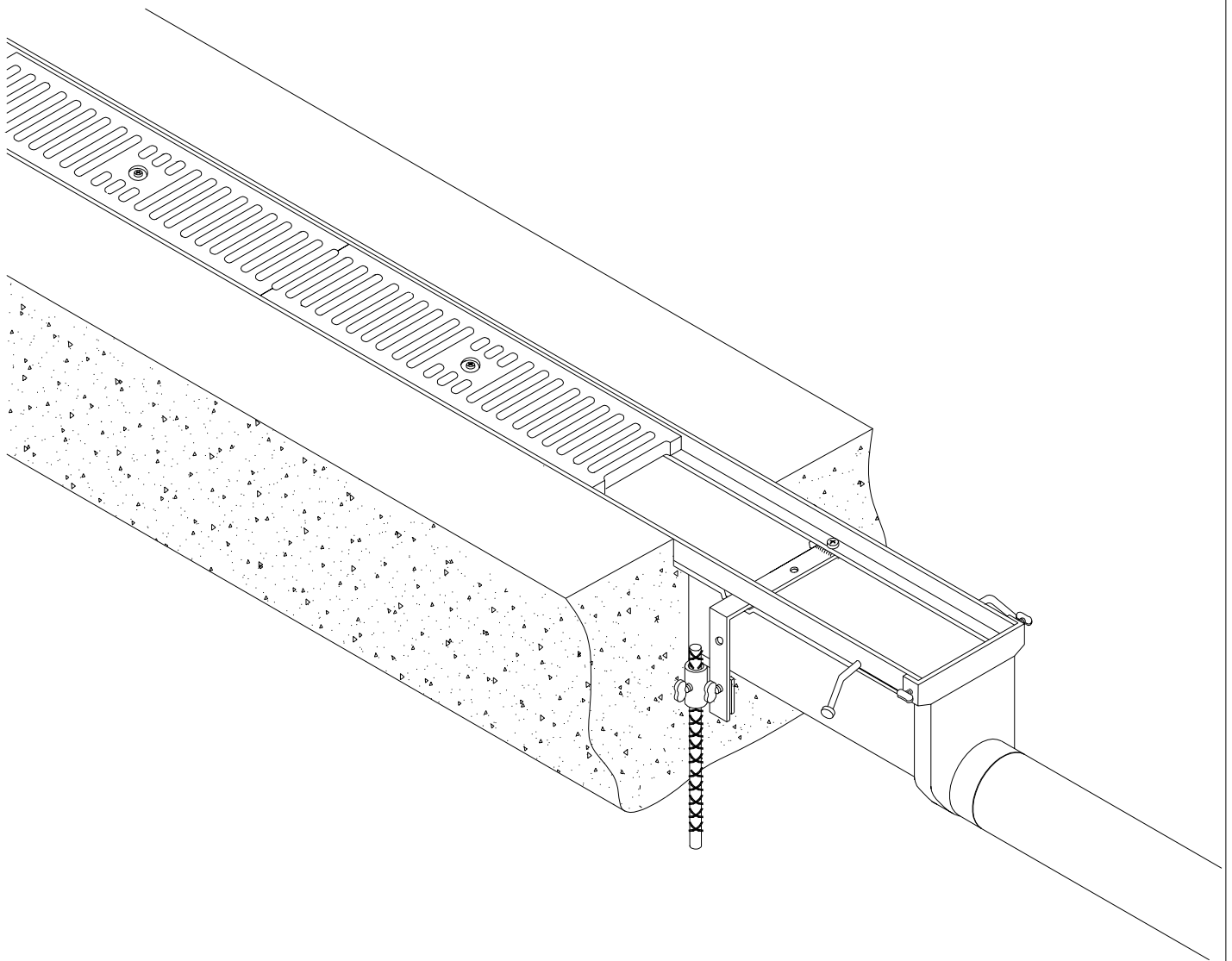


# **ZURN FLO-THRU™**

# **INSTALLATION INSTRUCTIONS**

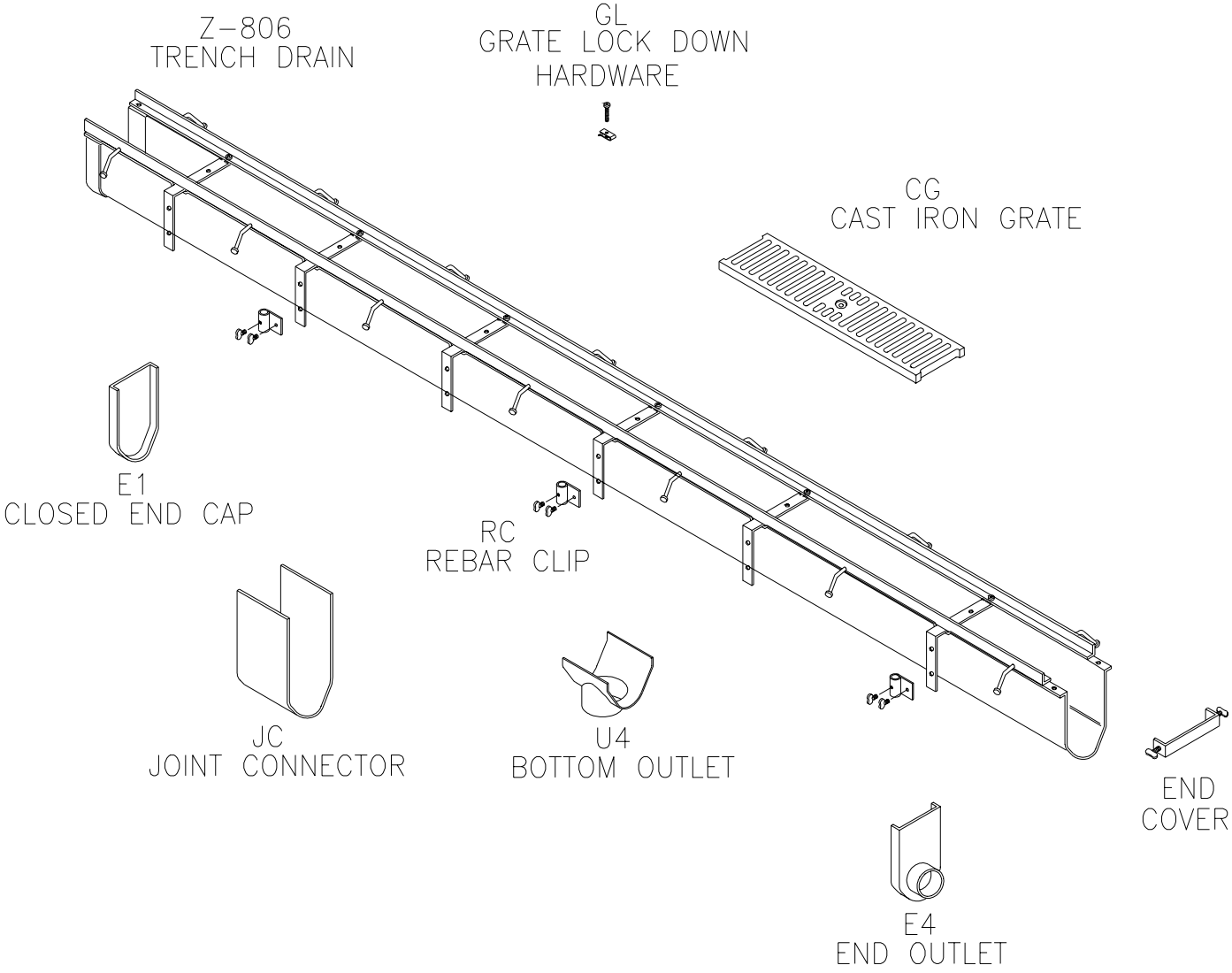


ZURN INDUSTRIES, INC., FLO-THRU DIV., 2855 Girls Road, Jamestown, NY 14701

Phone: 716/665-1132, Fax: 716/665-1135, World Wide Web: [www.zurn.com](http://www.zurn.com)

In Canada: ZURN INDUSTRIES LIMITED, 3544 Nashua Drive, Mississauga, Ontario L4V1L2, Phone: 905/405-8272 Fax: 905/405-1292

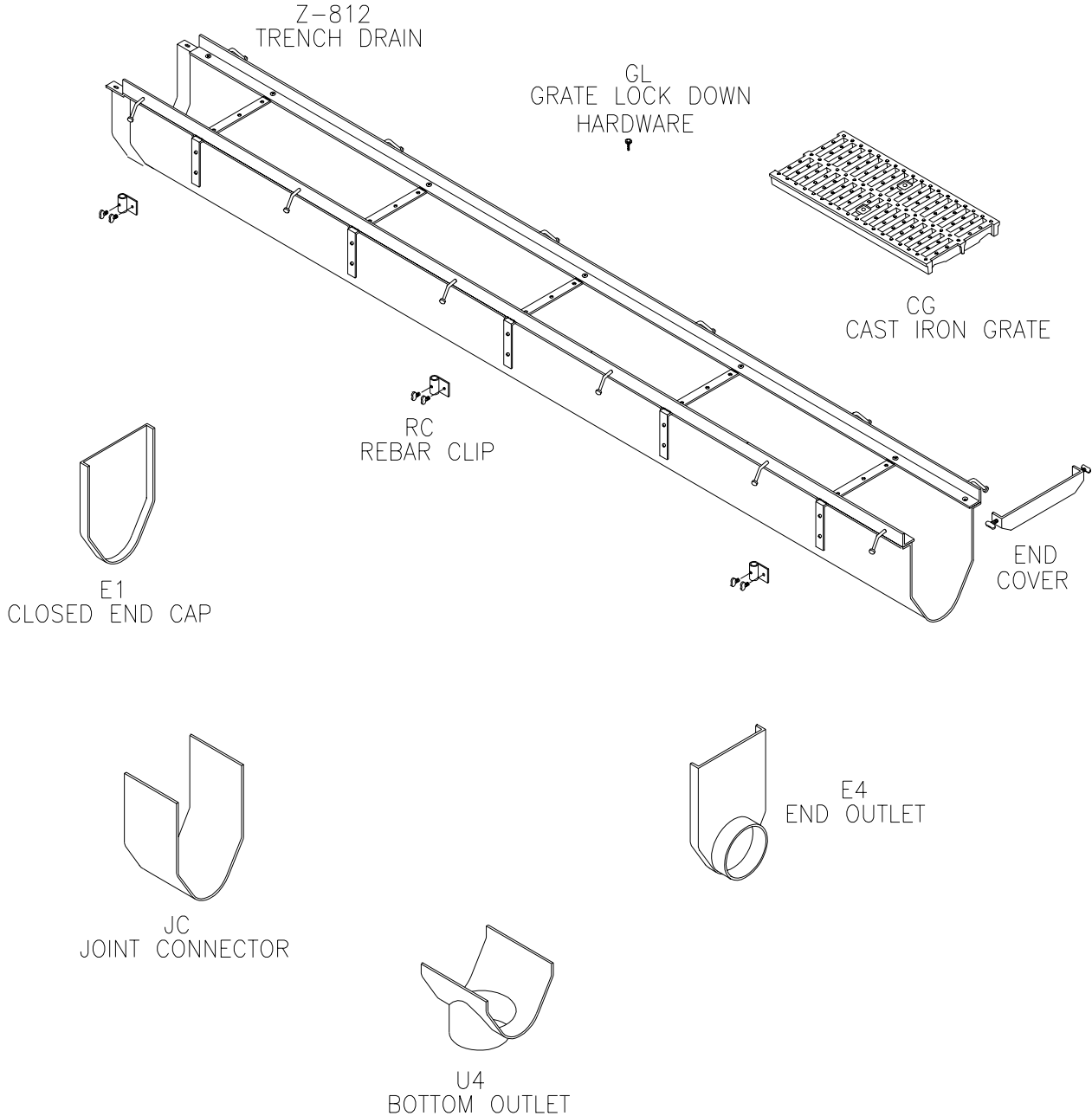
# FLO-THRU ACCESSORIES



Above are some of the trench drain components typical to an installation. Double check your order to ensure that you have all components particular to your job before beginning your installation.

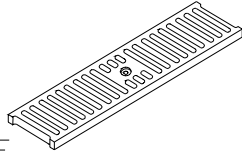
Contact Zurn 'Flo-Thru' at 716-665-1132 should additional material be required.

# FLO-THRU ACCESSORIES continued

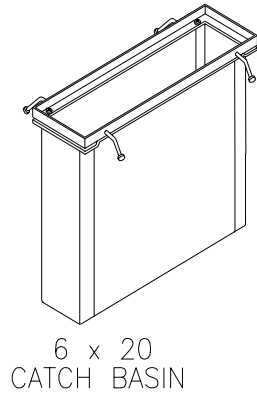
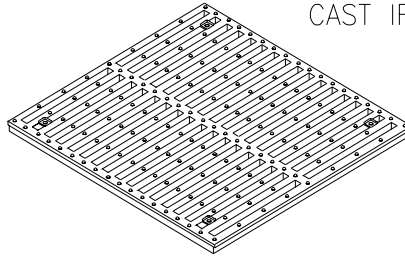


# CATCH BASIN ACCESSORIES

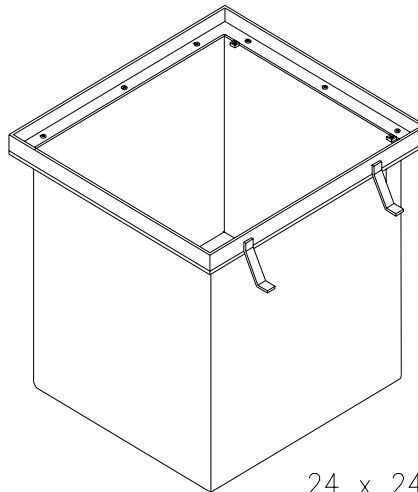
6 x 20 - CG  
CAST IRON GRATE



24 x 24 - CG  
CAST IRON GRATE



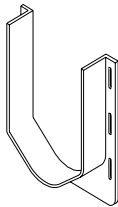
6 x 20  
CATCH BASIN



24 x 24  
CATCH BASIN



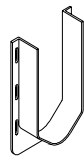
E4  
END OUTLET



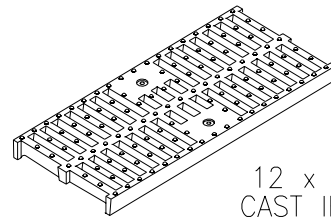
Z-812 - IA  
INLET ADAPTOR



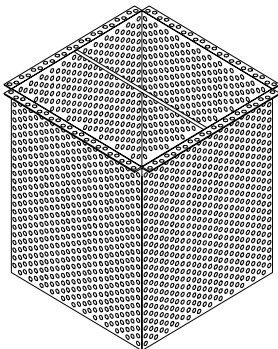
U4  
BOTTOM OUTLET



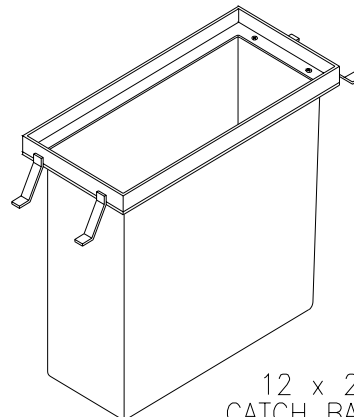
Z-806 - IA  
INLET ADAPTOR



12 x 24 - CG  
CAST IRON GRATE

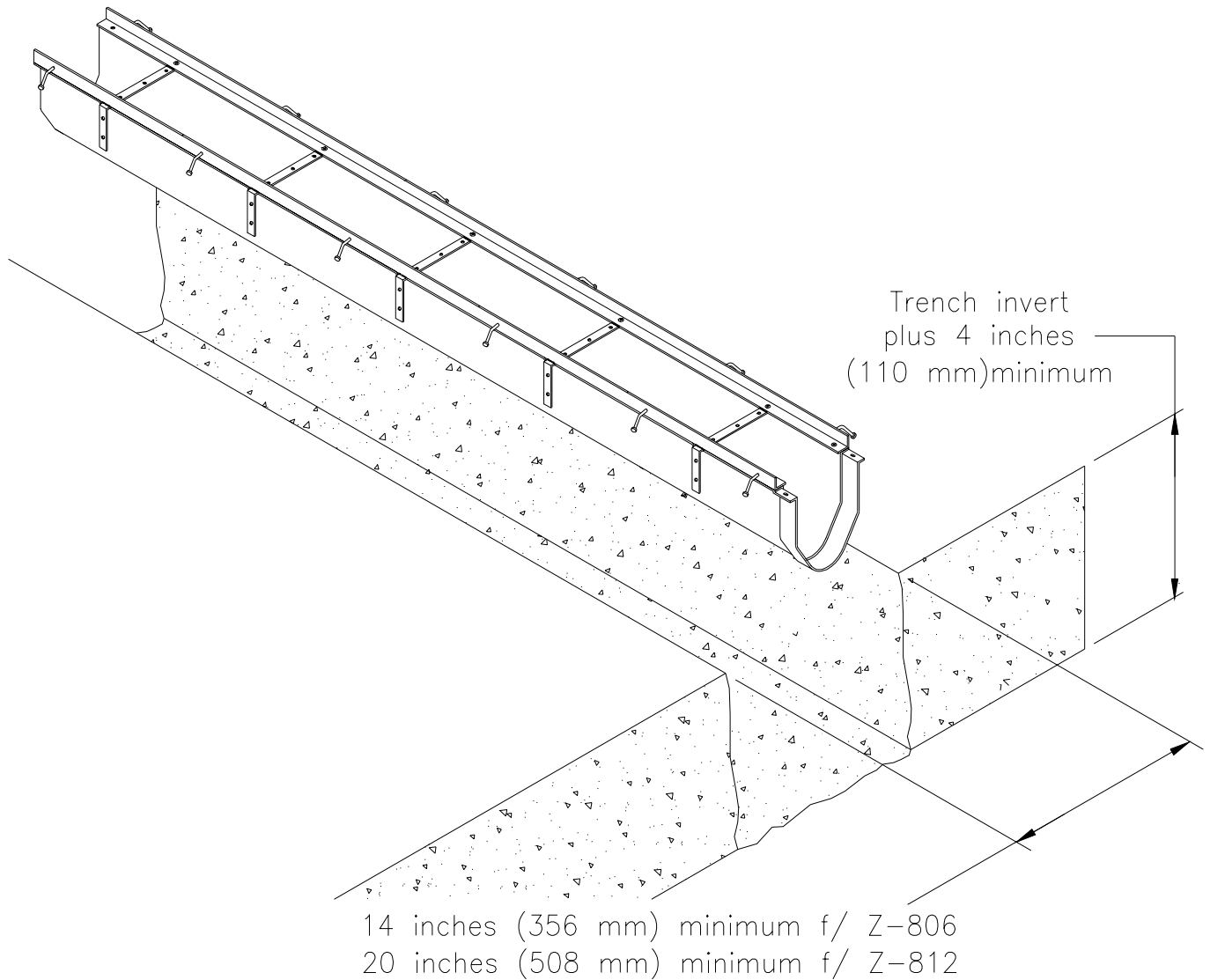


-Y  
SEDIMENT BUCKETS  
(TO FIT ALL BASINS)



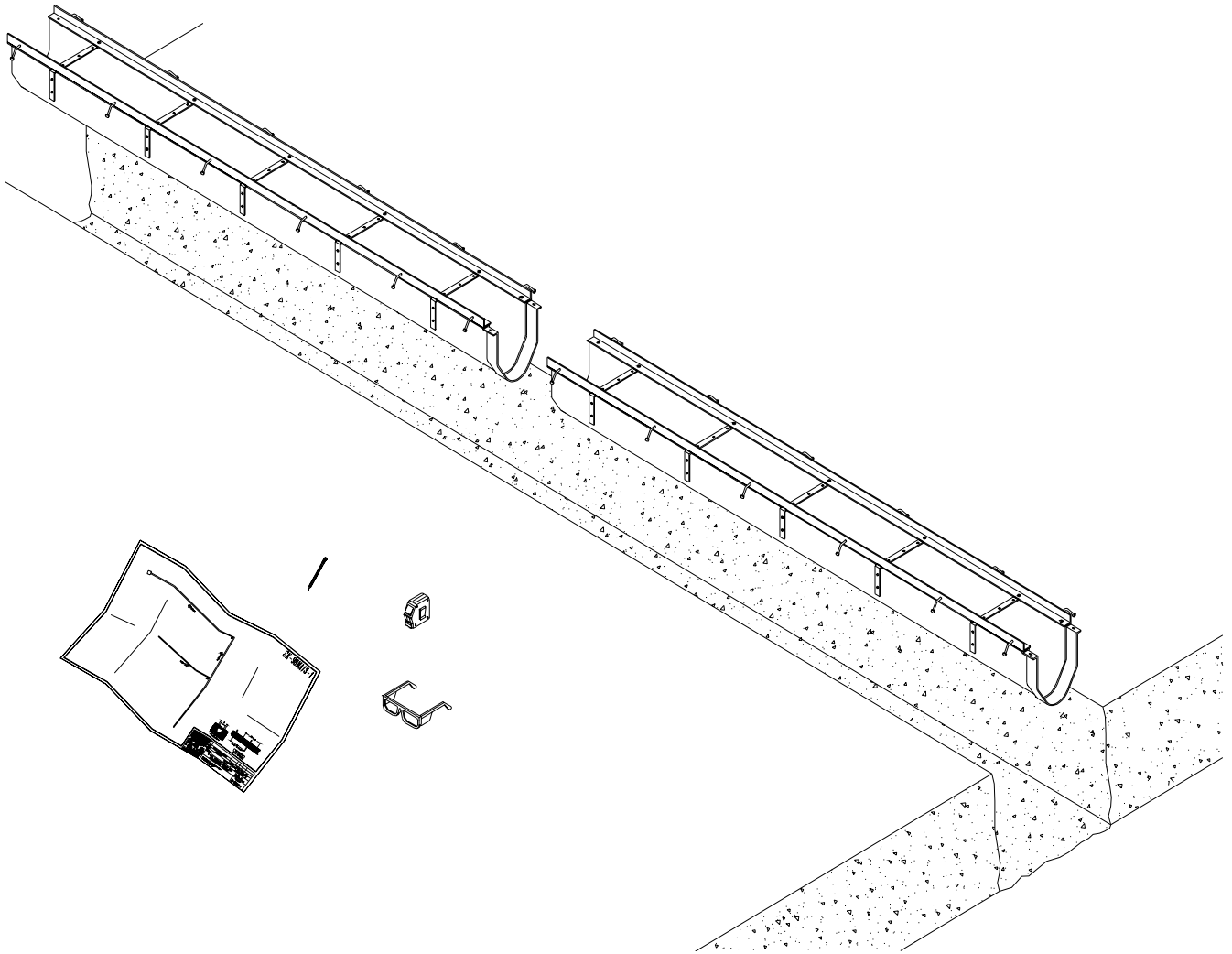
12 x 24  
CATCH BASIN

# EXCAVATION



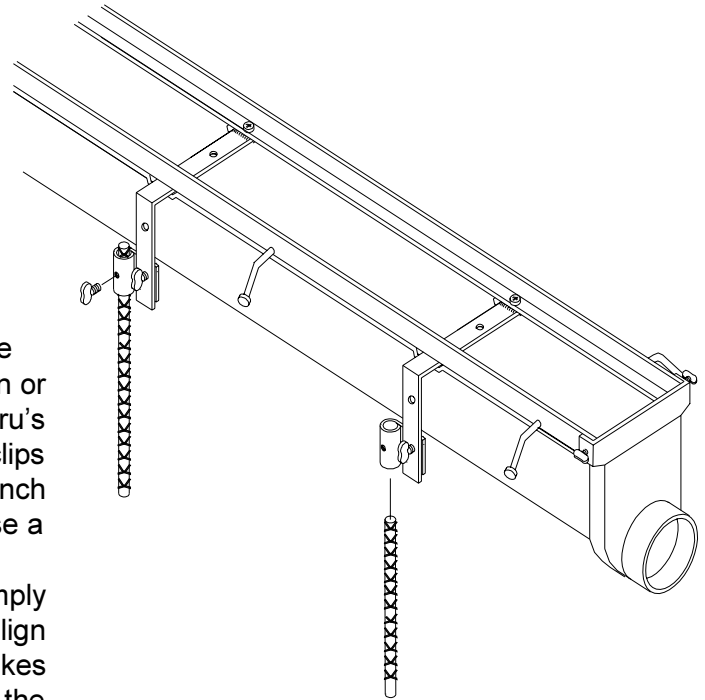
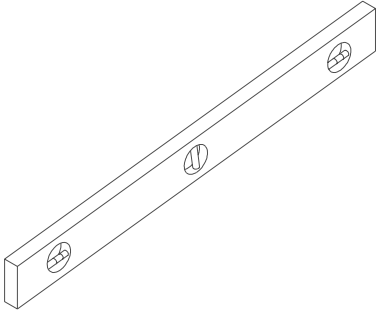
Trench excavation must be 4 inches greater than the trench depth and a minimum width of either 14 or 20 inches, depending on which system is being installed. Soft and/or shifting soil substrates may cause cracking of the concrete and consequent movement of the trench. It is critical that the concrete be poured on an adequate foundation.

# OVERALL LAYOUT



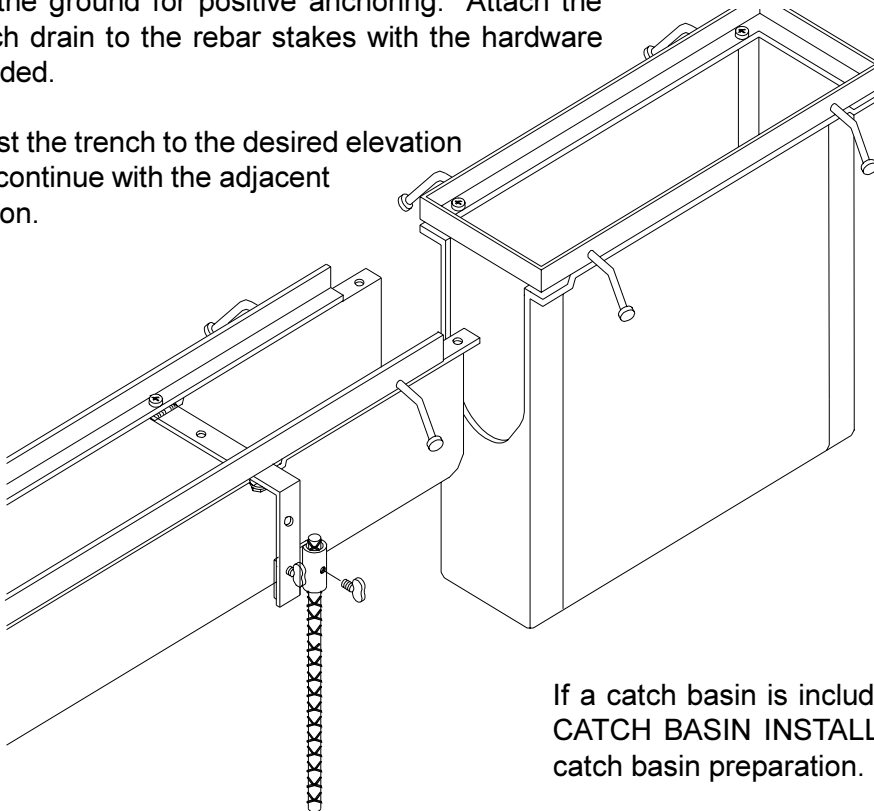
Upon completion of the trench excavation, the channels should be placed in numeric order alongside the excavation and according to the job layout. Each trench section has a trench identification number and flow direction arrow indicating its sequence within the system. Grates are not installed at this time.

# SETTING THE TRENCH



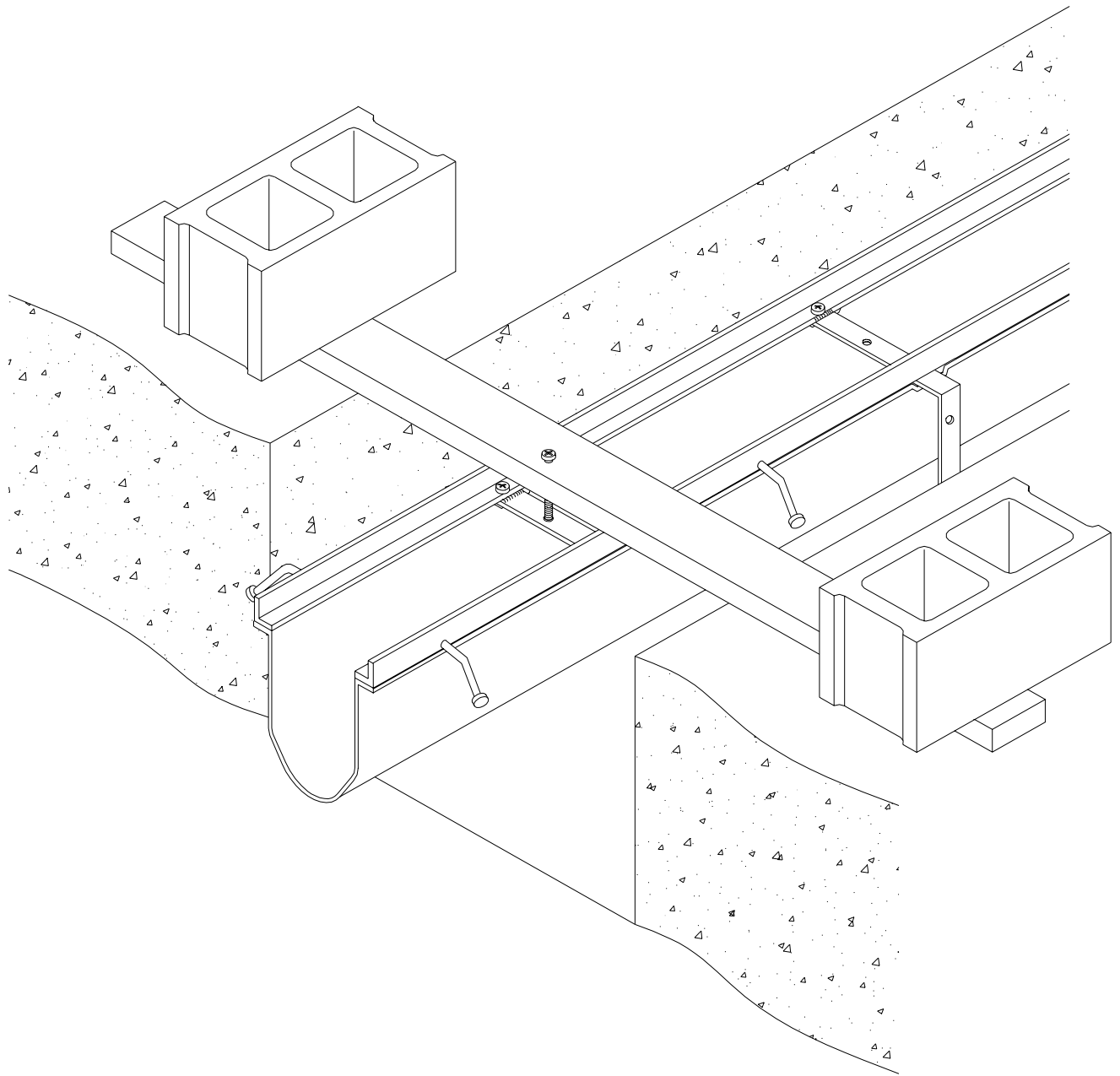
Typically, a trench system is assembled from the outlet on back. Starting with the deepest section or catch basin, set the first channel utilizing Flo-Thru's unique Rebar Clip anchoring system. Rebar clips are used on both sides of the length of each trench drain for easy attachment to #4 rebar stakes (use a minimum of 3 sets per 10' section of Z-806, a minimum of 4 sets per 10' section of Z-812). Simply attach the Rebar Clip to the anchor straps and align the rebar stakes where needed, then drive the stakes into the ground for positive anchoring. Attach the trench drain to the rebar stakes with the hardware provided.

Adjust the trench to the desired elevation and continue with the adjacent section.



If a catch basin is included within your layout refer to CATCH BASIN INSTALLATION for further details on catch basin preparation.

# SUSPENDED INSTALLATION

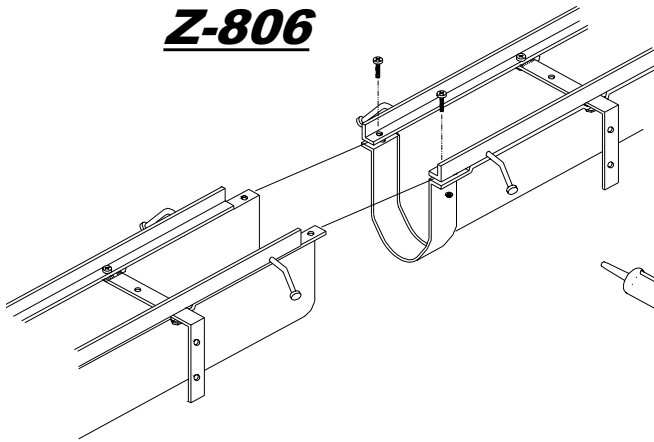


An alternative means of installation is to suspend the trench drain as shown. Wooden braces to hang the trench drain run can be attached to the drain body through the grate lock down bars as illustrated above.

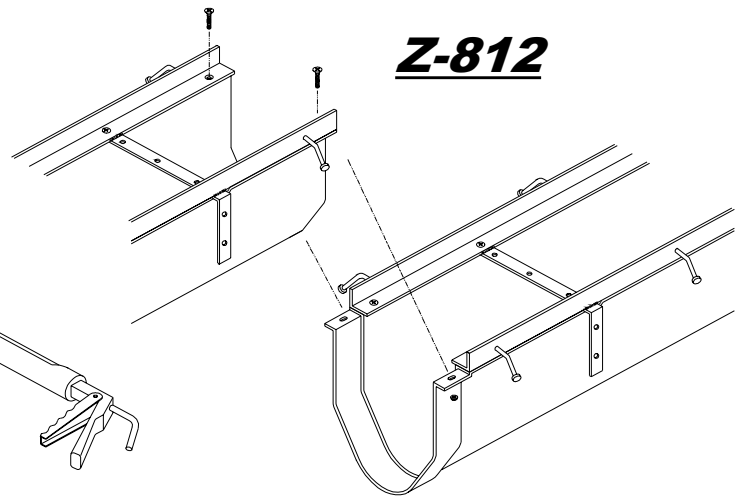


# JOINT CONNECTION

**Z-806**

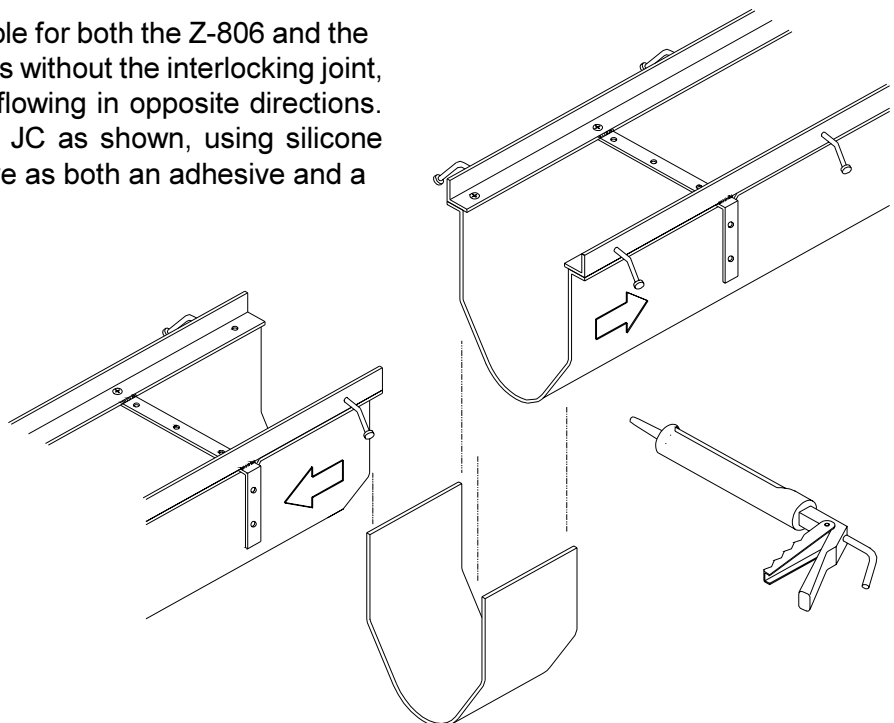


**Z-812**



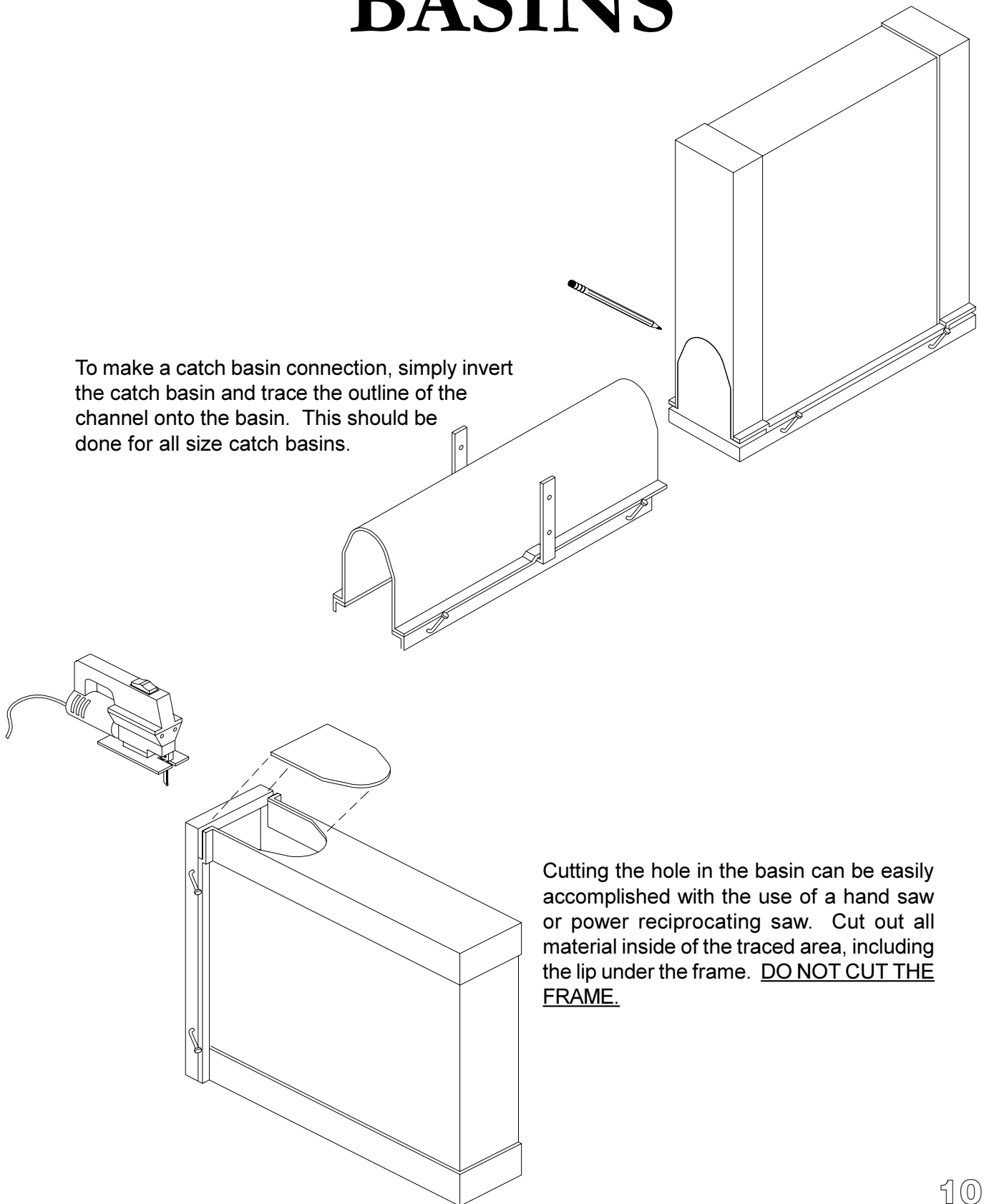
Assembling the trench run is easy using both types of 'Flo-thru's' mechanical interlocking joints. Simply align the two mating ends of the trench sections and fasten with the hardware fasteners provided. A silicone caulk, or a construction adhesive, such as Liquid Nails, is recommended to be used at each joint as a sealer. Vinylester channels should be joined using an epoxy of like properties. Recommended brands are the Plexus MA320 Methacrylate adhesive and the Sika-Dur 31 High Modulus Gel Adhesive.

A joint connector (JC) is available for both the Z-806 and the Z-812 to join two trench sections without the interlocking joint, such as sections that may be flowing in opposite directions. Cut the lengths and place the JC as shown, using silicone caulk or a construction adhesive as both an adhesive and a sealant.



# CATCH BASINS

To make a catch basin connection, simply invert the catch basin and trace the outline of the channel onto the basin. This should be done for all size catch basins.



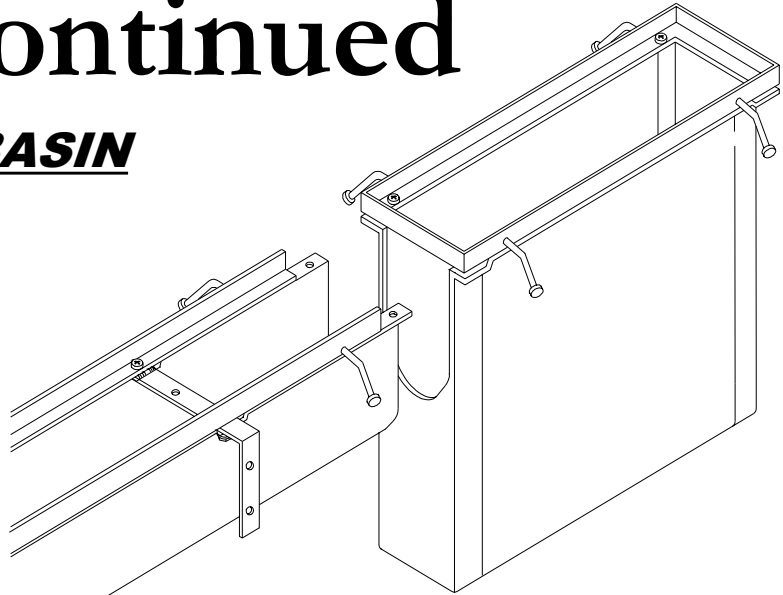
Cutting the hole in the basin can be easily accomplished with the use of a hand saw or power reciprocating saw. Cut out all material inside of the traced area, including the lip under the frame. **DO NOT CUT THE FRAME.**

# BASINS

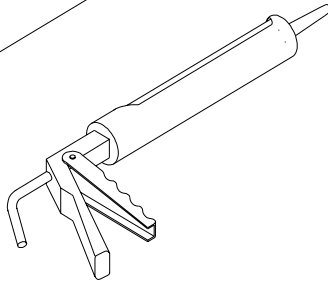
## continued

### **Z-806 INTO 6 x 20 BASIN**

After the channel outline is removed from the catch basin, slide the male end of the channel into the basin underneath the frame and secure them with the hardware provided. After the connection is complete and the channel leveled, a silicone caulk or a construction adhesive is recommended around the connection.

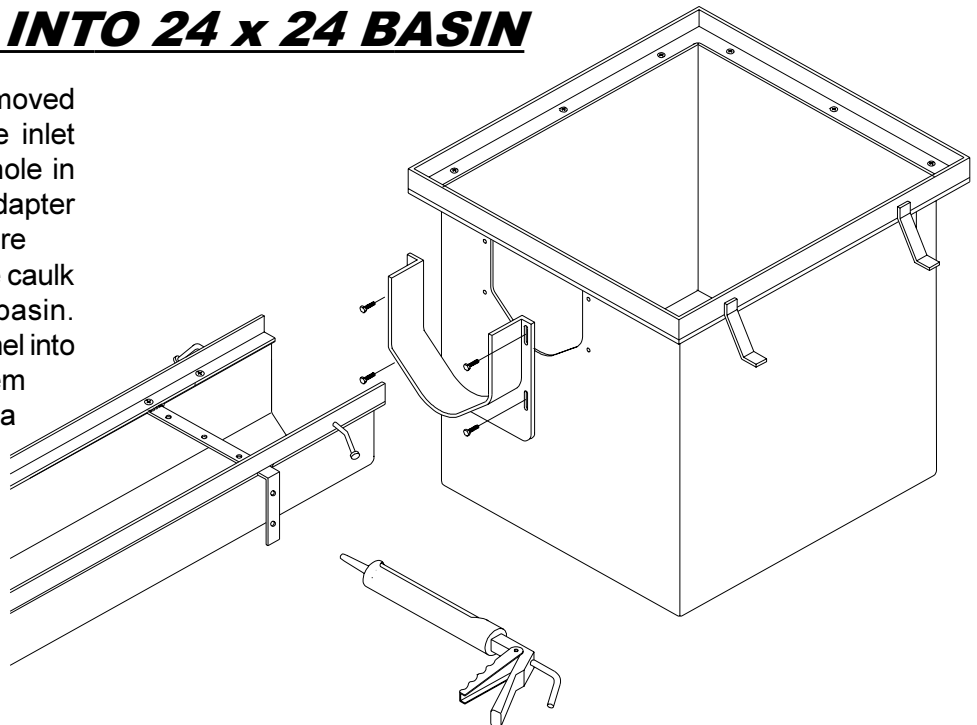


**(\*\*TRENCH SECTION MUST HAVE 2-1/2" EXTENSION IN ORDER TO CONNECT TO THE BASIN\*\*)**



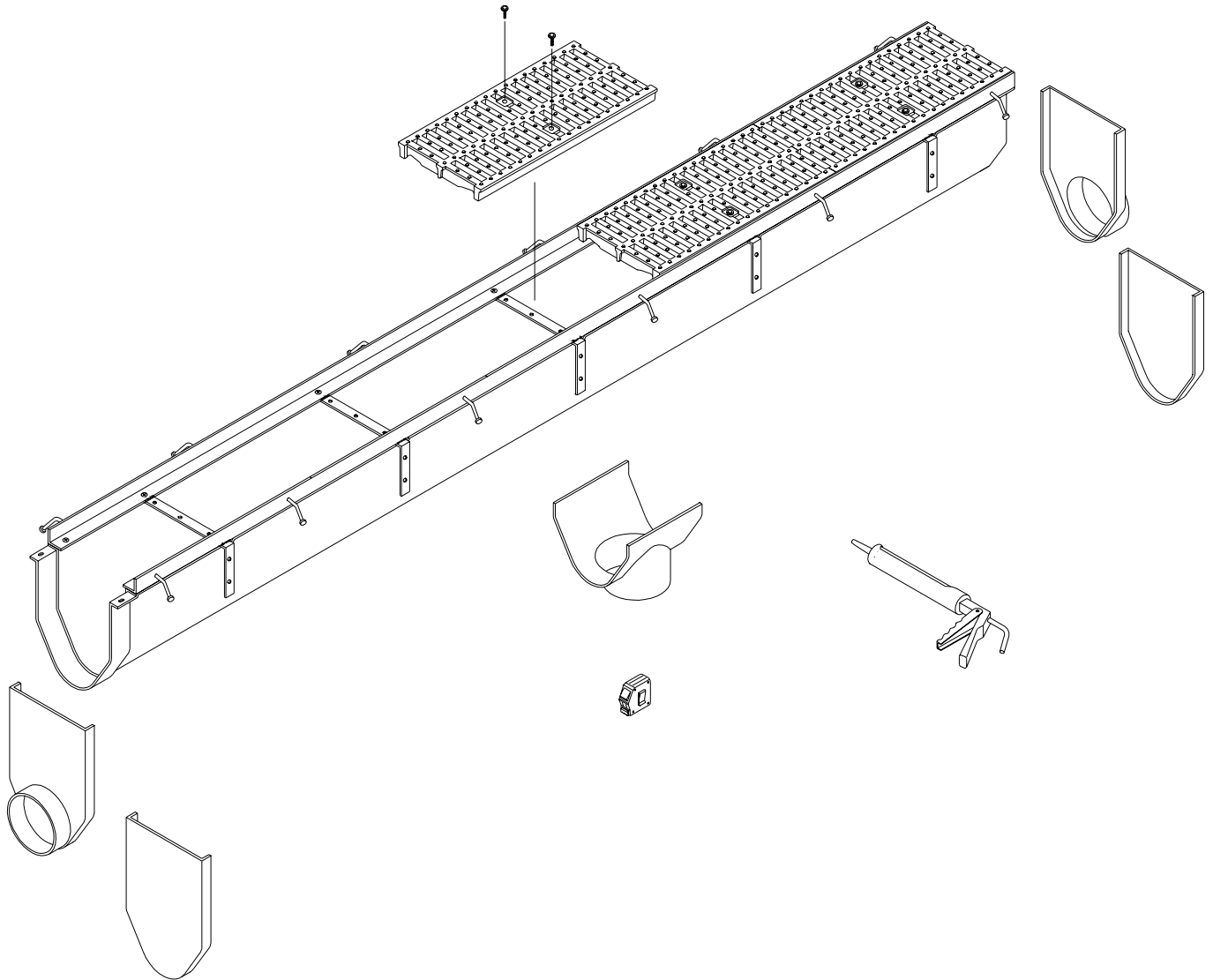
### **Z-806 & Z-812 INTO 24 x 24 BASIN**

After the channel outline is removed from the catch basin, cut the inlet adapter to the height of the hole in the basin. Secure the inlet adapter to the basin using the hardware provided. Be sure use silicone caulk to seal the adaptor to the basin. Slide the male end of the channel into the inlet adapter attaching them together with a silicone caulk or a construction adhesive.



**\*\*BEFORE POURING THE CONCRETE, BE SURE THAT PROPER STYROFOAM OR WOOD BRACING IS PLACED INSIDE CATCH BASIN TO PREVENT DEFLECTION FROM THE CONCRETE ON SIDES.\*\***

# OUTLETS & ACCESSORIES

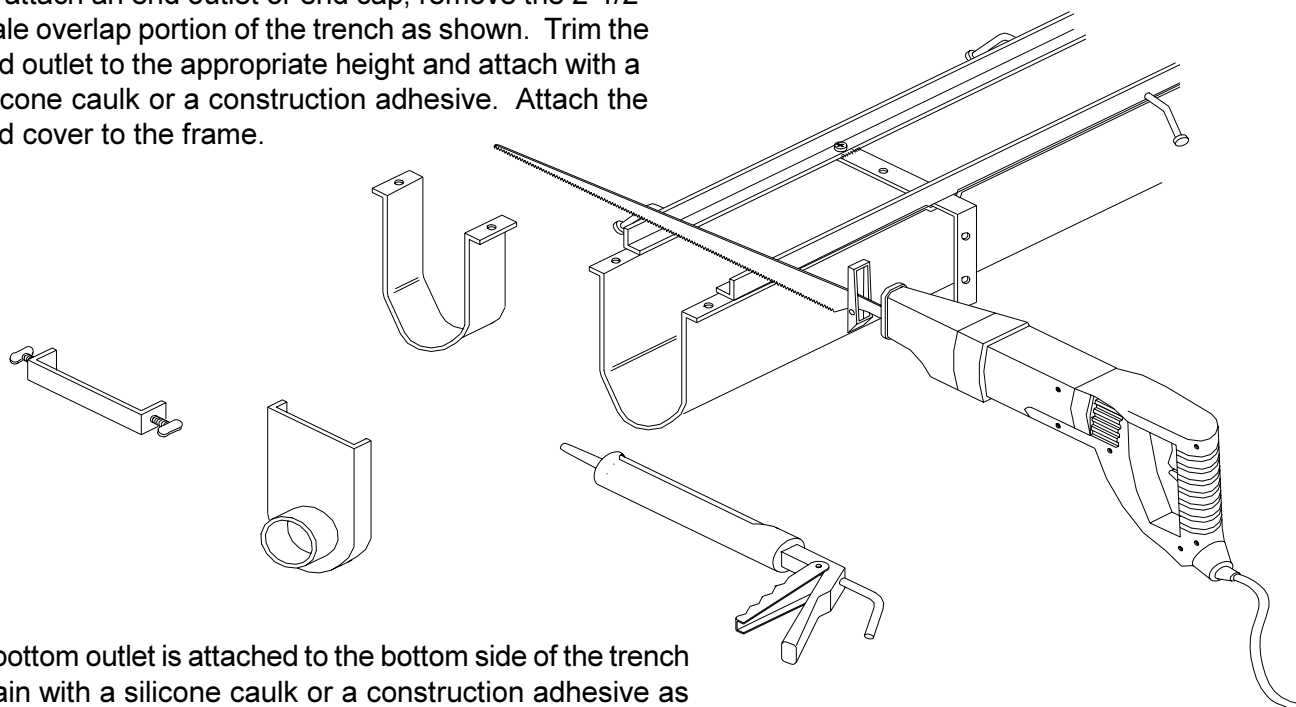


Locate the trench sections that are to receive any accessories, such as end caps, bottom outlets, and/or end outlets. These accessories can be easily attached with a silicone caulking or a construction adhesive such as Liquid Nails. Trim the end caps to the appropriate depth prior to attaching them to the trench sections. Vinylester outlets and accessories should be joined using an epoxy of like properties. Recommended brands are the Plexus MA320 Methacrylate Adhesive and the Sika-Dur 31 High Modulus Gel Adhesive.

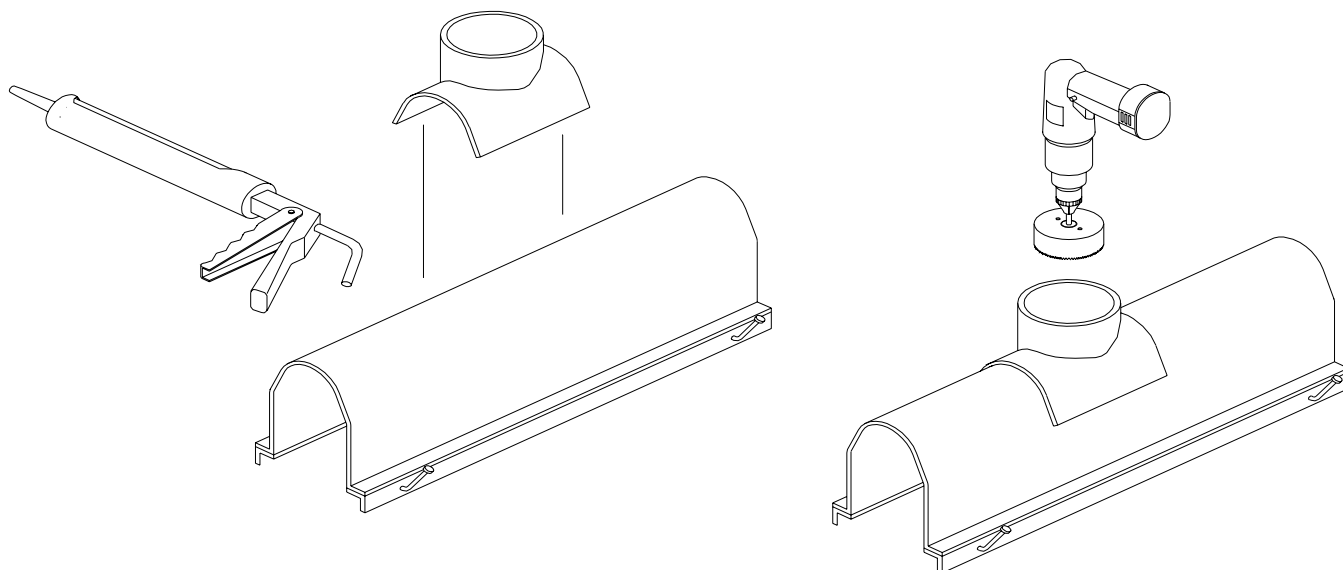
# OUTLETS & ACCESSORIES

## continued

To attach an end outlet or end cap, remove the 2-1/2" male overlap portion of the trench as shown. Trim the end outlet to the appropriate height and attach with a silicone caulk or a construction adhesive. Attach the end cover to the frame.



A bottom outlet is attached to the bottom side of the trench drain with a silicone caulk or a construction adhesive as shown below. A hole saw can be used to cut the appropriate size hole through the bottom of the trench.

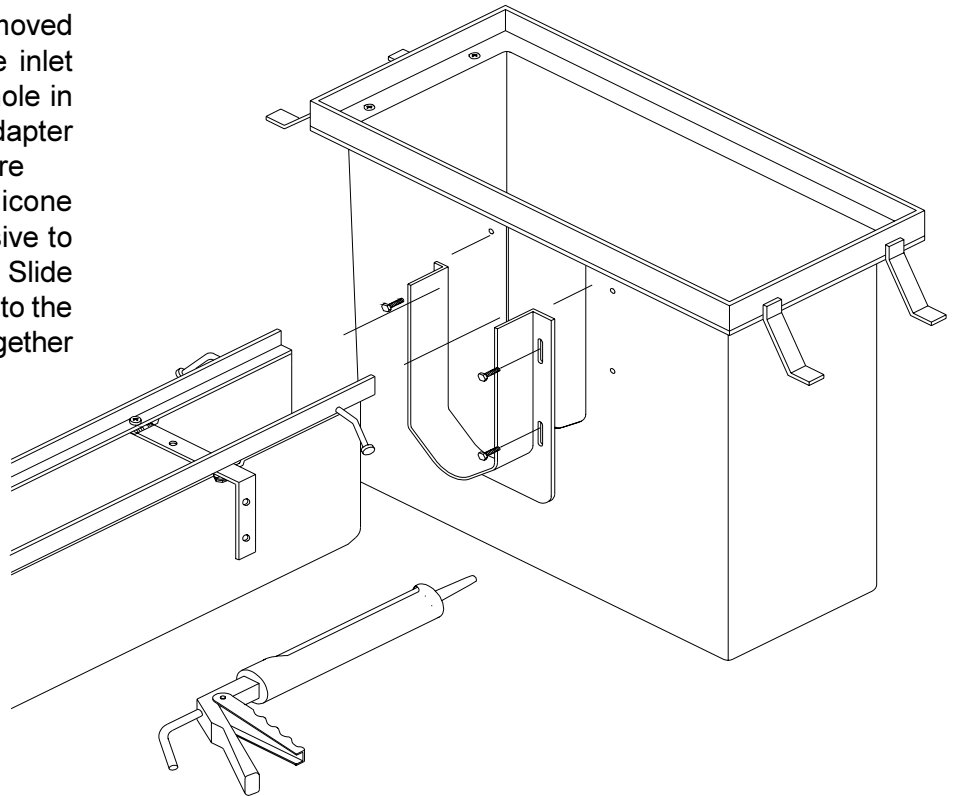


# BASINS

## continued

### **Z-806 & Z-812 INTO 12 x 24 BASIN**

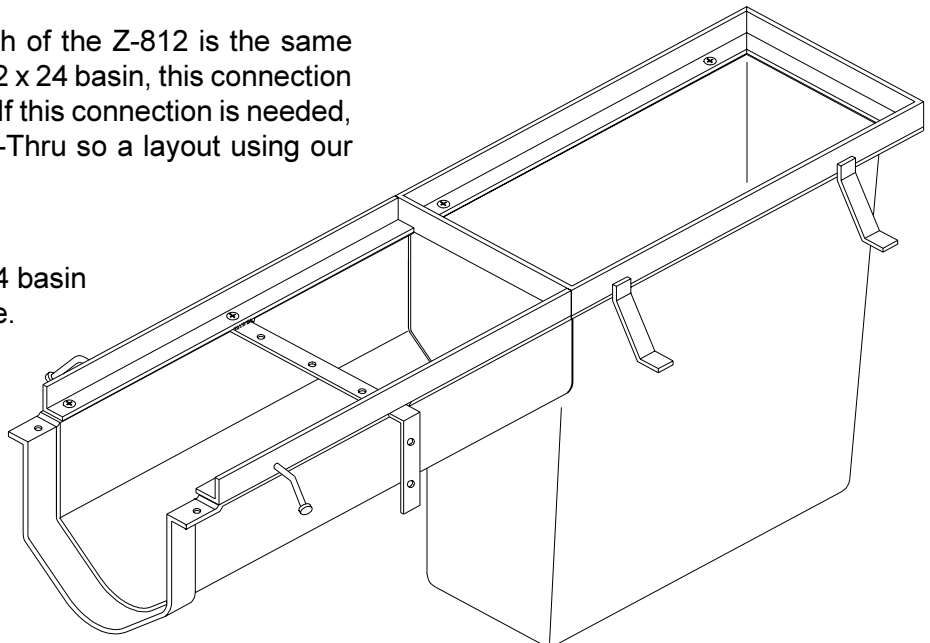
After the channel outline is removed from the catch basin, cut the inlet adapter to the height of the hole in the basin. Secure the inlet adapter to the basin using the hardware provided. Be sure use a silicone caulk or construction adhesive to seal the adaptor to the basin. Slide the male end of the channel into the inlet adapter attaching them together with silicone caulk.



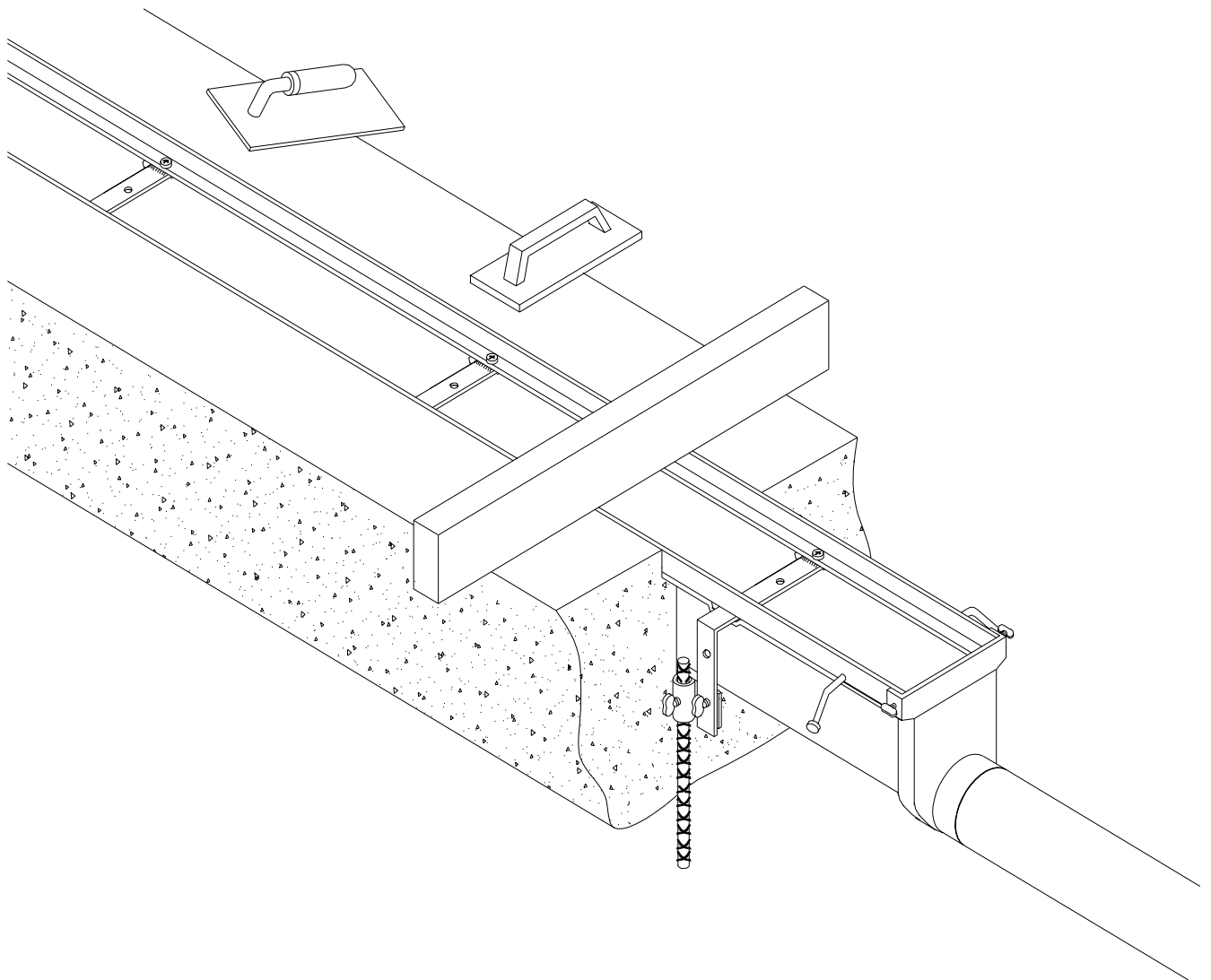
### **Z-812 INTO 12 x 24 BASIN - 12" SIDE**

Due to the fact that the width of the Z-812 is the same width as the 12" side to the 12 x 24 basin, this connection must be done in the factory. If this connection is needed, please send a sketch to Flo-Thru so a layout using our system can be done.

**\*\*NOTE:** Z-824 into a 24 x 24 basin requires the same procedure.



# POURING THE CONCRETE



Pour the concrete around the three sides of the trench drain. Be certain to adequately VIBRATE the concrete as it is being placed. Proper vibration will eliminate any unwanted voids within the concrete pour.

Finish troweling should be done to set the top edge of the trench drain about 1/16" below the floor grade. Remember to compensate for concrete shrink that may occur during cure so that the edge of the trench drain does not protrude above the finished floor grade.

# AFTER THE POUR

After the concrete has been poured, vibrated, and given sufficient time to dry, both the grates and grate lock down bolts must be installed. For both the Z-806 and Z-812 the center of the grate should straddle the tie strap that spans the frame. The exception is when both channel and frames are cut. To place these grates, line up the lock down hole in the grate with the lock down hole in the tie strap. Grates with a length of under 12" for the Z-806 and 14" for the Z-812 will not be able to be locked down. Lock down bolts can be installed using a 7/16" socket for the Z-806 and a 9/16" socket for the Z-812.

