

## 1.0 **GENERAL**

### 1.1 **Related *Work and* UBC Guidelines**

- .1 *Section 01 74 00 Cleaning and Waste Management for final cleaning and waste management procedures.*
- .2 *Section 03 33 00 Architectural Concrete*
- .3 Section 09 00 10 Finishes – General Requirements
- .4 Section 10 00 10 Special Room Requirements
- .5 *UBC LEED Implementation Guide*

### 1.2 **Related External Documents**

- 1. *Applicable product standards including CSA, CGSB and ASTM.*

### 1.3 **Description**

- 1. *Work in this section includes the following:*
  - .1 Waterproof membrane flooring and seamless cove base in mechanical rooms (see 2.1.1), service penthouses, and similar locations where leaks in building systems may occur and cause water damage, such as to floors below. Chosen system to have been specifically designed for this purpose.
  - .2 *Epoxy floor coating in main electrical rooms.*
  - .3 Waterproof traffic *coating* as corrosion protection for all concrete parking slabs. Chosen system to have been specifically designed for this purpose.

### 1.4 **Coordination**

- .1 *The Guidelines apply to all work completed within buildings on both UBC Vancouver and UBC Okanagan campuses unless stated otherwise.*
- .2 *In instances where conflicts are found between these guidelines and provincial regulations or codes, please notify the UBC Technical Review Team Architect or UBCO Facilities.*
- .3 *These guidelines are intended to be read by design consultants and their content integrated into construction drawings and specifications. Construction documents are not to reference the technical guidelines directly.*
- .4 *The Coordinating Registered Professional (CRP) is required to coordinate these requirements with other disciplines*

### 1.5 **Submittals**

- .1 *Submit required documents to consultants in accordance with Section 013300 Submittal Procedures*
- .2 *Provide samples for colour selection only if it is a Construction Office project.*
- .3 *O&M Submittals*
  - .1 *Provide list of floor finish types and colours used, complete with manufacturer/distributor name for all products used.*
  - .2 *Environmental Product Declaration (EPD)*
  - .3 *Maintenance data for all tile selections.*
  - .4 *Warranties.*
  - .5 *Material Data and Safety Sheets (MSDS).*
  - .6 *Maintenance data including source for replacement.*

### 1.6 **Quality Control and Assurance**

- .1 Quality Assurance
  - .1 Manufacturer licensed applicator.

- .2 Quality Control
  - .1 Strictly conform to Manufacturer written instructions, including preparation of substrates.

## 2.0 DESIGN AND PERFORMANCE REQUIREMENTS

### 2.1 *Design Requirements*

- .1 Membrane Flooring for Mechanical Room Floors
  - .1 Urethane elastomeric solvent-free liquid-applied seamless waterproof flexible flooring. System typically consists of a primer, primary coating, and colored top coat. Minimum 40 mil dry *film* thickness (*DFT*).
  - .2 Provide a seamless cove base trowelled in place, minimum 6" high. Ensure both cove material and flooring system are from the same supplier. *Flooring and cove base to be installed as per manufacturer's recommendations.*
- .2 Membrane Flooring for Main Electrical Room Floors
  - .1 Water-based epoxy floor coating with slip resistance incorporated into the floor finish such as sand granules or the equivalent.
- .3 Pedestrian Traffic Coating
  - .1 A waterproof traffic coating consisting of a flexible, liquid applied, elastomeric membrane topped with a liquid applied polyurethane wearing course containing hard aggregates and a urethane topcoat.
  - .2 The system to be totally water-proof, flexible and thermally compatible with the concrete substrate under applicable service conditions. The system to exhibit zero chloride permeability when tested in accordance with the test procedure developed by the Portland Cement Association.
  - .3 Finished surfaces to be skid resistant, wet or dry.
- .4 Vehicular Traffic Coating
  - .1 Provide traffic coating at exterior concrete slabs at loading bays which are over occupied space below.
  - .2 A modified polyurethane three-coat traffic deck coating system to be used.
  - .3 Waterproofing system to have complete adhesion, extreme impact and abrasion resistance along with chemical stability. The elastomeric properties of the system components should enable the complete assembly to give and work with the concrete slab, bridging the shrinkage cracks. Additionally, the system should protect the concrete from the damaging effects of water, de-icing salts, chemicals, gasoline, oils and anti-freeze.

### 2.2 **Performance Requirements**

- .1 Life Cycle *for the flooring systems* – 25 years.

## 3.0 MATERIALS

### 3.1 *Product Selection*

- .1 Membrane Flooring for Mechanical Room Floors
  - .1 *Acceptable* manufacturers are Sika, BASF, and Tremco *or approved equivalent.*
- .2 Membrane Flooring for Main Electrical Room Floors
  - .1 Acceptable product is Armorseal 8100, satin finish *or approved equivalent.*
- .3 *Provide a variance request for review and approval if an equivalent product is approved for use. Variance request to include a comparison of performance characteristics.*

\*\*\*END OF SECTION\*\*\*