

Casting House

Design Guide



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How To Use This Book

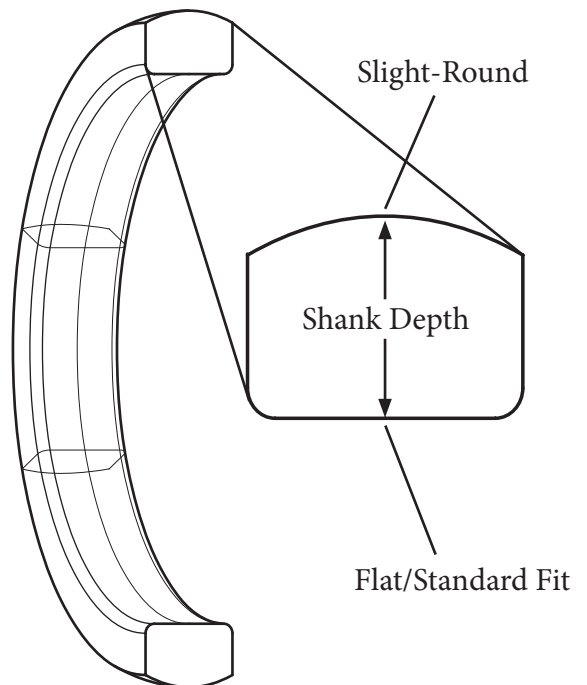
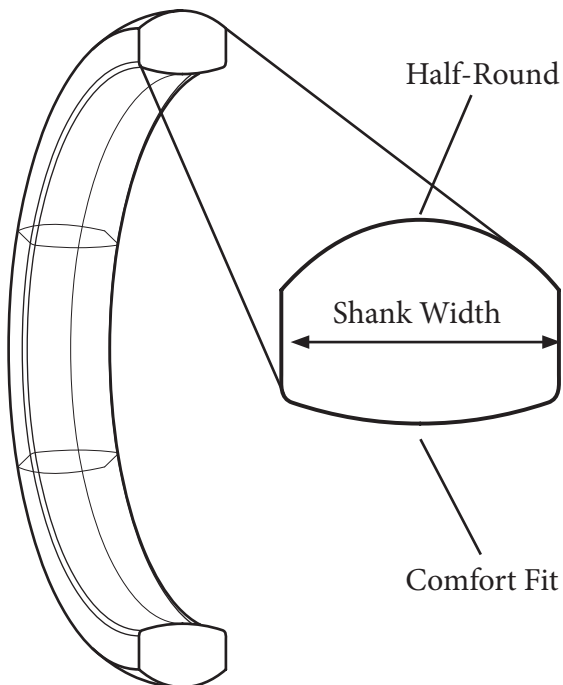
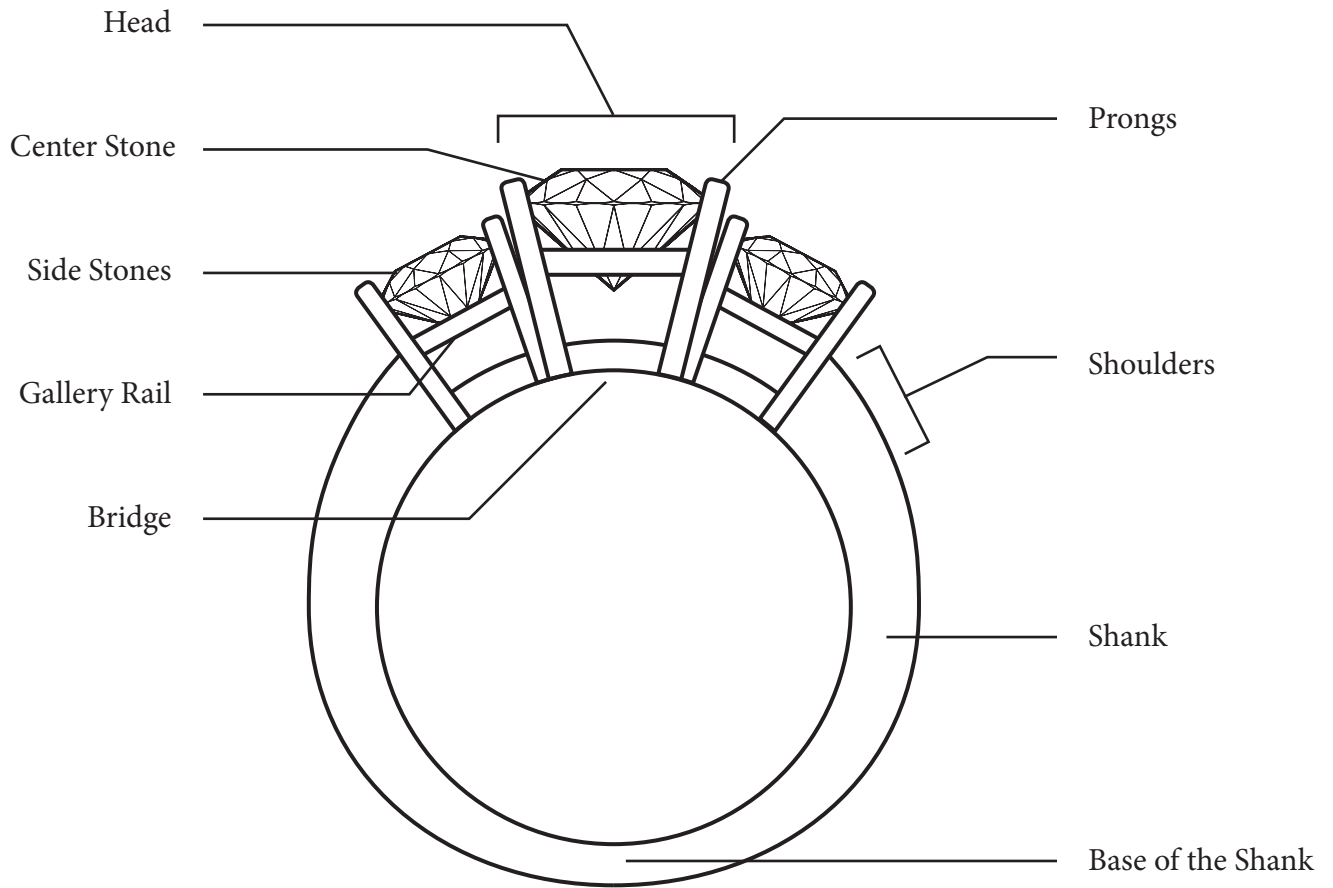
This book is meant to serve two purposes: to help us better communicate with our customers about custom design, and to help our designers understand customer orders more clearly.

Use this as a guide to walk prospective customers through their options when designing their jewelry. You'll find that all the terms used throughout are industry standard, and using common terms will make it much easier to communicate your design to the Casting House customer service representatives.

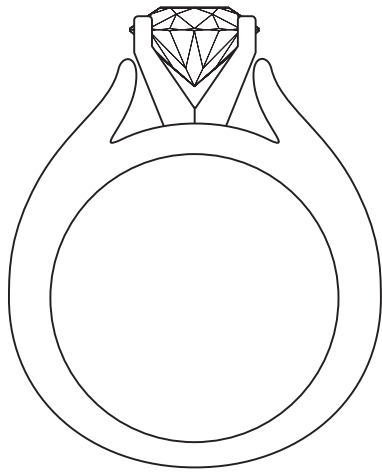
For more information, call us at
1-877-927-CAST (2278)

Rings & Bands

Anatomy of a Ring

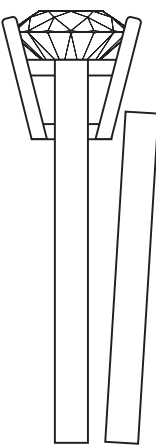
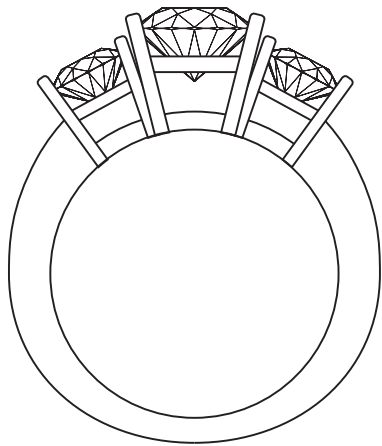


Wedding Bands



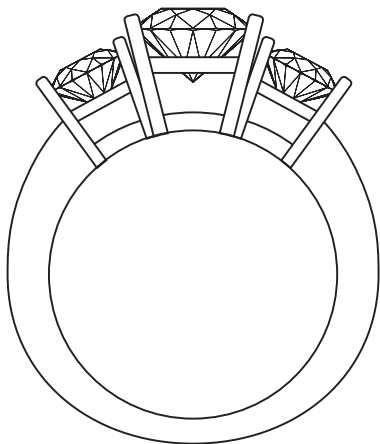
Flush Wedding Band

A flat Matching Band will sit flush to an Engagement Ring designed with enough space below the head.



Straight Wedding Band for a Large Gallery Head

A straight band will not sit flush to an Engagement Ring with a large protruding head.



Shadow Wedding Band

For a matching band to sit flush to a Large Gallery Head, a Shadow Band is often made which conforms to the profile of the Engagement Ring.

Shank Designs



Straight Shank



Tapered Shank



Knife-Edge Shank



Bypass Shank



Split Shank



Pinched Shank



Cathedral



Euro Shank

Center Settings / Gallery Styles



Basket



Double Prong Basket



Claw Prong Basket



Bezel



Split-Bezel



Bar



4-Prong Peg Head



6-Prong Peg Head



V-Prong Peg Head



Trellis



3-stone

Jewelry Essentials

Pendants & Bails



Bezel Set Pendant
with Standard Bail



Shared Prong Cluster Pendant
with Jump Ring Bail



French V Split Halo Pendant
with Hidden Bail

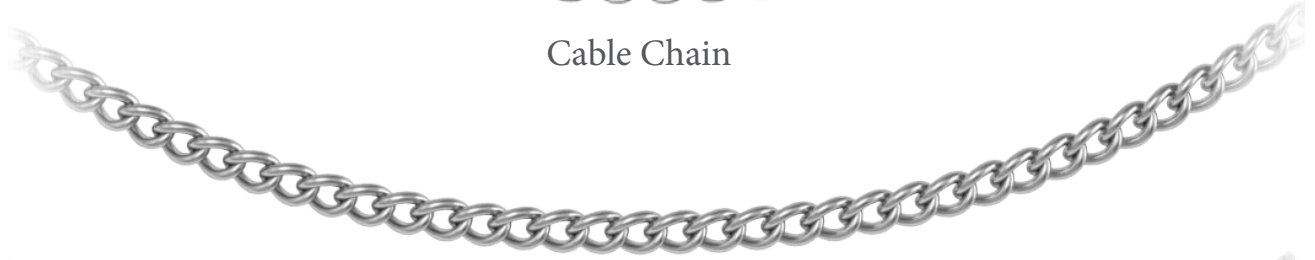


Basket Pendant
with Rabbit Ear Bail

Chain Styles



Cable Chain



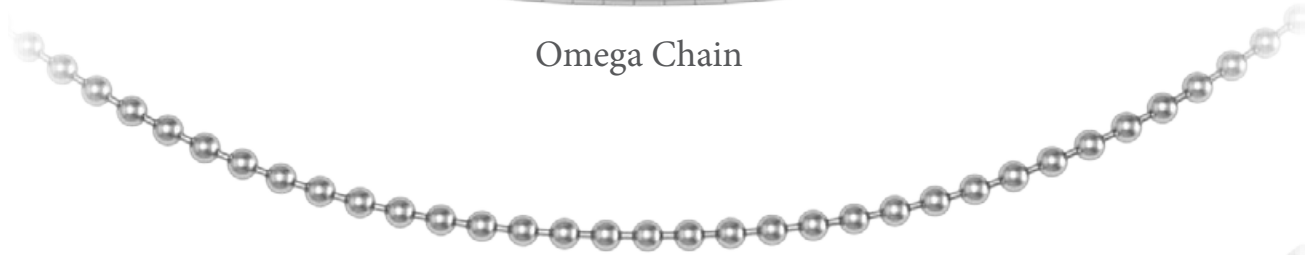
Flat Link Chain



Snake Chain



Omega Chain



Ball Chain



Box Chain



Wheat Chain

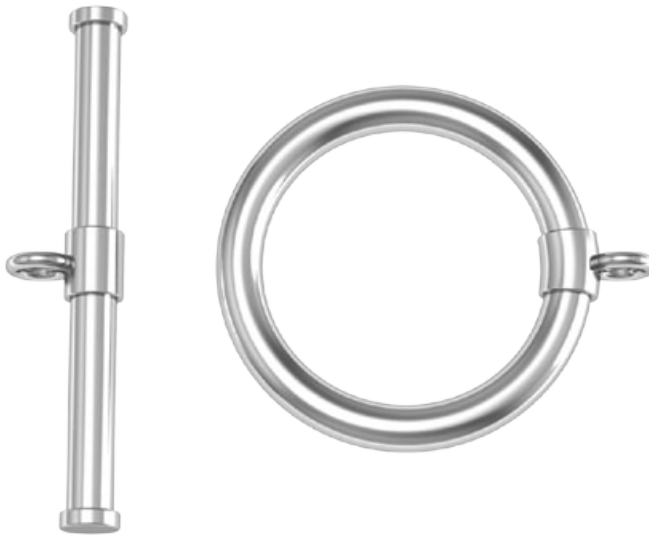
Clasp Styles



Hook & Eye



Box Clasp



Bar & Ring Toggle



S Hook



Lobster Clasp

Bracelet Styles



Bangle



Cuff



Chain

Setting Styles & Finishes

Melee Setting Styles



Bead Bright Setting



Scallop Setting



Channel Setting



Fishtail Setting



Flush Setting



Pavé Setting
(3 or more rows of diamonds)



Surface Prong Setting



Shared Prong Setting



Bar Set



Bezel Set



Delicate French V Split

Decorative Details & Metal Finishes



Recessed/Relief Design



High Polished



Milgrain Detailing



Brushed / Satin Finish



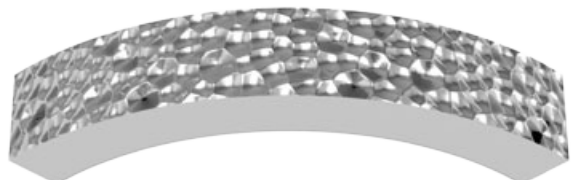
Resin Inlay



Bead Blasted / Matte Finish



Engraving



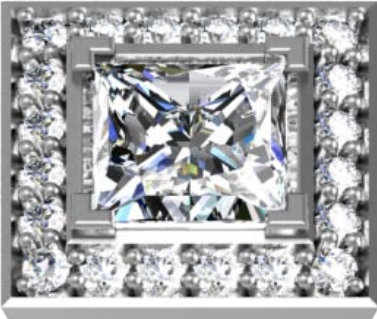
Hammered Finish



Scrollwork Design

Halo Styles

Sharp-Corner Halo



Round Halo



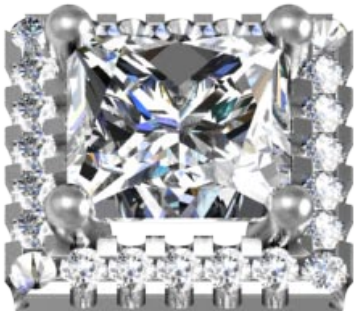
Cut-Corner Halo



Bead Bright Setting



Surface Prong Setting



Scallop Prong Setting

Halo Styles

Sharp-Corner Halo



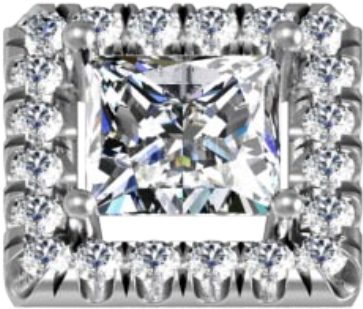
Round Halo



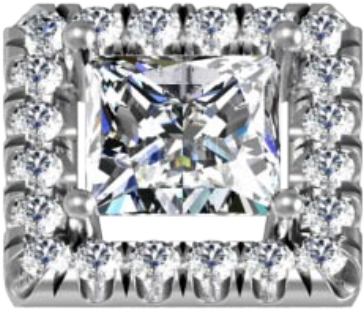
Cut-Corner Halo



Bead Bright Setting & Bezel Set Center



Delicate French V Split Setting



Sample Order Forms

Engagement Ring Sample



CUSTOM DESIGN ORDER FORM

FORM 1 OF 1 (kindly use one form per design and additional forms for matching wedding bands and other designs)

GENERAL INFORMATION

Customer Name: Your Store Customer Job #: P0081101SD Casting House Job #: 432617

DESIGN INFORMATION

CAD Design or Hand Carved Wax: (circle/highlight): CAD HAND Catalog Reference #: N/A

Finger Size: 6 Wax Approval (circle/highlight): Y N Molding (circle/highlight): Y N

Metal Type (circle/highlight): 14W 18W 14Y 18Y PT900 PT950 PD950 Other/Undecided: _____

Design Type (circle/highlight): WB ENG RING OTHER (list): _____

Shank Type: ROUND EURO OTHER (list): _____

Diamond Configuration (circle/highlight): NONE/SOLITAIRE ETERNITY HALF OTHER (list): 3/4 down shank

Special Instructions / Additional Description: "Flower Bud" Engagement Ring w/ 1ct RB Basket single claw set (4 prongs) center, Bezel-set milgrained 2.0mm side diamonds and 1.3mm scallop-set diamonds 3/4 down shank. Wedding band will not need to sit flush. Supply AA diamond melee.

GEMSTONE DETAIL:

Gemstones Enclosed (circle/highlight): Y N

Center Gemstone:

Cust Gem: <u>Y</u> N	Shape: <u>Round</u>	Measurements: <u>6.5mm</u>	Setting Type: <u>Single claw 4 prongs</u>
----------------------	---------------------	----------------------------	---

Side Gemstones and Mellee:

Cust Gem: Y <u>N</u>	Shape: <u>Round</u>	Measurements: <u>2mm - AA</u>	Setting Type: <u>Bezel w/ milgrain</u>
Cust Gem: Y <u>N</u>	Shape: <u>Round</u>	Measurements: <u>1.3mm - AA</u>	Setting Type: <u>Scallop</u>
Cust Gem: Y N	Shape: _____	Measurements: _____	Setting Type: _____

PROFILES (draw AND list measurements)



INTERNAL USE ONLY

CAD LEVEL (circle/highlight): 1 2 3 4 GROW LEVEL: S M L XL EXT

ATTACH PICTURES AND EXAMPLES AS NEEDED. PLEASE REFERENCE MATERIALS BELOW!!!!

Diamond Pendant Sample



CUSTOM DESIGN ORDER FORM

FORM 1 OF 1 (kindly use one form per design and additional forms for matching wedding bands and other designs)

GENERAL INFORMATION

Customer Name: Your Store Customer Job #: P0091112SD Casting House Job #: 443261

DESIGN INFORMATION

CAD Design or Hand Carved Wax: (circle/highlight): CAD HAND Catalog Reference #: N/A

Finger Size: N/A Wax Approval (circle/highlight): Y N Molding (circle/highlight): Y N

Metal Type (circle/highlight): 14W 18W 14Y 18Y PT900 PT950 PD950 Other/Undecided: _____

Design Type (circle/highlight): WB ENG RING OTHER (list): Aquamarine & Diamond Pendant

Shank Type: ROUND EURO OTHER (list): N/A

Diamond Configuration (circle/highlight): NONE/SOLITAIRE ETERNITY HALF OTHER (list): N/A

Special Instructions / Additional Description: Delicate Pear Shaped "floating" aqua with outer 'halos' 14KW jump rings between each "half" allow for movement please string on 14kw cable chain with lobster clasp - standard bail

GEMSTONE DETAIL:

Gemstones Enclosed (circle/highlight): Y N

Center Gemstone:

Cust Gem: <u>Y</u> N	Shape: <u>Pear</u>	Measurements: <u>8x5mm</u>	Setting Type: <u>V-prong</u> Basket with
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Side Gemstones and Mellee:

Cust Gem: Y <u>N</u>	Shape: <u>Round</u>	Measurements: <u>1mm</u>	Setting Type: <u>surface</u>
Cust Gem: Y N	Shape:	Measurements:	Setting Type:
Cust Gem: Y N	Shape:	Measurements:	Setting Type:

PROFILES (draw AND list measurements)

Top	Through Finger	Side

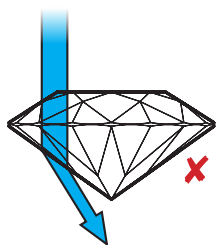
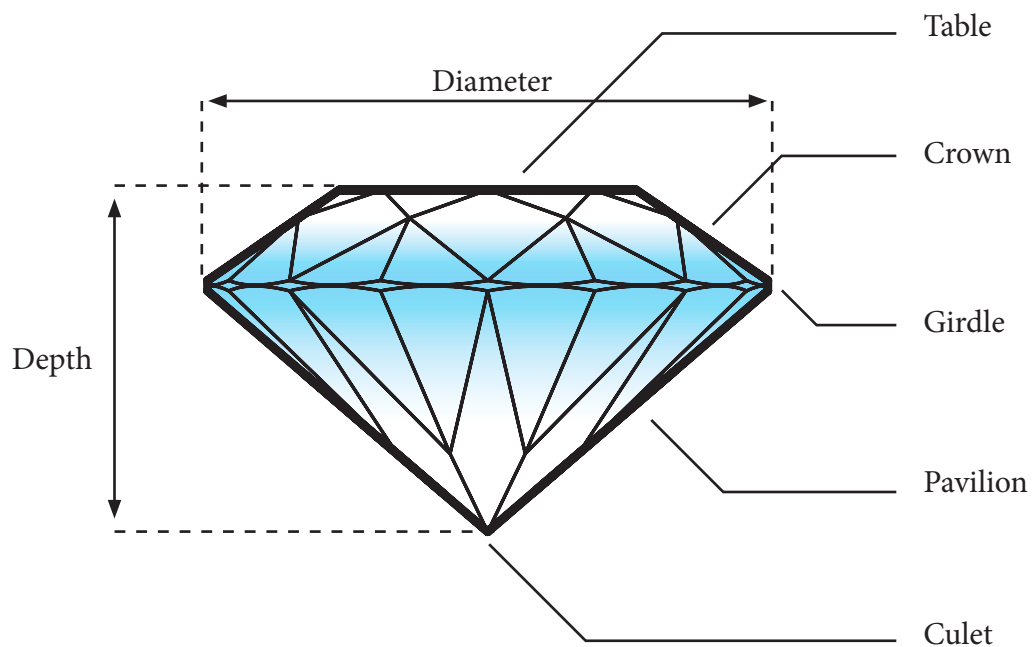
INTERNAL USE ONLY

CAD LEVEL (circle/highlight):	1	2	3	4	GROW LEVEL:	S	M	L	XL	EXT
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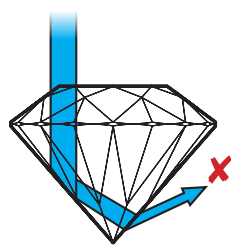
ATTACH PICTURES AND EXAMPLES AS NEEDED. PLEASE REFERENCE MATERIALS BELOW!!!!

Reference

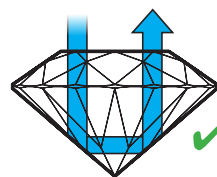
Anatomy Of A Diamond / Stone Cuts



Shallow



Deep



Ideal

Ideal-cut stones will refract the most light.



Round



Trillion



Marquise



Cushion



Trapezoid



Half-Moon



Princess



Triangle



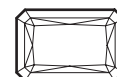
Heart



Pear



Straight Baguette



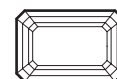
Radiant



Oval


































































































Tapered Baguette



Emerald

Stone Size Chart

carat weight:	.25	.50	.75	1.00	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00	4.00
ROUND													
10 5 0 mm:	4.10	5.20	5.90	6.50	7.00	7.40	7.80	8.20	8.50	8.80	9.10	9.40	10.40
PRINCESS													
10 5 0 mm:	3.40	4.35	4.95	5.50	6.00	6.50	7.00	7.50	7.75	8.00	8.15	8.30	9.00
OVAL													
10 5 0 mm:	5.00	6.00	6.50	7.00	7.50	8.00	8.25	8.50	8.75	9.00	9.50	10.00	11.00
MARQUISE													
15 10 5 0 mm:	5.00	8.00	9.00	10.00	10.50	11.00	11.50	12.00	12.50	13.00	13.50	14.00	16.00
PEAR													
15 10 5 0 mm:	4.50	6.00	7.00	8.00	8.50	9.00	9.50	10.00	10.50	11.00	11.50	12.00	14.00
CUSHION													
10 5 0 mm:	3.40	4.35	4.95	5.50	6.00	6.50	7.00	7.50	7.75	8.00	8.15	8.30	9.00
EMERALD													
10 5 0 mm:	5.00	6.00	6.50	7.00	7.50	8.00	8.25	8.50	8.75	9.00	9.50	10.00	11.00
ASSCHER													
10 5 0 mm:	3.40	4.35	4.95	5.50	6.00	6.50	7.00	7.50	7.75	8.00	8.15	8.30	9.00
RADIANT													
10 5 0 mm:	3.90	4.90	5.60	6.20	6.65	7.00	7.40	7.80	8.10	8.35	8.65	8.90	9.90
HEART													
10 5 0 mm:	4.00	5.00	5.80	6.50	6.75	7.00	7.50	8.00	8.25	8.50	8.75	9.00	10.00

General Reference Sheet

Carats to Millimeters Conversion Chart for Round Diamonds			
CTS	MM	CTS	MM
0.005	1.0	1.25	7.0
0.0067	1.15	1.33	7.2
0.01	1.3	1.50	7.4
0.015	1.5	1.60	7.6
0.02	1.7	1.75	7.8
0.025	1.8	1.90	8.0
0.03	2.0	2.00	8.2
0.035	2.1	2.15	8.4
0.04	2.2	2.25	8.6
0.05	2.4	2.50	8.8
0.06	2.5	2.65	9.0
0.07	2.7	2.85	9.2
0.08	2.8	3.00	9.4
0.09	2.9	3.15	9.6
0.10	3.0	3.35	9.8
0.11	3.1	3.50	10.0
0.12	3.2	3.75	10.2
0.14	3.3	4.00	10.4
0.15	3.4	4.25	10.6
0.16	3.5	4.50	10.8
0.17	3.6	4.75	11.0
0.18	3.7	5.00	11.2
0.20	3.8	5.25	11.4
0.22	3.9	5.50	11.6
0.23	4.0	5.75	11.75
0.25	4.1	5.81	11.8
0.30	4.2	6.00	11.9
0.33	4.4	6.25	12.1
0.35	4.5	7.00	12.5
0.38	4.6	7.50	12.85
0.40	4.8	7.75	13.0
0.43	4.9	8.00	13.1
0.47	5.0	8.23	13.25
0.50	5.2	8.50	13.4
0.60	5.4	8.75	13.5
0.63	5.5	9.00	13.65
0.65	5.6	9.20	13.75
0.75	5.8	9.75	14.0
0.80	6.0	10.34	14.5
0.85	6.2	12.00	15.0
0.95	6.4	12.92	15.4
1.00	6.5	13.17	15.5
1.10	6.6	14.50	16.0
1.17	6.8		

Weights and Measurements Conversion Chart		
To Convert...	to...	multiply by...
Carat	Pennyweight	0.1286
Carat	Gram	0.2
Pennyweight	Carat	7.776
Pennyweight	Gram	1.5552
Pennyweight	Troy Ounce	0.05
Gram	Carat	5
Gram	Pennyweight	0.64301
Inch	Millimeter	25.4
Kilogram	Troy Ounce	32.1507
Kilogram	Pennyweight	0.643014
Millimeter	Inch	0.03937
Ounce (av.)	Troy Ounce	0.91146
Ounce (av.)	Gram	28.3495
Troy Ounce	Gram	31.1035
Troy Ounce	Ounce (av.)	1.0971
Pounds	Gram	453.592
Pounds	Pennyweight	291.666
Pounds	Troy Ounce	14.583

Fineness of Gold Karats	
Karat	Fine Gold %
6k	25.0%
7k	29.2%
8k	33.3%
9k	37.5%
10k	41.7%
11k	45.8%
12k	50.0%
13k	54.2%
14k	58.3%
15k	62.5%
16k	66.7%
17k	70.8%
18k	75.0%
19k	79.2%
20k	83.3%
21k	87.5%
22k	91.7%
23k	95.8%
24k	100.0%

Gauge to Millimeters Conversion Chart for Round Wire	
Gauge	MM
0	8.25
2	6.54
4	5.19
6	4.11
8	3.26
10	2.59
12	2.05
13	1.83
14	1.63
15	1.45
16	1.29
18	1.02
19	0.91
20	0.81
21	0.721
22	0.643
23	0.572
24	0.511
25	0.455
26	0.404
27	0.360
28	0.320
29	0.285
30	0.254
32	0.201
34	0.160

Ring Sizes in Millimeters (Increments of 1/8 size)			
Size	MM	Size	MM
3	14.036	7 1/2	17.746
3 1/8	14.139	7 5/8	17.849
3 1/4	14.242	7 3/4	17.952
3 3/8	14.345	7 7/8	18.056
3 1/2	14.448	8	18.160
3 5/8	14.551	8 1/8	18.236
3 3/4	14.654	8 1/4	18.366
3 7/8	14.757	8 3/8	18.469
4	14.860	8 1/2	18.572
4 1/8	14.963	8 5/8	18.675
4 1/4	15.066	8 3/4	18.778
4 3/8	15.169	8 7/8	18.881
4 1/2	15.272	9	18.984
4 5/8	15.375	9 1/8	19.087
4 3/4	15.478	9 1/4	19.190
4 7/8	15.582	9 3/8	19.239
5	15.686	9 1/2	19.396
5 1/8	15.789	9 5/8	19.499
5 1/4	15.892	9 3/4	19.602
5 3/8	15.995	9 7/8	19.705
5 1/2	16.089	10	19.808
5 5/8	16.201	10 1/8	19.911
5 3/4	16.304	10 1/4	20.014
5 7/8	16.407	10 3/8	20.117
6	16.510	10 1/2	20.220
6 1/8	16.613	10 5/8	20.323
6 1/4	16.716	10 3/4	20.426
6 3/8	16.819	10 7/8	20.530
6 1/2	16.922	11	20.634
6 5/8	17.025	11 1/8	20.737
6 3/4	17.128	11 1/4	20.840
6 7/8	17.231	11 3/8	20.943
7	17.334	11 1/2	21.046
7 1/8	17.437	11 5/8	21.149
7 1/4	17.540	11 3/4	21.252
7 3/8	17.643	11 7/8	21.355
		12	21.458