

## MOULDING ECONO 120 MATRIX BOARD

### EQUIPMENT AND SUPPLIES REQUIRED

Vulcanising Press - Jackson 'PP' Series  
Polymer Master - MBM145, MBM175 or iHP Liquid Polymer  
Bearer Bars  
Mould Release Solution  
Release Cloth or Plate

### PROCEDURE

1. Prepare a piece of matrix board approximately 20mm wider and 20mm longer than the polymer master.
2. Paint both polymer master (or pattern plate) and the matrix board with mould release solution so that each surface is wet. Brushing in more than one direction helps to ensure a thorough and even application.
3. Place both the polymer master and matrix board in a warm place and allow the surfaces to dry. *Note: Do not overheat the matrix board - 30°C is ample.*
4. Bearer bars of not less than 6.0mm thickness should be placed at either end of the lower platen or the moulding tray where fitted. If using a master thicker than 2.4mm or release cloth the bearer thickness should be adjusted to compensate.
5. If using a mould release plate such as galvanised steel it should be large enough that the entire platen is covered including the bearer bars.
6. Press temperature should be stabilised at 150°C. Place the polymer master face down and centered on the matrix board and cover with the release material. Then insert in to the press or place on the moulding tray between the bearer bars.
7. Close the press to a 3mm gap and pause for 2 to 4 minutes to allow the matrix to soften prior to moulding. *This is referred to as preheating and is essential to avoid cracks in the surface of the finished board.*
8. Completely close the press and apply pressure until the bearers are tight between the platens. (It is advisable to use only sufficient pressure to nip the bearer bars to avoid damage to the platens.) *The minimum recommended cure time is 10 minutes to ensure full hardening of the board.*
9. On completion of the cure time remove the material from the press and place on a cool surface. Allow the material to cool to room temperature before attempting to separate the master from the matrix.
10. Remove the master by inverting the matrix (so that the master is facing down) and lightly tap one end of the matrix on the bench. The master should come away cleanly and "drop" to the bench quite quickly.