the futurebuild® range

MAN OF STEEL GIVES **FUTUREBUILD®** **LVL** A GO

FUTUREBUILD® STRUCTURAL LVL
hy ONE®

FUTUREBUILD® STRUCTURAL LVL
hy SPAN®

FUTUREBUILD® LVL TRUSS CHORDS
hy CHORD®

FUTUREBUILD® STRUCTURAL LVL BEAMS
hy 90®

FUTUREBUILD® LVL ENGINEERED I-JOISTS
hy JOIST®

FUTUREBUILD® LVL SCAFFOLD PLANKS
hy PLANK®

FUTUREBUILD® LVL FORMWORK BEAMS
tru FORM®

FUTUREBUILD® LVL FORMWORK EDGE BOARDS
edge FORM®

CarterHoltHarvey
Woodproducts New Zealand

CASE STUDY

the futurebuild® range

MAN OF STEEL GIVES FUTUREBUILD® LVL A GO

This large 3000 m² centre is a move away from the former, smaller storage centre. It is a sure sign of the company's overall growth and plans for the future. The Futurebuild® LVL range is manufactured at Marsden Point Futurebuild LVL mill, 200 kms from Auckland, then transported to the centre, ready to service the national industry.

PROJECT SPECIFICATIONS

PRODUCTS:
hySPAN®, hyJOIST®

ENGINEER & FABRICATOR:
Timberbuilt

CONTRACTOR/BUILDER:
Mick Neale

Built specifically for the storage of hySPAN, hyJOIST and hyPLANK® of every cut and dimension, the new Wiri Distribution Centre is 3000 square metres in area and growing. Designed by Timberbuilt's Bruce Hutchings, working with commercial builder Mick Neale, the centre has been constructed entirely from the products it houses.

FUTUREBUILD® STRUCTURAL LVL hyONE®

FUTUREBUILD® LVL ENGINEERED I-JOISTS hyJOIST®

CHALLENGE

Using hySPAN® and hyJOIST® in this project was an interesting departure for builder Mick Neale. A commercial builder in New Zealand with 30 years experience in the steel frame construction of factories and shops, he was impressed with the performance of hySPAN and hyJOIST.

"The Futurebuild LVL was more user friendly, easier to cut and drive nails through than steel," says Mick, "and if a mistake is made with steel it's harder to handle." Structurally he also found there was less movement than in a steel frame building, more rigidity. Mick Neale is no longer only a man of steel.

Vital to this structural soundness and to the efficiency of assembly of the Futurebuild LVL structure was its prefabrication and supply in kit-set form. This was Bruce Hutchings' and Timberbuilt's contribution. Builder Mick Neale agreed. "All the timber was pre-cut," he explained, "everything fitted together nicely and made the job quite easy."

SOLUTION

Assembling the 28 metre span portal frames and purlins was a challenge. It was Mick Neale who decided on an unusual erection method to take advantage of the accuracy of prefabrication and to speed construction. To achieve this, every second section or bay of roof framing was assembled on the ground and then erected. Mick explains: "After assembly of every second bay, these bays were successively lifted by crane and the rafters joined to the columns. Then every other bay was in-filled. Most people stage every individual portal frame, we chose to stand up the legs and prefabricate the rafters and purlins on the ground."

"Factory prefabricated Futurebuild LVL systems are not only faster and more efficient to build," observed Bruce Hutchings, "but, most importantly, factory prefabrication helps ensure a better quality finished product; a building framework that accurately reflects the designer's intent." The entire centre was constructed in this way, with solid hySPAN 300 x 45 purlins and 900 x 100 portal frames.

The same method and materials were then used to build the centre's feature canopies. Eight and a half metres of gable span out from the building's entrance, sitting on two columns. Under this protection from weather conditions, delivery trucks can load and unload without having to drive into the building itself. At the buildings other end is a similar but smaller cantilevered canopy also for this purpose.

To Mick Neale's surprise, the response to the completed Distribution Centre has been really positive. "It looks better than steel," he says, "the centre looks different, quite attractive, and being built from renewable resources makes it even more so."

RESULT

The warehouse section is completed and occupied, while Mick is working on the last phase of the design, a small two storey office section incorporating hyJOIST floor joists and rafters. The new Wiri Distribution Centre just South of Auckland is now filled to the rafters with rack after rack of laminated veneer lumber product and is itself a solid example of the advantages of Futurebuild LVL construction.

CarterHoltHarvey Woodproducts New Zealand

For on-site technical and product support freecall 0800 585 244 or visit www.chhwoodproducts.co.nz

0800 585 244
www.chhwoodproducts.co.nz