

Tech Tip #122 - *Light Finishing of Liquid Photopolymer Printing plates*

Selected MacDermid liquid photopolymer printing plates must go through one additional processing step in order to ensure the totally tack-free surface. The printing plate should be processed as normal through the developer and post exposure unit.

After the post-exposure step, the plate is placed into the dryer for 20-40 minutes at a temperature of 125-135°F (52-57°C). The plate must be completely dry and warm throughout when placed into the light finishing unit, and must remain warm during the entire light finishing step. The plate is then exposed in the light finishing unit. The conditions are outlined in the tables below:

Drying Temperature ¹	Drying Time ¹
135° F (52° C)	20 Minutes
130° F (54° C)	20 Minutes
125° F (57° C)	20 Minutes

Light Finishing Exposure		
Resin	Finishing Temperature (°F)	Finishing Time (min.)
LTL, LTT, LTS, MRC, MWB 50	110-125	18-25
MLC 25, MLC 32	110-125	8-14
MLC 25, MLC 32	Non-Heated	15-20
MWH	110-125	5-10

MacDermid light finishing units should be turned on 20 minutes prior to use each day to warm up the unit. This is done to ensure that plates remain warm and proper detacking occurs during exposure. With other plate finishers, exhaust from the unit should be minimized to maintain plate temperature, and longer processing times may be needed. ² This will aid in providing the best tack-free plate surface.

If the plate surface clouds or crazes after light finishing, it may indicate that the plate has been exposed for too long. Reduce the amount of time in the light finishing unit.

After completion of the light finishing step, MacDermid Liquid photopolymer printing plates are ready for press.

¹ With cooler dryers, longer drying time is required to ensure adequate plate temperature prior to light finishing. Care must be taken not to exceed temperature of 135 °F.

² Exhaust control may not be possible on all non MacDermid light finishers. Check with the equipment manufacturer.