



Freeman M-4500 Modeling Board

Description

The Freeman M-4500 board is ideally suited for prototype vacuum-forming tools, styling prototypes, master models, tooling aids and automotive die models.

Physical Properties

Color	Light Brown
Hardness (Shore D)	71
Density (g/cc)	0.72
Density (lb./ft. ³)	45
Compression Strength (psi)	5,076
Flexural Strength (psi)	4,360
Deflection Temp. (°F)	212
Tg (°F)	230
Coefficient Thermal Expansion (in./in./°F)	27 x 10 ⁻⁶

Machining

Machining parameters listed are starting points. Cutter type, material, spindle speed, feed rates, and other factors will determine machining results.

Roughing Speed	Roughing Feed	Finishing Speed	Finishing Feed
2,000 RPM	100 IPM	15,000 RPM	200 IPM

Cutters: **Roughing** 1" Ball End mill, 4-Flute, Carbide
 Finishing 5/8" Ball End mill, 2-Flute, Carbide

Depth: **Roughing** Varies from 1/4" to 2-1/2" deep with 40% stepover
 Finishing 1/8" deep leaving 0.002" scallop height

The user shall determine the suitability of this product for their application and assumes all risks and liabilities associated with the use of this product. The exclusive remedy for all proven claims is replacement of our materials only and in no event shall Freeman Mfg. & Supply Co. be liable for special, incidental, or consequential claims.