



Repair Procedures for Leaking Pipe-to-Manhole Connectors using AV202

Hydrophillic grouts are the primary material to repair leaking underground structures. Our company recommends the use of Avanti's AV202 to stop water infiltration through a pipe-to-manhole connector because of its unique characteristics and its long history of success.

There are two primary methods to employ AV202 to permanently stop water infiltration through a connector. These two methods are the "Oakum Soak'em Method" and the "Outside Injection Method". The "Outside Injection Method" can be accomplished by two fundamental applications and they are by puncturing the connector with a needle or by drilling through the wall of the manhole then injecting AV202 to the outside of the structure.

Oakum Soak'em Method

The Oakum Soak'em Method is soaking oakum in AV202 and placing the mixture into the leaking area. If the leak is occurring between the rubber and wall, the mixture is forced into the area. When the mixture comes in contact with moisture it will expand and fill up the area shutting off the water infiltration. The "Oakum Soak'em Method" is best suited for filling bug holes under boot type connectors.

Outside Injection Method

The "Outside Injection Method" stops water infiltration in two ways. One way it works is by using the water infiltrating to carry the AV202 into the area where the leak is taking place. The result is that the AV202 begins to react and fill up the area where the water is infiltrating and sealing off the leak. The second way the AV202 works is by creating a barrier around the leaking connector and solidifying the backfill in the area. The combination of these sealing factors is very effective in permanently eliminating water infiltration into leaking underground structures.

There are two primary ways to inject AV202 to the outside of the structure. One way is to use a needle and hose assembly and puncture the rubber connector with the needle. The puncture should be made as close to the area of infiltration as possible. The AV202 should be injected until the water infiltrating begins to show a "milky" streak coming in with the water. After you see the "milky" steak coming through and the infiltration ceases, you slowly withdraw the needle and making sure that the AV202 is flowing through the needle as you withdraw it to seal off the puncture.

The second way to inject AV202 to the outside of the structure is by drilling through the wall of the structure and injecting the AV202 to the outside by using a needle hose assembly or injection zerks. The AV202 is injected until you notice a “milky” streak appearing in the water infiltrating into the structure. At this point, you wait approximately 30 minutes to give the AV202 time to react with the water and to stop the water infiltration. If this does not stop the infiltration you re-inject the AV202 through the drilled hole or if necessary drill another hole 9 to 12 inches from the other hole and inject AV202 through this hole. You continue this process until the water infiltration is stopped. This is a very effective method to permanently stopping water infiltrating into underground structures.