



SHINY AND NEW: THE RADIANT CUT

The radiant was the first rectangular or square cut to have a complete brilliant facet pattern applied to both the crown and pavilion. **GARRY HOLLOWAY, KATE WYATT AND KATHERINE KOVACS, GAA** report.

On GIA grading reports the radiant is given the unfortunate name of the “cut-cornered rectangular (or square) modified brilliant”.

Following its patented development in 1976 by Henry Grossbard, it became seen as the forerunner of the modern branded diamond.

Until about 10 years ago, the preferred width-to-length proportion of 1.5 was in keeping with the proportions of an emerald cut, or the rectangular shape it was originally developed for.

Today, the radiant cut is more popular in a squarer shape, with the width to length ratio most commonly 1.2-1.3 or even as low as 1.05 (almost square).

The radiant’s original, patented design had 55 facets: 25 on the crown and 30 on the pavilion – plus or minus a culet – as illustrated. The cut corners help minimise chipping and maximise yield. They are also found with

more facets and different patterns on the pavilion.

Like cushion cuts, there are two main types of faceting arrangements: the brilliant and the “crushed-ice” style. The crushed-ice has less contrast, keeping the colour appearance pure and is also very effective at deepening the colour of fancy-coloured diamonds, due to increased average ray lengths – other shapes tend to have lighter colour areas throughout the stone. It is said that the use of a radiant cut can lift a fancy-coloured diamond by as much as a full grade – from fancy to fancy intense, for example.

Rectangular-shaped radiant-cut stones are more likely than their square counterparts to have the “bow-tie” effect due to their elongated shape. In order to appear as brilliant as a square of similar size, the rectangular shape should also have a greater depth percentage

because the depth percentage of fancy shapes is calculated as depth by width, while depth percentage of rounds is depth by average diameter.

As a consequence, longer stones tend to have a larger spread or surface area for a given depth percentage. Because of all the different proportion variables, there are no strict guidelines for table and depth percentages but, as a general rule, look for a table between 55 and 65 per cent and a depth between 59 and 66 per cent.

The decision to purchase a radiant cut should never just be based on its proportions alone; brilliance and the overall beauty of the stone also play their part. Light performance tools like the AGS ASET scope can also be useful.

As mentioned earlier, radiants tend to deepen colour so it is not surprising that some of the most well-known radiant cut diamonds

are fancy coloured.

The Peacock diamond – named after Chicago owner CD Peacock – is a magnificent example, a rare, internally flawless, fancy intense yellow that measures 15.62mm × 14.49mm × 9.37mm and weighs 20.65 carats. It’s set in a platinum and 18-carat gold ring, and flanked by two white trillion diamonds.

Smaller, but richer in infamy and price is the 6.1-carat, pink, radiant-cut diamond given by Ben Affleck to Jennifer Lopez, which reportedly cost \$US1.2 million.

The stone’s rare colour coupled with its size make this ring one of the most famous modern celebrity engagement rings. When the engagement was broken, Affleck got the ring back and re-sold it through jeweller Harry Winston – the stone was recut and resubmitted to GIA after the sale. It received a better colour grade, which raised many questions about GIA’s grading ♦