

## ANTENNA CONNECTION WEATHERPROOFING

The obvious purpose of wrapping a connection is to seal it from moisture intrusion. There are as many different methods of doing this as there are ways of cooking spaghetti. Some work, and some don't. The procedure illustrated here will give excellent results if done properly, and will last for years. The required materials are shown below: vinyl tape, butyl tape, mastic, and Scotch-Kote.



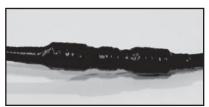






After a connection has been made and tested to verify that it has been properly done, it needs to be sealed. Begin by wrapping vinyl tape as shown to cover the connectors and a portion of both cables. Stretch the tape a minor amount as it is wound onto the cable, the connectors and then onto the other cable. Wrap this so that each new layer covers half of the previous wrap. Keep the wraps neat and as smooth as possible.









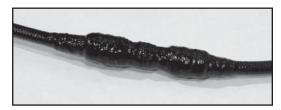
The second step is to wrap a second layer over the first layer, but wrap it in the other direction as shown. These two layers will keep the connection clean and tight. The next step is to wrap a layer of vinyl tape with the adhesive side out, as shown. Begin by folding the tape onto itself at a 45 degree angle. This provides a sticky surface to help bond the the next layer of tape to the connection.

The next step is to wrap the entire connection with the butyl tape. This layer provides the majority of the moisture shielding. The final step is to coat the entire butyl layer with Scotch-Kote. Coat a portion of each cable and the entire final layer of tape.









This material works very quickly to fuse the last layer together and to the cable jacket. After the Scotch-Kote has dried, encapsulate the finished connection with the mastic material.

It is best to secure the cable to the support on either side of the connection, not over the connection. One tie on each side is best, and spaced so as to support the connection, but not to disrupt the surface of the seal. This provides support, but will not compromise the seal you have just made. Added insurance against abrasion may be achieved by placing a single layer of vinyl tape onto the support where the connection will rest before tying the cable down. This provides some cushioning between the connection and the support.