# Structural Ceiling Tate Strut



Tate Strut is a strong, galvanized steel system with a white painted finish. The uniquely integrated welded flanges support tiles, light fixtures and return air grilles removing the need for two separate ceiling systems.

The continuous open channel slot allows for full flexibility when suspending cable trays, bus bars, and other heavy accessories from the structural ceiling. Both strut main runners and structural tees are pre-drilled for infill connections based upon application specifications.





- 12 gauge steel construction
- Hot dipped galvanized pretreatment with a white power coat finish
- Continuous open top slot to accommodate connection to building structure
- Continuous open bottom slot to accommodate connections of cable trays, bus bars and other heavy accessories
- Welded flange to accommodate ceiling tiles, lights and return grills
- Strut profile is pre-drilled for installation of light structural infill used for installing ceiling tiles

## Tate Strut Ceiling Grid Profiles

Light Structural Infil

(Typical)

Structural Tees

(Typical)



#### Performance Criteria

	Load							
SPAN (in)	Max Point Load @ Yield Point <sup>1</sup> (lbs)	Max Deflec- tion @ Yield Point (in)	Max Point Load @ Various Deflections (Ibs) SPAN /180 SPAN/240 SPAN/360			Max Uni- form Load (Ibs/LF)	Max Uni- form Load (Ibs/SF)	
48	1750 <sup>2</sup>	0.17	1750	1750	1369	219	109	
60	1750 <sup>2</sup>	0.33	1750	1315	876	175	70	
72	1667	0.55	1217	913	609	139	46	
84	1429	0.75	894	671	447	102	29	
96	1250	0.97	685	514	342	78	20	
108	1111	1.23	541	406	271	62	14	
120	1000	1.52	438	329	219	50	10	

1. Maximum point load locations are to be no less than the length of the strut span in any given direction 2. Maximum point loads are limited by the turnbuckle connections to strut. Turnbuckles are required to be within 12" of a Main Runner Splice

Main Runners

(Typical)

7510 Montevideo Road, Jessup, MD 20794 • T:410-799-4200 • E: info@tateinc.com • W: tateinc.com

# Structural Ceiling Tate Strut

#### **Connector Types**







Straight Connector

Hanging Connector

Splice Connector

### Tate Strut Ceiling Mains and Infill





# Traditional vs Tate Strut Structural Ceiling



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



Tate Strut can span distances up to 8' eliminating the need for any additional strut support structures.

#### **Connector Specifications**

- Simplistic Straight Connectors are used to connect Main Runners and Structural Tees with ease.
- Connectors are easily attached to Strut with Channel Nuts and Hex Bolts
- Straight Connectors provide excellent tension support for intersections, while the coped Structural Tees simplifies and accelerates installation
- 1/2"-13 x 7.85" Ig Turnbuckles are connected with the use of the Straight Connectors
- Turnbuckle locations can easily be adjusted to your application needs

## Tate Strut Hanging Methods



Tate Strut hanging method from steel building

Tate Strut hanging method from concrete building