What Is A Solar Panel

Well the answer is very simple to explain. Many people do not fully understand the basic principles of quality verses cost.

So a solar panel starts off life as a billet of manmade silicon. This is then segmented and divided into wafer thin silicon wafers by factories that produce solar panels. The division of this silicon refers to the quality of that wafer. The lower quality of wafer will then produce a less efficient performance ratio. We have found that some companies provide efficiency based on the cell performance, whilst other higher end manufacturers offer the performance statistic based on the overall build. The later is the most consistent option as the cells when connected together loose a percentage of performance due to voltage drops through the series connections. So with the lower graded cells, the greater the overall performances drop.

You may have heard of tiers, this is how a finished solar panel is graded. Tier 1 being the best as far as build quality and performance is concerned at above 16% efficiency. Tier 3 grading being the lowest performer, the differential is not large but the percentage gap has a greater hidden meaning. Once manufactured each panel is tested to revile its true identity. Only then is it possible to provide a certificate that matches this performance. So solar panels are not all alike.

So now that this is understood, the description of a solar panel should be easier to identify. Let's go back to tier 1, as this outlines the best product available. The tier 1 signifies overall performance ratio based over a 25 year life period. This performance provides time line steps as to the way particular solar panels perform over time. As all solar panels reduce in performance after the first year of operation, understanding how much these actually fall is the key to obtaining the best performing product within a given tier scale or product value.

Tiers performance and percentages. The lower range panel is probably the best example to explain in so far as the use. This range of panels or efficiency is often connected in series to provide lower cost installations. Whereas the mid to higher efficient panels are used to create higher dividend yields over a 20-25 years period. This is something that is down to each individual customer as in many cases the cost is the biggest influence when purchasing a solar panel. This to one side, one should understand the hidden performance issues surrounding every solar panel grade. Let us take the least efficient; very quickly this performance can dramatically drop. Usually after the first year by a high percentage, and then fall in performance again quickly over subsequent years quite dramatically. Performance after 5 years could be as much as 30% lower in some cases than the initial performance check when manufactured. Using this lower tier of panel could dramatically reduce the return on investment (based on yield calculations).

Tiers are important in many other ways, as it outlines the build quality, material used such as cell grades, glass, frames, backing media and variants on surface treatments of the aluminium frame structures and glass. But most important of all the amount of years the production company has been established in the manufacturing of solar panels and do they offer in house production of silicon cells.

Our company believe that the only way to treat our customers is to offer the very best products, as this should guarantee the outcome of future orders. We only provide tier 1 and higher end tier 2 products to our customer base. As our goal is to always achieve maximum potential gain, this pushes maximum power towards the grid requirement or battery storage facility.

I hope this explains my views on what is a solar panel question for our customers.

Solar panels prices can be found using this link: https://www.dragonsbreathsolar.co.uk/sharp-solar-panels-c-31.html