

#### concept

The courtyard townhouse typology is an affordable and compact 2 bedroom dwelling with a focus on outdoor living areas. Proposed as a cluster of dwellings on a single site, the dwellings work together to mediate the extent of overshadowing and limit the dominance of vehicles. The simple repetitive forms and limited material palette create a common language within the neighbourhood. The typology has a strong environmental strategy.

The design incorporates a shared pedestrian and vehicle zone to adopt a European model that removes garages and devotes this percentage of floor area back to the garden.

The compact floor plan and clustered townhouse layout translates to a density of 42 dwellings per hectare. This equates to inner city density while resolving common difficulties. For example, the design provides excellent solar orientation and successfully mediates the extent of overshadowing, privacy is maintained and vehicle dominance is avoided.

Each dwelling has a generous private courtyard that gives the occupants an opportunity to individualise their dwellings. Almost 50% of the site area is dedicated to landscaping.

The design features of a compact efficient floor plan and generous garden area means the model will appeal to couples, young and small families, retirees and elderly couples.

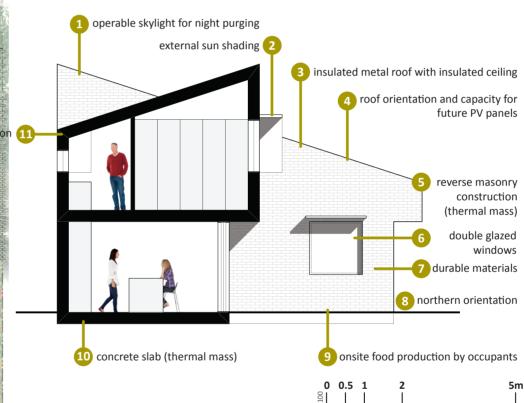
# sustainability

Strong environmental strategies ideal for Canberra's climate are an integral part of the concept. The design provides ideal orientation and a site layout that minimises overshadowing to ensure the typology has perfect thermal comfort. Reliance on mechanical cooling systems is unnecessary and heating input is limited. Each dwelling receives at least 5 hours of sunlight mid-winter to the primary living areas. Embracing building materials with high thermal mass ensures comfortable internal temperatures throughout winter and summer.

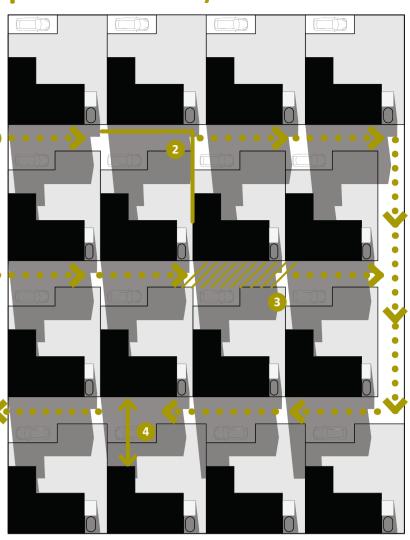
The upfront construction costs of incorporating proven environmental strategies (such as thermal mass, double glazing etc.) have significant impact on reducing the long term heating and cooling costs of the dwelling. This is an important cost of living factor within affordable housing markets.

Only by investing in environmental strategies at the initial stages of construction, can it be ensured the operational costs and environmental impacts are truly minimised. This not only provides measurable social responsibility benefits for the developer, but also provides longevity and durability, quality construction and market demand.

### | environmental measures



## | urban site layout



| 1 vehicle path | 2 courtyard wall contains privacy | 3 shared zone | 4 setback for solar access

| 0 2.5 5 10 25m | | | | | | | | | | |

### | figures

Each townhouse site occupies 220m², on which the 2 bedroom dwelling has a footprint of 62m² and a total floor area of 112m² (including external walls). 46% of the site is dedicated to a private landscaped garden.

Each dwelling receives at least 5 hours of sunlight mid-winter to the primary living areas.

The urban site configuration incorporates a one-way single lane vehicle access that is landscaped as a shared zone with pedestrians. This configuration translates to a density model of 42 dwellings per hectare.

It is estimated the dwelling will be constructed at a rate of \$2900/m2 or \$325,000.

Breakdown | Site area 220m<sup>2</sup> | Ground floor 62m<sup>2</sup>

External storage/ parking/ services 26m<sup>2</sup>

62m<sup>2</sup> | First floor 50m<sup>2</sup> es 26m<sup>2</sup> | Garden 102m<sup>2</sup>



