

nde co nz

Newsletter from the desks of Pure Design & Engineering.

ETNZ – on its way to San Francisco

Over the last two years the PURE team has been heavily involved in the engineering of Emirates Team Zealand's two AC72's and two wing sails. The majority of the composite design engineering and drawings were done by PURE. This includes the platform structure, dagger-foils, rudders, and wings, with Finite Element Analysis of these also exclusively carried out by the PURE team. After a successful year trialling the boats, they are now packing up for the trip to San Francisco. The team will start sailing in San Francisco in late May with the Louis Vuitton regatta starting in early July.

Go Team New Zealand.....

Elliott 35ss sets record in coastal classic

Congratulations to Crusader, the Elliott 35ss, in setting a new course record in the 2012 Coastal Classic for yachts under 10.66m and under 12.19m. PURE engineered her to be a reliable Ocean Racer, and this performance came straight out of the box - it was only 2 weeks after launch. The new time to beat is 10hrs 2 min 51sec. Crusader enjoyed the fresh reaching conditions with a top speed of 25.8 knots.

ASB reflector

On the 7 December a large composite reflector was craned into position atop the new ASB North Wharf building in Wynyard quarter. The reflector was built entirely with composite materials, Carbon/E-glass skins and carbon unidirectional in the major load regions. The reflector is 12m wide x 12m long x 6m high and weighs approximately 5000kg. The reflector was designed by architects BVN and built by Yachting Developments. PURE engineered the innovative structure, produced a full set of construction drawings, and carried out onsite inspections. The wind loadings were established from wind tunnel testing at the University of Auckland. The structure was analysed using Abaqus CAE FEA software where wind loadings from different wind directions were studied along with earthquake loadings. The PURE team are very proud to be associated with the new Auckland land mark.

"It was a pleasure working with you guys on the various composite structures and you really opened our eyes to a new way of doing things architecturally."

Brian Clohessy Practice Director BVN Donovan Hill



PURE have moved

After sharing office space with Emirates Team New Zealand for the last two years, PURE moved into a new office on the 1st May. The new, modern office is located in Suite 14, 150 Beaumont St, Freemans Bay, in the Orams Marine Village, right in the heart of the Auckland marine industry.

Engineering review Volvo 65

The 2014-2015 Volvo Ocean Race will be sailed for the first time in One-Design yachts. These 20m long yachts have been designed by Farr Yacht Design and are being built by a consortium of builders led by UK builder Green Marine. PURE were contracted by Green Marine to provide a third party review of the composite engineering and construction drawings and also to review the steel keel fin engineering.

ABOUT PURE:

PURE DESIGN & ENGINEERING specialises in the structural design of composite yachts. The founding partners Giovanni Belgrano, Andy Kensington, and Adam Greenwood together have over 70 yrs combined experience in the design of composite structures. PURE have a team of five engineers, and three draughtsmen. Services include engineering specifications, construction drawings, 3D modelling, FE analysis, onsite assistance & inspection.





PAKENHAM ST WEST

GAUNT ST

Suite 14, 150 Beaumont St, Freemans Bay