

Vanua Disaen Ltd has been based in Vanuatu—South Pacific for 10 years now and with 2015 Category 5+ Cyclone Pam decimating much of the Country, Vanua Disaen's finished prefabricated Homes and Buildings all survived with no structural damage.

General summary of our Construction System and where materials would be procured from. Sample pics from recent training centre built by Vanua Disaen Ltd on Tanna Island in Vanuatu 2016.

Stage 1—Foundations—Timber piers

Our Unique Building System can be built on concrete pads or raised on either timber or concrete pier system.

After marking out the site, 600 x 600 x 1m deep holes are dug, lined with 1.25mm polythene, Reinforcing cage is dropped into the hole along with the timber pile/ post then concreted in place. Steel is bought locally, H5 treated piles come from NZ, Concrete bought locally.



H3.2 Treated Bearers are then bracket fixed to the Piles with either 6kN or 12kN fixing kits H3.2 Treated floor joists are then cyclone strap fixed to the bearers - using associated product nails. All Timber—all H3.2 treated from NZ, fixings and product nails—From Mitek NZ



Once sheet nogging is in place, 20mm H3 Strandboard flooring sheets are then glued and screwed or ring-shank nailed down to the joists.









The flat packed Termite Treated *TRIBOARD* Solid Panel Construction system precut in NZ to Vanua Disaens drawings are then stood, glued and screwed together. All panels are rebated to take the next panel. Panels are braced with timber where required until all locating screws are in place.



The walls are then all strap fixed down to the bearers, joists with straps and product nails from Mitek NZ



Ridge plates, beams, rafters, purlins and cyclone straps fixed in place, change of pitch rafters bolted together, cyclone strap fixed on the diagonals to the roof planes. Materials ex NZ and Locally where possible





View under roof-Diagonal strap brace in place



Colorbond roof Sourced locally installed over insulation membrane.

12 screws per M2 for Cyclonic /
Typhoon areas.



Waterproof building paper stapled to outside of Triboard prior to installing 50 x 50 H3 cavity Battens. Battens are both skew nailed and batten screwed to wall/ Floor. Materials ex NZ









Aluminium joinery with either Crimsafe screens or Aluminium insect mesh installed along with head flashings prior to exterior cladding being installed. Joinery to be sourced Locally. Exterior Cladding installed. Materials selected locally Supplier unless specific system requested.









Ceiling linings, trims installed —PVC sourced locally. Flat pack kitchen installed—sourced locally. Doors are Tiboard unless specified different. Door hardware sourced locally.







Plumbing and Electrical fixtures, wiring and piping installed during construction are all purchased Locally as chosen by the client







Floor finishes, paint all purchased locally





From single beach bungalows to large homes, apartments, commercial buildings, evacuation centres, two story designs, Vanau Disaen Ltd can design to suit all Individual, group or organizations needs. Our system has been well tested with category 5+ cyclone Pam and Earthquakes including several 7+ magnitude ones



Designer and Director of Vanua Disaen: Stewart McEwen





Designing and building in the Tropics for 10 years

