

Material	Young's modulus E (GPa)	Yield stress σ_{ys} (MPa)	Toughness K_{IC} ($\text{MPa}\sqrt{m}$)	Thickness requirement 2.5 (K_{IC} / σ_{ys}) ² (mm)
Steels	210			
medium carbon		260	54	108
pressure vessel		470	208	489.6
high strength alloy		1460	98	11
AFC 77 stainless		1530	83	7.4
Aluminium alloys	72			
2024 T8		420	27	10.4
7075 T6		540	30	7.9
7178 T6		560	23	4.2
Titanium alloys	108			
Ti-6Al-4V		1060	73	12.6
(high yield)		1100	38	3.1
Comparative data				
Concrete	45	80	0.2-1.4	
Ice	9.1	85	0.2*	
Epoxy	2-3	30-60	0.5-3	
Boron fibre	441	3000		
Carbon fibre	250-390	2200-2700		
Boron/epoxy composite	220-340	725-1730	46	
CFRP	70-200	300-1400	32-45	
GFRP	38	100-300	20-60	

- not at room temperature !

Reference: Wang, C.H. (1996). "Introduction to fracture mechanics." DSTO-GD-0103, Aeronautical and Maritime Research Laboratory, Melbourne, Australia.