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POST CURE OF CORROCOAT PRODUCTS

Although not always required, it is sometimes necessary to post cure Corrocoat products in order that they have sufficient resistance to the environment (as specified in the chemical resistance list), or when rapid immersion in certain aggressive cargoes is important.

The following recommendations are for all products, 200 series, Polyglass etc., and epoxies.

- Ensure work is completed and all final QA procedures are carried out. It should be noted that re-work after post cure is not recommended due to reduced inter-coat adhesion.
- A minimum period of 12 hours at ambient cure should be allowed prior to carrying out any post-curing schedule. It is however preferable, where time allows, that the ambient cure is extended to 24 hours.
- Post curing should be carried out using indirect heaters fuelled by propane, gas, oil etc. Electrical resistance heating tapes may also be used. The heating system used must be capable of achieving a minimum temperature of 176°F (80°C). It may be necessary on some structures for insulation to be used to prevent heat loss.
- The temperature should be raised over a minimum period of 2 hours from ambient to temperatures between 140-176°F (60-80°C), the post cure temperature should then be maintained for approximately 8 hours. The higher the temperature achieved, the better the cure. Where temperatures above 140°F (60°C) are difficult to achieve, then a longer curing period should be allowed. Temperatures in excess of 176°F (80°C) are sometimes achievable and do not represent a problem, provided the temperature is raised and lowered slowly and that temperatures never exceed 248°F (120°C). It should be borne in mind that even a short cure will give better results than an ambient cure, but in order to attain the maximum resistance to chemical attack and moisture permeation, the longer post cures will be necessary in certain environments. If any doubt seek assistance from Corrocoat Technical Service.
- On completion of the post cure the temperature should be reduced slowly (minimum time period 2 hours) to 140°F (60°C), at which point the structure can be allowed to cool naturally to ambient temperature.
- When monitoring temperatures it is important that the temperature of the coating is monitored by using thermocouples, preferably in conjunction with a chart recorder. It should be noted that it is the lowest temperature that dictates the post cure schedule, not the air temperature or average temperature. Large thermal gradients should be avoided.
- It is important that coatings are not post cured with steam or fluid or put into service before allowing to cool naturally to ambient temperature, unless specific advice is obtained to the contrary from Corrocoat Technical Service.

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