

## Composite Mechanical Properties

Test	ASTM	Test description / type	Resin-X	Epoxy	CA	units
<b>Tensile Strength</b>	D638M	Force to break (pull) apart	30	24	9	[MPa]
<b>Tensile Elongation</b>	D638M	Deformation before failure	0.30%	0.45%	0.25%	
<b>Flexural Strength</b>	D790M	Force required to fail due to bending	50	43	27	[MPa]
<b>Flexural Modulus</b>	D790M	Measure of stiffness in bending	-	10411	6450	[MPa]
<b>Shore Hardness</b>	D2240	Surface hardness test	95 D	87 D	81 D	
<b>Heat Deflection Temperature (HDT) @ 66 psi (.46 Mpa)</b>	D648-98c	Resistance to deformation when exposed to heat & pressure	280	115	112	[°C]
<b>Compressive Strength</b>	-	Force required to crush specimen	157	98	-	[MPa]

Warranty/Disclaimer: Actual part properties may vary significantly from those listed above based on part geometry, processing parameters, operating conditions and material usage  
 Protofacturing makes no warranties of usability, expressed or implied, included but not limited to the warranties of merchantability or usability for a particular purpose