



**What mitigation is recommended for the "cold joint" between lifts of grout, if any?**

You could have a cold joint in your grouted tendon if you have to grout a second time due to an operational problem or an unforeseen void discovered during post grouting inspection. To answer the question, there is really nothing that can be done to address the "cold joint." The joint is going to exist inside the partially filled duct and will not be accessible. Vacuum grouting is the best method to ensure that all voids, and all partially filled ducts are completely filled with grout. As long as the duct and caps are completely filled with grout, the tendon is fully encapsulated, and the additional measures are taken (i.e., elastomeric coating over the grout caps) a cold joint should not be a concern. The multi layers of protection are the most important.