

# The Hills Green Roof Mix\*

The Hills Green Roof Mix has been developed to provide a stable substrate that can sustain plant life while maintaining volume over time. The Hills Bark Blower® 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 The Hills Bark Blower® 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.

Tested for:

As there is no appropriate Australian Standard for Green roof media yet, The Hills 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. The Hills Bark Blower® staff add important nitrogen sources, plenty of calcium, micro and macro nutrients and pH adjusters if needed.

## TEST RESULTS:

JULY 2019

Physical Properties	Unit	Target Range	Results	Comments
Texture	n/a	Gravelly loamy sand to organic sandy loam	Loamy Sand	Acceptable
Air-filled Porosity	%	≥ 5	15	Acceptable
Water Holding Capacity	%	≥ 45	49.3	Acceptable
Saturated repacked Density	kg/L	< 2	1.16	Acceptable
Large Particles	< 2 mm	% ww	46.3	Acceptable
	2 - 10 mm	% ww	44.7	High
	10 - 20 mm	% ww	8.96	Acceptable
	20 - 50 mm	% ww	0	Acceptable
	> 50 mm	% ww	0	Acceptable
Organic matter content	% w/w	< 25	24.8	Acceptable
Permeability	mm/h	> 100	1135	Acceptable
Wettability (AS4419)	mins	≤ 2	2.08	High - within margin of error
Dispersibility in water	Category	1 or 2 (AS 4419) category	3	High (add gypsum)
Chemical Properties	Unit	Target Range	Results	Comments
pH in water (1:5)	pH units	5.4 - 6.8	7.96	High
Electrical conductivity (1:5)	dS/m	< 2.2	1.54	Acceptable
Chloride	mg/L	< 200	145	Acceptable
Ammonium-N	mg/L	< 100	86.8	Acceptable
Ammonium-N + Nitrate-N	mg/L	> 50	87.8	Acceptable
Nitrogen draw-down index	-	> 0.7	5.3	Acceptable
Bioassay	mm	> 70	34	Low
Phosphorus	mg/L	< 3 / 8 - 40	4.1	Acceptable for Natives
Potassium	mg/L	50 - 250	70.2	Acceptable
Sulphate	mg/L	> 40	140	Acceptable
Calcium	mg/L	> 80	38	Low
Magnesium	mg/L	> 15	17	Acceptable
Ca:Mg Ratio	Ratio	1.5 - 10	2.2	Acceptable
K:Mg Ratio	Ratio	1 - 7	4.1	Acceptable
Sodium	mg/L	< 130	57	Acceptable
Iron	mg/L	>35	19.7	Low
Copper	mg/L	0.4 - 15	1.7	Acceptable
Zinc	mg/L	0.3 - 10	3.5	Acceptable
Manganese	mg/L	1 - 15	5.06	Acceptable
Boron	mg/L	0.02 - 0.065	0.445	High

**Independent laboratory certificate of compliance available with this product**  
**Hydraulic Conductivity – 32 drops (heavy compaction) – 948mm/hr**  
**Bulk Density = 0.52kg/L. Saturated Bulk Density = 1.16kg/L**



\*The Hills Bark Blower® staff add micro nutrients and ameliorants to provide those nutrients that test as mildly low. The Hills Bark Blower® mixes can have additions such as wetting agent and other fertilisers upon request.

All actions recommended by the independent laboratory are carried out before installation.