

EMPIRE™ Turf Installation Guide

1. Remove all building waste & weeds
2. Spread a free draining soil to a depth of 7-15cm (roots can penetrate much deeper) or loosen ground and mix in appropriate soil conditioners. Phone your supplier for more advice on this option. For sandy soils, simply mix in organic material and rotary hoe.
3. Level the surface using a screeding board, lawn leveller or similar device.
4. Apply a low analysis fertilizer with an N:P:K of approximately 5:6:5 or lawn starter fertilizer to the surface and incorporate with a rake.
5. In hot months, moisten the soil but do not make the soil too wet. Do not lay turf on hot, dry soil.
6. Lay turf as soon as possible after delivery.
7. On hot days, lay a section of turf and lightly water. Repeat until all turf is laid. On cool days, turf can be laid all at once. Roll and water thoroughly within one hour of laying turf.
8. Water thoroughly for 7-10 days or until turf is established. Take care that the water is saturating the soil beneath the turf. In colder months, the turf will take longer to establish. The turf should not dry out until roots are established.
9. When the soil has firmed and the EMPIRE ZOYSIA has rooted down, usually 2-3 weeks after laying (longer during winter), mow lightly to tidy up the lawn.



EMPIRE™ Turf Watering Tips

When to Water New Turf

Begin watering new turf within a half hour after it is laid on the soil. Apply at least 2 to 3 cm. (1 inch) of water so that the soil beneath the turf is very wet. Ideally the soil 7 to 10 cm. (3 to 4 inches) below the surface should be moist.

Below are some watering tips for a new Empire lawn:

1. Pull back a corner of the turf and push a screwdriver or other sharp tool into the soil. It should push in easily and have moisture along the first 7 to 10 cm. (3 or 4 inches), or you need to apply more water.
2. Make absolutely certain that water is getting to all areas of your new lawn, regardless of the type of sprinkling system you use. Corners and edges are easily missed by many sprinklers (if windy) and are particularly vulnerable to drying out faster than the centre portion of your lawn. Also, areas near buildings dry out faster because of reflected heat and may require more water.
3. Runoff may occur on some soils and sloped areas before the soil is adequately moist. To conserve water and ensure adequate soak in, turn off the water when runoff begins, wait 30 minutes to an hour and restart the watering on the same area. Repeating this start and stop process until correct soil moisture is achieved.
4. For the next two weeks keep the below-turf soil surface moist with daily (or more frequent) watering. Especially hot, dry or windy periods will necessitate increased watering amounts and frequency. As the turf starts to establish its new roots into the soil, it will be difficult, impossible and/or harmful to pull back a corner to check beneath the turf, but you can still use a sharp tool to check moisture depth by pushing it through the turf and into the soil.

5. Water as early in the morning as possible to take advantage of the daily start of the grass's normal growing cycle, usually lower wind speeds and considerably less of water loss because of high temperature evaporation.
6. If the temperature approaches 37°C (100 F), or high winds are constant for more than half of the day, reduce the temperature of the turf surface by lightly sprinkling the area. This sprinkling does not replace the need for longer, deeper watering, which will become even more critical during adverse weather conditions.
7. Infrequent and deep watering is preferred to frequent and shallow watering because the roots will only grow as deeply as its most frequently available water supply. Deeply rooted grass has a larger "soil-water bank" to draw moisture from and this will help the grass survive drought and hot weather that rapidly dries out the upper soil layer



EMPIRE™ Turf Maintenance Guide

Mowing

1. Mow every 7-21 days in the hot months & every 3-8 weeks in the cold months.
2. Mowing height will vary: 2-5cm in sunny/lightly shaded situations, 5-7cm in heavier shaded situations.

Watering

1. Water thoroughly and regularly after EMPIRE™ ZOYSIA has been laid to encourage a deep and vigorous root system (turf will be able to fossick for water and therefore be more able to withstand hot dry conditions).
2. Once the root system has fully established, water thoroughly only when needed-when a slight wilting is visible, usually once every 7-10 days in summer (on sandy soils more often), with much less or no water in cooler months.
3. Remember that infrequent, deep watering promotes a healthy lawn.
4. Over watering encourages excessive growth, disease and root rot.
5. It is best to water in the early morning; night watering is not recommended.

Fertilising

1. Lawns need to be fed to remain strong and healthy.
2. Use a complete fertiliser in early April and early September.
3. At other times of the year use a slow release fertiliser. If you need a quick green up, use a fertilizer high in nitrogen to promote a lush green lawn- e.g. Supergreen or organic based slow release fertilisers. In heat of summer avoid over fertilising or using manure based products.

Pests, Weeds & Diseases

EMPIRE™ ZOYSIA is very resistant to pests, weeds and fungi compared to most other turf varieties, but as with any natural product, occasional problems can occur. If these problems occur we recommend the following:

1. **Pests** – although Empire is more resistant to these, watch for the lawn grub (e.g. web worm or army worm) and African black beetle- apply suitable pesticides according to directions. In warm humid places such as QLD mealy bug can sometimes cause problems (look for white powdery secretion) although this can be sprayed for the home lawn with Cinfidor.
2. **Fungi** - watch for Brown Patch and Grey Leaf Spot- apply systemic fungicide.
3. **Weeds** - if weeds infest, hand eradicate before seed head develops or apply a suitable weedicide (ask your local garden centre.)