MIXING RATIOS, TECHNIQUES & HOMOGENEITY

OVERVIEW

Proper mixing of multi-component resinous coatings ensures chemical reaction, uniform color, and consistent performance. Incorrect ratios, poor mixing, or uneven dispersion can lead to incomplete curing, soft spots, adhesion failure, or visual defects.

Key Guidelines

- Follow Exact Manufacturer Ratios (A:B or A:B:C).
- Use Clean Tools: Contamination can alter cure chemistry.
- Mix Thoroughly: Scrape sides and bottom of containers.
- Mechanical Mixers: Recommended for large batches to maintain uniformity.
- Monitor and Verify ambient temperature, humidity and dew point is within manufacturer specification.
- Check product temperatures and pre-condition as necessary.

Techniques

- Set out product and group into components.
- Pre-mix components to ensure all solids are in suspension and/or pigment settling is non-existent.
- Combine components in clean, dry container.
- Mix slowly to avoid air entrapment unless instructed otherwise.
- Avoid pulling mixing paddle in and out of the mix to avoid air entrapment.
- Mix product for the specified amount of time to ensure a thorough and homogenous mix.
- Observe viscosity and color uniformity before application.
- Always use mixed product within specified pot life.
- Utilize same person for all mixes on project to reduce opportunities for error.

Best Practices

- Follow mix station set up recommendations and mixing procedures listed in products Technical Data Sheet (TDS).
- Clean mixing tools prior to mixing different products to avoid contamination.
- Use clean buckets when mixing different product to avoid contamination.