

ELACO® Panels vs Aerospace grade laminates – property comparison
Data source: CRC Composites, Australia, Testing Report, December 2007

Comparison	Specimen	Thickness	Weight	Areal Weight	Impact Velocity	Rebound Velocity	Impact Energy	Absorbed Energy	Peak Force	Damage Area	Approximate cost/m2*
		mm	Grams	g/m2	m/s	m/s	Joules	Joules	kN	Mm2	\$/m2
Aerospace grade laminates	Prepreg Tape (T2B8)	3.28	76.18	4962	7.93	3.44	16.42	13.33	3.57	1225.97	~\$720
	Prepreg Fabric (F1C8)	3.12	71.07	4629	7.75	4.05	15.66	11.39	2.61	852.68	~\$720
	RTM Woven Fabric (RFA4)	3.43	75.80	4937	7.87	4.30	16.16	11.34	3.76	662.44	~\$810
	RTM NCF (RNA4)	3.35	71.90	4683	7.87	5.99	16.16	6.81	N/A	599.41	~\$810
Glass Fibre	GWr-A00	2.47	55	3583	7.31	2.81	13.95	11.89	2.00	785	~\$90
ELACO	GWr-A90	2.48	55	3548	7.56	2.06	14.92	13.81	2.29	825	~\$90
Carbon Fibre	CPw-A00	2.76	55	3434	7.63	1.42	15.20	14.67	1.43	1495	~\$260
ELACO	CPw-A90	2.67	52	3257	7.73	1.47	15.60	15.03	1.55	900	~\$260

* **Note:** Approximate cost per area (m²) of the structure includes only the material cost based on component retail prices in Australia. Additional cost reduction could be achieved by use of low cost manufacturing processes (hand lay-up and vacuum bagging) for ELACO® samples compared to use of autoclave and RTM for Aerospace grade laminates.