1.0 GENERAL

1.1 WORK INCLUDED

1.1.1 Furnish labor, materials, equipment and services as necessary for the supply and application of cementitious waterproofing system to the interior “negative side” of subgrade concrete structure, namely, concrete dry well, basement, equipment pit or underground parking garage.

1.1.2 Provide all written materials, and site services necessary to complete the installation as herein specified.

1.1.3 The cementitious waterproofing materials shall be tested in accordance with the general recommendations of the latest proposed drafts of the National Standards of Canada, CAN/CSA.

1.2 RELATED SECTIONS

1.2.1 Section 00000 - Cementitious Concrete Waterproofing

1.3 QUALIFICATIONS

1.3.1 Provide KRYSTOL T1, KRYSTOL T2, KRYSTOL PLUG and KRYSTOL BARI-COTE as manufactured by Kryton International Inc., 8280 Ross Street, Vancouver, BC, Canada, V5X 4C6. Tel: (604) 324-8280 or approved equivalent.

1.3.2 Installation/Application shall be by an experienced installer approved by the manufacturer or by a non-approved installer under direct supervision of an independent materials engineering company.

1.4 SUBMITTALS

1.4.1 Certificates of conformance or compliance: Before delivery of the materials, a copy of the manufacturer’s certificates, attesting that materials meet the requirements specified, shall be submitted to and approved by the contracting officer.

1.4.2 Descriptive Product Literature: Manufacturer’s descriptive product literature shall be submitted and shall consist of detail specifications, application instructions and available performance test data.

1.4.3 Certified Laboratory Test Reports: Before delivery of materials copies of the reports of all tests specified herein or in reference publications shall be submitted to and approved by the contracting officer. Test reports shall be accompanied by certificates from the manufacturer certifying that the previously tested material is of the same type, quality, manufacturer and make as that proposed for this project.

1.4.4 Longevity: Product must have a history of over ten years of successful use and must be accompanied by a list of job sites of a similar nature.

1.5 DELIVERY AND STORAGE

1.5.1 Deliver materials in unbroken original packages bearing the manufacturer’s name and brand designation, batch number and date of manufacture. Store in a dry storage area to avoid contact with moisture.

2.0 PRODUCTS

2.1 CONCRETE WATERPROOFING SYSTEM

2.1.1 System Components: The system shall consist of the cementitious waterstop KRYSTOL T1, the cementitious slurry coating KRYSTOL T2, the rapid setting hydraulic grout KRYSTOL PLUG and the construction joint waterstop cap material, KRYSTOL BARI-COTE.

2.1.2 Slurry materials shall consist of a cementitious powder containing high growth organic producing chemicals with the ability to grow and penetrate to a depth of four inches in both directions from the coated surface. The materials shall be free of oils, stearates, chlorides and sodium based products.

2.1.3 Grouting mortar for cracks shall be compatible with the cementitious crystal producing chemicals and contain no chlorides or artificial accelerators. Grouting material shall be non-shrink, non-toxic, fast setting (initial 25 minutes) and contain high growth organic chemicals.

3.0 EXECUTION

3.1 GENERAL

3.1.1 Safety precautions shall conform to the manufacturer's MSDS printed literature and the current WCB regulations.

3.1.2 Preparation: Concrete surfaces to be treated must be clean and free of laitance, dirt, film, paint, coating or other foreign matter. Structural defects such as crack, faulty construction joints and honeycombing should be routed out to sound concrete and repaired. Concrete surfaces must have an open pore surface to allow penetration of Krystol. Surface to be treated must be thoroughly soaked with clean water to a surface saturated condition (SSD).

3.1.3 Cracks and joints: All cracks and joints will be mechanically chased out 1" (25mm) wide and 1.5" (38mm) deep. Careful attention must be taken to ensure the chase is square or u-shaped not v-shaped. Fill the first 1/3 of the depth of the chase with grouting mortar, KRYSTOL PLUG. Fill the second 1/3 of the chase with the cementitious waterstop, KRYSTOL T1. Fill the final 1/3 of the chase with the waterstop cap, KRYSTOL BARI-COTE. Overcoat the repair area with a slurry coating of KRYSTOL T1. Overcoat the the KRYSTOL T1 slurry with a slurry coat of KRYSTOL T2.

3.1.4 Concrete base slabs and walls: Apply coating of KRYSTOL T1 by brush using circular scrubbing motion as to achieve maximum adhesion and penetration. The spread rate is 0.8kg per m2. After the KRYSTOL T1 is set, KRYSTOL T2 is applied over top of the KRYTSTOL T1 by brush using circular scrubbing motion as to achieve maximum adhesion and penetration. Moist cure the treatment with fog mist sprayer or wet burlap for 24 hours. Protect the treatment from rain and excessive wind and freezing temperatures for 24 hours.

end of section