FAQs for EnduraTech Elastomeric Roof Coatings

Q: Why is my elastomeric roof coating blistering?

A: Blistering can be caused by several things. Blisters are actually localized spots suffering from either sensitivity to water and/or loss of adhesion. Most elastomeric roof coatings are formulated to be water resistant so it is rare that the blisters are caused by the formulation itself. Usually, blisters form because of a few reasons:

1. The coating was applied and not enough time passed for drying process before the first rain occurred. If the coating is not given enough time to dry before rain, it could blister.
2. The coating is applied to a substrate it is not designed for. For example, if a coating that is not designed for polyurethane foam adhesion is applied over polyurethane foam, it could blister whenever it is exposed to water.
3. The coating is incompatible with the coating underneath it. Labels on coatings usually explain what surfaces they can be applied to. If the underlying coating or surface is incompatible with the coating, it can blister.

Q: How can I repair blisters?

1. Before repairing blisters (see step 2), thoroughly inspect the roof system to determine the source of the blisters. If it appears that it is a surface phenomenon, then go to step 2. If the blisters go down to the surface, there may be a moisture issue with the roof system.
2. Remove the blisters by scraping or power washing to the point where you have a sound surface for re-coating. Allow surface to dry completely, and then apply the correct product for the job.

Q: Why does the roof coating look like it is wrinkling?

A: Wrinkling is the aftermath of significant blistering of the coating. Sometimes, blisters will go away, but if the blistering is bad enough, the coating has been stretched too far and the blisters cannot recover. Those damaged areas settle into a form that resembles wrinkles. The repair suggestions for wrinkling are the same as for blistering.

Q: Why is the roof coating flaking or peeling?

A: Flaking or peeling is due to a loss of adhesion. This could have been caused by blistering or simply because the coating was not designed for the surface. The repair suggestions for flaking or peeling are the same as for blistering.

Q: It looks like the roof coating had bubbles when it was wet, but now that it is dry, the bubbles are broken, leaving small dimpled spots on the coating surface. What causes this?

A: These defects are caused by foam that is trapped in the coating while it is wet. A properly formulated coating may still have bubbles in it, but these bubbles should break

and flow out smoothly so that when the coating dried, the surface is smooth. However, if the bubbles do not break quick enough and the coating begins to dry, then they will not flow out and you'll see these defects on the surface. In most cases, these defects will not affect the ultimate performance of the coating; they are usually just an aesthetic nuisance.

Q: What causes mildew or algae?

A: Mildew and Algae can grow on practically any surface. The more a surface is cool and damp, the more prone it will be to mildew or algae growth. In general, climates like the southeast and south-central United States are more prone to mildew and algae than climates like the southwest. A quality coating is designed to resist the growth of mildew or algae on its surface. The length of time a coating will resist mildew or algae varies, but should be at least a few years.

Q: How can I remove mildew or algae?

A: Mildew or Algae can be easily removed by power washing the surface with a mild bleach solution (one part bleach [maximum], three part water is more than sufficient).

Q: Why does the roof coating have roller or stipple marks?

A: Roller or stipple marks are unintentionally left behind by the paint roller. In general, the longer the nap of the roller covers the more marks you will see. Roller marks can be more pronounced if the applicator is pushing too hard on the roller or using a low quality roller cover. These roller marks will not affect the ultimate performance of the roof coating significantly. As an aside, one of the benefits of spray applying roof coatings is that you will not get these roller marks from the spray application.

Q: Why is the white elastomeric roof coating turning yellow?

A: If the underlying substrate is asphaltic, especially a fresh asphaltic substrate, the yellowing is most likely due to asphalt bleed, which is simply low molecular weight asphaltenes leaching up through the coating. This discoloration will not hurt the performance of the coating. It is an unsightly aesthetic issue, but in most cases, the yellow color will bleach out and disappear over a few month period.

Q: What is the white powdery material forming on the roof coating?

A: During the natural weathering process of a coating, the coating will eventually erode. A good quality coating will not start eroding for several years, but when it does, the erosion process releases some of the pigments in the coating. These pigments are white so they appear on the surface as a chalk-like powder. This mode of erosion is typically called chalking. A little bit of chalking is normal and is part of the natural erosion process. However, excessive chalking is not good and is a sign that the coating is degrading too quickly. This "chalk" can be removed by power washing, and then a fresh coat of elastomeric roof coating can be applied.

Q: Why is the elastomeric roof coating dirty?

A: Over a long period of time, it is not unusual that some dirt can accumulate on the surface of a coating. However, significant dirt early in the life of a coating is not desirable. When the surface of a roof coating is very dirty (hopefully after many years of service), the dirt can be removed by power washing with a mild soap and water cleaning solution, followed by a power wash with just water. This can be done as part of a maintenance program to keep a coating looking fresh; or, if the coating has been in service for many years, it could be time to apply another fresh coating of high quality elastomeric roof coating.

Q: Some damage occurred to the roof such that the polyurethane foam underneath is now exposed. What can I do?

A: Fortunately, one of the advantages to a roof system that has polyurethane foam as the underlayment is the ease of repair. In general, for damage less than ¾" diameter and ¼" deep, the area can be repaired with caulk alone or caulk and coating. For damage bigger than this, it may be prudent to remove damaged foam, and use both caulk and coating, or for multiple damage points (~20 or more), consider scarifying the foam surface, re-foaming, and then re-coating.