GENERAL

A. **Structural Grid:** Structural Ceiling grid shall be installed with [a Fixed] [a Floating] [no] perimeter angle condition option and on a [2’ x 2’] [2’ x 4’] grid supported with spacing of [4’ x 4’] [2’ x 2’] connection to structure above:

1.1 **Finish & Material:**
   a. Main Runners, Structural Tees, and Perimeter Angles shall be constructed of 6005-T5 extruded aluminum and have [Clear Anodized Finish] [Painted White] [Painted Black] finish.
   b. Connectors: Field, Field XL and Perimeter connectors shall be constructed of high strength cast aluminum with corrosion resistant finish which is silver in color.

1.2 **Performance:** Ceiling system shall be capable of directly supporting cable trays, utilities, light fixtures, HVAC registers and other accessories as indicated per area of work.
   a. Ceiling system shall be capable of supporting a uniform load up to 50lbs/ft².
   b. Ceiling system shall be capable of a maximum static point load of 380 lbs. with standard duty connector.
   c. Ceiling system shall be capable of a maximum static point load of 800 lbs. with heavy duty connector in line with turnbuckle connection to building structure.
   d. Turnbuckle connection shall be capable of a maximum point load connection to building structure of 800 lbs.

1.3 **Design Features:** Structural Ceiling grid shall include the following features:
   a. 2’ x 2’ centered grid system with continuous threaded ¼”-20 slot.
   b. 12’ Main Runners and 4’ Structural Tees shall be notched on 24” centers for easy system installation and positive positioning of 24’ Structural Tees.
   c. Connectors to include ribs to align system with grid on 24” center and prevent racking.
   d. System is capable of fitting most commonly supplied 60cm (23.45” square +/- 1/8”) size ceiling tiles, light fixtures and HVAC registers.
   e. Perimeter connector shall be optionally used on bottom slot of Grid for heavy duty loads requiring 3/8” threaded connection.
   f. 24” and 48” Structural Tees shall be cut back for vertical support through flange grid contact to 12’ Main Runners.
   g. Accepts standard 60cm ceiling panels and light fixtures.
   h. Connectors include 3/8”-16 Threaded turnbuckle connections
   i. On site modifiable connectors for perimeter installation.
   j. Connectors shall be constructed of high strength cast aluminum parts.
   k. Field XL Connector shall be utilized for 12’ Main Runner splice locations.
   l. **[Optional gasket]**
      i. 3/32” thick x 3/8” closed cell polyethylene gasket tape shall be provided to improve leakage through system at various air pressures.
m. ¼-20 button head Philips head screws with lock washer shall be utilized to secure connectors to Main Runners, Structural Tees, and Perimeter Angles.

1.4 **Installation:** Structural Ceiling grid shall be installed on a [2’ x 2’] [2’ x 4’] grid supported with spacing of [4’ x 4‘] [2’ x 2’] connection to decking:
   a. Grid spacing shall be defined by installation of 24” Structural Tees.
   b. Support Spacing shall be defined by positioning of turnbuckle connections offset from one another starting from one corner of the interior structural grid assembly and spaced evenly throughout. Additional supports shall be provided as required along the perimeter and at any critical areas or as per seismic or code requirements or considerations.
   c. 12’ Main Runners shall be installed on 48” centers and all main runners shall be parallel to one another. 48” Structural Tees shall be installed perpendicular to 12’ Main runners. Finally 24” Structural Tees shall be installed perpendicular to the 48” Structural Tees.
   d. All work shall be coordinated with all other trades including but not limited to electrical, mechanical, fire protection and furniture.

1.5 **Perimeter Installation:** Structural Ceiling grid shall be installed with **[a Fixed] [a Floating]** perimeter condition option
   a. Fixed perimeter installation: Perimeter Angles shall be mounted at level height to interior ceiling grid within 0.10” overall and 0.06” over any 10’ distance. Perimeter Angles shall be fastened to perimeter wall with appropriate wall type fasteners. Perimeter Angles can be field cut with non-ferrous carbide tipped blade. Joints shall fit with no more than .08” gaps.
   b. Floating perimeter installation: Perimeter Angles shall be supported from structure at level height to interior ceiling grid within 0.10” overall and 0.06” over any 10’ distance. Perimeter Angles shall be fastened to Main Runners and Structural Tees with perimeter connectors and suspended from structure above. Perimeter Angles shall be field cut with non-ferrous carbide tipped blade. Joints shall fit with no more than .125” gaps.