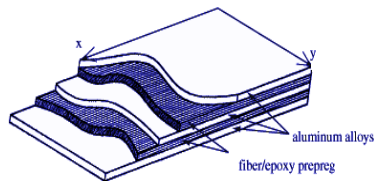


Impact-resistant Composite Sandwich Panels

A new sandwich panels with excellent impact resistance capability is designed and manufactured. Fiber metal laminate comprised of aluminium plates and composite ply made of glass fibre cloth and epoxy is used as the skin for penetration resistance. Aluminium foam is used as the core for excellent energy absorption capability. Large amount of experimental and numerical studies demonstrate the excellent impact resistance of the sandwich panels to low speed drop weight impact and high velocity ballistic impact.



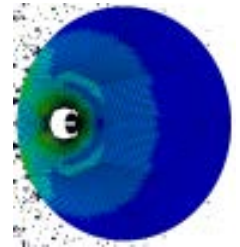
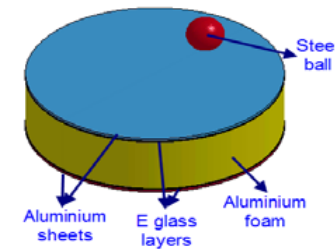
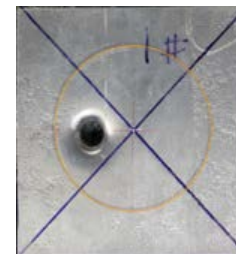
New composite sandwich panels Skin-fibre metal laminates Core-aluminium foam

Potential Applications

- Aerospace and aeronautical structures
- Military aircrafts
- Transportation vehicles.

Key Benefits

- Significantly enhanced impact resistance
- Excellent energy absorption ability.



The steel ball bearing impact with an initial velocity of 210 m/s