

VCASE STUDY February 2019

PROJECT SPECIFICATIONS

PRODUCTS:

Ecoply® Structural Plywood

DESIGNER:

Adriano Pupilli Architects

PRODUCT:

IMBY Building Kit

CarterHoltHarvey

1800 338 463 www.ecoply.com.au

Disclaimer: While the products in this document possess the characteristics described, no representation is made that the products will be effective in all locations and circumstances. Much depends upon building design, construction practices and the environment in which the products are used. Products must be installed in accordance with Carter Holt Harvey recommendations, industry accepted guidelines and good building practice.

IMBY - plywood prefab in my back yard

There are always challenges in architecture and some are self-created.

When Adriano Pupilli and his team of architects set themselves a goal of creating quality and well-considered architect designed buildings that could be made accessible to the wider public, there were plenty of challenges. Over ten years in the thinking, IMBY (In My Back Yard) Kit was the result.

'We wanted to create a modular building system that is beautiful, a delight to be in, and flexible. One that can be added to, subtracted from, reconfigured, clad in different ways, placed side by side and can also be packed away and transported somewhere else completely different,' explained Pupilli. 'Plus, we wanted it to be good for the planet as well as the hip pocket.'

Talk about challenging. Of course Pupilli and team wanted it to look good, sit modestly in a garden or small urban backyard, be multi-use, keep the water out, and let the sun in. It needed to meet State Planning legislation for Exempt Development, be efficient to freight, easy to assemble and economical to build, in terms of both cost and use of materials. So all these factors were placed in a creative bucket, mixed around for a number of months and IMBY was the outcome.

IMBY is a beautiful, light-filled structure that celebrates its own form. Ancient woodworking techniques were a huge inspiration in its creation with the structural plywood workings of the system exposed to form part of the aesthetic of the interior.

Pupilli explained, 'The tusk-tenon joint, an ancient way of making "knockdown" furniture and decorative architectural connections, is used exclusively throughout to connect horizontal and vertical structural members. It is user-friendly and no nails, glues or adhesives are needed when assembling the plywood frame. Best of all it can be knocked down just as easily and flat packed for transport or storage.'

Combining ancient timber joining techniques with the computer controlled cutting of the Ecoply® plywood panels, provides the best of two worlds -simplicity of expressed timber friction joints with the accuracy and strength of contemporary fabrication methods and materials.

Ecoply was the logical choice for IMBY. Locally harvested product keeps the carbon miles down, the timber is sourced from sustainably managed forests and is available Forest Stewardship Council (FSC®) certified (FSC® C012019) upon request.



'We love the stuff. Ecoply is strong, versatile and easy to work with. Its thickness is consistent and suitable for CNC milling, ensuring all parts are structurally sound. When we went through the process of designing each part and how they might 'nest' on a standard 1200 x 2400 mm sheet of plywood, we worked painstakingly to ensure we had minimal wastage of material. This was in line with our design objective to develop a carbon neutral building kit,' said Pupilli.

Pupilli adds, 'I believe architects have a responsibility to not only provide for client's wish lists, but to do so in a way that does not burden the planet. We have the tools and skill set to demonstrate how smaller, well-built and considered spaces can provide happier, healthier and inspirational environments for people. Our job is to demonstrate this daily with every design challenge we face.'

The challenges faced in creating IMBY did not deter Pupilli and his team and the outcome was well worth the effort.