



# **Durg Trench** manufactured by Eric'sons THE VERSATILE TRENCH SYSTEM





# www.trenchdrain.net

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# INTRODUCTION

Eric'sons was founded in 1998 with a mission of providing quality products to meet a variety of project needs. Eric'sons offers design, manufacturing, sales, installation, and repair of linear drain products. The company founders were engineers and entrepreneurs who created products that were both innovative and simple.

Eric'sons spent years developing the Dura-Trench brand of linear drainage systems. Innovation was spawned from the construction division of the company while assisting engineers with designs and installing other manufacturers products. Eric'sons set out to improve linear drain systems to make them more flexible for the designer, easier for the installer, and higher quality for the owner. Eric'sons staff began the innovative process of redesigning the linear drain system.



Eric'sons continues to grow and offer the same services it started with over a decade earlier. These services include design, manufacturing, sales, installation, and repair of linear drainage products. The Dura-Trench product line features a full offering of trench drains, slotted drains, utility trenches, catch basins, and many specialty products. The flexibility of the product line and wide breadth of standard products gives us the flexibility to handle most drainage problems. We encourage you to challenge our team with your most difficult drainage applications.



# TEAMWORK, INNOVATION, AND CONTINUOUS IMPROVEMENT DEFINE OUR TEAM

# **SPECIFICATION GUIDE**

To properly specify a linear drain it is necessary to understand all of the components that make up a complete system. If the designer fails to properly specify each of the system components, failures can occur at the weakest link.

The designer must consider three major design parameters. The first is the loading condition. The designer should follow the load path through the components of a linear drain system. Loads are imposed on linear drains from the top down. The load first enters the grating. Assuming the grate was properly specified the load is then transferred from the grate to the frame.

Assuming the frame is sufficiently strong and anchored properly in the concrete surround, the load is then passed to either the trench body or concrete surround. Dura-Trench systems are generally designed to pass all loading from the frame directly to the concrete surround eliminating the potential for channel failure. Unfortunately, many other systems on the market pass the load through the trench body before it can reach the concrete and then the trench body strength must be evaluated. Dura-Trench bodies do not receive the load and act solely as a concrete form, smooth flow profile, and chemical resistant liner. The designer must take the responsibility to properly specify and evaluate the load carrying capacity of each of these components (grates, frames, body, and concrete surround). If any of these components fail the entire system will prematurely fail.



The second design parameter that must be evaluated is the flow path. The path of the liquid flowing must be adequately sized at all points along the system. The liquid first

passes through the grate. If the openings in the grate are sufficient the liquid will reach the channel. If the channel has adequate size and slope to move the liquids, it will convey down the system to the outlet location. Finally, if the outlet is properly configured and sized then the liquid will exit the system. If any of these components are not properly sized the system will not function. Take care to evaluate each component before proceeding with a final design.



The final design parameters are the longevity and environment that the drain will be utilized. Things like material degradation due to the environment the drain is placed in must be carefully considered. For example, if the liquids are at elevated temperatures or have chemical loads special consideration should be given to material choices that can resist the chemical loads and elevated temperatures. This should also raise concern about how the trench bodies are sealed. Considerations should also be given to aesthetic concerns (colors & finishes), traffic type (ADA, Heel proof), grating patterns, abutting materials, etc.

After the correct product has been determined a proper written specification needs to be generated to ensure that the contractor provides a product that meets all the requirements of the design. The product specification should specify each component including the trench body, slope, grate, frame, grate lock, outlet, and joint sealant.

NOTE: The majority of linear drain specifications are incomplete or incorrect. This leads to confusion, added project costs, and premature failures of linear drainage systems.



Dura-Trench is a versatile system with a large selection of interchangeable components that can be utilized for a wide range of applications. This specification guide will assist you in writing an accurate specification that meets a specific application.

Product selection and application is achieved through a series of seven specification slots in which the specifier can select the trench body material, slope, grate, frame, grate locking device, outlet, and joint sealant. When all designations in the specification are properly filled in, the designer can ensure that the correct product is specified for a particular application.

### SAMPLE SPECIFICATION:

DTPF-1%-05B24DI-HDBP-GLSS-6B-SLUR slots 1 2 3 4 5 6 7

# SLOT 1 - TRENCH BODY

DTPF = Prefabricated GFRPC body (Polyester resin)

DTCF = Prefabricated GFRPC body (Chemical resistant Vinyl Ester)

DTFR = Prefabricated Fire Retardant GFRPC body

DTSS = Stainless steel trench body (304 typ, 316 is available)

DTTF = Forming system (body is removed for a concrete cast in place trench)

DTRPF = True radius precast GFRPC body (Polyester resin)

DTSP = Prefabricated fiber reinforced slot drain body (grating selected for this option only refers to clean-outs)

DTGP = Galvanized steel slotted pipe (grating selected for this option only refers to clean-outs)

DTUTPF = Prefabricated utility trench with standard GFRPC body (polyester resin)

DTUTCF = Prefabricated utility trench with chemical resistant GFRPC body (Vinyl Ester)

DTUTFR = Prefabricated utility trench with fire retardant GFRPC body

DTSH = Stainless steel trench body with flashing collar for membrane applications (T304 typ, 316 is available)

### SLOT 2 - SLOPE

Typical slopes are 0.5% and 1.0%. If this slot is left blank, the inverts shown on the plans will be utilized (note that any slope can be specified using this method). If nothing is shown on the plans typically a 0.5% slope will be utilized.

### SLOT 3 - GRATE

Utilize the part numbers of the desired grate in this slot. Grate part numbers can be found at the back of this literature. Note that when you select a grate it will by default determine the size of the trench. Example: If a 12" wide grate is selected, a 10" wide trench body will be paired with the grate for a complete system.

### SLOT 4 - FRAME

LDTP - Light duty thermal plastic frame

MDGS - Medium duty galvanized steel frame

HDBP - Heavy duty black powder painted steel

- HDGS Heavy duty galvanized steel
- HDSS Heavy duty stainless steel
- HDFG Heavy duty fiberglass frame

### SLOT 5 - GRATE LOCKING

GLNR - Grate locks not required GLZN - Steel grate locks GLSS - Stainless steel grate locks

SLOT 6 - OUTLET

List pipe size (1" through 24") then location (S=side, B=bottom, E=end)

### SLOT 7 - JOINT SEALANT

NSR - no sealant required SLUR - urethane caulk SLPF - Polyester joint sealant MDAL - Medium duty aluminum frame MDSS - Medium duty stainless steel frame EXBP - Extreme duty black powder painted frame EXGS - Extreme duty galvanized steel frame EXDI - Extreme duty ductile iron frame NOTE: for slot drain frames add SP in middle (EX: MDSPAL)

GLVP - Vandal resistant grate locks GL4B - Four corner bolt down of grates (where applicable) GLWCB - Welded and threaded cross bar





SLCF - Vinyl Ester joint sealant

SLWD - Weld joints water tight

# TRENCH FLOW CHARACTERISTICS

These trench flow charts are supplied to assist the designer in selecting the appropriate size trench drain. In order to properly size a trench drain, the designer must take into account many different design considerations. Below are the factors that should be reviewed in making this determination.

1. Required flow volume is calculated to generate the proper width, depth, and slope that will work for the application.

2. Debris load should be reviewed. Note that larger trenches will be able to hold more debris, however, smaller trenches with greater slope may pass the debris better due to higher flow velocities creating scouring characteristics.

3. Sites with steep cross slopes may need wider trenches in order to catch high velocity flows sheeting toward them without allowing bypass flow.

4. Consider constructability when selecting a size. Note that a narrower trench that is slightly deeper will typically be less expensive to install than a larger trench that is shallower. This is typically true of trenches less than 36" deep.



DESIGNER TIP: Verify that the outlet method is properly sized to carry the desired flow and debris loading. It is common for a trench to be properly sized but restricted by the outlet size or configuration. The outlet detail is equally as important as the size of the drain and can be a choke point in the flow. A system is only as good as its weakest link. Ensure the outlet configuration and size is not the limiting factor in the system design.









For questions about sizing a trench please contact our experienced technical support staff. We will be happy to assist you with calculations, CAD drawings, material selections, and layout drawings.





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PREFABRI	CATED TRENCH DRAINS (DTPF)
STANDARD SIZES	TRENCH BODY B' LENGTHS TYPICAL OFFERED IN 10', 16', AND 20' LENGTHS
2" ID 4" ID 6" ID	<ul> <li>WIDTHS FROM 2" - 48" STANDARD</li> <li>CUSTOM WIDTHS &amp; PROFILES</li> </ul>
8" ID 10" ID 12" ID 18" ID	JOINTS LARGE 2" BELL CONNECTIONS WATERTIGHT SEAL ATTAINABLE WITH FACTORY SUPPLIED SEALANT
24" ID 26" ID 36" ID 48" ID	

# **PREFABRICATED TRENCHES**

- FIBER REINFORCED POLYMER CONCRETE BODY INSTALLS FAST AND IMPROVES FLOW RATES
- RESISTANT TO DILUTE CHEMICALS, ROAD SALTS, AND PETROLEUM PRODUCTS
- PLYWOOD TOP KEEPS TRENCH SAFE AND CLEAN DURING CONSTRUCTION
- BUILT IN STEEL INSTALLATION DEVICES WON'T BREAK AND RESIST FLOTATION
- WIDE ARRAY OF FRAMES AND GRATES
- ANY WIDTH TRENCH
- BUILT IN SLOPE PER SPECIFIED INVERTS
- EASY INSTALLATION

# **INSTALLATION DEVICES**

- ADJUST TRENCH TO GRADE
- RESIST FLOTATION FORCES
- RIGID METAL BRACKET WON'T BREAK OFF DURING CONSTRUCTION

# **CONCRETE ANCHORS**

- 18" O.C. TYPICAL
- 3" X 3/8" THICK FOR DURABILITY
   EXTENDED SYSTEM LIFE IN
- TRAFFIC APPLICATIONS

# PREFABRICATED TURNS

SMOOTH INTERIOR
 CONTRACTOR FRIENDLY
 WELDED FRAME



### NOTES:

- 1. Maximum trench length is only limited by constructability.
- 2. Standard slope is 0.5% unless specified otherwise.
- 3. Rectangular bottom trenches are available upon request or per application.



# **INSTALLATION**

- SHIPS FULLY ASSEMBLED
- PLYWOOD TOP FOR SAFETY
- PLYWOOD KEEPS CONCRETE OUT DURING CONSTRUCTION
- EASILY ATTACH BRACES TO WOOD TOP

# LOAD BEARING FRAME

 ANY LOAD CONDITION
 MATERIAL OPTIONS INCLUDE: POWDER COATED STEEL GALVANIZED STEEL ALUMINUM CAST IRON PLASTIC FIBERGLASS STAINLESS STEEL
 FACTORY ATTACHED TO BODY

# SMOOTH RADIUS INTERIOR

INCREASED FLOW
 LESS SEDIMENT BUILD-UP

# <u>SLOPE</u>

0.5% AND 1% SLOPE STANDARD
 CUSTOM SLOPES OFFERED

# **GRATES**

WIDE VARIETY OF GRATES
 PEDESTRIAN TO AIRCRAFT LOADING
 ADA & HEEL PROOF OPTIONS



The Dura-Trench prefabricated trenches are the work horse of the product line. They are manufactured using GFRPC (Glass fiber reinforced polymer concrete). This is a proprietary blend of polyester resins, UV inhibitors, aggregates, ultra hard ceramic pellets, glass fibers, and pigments. This revolutionary formula makes the trenches extremely durable, lightweight, resistant to most common chemicals, and very easy to install.

These trench systems come in a variety of standard and custom widths, can have any slope, and offer a wide assortment of frames and grates to meet virtually any need.

The system is shipped factory assembled and ready to install. Plywood in the top keeps the frames aligned, coplanar, and debris out. Installation aides are standard. Factory fabricated turns and intersections ensure an easy and precise fit.

Choose a Dura-Trench prefabricated trench system if you need a quality trench system for your next project.



Visit us on the web at www.trenchdrain.net for more information on: Flow rates, chemical resistance, material properties, etc.



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### SYSTEM CHARACTERISTICS:

- General Purpose Drain
- Typical for flows up to 0.3 cfs (150 gpm)
- Light debris loading
- Light and medium duty loading

FRAME OPTIONS	LDTP, MDGS, MDSS, MDAL, CUSTOM
GRATES	3" WIDE GRATES
SYSTEM DEPTH	2" - 12" TYP
SECTION LENGTH	8' TYP (16' OR LONGER OPTION)
SLOPE	0.5% & 1% OR SPECIFY INVERTS

### **Engineering Specification:**

Trench drain shall be DuraTrench as manufactured by Eric'sons, 574C Industrial Way N., Dallas, GA 30132 - (770-505-6575). The trench drain body shall be composed of polyester fiber reinforced polymer concrete. The trench shall have a 2" clear open throat and have a rounded or flat bottom as indicated in details. The trench body shall be gray in color to closely resemble the color of concrete and have a smooth interior for improved flow rates and reduced debris build-up. Sections shall be 96" long (typical) and have a 2" receiving flange on the upstream end for receiving and sealing the trench sections together. Each of the sections shall be labeled to indicate proper flow and placement. The trench body shall mate to the frame and form a grate seat that shall accept the specified grate. The body shall be supplied with a factory fit top for rail alignment and fastening of the channels in the field ensuring that the rails are cast in a coplanar manner. The trench body shall have the following properties: 12,600 psi minimum tensile strength per ASTM C307, 11,600 psi. minimum compressive strength per ASTM C579, 26,500 psi minimum flexural strength per ASTM C580, less than 0.35% water absorption, shall be frost proof, salt proof, and be resistant to dilute acids and alkalis per ASTM C267.

\*shown here with the MDSS frame



### **TYPICAL DTPF2 TRENCH SECTION**



# SYSTEM CHARACTERISTICS:

- General Purpose Drain most popular size
- Typical for flows up to 2 cfs (950 gpm)
- Light debris loading
- All load classes

FRAME OPTIONS	LDTP, MDGS, MDSS, MDAL, HDBP, HDGS, HDSS, HDFG, EXGS, EXSS, CUSTOM
GRATES	5" WIDE GRATES
SYSTEM DEPTH	4" - 32" TYP (2" MIN DEPTH WITH RECT BOTTOM)
SECTION LENGTH	8' TYP (16' OR LONGER OPTION)
SLOPE	0.5% & 1% OR SPECIFY INVERTS



Trench drain shall be DuraTrench as manufactured by Eric'sons, 574C Industrial Way N., Dallas, GA 30132 - (770-505-6575). The trench drain body shall be composed of polyester fiber reinforced polymer concrete. The trench shall have a 4" clear open throat and have a rounded or flat bottom as indicated in details. The trench body shall be gray in color to closely resemble the color of concrete and have a smooth interior for improved flow rates and reduced debris build-up. Sections shall be 96" long (typical) and have a 2" receiving flange on the upstream end for receiving and sealing the trench sections together. Each of the sections shall be labeled to indicate proper flow and placement. The trench body shall mate to the frame and form a grate seat that shall accept the specified grate. The body shall be supplied with a factory fit top for rail alignment and fastening of the channels in the field ensuring that the rails are cast in a coplanar manner. The trench body shall have the following properties: 12,600 psi minimum tensile strength per ASTM C307, 11,600 psi. minimum compressive strength per ASTM C579, 26,500 psi minimum flexural strength per ASTM C580, less than 0.35% water absorption, shall be frost proof, salt proof, and be resistant to dilute acids and alkalis per ASTM C267.



TYPICAL DTPF4 TRENCH SECTION





- General Purpose Drain
- Typical for flows up to 4 cfs (1800 gpm)
- Light debris loading
- · Medium and heavy duty loading

FRAME OPTIONS	MDGS, MDSS, MDAL, HDBP, HDGS, HDSS, HDFG, CUSTOM
GRATES	8" WIDE GRATES
SYSTEM DEPTH	6" - 48" TYP (3" MIN DEPTH WITH RECT BOTTOM)
SECTION LENGTH	8' TYP (16' OR LONGER OPTION)
SLOPE	0.5% & 1% OR SPECIFY INVERTS

### **Engineering Specification:**

Trench drain shall be DuraTrench as manufactured by Eric'sons, 574C Industrial Way N., Dallas, GA 30132 - (770-505-6575). The trench drain body shall be composed of polyester fiber reinforced polymer concrete. The trench shall have a 6" clear open throat and have a rounded or flat bottom as indicated in details. The trench body shall be gray in color to closely resemble the color of concrete and have a smooth interior for improved flow rates and reduced debris build-up. Sections shall be 96" long (typical) and have a 2" receiving flange on the upstream end for receiving and sealing the trench sections together. Each of the sections shall be labeled to indicate proper flow and placement. The trench body shall mate to the frame and form a grate seat that shall accept the specified grate. The body shall be supplied with a factory fit top for rail alignment and fastening of the channels in the field ensuring that the rails are cast in a coplanar manner. The trench body shall have the following properties: 12,600 psi minimum tensile strength per ASTM C307, 11,600 psi. minimum compressive strength per ASTM C579, 26,500 psi minimum flateural strength per ASTM C580, less than 0.35% water absorption, shall be frost proof, salt proof, and be resistant to dilute acids and alkalis per ASTM C267.

\*shown here with the HDSS frame



# COMPACTED EARTH TYPICAL DTPF6 TRENCH SECTION

LOAD BEARING FRAME AS SPECIFIEI

# SYSTEM CHARACTERISTICS:

- General Purpose Drain
- Typical for flows up to 6 cfs (2750 gpm)
- Normal debris loading
- All load classes

FRAME OPTIONS	MDGS, MDSS, MDAL, HDBP, HDGS, HDSS, HDFG, EXGS, EXSS, EXDI, CUSTOM
GRATES	10" WIDE GRATES
SYSTEM DEPTH	6" - 48" TYP (3" MIN DEPTH WITH RECT BOTTOM)
SECTION LENGTH	8' TYP (16' OR LONGER OPTION)
SLOPE	0.5% & 1% OR SPECIFY INVERTS

### **Engineering Specification:**

Trench drain shall be DuraTrench as manufactured by Eric'sons, 574C Industrial Way N., Dallas, GA 30132 - (770-505-6575). The trench drain body shall be composed of polyester fiber reinforced polymer concrete. The trench shall have a 8" clear open throat and have a rounded or flat bottom as indicated in details. The trench body shall be gray in color to closely resemble the color of concrete and have a smooth interior for improved flow rates and reduced debris build-up. Sections shall be 96" long (typical) and have a 2" receiving flange on the upstream end for receiving and sealing the trench sections together. Each of the sections shall be labeled to indicate proper flow and placement. The trench body shall mate to the frame and form a grate seat that shall accept the specified grate. The body shall be supplied with a factory fit top for rail alignment and fastening of the channels in the field ensuring that the rails are cast in a coplanar manner. The trench body shall have the following properties: 12,600 psi minimum tensile strength per ASTM C307, 11,600 psi. minimum compressive strength per ASTM C579, 26,500 psi minimum flexural strength per ASTM C580, less than 0.35% water absorption, shall be frost proof, salt proof, and be resistant to dilute acids and alkalis per ASTM C267.





- General Purpose Drain
- Typical for flows up to 9 cfs (4000 gpm)
- Normal debris loading
- All load classes

FRAME OPTIONS	MDGS, MDSS, MDAL, HDBP, HDGS, HDSS, HDFG, EXGS, EXSS, EXDI, CUSTOM
GRATES	12" WIDE GRATES
SYSTEM DEPTH	6" - 48" TYP (3" MIN DEPTH WITH RECT BOTTOM)
SECTION LENGTH	8' TYP (16' OR LONGER OPTION)
SLOPE	0.5% & 1% OR SPECIFY INVERTS

\*shown here with the EXGS frame

# **Engineering Specification:**

Trench drain shall be DuraTrench as manufactured by Eric'sons, 574C Industrial Way N., Dallas, GA 30132 - (770-505-6575). The trench drain body shall be composed of polyester fiber reinforced polymer concrete. The trench shall have a 10" clear open throat and have a rounded or flat bottom as indicated in details. The trench body shall be gray in color to closely resemble the color of concrete and have a smooth interior for improved flow rates and reduced debris build-up. Sections shall be 96" long (typical) and have a 2" receiving flange on the upstream end for receiving and sealing the trench sections together. Each of the sections shall be labeled to indicate proper flow and placement. The trench body shall mate to the frame and form a grate seat that shall accept the specified grate. The body shall be supplied with a factory fit top for rail alignment and fastening of the channels in the field ensuring that the rails are cast in a coplanar manner. The trench body shall have the following properties: 12,600 psi minimum tensile strength per ASTM C307, 11,600 psi. minimum compressive strength per ASTM C579, 26,500 psi minimum flexural strength per ASTM C580, less than 0.35% water absorption, shall be frost proof, salt proof, and be resistant to dilute acids and alkalis per ASTM C267.



DTPF12

# SYSTEM CHARACTERISTICS:

- General Purpose Drain
- Typical for flows up to 12 cfs (5250 gpm)
- Normal debris loading
- All load classes

FRAME OPTIONS	MDGS, MDSS, MDAL, HDBP, HDGS, HDSS, HDFG, EXGS, EXSS, EXDI, CUSTOM
GRATES	14" WIDE GRATES
SYSTEM DEPTH	6" - 48" TYP (3" MIN DEPTH WITH RECT BOTTOM)
SECTION LENGTH	8' TYP (16' OR LONGER OPTION)
SLOPE	0.5% & 1% OR SPECIFY INVERTS



Trench drain shall be DuraTrench as manufactured by Eric'sons, 574C Industrial Way N., Dallas, GA 30132 - (770-505-6575). The trench drain body shall be composed of polyester fiber reinforced polymer concrete. The trench shall have a 12" clear open throat and have a rounded or flat bottom as indicated in details. The trench body shall be gray in color to closely resemble the color of concrete and have a smooth interior for improved flow rates and reduced debris build-up. Sections shall be 96" long (typical) and have a 2" receiving flange on the upstream end for receiving and sealing the trench sections together. Each of the sections shall be labeled to indicate proper flow and placement. The trench body shall mate to the frame and form a grate seat that shall accept the specified grate. The body shall be supplied with a factory fit top for rail alignment and fastening of the channels in the field ensuring that the rails are cast in a coplanar manner. The trench body shall have the following properties: 12,600 psi minimum tensile strength per ASTM C307, 11,600 psi. minimum compressive strength per ASTM C579, 26,500 psi minimum flexural strength per ASTM C580, less than 0.35% water absorption, shall be frost proof, salt proof, and be resistant to dilute acids and alkalis per ASTM C267.



TYPICAL DTPF12 TRENCH SECTION



- General Purpose Drain
- Typical for flows up to 22 cfs (10,000 gpm)
- Heavy debris loading
- All load classes

FRAME OPTIONS	MDGS, MDSS, MDAL, HDBP, HDGS, HDSS, HDFG, EXGS, EXSS, EXDI, CUSTOM
GRATES	20" WIDE GRATES
SYSTEM DEPTH	6" - 48" TYP (3" MIN DEPTH WITH RECT BOTTOM)
SECTION LENGTH	8' TYP (16' OR LONGER OPTION)
SLOPE	0.5% & 1% OR SPECIFY INVERTS

# Engineering Specification:

DTPF24

Trench drain shall be DuraTrench as manufactured by Eric'sons, 574C Industrial Way N., Dallas, GA 30132 - (770-505-6575). The trench drain body shall be composed of polyester fiber reinforced polymer concrete. The trench shall have a 18" clear open throat and have a rounded or flat bottom as indicated in details. The trench body shall be gray in color to closely resemble the color of concrete and have a smooth interior for improved flow rates and reduced debris build-up. Sections shall be 96" long (typical) and have a 2" receiving flange on the upstream end for receiving and sealing the trench sections together. Each of the sections shall be labeled to indicate proper flow and placement. The trench body shall mate to the frame and form a grate seat that shall accept the specified grate. The body shall be supplied with a factory fit top for rail alignment and fastening of the channels in the field ensuring that the rails are cast in a coplanar manner. The trench body shall have the following properties: 12.600 psi minimum tensile strength per ASTM C307. 11.600 psi. minimum compressive strength per ASTM C579, 26,500 psi minimum flexural strength per ASTM C580, less than 0.35% water absorption, shall be frost proof, salt proof, and be resistant to dilute acids and alkalis per ASTM C267.



# SYSTEM CHARACTERISTICS:

- General Purpose Drain
- Typical for flows up to 35 cfs (2750 gpm)
- Heavy debris loading
- All load classes

FRAME OPTIONS	MDGS, MDSS, MDAL, HDBP, HDGS, HDSS, HDFG, EXGS, EXSS, EXDI, CUSTOM
GRATES	26" WIDE GRATES
SYSTEM DEPTH	6" - 48" TYP (3" MIN DEPTH WITH RECT BOTTOM)
SECTION LENGTH	8' TYP (16' OR LONGER OPTION)
SLOPE	0.5% & 1% OR SPECIFY INVERTS

# **Engineering Specification:**

Trench drain shall be DuraTrench as manufactured by Eric'sons, 574C Industrial Way N., Dallas, GA 30132 - (770-505-6575). The trench drain body shall be composed of polyester fiber reinforced polymer concrete. The trench shall have a 24" clear open throat and have a rounded or flat bottom as indicated in details. The trench body shall be gray in color to closely resemble the color of concrete and have a smooth interior for improved flow rates and reduced debris build-up. Sections shall be 96" long (typical) and have a 2" receiving flange on the upstream end for receiving and sealing the trench sections together. Each of the sections shall be labeled to indicate proper flow and placement. The trench body shall mate to the frame and form a grate seat that shall accept the specified grate. The body shall be supplied with a factory fit top for rail alignment and fastening of the channels in the field ensuring that the rails are cast in a coplanar manner. The trench body shall have the following properties: 12,600 psi minimum tensile strength per ASTM C307, 11,600 psi. minimum compressive strength per ASTM C579, 26,500 psi minimum flexural strength per ASTM C580, less than 0.35% water absorption, shall be frost proof, salt proof, and be resistant to dilute acids and alkalis per ASTM C267.

\*shown here with the HDGS frame



TYPICAL DTPF24 TRENCH SECTION



\*shown here with the HDBP frame

### **Engineering Specification:**

Trench drain shall be DuraTrench as manufactured by Eric'sons, 574C Industrial Way N., Dallas, GA 30132 - (770-505-6575). The trench drain body shall be composed of polyester fiber reinforced polymer concrete. The trench shall have a 36" clear open throat and have a rounded or flat bottom as indicated in details. The trench body shall be gray in color to closely resemble the color of concrete and have a smooth interior for improved flow rates and reduced debris build-up. Sections shall be 96" long (typical) and have a 2" receiving flange on the upstream end for receiving and sealing the trench sections together. Each of the sections shall be labeled to indicate proper flow and placement. The trench body shall mate to the frame and form a grate seat that shall accept the specified grate. The body shall be supplied with a factory fit top for rail alignment and fastening of the channels in the field ensuring that the rails are cast in a coplanar manner. The trench body shall have the following properties: 12,600 psi minimum tensile strength per ASTM C307, 11,600 psi. minimum compressive strength per ASTM C579, 26,500 psi minimum flexural strength per ASTM C580, less than 0.35% water absorption, shall be frost proof, salt proof, and be resistant to dilute acids and alkalis per ASTM C267.

# SYSTEM CHARACTERISTICS:

- General Purpose Drain
- Typical for flows up to 60 cfs (27,000 gpm)
- Heavy debris loading
- All load classes

FRAME OPTIONS	MDGS, MDSS, MDAL, HDBP, HDGS, HDSS, HDFG, EXGS, EXSS, EXDI, CUSTOM
GRATES	38" WIDE GRATES
SYSTEM DEPTH	6" - 48" TYP (3" MIN DEPTH WITH RECT BOTTOM)
SECTION LENGTH	8' TYP (16' OR LONGER OPTION)
SLOPE	0.5% & 1% OR SPECIFY INVERTS



# DTPF48

\*shown here with the HDSS frame

# **Engineering Specification:**

Trench drain shall be DuraTrench as manufactured by Eric'sons, 574C Industrial Way N., Dallas, GA 30132 - (770-505-6575). The trench drain body shall be composed of polyester fiber reinforced polymer concrete. The trench shall have a 48" clear open throat and have a rounded or flat bottom as indicated in details. The trench body shall be gray in color to closely resemble the color of concrete and have a smooth interior for improved flow rates and reduced debris build-up. Sections shall be 96" long (typical) and have a 2" receiving flange on the upstream end for receiving and sealing the trench sections together. Each of the sections shall be labeled to indicate proper flow and placement. The trench body shall mate to the frame and form a grate seat that shall accept the specified grate. The body shall be supplied with a factory fit top for rail alignment and fastening of the channels in the field ensuring that the rails are cast in a coplanar manner. The trench body shall have the following properties: 12,600 psi minimum tensile strength per ASTM C307, 11,600 psi. minimum compressive strength per ASTM C579, 26,500 psi minimum flexural strength per ASTM C580, less than 0.35% water absorption, shall be frost proof, salt proof, and be resistant to dilute acids and alkalis per ASTM C267.

# SYSTEM CHARACTERISTICS:

- General Purpose Drain
- Typical for flows up to 90 cfs (40,000 gpm)
- Heavy debris loading
- All load classes

FRAME OPTIONS	MDGS, MDSS, MDAL, HDBP, HDGS, HDSS, HDFG, EXGS, EXSS, EXDI, CUSTOM
GRATES	50" WIDE GRATES
SYSTEM DEPTH	6" - 48" TYP (3" MIN DEPTH WITH RECT BOTTOM)
SECTION LENGTH	8' TYP (16' OR LONGER OPTION)
SLOPE	0.5% & 1% OR SPECIFY INVERTS



# **CUSTOM OPTIONS**

# **DOUBLE CONTAINMENT**

# END TREATMENTS



# **INTERNAL WIERS**

# SPECIAL PROFILES



# **SIDE BY SIDE DRAINS**

# **CUSTOM FRAMES**

# **FLOW CONTROL DESIGNS**

# **CLAMPING COLLARS**

# **YOU DREAM IT - WE BUILD IT!**

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# **SLOTTED DRAIN (DTSP)**

# LOAD BEARING FRAME

FRAME WITH STUDS TRANSFERS LOAD TO SURROUNDING CONCRETE NOT TO SLOT DRAIN BODY.

- HEEL PROOF, ADA COMPLIANT SLOT OFFERED OR HIGH FLOW BICYCLE SAFE MATERIAL OPTIONS INCLUDE:
  - POWDER COATED STEEL GALVANIZED STEEL STAINLESS STEEL

JOINTS

LARGE 2" INTEGRAL BELL CONNECTIONS WATERTIGHT SEAL ATTAINABLE WITH APPROPRIATE SEALANT

# SMOOTH INTERIOR

INCREASED FLOWS LESS SEDIMENT BUILD-UP

# VARIABLE HEIGHT RISER

0.5% AND 1% SLOPE STANDARD CUSTOM SLOPES OFFERED

# **SLOT PIPE BODY**

- 10' LENGTHS TYPICAL
- DIAMETERS OF 4", 6", 8", 12", 15", 18", 21", 24", AND 36"
- CUSTOM SLOT AND PIPE WIDTHS

### INSTALLATION DEVICES

- ADJUST SLOT PIPE TO GRADE
- RESIST FLOTATION FORCES
- RIGID METAL BRACKET WON'T BREAK DURING CONSTRUCTION

# **STANDARD SIZES** 4", 6", 8", 12", 15" 18", 21", 24", 36'



The Dura-Trench slot drain system is a modern advancement of the classic metal slot drain system. The interior of the DuraTrench slot drain is ultra-smooth to increase flow rates and reduce debris build up. With proper slope, scouring velocities are easily achieved. The heavy duty frames have an external flange and concrete anchors to provide proper bearing area for load transfer into the concrete. This is very important for the long term durability of a slot drain in heavy traffic applications. Unlike other slot drain designs, the load is transferred to the concrete instead of the slot pipe body. The Dura Trench slot drain comes standard with installation devices. These installation devices offer a way to level the slot drain and assist in anchoring and aligning the slot drain. The installation aides ensure proper concrete consolidation under the slot drain can be achieved. Variable height risers are also standard. This gives the designer the desired slope, flow, and cleaning velocities.



**Dura-Trench Slot Pipe** 



size outlet pipe connection desired, molded directly into the system for easy field connection to the drainage piping system. Clean-out chambers are offered for access

Slotted drains typically outlet with a pipe out the end or by using a catch basin. The Dura-Trench system is offered with any

to the slot drain at strategic locations. It is recommended that clean out chambers be placed at any turns, intersections, and at 100' intervals in the slot drain system to aide in the system maintenance.



Slot drain applications include parks, roads, fountains, aircraft parking aprons, loading docks, industrial areas, and numerous others. The slot drain pipes can be very large to extremely small depending on the required flows. The slot opening can be configured for ADA compliance & heel proof requirements. The low profile high flow slot drain is a reliable and long lasting linear drain option.







- General Purpose Drain
- Typical for flows up to 0.25 cfs (110 gpm)
- Light debris loading
- All load classes

FRAME OPTIONS	MDSPBP, MDSPAL, MDSPGS, MDSPSS, HDSPBP, HDSPGS, HDSPSS, CUSTOM
SYSTEM DEPTH	6" - 34" TYP
SECTION LENGTH	10' TYP (20' OPTION)
SLOPE	0.5% & 1% OR SPECIFY INVERTS

\*shown here with the MDSPAL frame

### **Engineering Specification:**

Slotted Pipe shall be DuraTrench as manufactured by Eric'sons, 574C Industrial Way N., Dallas, GA 30132 - (770-505-6575). The slot pipe body shall be composed of polyester fiber reinforced polymer concrete. The slot pipe body shall have an internal dimension of 4" and have a smooth interior for improved flow rates and reduced debris build-up. Sections shall be 120" long (typical), have a variable height riser with a 0.5% slope minimum (or as indicated on the plans), and have a 2" receiving flange on the upstream end for receiving the previous slot drain section. Each of the sections shall be labeled to indicate proper flow and placement. The slot pipe body shall mate to the load bearing frame. The slot pipe body shall have the following properties: 12,600 psi minimum tensile strength per ASTM C307, 11,600 psi. minimum compressive strength per ASTM C579, 26,500 psi minimum flexural strength per ASTM C580, less than 0.35% water absorption, shall be frost proof, salt proof, and be resistant to dilute acids and alkalis per ASTM C267.



TYPICAL DTSP4 SLOT DRAIN SECTION



# SYSTEM CHARACTERISTICS:

- Specialty Drain
- Typical for flows up to 0.25 cfs (110 gpm)
- Light debris loading
- Light loading

FRAME OPTIONS	MDSPBP, MDSPAL, MDSPGS, CUSTOM
SYSTEM DEPTH	6" - 34" TYP
SECTION LENGTH	10' TYP (20' OPTION)
SLOPE	0.5% & 1% OR SPECIFY INVERTS



### **Engineering Specification:**

Slotted Pipe shall be DuraTrench as manufactured by Eric'sons, 574C Industrial Way N., Dallas, GA 30132 - (770-505-6575). The slot pipe body shall be composed of polyester fiber reinforced polymer concrete. The slot pipe body shall have an internal dimension of 4" and have a smooth interior for improved flow rates and reduced debris build-up. The throat shall be offset so the drain can be closely placed against a vertical obstruction. Sections shall be 120" long (typical), have a variable height riser with a 0.5% slope minimum (or as indicated on the plans), and have a 2" receiving flange on the upstream end for receiving the previous slot drain section. Each of the sections shall be labeled to indicate proper flow and placement. The slot pipe body shall mate to the load bearing frame. The slot pipe body shall have the following properties: 12,600 psi minimum tensile strength per ASTM C307, 11,600 psi. minimum compressive strength per ASTM C579, 26,500 psi minimum flexural strength per ASTM C580, less than 0.35% water absorption, shall be frost proof, salt proof, and be resistant to dilute acids and alkalis per ASTM C267.

TYPICAL DTOSSP4 OFFSET SLOT DRAIN SECTION

**DTSP6** 

**Engineering Specification:** 

# SYSTEM CHARACTERISTICS:

- General Purpose Drain
- Typical for flows up to 0.8 cfs (350 gpm)
- Light debris loading
- All load classes

FRAME OPTIONS	MDSPBP, MDSPAL, MDSPGS, MDSPSS, HDSPBP, HDSPGS, HDSPSS, CUSTOM
SYSTEM DEPTH	8" - 36" TYP
SECTION LENGTH	10' TYP (20' OPTION)
SLOPE	0.5% & 1% OR SPECIFY INVERTS
	1



\*shown here with the HDSPBP frame

Slotted Pipe shall be DuraTrench as manufactured by Eric'sons, 574C Industrial Way N., Dallas, GA 30132 - (770-505-6575). The slot pipe body shall be

composed of polyester fiber reinforced polymer concrete. The slot pipe body

plans), and have a 2" receiving flange on the upstream end for receiving the

previous slot drain section. Each of the sections shall be labeled to indicate proper flow and placement. The slot pipe body shall mate to the load bearing

frame. The slot pipe body shall have the following properties: 12,600 psi minimum tensile strength per ASTM C307, 11,600 psi. minimum compressive strength per ASTM C579, 26,500 psi minimum flexural strength per ASTM C580, less than 0.35% water absorption, shall be frost proof, salt proof, and be

resistant to dilute acids and alkalis per ASTM C267.

shall have an internal dimension of 6" and have a smooth interior for improved flow rates and reduced debris build-up. Sections shall be 120" long (typical), have a variable height riser with a 0.5% slope minimum (or as indicated on the

# SYSTEM CHARACTERISTICS:

- Specialty Drain
- Typical for flows up to 0.8 cfs (350 gpm)
- Light debris loading
- Light loading

FRAME OPTIONS	MDSPBP, MDSPAL, MDSPGS, CUSTOM
SYSTEM DEPTH	8" - 36" TYP
SECTION LENGTH	10' TYP (20' OPTION)
SLOPE	0.5% & 1% OR SPECIFY INVERTS



Slotted Pipe shall be DuraTrench as manufactured by Eric'sons, 574C Industrial Way N., Dallas, GA 30132 - (770-505-6575). The slot pipe body shall be composed of polyester fiber reinforced polymer concrete. The slot pipe body shall have an internal dimension of 6" and have a smooth interior for improved flow rates and reduced debris build-up. The throat shall be offset so the drain can be closely placed against a vertical obstruction. Sections shall be 120" long (typical), have a variable height riser with a 0.5% slope minimum (or as indicated on the plans), and have a 2" receiving flange on the upstream end for receiving the previous slot drain section. Each of the sections shall be labeled to indicate proper flow and placement. The slot pipe body shall mate to the load bearing frame. The slot pipe body shall have the following properties: 12,600 psi minimum tensile strength per ASTM C307, 11,600 psi. minimum compressive strength per ASTM C579, 26,500 psi minimum flexural strength per ASTM C580, less than 0.35% water absorption, shall be frost proof, salt proof, and be resistant to dilute acids and alkalis per ASTM C267.



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TYPICAL DTOSSP6 OFFSET SLOT DRAIN SECTION



- General Purpose Drain
- Typical for flows up to 1.75 cfs (775 gpm)
- Moderate debris loading
- All load classes

FRAME OPTIONS	HDSPBP, HDSPGS, HDSPSS, EXBP, EXGS, EXSS, CUSTOM
SYSTEM DEPTH	11" - 44" TYP
SECTION LENGTH	10' TYP (20' OPTION)
SLOPE	0.5% & 1% OR SPECIFY INVERTS

# **Engineering Specification:**

Slotted Pipe shall be DuraTrench as manufactured by Eric'sons, 574C Industrial Way N., Dallas, GA 30132 - (770-505-6575). The slot pipe body shall be composed of polyester fiber reinforced polymer concrete. The slot pipe body shall have an internal dimension of 8" and have a smooth interior for improved flow rates and reduced debris build-up. Sections shall be 120" long (typical), have a variable height riser with a 0.5% slope minimum (or as indicated on the plans), and have a 2" receiving flange on the upstream end for receiving the previous slot drain section. Each of the sections shall be labeled to indicate proper flow and placement. The slot pipe body shall mate to the load bearing frame. The slot pipe body shall have the following properties: 12,600 psi minimum tensile strength per ASTM C307, 11,600 psi. minimum compressive strength per ASTM C579, 26,500 psi minimum flexural strength per ASTM C580, less than 0.35% water absorption, shall be frost proof, salt proof, and be resistant to dilute acids and alkalis per ASTM C267.





# SYSTEM CHARACTERISTICS:

- General Purpose Drain
- Typical for flows up to 5 cfs (2250 gpm)
- Moderate debris loading
- All load classes

FRAME OPTIONS	HDSPBP, HDSPGS, HDSPSS, EXBP, EXGS, EXSS, CUSTOM
SYSTEM DEPTH	15" - 48" TYP
SECTION LENGTH	10' TYP (20' OPTION)
SLOPE	0.5% & 1% OR SPECIFY INVERTS



Slotted Pipe shall be DuraTrench as manufactured by Eric'sons, 574C Industrial Way N., Dallas, GA 30132 - (770-505-6575). The slot pipe body shall be composed of polyester fiber reinforced polymer concrete. The slot pipe body shall have an internal dimension of 12" and have a smooth interior for improved flow rates and reduced debris build-up. Sections shall be 120" long (typical), have a variable height riser with a 0.5% slope minimum (or as indicated on the plans), and have a 2" receiving flange on the upstream end for receiving the previous slot drain section. Each of the sections shall be labeled to indicate proper flow and placement. The slot pipe body shall mate to the load bearing frame. The slot pipe body shall have the following properties: 12,600 psi minimum tensile strength per ASTM C307, 11,600 psi. minimum compressive strength per ASTM C579, 26,500 psi minimum flexural strength per ASTM C580, less than 0.35% water absorption, shall be frost proof, salt proof, and be resistant to dilute acids and alkalis per ASTM C267.





- General Purpose Drain
- Typical for flows up to 9 cfs (4000 gpm)
- Moderate debris loading
- All load classes

FRAME OPTIONS	HDSPBP, HDSPGS, HDSPSS, EXBP, EXGS, EXSS, CUSTOM
SYSTEM DEPTH	18" - 51" TYP
SECTION LENGTH	10' TYP (20' OPTION)
SLOPE	0.5% & 1% OR SPECIFY INVERTS

LOAD BEARING FRAME AS SPECIFIED

CONCRETE AND REINFORCING PER STRUCTURAL ENGINEER REQUIREMENTS (4" MINIMUM CONCRETE AROUND SLOT PIPE)

INSTALLATION BRACKETS FOR ALIGNING AND ANCHORING SLOT PIPE SECTIONS

#4 REBAR INSTALLATION LEGS

COMPACTED EARTH

### **Engineering Specification:**

Slotted Pipe shall be DuraTrench as manufactured by Eric'sons, 574C Industrial Way N., Dallas, GA 30132 - (770-505-6575). The slot pipe body shall be composed of polyester fiber reinforced polymer concrete. The slot pipe body shall have an internal dimension of 15" and have a smooth interior for improved flow rates and reduced debris build-up. Sections shall be 120" long (typical), have a variable height riser with a 0.5% slope minimum (or as indicated on the plans), and have a 2" receiving flange on the upstream end for receiving the previous slot drain section. Each of the sections shall be labeled to indicate proper flow and placement. The slot pipe body shall mate to the load bearing frame. The slot pipe body shall have the following properties: 12,600 psi minimum tensile strength per ASTM C307, 11,600 psi. minimum compressive strength per ASTM C579, 26,500 psi minimum flexural strength per ASTM C580, less than 0.35% water absorption, shall be frost proof, salt proof, and be resistant to dilute acids and alkalis per ASTM C267.



# SYSTEM CHARACTERISTICS:

- General Purpose Drain
- Typical for flows up to 15 cfs (6750 gpm)
- Moderate debris loading
- All load classes

PRECAST POLYMER SLOT PIPE BODY

FRAME OPTIONS	HDSPBP, HDSPGS, HDSPSS, EXBP, EXGS, EXSS, CUSTOM
SYSTEM DEPTH	21" - 54" TYP
SECTION LENGTH	10' TYP (20' OPTION)
SLOPE	0.5% & 1% OR SPECIFY INVERTS

TYPICAL DTSP15-EXBP SLOT DRAIN

### **Engineering Specification:**

Slotted Pipe shall be DuraTrench as manufactured by Eric'sons, 574C Industrial Way N., Dallas, GA 30132 - (770-505-6575). The slot pipe body shall be composed of polyester fiber reinforced polymer concrete. The slot pipe body shall have an internal dimension of 18" and have a smooth interior for improved flow rates and reduced debris build-up. Sections shall be 120" long (typical), have a variable height riser with a 0.5% slope minimum (or as indicated on the plans), and have a 2" receiving flange on the upstream end for receiving the previous slot drain section. Each of the sections shall be labeled to indicate proper flow and placement. The slot pipe body shall mate to the load bearing frame. The slot pipe body shall have the following properties: 12,600 psi minimum tensile strength per ASTM C307, 11,600 psi. minimum compressive strength per ASTM C579, 26,500 psi minimum flexural strength per ASTM C580, less than 0.35% water absorption, shall be fost proof, salt proof, and be resistant to dilute acids and alkalis per ASTM C267.





- General Purpose Drain
- Typical for flows up to 23 cfs (10,300 gpm)
- Heavy debris loading •
- All load classes

FRAME OPTIONS	HDSPBP, HDSPGS, HDSPSS, EXBP, EXGS, EXSS, CUSTOM
SYSTEM DEPTH	24" - 57" TYP
SECTION LENGTH	10' TYP (20' OPTION)
SLOPE	0.5% & 1% OR SPECIFY INVERTS

LOAD BEARING FRAME PER SPECIFICATION

CONCRETE AND REINFORCING PER STRUCTURAL ENGINEER REQUIREMENTS (4° MINIMUM CONCRETE AROUND SLOT PIP



Slotted Pipe shall be DuraTrench as manufactured by Eric'sons, 574C Industrial Way N., Dallas, GA 30132 - (770-505-6575). The slot pipe body shall be composed of polyester fiber reinforced polymer concrete. The slot pipe body shall have an internal dimension of 21" and have a smooth interior for improved flow rates and reduced debris build-up. Sections shall be 120" long (typical), have a variable height riser with a 0.5% slope minimum (or as indicated on the plans), and have a 2" receiving flange on the upstream end for receiving the previous slot drain section. Each of the sections shall be labeled to indicate proper flow and placement. The slot pipe body shall mate to the load bearing frame. The slot pipe body shall have the following properties: 12,600 psi minimum tensile strength per ASTM C307, 11,600 psi. minimum compressive strength per ASTM C579, 26,500 psi minimum flexural strength per ASTM C580, less than 0.35% water absorption, shall be frost proof, salt proof, and be resistant to dilute acids and alkalis per ASTM C267.



### INSTALLATION DRACKETS FOR ALIGNING AND ANCHORING SLOT PIPE SECTIONS T 4 REBAR INSTALLATION LEGS PRECAST POLYMER SLOT PIPE BODY THEFT COMPACTED EARTH TYPICAL DTSP21 SLOT DRAIN

# SYSTEM CHARACTERISTICS:

ΠĽ

- General Purpose Drain
- Typical for flows up to 32 cfs (14,250 gpm) •
- Heavy debris loading
- All load classes

FRAME OPTIONS	HDSPBP, HDSPGS, HDSPSS, EXBP, EXGS, EXSS, CUSTOM
SYSTEM DEPTH	27" - 60" TYP
SECTION LENGTH	10' TYP (20' OPTION)
SLOPE	0.5% & 1% OR SPECIFY INVERTS

# **Engineering Specification:**

Slotted Pipe shall be DuraTrench as manufactured by Eric'sons, 574C Industrial Way N., Dallas, GA 30132 - (770-505-6575). The slot pipe body shall be composed of polyester fiber reinforced polymer concrete. The slot pipe body shall have an internal dimension of 24" and have a smooth interior for improved flow rates and reduced debris build-up. Sections shall be 120" long (typical), have a variable height riser with a 0.5% slope minimum (or as indicated on the plans), and have a 2" receiving flange on the upstream end for receiving the previous slot drain section. Each of the sections shall be labeled to indicate proper flow and placement. The slot pipe body shall mate to the load bearing frame. The slot pipe body shall have the following properties: 12,600 psi minimum tensile strength per ASTM C307, 11,600 psi. minimum compressive strength per ASTM C579, 26,500 psi minimum flexural strength per ASTM C580, less than 0.35% water absorption, shall be frost proof, salt proof, and be resistant to dilute acids and alkalis per ASTM C267.



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TYPICAL DTSP21 SLOT DRAIN



- General Purpose Drain
- Typical for flows up to 96 cfs (43,000 gpm) •
- Heavy debris loading •

PRECAST POL

All load classes

FRAME OPTIONS	HDSPBP, HDSPGS, HDSPSS, EXBP, EXGS, EXSS, CUSTOM
SYSTEM DEPTH	39" - 72" TYP
SECTION LENGTH	10' TYP (20' OPTION)
SLOPE	0.5% & 1% OR SPECIFY INVERTS

TYPICAL DISPSE SLOT DRAIN

N & THK BLACK POWDER STRUCTURAL STEEL FRAM

INSTALLATION BRACKETS FOR ALLENING AND ANCHE SLOT PIPE SECTIONS

REBAR INSTALLATION LEG

\*shown here with the HDSPGS frame

Engineering Specification: Slotted Pipe shall be DuraTrench as manufactured by Eric'sons, 574C Industrial Way N., Dallas, GA 30132 - (770-505-6575). The slot pipe body shall be composed of polyester fiber reinforced polymer concrete. The slot pipe body shall be shall have an internal dimension of 36" and have a smooth interior for improved flow rates and reduced debris build-up. Sections shall be 120" long (typical), have a variable height riser with a 0.5% slope minimum (or as indicated on the plans), and have a 2" receiving flange on the upstream end for receiving the previous slot drain section. Each of the sections shall be labeled to indicate proper flow and placement. The slot pipe body shall mate to the load bearing frame. The slot pipe body shall have the following properties: 12,600 psi minimum tensile strength per ASTM C307, 11,600 psi. minimum compressive strength per ASTM C579, 26,500 psi minimum flexural strength per ASTM C580, less than 0.35% water absorption, shall be frost proof, salt proof, and be resistant to dilute acids and alkalis per ASTM C267.

# **CLEAN OUT PORTS**

# FRAMES TO MATCH SYSTEM

ALL FRAME MATERIALS AND FINISHES OFFERED WELDED TO SLOT PIPE FRAME

### NUMEROUS GRATE OPTIONS

CHOOSE ANY SIZE OR STYLE GRATE GRATES CAN BE LOCKED IN PLACE

# **INTEGRAL CLEAN OUT BOXES**

- MULTIPLE SIZES FAST INSTALLATION
- CAN BE OFFSET TO EITHER SIDE OR CENTERED ON SLOT DRAIN
- CAN BE AT ANY INTERVAL ALONG PIPE



# **TRUE RADIUS TRENCHES (DTRPF)**

# **STANDARD**

SIZES 2" ID 4" ID 6" ID 8" ID 10" ID 12" ID 18" ID 24" ID



# **RADIUS TRENCHES**

- TRUE RADIUS TRENCH
- ANY RADIUS
- GRATE OPTIONS INCLUDE ALUMINUM, STAINLESS STEEL, GALVANIZED STEEL, DUCTILE IRON, BRONZE, PLASTIC, STONE
- WIDE ARRAY OF GRATE PATTERNS
- ANY WIDTH TRENCH
- DURABLE PREFABRICATED BODY
- EASY INSTALLATION





OF TRENCH PROTECTS AND GIVES INSTALLER A PLACE TO ATTACH BRACES WIDE SELECTION OF TRUE RADIUS FRAME OPTIONS FOR ALL APPLICATIONS

SMOOTH RADIUS POLYMER TRENCH BODY WITH BUILT IN SLOPE CONCRETE ANCHORS

2" OVERLAP BELL

CAN BE SEALED

WATER TIGHT

RIGID METAL INSTALLATION BRACKETS ACCEPT #4 REBAR

LABEL SHOWS FLOW DIRECTION AND PART NUMBER

We are the premier manufacturer of true radius trench drains Standard widths are 2", 4", 6", 8", 10", 12", 18", 24" Any radius can be specified. Standard lengths are 8' long with smooth radius for fast installation!



Dura-Trench offers custom built radius trenches to the customer's specifications. The possibilities are limitless and any design or concept can be achieved with this system. Frames and grates can be virtually a n y m aterial. With the prefabricated trench bodies it makes the construction easy for contractors of any skill level. By specifying Dura-Trench you are sure to get the look you want.

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# **RADIUS SLOT PIPE (DTRSP)**

STANDARD SIZES 4" ID 6" ID 8" ID 8" ID 10" ID

The beauty of a slot drain is that it can be almost invisible

# **RADIUS SLOT PIPE**

- TRUE RADIUS SLOT PIPE
- ANY RADIUS
- FRAME OPTIONS INCLUDE ALUMINUM, STAINLESS STEEL, GALVANIZED STEEL, DUCTILE IRON, BRONZE, PLASTIC
- CAN HAVE OFFSET THROAT FOR PLACEMENT FLUSH AGAINST STRUCTURES
- DURABLE PREFABRICATED BODY
- EASY INSTALLATION







### LOAD BEARING FRAME

 NARROW REVEAL FRAME OR HEAVY DUTY WIDE LOAD TRANSFER FRAMES OFFERED.
 HEEL PROOF, ADA COMPLIANT SLOT OFFERED OR HIGH FLOW BICYCLE SAFE

BEFORE

 LARGE 2" INTEGRAL BELL CONNECTIONS
 WATERTIGHT SEAL ATTAINABLE WITH APPROPRIATE SEALANT

### **SMOOTH INTERIOR**

INCREASED FLOWSLESS SEDIMENT BUILD-UP

# 0.5% AND 1% SLOPE STANDARD

VARIABLE HEIGHT RISER

CUSTOM SLOPES OFFERED

# **INSTALLATION DEVICES**

ADJUST SLOT PIPE TO GRADE

- RESIST FLOTATION FORCES
- RIGID METAL BRACKET WON'T BREAK DURING CONSTRUCTION

# RADIUS SLOT PIPE BODY

- 8' LENGTHS TYPICAL
- DIAMETERS OF 4", 6", 8", AND 10"
- CUSTOM SLOT AND PIPE WIDTHS



AFTER

# **STAINLESS TRENCH (DTSS)**



18" ID 24" ID



# **INSTALLATION**

- SHIPS FULLY ASSEMBLED
- PLYWOOD TOP FOR SAFETY
- PLYWOOD KEEPS CONCRETE OUT DURING CONCRETE OUT DURING

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- CONSTRUCTION
- EASILY ATTACH BRACES TO WOOD TOP

# <u>SLOPE</u>

0.5% AND 1% SLOPE STANDARD
 CUSTOM SLOPES OFFERED

# CONCRETE ANCHORS

 18" O.C. TYPICAL
 3" X 3/8" THICK FOR DURABILITY
 EXTENDS SYSTEM LIFE IN TRAFFIC APPLICATIONS

# **INSTALLATION DEVICES**

- ADJUST TRENCH TO GRADE
- RESIST FLOTATION FORCES
  - RIGID METAL BRACKET WON'T
  - BREAK OFF DURING CONSTRUCTION

# TRENCH BODY

- 8' LENGTHS TYPICAL
- OFFERED IN LENGTHS UP TO 50'
- WIDTHS OF 4", 8", 10", 12", 18", AND 24"
- CUSTOM WIDTHS

# **STAINLESS TRENCHES**

- OFFERED IN T304 OR T316
- LONG SECTIONS REDUCE JOINTS
- ALL JOINTS HAVE FLANGES THAT CAN BE BOLTED OR WELDED WATER TIGHT
- CLAMPING COLLARS OFFERED FOR MEMBRANE APPLICATIONS
- BUILT IN SLOPE
- WATER TIGHT END PLATES AND OUTLETS
- TAILORED TO CUSTOMER NEEDS







- Specialty drain
- Sanitary or Chemical processing applications
- Typical for flows up to 0.3 cfs (150 gpm)
- Light debris loading
- All load classes

MATERIAL	16GA TYP (14GA & 12GA OPTIONAL) T304 TYP (T316 OPTIONAL)
FRAME	INTEGRAL FORMED FRAME
GRATES	3" WIDE GRATES
SYSTEM DEPTH	1.5" - 12" TYP
SECTION LENGTH	8' TYP (SECTIONS UP TO 50' LONG)
SLOPE	0.5% & 1% OR SPECIFY INVERTS



Engineering Specification: Trench drain shall be Dura Trench as manufactured by Eric'sons, 574C Industrial Way N., Dallas, GA 30132 - (770-505-6575). The trench drain body shall be constructed from 16ga T304 stainless steel and have a minimum clear opening of 2". Trench invert shall have a rectangular bottom. Sections shall be 96" long (typical), but can be fabricated in longer lengths as required(up to 50' lengths possible) and have a built in slope of 1/8" per foot (typical). The sections shall bolt together via a flange and can be sealed with a gasket or by on site welding. Each of the sections shall be labeled to indicate proper flow and placement. Trench body shall have a class 2b finish standard. Optional mill or bead blast finish as required on the contract documents.



TYPICAL DTSS2 TRENCH SECTION

# SYSTEM CHARACTERISTICS:

- Specialty drain
- Sanitary or Chemical processing applications
- Typical for flows up to 0.1 cfs (40 gpm)
- Light debris loading

RIGID METAL INSTALLATION BRACKETS FOR ALIGNING AND ANCHORING TRENCH SECTIONS

#4 INSTALLATION BARS

INVERT VARIES

All load classes

MATERIAL	16GA TYP (14GA & 12GA OPTIONAL) T304 TYP (T316 OPTIONAL)
FRAME	INTEGRAL FORMED FRAME
GRATES	NA
SYSTEM DEPTH	3" - 24" TYP
SECTION LENGTH	8' TYP (SECTIONS UP TO 50' LONG)
SLOPE	0.5% & 1% OR SPECIFY INVERTS

T304 STAINLESS STEEL SLOT DRAIN WITH INTEGRATED FRAME

CONCRETE AND REINFORCING PER STRUCTURAL ENGINEER REQUIREMENTS (4" MINIMUM CONCRETE AROUND SLOT PIPE)

COMPACTED EARTH



Slot drain shall be Dura Trench as manufactured by Eric'sons, 574C Industrial Way N., Dallas, GA 30132 - (770-505-6575). The slot drain body shall be constructed from 16ga T304 stainless steel and have a minimum clear opening of 2.5" I.D. The throat shall have a 3/4" opening. Trench invert shall be Vshaped. Sections shall be 96" long (typical), but can be fabricated in longer lengths as required(up to 50' lengths possible) and have a built in slope of 1/8" per foot (typical). The sections shall bolt together via a flange and can be sealed with a gasket or by on site welding. Each of the sections shall be labeled to indicate proper flow and placement. Trench body shall have a mill finish standard. Optional sand blast finish as required on the contract documents.

TYPICAL DTSS2 TRENCH SECTION

MINIMUM







- Specialty drain
- Sanitary or Chemical processing applications
- Typical for flows up to 1.5 cfs (700 gpm)
- Light debris loading
- All load classes

and the second se	
MATERIAL	14GA TYP (16GA & 12GA OPTIONAL) T304 TYP (T316 OPTIONAL)
FRAME	INTEGRAL FORMED FRAME
GRATES	5" WIDE GRATES
SYSTEM DEPTH	2" - 18" TYP
SECTION LENGTH	8' TYP (SECTIONS UP TO 50' LONG)
SLOPE	0.5% & 1% OR SPECIFY INVERTS



Trench drain shall be Dura Trench as manufactured by Eric'sons, 574C Industrial Way N., Dallas, GA 30132 - (770-505-6575). The trench drain body shall be constructed from 14ga T304 stainless steel and have a minimum clear opening of 4". Trench invert shall be V-shaped or flat bottom as indicated in the plans. Sections shall be 96" long (typical), but can be fabricated in longer lengths as required(up to 50' lengths possible) and have a built in slope of 1/8" per foot (typical). The sections shall bolt together via a flange and can be sealed with a gasket or by on site welding. Each of the sections shall be labeled to indicate proper flow and placement. Trench body shall have a mill finish standard. Optional sand blast finish as required on the contract documents.



TYPICAL DTSS4 TRENCH SECTION

# SYSTEM CHARACTERISTICS:

- Specialty drain
- Sanitary or Chemical processing applications
- Typical for flows up to 0.3 cfs (125 gpm)
- Light debris loading

RIGID METAL INSTALLATION BRACKETS FOR ALIGNING AND ANCHORING TRENCH SECTIONS

INVERT VARIES

#4 INSTALLATION BARS

All load classes

MATERIAL	16GA TYP (14GA & 12GA OPTIONAL) T304 TYP (T316 OPTIONAL)
FRAME	INTEGRAL FORMED FRAME
GRATES	NA
SYSTEM DEPTH	2" - 18" TYP
SECTION LENGTH	8' TYP (SECTIONS UP TO 50' LONG)
SLOPE	0.5% & 1% OR SPECIFY INVERTS

T304 STAINLESS STEEL SLOT DRAIN WITH INTEGRATED FRAME

> -CONCRETE AND REINFORCING PER STRUCTURAL ENGINEER REQUIREMENTS (4" MINIMUM CONCRETE AROUND SLOT PIPE)

COMPACTED EARTH



Slot drain shall be Dura Trench as manufactured by Eric'sons, 574C Industrial Way N., Dallas, GA 30132 - (770-505-6575). The slot drain body shall be constructed from 16ga T304 stainless steel and have a minimum clear opening of 2" I.D. The throat shall have a 3/4" opening. Trench invert shall be V-shaped. Sections shall be 96" long (typical), but can be fabricated in longer lengths as required(up to 50' lengths possible) and have a built in slope of 1/8" per foot (typical). The sections shall bolt together via a flange and can be sealed with a gasket or by on site welding. Each of the sections shall be labeled to indicate proper flow and placement. Trench body shall have a mill finish standard. Optional sand blast finish as required on the contract documents.



4" MINIMUM

DTSSP4







- Specialty drain
- Sanitary or Chemical processing applications
- Typical for flows up to 3.9 cfs (1750 gpm)
- Moderate debris loading
- All load classes

MATERIAL	14GA TYP (16GA & 12GA OPTIONAL) T304 TYP (T316 OPTIONAL)
FRAME	INTEGRAL FORMED FRAME
GRATES	8" WIDE GRATES
SYSTEM DEPTH	3" - 24" TYP
SECTION LENGTH	8' TYP (SECTIONS UP TO 50' LONG)
SLOPE	0.5% & 1% OR SPECIFY INVERTS



DTSS8

Engineering Specification: Trench drain shall be Dura Trench as manufactured by Eric'sons, 574C Industrial Way N., Dallas, GA 30132 - (770-505-6575). The trench drain body shall be constructed from 14ga T304 stainless steel and have a minimum clear opening of 6". Trench invert shall be V-shaped or flat bottom as indicated in the plans. Sections shall be 96" long (typical), but can be fabricated in longer lengths as required(up to 50' lengths possible) and have a built in slope of 1/8" per foot (typical). The sections shall bolt together via a flange and can be sealed with a gasket or by on site welding. Each of the sections shall be labeled to indicate proper flow and placement. Trench body shall have a mill finish standard. Optional sand blast finish as required on the contract documents.

# SYSTEM CHARACTERISTICS:

- Specialty drain
- Sanitary or Chemical processing applications
- Typical for flows up to 6 cfs (2775 gpm)
- Moderate debris loading
- All load classes

ΜΑΤΕΡΙΑΙ	
	T304 TYP (T316 OPTIONAL)
FRAME	INTEGRAL FORMED FRAME
GRATES	10" WIDE GRATES
SYSTEM DEPTH	3" - 24" TYP
SECTION LENGTH	8' TYP (SECTIONS UP TO 50' LONG)
SLOPE	0.5% & 1% OR SPECIFY INVERTS

# **Engineering Specification:**

Trench drain shall be Dura Trench as manufactured by Eric'sons, 574C Industrial Way N., Dallas, GA 30132 - (770-505-6575). The trench drain body shall be constructed from 14ga T304 stainless steel and have a minimum clear opening of 8". Trench invert shall be V-shaped or flat bottom as indicated in the plans. Sections shall be 96" long (typical), but can be fabricated in longer lengths as required(up to 50' lengths possible) and have a built in slope of 1/8" per foot (typical). The sections shall bolt together via a flange and can be sealed with a gasket or by on site welding. Each of the sections shall be labeled to indicate proper flow and placement. Trench body shall have a mill finish standard. Optional sand blast finish as required on the contract documents.





- Specialty drain
- · Sanitary or Chemical processing applications
- Typical for flows up to 8.8 cfs (3900 gpm)
- Moderate debris loading
- All load classes

MATERIAL	14GA TYP (16GA & 12GA OPTIONAL) T304 TYP (T316 OPTIONAL)
FRAME	INTEGRAL FORMED FRAME
GRATES	12" WIDE GRATES
SYSTEM DEPTH	3" - 24" TYP
SECTION LENGTH	8' TYP (SECTIONS UP TO 50' LONG)
SLOPE	0.5% & 1% OR SPECIFY INVERTS

### **Engineering Specification:**

DTSS12

Trench drain shall be Dura Trench as manufactured by Eric'sons, 574C Industrial Way N., Dallas, GA 30132 - (770-505-6575). The trench drain body shall be constructed from 14ga T304 stainless steel and have a minimum clear opening of 10". Trench invert shall be V-shaped or flat bottom as indicated in the plans. Sections shall be 96" long (typical), but can be fabricated in longer lengths as required(up to 50' lengths possible) and have a built in slope of 1/8" per foot (typical). The sections shall bott together via a flange and can be sealed with a gasket or by on site welding. Each of the sections shall be labeled to indicate proper flow and placement. Trench body shall have a mill finish standard. Optional sand blast finish as required on the contract documents.



# SYSTEM CHARACTERISTICS:

- Specialty drain
- Sanitary or Chemical processing applications
- Typical for flows up to 11.8 cfs (5275 gpm)
- Heavy debris loading
- All load classes

MATERIAL	14GA TYP (16GA & 12GA OPTIONAL) T304 TYP (T316 OPTIONAL)
FRAME	INTEGRAL FORMED FRAME
GRATES	14" WIDE GRATES
SYSTEM DEPTH	3" - 24" TYP
SECTION LENGTH	8' TYP (SECTIONS UP TO 50' LONG)
SLOPE	0.5% & 1% OR SPECIFY INVERTS



Trench drain shall be Dura Trench as manufactured by Eric'sons, 574C Industrial Way N., Dallas, GA 30132 - (770-505-6575). The trench drain body shall be constructed from 14ga T304 stainless steel and have a minimum clear opening of 12". Trench invert shall be V-shaped or flat bottom as indicated in the plans. Sections shall be 96" long (typical), but can be fabricated in longer lengths as required(up to 50' lengths possible) and have a built in slope of 1/8" per foot (typical). The sections shall bott together via a flange and can be sealed with a gasket or by on site welding. Each of the sections shall be labeled to indicate proper flow and placement. Trench body shall have a mill finish standard. Optional sand blast finish as required on the contract documents.







- Specialty drain
- Sanitary or Chemical processing applications
- Typical for flows up to 15.0 cfs (6725 gpm)
- Heavy debris loading
- All load classes

MATERIAL	14GA TYP (16GA & 12GA OPTIONAL) T304 TYP (T316 OPTIONAL)
FRAME	INTEGRAL FORMED FRAME
GRATES	20" WIDE GRATES
SYSTEM DEPTH	3" - 18" TYP
SECTION LENGTH	8' TYP (SECTIONS UP TO 50' LONG)
SLOPE	0.5% & 1% OR SPECIFY INVERTS

# Engineering Specification: Trench drain shall be Dura Trench as manufactured by Eric'sons, 574C

DTSS24

Industrial Way N., Dallas, GA 30132 - (770-505-6575). The trench drain body shall be constructed from 14ga T304 stainless steel and have a minimum clear opening of 18". Trench invert shall be V-shaped or flat bottom as indicated in the plans. Sections shall be 96" long (typical), but can be fabricated in longer lengths as required(up to 50' lengths possible) and have a built in slope of 1/8" per foot (typical). The sections shall bolt together via a flange and can be sealed with a gasket or by on site welding. Each of the sections shall be labeled to indicate proper flow and placement. Trench body shall have a mill finish standard. Optional sand blast finish as required on the contract documents.



# SYSTEM CHARACTERISTICS:

- Specialty drain
- Sanitary or Chemical processing applications
- Typical for flows up to 22.6 cfs (10,150 gpm)
- Heavy debris loading
- All load classes

MATERIAL	14GA TYP (16GA & 12GA OPTIONAL) T304 TYP (T316 OPTIONAL)
FRAME	INTEGRAL FORMED FRAME
GRATES	26" WIDE GRATES
SYSTEM DEPTH	3" - 18" TYP
SECTION LENGTH	8' TYP (SECTIONS UP TO 50' LONG)
SLOPE	0.5% & 1% OR SPECIFY INVERTS

# **Engineering Specification:**

Trench drain shall be Dura Trench as manufactured by Eric'sons, 574C Industrial Way N., Dallas, GA 30132 - (770-505-6575). The trench drain body shall be constructed from 14ga T304 stainless steel and have a minimum clear opening of 24". Trench invert shall be V-shaped or flat bottom as indicated in the plans. Sections shall be 96" long (typical), but can be fabricated in longer lengths as required(up to 50' lengths possible) and have a built in slope of 1/8" per foot (typical). The sections shall bolt together via a flange and can be sealed with a gasket or by on site welding. Each of the sections shall be labeled to indicate proper flow and placement. Trench body shall have a mill finish standard. Optional sand blast finish as required on the contract documents.



# **CHEMICAL TRENCH BODIES (DTCF)**

# **STANDARD**

SIZES 2" ID

4" ID

6" ID

8" ID

- 10" ID
- 12" ID
- 18" ID
- 24" ID
- 36" ID
- 48" ID



# LOAD BEARING FRAME

 ANY LOAD CONDITION
 MATERIAL OPTIONS INCLUDE: POWDER COATED STEEL GALVANIZED STEEL ALUMINUM PLASTIC FIBERGLASS STAINLESS STEEL
 FACTORY ATTACHED TO BODY

# TRENCH BODY

1% MINIMUM SLOPE RECOMMENDED

CUSTOM SLOPES OFFERED

- 8' OR 16' LENGTHS TYPICAL
- SINGLE OR DOUBLE CONTAINED BODY
- WIDTHS FROM 2" 48" STANDARD
- VINYL ESTER OR NOVALAK RESIN SYSTEMS



The Dura-Trench line of chemical trenches are very similar to the standard DTPF trenches. With all the same features and benefits, they are the easiest trenches to install on the market and with the right chemical composition they are very resistant to most harsh chemicals even at elevated temperatures. With harsh chemicals the SLCF joint bonding kit should be used. Particular attention needs to be paid to ensure a water tight system. It is best to water test these systems before concrete is placed around them to ensure a complete seal. It is also recommended that a significant reinforcing cage be installed around chemical trenches to minimize large movements in the concrete which can cause cracks and leaking of the trench drain system.





**CHEMICAL TRENCHES** 

- OFFERED WITH VINYL ESTER OR NOVALAK RESIN BODIES
- LONG SECTIONS REDUCE JOINTS
- ALL JOINTS ARE SEALABLE TO WATER TIGHT CONDITIONS
- CLAMPING COLLARS OFFERED FOR MEMBRANE APPLICATIONS
- BUILT IN SLOPE
- WATER TIGHT END PLATES AND OUTLETS
- TAILORED TO CUSTOMER NEEDS

# **CONCRETE ANCHORS**

2" BELL CONNECTIONS SHOULD BE

USE CHEMICAL RESISTANT BONDING

SEALED WATER TIGHT

KITS (SLCF)

- 18" O.C. TYPICAL
- 3" X 3/8" THICK FOR DURABILITY
- EXTENDED SYSTEM LIFE IN
  - TRAFFIC APPLICATIONS

# INSTALLATION DEVICES

- ADJUST TRENCH TO GRADE
- RESIST FLOTATION FORCES
- RIGID METAL BRACKET WON'T BREAK OFF DURING CONSTRUCTION

- PREFABRICATED TURNS SMOOTH INTERIOR
  - CONTRACTOR FRIENDLY
  - WELDED FRAME





Chemical trenches are available with 100% composite construction with no metal components. With certain chemical combinations even stainless steel materials can be compromised. In these applications a 100% polymer trench can be a viable solution.

Don't be fooled by the composite construction. These trenches can be designed to take fork truck traffic and handle the most harsh production environments.



# **MEMBRANE & SHOWER DRAINS (DTSH)**



- OFFERED IN LENGTHS UP TO 50'
- WIDTHS OF 2", 4", 8", 10", 12", 18", AND 24"



This elevated deck is a typical application that might require a shallow membrane drain placed in the topping slab. This drain was 8" wide inside with a 10" wide heel proof slotted stainless steel grate.



Linear shower drains are becoming more and more common in health care, hospitality, and residential applications. Some utilize very decorative grates while others prefer something simple. We can manufacture these in standard lengths or any custom width desired.

# **MEMBRANE DRAINS**

- DEPTHS CAN BE AS SHALLOW AS 2"
- LONG SECTIONS REDUCE JOINTS
- ALL JOINTS ARE SEALABLE TO WATER TIGHT CONDITIONS
- CLAMPING COLLARS STANDARD FOR SECURING MEMBRANE
- BUILT IN SLOPE OFFERED
- WATER TIGHT END PLATES AND OUTLETS
- CUSTOMIZABLE

Custom grating patterns are often requested for terrace and elevated deck applications. This project required T316 stainless steel for superior corrosion resistance and utilized a diagonal wave pattern.



# **TRENCH FORMING SYSTEMS (DTTF)**

# STANDARD SIZES 8" ID 10" ID 12" ID

18" ID 24" ID



# TRENCH BODY

- 8' LENGTHS TYPICAL
- OPTIONAL 16', LENGTHS
- SINGLE USE OR REUSABLE FORMS OFFERED
- WIDTHS OF 8", 10", 12", 18", 24"
- CUSTOM WIDTHS

# TRENCH FORMING SYSTEMS

- EXTREMELY FAST COMPARED WITH HAND FORMING
- MULTIPLE FORMING MATERIALS CAN MEET ANY DESIGN PARAMETERS
- RADIUS BOTTOMS
- BUILT IN SLOPE
- FITS ALL STANDARD FRAMES AND GRATES ANY WIDTH TRENCH
- GREEN DISPOSE OF LESS FORMING MATERIAL
- EASY INSTALLATION

SLOPE 0.5% AND 1% SLOPE STANDARD CUSTOM SLOPES OFFERED







The Dura-Trench forming system is a single use or reusable set of trench drain forms used to construct cast in place trench drains. Once the form work is removed the concrete trench has a radius bottom which is difficult to achieve with job built forms. The system also has single use forms that can be used for special fabrications such as turns, intersections, or end points that are not a standard length. Because of the rigidity of the forming system they are easy to bolt together and gang form repetitive trench drain layouts. The rigid forms also strip much easier than other methods and eliminate the need for discarding dumpster after dumpster of forming debris. As with all the Dura-Trench systems, a wide array of frame and grate options are offered with this system.



LOAD BEARING FRAME ANY LOAD CONDITION MATERIAL OPTIONS INCLUDE: POWDER COATED STEEL GALVANIZED STEEL IRON ALUMINUM PLASTIC FIBERGLASS STAINLESS STEEL



# **INSTALLATION**

- SINGLE USE OR REUSABLE FORMS
- PLYWOOD OR METAL COVERS FOR SAFETY
- COVERS KEEP CONCRETE OUT DURING CONSTRUCTION
- EASILY ATTACH BRACES TO WOOD TOP

# **CONCRETE ANCHORS**

 18" O.C. TYPICAL
 3" X 3/8" THICK FOR DURABILITY
 EXTENDS SYSTEM LIFE IN TRAFFIC APPLICATIONS

# <u>GRATES</u>

- WIDE VARIETY OF GRATES
- PEDESTRIAN TO AIRCRAFT LOADING
- ADA & HEEL PROOF OPTIONS

### NOTES:

- 1. Maximum length is only limited by constructability.
- Standard slope is 1% unless specified otherwise.
   Rectangular bottom trenches are available upon
- request or per application.







- General Purpose Drain
- Typical for flows up to 4 cfs (1800 gpm)
- Moderate debris loading
- All load classes

FRAME OPTIONS	MDGS, MDSS, MDAL, HDBP, HDGS, HDSS, HDFG, EXGS, EXSS, EXDI, CUSTOM
GRATES	10" WIDE GRATES
SYSTEM DEPTH	6" - 48" TYP (3" MIN DEPTH WITH RECT BOTTOM)
SECTION LENGTH	8' TYP (16' OPTION)
SLOPE	0.5% & 1% OR SPECIFY INVERTS

\*shown here with the EXGS frame

### **Engineering Specification:**

DTTF10

Trench drain shall be DuraTrench as manufactured by Eric'sons, 574C Industrial Way N., Dallas, GA 30132 - (770-505-6575). The trench drain body shall be a concrete trench cast on pre-engineered factory fabricated form pannels. The trench shall have a 8" clear open throat and have a rounded or flat bottom as indicated in details. Form sections shall be 96" long (typical) and shall be labeled for proper slope and placement. The trench body shall mate to the frame and form a grate seat that shall accept the specified grate. The body shall be supplied with a factory fit top for rail alignment and fastening of the channels in the field ensuring that the rails are cast in a coplanar manner. Form release is to be used liberally to ensure smooth interior walls and easy for removal. No forming materials shall be left in the trench after construction. Inspection of the underlying concrete shall be performed and any deficiencies shall be repaired according to standard ACI guidelines.



# SYSTEM CHARACTERISTICS:

- General Purpose Drain
- Typical for flows up to 6 cfs (2700 gpm)
- Moderate debris loading
- All load classes

FRAME OPTIONS	MDGS, MDSS, MDAL, HDBP, HDGS, HDSS, HDFG, EXGS, EXSS, EXDI, CUSTOM
GRATES	12" WIDE GRATES
SYSTEM DEPTH	6" - 48" TYP (3" MIN DEPTH WITH RECT BOTTOM)
SECTION LENGTH	8' TYP (16' OPTION)
SLOPE	0.5% & 1% OR SPECIFY INVERTS

TO AND AN ORCOTORS



Trench drain shall be DuraTrench as manufactured by Eric'sons, 574C Industrial Way N., Dallas, GA 30132 - (770-505-6575). The trench drain body shall be a concrete trench cast on pre-engineered factory fabricated form pannels. The trench shall have a 10" clear open throat and have a rounded or flat bottom as indicated in details. Form sections shall be 96" long (typical) and shall be labeled for proper slope and placement. The trench body shall mate to the frame and form a grate seat that shall accept the specified grate. The body shall be supplied with a factory fit top for rail alignment and fastening of the channels in the field ensuring that the rails are cast in a coplanar manner. Form release is to be used liberally to ensure smooth interior walls and easy for removal. No forming materials shall be left in the trench after construction. Inspection of the underlying concrete shall be performed and any deficiencies shall be repaired according to standard ACI guidelines.

\*shown here with the EXGS frame



TYPICAL DTTF10 TRENCH SECTION



- General Purpose Drain
- Typical for flows up to 8 cfs (3600 gpm)
- Heavy debris loading
- All load classes

FRAME OPTIONS	MDGS, MDSS, MDAL, HDBP, HDGS, HDSS, HDFG, EXGS, EXSS, EXDI, CUSTOM
GRATES	14" WIDE GRATES
SYSTEM DEPTH	6" - 48" TYP (3" MIN DEPTH WITH RECT BOTTOM)
SECTION LENGTH	8' TYP (16' OPTION)
SLOPE	0.5% & 1% OR SPECIFY INVERTS

### **Engineering Specification:**

DTTF18

Trench drain shall be DuraTrench as manufactured by Eric'sons, 574C Industrial Way N., Dallas, GA 30132 - (770-505-6575). The trench drain body shall be a concrete trench cast on pre-engineered factory fabricated form pannels. The trench shall have a 12" clear open throat and have a rounded or flat bottom as indicated in details. Form sections shall be 96" long (typical) and shall be labeled for proper slope and placement. The trench body shall mate to the frame and form a grate seat that shall accept the specified grate. The body shall be supplied with a factory fit top for rail alignment and fastening of the channels in the field ensuring that the rails are cast in a coplanar manner. Form release is to be used liberally to ensure smooth interior walls and easy for removal. No forming materials shall be left in the trench after construction. Inspection of the underlying concrete shall be performed and any deficiencies shall be repaired according to standard ACI guidelines.



# SYSTEM CHARACTERISTICS:

- General Purpose Drain
- Typical for flows up to 15 cfs (6750 gpm)
- Heavy debris loading
- All load classes

FRAME OPTIONS	MDGS, MDSS, MDAL, HDBP, HDGS, HDSS, HDFG, EXGS, EXSS, EXDI, CUSTOM
GRATES	20" WIDE GRATES
SYSTEM DEPTH	6" - 48" TYP (3" MIN DEPTH WITH RECT BOTTOM)
SECTION LENGTH	8' TYP (16' OPTION)
SLOPE	0.5% & 1% OR SPECIFY INVERTS



\*shown here with the EXGS frame

**Engineering Specification:** 

Trench drain shall be DuraTrench as manufactured by Eric'sons, 574C Industrial Way N., Dallas, GA 30132 - (770-505-6575). The trench drain body shall be a concrete trench cast on pre-engineered factory fabricated form pannels. The trench shall have a 18" clear open throat and have a rounded or flat bottom as indicated in details. Form sections shall be 96" long (typical) and shall be labeled for proper slope and placement. The trench body shall mate to the frame and form a grate seat that shall accept the specified grate. The body shall be supplied with a factory fit top for rail alignment and fastening of the channels in the field ensuring that the rails are cast in a coplanar manner. Form release is to be used liberally to ensure smooth interior walls and easy for removal. No forming materials shall be left in the trench after construction. Inspection of the underlying concrete shall be performed and any deficiencies shall be repaired according to standard ACI guidelines.

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- **General Purpose Drain**
- Typical for flows up to 23 cfs (10,350 gpm)
- Heavy debris loading
- All load classes

FRAME OPTIONS	MDGS, MDSS, MDAL, HDBP, HDGS, HDSS, HDFG, EXGS, EXSS, EXDI, CUSTOM
GRATES	26" WIDE GRATES
SYSTEM DEPTH	6" - 48" TYP (3" MIN DEPTH WITH RECT BOTTOM)
SECTION LENGTH	8' TYP (16' OPTION)
SLOPE	0.5% & 1% OR SPECIFY INVERTS

\*shown here with the EXGS frame

Engineering Specification: Trench drain shall be DuraTrench as manufactured by Eric'sons, 574C Industrial Way N., Dallas, GA 30132 - (770-505-6575). The trench drain body shall be a concrete trench cast on pre-engineered factory fabricated form pannels. The trench shall have a 24" clear open throat and have a rounded or flat bottom as indicated in details. Form sections shall be 96" long (typical) and shall be labeled for proper slope and placement. The trench body shall mate to the frame and form a grate seat that shall accept the specified grate. The body shall be supplied with a factory fit top for rail alignment and fastening of the channels in the field ensuring that the rails are cast in a coplanar manner. Form release is to be used liberally to ensure smooth interior walls and easy for removal. No forming materials shall be left in the trench after construction. Inspection of the underlying concrete shall be performed and any deficiencies shall be repaired according to standard ACI guidelines.



# **NOTE: FORMING SYSTEMS WIDER THAN 24" ARE NOT RECOMMENDED**







Concrete formed trenches are generally more expensive to construct due to the lack of skilled labor and wage rates. With the Dura Trench prefabricated forming system much of this labor and skill is removed. The end results look basically the same as a prefabricated trench from the surface, but in some instances are preferred to a prefabricated trench. No mater what system you need, Dura Trench has a solution for your linear drain needs.





of strangers



# UTILITY TRENCHES (DTUTPIF)

# **STANDARD SIZES**

- 8" ID
- 10" ID
- 12" ID
- 18" ID
- 24" ID
- 36" ID
- 48" ID



# **UTILITY TRENCHES**

- USE TO RUN CABLES AND PIPES
- NO CROSS BARS FOR EASY INSTALLATION AND ACCESS
- TYPICAL TRENCH WIDTHS ARE 8", 10", 12", 18", 24", 36", AND 48".
- TRENCH CAN BE SLOPED OR NEUTRAL
- WIDE VARIETY OF COVERS AVAILABLE (OPTIONS INCLUDE ALUMINUM, FIBERGLASS, GALV. STEEL, STAINLESS STEEL, AND DUCTILE IRON)
- FACTORY FABRICATED TURNS AND INTERSECTIONS
- JOINTS CAN BE SEALED WATERTIGHT FOR SECONDARY CONTAINMENT
- FACT



ORY



APPLICATIONS: CHEMICAL PIPING COMPRESSED AIR PIPING VACUUM HOSE TRENCHES FIRE SUPPRESSION PIPING ELECTRICAL CABLES GAS PIPING FUEL LINES

Utility trenches are vital for inspection and access of piping and cables. The Dura-Trench DTUTPF system makes the construction of these trenches easy. The systems can be sloped for drainage or specified with no slope. Options like

gasketed covers, sweep turns, open grating covers, leak detection, prefabricated turns, step up/down fabrications, and sealed joints make this system a real workhorse for those difficult applications. These trenches can be fabricated from vinyl ester resin where secondary containment of concentrated chemicals is required.

All of these systems come standard with galvanized, stainless, or composite channel struts inside of the trenches. This aides in installation of conduits and pipes. Large sweeping turns can also allow for large pipe diameters to be installed in the system.





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# **DTUTPF10**

# \*shown here with the HDBP frame

# SYSTEM CHARACTERISTICS:

- Secondary containment utility trench
- Built in 1 5/8" channel strut (48" o.c. typ)
- No internal cross braces to obstruct pipe installation
- Significantly increases speed of installation
- All load classes

FRAME OPTIONS	MDGS, MDSS, MDAL, HDBP, HDGS, HDSS, HDFG, EXGS, EXSS, EXDI, CUSTOM
GRATES	12" WIDE COVERS (OPTIONAL GASKETS)
SYSTEM DEPTH	12" - 36" TYP
SECTION LENGTH	8' TYP (16' OPTION)
SLOPE	0.0%, 0.5% & 1% OR SPECIFY INVERTS

# **Engineering Specification:**

Utility trench shall be DuraTrench as manufactured by Eric'sons, 574C Industrial Way N., Dallas, GA 30132 - (770-505-6575). The utility trench body shall act as secondary containment and be composed of polyester fiber reinforced polymer concrete. The trench shall have a 10" clear open throat and have a rectangular bottom. The trench body shall be gray in color to closely resemble the color of concrete. Sections shall be 96" long (typical) and have a 2" receiving flange on the upstream end for receiving and sealing the trench sections together. Each of the sections shall be labeled to indicate proper placement. The trench body shall mate to the frame and form a grate seat that shall accept the specified cover. The body shall be supplied with a factory fit protective top for rail alignment and fastening of the channels in the field ensuring that the rails are cast in a coplanar manner. The trench shall not have any cross bars that will interfere with later installation of utilities in the trench. The trench shall have 1 5/8" x 1 5/8" galvanized strut channel cast into the surrounding concrete once cast. The trench body shall have 3" x 3/8" dia. concrete anchors locking the strut into the surrounding concrete once cast. The trench body shall have the following properties: 12,600 psi minimum tensile strength per ASTM C307, 11,600 psi. minimum compressive strength per ASTM C579, 26,500 psi minimum flexural strength per ASTM C580, less than 0.35% water absorption, shall be frost proof, salt proof, and be resistant to dilute acids and alkalis per ASTM C267.







# SYSTEM CHARACTERISTICS:

- Secondary containment utility trench
- Built in 1 5/8" channel strut (48" o.c. typ)
- No internal cross braces to obstruct pipe installation
- Significantly increases speed of installation
- All load classes

FRAME OPTIONS	MDGS, MDSS, MDAL, HDBP, HDGS, HDSS, HDFG, EXGS, EXSS, EXDI, CUSTOM
GRATES	14" WIDE COVERS (OPTIONAL GASKETS)
SYSTEM DEPTH	12" - 36" TYP
SECTION LENGTH	8' TYP (16' OPTION)
SLOPE	0.0%, 0.5% & 1% OR SPECIFY INVERTS

### **Engineering Specification:**

Utility trench shall be DuraTrench as manufactured by Eric'sons, 574C Industrial Way N., Dallas, GA 30132 - (770-505-6575). The utility trench body shall act as secondary containment and be composed of polyester fiber reinforced polymer concrete. The trench shall have a 12" clear open throat and have a rectangular bottom. The trench body shall be gray in color to closely resemble the color of concrete. Sections shall be 96" long (typical) and have a 2" receiving flange on the upstream end for receiving and sealing the trench sections together. Each of the sections shall be labeled to indicate proper placement. The trench body shall mate to the frame and form a grate seat that shall accept the specified cover. The body shall be supplied with a factory fit protective top for rail alignment and fastening of the channels in the field ensuring that the rails are cast in a coplanar manner. The trench shall not have any cross bars that will interfere with later installation of utilities in the trench. The trench shall have 1 5/8" x 1 5/8" galvanized struc channel cast into the trench walls for mounting of utilities. The strut shall have 3" x 3/8" dia. concrete anchors locking the strut into the surrounding concrete once cast. The trench body shall have the following properties: 12,600 psi minimum tensile strength per ASTM C307, 11,600 psi. minimum compressive strength per ASTM C579, 26,500 psi minimum flexural strength per ASTM C580, less than 0.35% water absorption, shall be frost proof, salt proof, and be resistant to dilute acids and alkalis per ASTM C267.



# DTUTPF18



# SYSTEM CHARACTERISTICS:

- Secondary containment utility trench
- Built in 1 5/8" channel strut (48" o.c. typ)
- No internal cross braces to obstruct pipe installation
- Significantly increases speed of installation
- All load classes

FRAME OPTIONS	MDGS, MDSS, MDAL, HDBP, HDGS, HDSS, HDFG, EXGS, EXSS, EXDI, CUSTOM
GRATES	20" WIDE COVERS (OPTIONAL GASKETS)
SYSTEM DEPTH	12" - 36" TYP
SECTION LENGTH	8' TYP (16' OPTION)
SLOPE	0.0%, 0.5% & 1% OR SPECIFY INVERTS

# **Engineering Specification:**

Utility trench shall be DuraTrench as manufactured by Eric'sons, 574C Industrial Way N., Dallas, GA 30132 - (770-505-6575). The utility trench body shall act as secondary containment and be composed of polyester fiber reinforced polymer concrete. The trench shall have a 18" clear open throat and have a rectangular bottom. The trench body shall be gray in color to closely resemble the color of concrete. Sections shall be 96" long (typical) and have a 2" receiving flange on the upstream end for receiving and sealing the trench sections together. Each of the sections shall be labeled to indicate proper placement. The trench body shall mate to the frame and form a grate seat that shall accept the specified cover. The body shall be supplied with a factory fit protective top for rail alignment and fastening of the channels in the field ensuring that the rails are cast in a coplanar manner. The trench shall have a 15/8" x 1 5/8" galvanized strut channel cast into the trench walls for mounting of utilities. The strut shall have 3" x 3/8" dia. concrete anchors locking the strut into the surrounding concrete once cast. The trench body shall have the following properties: 12,600 psi minimum tensile strength per ASTM C307, 11,600 psi. minimum compressive strength per ASTM C579, 26,500 psi minimum flexural strength per ASTM C580, less than 0.35% water absorption, shall be frost proof, salt proof, and be resistant to dilute acids and alkalis per ASTM C267.





# SYSTEM CHARACTERISTICS:

- Secondary containment utility trench
- Built in 1 5/8" channel strut (48" o.c. typ)
- No internal cross braces to obstruct pipe installation
- Significantly increases speed of installation
- All load classes

FRAME OPTIONS	MDGS, MDSS, MDAL, HDBP, HDGS, HDSS, HDFG, EXGS, EXSS, EXDI, CUSTOM
GRATES	26" WIDE COVERS (OPTIONAL GASKETS)
SYSTEM DEPTH	12" - 36" TYP
SECTION LENGTH	8' TYP (16' OPTION)
SLOPE	0.0%, 0.5% & 1% OR SPECIFY INVERTS

# **Engineering Specification:**

Utility trench shall be DuraTrench as manufactured by Eric'sons, 574C Industrial Way N., Dallas, GA 30132 - (770-505-6575). The utility trench body shall act as secondary containment and be composed of polyester fiber reinforced polymer concrete. The trench shall have a 24" clear open throat and have a rectangular bottom. The trench body shall be gray in color to closely resemble the color of concrete. Sections shall be 96" long (typical) and have a 2" receiving flange on the upstream end for receiving and sealing the trench sections together. Each of the sections shall be labeled to indicate proper placement. The trench body shall mate to the frame and form a grate seat that shall accept the specified cover. The body shall be supplied with a factory fit protective top for rail alignment and fastening of the channels in the field ensuring that the rails are cast in a coplanar manner. The trench shall have 1 5/8" x 1 5/8" galvanized strut channel cast into the trench walls for mounting of utilities. The struct shall have 3" x 3/8" dia. concrete anchors locking the strut into the surrounding concret once cast. The trench body shall have the following properties: 12,600 psi minimum tensile strength per ASTM C307, 11,600 psi. minimum compressive strength per ASTM C579, 26,500 psi minimum flexural strength per ASTM C580, less than 0.35% water absorption, shall be frost proof, and be resistant to dilute acids and alkalis per ASTM C267.

and 24" O.C. channel strut option



# DTUTPF36



\*shown here with the HDBP frame

# SYSTEM CHARACTERISTICS:

- Secondary containment utility trench
- Built in 1 5/8" channel strut (48" o.c. typ)
- No internal cross braces to obstruct pipe installation
- Significantly increases speed of installation
- All load classes

FRAME OPTIONS	MDGS, MDSS, MDAL, HDBP, HDGS, HDSS, HDFG, EXGS, EXSS, EXDI, CUSTOM
GRATES	38" WIDE COVERS (OPTIONAL GASKETS)
SYSTEM DEPTH	12" - 36" TYP
SECTION LENGTH	8' TYP (16' OPTION)
SLOPE	0.0%, 0.5% & 1% OR SPECIFY INVERTS

# **Engineering Specification:**

Utility trench shall be DuraTrench as manufactured by Eric'sons, 574C Industrial Way N., Dallas, GA 30132 - (770-505-6575). The utility trench body shall act as secondary containment and be composed of polyester fiber reinforced polymer concrete. The trench shall have a 36" clear open throat and have a rectangular bottom. The trench body shall be gray in color to closely resemble the color of concrete. Sections shall be 96" long (typical) and have a 2" receiving flange on the upstream end for receiving and sealing the trench sections together. Each of the sections shall be labeled to indicate proper placement. The trench body shall mate to the frame and form a grate seat that shall accept the specified cover. The body shall be supplied with a factory fit protective top for rail alignment and fastening of the channels in the field ensuring that the rails are cast in a coplanar manner. The trench shall not have any cross bars that will interfere with later installation of utilities in the trench. The trench shall have 1 5/8" x 1 5/8" galvanized strut channel cast into the trench walls for mounting of utilities. The strut shall have 3" x 3/8" dia. concrete anchors locking the strut into the surrounding concrete once cast. The trench body shall have the following properties: 12,600 psi minimum tensile strength per ASTM C307, 11,600 psi. minimum compressive strength per ASTM C579, 26,500 psi minimum flexural strength per ASTM C580, less than 0.35% water absorption, shall be frost proof, salt proof, and be resistant to dilute acids and alkalis per ASTM C267.



# **DTUTPF48**

# SYSTEM CHARACTERISTICS:

- Secondary containment utility trench
- Built in 1 5/8" channel strut (48" o.c. typ)
- No internal cross braces to obstruct pipe installation
- Significantly increases speed of installation
- All load classes

FRAME OPTIONS	MDGS, MDSS, MDAL, HDBP, HDGS, HDSS, HDFG, EXGS, EXSS, EXDI, CUSTOM
GRATES	50" WIDE COVERS (OPTIONAL GASKETS)
SYSTEM DEPTH	12" - 36" TYP
SECTION LENGTH	8' TYP (16' OPTION)
SLOPE	0.0%, 0.5% & 1% OR SPECIFY INVERTS

# **Engineering Specification:**

Utility trench shall be DuraTrench as manufactured by Eric'sons, 574C Industrial Way N., Dallas, GA 30132 - (770-505-6575). The utility trench body shall act as secondary containment and be composed of polyester fiber reinforced polymer concrete. The trench shall have a 48" clear open throat and have a rectangular bottom. The trench body shall be gray in color to closely resemble the color of concrete. Sections shall be 96" long (typical) and have a 2" receiving flange on the upstream end for receiving and sealing the trench sections together. Each of the sections shall be labeled to indicate proper placement. The trench body shall mate to the frame and form a grate seat that shall accept the specified cover. The body shall be supplied with a factory fit protective top for rail alignment and fastening of the channels in the field ensuring that the rails are cast in a coplanar manner. The trench shall not have any cross bars that will interfere with later installation of utilities in the trench. The trench shall have 1 5/8" x 1 5/8" galvanized strut channel cast into the trench walls for mounting of utilities. The strut shall have 3" x 3/8" dia. concrete anchors locking the strut into the surrounding concrete once cast. The trench body shall have the following properties: 12,600 psi minimum tensile strength per ASTM C307, 11,600 psi. minimum compressive strength per ASTM C579, 26,500 psi minimum flexural strength per ASTM C580, less than 0.35% water absorption, shall be frost proof, salt proof, and be resistant to dilute acids and alkalis per ASTM C267.

\*shown here with the HDSS frame and 24" O.C. channel strut option





Dura Trench Utility trenches are being utilized for their flexibility of design, large sizes, ease of installation, and secondary containment properties. They can be used outdoors or indoors. The covers can have gaskets, lightweight easy to remove covers, lifting holes for large heavy duty covers, secured with vandal resistant hardware, or designed for virtually any other concern. Dura Trench Utility trenches make mounting of utilities easy with the built in channel struts and the ability to core holes at any location. Let us know how we can design a utility trench to meet your needs.



# CATCH BASINS

WIDTH	LENGTH	MIN. DEPTH	MAX. DEPTH	MAX STORAGE (GAL)
4	24	4	36	15.0
	48	4	36	29.9
8	24	4	36	29.9
	48	4	36	59.8
10	24	4	48	49.9
	48	4	48	99.7
12	24	4	48	59.8
	48	4	48	119.7
15	24	8	60	93.5
	48	8	60	187.0
18	24	8	60	112.2
	48	8	60	224.4
24	24	8	96	239.4
	30	12	96	299.2
	48	12	96	478.7
30	30	8	96	374.0
	36	12	96	448.8
	48	12	96	598.4
36	36	12	96	538.6
	48	12	96	718.1
48	48	12	96	957.4
60	60	12	96	1496.0
84	84	12	96	2932.2
96	96	12	96	3829.8

3' wide x 3' long x 4' deep chemical resistant catch basin for industrial application



18" wide x 18" long x 12" stainless steel floor sink with debris basket for food and beverage project

NOTE: Largest basin constructed to date is 12' x 12' x 12' deep!



10" wide x 24" long x 26" deep inline basin for civil application







- CUSTOM SIZES
- ANY APPLICATION
- MOLDED RECEIVERS ACCEPT TRENCH DRAINS
- WATER TIGHT
- CHEMICAL RESISTANT
- OUTLET PIPES ANY SIZE OR LOCATION
- TRASH BUCKETS
- SEDIMENT SCREENS
- LADDERS
- SEPARATOR PLATES
- WEIR PLATES



2' wide x 2' long x 4' deep basin at service station



Large 3' wide x 12' long x 5' deep catch basins for manufacturing process application

# TRENCH FRAMES



# **SLOT DRAIN FRAMES**



# TRASH & DEBRIS STRAINERS

Trash and debris often need to be screened out of the effluent traveling in a linear drain. The Dura Trench line offers trash baskets, outlet strainers, and sediment buckets. For large or floating particulate a trash basket or outlet strainer can be used. The hole size can be varied to match the size of the particulate. Typical hole sizes are 0.25" or 0.125" holes. In some cases the particulate is heavy solids and falls to the bottom. For these cases a solid sediment bucket works best. No matter the particulate we can provide adequate separation of the liquid and solid matter to keep your drains flowing.



# **TURNS & INTERSECTIONS**



Factory built turns, intersections, and unique fabrications are important advantages of the Dura-Trench line. These shop made fabrications ensure a high quality connection and a good fit. Prefabricated parts save significant time in the field making the Dura-Trench system the easiest product on the market to install.

Simply show the plan view of the trench layout and we will fabricate to match your every need. True custom trench drain design is 100% achievable without compromise to the project design.

# **GRATE LOCKS**

Grates can be locked to the trench frame by using either a locking bar or bolts through the corners of the grates. Note that in many applications the grates locking mechanisms are not necessary due to the weight of the grate material and type of traffic.

# **OUTLETS / INLETS**

Outlet pipes for the Dura-Trench system are made easy for the installer and water tight for the designer. When possible, the outlet connections are fabricated into the trench body at the factory. This ensures that the pipes are sealed to the trench and never loose or flimsy. The outlet pipes can be attached to the end of the trench, anywhere along the side of the trench, or anywhere along the bottom of the trench. Inlet pipes from down spouts or other trenches can also be located anywhere along the length of the run, simply specify pipe size, location, and invert.

The pipe connections can be any size from 1" up to 24". Any size outlet can be supplied on any size trench. Schedule 40 or SDR35 PVC pipe connections are typically supplied, however, HDPE, Stainless steel, Ductile iron, or other pipe materials are available upon request. Field fit universal end plates are also available for off the shelf applications.







**BOTTOM OUTLET** 

# **JOINT SEALANT**

Sealant can be an integral part of any trench drain system. For storm water applications, no sealant is typically required. If sealant is preferred for simple water or dilute chemicals, a single component urethane caulk (SLUR) is recommended.

For applications where a more durable seal is required our two part pastes can be used to seal the joints. Before applying these types of sealants, the joints need to be lightly sanded and cleaned. This will ensure a full bond of the two parts. The paste kits come with reinforcing fiber mixed into the paste and are very strong. Polyester(SLPF) and vinyl ester (SLCF) kits are offered. For water tight sealing or light chemical exposure the polyester is often sufficient. For severe chemical attack and longer term exposures the vinyl ester is more desirable.

When using a metal trench body, the best seal you can achieve is to fully weld any seams or joints.



# GRATES



\*NOTE: NOT ALL GRATES ARE DEPICTED IN ALL FINISHES OFFERED, HOWEVER PATTERN REMAINS SAME FOR ALL FINISHES

DIN

			DIN
<b>3" WIDE GRATES</b>	PART #	DESCRIPTION	LOAD
	03C24DI	HEEL PROOF DUCTILE IRON GRATE	Е
	03CF24BP	HEEL PROOF BLACK POWDER COATED STEEL GRATE	C
	03CF24G3 03CF24SS	HEEL PROOF STAINLESS STEEL GRATE	C
	© 03C24TP	HEEL PROOF THERMOPLASTIC GRATE	А
	03E24GS	PERFORATED HEEL PROOF GALV. STEEL GRATE	В
	03E24SS	PERFORATED HEEL PROOF STAINLESS GRATE	В
	03M24SS	HEEL PROOF MESH STAINLESS GRATE	В
	03BW48SSA	BASKET WEAVE STAINLESS DECORATIVE GRATE	А
	03CS48SSA	LINEAR STAGGERED SLOT DECORATIVE GRATE	А
11/1	03F48SSA	DIAGONAL SLOT DECORATIVE GRATE	А
	03BW48SSA	SLOTTED WAVE DECORATIVE GRATE	А

**5" WIDE** 

E GRATES	PART #	DESCRIPTION	LOAD
	05A24BP	BLACK POWDER PAINTED STEEL SOLID COVER	E
	05A24GS	GALVANIZED STEEL SOLID COVER	E
	05A24SS	STAINLESS STEEL SOLID COVER	E
	05B24DI	DUCTILE IRON SLOTTED GRATE	E
	05B24DG	GALVANIZED IRON SLOTTED GRATE	E
	05B24SSC	STAINLESS SLOTTED GRATE	C
	05B24SSE	STAINLESS SLOTTED GRATE	E
	05B24DIF	DUCTILE IRON SLOTTED GRATE	F
	05BF24BP	BLACK POWDER PAINTED STEEL SLOTTED GRATE	D
	05BF24GS	GALVANIZED STEEL SLOTTED GRATE	D
	05BF24SS	STAINLESS STEEL SLOTTED GRATE	D
	05C24DI	DUCTILE IRON ADA/HEEL PROOF GRATE	D
	05C24DG	GALVANIZED IRON ADA/HEEL PROOF GRATE	D

<b>5" WIDE GRATES</b>	PART #	DESCRIPTION	DIN LOAD
	05CF24BP	BLACK POWDER PAINTED ADA/HEEL PROOF GRATE	E
	05CF24GS	GALVANIZED STEEL ADA/HEEL PROOF GRATE	E
	05CF24SS	STAINLESS STEEL ADA/HEEL PROOF GRATE	E
	05C24TP	PLASTIC ADA/HEEL PROOF GRATE	A
	05D24GSB	GALVANIZED STAMPED STEEL SLOTTED GRATE	B
	05D24GSC	GALVANIZED REINFORCED STEEL SLOTTED GRATE	C
	05D24SSB	STAINLESS STAMPED STEEL SLOTTED GRATE	B
	05D24SSC	STAINLESS REINFORCED STEEL SLOTTED GRATE	C
ALL DUNA	05E24GSA	GALVANIZED HEEL PROOF PERFORATED GRATE	A
	05E24GSC	GALVANIZED HEEL PROOF PERFORATED GRATE	C
	05E24SSA	STAINLESS HEEL PROOF PERFORATED GRATE	A
	05E24SSC	STAINLESS HEEL PROOF PERFORATED GRATE	C
	05F24DI	DUCTILE IRON DIAGONAL SLOTTED ADA GRATE	D
	05F24DG	GALVANIZED IRON DIAGONAL SLOTTED ADA GRATE	D
	05F24SS	STAINLESS STEEL DIAGONAL SLOTTED ADA GRATE	D
	05G36GSC	GALVANIZED STEEL BAR GRATE	B
	05G36SSC	STAINLESS STEEL BAR GRATE	B
	05H36FG	FIBERGLASS MESH GRATE	В
EEEEEE	05M24SS	STAINLESS STEEL HEEL PROOF MESH GRATE	В
		·	
	05PS24GS	GALVANIZED STEEL HEEL PROOF PAVER SLOT	C
	05PS24SS	STAINLESS STEEL HEEL PROOF PAVER SLOT	C
	05T24DI	DUCTILE IRON HIGH FLOW SLOTTED GRATE	D
allas	05W24DI	DUCTILE IRON WAVE PATTERN GRATE	C
	05W24DG	GALVANIZED IRON WAVE PATTERN GRATE	C
200 march		PAGE 55	

<b>8" WIDE GRATES</b>	PART #	DESCRIPTION	DIN LOAD
	08A24BP	BLACK POWDER COATED SOLID COVER	D
	08A24GS	GALVANIZED STEEL SOLID COVER	D
	08A24SS	STAINLESS STEEL SOLID COVER	D
A CONTRACTOR OF	08B24CI	CAST IRON SLOTTED GRATE	D
	08B24DI	DUCTILE IRON SLOTTED GRATE	E
	08B24DG	GALVANIZED IRON SLOTTED GRATE	E
	08BF24BP	BLACK POWDER COATED STEEL SLOTTED GRATE	E
	08BF24GS	GALVANIZED STEEL SLOTTED GRATE	E
	08BF24SS	STAINLESS STEEL SLOTTED GRATE	E
	08C24CI	CAST IRON ADA/HEEL PROOF SLOTTED GRATE	D
	08B24DI	DUCTILE IRON ADA/HEEL PROOF SLOTTED GRATE	E
	08B24DG	GALVANIZED IRON ADA/HEEL PROOF SLOTTED GRATE	E
	08CF24BP	BLACK ADA/HEEL PROOF STEEL GRATE	E
	08CF24GS	GALVANIZED ADA/HEEL PROOF STEEL GRATE	E
	08CF24SS	STAINLESS ADA/HEEL PROOF GRATE	E
	08E24GS	GALVANIZED STEEL HEEL PROOF PERFORATED GRATE	D
	08E24SS	STAINLESS STEEL HEEL PROOF PERFORATED GRATE	D
	08G36GSC	GALVANIZED STEEL BAR GRATE	C
	08G36GSD	GALVANIZED STEEL BAR GRATE	D
	08G36GSE	GALVANIZED STEEL BAR GRATE	E
	08G36SSC	STAINLESS STEEL BAR GRATE	C
	08G36SSD	STAINLESS STEEL BAR GRATE	D
	08G36SSE	STAINLESS STEEL BAR GRATE	E
And and an and an and an and and and and	08G48FG	PULTRUDED FIBERGLASS BAR GRATE	D











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14" WIDE GRATES	PART #	DESCRIPTION	DIN LOAD
	14B24DIF 14B24DGF	DUCTILE IRON SLOTTED GRATE GALVANIZED IRON SLOTTED GRATE	F F
	14BF24BP 14BF24GS 14BF24SS	BLACK COATED STEEL SLOTTED GRATE GALVANIZED STEEL SLOTTED GRATE STAINLESS STEEL SLOTTED GRATE	D D D
	14C24CI	CAST IRON ADA/HEEL PROOF SLOTTED GRATE	С
	14C24DI 14C24DG	DUCTILE IRON ADA/HEEL PROOF SLOTTED GRATE GALVANIZED IRON ADA/HEEL PROOF SLOTTED GRATE	D D
	14CF24BP 14CF24GS 14CF24SS	BLACK COATED STEEL ADA/HEEL PROOF SLOTTED GRAT GALVANIZED STEEL ADA/HEEL PROOF SLOTTED GRATE STAINLESS STEEL ADA/HEEL PROOF SLOTTED GRATE	Ë D D D
	14E24GS 14E24SS	GALVANIZED STEEL HEEL PROOF PERFORATED GRATE STAINLESS STEEL HEEL PROOF PERFORATED GRATE	D D
	14G36GSC 14G36GSD 14G36GSE 14G36SSC 14G36SSD 14G36SSE	GALVANIZED STEEL BAR GRATE GALVANIZED STEEL BAR GRATE GALVANIZED STEEL BAR GRATE STAINLESS STEEL BAR GRATE STAINLESS STEEL BAR GRATE STAINLESS STEEL BAR GRATE	C D E C D E
	State and a state of the state		
	14G48FG	FIBERGLASS BAR GRATE	С
And the second		PAGE 62	







# DESCRIPTION

	PART #	DESCRIPTION	LOAI
	26BF24BPB 26BF24BPD 26BF24GSB 26BF24GSD 26BF24GSD 26BF24SSB 26BF24SSD	BLACK COATED STEEL SLOTTED GRATE BLACK COATED STEEL SLOTTED GRATE GALVANIZED STEEL SLOTTED GRATE GALVANIZED STEEL SLOTTED GRATE STAINLESS STEEL SLOTTED GRATE STAINLESS STEEL SLOTTED GRATE	B D D B D
	26CF24BPB 26CF24BPC 26CF24GSB 26CF24GSC 26CF24GSC 26CF24SSB 26CF24SSC	BLACK COATED STEEL ADA/HEEL PROOF SLOTTED GRAT BLACK COATED STEEL ADA/HEEL PROOF SLOTTED GRAT GALVANIZED STEEL ADA/HEEL PROOF SLOTTED GRATE GALVANIZED STEEL ADA/HEEL PROOF SLOTTED GRATE STAINLESS STEEL ADA/HEEL PROOF SLOTTED GRATE STAINLESS STEEL ADA/HEEL PROOF SLOTTED GRATE	E B E C B C B C
	26G36GSA 26G36GSB 26G36GSC 26G36SSA 26G36SSB 26G36SSC	GALVANIZED STEEL BAR GRATE GALVANIZED STEEL BAR GRATE GALVANIZED STEEL BAR GRATE STAINLESS STEEL BAR GRATE STAINLESS STEEL BAR GRATE STAINLESS STEEL BAR GRATE	A B C A B C
	And the second s	K.	
	26G48FG	FIBERGLASS BAR GRATE	В
	26H48FG	FIBERGLASS MESH GRATE	A
in the second	26HC48FG	FIBERGLASS ADA MESH GRATE	A

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<b>38" WIDE GRATES</b>	PART #	DESCRIPTION	DIN .OAD
	38A24BP 38A24GS 38A24SS	BLACK POWDER PAINTED STEEL SOLID COVER GALVANIZED STEEL SOLID COVER STAINLESS STEEL SOLID COVER	D D D
	38A24DI	DUCTILE IRON SOLID COVER	С
	38B38CI	CAST IRON SLOTTED GRATE	В
	38BF24BPB 38BF24BPD 38BF24GSB 38BF24GSD 38BF24SSB 38BF24SSD	BLACK COATED STEEL SLOTTED GRATE BLACK COATED STEEL SLOTTED GRATE GALVANIZED STEEL SLOTTED GRATE GALVANIZED STEEL SLOTTED GRATE STAINLESS STEEL SLOTTED GRATE STAINLESS STEEL SLOTTED GRATE	B D D B D
	38CF24BPB 38CF24BPD 38CF24GSB 38CF24GSD 38CF24GSD 38CF24SSB 38CF24SSD	BLACK COATED STEEL ADA/HEEL PROOF SLOTTED GRATE BLACK COATED STEEL ADA/HEEL PROOF SLOTTED GRATE GALVANIZED STEEL ADA/HEEL PROOF SLOTTED GRATE GALVANIZED STEEL ADA/HEEL PROOF SLOTTED GRATE STAINLESS STEEL ADA/HEEL PROOF SLOTTED GRATE STAINLESS STEEL ADA/HEEL PROOF SLOTTED GRATE	B D D B D
	38G36GSA 38G36GSB 38G36GSC 38G36SSA 38G36SSB 38G36SSB 38G36SSC	GALVANIZED STEEL BAR GRATE GALVANIZED STEEL BAR GRATE GALVANIZED STEEL BAR GRATE STAINLESS STEEL BAR GRATE STAINLESS STEEL BAR GRATE STAINLESS STEEL BAR GRATE	A B C A B C

![](_page_67_Figure_0.jpeg)

![](_page_68_Figure_0.jpeg)

# **CUSTOM GRATES**

In addition to the standard style grates in this section, Dura-Trench offers custom grate design. Openings can be holes, slots, logo designs, etc. Grate material can range from stone, brass, stainless, aluminum, steel, composites, to plastics. Finishes can include special colors, anodizing, textures, etc. Please contact us for additional information regarding specific needs.

![](_page_68_Picture_3.jpeg)

![](_page_69_Picture_0.jpeg)

Corporate / Southeast Office 574 Industrial Way N. Dallas, GA 30132 Northeast Office 13300 Ramblewood Dr. Chester, VA 23586 West Coast Office 1701 40th St. Sacramento, CA 95819

# *www.trenchdrain.net* 770-505-6575

![](_page_69_Picture_5.jpeg)

All reasonable care has been used in preparation of this information. Eric'sons core values are to promote continual improvement of our products. As such, all products and specifications are subject to change without notice. The recommendations on use of the products cannot be guaranteed as the conditions of use are beyond the control of the manufacturer. The customer has the responsibility of ensuring that the products selected are suitable for the actual application.

![](_page_69_Picture_7.jpeg)