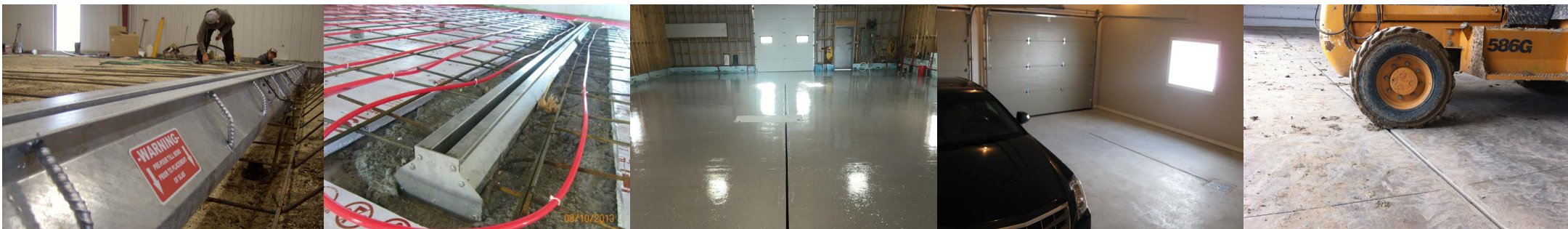
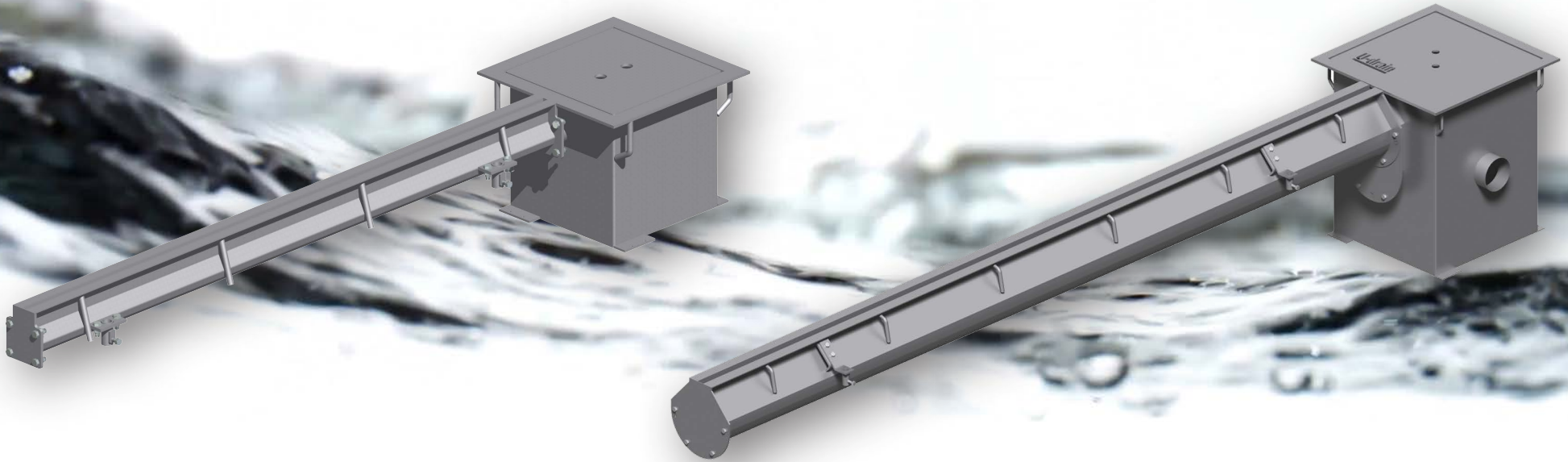




**LOW MAINTENANCE, EASY-TO-INSTALL**  
**LONG LASTING FLOOR DRAINS**



[www.u-drain.ca](http://www.u-drain.ca) | 1.855.746.8200 | [sales@u-drain.ca](mailto:sales@u-drain.ca)





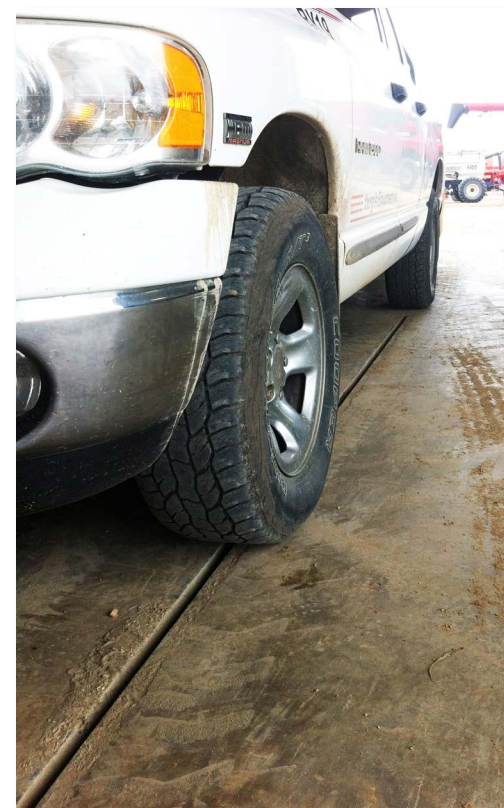
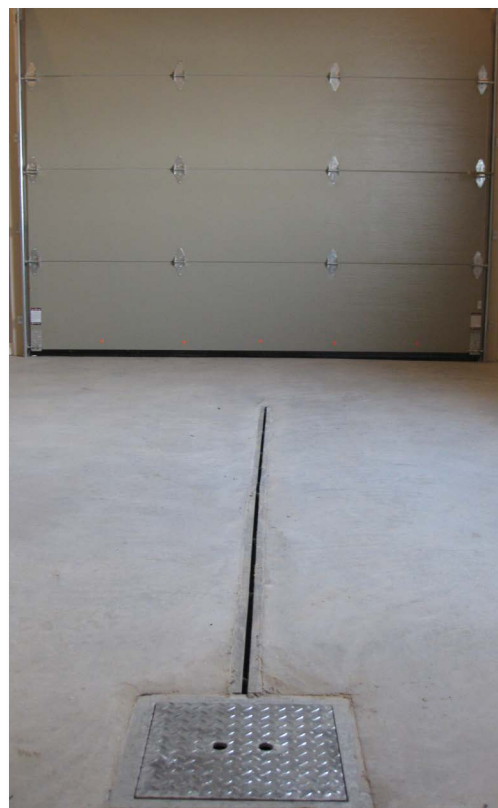
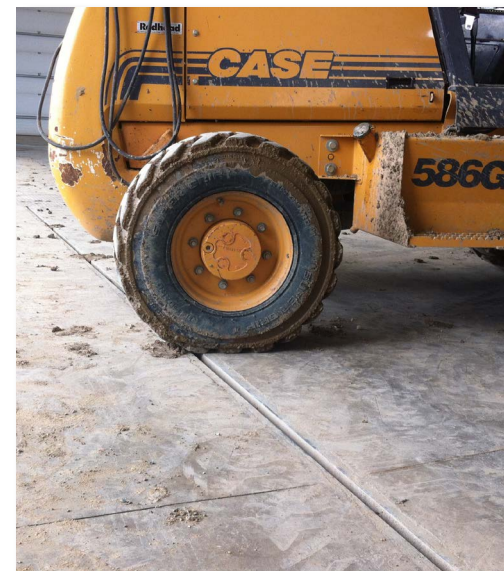


U-drain



# TABLE OF CONTENTS

WHAT IS U-DRAIN™?	3
WHY CHOOSE U-DRAIN™?	5
FREQUENTLY ASKED QUESTIONS ABOUT U-DRAIN™	6
RESIDENTIAL U-DRAIN™	7
COMMERCIAL U-DRAIN™	8
U-DRAIN™ APPLICATIONS	9
U-DRAIN™ OPTIONS/ACCESSORIES	12
INSTALLING U-DRAIN™	13



# WHAT IS U-DRAIN™?

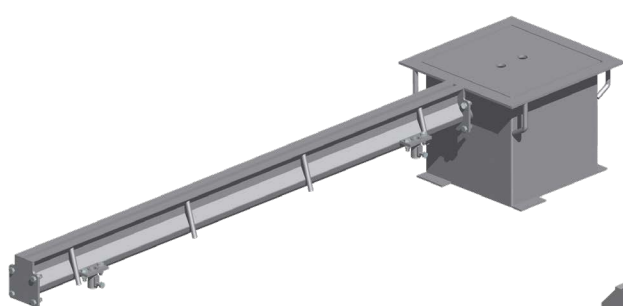
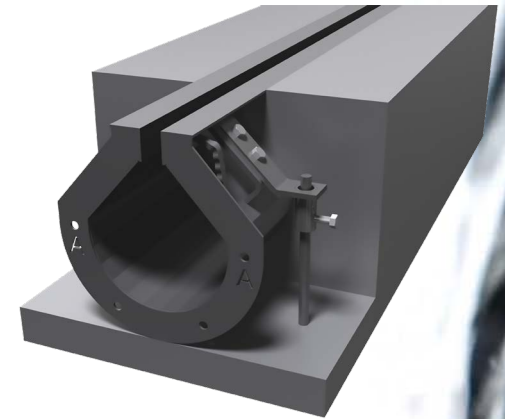
U-drain™ is a **SIMPLE, LOW MAINTENANCE, and COST-EFFECTIVE** solution for concrete floor drainage.

This **NON-GRATED, PRE-ENGINEERED SLOTTED TRENCH DRAIN** is installed into a concrete floor and designed to remove surface water through a single slot that opens into a trench which directs drainage to a connected sump.

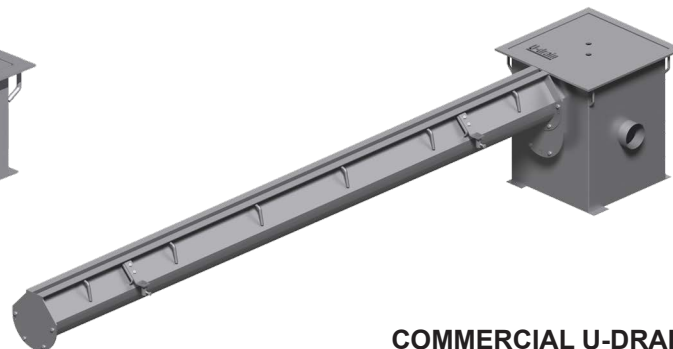
The basic U-drain™ system consists of pre-sloped and/or neutral sections, an adapter plate/end cap and a sump. Each of the drain system's components are bolt-together to provide **USER-FRIENDLY ASSEMBLY AND INSTALLATION**.

**INSTALLED INTO A FLOOR GRID PRIOR TO CONCRETE BEING POURED**, the U-drain™ system connects directly to the rebar grid. The drain can be used as a centre screed when pouring concrete. Once the concrete has been poured, the narrow slot opening is level with the floor, creating an aesthetically pleasing, low-profile intake.

U-drain™ is available in two models: **RESIDENTIAL AND COMMERCIAL**. Each model is fundamentally the same, but with unique features that allow for the drain to be used in a large variety of applications, ranging from home garages to aircraft hangars.



RESIDENTIAL U-DRAIN



COMMERCIAL U-DRAIN





# WHAT IS U-DRAIN™?



## DRAIN MATERIAL

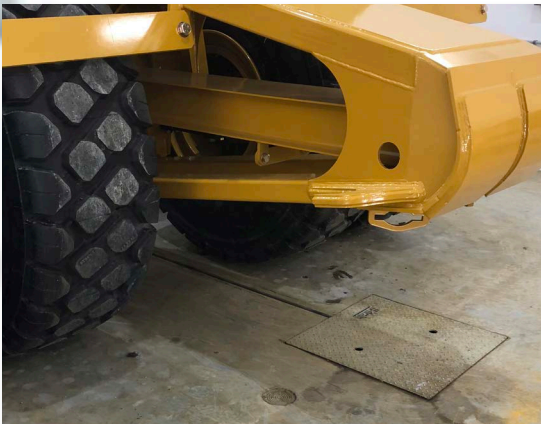
U-drain™ is **AVAILABLE IN TWO MATERIALS: GALVANIZED and STAINLESS STEEL.** Galvanizing's Zinc coating provides excellent resistance to normal corrosion over time. For applications that deal with highly corrosive drainage and/or sanitary concerns where bacteria buildup must be prevented, Stainless Steel provides unmatched performance.

## DRAINAGE CAPACITY

U-drain™ is **ABLE TO HANDLE A LARGE VOLUME OF DRAINAGE WITH EASE.** Our Commercial U-drain™ comes in standard 10' sections that have a 1" wide slot. This gives each 10' section 120 square inches of intake. Commercial U-drain™ standard sections are sloped at .05% (a 1/2" over 10') which ensures proper drainage flow towards the sump pit.

Residential U-drain™ comes in 5' lengths and features a 1/2" wide slot. This gives each 5' section 30 square inches of intake. Residential U-drain™ sections are not pre-sloped as their intended application is in shorter drain runs.

The only possible bottleneck to U-drain™'s drainage capacity is the discharge of the sump pit. A Commercial U-drain™ Sump Pit has a discharge pipe OD of 4.5" which allows for 240 GPM of capacity. A Residential U-drain™ Sump Pit has a discharge pipe OD of 2.375" which allows for 30 GPM of capacity.



## STRUCTURAL INTEGRITY

U-drain™ is designed in such a way that the weight load on top of the drain is channelled directly into the surrounding concrete. This design literally makes U-drain™ as strong as the concrete that is poured around it.

U-drain™ is **CSA TESTED and CERTIFIED IN BOTH CANADA AND THE UNITED STATES.** Our commercial and residential models in BOTH galvanized and stainless steel are CSA certified as Extra Heavy Duty (CSA B79-08) and Special Duty (ASME A112.6.3-2016). Special Duty is the highest ASME load class and requires the drain to have a safe live load of over 10,000lbs. This rating is safe for extremely heavy traffic including airport traffic.



## WHY CHOOSE U-DRAIN™?



### LOW MAINTENANCE

No grates to remove and clean. Simply insert the cleaning paddle and run it the length of the drain for cleanout.



### CLEAN DRAINAGE

The single slot intake minimizes bacteria build up and stays clean far longer than traditional grates.



### SLEEK LOOK

Seamlessly blends in with your concrete floor surface with either a 1/2" or 1" slot opening, U-drain™ is sleek & low profile.



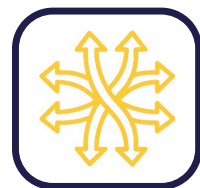
### LONG LASTING

Galvanized or Stainless Steel ensures far greater durability than plastic drains. There are no grates that warp and rust over time.



### EASY-TO-INSTALL

All drain components are bolt-together and are designed to be easy to assemble and connect into your floor's rebar grid.



### VERSATILE USE

From commercial to home use, U-drain™ is able to be utilized in almost any surface drainage application.



### STRUCTURAL INTEGRITY

We are not the cheap option but we will save you time and money. Fast install, low maintenance and unmatched durability.



### COST SAVINGS

We are not the cheap option but we will save you time and money. Fast install, low maintenance and unmatched durability.

# FREQUENTLY ASKED QUESTIONS ABOUT U-DRAIN™

## How do I plumb my U-drain™ system?

It is an easy process to plumb a U-drain™ system. Simply connect a regular PVC plumbing pipe to the drain's sump pit discharge via a FERNCO coupler. Direct the pipe to discharge wherever your preference and local codes allow.

## How far from a wall should I position my U-drain™?

We recommend keeping your U-drain™ around 10 feet away from any wall. This is to minimize the degree of slope that is required to ensure proper flow to the drain.

## Can U-drain™ handle the weight of my traffic?

Absolutely. Both Commercial and Residential U-drain™ (sections, sumps and lids) are CSA certified as Extra Heavy Duty and can handle safe live loads of well over 10,000lbs or 1,040 psi. U-drain™ has been installed into many extreme load applications, including: heavy equipment manufacturing facilities, aircraft hangers and loading docks.

## How expensive is U-drain™?

We are not the cheapest drain system on the market when compared to alternatives such as plastic or fiberglass. Instead we provide greater reliability and a longer life than our competitors. Our steel construction is second to none for durability. U-drain™ requires no grates which are normally the most expensive part of a trench drain system and must be replaced over time. For actual pricing for your specific system please call 1.855.746.8200 to be connected with your local dealer.

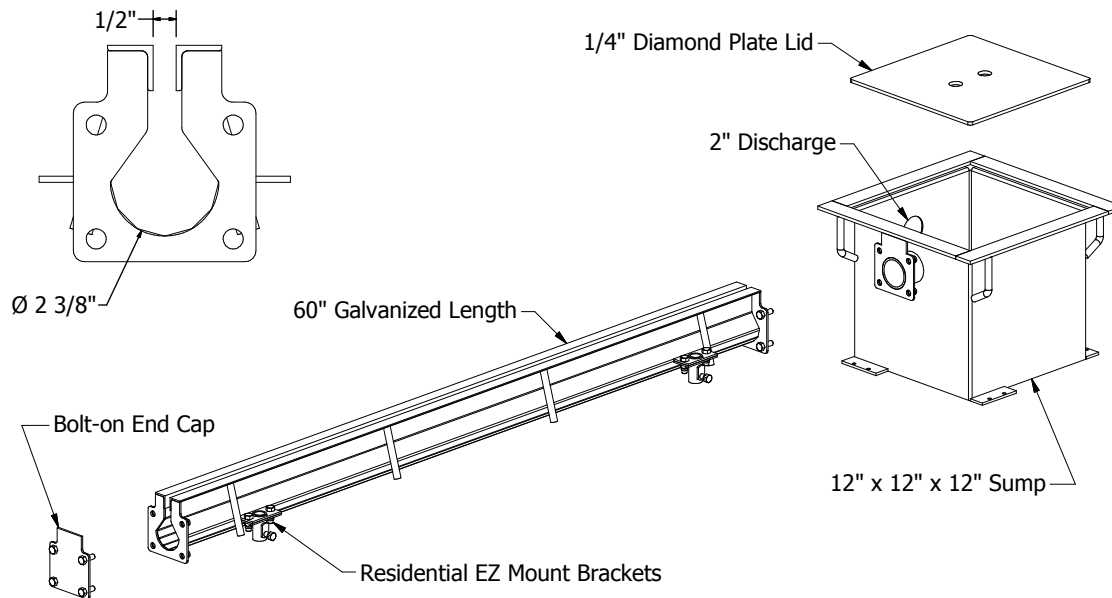




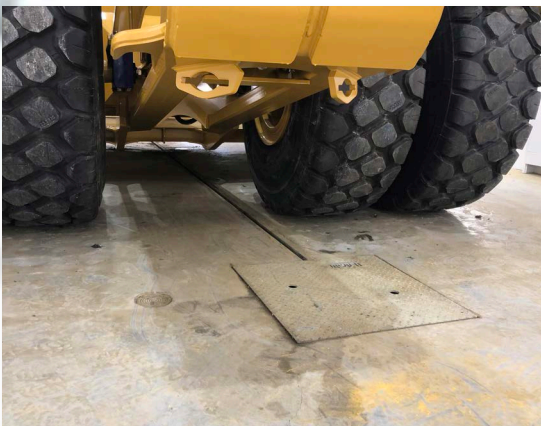
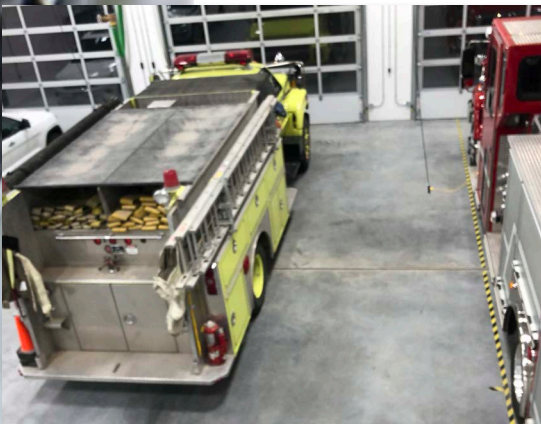
# RESIDENTIAL U-DRAIN™

Residential U-drain is designed for small scale drainage applications ranging from home garages to driveways. Residential U-drain comes in standard 5' lengths. These sections are not pre-sloped due to most residential applications requiring less overall length for drainage to travel. A 5' section of Residential U-drain has 30 square inches of intake for a maximum capacity of 240 GPM.

The residential system features an ADA compliant 1/2" slot opening that is able to handle anything from snow melt to washing a car indoors. This slot acts as the intake for the drainage to enter the trench and make its way to the sump pit. The standard residential sump size is 12" x 12" x 12" with larger sizes and multiple inlet options available.



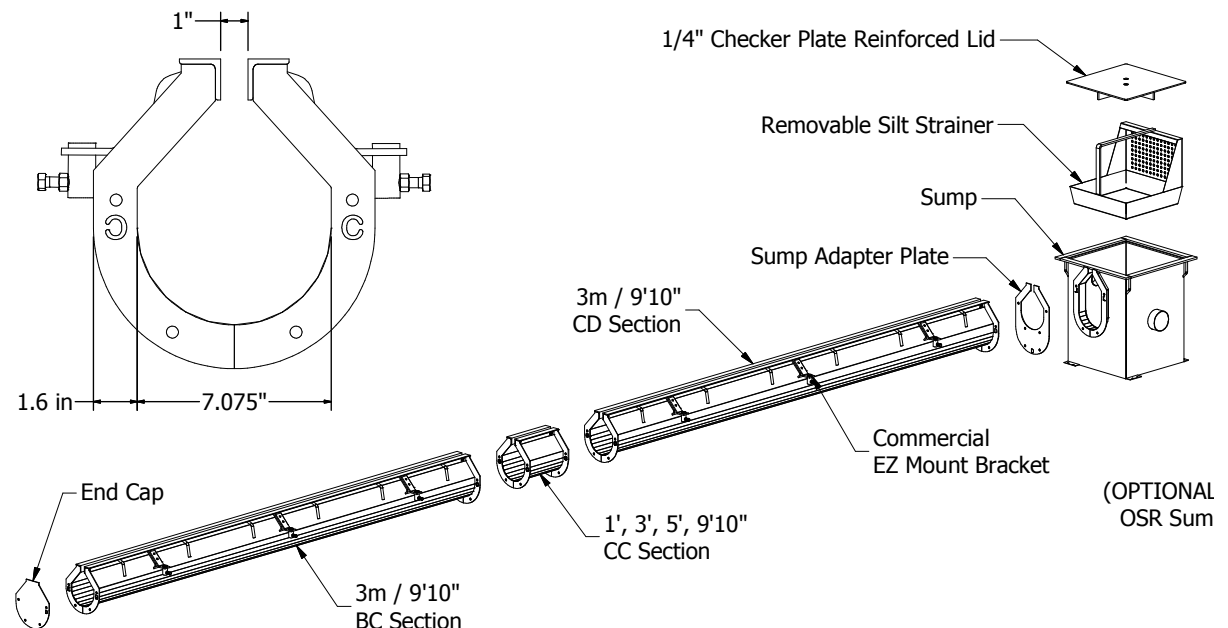




## COMMERCIAL U-DRAIN™

Commercial U-drain is designed for large scale drainage applications ranging from parkades to aircraft hangars. It is designed to meet and exceed HS-20 loading requirements, making it perfect for use in heavy traffic applications. Commercial U-drain comes in standard 10' lengths that are pre-sloped at a rate of .05% (1/2" over 10'). This slope allows for continuous flow over long distances and renders the drain self-cleaning. Unsloped 5', 3' and 1' sections are used for extending along short distances when needed. The drain system begins with an end section that slopes toward a sump pit, with sloped sections inserted to lengthen the drain as desired. 120' of continuous one way slope is available. With proper components, flow rates of over 950 GPM are attainable.

The Commercial U-drain system features a 1" slot opening. A wide variety of commercial sump pits and accessories are available, including silt strainers and oil separators.



# U-DRAIN™ APPLICATIONS

## EQUIPMENT SHOPS

Building an equipment shop? U-drain™ is an excellent choice. CSA tested and certified as Extra Heavy-Duty, U-drain™ can handle the weight of your machinery with ease. Our single slot intake eliminates the need to regularly remove and clean any grates. Commercial U-drain™'s continuous slope allows for long drain runs that maintain optimal water flow into the sump. U-drain™ is simple to install and is designed to last a lifetime.



## HOME GARAGES

Finally! A garage drain that looks good and gets the job done well. U-drain™ is low profile and blends in with your concrete floor for a clean look. The single slot is easy to clean/maintain and the bolt-together design making it a breeze to install for contractors and do-it-yourselfers. It only requires two floor slopes instead of four and it's ability to run longer distances makes U-drain™ far better at keeping things dry than a simple center drain.



## LANDSCAPING PROJECTS

A surface drain that adds class to your landscaping instead of taking away from it. U-drain™ has a 1/2" or 1" slot (depending on the model used) that makes for a sleek and modern look not often seen in floor drains. There are no ugly looking grates that regularly get plugged. Whether you're keeping your poolside or patio dry, U-drain™ is easy to look at and it's simple to maintain; two traits hard that are hard to find.

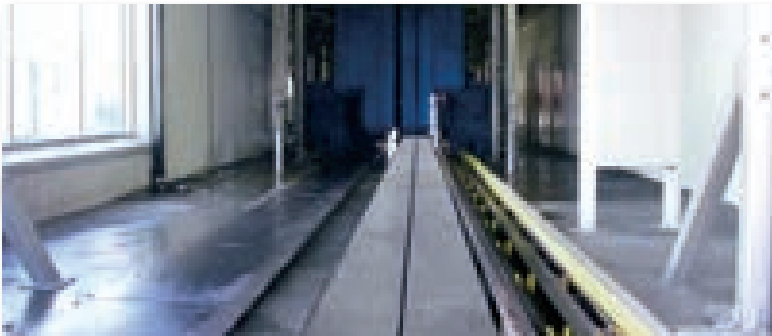






## INDUSTRIAL/MANUFACTURING

You don't have to worry about unsafe floor drains, tedious maintenance or damage due to heavy traffic. U-drain™ is CSA certified as Extra Heavy-Duty and easily handles heavy machinery and vehicles without you ever having to replace grating. The single slot eliminates having to lift out and clean grates and our low-profile design requires only two floor slopes instead of four. U-drain™ is available in durable galvanized or stainless steel.



## AUTOMOTIVE

U-drain™ has the strength and capacity to handle applications such as car washes, automotive service centers and factories. Our load-bearing design ensures that any machinery or vehicle traffic poses no danger to the drain. There are no grates to rust, get bent, plugged, cleaned or replaced. With options like Oil Separator (OSR) Sump Pits and self-cleaning attachments, U-drain™ is an excellent choice for any automotive application.



## FOOD & BEVERAGE PROCESSING

Maintaining a sanitary environment is key in food and beverage processing. U-drain™ is one of the cleanest, most sanitary floor drains on the market. Our single slot minimizes contamination risk with less area for bacteria to collect than traditional grated drains. U-drain™ has self-cleaning options and is available in stainless steel, making it one of the cleanest and best choices for a floor drain in the food/beverage industry.

# U-DRAIN™ APPLICATIONS



**CAR DEALERSHIP**



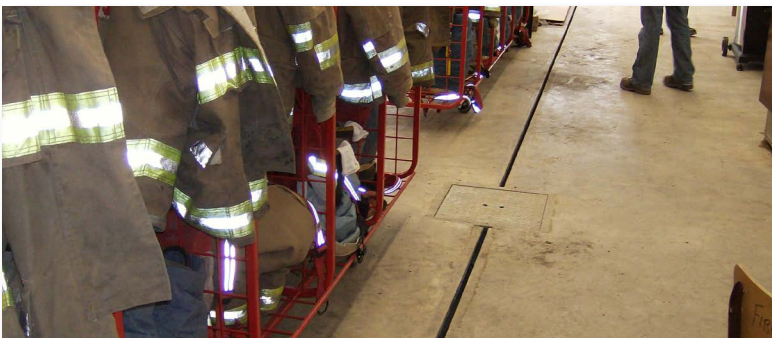
**MANUFACTURING FACILITY**



**AIRPORT HANGER**



**ANIMAL SHELTER**



**FIREHALL**



**HEAVY EQUIPMENT SHOP**



# U-DRAIN™ OPTIONS/ACCESSORIES

There are a variety of optional components available for your U-drain system including a wide range of sump pits with various sizing and intake options (single, double and triple inlet models available); oil separator sump units; checkerplate, grated or slotted lids and more.



12x12x12 Residential Sump  
(Single & Double Inlet)



18x18x24 Commercial Sump  
(Single, Double & Triple Inlet)



24x24x24 Commercial Sump  
(Single, Double & Triple Inlet)



36x36x36 Commercial Sump  
(Single, Double & Triple Inlet)



Oil Separator Sumps  
(18", 24" and 36" Models)



Residential or Commercial  
Silt Strainer



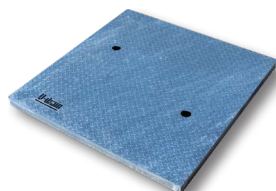
Commercial Sump  
Basket



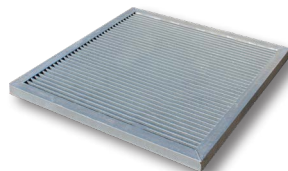
Flush Nozzle



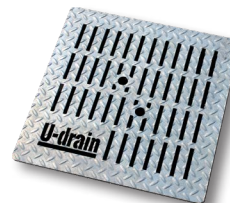
Cleaning Paddle  
(Residential &  
Commercial)



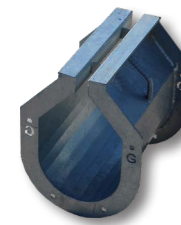
Checkerplate Lid



Grated Lid



Slotted Lid

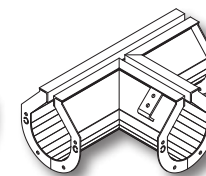
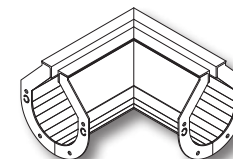
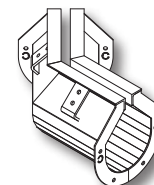


1' Sections



3' & 5' Sections

**NEW OPTIONS INCLUDE: 45°, 90° and T-Sections**



*U-drain™ is offered in Stainless Steel with 304L and higher finishes. Contact for more info.*

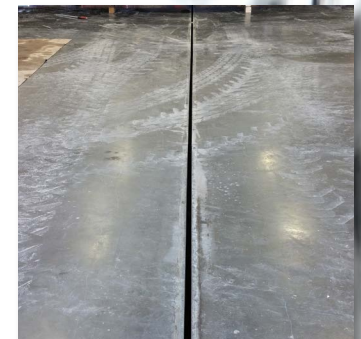
# SIMPLE INSTALLATION

## Recommended Tools:

- 9/16" Wrench and Socket
- Cordless Drill (optional)
- Sledge Hammer (to drive rebar)
- Level (transit or laser optional)
- Duct Tape

## RESIDENTIAL U-DRAIN INSTALLATION

1. Dig a trench, allowing room for a minimum of 6" of concrete underneath and on both sides of the U-drain.
2. Lay sump at desired end of the trench (it is recommended to pre-pour a concrete pad as a foundation for the sump pit to be properly secured; if no pad is poured, peg the sump pit down before the U-drain is connected).
3. Bolt all remaining sections of U-drain together. At the end of the last section, seal the drain with a bolt-on End Cap.
4. Fasten the E-Z Mount Brackets at each U-drain bracket interval using the hardware supplied. Pound appropriate lengths of rebar into your base material with the rebar running through the conduit portion of the E-Z Mount Bracket. Make sure that the tops of all sections are level. When this is completed, tighten the set bolts on the E-Z Mount Brackets to secure the U-drain.
5. Once the U-drain is level and secured, tie rebar from the floor grid into the rebar on the U-drain assembly for structural support. Cover the slot-opening with duct tape.
6. Once concrete has been poured and the slab is firm, remove duct tape from the slot-opening and, using the Cleaning Paddle, clean out the U-drain and sump pit.



*Follow the link to see our  
Residential U-drain™ Installation Video*



# SIMPLE INSTALLATION

## Safety & Installation Tips:

- Before starting, be sure to check building codes and local government ordinances regarding water drainage and plan your U-drain set up accordingly.
- Make sure the trench excavation allows for proper thickness and reinforcement specified by designer or engineer.
- Pre-pour concrete to the warning sticker (bend in steel) on the U-drain, prior to completing the concrete slab.
- Use a pencil vibrator to ensure that there are no air pockets around the drain assemblies.
- Lay out all U-drain sections using lettered sequence, prior to installation.
- Make all PVC pipe connections and sump pit installations prior to connecting U-drain channels.
- When connecting OSR sumps, use a Fernco Coupler (found at hardware stores) to secure connection at the standard 4.5" discharge outlets.
- A minimum of 3" between sump rims is recommended for OSR installations.
- Begin the installation at the outlet or discharge end and work backwards or "upstream".
- After the concrete has set, remove all of the Tape from drain slot and use the Cleaning Paddle to remove all debris from the U-drain channel and Sump Pit.

## COMMERCIAL U-DRAIN INSTALLATION

1. Dig a trench, allowing room for a minimum of 6" of concrete underneath and on both sides of the U-drain.
2. Lay sump at desired end of the trench (it is recommended to pre-pour a concrete pad as a foundation for the sump pit to be properly secured; if no pad is poured, peg the sump pit down before the U-drain is connected).
3. Install all sump pits and PVC piping, making sure that the sump pit walls are reinforced to prevent bowing of the sidewall.
4. Bolt the last section of U-drain (the deepest) to the sump pit. If there is a pre-existing sump pit or no pit at all, install the last U-drain section against the forming.
5. Bolt all of the remaining sections of U-drain together using the lettered flanges as a guide.  
Ex: Section End-A bolts to Section A-B, A-B bolts to B-C, etc.
6. Fasten the E-Z Mount Brackets at each U-drain bracket interval using the hardware supplied. Pound appropriate lengths of rebar into your base material with the rebar running through the conduit portion of the E-Z Mount Bracket. Make sure that the tops of all sections are level. When this is completed, tighten the set bolts on the E-Z Mount Brackets to secure the U-drain.
7. Once the U-drain is level and secured, tie the rebar from the floor grid into the rebar on the U-drain assembly for structural support. Cover the slot-opening with duct tape.
8. Once concrete has been poured and the slab is firm, remove duct tape from the slot-opening and, clean out the U-drain and sump pit using the Cleaning Paddle.



*Follow the link to see our  
Commercial U-drain™ Installation Video*



simple, efficient, and cost effective  
floor and surface **drainage system**

MANUFACTURED BY:



[www.u-drain.ca](http://www.u-drain.ca) | 1.855.746.8200 | [sales@u-drain.ca](mailto:sales@u-drain.ca)

Illustrations, photographs and specifications in this brochure are based on the latest information at the time of publication.  
Design and specification of products is subject to change without notice, please contact your local dealer for product information and availability.

©2021 Norstar Industries Ltd.