

# The Hills Lightweight Planter Box Mix



The Hills Lightweight Planter Box Mix is excellent for installation into the top 300 – 400 mm of a contained environment such as planter boxes and podiums. It has been developed in conjunction with the Hills B Horizon mix to work as the nutrient rich growing media layer of an engineered profile.

The Hills Lightweight Planter Box Mix is tested to the **Australian Standard 4419: 2018 Soils for Landscaping and Garden Use – Organic Soil Analysis**. It is also tested with the **6 Point Hydraulic Conductivity Test**. The mix requirements are specific and don't fit into any one Australian Standard. The mix is also tested against Specification E3 Low Density Container and Green Roof from Soil for Landscape Development. We use the standards as a tool only.

## TEST RESULTS:

May 2021

Physical Properties	Unit	Target Range	Results	Comments	
Texture	n/a	Gravelly loamy sand to organic sandy loam	Loamy Sand	Acceptable	
Air-Filled porosity	%	≥ 13	18	Acceptable	
Water-holding capacity	%	≥ 40	50.3	Acceptable	
Saturated Density	kg/L	< 2.4	1.15	Acceptable	
Large Particles	<2mm	% ww	30 - 50	50.4	Acceptable
	2 - 10mm	% ww	10 - 20	43.4	High
	10 - 20mm	% ww	5 - 10	5.29	Acceptable
	20 - 50mm	% ww	< 5	0.927	Acceptable
	>50mm	% ww	0	0	Acceptable
Organic matter content	% w/w	< 15	32	High-Ash Content	
Permeability (@ 16 Drops)	mm/h	> 100	720	Acceptable	
Wettability (AS4419)	mins	≤ 5	0.66	Acceptable	
Dispersibility in water	Category	1 or 2 (AS 4419) category	3	High - Dispersive	
Chemical Properties	Unit	Target Range	Results	Comments	
pH in water (1:5)	pH units	5.4 - 6.8	6.95	Slightly Alkaline	
Electrical conductivity (1:5)	dS/m	< 2.2	2.42	Slightly High	
Chloride	mg/L	< 200	393	High	
Ammonium-N	mg/L	< 100	1.6	Acceptable	
Ammonium-N + Nitrate-N	mg/L	> 50	9.8	Low	
Nitrogen draw-down index	-	> 0.7	0.01	Low	
Bioassay	mm	> 70	104	Acceptable	
Phosphorus	mg/L	< 3 / 8 - 40	12	Acceptable	
Potassium	mg/L	50 - 250	361	High	
Sulphate	mg/L	> 40	150	Acceptable	
Calcium	mg/L	> 80	154	Acceptable	
Magnesium	mg/L	> 15	50.3	Acceptable	
Ca:Mg Ratio	Ratio	1.5 - 10	3.1	Acceptable	
K:Mg Ratio	Ratio	1 - 7	7.6	Acceptable	
Sodium	mg/L	< 130	170	High	
Iron	mg/L	>35	33.1	Slightly Low	
Copper	mg/L	0.4 - 15	0.607	Acceptable	
Zinc	mg/L	0.3 - 10	5.4	Acceptable	
Manganese	mg/L	1 - 15	10.2	Acceptable	
Boron	mg/L	0.02 - 0.65	0.454	Acceptable	

Sample 'Lightweight Planter' has been tested to Specification E3: Low Density Container and Green Roof (Leake & Haeghe 2014).

Bulk Density = 0.47 kg/L Saturated Bulk Density = 1.15 kg/L

The Hills Bark Blower® staff add a further Nitrogen source, Dolomite, Gypsum, and other nutrition where needed.

Further organic fertilizers and water holding products can be added upon request.

Sample Date: 30th April 2021

Report Date: 14th May 2021

