



## Freeman M-4400 Modeling Board

### Description

The Freeman M-4400 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)                         | 69                    |
| Density (g/cc)                             | 0.72                  |
| Density (lb./ft. <sup>3</sup> )            | 44                    |
| Compression Strength (psi)                 | 4,714                 |
| Flexural Strength (psi)                    | 3,989                 |
| Deflection Temp. (°F)                      | 180                   |
| Coefficient Thermal Expansion (in./in./°F) | 26 x 10 <sup>-6</sup> |

### 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