

STRONGWELL

APPLICATION PROFILE



HELICOPTER POST SURVIVES CRASH TEST WITH FLYING COLORS

The success of composite fuel tanks, radomes and helicopter blades prompted government interest in the development of a prototype military helicopter built almost entirely of composite materials. This windshield post profile runs from the nose wheel through the windshield to the roof of the helicopter. Full scale prototype testing simulated a crash landing with the front wheel striking first. The pultruded post suffered less than half the physical damage considered acceptable and extinguished itself in half the time specified for fire retardance. Temperature cycle tests from 160°F 100% relative humidity to freezing showed that the composite's properties remained stable. The profile's hollow trapezoidal shape (1/8" wall thickness) is pultruded from a vinyl ester resin/carbon fiber mat and tows composite.

TECHNICAL DATA

Product:	Helicopter Windshield Post
Process:	Pultrusion
Materials:	High temperature vinyl ester resin, carbon fiber mat and tows
Size:	5 ft. long trapezoid
Weight:	1/2 lb./ft.
For:	Sikorsky Aircraft



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