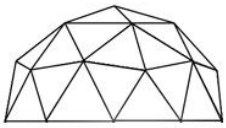
Building a 2V Geodesic Dome

2V - Each edge of the icosahedron is subdivided into 2 segments.

3V 4V

2V

1V



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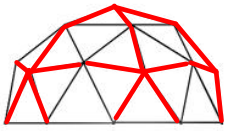

The radii coming from a degree 5 vertex are "shorts."

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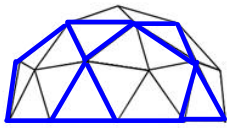


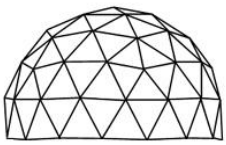
The perimeter of the pentagons are "longs." Equilateral triangles are "longs."
From the degree 6 vertices there will be two shorts and 4 longs.

3V - Each edge of the icosahedron is subdivided into 3 segments.

3V 4V

2V

1V

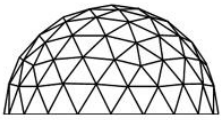


4V - Each edge of the icosahedron is subdivided into 4 segments.

3V 4V

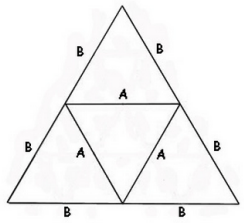
2V

1V



Building a 2V Geodesic Dome Notes

Strut	Strut factor	Dome	Sphere
A	.61803	35	60
B	.54653	30	60
4-way connectors		10	0
5-way connectors		6	12
6-way connectors		10	20



A/B = .61803/.54653 = 1.1308

The length of strut A is 1.13 times the length of strut B.