



Product Range - Lightweight Applique Armour Lightweight Applique Armour Systems

G4 Industries brings a wealth of valuable expertise to the G4 Group and to the business marketplace, providing a holistic approach to solution development and delivery. The following illustrates the primary areas of focus.



Protected window after gun shot and large object strike (inset), showing nil penetration

This technology provides a unique up-armouring capability utilising clear, appliqué high energy absorption film constructed of single or multiple-layer biaxially orientated PET laminated with chemical bond. The opaque up armour utilises a complex fibre configuration which is significantly lighter than any existing armour technology currently available.

The system could potentially be utilised to improve protection to vehicles, mobile C4I systems and buildings in a cost effective manner. There is also the potential to reduce vehicle mass during the development phase of a programme whilst still meeting exacting ballistic criteria.

The Opaque Up-Armour Series (OA) utilises a variant of this technology designed originally to augment steel, but may be used as a stand alone solution to replace steel - this gives it a broad spectrum of uses limited only by imagination. This provides a multiple-shot armour solution that is significantly lighter than current armour systems in use by law enforcement and the military. The technology and material configurations in this system are completely unique both in function and in the protective chain reaction when subjected to ballistic and kinetic energy loads, as well as specific loadings resultant from a blast over-pressure wave. The complex fibre configurations which assist in achievement of this level of protection within such a lightweight compound are fully patented and protected.



Personal Protection



Facility Protection



Vehicle Protection

Key Advantages:

- Lightweight, ideal for personal and mobile assets.
- Discreet technology.
- Inherent Tempest protective qualities.
- Proven technology.
- Broad spectrum of threat protection.

Potential Applications:

- Up armour existing military or commercial vehicles.
- Up armour mobile assets.
- Up armour or blast protect existing buildings and infrastructure.
- Tempest, vehicle or building upgrades.
- Blast and anti fragmentation protection of fragile assets.
- Storm and hurricane protection to personal and public infrastructure.
- Vehicle glazing and cabin protection.
- Improved protection of temporary deployed accommodation infrastructure