

Technical Bulletin # 164

985 2-Component Fast Curing Silicone Quality Field Procedures

Butterfly Test

This test is performed at each pump start-up and after either the curing agent or base containers are changed. The purpose of this test is to determine whether the two-component dispensing equipment is adequately mixing the sealant base and curing agent. For standard Pecora Corporation 985 Two-Component Structural Silicone, the sealant base is white and the curing agent is black. When properly mixed, the finished sealant is uniform dark gray, with no grey or white streaks. Improper mix can be the result of a damaged check valve, a clogged hose, a clogged mixer, etc. Regular equipment maintenance will help to ensure proper sealant mixing. Please consult with your dispensing equipment manufacturer for maintenance guidelines. If grey, white or custom colored Pecora Corporation 985 Silicone Sealant is being used, please contact your Pecora Corporation Technical Service Group for recommendations.

Following is the procedure for performing a Butterfly Test:

- Fold a sheet of stiff, white paper or card board in half.
- Apply a bead of sealant to the fold in the paper or card board.
- Press the sheet of paper together compressing the sealant into a thin film.
- Pull the paper apart and visually inspect the sealant for indications of poor mix.

Snap Time Test

Once proper mixing of the sealant is established by the Butterfly Test, a Snap Time Test must be performed. This test is performed each time a pump starts-up and after either the curing agent or base containers are changed. The snap time test helps to determine if the mix ratio is correct and whether the sealant is curing properly. Mixed Sealant will handle like a one component sealant until the chemical reaction between the base material and curing agent begins to occur. The sealant will in a matter of minutes begin to “snap” and begin to show elastomeric or rubber properties.

Following is a procedure for the Snap Time Test:

- Fill a small container with mixed Pecora Corporation 985 2-component Silicone Sealant.
- Place a small stick or spatula into the sealant.
- Record the time.
- Every few minutes, pull the stick out of the sealant. Do not stir or agitate the sealant.
- As the sealant becomes more cured, the sealant will become stringy. Once the sealant tears cohesively and snaps back once it is pulled, this is the “snap time”.
- Record this time.

The Snap Time Test will vary depending on temperature and humidity. Higher temperatures and higher humidity will cause the sealant to snap faster. Colder temperatures and lower humidity conditions will slow the snap time. Snap time will also vary from tester to tester depending on how the results are interpreted. Also, there will be variation from lot to lot of material and as the sealant ages. Highly unusual snap time values could be an indication of a problem with the pump. The most important determination from snap time is that the sealant does cure. If the sealant does not cure, then further investigation is required.