



Drawing an ellipse of the proper size, given a pipe ID:

Step 1 (from MP): For 1.375" ID drain pipe, 0.6875" radius: To get the compass radius for circles AC and BD, multiply $0.6875" \times 0.84 = .578" = 37/64"$ (use machinist's ruler to set compass). (Note: on other pipe ID sizes, a range from 0.84 to 0.875 (ie, from 84 – 87.5 % of the pipe ID) may be more appropriate to fit the ID) On your cardboard template, draw a line longer than the ellipse. With the compass point at B (arbitrary), draw the circle on the left, circle AC.

Step 2: Then, where that circle intersects the line on the right (C), put the compass point there and draw the circle on the right, circle BD.

Step 3: Create new 2 points on each circle by using the compass, without any change, and by using A and D as centers. Name them as F1, F2, F3 and F4.

Step 4: Adjust the compass as the length between F1 and E2 and run it from F1 to F2 using E2 as center. Repeat this step and draw the line from F3 to F4 by using E1 as center.

Adapted by MP from Sam Shakouri / CREATING WONDERS WITH WOOD.....Sydney,Australia....