

# Summary of Linkage Projects Applications for Funding to Commence in 2006

## Queensland

### James Cook University

**LP0668222** Dr JD Ginger; Prof CC Berndt; Dr W Karunasena; Mr C Healy; Dr S Gowripalan

**Approved Project Title** **Failure Mechanisms of Roof Cladding under Fluctuating Wind Loads**

**2006 :** \$32,150

**2007 :** \$29,650

**2008 :** \$28,650

**Primary RFCD** 2908 CIVIL ENGINEERING

APA(l) Award(s): 1

#### **Partner Organisation(s)**

Stramit Corporation Limited

**Administering Institution** James Cook University

#### **Project Summary**

Wind damage to low-rise buildings cause disruption to communities and result in economic losses. Improvements to the most vulnerable part (i.e. roof) will therefore have national benefits and associated economic benefits. Currently, roofing systems used in cyclonic areas are evaluated to DABM in the Northern Territory and to TR440 elsewhere, requiring the same product be tested under two different (and unsatisfactory) specifications. This is due to the limited understanding of wind-induced fatigue of cladding. This project will provide the framework for understanding and minimizing cladding fatigue. A realistic single test will also reduce cost and result in better design systems.