

Diamond Grading

Diamond description is defined by the “four C’s” which are cut, clarity, color and carat—each a measure of rarity more than beauty. This system, which was developed by the Gemological Institute of America, is used worldwide as the standard for determination of quality and value.

Cut refers to the facet arrangement, proportions and shape of the diamond. Brilliant cuts usually have 58 facets (faces or sides), 33 on the crown (upper part) and 25 on the pavilion (lower part) and are oriented around a common center point. The largest facet is the table and the bottom facet (sometimes pointed) is the culet. The middle part is the girdle and is often faceted as well. Baguette and emerald cut diamonds have parallel facets and are sometimes called step cut. Careful placement of the facets determines how well the diamond sparkles (brilliance) and shows the rainbow of colors (dispersion). All diamonds are not well-cut because the cutter is working to make the diamond as large possible from the given rough; typically a diamond loses about half of its original size in the cutting process. The cut grade is determined from analysis of the crown angle, pavilion depth, table size, girdle thickness and other factors and is ranked by the terms Excellent, Very good, Good, Fair and Poor. Some Excellent grades further defined by "ideal cut" and some Very good diamonds labeled "premium cut." The cut grading methodology used in this appraisal was created by the National Association of Jewelry Appraisers.

Clarity is the measure of imperfections in the diamond. Less than 1/4 of diamonds mined are suitable for jewelry because of excessive or damaging flaws and even 80% of gem quality diamonds have characteristics that are visible to the naked eye. Diamonds without blemishes or inclusions are quite rare and very expensive. As the flaws become more apparent availability increases and prices decrease due to the reduced rarity. Clarity is graded in the “face up” position with 10x magnification. The scale begins with Flawless (F1) or Internally Flawless (IF) and descends through (VVS1) and (VVS2), very very slightly included; (VS1) and (VS2), very slightly included; (SI1) and (SI2), slightly included; and (I1); (I2); and (I3) which are the included (eye-visible) grades. Internal characteristics become increasingly noticeable with each lower grade.

Color in diamonds defines the amount of body color or tint but does not refer to the prism of colors emanating from a well-cut diamond. The most common colors for diamonds are actually yellow, brown or gray but they can be any color—even black. White diamonds are actually somewhat unusual but are the most preferred; with their greater demand and scarcity they are also more expensive. Grading of color is done with 10x magnification through the pavilion against a white background under a lamp duplicating north daylight. Precisely calibrated color masters are used in grading diamonds to determine the exact color grade (or tone of color) that a diamond exhibits. The grading scale begins with (D) and goes to (Z) with the fancy colors described beyond this point. (D-F) are considered colorless; (G-J), near colorless; (K-M), faint tint; (N-R), very light tint; and (S-Z), light tint. Each progressive letter represents a slightly darker tone but does not identify the hue. Yellow or brown diamonds graded beyond (Z) are classed as one of five levels of fancy color and often have descriptive marketing names such as "cognac" or "coffee." The other colors, such as fancy greens, blues or pinks are designated with tone levels such as fancy light, fancy deep and fancy intense.

Carat is strictly the weight of the gemstone using an ancient measurement now equivalent to 1/5 of one gram. It is divided into 100 points, thus a quarter carat can be expressed as 0.25 carat or 25 points. Measurements and formulas are used to estimate the weight of mounted diamonds.

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