Housing Design Guide · The Beginning



July 2002 Architects · **Faumuina & Associates** Project management · **NVG Limited**

Guidelines for Designing Pacific Housing Solutions



A wide range of individuals, organisations and communities of Pacific people were involved in the development of the Pacific Housing Design Guide.

We particularly acknowledge the hard work of the project team, Housing New Zealand Corporation staff and valued advice from the following people:



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Pacific People

Housing New Zealand Corporation and the Project Team use the term "Pacific people" to describe people with Pacific Island ancestry or heritage. This term is not used to indicate a single ethnicity, nationality, or culture. This is the basis on which the term "Pacific people" is used throughout this document.



PACIFIC HOUSING DESIGN GUIDE

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This condensed version of the Pacific Housing Design Guide is for specific use with the Housing New Zealand Corporation (HNZC) Development Guide and aims to provide tangible solutions through design guidelines for creating better housing for Pacific people.

This Design Guide has been developed by Pacific designers in consultation with Pacific communities at the instigation of Housing New Zealand Corporation.



Introduction







----> Project Aims









The aims of this Design Guide are to:

- Improve understanding of the specific needs of Pacific housing in New Zealand;
- Highlight the cultural needs, dynamics, and pressures acting on Pacific people and their housing environment;
- ----> Establish performance-based guidelines for appropriate solutions;
- ••• Inform and assist all housing stakeholders (including architects, designers, and property developers in the public and private sectors) in the process of providing residential housing for Pacific people in New Zealand;
- ----> Inform designers, and encourage the development of new, innovative, and creative housing design for Pacific people.

3.1 Design Themes

The literature review highlighted some alarming statistics on the state of housing for Pacific people in New Zealand. In response, and as a result of consultation with the Pacific Reference Group and the Pacific community in general, the following themes were promoted as a basis for the brief for a Pacific Housing Design Guide.

3.1.1 Extended Family Living

Pacific people live as extended families and generally a standard New Zealand house is not designed to cope with the pressures of this lifestyle. Therefore, houses for Pacific people should be specifically designed to accommodate more people.

3.1.2 Flexible Design

Houses for Pacific people must be very flexible and adaptable to cope with their lifestyle, both on formal occasions, such as a celebration with an overflow of visitors, and during everyday family activities.

3.1.3 Multi-Purpose Spaces

The garage is an example of a multipurpose utility and living space, having significantly contributed to Pacific housing solutions. There is a need for a higher level of interior finishing to suit its function as a utility space for Pacific people.

3.1.4 Openness

The openness of a traditional Pacific house with no walls translated into a strong desire to include verandas or other similar transitional spaces in the house design for Pacific people in New Zealand. These transitional spaces allow ease of indoor/outdoor flow and other benefits to be discussed in detail in a separate section.

3.1.5 Warmer Living

Designers should aim to achieve internal layouts and site orientations that will maximise solar gain and provide natural warmth.

3.1.6 Built to Last

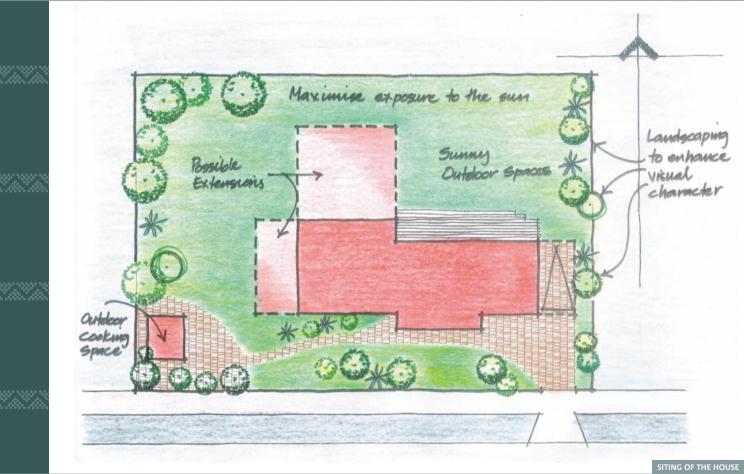
Houses are to be built of robust and hardwearing materials to increase the durability of the building for a larger number of people. Internal fixtures and fittings should also be high-quality and durable.

3.1.7 Pacific Identity

Houses should provide a sense of shelter, protection, security, and 'Pacificness', thus allowing Pacific people to reflect their identity. A sense of 'Pacificness' can be achieved in a number of ways, i.e. through the selection of building materials, colours, finishes, furnishings, and landscaping design.

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3.2 Outdoor Spaces

3.2.1 Siting of the House

The first consideration in any house design is its site location. In general, the following principles should be followed:

- Maximise exposure to the sun, ensuring maximum solar gain and natural warmth;
- ----> Minimise prevailing winds;
- Note existing natural features which could be retained to enhance the overall design;
- Prepare a master plan for the overall site development, allowing for future extensions to the house and additional structures;
- Provide sunny outdoor spaces,
 sheltering the occupants from
 prevailing winds with direct access
 to internal living spaces.



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3.2.2 Landscaping and Vegetable Gardens

Allow for landscaping, as this will enhance the visual presentation of the site. It will also provide a more natural and sympathetic border between neighbouring properties and shelter outdoor living spaces from prevailing winds.

It is important to consider a space for gardening during the master planning of the site. A vegetable garden is important for economic, health and cultural reasons. It will assist in reducing grocery bills, encourage working outdoors, and allow Pacific people to plant some of their favourite crops such as taro.

3.2.3 Separation Spaces

Where separation of neighbouring properties is required for security and privacy reasons, allow for suitable fencing. Each situation will determine the type of material, e.g. metal pool fencing, timber slats, planting. Regardless of the situation or material used, lower the fencing height at the front to maintain visual contact with the street.

3.2.4 Outdoor Cooking Space

Pacific people usually have an outdoor cooking space. This can be accommodated in the site planning, providing that it is in compliance with Territorial Authority requirements.









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3.3 Indoor Spaces

3.3.1 Entry Space

As Pacific people's houses have multiple functions, a wide main entry is important for formal occasions such as death in the family, when the coffin is carried through the front door.

It is also common for Pacific people to enter a house on informal occasions through a secondary access (a side or rear door), preserving the sanctity of the main entry.

Therefore, allow for a prominent main entry with a wider door, where visitors are received and led directly to the lounge, and an easily accessible secondary entry.

3.3.2 Formal Space

Pacific people regard the 'lounge' as the heart of the house – a multi-purpose, flexible space for all occasions, with the ability to accommodate a large number of people. It is the formal space where visitors are received, dined, and entertained.

If possible, provide multiple entries to the formal space, enabling a group of visitors to depart during formal occasions such as paying respects to a deceased family member, without inconveniencing other visitors.

The formal space must be separated from the rest of the house, especially from the cooking space, to avoid disturbance during formal occasions.

Visual and physical connection to the outdoor areas will relieve pressure on the internal space and promote a healthier lifestyle. Large french doors allow easy access to outdoor areas and a greater air flow through the internal space.

3.3.3 Informal Space

The living and dining rooms are seen as the informal space where the family can continue with its normal activities when the formal space is being used.

The informal space should be open plan and be connected to the formal space, thus creating one large everyday space. However, there must be an option to separate this space from the formal areas when required.

Visual and physical connection to the outdoors must be provided. This allows the children to play outside, while being monitored from inside.

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3.3.4 Cooking Space

To accommodate the demands of extended family living, the kitchen needs to be large enough for two or three people working at the same time, especially on formal occasions.

The cooking space should have the option of being separated from the formal space when required, but can form part of the open-plan informal space layout.

Provide for adequate storage for large and bulk items such as cooking pots, sacks of taro, tins of cabin bread, and cases of corned beef.

The use of robust and hard-wearing materials such as stainless-steel sink benches will help to meet the demands for the cooking space.

3.3.5 Utility Spaces

Loft space

Mezzanine levels maximise the use of internal ceiling heights, creating a multi-purpose utility space. The loft can be used as a secondary living area or dormitory for teenagers, but is not suitable for the elderly or young children due to the difficulty of access.

Veranda

One form of a traditional Pacific house has totally removable walls or blinds. Though dictated by the climate, the concept of 'ease of inside/outside movement' is fundamental to Pacific people.

Therefore, traditional transitional spaces (verandas, patios, porches and decks) are an essential part of Pacific people's homes. They provide other practical benefits, allowing for a seamless flow between indoor and outdoor spaces.

Transitional spaces should maximise solar gain, allow for the enjoyment of the site's natural features and provide the flow between internal spaces.

Garage

Pacific people often see garages as a useful multi-purpose overflow utility space for welcoming ceremonies, entertaining and temporary visitors.

Garages are also used for their more traditional purpose of storing vehicles.

Therefore, the garage should be properly insulated and internally lined in accordance with its use as a utility space by Pacific people.

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3.3.6 Personal Spaces

Bathroom

The demands of an extended family dictate that the bathroom and toilet be separate rooms. Provide walk-in showers with no steps for easy access by the elderly.

Pacific people generally prefer showers to bathtubs, which should therefore be an optional element in the layout.

Toilet

From cultural and practical points of view, toilets must be accessible without having to walk through the formal space.

There should be two separate toilets, with one of them being accessible for the disabled and the elderly. The minimum width of toilets should be 1.20m.

Laundry

Provide a separate, properly ventilated laundry. This space could also serve as storage for cleaning products.

3.3.7 Sleeping Spaces

When designing bedrooms, note the family sleeping arrangements – an important cultural issue with Pacific families.

The elderly are accommodated inside the house, as it is unacceptable and even insulting for them to sleep in sleep-outs or 'granny flats'.

The female family members, especially young girls and teenagers, are also accommodated inside, always separate from the males.

Sleep-outs, as part of an overall design, are reserved for the teenage male family members.

The number of sleeping places and their flexibility are very important for Pacific people. Allow for a minimum of five to six sleeping spaces to accommodate the extended family, with an option to combine smaller spaces into a bigger one due to an overflow of visitors. Locate the sleeping spaces away from living areas, and provide indoor/outdoor flow to promote a healthier lifestyle.

Provide appropriate storage for large items such as fine mats.

5.3.8 Connecting Spaces

Hallways are sometimes regarded as a waste of useful interior space, but they are convenient connecting spaces to bathrooms and toilets, eliminating the necessity to pass through the formal space. Allow for corridors with a minimum width of 1.10m.

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3.4 Pacific Housing Design Matrix

The matrix is a quick reference guide to the basic design of a Pacific housing solution. The relationship between these main spaces can be summarised as follows:

	Main Entry	Formal	Informal	Utility	Cooking	Personal	Sleeping	Outdoor
Main Entry		•	•	•	X	X	X	•
Formal	~		~	×	×	×	×	V
Informal	•	~		•	V	×	•	V
Utility	•	×	•		•	•	•	•
Cooking	×	×	v	•		×	×	•
Personal	×	×	X	•	×		•	X
Sleeping	×	×	•	•	×	•		•
Outdoor	•	~	~	•	•	X	•	

/	Essential	
	Essential	

.

spaces must be connected when designing a Pacific housing solution;

- Acceptable spaces may be connected, but it is not essential in a Pacific housing solution;
- × Unacceptable

avoid connecting these spaces.













4.1 New Housing

The principles in this Design Guide have been applied to the following design concepts of houses for Pacific people.

Design Concept 1 - a house with three sleeping spaces and a loft that offers flexibility in use.

Design Concept 2 - a similar design enhanced to accommodate larger families. It includes five sleeping spaces and a loft that offers flexibility in use.

Design Concept 3 - a cost-effective design solution that combines the outlined design principles with modern materials. It incorporates a carport as a garage alternative.

4.1.1 Design Concept 1

- Wide entry space, leading directly to the formal space;
- ••• Formal space with multiple entries and the ability to be temporarily separated from other spaces;
- •••• Open-plan informal space, consisting of living and dining spaces;
- Weranda, providing indoor/outdoor flow;
- ----> Loft, providing multi-purpose utility space;
- Garage, with its primary function as a utility space;
- Smaller sleeping spaces, with the ability to be combined into a larger sleeping space.





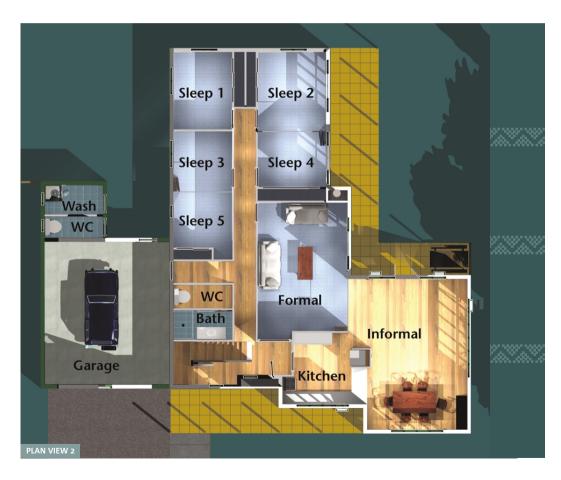
4.1.1 Design Concept 1







4.1.2 Design Concept 2



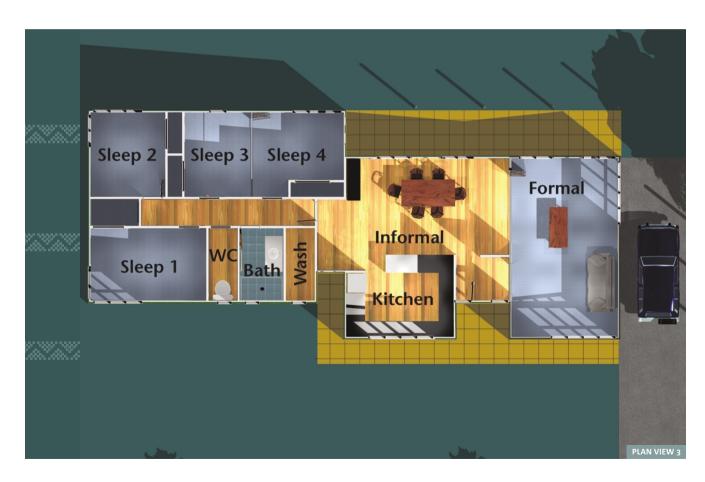
4.1.2 Design Concept 2

- Wide entry space, leading directly to the formal space;
- ----> Formal space with multiple entries and the ability to be temporarily separated from other spaces;
- -----> Open-plan informal space, consisting of living and dining spaces;
- Smaller sleeping spaces, with the ability to be combined into a larger sleeping space.
- ---> Veranda, providing indoor/outdoor flow;
- ---> Loft, providing multi-purpose utility space;
- ---> Garage, with its primary function as a utility space.





4.1.3 Design Concept 3



4.1.3 Design Concept 3

- ••• Multiple entries, formal/informal space, veranda, large cooking space, private personal spaces, and flexible sleeping spaces;
- Due to budget considerations, the double garage has been replaced by a carport, and the loft is omitted;
- \longrightarrow The form is simplified to reduce building costs.





4.2 Existing House

Renovating a house to suit the needs of Pacific people is a different challenge due to the constraints of the existing house. The design principles outlined in this document should be adhered to, but they may not all be feasible. The areas of concern to be addressed as part of the renovation are:



- ···· Improve the house overall flow to establish the correct relationship between formal, informal, and cooking spaces; separate sleeping facilities.
- ---> Alter entry spaces for formal and informal entries.
- ----> Provide a means for separating the formal space when required.
- ---> Upgrade cooking space to suit extended family lifestyle.
- ----> Upgrade personal spaces such as bathrooms and toilets.
- Provide extra sleeping spaces either through a house extension or by adding a sleep-out.
- ----> Provide a garage or a carport.
- Add a deck or a veranda to create indoor/outdoor flow and a healthier living environment for the family.











Pacific Housing Design Concepts



4.2.1 Design Concept 1

This property comprises a brick-and-tile 1940's three-bedroom house located at the front of a long narrow site and orientated towards the northwest.

The living room is at the front of the house, totally separated from the kitchen/dining area at the rear. Bedrooms and service areas occupy the space between the two main areas of the house.



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Proposed Changes

- The floor layout is reorganised to improve the flow, by grouping formal and informal spaces at the front, and sleeping spaces at the rear;
- Although formal and informal spaces have been designed as open-plan connecting spaces, sliding folding doors are proposed as a means of temporarily separating the formal space;
- The cooking space is upgraded to accommodate the needs of the extended family;





Personal spaces such as bathroom, toilet and laundry are upgraded, and an extra bathroom is added;

The extension to the rear provides more bedrooms and bathroom facilities;

A covered verandah and deck are added to the house providing an extension to interior spaces;

----> A new carport is added.

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