

**Semi-Extensive****LIGHTWEIGHT SEMI-EXTENSIVE ROOF GARDEN GUIDELINES**

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

The soil mix is 40% Hydrocell flakes, 15% composted organic matter, 30% 10mm scoria and 15% <7mm Scoria by volume.

NB: Outside Melbourne, recycled concrete is used to replace scoria, the weight is similar.

Saturated bulk density is 935 kg/m<sup>3</sup>

**Soil Mix**

	60mm depth	70mm depth	80mm depth	90mm depth	
<b>Layer 5:</b>	64 kg psm	75 kg psm	86 kg psm	96kg psm	Includes 15% for particle integration.

**Layer 4:**

**Hydrocell Hardfoam RG30 Flakes**-60mm thick. Saturated weight allowance of 30kg/m<sup>2</sup> at 60mm of which 27kg is water.

**Layer 3:**

**Geotextile Membrane**- Various types such as Bidim A14G. Thickness 2mm, weight negligible.

**Layer 2:**

**Drainage Layer**- Allow 15mm for GeoSheet

**Layer 1:**

**Vapour Layer**- LDPE plastic is laid as extra protection above the waterproofed roof. Thickness 0.02mm, weight negligible.

**Total Depth:****Total Saturated Weight:****Total Water at Field Capacity:**

	140 mm	150 mm	160 mm	170mm
	96 kg/m <sup>2</sup>	108 kg/m <sup>2</sup>	119 kg/m <sup>2</sup>	129kg/m <sup>2</sup>
	54 litres/m <sup>2</sup>	58.5 litres/m <sup>2</sup>	63 litres/m <sup>2</sup>	67.5 litres/m <sup>2</sup>

**Please note:** The weights shown do not include plants, you should allow an additional 10-15kg per m<sup>2</sup>.

**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 2.8 million square metres of roof garden in Europe since 1985 and 40,000m<sup>2</sup> in Australia since 2002.

No liability will be accepted by Fytogreen Australia or it's representatives as to the final performance based on this information.

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