

Building a Better New Zealand Conference 2014

Private Submission

HOW THE IDEAL HOUSE RECEIVED AN 8 HOMESTAR RATING

Matt Wilson

Registered Architect, ANZIA, NZGBC Homestar Assessor and GSAP.

The Ideal House is a high performance home which will be completed in May 2014. It aims to be certified by the Passive House Institute in Germany, and it has received an 8 Homestar design rating from the NZGBC. It will be positively producing electricity back into the national grid and was completed on a “main stream” budget for an architect designed home. The home will be occupied by Murray & Lee Durbin (and family) however opened up to the public for free once a fortnight for two years.

The home was designed by S3 Architects in Auckland. eZED in Queenstown completed the structural engineering, as well as the eco-engineering and Passive House certification. Matt Wilson completed the Homestar rating on the project, and this presentation will be designed to show how the Ideal House achieved it's 8 Homestar design rating and 8 star built rating (which should be verified by the conference). The high performing aspects of the house will be analysed with details, physical testing, simulated thermal modelling and key features explained

Homestar is becoming the leading rating tool in New Zealand and with its impending inclusion in the Auckland Unitary Plan, and with other Councils quickly following suit it is extremely topical. The presentation will be under both the themes of “Achieving better buildings” and “Improving the Performance of Materials”.

The presentation will showcase the designs aspects and products and systems used in and around the home, as well as highlighting areas where the home could have improved its rating, as well as a summary of the project costs. The focus will be on high insulation detailing, airtightness, minimal energy inputs to operation, onsite renewable energy generation and ecologically responsible and sustainable material and systems use.

Matt Wilson – mattwaiheke@gmail.com

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