



The



**Cs of
Choosing the
Right
Diamond**

By Devon Tyler
Creator of TeachJewelry.com

Introduction

There's endless terminology surrounding diamonds.

If you're buying one for the first time, you're likely concerned about overpaying for a low-quality gem.

And this is no accident.

Jewelers have profited off buyers who are unaware of what factors determine the value of a diamond, leading to huge margins on these sales.

The less you know, the more likely it is that you'll focus on the wrong characteristics and end up paying too much.

If you have explored buying a diamond, you've probably learned about the four Cs: carat, clarity, color, and cut.

1. Carat

2. Clarity

3. Color

4. Cut

Each plays an important role in its overall performance and value.

But there's a fifth C that's also important and lays the foundation for the other four.

It's certification.

We'll discuss each of these five Cs in detail so you can make an informed purchase.

Carat

Carat is a unit of weight equal to 0.2 grams.

It's often the quality that earns the most attention.

When you hear about celebrity engagement rings, the headline is usually about the carat weight, followed by its shape.



Hearing that someone sports a five-carat diamond, when most engagement rings weigh closer to one carat, shows just how much some are willing to spend.

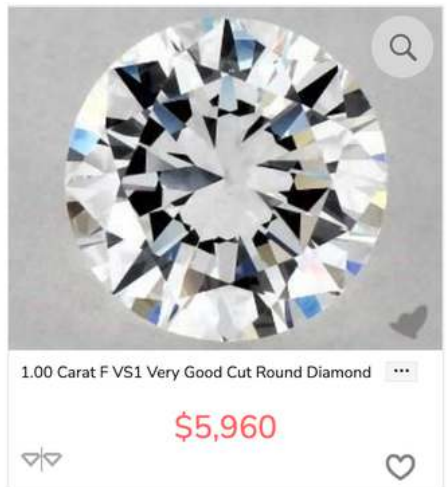
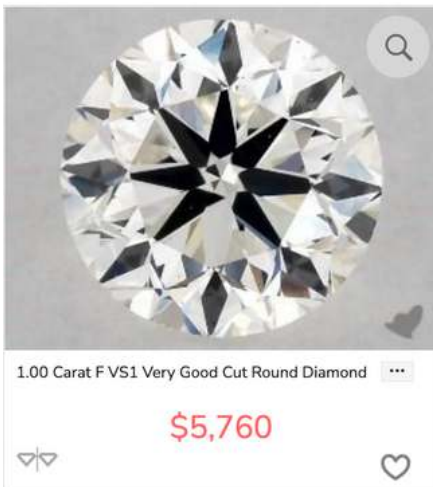
Carat is the common measurement for the size of a diamond. That means if you have two diamonds next to each other that each weigh one carat, they're considered the same size, even if one is longer or wider than the other.

The price of a diamond doesn't increase proportionately with its carat weight. It rises much faster.

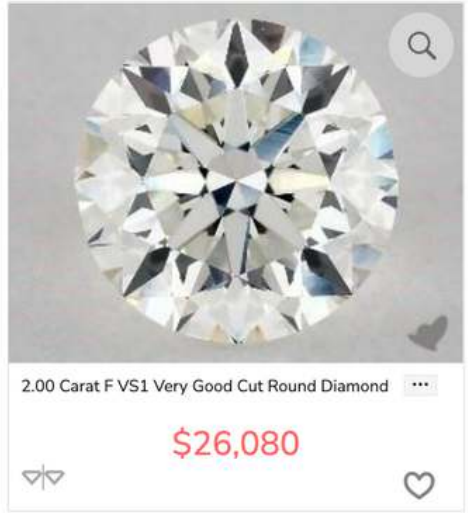
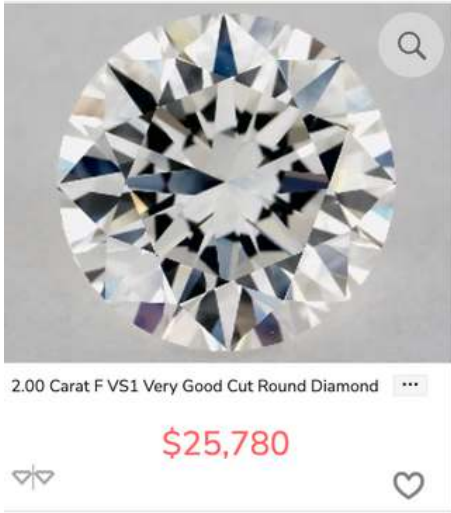
For example, we compared prices of diamonds from James Allen that have all the same qualities, except for carat weight. They earned the following grades from the Gemological Institute of America:

- Cut: Very good
- Color: F
- Clarity: VS1

One-carat diamonds with those grades cost an average of \$8,447, with a range from \$5,760-\$13,490.



If we double the carat weight to two, the average price goes to \$36,908, and the range is \$34,360-\$42,680.



That's 337 percent higher for double the carat weight.

The same idea is true as you continue increasing the weight.

Diamonds of that size, that are also free of visible flaws and color, are rare.

Small ones have much less value.

This illustrates a key concept.

If you want to increase the total carat weight (CTTW) of your ring without a significant price increase, add several small diamonds instead of increasing the carat weight of the main one.

As an example, check out this setting with pave diamonds from Blue Nile.



The pave diamonds weigh 0.24 carats. The entire setting costs \$1,390. If you increase the weight of the center diamond by that much, you'd likely pay close to the same amount as the setting.

It's why styles like pave and halos are popular. They add more sparkle to the ring with the corresponding price increase.

Check out this halo setting from Brilliant Earth.



It features 0.20 carats of diamonds and costs \$1,290.

It'll increase the apparent size of the main diamond, creating a more brilliant piece.

Although diamonds are often defined by their carat weight, it's crucial to consider its other qualities.

A large diamond with problems in other areas results in an expensive purchase with obvious flaws.

Clarity

Clarity refers to the presence of inclusions, or flaws, in a diamond's facets.

When diamonds are formed under the earth amid intense heat and pressure, these blemishes develop and take many forms.

One example is a twinning wisp. They can appear white, black, or transparent and often spread across multiple facets.

Needle inclusions are caused by crystals that extend into long, thin lines. They're often invisible without magnification but are one of the most popular types of inclusions.

Other examples include:

- Feathers
- Cavities
- Bruises
- Etch channels
- Indented naturals

The most common way diamond clarity is graded is on the GIA clarity scale, which begins at flawless (FL), and works down to I3 (included).

GIA CLARITY SCALE

FLAWLESS	INTERNALLY FLAWLESS	VVS ₁	VVS ₂	VS ₁	VS ₂	SI ₁	SI ₂	I ₁	I ₂	I ₃
		VERY VERY SLIGHTLY INCLUDED		VERY SLIGHTLY INCLUDED		SLIGHTLY INCLUDED		INCLUDED		

Each step down the scale indicates the inclusions are more impactful to the diamond.

Each inclusion affects a diamond in its own way, but it generally falls into three categories: appearance, durability, and brilliance.

The way inclusions affect appearance depend on the size, color, and location. A long feather that spans multiple facets is often more visible than several pinpoints that aren't clustered together.

We recommend finding an eye-clean diamond.

This means its inclusions are invisible to the naked eye, so it appears flawless.

You'll save on the price compared to a truly flawless diamond, but they'll look identical.

Take this diamond as an example.



It earned a VS1 clarity grade and has the following inclusions:

- Crystal
- Pinpoint
- Indented natural

But the VS1 grade for a one-carat diamond means they're likely invisible without magnification.

It costs \$10,112.

A diamond with those same grades, except its flawless, costs around \$18,000.



If you place them next to each other, you can't tell them apart.

Inclusions also affect durability. They represent weak points in a diamond's structure that make it more vulnerable to hits and drops.

The exact impact depends on the type of inclusion, its size, and position.

A large bruise near the corner of a princess cut causes more durability issues than small needles toward the center of a round cut.

The best way to protect your diamond is to remove it during physical activity and protect it with a strong setting.

Bezel settings are one of the strongest types but cover more of the diamond compared to a prong setting.



We recommend starting your search with SI1 diamonds to minimize the potential of durability problems from inclusions.

Inclusions diminish brilliance because they can distort the way light enters and exits. A diamond with maximum brilliance has round-cut facets with no inclusions and a quality cut (more on cut later).

Light can enter the diamond, bounce around, and return to the viewer. It doesn't hit a twinning wisp or feather and lose its luster.

Too many inclusions can result in a dull diamond.

Again, by starting your search at SI1 clarity and moving up as you see fit, you'll find the right balance between clarity and cost.

Color

A diamond's color grade refers to the presence, or lack thereof, of yellow and brown tints.

The GIA color scale starts at D (colorless) and ends at Z (light). Similar to the clarity scale, each letter grade down the scale indicates the presence of more yellow or brown.

You don't have to choose a D color diamond to avoid the appearance of color. In fact, many in the "near colorless" category only show yellow with magnification.

For example, take this round-cut diamond that earned an H color grade.



Now compare it to this D diamond.



Even with high-resolution images, you can't tell the difference.

But it depends on the cut. The brilliant-cut facets of round diamonds disguise color more effectively than the elongated step-cut facets of emerald cuts.

Here's a round- and emerald-cut next to each other that have the same color grade.



The difference in color is apparent. So you might have to choose a higher color grade for some fancy shapes.

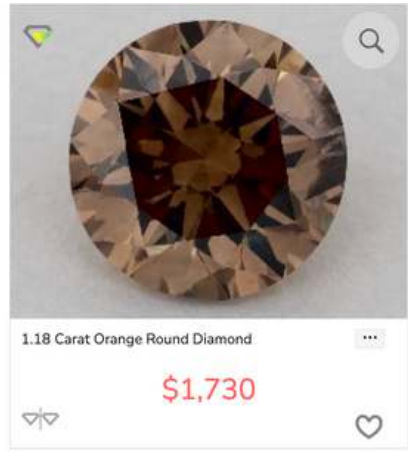
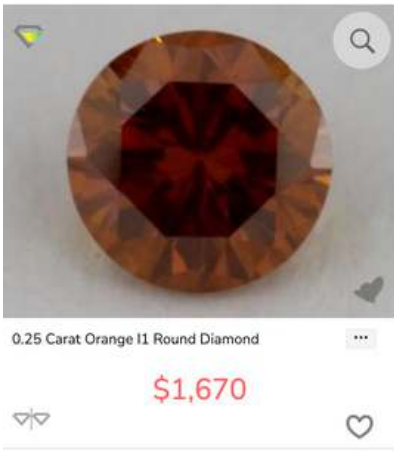
We recommend selecting a diamond in the near colorless range that doesn't show color because it'll appear identical to a colorless gem without the price premium.

Another tip to disguise color is to choose a white gold or platinum setting. The color on a yellow gold band has the potential to reflect off the diamond in a way that causes it to appear yellow.

White and silver settings have the opposite effect.

If you surround the center diamond with a halo setting, ensure it appears colorless. If you place it in the middle of colorless gems forming the halo, the yellow can appear more obvious.

We'll also note that many online vendors sell colored diamonds, available in pink, green, orange and more.

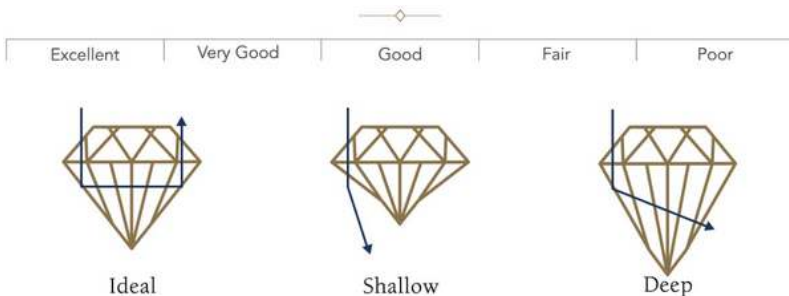


These aren't graded along the traditional GIA color scale and are rarely used as engagement ring diamonds.

Ones with a darker shade of its respective color are generally more valuable, and you should consider factors like cut, carat, and clarity in the same way you would a traditional diamond.

Cut

Diamond cut is graded on a scale from poor to excellent.



It's the quality that most affects its brilliance.

We recommend paying the premium for very good or excellent cut grades because poor or good has a noticeable effect on its appearance.

A number of factors determine a diamond's cut, like its symmetry, polish, proportions, and girdle thickness.

We'll discuss the details of each below.

Symmetry

Diamond symmetry indicates the alignment and shape of facets.

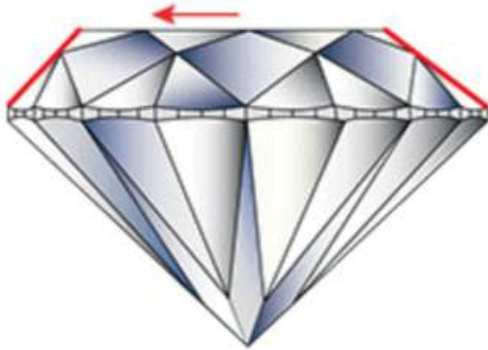
Proper symmetry causes better light performance because light can travel through the diamond without being misdirected.

A diamond with poor symmetry reflects light in different directions, which reduces the fire and brilliance. This can make the diamond appear dull and lack the luster it should have.

It's also graded on a scale of poor to excellent. A poor grade is given when the diamond has several defects that can be seen with naked eye. Excellent symmetry means very few, if any, deviations are identified with 10x magnification.

The gemologist examines the diamond, looking for issues like:

- The table or culet is off-center
- A round-cut isn't perfectly round
- The crown and pavilion are misaligned
- Misshapen facets
- Wavy girdles



Each of these could result in a less-than-excellent symmetry grade, which could lower its overall cut quality.

Polish

A diamond's polish grade is a result of the smoothness, or lack thereof, of its surface. If a diamond has a smooth surface, it's more likely to better collect and reflect light than one with a rough surface.

Issues related to polish include:

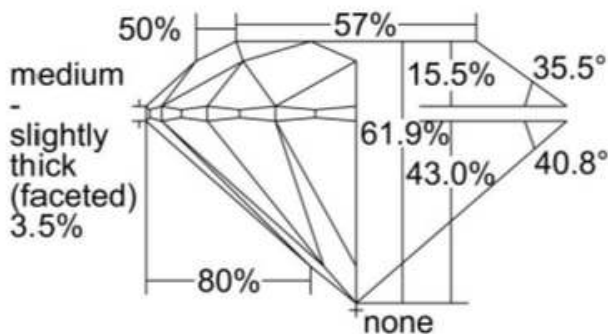
- Burns: haziness from intense heat during polishing
- Abrasions: scratches or pits on the edge of facets that cause fuzzy, white lines
- Pit: openings in diamonds that appear as white dots

Most diamonds have polish lines or cut lines, but if they're barely visible under 10x magnification, the diamond can still earn an excellent polish grade.

It's when they're noticeable to the naked eye, and there are several occurrences, that it may result in a poor or good grade.

Proportions

Proportions also impact a diamond's brilliance. The ratio and size of its depth, width, and table play a role in its final cut grade.



Profile to actual proportions

The issues to avoid are a diamond that's cut too shallow or deep. It causes light to leak out of its sides, which doesn't reflect back to the viewer.

A diamond's proportions are calculated using its table size, pavilion depth, and crown height in relation to the diameter.

For round-cut diamonds ideal proportions are:

- Depth percentage: 59 to 62.6%
- Table percentage: 54 to 57%
- Culet: none to pointed
- Length to width ratio: 1.0 to 1.03
- Girdle thickness: thin to slightly thick

For fancy shapes, the criteria are different.

Even if one or two of these traits don't fall within the ideal range, a diamond can still earn an excellent cut grade.

But it depends on how far it falls out, and whether it's one or all of them.

Girdle Thickness

The girdle separates the top of the diamond (the crown) from the bottom (the pavilion).

When you view a diamond from the top, the girdle creates the outline.

When viewed from the side, it divides the round top from the pointed bottom.



It influences the cut grade for round diamonds but is often less of a consideration for fancy shapes.

All diamonds have girdles but they vary in size and how they're polished. It's important that it's durable and can withstand impacts to the setting because diamonds are set and held in place by the girdle.

There are three main types of girdles:

- Faceted
- Polished
- Unpolished (bruted)

Girdle thickness is expressed by a percentage. Take its thickness, in millimeters, divided by the average diameter, and multiply it by 100.

$$\text{Girdle Thickness (\%)} = \frac{\text{Girdle Thickness (mm)}}{\text{Average Diameter}} \times 100$$

Its grade is assigned by assessing the thinnest and thickest points and labeled as:

- Extremely thin
- Very thin
- Thin
- Medium
- Slightly thick
- Thick
- Very thick

The differences between grades next to each other on the scale aren't noticeable to the naked eye.

You shouldn't expect visible changes in its light performance between a thick and extremely thick girdle.

But when they're several grades apart, it could impact performance and its overall cut grade.

Certification



GIA[®]



IGI



The fifth C of buying a diamond is certification. It varies the qualities across the other four Cs and provides more detail about them.

But first, we'll clarify terminology.

A grading report is created by an organization that determines where it ranks the color, cut, and clarity scales and more. In some cases, the organization will certify the diamond, but in others, they avoid using that term.

Instead, they issue grading reports.

Most buyers don't distinguish between these terms, but we'll note where appropriate which is considered a grading report versus certification.

As a buyer, you should only purchase a diamond with a grading report for a reliable third-party.

You'll avoid paying a premium for a diamond because its grades are inflated. For example, if you paid for a diamond as if it had a VS1 clarity grade, but the inclusions were more comparable to SI1, you will have paid 10 to 30 percent more.

Those grades could represent thousands of dollars when taken together.

There are many organizations that certify the quality of diamonds or provide grading reports such as the Gemological Institute of America (GIA), American Gem Society (AGS), International Gemological Institute (IGI) and Hoge Raad voor Diamant (HRD, which is translated "High Diamond Council").

In the United States, the GIA and AGS are the most regarded by the industry. IGI has earned a strong reputation for lab-created diamonds.

To help you understand how to read a GIA grading report, we'll walk through an example using this round-cut diamond from Blue Nile.



On the left panel, you'll find basic information about the diamond like its:

- GIA report number
- Shape and cutting style
- Grades across the four Cs
- Degree of fluorescence

GIA NATURAL DIAMOND GRADING REPORT

March 21, 2022

GIA Report Number 2427551722

Shape and Cutting Style Round Brilliant

Measurements 6.91 - 6.94 x 4.34 mm

GRADING RESULTS

Carat Weight 1.30 carat

Color Grade E

Clarity Grade VS1

Cut Grade Excellent

ADDITIONAL GRADING INFORMATION

Polish Excellent

Symmetry Excellent

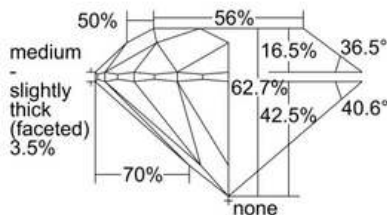
Fluorescence Very Strong Blue

Inscription(s): GIA 2427551722

Comments: Additional clouds, pinpoints and surface graining are not shown.

At the top of the middle panel is the proportions diagram. We can see this diamond has a medium - slightly thick girdle, and the culet is graded "none".

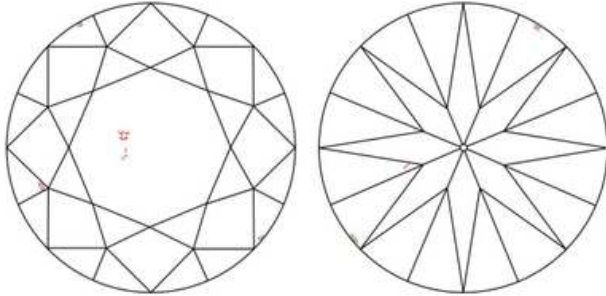
PROPORTIONS



Profile to actual proportions

Below the proportions diagram is the clarity characteristics plot. It provides details on the clarity grade, which in this case is VS1.

CLARITY CHARACTERISTICS



KEY TO SYMBOLS*

- Crystal
- ◌ Indented Natural
- ☉ Cloud
- ~ Feather
- ∖ Needle

We can see the diamond has five types of inclusions:

- Crystals
- Clouds
- Feathers
- Needles
- Indented naturals

Each is small and has few occurrences, which means it's likely eye-clean.

The right panel acts as a key to the report, where you'll find the GIA color, clarity, and cut scales.

GRADING SCALES

	GIA COLOR SCALE	GIA CLARITY SCALE	GIA CUT SCALE
COLOREST	D	FLAWLESS	EXCELLENT
	E		
	F		
NEAR COLOREST	G	INTERNALLY FLAWLESS	VERY GOOD
	H	VVS ₁	
	I	VVS ₂	
FAINT	J	VS ₁	GOOD
	K		
	L	VS ₂	
VERY LIGHT	M	SI ₁	FAIR
	N		
	O	SI ₂	
LIGHT	P	I ₁	POOR
	Q		
	R	I ₂	
	S		
	T	I ₃	
	U		
	V		
W			
X			
Y			
Z			

You can use this to determine where the diamond's qualities land on the scales.

Grading reports and certifications from other organizations follow a similar format.

One section usually gives an overview of its grades across the four Cs, and the rest of the report provides details on those grades.

Conclusion

Understanding the five Cs of buying a diamond is critical to making the right purchase. Issues with even one of the five Cs can result in a diamond that's far lower quality than you expected.

You might find a large diamond that's colorless and has an excellent cut.

But if you choose the wrong clarity grade and there's a visible black spot in the middle, you'll likely be disappointed by the obvious flaw.

Or take the same diamond without the inclusion but a poor cut, and it'll appear dull.

At online vendors like James Allen and Blue Nile, you can filter the selection by each of the five Cs, so you know exactly what to expect.



Blue Nile

If you only want to view diamonds graded by the GIA, there's a filter for that. Or if you know you're looking for a one-carat diamond, you can eliminate all others.

Review each aspect of the diamond carefully before buying. Our recommendation is a GIA or AGS diamond that appears eye-clean and colorless to the naked eye but avoids the premiums charged for ones at the top of the clarity and color scales.

Combined with an excellent cut grade, you'll have a diamond ring you're proud to display.