

# **MURAKAMI THICK FILM**

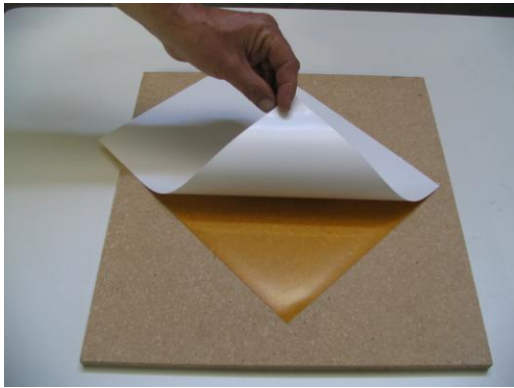
## **APPLICATION GUIDE**

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### **MESH SELECTION**

- **Mesh selection for High Density Printing is just as important as choosing the correct design, proper Thick Film, or ink. The thicker the well of the stencil, the harder it is for the ink to release. Murakami offers several specific mesh counts that allow the ink to release and not have mesh marks on the final print.**
- **Our 70S, 80S, and 110S have 71 micron threads. These thinner threads allow the High Density Inks to flow and release without leaving mesh marks in the final print.**
- **It may be necessary at times to use coarser mesh count to accomplish a specific job. Murakami and it's dealer network are available to assist you in determining the correct mesh count to correspond with a specific thickness of film.**



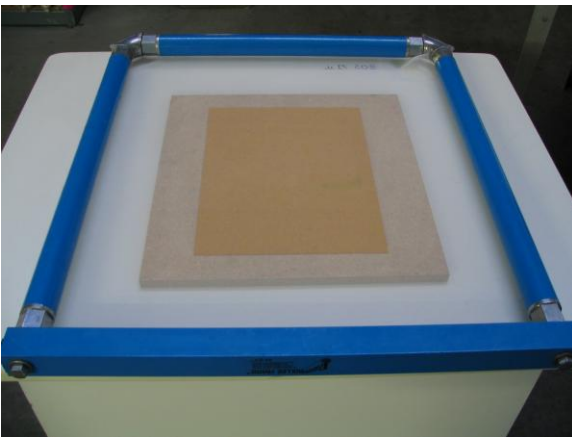
1. Remove white protective layer to expose film surface for adhesion.



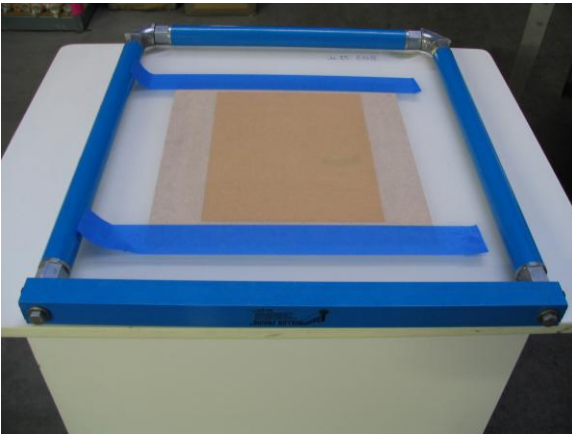
2. Use a build-up board that is slightly smaller than the inside dimensions of the frame but large enough to hold the film.



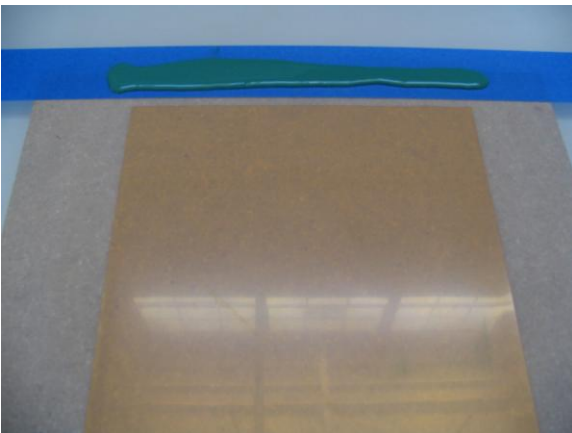
3. Place the film on the build-up board and then place the film on the newsprint emulsion side up.



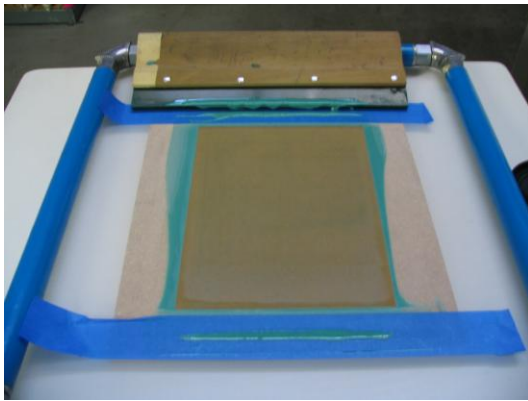
4. Place the frame, squeegee side up over the film. Notice that the frame hangs over the edges of the build-up board.



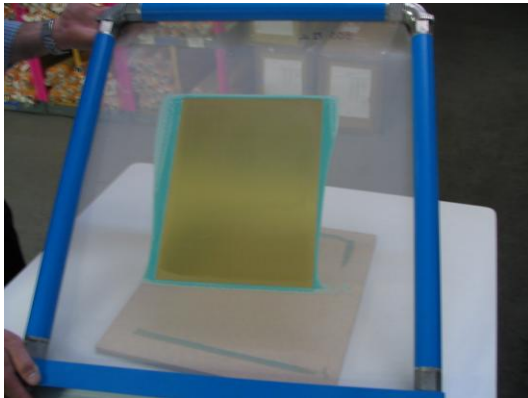
5. Place a piece of 2" masking tape at the top and bottom of the frame on the squeegee side just above and below the top and bottom edges of the film.



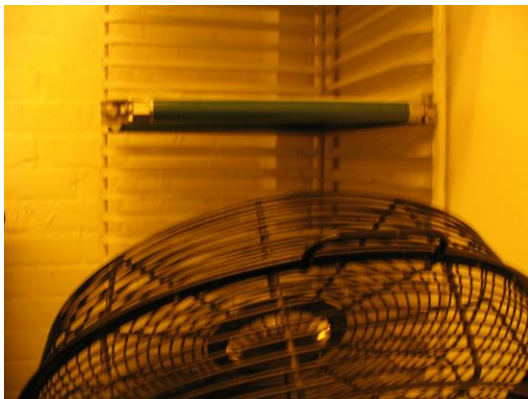
6. Pour a bead of One Pot Sol-C emulsion on the top piece of tape.



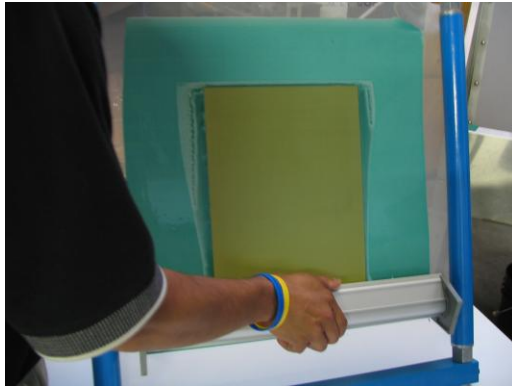
7. Using a sharp edge medium durometer squeegee, make four passes across the film from tape to tape. This is the initial adhesion of MS-Thick Film.



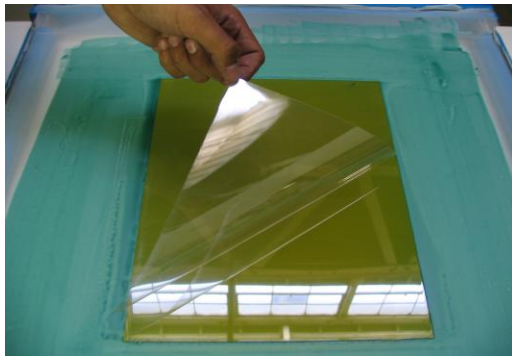
8. Remove the tape and any excess emulsion from the frame.



9. Place frame in a drying rack. Dry with either heat or cool air fan. When initial emulsion layer is dry, the frame is ready for final coating.



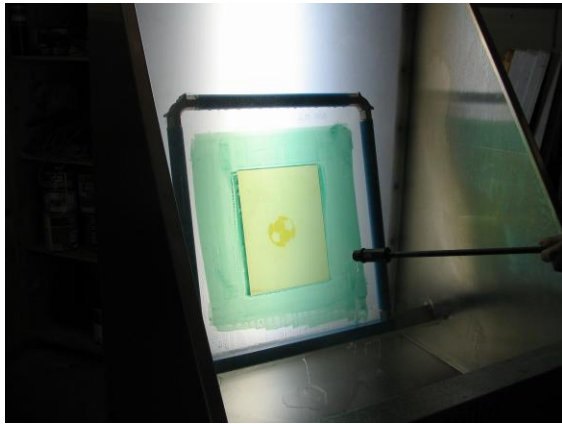
10. Coat squeegee side twice with the dull edge of the coater to seal the stencil. Dry completely until backing sheet releases with ease.



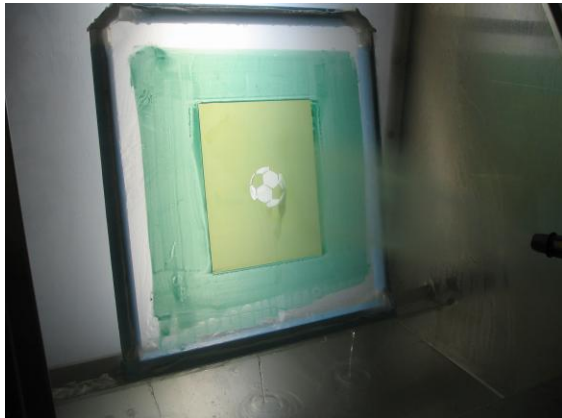
12. Peel backing sheet when stencil is completely dry. The backing sheet should peel with little or no resistance



13. Expose the dried stencil. Exposure time with a 5kw metal halide lamp at 40" is approx. 1 minute per 100 microns of film.



14. Wet the stencil completely from the squeegee side with pressure.



15. Turn the frame to the print side and wash with pressure until the image is completely clean.



16. The stencil now needs to be dried with a cool air fan and or limited heat until dry than make ready for the press.