

Dead Level® Pre-Sloped Trench Drain System

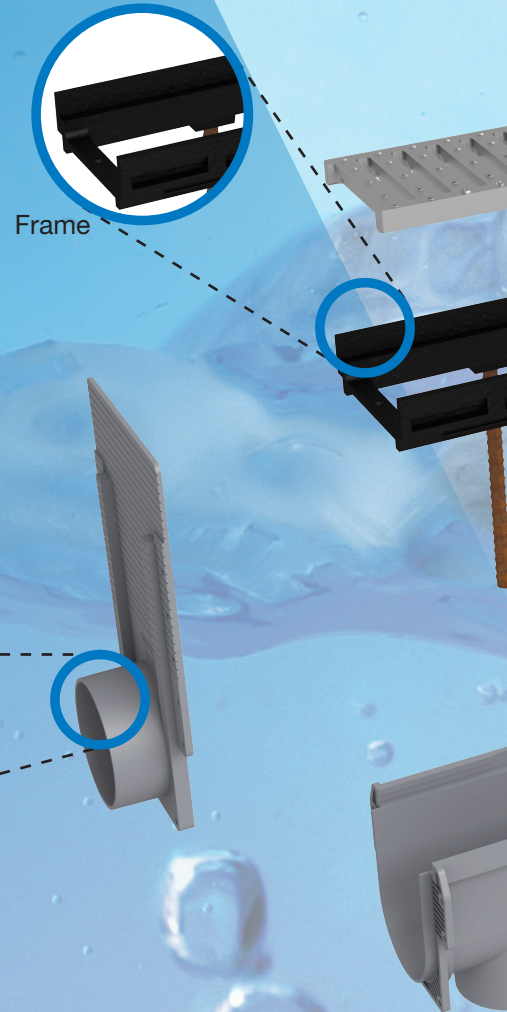


Dead Level® Pre-Sloped Trench Drain

Simple. Straight. Stable.

The Dead Level® Trench Drain is uniquely designed to install and perform like no other trench drain system. Its pre-sloped, original design, innovative features, and durable construction combine to create a drain that delivers:

- Simple, fast installations, saving time and costs.
- Straight, level runs
- Stable, long-term, warranted performance



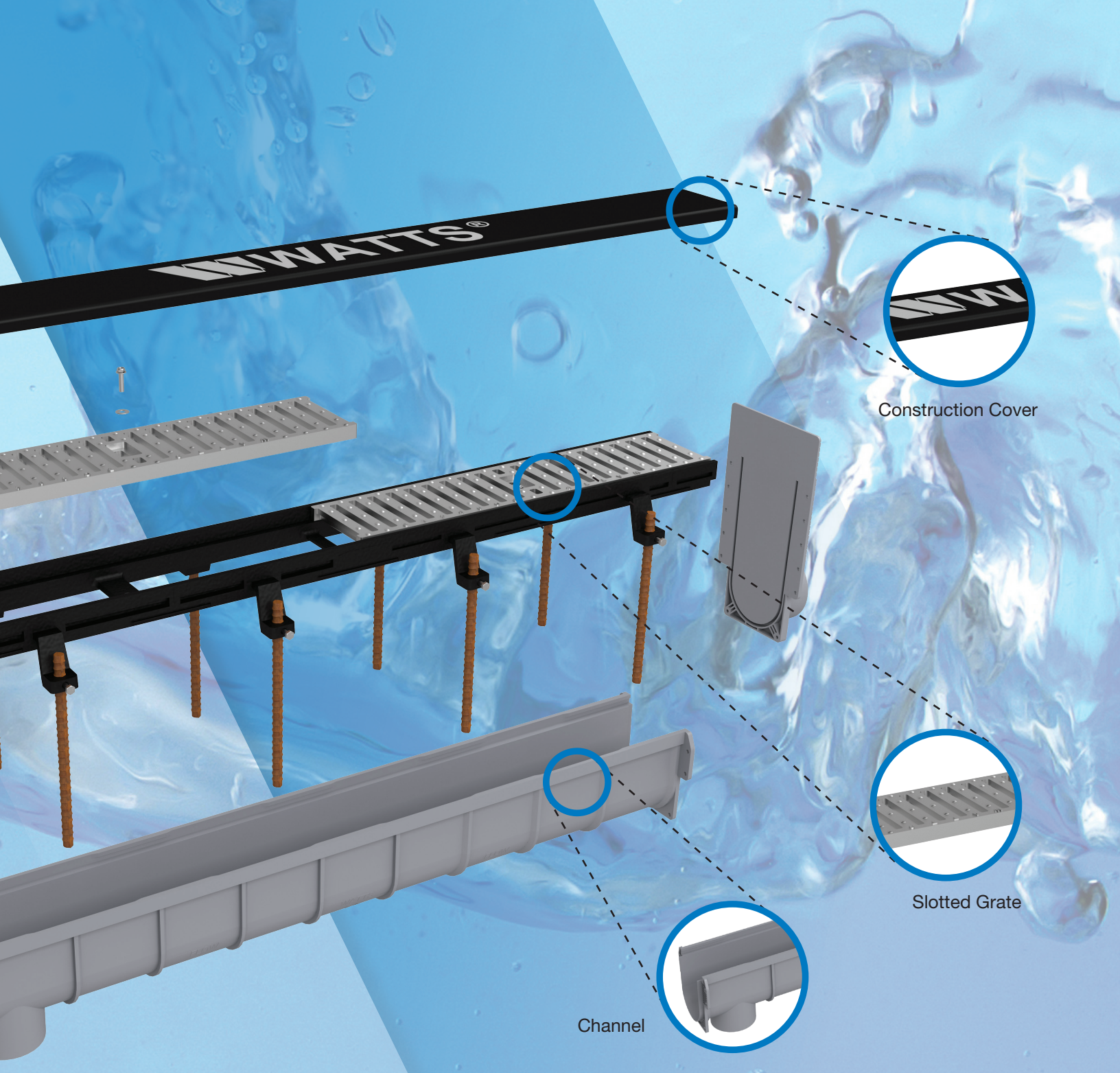
End Cap

Typical Applications

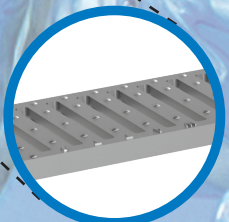
Structural Stability - Patented frame-anchored design ensures that drains go in straight and stay straight. Channels lock longitudinally outside the structural frame and cannot pinch, twist, or float with the concrete pour.

Construction Cover - Protect grates from construction traffic.





Construction Cover



Slotted Grate



Channel

Flexible Sizing - Clean installations can be made in 1 - foot increments, without the need for field cutting or modification , saving time and money.

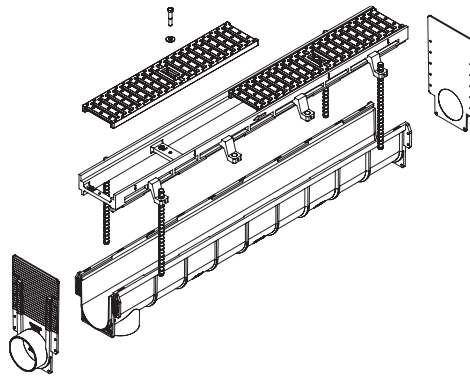
Durable Construction - Structural stability eliminates perimeter cracking, ensuring reliable longterm performance, protected by a Watts warranty.



Dead Level® Trench Drains

Features

***Uniquely engineered,
Dead Level® installs and
performs like no other
trench drain system***



Applications

Recommended for surface drainage in indoor or outdoor applications.

Superior Materials

Chemical resistant, UV stabilized injection molded polypropylene channels. Standard ductile iron frames for heavy traffic, or durable polypropylene frames for moderate traffic.

Stability & Structural Strength

Channels lock longitudinally outside of the structural frame, and cannot pinch or fold in with the concrete pour. Concentrated and dynamic loads transfer directly from the frame to the slab, protecting channels from stress and loading failure.

Frame Anchored Design

Support anchors tie directly to the structural frame, not the channels. Straight, level installations are easily accomplished, with less risk of channel floating.

Solid Connections

Flanged channel, end cap, and frame connections create proper joints and alignment. Pre-molded no hub outlets guarantee a solid connection to discharge piping.

Short & corner/tee sections

1' straight and combination corner/tee sections add flexibility on uneven runs, while eliminating difficult field cutting operations.

Maximum Flow

.7% sloped channels, with radiused bottom and smooth interior generate maximum hydraulic flow.

Gratings for Diverse Commercial Applications

Ductile iron, stainless steel, galvanized, polypropylene, fiberglass, and bronze gratings available to meet DIN 19580 Load Classifications A through F. Check product specifications for heel proof and ADA requirements.

Shipped with Construction Covers

Time-saving construction covers protect the grating, and keep channels free of debris during construction.

Design Considerations

Traffic

Vehicular or equipment traffic requires higher load classifications, depending upon the specific type of loading. In general, non-pneumatic wheels and high velocity traffic create the heaviest loads. Trench drains subject to pedestrian traffic may require heel proof or ADA compliant grating. Polypropylene grating should be specified in areas with barefoot traffic, particularly around swimming pools, where chlorine can attack stainless steel grating.

Flow & Outlets

Specific flow calculations are typically used for outdoor trench drain. Indoors, flushing is usually of primary concern, particularly in sanitary environments.

Pre-sloped trench drain is designed to be self-flushing, although minimal flows or long travel to an outlet will reduce flushing action. A general recommendation is minimum one outlet every 80' outdoors, every 100' indoors.

Catch Basins

Catch basins should be used as a point to trap debris, transition flow from the trench drain to discharge piping, or as a junction box receiving multiple runs.

Cosmetics

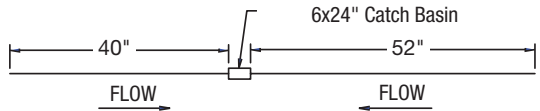
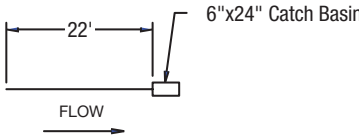
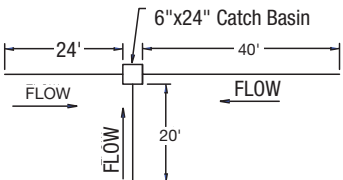
Any cast iron or ductile iron surface should be expected to show rust, even with an applied coating. Metal grating specified in a high visibility area should be galvanized or stainless steel. Optional galvanized or stainless steel frame guards are specified to match the frame to the grating, and maintain a uniform appearance.

* See Watts Dead Level® Trench Drains catalogue for complete information.

How to Configure & Order Dead Level Trench Drain Systems

Dead Level simple, all inclusive, by the foot quotation & ordering

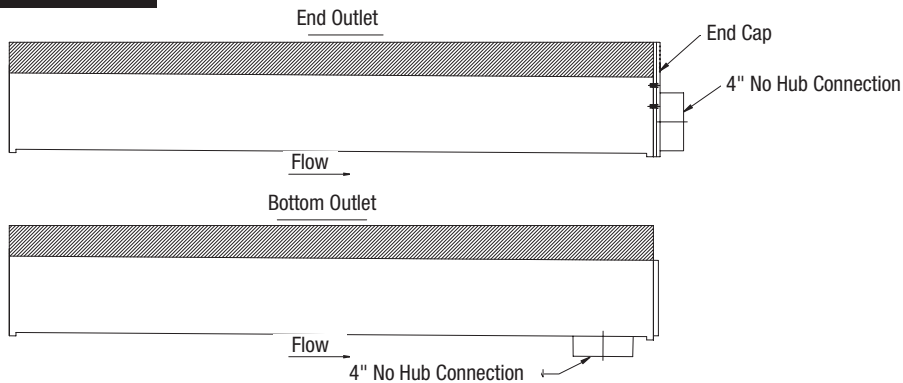
Steps to Configure & Order Dead Level® Trench Drain Systems

1. Sketch General Layout: Show length(s), position of outlet(s), direction of flow(s) & position of catch basins (If required) for each separate trench configurations.	
2. Specify Frame: Ductile Iron - 6" or 12" Width Polypropylene	Ordering Code D or DX P
3. Specify Length in Feet: Do not Include Catch Basins	Numeric
4. Specify Outlet: Straight Run End Outlet Straight Run Center Outlet Other Configuration	EO CO XO
5. Specify Grating: Ductile Iron ADA Ductile Iron Galvanized Ductile Iron Galvanized Steel Slotted Galvanized Steel Perforated Stainless Steel Slotted Stainless Steel Perforated Reinforced Galvanized Steel Slotted Reinforced Galvanized Steel Perforated Reinforced Stainless Steel Slotted Reinforced Stainless Steel Perforated Polypropylene	DI DI-ADA GDI GS GP SS SP RGS RGP RSS RSP PP
6. Specify Catch Basin: (If Required) 6" x 24" x 24" Catch Basin 24" x 24" x 24" Catch Basin	B6 B24
7. Specify Frame Guards: (If Required) Galvanized Steel Stainless Steel	FG FS
8. Configuration Examples: a. Straight Run (EO or CO) P22-EO-RSS-B6-FS P = Polypropylene Frame 22 = Trench Length in Feet EO = End Outlet RSS = Reinforced SS Slotted Grates B6 = 6" x 24" x 24" Catch Basin FS = Stainless Steel Frame Guard	
8b. Configure Special Run (XO) D84-XO-DI-B24 D = Ductile Iron Frame 84 = Trench Length in Feet XO = Other Configuration (Provide Sketch or Describe) DI = Ductile Iron B24 = 24" x 24" x 24" Catch Basin	

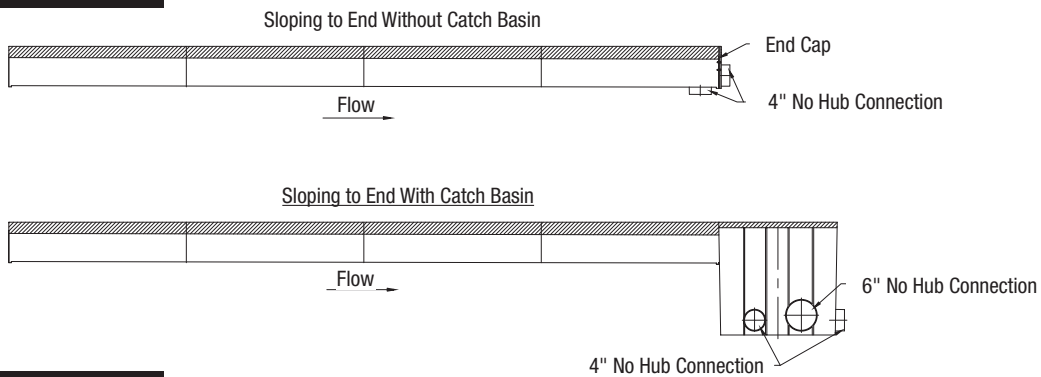
Dead Level® Trench Drains

Standard Configurations

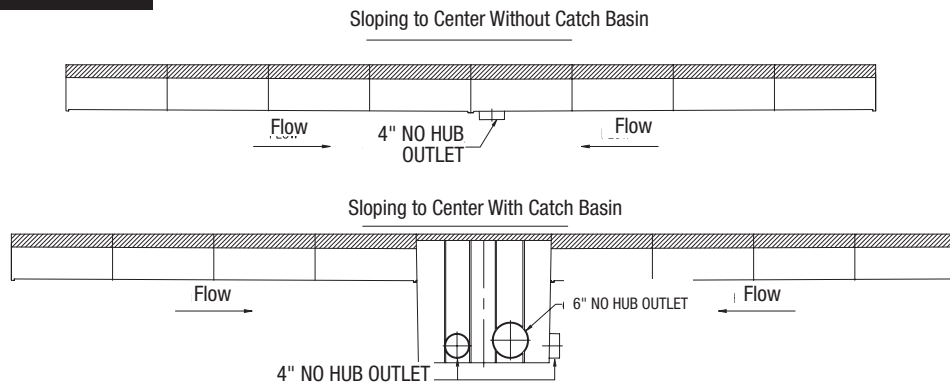
Outlet Variations



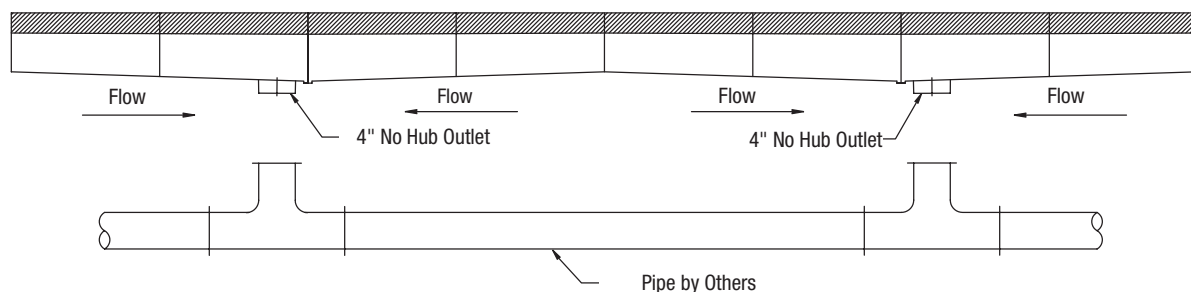
Sloping to End



Sloping to Center



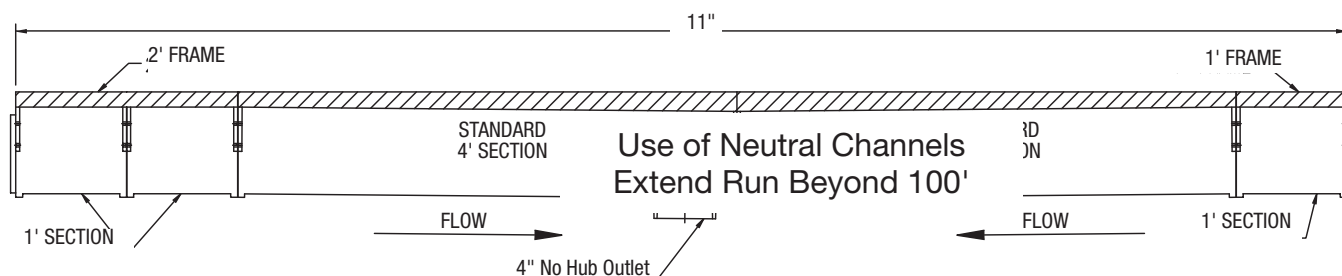
Multiple Outlets



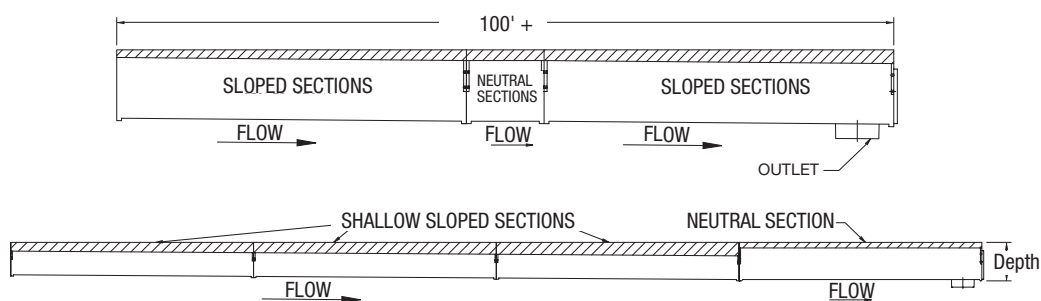
Dead Level® Trench Drains

Special Configurations

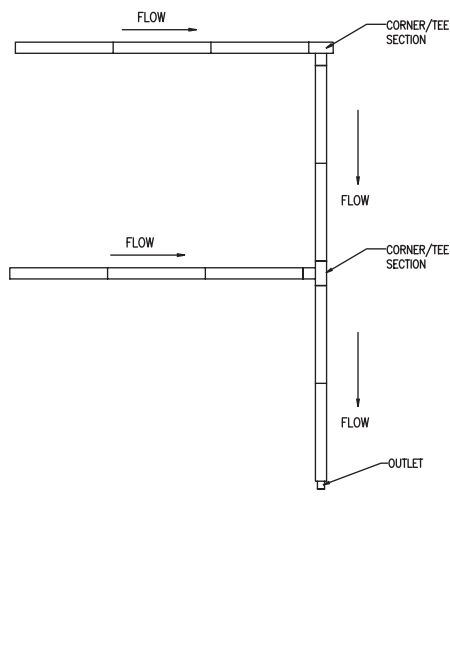
Use of Short Section



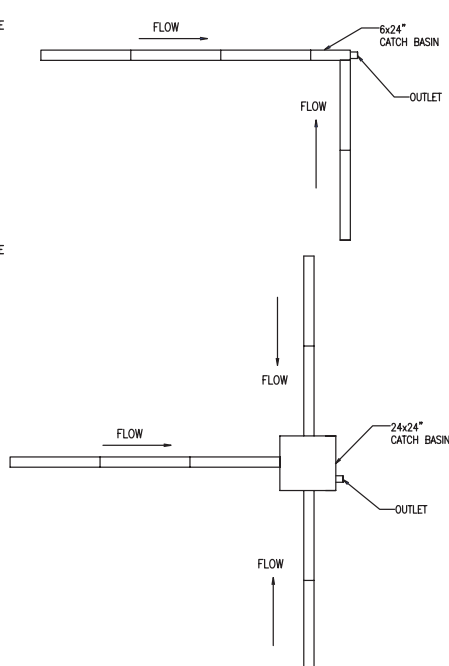
Use of Neutral Channels



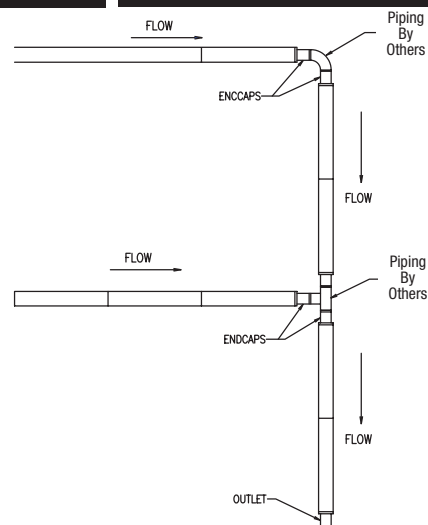
Use of Corner & Tee Section



Corner & Tee Section w/Catch Basin



Piped Corner & Tees



Dead Level® Trench Drains

6" Dead Level® Load Classifications

DIN 19580 / EN 1433 Load Classifications

Load Class Description



A Pedestrian areas, pavements, bicycle lanes, square, yard improvements, individual construction.



B Individual construction, private garages, gardens and parks, artificial landscape, private car parks.



C Pedestrian areas, waysides, parking areas, garages, car service stations, territory improvements.

Load Class Description



D Fuel filling stations, car washes, industrial areas, transport terminals, roads and automobile enterprises.



E Airports, highways, industrial companies, ports, fuel filling stations, transport terminals and storage terminals.



F Airport runways, industrial areas, transport terminals, structures with extreme loads on the road surface.

Dead Level D - Ductile Iron Frame 6" Wide

GRATING SUFFIX	GRATING DESC.	STD. LENGTH	DIN CLASS	ANSI CLASS	H-20 COMPLIANT	ADA COMPLIANT	HEEL PROOF	OPEN AREA
BR	Decorative Bronze	24"	B	MD	N	Y	Y	30%
DI	Ductile Iron	24"	F	SD	Y	N	N	30%
DI-ADA	Ductile Iron ADA	24"	F	SD	Y	Y	Y	25%
GDI	Galvanized Ductile Iron	24"	F	SD	Y	N	N	30%
PP	Polypropylene	24"	C	MD	N	Y	Y	15%
GP	Galvanized Perforated	48"	A	LD	N	Y	Y	15%
GS	Galvanized Slotted	48"	A	LD	N	Y	N	12%
RGP	Reinforced Galvanized Perforated	48"	E	XHD	Y	Y	Y	15%
RGS	Reinforced Galvanized Slotted	48"	E	XHD	Y	Y	Y	30%
SP	Stainless Steel Perforated	48"	A	LD	N	Y	Y	15%
SS	Stainless Steel Slotted	48"	A	LD	N	Y	Y	12%
RSP	Reinforced Stainless Steel Perforated	48"	E	SD	Y	Y	Y	15%
RSS	Reinforced Stainless Steel Slotted	48"	E	SD	Y	Y	Y	30%
SCI	Solid Cast Iron	24"	F	SD	Y	Y	Y	0%

Dead Level P - Polypropylene Frame 6"

GRATING SUFFIX	GRATING DESC.	STD. LENGTH	DIN CLASS	ANSI CLASS	H-20 COMPLIANT	ADA COMPLIANT	HEEL PROOF	OPEN AREA
BR	Decorative Bronze	24"	B	MD	N	Y	Y	30%
DI	Ductile Iron	24"	C*	HD*	N	N	N	30%
DI-ADA	Ductile Iron ADA	24"	C*	HD*	N	Y	Y	25%
GDI	Galvanized Ductile Iron	24"	C*	HD*	N	N	N	30%
PP	Polypropylene	24"	C	MD	N	Y	Y	15%
GP	Galvanized Perforated	48"	A	LD	N	Y	Y	15%
GS	Galvanized Slotted	48"	A	LD	N	Y	N	12%
RGP	Reinforced Galvanized Perforated	48"	C*	HD*	N	Y	Y	15%
RGS	Reinforced Galvanized Slotted	48"	C*	HD*	N	Y	Y	30%
SP	Stainless Steel Perforated	48"	A	LD	N	Y	Y	15%
SS	Stainless Steel Slotted	48"	A	LD	N	Y	Y	12%
RSP	Reinforced Stainless Steel Perforated	48"	C*	HD*	N	Y	Y	15%
RSS	Reinforced Stainless Steel Slotted	48"	C*	HD*	N	Y	Y	30%
SCI	Solid Cast Iron	24"	C*	HD*	N	Y	Y	0%

*Load Class E / ANSI Class XHD with Frame Guards

Dead Level® Trench Drains

6" DI Dead Level® Grating



6" Ductile Iron system(s) - standard with polypropylene channel, integrated ductile iron pre-sloped or neutral frame and specified grating option(s), pictured below.

- protective construction cover standard with all grating options
- incremental neutral 1-foot channel sections available

Grating Options:



Ductile Iron

8187063	DLG-DI12	12"
8187307	DLG-DI	24"



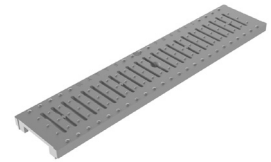
Ductile Iron ADA

8187611	DLG-DI12-ADA	12"
8187430	DLG-DI-ADA	24"



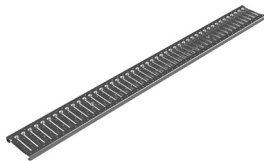
Galvanized Ductile Iron

8187989	DLG-GDI12	12"
8187475	DLG-GDI	24"



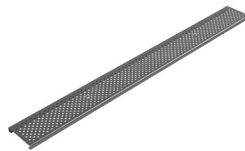
Polypro Composite

8187370	DLG-PP12	12"
8187030	DLG-PP	24"



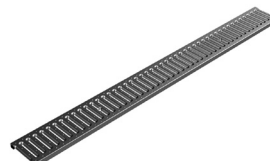
Galv. Steel Slotted

8187346	DLG-GS12	12"
8187366	DLG-GS24	24"
8188706	DLG-GS36	36"
8187309	DLG-GS	48"



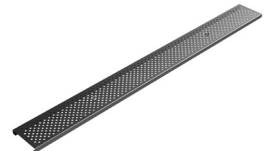
Galv. Steel Perforated

8187347	DLG-GP12	12"
8187358	DLG-GP24	24"
8188705	DLG-GP36	36"
8187312	DLG-GP	48"



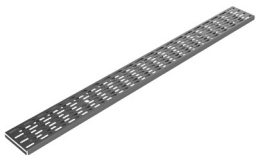
Stainless Steel Slotted

8187348	DLG-SS12	12"
8187368	DLG-SS24	24"
8188708	DLG-SS36	36"
8187308	DLG-SS	48"



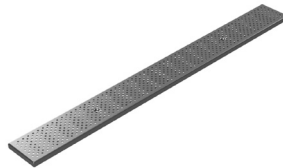
SS Perforated

8187349	DLG-SP12	12"
8187369	DLG-SP24	24"
8188707	DLG-SP36	36"
8189435	DLG-SP	48"



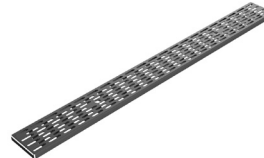
Reinforced Galvanized Steel Slotted

8187350	DLG-RGS12	12"
8187367	DLG-RGS24	24"
8188720	DLG-RGS36	36"
8187314	DLG-RGS	48"



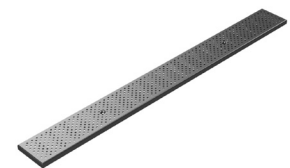
Reinforced Galvanized Steel Perforated

8187351	DLG-RGP12	12"
8187406	DLG-RGP24	24"
8188722	DLG-RGP36	36"
8187316	DLG-RGP	48"



Reinforced SS Slotted

8187353	DLG-RSS12	12"
8187382	DLG-RSS24	24"
8188723	DLG-RSS36	36"
8187317	DLG-RSS	48"



Reinforced SS Perforated

8187353	DLG-RSP12	12"
8187382	DLG-RSP24	24"
8188723	DLG-RSP36	36"
8187317	DLG-RSP	48"



Stainless Steel Brickslot

8189419	DLG-BK12	12"
8189003	DLG-BK24	24"
8189004	DLG-BK	48"



Decorative Bronze

8188672	DLG-BR12	12"
8187425	DLG-BR	24"



Solid Ductile Iron

8185967	DLG-SCI	24"
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Dead Level® Trench Drains

6" PP Dead Level® Grating



6" Polypropylene system(s) - standard with polypropylene channel, integrated polypropylene pre-sloped or neutral frame and specified grating option(s), pictured below.

- protective construction cover standard with all grating options
- incremental neutral 1-foot channel sections available

Grating Options:



Ductile Iron

8187063	DLG-DI12	12"
8187307	DLG-DI	24"



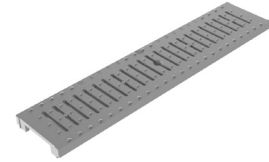
Ductile Iron ADA

8187611	DLG-DI12-ADA	12"
8187430	DLG-DI-ADA	24"



Galvanized Ductile Iron

8187989	DLG-GDI12	12"
8187475	DLG-GDI	24"



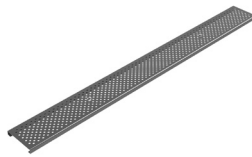
Polypro Composite

8187370	DLG-PP12	12"
8187030	DLG-PP	24"



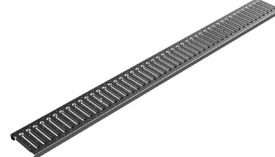
Galv. Steel Slotted

8187346	DLG-GS12	12"
8187366	DLG-GS24	24"
8188706	DLG-GS36	36"
8187309	DLG-GS	48"



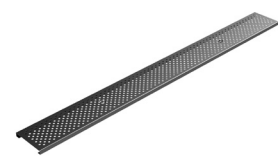
Galv. Steel Perforated

8187347	DLG-GP12	12"
8187358	DLG-GP24	24"
8188705	DLG-GP36	36"
8187312	DLG-GP	48"



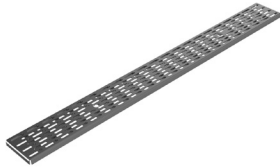
Stainless Steel Slotted

8187348	DLG-SS12	12"
8187368	DLG-SS24	24"
8188708	DLG-SS36	36"
8187308	DLG-SS	48"



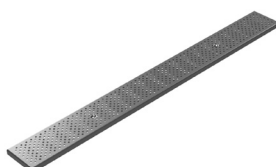
SS Perforated

8187349	DLG-SP12	12"
8187369	DLG-SP24	24"
8188707	DLG-SP36	36"
8189435	DLG-SP	48"



Reinforced Galvanized Steel Slotted

8187350	DLG-RGS12	12"
8187367	DLG-RGS24	24"
8188720	DLG-RGS36	36"
8187314	DLG-RGS	48"



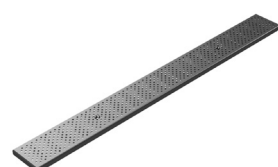
Reinforced Galvanized Steel Perf.

8187351	DLG-RGP12	12"
8187406	DLG-RGP24	24"
8188722	DLG-RGP36	36"
8187316	DLG-RGP	48"



Reinforced SS Slotted

8187353	DLG-RSS12	12"
8187382	DLG-RSS24	24"
8188723	DLG-RSS36	36"
8187317	DLG-RSS	48"



Reinforced SS Perforated

8187353	DLG-RSP12	12"
8187382	DLG-RSP24	24"
8188723	DLG-RSP36	36"
8187317	DLG-RSP	48"



Stainless Steel Brickslot

8189419	DLG-BK12	12"
8189003	DLG-BK24	24"
8189004	DLG-BK	48"



Decorative Bronze

8188672	DLG-BR12	12"
8187425	DLG-BR	24"



Solid Ductile Iron

8185967	DLG-SCI	24"
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Dead Level® Trench Drains

6" DI Dead Level® Cast-in-Place Frame & Grating



6" Ductile Iron system(s) - integrated ductile iron neutral frame and specified grating option(s) for cast-in-place applications, pictured below.

- protective construction cover standard with all grating options
- incremental neutral 1-foot channel sections available

Grating Options:



Ductile Iron

8187063	DLG-DI12	12"
8187307	DLG-DI	24"



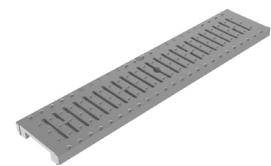
Ductile Iron ADA

8187611	DLG-DI12-ADA	12"
8187430	DLG-DI-ADA	24"



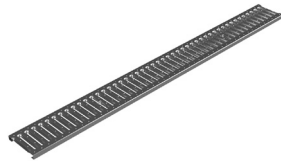
Galvanized Ductile Iron

8187989	DLG-GDI12	12"
8187475	DLG-GDI	24"



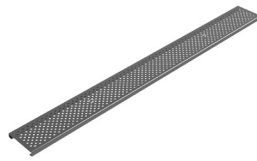
Polypro Composite

8187370	DLG-PP12	12"
8187030	DLG-PP	24"



Galv. Steel Slotted

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8188706	DLG-GS36	36"
8187309	DLG-GS	48"



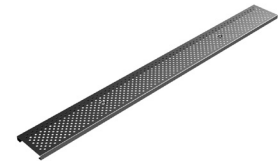
Galv. Steel Perforated

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8187312	DLG-GP	48"



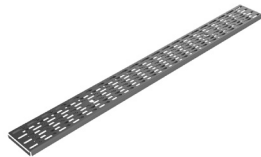
Stainless Steel Slotted

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8188708	DLG-SS36	36"
8187308	DLG-SS	48"



SS Perforated

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8189435	DLG-SP	48"



Reinforced Galvanized Steel Slotted

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8188723	DLG-RSP36	36"
8187317	DLG-RSP	48"



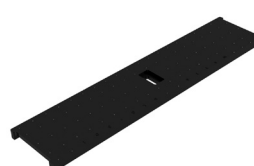
Stainless Steel Brickslot

8189419	DLG-BK12	12"
8189003	DLG-BK24	24"
8189004	DLG-BK	48"



Decorative Bronze

8188672	DLG-BR12	12"
8187425	DLG-BR	24"



Solid Ductile Iron

8185967	DLG-SCI	24"
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Dead Level® Trench Drains

6" DI Shallow Dead Level® Grating



6" Ductile Iron system(s) - standard with polypropylene channel, integrated ductile iron neutral frame and specified grating option(s), pictured below.

- protective construction cover standard with all grating options
- incremental neutral 1-foot channel sections available

Grating Options:



Ductile Iron

8187063	DLG-DI12	12"
8187307	DLG-DI	24"



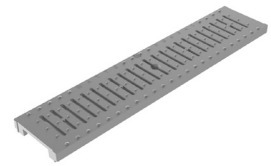
Ductile Iron ADA

8187611	DLG-DI12-ADA	12"
8187430	DLG-DI-ADA	24"



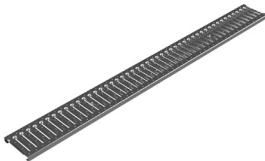
Galvanized Ductile Iron

8187989	DLG-GDI12	12"
8187475	DLG-GDI	24"



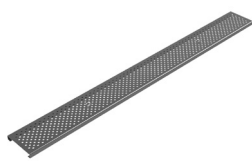
Polypro Composite

8187370	DLG-PP12	12"
8187030	DLG-PP	24"



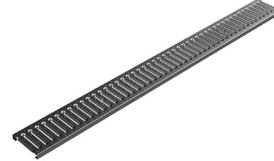
Galv. Steel Slotted

8187346	DLG-GS12	12"
8187366	DLG-GS24	24"
8188706	DLG-GS36	36"
8187309	DLG-GS	48"



Galv. Steel Perforated

8187347	DLG-GP12	12"
8187358	DLG-GP24	24"
8188705	DLG-GP36	36"
8187312	DLG-GP	48"



Stainless Steel Slotted

8187348	DLG-SS12	12"
8187368	DLG-SS24	24"
8188708	DLG-SS36	36"
8187308	DLG-SS	48"



SS Perforated

8187349	DLG-SP12	12"
8187369	DLG-SP24	24"
8188707	DLG-SP36	36"
8189435	DLG-SP	48"



Reinforced Galvanized Steel Slotted

8187350	DLG-RGS12	12"
8187367	DLG-RGS24	24"
8188720	DLG-RGS36	36"
8187314	DLG-RGS	48"



Reinforced Galvanized Steel Perforated

8187351	DLG-RGP12	12"
8187406	DLG-RGP24	24"
8188722	DLG-RGP36	36"
8187316	DLG-RGP	48"



Reinforced SS Slotted

8187353	DLG-RSS12	12"
8187382	DLG-RSS24	24"
8188723	DLG-RSS36	36"
8187317	DLG-RSS	48"



Reinforced SS Perforated

8187353	DLG-RSP12	12"
8187382	DLG-RSP24	24"
8188723	DLG-RSP36	36"
8187317	DLG-RSP	48"



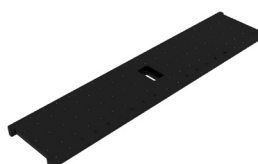
Stainless Steel Brickslot

8189419	DLG-BK12	12"
8189003	DLG-BK24	24"
8189004	DLG-BK	48"



Decorative Bronze

8188672	DLG-BR12	12"
8187425	DLG-BR	24"



Solid Ductile Iron

8185967	DLG-SCI	24"
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Dead Level® Trench Drains

6" PP Shallow Dead Level® Grating



6" Polypropylene system(s) - standard with polypropylene channel, integrated polypropylene neutral frame and specified grating option(s), pictured below.

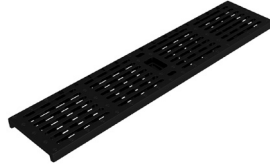
- protective construction cover standard with all grating options
- incremental neutral 1-foot channel sections available

Grating Options:



Ductile Iron

8187063 DLG-DI12 12"
8187307 DLG-DI 24"



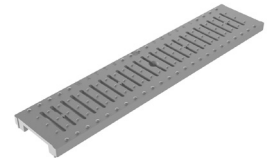
Ductile Iron ADA

8187611 DLG-DI12-ADA 12"
8187430 DLG-DI-ADA 24"



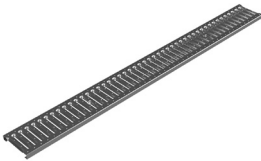
Galvanized Ductile Iron

8187989 DLG-GDI12 12"
8187475 DLG-GDI 24"



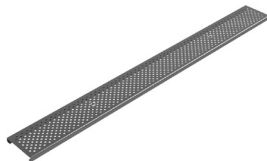
Polypro Composite

8187370 DLG-PP12 12"
8187030 DLG-PP 24"



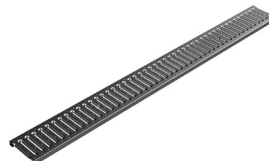
Galv. Steel Slotted

8187346 DLG-GS12 12"
8187366 DLG-GS24 24"
8188706 DLG-GS36 36"
8187309 DLG-GS 48"



Galv. Steel Perforated

8187347 DLG-GP12 12"
8187358 DLG-GP24 24"
8188705 DLG-GP36 36"
8187312 DLG-GP 48"



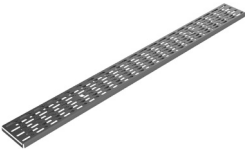
Stainless Steel Slotted

8187348 DLG-SS12 12"
8187368 DLG-SS24 24"
8188708 DLG-SS36 36"
8187308 DLG-SS 48"



SS Perforated

8187349 DLG-SP12 12"
8187369 DLG-SP24 24"
8188707 DLG-SP36 36"
8189435 DLG-SP 48"



Reinforced Galvanized Steel Slotted

8187350 DLG-RGS12 12"
8187367 DLG-RGS24 24"
8188720 DLG-RGS36 36"
8187314 DLG-RGS 48"



Reinforced Galvanized Steel Perforated

8187351 DLG-RGP12 12"
8187406 DLG-RGP24 24"
8188722 DLG-RGP36 36"
8187316 DLG-RGP 48"



Reinforced SS Slotted

8187353 DLG-RSS12 12"
8187382 DLG-RSS24 24"
8188723 DLG-RSS36 36"
8187317 DLG-RSS 48"



Reinforced SS Perforated

8187353 DLG-RSP12 12"
8187382 DLG-RSP24 24"
8188723 DLG-RSP36 36"
8187317 DLG-RSP 48"



Stainless Steel Brickslot

8189419 DLG-BK12 12"
8189003 DLG-BK24 24"
8189004 DLG-BK 48"



Decorative Bronze

8188672 DLG-BR12 12"
8187425 DLG-BR 24"



Solid Ductile Iron

8185967 DLG-SCI 24"

Dead Level® Trench Drains

6" Z Wide Flange Shallow Dead Level® Grating



6" Ductile Iron Wide Flange system(s) - standard with polypropylene channel, integrated ductile iron neutral frame and specified grating option(s), pictured below.

- protective construction cover standard with all grating options
- incremental neutral 1-foot channel sections available

Grating Options:



Ductile Iron

8187063	DLG-DI12	12"
8187307	DLG-DI	24"



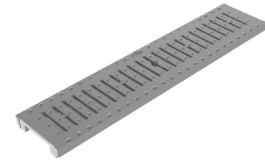
Ductile Iron ADA

8187611	DLG-DI12-ADA	12"
8187430	DLG-DI-ADA	24"



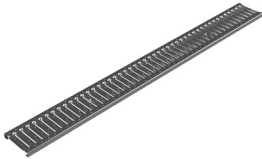
Galvanized Ductile Iron

8187989	DLG-GDI12	12"
8187475	DLG-GDI	24"



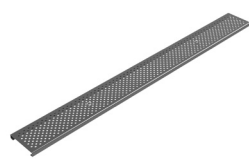
Polypro Composite

8187370	DLG-PP12	12"
8187030	DLG-PP	24"



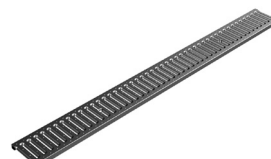
Galv. Steel Slotted

8187346	DLG-GS12	12"
8187366	DLG-GS24	24"
8188706	DLG-GS36	36"
8187309	DLG-GS	48"



Galv. Steel Perforated

8187347	DLG-GP12	12"
8187358	DLG-GP24	24"
8188705	DLG-GP36	36"
8187312	DLG-GP	48"



Stainless Steel Slotted

8187348	DLG-SS12	12"
8187368	DLG-SS24	24"
8188708	DLG-SS36	36"
8187308	DLG-SS	48"



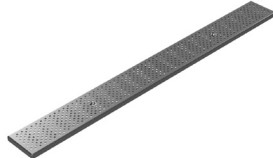
SS Perforated

8187349	DLG-SP12	12"
8187369	DLG-SP24	24"
8188707	DLG-SP36	36"
8189435	DLG-SP	48"



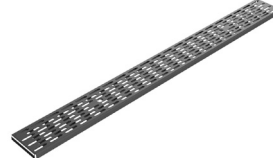
Reinforced Galvanized Steel Slotted

8187350	DLG-RGS12	12"
8187367	DLG-RGS24	24"
8188720	DLG-RGS36	36"
8187314	DLG-RGS	48"



Reinforced Galvanized Steel Perforated

8187351	DLG-RGP12	12"
8187406	DLG-RGP24	24"
8188722	DLG-RGP36	36"
8187316	DLG-RGP	48"



Reinforced SS Slotted

8187353	DLG-RSS12	12"
8187382	DLG-RSS24	24"
8188723	DLG-RSS36	36"
8187317	DLG-RSS	48"



Reinforced SS Perforated

8187353	DLG-RSP12	12"
8187382	DLG-RSP24	24"
8188723	DLG-RSP36	36"
8187317	DLG-RSP	48"



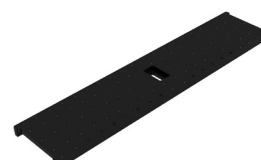
Stainless Steel Brickslot

8189419	DLG-BK12	12"
8189003	DLG-BK24	24"
8189004	DLG-BK	48"



Decorative Bronze

8188672	DLG-BR12	12"
8187425	DLG-BR	24"



Solid Ductile Iron

8185967	DLG-SCI	24"
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Dead Level® Trench Drains

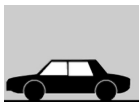
12" Dead Level® Load Classifications

DIN 19580 / EN 1433 Load Classifications

Load Class Description



A Pedestrian areas, pavements, bicycle lanes, square, yard improvements, individual construction.



B Individual construction, private garages, gardens and parks, artificial landscape, private car parks.



C Pedestrian areas, waysides, parking areas, garages, car service stations, territory improvements.

Load Class Description



D Fuel filling stations, car washes, industrial areas, transport terminals, roads and automobile enterprises.



E Airports, highways, industrial companies, ports, fuel filling stations, transport terminals and storage terminals.



F Airport runways, industrial areas, transport terminals, structures with extreme loads on the road surface.

Dead Level DX - Ductile Iron Frame 12" Wide

GRATING SUFFIX	GRATING DESC.	STD. LENGTH	DIN CLASS	ANSI CLASS	H-20 COMPLIANT	ADA COMPLIANT	HEEL PROOF	OPEN AREA
DI	Ductile Iron	24"	F	SD	Y	N	N	40%
DI-ADA	Ductile Iron ADA	24"	F	SD	Y	Y	Y	30%
GDI	Galvanized Ductile Iron	24"	F	SD	Y	N	N	40%
RGP	Reinforced Galvanized Perforated	24"	E	XHD	Y	Y	Y	15%
RGS	Reinforced Galvanized Slotted	24"	E	XHD	Y	Y	Y	30%
RSP	Reinforced Stainless Steel Perforated	24"	E	SD	Y	Y	Y	15%
RSS	Reinforced Stainless Steel Slotted	24"	E	SD	Y	Y	Y	30%
SDI	Solid Ductile Iron	24"	F	SD	Y	Y	Y	0%

Catch Basins

GRATING SUFFIX	GRATING DESC.	STD. LENGTH	DIN CLASS	ANSI CLASS	H-20 COMPLIANT	ADA COMPLIANT	HEEL PROOF	OPEN AREA
24x24x24	Ductile Iron	24"	F	SD	Y	Y	Y	40%
24x24x24	Stainless Steel	24"	F	SD	Y	Y	Y	30%

Dead Level® Trench Drains

12" DI Dead Level® Grating



12" Ductile Iron system(s) - standard with polypropylene channel, integrated ductile iron pre-sloped or neutral frame and specified grating option(s), pictured below.

- protective construction cover standard with all grating options
- incremental neutral 1-foot channel sections available

Grating Options:



Ductile Iron

8187679	DLX-DI12	12"
8187675	DLX-DI	24"



Ductile Iron ADA

8187680	DLX-DI12-ADA	12"
8187676	DLX-DI-ADA	24"



Galvanized Ductile Iron

8188515	DLX-GDI12	12"
8187678	DLX-GDI	24"



Solid Ductile Iron

8187677	DLX-SDI	24"
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Reinforced Galvanized Steel Slotted

8187687	DLX-RGS12	12"
8187683	DLX-RGS	24"



Reinforced Galvanized Steel Perforated

8187688	DLX-RGP12	12"
8187684	DLX-RGP	24"



Reinforced SS Slotted

8187685	DLX-RSS12	12"
8187681	DLX-RSS	24"



Reinforced SS Perforated

8187686	DLX-RSP12	12"
8187682	DLX-RSP	24"

Dead Level® Trench Drains

12" Dead Level® Cast-in-Place Frame & Grating



12" Ductile Iron system(s) - integrated ductile iron neutral frame and specified grating option(s), pictured below.

- protective construction cover standard with all grating options
- incremental neutral 1-foot channel sections available

Grating Options:



Ductile Iron

8187679 DLX-DI12 12"
8187675 DLX-DI 24"



Ductile Iron ADA

8187680 DLX-DI12-ADA 12"
8187676 DLX-DI-ADA 24"



Galvanized Ductile Iron

8188515 DLX-GDI12 12"
8187678 DLX-GDI 24"



Solid Ductile Iron

8187677 DLX-SDI 24"



**Reinforced Galvanized
Steel Slotted**

8187687 DLX-RGS12 12"
8187683 DLX-RGS 24"



**Reinforced Galvanized
Steel Perforated**

8187688 DLX-RGP12 12"
8187684 DLX-RGP 24"



Reinforced SS Slotted

8187685 DLX-RSS12 12"
8187681 DLX-RSS 24"



Reinforced SS Perforated

8187686 DLX-RSP12 12"
8187682 DLX-RSP 24"

Chemical Resistance Data - Polypropylene Resin

The user is advised to make his or her own tests to determine the suitability of polypropylene in the particular environment.

A = Negligible effect

Should be suitable for all applications where these environmental conditions exist.

B = Limited absorption or attack

Should be suitable for most applications.

C = Extensive absorption and/or rapid permeation

Should be suitable for applications where only intermittent service is involved, or where the swelling produced has no detrimental effect on the part.

D = Extensive attack

The specimen dissolves or disintegrates. Polypropylene is not recommended..

Environment	Concentration %	Temperature °C		
		20	60	100
Acetic acid (glacial)	97	A	B (80°C)	-
Acetic acid	50	A	A (80°C)	-
Acetic acid	40	A	-	-
Acetic acid	10	A	A	-
Acetone	100	A	A	-
Acetophenone	100	B	B	-
Acriflavine	2	A	A	-
(2% solution in H ₂ O)			(80°C)	
Acrylic emulsion		A	A	-
Aluminum chloride		A	A	-
Aluminum fluoride		A	A	-
Aluminum sulfate		A	A	-
Alums (all types)		A	A	-
Ammonia (aqueous)	30	A	-	-
Ammonia gas (dry)		A	A	-
Ammonium carbonate	Satd.	A	A	-
Ammonium chloride	Satd.	A	A	-
Ammonium fluoride	20	A	A	-
Ammonium hydroxide	10	A	A	-
Ammonium metaphosphate	Satd.	A	A	-
Ammonium nitrate	Satd.	A	A	-
Ammonium persulfate	Satd.	A	A	-
Ammonium Sulfate	Satd.	A	A	-
Ammonium Sulfide	Satd.	A	A	-
Ammonium thiocyanate	Satd.	A	A	-
Amyl acetate	100	B	C	-
Amyl alcohol	100	A	B	-
Amyl chloride	100	C	C	-
Aniline	100	A	A	-
Anisole	100	B	B	-
Antimony chloride		A	A	-
Aviation fuel (115/145 octane)	100	B	C	-
Aviation turbine fuel	100	B	C	-
Barium carbonate	Satd.	A	A	-
Barium chloride	Satd.	A	A	-
Barium hydroxide		A	A	-
Barium sulfate	Satd.	A	A	-
Barium sulfide	Satd.	A	A	-
Beer		A	A	-
Benzene	100	B	C	C
Benzoic acid	A	A	-	-
Benzyl alcohol		A	A (80°C)	-
Bismuth carbonate	Satd.	A	A	-
Borax		A	A	-
Boric acid		A	A	-
Brine	Satd.	A	A	-
Bromine liquid	100	D	-	-
Bromine water	(a)	C	-	-
Butyl acetate	100	C	C	-
Butyl alcohol	100	A	A	-
Calcium carbonate	Satd.	A	A	-
Calcium chlorate	Satd.	A	A	-
Calcium chloride	50	A	A	-
Calcium hydroxide		A	A	-

Environment	Concentration %	Temperature °C		
		20	60	100
Calcium hypochlorite bleach	20 ^(a)	A	B	-
Calcium nitrate		A	-	-
Calcium phosphate	50	A	-	-
Calcium sulfate		A	A	-
Calcium sulfite		A	A	-
Carbon dioxide (dry)		A	A	-
Carbon dioxide (wet)		A	A	-
Carbon disulfide	100	B	C	-
Carbon monoxide		A	A	-
Carbon tetrachloride	100	C	C	C
Carbonic acid		A	A	-
Caster oil		A	-	-
Cetyl alcohol	100	A	-	-
Chlorine (gas)	100	D	D	-
Chlorobenzene	100	C	C	-
Chloroform	100	C	D	D
Chlorosulfonic acid	100	D	D	D
Chrome alum		A	A	-
Chromic acid	80 ^(a)	A	-	-
Chromic acid	50 ^(a)	A	A	-
Chromic acid	10 ^(a)	A	A	-
Chromic/sulfuric acid		D	D	-
Cider		A	A	-
Citric acid	10	A	A	-
Copper chloride	Satd.	A	A	-
Copper cyanide	Satd.	A	A	-
Copper fluoride	Satd.	A	A	-
Copper nitrate	Satd.	A	A	-
Copper sulfate	Satd.	A	A	-
Cottonseed oil		A	A	-
Cuprous chloride	Satd.	A	A	-
Cyclohexanol	100	A	B	-
Cyclohexanone	100	B	C	-
Decalin	100	C	C	C
Detergents	2	A	A	A
Developers (photographic)		A	A	-
Dibutyl phthalate	100	A	B	D
Dichloroethylene	100	A	-	-
Diethanolamine	100	A	A	-
Diisobutyl phthalate	100	A	A	-
Emulsifiers		A	A	-
Ethanolamine	100	A	A	-
Ethyl acetate	100	B	B	-
Ethyl alcohol	96	A	A (80°C)	-
Ethyl chloride	100	C	C	-
Ethylene dichloride	100	B	-	-
Ethylene glycol		A	A	-
Ethylene oxide	100	B (10°C)	-	-
Ethyl ether	100	B	-	-
Fatty acids (C ₆)	100	A	A	-
Ferric chloride	Satd.	A	A	-
Ferric nitrate	Satd.	A	A	-
Ferric sulfate	Satd.	A	A	-

Chemical Resistance Data - Polypropylene Resin

Environment	Concentration %	Temperature °C		
		20	60	100
Ferrous chloride	Satd.	A	A	-
Ferrous sulfate	Satd.	A	A	-
Fluorosilicic acid		A	A	-
Formaldehyde	40	A	A	-
Formic acid	100	A	-	-
Formic acid	10	A	A	-
Fructose		A	A	-
Fruit juices		A	A	-
Furfural	100	C	C	-
Gas liquor		C	-	-
Gasoline	100	B	C	C
Gearbox oil	100	A	B	-
Gelatin		A	A	-
Glucose	20	A	A	-
Glycerine	100	A	A	A
Glycol		A	A	-
Hexane	100	A	B	-
Hydrobromic acid	50 ^(a)	A	A	-
Hydrochloric acid	30 ^(a)	A	B	D
Hydrochloric acid	20	A	A	-
			(80°C)	
Hydrochloric acid	10	A	A	B
			(80°C)	
Hydrochloric acid	2	A	A	A
50-50 HCl-HNO ₂	(a)	B	D	-
Hydrofluoric acid	40	A	-	-
Hydrofluoric acid	60 ^(a)	A	A	-
			(40°C)	
Hydrogen chloride gas (dry)	100	A	A	-
Hydrogen peroxide	30	A	-	D
Hydrogen peroxide	10	A	B	-
Hydrogen peroxide	3	A	-	-
Hydrogen sulfide		A	A	-
Hydroquinone		A	A	-
Inks		A	A	-
Iodine tincture		A	-	-
Isooctane	100	C	C	-
Isopropyl alcohol	100	A	A	-
Ketones		A	-	-
Lactic acid	20	A	A	-
Lanolin	100	A	A	-
Lead acetate	Satd.	A	A	-
Linseed oil	100	A	A	-
Lubricating oil	100	A	B	-
Magenta dye (aqueous solution)	2	A	A	-
			Some Staining	
Magnesium carbonate	Satd.	A	A	-
Magnesium chloride	Satd.	A	A	-
Magnesium hydroxide	Satd.	A	A	-
Magnesium nitrate	Satd.	A	A	-
Magnesium sulfate	Satd.	A	A	-
Magnesium sulfite	Satd.	A	A	-
Meat juices		A	A	-
Mercuric chloride	40	A	A	-
Mercuric cyanide	Satd.	A	A	-
Mercurous nitrate	Satd.	A	A	-
Mercury	100	A	A	-
Methyl Chloride	100	A	A	-
Methylene chloride	100	A	-	-
Methyl ethyl ketone	100	A	B	-
Milk and its products		A	A	A
Mineral oil	00	A	A	B
Molasses		A	A	-

Environment	Concentration %	Temperature °C		
		20	60	100
Motor oil	100	A	B	-
Naphthalene	100	A	A	a
Nickel chloride	Satd.	a	A	-
Nickel nitrate	Satd.	A	A	-
nickel sulfate	Satd.	A	A	-
Nitric acid	Fuming	D	D	D
Nitric acid	70 ^(a)	C	D	-
Nitric acid	60	A	D	-
			(80°C)	
Nutric acid	10	A	A	A
50-50 HNO ₃ -HCl	(a)	B	D	-
			(80°C)	
50-50 HNO ₃ -H ₂ SO ₄	(a)	C	D	-
			(80°C)	
Nitrobenzene	100	A	A	-
Oleic acid		A	B	-
Oleum	-	-	D	-
Olive oil	100	A	A	-
Oxalic acid (aqueous)	50	A	B	-
Paraffin	100	A	B	-
Paraffin wax	100	A	A	-
Petrol	100	B	C	-
Perroleum ether (boiling point 100°-140°C)	100	C	C	-
Phenol	100	A	A	-
Phosphoric acid	95	A	A	-
Plating solutions, brass		A	A	-
Plating solutions, cadmium		A	A	-
Plating solutions, chromium		A	A	-
Plating solutions, copper		A	A	-
Plating solutions, gold		A	A	-
Plating solutions, indium		A	A	-
Plating solutions, lead		A	A	-
Plating solutions, nickel		A	A	-
Plating solutions, rhodium		A	A	-
Plating solutions, silver		A	A	-
Plating solutions, tin		A	A	-
Plating solutions, zinc		A	A	-
Potassium bicarbonate	Satd.	A	A	-
Potassium borate	1	A	A	-
Potassium bromate	10	A	A	-
Potassium bromide	Satd.	A	A	-
Potassium carbonate	Satd.	A	A	-
Potassium chlorate	Satd.	A	A	-
Potassium chloride	Satd.	A	A	-
Potassium chromate	40	A	A	-
Potassium cyanide	Satd.	A	A	-
Potassium dichromate	40	A	A	-
Potassium ferri-/ferrocyanide		A	A	-
Potassium fluoride		A	A	-
Potassium hydroxide	50	A	A	-
Potassium hydroxide	10	A	A	A
Potassium nitrate	Satd.	A	A	-
Potassium perborate	Satd.	A	A	-
Potassium perchlorate	10	A	A	-
Potassium permanganate	20	A	A	-
Potassium sulfate		A	A	-
Potassium sulfide		A	A	-
Potassium sulfite		A	A	-
Propyl alcohol	100	A	A	-
Pyridine	100	A	-	-
Silicone oil	100	A	A	-
Soap solution (concentrated)		A	A	-
Sodium acetate		A	A	-
Sodium bicarbonate	Satd.	A	A	-
Sodium bisulfate	Satd.	A	A	-

Chemical Resistance Data - Polypropylene Resin

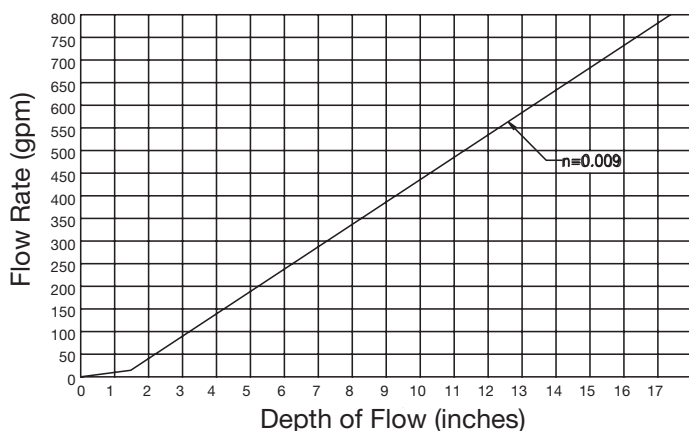
Environment	Concentration %	Temperature °C		
		20	60	100
Sodium bidulfite	Satd.	A	A	-
Sodium borate		A	A	-
Sodium bronide oil solution		A	A	-
Sodium carbonate	Satd.	A	A	-
Sodium chlorate	Satd.	A	A	-
Sodium chloride	Satd.	A	A	A
Sodium chlorite	2	A	A	-
		(80°C)		
Sodium chlorite	5	A	A	-
		(80°C)		
Sodium chlorite	10	A	A	-
		(80°C)		
Sodium chlorite	20	A	A	-
		(80°C)		
Sodium cyanide	Satd.	A	A	-
Sodium dichromate	Satd.	A	A	-
Sodium ferricyanide	Satd.	A	A	-
Sodium ferrocyanide	Satd.	A	A	-
Sodium ferrocyanide	Satd.	A	A	-
Sodium fluoride	Satd.	A	A	-
Sodium hydroxide	50	A	A	-
Sodium hydroxide	10	A	A	A
Sodium hypochlorite	20	A	B	B
Sodium nitrate		A	A	-
Sodium nitrite		A	A	-
Sodium silicate		A	A	-
Sodium sulfate	Satd.	A	A	-
Sodium sulfide	25	A	A	-
Sodium sulfite	Satd.	A	A	-
Stannic chloride	Satd.	A	A	-
Stannous chloride	Satd.	A	A	-
Starch		A	A	-
Sugars and syrups		A	A	-
Sulfamic acid		A	A	-
			(80°C)	
Sulfates of Calcium and magnesium		A	A	-
	Satd.			
Sulfates of potassium and sodium		A	A	-

Environment	Concentration %	Temperature °C		
		20	60	100
Sulfur		A	A	-
Sulfuric acid	98 ^(a)	C	-	D
Sulfuric acid	60	A	B	-
			(80°C)	
Sulfuric acid	50	A	B	-
Sulfuric acid	10	a	A	A
50-50H ₂ SO ₄ /HNO ₃	(a)	C	D	-
			(80°C)	
Tallow		A	A	-
Tanic acid	10	A	A	-
Tartaric acid		A	A	-
Tetrahydrofurn	100	C	C	C
Tetralin	100	C	C	C
Toluene	100	C	C	-
Transformer oil	100	A	C	-
Trichloroacetic acid	10	A	A	-
Trichloroethylene	100	A	A	-
			(80°C)	
Turpentine	100	C	C	C
Urea		A	A	-
Urine		A	A	-
Water (distilled, soft, hard and vapor)		A	A	A
Wet chlorine gas		-	D	-
			(70°C)	
Whiskey		A	A	A
White Paaraffin	100	A	B	-
			(80°C)	
White spirit	100	B	C	-
Wines		A	A	-
Xylene	100	C	C	C
Yeast		A	A	-
Zinc chloride	Satd.	A	A	-
Zinc oxide		A	A	-
Zinc sulfate	Satd.	A	A	-

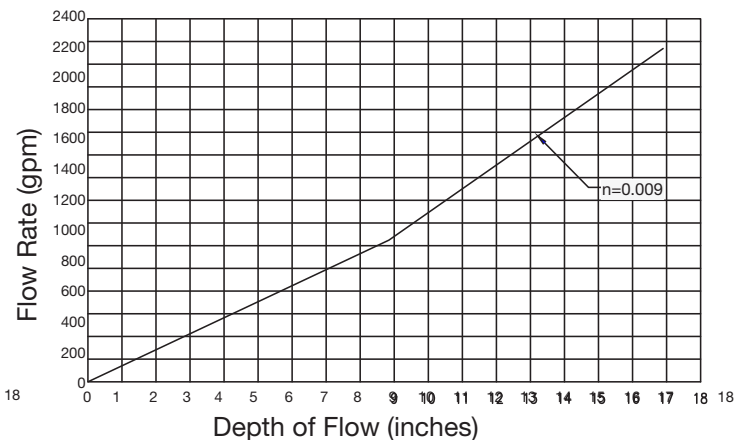
(a) May produce cracking in material under stress

Flow Data

DL 6" FLOW



DLX 12" FLOW



Notes:

Notes:

Watts Family of Brands

Watts designs, manufactures, and sells an extensive line of flow control, water safety, water filtration and treatment, drainage, and PEX plumbing products.

The Watts family of companies provides a single source for solutions used to safely convey, conserve, and manage water.

Making Watts your single source for plumbing-related solutions will streamline your operations, save you money, and reduce the variety of repair parts needed for maintenance.

