

General Fabrication Manual



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1 Handling and Storage of Trendstone Quartz Slabs

a) Handling

Always take care and maintain attention when moving slabs. You must have a minimum of two workers to relocate slabs(s) no matter what kind of equipment you use. Never stand under slabs when moving slabs. Stay at arm's length at all times.

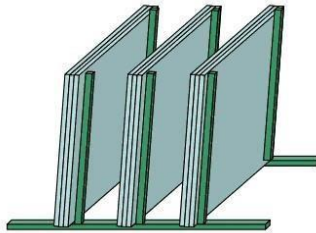
Dimensions and Weight			
Thickness	Size (mm)	Weight kg/Slab	Unit Weight (kg/m ²)
20mm	3200 x 1600	256	50
30mm	3200 x 1600	384	75

b) Slab Storage

It is recommended that all Trendstone Quartz slabs be stored indoors.

If slabs are stored outside they must be kept covered and be stored with the polished faces unexposed. UV light from the sun can react with the resins in the slabs and permanently damage the appearance and change the colour.

Refer below diagram for how the slabs are to be stored.



The first slab against the frame should be on the back side and the next slab should be polished face to polished face. Then the following should be back to back and so on.

2 Preparation

a) Health and Safety Information

Information hereunder provides the most important safety issue pertaining to the fabrication and installation of quartz stone products. Please read this carefully to understand how silica dust could cause silicosis and severely and permanently damage your health.

Quartz is a pure mineral that has the chemical formula SiO_2 and is crystalline and transparent in structure. Trendstone Quartz™ is composed of approximately 93% quartz by weight. No inherent health risks are present in its solid slab form. However, respirable crystalline silica dust represents a potential health hazards when they are inhaled by a person. The silica dust is created during all operations using dry techniques such as sawing, sanding, drilling or routing. Dry sweeping can also create silica dusts and cause for developing to silicosis.

Overexposure of silica dust can cause silicosis by the formation of scar tissue in the lungs. Silicosis can be disabling, non reversible and sometimes produce fatal lung disease. Symptoms of silicosis include coughing, difficulty in breathing and progressive impairment of lung functions.

Shop operations in a wet environment using proper ventilation and filtration systems would greatly reduce risk of inhaling deadly airborne dust and prevent shop employees from potential health risks.

Personal Protection

- Wear safety glasses
- Wear appropriate gloves
- Air purifying respirator

Note: All fabrication should be done wet.

b) Inspection

The manufacturers of Trendstone Quartz aim to provide the highest quality materials to our fabricators to ensure customer satisfaction. Each individual slab is checked after manufacture to ensure they meet export standards. In addition, it is the fabricators' responsibility to conduct a visual inspection for defects on every slab prior to manufacture.

Tips: All slabs must be inspected by stone masons prior to manufacture.

Remove plastic cover and carefully inspect slabs for any surface irregularities or pre-existing defects before cutting slabs.

Manufacturer will not accept claims for pre-existing visible defects after slabs have been cut. Manufacturer will not be responsible for any labour costs incurred for fabrication/installation of defective materials.

c) Fabrication and Installation Check List

Residential 10-year limited warranty of Trendstone Quartz™ surface products will not cover damages caused by improper fabrication or installation.

d) General Installation

- 1)** Be sure to check the sequence numbers on the slabs upon delivery of the product for the best colour-consistency.
- 2)** The top of the cabinets must be flat and true to within 3mm (1/8") of a flat surface for every 3m length.
- 3)** To prevent seam failure, clean the side or edges with acetone or similar before applying adhesive.
- 4)** Allow 3mm (1.8") minimum clearance between countertops and walls for every 3m.
- 5)** Never install mechanical fasteners such as screws, nails etc directly into the Trendstone Quartz™ surface.
- 6)** Support overhangs exceeding 300mm (12") for 20mm (3/4") thickness material.
- 7)** Radius all inside corners to a minimum of 6mm (1/4") radius for one piece L-shape, Ushape etc to reduce corner stresses. However, 2-piece L-shaped tops and 3-piece Ushaped tops with seams do not need to have an inside corner radius.
- 8)** Remove all nicks, tool marks, protective sheet residue etc using acetone and/or white nylon pad with non-abrasive cleaning products eg. Aquamix Nanoscrub
- 9)** Seams going through any cutouts are not recommended. It is acceptable for the dropin sink.
- 10)** Use only approved 2-part epoxy, polyester or acrylic adhesives.
- 11)** Avoid "Stress Risers", (i.e. gap, sharp angled inside corner etc). Stress risers weaken the overall performance and eventually can cause a crack in the quartz countertop.
- 12)** For quartz tops a 4mm clearance space gap should be on all sides of the cooktop cutouts to allow for heat expansion and contraction.

3 Seams & Edges

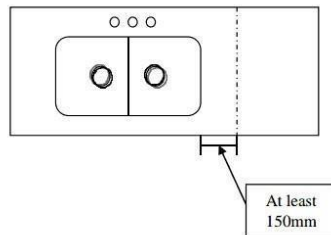
a) Seam Placement

Careful planning is the key factor in a successful job.

When planning a job, having the right seam placement will help you minimize the use of material and time.

In addition the right placement will help to ensure your customers to enjoy the beauty of Trendstone Quartz™ countertop without problems for years to come.

All seams are recommended to be at least 150mm from any cutouts.

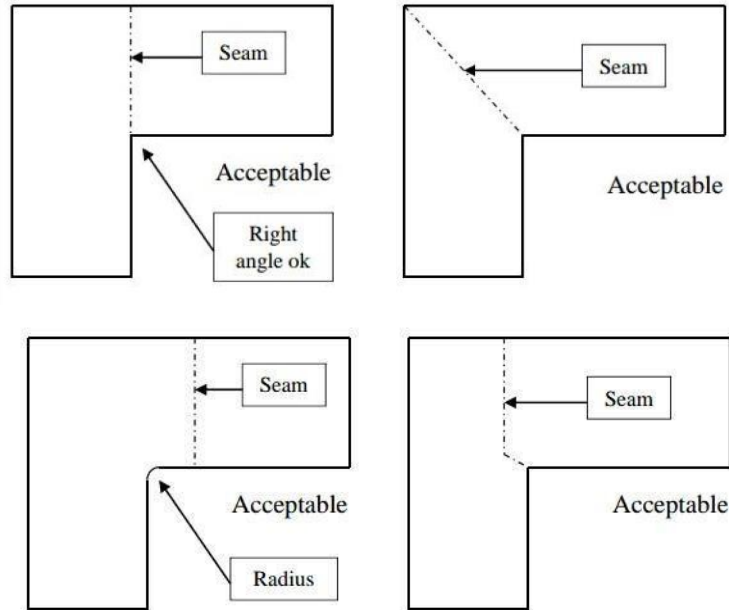


Tips: Always discuss seam placement with customers at the time of templating. The characteristic of visible seams may irritate some customers if they were not informed properly.

NOTE: There should be no seams over a dishwasher!!

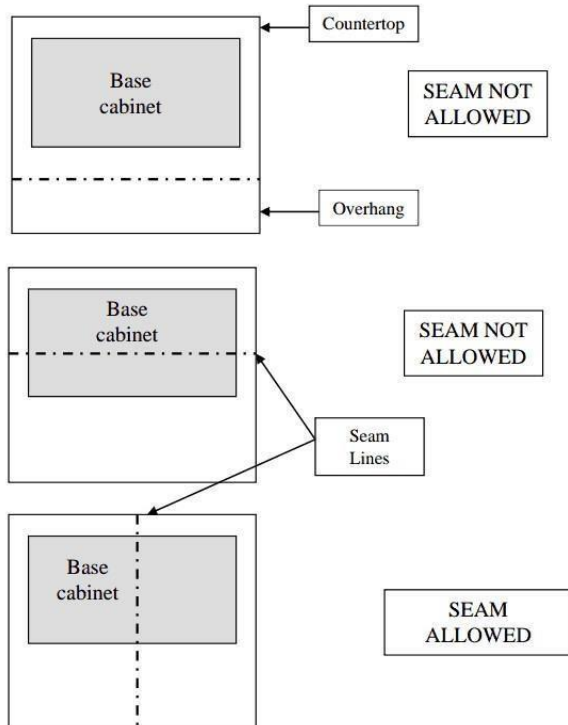
It is not recommended to have a seam going through a cooktop.

The following inside corner seams are acceptable.



There should be no seams on an overhang of a peninsula or island bench.

Due to the weight of quartz and mechanical bonding strength, the overhangs with seamed joints will eventually fail.



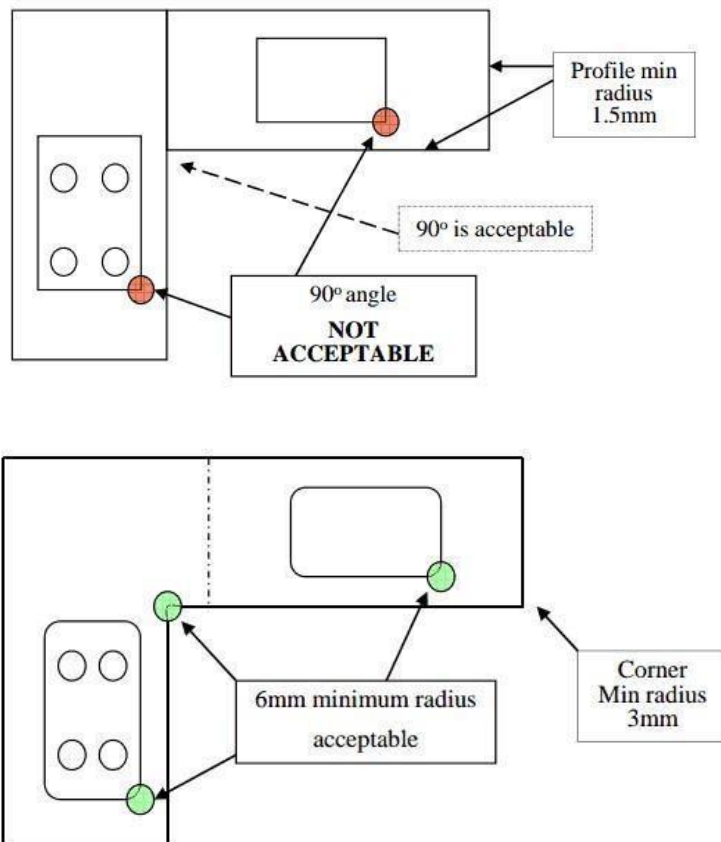
Radius inside corners to a minimum of 6mm (¼") will reduce corner stresses.

Two-piece L-shaped and 3-piece U-shaped tops with seams in the corners do not need to have radius corners.

Radius all top and bottom straight edge profiles to a minimum of 1.5mm radius.

Radius all outside corners to a minimum of 3mm radius.

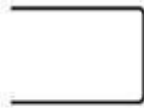
Square inside corners of any cutouts will not be covered under warranty.



b) Popular Edge Profiles

To help reduce the risk of edge chipping we recommend double pencil round (i.e. Pencil round top and bottom).

Most Popular Edges



Straight



6mm Round



Bevel



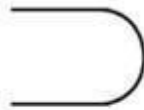
Round T&B



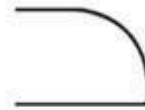
Half Bull-nose



6 Bevel T&B



Full Bull-nose

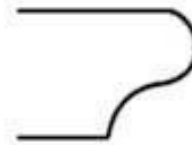


Semi Bull-nose

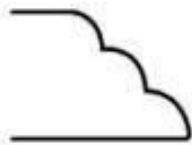
Premium Edges



Ogee



Stair Thread



Waterfall



Cove Ogee

4 Cutouts

a) Sink and Bowl Cut Outs

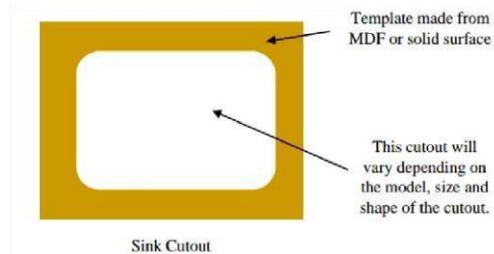
For a setback to a cut out:

40mm (1½") minimum from the back.

90mm (3½") minimum from the front (undermount).

60mm (2¼") minimum from the front (drop-in).

Sink and bowl cut out templates are an important part for fabricating countertops and can save you time and materials by fabricating in your shop for faster and accurate processing.



b) Cook Tops

Potential Problems:

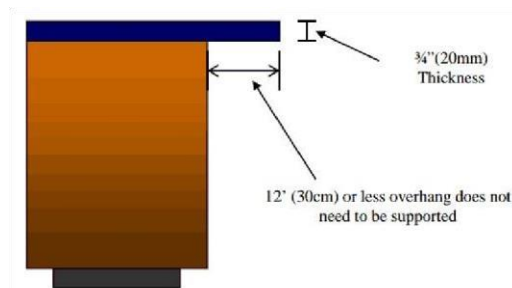
The cooktop area is the area where various problems could occur. The following is a list of possible damages you should consider.

- Heat – expansion and contraction.
- Stress riser points in the cutouts. Always radius corners of cut-outs minimum 6mm
- Faulty cooktops, dispensing too much heat.
- Not enough space between the cooktop and the countertop. Recommended minimum 4mm.

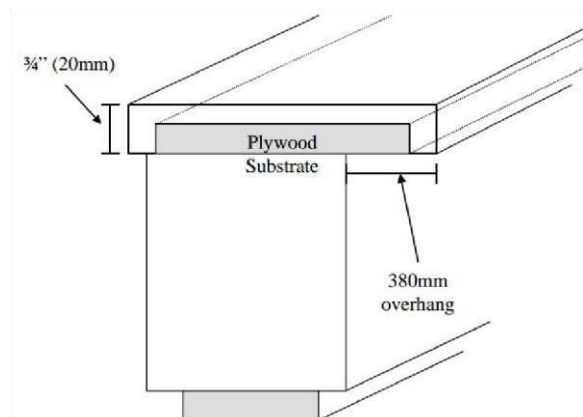
5 Support

a) Overhang Support

- Overhangs of 30cm (12") or less do not need to be supported for 20mm ($\frac{3}{4}$ ") thickness.
- Overhangs of 40cm (15") or less do not need to be supported for 30mm ($1\frac{1}{4}$ ") thickness.



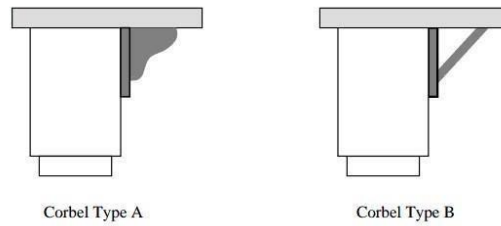
- Overhang of 30 – 45cm (12"-18") need to be supported with plywood substrate, material frame or Corbels for 20mm ($\frac{3}{4}$ ")
- Overhang of 48 – 60cm (15"-24") need to be supported with plywood substrate, material frame or Corbels for 20mm ($\frac{3}{4}$ ")



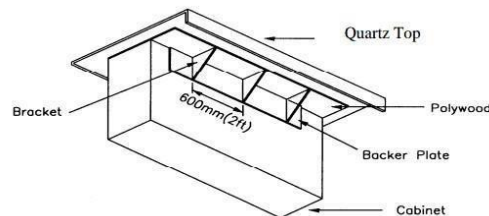
b) Overhang Support – Corbels

Usually made out of wood to match the cabinets or they can be made for many other materials to match the cabinets or countertop.

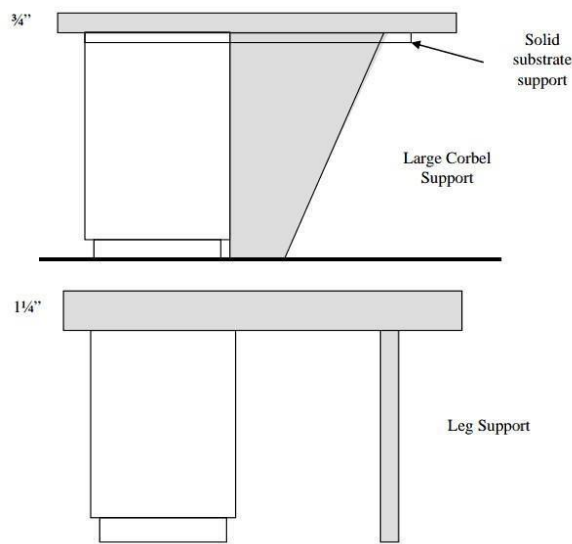
Corbels need to be 50% longer than the width.



- Brackets must be installed every 600mm (2') or less. Determine the number of brackets to fabricate by measuring the cabinets. Brackets must be long enough to reach within 127mm (5") of the countertop edge.
- Fabricate the backer plates that will be used to mount the brackets to the cabinet.



For 20mm ($\frac{3}{4}$ ") thickness overhangs of 45cm (18") or more need to be supported with solid substrate and a leg or column attached to the floor.



For 30mm ($1\frac{1}{4}$ ") thickness overhangs of 60cm (24") or more need to be supported with a leg or column.