

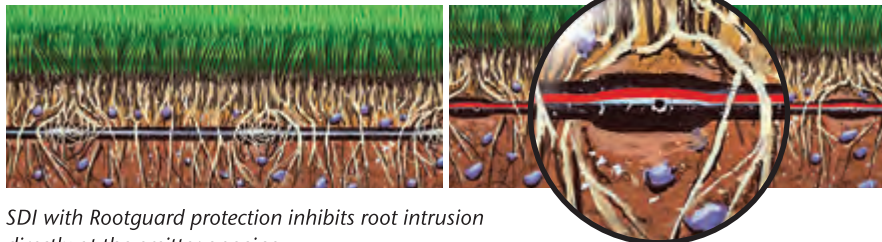
TORO**Count on it.**

Toro Irrigation Subsurface Drip Irrigation with ROOTGUARD®

Toro offers Subsurface Drip Systems with Rootguard for residential, commercial and sports turf applications. Rootguard is available with Drip-In® Classic and PC drip tubes.

Subsurface Drip Irrigation (SDI) with Rootguard is the most technologically advanced subsurface irrigation system available, delivering optimal water application directly to the root zone while impeding roots from clogging the emitters. SDI with Rootguard is suited to the irrigation of lawns and gardens, shrub areas, median strips, sports fields, carparks and vandal prone areas. SDI with Rootguard is also suited to specialised applications including bunker surrounds and tees.

How it Works



SDI with Rootguard protection inhibits root intrusion directly at the emitter opening

Toro SDI with Rootguard features patented Rootguard technology which prevents roots from clogging irrigation emitters.

The pre-emergent, TREFLAN®, is impregnated into the emitter during the moulding process and requires no maintenance.

There are no filters to change and no chemically treated discs to handle, making it one of the safest subsurface systems on the market.

Once SDI with Rootguard is installed in the ground, the slow release of TREFLAN creates a continuous barrier around the emitter. Roots are directed away from the emitter opening, ensuring optimal water application.

Features

Efficient Water Application

Flowers, shrubs and grass receive required water while, at the same time, eliminating water marks on expensive hardscapes such as paving, walls, glass or signage.

Design Flexibility

SDI with Rootguard fits narrow and odd-shaped landscapes perfectly. Irrigate trees and shrubs, ground cover and turf in virtually any landscape area.

Pressure Compensated Option

Pressure compensating emitters allow for longer run lengths and cope with steeper and undulating terrain, making difficult design scenarios easier.

Environmentally Friendly

Irrigation takes place below grade eliminating water loss due to mist, evaporation, run-off or wind drift. In addition, the amount of chemicals and fertiliser required to maintain the health of your landscape is decreased, since these are applied directly at the root zone. SDI with Rootguard requires no maintenance handling so it is safer than other subsurface products on the market.

Safer Surroundings

When SDI with Rootguard is installed below ground, the landscape surface is free from irrigation equipment allowing watering at any time without disrupting activities or causing injury.



Toro Rootguard - SA Art Gallery

Drip-In® (With Rootguard®)



For use in commercial and landscape irrigation applications.

- Black tube with red stripe
- Classic and Pressure Compensating emitters
- Spacings of 30, 40, 50, 60, 75, 90, 100 and 150cm (Non standard spacings also available ie. grouped emitters)
- 13mm ID tube - uses Australian standard fittings
- 16mm and 20mm OD tube sizes - use Drip-In fittings
- Variety of flow rates



For use with non-potable tertiary treated water.

- Lilac Tube with red stripe
- Marked 'Caution Not for Drinking'

Toro Irrigation Subsurface Drip Irrigation with ROOTGUARD®

Application Rates

| Gross Precipitation Rate | | | | |
|--------------------------|---------|--------|---------|--------|
| Emitter Flow Rate | 1.6 L/h | 2 L/h | 2.4 L/h | 4 L/h |
| Line & Dripper Spacing | | | | |
| 30cm x 30cm | 17mm/h | 22mm/h | 26mm/h | 44mm/h |
| 30cm x 40cm | 13mm/h | 16mm/h | 20mm/h | 33mm/h |
| 40cm x 40cm | 10mm/h | 12mm/h | 15mm/h | 25mm/h |

Suggested Drip Line & Dripper Spacing

| Turf | | | |
|-----------------------------|-------------------------------|-----------------|--------------|
| Soil Type | Line Spacing | Dripper Spacing | Burial Depth |
| Medium Sand | 30cm | 30cm | 100mm |
| Loam | 30cm | 30cm | 100mm |
| Clay Loam | 40cm | 40cm | 100mm |
| Clay | 30cm | 40cm | 100mm |
| Annuals, Ground Covers, etc | | | |
| Soil Type | Line Spacing | Dripper Spacing | Burial Depth |
| Medium Sand | 30cm | 30cm | 100mm |
| Loam | 30 to 40cm | 40cm | 100mm |
| Clay Loam | 40cm | 40cm | 100mm |
| Clay | 30cm | 40cm | 100mm |
| Large Shrubs, Trees, etc | | | |
| Soil Type | Line Spacing | Dripper Spacing | Burial Depth |
| Medium Sand | Vary to suit planting density | 30cm | 150mm |
| Loam | Vary to suit planting density | 40cm | 150mm |
| Clay Loam | Vary to suit planting density | 40cm | 150mm |
| Clay | Vary to suit planting density | 40cm | 150mm |

Suggested Uses

Golf Bunker Tongues



Borders/Median Strips



Carparks



Lawned Areas



Storage

It is important that the rolls of drip tube are installed below ground as close to the time of manufacture as possible. The TREFLAN release rate increases as the temperature increases.

When the rolls need to be stored prior to installation, they should be stored in a dry, well ventilated place out of direct sunlight. Do not store for more than six months from the date of manufacture.

Drip Zone Valve Assembly

- Place the assembly before each drip zone.
- Assembly to include ball valve, Y-filter, control valve, pressure regulator and necessary fittings.



Automatic Line Flushing Valve

- Provides for system flushing each time the system is started.
- Install at furthest point from the water source.
- Install in valve box with gravel bed capable of absorbing about 4 litres of water.



Air/Vacuum Relief Valves

- Essential to provide vacuum relief within the irrigation system. (Part Number 101VB15)
- Recommended on all high points of an irrigation system to provide vacuum relief at system shutdown.



Operation Indicator

- A visual indicator that pops up during each subsurface irrigation cycle. (Part Number DL-MP9)



N.B. Always consult your local Water Authority for backflow and connection requirements, such as Reduced Pressure Zone (RPZ) devices.

**For more information, phone
1300 130 898 or visit www.toro.com.au**