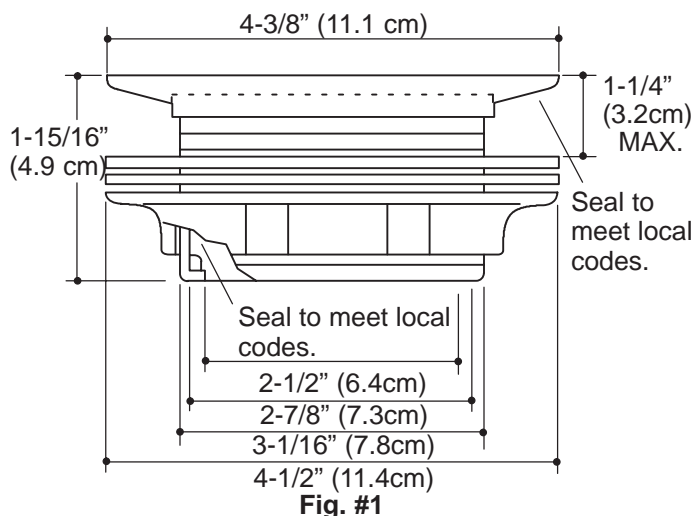


This installation instruction provides information for installing this drain with either the gasket/connector included, or with oakum and lead.



### TOOLS & MATERIALS REQUIRED

- Safety glasses
- Iron pipe cutter
- Pipe reamer (if using wheel-type cutter)
- Inside and outside caulking iron
- Caulking hammer
- Pipe wrench or adjustable wrench
- Basin wrench
- Ruler or tape measure
- Soapstone marker
- Pencil
- Soap solution
- Hammer
- Caulking
- Caulking lead (oakum and lead installations)
- Oakum (oakum and lead installations)
- Lead furnace, pot, ladle (oakum and lead installations)
- Yarning and packing irons (oakum and lead installations)

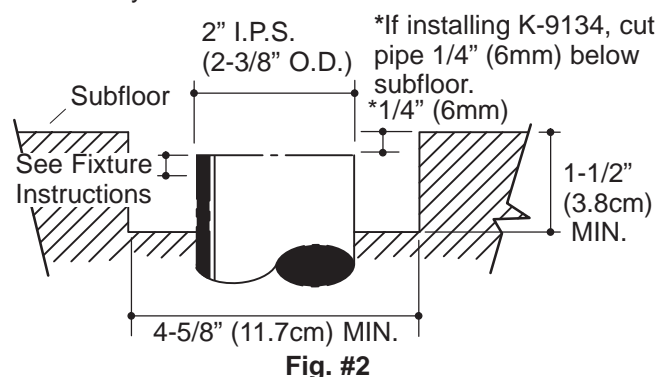
### BEFORE YOU BEGIN

**Install the shower drain to the fixture before installing the fixture.**

Locate the rough plumbing for the shower drain in accordance with dimensions specified for the fixture and for this fitting. **See Fig. #1 .**

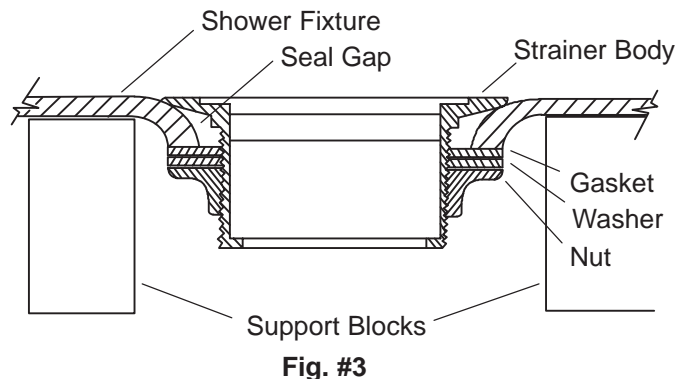
The 2" I.P.S. (2-3/8" O.D.) drain pipe must extend as specified for the fixture. Consult fixture installation instructions.

**See Fig. #2 .** Provide a 4-5/8" D.(11.7cm) minimum hole in subfloor to accommodate the 4-1/2" (11.4cm) shower drain nut. Provide a minimum working depth of 1-1/2" (3.8cm) to accommodate the shower drain nut, washer, gasket, and strainer body.



### INSTALLATION

Block up fixture to access the drain hole. **See Fig. #3 .**

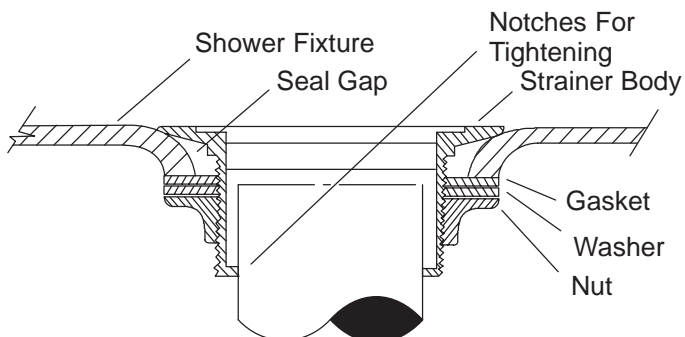


Apply a bead of sealant around underside of shower drain flange.

Position shower drain flange through drain hole in shower fixture.

Fit gasket and washer over strainer body and secure with nut.

**NOTE: The strainer body may be tightened into the nut from above (with the following restrictions).** As an alternative to pre-installing the shower drain to fixture, place the nut, gasket, and washer over the drain pipe before installing the fixture. After the fixture is installed, thread the strainer body into the nut from above. **See Fig. #4 .** This alternative may present difficulty in threading the nut. Use the integral bar in the strainer body to securely tighten the strainer body to the shower fixture.



**Fig. #4**

Set shower fixture squarely into the pocket in the subfloor or slab and over the drain pipe. Shim to plumb and level per the fixture instructions.

Verify that the drain pipe extends into the drain body the required distance, and that the drain pipe is centered in the drain body.

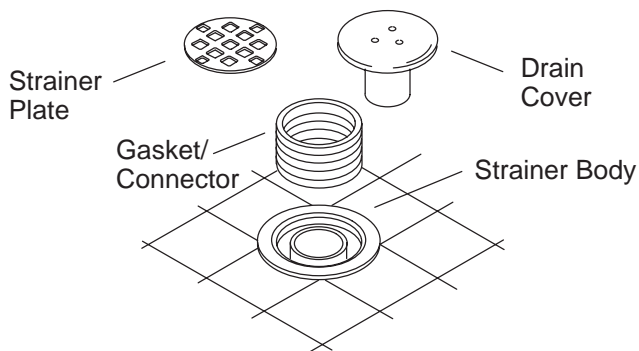
Secure the fixture per fixture instructions.

### INSTALL USING GASKET/CONNECTOR

Ensure that the drain pipe extends 1-1/4" (3.2cm) into the drain body. Center the shower fixture over the drain pipe.

Lubricate the gasket/connector with soap solution. With the drain pipe inserted into the drain body, pull the gasket/connector over the drain pipe so the raised letters face upward.

**See Fig. #5 .** Push the gasket/connector downward into the strainer body so it fits tightly. Use a hammer and caulking tool (a short, narrow piece of wood will suffice if a caulking tool is not available) to carefully drive the gasket/connector as far into the drain body as possible. The drain pipe should be even with the top of the gasket/connector.



**Fig. #5**

Proceed to **Finishing Steps.**

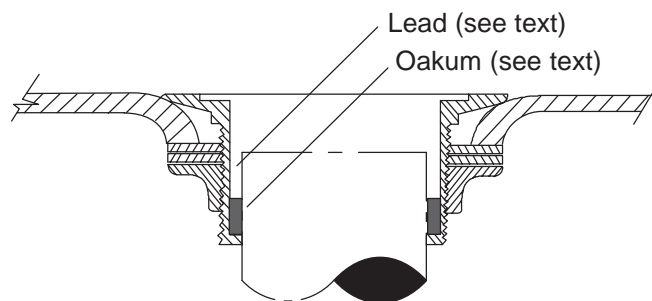
### INSTALL USING OAKUM AND LEAD

Gather materials and prepare site for lead caulking.

**⚠ WARNING Risk of personal injury.** An explosion may occur if moisture comes in direct contact with molten lead. Pre-heat wet or cold lead on the side of the furnace before adding it to a pot containing molten lead. Also dry the shower fixture, drain pipe, and all the shower drain components before installing the drain fitting over the drain pipe.

Begin melting lead to caulk the joint. Ensure proper quantity of lead to fill the joint in one pour.

**See Fig. #6 .** Yarn and pack oakum into the gap between the drain pipe and the strainer body to a depth of 1-5/16" (3.3cm) from the top of the strainer body (5/8" (1.6cm) thickness). Eliminate all loose oakum fibers by packing them with a yarning or packing iron heated in the molten lead pot.



**Fig. #6**

Pour the molten lead into the joint to the top of the pipe in one pour. Allow lead to cool.

Drive down the lead in four places with the caulking hammer and an inside caulking iron to set the joint.

Move the inside caulking iron slowly around the joint and pound it with the caulking hammer to thoroughly caulk the inside edge.

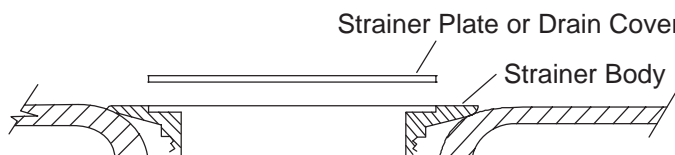
With an outside caulking iron, work slowly around the joint with the caulking hammer to thoroughly caulk the outside edge.

Proceed to **Finishing Steps.**

### FINISHING STEPS

Plug the inside diameter of the drain pipe and check for leaks at joint and around strainer body flange. Remove the plug.

**See Fig. #7 .** Press the strainer plate or drain cover firmly into the strainer body.



**Fig. #7**