

## Technical Information: Turf establishment

The use of compost in turf establishment, renovation and maintenance

### Compost characteristics

Fairfield's compost is made from fruit, vegetable, plant and woody waste. These are some recommended compost properties for use in turf establishment and maintenance.

Parameters	Reported as (units of measure)	Recommended Range
pH*	pH units (1:5 water extract)	7.0 – 8.7
Electrical Conductivity	µS/cm or mS/m (1:5 water extract)	2000 µS/cm max or 200 mS/max for turf establishment 2500 µS/cm max or 250 mS/max for turf establishment
Moisture Content	% m/m of fresh weight	35 - 55
Organic Matter Content	%, dry weight basis	>25
Screen Aperture Size	mm	25 Maximum for turf establishment 10 Maximum for general purpose top dressing 5 Maximum for fine turf top dressing
C:N Ratio		20:1 Maximum

\*The pH level of Fairfield's compost is 7.0.

Moist compost also provides the following available nutrients (these are approximate amounts based on typical analysis):

Depth over an area	Cubic metres per 100m <sup>2</sup>	Cubic metres per hectare	Tonnes per hectare	Tonnes dry matter per hectare	N*	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
0.6cm ¼"	0.6	60	30	19	24	45	144
1.2cm ½"	1.2	120	60	38	48	90	288
2.5cm 1"	2.5	250	125	79	100	190	600
5.0cm 2"	5.0	500	250	158	200	380	1200

\* kg per hectare

The nutrients available in inorganic fertilisers

Product	Analysis	Rate	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Potassium Sulphate	48% K <sub>2</sub> O	35g/m			168
Superphosphate	18% P <sub>2</sub> O <sub>5</sub>	70g/m		126	
Ammonium Sulphate	21% N	70g/m	147		
15:15:10 Spring Turf		35g/m	52	35	35
5:10:10 Autumn Turf		50g/m	25	35	35

### **Turf establishment - How to use compost**

Compost should be applied at 25 – 30mm deep and then incorporated to an approximate depth of 100-150mm. The compost application rate will vary depending on the soil conditions, compost characteristics, and turf species to be established. A soil analysis test is recommended to establish the quality of the site soil. Once incorporated, a proper seed bed should be established and the seed lightly brushed into the surface using a drag mat or rake. Turf may be applied directly on to the soil surface either manually, or with specialised equipment. Once planting is completed, the area should be fertilised if necessary and watered on an ongoing basis to ensure adequate rooting.

### **Turf Topdressing**

Compost can be used as a topdressing for all areas of turf, either as a component of a mix, or on its own.

Compost can be blended with various other materials such as sand and loam to produce a product that matches requirements, especially closely mown turf and same-dominated, free draining sports turf rootzones.

### Applying compost to turf

Apply to the turf surface at a rate of 6mm to 12mm, brush in and water if necessary. Use the lower rate on sports turf and lawns and the higher rate on low maintenance grass and roadside verges.

Core aeration techniques can also be used.

The compost should be moist but flowable to facilitate application.

### **Site Conditions**

The site drainage must be adequate before planting takes place. Subsoils may need to be ripped to relieve compacted layers. This should not be done when the soil is too wet. Where soils are particularly low in nutrients compost may be supplemented with a nitrogen fertiliser. Nitrogen in compost is mainly in a slow-release form and may not provide enough nitrogen in the first few weeks of growth.

