



Building a Sustainable Future

with OneSteel Reinforcing

There's more to building a sustainable house than installing solar panels on the roof and energy saving light globes. Building an environmentally sustainable home starts from the ground up, long before the foundations are poured says Cameron Rosen, owner of Australian Living, a company specialising in the design and construction of sustainable residential housing.

The Eco-Challenge project is Australian Living's latest development in Rose Bay in Sydney's east. It involves the construction of four houses designed by four independent architects specifically for the homeowners, of which Cameron is one.

"The goal is to build the most sustainable housing development possible," says Cameron, "And utilising steel reinforcing mesh and footings from OneSteel Reinforcing has contributed to the environmental properties of the houses.

"Under the Building Sustainability Index (BASIX) certification, these homes are very high performing," he said.

OneSteel Reinforcing has over 60 percent recycled content in its steel products. This, in addition to Boral green star three concrete equates to a concrete slab that's 60 percent recycled.

"Working with OneSteel Reinforcing has enabled me to make the right decision when it comes to material choice," Cameron said. "OneSteel Reinforcing opened up my world to information not only about the products they're supplying but also about the company itself.

"It's very satisfying to know that a

company as large as OneSteel Reinforcing has such high goals in the supply of sustainable products," he said.

In the initial design stage Australian Living sought assistance from the Green Building Council of Australia (GBCA) and Good Environmental Choice Australia (GECA) regarding material choice and suppliers such as OneSteel Reinforcing.

"Although these Associations are set up mainly for the commercial construction industry, they have provided excellent support as they understand what we are trying to achieve," said Cameron.

"The inclusion of recycled material is becoming increasingly popular with builders and homeowners in residential housing design. Builders are utilising recycled steel, concrete, stone and other non-toxic demolition debris that would otherwise become landfill," he added.

Each two storey house has the same type of structural system and comprises of approximately 270 square metres of floor space. The houses have a 350mm footing beam with 135mm slab, which equates to half the thickness when applying conventional building techniques.



The reinforcing supplied to Australian Living from OneSteel Reinforcing is prefabricated 300 mm x 400 mm stirrups with N12 500PLUS® REBAR to create the footing beam with SL82 ONEMESH® used in the slab.

"Over the last few years there has been increased awareness and eagerness from home owners who want to know more about sustainable building using a high proportion of recycled material," said Cameron. "Dealing with OneSteel Reinforcing has been excellent, both from product supply and promotion of sustainable building point of view."

"Every component is labelled for easy identification and delivered to site on time and when needed. This makes the whole project easier to manage," he said.

Each of the homes is north facing to draw in and capture as much light and solar energy as possible. It then permeates throughout the less frequently used areas, like the upstairs bedrooms.

"OneSteel Reinforcing have been excellent to deal with for this project and promoting the benefits of sustainable housing construction.

"The use of recycled material means that when the houses are demolished in the future, the material can be recycled into an alternative product or used in another house. This rounds the holistic principle of sustainable building," concluded Cameron.

To follow the progress of the Eco-Challenge visit www.australianliving.info

For further information on these and other OneSteel Reinforcing products or to view product installation videos visit the websites www.reinforcing.com and www.reinforcing.tv