Research Directions

Office of Research Services

Building for the Future

Dr Andrew Wheeler from the School of Engineering is collaborating with the building material manufacturer Rondo to improve the safety and stability of wall and ceiling building components.

'Recent improvements in manufacturing processes have resulted in changes in both steel and plasterboard properties' says Dr Wheeler. 'As a result of these changes in material properties such as increased strength, flexibility and durability, Rondo has been researching the possibility of providing more innovative and effective building materials and systems for use in both small and large construction projects. This research will build on product development work that is investigating and modifying the design of various products.'

By performing a range of experimental tests including stress testing, soaking, compacting, bending and applying load to materials, Dr Wheeler will analyse how these new products stand up to the sort of pressures that might commonly be found in building and construction. The project will also involve development of specimens and innovative experimental procedures to determine the strength of various components of product range. These results will be used in conjunction with theoretical investigations to suggest improvement of verify current performance factors of the materials.

As part of an ongoing relationship with Rondo, this research will assist the partner company with evidence of the strength and versatility of its new building and construction materials, and may ultimately provide designers, architects and builders with different materials and systems that can be used to revolutionise the way homes, large buildings and public infrastructure are constructed.

Project Title: Rondo composite building systems

Funding has been set at: $5,000
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