

# Armor Capabilities

Composiflex is a manufacturer of a broad line of composite products of which ballistic protection systems play a major role. We produce armor for vehicular applications, body armor breastplates, portable armor for protection of government officials and many other applications. Although we have traditionally focused on UHMWPE (Spectra Shield or Dyneema) materials, we fabricate a variety of armor systems using aramids, like Kevlar and Twaron, fiberglass and ceramics. As an example, we produced the armor for twelve C-130 Gunships using silicone carbide ceramic and Spectra Shield. We can also supply high hard steel and bulletproof glass for other armor requirements.

Composiflex works with the customer to design, engineer and produce the best combination of materials to address the type of threat. Weight and cost are always important factors - Spectra Shield and its European equivalent, Dyneema, are the lightest armoring materials on the market today. As a custom design house and 'build to print' center, we do not have any standard price list or extensive catalogue. Each customer's application is tailored to their individual requirements.

In terms of background, Composiflex has worked with Honeywell, formerly Allied Signal, from the initial development of Spectra Shield. In the early stages we manufactured test specimens and helped to define the processing parameters and their boundaries. One of the reasons companies like Honeywell rely on us is our expertise in materials and composite process, coupled with our high quality infrastructure.

Our large press (1.22 m x 1.93 m (48" x 76") platen size), for example, has digital temperature controls that keep the entire platens to within 1 degree centigrade. This press also has four pistons instead of the normal single piston, a design that provides far more uniform pressure. This is a particularly important feature to assure dependable ballistic performance in the field.

We can:

- Fabricate compression pressed flat sheets (4' x 6')
- Fabricate curved (or flat) sheets ( 7'x 20' Autoclave)
- Apply fire retardant face sheets using our own adhesive
- Cut to shape, including intricate cutouts and holes
- Adhere ceramic materials to the surface
- Finish surfaces with paint, cloth or ABS for a furniture like appearance
- Stencil and/or label to specifications

Composiflex is the first place to look for composite armor solutions.



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