



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" x 24", 24" x 48", and 48" x 48" suspension system layouts
- Allows for 96" x 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

TechLine 877 276-7876

[armstrongceilings.com/datacenter](http://armstrongceilings.com/datacenter)

#### 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



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50% ALUMINUM RECYCLED CONTENT

LOCATION DEPENDENT

Calculate sustainability with Ecomedes 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.

### ACCESSORIES

DMXB - X-Bracket Used to connect all cross tees together for rigid connection		DMTB - T-Bracket - Used to connect main beams and cross tees to the perimeter extrusion		DETAILS
DMXB - 24 PCS		DMTB - 36 PCS		
DMLB - L-Bracket - Used to connect perimeter extrusion corners together		DMIB - I-Bracket - Used to splice together main beam ends		
DMLB - 12 PCS		DMIB - 24 PCS		DM9800 Perimeter Molding
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.**		DMBSP - DynaMax Main Beam Splice Plate - Used with DMIB I-Bracket to splice together main beams that butt up against one another		LOAD DATA FOR DYNAMAX PLUS SUSPENSION SYSTEMS
DMHWK - 12 PCS ** 1/2" hardware kit available upon request.		DMBSP - 24 PCS		

### OPTIONAL ACCESSORIES

DMPHDC - Hold-down Clip for DynaMax Plus - Attaches to the suspension system to hold Lay-in panels in place		DM3FGSKT - Main Beam and Cross Tee Field Gasket for DynaMax Plus - Field Gasket option for DynaMax Plus Main Beams and Cross Tees		DM8FGSKT - Perimeter Molding Field Gasket for DynaMax Plus - Field Gasket option for DynaMax Plus Perimeter Molding	
DMPHDC - 100 PCS		DM3FGSKT - 108 LF/roll		DM8FGSKT - 10LF/roll	

### 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.		AX4SPLICEB - Axiom Splice Plate with Set Screws - Join straight sections of light cove together	
AXTBC - 1 PC		AX4SPLICEB - 1 PC	

TechLine 877 276-7876

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Armstrong®  
World Industries

 **DYNAMAX® Plus**  
Structural Aluminum Suspension System

  
**SUSTAIN™**  
High Performance  
Sustainable Ceiling Systems

Declare.

**LEED®**  
**WELL™**  
ALUMINUM

**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/  
harmful  
materials

lighting  
quality

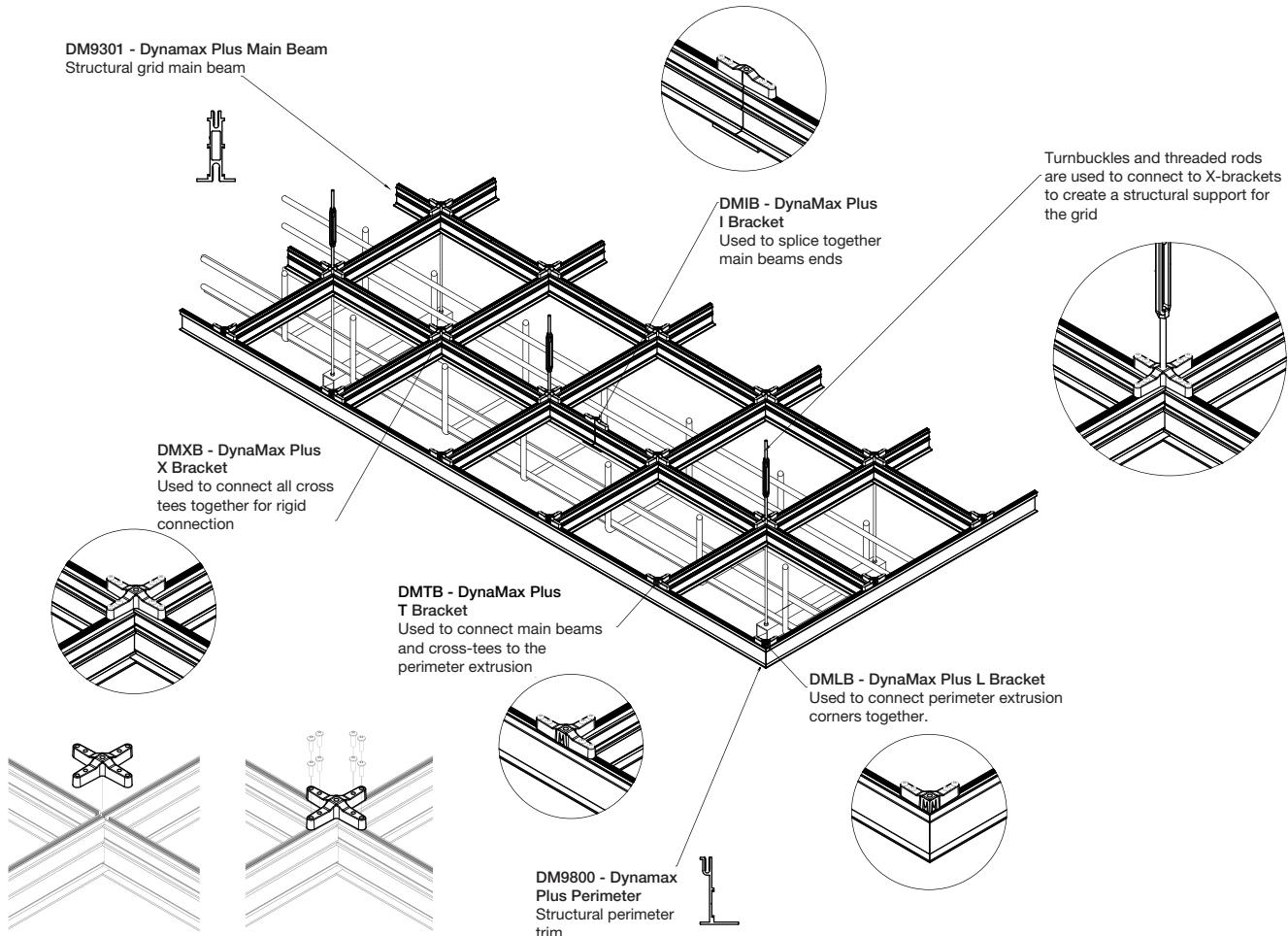
acoustics

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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50% ALUMINUM RECYCLED CONTENT

LOCATION DEPENDENT

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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.

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



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

**SUSTAIN™**  
High Performance  
Sustainable Ceiling Systems

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<b>LEED®</b>	<b>WELL™</b>	<b>LBC</b>
50% ALUMINUM	RECYCLED CONTENT	Calculate sustainability with Ecomedes <a href="http://armstrongceilings.com/ecomedes">armstrongceilings.com/ecomedes</a>
energy management	recyclable/ extended producer resp.	Well Building Standard™ (WELL) Living Building Challenge® (LBC)
construction waste mgmt	EPD	
regional materials	biobased materials	
design for flexibility	recycled content	
▲ LOCATION DEPENDENT	sourcing of raw materials	
	material ingredient reporting	
	low emitting/ materials	
	lighting quality	
	acoustics	

**VISUAL SELECTION**

Edge Profile	Perforation	Item No.	Dimensions (Inches)
METALWORKS™ for DYNAMAX® PLUS		<b>6345W24L48M1WHA</b>	23" x 47"

Square Lay-in M1 (Unperforated)



**6345W48L48M1WHA** 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	•	•	•	•

	<b>6345W24L48M19WHA</b> 23" x 47"
M19	0.70 * 0.85 Class A 0.75 • • • •

	<b>6345W48L48M19WHA</b> 47" x 47"
M19	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



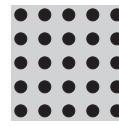
For custom options contact ASQuote,  
ASQuote@armstrongceilings.com

Whitelume (WHA)

**PERFORATION OPTIONS**  
(1:2 scale shown)



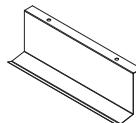
M1  
(Unperforated)



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](http://armstrongceilings.com/warranty)



## DYNAMAX® Plus

### Structural Aluminum Suspension System

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[armstrongceilings.com/ecomedes](http://armstrongceilings.com/ecomedes)

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

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

# axis

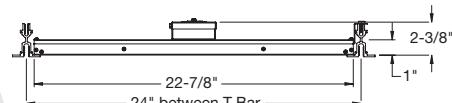
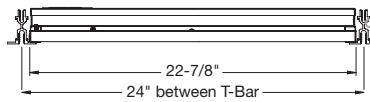
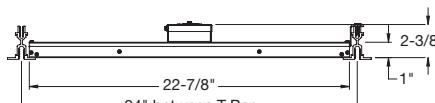
For compatible lighting details, visit [axislighting.com](http://axislighting.com)

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



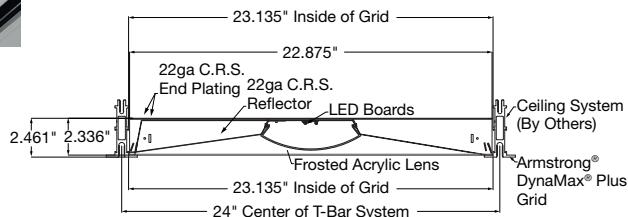
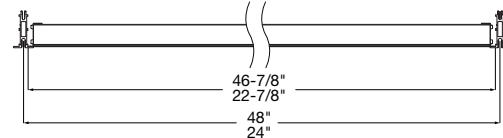
Detail View

# Williams

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

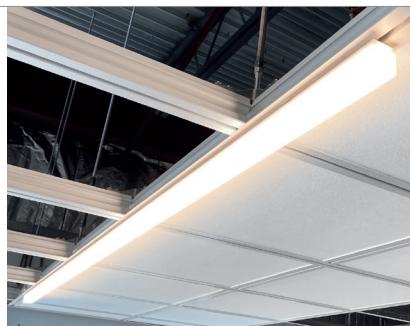


PTDC – Shallow Plenum LED Troffer  
for DynaMax® and DynaMax Plus System

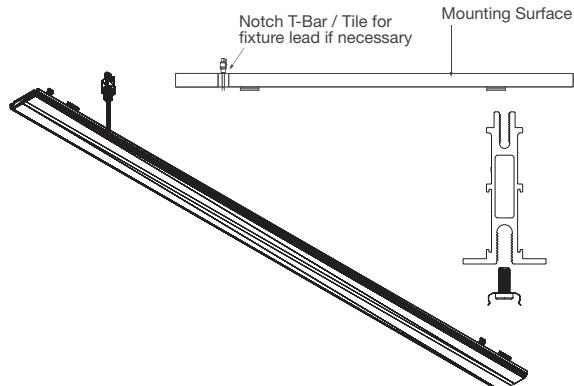


# vode

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



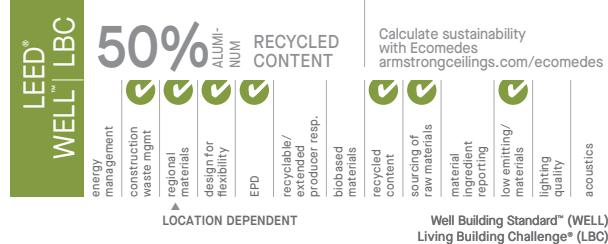
ZipTwo® Data Center Solutions for DynaMax and DynaMax Plus



**DYNAMAX® Plus**  
Structural Aluminum Suspension System



Declare.

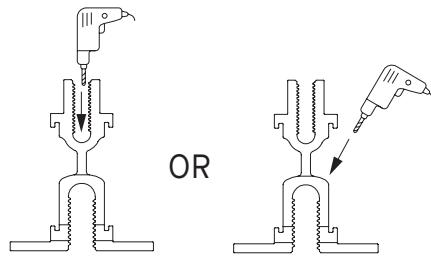
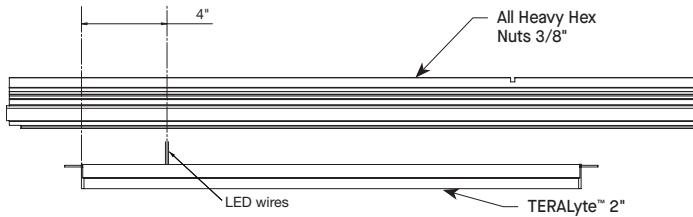
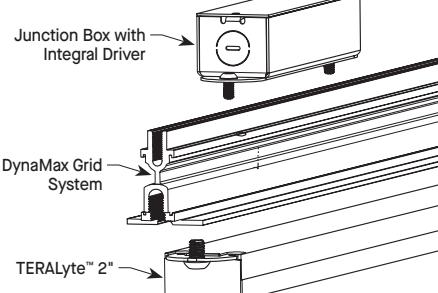


LIGHTING PARTNERS (CONTINUED)

**JLC • tech**

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

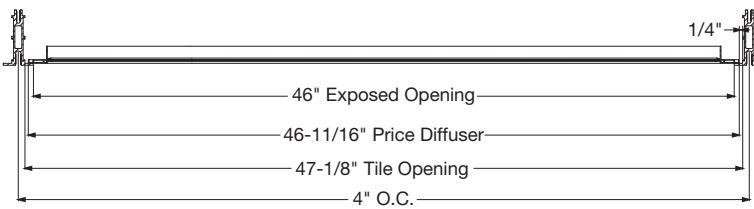
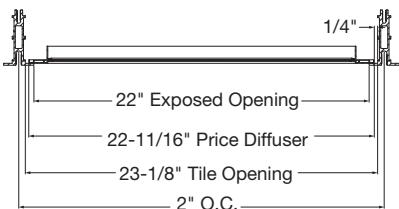
NOTE: Details in this section show standard DynaMax® suspension system; however, JLC-Tech TERALyte™ 2" is also compatible with DynaMax® Plus suspension system.



MEP PARTNER

**price®**

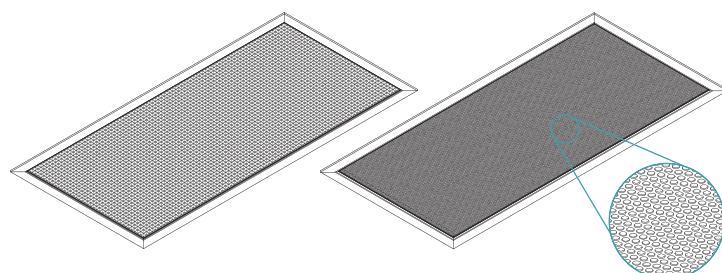
For compatible diffuser details, visit [priceindustries.com/diffusers](http://priceindustries.com/diffusers)



Eggcrate Air Device –  
Price® Model 80



Perforated Air Device –  
Price® Model 10



Eggcrate Air Device –  
Price® Model 80

Perforated Air Device –  
Price® Model 10

SUSPENSION SYSTEMS – DATA CENTERS



# DYNAMAX® Plus

## Structural Aluminum Suspension System

**SUSTAIN™**  
High Performance  
Sustainable Ceiling Systems

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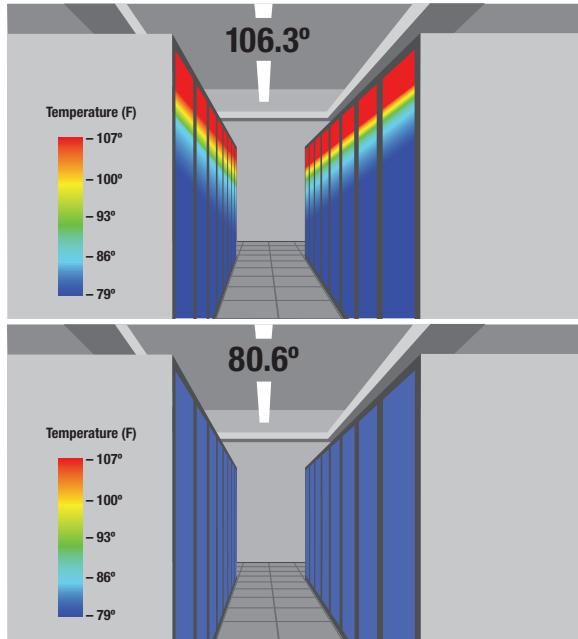
50% ALUMINUM RECYCLED CONTENT

energy management  
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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  
Aluminum  
Surface Finish  
Baked polyester paint or powder-coated  
Manufactured and tested in accordance with ASTM C635 and E3090  
Face Dimension  
2"  
Profile  
Exposed tee

Cross Tee/Main Beam Interface  
Simple override  
End Detail  
Main Beam: Butt cut  
Cross Tee: Override  
Duty Classification  
Heavy-duty  
System Weight  
2' x 2' - 1.63 LBS/SF  
2' x 4' - 1.20 LBS/SF

### CEILING PANELS PHYSICAL DATA

Ceiling Panels ASTM E1264 Classification  
Type XII, Form 2, Pattern E  
Fire Class A  
500 SF minimum  
Pieces/Carton:  
Square Feet/Carton  
4126 - 1.05 LBS/SF; 16 PCS/CTN; 58 SF/CTN  
4126BL - 1.05 LBS/SF; 16 PCS/CTN; 58 SF/CTN  
4127 - 1.05 LBS/SF; 12 PCS/CTN; 90 SF/CTN  
4127BL - 1.05 LBS/SF; 12 PCS/CTN; 90 SF/CTN  
2896 - 1.0 LBS/SF; 10 PCS/CTN; 36 SF/CTN

2896BK - 1.0 LBS/SF; 10 PCS/CTN; 36 SF/CTN  
2897 - 1.0 LBS/SF; 6 PCS/CTN; 44 SF/CTN  
2897BK - 1.0 LBS/SF; 6 PCS/CTN; 44 SF/CTN  
4270 - 0.94 LBS/SF; 16 PCS/CTN; 58 SF/CTN  
4271 - 0.88 LBS/SF; 8 PCS/CTN; 58 SF/CTN  
1807 - 1.08 LBS/SF; 12 PCS/CTN; 44 SF/CTN  
1808 - 1.08 LBS/SF; 6 PCS/CTN; 44 SF/CTN  
1599 - 1.08 LBS/SF; 12 PCS/CTN; 44 SF/CTN  
1638 - 1.08 LBS/SF; 6 PCS/CTN; 44 SF/CTN  
3210PB - 0.45 LBS/SF; 0.45 LBS/SF; 6 PCS/CTN; 93 SF/CTN

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