1.1 **GENERAL**

1.2 **Related SFU Technical Requirements**

.1 *Section 09 00 10 Finishes – General Requirements*

1.3 **Description**

.1 Metal T- Bar Suspension Systems and Infill Tiles, or alternative ceiling type with ease of access

1.4 **Performance Standards**


.2 Suspension components shall be in accordance with ASTM-C635, “Intermediate Duty” for typical ceiling lighter weight panels such as mineral fiber panels.

.3 “Heavy Duty” for heavier panels such as composed of gypsum board.

.4 Installation shall be in accordance with ASTM-C636.

.5 Seismic design, components, and installation: in accordance with ASTM-E580, Clause 4 “Areas Subject to Moderate to Severe Seismic Disturbance” and subsequent Clauses, and meeting all of the following requirements:

.1 BC Building Code.

.2 Coordination with seismic requirements of other trades, such as for *Divisions 20 to 25 and 26*, affecting the work of this section.

.6 Use only ceilings that are easily accessible and that can be removed and replaced by the service trades without damage and without requiring other tradesmen or special equipment.

.7 Only materials that carry some assurance of a future supply of patterns and colors should be specified.

.8 Fire resistant ceilings that require the use of hold down clips, and concealed spline systems must not be used at SFU.

.9 Wetlabs have specific ceiling requirements and should be reviewed on a case-by-case basis with SFU Facilities.

1.5 **Quality Control and Assurance**

.1 Submittals

.1 Samples.

.2 Quality Assurance

.1 All seismic restraint work including anchoring devices shall be designed and certified by a Professional Engineer registered in BC, who shall carry out periodic site reviews of the work of this Section during construction and at completion, and submit reports and Letters of Assurances in the Forms established by BC Building Code. Costs to be included in Contract.
2.1 MATERIALS

2.2 Performance Requirements

.1 General
  .1 T-bar ceilings are required to be seismically reinforced in all new constructions.
  .2 Typical, to equal or exceed: published performance data for "preferred" Armstrong components noted below, or as recommended by Project Acoustical Consultant.
  .3 Flame Spread Rating of 0-25 required for all Educational Facilities.

.2 Environmental
  .1 Source
    .1 ISO 1400 Series Certified.
  .2 Life Cycle Costing
    .1 25-year for suspension system.
    .2 High recyclable material content.
    .3 Maintenance.
      .1 Provide for the Owners future maintenance 5% of the tile used, original unopened packaging. The requirement for extra materials is reduced to 2% if the standard materials are utilized.

.3 Disposal
  .1 Recyclable.

2.3 Prescriptive Requirements

.1 Materials
  .1 Products should generally be imperial (2x2 or 2x4)

.2 Components
  .1 The following preferred standard panel products are used and stocked for maintenance at SFU; if used, the requirement for extra materials will be reduced:
    .1 Imperial 2x2
    .2 Imperial 2x4
  .2 For other systems proposed, criteria for selection: ease of accessibility, durability, high light reflectance, environmental responsibility, recommended for use by Project Acoustical Consultant.

.3 Execution
  .1 Connect T-Bar to edge molding using pop rivets, matching color of suspension system, as set out for seismic restraint by ASTM Standards.
  .2 Unless otherwise specified by the Building Code, manufactures guidelines, Facilities Services or Authorities Having Jurisdiction, ceiling tiles are not to be caulked, glued, or permanently affixed to the ceiling grid under any circumstances. This is an automatic rejection of installation and remediation will be at the cost of the installer or General Contractor.

***END OF SECTION***