

Fabrication & Installation Product Guide



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DANGER: SILICA DUST

Exposure to respirable crystalline
silica dust can cause silicosis or cancer

The finished product poses no health hazard



NO UNCONTROLLED DRY CUTTING
WEAR RESPIRATORY PROTECTIVE EQUIPMENT
AND APPROPRIATE PPE

For complete details on safe cutting
refer to wk.com.au/safecutting

Traces of RCS may be present. Refer to SDS for further details <1%

IMPORTANT INFORMATION FOR STONE FABRICATORS **Danger: Silica Dust**

Quantum Zero (<1 %), **Quantum Porcelain** and **natural stone** all contain crystalline silica. This material is known to cause cancer and have links to other diseases including silicosis, tuberculosis, pulmonary, kidney and autoimmune disease. These diseases can kill you. Following proper safety instructions eliminates the health risk. It is imperative that the proper safety measures contained in the Quantum Zero and Quantum Porcelain Fabrication and Installation Product Guide be followed when fabricating all stone products including natural stone.

Fabricated material poses zero safety risk to anyone.

1. INTRODUCTION

1.1. Purpose

The purpose of this manual is to define the basic technical requirements, suggestions and guidelines related to the introduction of the product, design, its usage, installation and maintenance.

1.2. Terminology

The word Quantum Zero[®] used in this document refers to any man-made or manufactured stone in slab, tile or cut to size forms, marketed and sold by WK Stone or its approved distributors or agents in Australia, New Zealand and Pacific Islands.

The word "the Customer" used in this document refers to any to any person, firm or company placing an order with WK Trading Services P/L or its approved distributors ("the Company") for the purchase of any Quantum Zero[®].

The words "Fabrication & Installation Product Guide" used in this document refers to the technical information, specification, design, fabrication, maintenance and other data relating to the use and application of Quantum Zero[®].

1.3. General Information

Quantum Zero[®] is a recycled surface - premium recycled glass bound with high-grade resin, pigments and other fillers. Quantum Zero[®] is manufactured using the most advanced technology to create a world first product.

Quantum Zero[®] recycled surfaces are sold all over Australia, New Zealand and Pacific Island countries by WK Stone, the leader in the supply of natural stone and manufactured stone for over 35 years. The Quantum Zero[®] collection is unsurpassed in quality and variety by any other supplier of crystalline silica-free surfaces in Australia.

Quantum Zero[®] can be used in a variety of domestic and commercial interior applications including kitchen benchtops and vanity tops, splashbacks, laundries, furniture, office-fitouts, food service counters etc.

Quantum Zero[®] is manufactured using premium sourced raw materials. The quality of CSF surfaces will vary from brand to brand depending on the quality of resin and raw materials used in the manufacture of the product. Quantum Zero[®] has been manufactured using high-quality raw materials as originally specified and recommended by Breton spa of Italy.

Quantum Zero[®] combines exquisite design with trusted durability. It's a high-quality product that is non-porous, hygienic and resistant to scratching and staining. Quantum Zero[®] requires minimum maintenance. Matte surfaces will require more regular care and maintenance.

1.4. Limitations & Responsibilities of WK Trading Services P/L and the Consumer/s.

We have taken every care to provide information in this document; this information should be used as a guide in the design, installation and care of Quantum Zero®. No warranty, however implied or expressed, is given in relation to the procedures outlined in this Fabrication & Installation Product Guide except that is required by law.

WK Trading Services P/L assumes that the designers, fabricators and installers using the Product, are familiar with all aspects outlined in this Fabrication & Installation Product Guide and strictly adhere to the recommendations and specifications described in the manual for use with Quantum Zero® only. Any deviation from the recommended guidelines may result in the products not performing as expected and may result in the warranty becoming null and void.

A word of caution for people who are using this Fabrication & Installation Product Guide, though every care and precaution has been taken in the preparation of this document, The Company assumes no responsibility for errors and or omissions, or for the damages resulting from the use of information contained in this Fabrication & Installation Product Guide. Under no circumstances the Company shall be liable for any loss of profit or any other loss or damage caused or alleged to have been caused either directly or indirectly as a result of any person solely relying upon any information contained in this Fabrication & Installation Product Guide

The Company reserves the right to change or modify this Fabrication & Installation Product Guide or its electronic version from time to time without notice, it is the responsibility of the Consumer/s to consult or contact their local Quantum Zero® distributor for accessing the latest version or updates.

2. SAFETY PROCEDURES

Danger: Silica Dust

Quantum Zero contains <1% crystalline silica. This material is known to cause cancer and have links to other diseases including silicosis, tuberculosis, pulmonary, kidney and autoimmune disease. It is imperative that the proper safety measures contained in the Quantum Zero Installation and Fabrication & Installation Product Guide be followed when fabricating material.

2.1. Basic Guidelines

i) Safety Procedures:

We recommend that the stonemason always adhere to good stone working and safety work practices and abide by all the building codes and regulations. In order to prevent any accidents. We strongly recommend that the stonemason follow these simple safety procedures.

- Prior to commencing the job the consumer should read the Fabrication & Installation Product Guide and The Safety Data Sheet. The instruction manuals of adhesives & manuals for operating the various tools.
- The Quantum Zero®, Quantum Porcelain & Natural Stone sheets should be handled with at least two people. When handling these sheets always use industrial protective gloves (AS/NZS 2161) and proper lifting devices and make sure that the lifting straps, lifting clamps and vacuum lifters are free from defects.
- Make sure that the work area is free of all debris and keep the work area clean and tidy.
- When cutting Quantum Zero®, Quantum Porcelain or Natural Stone always wear safety glasses (AS/NZS 1337) and earmuffs (AS/NZS 1269).
Quantum Zero®, Quantum Porcelain and Natural Stone contain silica and the powder (silica powder) when inhaled is injurious to your health. Always cut the stones using wet tools in well-ventilated areas. Respiratory half face reusable Particle Filter Dust Mask to AS/NZS 1715 and 1716 and WHSQ silica document standards should be worn when processing and fabricating all materials.
Click link:
- Quantum Zero®, Quantum Porcelain or Natural Stone should only be cut using wet tools to avoid inhalation of fine silica dust.
All efforts should be made to avoid cutting, polishing, grinding or drilling of Quantum Zero®, Quantum Porcelain or Natural Stone at the installation premises. If alterations are unavoidable, no uncontrolled dry cutting is allowed, refer to PN12472 (below link) for correct guidelines and details regarding controlled dry cutting procedures.

<https://www.safeworkaustralia.gov.au/safety-topic/hazards/crystalline-silica-and-silicosis/choosing-and-implementing-control-measures-respirable-crystalline-silica>

Click link:

https://www.worksafe.qld.gov.au/_data/assets/pdf_file/0028/17992/installing-stone-benchtops.pdf

We strongly recommend you consult with your local governing WorkSafe office for further details in your State.

WK Stone will not be held responsible for any pollution either directly or indirectly resulting out of processing the stone.

- Waterproof protective apron should be worn when using machines/tools with water applications.
- Always wear proper clothing and never wear loose clothing or loosely hanging jewels for safety reasons.
- It is important to wear only steel capped rubber soled industrial safety boots (AS/NZS 2210) when working with Quantum Zero, Quantum Porcelain or Natural Stone.

3. VARIOUS APPLICATIONS OF QUANTUM ZERO®

3.1. Interior Applications

Quantum Zero® is ideal for use in interior applications such as kitchen benchtops, bathrooms vanity tops, floors and walls, stairs, restaurants, hotels, hospitals, and laboratories and also wherever high quality, sanitary and maintenance-free bench tops are required. Their use is comparable to that of natural stone, with the following additional advantages:

The uniformity of colouring permits additional, coordinated applications

- Minimum wastage of material used due to consistent size of the slabs
- Natural defects such as veining, pores, cracks or fissures are minimised
- Resistant to moderate heat temperatures for a short period of time
- Resistant to stains
- Resistant to acids, chemicals and solvents
- Resistant to mildew and mould
- Resistant to freezing and thawing

Quantum Zero® when exposed to direct sunlight may result in colour change and warping, it is advisable to avoid direct sunlight over a prolonged period on the surfaces used in the above applications, including large windows and glass doors.

3.2. Exterior Applications

The company does not recommend Quantum Zero® for use in exterior applications, as Quantum Zero® when exposed to direct sunlight may result in colour change and warping. Including sheltered BBQ areas and BBQ installations.

4. TECHNICAL SPECIFICATIONS

Quantum Zero® is a high-quality product that is long lasting and is practically maintenance free. Quantum Zero® has a carefully designed colour palette of products that can be used in a variety of domestic and commercial applications. Quantum Zero®, however is not an ideal product for exterior use as exposure to direct sunlight for prolonged periods can result in colour changes or fading and warping.

4.1. Quantum Zero® Specifications

Quantum Zero® slab size: 3210 x 1610mm and available in 20mm thickness. The thickness may vary by plus or minus 1.5mm

Slab flatness: up to 2mm over 1.4 metre when slab is fully supported in horizontal position.

4.2. Quantum Zero® colour, surface finish and pattern

Quantum Zero® manufacturing process is renowned worldwide and contains 79-90% premium recycled glass and 15% high-grade resin, making it an extremely hard wearing, practical and highly versatile surface.

Quantum Zero® is the ultimate in stone technology and sophistication and is available in a colour palette ranging from subtle light tones to the marble-inspired veins, to matte concrete designs, which provide you the opportunity to perfect your individual style and decor.

Quantum Zero® slabs are generally available in a polished or matte finish only.

4.3. Quantum Zero® colour consistency and tonal characteristics:

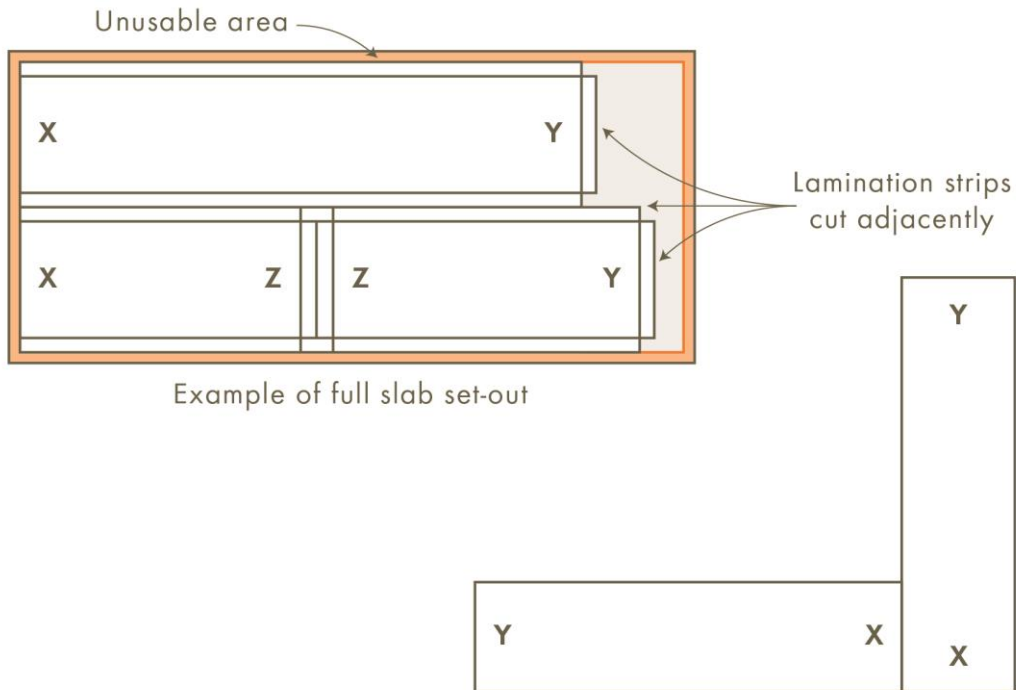
4.3.1 Variation

Variation in colour may occur from batch to batch of Quantum Zero® slabs due to the location from which the natural material is sourced. The composition of recycled glass particles and powders used in the products may sometimes produce minor irregularities such as crazing in the grains, blotches, spots, coloured particles, shiny glass reflections. Such imperfections are generally accepted by the industry.

Quantum Zero® is a non-porous product; but very fine micro pores could be present within the product range and is unavoidable during manufacturing process. These micro pores are present in the raw materials as they are characteristics of the recycled glass and glass particles (agglomerate) which make up to 93% of the product.

The recycled glass will also vary to some degree in each slab & within each slab & therefore we do not recommend adjacent installation of opposite sides or ends of the slab.

i.e.



Y edges should be kept together (labelling of slab edges prior to cutting is recommended)
X edges should be kept together (labelling of slab edges prior to cutting is recommended)
Z edges should be kept together (labelling of slab edges prior to cutting is recommended)

X to Y or **X to Z** or **Y to Z** adjacent butting may not always match with consistent colour or agglomerates.

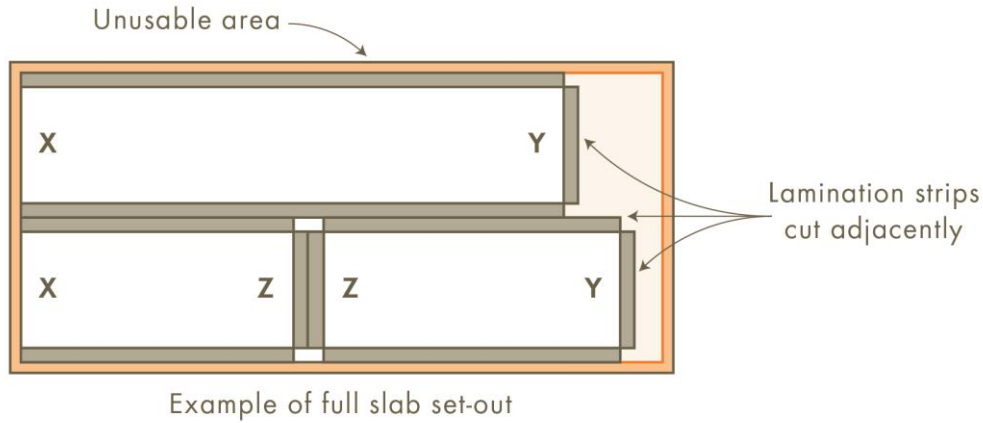
X to X or **Y to Y** or **Z to Z** adjacent butting is preferred and recommended.

4.3.2 Lamination Strips & Orientation

It is highly recommended strips for use in lamination are cut from adjacent areas of the slab, preferably beside the cut edge of the benchtop pieces. This ensures the best match possible.

Labelling of pieces is also recommended.

Orientation of the slabs is also recommended when using a second slab to complete a benchtop which is larger than a slab. Use the label markings on the reverse of the slab as a guide.



4.3.3 Usable Area

Quantum Zero® slabs are sold as 3210 x 1610mm nominal size & need to be trimmed & calibrated during the benchtop cutting process.

These are the manufacturing dimensions & due to production limitations cannot be considered as usable sizes. This nominal size protects the usable area from transportation, distribution or chipping damage which may occur during production &/or shipping.

Recommendations for usable size can be confirmed by Quantum Zero® or your fabricator, & may vary slightly from slab to slab.

The extreme perimeter of the slab should generally be trimmed during fabrication. If however, a large piece is needed, close inspection is required to ensure the area is usable. Most slabs have a wedge like appearance which is the result of the production process; although on occasions it is trimmed during the production cycle. A close inspection is recommended to confirm whether the edge of the slab is usable prior to cutting as the unusable area varies slab to slab.



4.4. Quantum Zero® Technical Characteristics

TEST RESULTS – COMPARISON

No.	Test Item	Test Requested (method)	Result(s)	Comments	Result(s)	Comments
			Quantum Quartz		Quantum Zero	
1a	Water Absorption	EN14617-1:2013	0.01%		0.05%	
1b	Apparent Density		2340kg/m ³		2155kg/m ³	
2	Flexural Strength	EN14617-2:2016	42.2MPa	Classification:F ₄	99.0MPa	Classification:F ₄
3	Impact Resistance	EN14617-9:2005	11.22J		16.47J	
4	Chemical Resistance	EN14617-10:2012	rating:C ₄		rating:C ₄	
5	Linear Thermal Expansion coefficient	EN14617-11:2005	23.5x10 ⁻⁶ /°C		22.6x10 ⁻⁶ /°C	
6	Dimensional Stability	EN14617-12:2012	Vertical displacement 0.06mm	Class:A	Vertical displacement 0.02mm	Class:A

Note: The values quoted above for Quantum Zero® are average range of values of the different products tested and should be considered as an indication only. The test results may vary depending on the colours and also the batches of the products.

TEST REPORT

No. : XMIN2312001543CM01_EN

Date : 2023-12-22

Page: 2 of 15

Summary of results:

(Average value)

No.	Test item(s)	Test method(s)	Test result(s)
1	Absorption by Weight	Refer to ASTM C97/C97M-18	0.07 %
	Density		2169 kg/m ³
2	Abrasion Resistance	Refer to ASTM C241/C241M-21	H _a : 21
3	Modulus of Rupture	Refer to ASTM C99/C99M-18	Dry condition: 54.7 MPa
			Wet condition: 64.6 MPa
4	Flexural Strength	Refer to ASTM C880/C880M-18 ^{e1}	Dry condition: 49.4 MPa
			Wet condition: 56.6MPa
5	Compressive Strength	Refer to ASTM C170/C170M-17	Dry condition: 201 MPa
			Wet condition: 209 MPa
6	Coefficient of Linear Expansion	Refer to ASTM D4535-13 ^{e1}	26.1×10 ⁻⁶ /°C
7	Specular Gloss	Refer to ASTM D523-14(2018)	38.8
8	Mohs Scratch Hardness	Refer to ASTM C1895-20	6
9	Load Test	Refer to CSA B45.5-17/IAPMO Z124-2017 Clause 5.8.6	0.01mm



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5. GENERAL INSTRUCTIONS TO CUSTOMERS

5.1. General Instructions to Installers

When taking delivery of Quantum Zero® slabs, please make sure of the following:

- Check all the slabs for uniformity of colour and granulometry (aggregate distribution) as slabs vary in colour and granulometry.
- Check the slabs for any surface defects including contamination of grains, fine fissures, stains chipping and for warping and thickness variation if any.
- Do not transport slabs horizontally and use proper “A” frames to transport the slabs. Always keep the polished surface covered with plastic film and remove any sharp tools or implement from the vicinity of the slabs to avoid scratches on the polished surface.

If you detect any of the problems after taking delivery of the slabs and prior to cutting, then do not proceed with the processing and return the slabs immediately.

5.2. Product Identification

Quantum Zero® slabs carry a product identification label on one side of the slabs giving the details of the product.

Quantum Zero® slabs are also stamped on the reverse side, clearly stating Quantum Zero® brand name, batch number, slab number and production date.

5.3. Chemicals to Avoid

Quantum Quartz although resistant to most household chemicals can be permanently damaged by exposure to strong chemicals and solvents that undermine its physical properties including but not limited to the following:

- Acetone (only for professional use)
- Thinners (only for professional use)
- Products which contain Trichloroethane or Methyl Chloride (paint thinners or strippers)
- High level Alkaline/pH level products.

Use of these products at any stage will void the Quantum Zero® Limited Warranty.

Products recommended for cleaning Quantum Zero®

Always read the cleaning product manufacturer's instructions and recommendations prior to use.

Firstly, ensure to use a clean micro-fibre cloth to avoid contamination of the Quantum Zero® surface by oils or chemicals from previous cloth use.

- 100% alcohol
- Methylated Spirits
- Isopropyl alcohol
- Quantum Quartz Spray cleaner
- Quantum Quartz Cream cleanser (for stubborn stains – dilute to water consistency)

6. DESIGN AND INSTALLATION GUIDE

6.1. Kitchen / Vanity Cabinets

Prior to installing the bench tops care should be taken to check the cabinets and base units for the following:

- Strong and stable, the cabinets and the sub strata base should be able to withstand Quantum Zero® bench top of weight in excess of 55 to 60 kgs per square meter.
- Units are fastened to both the wall and each other.
- Check that the cabinets are levelled properly. The cabinets must be plumb, true and flat. Make sure that the level does not vary by a maximum tolerance of 1.6mm over a length of 3 metres.
- Remove any nails, screws or sharp edges from the surfaces where the tops would be placed

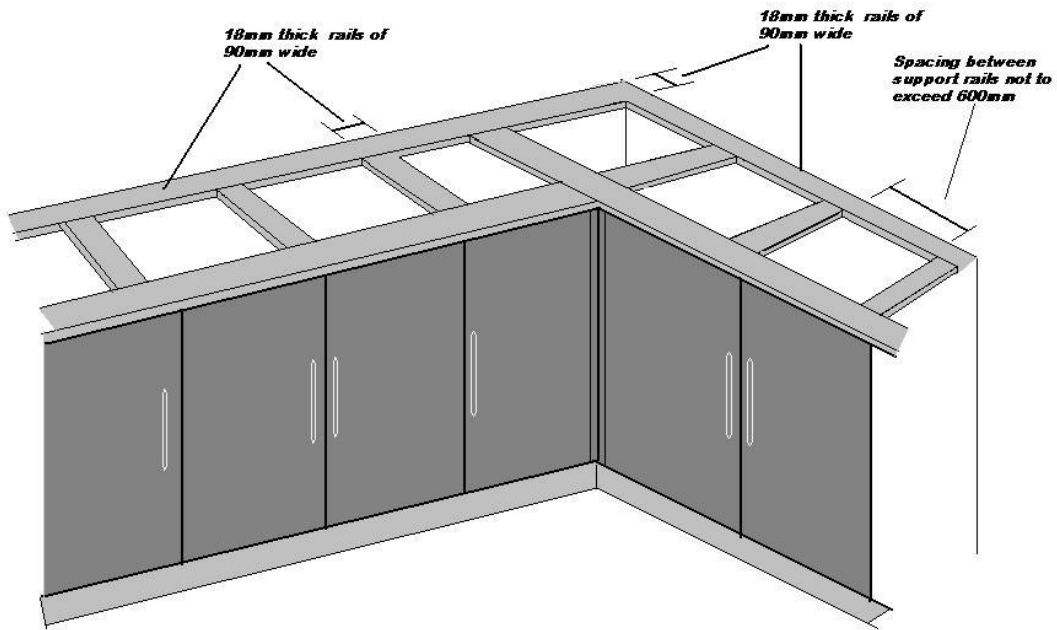
6.2. Installation of Benchtops

No one kitchen bench top is the same as the other, however, we have given below some guidelines for installing Quantum Zero® benchtops. The base supporting the Quantum Zero® bench tops can be either Complete Perimeter support or Complete underlay support.

- It is not common to have all the walls perfectly square. Please make allowance for such imperfections prior to cutting.
- Benchtops should be placed on a very sound and solid frame or a base which is perfectly flat and true.

i. Complete Perimeter Substrate Support:

- Support the top both front and back with a moisture resistant rail of not less than 90mm wide of 18mm thickness. Then support the back of the slab with 90mm-100mm wide rails spaced at regular interval of approximately 600mm apart as shown below.
- It is important to provide a minimum of 3mm between the edge of the tops and the wall so that any expansion in the wall or top due to temperature variation in the atmosphere could be accommodated. Additional gap of one mm per lineal meter should be provided for bench tops lengths exceeding three meters.
- Apply dabs of flexible glue (silicon) at a regular intervals of not less than 25 cm apart on the back of the top then place the tops gently and level the tops before the glue (silicon) cures.

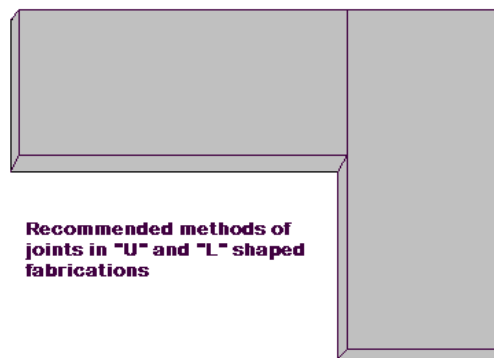


ii) Complete Full substrate support

Alternately the complete surface area of the bench top can be supported over the kitchen cabinets with full width self-supporting underlay made up of high moisture resistant MDF or marine plywood of minimum thickness of 18mm.

6.3. Planning and Installation of tops with joints & cut-outs:

- It is important when planning the joints that the cut outs for the sink and cook top etc are not placed less than 15 cm from the joints.
- WK Trading Services P/L does not recommend installing "L" shaped (or other angled) bench tops without a joint at the corner of angle due to various mechanical stresses to be experienced by such tops after installation (example settlement of floors, cabinets etc). Fabricator should use his own discretion when installing "L" shaped (or other angled) bench tops as our warranty does not apply when "L" (or other angled) shaped bench tops are fabricated from one piece of Quantum Zero® slabs.
- Quantum Zero® recommends that all cuts are performed and continued through to the end of the slab. Cross-directional plunge cutting is not recommended as it places undue stress on the overlap cuts which may cause corners to pop or crack. Cut-outs are exempt although these cuts should be performed with the internal corners pre-drilled.

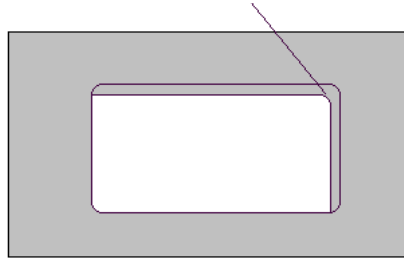


- All joints in the tops should be well supported underneath.
- All joints should be properly cleaned with acetone or denatured spirit to get rid of all the dust and grime.
- All sides of the joints should be straight cut as not to alter the normal thickness and grooved or slotted in the middle so that the glue joining the tops will be well distributed for good adhesion.
- Apply the flexible glue to the joints and also for joining the frame to the bench tops.
- Check that the tops are well aligned both along the joints and also along the front and check that the tops are levelled properly and plumb and true. Use paper masking tape at the joints so that the glue applied to the joints does not move to the polished face.
- Ensure that the joints are perfect and then place clamps at the joints until the adhesive sets properly.
- Once the joints properly set, remove the masking tape and clean off any excess adhesive and also the contact surface with acetone or denatured spirit.
- Do not use any mechanical fasteners like screws and nails to Quantum Zero®.
- Any modification, alteration to the surface of the products of Quantum Zero® (e.g. cutting & grooving the surface including manufacture of drain boards etc) is not recommended.

If you are planning to cut the cut outs at the site of installation, it is most essential that the operation is done in an area where you can use wet tools. Never attempt to cut the sink cut outs and cook top cut outs on the top of cabinets with dry cutting tools.

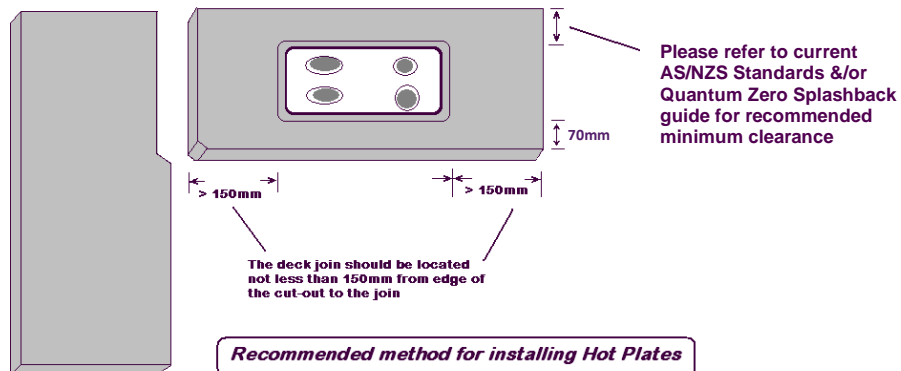
All the cut outs should be cut using only wet cutting tools to avoid generating excess heat to the tops and the corners. The radius of the corner should be around 15mm. When cut outs are planned allow extra 3mm between the appliance edges and the top cut out sides. This is essential to accommodate any expansion that may develop in the top due to temperature changes of the atmosphere.

Internal corners of the cut-outs should be rounded. Prior to cutting cut-outs, drill the corners with a minimum drill hole of 30mm.



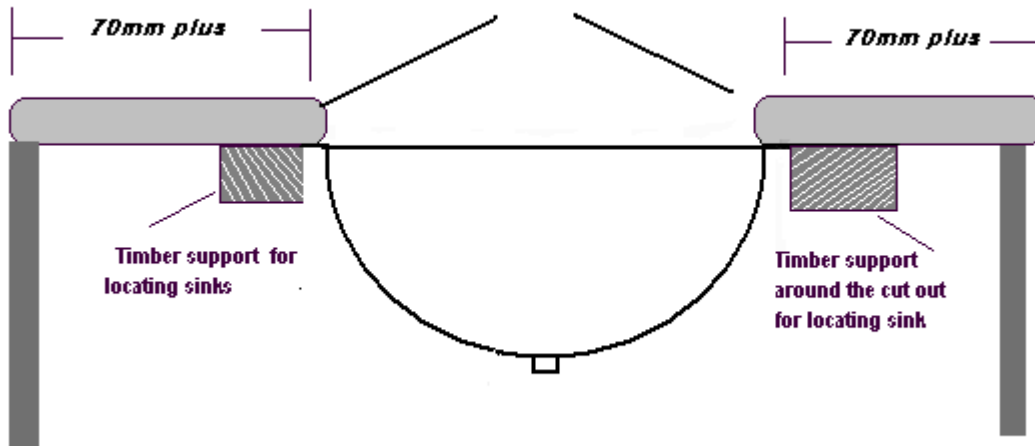
Planning Cut-Outs

- All care should be taken when installing appliances like cook top and sink etc. Read the instruction manual that was supplied along with the appliance prior to commencing installing the appliances. Make sure that all the brackets and supporting nuts are with the pack.
- Care should be taken when joining the tops above any heat generating appliances (e.g. Under bench oven), avoid joins above such heat generating appliances. The warranty becomes null and void if any joints are placed above such appliances.
- Centre all the appliances in the cut out and make sure that you allow minimum of 3mm space between the inside edges of the appliance and the cut-out walls.



- Position all the appliances in place and make sure that the seals provided with the appliances are properly placed prior to tightening the fasteners to keep the appliances in place. All the fasteners should be only fingering tight never use force in tightening the fasteners.
- Any appliances weighing more than 5kg should be adequately supported by the cabinet frames.

Width of Quantum Zero® rails should be not less than 70mm wide

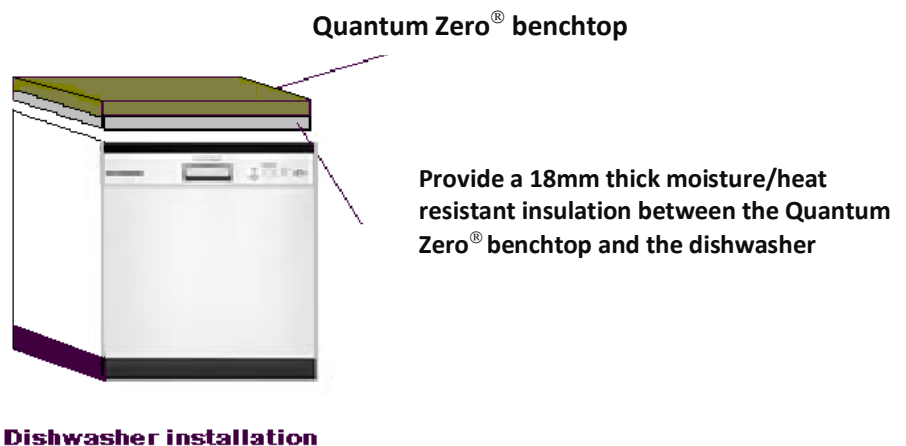


Installation of under the counter sinks

- All the joints between countertop and the appliance edges can be sealed with a high quality transparent flexible sealant. Clean any excess sealant immediately.

6.4. Installing Dishwashers

- Uneven thermal distribution over part of the bench top may occur in areas above dishwashers, ovens, or other heating appliances such as hot water plumbing systems which may cause the top to crack. To avoid this all the hot water plumbing should be thermally insulated, it is a good practice to make the tap holes slightly oversized so that the hot plumbing system is not in direct contact with the product, and when installing dishwasher or oven, it is essential to fit a 18mm thick moisture and heat resistant insulation above the appliance in the cabinet.



6.5. Overhang and Supporting Brackets

All overhangs provided for the breakfast bar or any top should be properly supported with brackets. Rule of thumb is that any overhang exceeding 300mm shall require 10mm thick, 70mm wide steel bar placed underneath the top or brackets spaced @ 600mm centres.

For aesthetic purposes the brackets can be evenly spaced allowing for extra support.

All surfaces without direct carcass support underneath are classified as overhangs.

The overhang dimension should be determined by a professional: Technical information can be referred to in this Fabrication & Installation Product Guide, Section 4.4

The dimension of the overhang is governed by certain conditions.

Conditions to consider

1. All overhangs subjected to any loads should be supported with additional supports, regardless of overhang dimension.
2. Overhangs with 40mm lamination i.e. 20mm benchtop with 20mm exposed polish face laminated underneath back-to-back require minimum 70mm overlap over the carcass.

Recommendations

20mm slabs

<300mm overhang	NO additional support (see condition 1)
300-500mm overhang as per drawing	support brackets @ 600mm centres or 70x10mm steel bar

>500mm overhang	Support posts, panels or columns
-----------------	----------------------------------

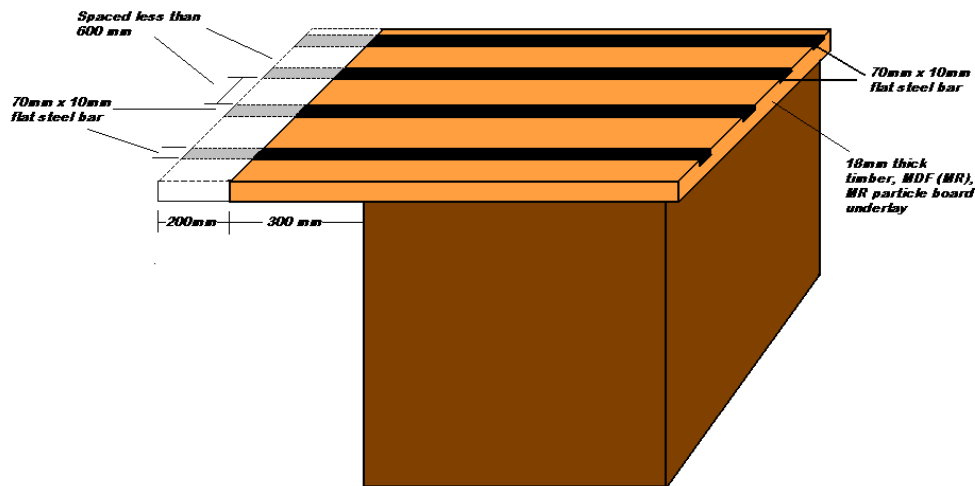
30mm slabs

<400mm overhang	NO additional support (see condition 1)
400-600mm overhang as per drawing	support brackets @ 600mm centres or 70x10mm steel bar

>600mm overhang	Support posts, panels or columns
-----------------	----------------------------------

All the overhangs provided for the breakfast bar or any top should be properly supported with brackets. Rule of thumb is that any overhang exceeding 300mm shall require 10mm thick, 70mm wide steel bar placed underneath the top.

If the overhang is less than 400mm then the general practice is to provide a support base made up of timber and the brackets placed approximately 500mm apart. All overhangs exceeding 400mm should be supported with proper metal legs. The brackets should be fastened to a backer plate, which is secured with the cabinet with screws.



Breakfast bar – example of support for overhang exceeding 300mm

Another example would be to use a 20mm square tube in a skeletal system incorporated into the carcass.

6.6. Installation of Splashback

Quantum Zero® can be used for splashback applications in wet areas, behind the wash basins/sinks and behind cook tops. However, when installing splashbacks behind gas cook tops and heat generating appliances, it is important that the Installer and Kitchen Designer must refer to and follow:

- Gas installations require a distance of 200mm from the periphery of the nearest gas burner to any vertical combustible surface. This includes all brands of engineered stone.
- Refer to The Australian & New Zealand Standards AS/NZS 5601.1:2022 Gas Installations for further information.
- AS 4386.2018 Domestic Kitchen Assemblies – Installation.
- Cooktop and appliance manufacturers specific installation guidelines.

The installer must also ensure that the following general guidelines are strictly followed:

- Make sure that the walls are vertical and free from dirt and grime; if so, clean the entire surface.
- It is not advisable to install splash backs on gyprock boards and any paper lined gypsum product. (refer to Quantum Zero Splashback guide)
- A fibre cement sheet is recommended, the splash back pieces should be thoroughly cleaned on the back and on the top and place it in the area to be installed and check whether the pieces fit properly.
- After the pieces of cladding satisfactorily fit, then clean the surface of contacts with acetone or denatured spirits and apply dabs of transparent two-part epoxy glue to both the surfaces of the contact and place the cladding. It is not advisable to use grout between the cladding and the counter top. Use a flexible silicon to fill the gap between the bench top and the splash backs

- “L” shapes should not be fabricated in one solid piece as this does not allow for movement due to thermal expansion.
- Cut-outs for items such as power points should be core drilled to produce radius internal corners. Cross cutting should be avoided at all times.

6.7. Cladding Walls

Quantum Zero® can be used for all internal cladding of walls and vertical applications. The installation of vertical panels varies from location to location. When designing and installing vertical panels and cladding, it is necessary to take the mass of the product into account and the services of an experienced structural engineer should be sought during the designing and installation phases. Avoid placement near direct natural or artificial UV light, heat lamps or fireplaces.

Although Quantum Zero® has successfully installed in wet area shower recesses, testing should be performed to ensure dimensional stability and moisture sensitivity prior to each installation. Most reputable adhesive manufacturers will have data and recommendations for adhesive best suited for engineered products in Quantum Zero®

6.8. Installation of Kitchen Sinks & Cooktops

Cracks have been known to occur in the narrow strips of bench tops of Quantum Zero® in front and back of the kitchen sinks and cook tops.

The reasons for the development of cracks are due to several factors.

Stainless steel and fibreglass sinks come in a variety of sizes and shapes. There are several variables associated in the installation of such sinks above or underneath the bench tops:

- the thermal expansion of the units
- fully laden weight of the sinks
- fastening & fitment of the support brackets
- the gauge of the stainless steel
- the type & amount of glue used
- insufficient thermal insulation in the installation of cook tops
- ground movement etc

It is not practical for Quantum Zero® to oversee whether all the parameters have been met by the installer at the time of installation of such equipment/s. Therefore, Quantum Zero® will not entertain any claims arising out of cracks developed in the peripheral area of cook tops and sinks and are not covered under 10 Year Limited Manufacturers Warranty.

6.9. Installation of Return Side Panel

Cracks developing in the side/return support of Quantum Zero® panel can be avoided provided the panels are glued only to the cabinet. Gluing the Quantum Zero® panel to cabinet and to both floor (in particular to wooden floor which is prone to warping and movement) and walls should be avoided completely. Silicon sealing of gaps is acceptable.

Gluing the panel to cabinet, floor and walls result in preventing the Quantum Zero® panel to expand or shrink freely thus causing possible stress causing the mitre join to open.

Quantum Zero® Warranty does not cover any cracks of approved installation procedures. Our suggestions are only to minimise the possibilities.

6.10. Edge Profile Details

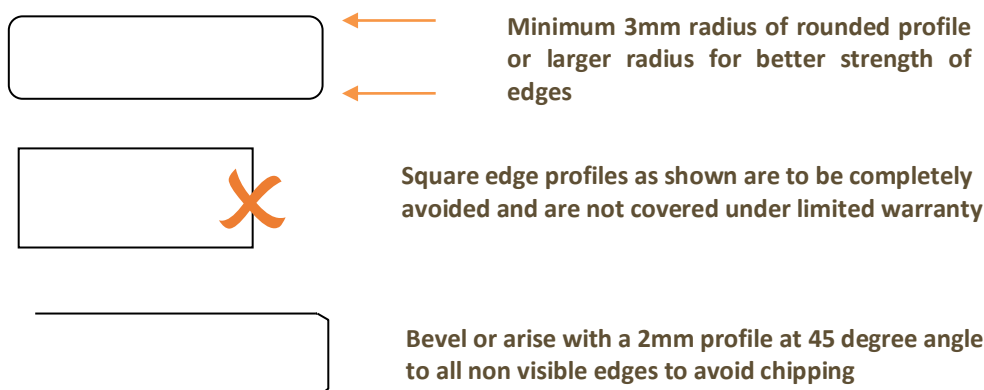
There are numerous edge profiles that can be used to design the edges of Quantum Zero® benchtops. These edges can be designed using 20mm or 30mm slabs or creating 40mm edges by laminating two pieces of 20mm slabs.

Though it is feasible to produce many types of edges the most practical and safest way to design an edge should be a well rounded one with a minimum of 3mm profiled radius or more, the larger the radius the better results in a longer life & general the long life and overall performance of the edge of the bench top. Designing a sharp edge should be completely avoided both from the safety point of view and also to prevent the chipping away of edges.

In addition to designing all visible edges with a minimum of 3mm radius profiles, all the cut edges should be bevelled or chamfered with a minimum of 2mm profile at an angle of 45 degrees. This will prevent accidental damage to edges.

It should be noted that Quantum Zero® Limited Warranty does not cover where the exposed edges have a square edge profile.

The following diagrams show the correct and preferred edge profile design.



Character colours such as, but not limited to, Monte Bianco, Calacutta Roma (as with all Ultra Natural Range colours) are produced using advanced techniques & during these processes the vein is pressed along with the slab as a whole.

There is no control of the outcome on the rear face of the slab. The priority is to ensure the best possible look & clarity is on the front face of the slab.

All slabs should be checked prior to cutting & aligned for best possible fit.

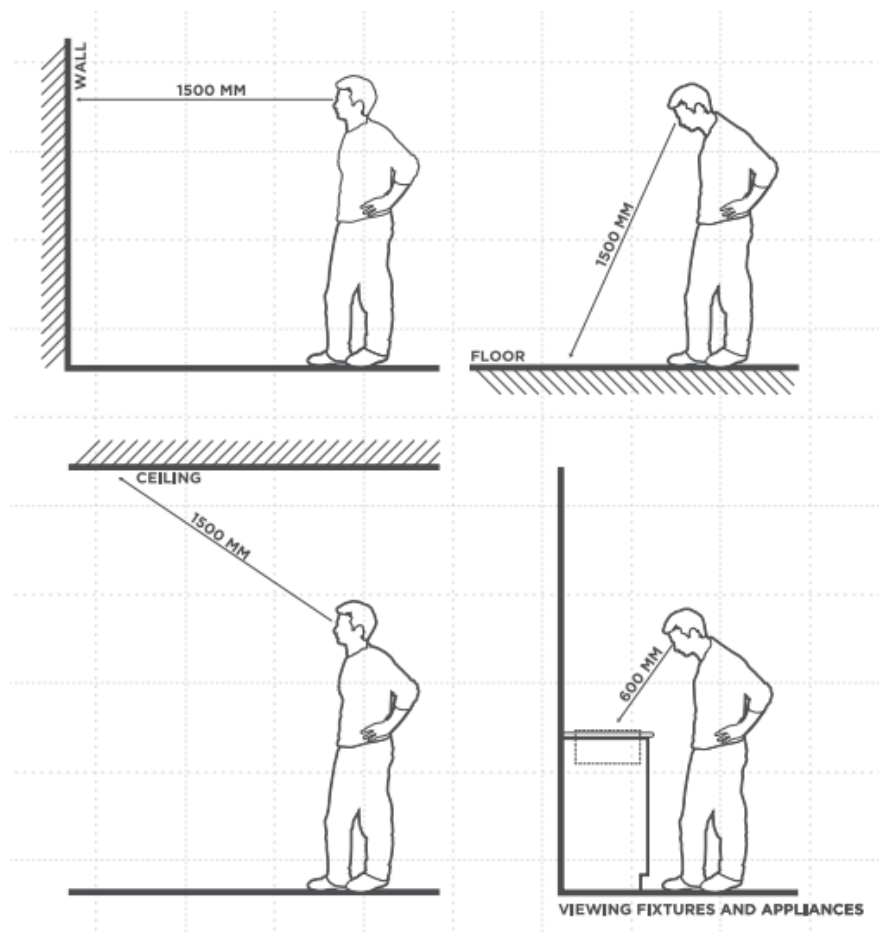
Our recommendation is to use a mitred profile to the edge of the bench top to ensure continuous flow of the vein detail. The apron should be cut adjacent to the edge of the bench top piece to match as close as possible.

6.11. Viewing and inspecting distances

Generally, variations in the surface colour, finish and texture of walls, ceilings, floors and roofs, and variation in glass and similar transparent materials are to be viewed where possible from a normal viewing position. A normal viewing position is looking from a distance of 1.5m or greater (600mm for appliances and fixtures) with the surface or material being illuminated by 'non-critical light'. 'Non-critical light' means the light that strikes the surface is diffused and is not glanced or parallel to that surface. Slight variations in the colour and finish of materials do not constitute as a defect.

NORMAL VIEWING POSITIONS

Reference: HIA Guide to Kitchen & Bathroom Construction / Australian Standards



MATERIALS SAFETY DATA SHEET

Quantum Zero

Section 1 — Product and Company Identification

Product Name:	Quantum Zero
Other Names:	BL3177Z
Recommended Use:	Benchtops, construction industry, vanities
Details of Manufacturer/Importer:	WK Trading Services Pty Ltd
Emergency Number:	02 9772 9888
Avoidance:	Do not subject the product to dry processes which may generate large amount of fine dust.

Section 2 — Hazard(s) Identification

The finished Quantum Zero product as supplied is classified as non-hazardous under normal conditions and does not present any inhalation, ingestion, skin, or eye hazard. However, dust created when the product is cut, grinded or machined may contain small amounts of crystalline silica which may be respirable (particles small enough to go into deep parts of the lung when breathed in). These particles may result in respiratory and pulmonary damage. Personnel undertaking such work must follow health and safety information and take necessary precautions* before the commencement of such work. While this product contains <1% crystalline silica, any inhaled dust should be considered bad for you.

*minimum precautions – Wet cut; Wear a Class P3 respirator; Review Section 8 of SDS for more detail.

*****PLEASE READ CAREFULLY*****

DANGER!¹



GHS08 (Health Hazard)
Category 1A (Carcinogenicity) (H350, H372, H334)



GHS07 (Health Hazard)
Category 3 (Respiratory tract irritation) (H319, H335)

¹ Work Health and Safety Regulations: Classification and Labelling for Workplace Hazardous Chemical, Safe Work Australia

HAZARD STATEMENTS:²

H350: May cause CANCER (inhalation)

H372: Causes damage to organ (lungs) through prolonged and repeated exposure if inhaled

H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled

H319: May cause eye irritation

H335: May cause respiratory tract irritation

PREVENTIONS STATEMENTS:³



P202: Do not handle until all safety precautions have been read and understood

P260: Do not breathe in dust particles generated during processing, working and cleaning

P264: Wash face and hands thoroughly after handling

P270: Do not eat, drink or smoke when using this product

P284: Wear respiratory protection for particles (P3 rating filters)

Refer to Section 7 for safe handling and storage, and, to Section 8 for dust exposure controls

FIRST AID MEASURES:



P314: Get medical advice/attention if you feel unwell after working with the product

POTENTIAL HEALTH EFFECTS:⁴

Inhalation: Do not inhale dust.

Workers, who have been repeatedly exposed to microcrystalline silica particles are at risk of developing silicosis – an incurable, progressive and degenerating disease which may cause severe inflammation and scarring of the lungs that can lead to permanent lung damage. Respirable fine Silica particles, when inhaled into airway, become trapped in lung tissue and block small air sacs (alveoli) where gas exchange occurs, reducing the lungs' ability to take in oxygen and causing irreversible lung injuries. In addition, lung cells engulfed with silica particles may also leave lung tissue and enter the blood stream to different parts of the body, creating other health hazards. Several studies also indicated links between prolong exposure to respirable silica and the development of chronic obstructive pulmonary disease, renal (kidney) disease and auto immune disorder.

² Globally Harmonized System of Classification and Labelling of Chemicals (GHS)-Safe Work Australia

³ Precautionary Statements – Globally Harmonized System of Classification and Labelling of Chemicals, Safe Work Australia

⁴ Silicosis Fact Sheet – Lung Foundation Australia, and, Crystalline Silica Fact Sheet – Safe Work Australia

The condition where damages are done by respirable silica to lung tissue causing it to scar and loss of normal functions, is known as **Silicosis**. Its symptoms, depending on the severity of the damage, include shortness of breath, persistent cough, chest pain, respiratory failure and may eventually lead to death.

Skin and Eye Contact:

Mineral dust contact may cause temporary irritation to skin such as redness and itching, and, can cause eye irritation with symptoms of burning, redness and tearing.

Aggravation of Pre-existing conditions:

Workers with pre-existing respiratory or skin/eye disorders may be more susceptible to the effects of this product during processing work. Pre-existing conditions such as asthma, emphysema, tuberculosis and other skin/eye allergies or diseases may be adversely aggravated where airborne silica particles are produced.

RESPONSE STATEMENTS:

P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P302+P350: IF ON SKIN: Wash with plenty of soap and water

P333+P313: IF SKIN IRRITATION/RASH OCCURS: Get medical advice/attention

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes, remove contact lenses if present and easy to do. Continue rinsing

DISPOSAL STATEMENTS:

P501: Dispose of products and by products according to local, regional, national and international regulations

Section 3 — Composition and information on ingredients

These products may contain amounts of crystalline silica (SiO₂) in the form of quartz and other crystalline silica minerals which may produce large amount of respirable airborne silica while being processed. Respirable silica particles are hazardous to human health and proper precautions are needed before the commencement of working with the product. Refer to Section 2 and Section 8 for further information. Percentage concentration estimations of crystalline silica listed below are taken from X-ray diffraction analysis of a sample of the product type, carried out by Stone Initiatives and Agon Environmental, Adelaide as part of report WST0124-1 – Quantum Zero BL3177Z. Other component ingredients are stated by the supplier.

See next page for ingredients

Ingredient	Formula	CAS Number	%Concentration estimated mean
Quartz (crystalline silica)	SiO ₂	14808-60-7	<1.0%
Rutile	TiO ₂	1317-80-2	1%
Recycled glass	Unknown	60676-86-0	>60%
Unsaturated Polyester Resin	Unknown	26123-45-5	<16%
Fe ₂ O ₃	Fe ₂ O ₃	1332-37-2	<1%
KH570	Unknown	2530-85-0	<1.8%
TBPO	Unknown	3006-82-4	<1.2%
Aluminium Hydroxide	Al(OH) ₃	21645-51-2	>15%

The above estimated concentration percentage of quartz crystalline silica is based on a sample of the material provided for testing and due to the variable nature of such products, these may be subject to change.

*Amorphous material may contain amorphous silica which has an exposure limit when in respirable form. Refer to Section 8.

Section 4 — First aid measures

Manufactured stone slabs and other dimension stones in their normal state exert minimal health hazard. However, harmful silica particles may be produced during processing activities. The following necessary first aid measures must be observed in the event of any incident/accident.

Eye	Immediately flush with plenty of water for at least 15 minutes. Hold eyelids apart. Remove contact lens if present and easy to do. Occasionally lift the eyelid(s) to ensure thorough rinsing. Beyond flushing, do not attempt to remove material from eye(s). Get medical attention if irritation develops or persists.
Skin	Wash off with soap and water. Get medical attention if irritation develops and persists.
Inhalation	Move person to fresh air. Call a physician if symptoms develop or breathing stops
Ingestion	Rinse mouth and drink plenty of water. Never give anything by mouth to an unconscious person. Get medical attention.
Notes	Provide general supportive measures and treat symptomatically. Keep victim under observation as symptoms may be delayed. Ensure that medical personnel and first aiders are aware of the materials involved and take appropriate precautions to protect themselves. Pre-existing medical conditions may be aggravated by the exposure. Personnel with eye, skin and lung conditions, as well as tobacco smoking should avoid further exposure.

Section 5 — Firefighting measures

Suitable Extinguishing Media	Non-combustible, non-flammable material, use fire extinguishing media appropriate for surrounding materials.
Special Protective Equipment	Use appropriate protective equipment for surrounding materials. No specific precautions noted as the product is an inert material.
General Information	No unusual fire or explosion hazards

Section 6 — Accidental release measures

This product does not represent a risk of spillage

CLEAN UP AND DISPOSAL

Solid Slabs: can be disposed in accordance with local/state/federal regulations

Dust: when large amount of dust is generated, clean-up personnel may be exposed to respirable crystalline silica-containing dust. Wear appropriate protective clothing and equipment (e.g. dust-proof goggles, rubber gloves, Class P3 respirator, coveralls and rubber boots). Do not dry sweep or use compressed air for dust clean-up. Misting of spilled material and collect it in sealable containers for disposal. Do not discharge fine particulates into drains or waterways.

Section 7 — Handling and storage

Storage: Avoid dust formation and accumulation. Store in ventilated area.

Handling: Do not handle until all safety precautions have been read and understood. Stone blocks/slabs are very heavy, use safe lifting methods and equipment to avoid injuries. Keep airborne dust formation to a minimum and provide proper exhaust and ventilation at places where dust may be generated. Wear appropriate personal protective equipment. Do not breath dust and avoid prolong exposure.

Hygiene: Observe good personal/industrial hygiene practice, including removing and washing dusty clothing immediately after use, washing hands before eating, prohibit eating, drinking and smoking in contaminated areas.

Section 8 — Exposure controls and personal protection

Exposure Guideline: Permissible Exposure Limit (PEL), PEL regulations vary in different countries, check PEL in country of use. There is no PEL associated with the finished product in the Workplace Exposure Standard for Airborne Contaminants, Safe Work Australia (January 2024).

However, dust containing respirable crystalline silica (SiO₂) and other minerals (such as various clay / mica minerals and calcium carbonate) or amorphous silica may be generated during processing of the product. These respirable particles have exposure standard limits according to the Safe Work Australia 'Workplace Exposure Standard for Airborne Contaminants' – January 2024.

		WES/TWA
Exposure Standards:	Respirable Crystalline Silica (Quartz – 14808-60-7):	0.05mg/m ³
	Respirable Crystalline Silica (Cristobalite – 14464-46-1):	0.05mg/m ³
	Respirable Crystalline Silica (Tridymite – 15468-32-3):	0.05mg/m ³
	Respirable Crystalline Silica (Tripoli – 1317-95-9):	0.05mg/m ³
	Silica, fused (60676-86-0):	0.05mg/m ³
	Respirable Amorphous Silica (Fumed silica – 7631-86-9)	2mg/m ³
	Respirable Amorphous Silica (Fumed thermally generated)	2mg/m ³

Abbreviations:
WES: Work Exposure Standards
TWA: Time Weighted Average - 8-hour time weighted average: the maximum average of an airborne concentration of a substance when calculated over an 8-hour working day, for a 5-day working week.

Employers should consult a qualified occupational safety and health professional (e.g. Certified Occupational Hygienist) to perform air monitoring in the workplace to determine the airborne concentrations of various contaminants.

Maintain air concentration below occupational exposure standards, using engineering controls if necessary. Use of a local exhaust ventilation, on-tool dust extraction and full-face P3 rated respirator is highly recommended for processing. Processing should also only be undertaken in a wet condition to reduce the quantity of dust released during processing.

Details in Exposure Control, Environmental/Health Monitoring and Personal Protective Measures can be found in the "Working with Silica and Silica Containing Products" – National Guidance Material, 18th February 2022, Safe Work Australia.

Section 9 — Physical and chemical properties

Appearance:	Solid artificial stone Amorphous material, rutile and quartz (crystalline silica)	Density:	2155Kg/m ³
Solubility:	Insoluble in water		
Colour:	White		
Odour:	Odourless	Thermal Expansion: ⁵	-
pH:	N/A	Flammability:	N/A
Melting Point:	N/A	Viscosity:	N/A
Boiling Point:	N/A	Auto-Ignition Temp:	N/A
Flash Point:	N/A	Decomposition Temp:	N/A
Burning Time:	N/A	Burning Rate:	N/A
Evaporation Rate:	N/A		

Section 10 — Stability and reactivity

Reactivity:	The product is stable and non-reactive under normal conditions of use, storage and transport
Chemical Stability:	The material is stable under normal conditions
Hazardous Reaction:	No dangerous reaction known under conditions of normal use
Physical Stability:	Avoid strong impacts which may cause material to break
Conditions to Avoid:	Avoid contact with strong oxidizing agents. When heated to extremely high temperature (>860°C), quartz gradually converts to tridymite or cristobalite – forms of crystalline silica which are considered to be more hazardous than quartz.
Incompatible Materials:	Crystalline silica may react violently with strong oxidizing agents, causing fire and explosions.
Decomposition products:	Silica dissolves in hydrofluoric acid producing a corrosive gas, silicon tetrafluoride.
Acute toxicity:	No acute or chronic effects are known from the exposure to the intact product. However, dust in contact with skin and eyes may cause mechanical irritation. Temporary inhalation of dust may result acute respiratory irritation, such as discomfort in the chest, shortness of breath and coughing.
Primary routes of exposure:	None for intact product. However, dust emitted from the fabrication process may be in contact with eyes, hand, lungs or other body parts by exposure or inhalation.

⁵S. S. Kirk and D. M. Williamson (2012). STRUCTURE AND THERMAL PROPERTIES OF POROUS GEOLOGICAL MATERIALS, AIP Conference Proceedings 1426, 867.

Section 11 — Toxicological information

Respiratory effects: Repeated inhalation of respirable crystalline silica (< 10µm) may cause silicosis, an incurable, progressing fibrosis (scarring) of the lungs. Silicosis increase the risk of contracting pulmonary tuberculosis, and, may cause other adverse conditions such as lung and kidney cancer (according to some studies). Safety measures including environmental measure such as proper ventilation and extraction, filtering system and wet processing. The use of effective personal protection particularly respiratory protection will also reduce the risk of dust inhalation.

Carcinogenicity Respirable crystalline silica is classified according to the following organisation:

GHS	IARC	NTP	NIOSH	ACGIH	WHO/NIH
Carcinogen - Cat 1A	Human carcinogen (Group 1)	Definite a lung carcinogen	potential occupational carcinogen	A2 suspected human carcinogen	Known human carcinogen

Sensitization No respiratory sensitizing effects known

Mutagenicity No data

Section 12 — Ecological information

Not expected to be toxic to aquatic organisms as the product is insoluble in water. However, discharging dust and fine particles into waterways may increase the total suspended particulate (TSP) level that can be harmful to certain aquatic species.

Degradability N/A

Bioaccumulative N/A

Mobility in Soil N/A

Other adverse effects: No other adverse environmental effects known caused by this product

Section 13 — Disposal considerations

Disposal methods	Do not allow fine particles to enter into sewers/water supplies. Do not contaminate ponds, waterways or ditches with dust. Dispose of product in accordance with local/regional/national/international regulations
Hazardous waste code	Not regulated
Residue/Unused products	Dispose products and residue in accordance with local regulations. Empty containers may retain product residues. All product residues and unused materials may be disposed in a safe manner
Contaminated Packaging	Follow packaging labels. Empty packaging materials should be recycled or disposed of in accordance with appropriate regulations and practices.

Section 14 — Transportation information

ADG Code of Classification	None
DOT Hazard Classification	None
PLACARD Required	None
LABEL Required	Label as required by the OSHA Hazard Communication standard {29 CFR 1910.1200(f)}, and applicable state and local regulations.

Section 15 — Regulatory information

Crystalline Silica is a component of this product, and is listed as carcinogenic material in GHS, IARC, NTP, NIOSH, ACGIH and WHO/NIH. Respirable crystalline silica has a workplace exposure standard of 0.05 mg/m³ averaged over eight hours according to WHS regulations.

Section 16 — Other information

Abbreviations:

WHS:	Work Health and Safety
IARC:	International Agency for Research on Cancer
NTP:	National Toxicology Program
NIOSH:	National Institute for Occupational Safety and Health
ACGIH:	American Conference of Governmental Industrial Hygienists
WHO/NIH:	World Health Organisation/National Institutes of Health
OSHA:	Occupational Safety and Health Administration, US Department of Labour
DOT:	US Department of Transportation
GHS:	Globally Harmonized System of Classification and Labelling of Chemicals

FOR FURTHER INFORMATION	CONTACT: (+61) 02 9772 9888
WK Stone 129 Fairford Road Padstow NSW 2211 Australia	
MSDS Preparation Date	30/January/2024

NOTICE:

WK Stone believes that the information contained on this Material Safety Data Sheet is accurate. The suggested precautions and recommendations are based on recognized good work practices and experience as of the date of publication. They are not necessarily all-inclusive or fully adequate in every circumstance as not all use circumstances can be anticipated. Also, the suggestions should not be confused with nor followed in violation of applicable laws, regulation, rules or insurance requirement. However, the product must not be used in a manner which could result in harm.

NO WARRANTY, EXPRESSED OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE IS MADE

10 Year Limited Warranty

Warranty Terms & Conditions

Congratulations on your recent purchase of **Quantum Zero**...
thank you for choosing us for your project!

Quantum Zero supplies material to your stonemason in slab format. Your stonemason of choice will cut, polish and install your bench top. All Quantum Zero material is checked when it arrives in our warehouse & before it leaves. After it leaves our warehouse, Quantum Zero has no control with transportation, manufacturing or installation.

Please take the time to read our care and maintenance recommendations. By following the proper installation, care and maintenance of Quantum Zero you should have many years of enjoyment from our Product.

Listed below are the terms and conditions applicable to Quantum Zero recycled surfaces.

What is included in the warranty:

1. Quantum Zero offers a 10-year limited warranty to the original customer for a period of 10 years from the date of installation.
2. The warranty covers any defects arising from the manufacture of the slab. Subsequent fabrication and installation are not covered in this warranty.
3. The Warranty is limited to a) replacing the material b) refunding the value of the material. c) repairing the material. The warranty does not include fabrication and installation of the material.

What is not included in the warranty:

1. Any defect or damage to the Product arising from work done by anyone other than Quantum Zero.
2. The fabrication and installation of the Product by other parties.
3. The use of the Product as flooring or outdoors (including BBQ areas) or in areas near swimming pools.
4. Changes in colour in different light conditions and discolouration or fading due to exposure to natural or artificial UV, sunlight or silicon (or similar). It is recommended to install a UV protecting film on windows where the benchtop is exposed to sunlight and rays through the glass.
5. Any modification or alteration (including the use of sealers or colour enhancers) to the surface of Quantum Zero.
6. Damage to the Product due to prolonged exposure to chemicals or solvents; such as (but not limited to) acetone, thinners, paint stripper, cleaners that have high alkaline/pH levels.
7. Damage by:
 - a. Placing hot pots / pans (including electric fry pans) on the surface
 - b. Applying excessive weight to the surface
8. Any defect or damage as a result of the Product not being cleaned in accordance with the Quantum Zero Care and Maintenance Guide.
9. Variations in colour, pattern or shade of the material against sample material, displayed or illustrated. Quantum Zero is made from recycled glass and pigments & some colour variation will occur between batches.
10. Failure of adhesives, caulking materials, damage resulting due to the accessories installed, failure due to inadequate support to joints and seams.
11. Failure to follow any procedures, instructions and recommendations given in the Product Manual provided to the Fabricators and/or Customers.
12. Damage as a result of sitting, climbing or standing on the Product.
13. Any defect or damage as a result of mishandling or abuse.
14. Bowing less than 1.5mm per 1000mm of material.
15. Cracks are not a material fault. They are not covered in the warranty and are usually a result of:
 - a. Mechanical stress on the material after installation
 - b. Settlement or movement in joinery or house as a whole
 - c. Sitting, standing or climbing on your bench top
 - d. Excessive heat
 - e. Sink or cook top cut out (not covered)
 - f. "L" shaped cut out / improper installation
16. Chipping is not a material fault; it is normally a direct result due to impact to the edge of the surface. Chips are not covered by this warranty.
17. Fireplaces are not covered as a result of variations in design and heat output.
18. The warranty only applies if the Product was installed by a qualified and licensed stonemason.
19. Very infrequent 'greyish' or 'reddish' dots in 'Galaxy Black' or 'Reflections' are normal. These dots are the reverse side of a mirror and are an expected result of the manufacturing process. Other very inconsistent small dots are part of the material used in the manufacturing process and are an accepted part of the material.

20. 'Galaxy Black', 'Reflections' and 'Turino' may show minor pitting on the surface due to the manufacturing processes of the mirror (glass). Turino may also show internal crazing within the glass. This is unavoidable and not considered a fault in the Product. We suggest inspection of slabs prior to purchase or cutting as no claims will be considered relating to pitting in the 'Galaxy Black', 'Reflections' and 'Turino'.
21. Small infrequent dots may appear in the material. These can be darker or lighter pieces of coloured glass in relation to the base colour and are not considered a fault of the material. Infrequent small white dots present in Midnight Black for example are particles of recycled glass used in the manufacturing process and are accepted as part of the material.
22. On 'Ultra Natural' colours, some black/greyish dots may appear both large or small. There may also be inconsistencies in the veining pattern or background. This is not a defect; the inconsistencies are designed to mirror the look of natural stone.
23. 'Character' colours such as Ash Grey, Dolce, Alabaster Matte and Graphite Matte and others include sporadic small circles and darker spots. These inclusions are not faults but are added intentionally and add to the unique & inconsistent character of the stone.
24. Concrete Matte is a unique and inconsistent colour. Due to the raw material mix used to make this colour and the unique polishing methods you may see small areas/spots of the stone that seem to be slightly more/less polished than others. This effect may be more noticeable when the bench is viewed under intense artificial or natural light. This is not a defect in the stone.
25. Concrete colours, Naturale Concrete and Metro Concrete have an uneven finish which may show inconsistent spots, mineral glitter and pits. These features, although sporadic, are part of the 'rough matte' finish production process and are not considered a defect.
26. Staining or discolouration is not covered by the Quantum Zero warranty. Quantum Zero is stain resistant however it is not stain-proof. Coloured condiments such as but not limited to beetroot, red wine and turmeric, and other coloured condiments may leave marks if not cleaned immediately, by absorbing without wiping.

Statutory Rights

The limitations on the Warranty set out in this document do not exclude or limit the application of the mandatory conditions or warranties implied by the Trade Practices Act 1974 or any other equivalent or corresponding legislation.

Registering your Warranty

Please register your warranty online at www.wk.com.au. This will enable us to offer you better customer service.

Making a Claim

Please address any claim in writing within 28 days of the occurrence to:

WK Trading Services P/L Trading
 as Quantum Zero
 129 Fairford Road Padstow NSW 2211
 Tel: +612 9772 9888
 Email: marketing@wk.com.au

Care and Maintenance Guide

Quantum Zero is a durable material but you should avoid:

- Sitting, standing or climbing on your bench top
- Direct exposure to hot pots, pans or other hot items
- Cutting food directly on the surface
- Knocking, dropping or bumping the Product with heavy items
- Exposure to strong chemicals and solvents

Matte finish products are as durable as our polished range however they are prone to oil marks from 'oily' based products and even our own natural skin. These are not permanent stains however extra care is required in order to maintain your matte finish product.

Note: all silicon or similar based products may leave a shiny film on the surface, causing a shiny appearance which cannot be removed. This is an unavoidable part of the installation and should be restricted to the necessary (splashback and joint sealing) areas of the benchtop.

Quantum Zero is low maintenance.

- For every day cleaning use a neutral pH cleaner or our Spray Cleaner*
 Absorb spills immediately and wipe with a soft cloth or sponge. Ensure you remove all cleaner residue with damp cloth or sponge.
- For stubborn stains use our Cream Cleanser*
- Quantum Zero is virtually non-porous and does not require sealing or polishing to maintain its semi-gloss, smooth finish.

NOTE: When cleaning with our Cream Cleanser, **please dilute with water first**, then apply with a non-scratch scourer or soft cloth.

When unsure, test the Cream Cleanser on a small piece of your bench that is out of view.

Quantum Zero is not a full gloss finish, it is a semi-gloss. If your bench top looks too shiny or blotchy please review your cleaning methods.



TO VIEW THE QUANTUM ZERO CARE & MAINTENANCE VIDEO VISIT www.wk.com.au

*Cream Cleanser is available at select kitchen companies and fabricators as well as online at wk.com.au

This document supersedes all previous versions and is subject to change without notice.