

Laminating Adhesives Troubleshooting Guide

PROBLEM	PROBABLE CAUSE	SUGGESTED SOLUTIONS
SEPARATION OF SUBSTRATES DURING LAMINATION PROCESS	<ul style="list-style-type: none"> A. Excessive application amount. B. Insufficient nip pressure. C. Irregular adhesive contact (mottled). D. Short drying cycle. E. Insufficient green tack of adhesion. 	<ul style="list-style-type: none"> A. Decrease application amount (change anilox roll). B. Increase nip pressure, or adjust stops. C. Use rubber nip roll, or increase viscosity. D. Change cycle, or increase oven temperature. E. Consult Supplier or Change Adhesive.
BLISTERING, ALLIGATORING, OR SPOTTY ADHESION IN LAMINATE	<ul style="list-style-type: none"> A. Excessive stress on substrates. B. Drying cycle inadequate. C. Poor substrate surface treatment. D. Contamination on substrate. E. Non-uniform adhesive application. F. Excessively foamed adhesive. 	<ul style="list-style-type: none"> A. Adjust web tensions. B. Adjust ovens accordingly. C. Consult supplier, or use in-line treatment. D. <ul style="list-style-type: none"> a. Clean, or change, substrate. b. Check application rollers c. Clean anilox roll, if necessary. d. Clean and/or replace Dr. blade. E. Correct placement of anilox in reference to substrate. F. Add defoamer, use mechanical defoamer, or change adhesive.
FINISHED LAMINATE MOTTLE	<ul style="list-style-type: none"> A. Insufficient nip pressure. B. Insufficient adhesive. C. Rough paperboard. D. Excessively foamed adhesive. E. Poor adhesive wetting. 	<ul style="list-style-type: none"> A. Increase nip pressure, or adjust stops; use rubber nip roll. B. Increase application amount (change anilox roll). C. Adjust rubber nip roll durometer or pressure. D. Add defoamer, use mechanical defoamer, or change adhesive. E. Decrease line speed.
ADHESIVE STRIKE THROUGH CAUSING BUILDUP ON ROLLERS (PAPER LAMINATIONS ONLY)	<ul style="list-style-type: none"> A. Too much adhesive. B. Too much nip pressure. C. Viscosity too low. 	<ul style="list-style-type: none"> A. Decrease application amount (change anilox roll). B. Adjust nip pressure. C. Increase viscosity.
CURL IN LAMINATION	<ul style="list-style-type: none"> A. Coating weight. B. Moisture in substrate. C. Tension control. D. Adhesive lay-up or lay flat property. E. Humidity in plant. 	<ul style="list-style-type: none"> A. Increase/decrease coating weight. B. Increase/decrease moisture-change incoming specs. C. Correct tension differences. D. <ul style="list-style-type: none"> a. Increase coating weight. b. Modify or change adhesive. E. Improve humidity control.

Need additional help?

For additional questions regarding adhesives applications, contact us at 317.834.5415

