TALOSTONE®

Your Natural Choice®

Fabrication, Installation Safety & Health Protection Guide

talostone.com.au

Version 2023.v1

Talostone® Fabrication & Installation, Safety & Health Protection Guide

Important Notes!

This Guide includes safety and health information and recommendations. However, it does not serve as professional advice, nor does it replace any stonemason's personal responsibility to apply all relevant health and safety measures. To protect the health and safety of all employees exposed to silica dust, it is always necessary to consult with a local advisor. All stonemasons, who work on Talostone® slabs, agree that their business operations already meet Safe Work Australia and OHS Australia standards prior to purchasing and/or fabricating Talostone® products. Talostone® reserves all rights and are not to be held liable for any consequences to stonemasons who do not meet Safe Work Australia and OHS Australia standards.

Distribution:

Stonemason/Installer

Architect/Designer

Developer/Builder

Kitchen/Joinery Company

Introduction

Talostone® offer a wide range of Low Crystalline Silica engineered stone products for high quality, luxurious interior designs at a more cost-effective rate in comparison to traditional stone solutions.

Talostone® is a professional wholesaler of engineered stone slabs. Since 2013, we have been stocking jumbo size slabs across our range – ranging from 3075x1600mm to 3200x1600mm, depending on the colour. The extra-large slab sizes help homeowners and developers save on material costs and allow designers to maximise slab usage and design potential. For some popular commercial project colours we also supply slabs, 3060x1440x20mm in size (please refer to Page 60 for more Talostone® Product Specifications)

At Talostone® we take the design and manufacturing of our products very seriously and invest heavily in Research and Development. On average, it takes a year and a half from original conception to the release of a new colour. Our Marble Range and Premium Marble Range colours are matched as closely as possible to the equivalent natural marble veins and colouring, allowing us to accurately imitate the beauty of natural stone.
Talostone® Premium Marble Range colours with wide veins are manufactured in pairs to assist designers to utilise the matching of major veins to achieve the design over larger areas, much like natural marble.

Our customers choose Talostone® for its premium quality, superior colouring and design selection, excellent service and large slab sizes. Whatever the colour scheme of your kitchen, bathroom or interior space, there is a Talostone® colour to match your design.

This Fabrication & Installation Guide is to provide stonemasons and installers with the necessary information and guidance to safely and correctly fabricate and install Talostone® products.

This manual is published by Talostone® to inform stonemasons with our recommendations for fabricating and installing bench tops and cladding from slabs supplied directly by Talostone®. This manual does not replace state and local industry standards for the fabrication and installation.

Talostone® offers a 15-year Limited Warranty to original purchasers of bench tops from licensed and certified stonemasons with respect to the quality of the slabs **purchased directly from Talostone®** and used by licensed stonemasons to fabricate bench tops.

Talostone® offers a 15-year Limited Residential and Commercial Warranty to the Stonemason in respect to each qualified slab sold by Talostone® directly to the stonemason.

Any failure by a stonemason to comply with the recommended methods of fabrication and installation of bench tops from Talostone® slabs may result in claims by an end user against the stonemason and refusal by Talostone® to accept a claim made by an end user under 15-year Limited Warranty given by Talostone®.

Under no circumstance shall Talostone® slabs be allowed to be re-sold to anyone. Talostone® is the only brand distributing our slabs to stonemasons directly. The terms and conditions of the 15-year Limited Residential and Commercial Warranty to the stonemasons and end users are set forth in this manual. Please direct any questions about the recommendations in this manual to Talostone® Head Office.

Note: this manual is not for general distribution.

This manual supersedes all previous manuals. Content is subject to change at any time without notice. The use of the term "Distributor" and "we" throughout this document refers to Talostone Pty Ltd. Talostone® is a registered trademark of Talostone Pty Ltd, ACN 162 170 194.

Version 2023.v2

Effective Date: 01st July 2023

Contents

GENERAL TALOSTONE® PRODUCT INFORMATION

At Talostone®, we understand the importance of safe stone practices and we have taken this into account while developing our current range. MinQ™ technology enables Talostone® to supply our slabs with a low percentage of Crystalline Silica, all under 40%. This not only ensures safer cutting practices for fabricators, it also provides peace of mind to our customers.

Equally important to us here at Talostone®, is ensuring the best quality products to our customers, and the development of the MinQ™ technology is no exception. We believe that our MinQ™ technology not only meets, but exceeds expectations in terms of quality, durability and strength. With years spent developing the Talostone® MinQ™ Range, we have managed to create a product equalled to our previous range in every way, including the beautiful and unique designs of each and every colour in our extensive range, only safer.

It is important to note that while our MinQ™ technology features a lower percentage of Crystalline Silica, the same safe-cutting practices must be followed as with any other engineered stone. We want to ensure that our customers are fully informed about the importance of following safe practices to prevent any risk of harm. At Talostone® we are dedicated to promoting a safer stone industry and we strongly urge the government to implement a national licensing scheme for stone fabricators, as we believe this will help ensure that safe practices are carried out across the industry.

Applications

Talostone® is ideal for a wide range of interior commercial and residential applications, including those subject to heavy use. Common Talostone® applications include: kitchen bench tops, vanity bench tops, interior wall panels, feature walls, and furniture pieces.

Talostone® is NOT suitable for exterior use, or any areas that are exposed to direct sunlight UV radiation or excessive heat over 100˚C.

Available slab sizes

- 3200mm x 1600mm
- 3075mm x 1600mm
- 3060mm x 1440mm (only available for some colours in Standard Range to offer more options to our customers for commercial projects requiring this size.)

Available slab thicknesses

- 20mm, 30mm *(selected colours only)*, and 12mm *(12mm is mainly for splash backs, feature walls, and any interior wall panels with backlit effect. Selected colours only).*

Talostone® material nominal weight

- 12mm thickness material weighs 27-31kg per square metre.
- 20mm thickness material weighs 42-51kg per square metre.
- 30mm thickness material weighs 67-71kg per square metre.

Current Talostone® ranges (from economical range to luxury range):

- 1 - Standard Range
- 2 - Deluxe Range
- 3 - Marble Range
- 4 - Premium Marble Range

The slab dimensions are nominal only. These are to be used for storage and transportation purposes. Actual usable slab surface is slightly less per side, and varies from slab to slab. If you need to use the maximum width and/or length of a slab, you must advise Talostone® when you order and we will check the sizing availability for you. Please inspect the slabs before you cut for polish irregularities, transportation damage or any other defect that may be visible. If a slab proves to be unsuitable, it should be exchanged prior to cutting and within seven days of slab pick up.

Note: Not all colours are available in all sizes and thicknesses.

Talostone® Paired Slabs

Talostone® Premium Marble Range colours with wide veins are manufactured in pairs to assist designers to utilise the matching of major veins to achieve a continuous design over larger areas, much like natural marble. However, As the nature of manufacturing these colours is done slab by slab, the paired slabs are not able to be matched 100% for all veins and it is the stonemasons responsibility to work on the paired slabs to achieve the best possible result.

Talostone Product Specifications (*Page 60*) was the updated Talostone® product specifications by the time we revised this version. Please check with Talostone® before you quote to your customers. All above information is subject to change without notice. For the latest version of Talostone® Product Specifications, please contact Talostone® Head Office on 02 8783 0600 or send emails to info@talostone.com.au.

Slab Return Policy

Any slab that is not suitable should be returned for credit or exchange. This can only be done providing the slab has not been altered in any way. If returned within seven days of pick up, no restocking fee is applied. After seven days, a restocking fee of AUD $100.00 + GST may apply for each slab being returned.

- Slab(s) cannot be returned later than 14 days from the date of slab pick up.
- Slab(s) cannot be returned if damaged in any way.
- Slab(s) cannot be returned if there is any outstanding invoice not paid.
- Slab(s) cannot be returned if Talostone® have no slabs left from the same batch at our warehouse.

SAFETY GUIDELINES

Talostone® has always been at the forefront of creating a safe work environment. We require that our stonemasons and installers follow the same level of conscientiousness regarding safety and comply with local and national occupational, health and safety regulations. Adhering to the following simple safety rules will help to prevent an accident.

- Maintain a clean and neat working environment, complying with all local and national occupational, health and safety regulations.
- Keep working areas uncluttered.
- Keep guards in place and in working order.
- Keep work areas clean, well ventilated and well lit.
- Do not use tools in dangerous environments. All tools which may be exposed to water or moisture must be certified.
- Do not force tools. A tool will do the job better and safer at the rate for which it was designed.
- Use the right tools. Do not force a tool or attachment to do a job for which it was not designed.
- For your safety, read any relevant instruction manuals prior to operating different tools. Learn the individual tool applications and limitations as well as any potential hazards specific to them.
- Maintain tools in top condition. Keep tools sharp and clean for the safest, most optimal performance. Follow manufacturer's recommendations for things such as lubrication, changing accessories and replacing parts.
- Wear proper apparel. Loose clothing, gloves, neckties, rings, bracelets and other jewellery may get caught in moving parts. Non-slip footwear is highly recommended. Wear hair-protective covering to contain long hair. Wear ear/nose protectors and safety shoes.
- Always wear a high quality dust mask and follow Australian Regulations for proper ventilation to keep the dust level within Australian regulation authorities – engineered stone dust contains silica which can be hazardous to your health. ANY DRY FABRICATING PROCESS IS PROHIBITED. Always shape and cut material with wet tools to reduce the amount of airborne particles.
- Always use safety glasses or approved eye protection. Everyday eyeglasses only have impact-resistant lenses; they are not safety glasses.

- Use high quality clamps to secure work when necessary, freeing both hands to safely operate tools.
- Do not over-reach. Keep proper footing and balance at all times.
- Children and visitors should be kept at a safe distance from any work area.
- Make workshop childproof with padlocks, master switches and removing starter keys.

Regarding safe work regulations, please refer to,

https://www.safeworkaustralia.gov.au/

HANDLING

The slabs are best loaded/unloaded from a container or truck using a forklift or lifting device capable of handling at least 1000Kg.

Slab handling can be carried out either singularly or in multiples of two depending on your equipment specifications. Use clamps or sling straps and lift the slabs face-to-face. For better grip, take care to clasp the slabs from the back side (whilst face-to-face). Only work in accordance with your clamp supplier's instructions.

Because of the weight, proper safety shoes and gloves should be worn.

***Warning:** Keep a safe distance when handling/lifting the slabs and NEVER be situated under the slabs at ANY time.*

Vehicle Loads

It is the responsibility of the driver to ensure that the load is within the legal carrying capacity of the vehicle in Australia, Talostone® have no way of determining this at our premises. As a guide, you must allow approximately 180kg per 12mm slab, 280kg per 20mm slab, and 400kg per 30mm slab plus the weight of any other items already loaded on the vehicle.

Securing the Load

It is the responsibility of the Driver to ensure that the load is fully supported and safely secured to the vehicle prior to leaving our premises. Talostone® staff are not permitted to secure the load to your vehicle.

Storage

Talostone® slabs must be stored in a manner that prevents warping.

Slabs should be stored so that the product is kept in a perfectly uniform manner, minimising any warping. Care must be taken to store Talostone® slab in a way that allows for easy identification of colour and batch numbers.

Slabs must always be stored in a way that ensures the polished surface is not exposed to direct sunlight. It is necessary to store the slabs in a shaded area and to keep the last slabs in each rack in a position in which the backside is facing out. Storage temperatures should not exceed 55˚C.

At the stonemasons storage facility, there should be no more than 20 slabs to each A frame (evenly distributed each side, with no more than two 20mm slabs discrepancy between the two sides of the A frame). The slabs should be stored face-to-face or back-to-back.

Note: *Talostone® is a heavy material that can cause serious injury or death if not stored, secured or handled properly. It is highly recommended that all slabs be secured during storage to maintain a safe working environment.*

VISUAL SLAB INSPECTION & IDENTIFICATION

Performing a visual inspection for defects and colour irregularities is essential when working with Talostone® and should be a standard practice before cutting. Complete the following slab inspection steps as a guide for carrying out a visual inspection for defects:

- Hairline cracks
- Quartz pattern irregularity and irregular spots
- Slab-to-slab colour match;
- Thickness tolerance:
    - 1.0mm for 12mm slab thickness.
    - 1.0mm for 20mm slab thickness.
    - 1.5mm for 30mm slab thickness.
- Inconsistent gloss levels.
- Colour consistency within the sheet for plain colours.
- Warpage*: 3200mm length direction <= 3.0mm, 1600mm width direction <= 2.0mm;
- Surface side pits/voids/impurities.

Note: *Talostone® will not accept any claims for any of the above if the slab is modified in any way whatsoever. The Stonemason is responsible for determining if the slabs are fit for purpose. If they are not, they should be exchanged prior to the slabs being cut or modified in any way.*

***** Length warp should be checked using a full-length straight edge when the slab is placed horizontally, especially, for the jobs which require finished edge thickness is more than slabs original thickness, i.e mitred edges, 40mm laminated edges etc.*

Colour Matching

An essential element of slab inspection is checking for colour match. The composition of Talostone® products produce a slight colour variations between production cycles due to the innate and complex blending of natural minerals – a characteristic inherent in the product.

Quartz Pattern Irregularity

The manufacturer of Talostone® has engineered its products to have random distribution throughout the slab. The nature of “random distribution” is such that sometimes particles will congregate in one area or will be segregated in another. If any obvious irregular distribution of particles is apparent in the slab, the stonemason must determine if the slab is suitable. If the slab is found to be unsuitable, it should be exchanged prior to cutting.

Batch Numbering

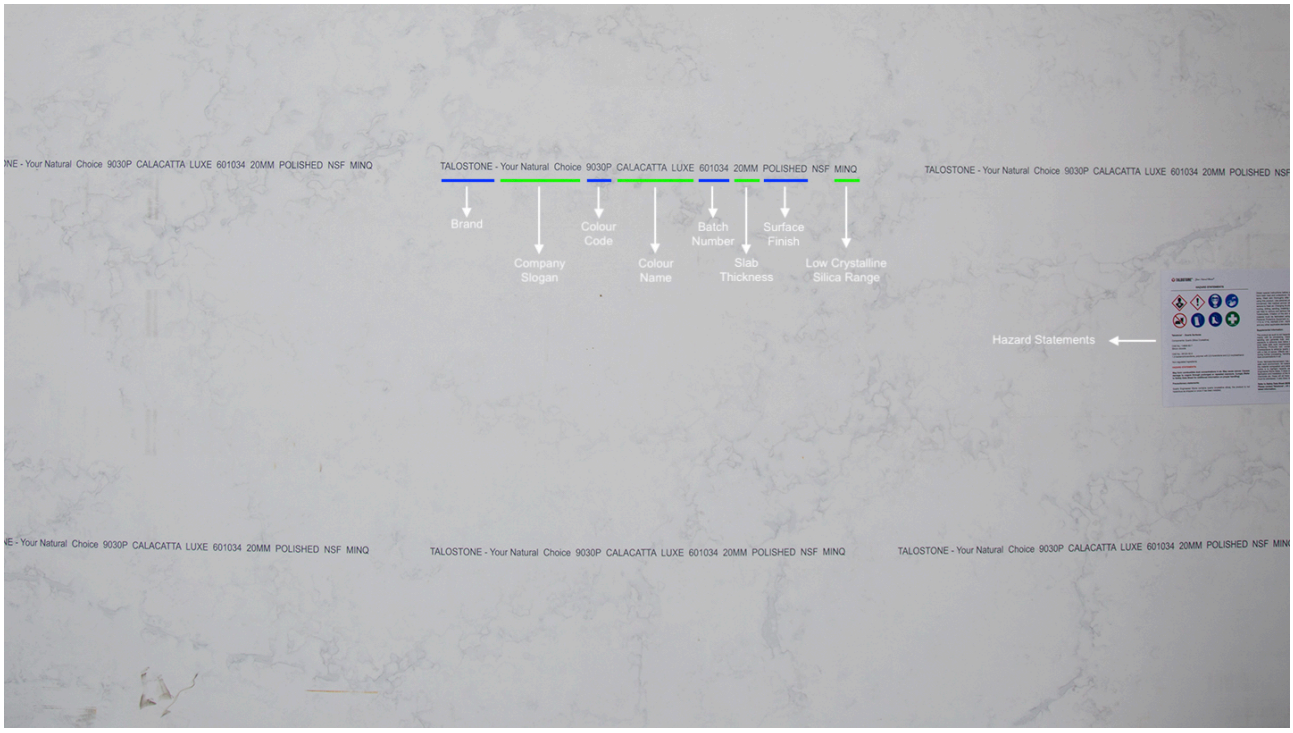
All slabs for a job should have the same batch number, this should ensure a colour match. However, a visual inspection of the slabs is recommended prior to cutting to confirm consistency in colour shading. Due to the raw materials originating from natural sources, each slab is unique and must be checked for shade and quartz distribution. When doing a trial colour match, the final visual inspection must be done under similar lighting conditions to those found at that particular job site. We strongly recommend that you do not have slabs from different batch numbers butting up to each other.

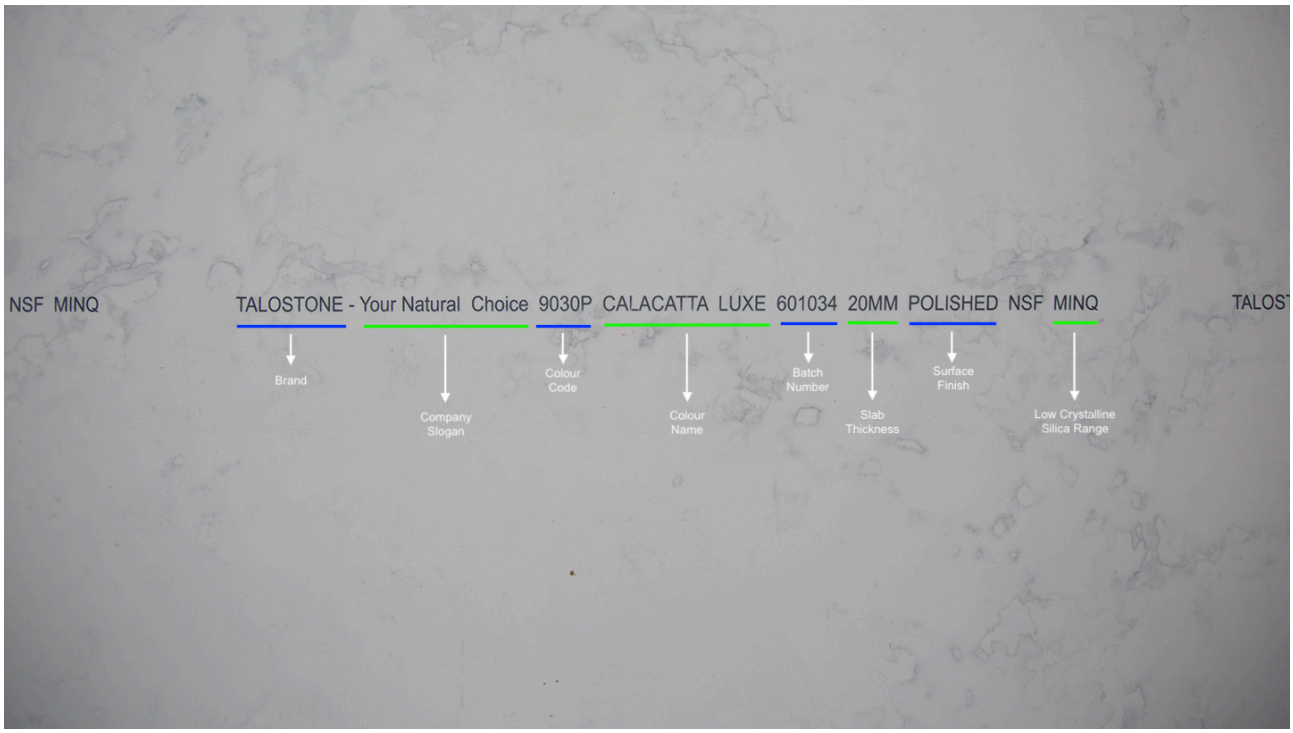
batch number is on the back of each slab.

Talostone® brand name, Company slogan, Colour code, Colour name, Batch number,

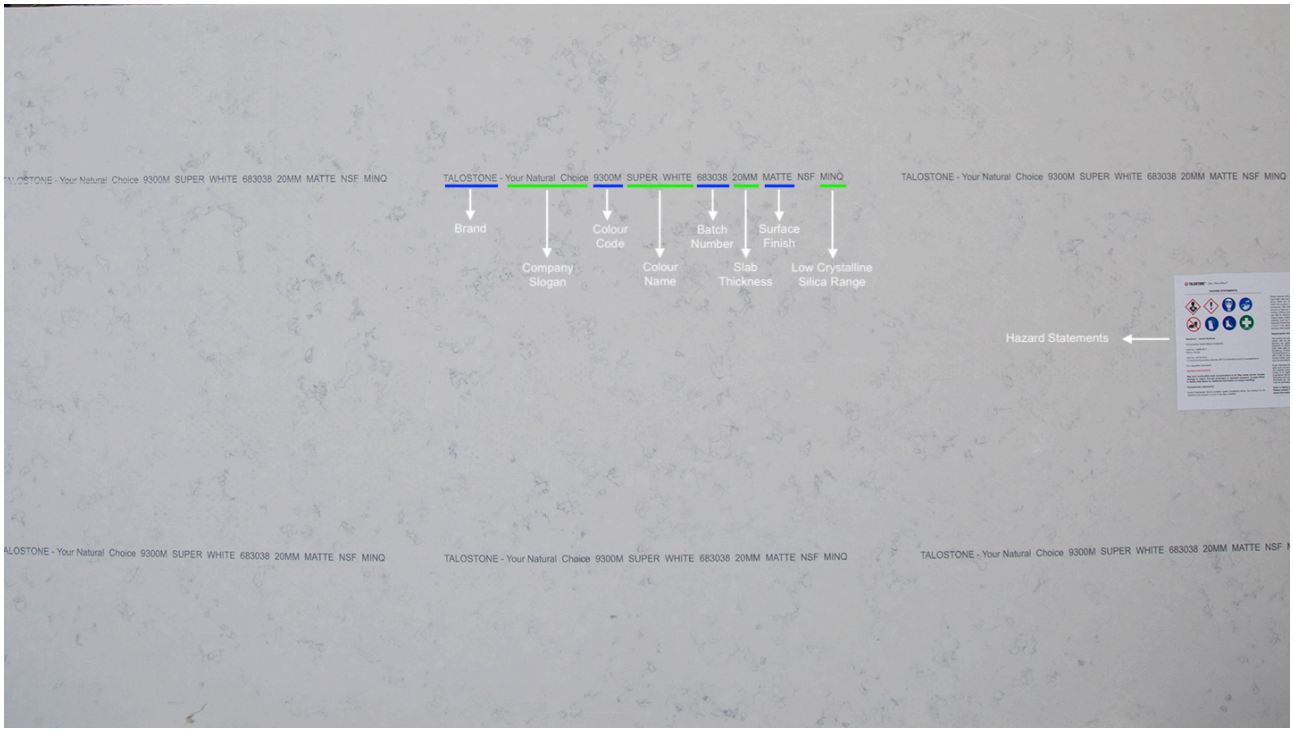
Thickness, Surface finish type, Certificates type (only for selected colours) as well as MinQ (Low crystalline silica formula) on relevant slabs.

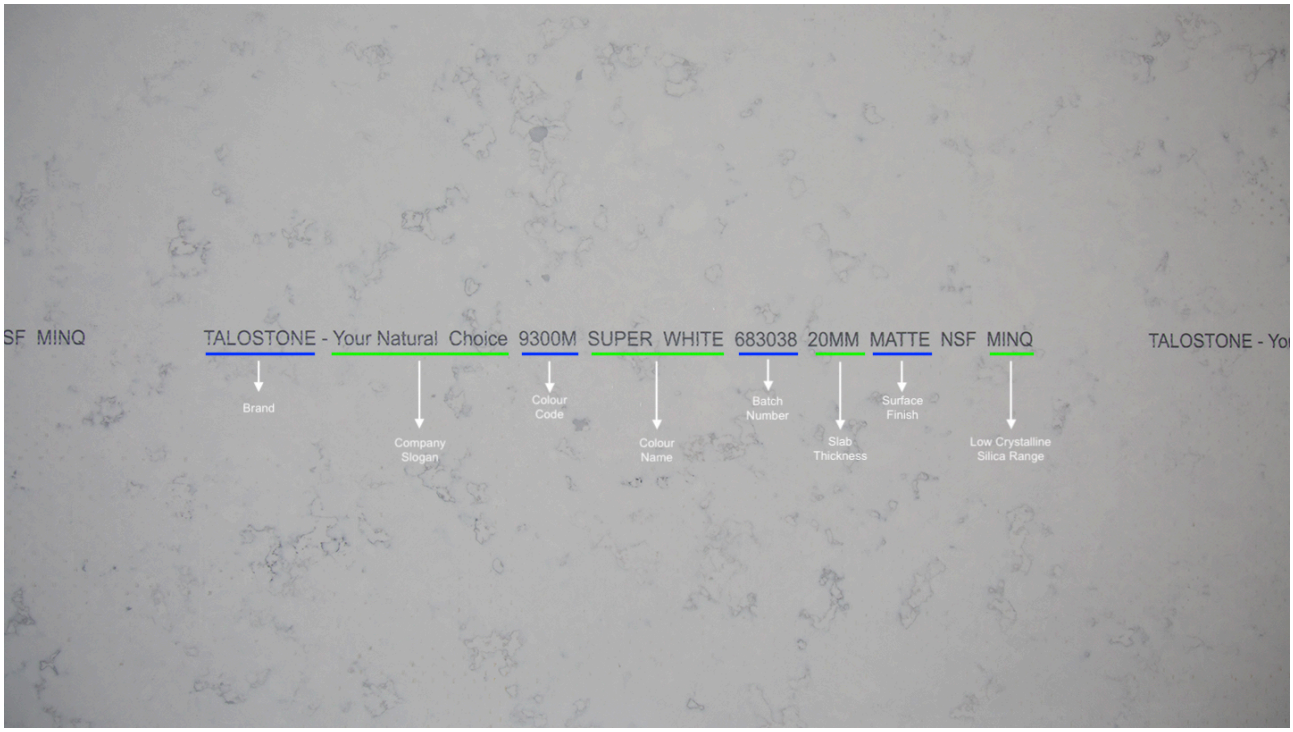
Product Information on the back of Polished slabs



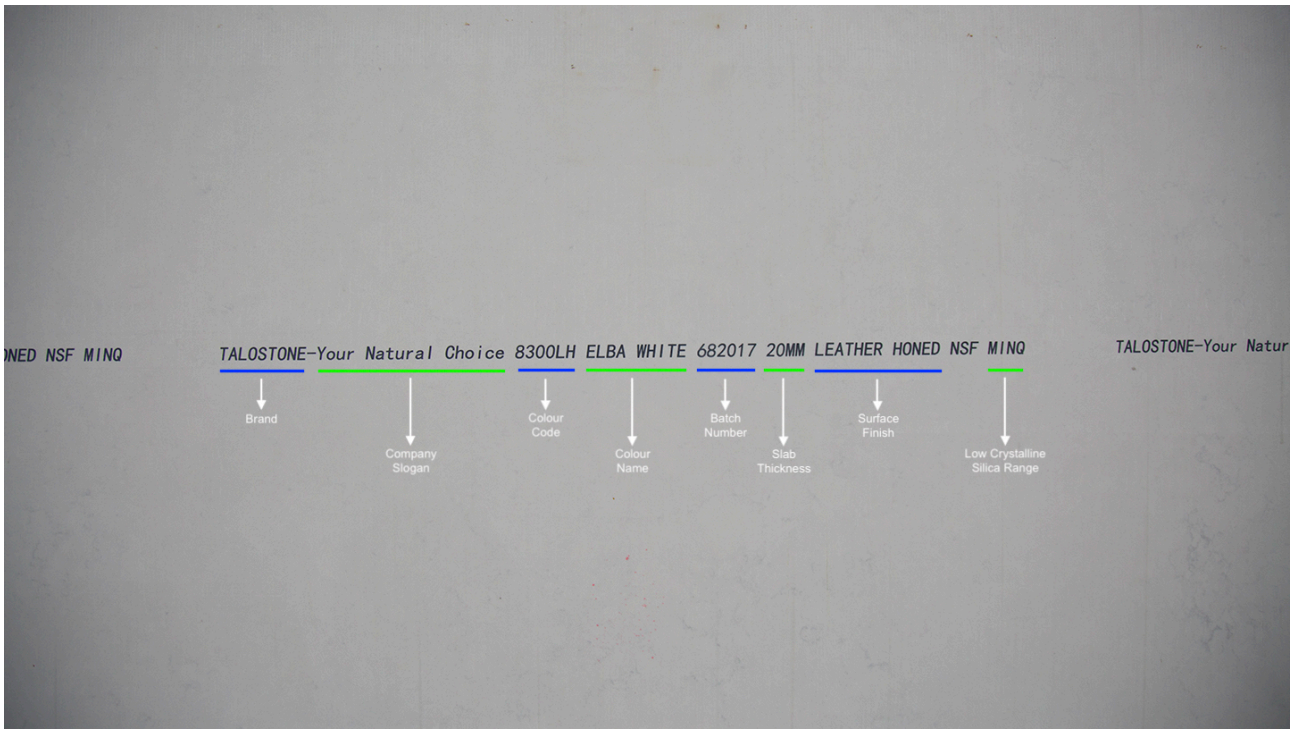


Product Information on the back of Matte Finished slabs





Information on the back of Leather Honed slabs



Note: *All batch numbers should be recorded for future reference.*

Health & Safety Warning Sticker on slabs

Sticker labels contain important information on OHS for Work Safe and health regulations in Australia. We highly recommend all our stonemason customers comply to the OHS regulations. Any unsafe dust level above the Australian regulations is prohibited. ANY DRY FABRICATING PROCESS IS FORBIDDEN!

TALOSTONE® - *Your Natural Choice®*

HAZARD STATEMENTS

Talostone® - Quartz Surfaces

Components: Quartz (Silica Crystalline)

CAS No.: 14808-60-7
Silicon dioxide

CAS No.: 26123-45-5
1,3-Isobenzofurandione, polymer with 2,5-furandione and 2,2-oxybisethanol

Non-regulated ingredients

HAZARD STATEMENTS:

May form combustible dust concentrations in air. May cause cancer. Causes damage to organs through prolonged or repeated exposure. (Lungs) (Refer to Safety Data Sheet for additional information on proper handling)

Precautionary statements:

Quartz Engineered Stone contains quartz (crystalline silica), the product is not hazardous as shipped or once it has been installed.

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust/ fume/ gas/ mist/ vapours/ spray. Wash skin thoroughly after handling. Do not eat, drink or smoke when using this product. Use personal protective equipment as required. If exposed or concerned: Get medical advice/ attention. If large amounts of dust are inhaled, remove to fresh air. Changing its physical state by dry cutting, grinding, polishing, routing, drilling, sanding, breaking etc, will create airborne crystalline silica. This can lead to various and serious health problems such as Lung Cancer, Silicosis, Tuberculosis, Irritation of the skin and eye and abrasion of the cornea, etc. This material must be fabricated using only wet tools with the use of appropriate Personal Protective Equipment to Australia standards, AS/NZS 2210, AS/NZS 1715 & 1716, AS/NZS 2161, AS/NZS 1337, AS/NZS 1269, AS/NZS 1801:1997, and any other applicable standards depending on your situation.

Supplemental information:

The product as such is not hazardous. The hazards of this product are associated mainly with its processing. Operations such as drilling, sawing, routing and sanding can generate dust, and adequate ventilation is compulsory to keep exposure to airborne dust below acceptable limits per Safe Work Australia and local state safe work requirements. Dust generated during handling of Quartz Surfacing Products can contain particles of crystalline silica (quartz). Overexposure to airborne quartz can cause silicosis (scaring of the lung tissue) with a risk of cancer. Effects can be permanent. If small particles are generated during further processing, handling or by other means, it may form combustible dust concentrations in air.

Every fabricator/stonemason has a legal responsibility to provide a healthy and safe work environment. All materials need to be fabricated with consideration to the material composition and behaviour under various fabrication processes. This notice is to highlight hazards associated with the fabricating of quartz based Engineered Stone slabs. It does not cover other items that are associated with the fabrication and installation of the material, items like joint fillers, glues, cleaner, and chemicals etc, these will all have their own safe handling requirements that also must be addressed. It also does not cover the various machinery or equipment.

Refer to Safety Data Sheet (SDS) for further information.
Please contact Talostone®, +61 (0)2 8783 0600, immediately to have the latest information.

Above text reads;

Talostone® - Quartz Surfaces

Components: Quartz (Silica Crystalline)

CAS No.: 14808-60-7
Silicon dioxide

CAS No.: 26123-45-5
1,3-Isobenzofurandione, polymer with 2,5-furandione and 2,2-oxybisethanol

Non-regulated ingredients

HAZARD STATEMENTS:

May form combustible dust concentrations in air. May cause cancer. Causes damage to organs through prolonged or repeated exposure. (Lungs) (Refer to Safety Data Sheet for additional information on proper handling)

Precautionary statements:

Quartz Engineered Stone contains quartz (crystalline silica), the product is not hazardous as shipped or once it has been installed.
Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust/ fume/ gas/ mist/ vapours/ spray. Wash skin thoroughly after handling. Do not eat, drink or smoke when using this product. Use personal protective equipment as required. If exposed or concerned: Get medical advice/ attention. If large amounts of dust are inhaled, remove to fresh air. Changing its physical state by dry cutting, grinding, polishing, routing, drilling, sanding, breaking etc, will create airborne crystalline silica. This can lead to various and serious health problems such as Lung Cancer, Silicosis, Tuberculosis, Irritation of the skin and eye and abrasion of the cornea, etc. This material must be fabricated using only wet tools with the use of appropriate Personal Protective Equipment to Australia standards, AS/NZS 2210, AS/NZS 1715 & 1716, AS/NZS 2161, AS/NZS 1337, AS/NZS 1269, AS/NZS 1801:1997, and any other applicable standards depending on your situation.

Supplemental information:

The product as such is not hazardous. The hazards of this product are associated mainly with its processing. Operations such as drilling, sawing, routing and sanding can generate dust, and adequate ventilation is compulsory to keep exposure to airborne dust below acceptable limits per Safe Work Australia and local state safe work requirements. Dust generated during handling of Quartz Surfacing Products can contain particles of crystalline silica (quartz). Overexposure to airborne quartz can cause silicosis (scaring of the lung tissue) with a risk of cancer. Effects can be permanent. If small particles are generated during further processing, handling or by other means, it may form combustible dust concentrations in air.

Every fabricator/stonemason has a legal responsibility to provide a healthy and safe work environment. All materials need to be fabricated with consideration to the material composition and behaviour under various fabrication processes. This notice is to highlight hazards associated with the fabricating of quartz based Engineered Stone slabs. It does not cover other items that are associated with the fabrication and installation of the material, items like joint fillers, glues, cleaner, and chemicals etc, these will all have their own safe handling requirements that also must be addressed. It also does not cover the various machinery or equipment.

Refer to Safety Data Sheet (SDS) for further information.
Please contact Talostone®, +61 (0)2 8783 0600, immediately to have the latest information.

OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION (OSHA)

Talostone® has an OSHA Policy in place to ensure the safety of all persons on our premises. All visitors must observe any direction given by our staff and also follow any warning signs that are posted throughout the warehouse.

Truck Driver Requirements

- Drivers should stay with their vehicles and ensure the slabs being loaded are suitable.
- Drivers are not to wander through the warehouse unless accompanied by an authorised Talostone staff member.
- Contract drivers need to be aware of which orders they are collecting and advise our warehouse of the customer name and Delivery Docket number. This is especially important when there are several orders to be picked up by the contract driver. Talostone® will not accept liability for any additional fees charged by contract drivers due to any incorrect or missing orders being picked up and should the driver need to return any slabs as a result, Talostone® may charge for any appropriate re-stocking fees incurred.

PERSONAL HEALTH & SAFETY

RESPIRABLE CRYSTALLINE SILICA

Guide Introduction

Engineered stone, like the other earth materials, contain Crystalline Silica which is dangerous when inhaled. Talostone® slabs, as well as fabricated and installed products, do not present health risk or hazard when transported, shipped or used by the end consumer. However, during the fabrication and processing, it generates respirable Crystalline Silica dust. This requires fabrication and processing to be performed under strict safety conditions.

It is important to note that the guidelines provided in this guide are not intended to replace your local laws and regulations, which should be complied with, as further detailed below.

All licensed and qualified stonemasons are strongly encouraged to provide their workers and customers with the relevant information related to workplace health and safety, particularly in areas where crystalline silica dust may be present.

The objective of this Guide is,

- To provide information about the risks and health hazards caused by working in an environment with respirable Crystalline Silica dust; and
- To provide certain information to assist in reducing workers' exposure to respirable Crystalline Silica dust, including guidance on the safe use of products containing Crystalline Silica in the workplace and protection that can be used.

What is Crystalline Silica dust and what health risks can be caused by silica dust?

Crystalline Silica dust is generated in workplace mechanical processes such as crushing, cutting, drilling, grinding, sawing or polishing of natural stone or man-made products that contain Crystalline Silica. Some dust particles can be so small that they are not visible; these are commonly referred to as respirable particles.

Respirable Crystalline Silica dust particles are small enough to penetrate deep into the lungs and can cause irreversible lung damage.

As a result, unprotected and uncontrolled occupational exposure and inhalation of respirable crystalline silica particles without the safety measures required by law is dangerous to health and may cause severe illnesses such as Silicosis, which is characterised by fibrosis of the lungs. Silicosis is a chronic and non reversible disease, which may cause severe physical disabilities and may be fatal. The pathological process

of Silicosis may cause severe complications such as: lung cancer, tuberculosis and autoimmune diseases such as rheumatoid arthritis. Pre-existing physical disorders may aggravate the adverse effects of exposure to Silica dust.

Silicosis is an occupational disease that may affect workers in the stone fabrication industry if they process marble, granite, quartz surfaces and other natural stones without safety measures, which has been recognised for over a century. This disease can affect the production/ fabrication workers themselves, and any other employee/worker who is present at the fabrication facilities (where there is silica dust) on a regular basis, for example managers and administrative staff.

What diseases can Crystalline Silica dust cause?

If a worker is exposed to and breathes in Crystalline Silica dust they could develop:

- Chronic bronchitis
- Emphysema
- Acute silicosis
    - Can develop after a short exposure to very high levels of Crystalline Silica dust, within a few weeks or years, and causes severe inflammation and an outpouring of protein into the lung.
- Accelerated silicosis
    - Can develop after exposures of 3 to 10 years to moderate to high levels of silica dust and causes inflammation, protein in the lung and scarring of the lung (fibrotic nodules)
- Chronic silicosis
    - Can develop after long term exposure to lower levels of silica dust and causes fibrotic nodules and shortness of breath
    - Can include progressive massive fibrosis where the fibrotic nodules in the lung aggregate
- Lung cancer
- Kidney damage, or
- Scleroderma
    - A disease of the connective tissue of the body resulting in the formation of scar tissue in the skin, joints and other organs of the body.

The above section information was sourced from www.safeworkaustralis.gov.au

General Prevention Principles

Silicosis and other diseases associated with Crystalline Silica dust as stated above can be reduced and controlled by following the required safety precautions, including those described below. Such measures include improved work practices (such as working with wet tools, - DRY PROCESSING IS PROHIBITED), engineering controls, ventilation and filter systems, respiratory protective equipment and training programmes, as further detailed below and in your local laws and regulations regarding working in environments containing harmful dust. Please note that the recommendations with respect to the work area relate mainly to the production/fabrication facilities, but are also applicable to adjacent offices.

In order to control and reduce/eliminate the health risks associated with Crystalline Silica, we highly recommend that a Silica control program be implemented in the workplace in accordance with all the applicable laws, regulations, orders and directives. This program should be reviewed on a regular basis. Furthermore, permissible exposure limits to respirable Crystalline Silica dust should be met. Exposure limits for quartz, silica sand and cristobalite must meet Safework Australia standard, please refer to www.safeworkaustralia.gov.au for detailed information.

It is important to note that the exposure and personal protection precautions are only necessary for the fabrication of Talostone® products (cutting, sawing, polishing etc.), due to the dust that may be generated in the process, and not for the slab as a product.

The employer is responsible for the primary duty of care for their employees, providing their workers with all the current information, tools and safety measures required in order to protect them from the risks of exposure to silica dust. The workers are responsible for fully implementing safety instructions. Access to the work area should be restricted to authorised employees only. By a joint effort of employers and their employees, the workplace can become a safe environment for everyone.

NO DRY CUTTING under any circumstance!

The best protection is to avoid exposure to dry Crystalline Silica. Therefore, where possible, implement fabrication techniques in which all cutting, grinding and shaping is performed wet.

- Work with wet tools and cutting machines as they help to prevent the release of Crystalline Silica dust. This applies to all tools.
- Design and use a good and efficient water system.
- Clean and maintain all drainage systems when using water sprays and hoses.
- Wet hosing rather than compressed air should be used for cleaning and under no circumstances should dust be swept up with a broom.

Ventilation and Filtration Systems

Engineering control is critical as well. This refers to the use of ventilation and filtration systems specifically designed to collect respirable particles of dust. Implement filter systems that include the following elements:

- Professional extraction hoods.
- Enclosure for collecting and containing pollutants.
- Ducts for pollutant removal.
- Filters positioned between the hood and the fan.
- Fans for moving air flow and releasing clean air outside the workplace.

Ventilation

Please visit or speak to your local authorities to get professional help and detailed requirements for this. Our further recommendations regarding proper ventilation include, but are not limited to;

- Ensuring that the workplace (including the fabrication facilities as well as adjacent offices) have complete and effective ventilation.
- Working with qualified engineers to ensure your ventilation system meet your requirements.
- Operating local exhaust ventilation at the dust source in order to capture the dust at the highest level.
- Connecting local exhaust ventilation to a dust extraction unit such as a bag filter/cyclone.
- Maintaining local exhaust ventilation in good working order plus Replacing/maintaining filters and other parts in accordance with supplier’s instructions.
- Keeping the dust source as isolated as possible to prevent dust dispersal.
- Keeping air ducts as short as possible, minimising the risk of exposure to employees.
- Positioning the work area as far away as possible from doors, windows and passages in order to prevent wind and drafts spreading the dust and hindering local exhaust ventilation.

We recommend seeking the services of a qualified ventilation expert or engineer prior to implementing any ventilation systems.

Dust Monitoring & Supervision

Dust monitoring and supervision include the following:

- Consulting your local regulations and laws as to the Permissible Exposure Limit (PEL) and/or Threshold Limit Value (TLV) for the legally permitted level of exposure to the different types of respirable silica dust.
- Performing a risk assessment to determine whether existing dust controls are sufficient.
- Working with designated experts to create appropriate dust monitoring systems and consulting with industrial hygiene professionals regarding dust sampling strategy.
- Keeping complete records of dust monitoring campaigns and implementing a quality system accordingly.
- Performing regular checks to ensure that the dust intake, filtration and expulsion systems are functioning correctly.
- Ensuring that settled dust and polluted air cannot be dispersed or spread to clean areas or outside the work area.
- Creating and enforcing rules that all employees wear protective respiratory equipment in areas with hazardous dust.
- **It is extremely important that all dust extraction emissions comply with local environmental rules.**
- **Signs of “Hazardous Dust” should be displayed in all areas with hazardous dust.**

Personal Protective Equipment (PPE)

Workers must wear protective equipment which should be used and replaced in accordance with the manufacturer’s instructions. In cases where exposure is particularly heavy, industrial respirators should be used and comprehensive training provided.

- Personal Protective Equipment (PPE) is mandatory in workplaces where risks exist. This should be clearly marked with appropriate signage.
- PPE should comply with your local legal requirements, be designed and manufactured according to safety and health standards and be used / replaced in accordance with the manufacturer’s instructions.
- Respiratory protection against Crystalline Silica dust should be P3 classification.

- Employees should receive training on the proper use and maintenance of their PPE, and should check efficacy of all respiratory protection equipment prior to use.
- Ensure that all employees wear appropriate PPE and keep records of all PPE in use, pursuant to applicable law.
- Provide employees who work with Crystalline Silica dust with overalls that prevent dust absorption.

Hygiene

Personnel hygiene is another important factor in health protection, and includes the following:

- Providing bathroom facilities in the plant with toilets, showers, wash basins and individual lockers for storing changes of clothing.
- Making two checkrooms available to all plant employees: one in which they change from home clothes into clean work clothes and store their home clothes during working hours; and another in which they change out of work clothes at the end of a working day before showering and changing back into home clothes.
- Employees should wear only designated work apparel at the worksite.
- Employees should leave their work clothes and shoes in the workplace and never remove them from the plant.
- Launder all employees' work clothes and provide them with clean clothes on a daily basis.
- Providing explanations on the importance of separating work clothes from clean clothes.
- Employees should wash their hands and faces plus change clothes before eating.
- Permitting eating, drinking and smoking only in designated areas that are not exposed to hazardous dust.

Cleaning

- Clean the workplace, floors and all exposed surfaces on a daily basis.
- Clean all equipment and systems on a regular basis.
- Employ both wet and vacuum cleaning methods,
- Do not sweep using a dry broom, brush or compressed air.
- Do not clean work clothes, machines or floors with compressed air.

Administration, Regulation & Maintenance

- Maintain all equipment in good working order.
- Do not make changes to any working systems without supplier approval.
- Keep instructions and diagrams of installed systems in a safe place for reference.
- Ensure that regular checks are performed on inlet airflows, duct air speed and filter pressure index on ventilation systems.
- Check all systems on a regular basis and in accordance with supplier instructions.
- Keep inspection reports as per local law compliance.

NOTE: All surfaces should be fabricated within the plant and not at the end user's location in order to protect installers as well as other persons on site or in the surrounding area.

Training Employees on Safety & Hygiene Issues

Employees who are involved in and committed to the safety programme are most likely to comply with them. Employee training may include the following:

- Creating and implementing clear guidelines for safe working procedures and good practices in your workplace.
- Training all new employees about health, safety and hygiene procedures.
- Continuously delivering mandatory training sessions to existing employees on an ongoing basis in order to update and review their knowledge of your health and safety procedures.

- Regularly reviewing and updating your safety and hygiene procedures as per local, state and national laws as well as any regulation requirements.
- Providing employees with current data on health effects associated with respirable crystalline silica dust.
- Providing training for the use of respiratory protective equipment or other Personal Protective Equipment and keeping comprehensive records of all training provided to employees plus recording employees' attendance at training sessions.
- Assessing employees' knowledge after each training session in order to verify that they understand your safety procedures.
- Providing clear data about the risks associated with Talostone fabrication tasks.

Health Surveillance

Health surveillance should be implemented based on your local rules and regulations, which may include the following:

- Implementing a health surveillance programme for employees who are exposed to respirable crystalline silica, including medical testing and other tests as required by local regulations.
- Keeping records following the termination of each employee's employment as per local regulation requirements.
- Keeping records of protocols and all tasks that expose workers to respirable crystalline silica.

Other Information & Disclaimers

The information contained in this Guide is, according to the best of our knowledge, current and accurate. However, this is only a summary. It is not possible in this short document to comprehensively cover all the topics mentioned, nor is it possible to cover in detail all areas of concern regarding crystalline silica dust in the workplace.
Furthermore, any recommendations or suggestions made here are general and do not take into account the specific conditions that exist at each fabrication site. In addition, none of the content in this guide may be construed as a recommendation for using any product or tool in violation of any laws, safety practice or other applicable terms.
We strongly recommend that you consult with occupational health professionals and other experts concerning all matters regarding control of respirable crystalline silica in each specific workplace. We also note that the laws and regulations regarding Crystalline Silica dust differ from state to state, and we recommend that you check and obey your local regulations and legislation regarding working in environments containing harmful crystalline silica dust. In any case where these guidelines contradict your local regulations, your local regulations shall take precedence.

None of the information contained in this guide creates a contractual relationship between Talostone® and any fabricator.

Information on occupational safety and health administration appears, among other sources on the following websites;

Safework Australia (https://www.safeworkaustralia.gov.au/)

Occupational Health & Safety Australia (http://www.ohs.net.au/)

FABRICATION INSTRUCTIONS

Tools and Safety Equipment

It is critically important that all licensed stonemasons wishing to fabricate Talostone® products have the proper tools and safety equipment to produce a quality finished product safely and efficiently. Below is a list of tools and safety equipment that are either essential or recommended in order to meet this objective.

Basic Tools

- Bridge saw
- Electric/pneumatic polisher (variable speed preferred)
- Diamond grinding wheel
- Diamond polishing pad
- Grinding stone
- Core bits
- Diamond contour blade
- Wet profiling machine (edge router)
- Stone carts/dollies
- A-Frame/storage racks
- Fabrication stands
- Air compressor
- Seaming clamps
- Water source

Advanced Tools

- Water jet
- CNC

Basic Safety Equipment

- First-Aid kit
- Ear plugs
- Safety glasses and shoes
- Work gloves & Aprons
- Premium quality respiratory masks

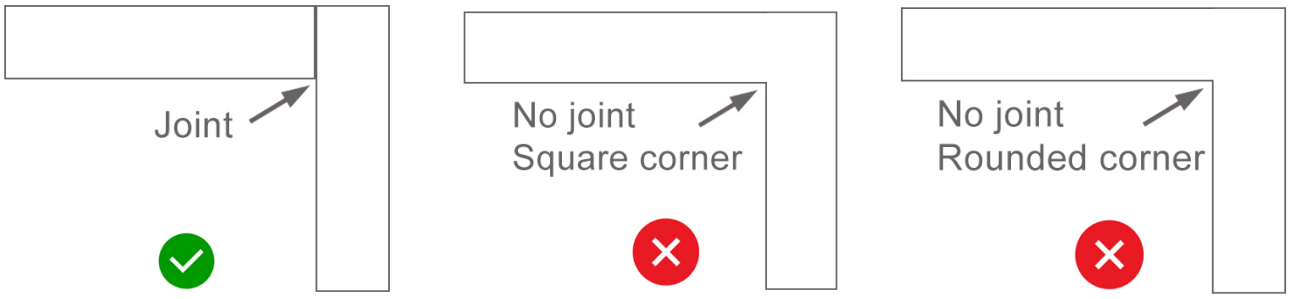
Basic Fabrication Guidelines

The following guidelines should be followed to ensure a high quality product:

- ANY DRY FABRICATING PROCESS IS FORBIDDEN!
- To avoid unsafe levels of crystalline silica dust and/or overheating the slab, only water-cooled tools should be used for cutting, drilling, and polishing Talostone® slabs.
- Do not change the original surface finish of the slabs by re-polishing, honing, sealing, or otherwise altering the factory finish.
- Do not cut square corners (cross cut) as this will create stress points in the slab which may result in cracking.
- When cutting an inside corner, always use a core bit to avoid damaging the corner area with the cutting disc. Damage to the radius area will create a stress point.
- Any internal angled corner must have a minimum radius of 5mm. Cut with the saw up to the joint of the drilled hole, leaving the drilled hole intact.
- Avoid dry grinding/polishing corners to avoid unsafe levels of crystalline silica dust being generated and/or overheating the area which may result in cracks occurring.

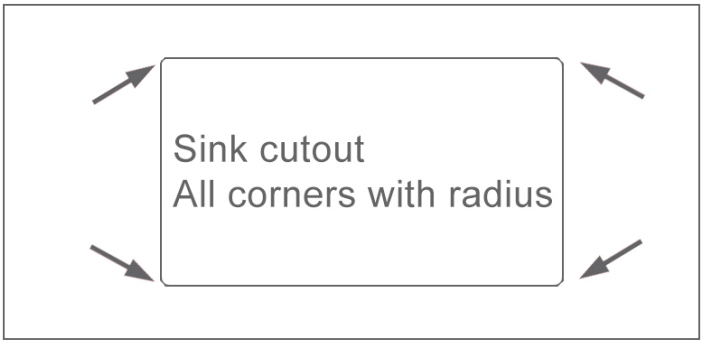
Internal Corners

In the case of an angular shaped kitchen (L- or U-shaped), the surfaces of the countertop should be fabricated from a single slab (or if necessary, multiple slabs from the same batch) with joins to internal corners between slab pieces. Create a join for every change in direction of the surface.

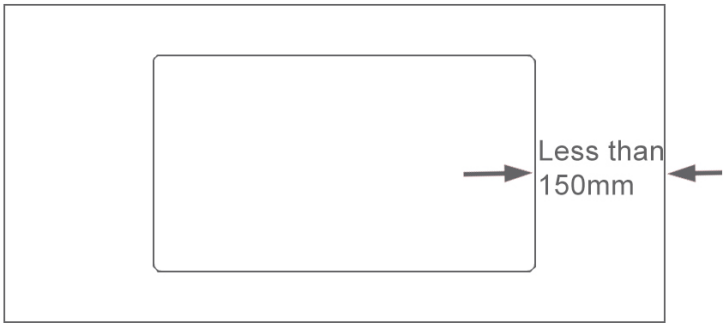


CUT-OUTS

It is commonly necessary to install accessories, such as sinks or cooktops, on bench tops. For all cut-outs, please fabricate a minimum radius of 15 mm to all corners of the cut-out. The larger the radius, the stronger the corner.



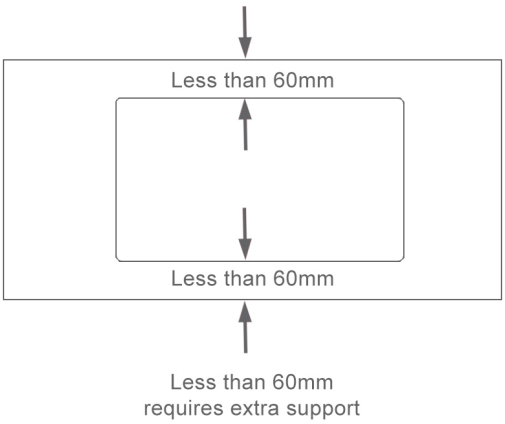
If the distance between the cut-out and a joint is less than 150mm, the area needs to be supported. This can be achieved by ensuring that all joints are placed at the junction of the base cabinets or a solid slat be fitted under the joint.



Less than 150mm
requires extra support

Cross cutting should be avoided. When preparing a cut-out always use a core bit. Avoid damaging the drilled area with a cutting disk.

The distance between a cut-out and an edge or join must be no less than 60 mm. The greater the distance, the stronger the area.



For cut-outs which result in less than 60mm rails either to the front or back, important consideration should be given to making these rails from separate pieces to avoid issues with cracking. Please advise the cabinet manufacturer and/or customer that separate rails should be used and the reasoning behind it.

Under-mounted sink

Make sure the cut-out is slightly smaller than the accessory to ensure the join between the accessory and the surface is not visible. Round or bevel the edge of the cutout. The larger the edge profile the greater the impact resistance of the edge, Talostone® recommends a minimum radius of 6mm.

NOTE

- All under-mount sink cutouts must have the inside edges polished.
- All under-mount sinks should be sealed to the countertop using 100% silicone.

Drop-in / Inset Sink

Fabricate the cutout slightly bigger than the accessory sink wall to leave a space between the sink wall and the cut-out. Please leave the cut-out edges un-polished.

Flush-mounted Sink

Ensure that both the actual cut-out and the milled down edge are slightly larger than the sink to allow for expansion. Follow measurements as per sink installation instructions but, Talostone® recommend that the gap between the top edge of the stone and the top edge of the sink be no less than 1.5mm to prevent damage to the stone from sink movement or expansion. Flush-mounted sinks should be sealed to the stone using 100% silicone.

Note: please follow any instructions and recommendations provided by the sink manufacturer.

Sink drainage grooves

Talostone® products are perfect for drainage grooves, especially the Marble range and Premium Marble range colours, as the patterns and veins are consistent throughout the thickness of the slab. After the drainage grooves are done, the detailed veins will still be in tact and visible, creating a great detail to your bench top.

Note: The surface of the drainage grooves may not match the exact finish on the rest of the top due to the difference between Stonemason tools and Talostone® original polishing systems.

Drainage grooves that are too deep, will seriously affect the strength of the bench top around that area. For 20mm thick slabs, we recommend the maximum depth of the drainage grooves be 4mm.

Drainage grooves that exceed 4mm in depth may require additional support to be placed underneath the stone in that area to eliminate any risks of immediate or future damage.

Drainage grooves could pose cleaning issues for the home owner. Drainage grooves may need to be cleaned with a soft bristle brush.

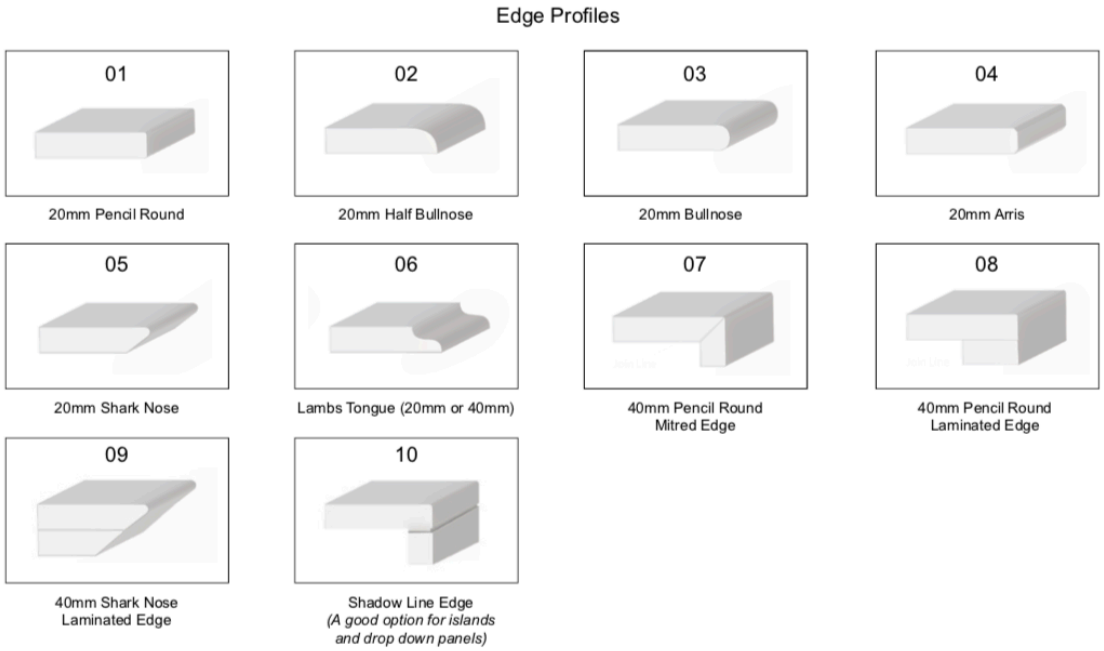
The quality and performance of the sink drainer is the responsibility of the stonemason.

JOINS

- If a straight seam is not used, any internal angled corner in the seam must have a 9mm radius.
- All seams should be made level by adjusting the material before adhesive sets.
- Do not surface polish seams to make them even/level.
- Use a high quality seam setter tool to ensure seams are as narrow and inconspicuous as possible. Seams should not be more than 2.0mm wide.

EDGES

- All exposed edges should be fabricated to the same finish as the surface.
- Do not create square edges. The top and bottom of edges must be rounded or beveled.
- All edges should have a minimum radius of 3mm for any profile.



Note:

Talostone® do not recommend 45˚ mitred edges for any drop-down panels as this will require polishing on the job site. This may result in un-safe levels of crystalline silica dust and may potentially cause health risk to installers or other people. However, 45˚ mitred edges are recommend for normal edges as stonemasons get this done at factory workshop with wet polisher.

Chiseled or hammered edges are not approved edge details.

Polishing Edge Profiles

Polishing any Talostone® edge profile should be done in a progressive manner using only granite or marble diamond polishing pads. This should only be done in the stonemasons workshop in compliance with Safework Australia and OHS Australia standards. Talostone® recommends the use of premium quality pads in conjunction with plenty of water for best polishing results. The quality of the pads being used will affect the time required to complete polishing and the quality of the finish. Polishing Talostone® should be done by starting with a surface that is smooth, clean, and free from any residual adhesive.

Note: Care must be taken not to over-polish edges in excess of the factory surface polish.

Recommended polishing process for Talostone®:

- Matte finish 100, 200, 400-grit diamond pads.
- Polished finish 100, 200, 400, 500–800, 1500–2000, 2000–2300-grit diamond pads.

These recommendations are a guideline for achieving a polish equal to the factory surface polish. The type of tools, diamond pads, and fabrication techniques used will affect actual polishing results. When polishing the edge profile, use water-cooled tools. Dry-polishing of the edge profile is PROHIBITED and may cause un-acceptable levels of crystalline silica dust as well as overheating. Excessive heat undermines the physical structure of the slab, and although not visible to the naked eye, micro-fissures are formed, leading to increased risks chipping, dis-coloration and an uneven polish finish.

- Use lower RPM on polishers when using 1000-grit or higher diamond polishing pads.
- Do not use stone “buff” pads on Talostone®.

Laminated edges

Lamination is the process of gluing a strip of stone along the bottom edge of another piece of stone in order to create the look of a thicker slab. This process is more complex and time consuming than fabricating single thickness edges and involves more labour from a stonemason, however, it produces a richer aesthetic effect.

Cut lamination strips from the same slab as the bench top, and wherever possible from the same saw cut, to ensure a colour match. If there is not enough to cut the strips from the same slab, stonemasons need to make sure the strips from different slabs are the same colour and has a similar quartz grain distribution by cutting trial laminated edges.

Even for same batch slabs, the inside quartz distribution may vary due to the nature of the manufacturing process. If the expected outcomes can not be achieved, stonemasons need to advise their customers and change the laminated edge profiles to mitred edge profiles or if necessary, a 20mm edge profile. Talostone® do not take any responsibility for the colour difference of 40mm laminated edge profiles and it is not covered by the Talostone® warranty policy.

Do not join laminations strips, each lamination strip should be the same length as the edge to which it will be glued.

Mitred Edges

- We do not recommend mitred edges for any drop-down panels which need to be polished on a job site as this will cause un-safe level of crystalline silica dust on the job site. We only recommend mitred edges that can be done at stonemason's factories with no additional polishing required on the job site. We strongly recommend mitred edge with shadow line for any drop-dow panels (eg. bench waterfalls etc.) to eliminate the need to carry out further polishing on site.
- Mitred edges should be done at a 45˚ angle to ensure maximum strength. The joint should be clean, flush, and parallel.
- Mitred edges have the greatest area of weakness and are most prone to chipping. (Our recommended minimum edge profile is a 3mm bevel. Our preferred minimum edge profile is a 3 - 4mm Pencil Round edge.)
- Chipping is most prevalent where the application of the adhesive is not evenly distributed throughout the joint.
- Do not cut edges at less than 45˚ as this makes the edge prone to physical damage such as chipping.
- Incorrect angles restrict the type of edge that can be produced, the larger the edge profile, the more visible the joint.
- Ensure that the adhesive is thoroughly and evenly distributed throughout the join for maximum strength.

Note: Any chipping which occurs in this situation is not covered by our warranty.

Recommended procedure for Leather Honed Finish edges

The natural, unique look of our Leather Honed finish have a low level of gloss, making it beautiful to both see and touch. Due to the innovative technology used to create lightly textured surfaces, we recommend the following guidelines to ensure the highest quality workmanship and an optimal result when polishing this type of edge finish.

We highly recommend that a mitred edge be used for this material, as it will achieve the best textured appearance. However if any other edge is demanded, special fabrication and brushes will be required for the edge detail. Talostone® Leather Honed finish is ONLY allowed to be fabricated in mitred edges to ensure the original surface finish matches that of the bench top.

1. Complete cutting the surface into the required pieces/sections, before proceeding with polishing.
2. Using clamps, attach all pieces required for the final design to a suitable work surface.
3. Cut or shape the required edge profile.
4. Smooth and polish the edge shape, following standard polishing procedures and according to regular levels – up to a maximum of 100–120 grain, using a generous amount of water.
5. Polishing a texture finish edge will require approximately the same amount of time as polishing a regular edge.
6. Use a suitable manual, electric or pneumatic angle grinder – with a low RPM of 600–1200. Connect it to a source of water and attach a 60 grain special texture brush.
7. Continue polishing until the edge attains a homogeneous finish.
8. Change the brush to a 120 grain and polish until there are no visible signs remaining of the 60 grain brush.
9. Repeat the above with 400, 800 and 1600 grain brushes or until the edge is consistent with surface finish.

Note: Only Certified Stonemasons with the ability to do these types of edges can fabricate these edges. All edge polishing processes must be carried out using a generous amount of water to minimise the dust levels as per local and national law and regulations.

TRANSPORTATION

Packing for Transport

- Stone slabs and fabricated bench tops sections are generally heavy and fragile. Consideration must be given to portability and site access when planning and packing for transport.
- Brace all cutouts to avoid flexing of the seams and corners.
- Transport Talostone® with sections touching face-to-face or back-to-back. Do not allow any parts to slide around during transportation. Make sure the face is always protected by Talostone® protective films and not touching any abrasive surface such as metal, the back of another slab, etc.

Racking for Transport

- Time and skill has been spent in the factory manufacturing a first-class product, good racking is essential for getting the product to the site in good condition.
- Many rack designs have been made for stone slab transportation devices. Some stonemasons prefer to have a removable “A” frame that they can hoist off the delivery vehicle.
- The slabs should be securely fastened to the rack by straps. Care should be taken to protect the straps from being damaged or cut by the edge of the slabs.
- All racking should have a protective layer between the rack and Talostone® material. This will help to prevent scratching and other surface damage during storage or transit.

INSTALLATION PROCEDURES

Non-Critical Light - In the Home / on Site

Slabs are to be viewed from a normal viewing position. A normal viewing position is looking at the bench tops from a distance of 600mm with the surface of the slabs illuminated by non-critical light.

Non-critical light means the light that strikes the surface of the slabs is diffused and is not glancing or parallel to that surface. Slight variations in the colour of the slabs do not constitute a defect.

This is site specific, so it could be an issue in a highly lit environment, but not visible in another. Check reflectivity at the factory and on site before fixing tops to cabinetry.

Preparing Base Units/Cabinets

Ensure that cabinets are complete and satisfactorily installed. Verify that all cabinets are level. The tops of the cabinets must be flat. The cabinets should be affixed to each other and then secured to the back wall. In the case of a dishwasher, make sure that the surrounds of the opening of the counter have sufficient support. The front edge of any countertop over a dishwasher should always be supported with material matching the installed cabinets to better match the kitchen.

NOTE: If cabinets do not meet the minimum standards, the installer must notify the homeowner or project manager present at the job site prior to installation.

- Fabricated Talostone® surfaces are installed on top of cabinets and are not attached to the wall.
- Before installing Talostone® bench tops, it is extremely important to make sure that cabinets are fully completed, stable, levelled, secured and suitable for bearing the weight of the Talostone® bench tops.
- Talostone® surfaces must be supported on a strong perimeter frame or on a full deck support.
- It is essential that the bench top is sufficiently supported, particularly in areas such as joins, cut-outs and open spaces for appliances such as dishwashers, ovens, washing machines, etc.
- For cut-outs longer than 600 mm, ensure there is firm side-to-side support underneath.

Cabinet Support

It is extremely important to note that plinths provide a strong and stable base for the cabinets and are considered the best practice method for securing cabinetry. Regardless of the method used to secure the cabinetry, It is essential that they are properly levelled and secured to the floor and wall.

Cabinets should be placed and fixed securely to ensure that there is no movement under any additional load, such as Talostone®. bench tops. Also, ensure that you have a level surface to place the tops on.

Under-bench Appliances

Under-bench appliances such as ovens, dishwashers and microwaves generate heat in a very confined area. For areas above appliances which generate heat, it is necessary to make sure that the heat is not going to damage Talostone® bench tops by attaching a board between the cabinet tops on both sides of under-counter appliances that generate heat. We recommend that a solid top is installed above these appliances made from the same material as the cabinet carcasses. This will provide both support and insulation for the bench top.

Benchtops

Preparation for Installation

- Place all the fabricated pieces of the surface in their final position on the cabinets without adhesive. Check that all the pieces are the correct size, shape and direction in relation to the cabinets and the walls.
- Check that all exposed edges and corners are fabricated and rounded as required.
- Check that the surface is straight and level with a spirit level and long ruler.
- Leave a space of 1mm per linear metre between straight stretches of the surface and each wall for expansion and contraction, but no less than 3mm overall in any event.
- Perform a final visual inspection to ensure that the surface is to your satisfaction.

Adhesive Application

- To fix the tops to the carcasses, apply enough flexible silicone adhesive to secure the tops. We do not recommend using any adhesives other than flexible silicone.
- Do not use excessive amounts of glue as even silicone, when used in abundance, is extremely strong and will restrict the slabs from moving due to expansion and contraction.
- Use the minimum amount required to do the job.
- Large pieces will not move easily due to their weight. As such, minimal adhesive is required. Smaller pieces will need extra adhesive so they are not dislodged.
- Areas such as island bars and breakfast bars with overhangs should be more securely fixed.

Joins

- Part the fabricated pieces of surface slightly at the join.
- Place a layer of paper on the cabinet underneath the join in order to prevent the adhesive from sticking the surface to the cabinet.
- Prepare a suitable colour-matched polyester resin adhesive.
- If necessary, mix the adhesive with pigments using a stainless steel or plastic spatula until achieving the required shade.
- Use a plastic spatula for mixing light colours. Ensure that the join is clean of debris.
- Spread a generous amount of the adhesive on both sides of the joint.
- Ensure that the groove in the middle of the join is filled with adhesive.
- Close, secure and straighten the join with clamps or a professional joining clamp to create a smooth, flush join.
- After the adhesive is completely dry, remove the clamps.
- Remove any excess adhesive with a scraper.
- Perform final cleaning with alcohol on a clean white cloth.
  Do not polish joins on Talostone surfaces.

Sealing Between the Surface and the Wall

- Clean the space between the surface and the wall.
- Fill the space generously with a flexible adhesive such as neutral 100% neutral cure silicone.
- The silicone adhesive prevents water from entering the cabinet.
- For visible joins between Talostone® surface and a different material, use coloured silicone.
- If the cabinets are supported on adjustable legs, ensure that all legs are evenly tensioned for maximum stability.

Overhangs

An overhang is a surface that is not directly supported by a construction underneath, i.e, a surface that extends past the edge of the supporting cabinet for use as a bench top.

Extra strength can be provided by laminating the edge of the overhang and attaching another slab of the same thickness underneath. In this case, the bottom slab is attached back to back to the underside of the bench top so that the polished surface is visible underneath the bench top.

The permitted overhang dimension must be determined by a professional. It is dependent on a number of factors, such as:

- The complete length to width ratio of the surface relative to the length and width ratio of the overhang.
- Whether the overhang is supported on one or more sides by a wall or other supporting fixture.

The table below provides approximate guidelines for support required for overhangs.

Supports are dependent on the application. If the overhangs will be subjected to high loads, then supports should be used regardless of the recommendations below.

20 mm thickness slabs(or 40 mm laminated)	30 mm thickness slabs	Support required
Less than 300 mm overhang	Less than 400 mm overhang	No additional support required
300-500 mm	400-600 mm	Support brackets at 600 mm intervals
Greater than 500 mm	Greater than 600 mm	Legs, columns or panels

STRUCTURAL SUPPORT

Below are some guidelines on installation and support types:

Bench Tops

- Talostone® must be supported on a strong perimeter frame.
- Front-to-back support within the cabinet should be provided every 600mm. Plan for front-to-back support strips 40mm–100mm wide to coincide with cutouts and periodic support.
- Do not undercut corners.
- Allow room for expansion between bench tops and walls.
- All cabinets must be levelled and supported prior to the installation of the tops.
- If the cabinets are on adjustable legs, please ensure that all legs are evenly tensioned to prevent any movement.

Note: Support is required across the top of a dishwasher space and over an under-counter oven. **Support must be provided under all countertop joints.**

Sinks and Basins

For all sink or basin installations, we recommend that you follow the sink manufacturers' recommendations.

- For cutouts, follow the recommendations on Page 31 of this manual. For under-mount installations, follow the minimum edge profile recommendations around the cutout to reduce the risk of chipping. Our recommended minimum edge profile is a 3mm bevel. Our preferred minimum edge profile is a 3 - 4mm Pencil Round edge.
- Twin basin installations (Drop-in or Under-mount), where the tap hole is in the countertop, require extra care to ensure that there is sufficient material left for strength. Extra support is required to ensure that no cracking occurs.
- All sink cut-outs must be made using drilled radius corners (minimum 10mm) to prevent stress points in the top.
- We highly recommend that all sink installations be fully supported independent of the Talostone® bench top. Please be sure to use a professional sink-setter or support rail system. Plan for front-to-back support strips (40mm–100mm wide) to coincide with cut-outs and periodic support.

Note: Under no circumstances can mechanical fasteners (screws, nails, etc.) be affixed directly to Talostone®.

Table Tops

If you are using Talostone® as a freestanding tabletop, care needs to be taken to secure the tabletop to the base firmly. This is of the utmost importance when the table has only one central leg as support. A silicone adhesive is not enough to adequately secure the Talostone® top to the base. In this situation, we recommend a stronger, more rigid adhesive be used (such as a construction adhesive like polyurethane that is strong yet still flexible) to ensure that the tabletop is properly secured to the base.

Wall Applications

Talostone® requires that all interior wall surfaces be sound, secure, rigid and conform to all applicable laws and engineering practices. All bedding and grouting should be weather, frost, shock, and chemical-resistant, and meet the local engineering specifications, laws, and regulations.

- Talostone® can be applied over concrete, block and masonry-type surfaces, plasters, cement backer board, plywood, asphalt, and steel with proper preparation and the use of appropriate adhesives and grout.
- Talostone® surfaces do not constitute a waterproof barrier and should not be considered a replacement for a waterproof membrane. For information on thin, load-bearing waterproof membranes, consult your preferred supplier.
- Talostone® surfaces to be bonded must be free of dust, oil, grease, paint, tar, wax, curing agents, primers, sealers, form release agents, or any other deleterious substances which may act as bond barriers. The installer is responsible for ensuring the removal of any such contaminant prior to the commencement of Talostone® installation.
- All additives, epoxy adhesives, and grouts should be from the same manufacturer to ensure compatibility.
- Handle, store, mix and apply all setting and/or grouting materials in strict compliance with the manufacturers directions.
- Observe good stone working and safety practices at all times and comply with applicable building codes and regulations.

After Installation

Once installation is complete, ensure that the slab surface is clean and the work area tidy.

If further construction work is to be performed at the job site after the installation of the Talostone® bench top is complete, ensure that the Talostone® surfaces are properly protected by covering the entire top with corrugated cardboard or another protective material with warning advice on the protective material, i.e. Talostone® Protective Film (TPF), available from Talostone.

Please make your customer aware that any successive trades must not use the new bench top as a workbench, a stepping or a standing platform, and that any trades using solvents or adhesives should take care to avoid and/or remove any spills created by their solvents or adhesives.

We strongly recommend that your customer confirm, in writing, their satisfaction with the material and workmanship at the completion of the job to cover you against damages caused by others.

Make sure to leave information about Talostone® 15-Year Limited Warranty as well as Care & Maintenance details for the customer. *https://talostone.com.au/support/*

CARE AND MAINTENANCE

Everyday Cleaning

Because all Talostone® surfaces are high in density and low in porosity, normal cleaning with a damp cloth and mild detergent is all that is required to maintain your Talostone® bench tops. Just be sure to rinse thoroughly after with clean water before drying off with a soft, clean microfibre cloth using round, circular motions.

Whenever possible, we recommend wiping up any spills on your bench top surface with a soft cloth or kitchen paper while the spills are still damp. If further cleaning is needed, apply a spray of mild detergent and leave for 2-3 minutes before rinsing thoroughly and drying.

We do not recommend using abrasive cleaners or pads on Talostone® surfaces as these could damage the surface finish and/or reduce the surface shine.

Deep Cleaning

We recommend thoroughly cleaning your Talostone® surfaces on a regular basis to keep them looking as-new.

For a deep clean, we recommend using a soft cloth or non-abrasive sponge and a bar of regular soap. Wet the cloth and rub it on the surface of the soap before applying it to the Talostone® surface. Clean your bench top using small, circular motions whilst applying firm pressure before rinsing thoroughly with clean water and dry using circular movements with a clean, soft microfibre cloth.

Alternatively, you can also us our Talostone® Cream Cleanser* for a deep clean, simply follow above procedures.

Stubborn or Hard Stains

If a stain is unnoticed and accidentally left for an extended period of time, it may become dry and difficult to clean. We recommend spraying the area with warm water and leaving it for 5 minutes. Once the dried residue becomes soft, it can be removed with a dry, soft cloth. If the stain proves to be stubborn, Talostone® Cream Cleanser* and a damp cloth may be used, following the above mentioned procedures. Please apply the cleaning cream to the cloth rather than directly onto the surface.

Matte and Leather honed finishes

As the surface texture on the Matte and Leather Honed finishes are significantly different in relation to shine, glossy substances such as water marks, finger prints and product residue tend to be more visible on these surfaces.
Streaking is usually the result of water or cleaning products being left to dry on its own accord which, when dry, will show up as a different finish from the Talostone bench top when reflected by light.

Matte and Leather Honed surfaces traditionally require more daily maintenance than polished finishes. With a Leather Honed or Honed finish, there is more surface area so marks, stains and other signs of daily living will show more easily on these surfaces. Most marks or stains can be removed easily using non-abrasive cleaning products mentioned above.

Heat Tolerance

Talostone® engineered stone contains natural quartz which allows the surface to tolerate brief exposures to moderately warm temperatures. However, as with all stone surfaces, any sudden or rapid temperature change can cause thermal shock, discolouration or damage so we strongly advise against hot pots, pans or plates being placed directly on the surface.

Scratch Resilience

Because all Talostone® surfaces are engineered, they are highly scratch resistant and durable. However, the surface is not indestructible and any stone can be damaged by metal or other sharp objects. We strongly recommend the use of a cutting board to avoid damage to your Talostone® surface.

Cleaning Agents to Avoid

All Talostone® surfaces are engineered to the highest chemical resistance levels available but strong chemicals or solvents may still permanently damage the slab. We do not recommend the use of any strong caustic chemical cleaners. If your Talostone® surface is accidentally exposed to such chemicals, rinse the area immediately with clean water to neutralise the effect.

By reading this document, you agree that the properties of Matte and Leather Honed finishes have been fully explained to you, and that you understand that more frequent cleaning may be required to keep the product looking new and free of marks. You also understand that while Talostone® has a 15-year Residential Warranty, this warranty covers failures caused by product defects when the material is installed by a Talostone® Certified Stonemason. Marks that are common on these finishes are not covered by our warranty.

Please note that as per exclusions on our warranty, damage caused by chemicals is not covered in our policy.

Please note that as per exclusions on our warranty, damage caused by excessive heat is not covered by our policy.

Please note that as per exclusions on our warranty, scratches are not covered by our policy.

TALOSTONE® WARRANTY POLICY

Talostone® offers a 15-year Limited Warranty to original purchasers of bench tops from licensed and certified stonemasons with respect to the quality of the slabs **purchased directly from Talostone®** and used by licensed stonemasons to fabricate the bench tops. Talostone® offers a 15-year Limited Residential and Commercial Warranty to the Stonemason in respect to each qualified slab sold by Talostone® directly to the stonemason.

For additional warranty information (including restrictions and exclusions), please refer to the Warranty Policy and Care and Maintenance sections of the Talostone® website at www.talostone.com.au.

Residential and Commercial 15-Year Limited Warranty

Thank you for the purchase of your new Talostone® surface, a leading brand for quartz surfaces in Australia. All Talostone® products come with a 15-Year Limited Warranty applicable to our products.

Talostone® will warrant from the original date of installation. Material that fails due to any Talostone® slab manufacturing defect when fabricated and installed by a qualified, licensed stonemason/fabricator who complies with all Health & Safety requirements from Safe Work Australia (www.safeworkaustralia.gov.au) for stone fabricating business. This warranty applies to the repair or replacement of failed material that has been permanently installed in your residence. The option to repair or replace the material is at the sole discretion of Talostone®.

This 15-Year Limited Warranty is available to residential and commercial jobs in which Talostone® has been originally installed. This Warranty is only available to the first owner of the properties.

Terms and Conditions

A. *This warranty applies only to Talostone® quartz surfacing materials and does not apply to any other products, including other quartz surfacing products manufactured or supplied by any other party, except Talostone®.*

B. *This warranty applies only to Talostone® quartz surfacing materials that have been permanently installed in interior applications and have not been moved from their original installation. If after or during installation you decide that you do not like the colour or finish you selected, that decision is not covered under this warranty.*

C. *This warranty does not cover any residence where the owner is not the occupant.*

D. *This warranty does not cover materials and/or services that have not been paid in full.*

E. *This warranty applies only to materials that have been maintained according to the Talostone® Care & Maintenance guidelines. Care & Maintenance guidelines are available at www.talostone.com.au.*

F. *To request service under this warranty you must contact the company who sold you Talostone® or contact Talostone® directly at (61) 02 8783 0600 within thirty (30) days of the failure of Talostone® quartz surfacing materials.*

G. *Following installation, you must register your product within thirty (30) days in order to activate your warranty. Simply complete the online form made available at www.talostone.com.au. In the event that no record of your warranty is on file, you must provide proof of purchase in the form of a copy of your original receipt or invoice showing the name of the Owner, Authorised Dealer and Licensed Fabricator. Upon receipt of your original receipt or invoice showing the name of the Owner, Authorised Dealer and Licensed Fabricator, Talostone® will honour this warranty even though no warranty is on file. You must agree to cooperate with Talostone® or its authorised agents in the inspection of the product and assist us in efforts to perform our obligations under this warranty.*

H. *Given that Talostone® Slabs are manufactured from natural materials, each slab is unique and varies to shading, quartz distribution and reflectivity do occur and are naturally occurring characteristics of the material. Consequently, (i) samples are indicative only and may vary from the final product; and (ii) naturally occurring variations in appearance caused by artificial or natural lighting are not covered by the warranty; Changes in the appearance of the slab from reflected light is a natural part of the slabs.*

I. *Inspections of the surface of the slabs is to be in a normal viewing position with the slab being illuminated by "non-critical light". Meaning of "Non-critical light" is the light that strikes the surface is diffused and is not glancing or parallel to that surface.*

J. *This warranty is not transferable.*

Exclusions

1. *This warranty does not cover products used as flooring material.*

2. *This warranty does not cover products installed in any outdoor application.*

3. *This warranty does not cover improper use or abuse. Improper use or abuse includes, but is not limited to, damage from mishandling of the product, damage from excessive heat or exposure to weather conditions, physical or chemical abuse and damage from improper care and maintenance, i.e placing hot items including, but not limited to, hot pans, electric frying pans or oven trays directly on the Slab, prolonged constant heat or instances where the heat exceeds approved temperature levels for BBQ/ Fireplace applications, etc.*

4. *Cracks in the material are not a material fault; cracking is the result of externally induced mechanical stress on the material after installation. The most likely causes are settlement or movement, excessive weight being placed on the tops, such as standing or sitting on them. Heat, as explained in section (3) may also result in a crack. Any crack emanating from an overhang, a sink cut-out, cook top cut-out or "L" shaped cut-out is also not covered under this warranty as these are not caused by any fault in the material.*

5. *This warranty does not cover chips or other excessive impact damage to the product. Chipping is not a material fault, it is normally the result of a directs impact to the bench top surface and as such, it is not covered by warranty.*

6. *This warranty does not cover scratches. Talostone® is a very hard material and highly scratch resistant but not scratch proof. Proper care must be exercised including the use of a cutting board as part of your care and maintenance.*

7. *This warranty does not cover routine maintenance. Routine maintenance includes but is not limited to, minor conditions such as removing stains and water spots by following the techniques specified in the Talostone® online Care & Maintenance Guidelines at www.talostone.com.au.*

8. *This warranty does not cover failures due to fabricators/installers not following the prescribed fabrication and installation procedures as outlined in the Talostone® Fabrication, Installation, Safety & Health Protection Guide. Improper fabrication and/or installation is the sole responsibility of the fabricator and/or installer.*

9. *This warranty does not cover any defect that was visible at the time of fabrication and was not avoided during fabrication. Fabricators are required to perform a visual inspection of all materials prior to fabrication and again prior to installation.*

10. *This warranty does not cover seam appearance or seam performance, adhesives, caulk or other accessory items. There are two main reasons for seam separation or cracking with the first one being shifting or movement of the substrate, cabinets or foundation. The second reason is thermal shock.which can occur when a hot pan, dish or other receptacle or object is left on the countertop for more than a brief period. Trivets or hot pads should always be used. These issues are not considered material defects.*

11. *This warranty does not cover any chemical damage.*

12. *This warranty does not cover material that has been milled or reduced in thickness.*

13. *This warranty does not cover the installation of sinks.*

14. *This warranty does not cover securing mechanical fasteners directly into the material.*

15. *This warranty does not cover any failures due to inadequate support. This includes any overhangs exceeding those recommended by Talostone® which are inadequately supported.*

16. *This warranty does not cover any chips or cracks that are a result of "DRY" cutting or polishing.*

17. *This warranty does not cover mitred edges where the joint is not cut correctly.*

18. *This warranty does not cover any defect or damage where the minimum distance from the periphery of the closest gas burner to the Talostone® splash back is less than 200mm.*

19. *This warranty does not cover the altering of any factory applied finish. Only colours listed as available in our brochure, sample book or on our website as "Leather honed" are eligible under this warranty. Any issues arising from the practice of "in-shop" honing is the sole responsibility of the fabricator.*

20. *This warranty does not cover additional modifications such as plumbing, electrical, tile, Cabinets, flooring, etc. that may be necessary to repair or replace the Talostone® product covered under this warranty.*

21. *This warranty does not cover natural variations in the colour, size, shape and pattern distribution of the natural quartz or the natural variations in background tone. These characteristics are inherent and unique characteristics of the product. Colour samples provided to consumers, dealers and fabricators are only representative and not an exact replication of what will be installed in your home.*

22. *This warranty does not cover what is referred to as spots or blemishes smaller than a AUS ten (10) cent piece. A certain level of spots or blemishes are inherent in the manufacturing process and do not affect the structural integrity of the material.*

23. *Talostone® materials contain important product information on the back of each slab. Removing this product information may void the warranty.*

Talostone® is not responsible for damage or injury caused in whole or in part by job site conditions, architectural/engineering design, human mishandling, structural movement, acts of vandalism or accidents.

Talostone® shall not be responsible in either contract or tort for any loss of direct, indirect, consequential, incidental, special, exemplary, or punitive damages arising out of the use or the inability to use the products covered by this warranty. Some states do not allow exclusion or limitation of incidental damage, so the above limitations or exclusions may not apply to you.

Privacy

I. *Talostone® requires the information that it requests from you when you purchase the Product and when you make a Warranty claim in order to provide the Warranty to you. For this purpose, it may be necessary to give your personal information to other companies.*

II. *Talostone® may also prepare aggregated user statistics or information summaries to describe the services of Talostone® and their popularity to business partners of Talostone® and prospective advertisers and for other lawful purposes. Such information may be disclosed by Talostone® to other companies appointed by it for this purpose. However, this information will not include information which identifies you personally.*

III. *Talostone® may also from time to time send you information regarding Talostone® range of products. If you do not wish to receive this information please advise Talostone® by calling Talostone® Head Office at 02 8783 0600 or sending an email to info@talostone.com.au.*

THE FOREGOING IS THE COMPLETE WARRANTY FOR TALOSTONE® AND SUPERSEDES ALL OTHER WARRANTIES AND REPRESENTATIONS, WHETHER ORAL OR WRITTEN. EXCEPT AS EXPRESSLY SET FORTH ABOVE, NO OTHER WARRANTIES ARE MADE WITH RESPECT TO TALOSTONE® . TALOSTONE® DISCLAIM ALL WARRANTIES NOT STATED HEREIN. THIS INCLUDES, TO THE EXTENT PERMITTED BY APPLICABLE LAW, ANY WARRANTY THAT MAY EXIST UNDER NATIONAL, STATE, PROVINCIAL OR LOCAL LAW INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SOME STATES OR OTHER JURISDICTIONS DO NOT ALLOW THE EXCLUSION OF IMPLIED WARRANTIES, SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU.

TECHNICAL DATA

SGS

TEST REPORT

No. : XMCCM130500410
Date : Jul.05, 2013
Page: 2 of 10

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755)83071443, or email: CN.Doccheck@sgs.com

Summary of test results:

(Average value)

Test items	Test methods	Test results
Stain resistance	ANSI Z 124.6-2007	Pass
Absorption by weight	ASTM C97/C97M-09	0.03%
Density		2360kg/m^3
Flammability	ASTM E 84-2011b	Class A
Compressive strength	ASTM C170/C170M-09	213 Mpa~224 Mpa
Flexural strength	ASTM C880/C880M-09	34.0 Mpa~39.4 Mpa
Abrasive wear index	ASTM C501-84(2009)	Wear index: 140
Liner thermal expansion coefficient	ASTM C531-00(2012)	1.6×10^{-5}/℃
Static coefficient of friction	ASTM C1028-07$^{\varepsilon1}$	Dry condition: 1.07 Wet condition: 0.59
Impact resistance	ANSI Z 124.6-2007	No crack or chip after test.
Thermal shock resistance	EN 14617-6:2005	No visual defects after 20 cycles.
Resistance to freeze/thaw cycling	Refer to ASTM C1026-2010	No visual defects after 20 freeze/thaw cycles.
Mohs' hardness	EN 101:1991	7

Sample 2: CRUSHED ICE

Test items	Test methods	Test results
Mohs' hardness	EN 101:1991	7

******** To be continued********

XMCCM 001357

Results represent a partial series range.

SAFETY DATA SHEET

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 Product identifier

Product name **TALOSTONE - QUARTZ SURFACES - MINQ™ PRODUCTS**

Synonyms

1.2 Uses and uses advised against

Uses QUARTZ SURFACING PRODUCTS

1.3 Details of the supplier of the product

Supplier name **TALOSTONE PTY LTD**

Address 97 Jedda Road, Preston, NSW, 2170, AUSTRALIA

Telephone 02 8783 0600

Email info@talostone.com.au

Website https://talostone.com.au/

1.4 Emergency telephone numbers

Emergency (0)405 451 858

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

CLASSIFIED AS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA CRITERIA

Physical Hazards

Not classified as a Physical Hazard

Health Hazards

Carcinogenicity: Category 1A
Specific Target Organ Toxicity (Repeated Exposure): Category 1

Environmental Hazards

Not classified as an Environmental Hazard

2.2 GHS Label elements

Signal word **DANGER**

Pictograms

Hazard statements

H350i	May cause cancer by inhalation.
H372	Causes damage to organs (lungs) through prolonged or repeated exposure if inhaled.

Prevention statements

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P264	Wash thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

5.3 Advice for firefighters
No fire or explosion hazard exists.

5.4 Hazchem code
None allocated.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures
Wear Personal Protective Equipment (PPE) as detailed in section 8 of the SDS.

6.2 Environmental precautions
Prevent product from entering drains and waterways.

6.3 Methods of cleaning up
Moisten with water to prevent a dust hazard and place in sealable containers for disposal or reuse.

6.4 Reference to other sections
See Sections 8 and 13 for exposure controls and disposal.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling
Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas.

7.2 Conditions for safe storage, including any incompatibilities
Store in a cool, dry, well ventilated area, removed from incompatible substances and foodstuffs. Ensure containers are adequately labelled and protected from physical damage when not in use. Suppress dust with water if stored in bulk.

7.3 Specific end uses
No information provided.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters
Exposure standards

Ingredient	Reference	TWA		STEL	
		ppm	mg/m³	ppm	mg/m³
Cristobalite (respirable dust)	SWA [AUS]	--	0.05	--	--
Quartz (respirable dust)	SWA [AUS]	--	0.05	--	--
Quartz (respirable dust) (Precautionary advice)	WorkSafe VIC	--	0.02	--	--
Titanium dioxide (a)	SWA [AUS]	--	10	--	--
Titanium dioxide (inhalable)	SWA [Proposed]	--	1	--	--
Tridymite (respirable dust)	SWA [AUS]	--	0.05	--	--

Biological limits
No biological limit values have been entered for this product.

8.2 Exposure controls
Engineering controls Avoid inhalation. Use in well ventilated areas. Where an inhalation risk exists, mechanical extraction ventilation is recommended. Wet where possible. Maintain dust levels below the recommended exposure standard.

Response statements

P308 + P313 IF exposed or concerned: Get medical advice/ attention.

Storage statements

P405 Store locked up.

Disposal statements

P501 Dispose of contents/container in accordance with relevant regulations.

2.3 Other hazards

The solid product as supplied is classified as non-hazardous under normal conditions and does not present an inhalation, ingestion, skin, or eye hazard. However, dust created when the product is cut, grinded or machined may cause mechanical irritation and may contain crystalline silica, some of which may be respirable. Repeated exposure to respirable crystalline silica dust may cause lung fibrosis (silicosis). NOTE: The classifications provided are reflective of the product once dust is generated. Adequate ventilation and wet processes are recommended to keep exposure to airborne dust below acceptable limits.

3. COMPOSITION/ INFORMATION ON INGREDIENTS

3.1 Substances / Mixtures

Ingredient	CAS Number	EC Number	Content
PIGMENT(S)	-	-	Remainder
QUARTZ (CRYSTALLINE SILICA)	14808-60-7	238-878-4	<40%
CRISTOBALITE	14464-46-1	238-455-4	<2%
1,3-ISOBENZOFURANDIONE, POLYMER WITH 2,5-FURANDIONE AND 2,2'-OXYBIS[ETHANOL]	26123-45-5	-	Not Available
TITANIUM DIOXIDE	13463-67-7	236-675-5	Not Available
TRIDYMITE	15468-32-3	-	Not Available
GLASS	-	-	<60%
POLYESTER RESIN(S)	-	-	<18%
ADDITIVE(S)	-	-	<5%

4. FIRST AID MEASURES

4.1 Description of first aid measures

Eye (Dust exposure) If in eyes, hold eyelids apart and flush continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre, a doctor, or for at least 15 minutes.

Inhalation Exposure is considered unlikely. Due to product form / nature of use, an inhalation hazard is not anticipated. (Dust exposure) If inhaled remove from contaminated area. Apply artificial respiration if not breathing.

Skin (Dust exposure) Gently flush affected areas with water. Seek medical attention if irritation develops.

Ingestion For advice, contact a Poisons Information Centre on 13 11 26 (Australia Wide) or a doctor (at once). Due to product form and application, ingestion is considered unlikely.

First aid facilities Eye wash facilities and safety shower should be available.

4.2 Most important symptoms and effects, both acute and delayed

Repeated exposure to crystalline silica may result in lung fibrosis (silicosis). Principal symptoms of silicosis are coughing and breathlessness. Crystalline silica is classified as carcinogenic to humans (IARC Group 1). However, due to the product form (solid bench-top), over exposure via inhalation is not anticipated with normal use, unless cutting, grinding, machining, etc dry/set product.

4.3 Immediate medical attention and special treatment needed

Treat symptomatically.

5. FIRE FIGHTING MEASURES

5.1 Extinguishing media

Use an extinguishing agent suitable for the surrounding fire.

5.2 Special hazards arising from the substance or mixture

Non flammable. May evolve toxic gases if strongly heated. May evolve silicon compounds, carbon oxides, titanium oxides, metal oxides and hydrocarbons when heated to decomposition. Dust may form combustible mixtures with air.

PPE

Eye / Face	If cutting or sanding with potential for dust generation, wear dust-proof goggles.
Hands	Wear leather or cotton gloves.
Body	Wear safety boots.
Respiratory	If cutting or sanding with potential for dust generation, wear a Class P2 (Particulate) respirator.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	COLOURED SOLID
Odour	ODOURLESS
Flammability	NON FLAMMABLE
Flash point	NOT RELEVANT
Boiling point	NOT AVAILABLE
Melting point	NOT AVAILABLE
Evaporation rate	NOT AVAILABLE
pH	NOT AVAILABLE
Vapour density	NOT AVAILABLE
Relative density	2.30
Solubility (water)	NOT AVAILABLE
Vapour pressure	NOT AVAILABLE
Upper explosion limit	NOT RELEVANT
Lower explosion limit	NOT RELEVANT
Partition coefficient	NOT AVAILABLE
Autoignition temperature	NOT AVAILABLE
Decomposition temperature	NOT AVAILABLE
Viscosity	NOT AVAILABLE
Explosive properties	NOT AVAILABLE
Oxidising properties	NOT AVAILABLE
Odour threshold	NOT AVAILABLE

9.2 Other information

Bulk density	2360 kg/m³ (Approximately)

10. STABILITY AND REACTIVITY

10.1 Reactivity

Carefully review all information provided in sections 10.2 to 10.6.

10.2 Chemical stability

Stable under recommended conditions of storage.

10.3 Possibility of hazardous reactions

Hazardous polymerisation is not expected to occur.

10.4 Conditions to avoid

Avoid heat, sparks, open flames and other ignition sources. Avoid shock, friction and heavy impact.

10.5 Incompatible materials

Incompatible with strong acids (e.g. hydrochloric acid).

10.6 Hazardous decomposition products

May evolve silicon compounds, carbon oxides, titanium oxides, metal oxides and hydrocarbons when heated to decomposition.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity Based on available data, the classification criteria are not met.

Information available for the ingredients:

Ingredient	Oral LD50	Dermal LD50	Inhalation LC50
TITANIUM DIOXIDE	5000 mg/kg (rat)	--	3.43 - 6.82 mg/L air (rat)

Skin Contact may result in mechanical irritation, redness, rash and dermatitis.

Eye Contact may result in mechanical irritation, lacrimation and redness.

Sensitisation Not classified as causing skin or respiratory sensitisation.

Mutagenicity Not classified as a mutagen.

Carcinogenicity The solid product as supplied is classified as non-hazardous under normal conditions. However, hazards are associated with processing, including the fabrication workshop and upon installing and removing/demolishing slabs. Operations such as cutting, drilling, sawing, routing, grinding, chipping, polishing, sanding etc. can generate dust, and adequate ventilation and wet processes are recommended to keep exposure to airborne dust below acceptable limits. Dust created when the product is cut, grinded and machined may contain crystalline silica some of which may be respirable (particles small enough to go into deep parts of the lung when breathed in). Crystalline silica is classified as carcinogenic to humans (IARC Group 1). However, there is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis. Therefore, preventing the onset of silicosis will also reduce the cancer risk. Titanium dioxide is classified as possibly carcinogenic to humans (IARC Group 2B).

Reproductive Not classified as a reproductive toxin.

STOT - single exposure Over exposure may result in irritation of the nose and throat, with coughing.

STOT - repeated exposure The solid product as supplied is classified as non-hazardous under normal conditions. However, hazards are associated with processing, including the fabrication workshop and upon installing and removing/demolishing slabs. Operations such as cutting, drilling, sawing, routing, grinding, chipping, polishing, sanding etc. can generate dust, and adequate ventilation and wet processes are recommended to keep exposure to airborne dust below acceptable limits. Dust created when the product is cut, grinded and machined may contain crystalline silica some of which may be respirable (particles small enough to go into deep parts of the lung when breathed in). Repeated overexposure to crystalline silica for extended periods may result in silicosis. Repeated exposure to titanium dioxide may result in slight lung fibrosis.

Aspiration This product does not present an aspiration hazard.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

The substance is inert and there is no evidence of significant toxicity.

12.2 Persistence and degradability

Being inorganic, the substance will not biodegrade.

12.3 Bioaccumulative potential

The substance is inert and will not be absorbed and accumulate in tissues.

12.4 Mobility in soil

No information provided.

12.5 Other adverse effects

The main component/s of this product are not anticipated to cause any adverse effects to plants or animals.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste disposal Reuse where possible. No special precautions are normally required when handling this product.

Legislation Dispose of in accordance with relevant local legislation.

14. TRANSPORT INFORMATION

NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE, IMDG OR IATA

	LAND TRANSPORT (ADG)	SEA TRANSPORT (IMDG / IMO)	AIR TRANSPORT (IATA / ICAO)
14.1 UN Number	None allocated.	None allocated.	None allocated.
14.2 Proper Shipping Name	None allocated.	None allocated.	None allocated.
14.3 Transport hazard class	None allocated.	None allocated.	None allocated.
14.4 Packing Group	None allocated.	None allocated.	None allocated.

14.5 Environmental hazards

No information provided.

14.6 Special precautions for user

Hazchem code None allocated.

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Poison schedule A poison schedule number has not been allocated to this product using the criteria in the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

Classifications Safe Work Australia criteria is based on the Globally Harmonised System (GHS) of Classification and Labelling of Chemicals (GHS Revision 7).

Inventory listings **AUSTRALIA: AIIC (Australian Inventory of Industrial Chemicals)**
All components are listed on AIIC, or are exempt.

16. OTHER INFORMATION

Additional information

PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:
The recommendation for protective equipment contained within this report is provided as a guide only. Factors such as form of product, method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

HEALTH EFFECTS FROM EXPOSURE:
It should be noted that the effects from exposure to this product will depend on several factors including: form of product; frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

Abbreviations

ACGIH	American Conference of Governmental Industrial Hygienists
CAS #	Chemical Abstract Service number - used to uniquely identify chemical compounds
CNS	Central Nervous System
EC No.	EC No - European Community Number
EMS	Emergency Schedules (Emergency Procedures for Ships Carrying Dangerous Goods)
GHS	Globally Harmonized System
GTEPG	Group Text Emergency Procedure Guide
IARC	International Agency for Research on Cancer
LC50	Lethal Concentration, 50% / Median Lethal Concentration
LD50	Lethal Dose, 50% / Median Lethal Dose
mg/m³	Milligrams per Cubic Metre
OEL	Occupational Exposure Limit
pH	relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).
ppm	Parts Per Million
STEL	Short-Term Exposure Limit
STOT-RE	Specific target organ toxicity (repeated exposure)
STOT-SE	Specific target organ toxicity (single exposure)
SUSMP	Standard for the Uniform Scheduling of Medicines and Poisons
SWA	Safe Work Australia
TLV	Threshold Limit Value
TWA	Time Weighted Average

Report status

This document has been compiled by RMT on behalf of the manufacturer, importer or supplier of the product and serves as their Safety Data Sheet ('SDS').

It is based on information concerning the product which has been provided to RMT by the manufacturer, importer or supplier or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer, importer or supplier.

While RMT has taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, RMT accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS.

Prepared by

Risk Management Technologies
5 Ventnor Ave, West Perth
Western Australia 6005
Phone: +61 8 9322 1711
Fax: +61 8 9322 1794
Email: info@rmt.com.au
Web: www.rmtglobal.com

[End of SDS]

Talostone Product Specifications

TALOSTONE®
Your Natural Choice®

Head Office & Warehouse
97 Jedda Rd, Prestons NSW 2170
T. 02 8783 0600

City Experience Centre - Sydney
1/1 Danks Street, Waterloo NSW 2017
T. 02 9698 6666

Victoria Distribution Hub
16 Furlong St, Cranbourne West VIC 3977
T. 03 9113 2277

Talostone® Colour MinQ® Range & Specifications 2023.v2

CR-Version-1

Effective from 01st January, 2023

Valid till 31st December 2023

Supersedes all prior versions

TALOSTONE® - MinQ® Range *(Crystalline Silica Percentage < 40%)*					Specifications		
Colour Range	**Colour Name**	**Colour Code**	**Surface Finish**	**Nominal slab size**	**12mm Thickness Slab**	**20mm* Thickness Slab**	**30mm Thickness Slab**
					Weight range (kg/M²)	*Weight range (kg/M²)*	*Weight range (kg/M²)*
Talostone Protective Film				100Metre x 600mm	Available for stonemasons for protection after installation		
Talostone Cleaning Kit				250ml	Available for all customers		
Standard Range	Crushed Ice™	*5010P*	Polished	3200x1600mm	-	45-51	-
	White MirrorLux™	*5020P*		3200x1600mm			
	Silver Ice™	*5030P*		3200x1600mm			
	Desert White™	*6010P*		3200x1600mm			
	Desert Grey™	*6070P*		3200x1600mm			
	Black Caviar™	*5050P*		3200x1600mm			
Deluxe Range	Arctic White™	*3010P*	Polished	3200x1600mm	-	45-48	-
	Neutral White™	*3020P*		3200x1600mm			
	Serene White™	*8060P*		3200x1600mm			
	River Sand™	*8050P*		3200x1600mm			
Marble Range	Carrara Gioia™	*8080M*	Matte	3200x1600mm	-	42-48	-
		8080P	Polished	3200x1600mm	27-30		
	Carrara Classic™	*8110P*	Polished	3200x1600mm	-		*67-69*
	Carrara Gold™	*8150P*	Polished	3200x1600mm	-		-
	Rustic Concrete™	*8200LH*	Leather Honed	3200X1600mm			
	Marquina™	*8270P*	Polished	3200x1600mm			
	Marmo Gris™	*8250LH*	Leather Honed	3200X1600mm			
		8250P	Polished	3200X1600mm			
	Elba White	*8300LH*	Leather Honed	3200x1600mm			
		8300P	Polished	3200x1600mm			
Premium Marble Range	Concrete Original™	*9010LH*	Leather Honed	3200x1600mm	-	42-48	-
	Imperial Danby™	*9020LH*	Leather Honed	3200X1600mm			
		9020P	Polished				
	Calacatta Gold™	*9080M*	Matte	3200X1600mm			68-70 3075x1600x20mm
		9080P	Polished				
	Statuario™	*9090LH*	Leather Honed	3075x1600mm		-	68-70 3075x1600x20mm
		9090P	Polished				
	Calacatta Luxe™	*9030M*	Matte	3200X1600mm	27-30	42-48	-
		9030P	Polished				
	Calacatta Oro™ New	*9040M*	Matte	3200X1600mm	-		
		9040P	Polished				
	Onyx White™	*9100P*	Polished	3200x1600mm	27-30		
	Super White™	*9300M*	Matte	3200x1600mm	-		
	Lord White™ New	*9400M*	Matte	3200x1600mm	-		
		9400P	Polished				
	Arabescato Borghini™ New	*9500M*	Matte	3200x1600mm	-		
		9500P	Polished				
	Arabescato Nero™ New	*9600M*	Matte	3200x1600mm	-		
		9600P	Polished				

For the lastest TALOSTONE® *colour innovation, please visit* ***talostone.com.au***

Important Notes:

- Slabs are picked up from **97 Jedda Rd, Prestons NSW 2170 in NSW and 16 Furlong St, Cranbourne West VIC 3977 in VIC** and weight range is an estimation;
- 20mm thickness slabs are regular stock, 12mm & 30mm thickness slabs are only for selected colours with limited stock available; Large stock will be available for projects, lead time is around 8 weeks from order date;
- 12mm thickness slabs are available now for splashbacks & interior wall panels with backlit effects. Limited stock is available for this thickness, please check for the availability prior to quoting;
- * means that MinQ® available stock only for 20mm thickness slabs at the moment;
- Neutral White™ and Arctic White™ are complimentary colours for Marble and Premium Marble ranges;
- **Talostone slabs are NOT sold to stonemasons who do NOT comply with Safety and Health Standards by Safework Australia. Talostone does not bear any responsibility from any re-selling activities.**
- **Please visit the Talostone City Experience Centre - Sydney (*TCEC-Sydney*) for more design inspiration at 1/1 Danks Street, Waterloo NSW 2017.**
- For more assistance from **TALOSTONE®**, please call **02 8783 0900** or email **orders@talostone.com.au**, thank you for your support.

Thank you for choosing* TALOSTONE® *- Your Natural Choice®

TALOSTONE®

Your Natural Choice®

NSW

Head Office & Warehouse

97 Jedda Road, Prestons NSW 2170
T. 02 8783 0600
info@talostone.com.au

City Experience Centre - Sydney

1/1 Danks Street, Waterloo NSW 2017
T. 02 9698 6666
tcecsydney@talostone.com.au

VIC

Victoria Distribution Hub

16 Furlong Street, Cranbourne West VIC 3977
T. 03 9113 2277
info@talostone.com.au

Calacatta Luxe™

talostone.com.au