

NEV Member Building Workshop

Designing Passive Houses

4th Sat of month
(for now)

To assist members designing their home – non-members welcome

Andy Marlow

Please note – we are **recording these presentations** for others (we will save the questions and answers). Turn off your screen if you wish

Agenda

1:05pm Andy Marlow

1:45pm Case study – Tony & Theresa Farrell

2:15pm Q&A

2:28pm Bio-break

2:38pm - Q&A or house design workshop questions

3:30pm Closing round

Acknowledgement of country

I acknowledge the Guringai, Darkinjung and Awabakal people, the traditional owners of the land on which I live, and the owners of the lands of all attendees, and pay my respects to the Elders past and present.

- NB: we are recording this for others

Last Workshops

<https://wiki.nararaecovillage.com/display/NBLS/NEV+Member+Building+Meetings+-+Help+with+your+home+design>

- Feb - Stage 1 houses overview
 - Dan & Deb Mohr – 74% reduction in BASIX cooling load
 - Heat-proof home
- Apr - Lowering Cost of Building at NEV
 - Graham Hunt
 - George Gilmour & Mark Dale home – low-cost \$/m² owner builder
 - Previous seminar recorded with Jon Ellis, Geoff Samuel and John Shiel
- Jun – Designing Sustainable Healthy Homes
 - Mark Dewsbury
 - Mikala Dind

Next meeting

- 4th Sat
- 22/10/22
- Another member house, plus an expert in sustainable building design

1. Andy Marlow – 40 mins

Bell - 10mins to go; 2 bells - 5 mins to go

2. Member Home

Tony & Theresa Farrell Home

Centralised System

Whole house 300-400m³/h

Brink – Renovent Excellent – Approx \$10k

www.brinkhrv.com

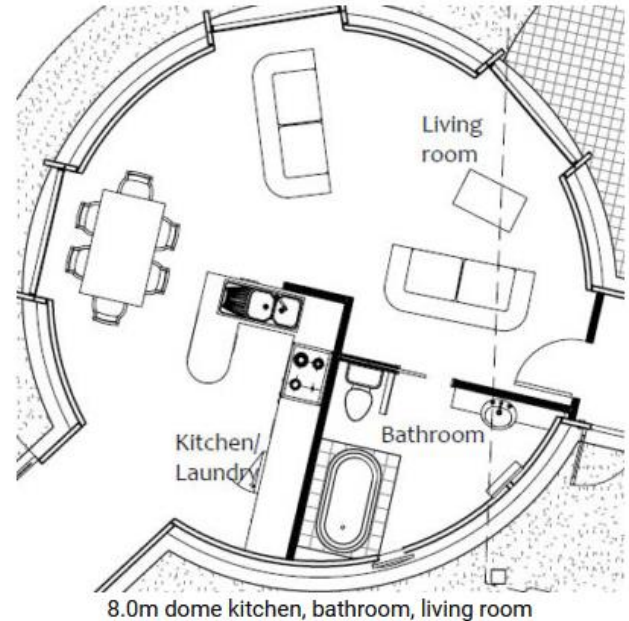


Video – how it works

www.youtube.com/watch?v=Xh6hnZp_wLo&t=106s

3. Q&A (1)

- Q&A – 2 rounds
 - Introduce yourselves
 - **What type of home/ question for Andy** - Top 2 ideas e.g. earth walls, shape, tightly sealed,
- Jo Hunt
 - 8m Dome <https://www.domeshells.com.au/dome-floor-plans/>
 - AM - Needs ventilation system, good insulation
- Gillian
 - Cool bedroom, open plan
 - AM –whole home comfortable; range of sleeping temperatures
- Catherine Oddie
 - Andy designing, live in forever, comfort like Tony & Theresa's
 - 1 B/R, 1 Bath, Joy of natural light
 - Opportunities for movement in case of being “smoked in” or working from home(COVID), e.g. yoga straps, gym equip
- Tanya Mottl
 - live in forever, get sun in, modular – Parkwood, co-housing



3. Q&A (2)

- Alex
 - how to make the building "air tight"
 - AM: there are many ways to make a building air tight, all need careful consideration and coordination. Building wraps are often used; the main suppliers are ProClima, Proctor and Siga.
 - Don't need as much thermal mass in a tight building
- Sierra & Adam
 - Keen to do a Passive House – plus live in forever, prefab for low cost
 - AM: Build from timber, prefab rarely saves money
 - The Asquith house was built using **Carbonlite** panels – Can be seen on Int **Passive House Day** – end of Sept & **Sustainable House Day**
 - Laros panels – AM: Yes they import passive house components – 3ply CLT panel for wall
- Rod and Olga
 - Similar to Tony & Theresa
 - What could be improved?
 - AM: Compact, 2 levels response to their block,
 - Roof construction method would be different
 - PCM – not put in these days, alternatives - water
- Prefab – other discussions
 - Easy to design and build for many of same size and shape – 0.1% waste
 - Large modelling costs for small one-off houses
 - Jo is interested in the existing Granny flat Passive House design shown in the slides, to see if it could be used at NEV