

31-String GOTHIC HARP BLUEPRINT GENERAL OVERVIEW

The Gothic Harp is a difficult project to build from scratch. It requires a full shop of power tools, including table saw, band saw, jointer, planer, belt sander, drill press, and router, in addition to standard hand tools. The front and back panels of this harp will be bent from one side to the other as you install them. This is important for both structural integrity and tuning stability. It means, however, that you need to use thin plywood for both panels. The only plywood we've found successful for the front panel (soundboard) is 3 mm thick "Aircraft Birch" that is made with 6 micro layers of hard birch (.5 mm per layer). This laminate comes from Finland and is difficult to find locally except in small pieces at hobby shops for model airplane builders. If you cannot source it locally, we offer it on our web site (search "Aircraft Birch"). We also offer 5/32" thick custom-made plywood for the back panel with either cherry or walnut face veneer (search "large back"). The rest of the instrument can be made from solid hardwood such as cherry, maple, walnut, or mahogany (not Lauan). We steer away from oak for the deeply curved neck because it splits too easily wherever the grain is short.

BILL OF MATERIALS (WOOD)

QTY	PART	TYPE OF WOOD	DIMENSIONS	NOTES
1	Soundboard	Aircraft Birch Ply	1/8" X 16-1/2" X 48"	6-ply, 3mm total thickness
1	Back	Any Plywood	5/32" X 16-1/2" X 48"	To match your hardwood
2	Sides	Good Hardwood	3/4" X 6" X 46"	cherry, walnut, maple, etc.
1	Curved Neck	Laminated Hardwood	1-5/8" X 12" X 25"	Laminate as shown on plan
1	Pillar	Good Hardwood	1-5/8" X 4-1/2" X 48"	
1	Shoulder	Laminated Hardwood	2" X 3" X 6-1/2"	3" high stack of hardwood
2	Feet	Good Hardwood	3/4" X 3" X 15-1/2"	
1	Set of 3 Inner Braces	Good Hardwood	3/4" X 3-1/2" X 36"	Cut all 3 from one board, or use scraps
1	Base	Laminated Hardwood	3/4" X 7" X 16-1/2"	or use thicker piece of solid hardwood
1	Outer Center Strip	Good Hardwood	1/4" X 1/2" X 48"	
1	Inner Reinforcement Bar	Aircraft Birch Ply	1/8" X 3-1/2" X 36"	
1	Hardwood Dowel	Good Hardwood	1" dia X 3-1/4" long	
2	Oval Overlays	Good Hardwood	3/8 X 1-3/4" X 7"	Structurally critical as well as decorative
1	Bottom Trim Strip	Good Hardwood	1/2" X 3/4" X 17-1/2"	Soak in water & bend to fit front
6	Stiffener Battens	Good Hardwood	3/8" X 3/8" X 9"	for inside of back