

**Input oven  
dimensions all  
in inches**



Oven size	39.00
Distance from IT Pivot to Dome Floor	1.00
Height of soldier course(s)	2.50
Brick Height	2.50
Brick Width	4.50
Brick Depth	4.50
Mortar Joint size	0.125

Length of IT (inches) 19.6

Dome height (inches) 20.6

Effective Radius (inches) 19.6

Inner Arc Angle 85.6

Inner Arc Length (inches) 29.2

Courses 11.0

Plug size (inches) 3.4

**Rough Brick Count (what to order)**

Dome 158

Floor, bricks on wide edge 29

OR

Floor, bricks on narrow edge 53

**Explanation**

Oven diameter

Include thickness of any plywood + any distance of the pivot point from the surface

Height that vertical bricks extend above the floor - installed either as soldiers or sailors

Height of the inside facing edge of standard bricks (normally 2.5")

Width of a standard brick (normally 4.5")

Depth of brick that will be the thickness of dome (normally 4.5")

Default is 1/8"

Pivot point to flat end, based on inputs

Height of inside of dome using a fixed length IT

Diameter of a circle that will give a constant arc for a dome based on desired dome height and soldier course height

Degrees of the circle that form the arc from soldiers to top of dome

Length of arc from dome center to soldier bricks - interior face one side of dome

Number of full height courses beyond the soldier to complete dome

Inner dimensions of the plug, should be less than 2 bricks wide

Not exact, as it assumes hemisphere shape w/out entry arch

Assumes exposed face dimension of 4.5 x 9.0 inches

Assumes exposed face dimension of 2.5 x 9.0 inches (running bond)



