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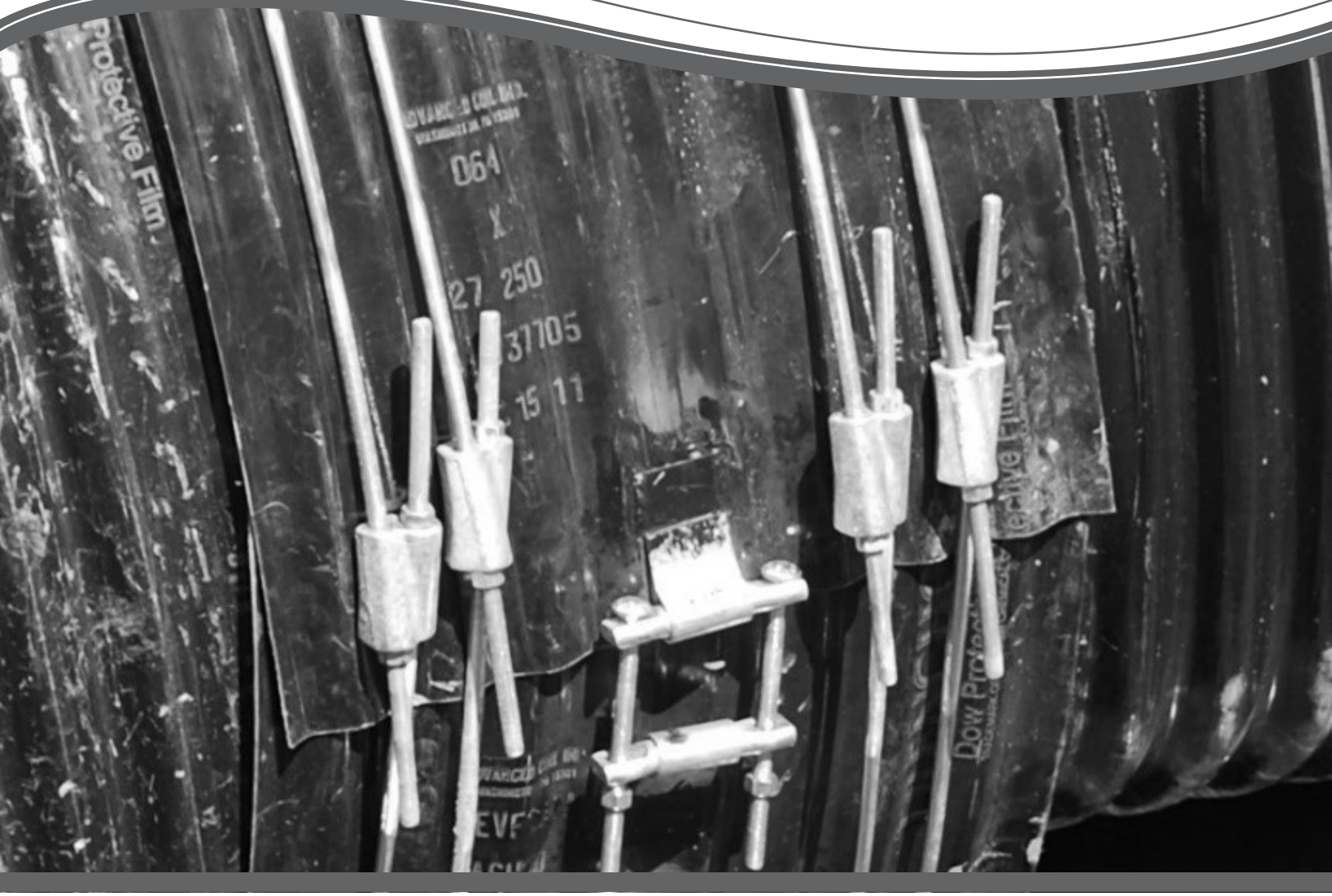
CMP Levee Band Installation Guide

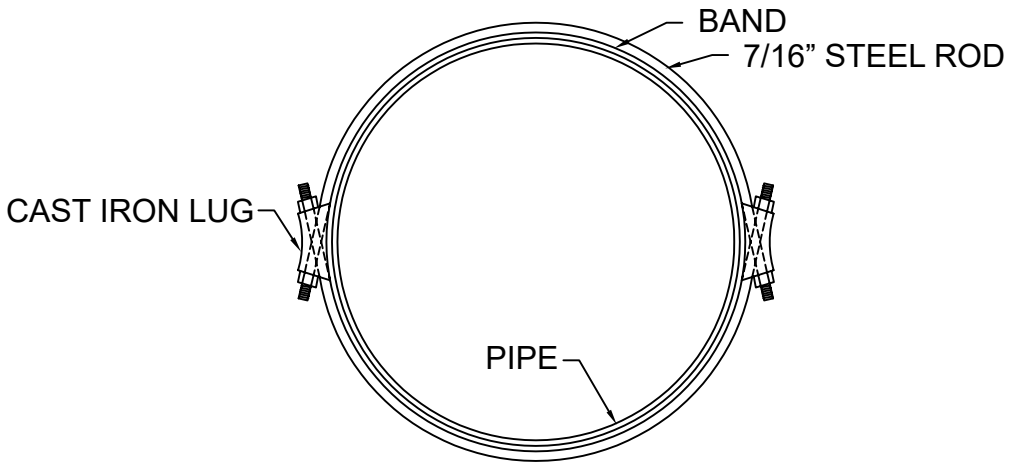


OVERVIEW

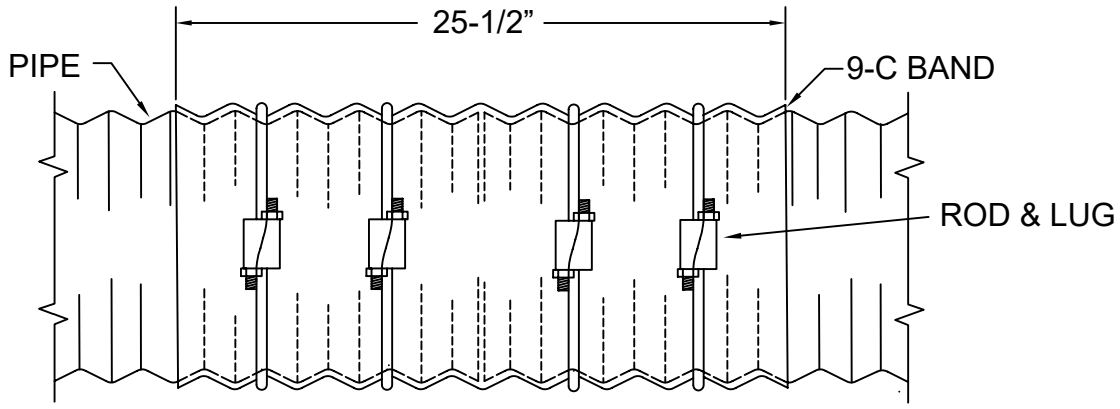
Contech CMP Levee Bands provide the best mechanically connected joint of any culvert pipe joint in the industry. If needed, leak resistant joints can be provided. If you have any questions about these instructions, call your Contech Representative.

Joint Details

12-inch wide and 24-inch wide (nominal dimensions) curved and corrugated sheets can be used for a levee band. Bands can be made from galvanized steel, aluminized steel, or polymer-coated galvanized steel. Bands can be installed with or without flat neoprene gaskets. Typically, 12-inch through 48-inch diameter pipes come with a one-piece band, 54-inch through 96-inch diameter pipes come with a two-piece band, and 102-inch diameter and larger pipes come with a three-piece band. The number of curved threaded rods required to go around the periphery will vary depending on the pipe diameter.



END VIEW
CORRUGATED LEVEE BAND

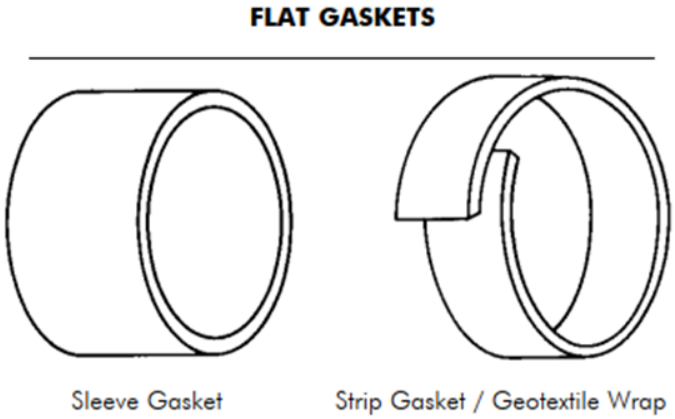


SIDE VIEW
CORRUGATED LEVEE BAND

Gaskets

Typically, flat, closed cell neoprene gaskets, that are a nominal 3/8" thick will be used. Thicker open cell gaskets may be used as well. The gaskets are normally as wide as the band, although different width gaskets can be used. Two types of flat gaskets can be used: sleeve gaskets (form fitting) or strip gaskets, supplied in lengths and overlapped at the top of the pipe.

If sleeve gaskets are supplied to the project site, too tight or too loose, the gasket can be field cut and placed around the pipe with the cut side of the gasket located at the 12 o'clock position.



Sleeve Gasket Installation Process

1. The bedding under the ends of the adjoining pipes needs to be excavated deep enough to allow for the gasket to be placed, folded and unfolded prior to tightening the band. This would be similar to having a "bell hole" for bell & spigot joints.
2. Clean the pipe end.
3. Apply a liberal amount of lubricant to the first two annular corrugations on the outside of the pipe.
4. Snap the flat gasket into position such that the gasket covers the first annular corrugation or the recorrugated end. Half of the gasket will be hanging over the end of the pipe.
5. Fold the remaining half of the gasket that is extended over the pipe end back over the section of the gasket positioned on the end of the pipe.
6. Apply a liberal amount of lubricant to the entire inner surface of the band.
7. Place the band into position on the installed length of pipe so that the next length of pipe can be indexed correctly and the flat gasket rolled over the second pipe end.
8. Apply a liberal amount of lubricant to the end of the second length of pipe.
9. Place the second length of pipe into position. The two pipe lengths must be positioned properly for the gasket to fit over, and the band to index, onto the second pipe end.
10. Unfold the gasket into position over the second length of pipe. Take care to insure that the gasket fits over the end of the second pipe section. Also, the band must be indexed into the proper annular corrugation on each length of pipe.
11. Check the complete periphery of the pipe to insure that the gasket is centered evenly on the two lengths of pipe.
12. Slide the band into position and tighten the bolts. For maximum compression of the gasket, the band corrugations must be fully seated into the proper corrugation on each pipe end. This will ensure that the pipe lengths are positioned properly for the gasket.

Sleeve gaskets are installed by putting one half of the gasket on the first pipe in the trench, then rolling the other half gasket over.

After the second pipe is placed, the half of the rolled gasket is placed over the second pipe.

Strip Gasket Installation Process

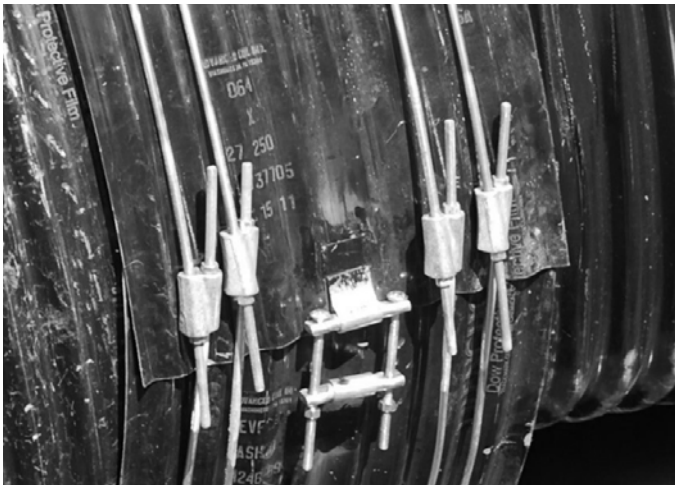
Strip flat gaskets are installed by overlapping and using duct tape to tape the gaskets at the 12 o'clock position. For leak resistant joint, spread lubricant on the pipe and bands in the area of the flat gasket.

Over lap strip flat gaskets and use duct tape to join.

Spreading lubricant on the pipe and bands, is recommended in the area of the flat gasket for a leak resistant joint.

Starter Bolts

For larger diameter pipes, started bolts and angles can be supplied to help hold the band in place prior to installation of the threaded rod and lugs. Typically, a one hole or two-hole band angle is supplied as the starter bolt



Spreading lubricant on the pipe and bands, is recommended in the area of the flat gasket for a lead resistant joint.

Curved Threaded Rods and Lugs

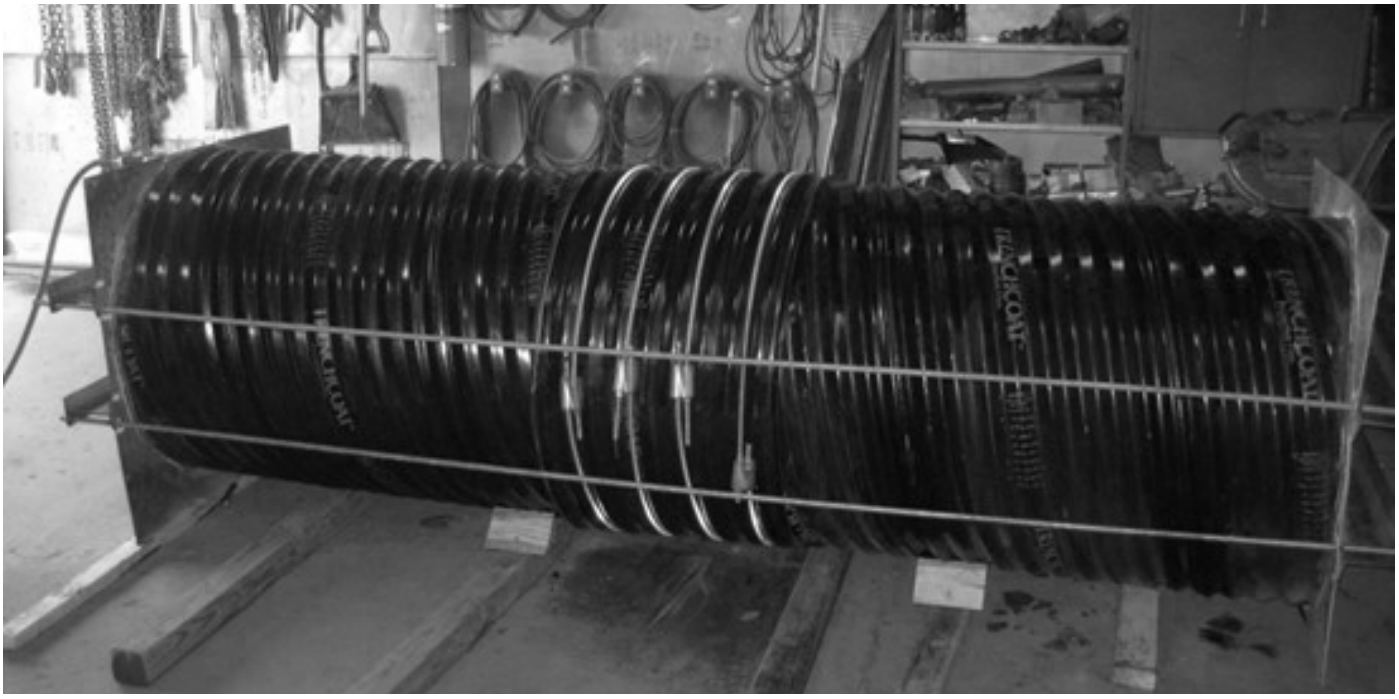
Two or four threaded rod and lug connections are provided for each band. As a rule, four threaded rods are used for 24-inch wide corrugated bands. The steel rods can be fully threaded or partially threaded on the ends. Threaded rods are typically ½" or 7/16" nominal diameter. A double "take up lug" is used to help tighten the rods against the band steel. A ½" diameter bolt is placed on the threaded rod after the take up lug is placed through the end of the threaded rod. The next curved rod is placed on the other side of the take up rod as shown in the photo below.

Starter Bolts

The bolts are then tightened up against the take up lug. Hand tighten or machine tighten the bolts evenly on each side of the lug until tight around the pipe. Double check at each location to make sure the band is tight

Tighten the bolts against the take up lug until the rods are tight around the pipe.

Finished levee band installation shown above.



Pipe joints have been factory-tested to ASTM F 477 standards – 10.8 psi for 10 minutes with no leaks. Actual field results may vary.

Notes:

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