



## Freeman T-9900 High Density Fixture Board

### Description

Freeman T-9900 is a high-density polyurethane board that exhibits exceptional machining capabilities and a fine surface finish. With high dimensional stability, excellent wear resistance, and the ability to withstand extended use and handling, this board is well suited to the machining of production fixtures, prototype metal forming dies, and vacuum forming tools.

### Physical Properties

Color	Light Tan
Hardness (Shore D)	88-90
Density (g/cc)	1.60
Density (lb./ft. <sup>3</sup> )	100
Compressive Strength (psi)	15,954
Flexural Strength (psi)	11,603
Temperature Resistance (°F)	185
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
1,600 RPM	40 IPM	10,000 RPM	100 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.