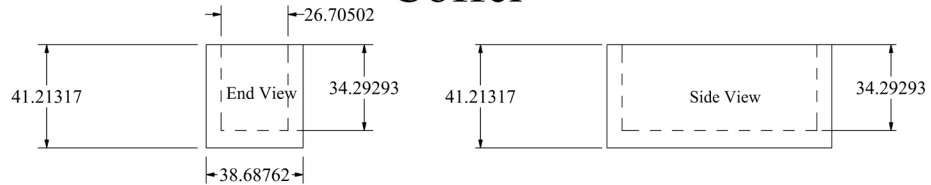


Volume of Coffe (or Ark) = W x L x H =
 77.80139 x 26.70502 x 34.29292 =
 71249.977257 or very nearly 71,250 Cubic Inches

These numbers are truncated, so the value falls short of the ideal...

Coffer



Volume of Ark is 2.5 x 1.5 x 1.5 Cubits =
 5.625 Cubic Cubits

But what is the relationship between the inch and the cubit?
 If the interior volumes of the Coffer and Ark are equal,
 then the ratio of the cube roots of these
 volume measurements will give the scale factor.

$$\sqrt[3]{71,250} / \sqrt[3]{5.625}$$

$$= 41.456721709248 / 1.778446652245$$

$$= 23.3106355239362272 \text{ inches per cubit}$$

However, the dimensions of the Ark are probably exterior measures, not interior. Since the interior volume is necessarily smaller than the exterior volume, a thickness of the materials that formed the Ark must be assumed....

A smaller interior volume for the Ark than 5.625 Cubic Cubits will require that the Cubit be longer than the 23.3 inches derived above.

If we assume the Cubit was 25 inches long, the thickness of the walls and bottom of the Ark can be estimated....

Cube root of Coffer's Volume / 25 = Cube Root of Ark's Interior Volume

$$41.4567 / 25 = 1.6582688669996$$

$$1.6582688669996^3 = 4.56 \text{ Cubic Cubits}$$

for the interior of the Ark.

Assume that 0.075 Cubits (1.875 inches) is a suitable wall thickness for the Ark's four sides. The thickness of the base would then be .06265+ Cubits or 1.56625+ inches.

The interior dimensions (in Cubits) would be:
 1.35 W x 2.35 L x 1.43735224586288416+ H
 or (in inches):

33.75 W x 58.75 L x 35.9338061465721 H (nearly one yard)

The interior volume is thus 71,250 Cubic Inches - Equal to that of the Coffer in the Great Pyramid.

The Exterior dimensions of the Ark, with a 25 inch cubit is:
 37.5 W x 62.6 L x 37.5 H

Ark

