



DynaMax Plus Structural Aluminum Suspension System

This system provides the accessibility and flexibility of DynaMax® grid but with enhanced load-carrying capacity for 6' and 8' rod drops.

#### KEY SELECTION ATTRIBUTES

- Allows for longer spans (6' and 8') while also providing greater load-carrying capacity
- 6' spacing allows for direct attachment to steel joists or pre-cast concrete tees
- Spanning 6' or more eliminates the need for slotted strut channel at deck/ roof level and creates more space for critical MEP components
- Eliminates up to 1/2 of threaded rods/accessories utilized today for typical 48" hanging spans
- Ideal combination of a finished ceiling system with a structural solution
- Easy integration into a conventional grid system using AXTBC clip and DynaMax® Plus boss channels
- Can integrate seamlessly with select Armstrong® ceiling panels for a complete ceiling system solution
- Suspension system has continuous threaded boss channel, allowing 3/8"-16 threaded rod to be installed to the suspension system at any location
- Available in 24" × 24", 24" × 48", and 48" × 48" suspension system layouts
- Allows for 96" × 96" (or similar) structural pods/bays with acoustical grid infill using AXTBC clips
- Fully accessible system allows for future expansion and upgrades
- Non-progressive installation allows you 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 Suspension System Warranty; 30-Year Limited Ceiling System Warranty
- For custom layout information and technical guidelines, contact TechLine customer support at 877 276-7876

#### COLORS

Standard



White  
(WH)



Available in  
any color!

White is standard color for main beams and cross tees. All brackets and hardware are unfinished. Custom colors and finishes are available for main beams, cross tees, perimeter molding, and ceiling panels. Contact Armstrong Customer Service 877 276-7876

#### TYPICAL APPLICATIONS

##### For Data Center Applications

- 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
- Controls airflow by eliminating penetrations
- Grid provides increased temperature and pressure management, reduced leakage, and enables the best hot and cold air containment at the ceiling plane when compared to other ceiling types
- Available with Ultima® AirAssure® panels with factory-gasketed edges to provide even greater temperature and pressure management
- Lighting, diffuser, and containment options are available from our Data Center lighting and MEP partners

- Data Centers
- Laboratories
- Hospitals
- Industrial Warehouses/ Distribution Centers
- Retail/Convenience Store



# DYNAMAX® Plus

## Structural Aluminum Suspension System



Declare.

LEED® WELL™ LBC

**50% RECYCLED CONTENT**

energy management  
construction waste mgmt  
regional materials  
design for flexibility  
ALUMI- NUM  
EPD  
recyclable/extended producer resp.  
biobased materials  
recycled content  
sourcing of raw materials  
material ingredient reporting  
low emitting materials  
lighting quality  
acoustics

LOCATION DEPENDENT

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armstrongceilings.com/ecomedes

Well Building Standard™ (WELL)  
Living Building Challenge® (LBC)

### VISUAL SELECTION

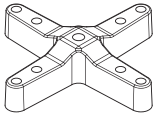
	Item No.	Description	Dimensions (Inches) L x W x H	PCS/ CTN	LF/ CTN
DynaMax® Plus Structural Aluminum Suspension System	DM9301	Main Beam	144 x 2 x 3-5/8"	2	24
	DM9320	2' Cross Tee	24 x 2 x 3-5/8"	6	12
	DM9340	4' Cross Tee	48 x 2 x 3-5/8"	6	24
	DM9360	6' Cross Tee	72 x 2 x 3-5/8"	2	12
	DM9380	8' Cross Tee	96 x 2 x 3-5/8"	2	16
	DM9800	Perimeter Molding	144 x 2-1/8 x 3-3/4"	2	24

NOTE: Contact local engineer for job-specific load and/or seismic requirements.  
\*Factory gasketing available upon request.

### PACKAGING

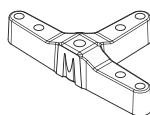
### ACCESSORIES

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



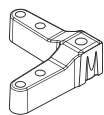
DMXB – 24 PCS

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



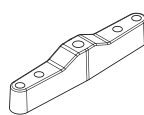
DMTB – 36 PCS

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



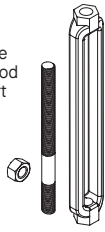
DMLB – 12 PCS

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



DMIB – 24 PCS

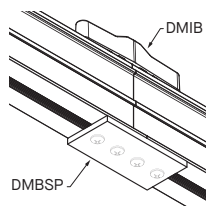
**DMHWK – Hardware Kit**  
Turnbuckles and threaded rods are used to connect the X-brackets to the threaded rod to create a structural support for the grid.\*\*



DMHWK – 12 PCS

\*\* 1/2" hardware kit available upon request.

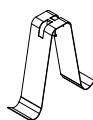
**DMBSP – DynaMax Main Beam Splice Plate**  
Used with DMIB I-Bracket to splice together main beams that butt up against one another



DMBSP – 24 PCS

### OPTIONAL ACCESSORIES

**DMPHDC – Hold-down Clip**  
for DynaMax Plus – Attaches to the suspension system to hold Lay-in panels in place



DMPHDC – 100 PCS

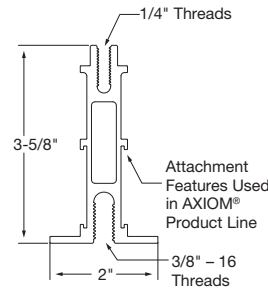
**DM3FGSKT – Main Beam and Cross Tee Field Gasket**  
for DynaMax Plus – Field Gasket option for DynaMax Plus Main Beams and Cross Tees

DM3FGSKT – 108 LF/roll

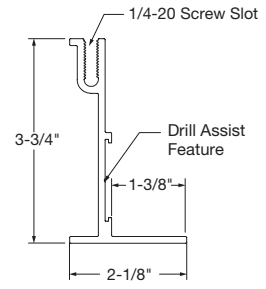
**DM8FGSKT – Perimeter Molding Field Gasket**  
for DynaMax Plus – Field Gasket option for DynaMax Plus Perimeter Molding

DM8FGSKT – 10LF/roll

### DETAILS



DynaMax Plus Main Beam



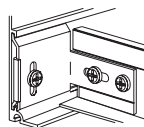
DM9800 Perimeter Molding

### LOAD DATA FOR DYNAMAX PLUS SUSPENSION SYSTEMS

Member Span and Spacing (IN.)	48"	60"	72"	96"
Maximum Allowable Uniform Area Load (LBS/SF)	113	72	50	28
Mid-Span Point Load @ L/360 Deflection (LBS)	1090	690	480	270
Maximum Static Point Load (LBS)	1800	1800	1800	1800
3/8" Turnbuckle Maximum Load to Structure (LBS)	1,200	1,200	1,200	1,200
1/2" Turnbuckle Maximum Load to Structure (LBS)	2,200	2,200	2,200	2,200

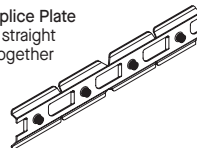
### NON-STRUCTURAL CEILING ADAPTER ACCESSORIES

**AXTBC – Axiom® T-Bar Connector Clip**  
Provides positive mechanical lock with factory-installed screw. Screw-fastened connection to suspension members that intersect the trim channel.



AXTBC – 1 PC

**AX4SPliceB – Axiom Splice Plate with Set Screws**  
Join straight sections of light cove together



AX4SPliceB – 1 PC

TechLine 877 276-7876  
armstrongceilings.com/datacenter

**Armstrong®**  
World Industries



# DYNAMAX® Plus

## Structural Aluminum Suspension System



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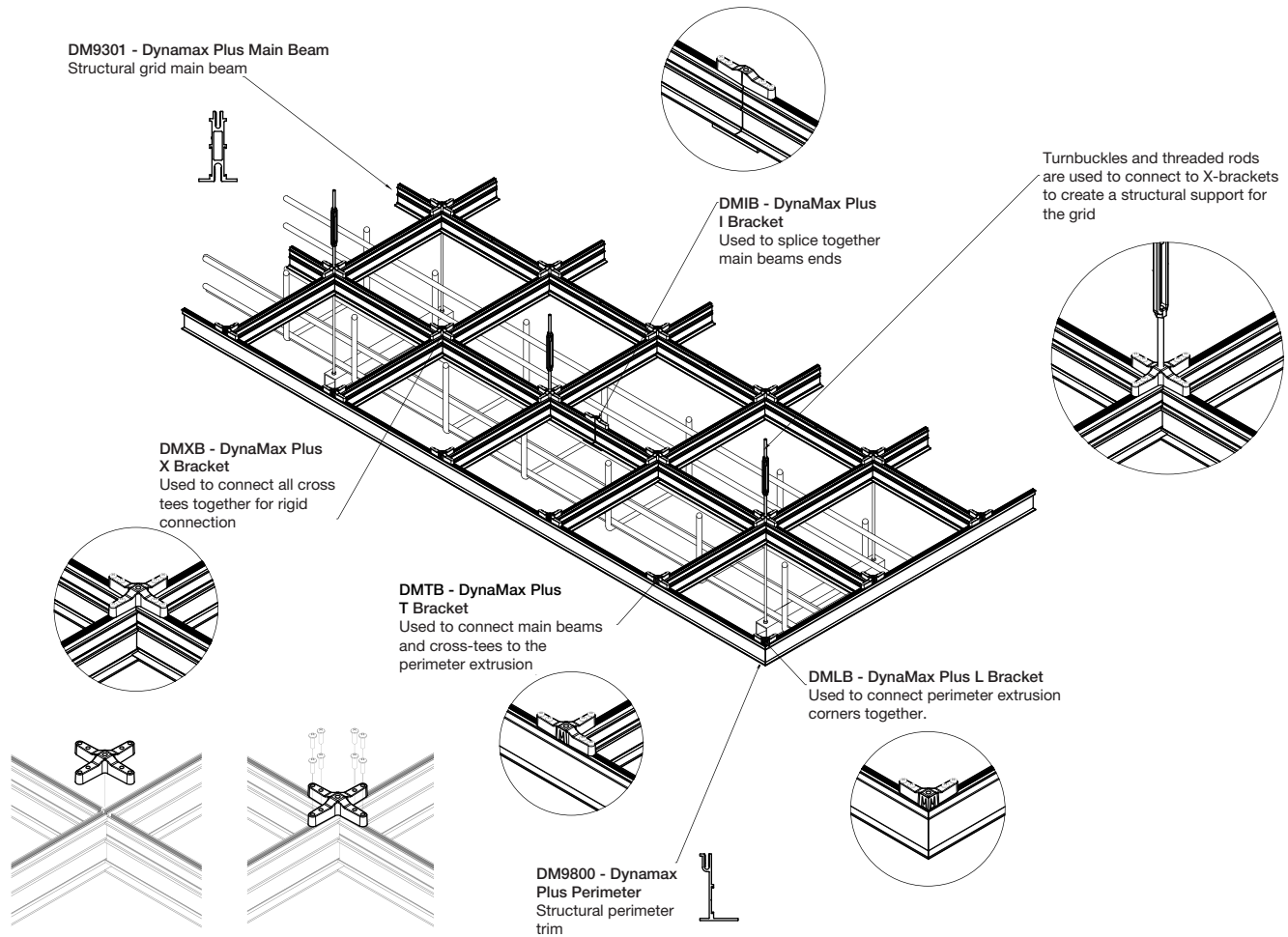
50% RECYCLED CONTENT

energy management	construction waste mgmt	regional materials	design for flexibility	ALUMI- NUM	EPD	recyclable/ biobased producer resp.	biobased materials	recycled content	sourcing of raw materials	material ingredient reporting	low emitting/ materials	lighting quality	acoustics
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LOCATION DEPENDENT	Well Building Standard™ (WELL)	Living Building Challenge® (LBC)
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### DYNAMAX® PLUS SUSPENSION SYSTEM INSTALLATION OVERVIEW



SUSPENSION SYSTEMS – DATA CENTERS



# DYNAMAX® Plus

## Structural Aluminum Suspension System



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ALUMI- NUM

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LOCATION DEPENDENT

Well Building Standard™ (WELL)  
Living Building Challenge® (LBC)

### CEILING PANELS

Ceiling panels are specially sized and engineered for DynaMax® Plus suspension system and must be used with the system. These panels do not fit in other suspension systems. Dots represent high level of performance.

Edge Profile	Item No.	Dimensions (Inches)	Sound Absorption NRC	Sound Blocking CAC	Total Acoustics <sup>1</sup> NRC CAC	Articulation Class AC	Fire Performance	Light Reflect	Bio-Block Mold & Mildew Protection	Humi-Guard+ Sag Resistant	Certified Low VOC Emissions	Durability	Recycled Content	Recycle Program	30-Yr Warranty
FINE FISSURED™ for DYNAMAX Plus	4126	23-1/4 × 23-1/4 × 5/8"	0.55	35	N/A	N/A	Class A	0.82	*	*	*	Std	Std	*	*
Square Lay-in															
	4126BL (Black)	23-1/4 × 23-1/4 × 5/8"	0.55	35	N/A	N/A	Class A	N/A	*	*	*	Std	Std	*	*
	4127	23-1/4 × 47-1/4 × 5/8"	0.55	35	N/A	N/A	Class A	0.82	*	*	*	Std	Std	*	*
	4127BL (Black)	23-1/4 × 47-1/4 × 5/8"	0.55	35	N/A	N/A	Class A	N/A	*	*	*	Std	*	*	*
CALLA® for DYNAMAX Plus	2896	23-1/4 × 23-1/4 × 1"	0.85	35	<b>BEST</b>	170	Class A	0.85	*	*	*	*	*	*	*
Square Lay-in															
	2896BK (Black)	23-1/4 × 23-1/4 × 1"	0.85	35	<b>BEST</b>	170	Class A	N/A	*	*	*	*	*	*	*
	2897	23-1/4 × 47-1/4 × 1"	0.85	35	<b>BEST</b>	170	Class A	0.85	*	*	*	*	*	*	*
	2897BK (Black)	23-1/4 × 47-1/4 × 1"	0.85	35	<b>BEST</b>	170	Class A	N/A	*	*	*	*	*	*	*
DUNE™ for DYNAMAX Plus	4270	23-1/4 × 23-1/4 × 5/8"	0.50	35	N/A	N/A	Class A	0.81	*	*	*	*	*	*	*
Square Lay-in															
	4271	23-1/4 × 47-1/4 × 5/8"	0.50	35	N/A	N/A	Class A	0.81	*	*	*	*	*	*	*
ULTIMA® for DYNAMAX Plus	1807	23-1/4 × 23-1/4 × 3/4"	0.75	35	<b>BETTER</b>	170	Class A	0.88	*	*	*	*	*	*	*
Square Lay-in															
	1808	23-1/4 × 47-1/4 × 3/4"	0.75	35	<b>BETTER</b>	170	Class A	0.88	*	*	*	*	*	*	*
ULTIMA® AirAssure® for DYNAMAX Plus	1599	23-1/4 × 23-1/4 × 3/4"	0.75	35	<b>BETTER</b>	N/A	Class A	0.88	*	*	*	*	*	*	*
Square Lay-in															
	1638	23-1/4 × 47-1/4 × 3/4"	0.75	35	<b>BETTER</b>	N/A	Class A	0.88	*	*	*	*	*	*	*
OPTIMA® PB for DYNAMAX Plus	3210PB	47-5/16 × 47-5/16 × 1"	0.95	N/A	N/A	190	Class A	0.88	*	*	*	*	*	*	*
Square Lay-in															

<sup>1</sup> Total Acoustics® ceiling panels have an ideal combination of sound absorption and sound blocking in one product.  
GOOD (NRC 0.60-0.65; CAC 35+) **BETTER** (NRC 0.70-0.75; CAC 35+) **BEST** (NRC 0.80+; CAC 35+)







# DYNAMAX® Plus

## Structural Aluminum Suspension System



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LOCATION DEPENDENT

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Living Building Challenge® (LBC)

### VISUAL SELECTION

Edge Profile	Perforation	Item No.	Dimensions (Inches)
METALWORKS™ for DYNAMAX® PLUS		6345W24L48M1WHA	23" x 47"
Square Lay-in	M1 (Unperforated)		
		6345W48L48M1WHA	47" x 47"
		6345W24L48M19WHA	23" x 47"
M19			
		6345W48L48M19WHA	47" x 47"

### PERFORMANCE

Dots represent high level of performance.

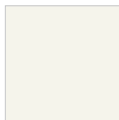
NRC with acoustical fleece	NRC with 1" fiberglass infill*	Fire Performance	Light Reflect	Mold & Mildew Protection	Certified Low VOC Emissions	Durability	Recycled Content
N/A	N/A	Class A	0.75	*	*	*	*
N/A	N/A	Class A	0.75	*	*	*	*
0.70	0.85	Class A	0.75	*	*	*	*
*	*						
0.70	0.85	Class A	0.75	*	*	*	*
*	*						

Ceiling panels are specially sized and engineered for the DynaMax and DynaMax Plus suspension systems and must be used with the systems. These panels do not fit in other suspension systems.  
\* NRC achieved with acoustical infill (Item 8200T10).

### COLORS

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

#### Painted



Whitelume (WHA)



Custom Colors Available

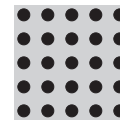
For custom options contact ASQuote,  
ASQuote@armstrongceilings.com

### PERFORATION OPTIONS

(1:2 scale shown)



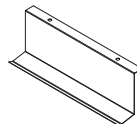
M1 (Unperforated)



M19

### ACCESSORIES FOR METALWORKS LAY-IN CEILING PANELS

6483H35 – MetalWorks Lay-In Perimeter Hold-down Clip for DynaMax Plus – Screw attaches to perimeter molding to hold the perimeter cut MetalWorks panels in place. Two clips required per cut panel.



6483H35 – 10 PCS

8200T10 – 1" Fiberglass Infill Bag –  
24 x 24 x 1"  
Color – Black (gloss)

8200T10 – 12 PCS

### PHYSICAL DATA FOR METALWORKS LAY-IN CEILING PANELS

#### Design Considerations

MetalWorks panels and DynaMax and DynaMax Plus grid are manufactured at separate facilities that use different paint systems. Colors i.e. White and Whitelume will coordinate but are not exact color matches.

#### Material

All MetalWorks panels: Aluminum - 0.064"

#### Warranty

One (1) year limited warranty for MetalWorks items. Details at armstrongceilings.com/warranty





# DYNAMAX® Plus

## Structural Aluminum Suspension System



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50% RECYCLED CONTENT



LOCATION DEPENDENT

energy management	construction waste mgmt	regional materials	design for flexibility	EPD	recyclable/extended producer resp.	biobased materials	recycled content	sourcing of raw materials	material ingredient reporting	low emitting materials	lighting quality	acoustics

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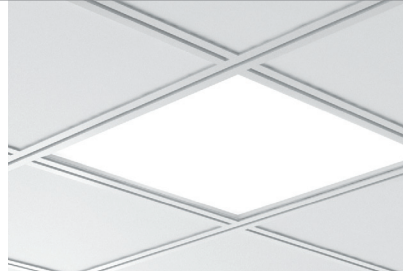
Well Building Standard™ (WELL)  
Living Building Challenge® (LBC)

**LIGHTING PARTNERS** Lighting and diffuser solutions are available through partner companies.

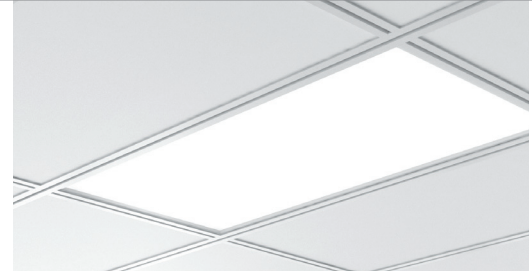
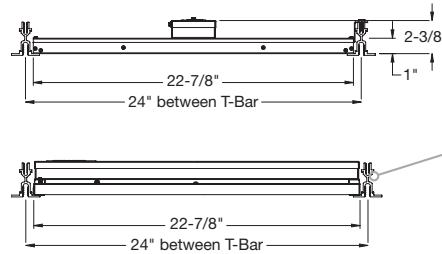


For compatible lighting details, visit [axislighting.com](http://axislighting.com)

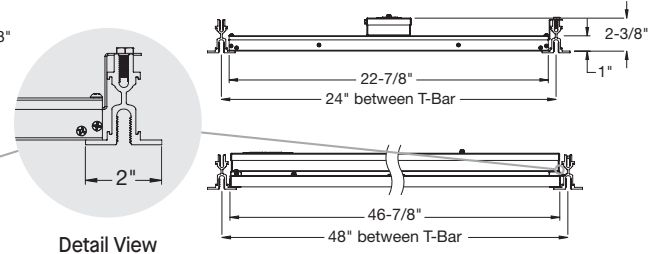
NOTE: Details in this section show standard DynaMax® suspension system; however, Axis TRAYFIT™ 2' x 2' and 2' x 4' are also compatible with DynaMax Plus suspension system.



TRAYFIT™ 2x2



TRAYFIT™ 2x4



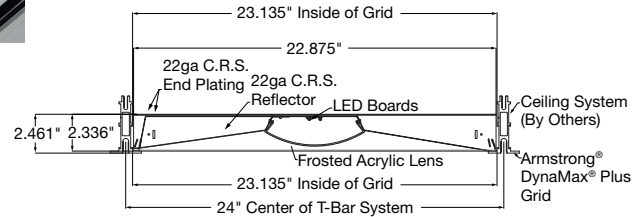
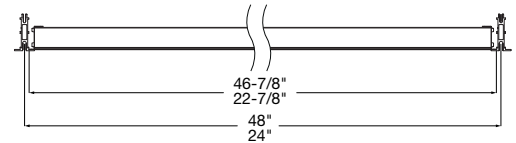
Detail View



For compatible lighting details, visit [hew.com/products/PTDC](http://hew.com/products/PTDC)



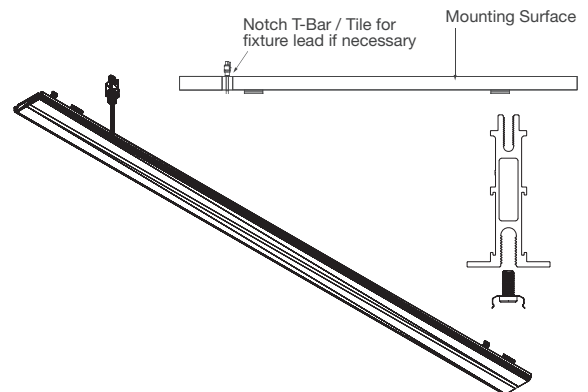
PTDC – Shallow Plenum LED Troffer for DynaMax® and DynaMax Plus System



For compatible lighting details, visit [vode.com/dynamax](http://vode.com/dynamax)



ZipTwo® Data Center Solutions for DynaMax and DynaMax Plus



**DYNAMAX® Plus**  
Structural Aluminum Suspension System



**LEED® WELL | LBC**

**50% RECYCLED CONTENT**

energy management  
construction waste mgmt  
regional materials  
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EPD  
recyclable/biobased materials  
producer resp.  
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Well Building Standard™ (WELL)  
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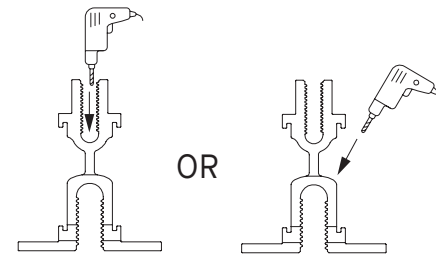
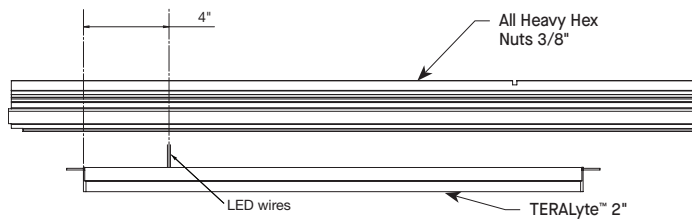
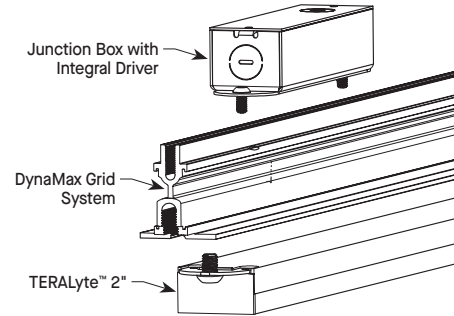
LOCATION DEPENDENT

**LIGHTING PARTNERS (CONTINUED)**



For compatible lighting details, visit [jlc-tech.com](http://jlc-tech.com)

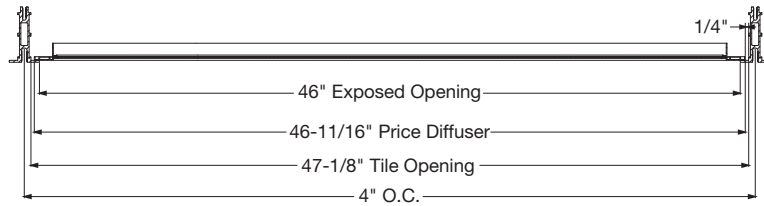
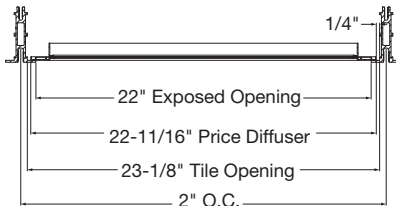
NOTE: Details in this section show standard DynaMax® suspension system; however, JLC-Tech TERAlyte™ 2" is also compatible with DynaMax® Plus suspension system.



**MEP PARTNER**



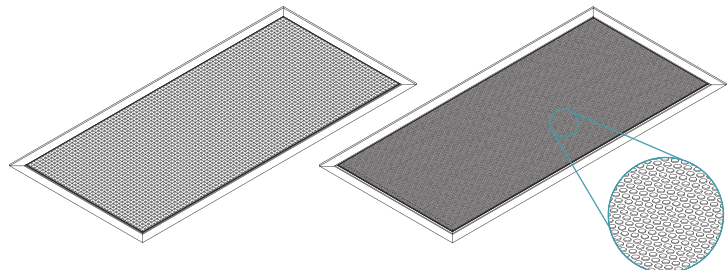
For compatible diffuser details, visit [priceindustries.com/diffusers](http://priceindustries.com/diffusers)



Eggcrate Air Device – Price® Model 80



Perforated Air Device – Price® Model 10



Eggcrate Air Device – Price® Model 80

Perforated Air Device – Price® Model 10



# DYNAMAX® Plus

## Structural Aluminum Suspension System



LEED® WELL™ LBC

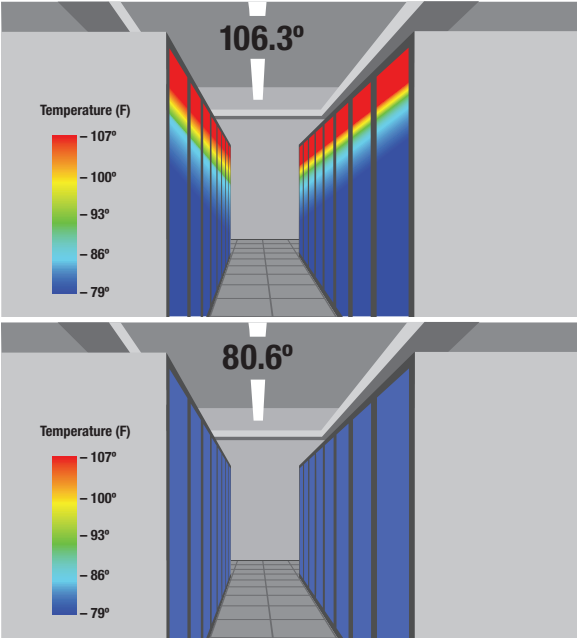
50% RECYCLED CONTENT

energy management construction waste mgmt regional materials design for flexibility EPD recyclable/extended producer resp. biobased materials recycled content sourcing of raw materials material ingredient reporting low emitting materials lighting quality acoustics

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Well Building Standard™ (WELL) Living Building Challenge® (LBC)

### TEMPERATURE AND PRESSURE CONTROL ADVANTAGES



DynaMax and DynaMax Plus structural grid systems provide increased pressure management, reduced leakage, and enables the best hot and cold air containment at the ceiling plane when compared to other ceiling types.

Unlike drilled hole or slotted strut ceilings, the integration of DynaMax and DynaMax Plus grid and Armstrong® Ceiling Panels keeps ceiling planes closed for improved pressure and temperature control where it matters most, such as data center halls.

A 2021 Computational Fluid Dynamics (CFD) simulation showed that, on average, the top of data center cabinet equipment is approx. 26°F warmer when a slotted strut ceiling (top left) is in place and approx. 6°F warmer with drilled hole ceiling (not shown) than with the DynaMax and DynaMax Plus structural grid systems (bottom left).

### PHYSICAL DATA

Material	Cross Tee/Main Beam Interface
Aluminum	Simple override
Surface Finish	End Detail
Baked polyester paint or powder-coated	Main Beam: Butt cut
Manufactured and tested in accordance with ASTM C635 and E3090	Cross Tee: Override
Face Dimension	Duty Classification
2"	Heavy-duty
Profile	System Weight
Exposed tee	2' x 2' - 1.63 LBS/SF
	2' x 4' - 1.20 LBS/SF

### CEILING PANELS PHYSICAL DATA

Ceiling Panels ASTM E1264 Classification	2896BK - 1.0 LBS/SF; 10 PCS/CTN; 36 SF/CTN
Type XII, Form 2, Pattern E	2897 - 1.0 LBS/SF; 6 PCS/CTN; 44 SF/CTN
Fire Class A	2897BK - 1.0 LBS/SF; 6 PCS/CTN; 44 SF/CTN
500 SF minimum	4270 - 0.94 LBS/SF; 16 PCS/CTN; 58 SF/CTN
Pieces/Carton;	4271 - 0.88 LBS/SF; 8 PCS/CTN; 58 SF/CTN
Square Feet/Carton	1807 - 1.08 LBS/SF; 12 PCS/CTN; 44 SF/CTN
4126 - 1.05 LBS/SF; 16 PCS/CTN; 58 SF/CTN	1808 - 1.08 LBS/SF; 6 PCS/CTN; 44 SF/CTN
4126BL - 1.05 LBS/SF; 16 PCS/CTN; 58 SF/CTN	1599 - 1.08 LBS/SF; 12 PCS/CTN; 44SF/CTN
4127 - 1.05 LBS/SF; 12 PCS/CTN; 90 SF/CTN	1638 - 1.08 LBS/SF; 6 PCS/CTN; 44 SF/CTN
4127BL - 1.05 LBS/SF; 12 PCS/CTN; 90 SF/CTN	3210PB - 0.45 LBS/SF; 0.45 LBS/SF; 6 PCS/CTN; 93 SF/CTN
2896 - 1.0 LBS/SF; 10 PCS/CTN; 36 SF/CTN	