

**DG 1.5 STRUCTURAL ScrewSlot DATA CENTER CEILING GRID
SPECIFICATION SECTION 09 54 00**

PART 1: GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings, General and Supplementary Conditions and Division 1 apply to Work specified in this section.

1.2 DESCRIPTION OF WORK

- A. Furnish and install extruded aluminum suspended Structural ScrewSlot Data Center ceiling grid system as manufactured by Gordon Data Center Products and as indicated on drawings, including notes and details.

1.3 WORK INCLUDED

- A. Work on this Section includes the installation of the Structural ScrewSlot Data Center ceiling grid system including but not necessarily limited to the following:

1. Aluminum ceiling grid: As specified in this Section.
2. Threaded rod and turnbuckle suspension: As specified in this Section.

1.4 RELATED WORK

- A. Intermediate steel framing: As specified in Division 5.
- B. Lay-in and/or surface mounted light fixtures: As specified in division 16

1.5 PERFORMANCE

- A. Completed ceiling system shall be capable of providing direct suspension of cable trays and other utilities as required and indicated for area installed.

PART 2: PRODUCT

2.1 ACCEPTABLE MANUFACTURER

- A. Gordon, Inc. "DG 1.5 ScrewSlot Data Center Ceiling Grid"

2.2 CEILING SUPPORT MATERIALS AND SYSTEMS

A. DG 1.5 ScrewSlot DATA CENTER CEILING GRID AND SUSPENSION

1. DG 1.5 ScrewSlot Data Center Grid – The grid system shall be manufactured of extruded aluminum alloy 6063, temper T5 with a 204-R1 etched and clear anodized finish. Grid profile shall have a 1.5-inch wide face with a continuous integral thread boss within the web for attachment of intersection connectors at any point along the top of the grid members, and to facilitate ease of field installation.

2. 12' Main Runners and 4' (nominal length) Cross Tees shall have a continuous 3/8-16 ScrewSlot thread boss feature to allow direct attachment of cable trays, utility racks, partition wall system head tracks, surface-mounted lighting fixtures, softwall curtain tracks or other accessories.
3. Suspension system
 - a. Model G-38 grid connectors – Heavy duty zinc alloy casting connectors shall be used at grid intersections and to suspend the grid system via 3/8-16 threaded rods. 1/4-20 phillips drive button head cap screws are used to fasten the connectors to the extruded aluminum grid members.
 - b. 3/8-16 Threaded Starter Rod and Turnbuckle– ASTM rated RH/LH, 8" long, zinc plated, 3/8-16 threaded rod and 6" body zinc plated steel turnbuckle spaced at 48" centers along the main runners, for a 4' x 4' nominal suspension from building structure. (Note: 3/8-16 all-thread between building structure or intermediate steel and manufacturer-furnished turnbuckle is by the installing contractor.)
4. Structural
 - a. Ceiling system with 4' x 4' suspension, shall be capable of supporting a fully populated ceiling grid, including blank panels, HVAC supply and return registers, and light fixtures, plus directly supporting cable trays, utility racks, and other accessories.
 - b. Contact manufacturer for job-specific load requirements.

PART 3: INSTALLATION

3.1 DG GRID INSTALLATION

A. Perimeter Installation

1. "Fixed" Perimeter Option: Position wall angle at proper ceiling height on center of wall using a laser leveling device and attach with fasteners appropriate for existing wall type. Continue installing toward the corners and then around the room until complete. Corner can be field cut with a power miter saw using a non-ferrous, carbide tipped blade. All joints must fit tight with no gaps.
2. "Floating" Perimeter Option: Floating perimeter main tee installation: Perimeter closure angles, if required, shall be affixed to the perimeter walls with fasteners appropriate for existing wall type, using a laser leveling device. Perimeter main tee extrusions shall be suspended from structure at the proper ceiling height and using a laser leveling device, beginning at the center of the room. Continue installing toward the corners and then around the room until complete. Corner can be field cut with a power miter saw using a non-ferrous, carbide tipped blade. All joints must fit tight with no gaps. Secure partition wall head tracks to the ScrewSlot perimeter main tees.

B. Grid Installation

1. Position main tees at 48" or 48 ½", or as required, perpendicular to wall angle taking care to align notches on main tee with notches on wall angle. Attach threaded rod previously hung by others from steel structure to turnbuckle and rod attached to connectors on grid.
2. Level entire ceiling to within 0.10" overall and/or 0.06" in any 10' length.
3. Brace grid for seismic conditions when required by local code.

3.2 INSTALLATION GENERAL

- A. Coordinate all work with other trades to be performed in or on ceiling system including light fixtures, HVAC equipment, sprinkler systems and wall partition systems.