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DIAMOND EDUCATION

Cut

As the single human contribution to a polished diamond's beauty, cut is perhaps the most important, yet most over-looked, of the Four Cs of diamond quality. How does cut affect a diamond's value and beauty? A good cut gives a diamond its brilliance, its dispersion, its scintillation-in short, its life. And brilliance is what a diamond is all about, especially in the eyes of the consumer. The particular angles and finish of any diamond are what determine its ability to handle light, which leads to brilliance. Several factors are considered:

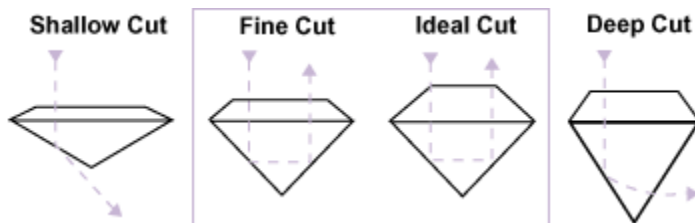
Proportion

A well-cut diamond reflects light back to the eye evenly in the face-up position, with no dark areas. Dark or 'dead' areas are due to poor cutting, and should not be confused with the faint "bow-ties" which are typical of fancy shapes; in the case of fancy shapes, bow-ties are where the main brilliance and life of the diamond are least apparent.

As you can see from the illustrations below, when a diamond is well-cut (either a fine cut or an Ideal cut), light enters through the crown or top portion of the diamond and travels all the way to the pavilion where it reflects from one side to the other - intensifying in the mirror-like facets as it travels - before reflecting back out of the diamond through the crown and to the observer's eye.

This brightness that seems to come from the very heart of a diamond is known as brilliance. It is the effect that makes diamonds unique among all other gemstones. While other gemstones also display brilliance, none have the power to equal the extent of diamond's light-reflecting power.

In a poorly cut diamond, however, the light that enters through the crown reaches the pavilion facets and then 'leaks' out from the sides or bottom of the diamond rather than reflecting back to the eye.



The illustration above shows how light behaves in different cuts of diamond. Note how the light 'leaks' out of the bottom and sides of diamonds that are too deep or



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too shallow. Well-made diamonds such as Ideal cuts and other fine cuts of diamond return light back to the eye, through the table, for maximum brilliance.

FINISH refers to the qualities imparted to a diamond by the skill of the diamond cutter. The term "finish" covers every aspect of a diamond's appearance that is not a result of the diamond's inherent nature when it comes out of the ground. The execution of the diamond's design, the precision of its cutting details, and the quality of its polish are all a consideration when a gemologist is grading finish. If you examine a diamond's grading report, you will see its finish graded according to two separate categories: polish and symmetry.

POLISH refers to any blemishes on the surface of the diamond that are not significant enough to affect the clarity grade of the diamond. Examples of blemishes that might be considered as 'polish' characteristics are faint polishing lines and small surface nicks or scratches.

SYMMETRY refers to variations in a diamond's symmetry. The small variations can include misalignment of facets or facets that fail to point correctly to the girdle (this misalignment is completely undetectable to the naked eye).

Major symmetry problems are often seen in diamonds graded as Fair or Poor; they can include severe misalignment of facets, a noticeably off-center table or culet, a noticeably 'wavy' girdle, or a table which is noticeably not parallel to the girdle. However, these types of problems are not a consideration when buying a diamond from Suncoast Gem Lab because we do not sell any diamonds graded as Fair or Poor.

In this technological and mechanized age, diamond cutting is still done by hand, not by machine. Professional cutting requires knowledge of the stone, a precise touch and flawless judgment.

Diamond cuts are broadly graded as Ideal, Excellent, Very Good, Good, Fair or Poor.

Suncoast Gem Lab will classify a diamond as Ideal only if it meets the highest qualifications established by the American Gem Society's Gemological Laboratories. These are strict standards set for proportion, symmetry and polish. Be wary of retailers who call a stone Ideal without a Diamond Quality Report (DQD) from the AGS Labs to back up their claim.

Suncoast Gem Lab sells only those diamonds which are graded as Excellent (AGS Ideal) through Good. Excellent and Very Good diamonds are true works of art-perfect examples of the beauty and brilliance that a skilled cutter can impart to an already beautiful gem. Good diamonds are also a credit to the cutter's skill; though there are minor finish or symmetry characteristics in such diamonds, they are undetectable to the naked eye.

Suncoast Gem Lab does not sell Fair or Poor quality diamonds, and we strongly recommend that you avoid these qualities, no matter where you ultimately choose to purchase your diamonds. In the long-run, the cost savings of buying such diamonds does not make up for the loss of brilliance or life in the stone.



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Well Cut or Not

To determine if a diamond is well cut and proportioned you will need an understanding of how a diamond actually 'works.'

The Truth About Table Percentages

The table is the largest and top-most facet on the diamond's crown. The table percentage is the value which represents how the diameter of the table facet compares to the diameter of the entire diamond. So, a diamond with a 53% table has a table which is 53% as wide as the diamond's outline. For a round diamond, gemologists calculate table percentage by dividing the diameter of the table, which is measured in millimeters (this millimeter measurement does not appear on diamond grading reports) by the average girdle diameter (an average of the first two millimeter measurements on the top left-hand side of a diamond grading report). For a fancy shape diamond, table percentage is calculated by dividing the width of the table, at the widest part of the diamond, by the millimeter width of the entire stone (this total width measurement is the second of the three millimeter values in the top left-hand corner of the diamond grading report).

Contrary to popular misconception, having a small table percentage (53% to 57%) does not make a round diamond any more brilliant than a diamond with a larger table. Rather, the table percentage plays a far more subtle role in the interaction between a particular diamond and the visible light surrounding it. It is meant to reflect and return white light to the eye, creating those quick flashes of light you see as a person tilts the diamond back and forth during normal movement. These quick flashes of light are known as scintillation. Arranged around the table are several smaller facets (bezel and star facets) angled downward at varying degrees. These facets, and the angles at which they are cut, have been skillfully designed to break up white light as it hits the surface, separating it into its component spectral colors - red, blue, green and the like. This effect, which appears as a play of small flashes of color across the surface of the diamond as it is tilted, is what we refer to as the diamond's dispersion (also called "fire"). This play of color should not be confused with a diamond's natural body color (normally white, though sometimes yellow, brown, pink or blue in the case of fancy color diamonds) which is uniform throughout the entire diamond, regardless of whether it is being tilted or not.

If you are still concerned that a diamond with a larger table might somehow look 'less beautiful' than a diamond with a smaller table, please consider the following examples of the difference between two table sizes: in a 1 carat diamond, the difference between a 57% "ideal" table and a table of 59% (which is just outside the traditional ideal range) is a mere 0.13 millimeters - this is just slightly more than the thickness of a single human hair! And while the difference between a diamond with a 57% table and one with a 62% table might sound dramatic, even this represents a difference of less than 0.30 millimeters. These subtleties are very hard to detect with the human eye.

As you may have noticed, brilliance was not mentioned at all in the above explanation. This is because brilliance is not really a consideration when discussing



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the table. To understand brilliance, we must look at another part of the diamond -the angles of the crown and the pavilion.

Different Angles

Diamonds have many wonderful natural properties - their unique and incomparable hardness for one - but they are not particularly brilliant or glittery when they first come out of the earth. What, then, brings out the brightness from within the heart of these stones? The key to it all lies in the angles of the crown and pavilion.

The Crown

For a round diamond, in order for the crown to provide sufficient fire, the bezel facets should be cut within a specific range of angles (usually between 33 and 35 degrees). However, this range is merely a guideline, not a hard-and-fast rule that must be adhered to in every case. At the outer points of this range, you might find diamonds with crown angles of as little as 31.5 degrees and as much as 35.9 degrees which are still very attractive. These angles do not affect the diamond's table percentage in any way. It is possible for a diamond's crown to have any combination of crown angles and table size that a cutter desires.

The Pavilion: The Most Overlooked Part of the Diamond

The pavilion is the part of the diamond that lays just below the girdle. It is easy to see why people often neglect to consider it's contribution to a diamond's beauty; when a diamond is set, typically only the crown stands out prominently, and the girdle and pavilion are hidden beneath prongs or bezels. They seem to serve only the utilitarian purpose of providing a way to hold the diamond in place. However, it is this hidden part of the diamond that is the key to brilliance.

So, How Does Brilliance Work Exactly?

The secret is in the pavilion angles, which, in a round diamond, should typically be between 40.5 and 41.5 degrees. Unlike crown angles, variations in pavilion angle can produce drastic and, in some cases, devastating differences in the appearance of a diamond. However, even here, the rules allow some leeway for a cutter who is trying to perfect his art. For example, according to AGS, a round diamond may have a 40.25 degree pavilion and still be considered an "ideal cut." At Suncoast Gem Lab, we generally avoid carrying diamonds with even this subtle degree of variation, as it sometimes creates a mild "fish eye." A fish eye is the reflection of a diamond's girdle that is visible through the table; it appears as a faint white ring in the center of the diamond (the effect looks like a fish's eye, hence its name). Even though we generally prefer to avoid these diamonds, we want to emphasize that having a 40.25 degree pavilion angle does not necessarily mean a diamond will display a fish eye or that it will be 'ugly' in any way. Diamond cutting is an art, not a science, and cutters learn, through years of experience, to consider all aspects of their finished product. While a certain pavilion angle may not achieve the proper look in combination with one set of crown angles and table sizes, when the same pavilion angle is paired with a different arrangement of crown facets, the result can be stunning.

That said, there are still some variations on pavilion angle that are very definitely unacceptable. Cutting a pavilion of 40 degrees (just ½ degree shallower than the



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standard!) produces what is considered industry-wide to be a very clear-and very undesirable-fish eye. And on the deeper side of the spectrum, while a 42 degree angle can still produce a beautiful diamond, anything deeper than that will create a "nail head"-a dark, lifeless spot in the center of the stone caused when the light entering the diamond is lost in the bottom of the pavilion and fails to reflect back through the crown to your eye.

Rest assured that when you buy a diamond from Suncoast Gem Lab, it is always examined carefully by our lab before it is shipped to guarantee that it displays the maximum possible brilliance for its cut.

Fancy Cuts

Ovals, pears, hearts, marquises, emerald cuts, princess cuts, radiants and trilliants Most of the information you hear about diamonds refers to the most common and most traditional cut, the round brilliant. In general, the same facts are true of fancy cuts, though there are a few differences which you ought to keep in mind:

Table Percentages and Crown Angles on a Fancy Shape

As with round diamonds, the table percentage and crown angles of a fancy shape diamond do not affect its brilliance. While some people may have personal aesthetic preferences for smaller or larger tables on round diamonds, these same percentages do not apply to the fancy shapes. For example, while an 75% table would be unthinkable on a round diamond, it is quite common and quite attractive on a princess cut. In this sense, the standard or 'ideal' proportions for a round diamond do not apply to the fancy shapes. Because of their unique designs, there are many more variations possible for the fancy shapes than for rounds (i.e. how many pavilion facets they have; the length-to-width ratio; the prominence of their respective lobes and wings; whether their points are cut as French tips or standard tips). Therefore, there is no equivalent of an 'ideal cut' among the fancy shapes. Though there are most certainly acceptable and unacceptable ranges for each shape, attractive proportions are based more often on judgment calls and personal taste.

The Myth of the 'Bow-Tie Free' Fancy Shape

Theoretically, in a round diamond, all angles and facets are perfectly symmetrical. This creates an even brilliance and play-of-light throughout the diamond. With fancy shapes, however, pavilion angles differ not only from diamond to diamond but also from one part of a diamond to another part of the same diamond. This is because, in order to meet at the same point, angles running from the [longer] length of the diamond to its center must be shallower than the angles running from its [narrower] width to the center. As a result, the light reflected back to the eye from the pavilion differs from point to point within any given diamond. This effect is manifested in the form of small patterns, known as bow ties, in the diamond's center. They are so-called because they often look like two little triangles attached to one another in the shape of a man's bow tie.

These bow ties are not an option, but rather, an integral part of every fancy shape. While some people regard bow-ties as a negative aspect of fancy shape diamonds,



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the truth is that they are unavoidable. A good cutter will try to minimize their appearance.

As with round diamonds, careful design of a fancy shape relies heavily on the pavilion. Most fancy shapes require deeper pavilions than round diamonds do in order to achieve the same amount of brilliance.

Total Depth Percentage

With round diamonds, a total depth percentage in the upper 50s or lower 60s results in a beautiful diamond. However with princess and radiant cuts, this depth would create a diamond that looked like glass - not at all like the diamond you would expect. This is because more of the weight, and more of the depth, in a fancy shape must be dedicated to the pavilion in order to create the proper angles for light to be reflected back to the eye. Therefore, in a princess or radiant cut with a proper crown, a total depth of 70% or more is not uncommon for well-made diamonds. These two shapes generally require the greatest depths of all the fancy shapes.

Emerald cuts differ a bit from most of the other fancy shapes. Rather than having facets that radiate out from the diamond's center to its edge, emerald cuts have facets that are arranged in concentric rows around the diamond. These types of facets reflect light in a different way than the other shapes do. They also require a slighter greater depth percentage than rounds.

Despite the fact that some shapes require greater depth than others, you should not obsess too much over total depth percentage. Remember that, in the end, brilliance is based less on the total depth of a diamond than on how that depth is distributed, and on how the depth interacts with the particular crown and pavilion angles of the diamond.

Finally, keep in mind that most of the 'facts' that you hear about diamonds are really just the opinions and preference of one party or another. Different jewelers have different theories on what makes a diamond beautiful; they market these ideas to customers in order to create the sense of a unique brand of diamond that their customers can feel comfortable with. These theories are not necessarily 'wrong,' but they are also not the only theories that are 'right'. Whenever you see a chart that says the a diamond should be between x% and y% to be beautiful, keep in mind that these boundaries are merely intended as rough guidelines for consumers; you do not automatically risk choosing between a 'good' diamond or a 'bad' diamond in you choose something that lays outside these parameters. These ranges represent only an approximation of the average beautiful diamond. Ultimately, it is up to you to do your homework, look at a few diamonds and get to know your own personal tastes before you decide to buy. Then relax and trust your own instincts and the excellent quality of Suncoast Gem Lab.



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Color

The diamond that most people think of as the traditional or ideal diamond is, in truth, totally colorless. It's this absence of color that gives a diamond its great value. Even the slightest tinge of yellow or brown in a white diamond will decrease its value. The presence of color in an otherwise ideal white diamond shouldn't be confused with a fancy colored diamond, whose value is based precisely on the quality of its color. To keep it simple, just remember that diamonds are found in three categories, White Diamonds, Fancy Natural Colored Diamonds and Color Treated Diamonds:

White Diamonds, diamonds falling within GIA's D to Z color grading scale, traditionally used for engagement rings and fine jewelry

Fancy Natural Colored Diamonds, diamonds with faint to vivid saturations of hues such as blue, yellow, or pink, frequently used for fashion jewelry

Here is the scale used to grade color in diamonds:



Color Grading

Generally speaking, when customers or jewelers speak of a diamond's color, they are referring to the presence or absence of color in white diamonds. In this case, the rule of thumb is, the whiter a diamond's color, the greater its value. However, this does not mean that lower color diamonds cannot be just as beautiful when they are cut well.

To grade 'whiteness' or colorlessness, most jewelers refer to GIA's professional color scale that begins with the highest rating of D for colorless, and travels down the alphabet to grade stones with traces of very faint or light yellowish or brownish color. Though the color scale continues all the way to Z, Suncoast Gem Lab does not sell any diamonds graded lower than M unless specifically requested by the client.

Diamonds graded D through F are naturally the most valuable and desirable because of their rarity. Such diamonds are a treat for the eyes of any connoisseur. However, if you are working within a budget, you can still obtain great value with diamonds graded G through I, since no color is visible to the untrained eye with these stones. And while a very, very faint hint of yellow will be apparent in diamonds graded J through M, this color can often be minimized or almost completely hidden by carefully selecting the right jewelry in which to mount your diamond. Yellow metals will hide traces of color in a colorless diamond, while white metals will enhance it. Keep in mind that, while most people strive to buy the most colorless diamond they



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can afford, there are many people who actually prefer the warm, sunny glow of lower-color diamonds.

Fancy Colored Diamonds

Everyone has heard talk about "The Four Cs". They are significant because, for colorless diamonds, color is only one of several quality considerations that should be given equal weight in choosing the right stone. With fancy color diamonds, however, it's a whole different ballgame. Here, the purity and richness of the diamond's color is the most important consideration.

Many fancy color diamonds come from Australia. They are generally smaller than other diamonds and are used primarily in fashion jewelry. Yellow is the most commonly-occurring fancy color, while red and green diamonds are extremely rare. The price of fancy colored diamonds is dependent on several factors: the particular hue, or spectral color, of the diamond (the rarer the color, the greater the cost); the richness or saturation of the color (ranging from very light to light to intense to vivid); and the purity of the color (i.e. whether the color is bright and clear, or 'muddied' by the presence of other color-causing trace elements).

Treated Colored Diamonds

Though fancy colored diamonds occur rarely in nature, with the marvels of modern science they can occur quite readily in a laboratory setting. Irradiated Diamonds are natural colorless diamonds that have been treated with a special combination of radiation and intense heating to bring forth a wide spectrum of rich fancy colors. The treatment creates a permanent color change, and leaves no harmful traces of radiation on the diamond. Though they are still 'real' diamonds, irradiated fancy colored diamonds have a significantly lower value than naturally occurring fancy colored diamonds, and they can be detected for what they really are through spectroscopic analysis in a properly equipped laboratory setting.

Recently, similar treatments have also been developed to make lower-color white diamonds more white.

Clarity

When we speak of a diamond's clarity, we are referring to the presence of identifying characteristics on and within the stone. While most of these characteristics are inherent qualities of the rough diamond and have been present since the earliest stages of the crystal's growth below ground, a few are actually a result of the harsh stress that a diamond undergoes during the cutting process itself.

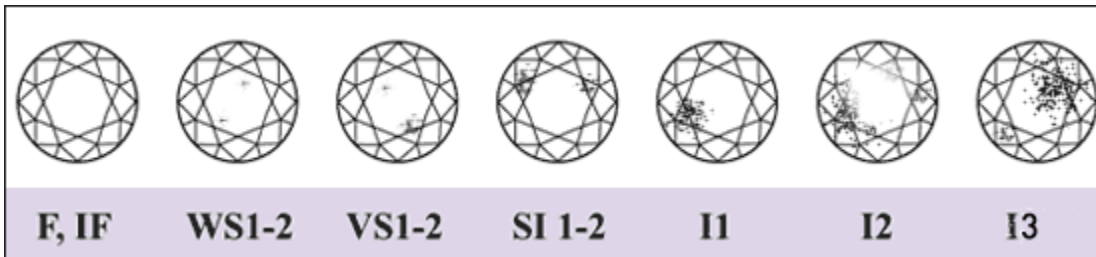
Clarity Grading Diamonds

All diamonds are graded based on their appearance--that is, the presence or absence of blemishes and inclusions--under 10x magnification. They are graded on a scale that ranges from Flawless to Imperfect:





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Flawless	no external marks or internal inclusions
IF	surface blemishes but no internal inclusions
VVS1, VVS2	very, very slight inclusions
VS1, VS2	very slight inclusions
SI1, SI2	slight inclusions
I1, I2, I3	inclusions visible under 10X magnification as well as to the human eye

Flawless diamonds have no blemishes or inclusions. To be graded as Flawless, the diamond must appear completely clean to the gemologist under both a jeweler's loupe and a microscope at 10x magnification.

Internally Flawless (IF) diamonds have no internal inclusions and only very, very minor blemishes that are apparent only under 10x magnification.

Very Very Slightly Included (VVS) diamonds are graded within one of two subcategories: VVS1 and VVS2. In both categories, the inclusions which are present are extremely hard to see, even for a trained gemologist. Often, even under magnification the inclusions are still only visible from the pavilion (upside-down position) and not in the face-up position. The most typical inclusions found in diamonds within these two clarity grades are a few tiny pinpoints, faint clouds, tiny feathers, or internal graining.

Very Slightly Included (VS) diamonds are also graded within one of two subcategories: VS1 and VS2. They have minor inclusions which are minute and impossible to detect with the naked eye, but which are apparent to a gemologist under 10x magnification. Inclusions which are typical in these clarity grades include small included crystals, feathers, distinct clouds, and groupings of pinpoints.

Slightly Included (SI) diamonds fall within one of two subcategories: SI1 and SI2. Within both of these categories, inclusions are often centrally located and easily detectable under 10x magnification. In some cases, an inclusion may even be visible to the naked eye when the diamond is held a couple of inches away from the viewer's eye, though no inclusions will be visible when the diamond is mounted or held at normal wearing distance (12" to 16") from the eye. Typical inclusions in these clarity grades are included crystals, clouds, and feathers.



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Imperfect (I) diamonds actually are subdivided into three categories--I1, I2, and I3--though it is unlikely that you will ever see an I3 being sold as jewelry (because of the severity of their inclusions, they are usually used as industrial abrasives instead). However, it is not uncommon to find many attractive I1 and I2 diamonds being sold today. These grades contain inclusions that are very obvious under 10x magnification; these inclusions may even be visible to the naked eye as well. Typical characteristics of these grades include large included crystals and feathers. Because of their lower clarity, I1 and I2 diamonds can offer an excellent cost savings for customers who are working with a smaller budget but still desire a good size diamond. If you are buying from Suncoast Gem Lab, don't be concerned about the stability or brilliance of these diamonds; we will not sell any Imperfect diamond in which the inclusions threaten the integrity of the diamond or diminish its brilliance.

Clarity Characteristics

Clarity characteristics are usually divided into two categories:

BLEMISHES - Just like the blemishes we notice on our own faces every now and again, these occur on the surface of a diamond and are usually a result of the environment that the diamond has encountered, rather than an inherent quality of the diamond crystal. The most common types of blemishes found on diamonds are:

Extra Facets: These are usually cut to remove a near-surface inclusion and to raise the overall clarity grade of the polished diamond. In many cases, they do not affect the clarity grade. In most cases, they are undetectable to the naked eye.

Naturals: A natural is a small part of the original rough diamond's surface which is left on the polished diamond, frequently on or near the girdle. While these are blemishes, they might also be regarded as a sign of skilled cutting; the presence of a natural reflects the cutter's ability to design a beautiful polished gem, while still retaining as much of the original crystal's weight as possible. In many cases, naturals do not affect the clarity grade. In most cases, they are undetectable to the naked eye. Another type of natural is the Indented Natural; in this case, the portion of the original rough diamond's surface which is left on the polished diamond dips slightly inward, creating an indentation. Usually, the cutter makes an effort to cut the polished diamond so that the indented natural will be confined to either the girdle or the pavilion (making it undetectable to the naked eye in the face-up position).

Surface Graining: This is one of the few types of blemishes which actually occur during a diamond's growth rather than during the cutting process. Despite its name, surface graining does not exactly occur on the diamond's surface; it is an integral part of the crystal's structure and usually cannot be removed from the diamond without causing significant weight loss. Graining is caused by minor irregularities and stresses which occurred millions and millions of years



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ago when the diamond crystal was still growing. Under a microscope, this graining appears as transparent wavy lines running over the diamond's surface; without a microscope these lines cannot be seen at all.

INCLUSIONS - These are characteristics that occur inside the diamond itself. Nearly all internal inclusions are naturally occurring. The most common ones are:

Included Crystals: These are exactly what they sound like: minute crystals of other minerals--and, in some cases, even other small diamonds--that were absorbed by the diamond crystal as it was still growing. Some are transparent and some have color, depending on what type of crystals they are. Under a microscope they often look like little round bubbles inside the diamond, but some can have more unusual shapes. In the majority of circumstances, included crystals are undetectable to the naked eye. When setting the clarity grade of a diamond, gemologists consider not only the mere presence of included crystals, but also the number of crystals present, their size, and their nature (i.e. transparent or dark; large or small).

Pinpoints: These are included crystals that are so tiny that, even when magnified to 10x, they still only look like little dots. Even for trained gemologists, these can sometimes be tough to find. Except when gemologists are trying to distinguish between the highest clarity grades (Flawless, Internally Flawless, and Very Very Slightly Included) these types of inclusions rarely impact a diamond's clarity grade significantly.

Needles: Needles are yet another type of included crystal. Under magnification, instead of appearing as little bubbles, they look like tiny super-slender needles, as their name implies.

Knots: A knot is an included diamond crystal that reaches from the inside to the surface of the polished diamond.

Chips: A chip is a small, very shallow opening on a diamond's surface, usually on or near the girdle. It may be a naturally occurring opening in the diamond, or it may be created, either by the removal of a tiny included crystal or by a sharp impact with another object.

Cavities: A cavity is a larger version of a chip. Cavities are sometimes created by the diamond cutter when an included crystal near the surface of the rough diamond is removed during the faceting process, leaving an indentation where the crystal was originally imbedded.

Feathers: These are small fractures in a diamond. They are usually caused by the tremendous stress that the diamond suffered while it



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was growing underground. In some cases the feather both begins and ends beneath the diamond's surface and, in other cases, the feather begins inside the diamond and extends to the surface. Likewise, when viewed under magnification, some feathers are transparent and others have a light white appearance to them. The term "feather" comes from the fact that, under magnification, these fractures often seem to have an indistinct, feathery shape to them. The size, number and position of these feathers are usually a significant determining factor in setting the clarity grade of a diamond. However, while the idea of buying a diamond with "fractures" may sound scary, the reality is really much better than it sounds at first; with normal wear and care, it is exceptionally unlikely that such diamonds will ever "crack in half" as many customers fear. Consider this: even with the fractures, these diamonds survived their growth and their journey to the earth's surface intact. Once on the surface, they also survived the mining process, as well as the brutal stresses of the diamond cutting process. Though diamonds are certainly not invulnerable to damage, basic consideration to their care and handling during everyday wear will most likely protect them over the course of several human lifetimes. If you are still concerned about keeping your diamond safe from damage, it would be wise to select a jewelry setting that protects it well. Bezel settings (which cover the diamond around its entire edge) and prong settings that carefully cover any vulnerable areas, such as the corners or points of fancy shapes, are two excellent choices.

Internal Graining: Like surface graining, which is described above under the category of 'blemishes,' this is a naturally occurring phenomenon in some diamonds. The appearance of internal graining is very similar to that of surface graining, except that it occurs within a diamond rather than on the diamond's surface.

Clouds: You'll notice from many of the above descriptive terms that gemologists have a bit of a poetic nature; 'needles,' 'feathers,' 'clouds'--these are just a few examples of the vocabulary of the gemologist. While the terms are poetic, they are also an effective way to describe the appearance of many inclusions that would otherwise be difficult to explain. Clouds are actually a grouping of a number of extremely tiny inclusions that are too small to be distinguishable from one another, even under magnification. The result is that, under a microscope, this grouping often looks like a soft transparent cloud inside the diamond. Of course, clouds cannot be seen with the naked eye. Usually, this sort of inclusion does not significantly impact a diamond's clarity grade. However, in certain diamonds, clouds are large or intense enough to reduce brilliance; rest assured that Suncoast Gem Lab will not sell any diamond in which inclusions compromise the overall brilliance of the stone.



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Clarity Treated Diamonds

In some cases, cutters may choose to use certain treatments in order to improve the clarity grade of a diamond. Some of these treatments are common and accepted practices; others are less permanent and less accepted.

Laser Drill Holes - Laser drill holes are one of the few man-made inclusions that can occur inside a diamond. Why on earth would anyone want to drill holes into a perfectly good diamond? It may seem counter-productive, but drilling this type of hole into a diamond can actually raise its clarity grade. In some diamonds, the clarity grade may be determined mainly by the presence of just one or two dark included crystals in a diamond that is otherwise relatively free of inclusions. In certain circumstances, the diamond cutter will decide to use a procedure to remove the dark inclusions and, hopefully, increase the clarity of the diamond. How is it done? First of all, a hole is precisely made with state-of-the-art equipment; it extends no further than it needs to, and its width is so small (about the size of a pinpoint) that a loupe or microscope is usually required to detect it. Next, a strong acid solution is forced into the new hole. Since diamonds are resistant to acids, the solution actually dissolves the included crystal while leaving the diamond completely unharmed. The end result is a more transparent diamond. The structural stability of the diamond is not compromised in any way by this hole, and the process is permanent. Suncoast Gem Lab does not advise purchasing any laser-drilled diamonds graded SI1 or higher. Though this is a permanent and acceptable clarity treatment, Suncoast Gem Lab will not sell a diamond with a drill hole unless the customer understands what the treatment is, and what he is buying.

Fracture Filling - Fracture filling is a process that is performed on certain diamonds which have white feathers that reach to the surface of the stone. To reduce the appearance of the feather, thereby making the clarity seem higher, some cutters or jewelers will force a liquid into the diamond through this fracture. The liquid then hardens to a clear solid, filling the fracture and reducing its appearance under magnification. However, this treatment is not permanent; under sufficiently high heat, the liquid may melt and leak out of the diamond, leaving the diamond in its original state. Because this particular type of treatment is not permanent, and because many in the diamond trade regard it as a somewhat deceptive practice, most labs (including GIA and AGS) refuse to grade diamonds that have been fracture filled. Suncoast Gem Lab does not sell fracture-filled diamonds.

The Bottom Line

Grading is done in a lab by experts using sophisticated gemological equipment. When a gemologist grades a diamond, he or she also creates a "plot" of a stone-- essentially a blue print of every clarity characteristic that appears in the diamond. This plot is found on the right-hand side of the diamond grading certificate. (An exception is the case of some smaller weight diamonds which are certified with GIA 'dossiers' rather than with full-size grading reports; dossiers describe the main characteristics of the diamond but do not plot them out. Every diamond that is accompanied by a dossier also has the certificate number microscopically laser-inscribed on its girdle as proof of its identity.) While the presence of these clarity



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characteristics do lower the clarity grade, and therefore the value, of a diamond they can also be viewed as proof of a diamond's identity. Since no two diamonds are exactly the same, comparing the uniqueness of your diamond's clarity characteristics with the plot provided on the diamond certificate offers assurance that the diamond you pay for is the same diamond you receive.

Carat Weight

It's the old quandary. Is bigger better? Size is sought after, naturally; but overall quality counts in the stretch. This balance of size and quality makes up much of the art of a professional gem cutter. It is the cutter's job to produce a gorgeous diamond while giving the consumer the highest CARATAGE for his or her money.

Caratage means CARAT, the measurement used to weigh a diamond.

The word carat is taken from the perfectly matched carob seeds that people once used in ancient times to balance scales. So uniform in shape and weight are these little seeds that even today's sophisticated instruments cannot detect more than three one-thousandths of a difference between them.

Don't confuse it with KARAT, the method of determining the purity of gold.

What's The Point?

One Carat= 200 milligrams, or 0.2 grams. 142 carats adds up to one ounce. Carats are further divided into points.

▶ One carat	100 points
▶ Three-Quarter carat	75 points
▶ Half-carat	50 points
▶ Quarter-carat	25 points
▶ Melee	those smaller stones used in pave or channel settings. They weigh in at less than 0.15 carats and are grouped together or used to augment a larger stone.

What Does All This Mean, and How Does it Work?

The price of a diamond will always rise proportionately to the size of the stone. Larger diamond crystals are more rare and have a greater value per carat. So, a one carat diamond of a given color and clarity will be much more valuable than 2 one half carat diamonds of equal quality.



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Diamond Shapes

The classic diamond is, to most people, a round gem of sparkling white brilliance with a kaleidoscope of dazzling facets to entice the eye. Yes and no. Diamonds are natural crystals of varying size and shape formed in the earth over millions of years. The traditional round brilliant diamond, though the most popular diamond shape of all, is hardly the whole story. By the diamond cutter's art these crystals are carved into gems of spectacular and whimsical beauty. A cutter's skill will produce a diamond of the greatest size with the fewest flaws and the most brilliance.

Take a tour and see what we mean:

Round



Round Brilliant

This shape has set the standard for all other diamond shapes, and accounts for more than 75% of diamonds sold today. Its 58-facet cut, divided among its crown (top), girdle (widest part) and pavilion (base), is calibrated through a precise formula to achieve the maximum in fire and brilliance.

Oval



Oval

An even and perfectly symmetrical design, the oval is popular among women with small hands or short fingers. Its elongated shape gives a flattering illusion of length to the hand.

Marquise



Marquise

An elongated shape with pointed ends inspired by the fetching smile of the Marquise de Pompadour and commissioned by the Sun King, France's Louis XIV, who wanted a diamond to match it. It is gorgeous when used as a solitaire or when enhanced by smaller diamonds.

Pear



Pear

A hybrid cut, combining the best of the oval and the marquise, it is shaped most like a sparkling teardrop. It also belongs to that category of diamond whose design most complements a hand with small or average-length fingers. It is particularly beautiful for pendants or earrings.



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Heart



Heart

This ultimate symbol of romance is essentially a pear-shaped diamond with a cleft at the top. The skill of the cutter determines the beauty of the cut. Look for a stone with an even shape and a well-defined outline.

Emerald



Emerald

This is a rectangular shape with cut corners. It is known as a step cut because its concentric broad, flat planes resemble stair steps. Since inclusions and inferior color are more pronounced in this particular cut, take pains to select a stone of superior clarity and color.

Princess



Princess

This is a square or rectangular cut with numerous sparkling facets. It is a relatively new cut and often finds its way into solitaire engagement rings. Flattering to a hand with long fingers, it is often embellished with triangular stones at its sides. Because of its design, this cut requires more weight to be directed toward the diamond's depth in order to maximize brilliance. Depth percentages of 70% to 78% are not uncommon.

Trilliant



Trilliant

This is a spectacular wedge of brittle fire. First developed in Amsterdam, the exact design can vary depending on a particular diamond's natural characteristics and the cutter's personal preferences. It may be a traditional triangular shape with pointed corners or a more rounded triangular shape with 25 facets on the crown, 19 facets on the pavilion, and a polished girdle. It is definitely for the adventurous.

Radiant

This square or rectangular cut combines the elegance of the emerald shape diamond with the brilliance of the round, and its 70 facets maximize the effect of its color refraction. Because of its design, this cut requires more weight to be directed toward the diamond's depth in order to maximize brilliance. Depth percentages of 70% to 78% are not uncommon.

Cushion

An antique style of cut that looks like a cross between an Old Mine Cut (a deep cut with large facets that was common in the late 19th and the early 20th centuries) and a modern oval cut.



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The shape of things to come in diamonds has already produced other fanciful and innovative styles such as the flower, cloverleaf, triangle and kite. Nor does it stop there. Some cuts are variations on standard shapes, others spin off the natural crystal formation of the stone, and still others take the idea of shape to revolutionary new heights. Individuality and taste determine the fashion, and the magic of the gem cutter transforms each stone into a unique work of art.

Fluorescence

What is fluorescence in a diamond?

Fluorescence is the effect that is seen in some gem-quality diamonds when they are exposed to long-wave ultraviolet light (such as the lighting frequently seen in dance clubs). Under most lighting conditions, this fluorescence is not detectable to the eye. However, if a diamond is naturally fluorescent, it will emit a soft colored glow when held under an ultraviolet lamp or "black light." Fluorescence is not dangerous to the diamond or to the wearer; it is a unique and fascinating quality that occurs naturally in a number of gems and minerals.

Do all diamonds fluoresce in the same way?

No. Some diamonds do not fluoresce at all. On diamond grading reports, non-fluorescent diamonds are described as having either "inert" fluorescence, or "none."

Of the diamonds which do exhibit fluorescence, the degree of fluorescence can vary from "faint" (a slight glow of color that is difficult to see under ultraviolet light) to "medium" to "strong" to "very strong" (a deep, even glow that is very evident under ultraviolet light).

Even the color of the fluorescence itself can vary from diamond to diamond. Blue is the most common color of fluorescence which occurs in diamonds, but yellow, green and white fluorescence are among the other naturally-occurring colors of fluorescence. In fact, the famous Hope diamond exhibits a rare red fluorescence when it is exposed to ultraviolet light.

Is fluorescence a bad thing in a diamond?

Not at all. Most of the time, fluorescence doesn't affect a diamond one bit under normal lighting conditions.

In the winter of 1997, the GIA published findings on the effect of blue fluorescence on the appearance of diamonds in their journal, *Gems & Gemology*. After studying 1000 diamonds, their conclusion was that, for non-trade observers (that is, the majority of the jewelry-buying public), the difference between varying levels of fluorescence was indistinguishable. Specifically, for most consumers, fluorescence had no visible effect on a diamond's color appearance or transparency. In the final sentences of the study, GIA concluded:

"The present study also challenges the trade perception that fluorescence usually has a negative effect on better-color diamonds. Our results show that the diamond



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industry would be better served by considering each individual diamond on its own merits."

In fact, many people happily own diamonds for their whole lifetimes without ever being aware of the presence or absence of fluorescence in their stones. And while most people are a little uncomfortable with the idea of fluorescence when they first hear about it, many find it very fascinating and attractive when they have the opportunity to see it in person.

Fluorescence can even be a positive quality in a diamond, and a financial consideration when selecting the diamond that is right for you. Diamonds of high color with strong or higher fluorescence are generally lower-priced than their lower-fluorescent counterparts, due to trade perceptions. Because of this, choosing a diamond with high fluorescence can represent a significant cost-savings for a savvy customer.

When choosing a diamond with I color or below, strong fluorescence and higher can create an aesthetic advantage for customers. In diamonds with these colors, the color of the strong fluorescence actually counteracts the slight yellow body color of the diamond, creating a diamond that appears to be more white or colorless than it actually is. In this case, a budget-conscious consumer can purchase a lower-color but whiter-looking diamond for less than they would pay for a higher-color diamond with a comparable face-up appearance.

Diamonds with no fluorescence or faint fluorescence have no effect on diamond value or appearance. Financially and visually, medium fluorescence has only a slight effect.

In some rare cases, very strong fluorescence may create a foggy or "oily" appearance that detracts from the brilliance of the diamond. However, such diamonds account for only about 2% of all gem-quality diamonds on the market. As mentioned in the above-referenced GIA study, it is important to judge every diamond on its own merits. We, at Suncoast Gem Lab, have the capabilities and expertise to recognize and select only the finest-quality diamonds.

Suncoast Gem Lab will not sell any diamond which exhibits anything less than the highest levels of brilliance.

The Ideal Cut

The pursuit of perfection is a human calling. The diamond -- already perfection in the eyes of most -- has been cut and shaped in an ever-changing variety of ways since modern cutting techniques were invented, all in an effort to maximize its full potential for brilliance. Predecessors of the modern round brilliant, such as the European or Old Mine cut, were fairly deep stones with very small tables, large culets and short pavilion facets; they was no single standard way of cutting them and diamonds from that time therefore vary widely in appearance. However, in 1919, diamond cutter Marcel Tolkowsky published a doctoral dissertation that would change all of that. Using only his own visual assessments of different variations of diamond cuts, he presented a theory about the cutting angles which would create the most



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proportionate balance of brilliance and dispersion in a gem-quality diamond. Tolokowsky's measurements for achieving this balance were exact and strict: a $34\frac{1}{2}^{\circ}$ crown angle with a 53% table, which created a 16.2% crown height; and $40\frac{3}{4}^{\circ}$ pavilion angle combined with a 43.1% pavilion depth. Improved cutting techniques and technology which were being developed at the same time finally allowed cutters to achieve these more precise and stream-lined designs.

Despite Tolokowsky's theories, opinion regarding diamond proportions was not unanimous. Tolokowsky's measurements were eagerly adopted and adhered to by the AGS. However, by the beginning of the 1950s, a backlash had begun and diamond cutters increasingly moved away from the ideal cut and toward diamonds with shallower crown angles -- angles as low as $32\frac{1}{2}^{\circ}$ -- and larger tables of 60% and even 64% or 65%. Many went so far as to argue that the proportions of the Ideal Cut created an inherent over-abundance of dispersion, or "fire," which distracted from the diamond's brilliance. As proof that the Ideal Cut was not an absolute embodiment of perfection, they pointed to Eastern cultures, which actually considered larger tables more beautiful than the smaller ones which typified an Ideal Cut. Even those who embraced the Ideal Cut realized the impracticality of cutting diamonds to such a specific set of parameters and soon modified its definition by expanding the acceptable table size from Tolokowsky's original 53% up to nearly 58%.

Against this backdrop of disagreement, The American Gem Society (AGS) opened its own lab in 1996. They sought to bring the public trust into their camp by providing independent documentation to confirm the superiority of the Ideal Cut. To accomplish this, the AGS began to grade and certify cut and proportions -- something that had previously not been done by other labs. These grades were based on how closely a given diamond's cut conformed to the standards established by the Ideal Cut. The grading scale ranged from 0 (the finest quality) to 10 (poor quality). Diamonds that fell within the Ideal Cut range were, of course, graded as 0. AGS's influence on the Ideal Cut's rise in popularity is evidenced by the fact that, today, the term "AGS zero" is synonymous with the Ideal Cut.

What Exactly Is An Ideal Cut?

By the time the AGS Lab opened its doors, the Ideal Cut was no longer conceived of as only the single set of proportions set forth in Tolokowsky's original dissertation. Rather, it was regarded as a design based on a narrow range of combinations of proportions.

The range is:

- **Table Diameter:** 52.4% to 57.5%
- **Crown Angle:** 33.7 degrees to 35.8 degrees
- **Girdle Thickness:** Thin to Slightly Thick (.51% to 2.95%)
- **Pavilion Angle:** 40.2 degrees to 41.25 degrees
- **Culet:** None (Pointed) to Medium
- **Total Depth:** 56.88% to 63.92%



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These proportions are measured by a precisely-tuned instrument called a Sarin. No machine can measure a diamond's quality of finish (this work is done by highly trained gemologists), but the AGS 0 cut grade also means that a diamond possesses ideal symmetry and polish.

Because AGS was so successful in promoting their Ideal Cut as the "best" diamond on the market, many jewelers have jumped on the band-wagon to make a profit from its popularity with customers. Technically, Ideal Cut is a brand name for diamonds that both fall within the Ideal range and are accompanied by an AGS certificate. However, in recent years the term "ideal cut" has been adopted by many jewelers, either unwittingly or to intentionally deceive customers, to loosely describe any diamond that falls within these general cutting parameters. Customers should also be aware that many jewelers inaccurately use the term to describe any diamond that has a small table.

Caution: You should consider it nothing less than outright deception if a GIA-certified diamond with a small table is described by any jeweler or diamond retailer as an "Ideal Cut" if it also possesses any of the following qualities:

- Polish or Symmetry rated as Good, Fair, or Poor
- A girdle that is extremely thin, thick, or extremely thick

Diamonds with these qualities may be attractive and valuable. However, such diamonds are clearly not Ideal Cuts based on the specifications recognized by AGS. Describing such diamonds as Ideal or even as Very Good is an inaccurate representation of the diamond's quality.

So Is The Ideal Cut Really The Best?

Recent research suggests that the answer is really just a matter of personal opinion.

Around the globe, the Gemological Institute of America (GIA) -- a major supporter of public gemological and diamond education -- is regarded as the leading expert on anything in the gem world. Their recent study on brilliance in diamonds relied on thousands of graded diamonds from the Institute's collection, as well as on thousands of computer simulations which analyzed the way light travels into, out of, and within a diamond. The surprising conclusion of this study was that, while Ideal Cut diamonds do display a great deal of brilliance, they don't necessarily always display the most brilliance. Rather than finding one single range of proportions that were the most brilliant, the study found a number of differing combinations of proportions that could all bring out high degrees of brilliance in a diamond. In fact, at the end of their report in the Fall 1998 issue of *Gems & Gemology*, William Boyajian, President of the GIA, concluded that:

"Although it is not GIA's role to discredit the concept of an 'Ideal' cut, on the basis of our research to date we cannot recommend its use in modern times."



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The Bottom Line

In the end, it comes down to aesthetics. Personal preferences and aesthetic tastes vary widely from person to person, and it would be impractical to assume that only one type of diamond would be appropriate for all customers. It's up to the buyer to decide what's beautiful to him or to her. No woman who falls in love at first sight with a diamond engagement ring is thinking about the GIA or AGS. She is appreciating the unique beauty inherent in the diamond, and the love which is symbolized by the giving of that diamond.

At Suncoast Gem Lab we pay a great deal of attention to the diamond's finish; "finish" refers to a diamond's polish and symmetry. A quality finish is really a statement of the care and skill that the cutter has put into designing the diamond. An Ideal, Excellent or Very Good finish display a rare demonstration of the height of the cutter's art, but a Good finish also offers proof of a carefully and lovingly cut diamond.

No matter what your personal preferences are in terms of table size and other diamond proportions, we urge you to take the diamond's finish into consideration as well. We consider finish such an important contribution to a diamond's beauty that we will not carry any diamond graded lower than Good.

If your heart is set on owning an Ideal Cut, remember that, while they are exceptional, they are generally also more expensive. Be prepared to spend a little more for an Ideal Cut than you will for a comparable diamond that is not graded as Ideal. Also, if you truly want an Ideal Cut, make an effort to select a diamond that has been graded by the AGS rather than the GIA or another lab; with an AGS certificate, you can be guaranteed that all of your diamond's qualities fall within Ideal specifications. In all circumstances, beware of jewelers who describe as "ideal" any diamond with Ideal proportions but without high-quality finish.

If you are not already set on buying an Ideal Cut, do not be persuaded to buy an Ideal Cut simply because a jeweler tells you it is the only type of diamond that is brilliant. If you are concerned that a diamond with a larger table might somehow look 'less beautiful' than a diamond with a smaller table, please consider the following examples of the difference between two table sizes: in a 1 carat diamond, the difference between a 57% "ideal" table and a table of 59% (which is just outside the traditional ideal range) is a mere 0.13 millimeters -- this is just slightly more than the thickness of a single human hair! And while the difference between a 57% table and a 62% table might sound dramatic, even this represents a difference of less than 0.30 millimeters. These subtleties are very hard to detect with the human eye, and to some people, such subtleties are not worth the added expense that buying an Ideal Cut entails.

In the long run, depending on your tastes, you can find many equally beautiful, and brilliant, diamonds in the Ideal Cut and non-Ideal ranges. Whatever type of diamond you ultimately decide to purchase, you can count on Suncoast Gem Lab to sell only brilliant, high-quality diamonds. We will not sell any diamond that does not display necessary brilliance to bring out the diamond's natural beauty.



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Diamond Certificates

The pursuit of perfection is a human calling. The diamond -- already perfection in the eyes of most -- has been cut and shaped in an ever-changing variety of ways since modern cutting techniques were invented, all in an effort to maximize its full potential for brilliance. A certificate, or diamond grading report, is a professional evaluation of a diamond's quality and characteristics. This certificate, when it accompanies a diamond, serves as proof of the diamond's identity.

Frequently the certificate contains a 'plot' or diagram of all the characteristics that are found in the diamond. Upon request, Suncoast Gem Lab can provide an appraisal on all diamond or jewelry purchase of \$1,000 or more.

Please note: a certificate is not the same thing as an appraisal. A certificate describes the quality of a diamond, but it does not place a monetary value on the gem.

If you are seeking to insure your diamond, you will need to get a separate appraisal; most appraisers, though, will base their appraisals on the stated quality of the diamond that is found on the certificate.

Who Issues Certificates?

This evaluation can be performed by anyone with the appropriate training and lab equipment, but it is most trustworthy and most useful when it is issued by an accredited independent lab that is not involved in the sale or purchase of the diamond.

The Gemological Institute of America (GIA) and the American Gem Society (AGS) are the two most widely regarded and recognized labs in the world. Because some other labs are not as strict with their standards, and many err on the side of leniency to please the retailers, we recommend always buying only GIA or AGS-certified diamonds.

If you do elect to buy a diamond elsewhere, always ask for credentials of the certifying lab, and choose carefully.

What's On A Certificate?

All certificates contain the following information:

- Certificate number that is unique to the diamond
- A description of the shape of the diamond
- The carat weight of the diamond
- The color of the diamond
- The clarity of the diamond
- The length, width and depth of the diamond in millimeters
- The quality of the diamond's polish and symmetry



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- The total depth percentage and table percentage of the diamond
- A description of the girdle's appearance
- A description of the culet's appearance
- A description of the presence or absence of fluorescence in the diamond

Some certificates may also contain the following additional information:

- An assessment of the quality of the diamond's cut: Currently only AGS offers this assessment on their certificates.
- A plot of the clarity characteristics in the diamond: Some diamonds weighing 1.00 carats or less are accompanied by dossiers, rather than a full grading report; these dossiers provide a written description of the main characteristics rather than a plot, but they are still considered to be equally valid proof of the diamond's identity. In fact, all diamonds that are accompanied by GIA dossiers have their certificate numbers laser-engraved on the girdle as further proof of their identity.
- A section entitled "Comments" that is listed directly underneath the description of the diamond's fluorescence on a GIA report, or underneath the carat weight on an AGS report: Usually this section simply describes particular characteristics of the diamond's clarity, and it is of no concern. However, for some diamonds, the comments may refer to "crown angles;" this means that the angles of the diamond's crown lay outside of what is generally considered acceptable for that particular cut. Suncoast Gem Lab does not sell any diamond with such crown angles, and we strongly recommend that you avoid buying any diamond that is accompanied by a certificate that notes the crown angles.

How Do I Get A Certificate With My Diamond?

Just ask for one. Suncoast Gem Lab provides a certificate with every diamond we sell. In many jewelry stores, they're provided upon request.

A quick rule of thumb: If a jewelry store offers to sell you a diamond without a certificate, keep in mind that it means you are buying the diamond based only on the salesperson's claim about its quality, and that a trained gemologist or even other jewelers may disagree with the salesperson's assessment.

That means that, by independent laboratory standards, you may not be buying what the salesperson claims, so the diamond may not be such a bargain in the end. Wherever you choose to get your diamonds, always buy from someone you trust and get a report from a professional lab to ascertain that you've gotten what you paid for.

What's Better – Certified Or Non-Certified?

There is no physical difference between a diamond that is certified and one that is not. A certificate does not change the nature of a diamond in any way.





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The difference between a certified and an uncertified diamond is that, with the certified diamond, you have tangible, legal assurances as to the particular nature and quality of the diamond you are purchasing.

A certified diamond comes with a diamond grading report guaranteed by an accredited gem lab. This report assures the customer that the diamond is independently recognized as possessing all the qualities specified by that report.

On the other hand, an uncertified diamond is not accompanied by a diamond grading report, and therefore its stated quality is based only on the word of the seller.

An uncertified diamond is not necessarily a bad diamond; certainly, it can be as beautiful as its certified counterpart. However, we encourage our customers to buy certified diamonds for the following reasons:

1. Shopping for certified diamonds allows you to make an informed choice about your selections, and to comparison shop. You can compare one diamond with a particular weight and quality with other diamonds of similar weight and quality to determine which is the better value.
2. With uncertified diamonds, it is difficult to determine whether the quality assessments of one jeweler will be as stringent and precise as the judgments of other jewelers; that is, not all jewelers may agree about the quality of an uncertified diamond.
3. A diamond grading report adds value to a diamond. The quality assessments made by independent labs, such as GIA or AGS, are recognized worldwide. These quality assessments are used by appraisers to determine the insurance or replacement value of your diamond.
4. If you purchase an uncertified diamond, there is no guarantee that the appraiser will appraise your diamond at the same level at which the jeweler who sold it to you did. A quick note on how reports from various independent labs compare with one another: GIA and AGS are considered the industry leaders, and the final word on gem quality, among diamond dealers worldwide.
5. While plenty of other independent labs exist, some are a bit lax in their assessments of diamond quality and do not command the same respect for consistency and quality of grading that GIA and AGS do. For this reason, if you are in the market for a diamond, make an effort to buy only GIA or AGS-graded diamonds.
6. A diamond grading report adds an increased comfort-level to your purchase. Because the quality of your purchase has been independently verified, you can feel assured that you have made a wise purchase and that you have received exactly what you have paid for.