

# DETACHED HOUSE CONCEPT TO COMPLETION

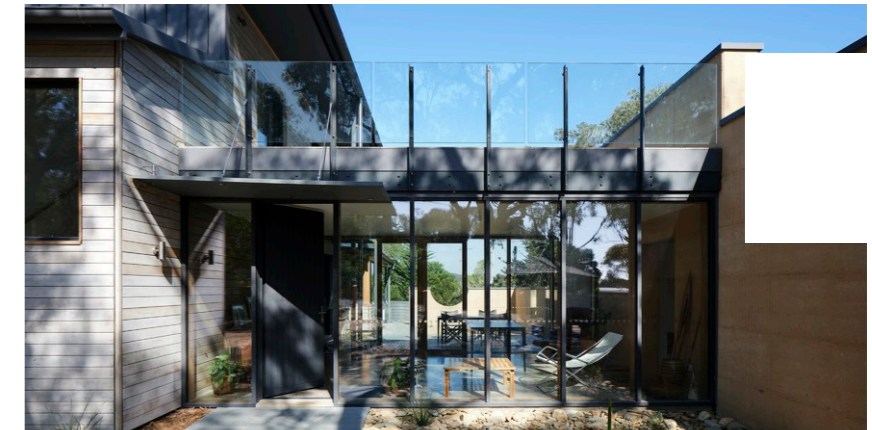
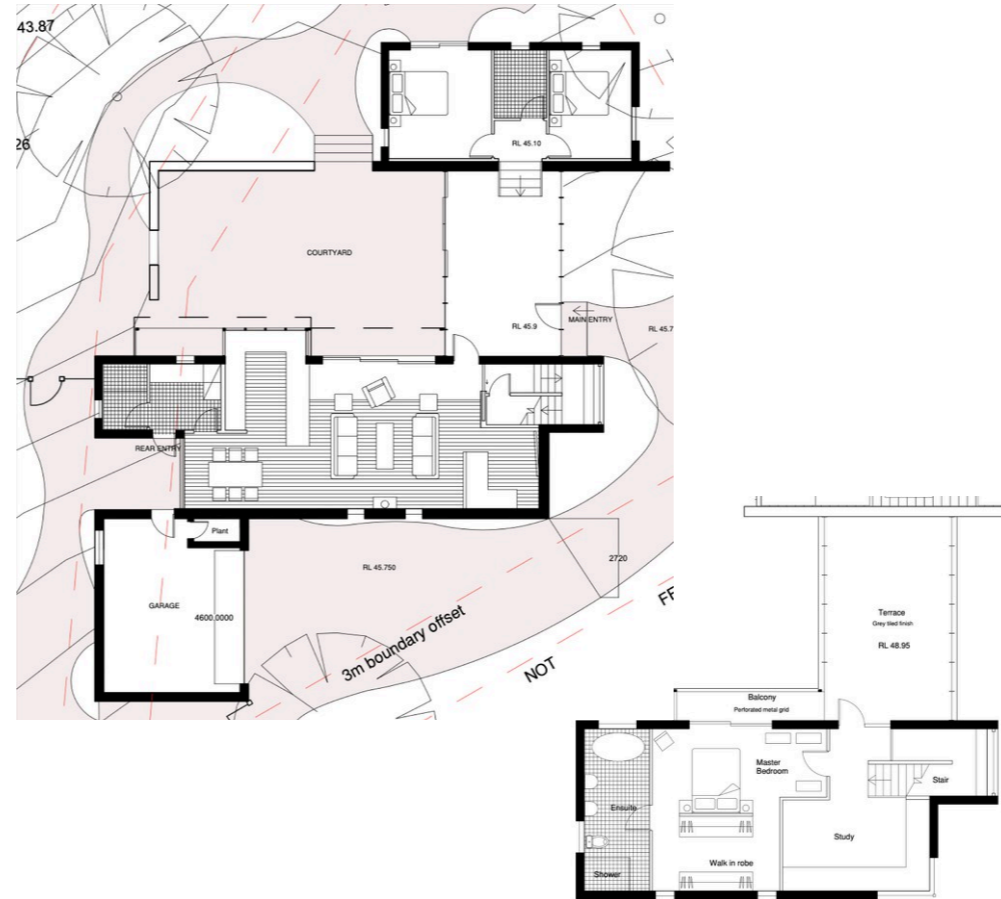
## Courtyard Passivhaus

Passive Courtyard House is an example of building efficiently; an adequate floor area but not large and built to higher standards than code. It serves a couple who have guests, requiring a warm sense of welcome, but with privacy and designed efficiently to meet zero carbon in use.

The sloping triangular site allowed the house's orientation of due north, with PV generating more energy than it uses. Application of PH principles located steel structure outside the thermal envelope and thermal mass located for passive solar in winter and night purge in summer. Energy recovery ventilation has 90% returned in fresh incoming air, leaving the small wood burning stove and single split to provide comfort.

Design features include:

- Guest wing and private courtyard
- 3 bedrooms, 3 bathrooms, study, multi-purpose lobby, balcony and roof deck
- Passive House certification planned
- BAL 29 bushfire constraints accommodated
- Rammed earth, matt Colorbond and Spotted Gum cladding
- Passive solar principles also applied
- Responds to triangular site



project datasheet

Studio B Architects t. 03 9486 4425 [www.studiob.net.au](http://www.studiob.net.au)