SPEEDGROW MANUAL

Plant growth is a very natural thing. We must respect nature, however, we will always continue to try to extend the boundaries and explore new avenues.

This is also why every grower has his/her own specific techniques.

However, there are some standard techniques, which have proved themselves over time. Some of which are listed below.

The Positioning the slabs.

The ground under the slabs must be flat, with a small slope, to allow the slab to drain quickly, easily. The slabs are designed to be fully drained.

Wetting up of the slabs

To create the optimum air-to-water ratio during the cropping, it is essential to initially soak new slabs for at least 1-2 days with the right nutrient solution. If the slabs are not completely saturated to begin with, you are not maximising the slabs potential volume.

When wetting up, it is a good opportunity to check the variation between the drippers.

Drainage slits.

Good drainage slits in the polythene are vital, as the excess water must be able to drain freely from the slab. So, It is vital to get this job right.

- Make the slits before planting.

- The best position for these slits : between the plants and at the lowest point of the slab.
- The vertical drain slits must be at least 3 cm long. Horizontal slits (for roses) must be 10 – 15 cm long and every 50 – 60 cm. Try to make arough edge to the slits, to prevent them from re-sealing.
- Cut from the bottom of the slab up to avoid damage to the ground polythene.

Growing

When the blocks are placed onto the slabs, they should be watered frequently to assure good rooting in.

As soon as the roots have penetrated well into the slab, the watering can be adjusted as below.

- Regularly check the amount of drain;
- Start watering when transpiration has started. Stop watering at least 2 hours before sunset. On dulldays even earlier. The time to stop is dependent on the weather, the crop and the irrigation strategy;

- Night watering depends on the conditions. In general, if the water content of the slab during the night decreases more than 10 %, night watering is necessary.During this period the EC will rise in the slab , due to a build up of nutrients. To combat this wash the salts out by increasing the drainage percentage during the hottest part of the day.

The next phase.

After the period of controlling the crop, it is important to keep enough strength for growth, both of the plant and its fruit. From this period, it is important to give enough water to achieve the desired drain. The total amount of drain (per day) must be between 30 and 50% (dependent on the crop). To change the water content and EC of the slab, the following watering techniques can be used:

- start time;
- stop time;
- amount per round ;
- total amount of water (and drain);
- watering frequency;
- nightwatering.

The way these tools are used determines the characteristics of the slabs.

The following table gives a summary of the techniques that can be used to influence the slabs. The left-hand column shows the objective, the right-hand shows the method.

Objective	Method
Higher water content	• Less water each time, higher frequency • Higher watering frequency • Start earlier • Stop later • Watering at night
Lower water content	• More water each time, lower frequency • Lower watering frequency • Start later • Stop earlier • No watering at night
Higher EC in the slab	• Higher EC input • Less water each time • Less drain
Lower EC in the slab	• Lower EC input • More water each time • More drainage