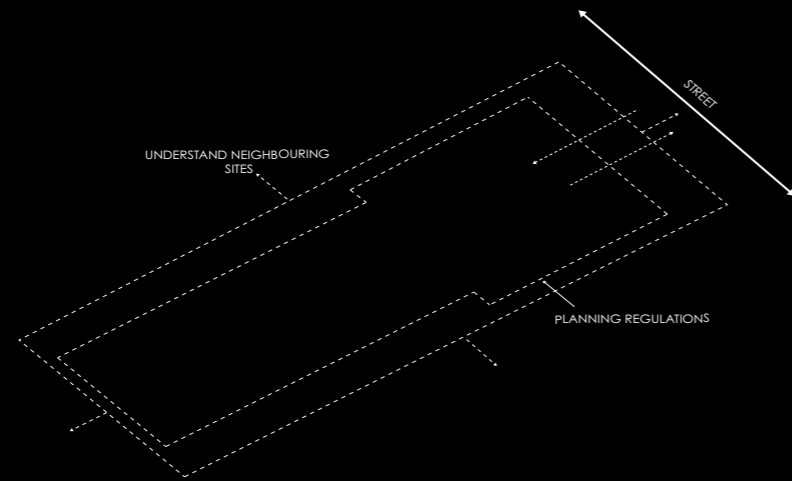


Figure 33: Site application of Vā Moana.

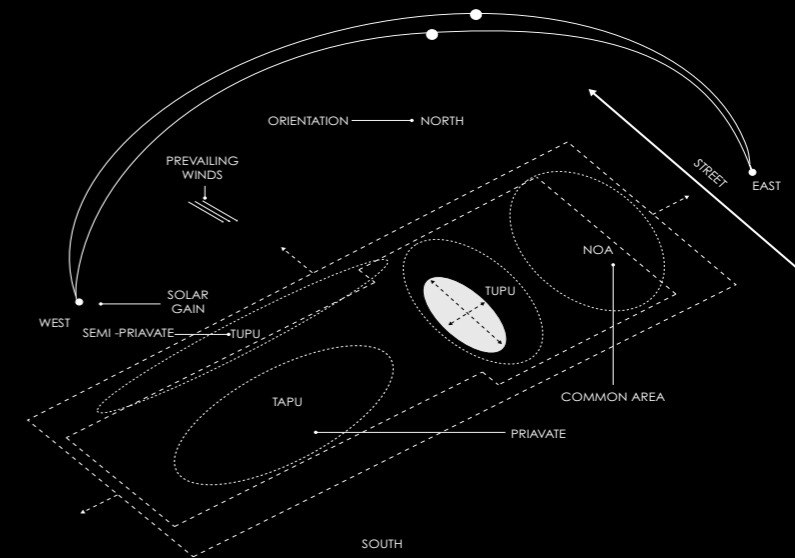


Figure 35: Site application of Mana Moana.

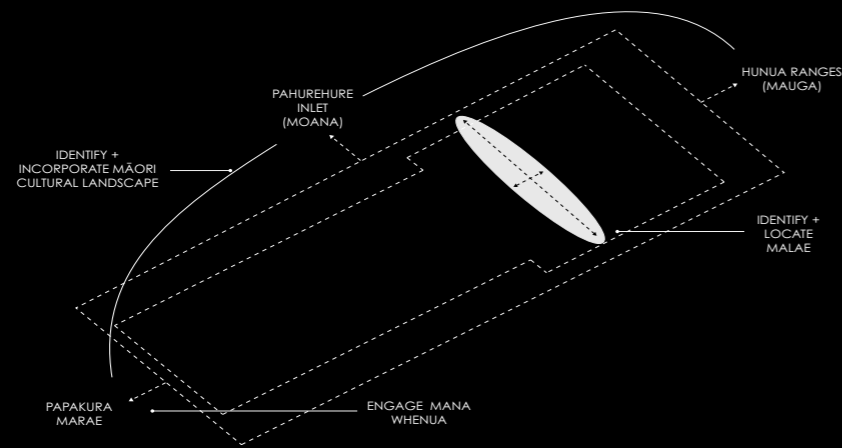


Figure 34: Site application of Mauri Moana.

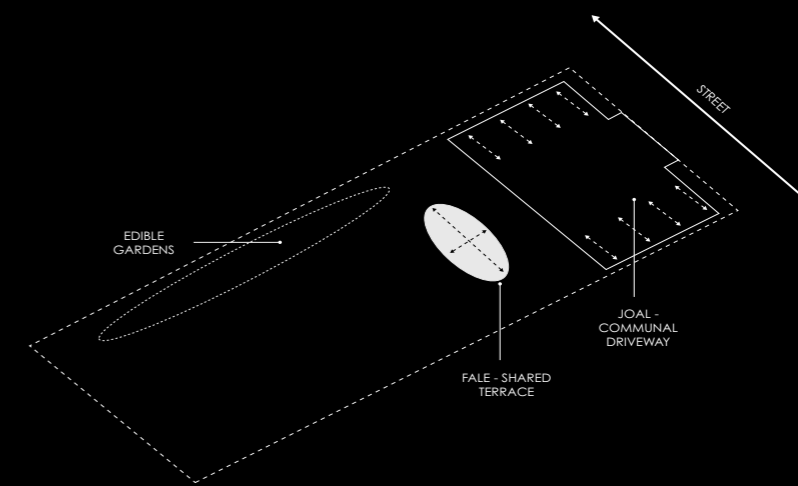


Figure 36: Site application of Vanua Moana.

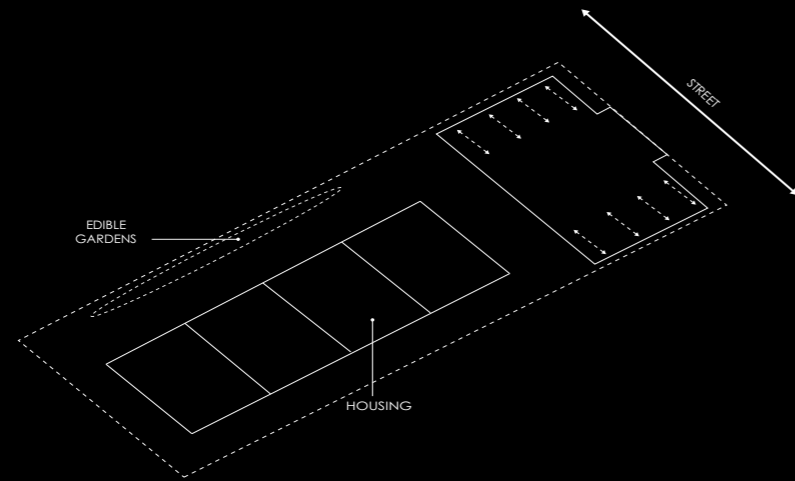


Figure 37: Site application of Ara Moana.

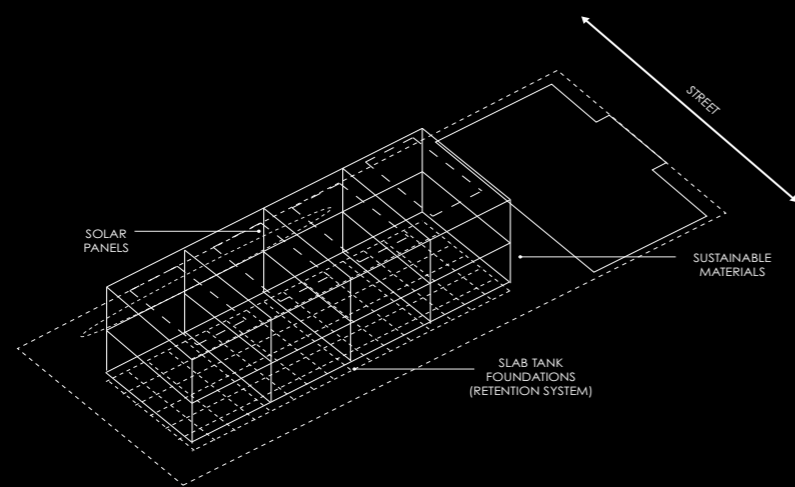


Figure 38: Site application of Wao Moana.

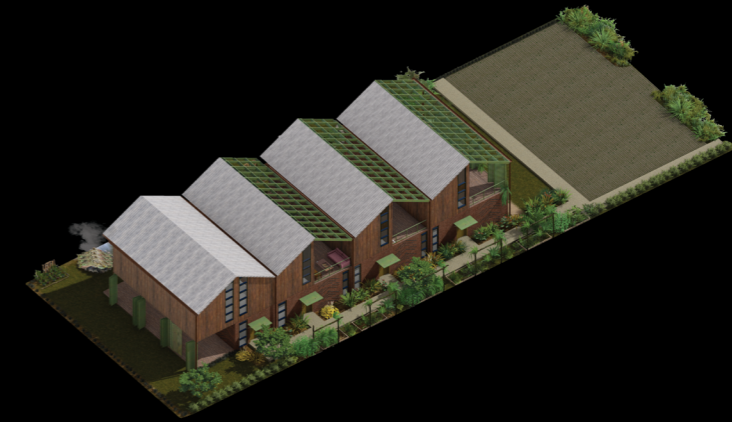


Figure 39: Site application of Mau Moana.

Application of Tool Two: Fale Typologies

The Fale Typologies operationalised the Ara Moana sequencing by providing adaptable housing forms. On the pilot site, the base build responded to Penina's identified need for two- to four-bedroom homes. Each dwelling was designed with the capacity to expand into four or five bedrooms over time, facilitated by a rational structural grid that supported incremental additions without disrupting the original form.

This approach strikes a balance between immediate affordability and long-term adaptability. Families could enter housing that met their current needs, knowing that expansion was possible as circumstances shifted, whether through the arrival of extended family, changes in caregiving responsibilities, or the demands of cultural events. The base build, therefore, was not a static product but a platform for growth.

By embedding adaptability from the outset, the base-build typologies challenged the limitations of conventional housing provision, where families are often forced to relocate when their needs change. On this site, the dwellings were instead designed to evolve with their occupants, affirming continuity and reducing disruption.



Figure 40: Pilot site communal garden.

Application of Tool Three: Material Palette

Tool Three, the Material Palette, was tested through Wao Moana's ecological integration. The pilot site material choices were guided by durability, affordability, and regenerative potential, reflecting both cultural values and practical realities of construction.

The base build utilised Q-pod slab tank foundations, incorporating stormwater management into the structural system. Interior flooring was specified as vinyl in service areas, sealed CLT in living areas and carpet in bedrooms, striking a balance between maintenance and comfort. CLT formed the structural frame, with exposed linings providing a sense of warmth and material honesty.

Externally, the dwellings featured customised brick veneer panels on the lower level and timber cladding on the upper level, producing a robust yet culturally adaptable aesthetic. Corrugated Coloursteel roofing ensured resilience and low maintenance, while the integration of solar panels aligned the project with regenerative practice. Landscape and hardscape strategies reinforced this intent: permeable pavers supported stormwater infiltration, and the planting of native vegetation and edible gardens enhanced biodiversity and food resilience. The Q-pod slab tank foundations serve as double-duty retention tanks, allowing water to cycle through the site with a regenerative purpose.

While not all materials met the highest standards of environmental performance, their selection reflected what was both feasible and accessible to Penina. This balance highlighted the systemic inequities of construction supply chains while also demonstrating how culturally aligned and regenerative choices could still be embedded within real constraints.



Figure 41: Pilot site interior perspective.



Figure 42: Sectional perspective of the pilot site units.



Figure 43: Pilot site ground floor plan.



Figure 44: Pilot site level 1 floor plan.

Application of Tool Four: Communal Wellbeing Spaces

The final tool, Communal Wellbeing Spaces, was expressed in the open-air areas embedded within the site plan. These spaces were deliberately left unoccupied in the base build, enabling families to customise them as needs emerged.

Visual perspectives illustrated potential uses: spaces for socialising, gathering, art-making, and food preparation. By providing tangible images of these scenarios, the toolkit made incremental living legible to non-specialists, enabling both Penina and families to visualise how the site could adapt over time.

These communal spaces extended the cultural logic of the malae, embedding opportunities for connection and collective activity within the fabric of the housing. Their openness allowed for flexibility, ensuring that they could accommodate diverse practices across generations. In doing so, they affirmed the principle that housing encompasses not only private dwellings but also the shared life of the community.



Figure 45: Pilot site lower communal wellbeing space being used for food preparation.



Figure 46: Pilot site upper communal wellbeing space being used as a more private space.



Figure 47: Pilot site upper communal wellbeing space being used as a communal rooftop terrace.

Reflection

The process of applying the toolkit to the Papakura site was invaluable, even though the project ultimately did not proceed with its use. Instead, Penina Trust adopted the original architects' concept, which delivered six homes to meet the financial requirements. This decision highlights the broader realities of community housing provision in Aotearoa, where financial viability and policy frameworks often dictate outcomes. While this meant the toolkit was not realised in built form, the exercise of testing it against a live site revealed important lessons about both feasibility and future potential.

Central to this reflection is the role of Penina Trust. Their guidance, openness, and willingness to share insights provided the grounding necessary for *Fale Tupu* to take shape. Talanoa with Penina highlighted the practical constraints of housing delivery in ways that literature alone could not capture. This relationship enabled a process that was culturally grounded and relationally accountable, even if external structures ultimately determined the project's direction. Without Penina's trust and generosity, the development of *Fale Tupu* would not have been so rigorous.

A key insight from this application has been the weight of policy and financial systems in shaping what is achievable. Innovation often needs to be classified before it can gain support. While these frameworks safeguard accountability, they also constrain cultural and regenerative aspirations, forcing them into bureaucratic forms that may not fully align with community needs. The pilot site illustrated how such structures, rather than design intent, can ultimately decide outcomes.

Affordability was another defining theme. Although the toolkit promotes regenerative practices, many sustainable options remain out of reach for PHPs due to their high cost. Systems aligned with benchmarks such as the Living Building Challenge are inaccessible when budgets prioritise delivering more homes rather than optimising long-term ecological performance. This inequity highlights a structural gap in the sector: while sustainability is promoted at the national level, the financial tools to support it are lacking where the need is greatest.

Despite these barriers, the process confirmed Penina's courage and vision as a provider. Their earlier multigenerational housing project, *Redhill*, demonstrated their capacity to innovate beyond prevailing models. The pilot site experience confirms that such leadership is crucial for advancing culturally aligned housing, even if compromises are necessary. The reflection suggests that the future lies in continued advocacy, strategic risk-taking, and demonstration projects that can evidence the value of housing designed for intergenerational wellbeing.

Conclusion

The attempted application of *Fale Tupu* on the pilot site highlighted both its promise and its limitations. While the project ultimately proceeded under the original architects' scheme to deliver six homes, this outcome revealed the financial and policy pressures that shape housing provision for Pasifika communities. In practice, meeting funding requirements took precedence over testing a culturally grounded toolkit, underscoring the structural barriers that providers must navigate.

Nonetheless, the process of applying the toolkit confirmed its value as a conceptual and practical resource. Maumoana framed governance and accountability; the Fale Typologies offered pathways for adaptability; the Material Palette introduced regenerative considerations; and the Communal Wellbeing Spaces illustrated the potential for cultural expression. Although these tools were not realised on site, working through them demonstrated how the built outcomes could have been markedly different from business-as-usual provision—more porous, adaptable, communal and responsive to Pasifika ways of living. This application phase clarified how cultural frameworks can produce spatial strategies that prioritise social connection, intergenerational care and ecological reciprocity, while also revealing where systemic obstacles prevent such translation in practice.

The Papakura experience affirms that while the toolkit is operationally viable, its wider adoption will require supportive policy, accessible funding mechanisms, and providers willing to champion alternative approaches. In summary, this pilot highlighted both the challenges of implementation and the enduring importance of culturally grounded design as a pathway to more equitable housing futures.

07

Conclusion

Key Takeaways

This research has demonstrated the value of developing a culturally grounded, practice-ready design toolkit informed by the realities of a PHP. *Fale Tupu* is distinctive in its integration of governance, adaptable typologies, material strategies, and communal wellbeing spaces within a single, systemic resource. Unlike existing frameworks, which often remain at the level of policy or high-level strategic aspiration, this work translates cultural aspirations into tangible design tools. Its importance lies in providing PHPs with resources that both respect Indigenous values and can be operationalised within the realities of housing delivery.

Relevance to Stakeholders

For PHPs, the toolkit offers a structured yet flexible means of engaging consultants, contractors, and funders while keeping cultural and ecological values at the centre. For Kāinga Ora and other CHPs, the toolkit demonstrates an approach that bridges policy aspirations and design practice, with potential for adaptation across diverse communities if accompanied by appropriate cultural facilitation. For Pasifika families, the toolkit affirms housing is more than shelter – it is a site of wellbeing and collective life. In this way, the research contributes to the wider discourse on housing equity by reframing provision around dignity, adaptability and cultural agency.

Contribution to Knowledge

Methodologically, this thesis has shown how Maumoana can operate as a coherent practice-led methodology, embedding Indigenous epistemologies into the architectural process. It extends scholarship on Indigenous design by evidencing how relational frameworks can be sequenced into practice through talanoa and visual making, producing outputs that are both culturally accountable and technically legible.

Practically, the research delivers *Fale Tupu: A Pasifika Housing Toolkit* as an accessible resource for PHPs and, potentially, for CHPs by providing design-ready tools that can support incremental growth, ecological integration, and communal wellbeing.

Theoretically, the research contributes to Indigenous research discourse by reinforcing the importance of relational accountability and demonstrating how design can function as a regenerative act. By positioning housing as ceremony, as Wilson (2008) described research more broadly, this project aligns built form with Indigenous ontologies that see land, people, and ocean as interconnected living systems.

Limitations

The primary limitation of this research is its application to a single pilot site. While the toolkit was tested against live conditions, the project ultimately proceeded under a different architectural scheme to meet financial requirements. This restricted the ability to evaluate built outcomes and limited the scope of testing to conceptual application. Furthermore, while the toolkit has been designed to be adaptable, its application to other contexts will require further testing, refinement, and cultural facilitation. Finally, the scope of this research, as a master's thesis project, necessitated boundaries around material specifications, planning advocacy, and cross-regional application, all of which could be expanded in future work.

Further Considerations and Future Research

Several pathways for further exploration have been identified. At an urban planning level, there is potential to investigate how toolkits such as this could influence neighbourhood and city-scale strategies, embedding cultural frameworks beyond the site. Future research could also expand the material palette to include more detailed specifications, life-cycle assessments, and cost modelling to support PHP advocacy in procurement conversations. Regional application is another avenue: testing the toolkit in different contexts across Aotearoa could reveal its adaptability and highlight the diversity of Pasifika housing needs. Finally, there is scope to explore how the toolkit could be scaled up, potentially through digital platforms or training modules, to enable wider sector uptake while maintaining cultural integrity.



Figure 48: Pasifika students and staff at the NZIA Student Design Awards celebrating the historic achievement of three Pasifika students receiving all major prizes (Tantrum, 2025).

Final Reflection

This research has, above all, been a relationship. Engaging with Penina as an industry professional affirmed that culturally grounded housing is not a discrete design task but an ongoing commitment to people and place. Professional dialogue with Penina’s team provided valuable understanding of the challenges and opportunities within the Pasifika housing landscape, ensuring that design thinking remained responsive to lived realities rather than abstract speculation. These exchanges highlighted the everyday ingenuity and persistence required to deliver dignified homes within constrained systems, alongside the inequities that Pasifika communities continue to face. The Maumoana Framework helped me sustain that commitment, reminding me that design is inseparable from the relationships and responsibilities that sustain it (Wilson, 2008). Even though the pilot did not proceed under this toolkit, the process clarified what matters: governance that centres Indigenous authority, adaptable forms that honour intergenerational care, regenerative and ecological intent, and design that reflects our communities’ vast needs. In doing this exercise, it was made very apparent that the toolkit (or something like it) needs to become the reality of Pasifika housing; the challenge is ensuring it is recognised as valuable by those who control funding and policy levers.

This reflection reinforces the research question, *How can Indigenous-led design systems support Pasifika housing providers to deliver resilient, culturally responsive housing in Aotearoa?* It shows that even without full implementation, the process illuminated both opportunities and barriers. In doing so, the work contributes new knowledge by placing PHP perspectives at the centre of design translation and addressing a persistent gap in Pasifika housing literature, where community aspirations have seldom been operationalised into spatial strategies, let alone into regenerative practices that honour both ecological systems and cultural continuity.

The pilot application also clarified the architectural significance of the toolkit: it produces a spatial language grounded in oceanic spatiality—open, social, climate-responsive, and fluid rather than confined within rigid Western typologies. Its generational adaptability, porosity to the living world, and orientation toward communal life signal a fundamentally different way of making home, one that feels culturally resonant rather than imposed. Even though financial realities prevented its adoption on site, the process affirmed the robustness of the methodology and highlighted the value of iterative talanoa and design tools as mechanisms for testing feasibility as much as generating form.

This research also underscored the wider transformative potential of *Fale Tupu*. First, it gestures toward a contemporary Aotearoa vernacular shaped not only by climate and materials but by the Pacific cultures that now define much of our urban life—inviting an oceanic architecture grounded in Moananui values, relationships, and regenerative ways of living. Second, it reframes participation by giving Pasifika Housing Providers tangible tools through which families can exercise agency over their spaces; homes become adaptable and ecologically responsive, evolving with aiga rather than constraining them. Finally, the toolkit challenges assumptions about architectural practice itself. Rather than positioning architects as sole authors of form, it casts them as facilitators who design processes, frameworks, and conditions that enable long-term cultural and ecological wellbeing. In this sense, *Fale Tupu* expands what architecture can be: not simply the production of houses, but the cultivation of regenerative systems that allow communities to shape their own environments with dignity and sovereignty.

I remain deeply appreciative of Penina Trust’s openness and generosity in sharing professional context. The ongoing leadership of the trust continues to define what responsible practice can look like. The relationships formed throughout this research reflect the interconnectedness of the Moananui context where practitioners who shared insights and reflections contributed to a collective understanding that will continue to shape my practice beyond this thesis.

Nevertheless, the scope was limited to a single site and one provider, indicating the need for further pilots, broader regional application, and sustained advocacy to enable affordability and cultural integrity to co-exist in practice. Moving forward, my responsibility is to keep this work open, iterative and useful, and to translate advocacy into tools, and tools into outcomes, without losing sight of the ceremony of relationship that gives the work its purpose (Wilson, 2008). In that spirit, the toolkit is not an endpoint but a beginning.



Figure 49: Amelia Lee Chee in NZIA Student Design Awards exhibition booth (Tantrum, 2025).

References

- Alalaga Research Collective. (2024). Alalaga Research Document. Unpublished manuscript.
- Anderson, T., Yeates, K., Hyslop, S., Weasel Moccasin, D., & Shade, R. (2022). Using Two-Eyed Seeing to co-develop First Nations housing policies with Canada. *Canadian Public Administration*, 65(1), 8–30. <https://doi.org/10.1111/capa.12479>
- Asia Society, & Asia Society Museum. (2004). Paradise now? Contemporary art from the Pacific. <https://asiasociety.org/paradise-now-contemporary-art-pacific>
- Baker, M., Zhang, J., Blakely, T., Crane, J., Saville-Smith, K., & Howden-Chapman, P. (2012). Collaborative Housing Research Programme – Background paper. He Kainga Oranga.
- Central Pacific Collective. (n.d.). Mua i malae. Retrieved March 31, 2025, from <https://www.cpc-homes.org.nz/new-property-site-release/mua-i-malae>
- City of Vancouver. (2023). City of Vancouver UNDRIP action plan 2024–2028. <https://vancouver.ca/files/cov/undrip-action-plan-2024-2028.pdf>
- Fa'avae, D., Jones, A., & Manu'atu, L. (2016). Talanoa'i 'a e talanoa: Some dilemmas of a novice researcher. *AlterNative*, 12(2), 138–150. <https://doi.org/10.20507/AlterNative.2016.12.2.3>
- Fien, J., Charlesworth, E., Lee, G., Morris, D., Baker, D., & Grice, T. (2007). Flexible guidelines for the design of remote Indigenous community housing. Australian Housing and Urban Research Institute.
- Government of South Australia. (2021). South Australian Aboriginal housing strategy 2021–2031. SA Housing Authority.
- Hammond, C., Gifford, W., Thomas, R., Rabaa, S., Thomas, O., & Domecq, M.-C. (2018). Arts-based research methods with Indigenous peoples: An international scoping review. *AlterNative: An International Journal of Indigenous Peoples*, 14(3), 260–276. <https://doi.org/10.1177/1177180118796870>

- Hoskins, R., Morgan, J.-L., Knox, W., Dennis, H., Henry, L., Nathan, L., Smiler R., & Ratana, M. (2019). Tūranga ki te marae, e tau ana: Reimagining marae-based kāinga in Tāmaki Makaurau. Building Better Homes, Towns and Cities National Science Challenge. https://www.buildingbetter.nz/wp-content/uploads/2023/08/Hoskins_et_al_2019_Turanga-ki-te-marae-tau-ana.pdf
- Housing New Zealand Corporation. (2009). Orama nui: Housing strategy for Pasifika peoples. Housing New Zealand Corporation.
- Howden-Chapman, P., & Chapman, R. (2012). Health co-benefits from housing-related policies. *Current Opinion in Environmental Sustainability*, 4(4), 414–419. <https://doi.org/10.1016/j.cosust.2012.08.010>
- Indigenous Home-lands. (2020). Housing ecosystem overview and strategy development guidance. Ecotrust Canada.
- Interview: John Pule, Niuean visual artist and poet. (2018, March 30). Flash Frontier. <https://flashfrontier.com/john-pule/>
- Johnson, A., Howden-Chapman, P., & Equb, S. (2016). Pasifika people and housing in Auckland. Salvation Army Social Policy and Parliamentary Unit.
- Joynt, J. L. R., & Lysnar, P. (2016). The impact of intensification on displaced tenants (Technical report 2016/017). Auckland Council. <https://knowledgeauckland.org.nz/publications/the-impact-of-intensification-on-displaced-tenants>
- Joynt, J. L. R., Tuatagaloa, P. & Lysnar, P. (2016). Pasifika people and housing in Auckland: A stocktake of issues, experiences and initiatives (Technical report 2016/027). Auckland Council. <https://knowledgeauckland.org.nz/publications/Pacific-people-and-housing-in-auckland-a-stocktake-of-issues-experiences-and-initiatives>
- Kāinga Ora. (2023). Modernising Pasifika housing in Māngere: Research and findings report [Unpublished manuscript].
- Take, J., & Paul, J. (2018, May 14-15). Evaluating the application of Māori design principles to urban neighbourhood development projects to develop a Kaupapa Māori design framework and assessment tools. 2018 Urbanism New Zealand Conference, Wellington, New Zealand.

- Koloto & Associates. (2007). Pasifika housing experiences: Developing trends and issues. Centre for Housing Research Aotearoa New Zealand.
- Lelaulu, T. (2024). Maumoana: An Indigenous design framework for regenerating Moananui living systems [Doctoral thesis, Auckland University of Technology]. Tuwhera. <https://openrepository.aut.ac.nz/bitstreams/84ebfac2-0f9a-49b8-ae30-b594aa678ad6/download>
- Lopesi, L. (2018). False divides. Bridget Williams Books.
- Mila-Schaaf, K., Hudson, M., Vano, R., Ah-Hi, M., Nua, M., Vui, F., & Tautau, S. (2022). Pasifika housing experiences: Developing a shared wellbeing outcomes framework. Ministry of Business, Innovation & Employment. <https://www.mbie.govt.nz/assets/Pasifika-housing-experiences-report.pdf>
- Ministry for Pacific Peoples. (2018). Pasifika Aotearoa: Lalanga Fou – Our futures, our people. <https://www.Pasifikaotearoa.org.nz/assets/Reports/Pasifika-Aotearoa-Lalanga-Fou-Report.pdf>
- Ministry for Pacific Peoples. (2020). Pacific Aotearoa: Rebuilding together, wellbeing budget 2020. Ministry for Pacific Peoples.
- Ministry for Pacific Peoples. (2024, April 29). Multi-generational living a reality in Aotearoa. <https://www.mpp.govt.nz/latest-news/multi-generational-living-a-reality-in-aotearoa>
- Ministry for Pacific Peoples, Ministry of Housing and Urban Development, & Kāinga Ora. (2022). Fale mo aiga: Pasifika housing strategy and action plan 2030. Ministry for Pasifika Peoples.
- Ontario Federation of Indigenous Friendship Centres, & Government of Ontario. (2018). Urban Indigenous action plan. Queen's Printer for Ontario. <https://ofifc.org/publication/urban-indigenous-action-plan>
- Parsons, M., Fisher, K., & Nalau, J. (2016). Alternative approaches to co-design: Insights from indigenous/academic research collaborations. *Current Opinion in Environmental Sustainability*, 20, 99–105. <https://doi.org/10.1016/j.cosust.2016.07.001>

- P. T. (n.d.). Penina Trust. Penina Trust. Retrieved December 5, 2025, from <https://penina.org.nz/>
- Rethinking The Future. (n.d.). Villa Verde project by Alejandro Aravena: Low-cost housing. <https://www.re-thinkingthefuture.com/case-studies/a7429-villa-verde-project-by-alejandro-aravena-low-cost-housing>
- Reti, S., & Potaka, T. (2024, October 31). Affordable housing project supporting home ownership. New Zealand Government. <https://www.beehive.govt.nz/release/affordable-housing-project-supporting-home-ownership>
- Smith, L. T. (2012). Decolonizing methodologies: Research and Indigenous peoples (2nd ed.). Zed Books.
- Suaalii-Sauni, T., & Fulu-Aiolupotea, S. M. (2014). Decolonising Pacific research, building Pacific research communities and developing Pacific research tools: The case of the talanoa and the faafaletui in Samoa. *Asia Pacific Viewpoint*, 55(3), 331–344. <https://doi.org/10.1111/apv.12061>
- Tanielu, R. (2019). The housing crisis facing Pasifika people in Aotearoa. The Salvation Army Social Policy and Parliamentary Unit. <https://www.salvationarmy.org.nz/HousingCrisis19>
- Tantrum, M. (2025). Te Kāhui Whaihanga New Zealand Institute of Architect [Photograph].
- Taylor, N. (2022, September 16). Collection story: More than a fashion statement – The symbolism behind the Black Panther Party uniform. National Museum of African American History & Culture, Smithsonian Institution. <https://nmaahc.si.edu/explore/stories/black-panther-party-uniform>
- The Living House New Zealand. (n.d.). Living house. RTA Studio. <https://livinghouse.nz/>
- Thomas, N. (1995). *Oceanic art*. Thames & Hudson.
- T. K. W. N. Z. I. O. A. (2025, October 31). Highly Commended - Amelia Lee Chee. NZIA Website. Retrieved April 22, 2026, from <https://www.nzia.co.nz/awards/resene-student-design-awards/2025-student-design-awards/amelia-lee-chee/>

- Vaioleti, T. M. (2006). Talanoa research methodology: A developing position on Pasifika research. *Waikato Journal of Education*, 12(1), 21–34. <https://doi.org/10.15663/wje.v12i1.296>
- Vaioleti, T. M. (2011). Talanoa, manulua and founa ako: Frameworks for using Pasifika knowledge in education [Doctoral thesis, University of Waikato]. Research Commons. <https://hdl.handle.net/10289/5179>
- Wilson, S. (2008). *Research is ceremony: Indigenous research methods*. Fernwood Publishing.
- Zilliacus, A. (2016, October 24). Half a house builds a whole community: Elemental's controversial social housing. ArchDaily. <https://www.archdaily.com/797779/half-a-house-builds-a-whole-community-elementals-controversial-social-housing>

Appendices

Appendix A: Housing Inequities

Despite strong aspirations outlined in policy frameworks such as *Fale mo Aiga* (MPP et al., 2022), persistent housing inequities reveal the depth of unmet needs among Pasifika communities. Overcrowding remains a pressing issue, with Pasifika families experiencing the highest rates of overcrowding in Aotearoa, often due to limited housing stock that does not support extended or multigenerational living (Tanielu, 2019). National frameworks continue to privilege nuclear family assumptions, exacerbating spatial and cultural misfits (Koloto & Associates, 2007).

Affordability is a further barrier. Rising costs and displacement from urban redevelopment have pushed many Pasifika tenants into precarious rental arrangements or temporary accommodation (Joynt & Lysnar, 2016). As noted in the *Fale mo Aiga* strategy, homeownership among Pasifika peoples lags behind the national average, while community-led development remains rare due to structural and funding constraints (MPP et al., 2022).

These inequities illustrate the gap between aspiration and lived reality, underscoring the need for culturally anchored, systemically integrated housing solutions.

Appendix B: Policy Frameworks

The review of Pasifika housing strategies previously stated in Chapter 2, including *Orama Nui* (Housing New Zealand Corporation, 2009) and *Fale mo Aiga* (MPP et al., 2022), demonstrates strong aspirations for secure, culturally grounded housing and highlights the value of extensive community talanoa. However, both documents stop short of offering spatial or design-specific pathways, leaving a gap between strategic vision and built outcomes.

Pasifika Aotearoa: Lalanga Fou (MPP, 2018) reinforces community wellbeing priorities and aspirations for intergenerational wealth and collective futures, yet similarly lacks mechanisms to ensure delivery. *The Pacific Aotearoa: Rebuilding Together, Wellbeing Budget* (MPP, 2020) reasserts housing's centrality but again does not embed pathways for implementation.

These frameworks represent a valuable foundation, but the absence of design translation in them highlights the significance of this thesis in operationalising aspirations into practice-ready tools for PHPs.

Appendix C: Case Studies

Fale mo Aiga: Pacific Housing Strategy and Action Plan 2030

Fale mo Aiga (MPP et al., 2022) is the government's first comprehensive strategy addressing Pasifika housing inequities in Aotearoa. Developed through extensive talanoa with over 2,500 participants, it establishes a collective vision for secure, affordable, and culturally grounded homes. The plan positions housing as a foundation for intergenerational wellbeing, home ownership, and economic resilience. While *Fale mo Aiga* sets a strong strategic direction, it offers limited spatial or design guidance. This research builds on its aspirations, translating policy into practice through *Fale Tupu*, a toolkit that operationalises these goals into culturally responsive design tools for housing providers.

Alalaga Research Document

The *Alalaga Research Document* (Alalaga Research Document, 2024) represents a developing body of work that advances Pasifika-led approaches to housing design in Aotearoa. Emerging from collective research and policy discussions, it establishes a theoretical and strategic foundation for embedding Pasifika values, self-determination, and cultural frameworks within future housing delivery. While *Alalaga* contributes critical conceptual grounding and advocacy for Indigenous design leadership, this thesis extends that intent into practice through the creation of *Fale Tupu*, a tangible design resource that translates these principles into operational tools for housing providers and practitioners. *Alalaga* provides an important precursor to this research, highlighting the necessity for culturally grounded frameworks and reinforcing the sector-wide shift toward Indigenous-led, values-based housing practice in Aotearoa.

Our Whare Our Fale (Porirua)

Led by Central Pacific Collective in partnership with Ngāti Toa rangatira, this \$114 million government-backed project aims to deliver up to 300 affordable homes for Pasifika families. Its design draws on Pasifika village models, creating collective, culturally resonant communities. Affordability is achieved through perpetual leasehold tenure from Ngāti Toa, shared equity schemes, and building at cost, ensuring ownership pathways are accessible to families typically excluded from the market. Environmental sustainability and health outcomes are also prioritised (Reti & Potaka, 2024). While promising, the project highlights the continued reliance on large-scale government investment, raising questions of scalability for smaller PHPs without comparable resources.

Mua i Malae (Central Pacific Collective, n.d.)

Mua i Malae demonstrates a Pasifika-led housing initiative grounded in economic and cultural responsiveness. Through leasehold land tenure and shared equity, the project supports stability without requiring full market buy-in. Financial capability programmes address challenges around intergenerational wealth building, while courtyard layouts and low-maintenance materials reflect Pasifika cultural values. Though not incremental, the model's flexibility mirrors the adaptive ethos central to this thesis.

Tūranga Ki Te Marae (Hoskins et al., 2019)

This Papakāinga design toolkit, located adjacent to a Ngāi Tahu marae, was shaped through tikanga-led design processes. Clustered typologies, shared green space, and on-site ecological systems embed whanaungatanga (kinship), ecological regeneration, and intergenerational living. The project demonstrates the power of Indigenous leadership in housing, highlighting cross-cultural resonances with Pasifika concepts such as vā, whakapapa, and kaitiakitanga (guardianship).

Villa Verde (Rethinking The Future, n.d.; Zilliacus, 2016)

Alejandro Aravena's *Villa Verde* project, known as the "half a house" model, delivers structurally complete homes with space for incremental expansion. Families expand dwellings over time as resources allow, balancing affordability with adaptability. The model aligns closely with challenges faced by PHPs, where initial funding constraints require pragmatism, but family needs demand long-term flexibility.

Living House (The Living House New Zealand, n.d.)

The Living House by RTA Studio is New Zealand's first home to pursue full certification under the *Living Building Challenge* (The Living House New Zealand, n.d.), demonstrating how regenerative design principles can be embedded within residential architecture. The project integrates closed-loop water systems, solar energy generation, non-toxic materials, and locally sourced timber to achieve self-sufficiency and ecological responsiveness (The Living House New Zealand, n.d.). Unlike conventional sustainability approaches, it positions the dwelling as a living system in reciprocity with its environment, advancing material and ecological standards rarely seen in mainstream housing. While its highly technical requirements and cost place it beyond immediate reach for most PHPs, its principles informed the development of the material palette in this research, providing aspirational benchmarks for regenerative practice.

Penina Trust Multigenerational Housing (South Auckland)

Penina Trust's development is the first of its kind in Aotearoa designed specifically for multigenerational Pasifika families. The project responds to the mismatch between nuclear-family housing stock and the lived realities of Pasifika households. By embedding flexibility for extended family living, it affirms cultural care structures and wellbeing. As noted by Penina's CEO, the initiative addresses both housing supply and the cultural need for homes that sustain identity and intergenerational connection (MPP, 2024). While pioneering, its replicability depends on overcoming systemic constraints in funding and planning that continue to prioritise generic models.

Appendix D: International Comparisons

Recent Indigenous and First Nations housing strategies demonstrate how policy and design frameworks can function as practical resources to embed cultural integrity in housing delivery. The *Flexible Guidelines for the Design of Remote Indigenous Community Housing* highlight the need for adaptable principles that respond to extended family living, cultural use patterns and environmental realities (Fien et al., 2007). Similarly, the *South Australian Aboriginal Housing Strategy 2021–2031* positions Aboriginal governance and co-design at the centre of provision, linking self-determination with long-term investment and community wellbeing (Government of South Australia, 2021). Complementing these, the Indigenous Home-lands (2020) *Housing Ecosystem Overview and Strategy Development Guidance* frames housing as part of a broader system of land, governance, and cultural process, offering tools for mapping assets, gaps, and opportunities for community-led strategies.

The *City of Vancouver UNDRIP Action Plan 2024–2028* operationalises rights-based commitments through departmental actions and indicators, including housing-related measures tied to municipal accountability (City of Vancouver, 2023). *Ontario's Urban Indigenous Action Plan* similarly sets expectations for partnership, data-sharing, and culturally safe services with urban Indigenous organisations (Ontario Federation of Indigenous Friendship Centres & Government of Ontario, 2018). Both initiatives demonstrate advances in governance, co-design, and measurable accountability, yet they remain situated at the level of policy and programme delivery, stopping short of translation into spatial form.

From Wilson's (2008) framing of research as ceremony, such approaches risk reducing Indigenous knowledge to data to be managed, rather than treating it as relational accountability held by communities themselves. Such framing raises the critical question of whether monitoring and evaluation should be led by state actors or by Indigenous peoples. *The Two-Eyed Seeing* study surfaces this same tension, with a participant affirming that "everything is connected and can be linked to housing. If community members had a safe, sustainable home, self-determination, and access to culture, then the community would be doing even better regarding health, education, security, and economic development" (Anderson et al., 2022). While the report advocates balancing Indigenous and Western knowledges, such parity risks diminishing Indigenous sovereignty by positioning cultural authority as equivalent to external validation.

Fale Tupu: A Pasifika Housing Toolkit builds on these precedents while extending them. It operationalises Indigenous governance through practice-ready outputs, anchored entirely in Indigenous frameworks rather than Western benchmarks. In doing so, it reframes the concept of feasibility itself. If housing is recognised as a right, as UNDRIP implies, then affordability should not be measured solely through cost metrics but through its ability to sustain wellbeing, cultural continuity and ecological integrity.

Appendix E: Method Loop: Maumoana, Talanoa, Visualisation, Toolkit

- Cyclical structure. Design development followed an iterative loop in which Maumoana set the cultural–ecological compass; Talanoa generated lived insights; and visualisation translated these into artefacts that informed successive toolkit iterations (Smith, 2012; Wilson, 2008).
- Relational accountability. The loop positioned knowledge as relational and revisitable, privileging reciprocity and sustained responsibility over linear extraction (Smith, 2012; Wilson, 2008).
- Sub-framework focus by phase (illustrative).
 1. Vā Moana: early relationship-building and contextual grounding.
 2. Mauri Moana: wellbeing embedded in spatial decisions.
 3. Mana Moana: cultural authority and accountability in decision-making.
 4. Vanua Moana: genealogical ties, stewardship and custodianship.
 5. Ara Moana: sequencing, adaptability and future pathways.
 6. Wao Moana: ridge-to-reef ecological integration (Lelaulu, 2024).
- Talanoa practice. Open, reciprocal dialogues with PHPs, practitioners and academic peers upheld cultural protocol and co-authorship, aligning with Pasifika research ethics (Fa’avae et al., 2016; Suaalii-Sauni & Fulu-Aiolupotea, 2014; Vaioleti, 2006).
- Visual making. Drawing on John Pule’s decolonial visual language, artefacts recorded non-linear, memory-rich narratives; art operated as analytic and decolonising method (Lopesi, 2018; Thomas, 1995). These visuals later translated into architectural diagrams that shaped typologies, wellbeing spaces, ecological overlays and material pathways.
- Policy–practice bridge. Foundational documents (Orama Nui; Fale mo Aiga; Modernising Pasifika Housing) framed gaps in intergenerational living, spatial translation and community sovereignty, reinforcing a transdisciplinary, co-benefits lens for housing (Housing New Zealand Corporation, 2009; Howden-Chapman & Chapman, 2012; Kāinga Ora, 2023; MPP et al., 2022).

Appendix F: Talanoa and Engagement Log

Event 1: Positioning the project

Date: April 2025

Location: Auckland University of Technology

Participants: Academic staff and peers

- Maumoana focus: Vā Moana (teu le vā / tauhi vā).
- Purpose: Test alignment with regenerative Indigenous methodologies and strengthen conceptual clarity.
- Key insight: Convert representational “essence” into spatial/experiential form; surface more-than-human relations.
- Response: Produced an “essence image” and a first pass at sector-readable strategy sheets; held back design detailing until Talanoa with Penina (Lelaulu, 2024; Vaioleti, 2006).

Talanoa with Penina: Session 1

Date: May 2025

Location: Teams call

Participants: Academic Supervisor, Penina Trusts CEO and Founder, Administrator, and Housing Development Manager

- Maumoana focus: Vā Moana, with Mauri Moana and Mana Moana considerations.
- Priorities voiced: Affordability; intergenerational flexibility; central communal space; robust/low-maintenance materials; clear indoor–outdoor connections; parking. Penina generously made a Papakura site available for testing.
- Response: Developed incremental typologies and site strategy via the seven-step Maumoana process.
- Outcome: Shift from abstract visuals to site-responsive tools anchored in lived priorities (Fa’avae et al., 2016; Lelaulu, 2024).

Talanoa with Industry Professional

Date: May 2025

Location: Teams call

Participants: Industry Professional 1

- Maumoana focus: Ara Moana (sequencing and scalability), with Mana Moana considerations around delivery and feasibility.
- Priorities voiced: Testing housing outcomes across varied site sizes; understanding what drives site acquisition (built form vs urban layout); limitations of incremental typologies within social housing models; challenges of delivering culturally responsive Pasifika housing at medium density.
- Response: Ensured the Maumoana framework supports the assessment of yield and spatial potential across varied site conditions, embedding guidance on site capacity and urban design logic within Tool 1 alongside typological development.
- Outcome: This talanoa reinforced the value of the seven-step Maumoana process, demonstrating its capacity to extend the toolkit beyond dwelling design toward site-responsive planning strategies, strengthening scalability and applicability across diverse development contexts.

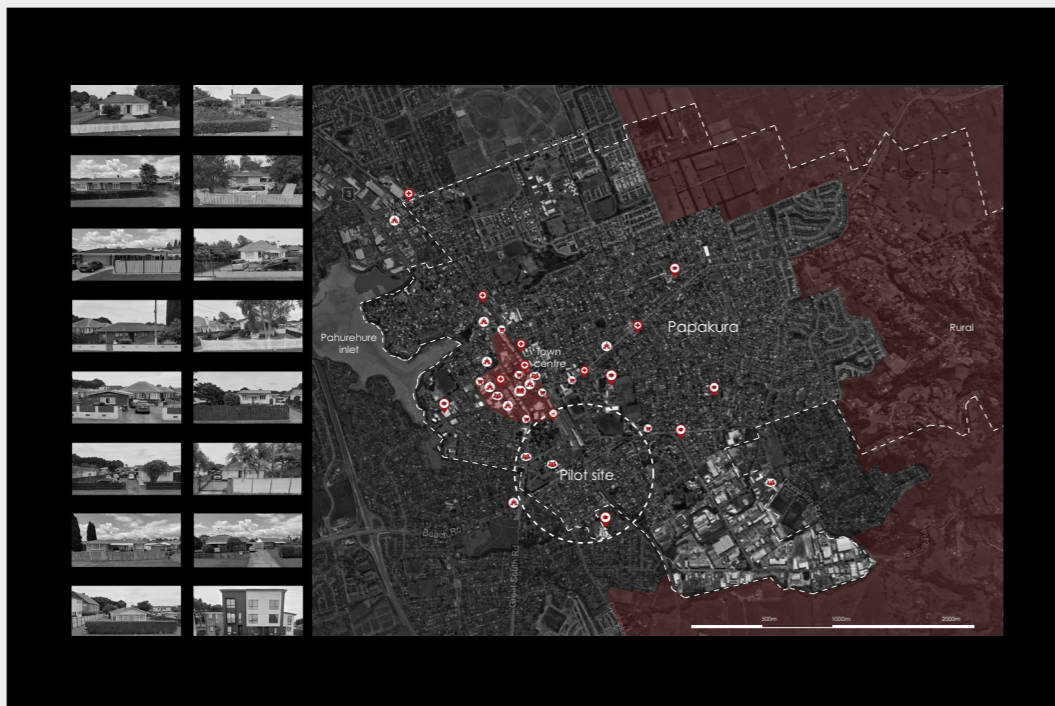


Figure 50: Initial site analysis.

Talanoa with Industry Professional

Date: August 2025

Location: Teams call

Participants: Industry Professional 2

- Maumoana focus: Vanua Moana (genealogical grounding), with Vā Moana and Mana Moana considerations.
- Priorities voiced: Contextualising Pasifika housing within broader papakāinga and Māori development frameworks; recognising shared Pacific genealogies and cultural practices; the role of knowledge in supporting pathways to home ownership; and exploring culturally grounded alternatives to conventional boundary definitions, such as planting over fencing.
- Response: Strengthened the cultural grounding of the toolkit by aligning Maumoana with papakāinga precedents and Indigenous frameworks, while exploring how cultural practices, such as planting for boundary-making, could be translated into contemporary spatial strategies.
- Outcome: Reinforced the importance of genealogical and cultural continuity within the toolkit, expanding its relevance beyond built form to include landscape, knowledge-sharing, and culturally-embedded spatial practices.

Talanoa with Penina: Session 2

Date: June 2025

Location: Teams call

Participants: Academic Supervisor, Penina Trusts CEO and Founder, Administrator, Housing Development Manager, and Treasurer

- Maumoana focus: Ara Moana (sequencing) with Vā Moana (ongoing reciprocity).
- Key insight: Refine room naming conventions to match funding policies; simplify layout via a rational grid for efficiency and affordability.
- Response: Adjusted naming, redrew typologies on a clearer grid, and ran a value-proposition check across the toolkit to confirm service value, gain creation and pain relief for PHPs and families.

Event 2: Concept design review (cross-disciplinary)

Date: June 2025

Location: Auckland University of Technology

Participants: Academic staff and peers

- Maumoana focus: Ara Moana (sequencing/adaptability).
- Key insight: Incremental housing must be diagrammed simply for non-architectural audiences; renders should reflect the “Pasifika essence” shown in the essence image.
- Response: Produced simplified, legible growth diagrams and explanatory sequences.

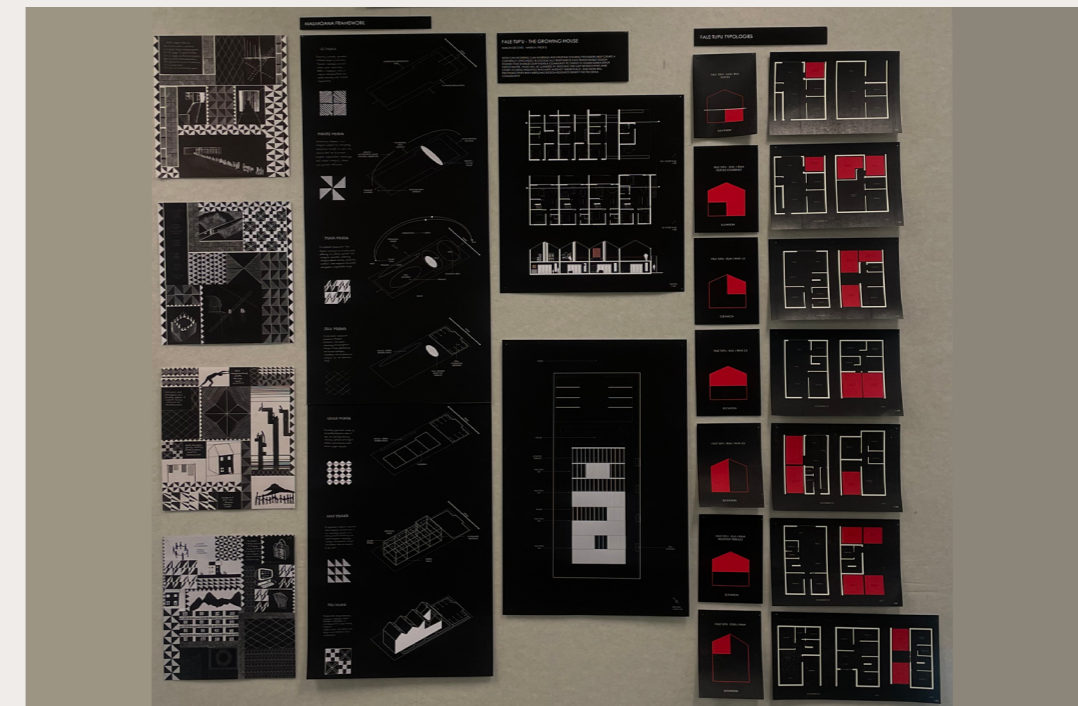


Figure 51: Concept design presentation pin-up.

New Zealand Institute of Architecture Student Design Awards - Developed Design Review

Date: July 2025

Location: Auckland University of Technology

Participants: Academic staff and peers

- Maumoana focus: Mauri Moana (wellbeing).
- Action: Streamlined the toolkit to four micro-scale, practice-ready tools—Maumoana framework; refined typologies; material palette; communal wellbeing spaces.
- Rationale: Keep scope micro to maximise transferability for PHPs.



Figure 52: Developed design pin-up.

Event 3: Detailed Design Symposium

Date: September 2025

Location: Auckland University of Technology

Participants: Academic staff and peers

- Maumoana focus: Mauri Moana (wellbeing) with Wao Moana (ecology).
- Focus areas:
 1. Material palette: Shifted from specification list to accessible menu prioritising durability/low maintenance, with regenerative options where feasible.
 2. Communal wellbeing spaces: Ten speculative scenarios to democratise design literacy and support family/PHP engagement.
- Insight: Persisting tension between affordability and high-benchmark sustainability, e.g., *Living Building Challenge* (The Living House New Zealand, n.d.).
- Response: Calibrated options to enable staged ecological ambition within PHP constraints.



Figure 53: Detailed design pin-up.

Talanoa with Penina: Session 3

Date: September 2025

Location: Teams call

Participants: Academic Supervisor, Penina Trusts CEO and Founder, Administrator, Housing Development Manager, and Treasurer

- Maumoana focus: Mana Moana (authority/accountability) and Ara Moana (operational pathways).
- Key insight: Move from “good academic product” to operational tool; trailblazing may be required rather than waiting for policy endorsement.
- Outcome: Penina endorsed the toolkit’s direction and invited presentation at a community conference in Samoa, signalling broader Pasifika relevance.

New Zealand Institute of Architects – National Student Design Awards New Zealand Institute of Architects – National Student Design Awards

Date: November 2025

Location: Victoria University

Participants: Tina Williams, Murali Bhaskar, Huia Reriti, and Karl Wipatene

- Maumoana focus: Mana Moana (authority and cultural responsibility), Vanua Moana (genealogical grounding), and Ara Moana (clarity of sequencing for new audiences).
- Context: This was the first time *Fale Tupu* was presented to an audience with no prior knowledge of the project. The presentation required weaving together statistics, context, motivations, methods, and outcomes into a coherent narrative that communicated both the need for the toolkit and its architectural significance.
- Key insight: Clear articulation of the project’s “why, when, what, how, and who” is essential for audiences outside the Pasifika housing sector. Bringing earlier presentations into a single, refined narrative helped demonstrate how the toolkit evolved and why it fills a systemic gap. The refined ending introduced the threefold architectural significance of *Fale Tupu*: its invitation toward an oceanic vernacular, its democratisation of the design process, and its reframing of the architect as a facilitator of community agency.
- Feedback: The jury commended the depth, clarity, and ambition of the project, noting that *Fale Tupu* should not be seen as a Pasifika-only resource, but as a model that could influence housing design throughout Aotearoa. The primary critique asked whether more original construction or material systems had been explored; this was addressed by explaining that such development falls within the Wao Moana phase of the framework and sits beyond the scope of this thesis, but remains a future pathway.
- Response: The feedback affirmed the broader applicability of the toolkit and strengthened its positioning as a contribution to New Zealand’s architectural discourse. It also reinforced the value of integrating the threefold architectural narrative as a clear statement of why *Fale Tupu* matters—not only culturally, but structurally and spatially within Aotearoa’s housing landscape.

Examination

Date: February 2026

Location: Auckland University of Technology

Participants: Frances Joseph and James Miller



Figure 54: Examination pin-up.

Appendix F1: Example of Talanoa Documentation and Analysis Process

The following example expands upon Talanoa with Penina: Session 1 outlined in Appendix F.

Talanoa with Penina: Session 1

Date: May 2025

Location: Teams call

Participants: Academic Supervisor, Penina Trusts CEO and Founder, Administrator, and Housing Development Manager

- Maumoana focus: Vā Moana, with Mauri Moana and Mana Moana considerations
- Talanoa extract: Participants emphasised the need for housing that reflects intergenerational living realities, with flexible layouts, accessible ground-floor spaces, and the ability to adapt over time. The importance of communal gathering spaces, strong indoor–outdoor connections, and durable, low-maintenance materials was repeatedly raised. Parking pressures and misalignment between government funding models and lived housing needs were also identified as critical challenges.
- Documentation: Insights were recorded through reflective note-taking and diagrammatic mapping during and following the session. Key ideas were organised through the Maumoana framework, aligning discussions with Vā Moana, Mauri Moana, and Mana Moana.
- Thematic analysis: Recurring themes included intergenerational adaptability, communal living, affordability constraints, durability, and the need for spatial flexibility within regulatory limitations. Tensions between policy frameworks and lived realities were also identified as a significant driver of design response.
- Design translation: These insights directly informed the development of incremental fale typologies, enabling connected yet adaptable living arrangements that respond to evolving family structures. The emphasis on communal space and indoor–outdoor flow shaped the integration of central shared zones and transitional spaces. Material explorations and research prioritised durability and low maintenance, while site testing at Papakura utilised the Maumoana Framework to translate these themes into a regenerative living system.
- Outcome: This process marked a shift from abstract conceptual exploration to the early stage development of site-responsive, culturally grounded design tools, ensuring that lived Pasifika housing priorities were embedded within the toolkit.

Appendix G: New Zealand Institute of Architecture – Resene Student Design Awards 2025

Judges citation, “Not just townhouses, but a toolkit for how to design flexible spaces for Pasifika, Māori and other families in Aotearoa. A strong real-world feel to this project that is happening now, and deeply reflective of lives in Aotearoa. This project could be anywhere – potentially even in the Pacific itself. Very impressive with great presentation and strong designs and supporting artwork. A strong framework for things to happen to resolve our most pressing housing issues in Aotearoa. This project shows architects as collaborators, and features indigenous values embedded throughout. This is the type of social housing we should be providing” (Te Kāhui Whaihanga New Zealand Institute of Architects, 2025, para. 1).

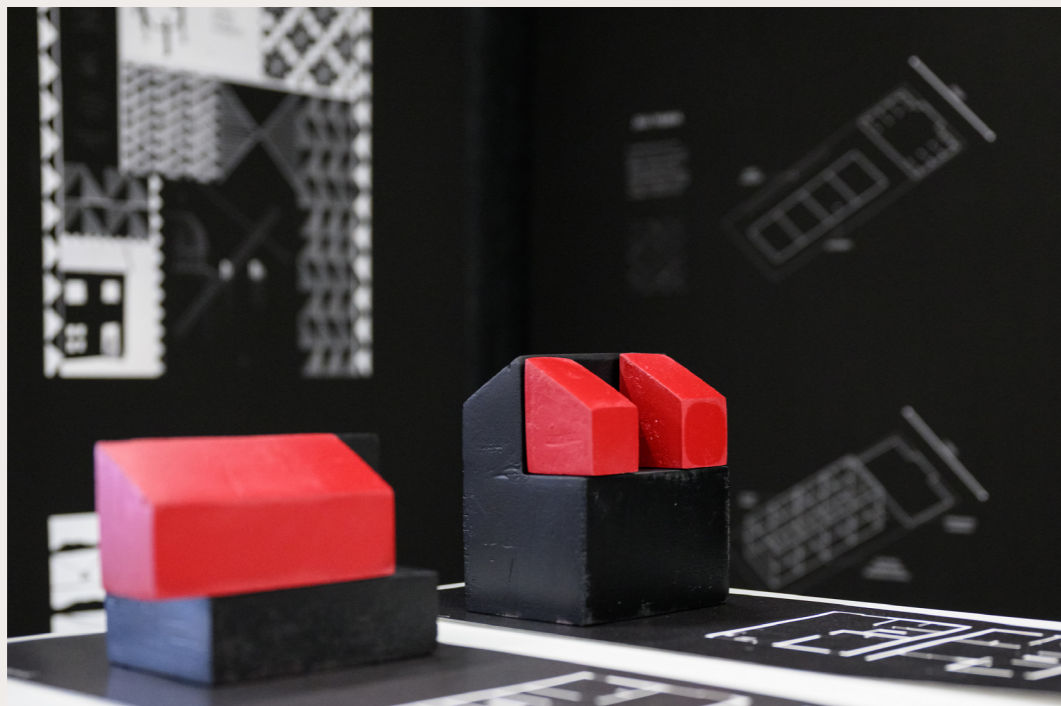


Figure 55: Fale Tupu mass models at NZIA Student Design Awards.



Figure 56: Fale Tupu presentation booth at NZIA Student Design Awards.



Figure 57: Fale Tupu presentation booth at NZIA Student Design Awards.

Appendix H: Early Regenerative Systems and Communal Spaces

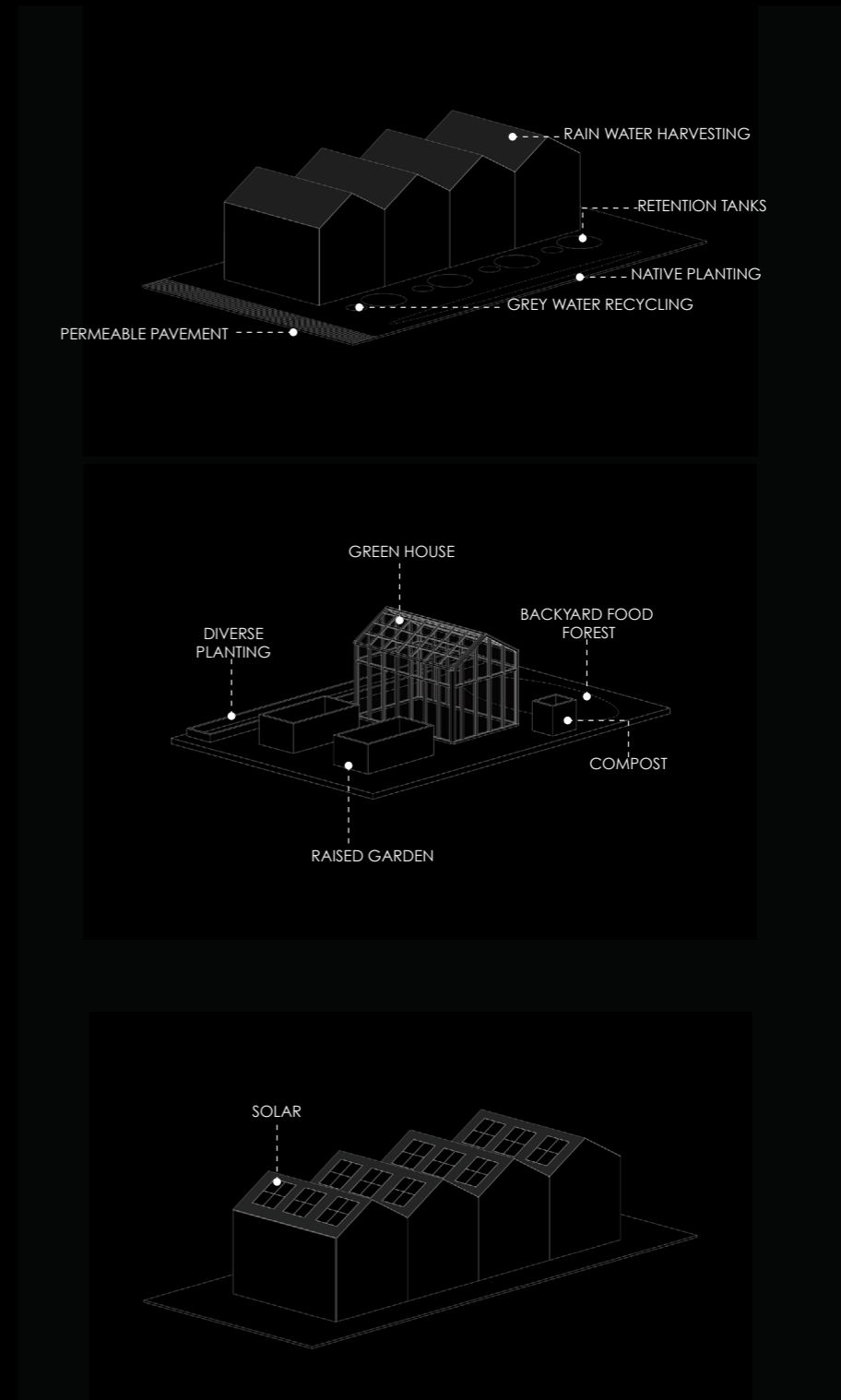


Figure 58: Early regenerative system drawings.

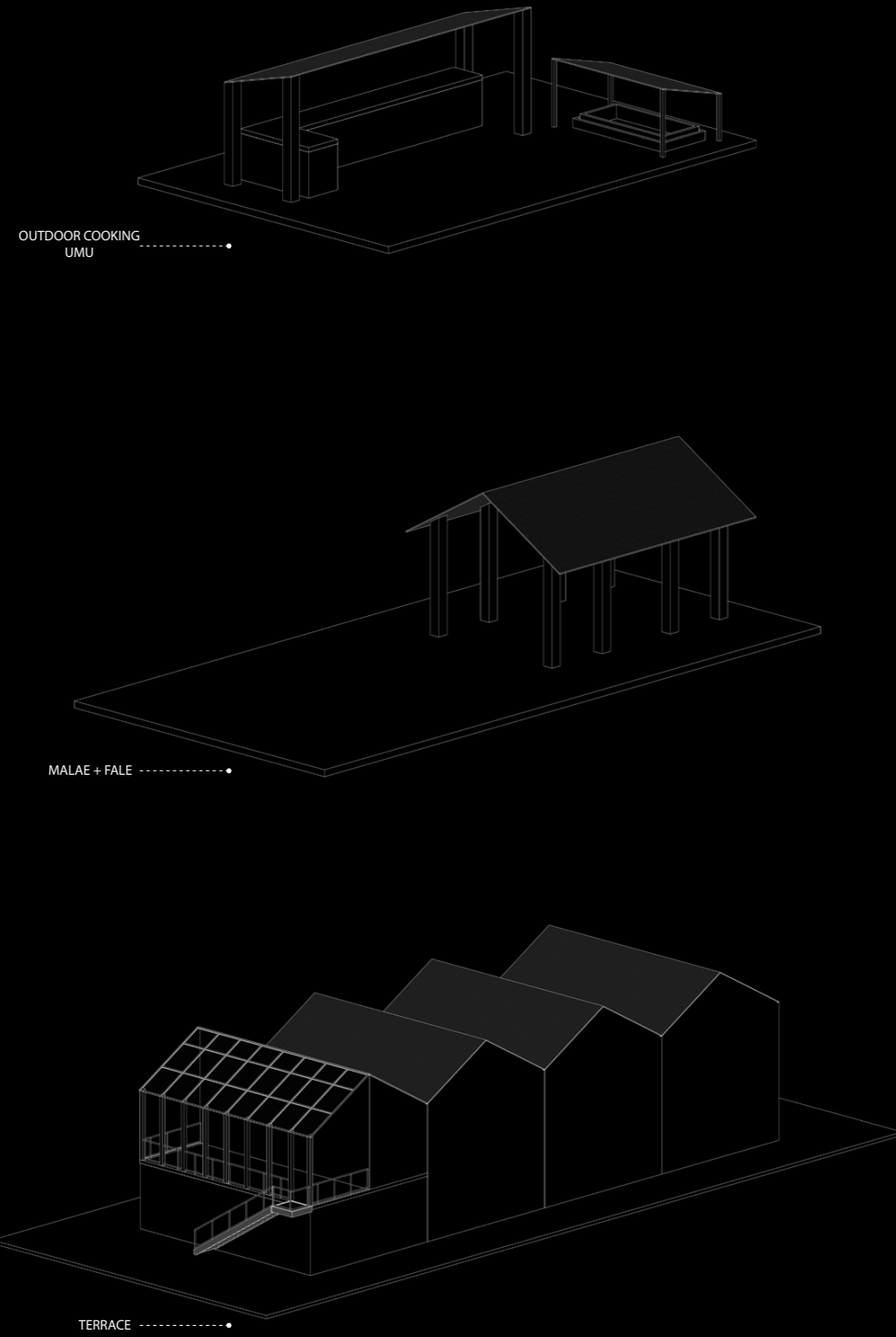


Figure 59: Early communal spaces drawings.

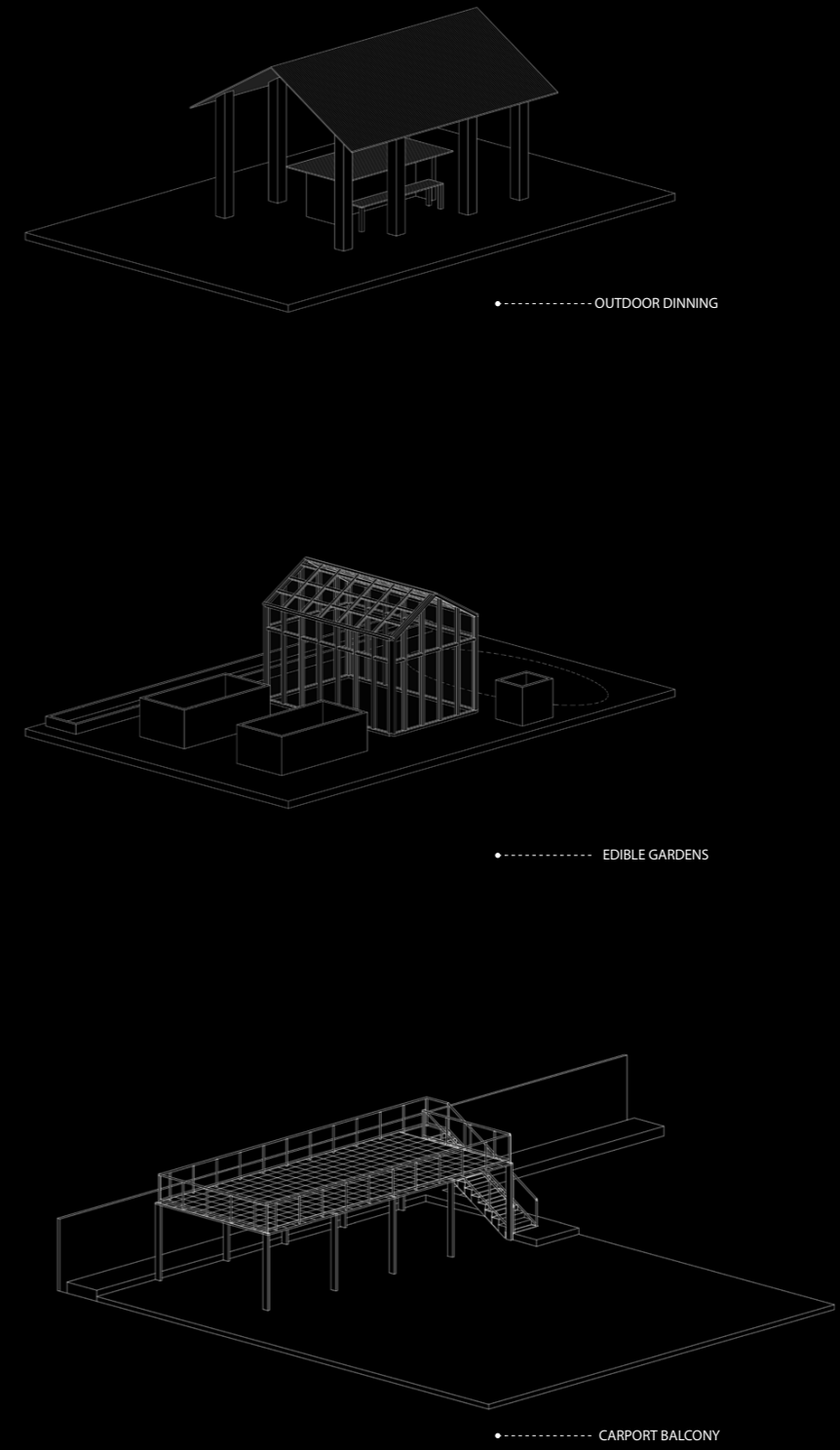


Figure 60: Early communal spaces drawings.

Appendix I: Fale Tupu : The Pasifika Housing Toolkit

FALE TUPU

An Indigenous Toolkit for Designing Culturally
Grounded Living Environments with Pasifika
Communities in Aotearoa

This variation of Fale Tupu was created for the use of academic and industry professionals. The Fale Tupu resource will differ dependant on the users background.

Contents

01	Background	.....	04
02	Fale Tupu	.....	08
T1	Maumoana Framework	.....	10
T2	Fale Typologies	.....	16
T3	Material Palette	.....	22
T4	Communal Wellbeing Spaces	.....	26
03	Summary	.....	32

01

Background

Pasifika housing in Aotearoa

The Pasifika population in Aotearoa has grown from 2,159 people in 1945 to 381,642 in 2018, with projections exceeding 650,000 by 2038. Migration was driven by post-war labour and educational opportunities that attracted families from across Polynesia, Melanesia, and Micronesia. These communities brought rich cultural worldviews that have profoundly shaped Aotearoa's social and economic landscape.

Despite these contributions, Pacific peoples continue to face enduring inequities across housing, health, and employment. Housing systems remain largely misaligned with Pacific ways of living, privileging nuclear family models over collective, intergenerational arrangements. Multigenerational living, an expression of care and reciprocity, has often been misinterpreted as "overcrowding," reinforcing deficit narratives rather than recognising cultural resilience.

Urbanisation

Pasifika communities are now predominantly urban, concentrated in metropolitan regions such as Tāmaki Makaurau. Yet urban development and intensification have frequently displaced these communities, leading to cultural fragmentation and loss of proximity to ancestral and social networks. Planning systems focused on market-led growth have seldom accounted for Pacific cultural values, resulting in spatial exclusion and inadequate access to affordable, appropriate housing.

Urban living has also exposed Pasifika families to economic vulnerability. Concentration in low-wage sectors and high rental dependency have created persistent cycles of housing insecurity. The impacts of COVID-19 further revealed the fragility of these conditions, as many Pasifika workers were employed in essential roles.

At the same time, urban isolation has accelerated the decline of Indigenous languages and cultural practices among Pacific youth. To restore wellbeing and identity within the city, housing and infrastructure must be designed not only for shelter but for reconnection, supporting communal life, language and intergenerational exchange.

Key Statistics

The scale of Pasifika housing deprivation underscores the urgency for transformation:

- Home ownership: 21% in 2018 (down from 22% in 2006).
- Rental Dependency: 79% of Pasifika people's live and rented or social housing.
- Overcrowding: Nearly 40% live in overcrowded dwellings, the highest national rate.
- Housing quality: 72% report living in cold homes; 35–37% in damp or mouldy dwellings.
- Homelessness: Pasifika people's experience severe housing deprivation at six times the rate of Europeans.

These figures highlighted that housing and equity is not only a quantitative crisis but also a qualitative one which is impacting health, dignity and cultural continuity.

Pasifika Housing Goals

Fale mo Aiga: Pacific housing strategy and action plan 2030 set up three aspirations: increasing homeownership, improving housing quality, and delivering culturally appropriate homes. Housing is positioned as a foundation for intergenerational wellbeing, economic resilience, and identity. Building on Orama Nui and aligning with the Pacific Aotearoa Wellbeing Budget

2020, the strategy articulates a collective vision for secure, affordable and culturally grounded homes. However, it includes limited spatial or architectural direction, leaving a critical gap between policy and implementation. Fale Tupu addresses that gap by translating policy goals into tangible design frameworks, providing PHP's with adaptable tools to lead culturally aligned housing delivery.

Pasifika Housing Case Studies

Modernising Pasifika Housing

Led by Kāinga ora, This initiative explored culturally responsive housing in Māngere. It incorporated communal spaces, dual-key typologies, but was context specific.

Central Pacific Collective

Our Whare Our Fale is a Pasifika–lwi partnership delivering affordable homes. Mua i Malae, it's pilot, reimagined village living through shared malae and fale. While culturally grounded, the project relies on large scale funding and lwi partnerships, limiting repeatability for smaller providers.

Penina Trust: Redhill

South Auckland's first development design specifically for multigenerational Pasifika families. It demonstrates how flexibility, care networks, and cultural space can be integrated within contemporary housing models.

Non Pasifika Case Studies

Alejandro Aravena / Elemental Villa Verde

The 'half a good house' model provides foundations, structure, and essential services upfront, allowing families to extend dwellings overtime as finances permit. This incremental approach aligns with Pasifika notions of growth, adaptability, and shared responsibility.

Tūranaga Ki Te Marae, E Tau Ana

A Maori Papakāinga toolkit demonstrating how tikanga-led frameworks, shared green space, and clustered typologies can embed whanaungatanga and ecological care, values resonant with Pasifika design logics.

RTA Studio : Living House

This project demonstrates regenerative design through fast building times, non-toxic materials, and ecological self-sufficiency. This informs sustainability benchmarks, showing that high-performance housing is achievable within Aotearoa's regulatory and construction context.

Formulation

This was developed through a sustained program of Talanoa with Pasifika Housing Providers, architects, and educators, supported by desk-top research into existing develop-

ments, design guide guides, and policy frameworks. Talanoa functioned as both a research method and a process of accountability, ensuring that design decisions remained grounded in lived experience, cultural integrity, and collective aspiration.

Fale Tupu consolidates design principles and strategies, typologies, and material guidance into a modular resource for PHP's, enabling them to navigate design, funding, and implementation process with clarity and confidence. Tested through one of Penina Trust's sites, it has been refined for adaption across multiple Pasifika contexts in the central and upper North Island.

Mana Whenua

All housing on Aotearoa whenua must begin with recognition of Mana Whenua as original kaitiaki. In the Central and upper North Island the enduring relationships of Mana Whenua with land and water formed the foundations of the projects overarching methodology for ethical housing practice. By embedding Tikanga and Pasifika spatial logics, Maumoana advances housing as an act of cultural acknowledgment, ecological care and shared indigenous sovereignty.

02

Fale Tupu

Fale Tupu comprises four interconnected tools, each addressing a distinct dimension of culturally responsive housing delivery. They may be used independently or in combination, depending on the specific needs, resources, and values of each PHP and their community.

Fale Tupu is structured as a living resource, not a fixed prescription. It acknowledges that Pasifika communities are diverse, and housing responses must remain adaptable to different cultural, spatial and operational realities. Each tool has been developed through a values-based lens, intended to create tangible gains, reduce common barriers, and empower providers with culturally aligned design leadership.

Tool One: Maumoana Framework

A regenerative design framework that centres Indigenous values of stewardship, reciprocity, and relational accountability. It provides a process lens for navigating governance, decision-making, and design alignment with cultural and ecological systems.

Tool Two: Fale Typologies

A series of adaptable housing typologies that support incremental growth, multigenerational living, and cultural expression. These typologies offer spatial configurations responsive to Pasifika ways of living and provide alternatives to Western-centric housing models.

Tool Three: Material Palette

A curated selection of base-build and growth materials prioritising affordability, durability, and low maintenance, core considerations for Pasifika Housing Providers operating within constrained budgets. Where funding permits, regenerative options are offered as aspirational upgrades to support ecological goals.

Tool Four: Communal Wellbeing

A tool to offer a more accessible set of drawings for people who may not have specialised knowledge. This tool is meant for housing providers to work with aiga and potential funders to articulate the potential of Fale Tupu.

T1

Maumoana Framework

Maumoana, created by Tuputau Lelaulu, is a decision-making framework that grounds housing design within Moananui worldviews, embedding cultural continuity, ecological stewardship, and collective identity. Structured as a seven-step co-design process, it guides Pasifika Housing Providers in translating community values into spatial strategies that are culturally and environmentally responsive. Serving as both a governance compass and a design method, it ensures that housing decisions uphold Indigenous principles of relationality, accountability, and reciprocity. Adaptable across different contexts, Maumoana empowers providers to lead with cultural authority, aligning design practice with regenerative outcomes and reaffirming Pasifika agency within the housing landscape.

01. Vā Moana

Fostering culturally grounded, relational design by honouring dynamic connections between people, place and ecology. Rooted in Indigenous values, it supports intergenerational care, spatial harmony and ecological responsibility.

02. Mauri Moana

Revitalising Moananui socio-ecological systems by integrating Indigenous concepts of mauri, hau, wairua, and ora to promote reciprocal, regenerative relationships that sustain ecological, cultural and spiritual wellbeing.

03. Mana Moana

Promoting regenerative design by incorporating Indigenous values of tapu, noa and tupu, thereby restoring spiritual and ecological balance and enhancing mana between people and place.

04. Vanua Moana

A place-based framework grounded in Moananui philosophies that fosters community-led development through kinship, guardianship and ancestral belonging, embedding cultural identity and ecological care into regenerative design.

05. Ara Moana

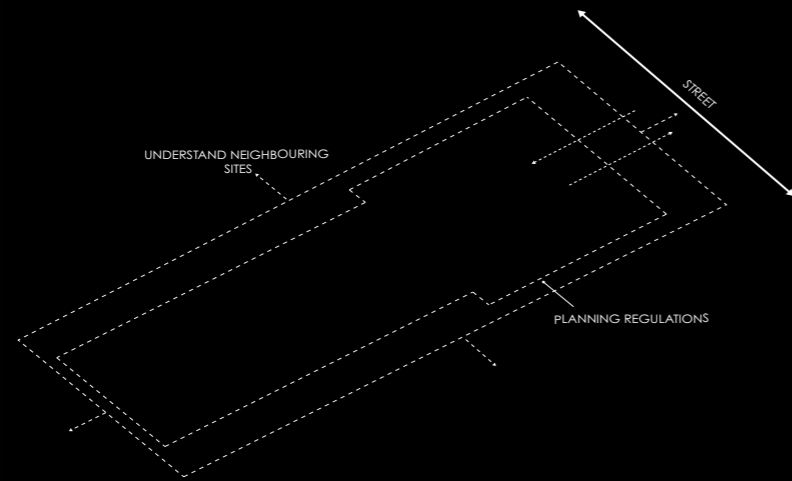
A relational framework that frames journeys as transformative pathways of cultural, spiritual and ecological connection, fostering intergenerational identity, community resilience and indigenous knowledge integration in regenerative design.

06. Wao Moana

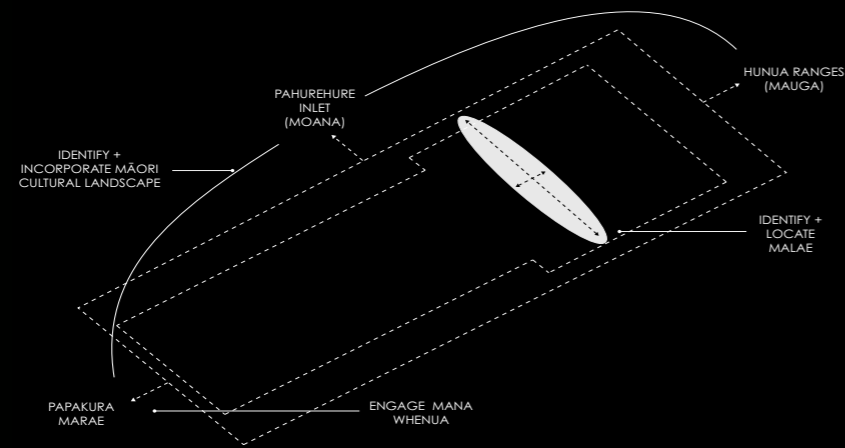
A regenerative indigenous framework that integrates ancestral land to sea knowledge to guide holistic zoning, promote biodiversity, and uphold Indigenous sovereignty through interconnected ecological stewardship from the mountains to the ocean.

07. Mau Moana

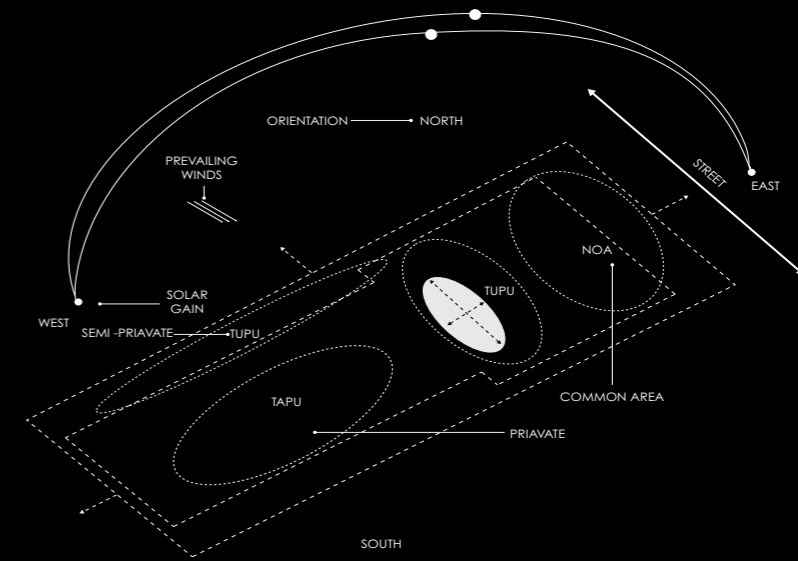
Integrating six sub-frameworks to enable one living environment for Pasifika families.



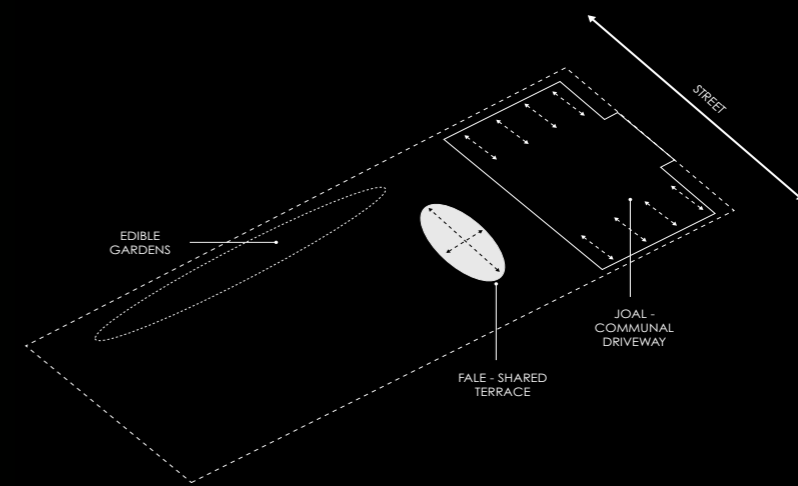
01. Vā Moana



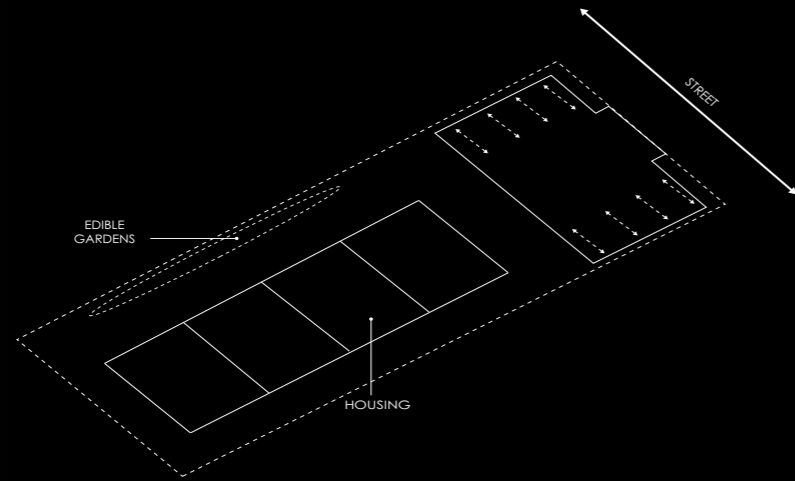
02. Mauri Moana



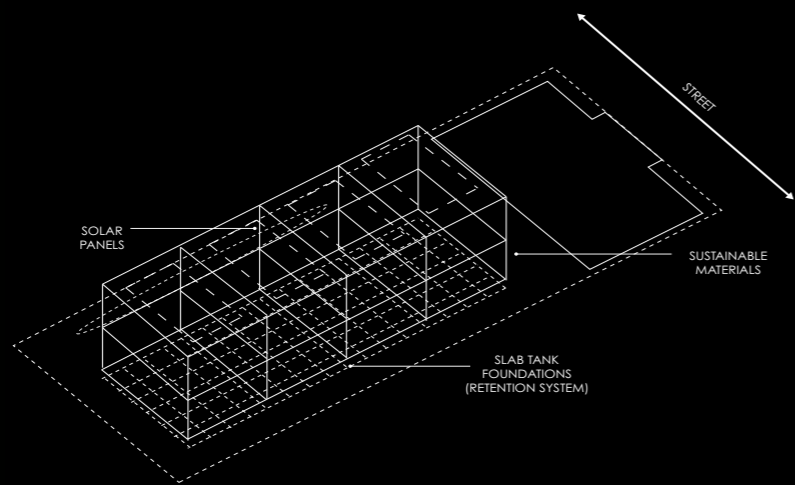
03. Mana Moana



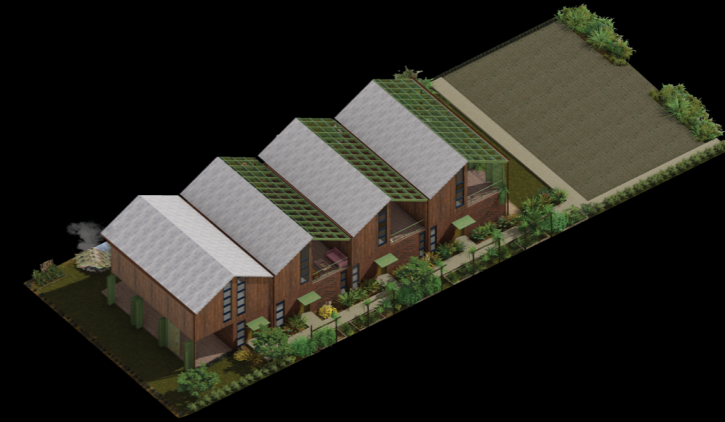
04. Vanua Moana



05. Ara Moana



06. Wao Moana



07. Mau Moana

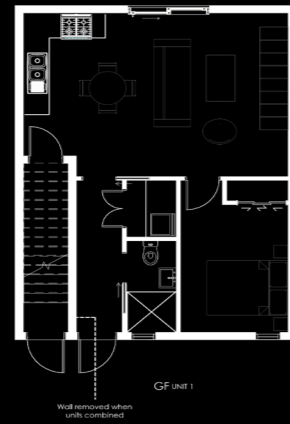
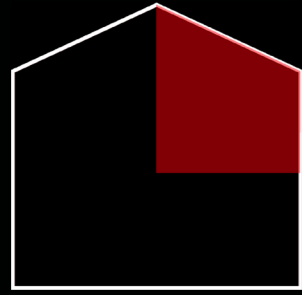
T2

Fale Typologies

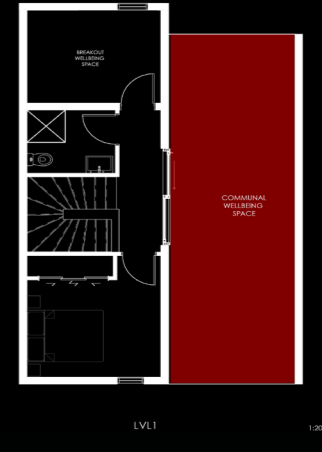
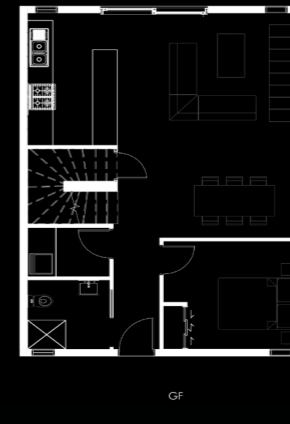
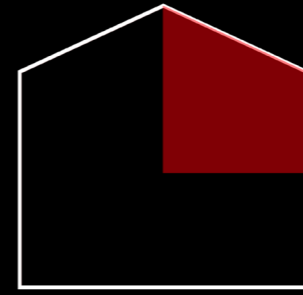
Fale Typologies offer adaptable, growth-based housing models that expand or contract in response to changing family structures, cultural practices, and intergenerational responsibilities. Developed through talanoa with Pasifika Housing Providers and design professionals, the typologies address the rigidity of conventional housing by providing spatial flexibility grounded in Pasifika values.

Each design template includes mapped tupu (growth) pathways to support incremental development, enabling homes to evolve alongside community needs. Integrated within the Maumoana framework, these typologies uphold cultural continuity, promote long-term resilience, and provide PHPs with practical, design-ready options that translate community aspirations into spatial realities while aligning with local planning conditions.



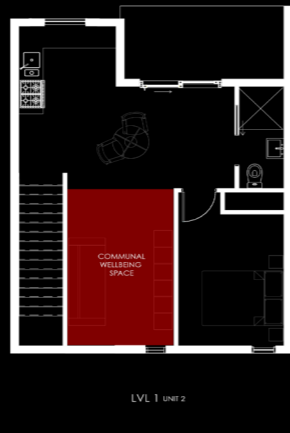
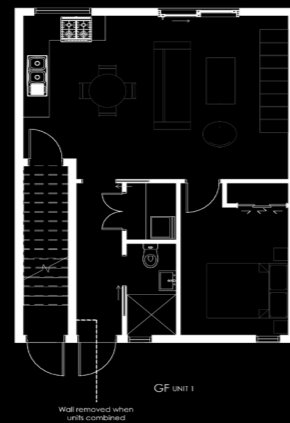
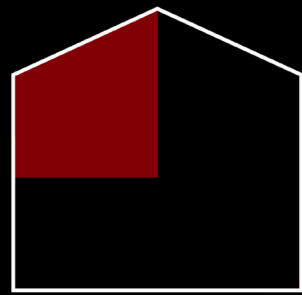


1:200



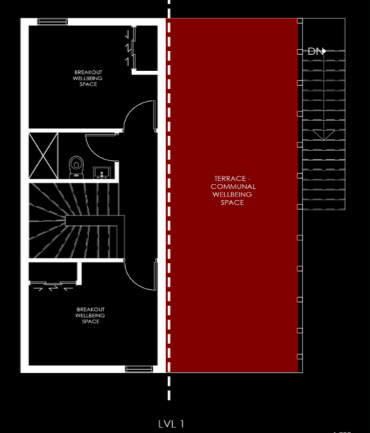
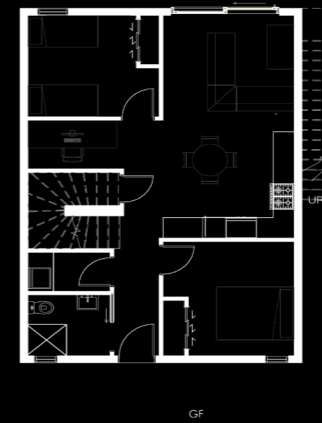
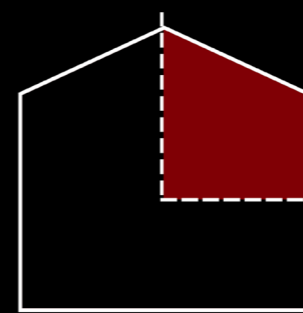
1:200

FALE TAHI/ TORU



1:200

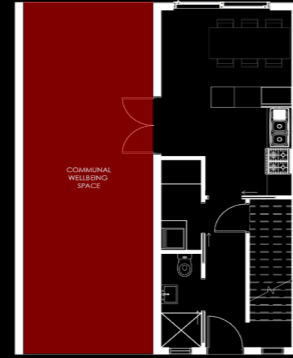
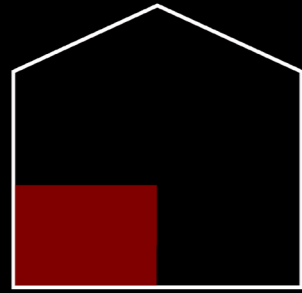
FALE RUA/ WHĀ



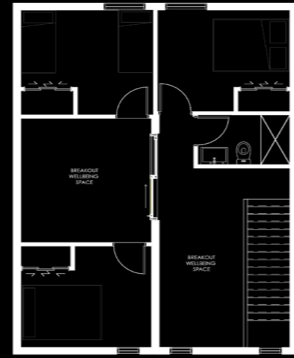
1:200

FALE TAHI/ TORU

FALE RUA/ WHĀ



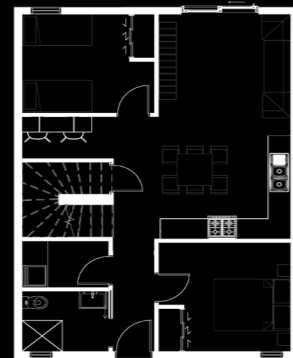
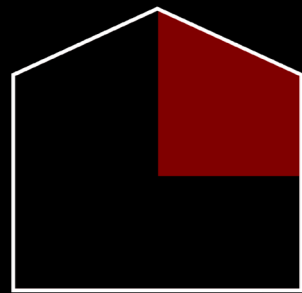
GF



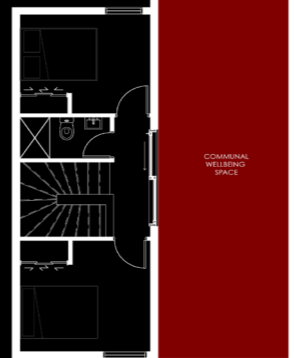
LVL 1

1:200

FALE TORU/ WHĀ



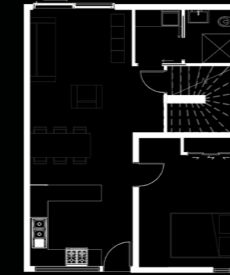
GF



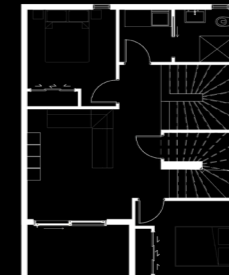
LVL 1

1:200

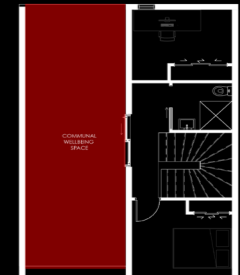
FALE WHĀ/ RIMA



GF



LVL 1



LVL 2

FALE WHĀ/ ONO

T3

Material Palette

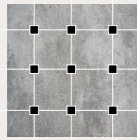
The Material Palette is a concept-phase resource that enables Pasifika Housing Providers to make informed, environmentally responsive material choices early in the design process. It presents a structured palette of Paepae (base-build), alongside adaptable Tupu (growth) pathways that allow families to personalise their space.

By integrating ecological intelligence, it prioritises this from the outset, the palette helps providers balance affordability, durability and sustainability. It ensures that environmental care and cultural integrity are embedded in decision-making, empowering PHPs to advocate for resilient, place-based, and contextually appropriate housing solutions.

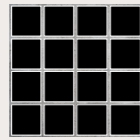


Paepae Palette

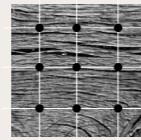
FOUNDATIONS



RAFT SLAB



QPOD

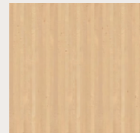


TIMBER PILE

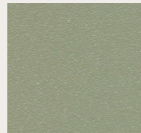
FLOORING



CARPET



SEALED CLT

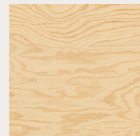


COLOURED VINYL

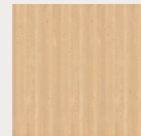
INTERIOR LINING



PAINTED GIB BOARD

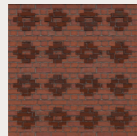


EXPOSED PLY



EXPOSED CLT

LOWER CLADDING



CUSTOM BRICK VENEER



CONCRETE BLOCK

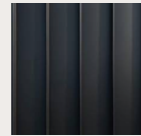
UPPER CLADDING



TONGUE AND GROOVE TIMBER BATTEN



COMPRESSED FIBRE CEMENT BOARD

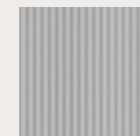


TRAY CLADDING (CUSTOM COLOUR)

ROOF

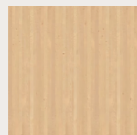


LONG-RUN ROOFING

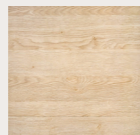


CORRUGATED COLOUR STEEL

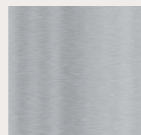
STRUCTURE



CLT



LEVEL TIMBER FRAME



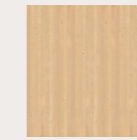
STEEL PORTAL + TIMBER INFILL

Tupu Palette

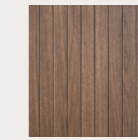
FLOORING



CARPET

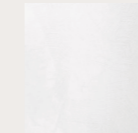


SEALED CLT

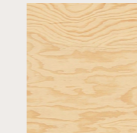


DECKING

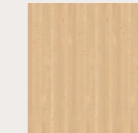
INTERIOR LINING



PAINTED GIB BOARD

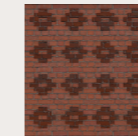


EXPOSED PLY



EXPOSED CLT

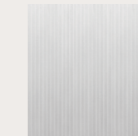
LOWER CLADDING



CUSTOM BRICK VENEER

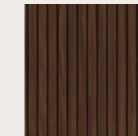


CONCRETE BLOCK

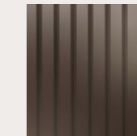


TWIN-WALL POLY-CARBONATE

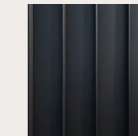
UPPER CLADDING



TONGUE AND GROOVE TIMBER BATTEN



CORRUGATED COLOUR STEEL



TRAY CLADDING (CUSTOM COLOUR)

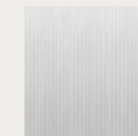


TWIN-WALL POLY-CARBONATE



COMPRESSED FIBRE CEMENT BOARD

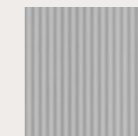
ROOF



TWIN-WALL POLY-CARBONATE

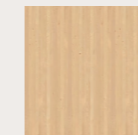


LONG-RUN ROOFING

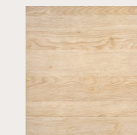


CORRUGATED COLOUR STEEL

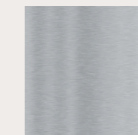
STRUCTURE



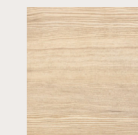
CLT



LEVEL TIMBER FRAME



STEEL PORTAL + TIMBER INFILL



LIGHT-WEIGHT TIMBER STRUCTURE

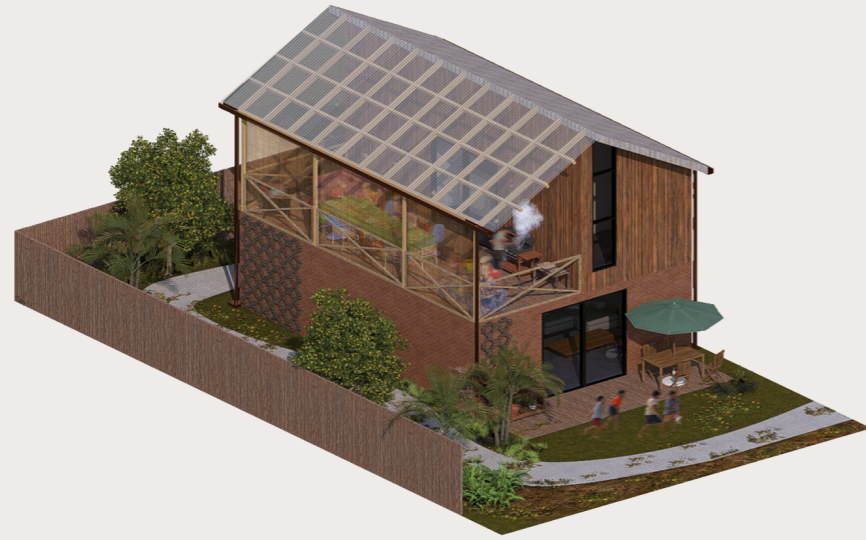
T4

Communal Wellbeing Spaces

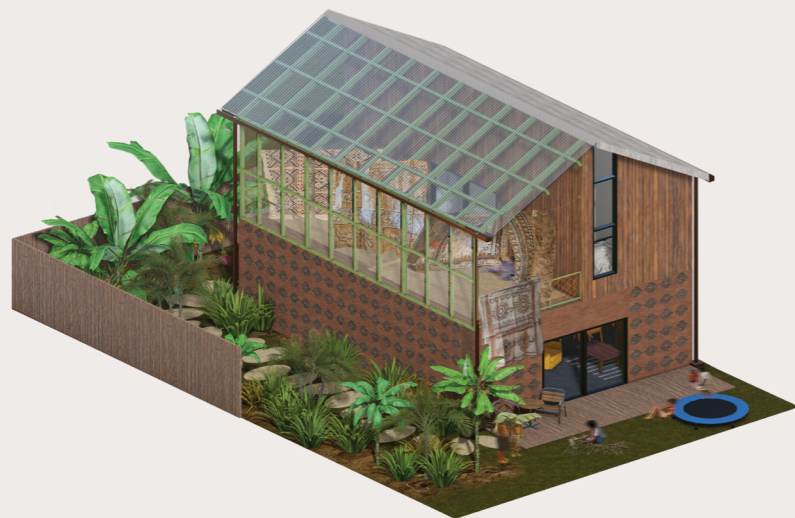
Communal Wellbeing Spaces offer visual prompts that illustrate how families might adapt the fourth quarter of their home to reflect cultural practices and evolving needs. Through multiple speculative scenarios, the tool makes incremental living accessible to families, housing providers, and non-specialist audiences. It bridges technical and cultural communication gaps, enabling co-imagination of staged adaptation over time.

Designed for use in engagement and advocacy settings, this tool promotes cultural agency, spatial flexibility and sector-readable dialogue. It affirms that housing is not static, but a platform for cultural expression and intergenerational wellbeing.





An open-air space to host kogai (gatherings)



Partially enclosed to protect from wind and rain



Lower open-air area for a workshop and making space

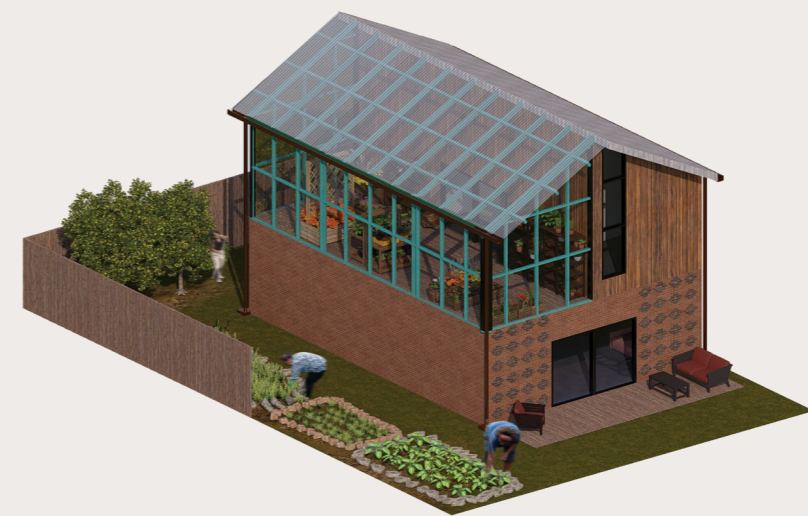


A sleepout with an exterior space for food preparation



An enclosed interior with additional space for music and dance

Fully enclosed marae-style interior



Two additional rooms with an internal courtyard for socialising

An enclosed greenhouse/ conservatory for a seed nursery

03

Summary

This toolkit affirms the potential of Indigenous-led, culturally responsive design to transform Pasifika housing delivery in Aotearoa. By operationalising cultural values through spatial tools, it provides Pasifika Housing Providers with a practical resource to navigate design, advocacy, and planning processes. However, its implementation is inextricably linked to broader systems of governance and finance. Regulatory frameworks must accommodate incremental housing models and co-design processes, while maintenance strategies require culturally aligned, community-led management approaches. Financial mechanisms must also shift from rigid funding

cycles to flexible, staged investment that supports long-term growth and regenerative outcomes.

Future research should investigate how this toolkit performs in practice, particularly across diverse PHP contexts. Further exploration is needed into how procurement, compliance, and funding environments evolve to support Indigenous design leadership and enable broader adoption. Ultimately, this resource is a starting point for sector transformation, supporting a movement where housing is not only delivered for Pasifika families but shaped with and by them, in ways that uphold cultural continuity, ecological care and intergenerational resilience.



