

# **Exploratorium Cookbook II**

**A Construction Manual for Exploratorium Exhibits**

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**by Ron Hipschman and the Exploratorium staff**

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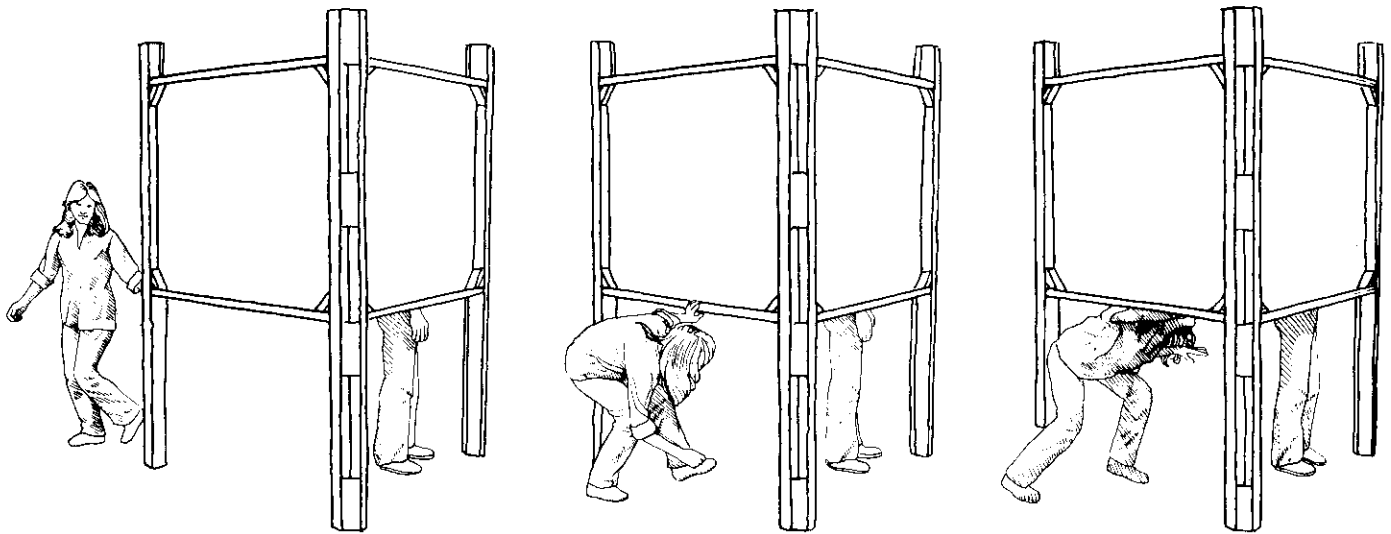
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# Duck Into Kaleidoscope



## Description

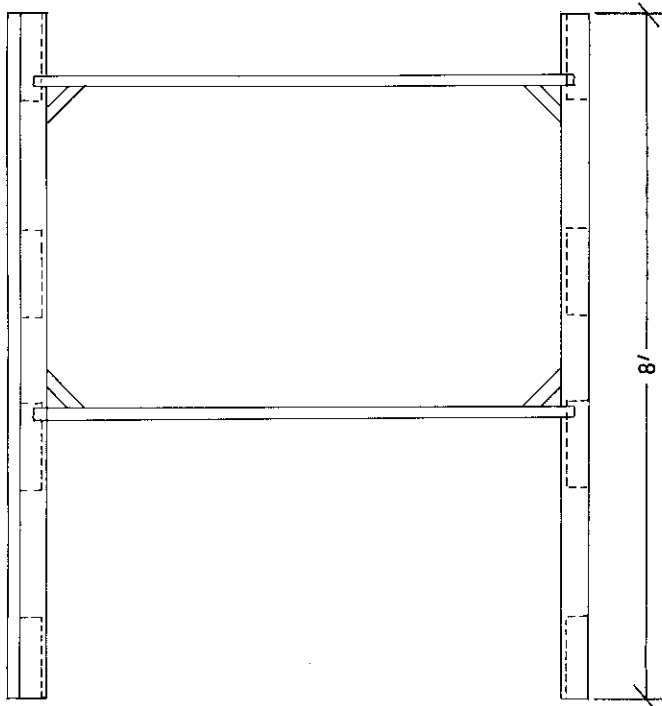
The visitor ducks under one side of a large 3 sided wooden enclosure whose inner surfaces are covered with mirrors. Myriads of reflections of the person, the mirror corners, and the museum visible above and below the mirrors stretch off into the distance.

## Construction

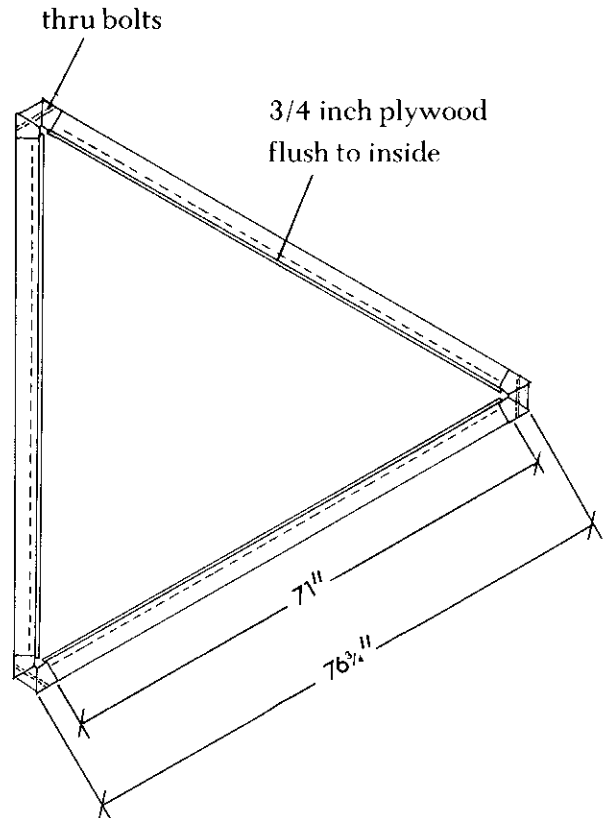
The Duck into Kaleidoscope is made from three large 4x6 foot mirrors arranged in a 60 degree equilateral triangular prism. The mirrors are glued with contact cement to a layer of 3/4"

plywood. The backed mirror is then placed in a frame (with integral legs) made of fir 2x4's (top and bottom) and fir 4x4's (sides/legs). The 4x4's are cut at a 60 degree angle (see diagram) which allows the edges of the mirror to abut. The three sides of the exhibit then bolt together with large bolts through the 4x4's and 60 degree wedges (4 at each joint, each wedge 10" long) added for strength. The mirror has an oak molding around the top and bottom edges for appearance and to protect the edges of the mirrors. The bottom of the mirror is 40" above the floor allowing wheelchair access (albeit awkward) to the exhibit.

elevation view



top view



## Critique and Speculation

The exhibit must have explicit instructions (we have illustrations of someone ducking into the kaliedoscope, plus the name of the exhibit) which tell people to duck under the walls into the exhibit or else people tend to view the structure as a large wooden signboard. Even with graphics the exhibit sometimes goes unused for quite a while, even when the museum is crowded, until someone tries it and supplies an example that other people can follow. The exhibit is difficult for some people to get into since it requires a moderate amount of bending to get under the 40" high mirror (senior citizens especially experience this problem). Of course, the mirrors require periodic cleaning for best results.

## Related Exploratorium Exhibits

### REFLECTION

Look Into Infinity  
Shadow Kaleidoscope  
Corner Reflector  
Primary of a Cube

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