

# SPECIFICATION



## INSTALLATION PRACTICE FOR MISSION RUBBER COUPLING

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# INSTALLATION SPECIFICATION FOR MISSION RUBBER COUPLING

## 1.0 Intent

1.1 It is the intent of this specification to detail a safe, efficient, cost-effective installation method of connecting a new pipe to a CIPP pipe lining.

1.2 The Mission Rubber Coupling for connecting a new pipe to a CIPP Lining shall be commercially available from LMK Technologies or an LMK distributor for use as an adjunct to rehabilitative pipe lining projects on a price per each basis.

## 2.0 Specification

2.1 Furnish and install stainless steel shielded sewer couplings, as manufactured by Mission Rubber Company and distributed by LMK Technologies, LLC. Coupling to meet ASTM C-1173, gasket to meet ASTM C 425-91 Table 2, 300 series stainless steel shear ring with a minimum thickness of .012", 316 series stainless steel clamps with nut & bolt take up, shear ring and clamps to meet all requirements of ASTM A-240, transitional sizes to utilize a one-piece gasket.

## 3.0 Material

3.1 The non-shear rubber couplings are made specifically to fit the outside diameter of cured-in-place pipe (CIPP) in order to connect to direct bury pipe. The exterior of the coupling is shielded with stainless steel for strength to eliminate shifting resulting in offset joints.

3.2 The stainless steel nuts and bolts offer superior clamping and are non-shearing. The clamping mechanism provides 50 lbs. per inch of pipe shear protection where there is a need for resistance to heavy earth loads, shear forces and improved alignment.

3.3 The sealing "O" rings under each clamp band provide a more positive seal preventing pipe slippage.

3.4 Surgical grade 316 stainless steel clamps provide the greatest corrosion resistance possible.

3.5 Most transition couplings for dissimilar types or sizes of pipe are comprised of a one-piece transition gasket – no bushings required.

### 3.6 Sizes:

|                               |
|-------------------------------|
| <b>4" SDR 35 to 4" CIPP</b>   |
| <b>4" Clay to 4" CIPP</b>     |
| <b>6" SDR 35 to 6" CIPP</b>   |
| <b>6" Clay to 6" CIPP</b>     |
| <b>8" SDR 35 to 8" CIPP</b>   |
| <b>8" Clay to 8" CIPP</b>     |
| <b>10" SDR 35 to 10" CIPP</b> |
| <b>10" Clay to 10" CIPP</b>   |
| <b>12" SDR 35 to 12" CIPP</b> |
| <b>12" Clay to 12" CIPP</b>   |
| <b>15" SDR 35 to 15" CIPP</b> |
| <b>15" Clay to 15" CIPP</b>   |

## **4.0 Installation Recommendations**

4.1 The following is intended to be a guideline of general installation requirements for the Mission Rubber Coupling; for standard connections., repairs and insertions. These instructions are to be used in accordance with engineering criteria and municipal trade practices in the field.

### 4.1.1 Standard Connections

Step 1. Loosen bolts on stainless steel shear band assembly and tightening clamps. Do not remove either the shear band assembly or tightening clamps from the coupling.

Step 2. Slide the coupling over the ends of the two pipes to be joined.

Step 3. Tighten clamp bolts alternately and firmly to 60 in. lbs. Torque (6.78 N°m).

Step 4. Tighten shear band assembly bolts alternately and firmly to 60 in. lbs. Torque (6.78 N°m).

### 4.1.2 Repairs and Insertions

Step 1. Cut out section of broken pipe. In order to provide a sound joint, the ends should be cut square.

Step 2. Remove broken pipes section, then slide coupling over both pipes ends.

Step 3. Place a pencil mark ½ the coupling width from each joint on existing pipe ends.

Step 4. Insert new pipe or fitting, then slide coupling with the shear band assembly and clamp bolts intact over the new and old pipe ends. Check pencil marks to make sure the coupling is centered over the new and old pipe ends.

Step 5. Tighten clamp bolts alternately and firmly to 60 in. lbs. Torque (6.78 N°m).

Step 6. Tighten shear band assembly bolts alternately and firmly to 60 in. lbs. Torque (6.78 N°m).