

60% SAND BASED**LIGHTWEIGHT ROOF GARDEN GUIDELINES**

Fytogreen Australia's lightweight roof garden system works to the following depth and saturated weight guidelines.

The soil mix is 55% soil, 40% Hydrocell flakes and 5% composted fine bark by volume.

Total bulk density is 1170 kg/m³

	TURF	SHRUBS	BUSHES	SMALL TREES Small with flat root systems	TREES Large to 12 metres
Soil Mix	100mm depth	200mm depth	300mm depth	500 mm depth	800 mm depth
Layer 6:	118 kg psm	235 kg psm	353 kg psm	588 kg psm	940 kg psm
Layer 5:	Root Anchor Layer - HDPE netting with holes of 5 x 5 mm. Thickness 2 mm, weight negligible.(only with trees)				
Layer 4:	Hydrocell Hardfoam RG30 -100mm thick. 84kg/m ² (80kg water and 4 kg hardfoam) Compressive strength 23,000kg psm, Product life 25 years without maintenance.				
Layer 3:	Geotextile Membrane - Various types such as Teram 700. Thickness 2mm, weight negligible.				
Layer 2:	Drainage Layer - Allow 40mm for various types. Atlantis, Plazadeck				
Layer 1:	Vapour Layer - LDPE plastic is laid as extra protection above the waterproofed roof. Thickness 0.02mm, weight negligible.				
Total Depth:	245 mm	345 mm	445 mm	645 mm	945 mm
Total Weight:	210 kg psm	330 kg psm	450 kg psm	690 kg psm	1,100 kg psm

Please note: The sand is a 80/20 mix of turf sand and sand loam with a maximum of 5% organic matter with a bulk density of 1.5. Hydrocell flakes have a saturated bulk density of .62 and composted fine bark has a bulk density of .4. The weights shown do not include plants. For example, rolled turf weighs approximately 15kg psm. Hydrocell is also known as Fytocell.

Disclaimer: This information is supplied in good faith and trials are recommended by the user to test the suitability of the procedure in their climatic region. The system now covers 1.8 million square metres of roof garden in Europe since 1985. No liability will be accepted by Fytogreen Australia or it's representatives as to the final performance based on this information. Date 15/9/2003