



6996 Concrete Cylinder Tapping Sleeve

1. Site excavations of the pipe must meet the minimum spatial requirements as illustrated in Figure 16-7 of M9, 3rd Edition or any version of the manual that supersedes it.
2. Clean the pipe in the area where the tapping sleeve is to be installed. Remove any surface irregularities that protrude above the normal surface of the pipe.
3. Measure and record the OD of the pipe and then verify that the sleeve is the correct size.
4. Measure and record the length of pipe exposed for the tap by the excavation (if applicable), noting any support points (if any) under the pipe relative to the location of the tapping sleeve.
5. Inspect the entire exposed length of pipe to ensure that there are no cracks. If anything was observed, document it, take photos and report all inconsistencies.
6. Position the outer sleeve body on the pipe as it will be installed - the grout horn on the outlet is threaded so that a lifting eye can be installed in efforts to facilitate manipulating the sleeve. Once positioned, mark the inside diameter of the sleeve body's outlet and set the body aside.
7. Within the marked area, carefully remove the cement casing to expose the pre-stressed wires and steel cylinder.
8. Install the tapping sleeve body on the pipe with the grout horns positioned upwards. Center the sleeve over the exposed cylinder.
9. Install the straps and tighten the bolts until both the outer perimeter gasket and inner gasket are compressed enough to form a seal.
10. As a precautionary measure, support the pipe 6" from either side of the sleeve.
11. Grout the cavity between the pipe and the inner sleeve body. Tap the body of the sleeve to settle the grout and to help remove air pockets. Allow sufficient time for the grout to cure.
12. After the grout has cured, incrementally torque the strap bolts evenly to 75 ft-lbs, working from the outside inwards alternating sides as well as from top to bottom.

13. Carefully cut the exposed reinforcing wires without damaging the steel cylinder. Make sure that enough of the cylinder has been cleared to provide clearance for the outlet gasket and that the surface of the cylinder is smooth and clean.
14. Check the gasket in the gland body to ensure that it is undamaged and secured.
15. Lubricate the gasket surface with a suitable lubricant for potable water. Insert the outlet section into the sleeve body such that the contour of the outlet matches that of the pipe.
16. Install and tighten the draw studs evenly to compress the gasket. Stop when there is approximately a 1/8" gap between the gland body and the cylinder - **DO NOT BOTTOM OUT THE GLAND BODY AGAINST THE STEEL CYLINDER**. Use a feeler gauge to check that the gasket is nicely compressed - no feeler gauge of any thickness should slip under the gasket.
17. Install and torque the jack bolts to 30 ft-lbs. These will lock the gland body in place.
18. Pressure test the assembly with water - **DO NOT EXCEED THE LINE PRESSURE**: either attach and support the tapping valve or cap the gland body with a blind end flange. If the tapping machine is connected to the valve at this point, it must be supported throughout the tap always.
19. Tape around the two draw flanges of the gland and sleeve bodies so as to contain grout.
20. Grout the annular cavity between the gland and sleeve bodies. Allow the grout to fully cure.
21. Commence with the tap.