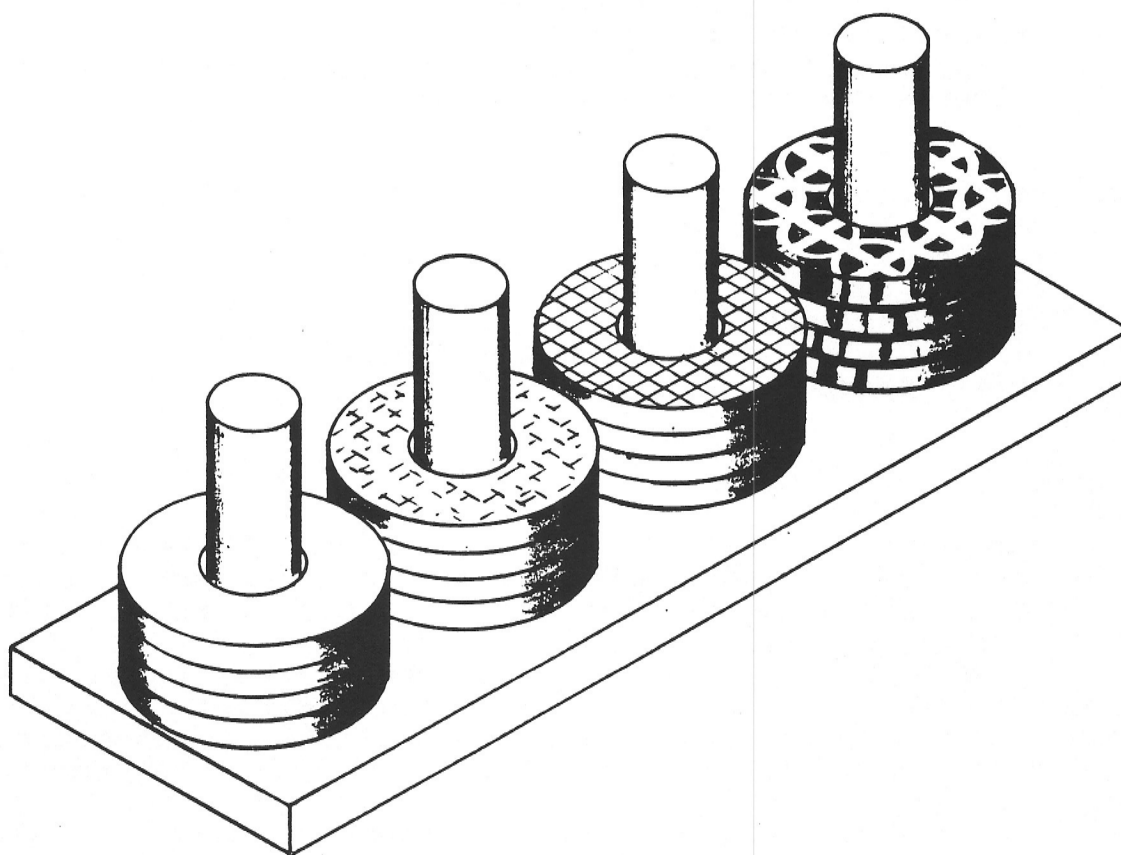


### TACTILE STACKER

Learning to discriminate by touch can be difficult. This toy helps make it fun. The tactile stacker has four sets of discs with surfaces of different textures. The child stacks the discs onto pegs, sorting by texture. The discs are all the same color to reinforce the tactile differences.



Materials needed:

- One piece 10" x 3 3/8" x 1/2" birch plywood
- Four pieces 3/4" diameter x 2 3/4" long dowels
- Two pieces 3" x 3" x 1/4" thick plywood
- Eight pieces 2 3/4" x 2 3/4" x 3/16" thick perforated masonite (These can be cut from a piece 6" x 12".)
- Eight pieces, each of two patterns, 2 3/4" x 2 3/4" x about 1/16" to 1/8" thick of patterned plastic used for diffusing light, as in a fluorescent fixture or a room divider. Purchase in a hardware store.
- Eight pieces 2 3/4" x 2 3/4" x 1/8" clear plexiglas
- Four pieces 2 3/4" x 2 3/4" x 1/4" thick birch plywood
- About 1/2" of 3/16" diameter dowel
- Plastic cement or "Superglue"
- Spray can of Varathane enamel or equal, one color
- Elmer's Carpenter's glue or equal

Tools needed:

- Table saw
- Circle cutter
- Vise or clamps
- 3/8", 3/4", and 7/8" diameter drills
- Drill press

Construction suggestions:

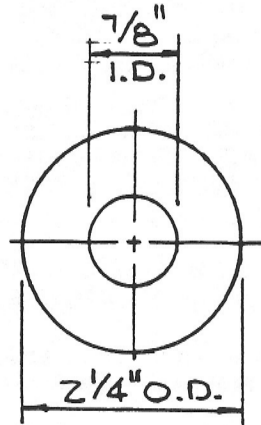
Either cut out all of the 2 3/4" x 2 3/4" pieces and then drill each 2 1/4" diameter disc, or make a layout of centerpoints on a 6" x 12" piece and cut out the discs directly using a circle cutter adjusted to 2 1/4" diameter.

The circle cutter has a pilot drill that makes a 3/16" diameter hole in the center of each disc. Except for the plain plywood disc that is 1/4" thick, each of the finished discs is made up of two or three cut-out discs that have been cemented or glued together.

To assure that these discs are properly aligned for gluing, make a simple alignment device, as detailed on the top of page 4. To one 3" x 3" piece, glue a 3/16" diameter dowel that is long enough to go through the two or three cut-out discs and into the other 3" x 3" alignment piece. This is used by applying cement or glue to the cut-out discs, placing them on the 3/16" dowel stub in one face piece and covering the discs with the other piece. Then clamp the alignment device in a vice until the cement sets.

After the disc pieces are all glued, drill a 7/8" hole down the 3/16" pilot hole of each disc assembly.

Spray paint all the discs the same color.

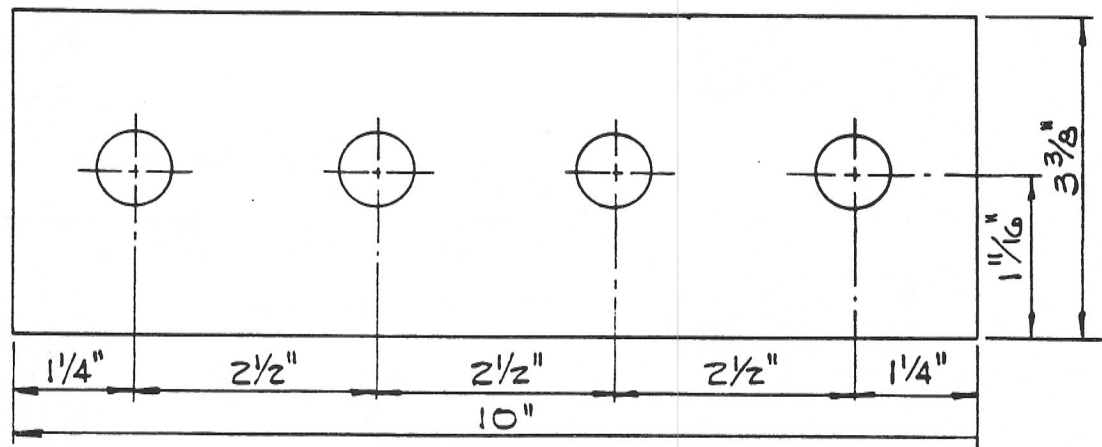


TEXTURED DISC  
(TYPICAL SIZE)

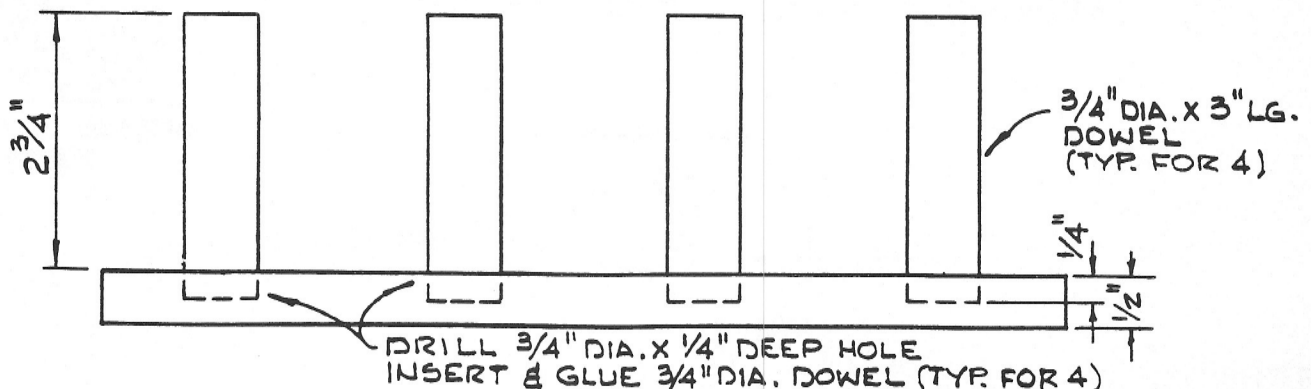
NOTE:

16 DISCS REQUIRED FOR THIS TOY.  
DISCS ARE OF FOUR DIFFERENT  
TEXTURES AND CONSTRUCTION,  
FOUR DISCS EACH OF ALIKE  
TEXTURE.

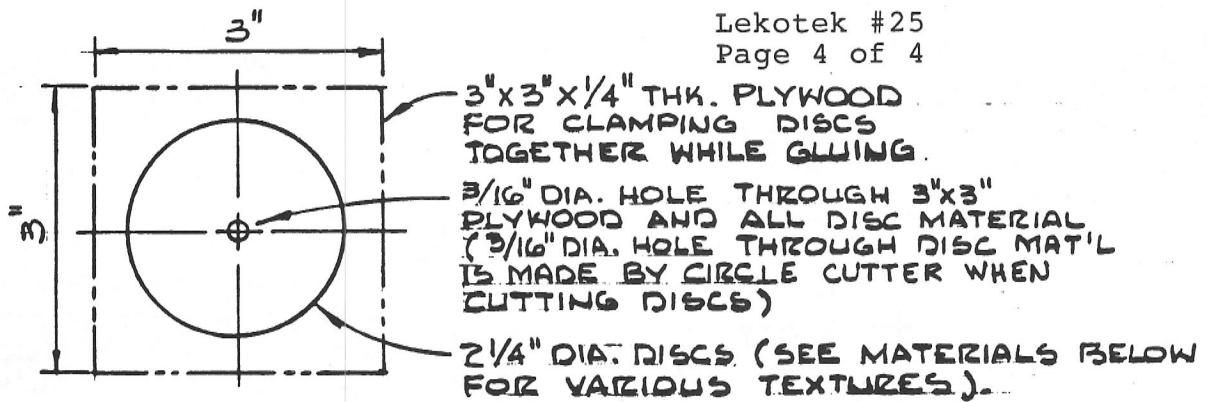
SEE CONSTRUCTION DETAILS.



TOP VIEW OF DISC STAND

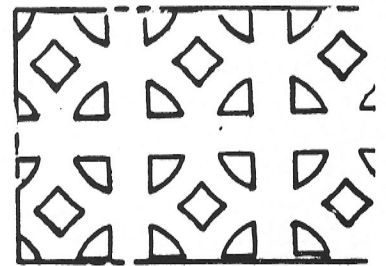
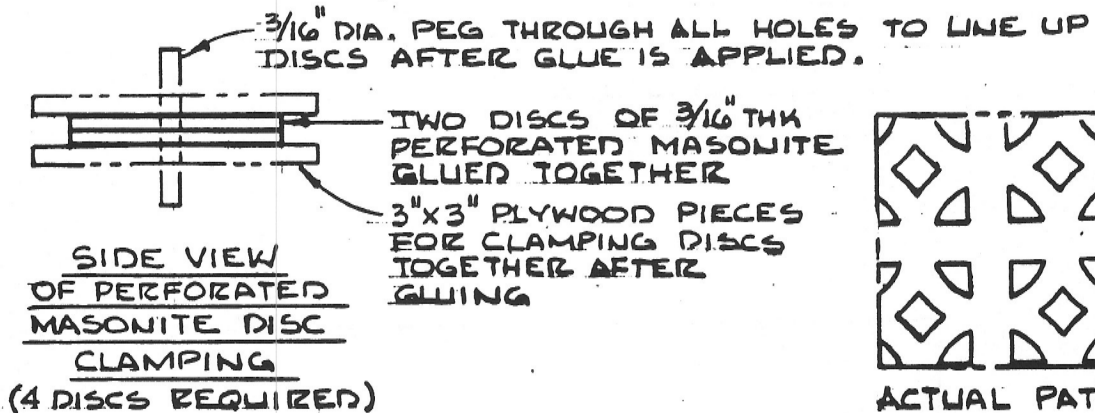


FRONT VIEW OF DISC STAND

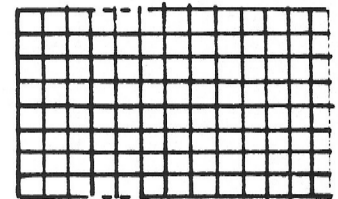
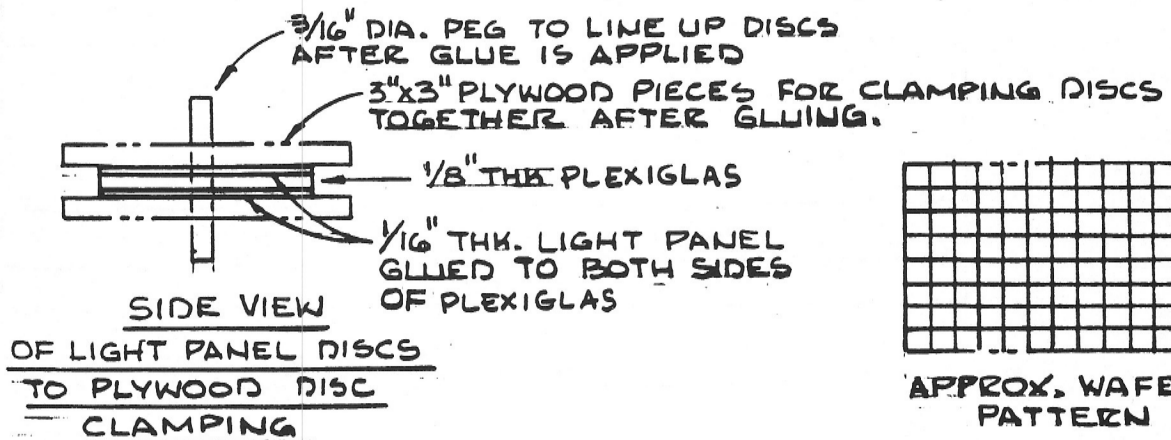


TOP VIEW

NOTE: DRILL 1/8" DIA. HOLE THROUGH ALL DISCS AFTER GLUING

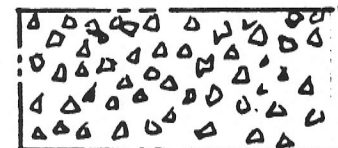


ACTUAL PATTERN OF MASONITE



APPROX. WAFER PATTERN

(4 DISCS REQ'D W/WAFER PATTERN)  
(4 DISCS REQ'D W/CRACKED ICE PATTERN)



APPROX. CRACKED ICE PATTERN

