

# **GEMBOREE 2012**

## **COMPETITION SECTIONS**

### **GROUP 1 & 2: CABACHON**

### **TROPHY S C**

All Cabochons must have a Minimum size must not be able to be passed through a 15mm diameter hole

O 1A.1	Standard Cabochon - Agate	AA	AT07	A
I 1A.2	Standard Cabochon - Agate	AA	PT02	A
N 1A.3	Standard Cabochon - Agate	AA		A
J 1A.4	Standard Cabochon - Agate	CS	AT01, AT15	A
O 1A.5	Standard Cabochon - Chrysoprase	CS	PT01, AT21	A
I 1A.6	Standard Cabochon - Chrysoprase	CS		A
N 1A.7	Standard Cabochon - Chrysoprase	CS	PT03	A
O 1B.1	Fancy Cabochon	AA	AT27	A
I 1B.2	Fancy Cabochon	AA	AT27	A
N 1B.3	Fancy Cabochon	AA	AT27	A
J 1B.4	Fancy Cabochon	CS	AT01, AT27	A
O 1B.5	Fancy Cabochon - Petrified Wood	CS	PT01	A
N 1B.6	Fancy Cabochon - Petrified Wood	CS	PT03	A
O 2A.1	Double Standard Cabochon	CS	AT18, PT01	A
I 2A.2	Double Standard Cabochon	CS		A
N 2A.3	Double Standard Cabochon	CS	PT03	A
O 2B.1	Double Fancy Cabochon	CS		A
N 2B.2	Double Fancy Cabochon	CS		A

### **GROUP 3: FREE FORM**

Sections 3.1 to 3.4 minimum size MUST NOT be able to be passed through 15mm diameter hole

O 3.1	Free Form	AA	AT27	A
I 3.2	Free Form	AA	PT02, AT27	A
N 3.3	Free Form	AA	AT27	A
J 3.4	Free Form	CS	AT01, AT27	A

Sections 3.5 to 3.7 minimum size MUST NOT be able to be passed through 10mm diameter hole

O 3.5	Free Form – Opal Solid	CS	AT14, AT27	A
N 3.6	Free Form – Opal Solid	CS	AT27	A
J 3.7	Free Form – Opal Solid	CS	AT01, AT27	A

### **GROUP 4: OPAL**

Minimum size MUST NOT be able to be passed through a 10mm hole.

O 4A.1	Opal Doublet – Flat Top	CS	PT01	A
N 4A.2	Opal Doublet – Flat Top	CS		A
O 4C.1	Opal Triplet	CS		A



	<b>TROPHY</b>	<b>SC</b>
N 10.3	Modified Square Brilliant – manmade Corundum	AT22, AT27
J 10.4	Modified Square Brilliant – manmade Corundum	AT27
O 11.1	Antique Cushion – shallow pavilion Natural Sapphire	AT27, AT16
I 11.2	Round Brilliant Brite Top – Cubic Zirconia	AT27
N 11.3	Mod. Aztec Triangle – Cubic Zirconia	AT22, AT27
J 11.4	Mod. Aztec Triangle – Cubic Zirconia	AT27

### **GROUP 12: TUMBLED STONES**

Maximum size 40mm – Must not be able to be passed through a 15mm hole.

O 12A.1	Pre-form – Set of 3 different Material	AT27	A
N 12A.2	Pre-form – Set of 3 different Material	AT27	A

### **GROUPS 13 & 14: POLISHED FACES**

O 13.1	Any Material – Flat Surface	CS	AT27
N 13.2	Any Material – Flat Surface	CS	AT27
O 14.1	Any Material – Curved Face	AA	

### **GROUP 16: GEM TREES**

Base not to exceed one third of overall height

O 16.1	Single Tree
N 16.2	Single Tree

### **GROUP 17: NOVELTY GEMCRAFT**

Minimum size 50mm on the longest dimension excluding base

O 17.1	Novelty Gemcraft	AT27
N 17.2	Novelty Gemcraft	AT27

### **GROUP 18: HAND-FABRICATED AND WIRE WRAPPED JEWELLERY**

O 18A.1	NOT intended to include lapidary, fossil or mineral items	AT02
I 18A.2	NOT intended to include lapidary, fossil or mineral items	
N 18A.3	NOT intended to include lapidary, fossil or mineral items	
O 18B.1	WITH lapidary item/s cut and set by entrant	AT11, AT27
I 18B.2	WITH lapidary item/s cut and set by entrant	AT27
N 18B.3	WITH lapidary item/s cut and set by entrant	AT27
O 18B.4	WITH lapidary items/s – OPAL cut & set by entrant	AT24, AT27
O 18C.1	WITH Natural mineral or fossil specimen/s set by entrant	AT06
N 18C.2	WITH Natural mineral or fossil specimen/s set by entrant	
O 18D.1	WITH Commercial lapidary item/s set by entrant	
N 18D.2	WITH Commercial lapidary item/s set by entrant	
O 18E.1	Wire Wrapped Jewellery with Lapidary, Fossil or Mineral item/s prepared and Set by entrant	AT26
N 18E.2	Wire Wrapped Jewellery with Lapidary, Fossil or Mineral item/s prepared and set by entrant	AT26
J 18E.3	Wire Wrapped Jewellery with Lapidary, Fossil or Mineral Item/s prepared and set by entrant	AT26

## TROPHY SC

### **GROUP 19: CAST JEWELLERY USING PATTERNS, MOULDS AND DIES MADE BY THE ENTRANT**

- |         |   |      |
|---------|---|------|
| O 19A.1 | NOT intended to include Lapidary, Fossil or Mineral items | AT28 |
| N 19A.2 | NOT intended to include Lapidary, Fossil or Mineral items | AT28 |
| O 19B.1 | WITH Lapidary item/s cut and set by entrant               | AT28 |

### **GROUP 20: CAST JEWELLERY USING NATURAL OBJECTS AS PATTERNS**

- |         |  |      |
|---------|--|------|
| O 20A.1 | NOT intended to include Lapidary, Fossil or Mineral Specimen/s | AT28 |
| N 20A.2 | NOT intended to include Lapidary, Fossil or Mineral Specimen/s | AT28 |

### **GROUP 21: CAST JEWELLERY USING COMMERCIAL WAX MODELS OR PATTERNS**

- |         |  |      |
|---------|--|------|
| O 21A.1 | NOT intended to include Lapidary, Fossil or Mineral item/s | AT28 |
| N 21A.2 | NOT intended to include Lapidary, Fossil or Mineral item/s | AT28 |
| O 21D.1 | WITH Commercial Lapidary item/s set by entrant             | AT28 |

### **GROUP 24: ENAMELLED JEWELLERY IN HAND FABRICATED OR CAST SETTING**

- |         |   |  |
|---------|---|--|
| O 24A.1 | Enamelled Jewellery in Hand Fabricated Setting                              |  |
| N 24A.2 | Enamelled Jewellery in Hand Fabricated Setting                              |  |
| O 24C.1 | Enamelled Jewellery in Cast Setting using Natural Objects as patterns       |  |
| O 24D.1 | Enamelled Jewellery in Cast Setting using Commercial Wax Models or Patterns |  |

### **GROUP 25: COMMERCIAL MOUNT JEWELLERY WITH LAPIDARY ITEM/S CUT AND SET BY ENTRANT**

- |        |   |      |
|--------|---|------|
| O 25.1 | WITH Lapidary item/s cut and set by entrant |      |
| I 25.2 | WITH Lapidary item/s cut and set by entrant | PT02 |
| N25.3  | WITH Lapidary item/s cut and set by entrant | PT03 |
| J 25.4 | WITH Lapidary item/s cut and set by entrant | AT01 |

### **GROUP 26: ENAMELLING**

- |         |   |      |
|---------|---|------|
| O 26A.1 | Enamelled Jewellery in Commercial Mount |      |
| N 26A.2 | Enamelled Jewellery in Commercial Mount |      |
| O 26B.1 | Enamelled Jewellery Without Mount       |      |
| N 26B.2 | Enamelled Jewellery Without Mount       |      |
| O 26C.1 | Enamelling Non-Jewellery                | AT05 |
| N 26C.2 | Enamelling Non-Jewellery                |      |

### **GROUP 27: GENERAL METALCRAFT**

- |         |  |  |
|---------|--|--|
| O 27A.1 | NOT intended to include Lapidary, Fossil or Mineral item/s |  |
|---------|--|--|

**TROPHY SC**

**GROUP 28: METAL SHEET WORK**

O 28B.1 Metal Sheet Work – Etched Pattern

**GROUP 29 SHOWCASES**

O 29A.1 General – UNLIT

O 29B.1 General – LIT

**GROUP 32: FOSSILS**

O 32A.1 Fossil Non Display – Any Type Australian AT08

N 32A.2 Fossil Non Display – Any Type Australian AT08

O 32A.3 Fossil Non Display – Any Type Overseas AT08

N 32A.4 Fossil Non Display – Any Type Overseas AT08

J 32A.5 Fossil Non Display – Any Type Any Location AT08

Maximum plan size of whole group NOT to exceed 200mm x 200mm

O 32B.1 Fossil Non Display – Group of 3 Mixed Australian AT08

N 32B.2 Fossil Non Display – Group of 3 Mixed Overseas AT08

J 32B.3 Fossil Non Display – Group of 3 Mixed Any Location AT08

**GROUP 34: MINERALS NON-DISPLAY**

Maximum size allowable for Cabinet specimens 150mm x 150mm x 150mm

O 34A.1 Single Specimen – Cabinet Size - Australian AT04, AT13

N 34A.2 Single Specimen – Cabinet Size - Australian AT04, AT12

J 34A.3 Single Specimen – Cabinet Size - Australian AT04, AT19

O 34A.4 Single Specimen – Cabinet Size – Overseas Specimen AT04, AT13

With a Copper Mineral as a significant component

N 34A.5 Single Specimen – Cabinet Size – Overseas Specimen AT04, AT12

O 34B.1 Group of 4 Miniature – 4 different Crystal systems AT04, AT13

N 34B.2 Group of 4 Miniature – 4 different Crystal systems AT04, AT12

J 34B.3 Group of 2 Miniature – 2 different Crystal systems AT04, AT19

O 34B.4 Group of 3 Thumbnail Size – Australian Location AT27, AT13, AT09  
AT04

N 34B.5 Group of 3 Thumbnail Size – Any Location AT04, AT12, AT27

J 34B.6 Group of 3 Thumbnail Size – Any Location AT04, AT19, AT27

**GROUP 37: MINERAL SHOWCASE – DISPLAY**

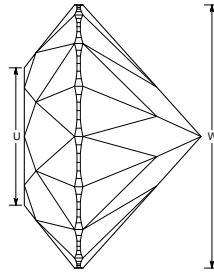
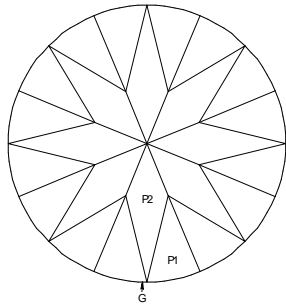
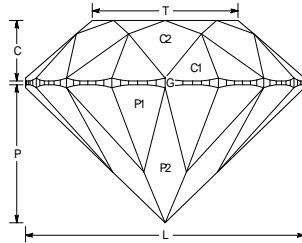
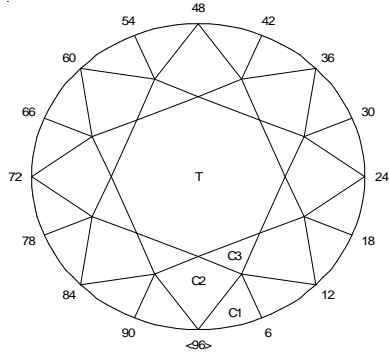
O 37B.1 Mineral Showcase – Display – LIT AT20, AT13, AT04

**NOVICE – N.8A.1**

**JUNIOR - J.8A.2**

Materials - Natural Amethyst

Facets: 58 - Meets 41 (Crown 24 Pavilion 17)



**STANDARD ROUND BRILLIANT (CONTINUOUS GIRDLE)**

Angles for R.I. = 1.540

57 + girdle = 58 facets

8-fold, mirror-image symmetry

96 index

$L/W = 1.000$   $T/W = 0.525$   $U/W = 0.525$

$P/W = 0.459$   $C/W = 0.202$

$Vol./W^3 = 0.235$

**PAVILION**

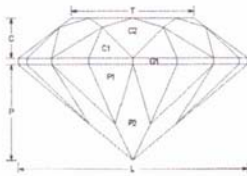
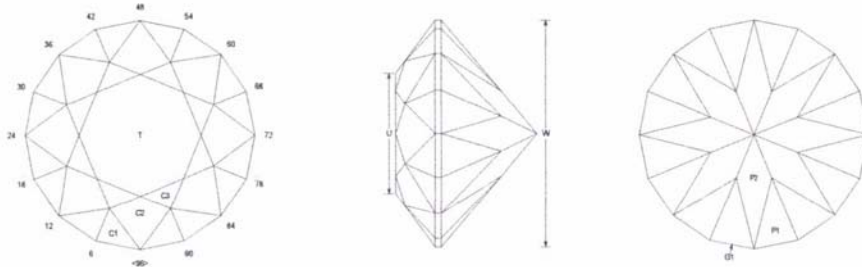
P1	44.00 <sup>0</sup>	03-09-15-21-27-33-39-45-51-57-63-69-75-81-87-93	Cut to T.C.P.
G	90.00 <sup>0</sup>		Establish girdle location/size
P2	42.00 <sup>0</sup>	96-12-24-36-48-60-72-84	Meet P1 P1 at girdle

**CROWN**

C1	44.00 <sup>0</sup>	03-09-15-21-27-33-39-45-51-57-63-69-75-81-87-93	Establish girdle width
C2	39.00 <sup>0</sup>	96-12-24-36-48-60-72-84	Meet C1 C1 at girdle
C3	24.00 <sup>0</sup>	06-18-30-42-54-66-78-90	Meet C2 C1 C1 C2
T	0.00 <sup>0</sup>	Table	Meet C3 C2 C3.

**OPEN / INTERMEDIATE SECTIONS O. 8B.1/ I. 8B.2**

**Materials Australian Topaz**  
**Facets 73 Meets 57 (Crown 32, Pavilion 25)**



**Standard Round Brilliant - Faceted Girdle**

Angles for R.I. = 1.610  
 57 + 16 girdles = 73 facets  
 8-fold, mirror-image symmetry  
 96 index  
 $L/W = 1.000$   $T/W = 0.533$   $U/W = 0.533$   
 $P/W = 0.420$   $C/W = 0.176$   
 $Vol./W^3 = 0.216$

**PAVILION**

P1	42.00°	03-09-15-21-27-33-39-45-51-57-63-69-75-81-87-93	Cut to T.C.P.
G1	90.00°	03-09-15-21-27-33-39-45-51-57-63-69-75-81-87-93	Establish and level girdle.
P2	40.00°	96-12-24-36-48-60-72-84	Meet G1 P1 P1 G1 at girdle.

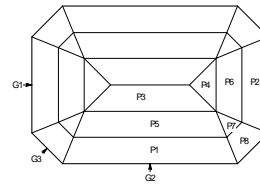
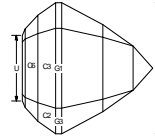
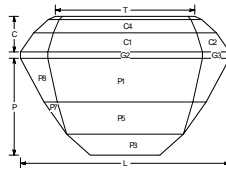
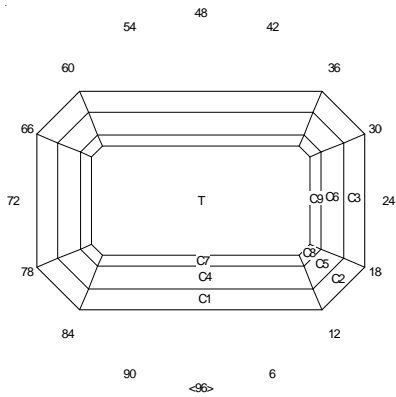
**CROWN**

C1	42.00°	03-09-15-21-27-33-39-45-51-57-63-69-75-81-87-93	Establish girdle width.
C2	37.00°	96-12-24-36-48-60-72-84	Meet C1 C1 at girdle
C3	22.00°	06-18-30-42-54-66-78-90	Meet C2 C1 C1 C2.
T	0.00°	Table	Meet C3 C2 C3.

**OPEN – O.9A SS.1 – 9mm x 6mm**

Materials – Natural Australian Smoky Quartz

Facets 53 – Meets 44 (Crown 24 Pavilion 20)



**STANDARD OBLONG STEPCUT WITH CUT CORNERS**

L/W 1.50

Angles for R.I. – 1.540

45 + 8 girdles = 53 facets

2-fold, mirror-image symmetry

96 index

L/W = 1.500 T/W = 1.000 U/W = 0.500

P/W = 0.695 C/W = 0.257

Vol./W<sup>3</sup> = 0.797

**PAVILION**

G1	90.00 <sup>0</sup>	24-72	G1 & G2 establish L/W ratio
G2	90.00 <sup>0</sup>	96-48	G1 & G2 establish L/W ratio
P1	62.00 <sup>0</sup>	96-48	Locate girdle
P2	62.00 <sup>0</sup>	24-72	level girdle
P3	42.00 <sup>0</sup>	96-48	Cut to make P1 & P2 same plan width*
P4	42.00 <sup>0</sup>	24-72	Meet P2 P2 P3
P5	54.30 <sup>0</sup>	96-48	Cut to make P1 P3 & P5 equal in plan width*
P6	54.30 <sup>0</sup>	24-72	Meet P1 P2 P5
P7	54.30 <sup>0</sup>	12-26-60-84	Meet P3 P4 P5 P6
P8	62.00 <sup>0</sup>	12-36-60-84	Meet P1 P5 P7
G3	90.00 <sup>0</sup>	12-36-60-84	Meet G1 P1 P8 (Level girdle)

**CROWN**

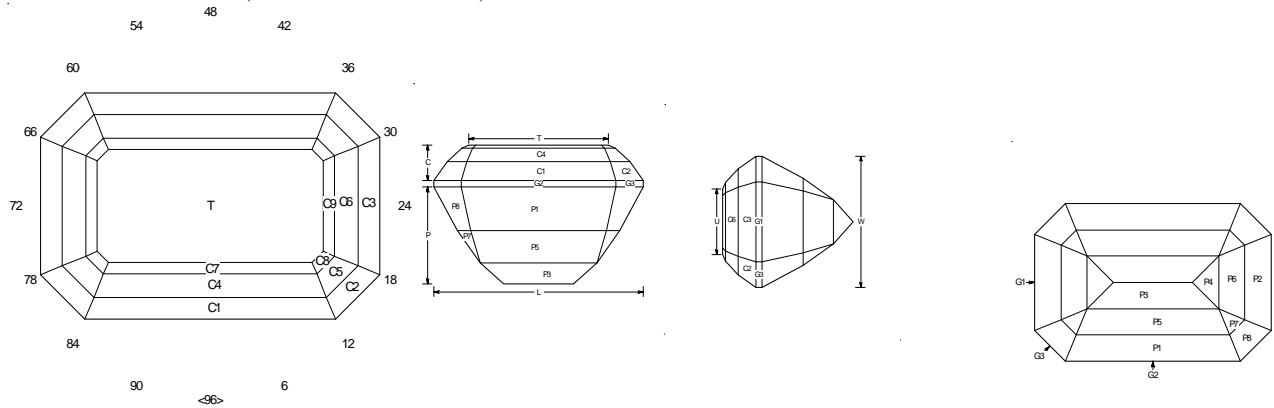
C1	55.00 <sup>0</sup>	96-48	Establish girdle width
C2	55.00 <sup>0</sup>	12-36-60-84	Level girdle
C3	55.00 <sup>0</sup>	24-72	Level girdle
C4	42.00 <sup>0</sup>	96-48	Establish depth*
C5	42.00 <sup>0</sup>	12-36-60-84	Meet C1 C2 C4
C6	42.00 <sup>0</sup>	24-72	Meet C2 C3 C5
C7	27.00 <sup>0</sup>	96-48	Estimate depth*
C8	27.00 <sup>0</sup>	12-36-60-84	Meet C4 C5 C7
C9	27.00 <sup>0</sup>	24-72	Meet C5 C6 C8
T	0.00 <sup>0</sup>	Table	Cut to establish width of C7/Table size

\* For idealized step cut, all pavilion facets are the same plan width while the crown facet is approx 2 : 2 : 1 in plan width.

**INTERMEDIATE – I.9A.2 – 9mm x 6mm**

Materials – Natural Citrine

Facets 53 – Meets 44 (Crown 24 Pavilion 20)



**STANDARD OBLONG STEPCUT WITH CUT CORNERS**

L/W 1.50

Angles for R.I. – 1.540

45 + 8 girdles = 53 facets

2-fold, mirror-image symmetry

96 index

L/W = 1.500 T/W = 1.000 U/W = 0.500

P/W = 0.695 C/W = 0.257

Vol./W<sup>3</sup> = 0.797

**PAVILION**

G1	90.00 <sup>0</sup>	24-72	G1 & G2 establish L/W ratio
G2	90.00 <sup>0</sup>	96-48	G1 & G2 establish L/W ratio
P1	62.00 <sup>0</sup>	96-48	Locate girdle
P2	62.00 <sup>0</sup>	24-72	level girdle
P3	42.00 <sup>0</sup>	96-48	Cut to make P1 & P2 same plan width*
P4	42.00 <sup>9</sup>	24-72	Meet P2 P2 P3
P5	54.30 <sup>0</sup>	96-48	Cut to make P1 P3 & P5 equal in plan width*
P6	54.30 <sup>0</sup>	24-72	Meet P1 P2 P5
P7	54.30 <sup>0</sup>	12-26-60-84	Meet P3 P4 P5 P6
P8	62.00 <sup>0</sup>	12-36-60-84	Meet P1 P5 P7
G3	90.00 <sup>0</sup>	12-36-60-84	Meet G1 P1 P8 (Level girdle)

**CROWN**

C1	55.00 <sup>0</sup>	96-48	Establish girdle width
C2	55.00 <sup>0</sup>	12-36-60-84	Level girdle
C3	55.00 <sup>0</sup>	24-72	Level girdle
C4	42.00 <sup>0</sup>	96-48	Establish depth*
C5	42.00 <sup>0</sup>	12-36-60-84	Meet C1 C2 C4
C6	42.00 <sup>0</sup>	24-72	Meet C2 C3 C5
C7	27.00 <sup>0</sup>	96-48	Estimate depth*
C8	27.00 <sup>0</sup>	12-36-60-84	Meet C4 C5 C7
C9	27.00 <sup>0</sup>	24-72	Meet C5 C6 C8
T	0.00 <sup>0</sup>	Table	Cut to establish width of C7/Table size

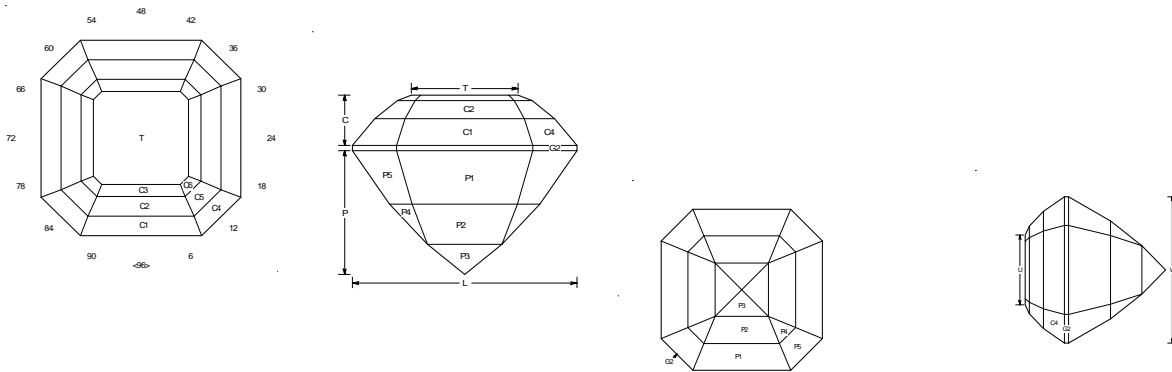
\* For idealized step cut, all pavilion facets are the same plan width while the crown facet is approx 2 : 2 : 1 in plan width.

**NOVICE – N.9B.1**

**JUNIOR – J.9B.2**

Materials – Labradorite

Facets 53 – Meets 45 (Crown 24 Pavilion 21)



**STANDARD SQUARE STEP CUT WITH CUT CORNERS**

Angles for R.I. = 1.540

45 + 8 girdles = 53 facets

4-fold, mirror-image symmetry

96 index

$L/W = 1.000$   $T/W = 0.480$   $U/W = 0.480$

$P/W = -.638$   $C/W = 0.262$

$Vol./W^3 = 0.425$

**PAVILION**

P1	59.00 <sup>0</sup>	96-24-48-72	Cut to T.C.P.
	90.00 <sup>0</sup>	96-24-48-72	Establish girdle line
P2	51.00 <sup>0</sup>	96-24-48-72	Establish facet depth*
P3	43.00 <sup>0</sup>	96-24-48-72	Establish facet depth*
P4	51.00 <sup>0</sup>	12-36-60-84	Meet P2 P3 P3 P2
P5	59.00 <sup>0</sup>	12-36-60-84	Meet P1 P2 P4
G2	90.00 <sup>0</sup>	12-36-60-84	Meet G1 P1 P5. Level girdle

**CROWN**

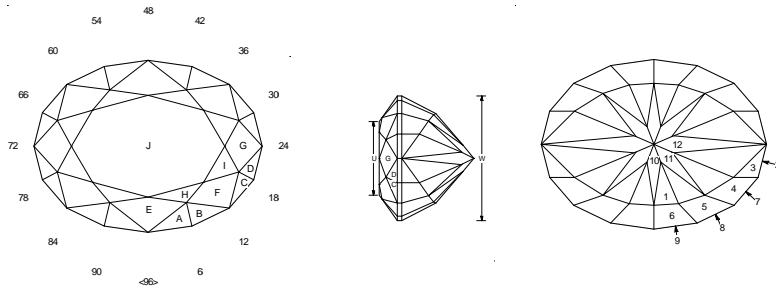
C1	55.00 <sup>0</sup>	96-24-48-72	Establish width of girdle
C2	42.00 <sup>0</sup>	96-24-48-72	Meet P1 G2 P1
C3	27.00 <sup>0</sup>	96-24-48-72	Cut so plan width of C2 equals C1*
T	0.00 <sup>0</sup>	Table	Cut table so plan width of C3 is approx. ½ C1 and C2
C4	55.00 <sup>0</sup>	12-36-60-84	Level girdle
C5	42.00 <sup>0</sup>	12-36-60-84	Meet C1 C2 C4
C6	27.00 <sup>0</sup>	12-36-60-84	Meet C2 C3 C5

\*Note! For ideal proportions all pavilion facets are equal width in plan view. Crown facet width ratios are 2 : 2 : 1 in plan view.

**OPEN SECTION O.10.1**

Material – Cubic Zirconia

Facets 89 – Meets 71 (Crown 32, Pavilion 39)



**RAINBOW 1.33**

Angles for R.I. = 2.160

73 + 16 girdles = 89 facets

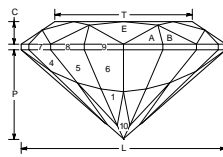
2-fold, mirror-image symmetry

96 index

L/W = 1.335 T/W = 0.891 U/W = 0.590

P/W = 0.579 C/W = 0.149

Vol./W<sup>3</sup> = 0.379



**PAVILION**

1	42.00 <sup>0</sup>	03-09-15-21-27-33-29-45-	Cut to T.C.P.
		51-57-63-69-75-81-87-93	
2	90.00 <sup>0</sup>	20-28-68-76	Establish length of stone
3	45.00 <sup>0</sup>	20-28-68-76	Cut to meet 1, 1 and 2, 2
			Intersection
4	51.99 <sup>0</sup>	13-35-61-83	Cut to meet 1, 1 and 3
5	59.13 <sup>0</sup>	07-41-55-89	Cut to meet 1, 1 and 4
6	63.08 <sup>0</sup>	02-46-50-94	Cut to meet 1, 1 and 5
7	90.00 <sup>0</sup>	13-35-61-83	Cut to meet 2, 3, 4
8	90.00 <sup>0</sup>	07-41-55-89	Cut to meet 4, 5, 7
9	90.00 <sup>0</sup>	02-46-50-94	Cut to meet 5, 6, 8
10	40.50 <sup>0</sup>	96-48	Cut to meet 1, 1 and 6, 6
11	40.69 <sup>0</sup>	12-36-60-84	Cut to meet 1, 1 and 4, 5
			(Will form P.C.P.)
12	40.94 <sup>0</sup>	24-72	Cut to meet 1, 1 2, 2 and 2,
			2 (Meets P.C.P.)

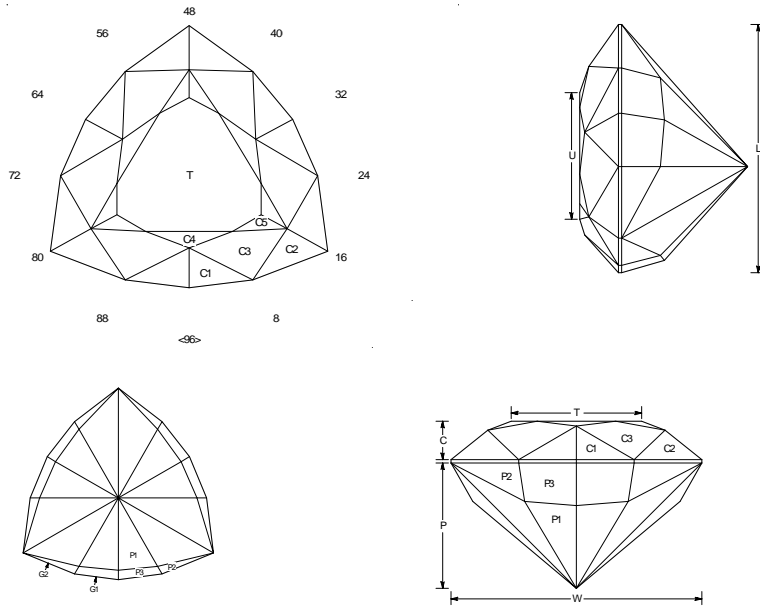
**CROWN**

A	41.55 <sup>0</sup>	02-46-50-94	Establish girdle thickness
B	42.36 <sup>0</sup>	07-41-55-89	Level girdle
C	44.61 <sup>0</sup>	13-35-61-83	Level girdle
D	44.57 <sup>0</sup>	20-28-68-76	Level girdle
E	36.00 <sup>0</sup>	96-48	Cut to meet girdle at 9, 9 and A, A
F	35.47 <sup>0</sup>	10-38-58-86	Cut to meet girdle at 7, 8 and B, C
G	33.89 <sup>0</sup>	24-72	Cut to meet girdle at 2, 2 and D, D
H	15.28 <sup>0</sup>	04-44-52-92	Cut to meet A, B and E, F
I	20.86 <sup>0</sup>	16-32-64-80	Cut to meet C, D and F, G
J	0.00 <sup>0</sup>	Table	Cut to meet F, H and H

**INTERMEDIATE SECTION I.10.2**

Material – Man made Corundum

Facets 64 – Meets 46 (Crown 24 Pavilion 22)



**BARION TRILLIANT SMALL BARIONS.**

John Broadfoot 2006.

Angles for R.I. = 1.760

52 + 12 girdles = 64 facets

3-fold, mirror-image symmetry

96 index

$L/W = 1.008$   $T/W = 0.521$   $U/W = 0.512$

$P/W = 0.510$   $C/W = 0.155$

$Vol./W^3 = 0.232$

**PAVILION**

P1	42.00 <sup>0</sup>	03-13-19-29-35-45 51-61-67-77-83-93	Cut to meet point using opposite pairs
G1	90.00 <sup>0</sup>	02-30-34-62-66-94	Cut girdle line to meet at P1 P1
G2	90.00 <sup>0</sup>	06-26-38-58-70-90	Cut girdle line to meet at P1 P1 G1
P2	73.00 <sup>0</sup>	06-26-38-58-70-90	Cut to meet G2 P1 P1 G2
P3	74.10 <sup>0</sup>	02-30-34-62-66-94	Cut to meet P1 P2 G1 G2

**CROWN**

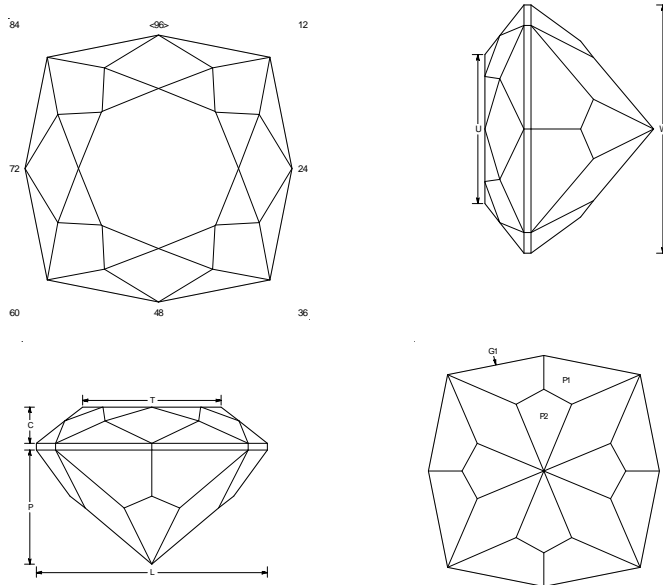
C1	42.00 <sup>0</sup>	02-30-34-62-66-94	Establish girdle width
C2	42.00 <sup>0</sup>	06-26-38-58-70-90	Level girdle line
C3	37.50 <sup>0</sup>	04-28-36-60-68-92	Meet C1 C2 at girdle
C4	15.00 <sup>0</sup>	96-32-64	Meet C1 C3 C3 C1
C5	20.00 <sup>0</sup>	08-24-40-56-72-88	Meet C2 C3 C3 C2
T	0.00 <sup>0</sup>	Table	Meet C4 C5

**NOVICE – N.10.3**

**JUNIOR - J.10.4**

Materials – Man made Corundum

Facets 49 – Meets 33 (Crown 24 Pavilion 9)



**MODIFIED SQUARE BRILLIANT**

Angles for R.I. = 1.760

41 + 8 girdles = 49 facets

4-fold, mirror-image symmetry

96 index

$L/W = 1.000$   $T/W = 0.601$   $U/W = 0.601$

$P/W = 0.495$   $C/W = 0.156$

$Vol./W^3 = 0.273$

**PAVILION**

P1 54.00° 03-21-27-45 51-69-75-93 Cut to T.C.P.

G1 90.00° 03-21-27-45- 51-69-75- Establish outline/size  
93

P2 40.00° 96-12-24-36- 48-60-72-84 Cut to meet girdle at corners to form P.C.P.\*

**CROWN**

49.70° 03-21-27-45- 51-69-75-93

38.00° 96-24-48-72

28.30° 12-36-60-84

21.70° 06-18-30-42- 54-66-78-90

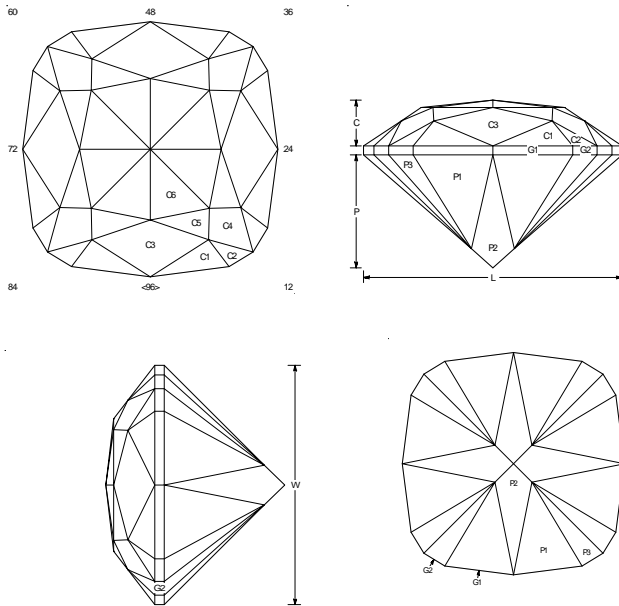
0.00° Table

\* Cut P2 facets (index 12, 26, 60 & 84) to form P.C.P. then cut the rest (Index 96, 24, 48 & 72) to meet P.C.P. (ie constant mast height).

**OPEN SECTION O.11.1**

Material – Natural Sapphire

Facets 76 – Meets 54 (Crown 33 Pavilion 21)



**ANTIQUÉ CUSHION – Shallow Pavilion**

Adapted from PC 09.070 by R.H. Long & N.

W. Steele.

Angles for R.I. = 1.760

60 + 16 girdles = 76 facets

4-fold, mirror-image symmetry

96 index

L/W = 1.000

P/W = 0.435 C/W = 0.179

Vol./W<sup>3</sup> = 0.244

**PAVILION**

P1	42.00 <sup>0</sup>	02-22-26-46-50-70-74-94	Cut to T.C.P.
G1	90.00 <sup>0</sup>	02-22-26-46-50-70-74-94	Establish size
P2	41.00 <sup>0</sup>	96-24-48-72	Meet P1 G1 G1 P1
P3	39.60 <sup>0</sup>	08-16-32-40-56-64-80-88	Meet P1 P2 P2 P1
G2	90.00 <sup>0</sup>	08-16-32-40-56-64-80-88	Meet P1 P3 G1 (Level girdle)

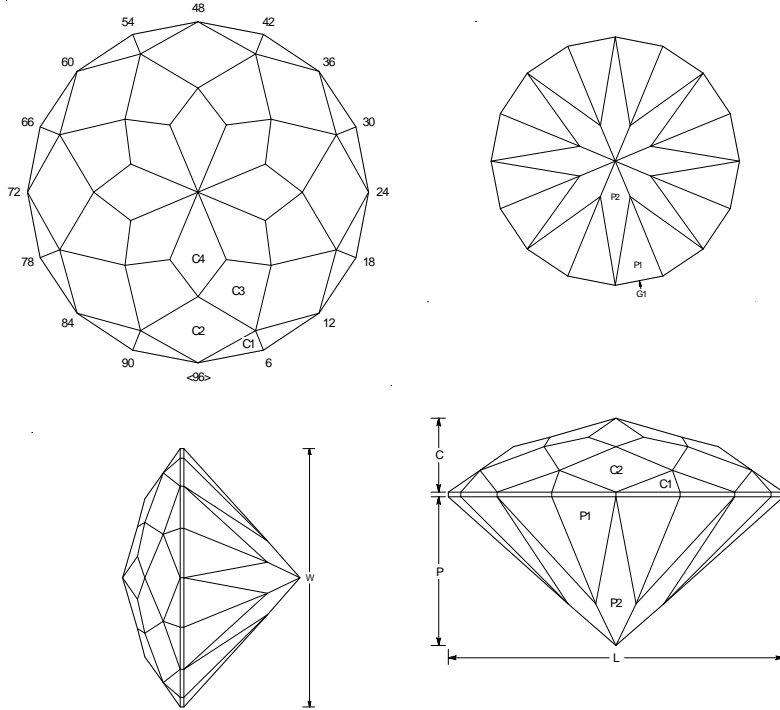
**CROWN**

C1	40.60 <sup>0</sup>	02-22-26-46-50-70-74-94	Establish width of girdle
C2	36.90 <sup>0</sup>	08-16-32-40-56-64-80-88	Meet G1 G2 C1 (Level girdle)
C3	34.00 <sup>0</sup>	96-24-48-72	Meet G1 C1 C1 G1
C4	31.60 <sup>0</sup>	12-36-60-84	Meet G2 C2 C2 G2
C6	6.00 <sup>0</sup>	03-21-27-45-51-69-75-93	Cut to meet C3 C5 C5
C5	23.50 <sup>0</sup>	03-21-27-45-51-69-75-93	Meet C1 C2 C3 C4

**INTERMEDIATE SECTION I.11.2**

Material – Cubic Zirconia

Facets 80 – Meets 58 (Crown 33 Pavilion 25)



**ROUND BRILLIANT BRITE TOP**

Evan A. Williams

Angles for R.I. = 2.160

64 + 16 girdles = 80 facets

8-fold, mirror-image symmetry

96 index

L/W = 1.000

P/W = 0.450 C/W = 0.223

Vol./W<sup>3</sup> = 0.208

**PAVILION**

P1 43.50° 03-09-15-21-27-33-39-45-51-57-63-69-75-81-87-93

Cut to T.C.P.

G1 90.00° 03-09-15-21-27-33-39-45-51-57-63-69-75-81-87-93

Establish and level girdle

P2 42.00° 96-12-24-36-48-60-72-84

Meet G1 P1 P1 G1

**CROWN**

C1 48.00° 03-09-15-21-27-33-39-45-51-57-63-69-75-81-87-93

Establish width of girdle

C2 35.00° 96-12-24-36-48-60-72-84

Meet G1 C1 C1 G1

C3 24.20° 06-18-30-42-54-66-78-90

Meet C1 C2 C2 C1

C4 15.80° 96-12-24-36-48-60-72-84

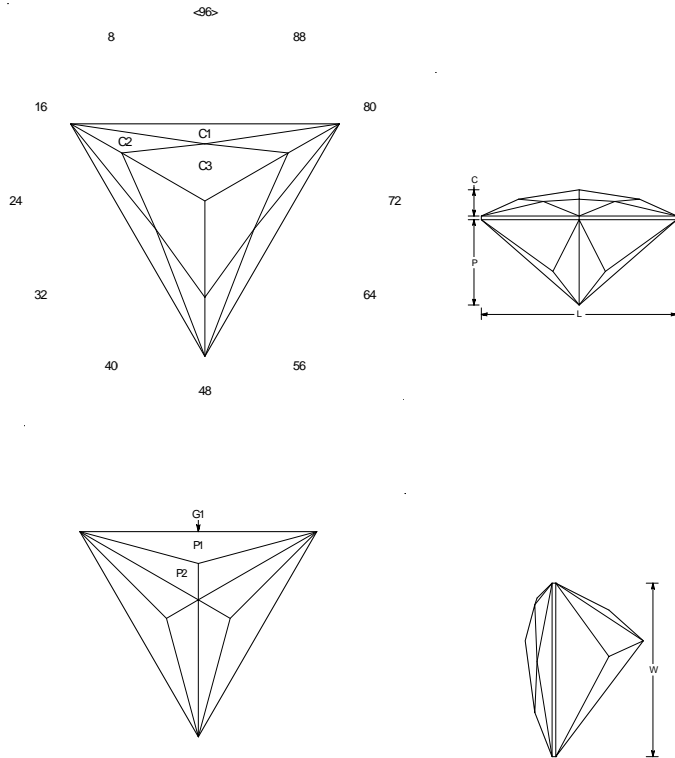
Meet C3 C2 C3

**NOVICE – N.11.3**

**JUNIOR - J.11.4**

Material – Cubic Zirconia

Facets 24 – Meets 14 (Crown 10 Pavilion 4)



**MOD. AZTEC TRIANGLE**

Combination of design 14.001A & 14.060A

Angles for R.I. = 2.160

21 + 3 girdles = 24 facets

3-fold, mirror-image symmetry

96 index

$L/W = 1.155$

$P/W = 0.506$   $C/W = 0.154$

$Vol/W^3 = 0.167$

**PAVILION**

G1 90.00° 96-32-64

P1 63.00° 96-32-64

P2 49.00° 03-29-35-61-67-93

Establish outline size

Develop girdle line

Meet P1 G1 G1 P1 at corners

**CROWN**

C1 45.00° 96-32-64

C2 35.00° 01-31-33-63-65-95

C3 15.00° 96-32-64

Establish girdle width

Meet G1 C1 C1 G1 at corners

Meet C2 C1 C2