



The Green Roof Mix has been developed to provide a stable substrate that can sustain plant life while maintaining volume over time. Scapeworks Australia has installed large trial plots and monitored them over a 6-year period to ensure the green roof media used is the best available. It is also tested independently. Not only that, but Scapeworks Australia Green Roof mix has been given a certificate of compliance with the requirements in the soil publication by Leake and Haege, no easy feat. Available upon request.

As there is no appropriate Australian Standard for Green roof media yet, Green Roof Mix is tested to the Australian Standard 3743 Potting Mix non specialist (Regular Grade). We also test the Bulk Density to the Australian Standard 4419: 2003 Soils for Landscaping and Garden Use – Organic Soil Analysis. It is also tested with the 6 Point Hydraulic Conductivity Test. We use the standards as a tool only. The mix is also tested against Specification E3 Low Density Container and Green Roof from the text Soil for Landscape Development by Leake and Haege. Scapeworks Australia staff add important nitrogen sources, plenty of calcium, micro and macro nutrients and pH adjusters if needed.

August 2025

PHYSICAL PROPERTY	UNITS	TARGET RANGE	RESULT
Texture, preferred range	n/a	Gravelly loamy sand to organic sandy loam	Loamy Sand
Air-filled porosity (AFP)	%	10 -15	18.2
Water-holding capacity (WHC)	%	45 - 55	40.9
Permeability (16 drops by McIntyre Jakobsen)	mm/h	100 - 200	168
Organic matter (OM)	% w/w	< 25	11.9
Wettability	min	< 2	22 s
CHEMICAL PROPERTY	UNITS	TARGET RANGE	RESULT
pH in water (1:5) standard range	pH units	5.4–6.8	6.94
Electrical conductivity (1:1.5)	dS/m	< 2.2	3.14
Chloride	mg/L	≤ 200	309
Ammonium-N (NH ₄)	mg/L	≤ 100	1.16
Ammonium-N + nitrate-N (NH ₄ + NO ₃)	mg/L	≥ 50	45
Nitrogen draw-down index	–	≥ 0.7	0.07
Toxicity index	mm	≥ 70	68.4
Phosphorus – P standard range	mg/L	8–40	26.4
Low phosphorus - P-sensitive plants	mg/L	< 3	26.4
Potassium (K)	mg/L	50–250	355
Sulphate (SO ₄)	mg/L	≥ 40	288
Calcium (Ca)	mg/L	≥ 80	330
Magnesium (Mg)	mg/L	≥ 15	66.6
Ca:Mg ratio	Ratio	1.5–10	4.96
K:Mg ratio	Ratio	1–7	5.33
Sodium (Na)	mg/L	< 130	143
Iron (Fe)	mg/L	≥ 35	39
Copper (Cu)	mg/L	0.4–15	0.59
Zinc (Zn)	mg/L	0.3–10	3.53
Manganese (Mn)	mg/L	1–15	6.9
Boron (B)	mg/L	0.02–0.65	0.23
ADDITIONAL TESTING	UNITS	TARGET RANGE	RESULT
Saturated Bulk Density	kg/L	1.1 – 1.8	1.27
Dry Bulk Density	kg/L	No requirement	0.64
Asbestos*		No requirement	Not Detected

Scapeworks Light Weight Planter Box Mix - A Horizon tests as Grade A soil for unrestricted use.

The Urban Soil Doctor (TUSD) was requested by Scapeworks Australia to conduct in-situ sample collection at Scapeworks Australia's yard, also oversees, analyses and reports on products collected. Chantal Milner, CPSS Principal Soil Scientist BSc Env Sci, PGCert Green Infrastructure, CPSS

