

CYCLOGYRO WIND MACHINE

PARTS AND MATERIALS

NUMBER REQUIRED	PARTS	SIZE		MATERIALS
		ENGLISH "	METRIC mm	
1	Base	3/4 x 5 1/2 x 9	20x140x228	Pine
2	Risers	3/4 x 1 1/2 x 2	20x38x51	Pine
2	Horizontal supports	3/4 x 1 1/2 x 9	20x38x228	Pine
2	Hubs	3/4 x 2 5/8 x 3	20x67x76	Pine
3	Blades	1/8 x 1 1/4 x 8	3x32x203	Hardboard
1	Shaft	1/4 x 11		Birch dowel
2	Vertical supports	1/4 x 9 1/2		Birch dowel
6	Blade supports	1/4 x 3		Birch dowel

PROCEDURE

BASE

1. Cut to size and disc sand end grain.
2. Rout top edges.
3. Finish sand.

RISERS

1. Cut to size and disc sand end grain.
2. Finish sand.

HORIZONTAL SUPPORTS

1. Cut to size.
2. Layout curves and hole locations (3 holes in each piece).
3. Cut curves and sand to shape.
4. Drill 1/4" (6mm) and 17/64" (7mm) holes through both pieces at same time on drill press.
5. Finish sand.

HUBS

1. Layout stock according to drawing using 30°/60° triangle, rule, and compass.
2. Cut hubs to rough shape and disc sand to final size.
3. Layout blade support holes and center punch. Also center punch shaft locations.
4. Drill all holes with 1/4" (6mm) bit. Use drill press vise for drilling blade support holes 1/2" (12mm) deep. Use construction lines on hub to keep drill holes in proper alignment. Drill shaft holes completely through hubs.
5. Finish sand.

BLADES

1. Cut 3 blades to size.
2. Layout and drill 1/4" (6mm) holes through all pieces at same time on drill press.
3. Finish sand.

DOWEL PARTS

1. Cut dowel parts to size and finish sand.
2. Nail a small brad at bottom of vertical shaft dowel. Leave 1/4" (6mm) exposed.

ASSEMBLY

1. Nail a tack flush to the surface on the base where the shaft will rest.
2. Assemble all parts as shown in drawings.
3. Apply finish.

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