

Mechanical Properties of Engineered Quartz eBook

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depending on your preference.

Granite – So from above we know that it is a “natural” product, every slab will be different and you may have variations in colour throughout.

As it is a natural product there may be inconsistencies in the product or potential weak points, you may be unlucky enough to bang a pan in the wrong place 12 or 18 months from now and chip it, it is a bit of “the luck of the drawer”

Having said that, Granite can be stunning, its variation can be absolutely beautiful!

You will also find that granite will range a lot more in price than a quartz will, if it is a rare granite and very popular then the costs will be astronomical, if it is not so popular and there are quarries full of it the price can be quite reasonable.

In general the darker the colour the stronger the stone – so a white granite will be quite a soft material compared to a black granite.

Our final bit of advice on granite is – if you are having it, go and actually see the slab you are having and check the colour and any blemishes, reserve the one you want and you will get a stunning worktop.

Quartz worktops – As it is manmade you will get consistency throughout the whole product so one end of your kitchen will match perfectly to the other, you may love this or you may hate it!

It also tends to be a stronger product thanks to the resins they use and, in my view, can take quite a lot of wear and tear and is quite difficult to actually damage.

Some companies also make sinks out of quartz so you can have an undermounted sink in the same colour as your worktops.

But just like everything in this world there are brand names, the BIG players,

they spend the most on advertising, product development and brand awareness, but because of this their costs are the highest.

Whenever you are looking for a solid stone worktop, our best suggestion would be to go look around, choose a colour you like and ask if they have something similar that may be cheaper than the one you chosen! You never know – it could save a few £100 or even a few £1000

What Kitchen Worktops to Choose

Working in the kitchen industry we often get asked about worktops, the benefits of materials, the drawbacks and always the "what do you have in your kitchen?" question.

Realistically, worktops can make up a BIG part of the budget if certain materials are chosen but can also be a very cheap part of the kitchen budget if others are selected.

In this blog we will look at the main types of kitchen worktops, some benefits, some problems, costs and considerations.

Worktops can be a minefield, and can be confusing, so when explain to customers the options we almost always do it in price order.

Laminate Kitchen Worktops

Laminates have a bit of a bad name and a bit of a stigma but to be honest this is mainly due to some pretty shoddy and cheap versions around in the 1990s and very cheap ones from the big DIY sheds (which are still available unfortunately!).

If you choose a good quality laminate, it won't break the bank and if treated properly and cared for can look as good in 10 years' time as they will today.

Some of the textures and effects you get these days are really lifelike. We have fitted some "wooden effect" laminates and once fitted it was hard to tell if they were real wood or not!

We have also done lots of "natural stone" effect ones that also look amazingly realistic.

When choosing laminates we would always say "never go for gloss". Gloss kitchen work surfaces will look nice and pretty once installed and can reflect light and help with a dark kitchen but the problem with gloss is, if you scratch it, (which you will at some point) the scratch will be HIGHLY visible as the light reflects off the surface.

What is the cost of laminate kitchen worktops?

The cost of laminates for a standard size kitchen in our experience is around £750 - £900 so in the grand scheme of things is pretty reasonable.

Real wood Worktops

With real wood worktops there are LOTS of types: oak, pine, bamboo, teak, walnut, iroko, beech plus lots more.

They do vary in price immensely, pine and bamboo being some of the cheapest and teak and walnut being some of the more expensive ones. Even in the most common ones you get premium oak, contract oak, wide stave oak etc. The choice is amazing and a little mind blowing.

The one thing we will always say when someone is enquiring about wood is "Will you look after it?"

The most common answer is "Yes" but then they think about it for a few minutes and quite often agree that "well, probably no they wouldn't look after it!"

Wood is a natural product and in a kitchen environment it needs to be sealed

against moisture, normally this means being oiled, which will slowly evaporate.

If you can regularly (once every 6 months) re-apply a thin layer of oil over the entire work surface, the wood will remain protected and look good. If, however, you don't and water seeps into the grain, the wood will turn black and it is ruined!

The good thing about wood is that it can be sanded and re oiled if you have scratches, dents etc in it, so you can repair it pretty easily (apart from water damage!)

On average depending on the species chosen, wood will cost for an average kitchen work surface from £1,000 - £2,000 for the most expensive species. It also has a very tactile and warm feeling to it.

Composite Kitchen Worktops

Hmm, where to start? There are lots available - some made like a laminate with a chipboard core, some solid all the way through.

Most can be fitted by a standard kitchen fitter which is great, but this does mean that they aren't as strong as granite or quartz, so they will also scratch easier.

Some of these worktops have the ability to disguise the joins, which aesthetically can be great.

We are split in the office about the benefits of composite worktops compared to the problems with scratching, almost a 50:50 split!

Personally, I wouldn't want it in my kitchen due to the ease in which they can get scratched but they are also cheaper than the alternatives, so it can be a very fine line.

On average we would expect these kitchen worktops to be from £1,500 to £2,200 for an average kitchen.

Granite and Quartz Worktops

The first thing we get asked is "what is the difference?"

Well, in kitchen terms the difference is quite easy, granite is a natural product, it is dug out of the ground and you get what nature created, every piece will be slightly different (which can add to its charm or be a problem) and if there are quarries of it and it isn't popular it can be relatively cheap, but if there is limited supply and very popular then it can also be astronomically priced.

Granite worktops will need to have a protective coating put on it to make it more water resistant, and we often hear about people being worried about staining and scratching, but in our experience this rarely happens! I have been in the industry for many years and have yet to see a proper stain on granite, despite the fact that every customer asks about it.... Maybe I have been lucky, but I do think this problem is a little hyped.

Another thing people worry about with granite is strength, and it is true, as it is natural you really don't know if there is a fault in it or a weak spot, in general the darker the granite the stronger it is, so less likely to get damaged. You may notice that some granites have a mesh on the back glued to them, this is to add strength.

As I said earlier, granite can range in price hugely – but for an average kitchen I would expect £2,500 - £4,000

My advice for anyone buying granite would be to see the ACTUAL slab you are going to have and check you are happy with it. As it is natural, every slab could be different and it is too late to complain about a vein or colour once it is installed!

[Quartz worktops](#) are basically man-made stone – they get the stone they want – grind it down, mix it with different colours and a resin and it is pressed into slabs.

You will get consistence of colour and strength throughout the worktop and the resin they use is, I am told, stronger than the original stone so shouldn't

chip as easily as a granite.

Like everything, there are brand names in quartz – and also lesser known brands. The prices will vary hugely depending on colour brand etc. but in general for an average kitchen would be £2,500 - £4,000 - very much like granite.

Dekton Worktops

Dekton is a new product, which is a mixture of glass and ceramic – I am reliably told by the representatives that you could have a mini bonfire on top of it and it wouldn't hurt the worktop, which is great if you were planning to do this!!!

Realistically it is a VERY hard and dense product, so dense that not every stone supplier has the correct tools to cut it, so currently it is a niche product. Making it more expensive!!!

On average I would expect it to cost £3,000 - £4,500 for an average kitchen. There are other kitchen worktops available but we had to draw the line at the most popular ones, so back to the question I get asked the most "what worktops do you have in your kitchen?" Well the answer is Laminate!

I think the colours, feel and durability for the cost is outstanding and due to the cost it can be changed quite easily giving a whole new look to a kitchen.

Why You Should Buy Granite or Quartz Worktops

When you order custom designed and built cabinets, you need to complement them with an equally high quality quartz worktop.

It needs to match the luxury feel of your cabinets, be something which you can show off, but also which functions.

After all, your kitchen is a working room and not just a show piece for guests. Granite/Quartz worktops are the best balance between looking stunning and doing a great job. Here's three reasons why you should consider buying them from us:

1. Value for Money

When you speak to Estate Agents about what adds value to a home, the two biggest rooms for this are the bathroom and especially the kitchen. One of the major plus factors in raising the value of any kitchen is granite/Quartz worktops. Our granite counters are chosen because they are high quality, but also affordable.

The return on investment for any DIY project or renovation with the sole motivation of increasing home value is to cost less than the amount of money added to the value. Granite work surfaces do this in abundance, but they also send a psychological message to the potential buyer and to the estate agent valuing your home that your home is a quality one and that can be worth more than money sometimes.

2. Great Design Potential

Whatever cabinet and appliance design you go for, granite will work with it. Granite worktops come in a variety of colours and styles, allowing you to go for that bold, line of black to complement or contrast with your cabinets. Or alternatively, you could go for silver pearl, stunning white or even gold if you so wish. Each worktop is one of a kind due to the random nature and make up of stone. We cannot craft its composition, so you might see the perfect one for you with its veins of alternative colours.

3. Low Maintenance

Granite/Quartz is durable and long lasting. It is also easy to clean, hard to damage, and even harder to stain. This is because the stone is made from igneous rock which is unique because of its holocrystalline structure which is where the crystals within the rock interlock in a unique way, allowing it to form stronger bonds than many other rocks.

Short of using a sledgehammer on the work surface, you should be able to break any knife before you damage the counter, even if you decide you use it

instead of a chopping board for your veg. Given the kitchen is the heart of the home and one of the busiest, most action packed rooms, it's good to know you have durable as well as good looking worktops.

If you would like to talk to us further about our range of worktops, please get in touch on 01202481177. We'd be happy to discuss this further with you. In addition to granite or quartz worktops, we also offer a wide range of solid wood work surfaces with an extensive catalogue of choices.

Engineered Quartz Worktops - Technical - Environmental Features

Technical and Environmental Features of Engineered Quartz Worktops
Engineered Quartz Worktops - Technical & Environmental Features

In the last couple of decades engineered quartz worktops have taken over as a main choice among leading interior designers and kitchen designers. It used to be natural stone that ruled the industry, however, due to certain downsides, the use of marble and granite worktops has diminished.

Here we're looking at technical and physical properties of quartz through various scientific tests.

Quartz is a natural silicate material mainly consisting of SiO₂ (crystalline silicon dioxide). Because it's so common and wide-spread, engineered quartz worktops come out cheaper than natural stone, despite quartz being rather labour-intensive. As quartz only occurs in small clusters, you can't make slabs out of it. That's why it's crushed in small pieces and mixed with polyester resin to form slabs.

The resulting material is superior to agglomerated marble in both abrasion resistance, acid resistance and hardness. Also, engineered quartz displays virtually no water absorption qualities which is something you can't say about marble and other natural stone kitchen worktops that often suffer with water ingress which leads to discolouration deterioration.

	quartz	marble
water absorption	0.01%	0.2%
abrasion resistance	60	30
acid resistance	yes	no
hardness	7 Mohs	4 Mohs

To be used in residential applications, quartz has to fulfil both aesthetical and utilitarian expectations and sometimes overcome the kitchen designers' and interior designers' natural scepticism about a new material. It was recently proved that the material also meets more stringent non-residential building code requirements. More interestingly, designers can use quartz surfacing for both horizontal and vertical applications in other words - any interior where a smooth, strong, high-performance yet low-maintenance surface is required.

It's worth keeping in mind that engineered quartz worktops can degrade when exposed to strong ultraviolet light, however, in most indoor applications it should last at least 20 years.

What is Engineered Quartz

Quartz slabs are composite made of approximately 93% natural quartz aggregate chips, which is the most abundant mineral that is found in the earth's crust. Much like concrete, it consists of a high percentage aggregate and binder - silica sand - held together by a thermoplastic polyester resin.

The aggregate and resin are blended with mineral oxide pigments and other fade-resistant colorants. The mixture is formed into a high-density slab through a combination of intense vibration, high pressure, and vacuum. It is then heated and vibrated until the resin fuses the aggregates. After cooling, the slab is either polished to a smooth surface or given a decorative finish.

Selection of pigmentation and the quartz's colour, size, and gradation, can produce an enormous range of visual effects. Some manufacturer models of quartz surfacing resemble granite, limestone, or other natural stones, whereas others emulate high-quality architectural portland cement concrete.

Some types of quartz can even look like terrazzo due to the presence of polished stone chips in a coloured matrix. Certain brands have a distinctive appearance that is impossible to achieve with other materials.

Depending on the brand, the quartz aggregate chips range in diameter about 4 mm maximum to extremely fine grains of silica sand. The finest aggregate produces an aesthetic similar to grainless stone yet maintains the lustre and light-holding ability of quartz crystal. In contrast to most natural stones marked by veining and variations in coloration, quartz surfacing can be controlled to provide a uniform appearance across a slab and between slabs made within a manufacturer's production run.

Quartz's appearance varies widely, from familiar transparent crystals such as clear quartz, rose quartz, smoky quartz, and amethyst, to multi-coloured, translucent and semi-translucent agates. Quartz can also come in the opaque earth tones of jasper, or the yellows, reds, browns, and greens of citrines and prasiolites.

Like most transparent and translucent crystalline materials, quartz reflects some light at the surface, but also transmits it to the interior where it reflects from internal crystal planes, for a sparkling and glowing effect. The translucent resin in quartz surfacing works well with these properties, and quartz surfacing often produces a sense of depth and light.

Kitchen worktop slabs can be made to meet requirements of local or regional stone fabricators equipped with diamond cutting and polishing tools, as well as wet cutting equipment. However, quartz surfacing is much easier to handle than natural stone, because its inherent strength reduces the likelihood of a slab cracking under its own weight when lifted.

Testing Engineered Quartz Worktops

Quartz is harder than natural building stones, as measured by the Mohs scale of mineral hardness. As quartz has a Mohs hardness of 7, only a few materials-such as topaz (Mohs 8) and diamond (Mohs 10) are hard enough to scratch it. In comparison, most other materials are not hard enough to do so. For example, the average Mohs values for other materials are:

granite	6
marble	4
limestone	3
slate	3

Most typical household or workplace items cannot scratch quartz in daily use unless your utensils are made of diamond.

The composite retains much of the toughness of quartz, due to the high proportion of stone and the nature of the manufacturing process. Vibration, temperature and pressure cause the stone's crystal facets to align, and subsequent grinding and polishing tend to reveal more aggregate on the surface. Scratches in the interstitial resin are short, and generally not visible. The resin's ductility also contributes to the material's impact resistance.

Wear and Tear

Quartz worktops tested passed Section 5.3, "Wear and Cleanability," of American National Standards Institute (ANSI) Z 124.6

This test involves 10,000 cycles of scrubbing with abrasive suspension followed by 25 cycles of rubbing with dirt. After ensuant cleaning, light reflectance was reduced by 3% at most - a result well within the 5% reduction acceptable under the standard.

Quartz is highly stain-resistant due to the intrinsic impermeability of the quartz aggregate and polymer resin, as well as the manufacturing process that forms the ingredients into a dense slab practically free of gaps and pores.

Stain Resistance

In accordance with Section 5.2, "Stain Resistance," under ANSI Z 124.6, the tests exposed quartz surfacing for 16 hours to typical products that end up ruining kitchen worktops in real life application:

- crayon
- ink
- beet juice
- lipstick
- hair dye
- iodine
- tea

Only ink and lipstick produced any staining at all and occurred only in certain extremely light - coloured brands. Regardless, these slight stains still met ANSI requirements because they could be cleaned with standard cleaning liquids.

Chemical Resistance

To verify resistance to chemical exposure, quartz slabs were tested in accordance with Section 5.5, "Chemical Resistance," under ANSI Z 124.6. The material was unaffected when exposed to solutions such as:

naphtha; ethyl alcohol; ammonia; citric acid; urea; acetone; vinegar, hydrogen peroxide; lye; bleach pine oil.

This performance data may not apply to products by all manufacturers. For example, at least two USA-based manufacturers of quartz surfacing warn against any exposure to bleach.

International Standards

Even more stringent is ASTM International C 650, Resistance of Ceramic Tile to Chemical Substances, which involves 24-hour exposure to chemicals. In this testing, quartz surfacing remained unaffected by solutions of:

- acetic acid
- ammonium chloride
- citric acid
- lactic acid
- phosphoric acid
- sulfamic acid
- sodium hypochlorite
- hydrochloric acid
- 3% potassium hydroxide solution

Although some quartz worktop brands were moderately etched or discoloured by 24-hour exposure to 10% potassium hydroxide solution, it is highly unlikely quartz slab or any decorative quartz surfacing would be considered in industrial situations where such prolonged contact could occur.

Quartz kitchen worktops don't need to be maintained with sealers, waxes, or polishes. The way other natural kitchen worktop materials do. Granite and marble are relatively porous and require frequent sealing to resist staining by common substances like cooking oil and wine.

Sustainable quartz kitchen worktops and their certification credentials

Quartz worktops can be considered a sustainable material. Extraction processes have relatively minimal environmental impact, as quartz's raw material is rarely mined expressly for use as a surfacing product. Instead, crushed chips and chunks of quartz are generally reclaimed waste products of other mining operations—for example, gold is found in quartz veins. Fine aggregate is produced naturally—silica sand is an abundant resource.

It is also a low-volatile organic compound (VOC)-emitting material, with several manufacturers qualifying for both Greenguard's Indoor Air Quality Certification and its more stringent Children & Schools Certification, which tests performance against the standards set forth in the California Department of Health Services Standard Practice CA 01350-Special Environmental Requirements.

These indoor air quality (IAQ) certifications qualify quartz surfacing products to contribute to earning credits in U.S. Green Building Council's (USGBC's) Leadership in Energy and Environmental Design Commercial Interiors (LEEDiCI) program, such as Indoor Environmental Quality (EQ) Credit 4.5, Low-emitting Materials-Systems Furniture and Seating, the Collaborative for High Performance Schools (CHPS) Best Practices Manual for K-12 Schools, and other green building programs.

Quartz kitchen worktops do not require application of sealants, helping maintain air quality. Other surfaces, such as natural stone and concrete, need to be resealed frequently; the VOC-emitting sealants used have negative environmental impacts over the materials' service lives. Unless misused or subjected to abuse, quartz surfacing can be expected to retain its good looks indefinitely; lifetime limited warranties are available from some manufacturers.

In most applications, close examination of quartz surfacing test data is unnecessary-the product's performance in common applications is well-documented and many of its salient characteristics can be easily established. Yet whenever a designer uses a material in a creative new way, professional standards require critical assessment of claims published by various manufacturers.

Quartz worktops satisfy the strict hygienic requirements of foodservice and healthcare facilities. Moreover, quartz surfacing offers an aesthetic that complements contemporary architectural styles. This engineered stone consists of crushed quartz particles in a thermoplastic binder. In the two decades since its invention, millions of square feet have been installed worldwide.

Quartz was introduced to North America and Western Europe in the late 1990s, concurrent with the onset of the fashion for granite worktops. While its wide palette of colours and patterns secured a place in the design professional's repertoire, quartz surfacing's continuing popularity stems from physical performance that rivals, if not exceeds, other common surface materials. Moreover, its installed cost is competitive with natural stone and other high quality finishes. The material's sustainability further adds to its appeal.

Additionally, it complies with the EU construction material regulations in terms of fire resistance classes. It was tested by AFITILICOF Centre of Fire Testing

and Research (Association for the Promotion of Research and Fire Safety Technology) regulation 653 IMO FTPC Code Resolution MSC 61.

It is allowed to prepare food directly on a quartz surface because it is approved by both National Health and Safety Foundation – a non-profit consumer organisation based in the USA. Also, all quartz worktops are marked with the familiar glass and fork mark – the European Regulation food certificate according to CE 1935/2004.

This point was evident when you compare results of their testing to published product performance data. As mentioned, the flexural strength of quartz surfacing was found to lie between 44,800 and 74,250 kPa (6500 and 10,770 psi), a significantly broad range. On examination, it can be determined this spread could be explained by the quartz aggregate's size in the model tested. The flexural strength of quartz surfacing varies inversely with aggregate size smaller-aggregate materials have higher flexural strength.

Strength and versatility

Marble and granite have little flexural strength. For example, granite's flexural strength is generally between 6900 and 13,800 kPa (1000 and 2000 psi)-this low strength makes natural stone highly vulnerable to breakage during handling and fabrication. In comparison, quartz material tested according to ASTM C 880, Flexural Strength of Dimension Stone, ranges from 44,800 to 74,250 kPa (6500 to 10,770 psi). This strength may enable use of thinner materials for reduced weight.

Natural materials are also inconsistent in strength, even across the breadth of an individual sample. No two pieces of granite are the same; any piece may have flaws and weak points. As a manufactured material, quartz surfacing has uniform strength within each piece; its strength is consistent between samples of the same type or model of material. Thin natural stone worktops must be installed atop full underlayment support due to the stone's strength limitations. In contrast, quartz surfacing of the same thickness can be installed with only partial underlayment support, such as a wood frame around the top of base cabinets.

Quartz worktop is also strong enough to permit cantilevered worktop installations-with full perimeter support at the cabinet edge, 20-mm thickness

quartz surfacing can sustain a 300mm unsupported overhang with ordinary residential loads, and a 30-mm thickness can support an overhang of 400 mm.

With corbels or brackets every 600 mm, this overhang can increase to 500 mm for 20-mm material, and 600 mm for thicknesses of 30 mm at typical residential loads.

As the material contains a thermoplastic, heat resistance is a concern. Tests prove quartz surfacing can resist 20 minutes of exposure to a 177 C vessel, or to boiling water, without changing colour or surface finish. Nevertheless, most manufacturers caution against placing hot cookware directly on quartz worktops and recommend using insulated hot pads or trivets.

Quartz Worktops Safety Factors

Material safety is an important issue, especially in institutional applications. On the basis of surface burning characteristics, we found quartz qualifies as Class 1 by the International Code Council (ICC) and Class A per the National Fire Protection Association (NFPA), permitting its use in buildings with stringent life safety requirements.

Moreover, quartz surfacing resists damage from burning cigarettes. Its emissions under fire conditions are only one-seventh as toxic as those of burning wood, easily passing New York City code requirements.

The material is naturally resistant to fungal growth and its dense, non-porous surface offers little room for bacteria to flourish. Consequently, many quartz surfacing products are accepted under NSF International 51, Food Equipment Materials, as 'splash zone'-approved for areas subject to food spattering and spills (e.g. backsplashes and other vertical surfaces).

Certain models are also 'food zone'-approved for direct food contact, such as worktops and serving lines. In commercial food venues, only NSF-listed products should be selected.

Concerns about radioactive radon emissions have induced some quartz

surfacing manufacturers to test their materials.

Testing conducted by Israel's Soreq Nuclear Research Centre (NRC) using the procedure set forth in ANSI/Institute of Electrical and Electronics Engineers (IEEE) N 4214-1999, American National Standard for Calibration and Use of Germanium Spectrometers for the Measurement of Gamma ray Emission Rates of Radionuclides, found the product fulfils the European Commission's standard "Radiation Protection No. 112, Radiological Protection Principles Concerning the Natural Radioactivity of Building Materials."

Although it now seems obvious, this characteristic of quartz surfacing was not acknowledged in most manufacturers' literature. For example, one producer says its product has a Flexural strength greater than 36,542 kPa (5300 psi), whereas another states its product has one of 40.265 kPa (5840) psi-without regard for grain size.

The engineered quartz industry has not yet developed uniform levels of disclosure about its products properties. As it is impractical to review test data for all characteristics of products, specifiers must decide when to request test reports and how to interpret their findings. In applications where performance is critical, model-specific proprietary specifications or detailed performance specifications should be used as the basis for construction documents.

In addition to being durable, quartz is also recyclable at the end of its service. One manufacturer has recently started a program to collect and recycle scraps produced during local fabrication of quartz surfacing or following building decommissioning.

Neither the quartz mineral nor the thermoplastic resin suffers any degradation during recycling, and the energy needed to crush and reuse the materials is minimal. The number of recycling programs in effect is expected to increase rapidly in the coming years.

Mechanical Resistance

Quartz constantly tops the Consumer Reports kitchen guides. It's basically, the American equivalent of Which? consumer guide. They carry out surveys

evaluating materials by submitting them to rigorous testing. They test and score kitchen worktops in five disciplines: resistance to stains, cuts, heat, abrasion and blunt impact. Quartz always comes on top. Most recently, it scored 84 out of 100.

Quartz	84
Granite	81
Recycled glass	69
Laminate	68
Dekton	63
Soapstone	46
Concrete	40
Butcher block	37
Limestone	27
Marble	14

Where quartz slabs can be used is largely a matter of vision. The material itself is versatile and suitable for various applications. As a kitchen worktop, it is a good choice for the hospitality industry - it can endure hard wear with little maintenance, cutting costs both in hotel rooms and public areas. It is also suitable for food handling areas.

Furthermore, easy cleaning and resistance to fungal and bacterial infestation make it a strong possibility in medical and educational environments.

In vertical applications, the lighter-weight, thinner material has strong potential. As wall cladding, wainscoting, baseboard, or doorframe trim, quartz surfacing can provide a unique contemporary touch or traditional stone-like look. It can even be used in fireplace surrounds with proper attention to sufficient isolation from heat, as defined in NFPA 211, Standard for Chimneys, Fireplaces, Vents, and Solid Fuel-burning Appliances.

In restrooms, quartz surfacing is an excellent choice for shower and bath enclosures. It also provides a distinctive option for toilet compartment

partitions that can coordinate with quartz surfacing on walls and worktops to create an integrated suite of finishes.

Decorative applications are as wide as your imagination. The material can be finished on one or both sides and perforated, offering an intriguing look for railings and balusters. Indoor water features can be constructed or decorated with one or more varieties of quartz surfacing, creating an optical interaction of water and crystal.

Wall surfaces can be etched with custom designs. Undoubtedly, the various characteristics of quartz surfacing offer endless possibilities in the design/construction sector.

For more information about quartz properties, head over to: <https://classic-kitchens-direct.com/engineered-quartz-worktops-features>

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