SECTION  – simulated stone countertops

1. General
   1. SUMMARY

SPEC NOTE: Edit the following to reflect project conditions. Delete sink requirement if sinks are not part of the scope of work on this Project.

* + 1. This Section includes requirements for supply and installation of quartz agglomerate countertops on top of millwork, ready to accept under mount sinks indicated on Mechanical Drawings.
  1. SUBMITTALS
     1. Provide product information in accordance with Section 01 33 00 – Submittal Procedures.
     2. Action Submittals: Provide the following samples before starting any work:
        1. Product Data: Indicate product description, fabrication information, and compliance with specified performance requirements.
        2. Shop Drawings: Submit shop drawings indicating dimensions, component sizes, fabrication details, attachment provisions and coordination requirements with adjacent work.
        3. Samples for Initial Selection: Submit minimum 305mm x 305mm (12" x 12") samples. Indicate full colour and pattern variation.
        4. Samples for Verification:
           1. One full-size quartz agglomerate countertop, with front edge and backsplash, 200mm x 250mm (8” x 10”), of construction and in configuration specified.
  2. closeout submittals
     1. Maintenance Data: Include recommended cleaning materials and procedures, and list of materials detrimental to surfaces.
  3. QUALITY ASSURANCE
     1. Qualifications: Provide proof of qualifications when requested by Consultant:
        1. Fabricator: Use a fabricator having a minimum of three (3) years experience in fabrication and installation of quartz agglomerate countertops and have training and certification from the manufacturer for work of similar scope and complexity as that required for the project.
        2. Installer: Install using personnel experienced in installation of quartz agglomerate countertops of similar design and complexity as that required for this Project.
  4. DELIVERY, STORAGE AND HANDLING
     1. Delivery and Acceptance Requirements: Deliver components to project when areas are ready for installation.
        1. Transport countertops with care, securely anchored to pallet, to prevent damage to materials or finishes.
        2. Transport countertops to the site after completion of adjacent construction that could damage materials of this Section.
     2. Storage and Handling Requirements:
        1. Store countertops indoors in an area adjacent to installation.
        2. Block off floor.
        3. Tilt slightly and secure to prevent fall over.
        4. Protect and wrap to prevent abuse, damage, or soiling.
  5. SITE CONDITIONS
     1. Site Measurements: Verify dimensions by site measurements before fabrication and indicate measurements on shop drawings where countertops are indicated to fit between or around other construction; coordinate fabrication schedule with construction progress to avoid delaying the Work.
     2. Established Dimensions: Establish dimensions and proceed with fabricating countertops without site measurements where site measurements cannot be made without delaying the Work; coordinate construction to ensure that actual site dimensions correspond to established dimensions; allow for trimming and fitting.
  6. warranty
     1. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace simulated stone countertops that fail in materials or workmanship within specified warranty period.
        1. Warranty shall also include installation and finishing that may be required due to repair or replacement of defective simulated stone countertops.
        2. Warranty Period: Ten (10) years from date of Substantial Completion.

1. Products
   1. countertop materials

SPEC NOTE: Add the SC# from the Product and Finish Schedule below.

* + 1. Quartz Agglomerate (SC-#): Solid sheets consisting of quartz aggregates bound together with a matrix of filled plastic resin and complying with the "Physical Characteristics of Materials" Article of ANSI SS1.
       1. Colours, Patterns and Manufacturers: As indicated in Section 09 06 05 Product and Finish Schedule.
  1. QUARTZ AGGLOMERATE COUNTERTOPS
     1. Configuration: Provide countertops with the following front and backsplash style:
        1. Front and Back Edge Profile: As indicated on the Drawings.
     2. Countertops: 19mm (3/4”) thick, quartz agglomerate with front edge built up with same material.
     3. Fabrication: Fabricate tops in one piece with shop-applied edges unless otherwise indicated. Comply with quartz agglomerate manufacturer's written instructions for adhesives, sealers, fabrication, and finishing.
     4. Fabricate countertops without joints.
     5. Finish: Polished.
     6. Fabricate countertops in sections if one piece is not possible for joining in field, with joints at locations indicated and as follows:
        1. Bonded Joints: 0.8mm (1/32”) or less in width.
  2. COUNTERTOP SUPPORT MATERIALS
     1. Steel Support Framing: Refer to Section 05 70 00 – Decorative Metal, fabricate steel support framing to support weight of simulated stone materials and to account for cut outs and openings required for installation.
     2. Wood Core: Fabricate countertop core from shop sanded exterior grade veneer core plywood, as indicated in Section 06 40 23 – Interior Architectural Woodwork.
     3. Shims: Fabricator’s standard shim materials to fully support simulated stone countertops on wood core to provide flat and level installation that does not transfer stresses that could cause cracking in simulated stone countertops.
     4. Fasteners: As recommended by manufacturer and as follows:
        1. Draw Bolt Fasteners: Mitre butt joint fastener, adjustable and requiring no special tools for installation, galvanized.
        2. Non-Exposed Fasteners: Fabricators choice consistent with quality level specified; exposed fasteners will not be permitted.
  3. ACCESSORIES
     1. Joint Adhesive: Manufacturers recommended adhesive designed to create chemically bonded, inconspicuous, nonporous joints.
     2. Sealant: Mildew resistant, silicone sealant, as specified in Section 07 92 00 – Joint Sealants. Colour: As selected by the Consultant from the manufacturer’s standard product line.
     3. Cleaner: Type recommended by manufacturer.
  4. FABRICATION
     1. Fabricate units to maximum size capable of being safely transported and handled to place of final installation in accordance with shop drawing and manufacturers written instructions using a fabricator certified by the manufacturer.
     2. Fabricate and machine shapes to profiles indicated on Drawings; obtain all dimensions affecting fabrication and installation from job site before starting fabrication.

SPEC NOTE: Delete the following paragraph if sinks are not part of this Project.

* + 1. Cut, drill and shape fabrications as required to receive plumbing fittings and services, and built-in accessories, provide edge treatments, back splashes, and other details as indicated on Drawings.
    2. Finish edges and surfaces true, level and even with inconspicuous joints between having no voids formed using manufactures standard joint adhesive and reinforcing strips.
    3. Make cut outs with 3mm (1/8") radius corners to prevent stress cracking.
    4. Fabrication assemblies with tolerances as follows:
       1. Variation in component size: + 3mm (1/8").
       2. Location of openings: + 3mm (1/8") from indicated location.
    5. Match numbered components assembled on site; number items to show proper location on site; number on back using material that will not show or telegraph through finished assemblies.
    6. Provide anchorage to receive Work of other Sections scheduled and detailed to be installed.

1. Execution
   1. EXAMINATION
      1. Examine substrates, areas, and conditions where installations of countertops occur, with Installer present, for compliance with manufacturers requirements. Verify that substrates and conditions are satisfactory for installation and comply with requirements specified.
         1. Carefully inspect the backup structure and millwork to verify that it is ready to accept the work of this Section.
         2. Verify all anchors, seats, connections attached to miscellaneous metal supports properly and securely fastened in correct locations.
         3. Verify access to point of installation for each unit.
   2. INSTALLATION
      1. Support countertops evenly to prevent stress fractures.
      2. Apply a thin bead of adhesive to top edges of base cabinet and set counter on top, square to face of cabinet work; cut out openings to match fixtures required and remove from countertops after final set of adhesives.
      3. Secure and tighten connections with equal torque to prevent stress fractures after simulated stone countertops are properly aligned, vertically and horizontally with each other and with other related building components.
      4. Seal joints between countertops and adjacent materials, and between abutting countertops with silicone sealant

SPEC NOTE: Delete the following two (2) paragraphs if sinks are not part of this Project.

* + 1. Adhere under mount sinks to countertops using manufacturer's recommended adhesive and mounting hardware.
    2. Coordinate plumbing connections and electrical requirements with affected Sections of work.
  1. CLEANING AND PROTECTION
     1. Keep components and hands clean during installation; remove adhesives, sealants and other stains as work progresses; keep components clean until Substantial Performance for the Project.
     2. Demonstration: Inform Owner of cleaning techniques and required cleansing materials.
     3. Repair or replace damaged work that cannot be repaired to match installed work at no additional cost to the Owner.
     4. Protect surfaces and corners liable to damage with wood blocking, sacking, or other means, to prevent damage and chipping of installed countertops until Substantial Performance of the Project.

END OF SECTION