

DYNAMAX™

Structural Aluminum Data Center Suspension System

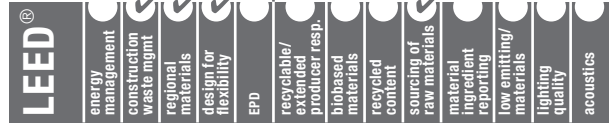
DeclareSM
Living Building
Challenge Compliant

SUSTAIN™
High Performance
Sustainable
Ceiling Systems



50% ALUMINUM RECYCLED CONTENT

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LOCATION DEPENDENT



DynaMax™ Structural Aluminum Data Center Suspension System

Ceiling panels are specially sized and engineered for the DynaMax™ suspension system and must be used with the system. These panels do not fit in other suspension systems.

This fully accessible and flexible system allows you to support heavy point loads to provide a solution for every type of data center.

KEY SELECTION ATTRIBUTES

- Ideal combination of a finished ceiling system with a structural solution
- Provides a suspension platform or attachment for data center cable trays, equipment, partitions and hot and cold aisle containment barriers from building structure to below the ceiling plane
- Finished ceiling system offers a containment barrier to protect servers from debris
- Easy integration into a conventional grid system using AXTC clip and DynaMax™ boss channels
- DynaMax suspension systems can integrate seamlessly with Armstrong® ceiling panels for a complete ceiling system solution
- Lighting integration solutions available
- Supports up to a 900 lb. point load rating using 3/8" threaded rod at 4' x 4' connection points
- Factory cut notches on main beams for a faster and easier installation
- Suspension system has continuous threaded boss channel, allowing 3/8" threaded rod to be installed to the suspension system at any location
- Controls airflow by eliminating penetrations
- Available in 2 x 2', 2 x 4' and 4 x 4' suspension system layouts
- CNC override feature creates a tight fit minimizing air leakage between plenum and occupied space
- Fully accessible system allows for future expansion and upgrades
- Non progressive installation gives the ability to remove or replace a section of the system without the need to dismantle those components around it
- Cross tees not bearing any load are removable for plenum access without compromising the structural integrity of the system
- 10 year limited warranty
- X-Brackets installed on DynaMax grid provide attachment points for 4' x 4' suspension from building structure

For custom layout information and technical guidelines, contact TechLine customer support at 877 276-7876

VISUAL SELECTION

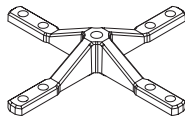
PACKAGING

Item No.	Description	Dimensions (Inches)	Pcs./ Ctn.	Lin. Ft./ Ctn.
DynaMax Structural Aluminum Data Center Suspension System				
<input type="checkbox"/> DM4301	Main Beam	144 x 2 x 2-3/8"	4	48
<input type="checkbox"/> DM4340	4' Cross Tee	48 x 2 x 2-3/8"	12	48
<input type="checkbox"/> DM4320	2' Cross Tee	24 x 2 x 2-3/8"	12	24
<input type="checkbox"/> DM4800	Perimeter Molding	144 x 2-1/8 x 2-1/2"	6	72

NOTE: Contact local engineer for job specific load and/or seismic requirements

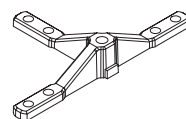
ACCESSORIES

DMXB – X-Bracket
Used to connect all cross tees together for rigid connection



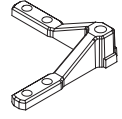
DMXB – 24 pcs

DMTB – T-Bracket
Used to connect main beams and cross tees to the perimeter extrusion



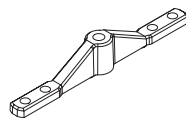
DMTB – 36 pcs

DMLB – L-Bracket
Used to connect perimeter extrusion corners together



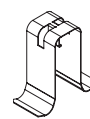
DMLB – 12 pcs

DMIB – I-Bracket
Used to splice together main beam ends



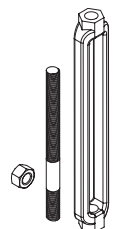
DMIB – 12 pcs

DMHDC – Hold Down Clip
Attaches to the suspension system to hold Lay-in panels in place



DMHDC – 100 pcs

DMHWK – Hardware Kit
Turnbuckles and threaded rods are used to connect the X-brackets to the threaded rod to create a structural support for the grid




DMHWK – 12 pcs

DYNAMAX™

Ceiling Panels for DynaMax
Data Center Ceiling Systems

VISUAL SELECTION

Edge Profile	Item No.	Description	Dimensions Actual (Inches)
Ceiling Panels for DYNAMAX Data Center Ceiling Systems			
 Square Lay-in	4126	Fine Fissured	23 x 23 x 5/8"
	4126BL	Fine Fissured	23 x 23 x 5/8"
	4127	Fine Fissured	47 x 23 x 5/8"
	4127BL	Fine Fissured	47 x 23 x 5/8"
	2896	Calla	23 x 23 x 1"
	2896BK	Calla	23 x 23 x 1"
	2897	Calla	47 x 23 x 1"
	2897BK	Calla	47 x 23 x 1"
	4270	Dune	23 x 23 x 5/8"
	4271	Dune	47 x 23 x 5/8"
	1807	Ultima	23 x 23 x 7/8"
	1808	Ultima	47 x 23 x 7/8"

PERFORMANCE SELECTION

Dots represent high level of performance.

UL Classified Acoustics		Total Acoustics ¹	Articulation Class	Fire Performance	Light Reflect	Anti-Mold & Mildew	Sag Resist	Certified Low VOC Emissions	Durability	Recycled Content	Recycle Program	10-Yr Warranty
NRC	CAC	NRC + CAC	AC	Class	Reflect	Bio Block	Humi-Guard+					
0.55	35	—	—	Class A	0.85	•	•	•	Std	Std	•	•
0.55	35	—	—	Class A	N/A*	•	•	•	Std	Std	•	•
0.55	35	—	—	Class A	0.85	•	•	•	Std	Std	•	•
0.55	35	—	—	Class A	N/A*	•	•	•	Std	•	•	•
0.85	35	BEST	170	Class A	0.85	•	•	•	•	•	•	•
0.85	35	BEST	170	Class A	N/A	•	•	•	•	•	•	•
0.85	35	BEST	170	Class A	0.85	•	•	•	•	•	•	•
0.85	35	BEST	170	Class A	N/A	•	•	•	•	•	•	•
0.50	35	—	—	Class A	0.85	•	•	•	•	•	•	•
0.50	35	—	—	Class A	0.85	•	•	•	•	•	•	•
0.75	35	BETTER	170	Class A	0.88	•	•	•	•	•	•	•
0.75	35	BETTER	170	Class A	0.88	•	•	•	•	•	•	•

* These panels are specially sized and engineered for the DynaMax™ suspension system and must be used with the system. These panels do not fit in other suspension systems.

ALLOWABLE LOAD CHART FOR DYNAMAX SUSPENSION SYSTEMS

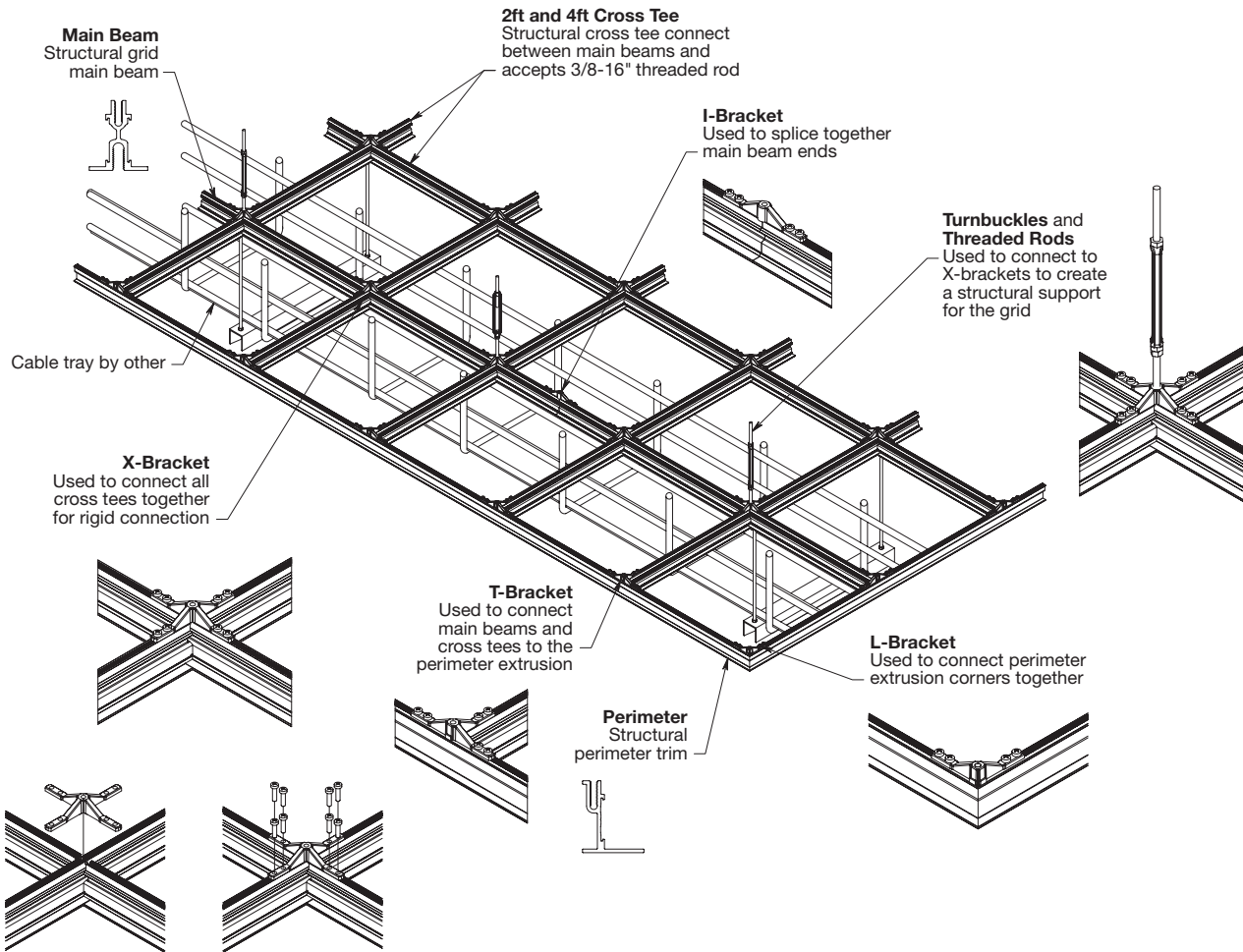
Member Span (ft)	4ft	5ft	6ft
Allowable Uniform Area Load (lbs/SF)*	56.25	45.00	37.50
Mid-Span Point Load @ L/360 Deflection (lb)	320	200	140
Ultimate Mid-Span Point Load	730	590	490

* Assumes loads applied under threaded rod support brackets
500 SF minimum

DYNAMAX™

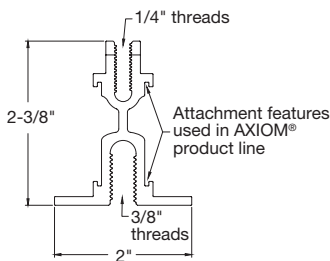
Structural Aluminum Data Center
Suspension System

DYNAMAX™ SUSPENSION SYSTEM INSTALLATION OVERVIEW



DETAILS

DynaMax
Main Beam



COLOR SELECTION

Due to printing limitations, shade may vary from actual product.



White (WH)



Available in
any color!

White is standard color for main beams and cross tees. All clips are unfinished.

Custom colors and finishes are available for main beams, cross tees, and load connector clips to coordinate with Create!™ ceiling panels and custom project colors.

Contact Armstrong Customer Service 877 276-7876

PHYSICAL DATA

Material
Aluminum

Surface Finish
Powder coated

Manufactured and tested in accordance with ASTM C635 and E3090

Face Dimension
2"

Profile
Exposed tee

Cross Tee/Main Beam Interface
Override

End Detail
Main Beam: Butt cut
Cross Tee: Override

Duty Classification
Heavy-duty