

QUANTUM PORCELAIN

12mm Slabs Supplementary Manual

To be read in conjunction with Quantum Porcelain Installation Manual



12mm Slabs Supplementary Manual

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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

Important information for stone fabricators

Danger: Silica Dust

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 Installation and Product Manual be followed when fabricating all stone products including natural stone.

Fabricated material poses zero safety risk to anyone.

Safety precautions

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 Product Manual, 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 Porcelain & Natural Stone contain crystalline 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.

https://www.worksafe.qld.gov.au/_data/assets/pdf_file/0020/163541/protecting-workers-from-respirable-crystalline-silica-guide.pdf

- 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.worksafe.qld.gov.au/_data/assets/pdf_file/0005/172157/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 .

Recommendations:

Handling

Quantum Porcelain 12mm slabs must be handled which includes loading, unloading & transporting by using a forklift, gantry crane or industrial lifting device with suitable jib & clamp. Slabs must be balanced during lifting & must be carried considering its centre of gravity.

Quantum Porcelain slabs must be handled & carried on edge, & never carried in a flat-bed position. All care must be taken when leaning to place the slab on a bench for working. Slabs must be leant onto the bench edge & lifted using the bench edge as support & leverage.

12mm Quantum Porcelain (3200x1600x12mm) slabs weigh approximately 161kg.

Slab Inspection

Slab inspection prior to fabrication

Quantum Porcelain recommend cleaning the surface of the slabs thoroughly & inspect the slab for any of the following:

- Foreign contaminations
- Cracks, fissures, blisters or stress marks
- Colour tonality or print fault including infiltrations

This should be carried out each & every time prior to commencement of fabrication.

Continued inspection of the slabs should be carried out to ensure foreign contaminates are not lodged underneath the slab.

Tooling cutting, grinding, drilling to be performed wet

Use correct protective attire and appropriate wet tools during all processing of Quantum Porcelain

Blades

Quantum Porcelain CX350 continuous rim or Quantum Porcelain SCX350 segmented blades are recommended for cutting Quantum Porcelain 12mm slabs.

These blades were designed to cut Quantum Porcelain slabs but are equally at home cutting Quantum Zero & natural stone. Blades are available for purchase through your local WK Stone warehouse.

Core Bits, polishing pads wet

Quantum Porcelain recommends the use of high-quality products including:

- Diamond polishing disks (Wet)
- Silicon Carbide disks (Wet)
- Core bits-electroplated, sintered &/or continuous rim (Wet)

Adhesives for bonding mitres/& benchtop installation

Tenax Powerbond or Topfill is recommended for all applications - interior & exterior.

Follow the instructions of the manufacturer.

Tenax Powerbond is available in 31 colours no yellowing; Available in Cartridge format, with quick gel time. (3-5')

Topfill 50 is a 2 part (1:1) "transparent ice" epoxy glue with approx. 45' gel time & very low yellowing.

An alternative is Integra Xi bonder suitable for interior applications only. Please consult with local suppliers for recommendations.

For vertical kitchen splash back installation, natural silicon is recommended. Please ensure silicon is compatible with the substrate. Remove 50mm strips of mesh from reverse of Quantum Porcelain at 450mm centres & apply thick bead of silicon leaving the perimeters open to allow silicon to cure. Press the sheet gently into position to spread the silicon bead to position & create a bond with the substrate.

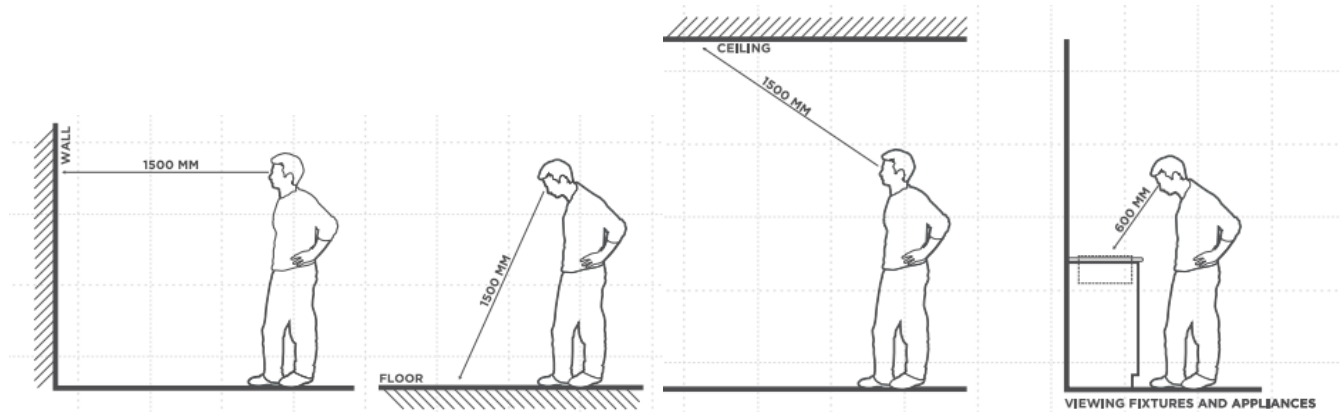
Viewing and Inspecting Distances

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



General Fabrication Guidelines

- Ensure all cabinets are true, straight & level & able to accept the weight of the counter top.
- QP benchtop to be supported with full substrate.
- Maximum unsupported overhang (eg breakfast bar overhang) 10cm (100mm).
- All cut-outs for appliances must be fully supported around the perimeter of the cut-out & anchored to the carcass.
- Quantum Porcelain 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.
- Any accessory or appliance must be glued, sealed & installed as per the manufacturer's instructions. We suggest these appliances are installed last, after the benchtop is placed & glued to the carcass. Underslung sinks can be pre glued but must be supported as per previous note once top is installed.
- Seams & benchtop joins must be located above a structural rail or cupboard wall.
- Non rectified slabs require initial trimming to release possible tension.
- Bridge saw travel cutting speeds are half of 6mm recommendations based on 350 dia blades. RPM blade revolutions is similar to 6mm but adjustments must be made to suit individual machines. Always remember to keep within the recommendations of the blade & machine manufacturers.

12mm we suggest 0.32-0.36m/min & 1800-2200rpm.

- All cut-out corners must be predrilled.
- L-shape panels are not recommended & must be avoided. Always fabricate L-shaped pieces with a join on the inside corner(s).
A join is required at every change of direction. Ensure that all joins & seams are supported at all junctions.
- We recommend a minimum 7cm from the edge of slab to any cut-out. Minimum 5cm to tap hole & sink cutout.
- 2mm aris or radius to all edges is recommended to minimise chipping. This is the best compromise between chip resistance & looks.

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