



# FREEMAN MODELING & TOOLING BOARDS

Freeman is proud to introduce a new line of modeling and tooling boards in all of the most popular sizes and densities! With the addition of these boards to our already extensive lineup of RenShape products, the world's most complete line of modeling, fixture and foundry boards just got better!

## Specifications

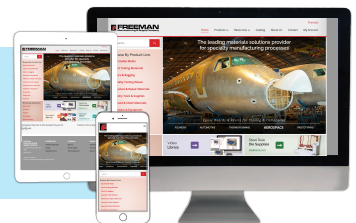
	Hardness (Shore D)	Density (g/cc)	Density (lb.ft. <sup>3</sup> )	Compressive Strength (psi)	Flexural Strength (psi)	Deflection Temp (°F)	CTE (in./in./°F)	Color	Thicknesses	Width	Length
<b>M-3700 Modeling Board</b>	59	0.59	37	2,538	3,263	180	31 x 10 <sup>-6</sup>	Brown	0.98", 1.97", 2.96" 3.94", 5.91"	19.7"	59.1"
<b>M-4000 Modeling Board</b>	62	0.64	40	3,989	3,989	180	31 x 10 <sup>-6</sup>	Brown	0.98", 1.97", 2.96" 3.94", 5.91"	19.7"	59.1"
<b>M-4400 Modeling Board</b>	69	0.72	44	4,714	3,989	180	26 x 10 <sup>-6</sup>	Lt. Brown	0.98", 1.97", 2.96", 3.94", 5.91"	19.7"	59.1"
<b>M-4500 Modeling Board</b>	71	0.72	45	5,076	4,360	185	27 x 10 <sup>-6</sup>	Lt. Brown	2", 3", 4"	24"	60"
<b>M-4650 Modeling Board</b>	71	0.75	46.8	5,000	5,801	212	31 x 10 <sup>-6</sup>	Turquoise	1.97", 2.96", 3.94", 5.91"	19.7"	59.1"
<b>T-4800 Fixture Board</b>	71-75	0.77	48	6,015	11,660	200	29 x 10 <sup>-6</sup>	Gray	1", 2", 3", 4", 5", 6"	24"	60"
<b>T-5100 Fixture Board</b>	71	0.81	51	4,714	4,714	198	30 x 10 <sup>-6</sup>	Gray	0.98", 1.97", 2.96", 3.94"	19.7"	59.1"
<b>T-7100 Foundry Board</b>	86	1.14	71	11,380	17,350	214	25-28 x 10 <sup>-6</sup>	Red	1", 2", 3", 4", 6"	24"	60"
<b>T-7500 Foundry Board</b>	84	1.20	75	11,986	12,691	189	34 x 10 <sup>-6</sup>	Red	0.98", 1.97", 2.96", 3.94", 5.91"	19.7"	59.1"
<b>ASTM</b>	D-2240	D-792	D-792	D-695	D-790	D-648	D-3386	-	-	-	-

For part numbers, technical documents, and ordering, visit our website at [www.FreemanSupply.com](http://www.FreemanSupply.com).



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Your Freeman Customer Number can be found on any invoice.



# ACCESSORIES FOR FREEMAN BOARDS

## SEM Quick Set 180 Urethane Adhesive

SEM Quick Set 180 is a rapid-curing, 2-part polyurethane adhesive allowing you to machine same day with a solid, secure bond! It offers an ideal combination of strength and speed, with a 3-min. gel time and can be machined in 1-2 hours.



## Freeman 5075

This epoxy adhesive is designed specifically for gluing red foundry boards. Freeman 5075 features a 15 minute working time and a quick 3-4 hour light handling time.

## Freeman 6700 Epoxy Laminating System

Freeman 6700 is a general purpose, clear epoxy laminating system designed for producing laminates or for use as an adhesive. Freeman 6700 may be used at room temperature without a post cure. A heated post cure is required for applications involving elevated temperatures up to 190°F.

## Freeman 4105 High-Temp Epoxy Laminating System

Freeman 4105 is a low viscosity unfilled hi-temp epoxy laminating system that offers excellent wet out for tooling applications requiring service temperatures up to 350°F. A heated post cure is required to obtain full properties. It is an excellent adhesive for bonding High-Temperature Tooling Boards.

## Freeman Fast Set Epoxy Adhesives

Freeman Fast Set 505 & 517 Epoxy Adhesives both feature a one-to-one mix ratio. Fast Set 505 has a 5 minute gel time and a 1 hour handling strength. Fast Set 517 has a 17 minute gel time and 3-4 hour handling strength. Both are ideal for quick bonding of modeling, fixture, and tooling boards.



## Fixture Wax

Once melted to a liquid form (approx. 200°F), the 1595A Fixture Wax is a castable compound used to encapsulate, stabilize and fixture small or delicate parts for precision machining or finishing. 1595A Fixture Wax can be used as an alternative method to secure modeling and tooling boards during the finishing process.

## Freeman 5070 Repair Material

This red urethane patch material is designed specifically for the repair or buildup of the red foundry boards. It features a 1:1 mix ratio by volume, working time of 1.5 minutes, and a quick cure time of 20-30 minutes. Once cured this material can be machined and will exhibit properties similar to red foundry boards.

## TUF-Fil & TUF-Carv Polyester Repair Paste

Freeman TUF-Fil closely matches mahogany and other hardwoods in hardness. It is suitable for high wear applications, and when fully cured, TUF-Fil may be scraped, filed, tapped and sanded. While it is still rubbery, it can be carved using woodworking tools.



Freeman TUF-Carv is a less dense material than TUF-Fil, closely matching the hardness of pine and jelutong. It produces a durable, yet carvable finish. When cured, it can be carved, sawed, sanded, filed, tapped and machined easily with woodworking tools.

## Freeman Wood & Plaster Sealer

This clear lacquer sanding sealer may be applied by brush or low pressure spray. Specially formulated to seal porous materials, it is ideal for sealing wood master models, as well as polyurethane modeling boards, to prepare the surface for plastic duplication.



## Chemlease MPP 2180 Mold Prep & Primer

Chemlease MPP 2180 is a heavy duty primer used to prepare and seal mold surfaces for use in applications with elevated temperatures. Excellent for polyester, epoxy, phenolic, and metal. It can also be used with epoxy tooling boards, as well as select polyurethane modeling and tooling boards. Provides a smooth, non-porous surface for the application of semi-permanent sealers and release agents.



## Abrasives

Precisely remove small amounts of material to achieve a specific dimension, smooth or polish a surface, or roughen materials for gluing applications. Garnet, aluminum oxide, and silicone carbide abrasives are available in sheets, rolls, or discs with either paper or cloth backing.



## Bits & Cutting Tools

CNC routers, mill bits, and cutting tools manufactured by LMT for use with wood, metal, plastic, honeycomb, and composites.

