

## Technical Information: Backfilling, Trees, Shrubs & Herbaceous Borders

### Preparation of backfill for planting pits with compost

This task consists of excavating a planting hole and blending compost with the excavated soil. This specification applies to the installation (planting) of various types of plant materials, including bare root, containerized, and balled and burlapped stock.

### Compost standards

Fairfield's compost meets the requirements of the British Standards Institution Publicity Available Specification 100 (BSI PAS 100).

The specification below sets out further requirements for the use of compost in planting pit preparation.

### Compost specification for use in planting pits backfills:

The specification below sets out further requirements, in addition to BSI PAS 100, for the use of compost in this specific application.

<b>Horticultural Parameters</b>	<b>Reported as</b> (units of measure)	<b>Recommended Range</b>
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 or 200 mS/m max
Moisture Content	% m/m of fresh weight	35 – 55
Organic Matter Content	% dry weight basis	>25
Particle Sizing	% m/m of air-dried sample passing the selected mesh aperture size	99% pass through 25mm screen 90% pass through 10mm screen
C:N Ratio		20:1 maximum
<b>Contaminant Parameters</b>	Various	Meet BSI PAS 100* Criteria

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

**How to use composted material:**

Excavate a planting hole equal in depth to the root mass, and 2 to 3 times its width. Place the root mass on firm soil so that the top of the root mass is level with the soil surface.

For shrubs, bulbs and herbaceous plants: uniformly blend a 3:1 ratio<sup>1</sup> (v/v) of soil and compost where soils are sandy in nature, or subsoils. Use a 4-5:11 (v/v) soil and compost ratio when planting species that require low nutrient levels, or on sites where soil quality is more favourable.

For trees: use a 4:1 ratio<sup>1</sup> (v/v) blend of excavated soil and compost. Place blended soil around the root mass, firming occasionally. Do not apply fertilization in the backfill material, or at time of planting. Water thoroughly after planting.

Take note that the addition of compost may reduce the required frequency of watering. In almost all landscape applications, the addition of pre-plant fertilizer can be eliminated when a stable compost is applied at recommended rates.

**Soil analysis:**

Before any soil preparation procedures ensue, a soil analysis shall be completed by a reputable laboratory to determine any nutritional requirements, pH and organic matter adjustments necessary.

**Footnotes:**

The Landscape Architect/Designer shall specify the compost inclusion rate depending upon soil conditions and quality, plant tolerances, and manufacturer's recommendations. These recommendations are suited for most external planting pits. However, recommendations may require modification for plant species requiring minimal fertilization, and those that are lime-hating, such as rhododendrons, camellias, etc. Typically, compost should not be used where lime-hating species are to be planted.