

# The Basics of Jewelry

by Stuller

TERMINOLOGY AND DESIGN GUIDE



# The Basics of Jewelry by Stuller

## TERMINOLOGY AND DESIGN GUIDE



## Table of Contents

---

- 9 Rings
- 23 Earrings
- 29 Neckwear
- 39 Men's, Pins, Brooches
- 40 Bracelets
- 45 Diamonds and Gemstones
- 57 Jewelry Attributes
- 64 Glossary
- 76 Reference Tables



---

The Basics of Jewelry by Stuller  
Published by Stuller, Inc. ©2012  
302 Rue Louis XIV  
Lafayette, LA 70508 USA  
Phone 337 262 7700  
Stuller.com



Your customers are demanding more these days, and as you've come to expect over the last 42 years, we're responding to help you meet those demands. Choose/Change/Create™ gives you more choices, more flexibility, and more ways to make designs your own. It's the kind of thing you've been doing for years – now we're making it easier.



---

## CHOOSE

---

From a vast selection of items  
online or in our catalogs.



---

## CHANGE

---

Elements to customize  
your selection.



---

## CREATE

---

One-of-a-kind jewelry with  
CounterSketch® Studio or CAD.

# RINGS

---

9 The Anatomy of a Ring

10 Shank Styles

11 Ring Profiles

12 Ring Styles

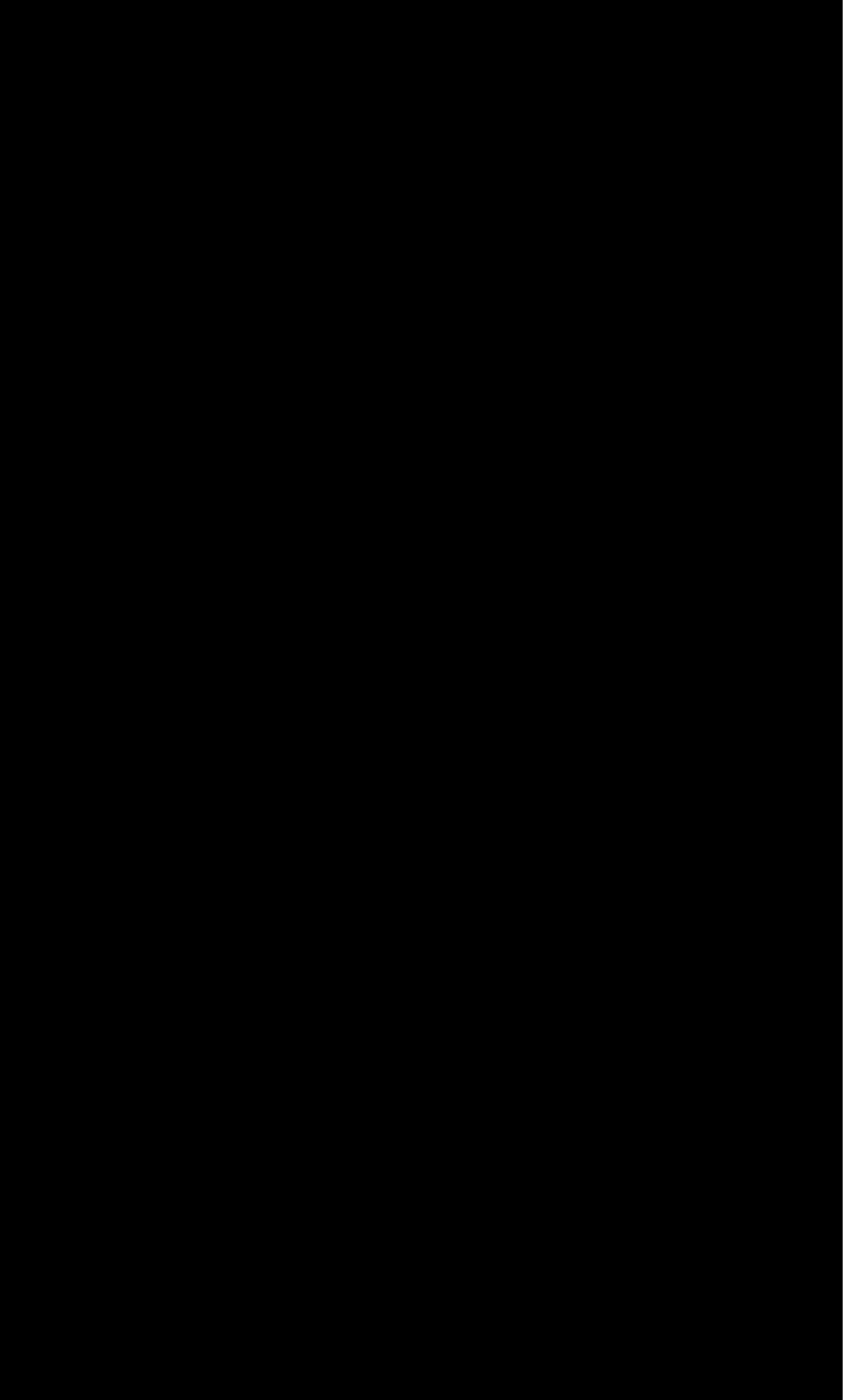
14 Bridal Sets

15 Ring Size Reference

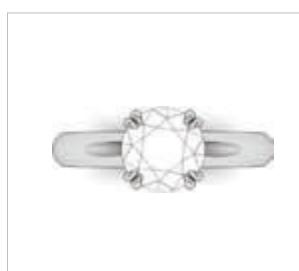
16 Prong Styles

17 Setting Styles





## THE ANATOMY OF A RING



Top/Looking Down View



Through Finger View



Side View

## SHANK STYLES

---



Traditional



Euro-Style



Straight



Tapered



Reverse Tapered



Pinched



Flair



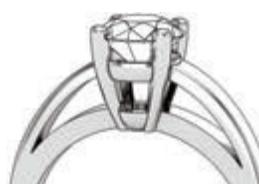
Bypass



Split

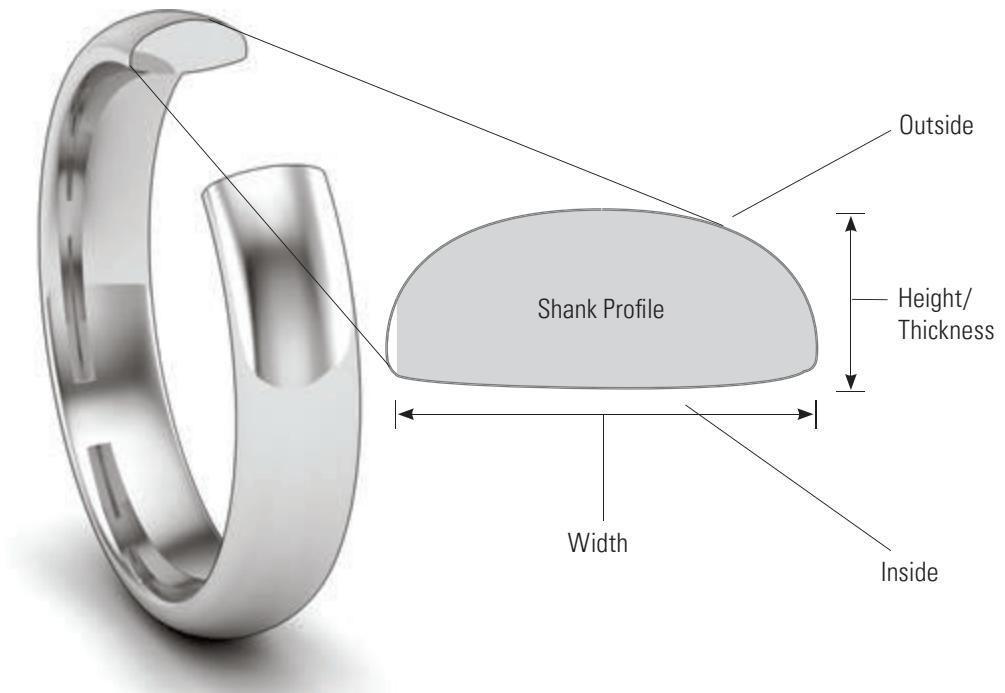


Freeform

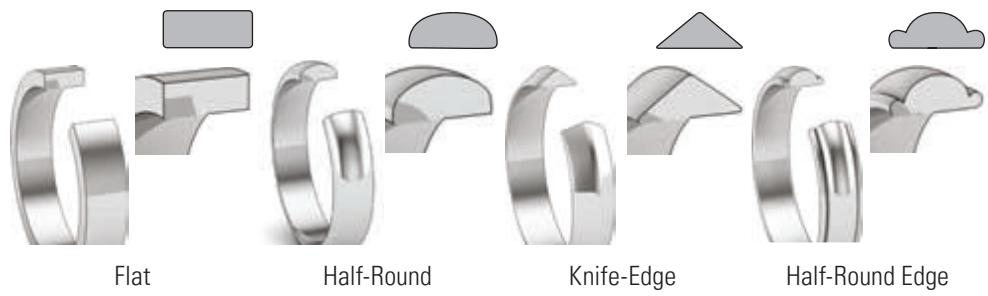


Cathedral

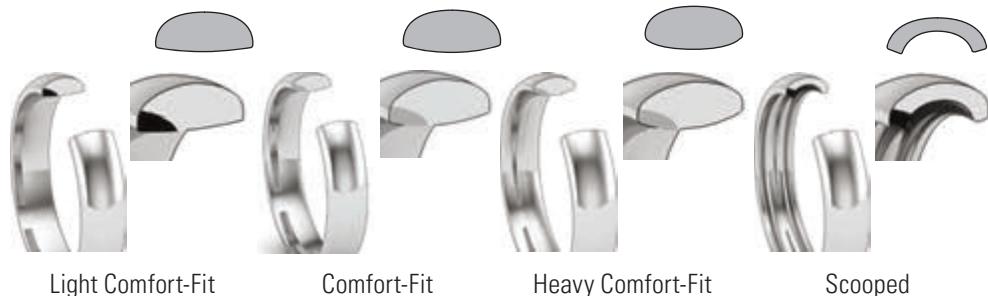
## RING PROFILES



## OUTSIDE PROFILES



## INSIDE PROFILES



## RING STYLES

---



Fashion



Halo



3-Stone



Promise



Semi-Mount



Award/Signet

RINGS | Ring Styles



Engagement



Solitaire



Bridal Set  
(Engagement Ring and Wedding Band )



Wedding Band



Anniversary Band



Eternity Band



### SHADOW BAND/NOTCHED BAND

A shadow band is masterfully crafted to shadow the engagement ring. The band is customized to perfectly accent the engagement ring so that no gap can be seen.

### Straight Band

A straight band is designed to complement and sit next to the engagement ring. One advantage of a straight band is that it can be worn independently from the engagement ring. A straight band can fit flush against the engagement ring. However, if the engagement ring has a center setting that prevents the band from sitting flush, a gap can be seen between the ring and band.



Straight Flush

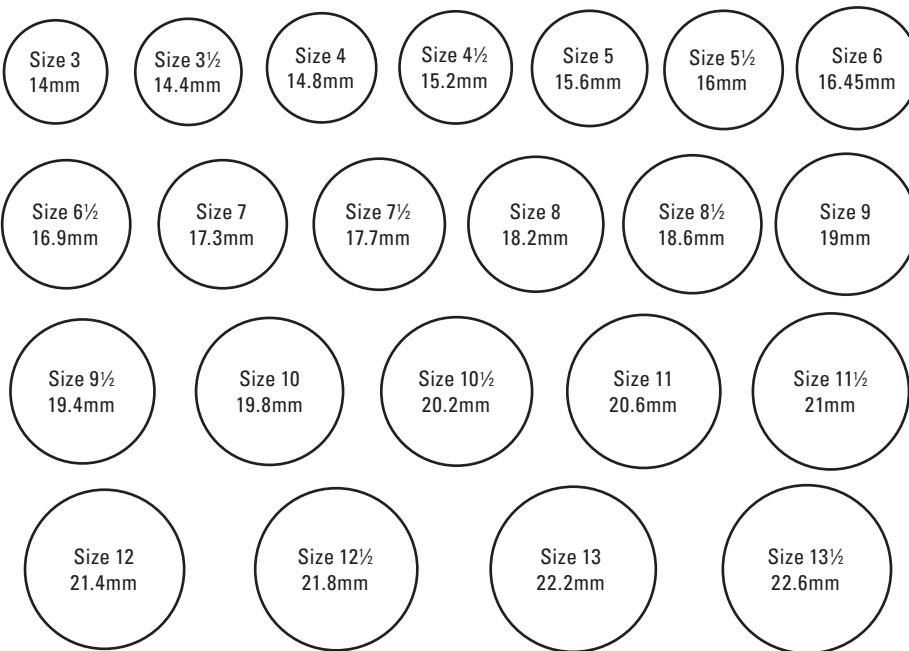
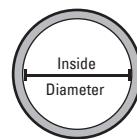


Straight With Gap

## RING SIZE REFERENCE

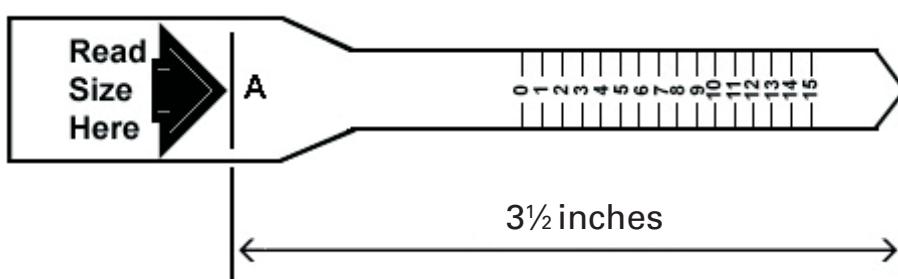
### Option 1:

- Place your ring over the circles, matching the inside edge of the ring to the nearest in size.
- If the ring falls between two sizes, select the larger size.



### Option 2:

- **Copy this page.**
- Cut out the ring size chart and then cut a slit for slot "A".
- Wrap the ring size chart around your finger with the numbers facing outward.
- Insert "B" through slot "A" until it fits snugly around the finger where the ring will be worn.
- The number aligned along the slit is your ring size. If the measurement occurs between two numbers, your size is a half size. For example, if it falls between 7 and 8 then your ring size is 7½.



---

## PRONG STYLES

---

---

## PRONG TYPES

---



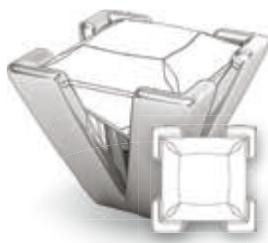
Single



Double



Triple



V-Prong/Chevron

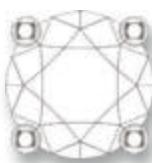


Decorative Double

---

## PRONG COUNT

---



Four (Standard)



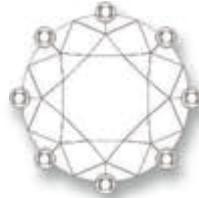
Six



Two (Vertical)



Four (Diagonal)



Eight



Two (Horizontal)

SETTING STYLES



Basket



Peg Head



Decorative



Bezel



Half-Bezel



Bar/Channel



Bright-Cut



Bridge Accent



Illusion



Channel



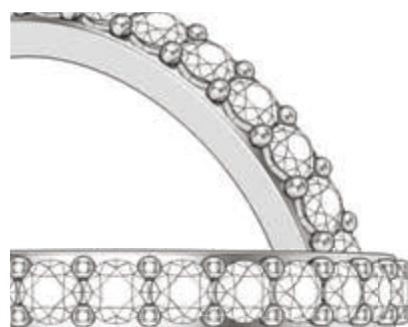
Trellis



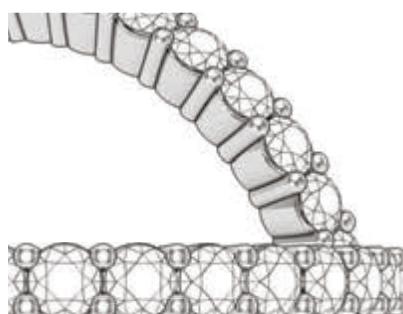
Channel



Bead and Bright-Cut/Pinpoint



Surface Prong



Shared Prong

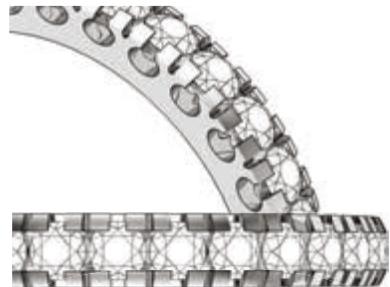


Bar

RINGS | Setting Styles



Scallop



Fishtail



Pavé



Bezel



Gypsy/Flush

# EARRINGS

---

23 Earring Styles

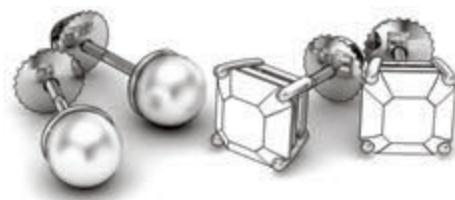
25 Earring Components





## EARRING STYLES

### EARRINGS | Earring Styles



Stud



Cluster



Jackets (with studs)



Drop



Dangle

## EARRING STYLES

---



Chandelier



Hoops

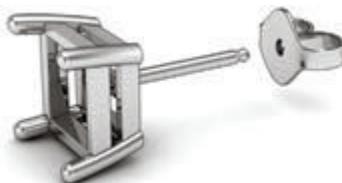


Hinged/Huggie



Ear Trim

EARRING COMPONENTS



Friction Post/Tension Back



Friction Post/Clutch Back



Threaded Post/Threaded Back



Protektor™ Post/Back



Omega Clip



Clip On



Lever Back



Hinged Earwire



Earwire/Shepherds Hook

# NECKWEAR

---

29 Neckwear Styles

30 Bail Styles

31 Pendant Styles

32 Chain Styles

34 Clasp Assembly

35 Clasp Styles





## NECKWEAR STYLES

---

### NECKWEAR | Neckwear Styles



Riviera



Chain



Pendant



Station



Lariat

---

## NECKWEAR STYLES

---



Collar



Choker

---

## BAIL STYLES

---



Standard



Rabbit Ear



Decorative

PENDANT STYLES



Pendant with Bail



Solitaire



Slide



Hidden Bail



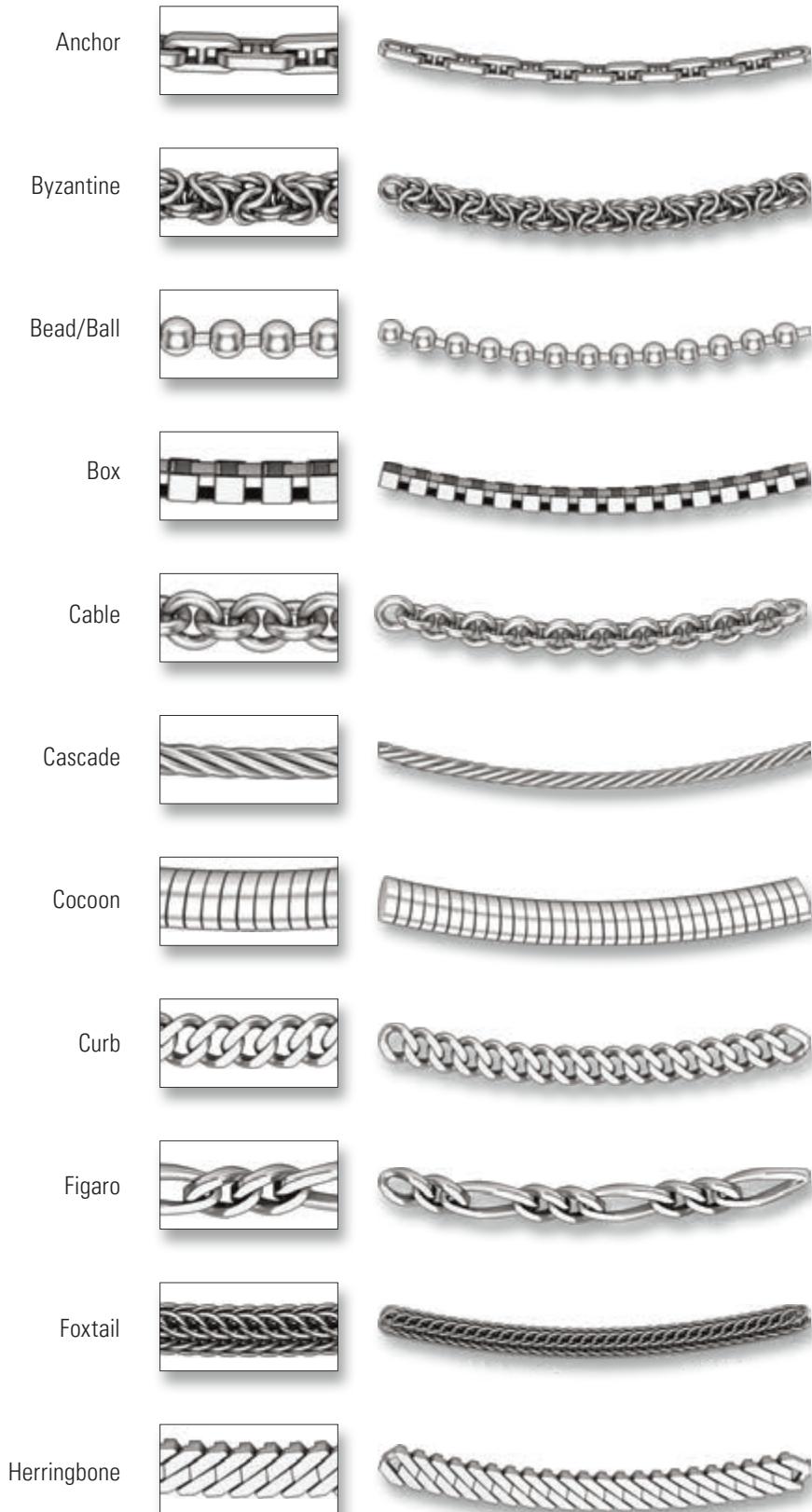
Locket



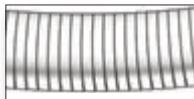
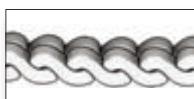
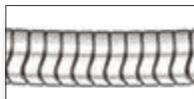
Roundel/Rondelle

## CHAIN STYLES

---



NECKWEAR | Chain Styles

Leather Cord		
Omega		
Popcorn		
Rolo		
Rope		
Serpentine		
Snake		
Snake with Bead		
Singapore		
Spiral		
Wheat/Palma		

## CLASP ASSEMBLY

---



Chain Ends



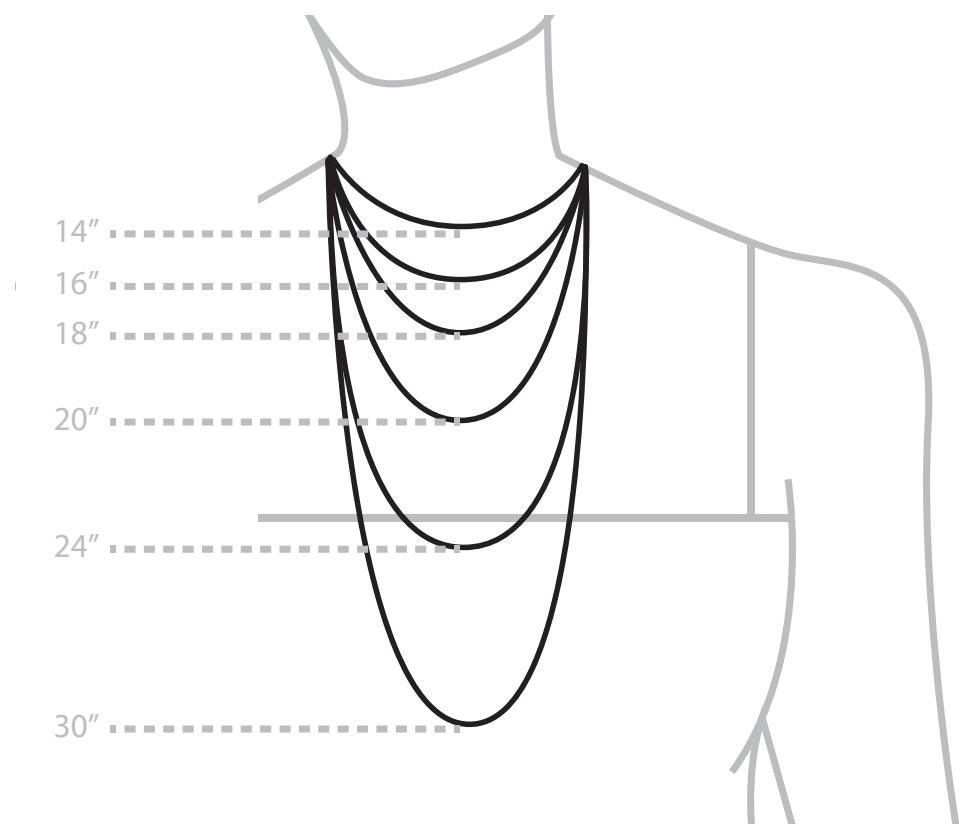
Chain Tags



Clasps



Jump Rings



CLASP STYLES



Spring Ring



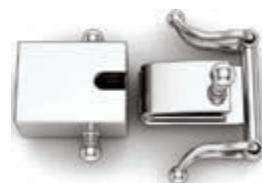
Lobster Claw



Bayonet



Barrel



Open Box



Figure 8 Safety



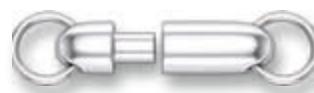
Toggle



S-Hook



Mystery



Magnetic



Pearl



Bracelet Catch

# OTHER TYPES OF JEWELRY

---

39 Men's

39 Brooches/Pins

40 Bracelet Assembly

41 Bracelet Styles







Cuff Links



Tie Tack



Money Clip

BROOCH AND LAPEL PIN

---



Lapel Pin



Brooch



Pin Assembly

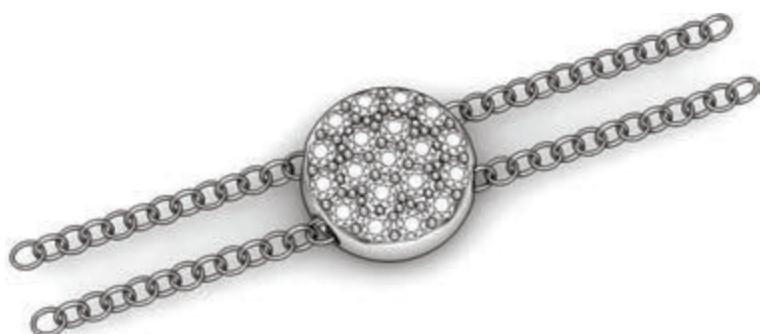
*(Also known as stem and catch, or pinch and joint)*

## BRACELET ASSEMBLY

---



Charm



Bracelet Slide



Beads

## BRACELET STYLES

---



Line/Tennis



Link



Cuff



Bangle

# DIAMONDS AND GEMSTONES

---

45 The Anatomy of a Diamond

45 Ideal Cut

46 The 4 Cs

48 Stone Shapes

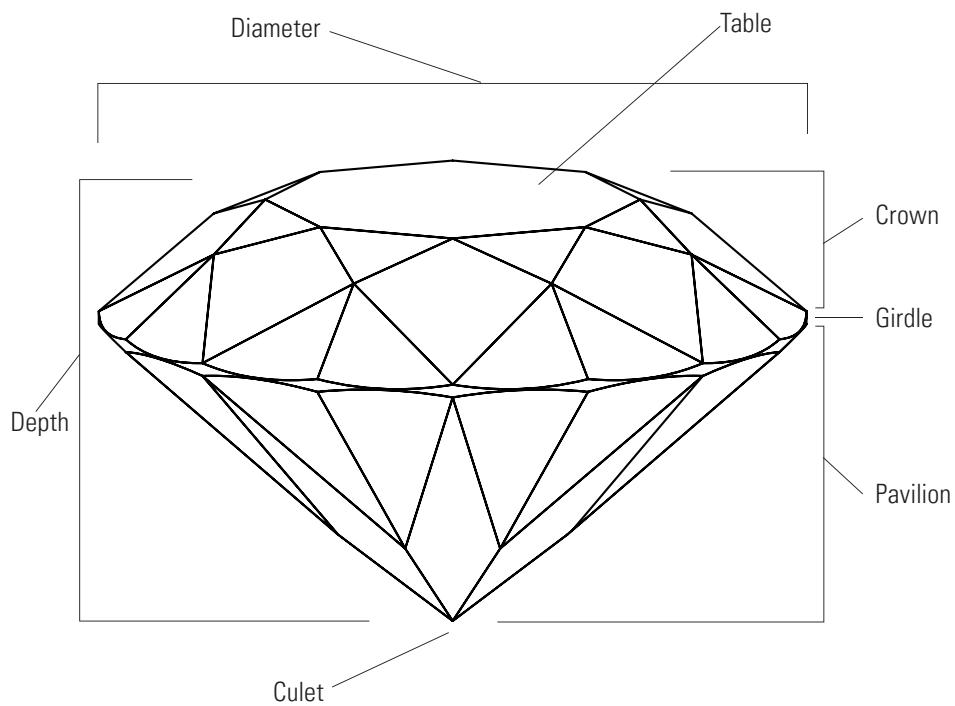
50 Stone Cuts

52 Diamond Size Chart

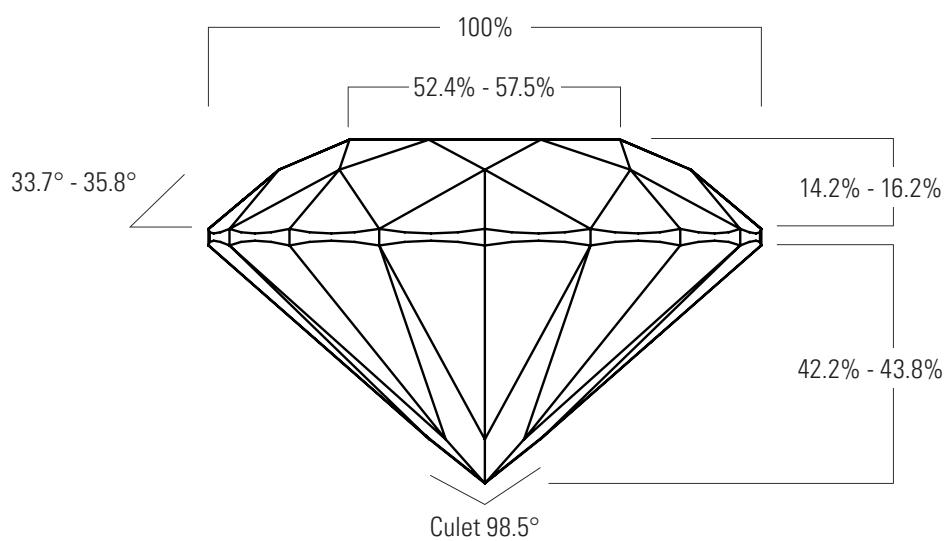




## THE ANATOMY OF A DIAMOND



### AMERICAN GEMOLOGICAL SOCIETY (AGS®) IDEAL CUT



— GEMOLOGICAL INSTITUTE OF AMERICA (GIA®) —  
DIAMOND GRADING

## COLOR

One factor that determines the value of a diamond is its color. With the exception of fancy-colored diamonds, the most valuable diamonds are those with the least color. Although many people think of gem quality diamonds as colorless, completely colorless diamonds are very rare. The diamond color scale ranges from D (colorless) to Z (light yellow or brown). A diamond's color is determined by a manual process of comparing the diamond to a master set. Each letter grade represents a range of color and is a measurement of how noticeable a color is.

When diamonds are formed with traces of other minerals, rare and beautiful colors can result. These "fancy" colors range from blue and brilliant yellow to red, brown, pale green, pink, and violet. Because of their rarity, colored diamonds are highly desirable and typically more valuable.

Color Grading Scale

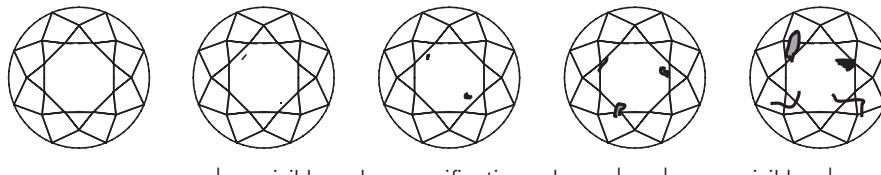
D E F	G H I J	K L M	N O P Q R	S T U V W X Y	Z+
colorless	nearly colorless	faint yellow	very light yellow	light yellow	fancy

## CLARITY

A diamond's clarity is measured by the existence or absence of visible flaws. Tiny surface blemishes or internal inclusions, even those seen only under magnification, can alter the brilliance of the diamond and thus affect its value. Clarity levels begin with flawless (FL, IF), followed by very, very slight (VVS<sub>1</sub>, VVS<sub>2</sub>), very slight (VS<sub>1</sub>, VS<sub>2</sub>), slightly included (SI<sub>1</sub>, SI<sub>2</sub>), and included (I<sub>1</sub>, I<sub>2</sub>, and I<sub>3</sub>).

Clarity Grading Scale

FL	VVS <sub>1</sub>	VVS <sub>2</sub>	VS <sub>1</sub>	VS <sub>2</sub>	SI <sub>1</sub>	SI <sub>2</sub>	I <sub>1</sub>	I <sub>2</sub>	I <sub>3</sub>
flawless no blemishes	very, very slightly included	very slightly included	slightly included	imperfect, eye visible					

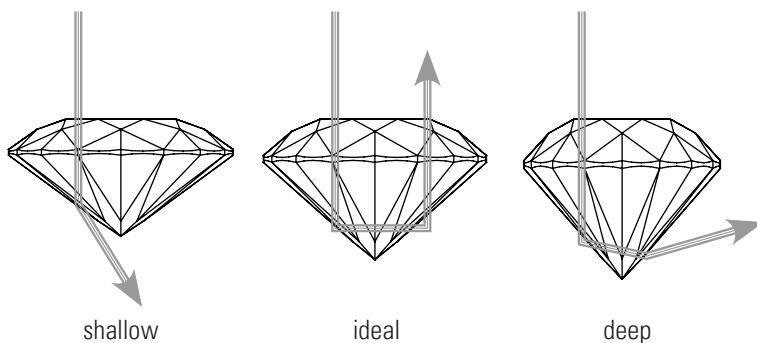


## CUT

While cut does include shape, in terms of the 4 Cs it refers to the proportions of the cut. A diamond's cut grade is an objective measure of a diamond's light performance, or the amount of sparkle a diamond has.

A diamond's overall proportions, as well as the size and position of its facets, make up the cut. The consistency and balance of these can greatly affect how the stone captures light and reflects it back to the eye. When a diamond is cut with the proper proportions, light enters the diamond and is returned through the top of the diamond. If a diamond is too shallow, light will escape from the bottom of the stone. If it is cut too deep, light will escape out the sides.

Studies have been conducted to find the optimum proportions of a diamond's cut so that it has the greatest amount of sparkle. If its cut falls within these parameters, it is considered an ideal cut. Diamonds with fine proportions, symmetry and polish optimize their interaction with light and have increased brilliance, dispersion, and scintillation.

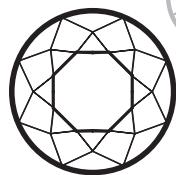


## CARAT

Carat refers to a diamond's weight. One carat, the traditional unit of measurement for diamonds, is approximately 0.2 grams. You may also hear the weight of a diamond referred to in points. One carat is equivalent to 100 points, so a 75-point diamond is equal to 0.75 carats. Because they are rarer, larger diamonds have greater value per carat, so the price of a diamond rises exponentially to its size. (Refer to diamond size chart, page 52).

## STONE SHAPES

---



Round



Oval



Cushion



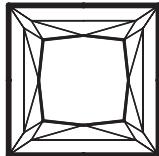
Square Cushion



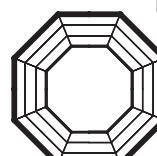
Pear



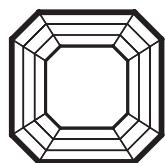
Marquise



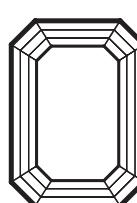
Square/Princess



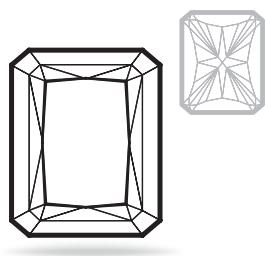
Octagonal



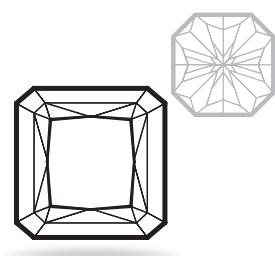
Asscher/Square Emerald



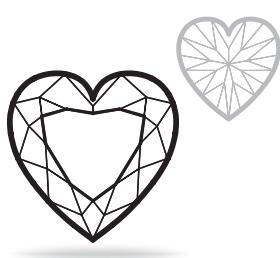
Emerald



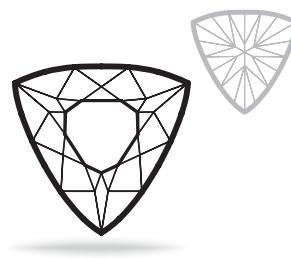
Radiant



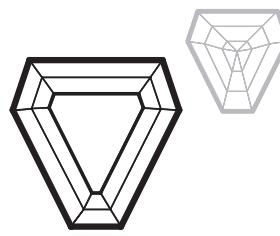
Square Radiant



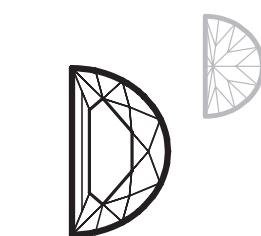
Heart



Trilliant/Trillion



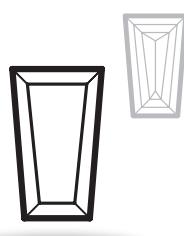
Shield/Calf



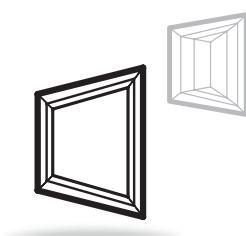
Half-Moon



Straight Baguette



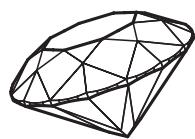
Tapered Baguette



Trapezoid

## STONE CUTS

---



Brilliant



Side



Crown



Pavilion



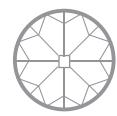
Old European



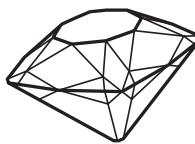
Side



Crown



Pavilion



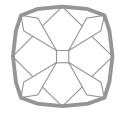
Old Mine



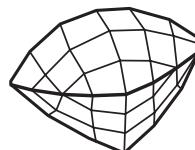
Side



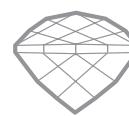
Crown



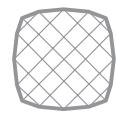
Pavilion



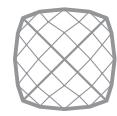
Checkerboard



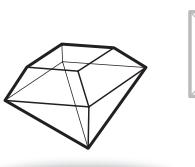
Side



Crown



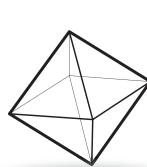
Pavilion



Table



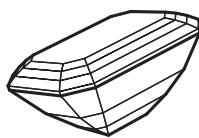
Crown



Point



Crown



Step



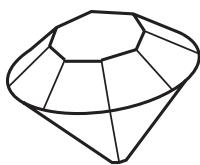
Side



Crown



Pavilion



Eight



Side



Crown



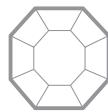
Pavilion



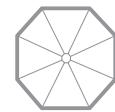
Old Single



Side



Crown



Pavilion



Rose



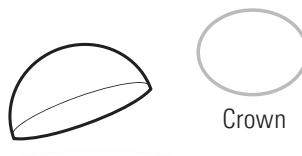
Crown



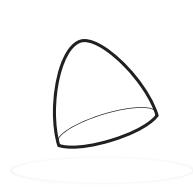
Briolette



Crown



Cabochon



Bullet

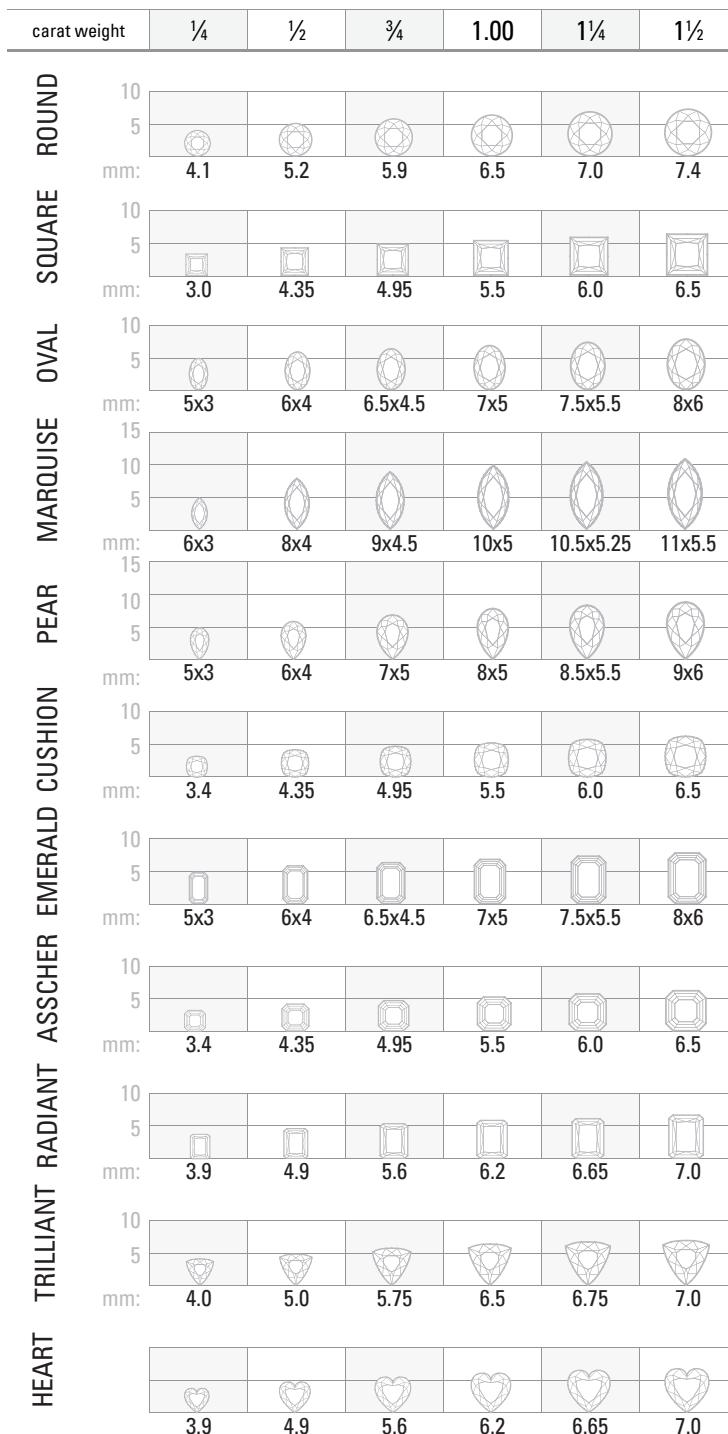


Crown

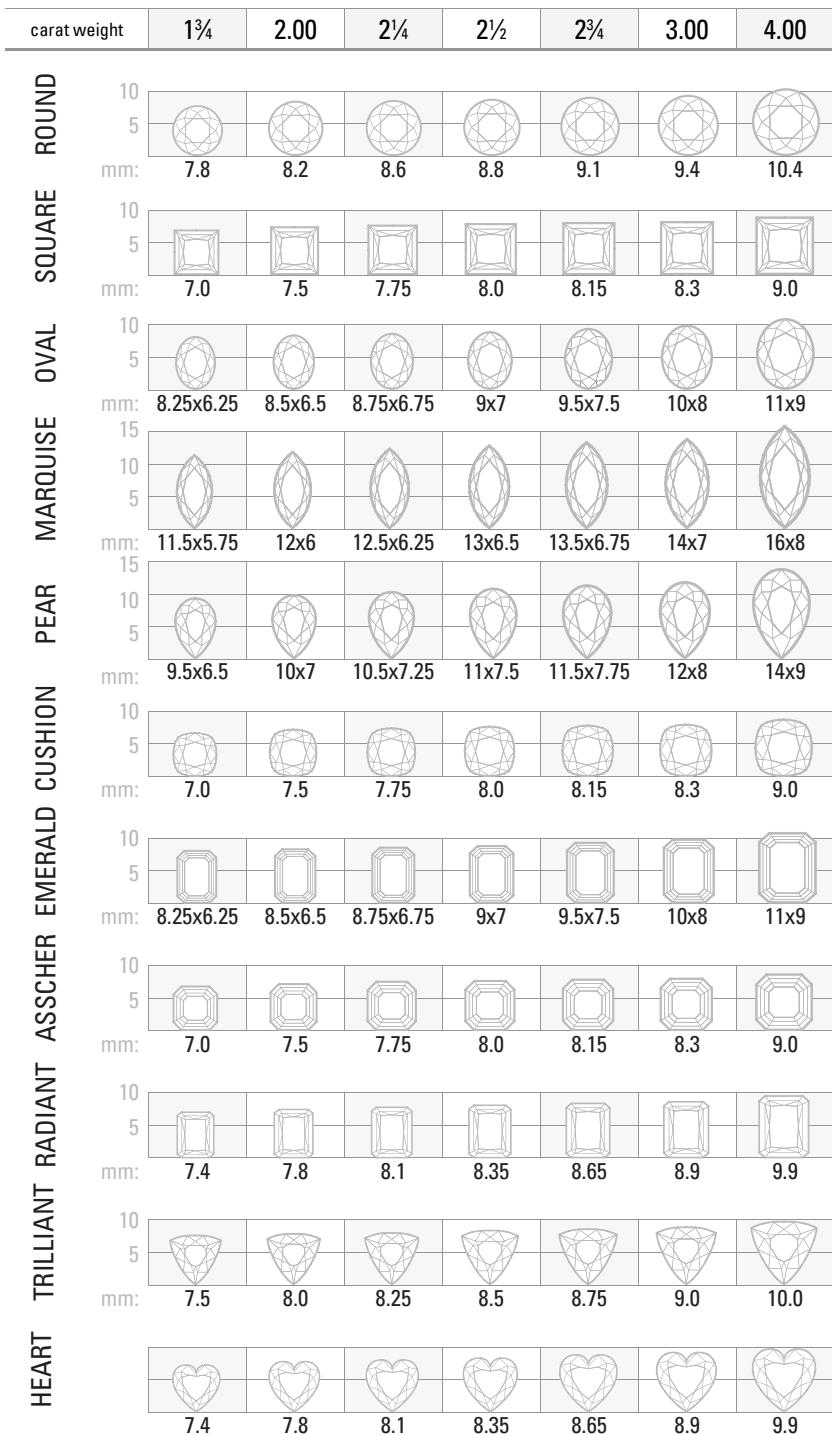
Master gem cutters, mathematicians, scientists, and jewelers have been developing unique and proprietary cuts to draw the beauty out of gemstone material. Some gem cuts are created to maximize the sparkle, while other gem cuts are created to draw the viewer into the gemstone.

# DIAMOND SIZE CHART

Diamonds illustrated to scale



Diamonds illustrated to scale



# JEWELRY ATTRIBUTES

---

- 57 Design Details
- 58 Finishes
- 59 Levels of Finish
- 60 Jewelry Metal Types







Engraving



Filigree



Milgrain



Pierced/Openwork



Carved



Enamel/Resin Inlay



Raised Text



Recessed Text



Inside Engraving

## FINISHES

---



Bright Polished



Semi-Polished



Satin/Brushed



Bead Blast/Matte



Glass Blast



Ice



Stone



Hammered



Florentine

## LEVELS OF FINISH



### **FINISHED JEWELRY**

Complete and ready-to-wear jewelry that is polished and set with all stones.



### **SEMI-FINISHED JEWELRY**

Partially complete jewelry which is typically set with accent gems. Due to increased flexibility and extreme difference in cost of larger gemstones (based on quality and size), the center setting is incomplete so that a jeweler can remount a customer's existing gemstone, set an in-stock gemstone, or purchase a new gem based on the customer's desire.

### **SEMI-MOUNT WITH HEAD**

Polished and set with side stones or melee and complete with a fixed head. The center stone itself still needs to be set.

### **SEMI-MOUNT WITHOUT HEAD**

Set with side stones or melee, but with no head or center stone. The center setting itself still needs to be installed and set.



### **UNFINISHED JEWELRY**

Jewelry available in different degrees of finish.

**RAW.** A raw casting that needs to be sanded, polished, and set with stones if needed.

**SEMI-POLISHED.** The jewelry item has been tumbled, but needs a final polish and all stones to be set if needed.

**POLISHED.** The jewelry item is complete pertaining to finishing, but all stones still must be set if needed.

**FINDINGS.** Components or parts used in the making of jewelry, for example, heads, earwires, basket settings, jump rings, posts, etc.

### GOLD (Au)

24 Karat gold is a dense, malleable precious metal that is bright yellow in color and can be polished to a high luster. In its pure form it is considered too soft and not suitable to use in jewelry. Gold is commonly mixed with other metals, or alloys, to create a wide range of color variations and working properties.

White gold is a silvery-looking gold alloy that contains gold mixed with palladium, nickel, or sometimes zinc to achieve its color. White gold has yellow undertones and is commonly rhodium-plated to create a whiter appearance. The plating will eventually wear away at which time it can be replated.

X<sub>1</sub> White Gold is a super white alloy that does not require rhodium-plating.

- 24 Karat gold fine (99.7% gold).
- 18 Karat gold is 18 parts gold or 75% pure gold content, which may be marked as 750.
- 14 Karat gold is 14 parts gold or 58% pure gold content, which may be marked as 585.
- 10 Karat gold is 10 parts gold or 41% pure gold content.



Yellow



White



Rose



Green

### PLATINUM (Pt)

Platinum is a dense, malleable metal that is white in color with cool undertones. It is almost always used in its purest form in jewelry, 95%. Platinum is substantial in weight. Comparatively, a ring in platinum will weigh almost 60% more than the same ring in 14kt gold. For these reasons a platinum ring is significantly more expensive than the same item in a gold alloy.

### PALLADIUM (Pd)

Palladium is a member of the platinum metal group and is a soft, silvery-white color with slightly gray undertones. It is also used in an almost pure form in jewelry, 95%.

### SILVER (Ag)

Silver is a soft, lustrous metal that is very malleable and silvery-white in color.

Sterling silver is a common alloy comprised of 92.5 % silver and 7.5 % copper. Continuum™ sterling silver is an alternative that is 92.5% pure, resistant to oxidation, and harder. Continuum™ sterling is suitable for gem setting and offers added longevity.

## REFERENCE TABLES

Metal	Color	Finish	Working Properties	Hypo-Allergenic
Yellow Gold	Bright yellow to yellow	Shows scratches, polishes as worn	Malleable, wears over time	No
White Gold	White with a yellow undertone	Shows scratches, polishes as worn	Rigid, more brittle than platinum, wears over time	No
Platinum	White with a cool undertone	Resistant to wear, shows scratches, dulls to satin finish	Malleable but dense. Maintains surface embellishment such as engraving and milgrain	Yes
Palladium	Silvery-white with a gray undertone	Resistant to wear, shows scratches, slowly dulls to satin finish	Similar to platinum but with less weight	Yes
Sterling Silver	Silvery-white with a slight pink undertone	Shows scratches, polishes as worn, tarnishes	Malleable, less suitable for everyday jewelry because it wears away more quickly	No

## CONTEMPORARY METALS

A variety of metal alternatives offer lower cost options for use in jewelry.

Rings created from contemporary metals cannot be sized.

Metal	Color	Finish	Properties	Hypo-Allergenic	Emergency Removal
Titanium	Gray	Will show signs of wear, but can be polished	Lightweight, shatterproof	Yes	Motorized Ring Cutter
Dura Cobalt®	White	Will show signs of wear, but can be polished	Shatterproof	Yes	Motorized Ring Cutter
Dura Tungsten®	Gray White, Black (topcoat)	Will remain polished with no maintenance	Heavy, substantial feel, can fracture or break	Yes	Tungsten/Ceramic Ring Cracker
Ceramic Couture™	Black, White, Pink (throughout)	Maintains its finish	Can break	Yes	Tungsten/Ceramic Ring Cracker
Stainless Steel	Grayish White	Can be machined or cast. Will show signs of wear but can be polished	Shatterproof	Yes	Motorized Ring Cutter

## GLOSSARY OF TERMS

---



**4 Cs** A universal grading system developed by GIA (Gemological Institute of America) to evaluate the quality of a diamond. The 4 Cs are Carat, Color, Clarity, and Cut.

**Accent Gemstones** Gemstones within a jewelry design that are not the main focus, but instead accent or complement the center gemstone and side gemstones. Accent gemstones are typically comprised of melee gemstones.

**Alloy** A mixture of two or more metals to create more desirable characteristics and/or added strength.

**Anneal** A process used to bring metal alloys to a desired consistency, texture, or hardness by gradually heating and cooling.

**Anniversary Band** A ring of three or more diamonds or gemstones, typically set in a channel or prong setting. The stones partially encircle the ring.

**Antique Jewelry**  
Jewelry that is 100 years old or more.

**Anticlastic** A form that is curved in two directions opposite one another (saddle-shaped). *See Synclastic.*

**Art Deco** A decorative style of the 1920s and 1930s that features bold geometric shapes, linear patterns, and diverse colors.

**Art Nouveau** A decorative style from the late 1800s to early 1900s characterized by free-flowing lines and stylized natural forms such as flowers, leaves, and feminine form.

**Assay** The process used when determining the proportions of precious metal contained in a piece of gold, silver or other alloys.

**Attribute** A characteristic of a product that can include a color, design, style, form, shape, or feature.

**Azured** A mounting that leaves a gemstone's pavilion facets uncovered so that light can enter.

**Baby/Youth** Describes items small in scale to be worn by babies, toddlers, and teens. Earring posts are usually shorter and are often threaded or have some sort of safety clasp. Rings are usually sizes 0–3. Bracelets are usually 5–5½" long. Necklaces are usually 15"–16" long.

**Bail** An arched (often oval, teardrop, or d-shaped) metal component used to hang a pendant from a chain or cord. It is meant to slide onto the chain rather than being soldered to it so that the pendant moves independently from the chain and is not a permanent part of the chain or cord.

**Band** A ring, usually uniform in width, with no distinguishable "top"; may be set with gemstones.

**Bangle Bracelet** A closed, rigid bracelet – with or without hinge and clasp – that slides over the hand.

**Baroque** An irregular-shaped stone or pearl. Also an art style characterized by ornate detail.

**Bar Set** A setting technique where the gemstone is secured between two parallel bars, while the sides of the gem remain open.

**Base Metal** A term informally referring to non-precious metals (such as copper, zinc, tin, nickel, lead, or iron), which are commonly used in costume jewelry.

**Basket Setting** A type of prong setting with open sides similar to a basket weave, that allows the lower portion of the gemstone to be visible.

**Basse-taille** An enameling technique in which a low-relief pattern is created in metal by engraving or chasing, then the entire pattern is filled with translucent enamel (similar to French "low height" champlevé). *See Enamel.*

**Bead** A small, usually spherical component made from a variety of materials, which may be partially drilled or fully drilled. A full drilled bead will have one or more holes through it, allowing it to be strung singularly or with others in a sequence. Beads in shapes other than round are sometimes described as "fancy."

**Bead Set** A method for securing a gemstone where a small bur of metal is raised with a graver and pushed over the edge of the gemstone.

**Belcher** A ring mounting in which the prongs for the setting are formed from the shank of the ring so that the gemstone does not extend above the circumference of the shank.

**Bezel-Set** A method for securing a gemstone in which a band of metal encircles the girdle of the gemstone and is folded over the gem to hold it in place.

**Birthstone** A precious or semi-precious gemstone popularly associated with the month of birth.

- January- Garnet
- February- Amethyst
- March- Aquamarine
- April- Diamond
- May- Emerald
- June- Pearl
- July- Ruby
- August- Peridot
- September- Sapphire
- October- Opal
- November- Citrine
- December- Topaz

**Body Jewelry** Jewelry that was manufactured specifically for use in body piercing.

**Bracelet** An ornamental band or circlet for the wrist, arm, or sometimes for the ankle.

**Bracelet Slide** A bead-type adornment designed with two sets of holes to allow it to be strung onto a bracelet constructed of two rows of chain. The resulting bracelet is known as a slide bracelet.

**Bridal Set** A matching set of rings that includes an engagement ring and a wedding band, which are worn stacked together.

**Bridge** The structural portion of a mounting that connects one side of the shank to the other.

**Bridge Accent** A design element located beneath the center stone that can be seen when looking at the ring in the through finger view.

**Bright-Cut** A metal engraving technique created by chiseling the metal with a polished tool creating a highly reflective surface.

**Brilliance** Pertaining to diamonds, this term has two components: brightness and contrast. Brightness refers to the amount of light returned from the diamond's surroundings and back to the observer. To be brilliant, a diamond also needs contrast, intensity of the white light from the crown of a polished diamond or other gemstone.

Brilliance is affected by: hardness, refractive index, reflectivity, polish, luster, and proportions.

**Brooch** A piece of jewelry that may be fastened to clothing, usually with a mechanism that consists of a straight, sharp pin finding, a hinge, and a catch.

**Bulk Chain** Chain that does not include a clasp assembly. It has raw, cut ends and cannot be worn in its current state.

**Buttercup Setting** A setting usually consisting of six prongs connected to a scalloped-shaped base that resembles a buttercup flower.

**Bypass** A ring mounting design in which the two sides of the band do not meet in a straight line, but overlap or crisscross each other as seen in the top/looking down view.

**Cabochon**  
A polished, convex-cut, unfaceted gemstone.

**CAD/CAM**  
Computer-aided design and manufacturing.

**Cameo** A design cut in relief, usually into a hard gemstone or shell.

**Carat** A unit of weight for precious and semi-precious gemstones, equal to 200 milligrams. *See 4 Cs.*

**Cathedral Setting** A style of mounting in which the sides of the ring arch above the band on either side of the stone as seen in the through finger view.

**Catch** *See Pin-Catch.*

**Center Gemstone** The main gemstone in the design which is usually the focal point of the jewelry.

**Chain** A series of connected metal links or loops with an attached clasp assembly.

**Clasp Assembly** The mechanism used to secure a chain and typically consists of a chain end and clasp.

**Chain End** The hoop located on one end of a chain, through which the other end can be looped.

**Chain Tag** A flat metal piece with a hole in each end where the quality mark or trademark can be stamped.

**Champlevé** An enameling technique of decoration in which the design is made by lines or cells cut into a metal base. Similar to cloisonné, but the partitions are part of the base. *See Enamel.*

**Chandelier Earring** One of a pair of long ornate earrings that dangle from the earlobes, usually dropping more than one level.

**Channel-Set** A setting style in which a series of gemstones are set close together into grooves in two parallel walls.

**Charm** A miniature object that may depict symbols, figures, letters, etc., usually attached to a bracelet using a spring-type clasp or a jump ring.

A **Dangle Charm** has a jump ring or bail-type clasp allowing it to swing to and fro.

A **Bead Charm** is a large, fancy bead with large holes allowing it to be strung onto a bracelet.

**Charm Bracelet** A bracelet to which charms may be or have been attached.

**Chevron or V-Prong** A prong in the shape of a V usually found on gemstone shapes with sharp corners.

**Choker** A non-rigid necklace that fits snugly around the throat, usually 14"-15" in length.

**Claddagh** A traditional Irish ring design depicting two hands holding a crowned heart, representing friendship or love.

**Clarity** A term used to describe the absence or presence of internal or external flaws in a gemstone. *See 4 Cs.*

**Clasp** A mechanism used to attach objects or parts together, such as both ends of a chain.

**Claw (Prong)** A wire used to fasten and hold a gemstone in a setting.

**Cloisonné** An ancient enameling technique in which a design is outlined on a metal base with bent wire or metal strips (typically soldered to the base) forming individual sections or compartments that are filled in with colored enamel (French "cloison" = cell or partition). *See Enamel.*

**Cluster** Multiple gemstones grouped together in a setting, which may or may not overlap each other.

**Clutch Back** *See Earring Clutch.*

**Dura Cobalt** A corrosion and wear-resistant contemporary metal alloy consisting of cobalt and chromium.

**Collar** A rigid choker-style necklace that fits snugly around the neck.

**Color Grade** As it pertains to diamonds, color is one of the characteristics used to define the quality of a diamond. The GIA color scale ranges from D to Z, D being considered colorless and higher in value. *See 4 Cs.*

**Comfort-Fit** Describes the convex interior of a ring or band.

**Contemporary** Designs that are up-to-date with current trends in the industry with a modern flair.

**Contemporary Metal**

Metal alloys and industrial metals that are not part of the traditional "precious metal" group. These low-cost alternatives include, but are not limited to, titanium, tungsten carbide, stainless steel, and cobalt chrome.

**Contour Band** *See Shadow Band.***Costume Jewelry** Jewelry made with inexpensive materials or imitation gems.

**Cord** A long, thin, flexible strand that can be used instead of chain for necklaces and bracelets. Cord can be made from satin, leather, rubber, and other alternative materials.

**Crown** As it refers to a cut gemstone, the faceted area of a gemstone located above the girdle, but below the table.

**Cuff Bracelet** A rigid bracelet designed with an opening for easily slipping the bracelet onto the wrist.

**Cuff Link** A decorative fastener – similar to a button – which is used to secure the ends of a shirt cuff. It may consist of two buttons or button-like parts connected with a chain or peg that passes through two slits in the cuff.

**Culet**

Refers to the base point of a diamond.

**Cut** As it refers to a round diamond, cut is the factor that determines the diamond's brilliance. Cut qualifies the brilliance, fire, and scintillation of a round, brilliant cut diamond by analyzing the diamond's symmetry, proportions, and polish. *See 4 Cs.*

**CZ** Short for Cubic Zirconia, a man-made gemstone created to simulate a diamond. Approximately 64% heavier than diamond.

**Dangle Earring** An earring that extends below the earlobe and is designed to swing to and fro.

**Danish Modern** A design style using elements from the period of the 1960s. The designs are of the "form follows function" genre and are minimalist in presentation. *See Minimalist.*

**Depth** In reference to a gemstone, it is the length from table to culet.

*See Table/Culet.*

**Design Element** An attribute type used to describe features of a jewelry item.

**Diameter** In reference to a gemstone, it is the overall width.

**Diamond-Cut Chain** Sharp edges cut onto the surface of a chain so that the links flash and catch the light.

**Die Struck** A process for manufacturing heads in which the item is stamped under extreme pressure, resulting in a work-hardened rigid part. *See Anneal.*

**Dispersion** The power of a diamond when breaking up its light into its constituent colors. *See Fire.*

**Drop Earring** An earring that extends below the earlobe and is stationary.

**DWT** Abbreviation for pennyweight. There are 20 pennyweights in a ounce (troy). *See Pennyweight.*

**Ear Trim** An earring designed to follow the contour of the ear.

**Earring** A piece of jewelry worn on the lobe or edge of the ear. Popular earring types are chandelier, cluster, dangle, drop, earring jacket, ear trim, huggie, hinged, hoop, lever back, and stud.

**Earring Jacket** An adornment for the ear that is an accessory to an earring, designed to be secured to the lobe with a stud.

**Earring Post** A pin-like or wire finding attached to the back of an earring that passes through a pierced earlobe. Examples included screw posts and friction posts.

**Earring Back** A disc or bead with a hole, through which an earring post is threaded for the purpose of securing the earring to the earlobe. Examples include nut, screw, tension, omega, and clutch.

**Earring Clutch** A type of earring back that attaches to an earring post after it passes through a hole in the earlobe. The earring clutch is used to secure an earring in place.

**Earwire** A wire used for pierced earrings. Popular styles include French hooks, lever back, and kidney.

**Edwardian** Characteristically containing lace-like, fine filigree work with milgrain settings. Popular from 1900-1914, it was usually produced in platinum for strength. Intricate, airy, and feminine. *See Filigree and Milgrain.*

**Enamel** An opaque or semi-transparent glass or substance applied to a metal surface for protection or ornamental purposes.

**Engagement Ring** Traditionally worn only by women (especially in Western cultures), an engagement ring is a ring indicating that the person wearing it is engaged to be married.

**Enhancer** An enhancer attaches to an existing jewelry item to create a new look. Some examples of enhancers include ring enhancers, pearl enhancers, and pendant enhancers.

**Engraving** The process or art of cutting or carving a design into a hard surface.

**Eternity Band** A band set with one or more continuous rows of gemstones that completely encircle the band.

**Facet** The flat, polished surface of a gemstone that affects a gemstone's brilliance and sparkle.

**Fancy** Describes any jewelry that incorporates whimsy, fun, and innovation in its design. It is trendy and stylish and may not become a classic or be considered a basic item. It makes a great fashion statement or conversation starter.

**Family Jewelry** A jewelry item created with personal significance to the family usually using birthstones to represent each member of the family.

**Fancy Wedding Band** A wedding band with more decorative styling than a simple, traditional band.

**Fashion Ring** A type of ring worn to express style or a current trend.

**Filigree** Lace-like ornamental work formed from thin wires of intricately-arranged intertwined precious metal. May be plain, twisted, or plaited.

**Finding** A component or part used in the making of a piece of jewelry.

**Finish** A decorative texture applied to the surface to enhance its appearance.

**Fire** Dispersed light that appears as flashes of spectral colors (rainbow) on a diamond. *See Dispersion.*

**Fishtail Setting** A setting technique consisting of four prominent triangular corners cut from the existing shank that hold the gemstone in place. When viewed from the through finger view it looks like the tail of a fish.

**Fitted Band** *See Shadow Band.*

**Flush-Set** A setting technique in which the gemstone is embedded within the band and the metal from the band is used to secure the gemstone, leaving only the top of the gem visible.

**Fluted** An ornamental groove in a surface which creates visual interest.

**Freeform** An asymmetrical, flowing shape or design.

**French Hook** An earwire shaped like a hook used for pierced drop earrings.

**Gallery** The negative space located on a head/setting.

**Gemstone** A mineral or organic material with sufficient beauty, rarity, and durability to be set into jewelry.

**Gallery Rail/Bearing** The metal rim located on a head/setting, below the girdle of a gemstone.

**Gemstone Shape** Referring to the potential options of shape and size that a gemstone can be cut. The outline form of a gemstone, not to be confused with the faceting pattern.

**Genuine Stone** A gemstone that is produced by nature without interference from man, other than cutting or fashioning. Do not confuse "natural" with untreated gemstones.

**Girdle** The narrow band or edge separating the upper and lower faceted portions of a gem.

**Gold** A precious, yellow, metallic element, highly malleable and ductile and not subject to oxidation or corrosion.

**Gram** A gram is a metric system unit of mass/weight. One ounce (troy) is equivalent to 31.10 grams.

**Graver** A tool used to cut designs into metal and for precision gemstone setting that is made of highly-polished steel.

**Granulation** A surface adornment technique in which minute grains or tiny balls of precious metal are applied to a surface in patterns to create visual interest.

**Guilloch ** An enameling technique in which precise, intricate, symmetrical patterns are mechanically engraved into a metal base; sometimes referred to as "engine turning." It was named after a French engineer who invented a machine to replicate these precise patterns that were previously done by hand (*Example: Faberge' eggs.*)

**Gypsy-Set** *See Flush Set.*

**Half Bezel-Set** A method for securing a gemstone in which a band of metal partially encircles the girdle of the gemstone and is folded over the gem to hold it in place.

**Hallmark** A quality mark indicating precious metal content (10kt, 14kt, 18kt, platinum, etc). Typically stamped on a jewelry item in an inconspicuous location (back, inside ring shank, etc.). FTC requires the manufacturer or distributor of said product to disclose their identity by accompanying the quality mark with a trademark or company name.

**Hammer-Set** *See Flush Set.*

**Halo** A jewelry style featuring a central gemstone surrounded by a border of smaller gemstones.

**Head** The part of a jewelry item that secures the gemstone. This is sometimes referred to as the setting.

**Hidden Bail** A bail located inconspicuously on the reverse side of a pendant, so that the pendant appears to float on the chain or cord. *See Bail.*

**Hinge** A pin that fits through pieces of metal tubing that allow an item to articulate. Hinges are commonly found on lockets and boxes.

**Hoop Earring** A (usually) circular, ring-like earring that may be a complete circle or may only go part of the way around.

**Huggie Earring** A small hoop earring that fits closely around the ear lobe. It is thicker than a standard hoop so that it appears to be "hugging" the ear lobe. It is designed with a hinge at the base of the hoop, facing the shoulder, and a groove in the post enables it to snap into place to close securely.

**Hypo-Allergenic** A term used to describe items (in this case jewelry) that cause or are claimed to cause fewer allergic reactions. Depending on the allergen of the subject, these may include metals such as stainless steel, titanium, gold, etc.

**Illusion-Set** A setting technique patented by Van Cleef & Arpels in 1933 (Mystery Setting) in which a diamond is placed in a collet of reflective, highly-polished metal so that it appears to be part of the gemstone in order to enhance the perceived size of the diamond.

**Inlay** The insertion of pieces of gemstones, wood, ivory, etc. into slots created on a surface for embellishment.

**Invisible-Set** A setting technique with no visible prongs or supports. The gemstones are grooved so that a thin wire framework holds the gemstones in place.

## GLOSSARY

---

**Jump Ring** A wire ring of any size, usually round or oval in shape, used for attaching jewelry parts.

**Karat** A unit of measure of the purity of gold. Pure gold equals 24 karats.

**Key Ring** A device for holding keys together usually consisting of a metal ring.

**Kinetic** Jewelry designed to move, rotate, or revolve. Moving parts are trapped and cannot usually be removed from the main jewelry object.

**Kit** An assortment of products, often components, sold together, usually for back of store use, often at a lower price than if the items were purchased individually.

**Lapel Pin** A small piece of jewelry with a post-type pin affixed to it with a clutch mechanism to secure it. May also be assembled with a small brooch-type, hinged pin assembly. A lapel pin is usually smaller than an inch in length.

**Lariat Necklace** A long cord-like necklace without a clasp, usually looped into a knot, thus allowing the ends to hang down in the front.

**Lever Back** A spring-loaded closure on the back of some earrings. When in the closed position, it secures the earring to the earlobe.

**Line Bracelet** A flexible bracelet that can be unclasped and laid out to form a "line." The links are usually joined by hinge pins. A tennis bracelet is a type of line bracelet.

**Link Bracelet** A bracelet made from connecting or linking various, sometimes similar, components together. The links are usually interlocking, eliminating the need for hinge pins.

**Locket** A small, decorative case with one or more spaces to hold a picture or memento, designed to be suspended from a chain. May also be incorporated into the design of a ring or bracelet.

**Looking Down/Top View** A way to describe looking at a ring from the top down or bird's eye view.

**Medical ID Jewelry** Designed with a medically identifiable emblem and engraved to inform others of medical issues such as drug and food allergies and other medical conditions.

**Melee** Classification used in the sorting of diamonds weighing less than .17 carats or 17 points each.

**Micro Pavé** A highly precise setting technique similar to pavé but using extremely small gemstones.

**Milgrain**  
Having the edge shaped into fine beading.

**Minimalist** A term used to describe a movement in design and architecture around the 1960s and 1970s, where the subject is reduced as much as possible to only its necessary elements.

**Moissanite** A rare mineral discovered by Henri Moissan, later synthesized in the laboratory and used as a high-quality diamond substitute.

**Money Clip** A folded clip used to keep folded cash and/or credit cards in lieu of a wallet.

**Mounting** A jewelry item that has stone settings, but in which no stones have been set. It requires no further assembly work; the exception being an unset semi-mount mounting which requires a head to be attached.

**Neckwear** A piece of jewelry that may be a string of gemstones, beads, jewels, etc., or a metal chain worn around the neck.

**Niobium**  
A silver-gray contemporary metal.

**Notched Band** *See Shadow Band.*

**Nugget Ring/Jewelry**  
Jewelry designed to mimic and exaggerate the look of a native lump of precious metal, usually yellow gold.

**Omega Clip** A wire attached and hinged on the back of an earring and used as a mechanism to hold the earring in place.

**Openwork** *See Pierced.*

**Organic** A design style using free-flowing curves and surfaces similar to those from nature such as in leaves, vines, etc.

**Packages/Kits** *See Selling Systems.*

**Patina** Discoloration that forms naturally over time on metals such as silver and bronze. Patinas may also be introduced artificially through certain chemicals for aesthetic value.

**Pavé** A field of bead-set gemstones closely set, usually in rows, whereby the entire surface of the jewelry is covered or paved.

**Pavilion** The lower part of a cut gemstone below the girdle.

**Pearl Enhancer** A pendant with a hinged, clasp-type bail that allows it to be attached to a pearl or bead necklace, or any necklace that doesn't allow a pendant to be slid onto it.

**Peg Head** A setting with a peg attached to it that can be easily attached to a jewelry item by inserting the peg into a drilled hole. Peg heads are commonly used in semi-mount engagement rings.

**Pendant** An adornment designed to be suspended from a necklace.

**Pendant Enhancer** A pendant designed so that another pendant, usually a solitaire, can be suspended inside of it.

**Pennyweight** Pennyweight is a common weight unit of measure used in the valuation and measurement of precious metals. One pennyweight equals  $\frac{1}{20}$  of a ounce (troy). *See DWT.*

**Pierced** In jewelry it refers to perforated or openwork designs with regular patterns of openings and holes.

**Pin** Any type of jewelry that is fastened to clothing using a sharp, pointed post and a catch or clasp. May be a brooch, lapel pin, or tie tack.

**Pin Assembly** Jewelry findings used to secure a pin to the wearer. This assembly is comprised of a pin-stem and pin-catch.

**Pin-Catch**

The securing mechanism for a pin-stem.

**Pin Stem** A sharply-pointed pin on a hinge that is suitable for piercing fabric or clothing. It is secured with a pin-catch.

**Platinum** A heavy, non-corrosive white metal with high tensile strength which dulls as it is worn but holds its detail for many years, giving it heirloom characteristics.

**Plique-à-Jour** An enameling technique by which the design is outlined with metal and filled in with colored enamels, but with no backing so that the effect is similar to a stained glass window.

**Precious Metals** Metals that are rare and have high economic value. Gold, silver, platinum, and palladium.

**Precious Gemstone** The group of gemstones consisting of diamonds, rubies, sapphires and emeralds.

**Primary Metal** The metal alloy that, when describing a two-tone item, makes up the majority of the weight of the jewelry item. *See Secondary Metal.*

**Profile** A profile is a cross sectional view. Flat inside round, comfort-fit, inside round, flat, knife-edge, etc., are examples of band profiles.

**Promise Ring** A ring worn to show commitment to a monogamous relationship, usually set with one or more diamond melee.

**Prong-Set** A setting technique in which a gemstone is held in place by metal projections or tines, called prongs.

**Prototype** An example of a piece of jewelry created from inexpensive, non-precious materials.

**Puzzle Ring** Several rings that fit together to create a single ring.

**Remount** The act of removing gems from one jewelry item and setting them into a new jewelry item. The term remount is sometimes used interchangeably with "semi-mount," when referring to jewelry designed for this purpose.

**Ring** A piece of jewelry worn on the finger. Very small rings may be worn on the toes.

**Ring Guard** A ring designed with two shanks assembled so that a solitaire ring may be inserted into it.

**Riviera** A necklace style comprised of flexible gemstone links which are typically tapered in size.

**Rolling Ring** A ring usually consisting of three or more bands. As the ring is slid on and off the finger, the bands roll over one another.

**Roundel/Rondelle** A doughnut-shaped or flattened, disk-shaped bead that is used as a spacer or an accent between other beads.

**Rub Over** *See Flush Set.*

**Safety Clasp** A secondary closure added to some bracelets and necklaces for extra security.

**Scalloped-Set** A technique for setting gemstones in which the prongs are created from the shank. Fishtail is one example of a scalloped setting.

**Scintillation** The intense sparkles and flashes of light visible when either the person viewing the diamond or the lighting moves.

**Scooped Band** A band with a concave groove on the inside of the band, designed to lessen the weight of the piece, therefore lowering the price.

**Secondary Metal** When describing a two-tone item, the metal alloy that makes up the minority of the weight of the jewelry item. *See Primary Metal.*

**Selling System** A pre-merchandised collection of items marketed in a packaged format, designed as a turn-key sales solution.

### **Semi-Precious Gemstone**

A gemstone that is not a diamond, emerald, sapphire, or ruby – historically thought to be less valuable than a precious gemstone, i.e., amethyst, peridot, aquamarine, etc.

### **Semi-Mount Ring**

**with Head** Any engagement ring set and sold to the jeweler with side stones or melee, but without the center stone. The fixed head for the center stone is in place.

### **Semi-Mount Ring**

**without Head** Any engagement ring set and sold to the jeweler with side stones or melee but without the center stone. The head for the center stone is NOT in place. May also be referred to as a set shank since it is not a completely assembled ring.

**Setting** The act of securing a gemstone. The term setting is sometimes used interchangeably with head and/or mounting.

**Shadow Band** A wedding band designed and contoured to be worn with a specific engagement ring. The design is such that it would not usually be worn on its own.

**Shank** A ring designed for, but stocked without a center head and that is not complete without such head. The part of a ring that encircles the finger.

**Shepherds Hook** *See French Hook.*

**Shoulders** The upper part of a ring shank.

**Side Stones** Gemstones that complement and place emphasis on the center gemstone. Side gemstones are typically larger than accent gemstones.

**Side View** A way to describe looking at a ring from the side.

**Silver** A precious metal that is commonly alloyed to create the more durable alloy known as sterling silver.

**Signet Ring** A ring with letters (usually one's initials), or a design carved into it. A college ring is an example of a signet ring.

**Sizing Area** The area at the bottom of a ring shank where metal can be inserted or removed to reduce or increase the finger size of the ring.

**Slide Pendant** A bail-less pendant. May incorporate holes into the design to allow passage of a chain or cord.

**Solitaire** A piece of jewelry containing or designed to hold a single diamond.

**Stainless Steel** A contemporary metal (a form of steel containing chromium and/or nickel) resistant to tarnishing and rust.

**Station Necklace**  
A necklace with repeating elements.

**Sterling Silver** A precious metal alloy of 92.5% silver and copper, or another material.

**Strip Setting** A metal strip jewelry finding that is usually comprised of repeating patterns in which gemstones can be set.

**Stud Earring** Jewelry attached to the ear with an earring post through a piercing and secured with an earring back.

**Synclastic** A surface or a portion of a surface that is curved towards the same side in all directions.

**Table** Referring to the top, flat part of the cut of a gemstone.

**Tennis Bracelet** *See Line Bracelet.*

**Tension-Set** A setting that holds the gemstone in place entirely with compression/tension and not prongs.

**Three-Stone Ring** A ring consisting mainly of three larger stones.

**Through Finger View**  
A way to describe looking at a ring through the finger hole.

**Tie Tack/Tie Clip** A piece of jewelry used to hold a necktie in place.

**Titanium** A strong, low-density, highly corrosion-resistant and lustrous white element that occurs widely in igneous rocks and is mainly used to alloy aircraft metals. It is also a popular choice for piercing jewelry.

**Trellis Setting** A structure of open latticework especially used as a gallery support for gemstones.

**Trim** A decorative finding that can be added to another jewelry component to create a finished jewelry item.

**Troy Ounce** A unit of troy weight, used for weighing precious metals. The ounce contains 20 pennyweights (dwt) each of 24 grains. One troy ounce is equivalent to 31.10 grams.

**Tungsten** A contemporary metal containing equal parts of tungsten and carbon atoms.

**Two-Tone** A jewelry item comprised of two different metals or alloys of different color.

**Unset Semi-Mount** A ring mounting designed to hold side stones or melee, but in which no stones have been set and the head for the center stone is NOT in place. May also be referred to as a shank.

**Vermeil** Gold-plated or gilded silver. The FTC allows a product to be described as "vermeil" if it consists of a base of sterling silver coated or plated on all significant surfaces with gold or gold alloy of not less than 10 karat fineness, that is of substantial thickness and a minimum thickness throughout equivalent to 2½ microns of fine gold.

**Wedding Band** *See Band.*

**White Gold** A white-colored alloy of gold with nickel, platinum, or another metal.

**Work-Hardened** The change in hardness of metal due to repeated cold flexing or stress. The annealing process can be used to relieve the stress.



# REFERENCE TABLES

---

- 76 Carats to Millimeters Conversion Chart for Round Diamonds
- 77 Weights and Measurements Conversion Chart
- 77 Gauge to Millimeters Conversion Chart for Round Wire/Flat Sheet
- 78 Gemstone Hardness and Specific Gravity
- 79 Metal Hardness and Specific Gravity
- 80 Finger Size to Millimeters Size Conversion Chart
- 80 Fineness of Gold Karats

Carats to Millimeters Conversion Chart for Round Diamonds

Carat (ct)	Millimeters (mm)
0.005	1.0
0.007	1.2
0.010	1.3
0.015	1.5
0.020	1.7
0.025	1.8
0.030	2.0
0.035	2.1
0.04	2.2
0.05	2.4
0.06	2.5
0.07	2.7
0.08	2.8
0.09	2.9
0.10	3.0
0.11	3.1
0.12	3.2
0.14	3.3
0.15	3.4
0.16	3.5
0.17	3.6
0.18	3.7
0.20	3.8
0.22	3.9
0.23	4.0
0.25	4.1
0.30	4.2
0.33	4.4
0.35	4.5
0.38	4.6
0.40	4.8
0.43	4.9
0.47	5.0
0.50	5.2
0.60	5.4
0.63	5.5
0.65	5.6
0.75	5.8
0.80	6.0
0.85	6.2
0.95	6.4
1.00	6.5
1.10	6.6
1.17	6.8

Carat (ct)	Millimeters (mm)
1.25	7.0
1.33	7.2
1.50	7.4
1.60	7.6
1.75	7.8
1.90	8.0
2.00	8.2
2.15	8.4
2.25	8.6
2.50	8.8
2.65	9.0
2.85	9.2
3.00	9.4
3.15	9.6
3.35	9.8
3.50	10.0
3.75	10.2
4.00	10.4
4.25	10.6
4.50	10.8
4.75	11.0
5.00	11.2
5.25	11.4
5.50	11.6
5.75	11.8
5.81	11.8
6.00	11.9
6.25	12.1
7.00	12.5
7.50	12.9
7.75	13.0
8.00	13.1
8.23	13.3
8.50	13.4
8.75	13.5
9.00	13.7
9.20	13.8
9.75	14.0
10.34	14.5
12.00	15.0
12.92	15.4
13.17	15.5
14.50	16.0

### Weights and Measurements Conversion Chart

To Convert	( x )	Multiply by	( = )	To Get
Carat (ct)		0.1286		Pennyweight (dwt)
Carat (ct)		0.2		Gram (g)
Pennyweight (dwt)		7.776		Carat (ct)
Pennyweight (dwt)		1.5552		Gram (g)
Pennyweight (dwt)		0.05		Ounce (troy)
Gram (g)		5		Carat (ct)
Gram (g)		0.64301		Pennyweight (dwt)
Kilogram (kg)		32.1507		Ounce (troy)
Kilogram (kg)		0.643014		Pennyweight (dwt)
Inch		25.4		Millimeters (mm)
Ounce (av)		0.91146		Ounce (troy)
Ounce (av)		28.3495		Gram (g)
Ounce (troy)		31.1035		Gram (g)
Ounce (troy)		1.0971		Ounce (av)
Pounds (lb)		453.592		Gram (g)
Pounds (lb)		291.666		Pennyweight (dwt)
Pounds (lb)		14.583		Ounce (troy)

### Gauge to Millimeters Conversion Chart for Round Wire/Flat Sheet

Gauge (ga)	Millimeters (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

Gauge (ga)	Millimeters (mm)
20	0.81
21	0.721
22	0.643
23	0.572
24	0.511
25	0.455
26	0.404
27	0.36
28	0.32
29	0.285
30	0.254
32	0.201
34	0.16

## Gemstone Hardness and Specific Gravity

Material	Hardness (Mohs)	Gravity
Agate	7	2.54-2.65
Alexandrite	8.5	3.68 - 3.78
Amber	2.5	1.08-1.1
Amethyst	7	2.63-2.65
Ametrine	7	2.63-2.65
Andalusite	7.5	3.13-3.21
Apatite	5	3.20
Aquamarine	7.5	2.67-2.91
Aventurine	7	2.62-2.65
Azurite	3.5	3.78
Beryl	7.5	2.69
Bloodstone	7	2.60-2.65
Chalcedony	7	2.61-2.65
Calcite	3	2.71
Carnelian	7	2.60-2.65
Chrysoberyl	8.5	3.68-3.78
Chrysoprase	7	2.58-2.65
Citrine	7	2.65
Coral	3.5	2.65-2.68
Corundum	9	3.96-4.01
Diamond	10	3.52
Emerald	7.5	2.63-2.91
Feldspar	6	2.55-2.76
Fluorite	4	3.10
Garnet	6.5-7.5	3.5-4.3
Goldenite	7	2.63-2.91
Goshenite	7.5	2.63-2.91
Gypsum	2	2.31-2.33
Heliodor	7.5	2.63-2.91
Hematite	6.5	5.05-5.20
Hiddenite	7	3.18
Howlite	3.5	2.53-2.59
Iolite	7	2.59-2.63
Ivory	2.5	1.80
Jade	6.5-7	2.90-3.10

Material	Hardness (Mohs)	Gravity
Jasper	7	2.58-2.91
Jet	2.5	1.38
Kunzite	7	3.16-3.2
Kyanite	7.0/5.0	3.60-3.68
Labradorite	6	2.55-2.76
Lapis Lazuli	5.5	2.70-2.90
Malachite	4	3.80
Moonstone	6	2.55-2.76
Morganite	7.5	2.63-2.91
Obsidian	5	2.30-2.6
Onyx	7	2.60-2.65
Opal	6.05/6.5	1.98-2.25
Pearl	3	2.70-2.75
Peridot	6.5	3.22-3.45
Quartz	7	2.65
Rhodochrosite	4	3.6-3.7
Rhodonite	6	3.6
Ruby	9	3.97-4.08
Sapphire	9	3.99-4.05
Sardonyx	7	2.61
Scapolite	6	2.70
Serpentine	2.5/5	2.4-2.8
Silimanite	7.5	3.25
Sodalite	5.5	2.13 - 2.29
Spinel	8	3.58-4.06
Sunstone	6	2.55-4.06
Talc	1	2.75
Tanzanite	6.5	3.35
Tiger's Eye	7	2.64-2.71
Topaz	8	3.50-3.60
Tortoiseshell	2.5	1.30
Tourmaline	7.5	3.02-3.26
Turquoise	6	2.60-2.80
Zircon	7.5	4.60-4.70

## Metal Hardness and Specific Gravity

Metal	Hardness (Vickers)	Density <sup>1</sup> (gram/cubic cc)
-------	--------------------	--------------------------------------

**Gold (Au)**

10kt Yellow Gold, Standard	128	11.32
10kt Yellow Gold, Bright	135	11.47
10kt Yellow Gold, Rich	131	11.42
10kt White Gold	165	10.99
10kt Rose/Red Gold	120	11.52
14kt Yellow Gold, Standard	134	12.84
14kt Yellow Gold, Clean Cast	138	12.89
14kt Yellow Gold, Bright	155	12.99
14kt Yellow Gold, Rich	162	13.05
14kt Yellow Gold, Lemon	165	12.84
14kt Green Gold	88	14.17
14kt X <sub>1</sub> White Gold (.585)	204	12.58
18kt Yellow Gold, Royal	126	15.53
18kt Yellow Gold, Rich	160	15.39
18kt Rose/Red Gold	257	15.02
18kt White Gold, Soft (low nickel)	203	14.62
18kt X <sub>1</sub> White Gold	231	14.69
22kt Yellow Gold	74	17.86
24kt Fine Gold	30	19.30

**Silver (Ag)**

Fine Silver	251	10.49
Sterling Silver	251	10.35

**Platinum (Pt)**

.585 Platinum	145	17.27
.900 Platinum Iridium	110	21.56
.950 Platinum Cobalt	135	20.10

**Palladium (Pd)**

.950 Super Palladium	138	11.79
14kt White Palladium	125	14.37
18kt White Palladium	158	15.66

**Titanium (Ti)**

Titanium	970	4.51
----------	-----	------

## Finger Size to Millimeters Size Conversion Chart

Finger Size	Millimeters (mm)
3	14.036
3⅛	14.139
3¼	14.242
3¾	14.345
3½	14.448
3⅝	14.551
3¾	14.654
3⅞	14.757
4	14.860
4⅛	14.963
4¼	15.066
4¾	15.169
4½	15.272
4⅝	15.375
4¾	15.478
4⅞	15.582
5	15.686
5⅛	15.789
5¼	15.892
5¾	15.995
5½	16.089
5⅝	16.201
5¾	16.304
5⅞	16.407
6	16.510

Finger Size	Millimeters (mm)
6⅛	16.613
6¼	16.716
6¾	16.819
6½	16.922
6⅝	17.025
6¾	17.128
6¾	17.231
7	17.334
7⅛	17.437
7¼	17.540
7¾	17.643
7½	17.746
7¾	17.849
7¾	17.952
7¾	18.056
8	18.160
8⅛	18.236
8¼	18.366
8¾	18.469
8½	18.572
8¾	18.675
8¾	18.778
8¾	18.881
9	18.984
9⅛	19.087

Finger Size	Millimeters (mm)
9¼	19.190
9¾	19.239
9½	19.396
9¾	19.499
9¾	19.602
9¾	19.705
10	19.808
10⅛	19.911
10¼	20.014
10¾	20.117
10½	20.220
10¾	20.323
10¾	20.426
10¾	20.530
11	20.634
11⅛	20.737
11¼	20.840
11¾	20.943
11½	21.046
11¾	21.149
11¾	21.252
11¾	21.355
12	21.458

## Fineness of Gold Karats

Karat	% Gold
6kt	25.0%
7kt	29.2%
8kt	33.3%
9kt	37.5%
10kt	41.7%
11kt	45.8%
12kt	50.0%

Karat	% Gold
13kt	54.2%
14kt	58.3%
15kt	62.5%
16kt	66.7%
17kt	70.8%
18kt	75.0%
19kt	79.2%

Karat	% Gold
20kt	83.3%
21kt	87.5%
22kt	91.7%
23kt	95.8%
24kt	100.0%



---

stuller.com | 800 877 7777