



orion
QUARTZ SURFACES

Fabrication & Installation Guide



Introduction

Orion Quartz is produced from product of nature by combining technology with natural quartz. Natural quartz is one of the most abundant and hardest natural minerals available. Orion quartz are engineered using the highest quality natural quartz to provide a durable and non-porous surface in a variety of looks that brings beauty elegance functionality for residential and commercial applications. Orion quartz consists around 93% natural quartz with polymer resin and color pigments to add the color of choice.

Applications

Residential

Kitchen Countertops, Bathroom Vanity Tops, Shower Stalls and Shower Surrounds, Table Tops, Fireplace Surrounds, Window Sills, Wainscoting, Wall Coverings, Thresholds, etc.

Commercial

Healthcare Facilities, Restaurants, Office Conference Tables, Reception, Desktops, Countertops and Credenzas, Lobby/Interior Walls, Food Preparation Areas, Laboratories, Floorings and Inlays.

ORION QUARTZ IS NOT RECOMMENDED FOR USE IN AREAS THAT ARE EXPOSED TO DIRECT SUNLIGHT, UV RADIATION OR EXCESSIVE HEAT OVER 150°C / 300°F

This instruction guide is based on general fabrication techniques recommended by various industry experts and the instructions may not cover all areas of fabrication & installation. Unlike the established brands we still heavily rely on information and feedback from our industry partners, stone professionals and customers to make required updates for this guide. Contents on this guide is subject to change without notice as we review the need.

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Material Inspection

A thorough visual inspection of the slab is mandatory on all Orion Quartz slabs before cutting, fabricating or Installation.

PLEASE REMOVE THE PLASTIC FILM FROM THE SLAB BEFORE CUTTING, CLEAN AND INSPECT THE SURFACE AREA FOR DEFECTS.

Some defects to look for are:

- Chips, Cracks, Scratches, Swirl marks or streak
- Color / Shade variation
- Thickness variation / Warpage
- Variation in Finish or gloss levels
- Blotches / Pattern Inconsistency
- Pits or voids
- Foreign materials such as wood, metal, etc
- Barcodes between slabs if using multiple slabs

Upon inspection if any defects are found on the slabs, please contact your Orion Quartz representative before cutting or fabricating the slab. Orion Quartz will not be responsible for any labor charges incurred for fabricating defective slabs if not reported prior to cutting.

Storage

Orion Quartz slabs **MUST BE STORED STRICTLY INDOORS ONLY** and slabs must be allowed to acclimate for at least 48 to 72 hours before fabrication. Slabs have a high risk of breakage if not acclimated and exposed to the stresses from cutting.

General Fabrication Instructions

- Use blades and tools specifically designed for cutting quartz surfaces.
- A minimum of 3/8" radius must be used for all inside corners, including sinks, cooktops, L-shaped counters, etc. A larger radius will produce a stronger corner. For areas where a true 90-degree corner is required, a seam must be used.
- All cuts should be done with only using wet diamond cutting tools to avoid generating excessive heat, which could result in hairline cracks.
- Dry Grinding the corners is not recommended as it generates excess heating and consequently it leads to cracking of the corner.
- Always ensure to keep a constant flow of cooling water in the working area of the blade
- Always include a minimum allowance of 1/8" or 3 mm around the edges of appliances for heat expansion.
- Avoid creating stress points by cross cutting, when preparing for cutouts always use a core bit. Avoid damaging the drilled area with a cutting disk.
- Damage to the drilled area can result in stress points that may lead to hairline cracks.
- Do not alter original finish on the surface of the slab by re-polishing, honing, sealing or modify factory finish in other ways.

Miter Edges


Miter edges must be fabricated at an angle of 45° using a miter saw to ensure maximum strength and enable a final edge angle of 90°. Any angle less than 45° makes the edges prone to chipping.

The individual pieces are laminated together with the help of clamps such that they form an angle of 90°. In order to create an accurate 90° angle and to ensure proper bonding between the stone and the adhesive it is recommended to use a miter clamp.

Polishing Edges

Following guidelines are recommended to achieve an edge polish equal to the factory surface polish.


- Ensure machine and abrasives conditions are good
- Use diamond polishing pads with water
- Always use wet polishing for quartz and ensure to use sufficient water, do not dry polish to avoid burning.

 Never polish the top surface of the slab, only polish the edge details.

Polishing edge profiles must be done in a progressive manner using suitable diamond polishing pads with water. Polishing must be performed progressing through various grit sizes starting with lower (coarse) to higher (fine) number.

Recommended polishing grit sizes for quartz

	Grit Size					
Polished Finish	100	200	400	500 - 800	1500 - 2000	2000 - 3000
Honed Finish	60	80	120	400		

 Take precautions to avoid over polishing the edges in excess of factory polish on surface

