

Absolute Sheets (Short Fiber Filled Epoxy)

Sawbones' unique epoxy formulation is filled with short glass fibers and used to simulate cortical bone for structural testing of fixation devices and total joint replacements. Our simulated cortical bone has a density, fracture toughness, strength, modulus and hardness all similar to cadaveric cortical bone.

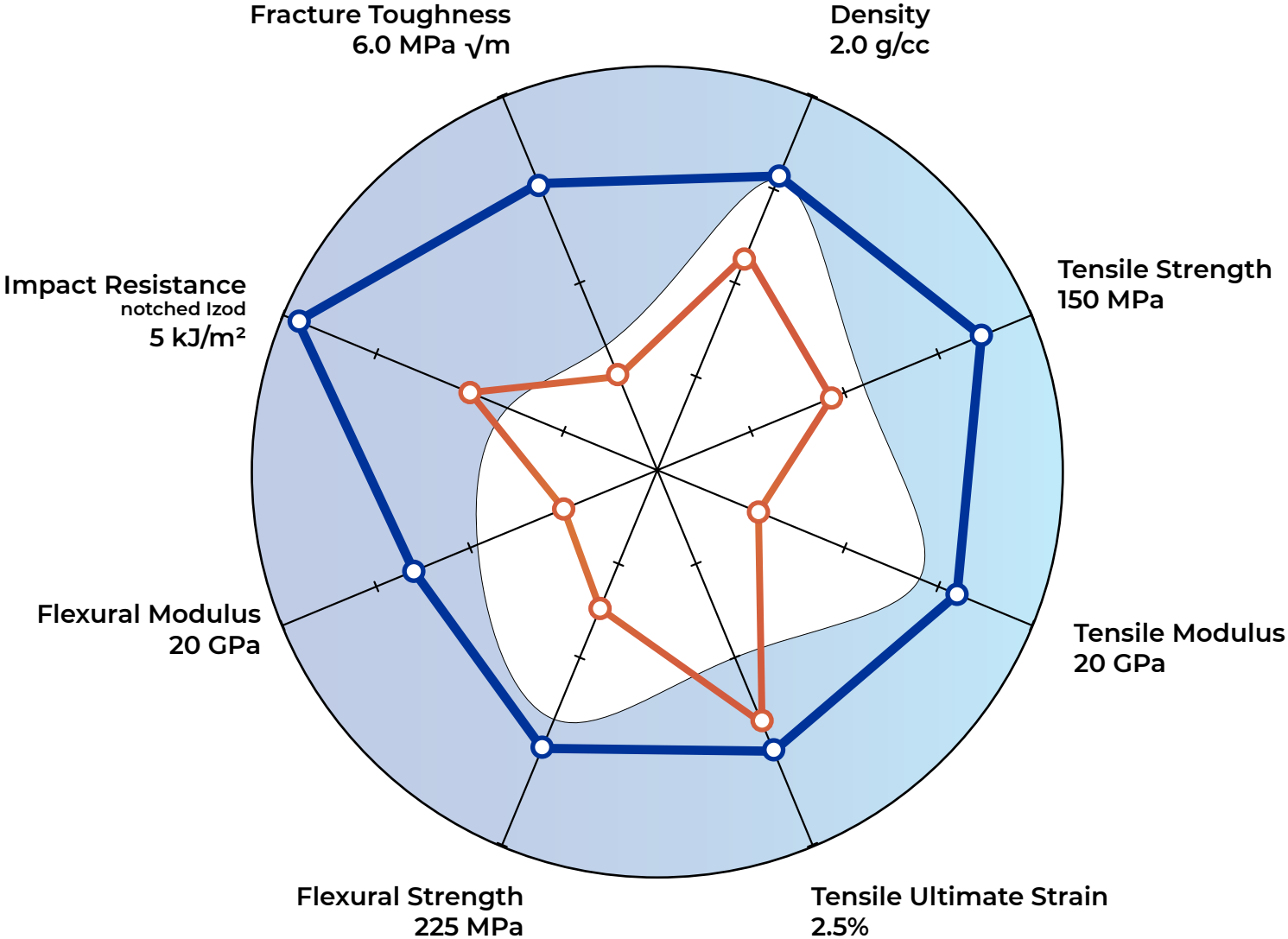
This material is the cortical bone for all our absolute bones.

DENSITY		COMPRESSION		TENSION		
ASTM D792		ASTM D695		ASTM D638		
Density (pcf)	Density (g/cc)	Strength (MPa)	Modulus (MPa)	Strength (MPa)	Modulus (MPa)	Ultimate Tensile Strain (%)
102	1.64	157	17	106	16	1.4
		poisson ratio	Shore D Hardness	Transverse Strength (MPa)	Transverse Modulus (MPa)	Transverse Ultimate Strain (%)
		0.26	90+	93	10	1.2

EPOXY SHEET TOLERANCES:	
Density	+ /- 2.5%
Length and Width	+/- 2mm
Thickness	+/- 0.3mm
1mm and 2mm are +/- 0.2mm (3401-07, 3401-01)	



absolute™ 4th Generation



Legend:
Blue Gradient is human cortical bone
Dark blue is absolute 4th gen
Orange is absolute osteo