

Formglas[®] QuarryCast[®]

SECTION 06 20 23

INTERIOR FINISH CARPENTRY (Stone-textured Architectural Elements)

PART 1 - GENERAL

1.1 SUMMARY

- A. This section includes furnishing all materials, labor, equipment, and related services necessary to supply and install decorative Stone-textured fabrications, parts and/or panels for interior use as indicated in the contract documents, and in compliance with applicable codes.

1.2 RELATED SECTIONS

- A. Section 06 20 00 Millwork
- B. Section 06 61 00 Simulated Stone Fabrications
- C. Section 09 27 13 Glass Fiber Reinforced Plaster Fabrications
- D. Section 06 10 00 Rough Carpentry – for connection attachment to structural steel framing.
- E. Section 09 22 00 Supports for Plaster and Gypsum Board – for connection attachment to structural steel framing.

1.3 REFERENCES

- A. ASTM International (ASTM)
 - 1. E84 Standard Test Method for Surface Burning Characteristics of Building materials.
 - 2. C754 Specification for Installation of Steel Framing Members to Receive Screw-Attached Gypsum Panel Products.
 - 3. C1007 Specification for Installation of Load Bearing (Transverse and Axial) Steel Studs and Related Accessories.

1.4 ACTION SUBMITTALS

- A. Product Data: Submit product data sheets for each specified product.
- B. Past Projects: Submit a minimum of 3 previously completed installations of similar materials and complexity. Include contact name, e-mail address and phone number for each project.

- C. Shop Drawings: Submit drawings for approval showing plans, sections, details, joint treatment, reinforcing, fastening devices and the relation of the Stone-textured parts to the surrounding construction.
- D. Samples: Submit a minimum of 3 flat samples of Stone-textured material for each color and texture indicated.

1.5 QUALITY ASSURANCE

- A. Manufacturer Qualifications:
 - a. Manufacturer shall have a minimum of 10 years' experience having successfully supplied Stone-textured parts or panels for other projects similar in scope and complexity for the work of this Contract.
 - b. Manufacturer shall have a minimum of 10 years' experience using 3D modelling software and CNC machines for the creation of master patterns used to make molds for fabricated Stone-textured components.
- B. Installer Qualifications: Installer shall have a minimum of 5 years' experience having successfully completed projects similar in scope and complexity for the work of this Contract.
- C. Substrates to accept Stone-textured parts shall be installed straight and true within 1/8 in. in 8 linear ft. (3mm in 2500mm) and shall be free of obstructions and interference that prohibits the correct alignment and attachment of the Stone-textured parts.

1.6 DELIVERY, STORAGE AND HANDLING

- A. Stone-textured parts shall be kept clean and dry and stored to prevent distortion, warping, and other physical damage in accordance with the manufacturer's recommendations.
- B. The Stone-textured parts shall not be stacked or placed on other parts. Do not "lean" as this may result in warpage. Parts must be protected from jobsite damage prior to, during, and after installation.

1.7 PROJECT CONDITIONS

- A. Environmental Limitations: Do not deliver or install Stone-textured parts until building is enclosed and weatherproof, wet work is complete, and the HVAC system maintains temperature and humidity at normal occupancy levels.
- B. Acclimatize the Stone-textured parts for a minimum of 48 hours to the ambient temperature and humidity levels of spaces in which they are to be installed.

1.8 WARRANTY

- A. Manufacturer Warranty: Provide manufacturer's standard product warranty.

PART 2 – PRODUCTS

2.1 MANUFACTURERS

- A. Formglas Products Ltd. – Tel: +1.416.635.8030 | +1.866.635.8030
Contact your local Formglas representative – www.formglas.com/contact
or send requests for quotations directly to estimating@formglas.com

2.2 QuarryCast® Stone-textured Architectural Elements

- A. Fabrications: Stone-textured parts are to be made in accordance with the approved shopped drawings and samples.
- B. Color and Texture: Stone-textured parts to be supplied in the color and texture as per approved samples.
- C. Embedments: Stone-textured parts to have typical embedments and reinforcement of galvanized steel or wood, if required, for the purposes of suspension, attachment and stiffness.
- D. Stone-textured “Veneer” panels are available: Pre-made outside 90° “Veneer” corners can be supplied.
- E. Sealer: Molded Stone-textured parts to have a factory applied clear (non-gloss) sealer.
- F. Joint Treatment: As detailed in the approved drawings. Follow manufacturer’s instructions.
- G. Adhesive: Installer to use a manufacturer recommended adhesive to ensure proper adhesion and to prevent bleed through.

2.3 PHYSICAL PROPERTIES

- A. Matrix: Alpha Gypsum Cement and various aggregates
 - Veneer thickness: 5/16” (8 mm) nominal
 - Shell thickness: 5/16” (8 mm) nominal
 - Edge thickness: 3/4”-1¼” (19-32 mm) typical
 - Veneer panel weight: 2-2½ lb/ft² (10-12 kg/m²)
 - Molded parts weight: 2½-5 lb/ft² (12-24 kg/m²)
 - Density: ~100 lb/ft³ (1600 kg/m³)
 - Glass Fiber: 5% typical
 - Embedments: Galvanized steel or wood, if required
 - Impact Resistance (ASTM D256): 4.2 ft.lbf/in (224 J/m)
 - Surface Burning Characteristics (ASTM E84):
 - Flame Spread: 0
 - Smoke Development: 5
 - Behavior at 750°C (ASTM E136): Pass

PART 3 – EXECUTION

3.1 EXAMINATION

- A. Site Conditions: Verify the conditions for compliance with the requirements including environmental conditions, installation tolerances and other conditions affecting the installation and performance of Stone-textured parts. Any unsatisfactory conditions to be corrected prior to installation.
- B. Field Dimensions: Field dimensions are to be verified including those not shown on the drawings. Any discrepancies are to be brought to the attention of the Architect with resolutions to the discrepancies to be mutually agreed upon by all parties involved. Details of any changes required must be incorporated into the manufacturer’s shop drawings prior to commencing the manufacture of the Stone-textured parts.

3.2 PREPARATION

- A. Substrate: Substrates to accept Stone-textured parts, provided by others, shall be installed straight and true within 1/8 in. in 8 ft. (3mm in 2500mm) and shall be free of obstructions and interference that prohibits correct attachment of Stone-textured parts.
- B. Metal framing members, provided by others, shall be of the proper size and design for the intended use and shall be sufficient to properly support the installed Stone-textured parts. Metal framing members shall be installed in accordance with ASTM Standards C754 or C1007 as required.

3.3 INSTALLATION

- A. It is the Installer's responsibility to verify scope and to order the correct quantities of parts (including a waste allowance).
- B. Supply and install all shims and brackets required for work in this section and to ensure a solid and secure installation of Stone-textured parts.
- C. Position the Stone-textured parts carefully into place and align with adjacent parts and materials in accordance to the drawings. Attach Stone-textured parts to substrates and framing with fastening devices and adhesives as specified by the manufacturer. Use concealed shims as required.
- D. As with most natural stone, Stone-textured parts will have texture and color shading variations. DO NOT try to match shadings in specific areas. Mix varying parts at random.
- E. Where Stone-textured parts are suspended, use the suspension points indicated on the shop drawings as a minimum requirement and use additional support(s) as required.
- F. Complete joint treatment, hole filling, patching and cleaning in accordance to the manufacturer's recommendations. Plan in advance to secure Architect approval of any use of color matching caulk (to be supplied by installer).

END OF SECTION