## RAIN-CATCHING GARDEN SHED

## & RAIN CATCHER for barrels

# Description and Materials List

**Description**: The rain-catching garden shed has a roof that acts as a rain-catcher. Instead of a standard peaked gable, the roof has an inverted, v-shape with a central gutter that slopes downward from one side of the shed to the other, and drains into a rain barrel that is supported on a shelf extending from the side of the shed on the lower end. The gutter is lined with flashing, and the plywood roof is covered with a smooth sheet of 1/8" plastic to provide maximum run-off. A 4' wide x 2.5' deep shed will provide approximately 18 square feet of collective surface area.

Materials for 4' wide x 2.5' deep x 6' high garden shed: recommend use of pressure treated lumber throughout, but only the four 4x4 corner posts absolutely must be pressure treated.

4" x 4" x 8' PT corner posts Qty 4 (shed is only 6' high, but posts should be planted 18")

2" x 4" x 8' studs (PT or kiln dried) Qty 5 (includes support for barrel shelf)

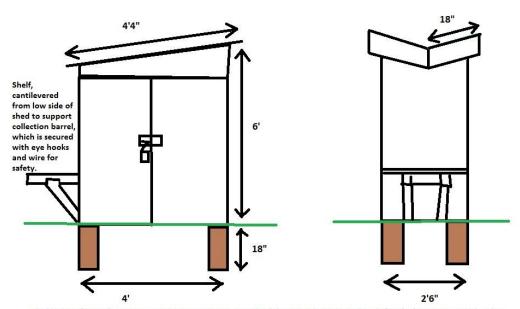
"x 4" x 8" plywood (PT or standard) Qty 5 (includes sides, doors, roof, floor and shelf)

1" x 4" x 8" Qty 1 (overlap for doors and hinge backing on doors)

4" door hinges (galvanized) Qty 4 6" wide gutter flashing 6'

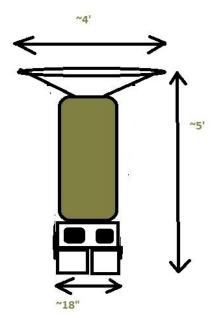
2' x 4.5' x 1/8" plastic for roof Qty 2 (I used shower wall white plastic in 4' x 8' sheet)

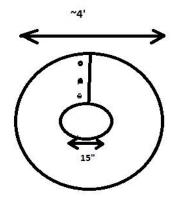
3" deck screws (box of 150-200) Qty 1 1 1/2" drywall screws (box of 150-200) Qty 1



Shed built on frame of pressure treated 4x4 corner posts, buried 18" deep, with height at high end of roof 6 feet above ground. Sides, floor and roof are 1/2" pressure treated plywood supported by 2x4 framework attached to corner posts. Roof is slanted 3.5" from high to low, presenting approximately 12 sq ft of rain collection area. Center groove is lined with aluminum flashing to channel rain to collection barrel. Remainder of roof is covered with 1/8" plastic panels to help collect rain and protect plywood.

### **Rain Catcher Design**



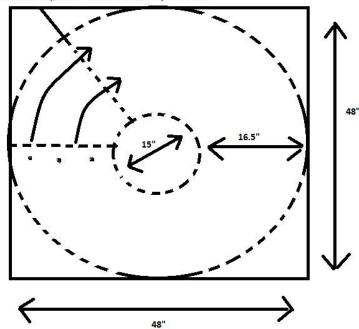


Rain catchers on top of olive barrels are fashioned from 1/8" white plastic sheets (normally used to line shower walls). They are approximately 4' in diameter, resulting in a collection surface of approximately 12.5 sq ft.

See separate "How To" sheet for instructions on how to fashion the rain catcher and attach it to the olive barrel. Recommend putting a nylon screen (as for a screen door) over the barrel opening (securing it under the screw on lid) to keep mosquitoes and wind-borne debris out of the barrel.

#### Rain Catcher Design

**Materials:** 1/2 sheet of 4'x8' 1/8" plastic "shower wall covering" from Home Depot;  $3 \times 1/2$ " #10 machine screws with nut and 2 washers (one each inside and outside); and  $6 \times 1.25$ " stainless drywall screws



How To: 1. Cut along the dotted lines. The material is thin but sturdy, so requires a heavy duty jigsaw. 2. Drill 3 holes, big enough for the #10 machine screws, 1" from the leading edge of the cut to the center circle. 3. Pull the two edges together (curved arrows) until you have a 2" overlap, with screw holes on inside of cone (hold in place with clamps or trusty assistant). 4. Drill holes through underlapping portion to align with holes in overlap. 5. Insert screw with washer through each hole, then attach nut with washer on the back side and tighten. 6. Invert cone so opening is up, place water barrel lid (with center cut out) upside down and centered on cone opening. 7. Screw drywall screws (evenly spaced) through deepest part of lid groove and through water catcher. 8. Screw lid with catcher onto water barrel.