



Mycelium Product specifications

Metric	Standard	Performance
Compressive strength (kPa, 10% Compression)	ASTM D695	2,1 – 46
Compressive strength ($\times 10^5$ Pa, 50% Compression)	ASTM D695	4,9-17,9
Flexural strength ($\times 10^5$ Pa)	ASTM D3575	1,4-1,9
Elastic modulus ($\times 10^6$ Pa)	ASTM D3575	1,4-1,7
Density (kg/m ³)	AVANS*	115,5
Thermal conductivity (W/m*K)	ASTM C155 AVANS**	0,05760 0,049
Water absorption (Class Vapor Retarder)	ASTM E96	Class 1
Water vapor transmission rate (metric perm)	ASTM E96	0,013 – 0,02
Fire resistance (Class)	ASTM E84	Class A
Flame spread (-)	ASTM E84	20
Smoke developed (-)	ASTM E84	50
Aldehyde & VOC emissions (ppm)	ASTM E1333	<0,01–0,03
Peak deceleration (g)	75cm drop-5cm cushion 6,8kPa, avg of 2-4 th drops	61

Mycelium products (aka Mushroom Packaging) is a biomaterial developed and patented by Ecovative Design, LLC. Cushioning, structural and thermal conductivity tests performed by Ecovative Design Labs. Testing for fire properties conducted by the Packaging Science Department at Rochester Institute of Technology.

* Density tests performed by AVANS University of Applied Sciences

** A parallel test, performed by AVANS University of Applied Sciences on samples made by Grown BV, show a different number than the test performed by the Rochester Institute of Technology on a Ecovative sample. So the test were performed on different samples made by different production methods.

Grown.bio is a biotech company in Hedel, the Netherlands. Grown BV is the European licensee of Ecovative Design, LLC. Grown uses mycelium technology pioneered by Ecovative.

