

Double Frame Square Emerald

Crown by Fred Van Sant (FVS-72 L&S 08.045b); pavilion by Glenn Ruminson
Assigned to the public domain.

CWFG Design Group, February 2024

Angles for R.I. = 1.540

61 + 8 girdles = 69 facets

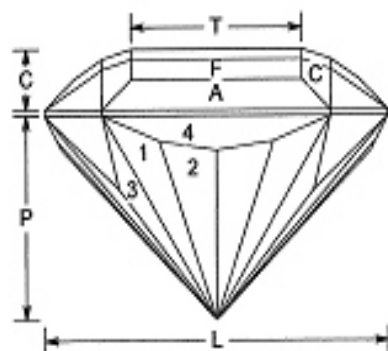
4-fold, mirror-image symmetry

96 index

L/W = 1.000 T/W = 0.497 U/W = 0.497

P/W = 0.516 C/W = 0.154

Vol./W³ = 0.286



PAVILION

G1	90.00°	96-24-48-72	Cut to desired stone size
1	42.89°	03-21-27-45- 51-69-75-93	Cut to form CMP
2	43.70°	01-23-25-47- 49-71-73-95	Cut to CMP
3	40.90°	07-17-31-41- 55-65-79-89	Cut to CMP
G2	90.00°	12-36-60-84	Cut to MP G1, 1, 3
4	60.00°	96-24-48-72	Cut to MP G1, 1, 3 to begin level girdle
5	44.91°	12-36-60-84	Level girdle

CROWN

A	42.50°	96-24-48-72	Cut to desired girdle width.
B	40.95°	12-36-60-84	Continue level girdle
C	34.39°	07-17-31-41- 55-65-79-89	Cut to MP A, G1, G2, B
D	23.17°	12-36-60-84	Cut to C, B, C. Forms TMP D, A, D.
E1	16.83°	96-24-48-72	See fn. for cutting instructions of E1, E2, E3, and E4
F	31.54°	96-24-48-72	Cut to MP C, D, E
T	0.00°	Table	Cut to MP E, D, E

This crown design looks tricky. It aligns accurately using these instructions for cutting Facet E. Cut E1 to the two TMPs formed by Facets D, A, D at l=24 and 72. Cut E2 to TMP D, A, D at l=48. Cut E3 to TMP D, A, D at l=72. Cut E4 to the TCMP formed by Facets E1, E2, and E3. Now cut F and T. This design performs well through R.I. 2.16. Reflection pattern rolls back and forth with tilt.

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