MultiDrain Systems, Inc.

Manufacturers of Pre-engineered Trench Drain Systems

MultiDrain®

Steel Trench Drain System

Surface Drainage Technology & Solutions

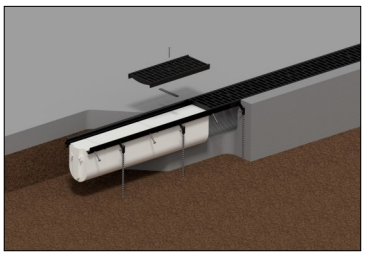
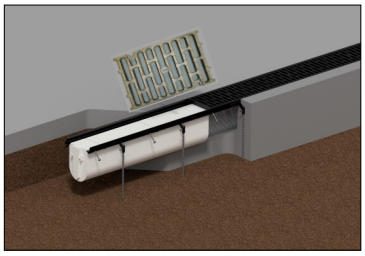
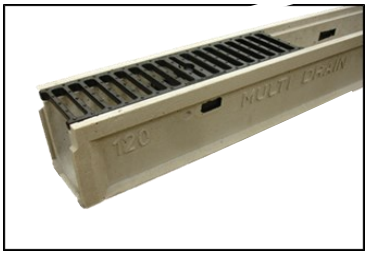
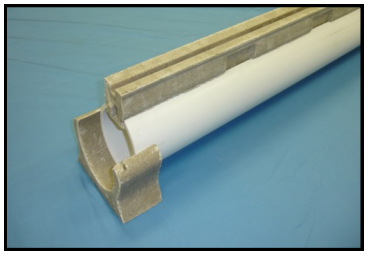
EconoDrain® ● EconoDrain PT-2™ ● Alfa Channel® ● Alfa Slot® ● MultiDrain®

MultiDrain®
We Drain Your Site, Not Your Budget!

EconoDrain®
www.multidrainsystems.com

MultiDrain Products

EconoDrain® ● EconoDrain PT-2™ ● Alfa Channel® ● Alfa Slot® ● MultiDrain®

	Product Name & Description	Typical Applications	Product Information
	**EconoDrain®** Pre-engineered Trench Drain Forming System (Removable Forms)	Loading docks Food & beverage Petrochemical Automobile dealerships Fire stations Numerous civil uses Commercial & Industrial	96” Long form sections 4.5” - 24” Trench Widths 0.5% Standard Slope Radius or Square Bottoms Monolithic Concrete Run Lengths 264’ to 336’ (Std.) Easily Customized
	**EconoDrain PT-2®** 2 - Point Bolt Down Grate System Extra Heavy Duty Pre-engineered Trench Drain Forming System (Removable Forms)	Airports Ports Intermodal DOT Heavy Industrial Military Petrochemical	96” Long Form Sections 8” & 12” Trench Widths 0.5% Standard Slope Extra Heavy Duty System Load Rating: HS25/FAA Bolt Down Grates Made in America
	MultiDrain® Steel Trench Drain System	Food & Beverage Food Service Medical Fire Stations Automobile Dealerships Petrochemical Facilities Commercial & Industrial	96” Long Sections 6”, 8”, 10”, 12”, 15” 18” & 24” Pre-sloped up to 1% Heavy Duty System Stainless & Galvanized Steel 12, 14, 16 or 18 Gauge Steel EZ Rebar Anchor Stand
	**Alfa Channel®** Modular, Precast, Polymer Concrete Trench Drain System.	Loading Docks Food & Beverage Petrochemical DOT Civil Military Industrial	39” Long Sections 4” Interior Trench Width Pre-sloped 0.6% Polyester (Std) / Vinylester Radius Bottom Tongue & Groove Joints UL Certified
	**Alfa Slot®** PVC Pipe and Polymer Concrete Light Duty Trench Drain System	Swimming Pools Plaza Decks Side Walks Patio Pavilions Shower Stalls Water Features	39” & 78” Sections 4” & 6” PVC Pipe Sizes Schedule 40 PVC 1/4” & 1/2” Slots Light Duty ADA Compliant Connector Saddles & End Caps

Refer to www.multidrainsystems.com for additional information and available components.

MultiDrain Steel Trench Drain System

MultiDrain® Steel Trench Drain
MultiDrain® is a pre-engineered steel liner trench drain system. The system consists of metal form liners, adjustable EZ Grate Frame, anchor stands, frame anchorage into the surrounding concrete and grates. MultiDrain is versatile with interior channel widths ranging from 5-13/16" and up to 23-13/16" (see the chart on page 6). The system includes EZ Frame with an adjustable feature allowing each channel to be either neutral in slope or adjusting up to 1% slope.

For faster installation and labor savings, standard channel sections are manufactured 8 feet long and includes overlapping connectors which may be sealed using a flexible caulk or field welding. The modular design of the MultiDrain system provides true on-site adaptability and cuts down overall project costs by reducing excess materials and labor.

Steel Channel
MultiDrain's unique feature is the Steel Channel construction. Steel channels make a tough, durable and easy to install trench drain liner. The steel channel is fabricated in 16 gauge (standard) or 12, 14 and 18 gauges (options). The material options are galvanized steel, stainless steel (types 304 or 316) and duplex stainless steel.

EZ® Frame
The patented EZ grate frame is designed to allow the channels to be adjusted in the field for a slope up to 1%. Channels comes in the standard galvanized steel and optional stainless steel. Select the best frame material for your application or adhere to the professional engineer's specification. All frames are independently anchored into the surrounding concrete so that the encapsulation concrete receives the horizontal loads, not the channel walls.

Grating
A variety of gratings and cover options are available to provide load capabilities from pedestrian, ADA and up to large aircraft and severe point loads. Grating options include cast iron, ductile iron, FRP, galvanized and stainless steel bar grates. Iron grates can be galvanized to meet many commercial and industrial needs.

Pre-Engineered System
Wood forming requires expensive labor with well-trained carpenters to build forms precisely to meet the grating needs and the engineer's specifications. The carpenter must be able to hold the tolerance for the grate width, build-in the trench slope, and keep the trench straight and aligned. Once the concrete is placed, wood forms must be removed and discarded.

MultiDrain is pre-engineered therefore eliminating the need for carpenters. The channels are 8' long and designed to butt end to end and connected by overlapping steel connections keeping the channels aligned and straight. The overlapping connection may be sealed using a flexible caulk by field welding. Adjustable slope from 0% to 1% for Optimum Fluid Velocity. Channels are manufactured to the proper width spacing to receive the grating designed for the application. With smooth steel finish and 0% up to 1% slope built in, MultiDrain is designed for better hydraulics.

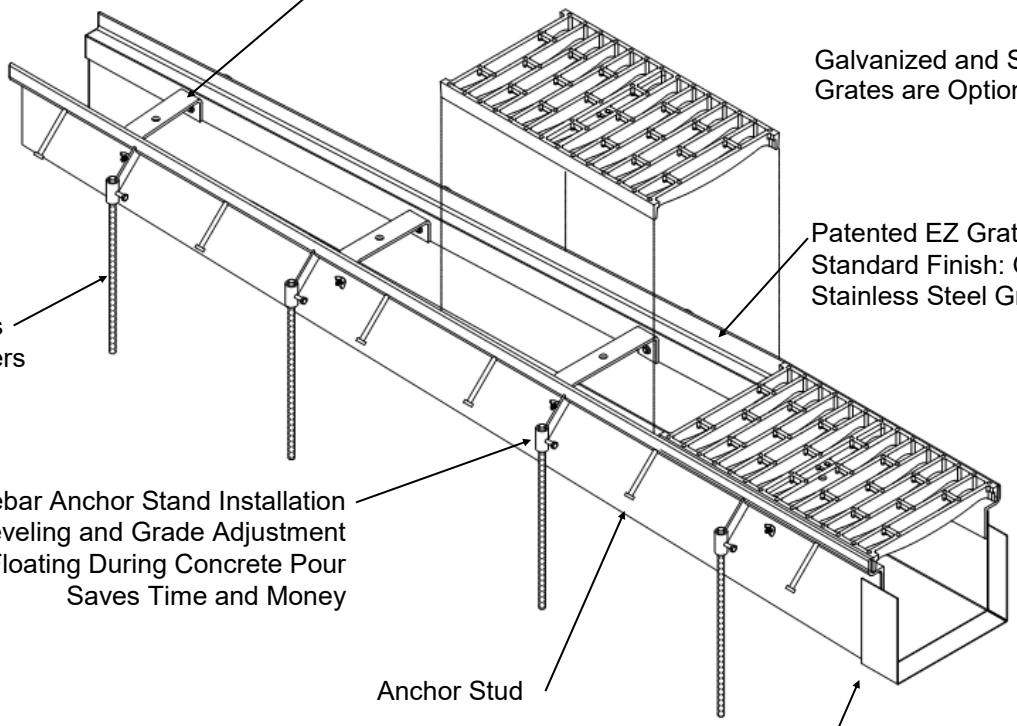
Engineered for Fast and Easy Installation
Patented EZ Rebar Anchor stands provide for quick installation, leveling, grade adjustment and resists floating during concrete pour. Drive #4 rebar (supplied by others) through the anchor stands to anchor and level the MultiDrain steel channels.

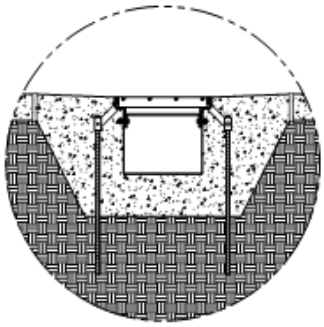
Channels are well-marked with arrows showing the direction of slope. Each channel is labeled with a number showing the numerical sequence.

Environmental
With today's demands on capturing and conserving water, MultiDrain is ideal for channeling water runoff to where it can be reprocessed for usable water, assist in erosion control, channeling water for safety purposes and containment for industrial uses.

MultiDrain is often the choice of engineers for many applications such as civil, industrial, DOT, airports, intermodal and many other areas where containment or channeling water is necessary. For chemical resistance, please go to the MultiDrain website and see the "MultiDrain Steel Trench Drain - Chemical Resistance Guide".

MultiDrain Steel Trench Drain System

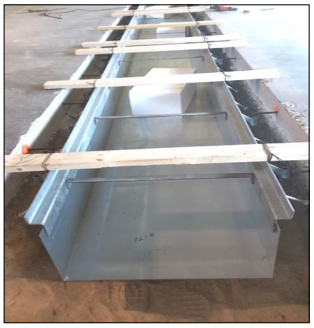




End view with MultiDrain and concrete

MultiDrain Series	Grate Width	Channel Width	Channel Depth Minimum (From Top of Grate)	Channel Depth Maximum (From Top of Grate)
600	8”	5-13/16”	6” Minimum Depth	24” Maximum Depth
800	10”	7-13/16”	6” Minimum Depth	24” Maximum Depth
1000	12”	9-13/16”	6” Minimum Depth	24” Maximum Depth
1200	14”	11-13/16”	6” Minimum Depth	24” Maximum Depth
1500	17”	14-13/16”	6” Minimum Depth	24” Maximum Depth
1800	20”	17-13/16”	6” Minimum Depth	36” Maximum Depth
2400	26”	23-13/16”	6” Minimum Depth	36” Maximum Depth

MultiDrain Steel Trench Drain System



E-Z Frame Options

- A-36 Steel, Galvanized
- 304 Stainless Steel
- 316 Stainless Steel

Steel Channel Options

- 12 Gauge
- 14 gauge
- 16 Gauge
- 18 Gauge
- Galvanized Finish
- 304 Stainless Steel
- 316 Stainless Steel
- Duplex Stainless Steel

Grating Options

- Ductile Iron (See Pages 6 & 7)
- Pedestrian Loading
- H-20 Loading
- Bar Grating
- Cast Grating
- FRP Grating

Grating Finish Options

- Galvanized
- 304 Stainless Steel
- 316 Stainless Steel
- Painted
- Uncoated

FEATURES AND BENEFITS

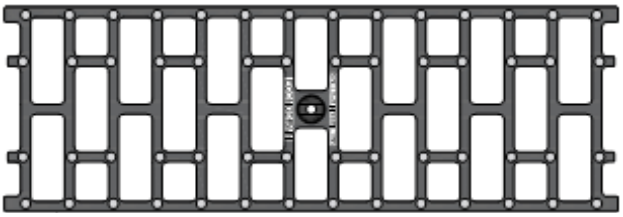
- MultiDrain is a versatile pre-engineered steel trench drain system.
- The system options include metal liners in galvanized steel, stainless steel and duplex stainless steel.
- Steel channels are available in 16 gauge (standard) or 12, 14 and 18 gauge (options).
- Trench slopes from 0% to 1% are for optimal flow velocity.
- Custom made-to-order to fulfill specific site drainage project requirements.
- EZ-Frame incorporates affixed anchor stand for leveling and grade adjustments.
- EZ-Frame and spacer bars attach to metal channels using wingnuts and bolts.
- Anchor stands and anchor studs welded to the EZ-Frame assure secure anchorage into the surrounding concrete.
- Engineered to accept a variety of grating types and service loads.
- Joints may be sealed using a flexible caulk or by welding.

TYPICAL APPLICATIONS

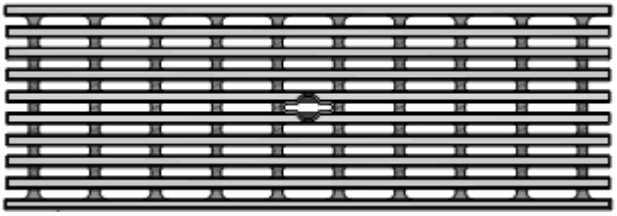
- Food and beverage
- Commercial and industrial
- Petrochemical facilities
- Agricultural
- Hospitals, medical facilities and laboratories
- Animal hospitals and Kennels
- Fire stations
- Automobile sales and maintenance
- Laundry facilities

MultiDrain Grates

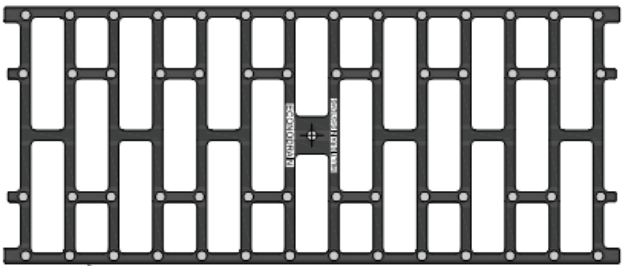
Series 600 Grate #A



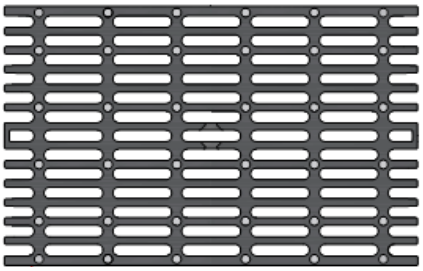
Series 600 Grate #B



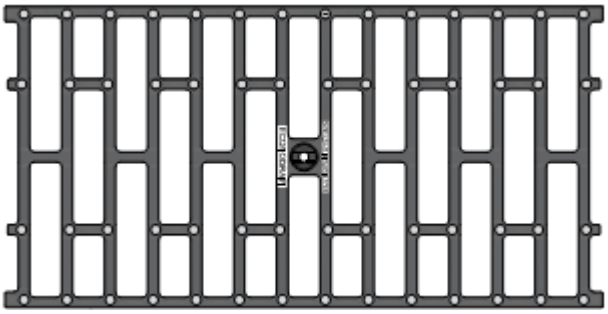
Series 800 Grate #C



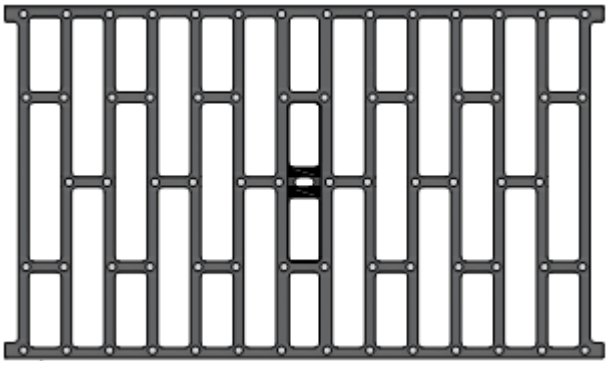
Series 800 Grate #D



Series 1000 Grate #E



Series 1200 Grate #F



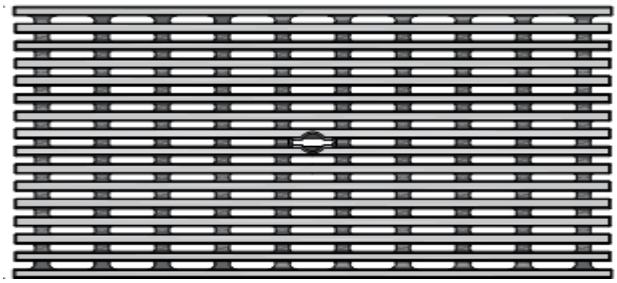
Grate ID	Series	Part Number	Material Type	Size	Grate Slot Size	Open Area	Load Rating
A	600	EG-0824-1-DI-A	Ductile Iron	8” x 24”	1-3/8” x 3-7/16”	63.5%	HS25
B	600	EG-0824-1-DI-ADA	Ductile Iron - ADA Compliant	8” x 24”	7/16” x 2”	38.1%	HS25
C	800	EG-1024-1-DI-A2	Ductile Iron	10” x 24”	1-5/16” x 4-7/16”	66.3%	HS25
D	800	EG-1016-1-DI-ADA	Ductile Iron - ADA Compliant	10” x 16”	7/16” x 2-1/4”	48%	HS25
E	1000	EG-1224-1-DI-A	Ductile Iron	12” x 24”	1-5/16” x 5-7/16”	64.8%	HS25
F	1200	EG-1424-1-DI-A2P	Ductile Iron	14” x 24”	1-3/16” x 6-3/8”	67%	H20

*All dimensions are nominal

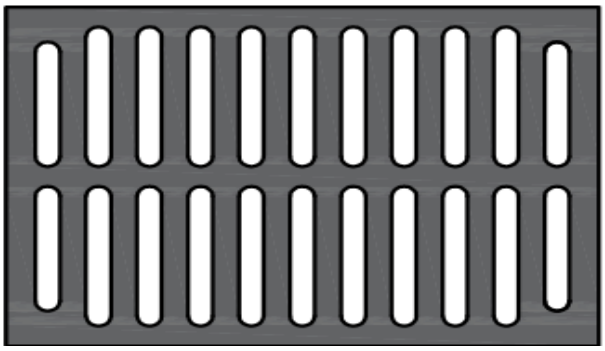
*Bar grates are available upon request

MultiDrain Grates

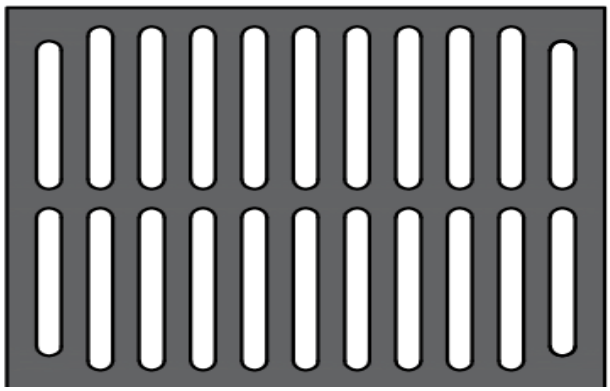
Series 1200 Grate #G



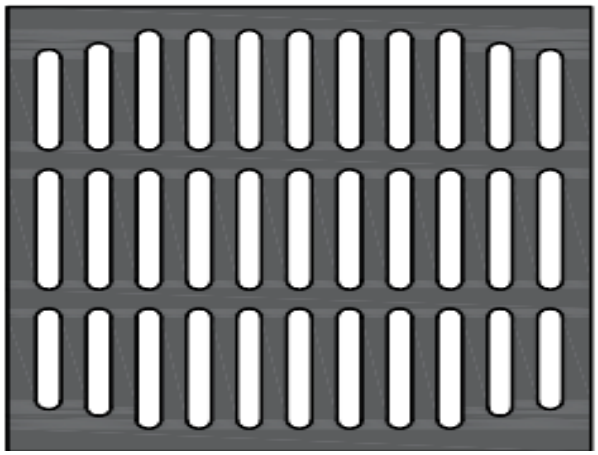
Series 1500 Grate #H



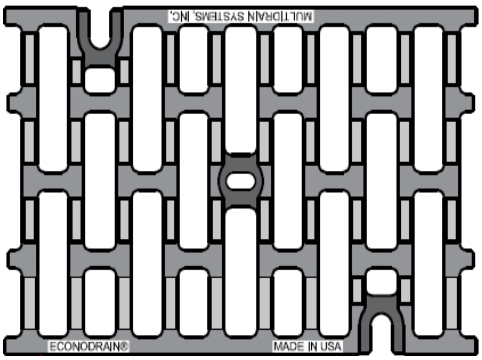
Series 1800 Grate #I



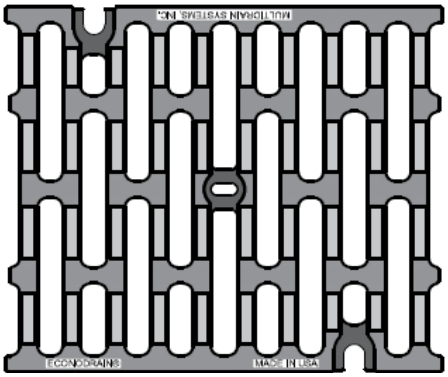
Series 2400 Grate #J



Series 800 - Extra Heavy Duty Grate #K



Series 1200 - Extra Heavy Duty Grate #L



Grate ID	Series	Part Number	Material Type	Size	Grate Slot Size	Open Area	Load Rating
G	1200	EG-1424-1-DI-ADA	Ductile Iron - ADA Compliant	14” x 24”	3/8” x 1-13/16”	33.1%	HS25
H	1500	EG-1724-CI-A	Cast Iron	17” x 24”	1” X 6-5/8” Avg.	35.8%	H20
I	1800	EG-2024-DI-A	Cast Iron	20” x 24”	1” x 8-1/8” Avg.	37%	H20
J	2400	MG-2624-CI-A	Cast Iron	26” x 24”	1” x 7-1/4” Avg.	38%	H20
K	800	EG-1016-2DI-A	FAA AC150 5320-6E	10” x 16”	1-3/16” x 4-3/8”	54%	HS-25
L	1200	EG-1416-2DI-A	FAA AC150 5320-6E	14” x 16”	1-1/16” x 6-3/16”	49%	HS25

All dimensions are nominal ● Bar grates are available upon request ● Grates K and L, no locking devices

We Help You Plan for Rainy Days

@AECDAILY. ARCAT

MultiDrain®
We Drain Your Site, Not Your Budget!

MultiDrain Systems, Inc.
1405 Industrial Dr. • Statesville, NC 28625
P: (704) 508-1010 • (800) 433-1119 • F: (704) 508-1011
www.multidrainsystems.com

EconoDrain®
www.multidrainsystems.com

"DISCLAIMER: The customer and the customer's architects, engineers, consultants and other professionals are completely responsible for the selection, installation, and maintenance of any product purchased from MULTIDRAIN SYSTEMS, INC., and EXCEPT AS EXPRESSLY PROVIDED IN MULTIDRAIN'S STANDARD WARRANTIES, MULTIDRAIN MAKES NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE SUITABILITY, DESIGN, MERCHANTABILITY, OR FITNESS OF THE PRODUCT FOR CUTOMER'S APPLICATION. Copies of MultiDrain's standard warranties are available upon request."
MultiDrain Systems, Inc. Trade Mark Products: Alfa Channel®, Alfa Slot®, EconoDrain® and MultiDrain.
These products are protected by one or more U.S. patents.
Copyright © 2024