



## Portuguese Cushion Triangle

By Ernie Hawes

With perform instructions

Angles for R.I. = 1.540

94 + 15 girdles = 109 facets

3-fold, mirror-image symmetry

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$L/W = 1.028$   $T/W = 0.608$   $U/W = 0.589$

$P/W = 0.489$   $C/W = 0.161$

$Vol./W^3 = 0.238$

### PREFORM

pf1	49.20°	16-48-80
pf2	48.45°	12-20-44-52-76-84
pf3	46.25°	08-24-40-56-72-88
pf4	90.00°	16-48-80
pf5	90.00°	12-20-44-52-76-84
pf6	90.00°	08-24-40-56-72-88

Cut to Centerpoint  
 Cut to centerpoint set by pf1  
 Cut to established centerpoint  
 Set stone width; determine girdle  
 Cut to even girdle line set by pf4  
 Cut to even girdle line

### PAVILION

1	55.00°	16-48-80
2	55.00°	12-20-44-52-76-84
3	55.00°	08-24-40-56-72-88
4	50.00°	10-22-42-54-74-86
5	50.00°	14-18-46-50-78-82
6	49.00°	06-26-38-58-70-90
7	47.00°	16-48-80
8	47.00°	12-20-44-52-76-84
9	45.00°	14-18-46-50-78-82
10	43.00°	16-48-80

Cut enough below pf4 for other preform facets to be eliminated later  
 Cut to girdle line  
 Cut to girdle line  
 Meet 2 & 3 at girdle  
 Meet 1 & 2 at girdle and at juncture of 2 & 4  
 Meet 3 at girdle  
 Meet at juncture of 1 & 5  
 Meet at juncture of 2, 4 & 5 and at 4 & 6  
 Meet at juncture of 5, 7 & 8  
 Meet at juncture of 7 & 9

### CROWN

a	43.00°	16-48-80
b	43.00°	12-20-44-52-76-84
c	43.00°	08-24-40-56-72-88
d	38.00°	10-22-42-54-74-86
e	38.00°	14-18-46-50-78-82
f	34.00°	16-48-80
g	33.50°	12-20-44-52-76-84
h	29.90°	14-18-46-50-78-82
T	00.00°	Table

Determine girdle thickness  
 Meet at girdle line established by a  
 Meet at girdle line  
 Meet a & c at girdle  
 Meet a & b at girdle  
 Meet a & e  
 Meet at juncture of b, d & e  
 Meet at juncture of e, f & g  
 Cut to juncture of d & g and f & h