



The B Horizon Mix performs well as a lower profile substrate in contained environments, below the Lightweight Planter Box Mix. It has been developed to work as the stable drainage media layer of an engineered profile. It provides enough nutrition for continued root growth while creating a stable substrate for long term volume.

The B Horizon 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. We use the standards as a tool and request extra Bulk density and environmental compliant testing.

Test Results:

February 2024

Physical Properties	Unit	Target Range	Results	Comments
Texture	-	Loamy Sand - Sandy Loam	Loamy Sand	Acceptable
Air-Filled Porosity	%	≥ 10	17	Acceptable
Water-Holding Capacity	%	≥ 40	40.7	Acceptable
Permeability (@16 Drops)	mm/hr	> 100	567	Acceptable
Organic Matter	% w/w	< 5	23	High - Due to Ash
Wettability (AS4419)	min	≤ 5	2.48	Acceptable
Dispersibility	Category	1 or 2	1	Acceptable
Large Particles				
< 2 mm	% ww	30 - 70	43.3	Acceptable
2 -10 mm	% ww	10 - 20	26	High
10 - 20 mm	% ww	5 - 10	23.4	High
20 - 50 mm	% ww	< 5	7.3	High
> 50 mm	% ww	0	0.5	Acceptable
Saturated Density	kg/L	< 2.4	1.21	Acceptable
Chemical Properties	Unit	Target Range	Results	Comments
pH in water (1:1:5)	pH units	5.4 - 6.8	7.09	Slightly High
Electrical Conductivity	dS/m	< 2.2	.99	Acceptable
Chloride	mg/ L	≤ 200	169	Acceptable
Ammonium-N (NH ₄)	mg/ L	≤ 100	0.6	Acceptable
Ammonium-N + Nitrate-N (NH ₄ + NO ₃)	mg/ L	≥ 50	5.0	Low
Nitrogen Draw-Down Index	-	≥ 0.7	.01	Low
Bioassay	mg/ L	≥ 70	112	Acceptable
Phosphorus	mg/ L	8 - 40	8.1	Acceptable
Low Phosphorus - P-Sensitive plant	mg/ L	< 3	8.1	high
Potassium	mg/ L	5 - 250	156	Acceptable
Sulphate (SO ₄)	mg/ L	> 40	58	Acceptable
Calcium (Ca)	mg/ L	≥ 80	101	Acceptable
Magnesium (Mg)	mg/ L	≥ 15	29.8	Acceptable
Ca:Mg Ratio	Ratio	1.5 - 10	3.4	Acceptable
K:Mg Ratio	Ratio	1 - 7	5.2	Acceptable
Sodium (Na)	mg/ L	≤ 130	87	Acceptable
Iron (Fe)	mg/ L	≥ 35	25.2	Low
Copper (Cu)	mg/ L	0.4 - 15	0.53	Acceptable
Zinc (Zn)	mg/ L	0.3 - 10	2.2	Acceptable
Manganese (Mn)	mg/ L	1 - 15	2.57	Acceptable
Boron (B)	mg/ L	0.02 - 0.65	0.168	Acceptable



Saturated bulk density = 1.1kg/L. Dry bulk density = 0.67kg/L

Laboratory recommendations are implemented when the B Horizon is the predominant growing media in the podium and where corrections need to be made. Scapeworks staff add important nitrogen sources plenty of calcium, micro and macro nutrients and pH adjusters if needed.