

EFFECTS OF HUMIDITY ON RESINOUS COATING APPLICATION

OVERVIEW

Humidity impacts the cure rate, adhesion, and surface quality of resinous coatings. Excessive moisture in the air can cause amine blush, white haze, bubbles, or incomplete cure, particularly for epoxies and polyurethanes.

Critical Considerations

- High RH (>85%) increases blush formation risk.
- Low RH (<30%) accelerates solvent evaporation → pinholes, cracking.
- Dew point must always be monitored to prevent condensation.

Application Guidelines

- Schedule application during moderate RH conditions.
- Use dehumidifiers or HVAC control to maintain optimal environment.
- Avoid coating floors immediately after rain, snow, or water exposure.

Best Practices

- Test dew point relative to substrate temperature.
- Maintain controlled humidity until coating fully cures.
- Document humidity readings throughout installation.