

# Innovating to deliver more homes sooner

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August 2024



# Acknowledgement of Country

I acknowledge the Wann-gal, the traditional owners of the lands on which we meet today and the Aboriginal and Torres Strait Islander people participating in this event.

I pay my respects to Elders past, present and emerging, and recognise and celebrate the diversity of Aboriginal peoples and their ongoing cultures and connections to the lands and waters of NSW.

# Today's agenda

- 1 About Homes NSW
- 2 What is Modern Methods of Construction
- 3 About the MMC Program
- 4 Building Products at Homes NSW
- 5 Closing remarks



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Homes NSW



# Delivering quality homes and services that change lives and end homelessness

Commenced as an agency from **1 February 2024** bringing together housing and homelessness, with social housing, aboriginal housing and key worker housing all under one roof – making the system more efficient and accessible.

## Land and Housing Corporation

NSW social housing portfolio

Maintenance

Delivery of new homes



## DCJ Housing and Homelessness

Tenant management of social housing

Homelessness services

Disaster welfare



## Aboriginal Housing Office

Provider of housing for Aboriginal and Torres Strait Islander people



## Key Worker Housing

Teacher and Police housing

Regional Key Worker housing





# Our role – Homes NSW

The role of **Housing Portfolio** within Homes NSW is to **actively grow and manage the supply of the right types of housing, at the right time, in the right areas, for people in need in our communities.**

We manage the largest social housing portfolio in Australia, with over 125,000 properties valued at approx. \$63 billion (as at 30 June 2023).



### NSW-wide portfolio

125,000

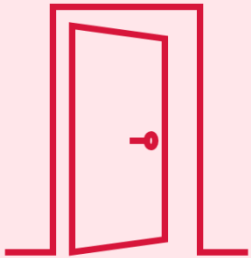
30,889 managed by  
Community Housing Providers



### New homes

8,400

Over the next four years to as  
part of the recent Building  
Homes for NSW budget



### Average age of homes

43.6

Retain and maintain properties  
for over 50 years



### Maintenance spend

\$810m

Over the next four years to  
repair and restore 30,000  
properties

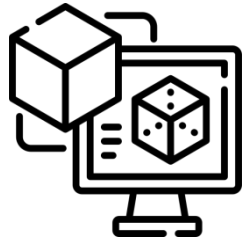
# 2

## What is Modern Methods of Construction?

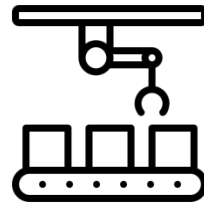


# MMC is not one approach, it describes a collection of methods to plan, design, build and manage assets.

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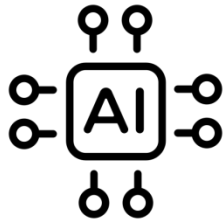
**Digital  
twins**



**Off-site  
manufacturing**



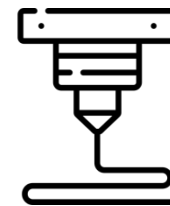
**Off-site  
modular**



**Artificial  
intelligence**

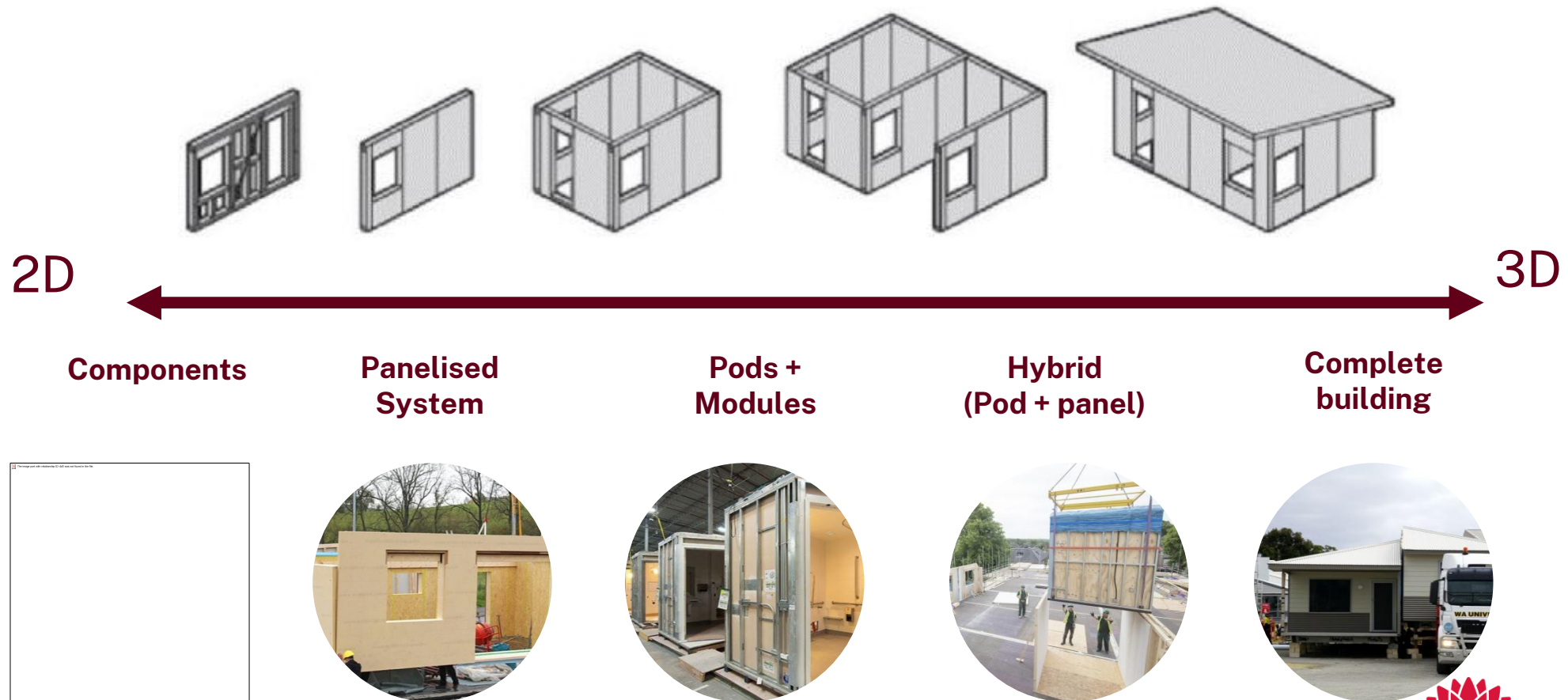


**Site  
technologies**



**3D Printing**

There is no one size fits all. Selecting from a spectrum to find the best fit for the project and program.



# Delivering quality homes faster, improving quality, reducing waste and risk.



MMC can be repeatable while retaining flexibility, to speed up design and procurement times as well as onsite construction.

Can be built to manufacturing and factory tolerances, improving quality, minimising waste and improving sustainability outcomes.

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## About the program

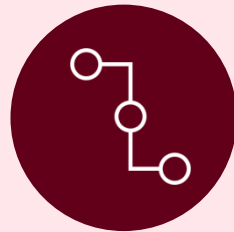
Demonstrate how Modern Methods of Construction can be adopted to deliver more social, affordable, and key worker homes, with speed of delivery, great quality, volume, and value for money benefits, incorporating learnings and improving tenant outcomes.



**Deliver homes  
faster**



**Change  
perceptions**



**Enable a  
pipeline**

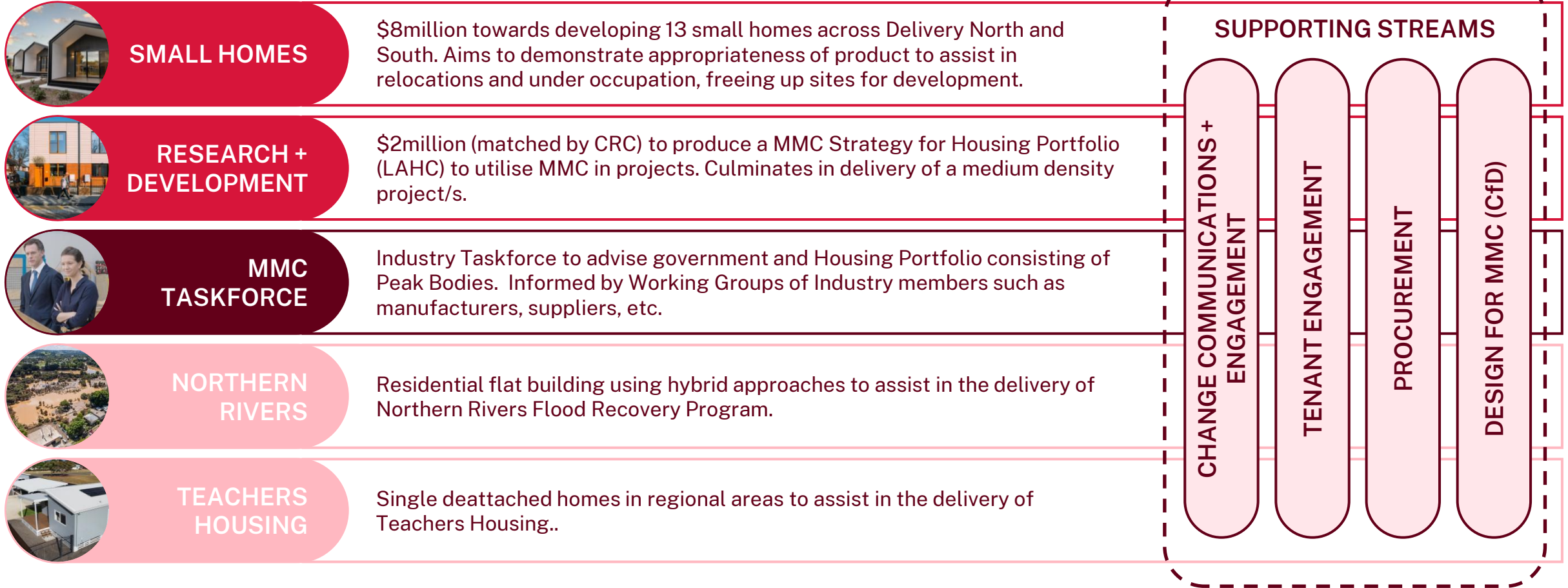


**Build  
organisational  
capability**



**Lead the way in a  
sustained,  
systemic way**

# MMC Program



# Demonstrating different methods and products across a range of typologies



# Modern Methods of Construction Taskforce

**The Taskforce was launched by Premier Minns and Minister Jackson on 27 November 2023.**

- Provide advice on the use and adoption of MMC to deliver more homes in NSW, growth of the off-site manufacturing industry
- Provides recommendations to NSW Government on industry wide challenges.
- Members include peak body representatives representing housing, construction, manufacturing, local government and tenants.
- Quarterly meetings
- 2 years and conclude in 2025



*MMC Taskforce June 2024*



# What we heard



## More homes

- Provide a consistent, **transparent**, and reliable **pipeline**.
- Efficiencies are achieved through **standardisation**, repetitious designs. Provide a program, not projects.
- Consider **different models** using a hybrid of modern methods of construction and traditional construction



## Planning and regulation

- Work with regulatory bodies to **streamline planning and building regulations** to accommodate MMC whilst ensuring safety and quality standards.
- Work with governments to **provide certainty through the planning system** through pre-approved or regularised plans, to ensure there is a fast, efficient, approval system to give confidence to investors and other financial institutions.



## Building the industry

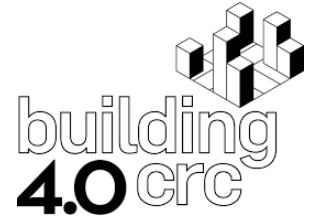
- Government should “**get on with it**” and deliver demonstration projects to inform a broader program and enable certainty of investment.
- Consider collaborative contract models to reflect MMC
- Create more **accessible government procurement** methods to make it easier for suppliers to tender



## The journey to adoption

- **Collaborate across the nation** to build confidence in and knowledge of MMC with exemplar projects demonstrating quality design, and consistent standards and certification.
- **Create high quality design**, deliver higher sustainability performance and communities people love.

# Research and Development to innovate how we design, plan, deliver and maintain quality homes



## Scoping, Strategy & Platform development

Homes NSW, in collaboration with Building 4.0 CRC, will develop strategies and methods and demonstrate the application of MMC on a series of live projects to further facilitate and support industry adoption of innovative methods of construction.

## Proof of concept projects

Proof of concept projects will integrate prototypes developed, to develop an operational handbook and a kit of parts approach for MMC.

### Key focus areas:



Speed and efficiency of housing delivery



Cost and value for money



Tenant satisfaction and experience



Sustainability and resilience



Operations and maintenance

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# Building products at Homes NSW

# What design means to Homes NSW



## **AFFORDABLE**

Upfront costs  
Operational Costs  
Lifecycle +  
maintenance



## **SUSTAINABLE**

For our residents  
For the environment  
For the community



## **BEAUTIFUL**

What home means  
Context + Character  
Support life choices

# Rigorous design standards and performance requirements

## GOOD DESIGN FOR SOCIAL HOUSING

This document has been developed by the NSW Land and Housing Corporation (LAHC) in partnership with the Government Architect NSW (GANSW). It explains the relevance of good design for social housing, and what's important when new homes are designed and built.

**Why good design?**  
Good design is NSW Government policy, and it underpins the creation of better places that support the physical, social, cultural, environmental, and economic wellbeing of the community.

LAHC manages and delivers housing for those most in need in our community through the NSW Government's social housing portfolio. While providing homes to over 250,000 people, LAHC is committed to create housing that not only benefits tenants, but enhances neighbourhoods and generates social and economic value for NSW.

Future Directions for Social Housing in NSW (Future Directions) is the NSW social housing policy which is underpinned by three strategic priorities:  
— More opportunities, support and incentives to build and/or lease social housing  
— A better social housing experience  
This document outlines four key goals:  
— Wellbeing for tenants  
— A sense of belonging for our communities  
— Collaboration with our partners  
— Long-term value for the NSW government

Successful social housing requires a thoughtful design process to balance these goals.

GOVERNMENT ARCHITECT NEW SOUTH WALES  
SEPTEMBER 2020

	TENANTS	COMMUNITIES	NSW GOVERNMENT	PARTNERS
GOALS	<b>WELLBEING</b> The design of our homes and their context supports the physical, cultural, social, and economic wellbeing of tenants.	<b>BELONGING</b> The quality of our housing and urban design fosters a sense of belonging and supports social cohesion and community wellbeing.	<b>VALUE</b> Design optimises the potential of our homes to retain their value over time and increase social, environmental and economic benefits.	<b>COLLABORATION</b> Provide our knowledge and guidance while allowing our partners to innovate and deliver their best outcomes.
PRINCIPLES	<b>HEALTHY ENVIRONMENTS</b> Our housing supports the physical and mental health and safety of our tenants.	<b>MIXED TENURE</b> Our housing is indistinguishable from private housing and is well-integrated within diverse communities.	<b>WHOLE OF LIFECYCLE APPROACH</b> New homes are considered for their whole-of-life costs, including operation and maintenance efficiency.	<b>A GOOD PARTNER</b> Develop genuine relationships and strong partnerships conducive to innovation and a sense of shared purpose.
	<b>GOOD FOR TENANTS</b> Our housing considers the needs of our tenants, has low running costs and is flexible to adapt to future requirements.	<b>GOOD SHARED AND PUBLIC SPACES</b> Our housing provides welcoming and safe public spaces and common areas, that support positive social interactions.	<b>SUSTAINABILITY AND RESILIENCE</b> Our housing is environmentally, culturally, socially and economically sustainable, and resilient to anticipate future challenges.	<b>PLACE MAKING</b> Our housing is well integrated with other investments and initiatives in a place.
	<b>QUALITY HOMES</b> Create a sense of dignity by providing housing that tenants are proud to call their home.	<b>CONTRIBUTE TO LOCAL CHARACTER</b> Our housing contributes to distinctive neighbourhoods by interpreting the past, present and future identity of places and their communities.	<b>MAKE EVERY DOLLAR COUNT</b> Create design efficiencies that generate savings which can be directed towards building more homes.	<b>CONTINUOUS IMPROVEMENT</b> To make the next project better than the last through learning from others, our experience and incorporating new practices.

## NSW Land and Housing Corporation Design requirements

The Land and Housing Corporation (LAHC) Design Requirements inform the design and development of the LAHC social housing property portfolio. These requirements apply to all new LAHC developments and are driven by tenant wellbeing, design quality, environmental performance and operational effectiveness within cost parameters.

This document is a benchmark tool to establish minimum requirements, standardise decision-making and enable project-specific innovation. It is for the use of LAHC staff, external consultants, project managers and development partners.

### Legislation and code reference

Legislation and policies that impact the design of LAHC projects:

- Environmental Planning and Assessment Act 1979, Housing Act 2001 (NSW), Residential Tenancies Act 2010
- State Environmental Planning Policy (Housing) 2021 (Housing SEPP) and other environmental planning instruments (SEPPs and LEPs)
- National Construction Code (NCC) and referenced Australian Standards
- BASIX, NatHERS
- State Environmental Planning Policy No 65 - Design Quality of Residential Apartment Development and Apartment Design Guide 2015 (ADG)
- Local development control plans and council guidelines (DCP+L)
- Sectors housing design guidelines given effect by the Housing SEPP
- Liveable Housing Design Guidelines

Good Design for Social Housing and LAHC Design Requirements (this document) are required to be considered by NSW Land and Housing Corporation before carrying out certain developments without consent, as required under s.330, 4.3 and 10(6) of the Housing SEPP.

These documents further inform the design of any LAHC development:

- LAHC development brief (project specific)
- LAHC policies including the LAHC Heating and Cooling Policy and the LAHC Lift Policy
- LAHC specification with associated schedules

### Key design principles

These principles from Good Design for Social Housing apply to all design decisions and material selections for LAHC developments:

- Good for tenants**  
Our housing considers the needs of our tenants, has low running costs and is flexible to adapt to future requirements.
- Whole of life cycle approach**  
New homes are considered for their whole-of-life costs, including operation and maintenance efficiency. Reducing the cost and burden of maintaining property benefits everyone.
- Mixed tenure**  
LAHC aims to create an enduring, high-quality property portfolio that is a source of pride for our tenants. Our housing is indistinguishable from private housing and is well-integrated within diverse communities.
- Continuous improvement**  
The next project is better than the last through learning from others, our experience and incorporating new practices.
- Sustainability and resilience**  
Our housing is environmentally, culturally, socially and economically sustainable, and resilient to anticipate future challenges.
- Quality homes**  
Create a sense of dignity by providing housing that tenants are proud to call their home.

GOVERNMENT ARCHITECT NEW SOUTH WALES  
FEBRUARY 2023 1 OF 5

## NSW Land and Housing Corporation COMPONENT REQUIREMENTS

NSW Land and Housing Corporation  
Department of Planning and Environment

NSW Land and Housing Corporation

March 2023

Forming part of the Asset Standards. COPYRIGHT © NSW Land and Housing Corporation

Component Requirements March 2023 1

# Key design and build considerations



- ✓ Is a replacement for an item **easily available**?
- ✓ If there is a tile to be replaced, can we get a **matching tile**?
- ✓ Can we use **one piece splash backs** to kitchen?
- ✓ Can we eliminate the use of **floor tiles** – e.g. sheet vinyl
- ✓ Can we **standardise doors/windows** for easier replacement?
- ✓ Can we **future proof** by allowing for AC and Solar?
- ✓ Can we **reduce** the extent of **painting** externally and internally?
- ✓ Consider **prefinished** sheet materials.

# External Wall Cladding Options



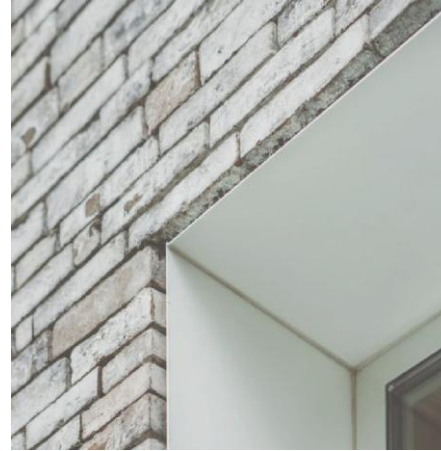
## Sheet Metal

- ✓ Low maintenance
- ✓ Readily available
- ✓ Ease of module connection
- ✓ Standard corner details
- x Reflected heat
- x Embodied carbon is high
- x Window details complicated and expensive



## Weatherflex

- ✓ Low embodied carbon, made from hardwood waste locally.
- ✓ Sheet based product for fast install.
- ✓ Pre-finished option has long warranty (20yrs TBC), therefore low maintenance
- ✓ Low cost
- x Junction detailing and maintenance risk at junctions.



## Brick slips on rail system

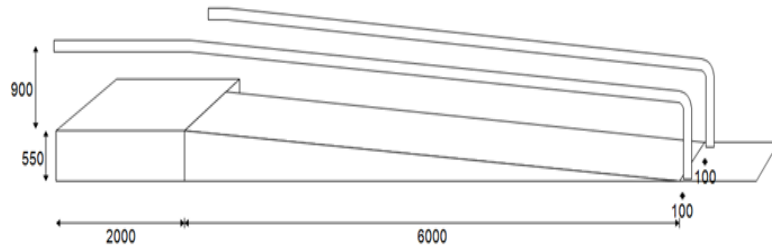
- ✓ Low maintenance external finish.
- ✓ Achieve heavy weight appearance on lightweight structure
- ✓ Australian predisposition to brick finish and psychological advantage for tenants.
- x Cost of construction



## Fibre Cement

- ✓ Relative low cost.
- ✓ Needs batten detail to cover screw holes and joint, which lends itself to modular construction.
- x Stigma associated with fibro houses.
- x Requires painting and re-painting.

# Future Proofing and Adaptability



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**Homes NSW properties need to be adaptable to move with the changing needs of our clients**

- Consider **Disability Modifications** from Grab rails and ramps to full kitchen and bathroom modifications.
  - **Fastening points** Eg: Blocking pieces/ply backing for grab rails.
  - Ability to add **Solar PV**.
  - Provision for **Air Conditioning**.
  - **Level Access Points** and thresholds.
  - Minimum Door and hallway widths for **accessibility**.
  - **Hobless Showers**.
  - **Additional Power Outlets** for appliances/IT.
-



# Thank you



Learn more

[www.nsw.gov.au/homes-nsw/mmc](http://www.nsw.gov.au/homes-nsw/mmc)

