1.1 **GENERAL**

1.2 **Co-ordination Requirements**
   .1 Coordinate with SFU Facilities.

1.3 **Description**
   .1 Resilient Flooring and Bases, typically used for wetlabs.

1.4 **Performance Standards**
   .1 National Floor Covering Association of Canada (NFCA) - Floor Covering Reference Manual.
   .2 Applicable product Standards including CSA, CGSB and ASTM.

1.5 **Quality Control and Assurance**
   .1 **Submittals**
     .1 **Before Start of Work**
     .1 List of each proposed materials for review, and color samples for selection plus for final approval.
     .2 MSDS Material Data Sheets for review and posting at jobsite.
     .3 Manufacturer requirements for bond and moisture tests, and reports of test results to indicate substrate conformance.
   
     .2 **At Completion**
     .1 Maintenance data shall be an itemized list c/w manufacturer/distributor name, product type and color.
     .2 Maintenance material shall be a minimum 5% of each product/color used (no cuttings), 2% if the standard materials listed below are utilized.
     .3 Include sufficient adhesive in unopened containers. Package and label, including Project Name and Number, and hand over to SFU Facilities.
     .4 Maintenance Manual shall be manufacturers’ recommended maintenance procedures and products.

   .2 **Quality Assurance**
     .1 For sheet material, installer to be a certified manufacturer-trained “Master Mechanic” (or similar term), completely familiar with the products, seam welding, and the manufacturer currently recommended methods and conditions of installation. Submit certificate of qualification. Similarly for other resilient flooring installers, when available.

     .2 Adhesives and auxiliary products to be as recommended in writing by each resilient flooring manufacturer.

   .3 **Quality Control**
     .1 Manufacturer preference shall be a registered ISO 9001 quality system.

     .2 The manufacturer’s representative shall inspect the work when required during the contract, and at completion prior to submitting the manufacturer's warranty.

     .3 Install resilient flooring only when moisture emission from concrete substrate is at or below the maximum permissible level of 3 lbs. of water per 1000 sq.ft, based on qualitative tests using calcium chloride test kits developed by the Resilient Flooring Institute, and to manufacturer's requirements.
.4 Warranties
   .1 In addition to a 2-Year subcontractor warranty, submit a 5-Year manufacturer limited warranty for sheet flooring work.

.5 Commissioning
   .1 Provide xx hours of instruction time to SFU Facilities on recommended maintenance procedures and products, by manufacturer representative in presence of trade contractor.

.6 Maintenance
   .1 Refer to Section 01 77 00 Closeout Procedures.

2.1 MATERIALS

2.2 Performance Requirements

   .1 General
      .1 Products to conform and perform to Manufacturer published literature.

   .2 Environmental
      .1 Source
         .1 Manufacturer preference for registered ISO 14001 Environmental Management System.

      .2 Manufacture
         .1 Select materials of lowest VOC content, including adhesives which preferably should be water-based.
         .2 Select products with highest natural material content: Use linoleum as much as is practical, as the preferred product.
         .3 Consider the use of linoleum which is produced from natural renewable ingredients.

      .3 Maintenance
         .1 Suggest cleaning agents of least impact on environment.

         .2 Disposal
            .1 Products containing PVC: do "NOT" incinerate.
            .2 Dispose for recycling wherever possible.

2.3 Prescriptive Requirements

   .1 General
      .1 All flooring types must have cleaning and maintenance requirements reviewed and approved by SFU Facilities prior to selection/approval of floor types.

   .2 Rubber Flooring
      .1 Rubber flooring is preferred for public areas.
      .2 Rubber flooring is preferred in classrooms and theatres.

   .3 Sheet Vinyl
      .1 Use in areas of lower traffic and for labs.
      .2 Use non-slip vinyl with abrasive strip embedded for janitor rooms

   .4 Epoxy Flooring
      .1 Use in washrooms.
      .2 Wet areas (as option to ceramic or similar tile), food service areas, and laboratories.
.5 PVC Based Materials
   .1 Usage is discouraged but will be considered for special applications in consultation with SFU Facilities.

3.1 OTHER

   .1 Cleaning
      .1 Refer Section 01 77 00 Closeout Procedures.

   .2 Turn-Over Procedures
      .1 Contractors will conduct construction clean (dust, debris, etc.) prior to handover.
      .2 Upon handover and before occupancy, SFU Project Manager will initiate SFU Facilities ‘trade assist’ for a final clean prior to occupancy.

***END OF SECTION***