

# Structural Ceiling Tate Grid



## Continuous Threaded Slot for Maximum Flexibility

Tate's Grid is the ideal solution for suspending large heavy items overhead within a building. Replacing custom-built on-site structural support systems such as strut, with Tate's Structural Ceiling Grid can offer many advantages. A structural ceiling allows you to pre-design and specify the support solution in advance and, best of all it's less expensive and faster to install.

## Key Performance Characteristics

- Multiple grid patterns and configurations are available
- Faster and easier to install than other grid systems
- Eliminates the need for multiple trades on-site
- Experienced data center manufacturer and contracting teams



## Structural Ceiling Features and Benefits

Tate's grid system has been engineered with alignment features that make it quick and easy to install. The Field Connectors feature a ribbed underside that fits into the top side track of the grid. Spacing and alignment are simplified by using locating notches in the Mains and Tees, which allow the rib in the connector to perfectly align the four segments of the grid.

- Main Runners with notches for precise location and connection of coped Structural Tees using simple four screw connectors
- Grid member center-to-center spacing can be customized to accommodate project-specific specifications
- Available in White, Black or Silver painted finish

## Containment Mounting

Hang aisle containment partitions and structures anywhere on the grid without the need for customized solutions or penetrating the ceiling tiles.

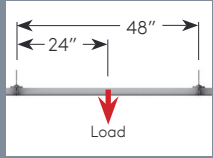


## Cable Tray Mounting

The high load capacity of Tate structural ceilings allows cable tray, bus bar and other service distribution equipment to be mounted overhead.



## System Load Performance

| Hanging Method      |  |  |
|---------------------|---|--|
|                     | Grid Load Performance<br>(with building connections<br>4'x4' on centers)              | Connection to<br>Bottom Slot<br>(1/4"-20 or 3/8"-16) |
| Point Load          | 380 lbs* (1.7 kN)   | 380 lbs* (1.7 kN)                                    |
| Uniform Load        | 50 lbs/ft <sup>2</sup> (2.4 kN/m <sup>2</sup> )                                       | -  |
| Ultimate Point Load | 700 lbs (3.1 kN)  | 760 lbs (3.4 kN)                                     |

\*Max point load no less than 4' (120 cm) apart in any direction.

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## Tate Grid Connector Types



Field Connector

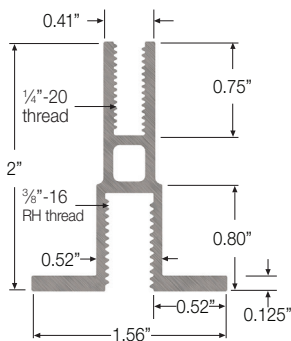
XL Connector  
Main Runner Splice

Perimeter Connector  
Easily cut for along walls

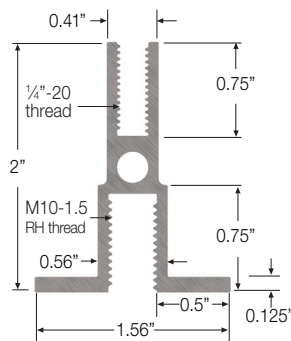
## Connector Specifications

- Accommodates 3/8"-16 threaded turnbuckle connection
- 800 lbs point load connection to building structure
- Ribs on the bottom of the connector align with the continuous slot on the top of the grid to prevent racking
- High strength cast aluminum construction
- Corrosion resistant aluminum casting
- Attaches to grid with 1/4"-20 steel screws

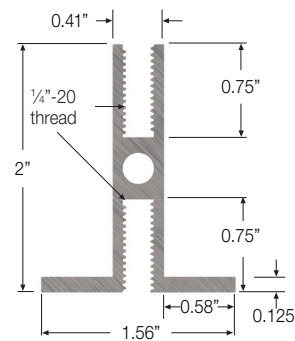
## Tate Grid Structural Ceiling Extrusion Range



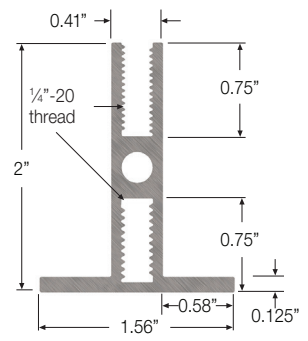
3/8"-16 Bottom Slot



M10 Bottom Slot

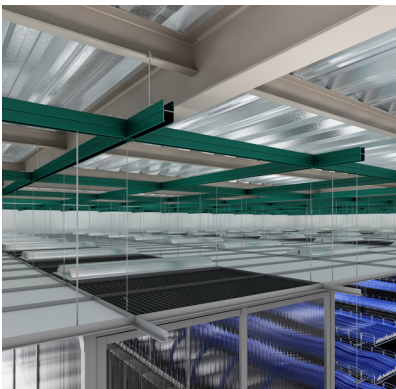


1/4"-20 Slot

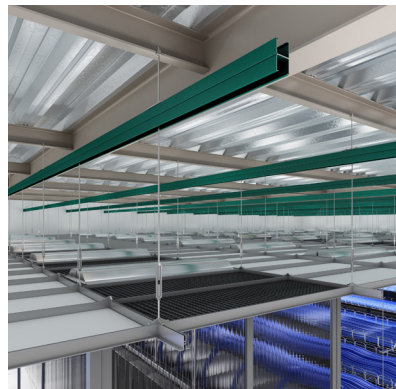


1/4"-20 Hidden Slot

## Traditional vs Tate Grid Structural Ceiling



Traditional ceilings require an interstitial strut grid for hanging heavy items.



Tate Grid requires connections only every 4' on center eliminating the majority of the additional strut support system.

## Tate Grid Hanging Methods



Tate Grid hanging method from steel building



Tate Grid hanging method from concrete building