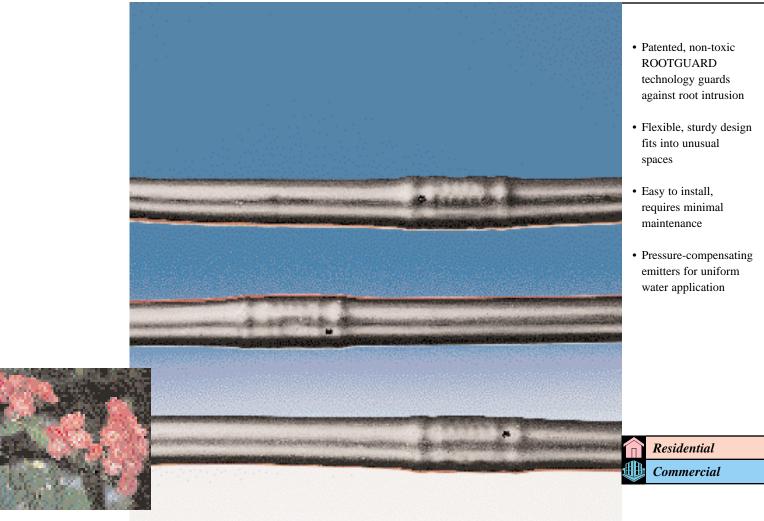


SpecSheet

# **Toro DL2000<sup>™</sup> Series Irrigation System**

#### Complex design challenges. The simple subsurface solution.

Toro DL2000 — the most technologically advanced subsurface irrigation system available. Through revolutionary, non-toxic ROOTGUARD<sup>®</sup> technology, DL2000 with DTech<sup>™</sup> prevents emitter clogging while delivering optimal water application directly to the root zone. DL2000 is perfect for odd-shaped designs, median strips, public recreation areas and residential property — any place where sprinklers don't fit the application.





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## **Environmentally Friendly.**

The DL2000 Series by Toro offers pressure-compensating emitters to control flow variations, delivering equal amounts of water to every emitter on slopes, long lines and hilly terrain. Since irrigation takes place at or below grade, there is minimal water loss due to mist, evaporation, runoff or wind—so water use can be cut by up to 50%.

Since water is going right to the root source, subsurface water application decreases the need for chemigation or fertigation to maintain the health of your landscape. This in turn reduces the impact of chemicals on the environment.



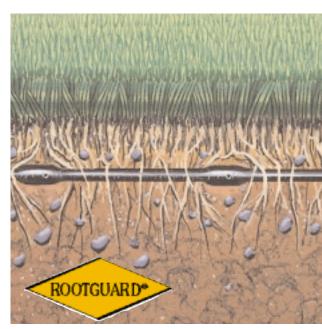


### Safer Surroundings.

Since DL2000 can be installed below ground, the landscape surface is free from irrigation equipment that may disrupt activities or cause injury to playing children, joggers, walkers and maintenance crews.

DL2000 delivers water at or below grade, minimizing slippery walkways caused by irrigation runoff or overspray — further reducing potential liability while maintaining the beauty of your landscape.

ROOTGUARD is a registered trademark of A. I. International and manufactured under U.S. patent no. 5116414. TREFLAN is a registered trademark of DowElanco.



### **Root Intrusion Prevention.**

Toro DL2000 dripline features patented, non-to technology, which prevents roots from clogging The pre-emergent, TREFLAN,<sup>®</sup> is impregnated during the molding process and requires virtual There are no filters to change. No chemically tra

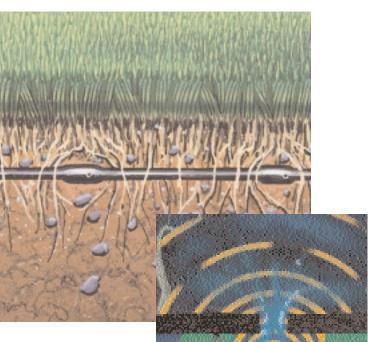
Once DL2000 dripline is installed in the grour of TREFLAN creates a barrier around the emi directed away from the emitter opening, ensur application.

- Root-intrusion protection through ROOTGU
- Eliminates maintenance time and cost
- Guaranteed trouble-free root-intrusion protect



# **Precise Water Application.**

Toro DL2000 eliminates overspray and potential water damage by delivering water at the roots, not through the air. Flowers and shrubs receive the precise amount of water to ensure beauty and health. And the irrigation system leaves no water marks on expensive walls, glass, signage or hardscape. Because there is no spray, these hardscapes will not deteriorate or discolor over time.



xic ROOTGUARD<sup>®</sup> g irrigation emitters. nto the emitter ly no maintenance. eated disks to handle.

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DL2000 emitters are made with the DTech<sup>™</sup> automatic flushing feature, to allow the emitters to self-clean throughout the irrigation cycle. First, water flows through a winding labyrinth path of right-angled channels within the emitter. This process prevents sediment from settling and clogging the emitter. Then, the DTech feature is activated, allowing debris or accumulated particles to be flushed out. DTech works at startup, shutdown and throughout the irrigation cycle.

And, the patented ROOTGUARD protection embedded in each DL2000 dripline emitter ensures that the discharge outlet will not become pervaded with roots.



# **Design Flexibility.**

DL2000 irrigation systems fit narrow and odd-shaped landscape perfectly. Irrigate trees, shrubs, ground cover and turf in virtually any landscape area where sprinklers are impractical. And DL2000 ¼" microline tubing is ideal for small, tight areas.

Impeccable landscape design requires creativity. Toro DL2000 offers maximum flexibility so you can provide creative solutions for the most challenging design areas.

Products depicted in this brochure are for demonstration purposes only. Actual products offered for sale may vary in design, required attachments and safety features.

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#### Toro DL2000<sup>™</sup> Series Irrigation System

#### Features

- ROOTGUARD<sup>®</sup> protection using the pre-emergent TREFLAN<sup>®</sup> is non-toxic and guards against root intrusion by diverting root growth away from the emitter outlet
- TREFLAN is impregnated during the manufacturing process and requires virtually no maintenance
- DTech<sup>™</sup> self-cleaning emitters for precise, trouble-free water application
- Flexible, sturdy design to fit into unusual spaces
- Easy to install and requires minimal maintenance
- Can be installed at grade or buried 4"-8" underground, delivering irrigation directly at the plant's root zone

- Choice of pressurecompensating or nonpressure-compensating dripline with 12", 18" or 24" emitter spacing
- Purple-striped tubing available with 12" and 18" spacing for effluent water applications
- ¼" microline tubing available in 6" and 12" spacing for small, tight areas
- Emitters are inseparably welded to the inside wall of durable polyethylene dripline tubing during manufacturing
- Withstands acids down to pH2 as well as fertilizers, chemicals and chlorine

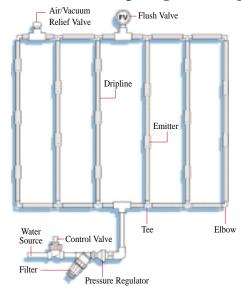
- 2 flow rates, .53 and 1.02 GPH
- Pressure regulators maintain a constant pressure from 15-40 PSI
- Maximum operating
   pressure is 50 PSI
- Approved fertilizers and chemicals can be added at a central inlet and flow directly to the root zone
- Distinctive red stripes on dripline signifies Toro quality

For more information and warranty details, contact your local Toro distributor.

#### Maximum Recommended %" DL2000 Dripline Length

Press	Pressure-Compensating			Non-Pressure-Compensating					
GPH	PSI	Spacing	Flow	Max. Run	GPH	PSI	Spacing	Flow	Max. Run
0.53	25	12"	0.53	354'	0.53	25	12"	0.67	254'
0.53	40	12"	0.53	450'	0.53	40	12"	0.90	211'*
0.53	25	18"	0.53	502'	0.53	25	18"	0.67	345'
0.53	40	18"	0.53	640'	0.53	40	18"	0.90	286'*
0.53	25	24"	0.53	637'	1.02	25	12"	1.20	175'
0.53	40	24"	0.53	819'	1.02	40	12"	1.48	153'*
1.02	25	12"	1.02	234'	1.02	25	18"	1.20	238'
1.02	40	12"	1.02	300'	1.02	40	18"	1.48	208'*
1.02	25	18"	1.02	331'	* With non-pressure-compensating dripline, maximum				
1.02	40	18"	1.02	425'	run lengths decrease slightly at higher pressures. Calculations are based on 0% slope.				
1.02	25	24"	1.02	420'			Calculation	is are base	d on 0% slope.
1.02	40	24"	1.02	540'					

#### **Typical Subsurface Drip Irrigation Design**



#### <sup>1</sup>/4'' **DL2000 Microline** Maximum Recommended

Microline Length		
	6"	12"
Dripper Flow	0.53	0.53
Max. Run @ 20 PSI	15'	33'
Note: Use your inlet	pressu	re and

the friction loss charts below to determine maximum run lengths.

Specifying Information						
	RGX X XX XX X					
Description	Pressure Compensation	Flow	Spacing	Size	Optional	
DL2000 Dripline w/ROOTGUARD®	P—Pressure- Compensating N—Non-Pressure- Compensating	2—.53 GPH 4—1.02 GPH	12—12" Dripline 18—18" Dripline 24—24" Dripline	01—100' Roll 03—300' Roll 05—500' Roll 10—1000' Roll	E—Effluent Dripline	
For Example: When specifying a 1000' roll of pressure-compensating dripline with ROOTGUARD,						

12" emitter spacing and .53 GPH, you would specify: **RGP-212-10** 

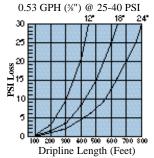
> Non-pressure-compensating dripline is available in 500' rolls only. 24" emitter spacing available in pressure-compensating 300' and 1000' rolls only. Effluent dripline available in 12" and 18" spacing in 300' and 1000' rolls only.

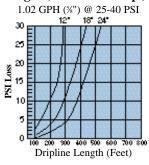
Calculations are based on 0% slope

	Specifying Information
Model Number	Description
MCRG-206	DL2000 100' Roll, ¼" Non-Pressure-Compensating Microline Dripline w/ROOTGUARD®, 6" Emitter Spacing, .53 GPH
MCRG-212	DL2000 100' Roll, ¼" Non-Pressure-Compensating Microline Dripline w/ROOTGUARD®, 12" Emitter Spacing, .53 GPH

A complete line of DL2000 components is also available. Please contact your Toro distributor.

#### Friction Loss vs. Dripline Length (Pressure-Comp.)

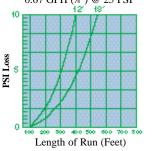




 Friction Loss vs. Length of Run (Non-Pres.-Comp.)

 0.67 GPH (%") @ 25 PSI

 1.20 GPH (%") @ 25 PSI



Length of Run (Feet)



Form No. 490-2930

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**The Toro Company** • Irrigation Division • An ISO 9001-Certified Facility • PO Box 489 • Riverside, CA • 92502 • Phone (800) 664-4740 • www.toro.com