

## **Impact damage behaviour of woven glass fibre reinforced polymer composite**

### **Abstract**

This study investigates and characterizes the impact damage of woven E-glass Fibre Reinforced Polymer (GFRP) composite under drop weight impact event. The experimental tests are performed according to ASTM standards (D7136/D 7136M-05 and D5687/D 5687M-05) utilizing a blunt conical impactor and drop weight testing rig. Four groups of specimens have been utilized for the impact event with various drop height. The event resulted in a series of linear damage growth that is proportional to the absorbed impact energy. From the micrographic observation, the specimen damage is found to form cross shape cracking on the front surface or known as effect of orientation of delamination.