Conklin Company Inc. TECHNICAL BULLETIN

B-7-55-57

EQUINOX® Low Temperature Acrylic Coating

Elastomeric roof coating application at temperatures between 36°F and 60°F can be challenging due to the slower rate of water, which is the carrier in acrylic coatings, and evaporates out of the material as it cures. Temperature, humidity, and air movement are the three main factors that affect the drying and curing time of acrylics. Surface temperatures can also vary in relation to air temperature. It is important to observe the same surface temperature range constraints as the air temperature limitations.

The dew point (the temperature which water droplets begin to condense and dew can form) is often within just a few degrees of the air temperature when ambient temperature is under 60°F. Condensation on the surface of the roof can cause adhesion problems when coatings are applied in these conditions. Condensation can also cause freshly applied coatings to dry slower or soften the coatings, essentially rewetting them due to the slow evaporation of the water. A lack of air flow can further slow the evaporation process since air movement is a key factor in the drying and curing of acrylic coatings.

Conklin Roofing Systems EQUINOX is designed to significantly speed up the evaporation of the water from the elastomeric coating in the 36°F to 60°F temperature range. An additional advantage to drying at these lower temperatures with a faster dry-time is a significantly lower risk of wash-off from dew after application. Due to the fast nature of the drying of EQUINOX, there are specific use and handling instructions to consider. The faster rate of water evaporation can increase the risk of flash drying above 60°F or when combined with significant wind speed. Therefore, do not apply EQUINOX above 60°F. Maintaining a wet edge during application is also critical for consistent coverage and adhesion. EQUINOX should be applied in a manner wherein a constant wet edge can be maintained. Also note that partial drums or buckets can skin-over quickly if improperly handled, so a storage temperature between 50°F and 80°F must always be maintained. If longer-term storage is required, pour partial containers down into a smaller container size to eliminate air space.

To achieve a dry film thickness of 13.5 mils EQUINOX is applied at 22 wet mils. EQUINOX's 1.6 gallon per square application rate already includes 15 percent for application loss and 10 percent for surface texture. Variation of color or perceived shading is more likely the difference in spraying wet material into an already dry edge. Do not assume this visual appearance is insufficient mils. Always verify wet mils throughout the application process. Sprayer tip size should be between .025 and .029. Half inch diameter hose is recommended for spraying.