PART 1: GENERAL

1.1 GENERAL REQUIREMENTS:

.1 Conform to the requirements or Division 1 in addition to the requirements of this section.

1.2 DESCRIPTION OF WORK:

.1 This sub trade is responsible for the supply and installation of the following items, including all related labour and materials necessary to successfully complete the installation of sane whether or not noted on the Contract Documents.

1. Composite building panels
2. Fastening system
3. Closures and related trim
4. Caulking and sealants
5. Other related work as indicated on Drawings and Specifications.

1.3 QUALITY ASSURANCE:

.1 Manufacture’s Qualification: 20 year minimum experience in Manufacturing Glass Fibre Reinforced Concrete Panels.

.2 Provide a written guarantee covering the replacement of defective work for a period of one year from the expiry of the standard one year General Contractor’s warranty.

.3 The following will be deemed as defective work; leakage, failure to stay in place, undue cracking, chipping or adjacent deformations, panel deformation, buckling, spalling, deterioration of surface. Failure of 15% of surface are of panels shall be deemed a total failure of the installation requiring complete re-application of the panels.

.4 In addition, provide a written guarantee from the manufacture regarding defective panel replacement, for a period of 3 years.

1.4 SHOP DRAWINGS:

1.5

Building panel shop drawings shall be submitted to the Consultant for review. No work shall be fabricated before review of shop drawings by the

Consultant. Submit shop drawings in accordance with Section 01300.

.2 Indicate on the drawings all information required to fabricate and install components of the Section. This shall include product and material standards, dimensions, connection and jointing details, gauges, finishes, etc. ensure that plan and section details of interior and exterior corners, horizontal and vertical joints, fascias and soffits, cut-outs, misc. trim, fastening methods etc., are shown at a minimum 1:5 scale.

PART 2: PRODUCTS

2.1 PANEL SYSTEM:

.1 The following specified products and materials form the complete building panel system required for this Project. Ensure that only compatible products and materials are used. Alternates may only be used if approved, in writing, by the Consultant.

.2 Panels shall be SYNSTONE simulated slate panels, and are to be back fastened. They shall consist of inorganic fibre with natural stone and cement.

.3 Panels shall be fabricated in the factory to ensure that they are the same size, consistent in colour and free from warps, cracks and other imperfections. The panels shall be Synstone GFRC solid with a nominal overall thickness of 5/8” (15mm) or as specified.

These panels shall meet a maximum flame spread rating of 5 and a maximum developed smoke rating of 25 when tested in accordance to CAN4-S102M. FR designed panels are non-combustible when tested to ASTM E-136-81 (Also CAN4-S114M80). The panel sizes of 48”(1220 mm) by 96”(2440 mm) are to be used in order to minimize joints when being installed on the job site.

.4 Panels shall be glass fibre reinforced concrete Synstone panels as manufactured by Concrete Cladding Systems Ltd., 905.607.8304, supplied and installed as per the manufacturer’s latest published data, and as noted on the Drawings and Specifications.

.5 The concrete panel has been designed for a wind load of 25 psf. Based on the recommendation of the Pre-stressed Concrete Institute (PSI), a factor of Safety of 4 to 6 should be used for GFRC materials. A safety factor of 4 has been used in this design calculation

2.2 FASTENERS:

All panels are supplied with 5/16 dia. blind weld nuts cast in the panels during manufacturing. 12 gauge galvanized steel hook clips are bolted to the panels with 5/16 dia. bolts and the assembly is hung on 16 gauge galvanized steel "J" girts that are mechanically fastened to the substrate..

2.3 SEALANTS:

Dow Corning 795 or CWS, one-part silicone, neutral-cure, architectural sealant or Bondaflex Sil 295 NB or Sil 199PG, one-part silicone neutral cure, architectural sealant. Colour as selected by the Architect from the manufacturer's chart.

PART 3: EXECUTION

3.1 GENERAL:

.1 All panels are to be installed level, true and plumb and in line as indicated on the drawings. Tolerances shall be within 2mm. in 3 meters vertically and horizontally, and 3mm. in 3 meters for the diagonal surface alignment.

.2 Panels required to be stored shall be protected from dirt and damage. Panels which are damaged in any way shall not be accepted or installed.

.3 It is recommended that only installers approved by Concrete Cladding Systems Ltd. be allowed to install this system.

3.2 CLEAN UP:

.1 Upon completion of panel installation, remove any excess sealant with solvent approved or recommended by the panel manufacturer. No routine maintenance is required with Synstone panels. If required, the panels may be cleaned with mild detergent and water.

END OF SECTION 07455