17/16 HAMMERED DULCIMER BLUEPRINT GENERAL OVERVIEW

The Hammered Dulcimer is a challenging woodworking project to build from scratch. You will need a shop full of power tools in order to cut the parts from your own wood (table saw, band saw, jointer, planer, router, belt sander, and drill press, in addition to standard hand tools). The top panel (soundboard) should be cut from solid wood boards that are edge-glued and planed to the dimensions shown. A plywood top will not be strong enough to withstand the tension of 66 strings, and will likely buckle or sag. Like most musical instruments, the hammered dulcimer sounds good with a soft wood soundboard, such as spruce, cedar, or redwood, but it also sounds great with a mahogany or even a maple top. If you use a soft wood, keep the thickness at 3/8" (10 mm) for strength, but if you use hardwood you can plane it down to about 5/16" (7mm). We offer a pre-cut soundboard on our web site if you decide not to make your own (search "1716top"). The back panel can be standard 1/4" plywood. The frame of the box should be made with good quality hardwood, but it must be fully dried to less than 10 percent moisture. We use laminated maple for our pinblocks, with all layers of maple so the tuning pins are held firmly with grain from different directions, but solid maple or cherry or walnut will also work if it is fully dried. The playing hammers are outlined on the blueprint too, and they can be made from 1/8" (3mm) Balitic Birch or thin solid hardwood. We offer a variety of finished hammers on-line (search "hammers") if you'd rather purchase than make those. We also offer solid maple bridges cut by laser for perfect accuracy (search "1716brid"), as drilling and shaping the bridges can be daunting for some. We have a companion blueprint for an adjustable stand to hold this instrument at and angle as you play (search "adjstand").

BILL OF MATERIALS (WOOD)

QTY	PART	TYPE OF WOOD	ROUGH SIZE	NOTES
1	Soundboard	Solid wood	3/8" X 20" X 40	Spruce, Cedar, Redwood, or Mahogany
1	Back	Any Plywood	1/4" X 20" X 40"	To match your hardwood
2	Pinblocks	Good Hardwood	2-1/4" X 2" X 23"	can be stacked up to make 2-1/4" thickness
1	Front Rail	Good Hardwood	3/4" X 2-1/4" X 38"	
1	Rear (Back) Rail	Good Hardwood	3/4" X 2-1/4" X 16"	
1	Short Inner Brace	Good Hardwood	3/4" X 1-5/8" X 19"	
1	Longer Inner Brace	Good Hardwood	3/4" X 1-5/8" X 27"	
1	Pair Bridges	Good Hardwood	3/4" X 3" X 21"	Drill holes first, then cut apart into 2 bridges
1	Tone Bar	Good Hardwood	9/16" X 9/16" X 15"	
1	Bridge Support Block	Good Hardwood	3/4" X 2-1/4" X 1-1/2"	
1	Pair Playing Hammers	Thin Hardwood	1/8" X 1-1/4" X 9-1/2"	or use 3mm Baltic Birch