



FABRICATION & INSTALLATION MANUAL

I. INTRODUCTION

1. Purpose

The purpose of this manual is to outline the basic technical requirements and provide suggestions and guidelines relating to the installation and maintenance of MetroQuartz.

2. Terminology

The phrase "MetroQuartz" when used in this document refers to any engineered stone cut to size forms manufactured, marketed, and sold by Architectural Surfaces Group or its approved distributors or agents.

"The Customer" used in this document refers to any person, firm or company who has placed an order with Architectural Surfaces Group or its approved distributors ("the Company") for the purchase of MetroQuartz.

"Product Manual" used in this document refers to the technical information, specifications, design, fabrication, maintenance and other data relating to the use and application of MetroQuartz.

3. General Product Information

MetroQuartz is a composite of natural minerals and rocks, mainly quartz, which is required for the fabrication of MetroQuartz.

Architectural Surfaces Group and its approved distributors and agents are not responsible for MetroQuartz applications. The recommendations and guidelines may vary and become null and void if not followed.

Though every effort is made to ensure the accuracy of the information contained in this Manual, Architectural Surfaces Group shall not be liable for any loss of profit or any other damages that have been caused either directly or indirectly as a result of the information contained in this Manual.



Architectural Surfaces Group reserves the right to change or modify this Manual or its electronic version from time to time without notice. It is the responsibility of the Consumer to consult or contact Architectural Surfaces Group for the latest version or updates.

II. Applications for MetroQuartz

1. Interior Applications

MetroQuartz is ideal for use in interior applications such as: kitchen countertops, bathroom vanities, tub and shower surrounds, fireplace mantles, walls, stairs, restaurants, hotels, hospitals, and laboratories, and also wherever high quality, sanitary, and low maintenance countertops are required.

Exposure to unfiltered direct sunlight may result in color change and/or warping. Most windows manufactured in the last 30 years block a sufficient amount of the UV rays to prevent color change or warping, however it should be taken into account, especially in older homes. It is advisable to avoid direct unfiltered sunlight over a prolonged period on the surfaces used in the above applications.

2. Fireplace Mantle Applications

MetroQuartz can be used for fireplace mantles but is not recommended for fireplace surrounds. MetroQuartz should not make contact with the firebox or surfaces exceeding 212 °F (100 °C). Exposure to temperatures above 212°F may result in localized seam separation or material cracking if not properly installed.

3. Exterior Applications

Architectural Surfaces Group does not recommend MetroQuartz for use in exterior applications. Its use in an exterior application will void the warranty.

III. PRODUCT SPECIFICATIONS

1. Slab Sizes

MetroQuartz can be manufactured in a wide range of sizes and thicknesses to accommodate any application. However, some may be available on a special order bases only. For information about availability, minimum purchase quantities, and lead time, please contact your sales representative. Slab sizes are approximate only, as sizes may be up to 1-2 inches larger or smaller than indicated based on the actual slab.

2. Color & Finish

MetroQuartz has a color palette ranging from subtle white and beige tones to darker greys, browns, and blacks. MetroQuartz slabs are generally available in the polished finish, while select col ed



Do not transport slabs horizontally and use proper "A" frames to transport the slabs. Always keep the polished surface protected and remove any sharp tools or implements from the

For a “U” shaped cut, mark and drill relief holes where the cut lines will intersect. Always make the shortest cut first.



For an “L” shaped cut, mark and drill relief holes where the cut lines will intersect. Always cut the shortest length first, and cut towards the relief hole.

For a cut that will be the full length of the slab, either with a plunge cut, or starting at the edge, mark and drill a relief hole at the termination point of the cut, then cut towards the relief hole.

- Fabrication of MetroQuartz requires a minimum radius for all inside corners of 3/8” or larger.

2. Recommended Waterjet Settings

For the best results, be sure the cutting table is completely flat when fabricating MetroQuartz.

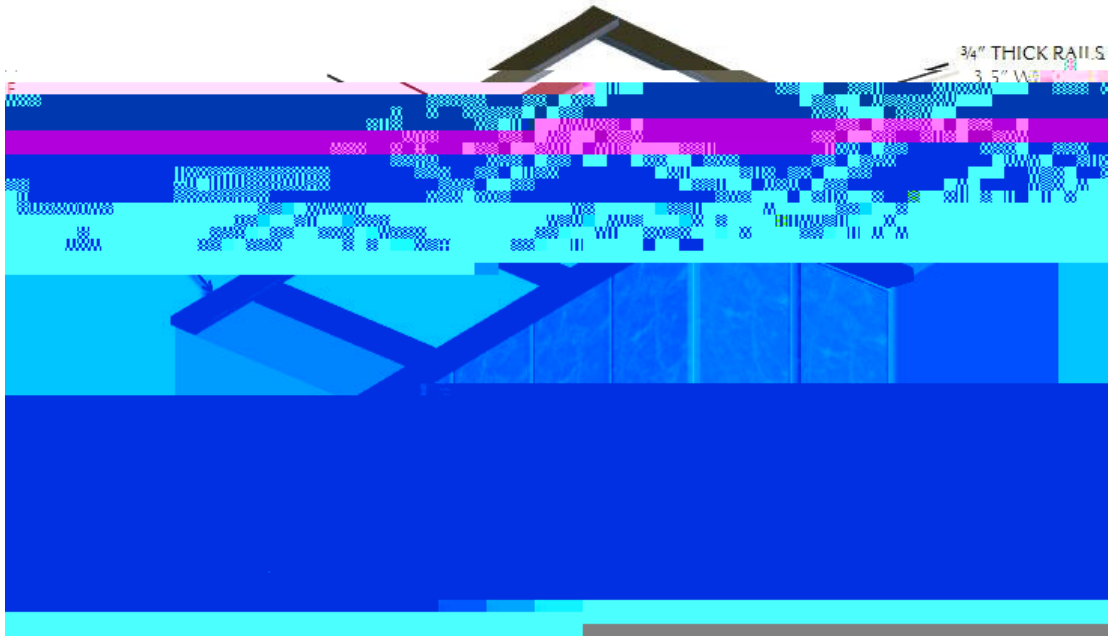
Orifice size: .0140

Abrasive Flow Rate: .16

Initial cut for approximately the first 10-15 seconds at low pressure: 8,000 - 10,000 PSI

Then increasing to high pressure for the balance of cutting the piece: 43,000 - 45,000 PSI

Feed Rate: 2.5 in/min. initially at low pressure. Increase to 3.5 - 3.75 in/min. for the remainder of the cutting at high pressure.

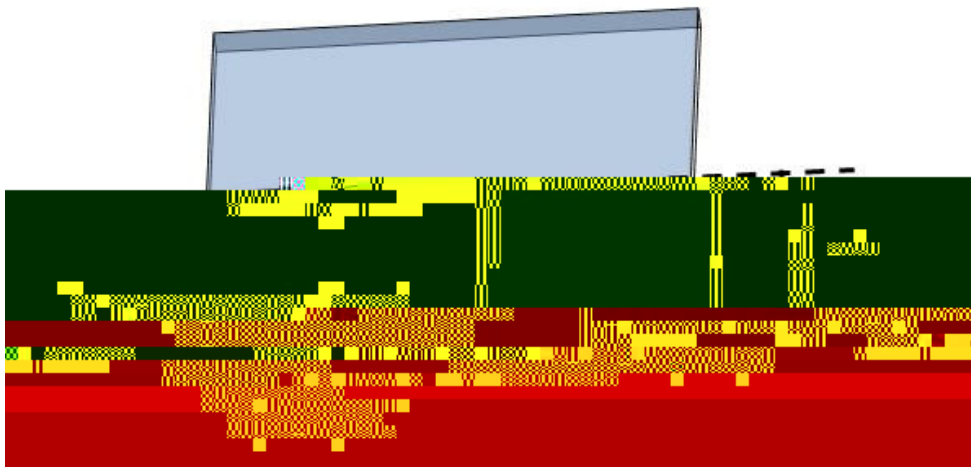


Complete Underlay Substrate Support

Alternately, the complete surface area of the countertop can be supported over the kitchen cabinets with a full width self-supporting underlay made up of plywood with a minimum thickness of 5/8".

5. Planning and Installation of Countertops with Joints & Cutouts

Do not place joint within 6 inches of a planned cut out, such as for a sink, cook top, etc. Due to various mechanical stresses experienced after installation, Architectural Surfaces Group does not recommend installing "L" shaped countertops without a joint at the corner of the "L" shape. Fabricator should use their own discretion when fabricating.



All the joints in the countertops should be well supported from underneath.

All the joints should be properly cleaned with denatured alcohol to get rid of dust and grime.

All the sides of the joints should be grooved or slotted in the middle so that the glue joining the two slabs will be well distributed for good adhesion.

Check that the countertop is well aligned, both along the joint(s) and also along the front.

Check that the countertop is leveled properly and is plumb and true.

Use paper masking tape at the joints so that the glue applied to the joints does not move to the polished face.

Ensure that the joints are perfect and then place clamps at the joints until the adhesive sets properly.

Once set, remove the masking tape and clean off any excess adhesive from the contact surface with denatured alcohol or denatured spirit.

Do not fasten any mechanical fasteners like screws and nails directly into MetroQuartz.

Seams should not be placed directly over a dishwasher or other appliance that may radiate heat.

If you are planning to make your cut outs onsite, it is essential that the operation is in an area where you can use wet tools. It is not recommended that you cu

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

Uneven thermal distribution may occur in areas above dishwashers and over hot water plumbing systems which may cause the top to crack. To avoid this, all the hot water plumbing should be thermally insulated. It is a good practice to make the tap holes slightly oversized so that the hot plumbing does not distort the countertop.

the top can extend the whole width of the overhang to take away some of the stress placed on the overhang.

If the overhang is less than 20" then general practice is to provide a support base made up of timber and brackets placed approximately 20" apart. The brackets should be fastened to a backer plate, which is secured to the cabinet or wall with screws. All over hangs exceeding 20" should be supported with proper metal or solid wood legs.

Material Support Required	2cm (3/4")	2cm (3/4") With 5/8" Sub Top	3cm (1 1/4")
No Additional Support Required	Less than 8" (200mm)	Less than 12" (400mm)	Less than 16" (400mm)
Brackets Required at 24" (600mm) Intervals	8 - 16" (200mm – 400mm)	12 - 20" (400mm – 600mm)	16 - 24" (400mm – 600mm)
Legs, Columns, or Panels Required at 24" (600mm)	Over 16" (400mm) Intervals	Over 20" (600mm) Intervals	Over 24" (600mm) Intervals

SUPPORT DETAILS FOR OVER HANG EXCEEDING 8"

7. Installation of Backsplash

MetroQuartz can be used for a backsplash application in wet areas, behind wash basins, sinks, and behind cook tops. However, when installing backsplashes behind gas cook tops and heat generating appliances, it is important that the installer follow all instructions and safety



7. Maintenance of Floors

Dust, grit, and barrier materials from the floors should be removed on a daily basis by sweeping with a soft brush. Sand, rocks or other debris can scratch a Quartz Based floor and those surfaces should always be kept free from dust, sand and soil. MetroQuartz surfaces can be easily cleaned with warm water and mild household detergent using a standard mop. Make



Note: Do **NOT** use chemicals such as alcohol or acetone! The use of solvents to remove the film causes the adhesive to dissolve and create a chemical reaction which may change the appearance of the slab surface and will not be covered under the product warranty.

9. Advice to the Installer

It is the duty of the installer to advise customers of the important aspects of Care and Maintenance for MetroQuartz.

Matching adhesives available at Integra Adhesives.

Please visit the link below to learn more about safety when cutting natural stone and engineered stone slabs. Please keep in touch with OSHA and MIA for the most updated information.

<http://www.marble-institute.com/silica/>

