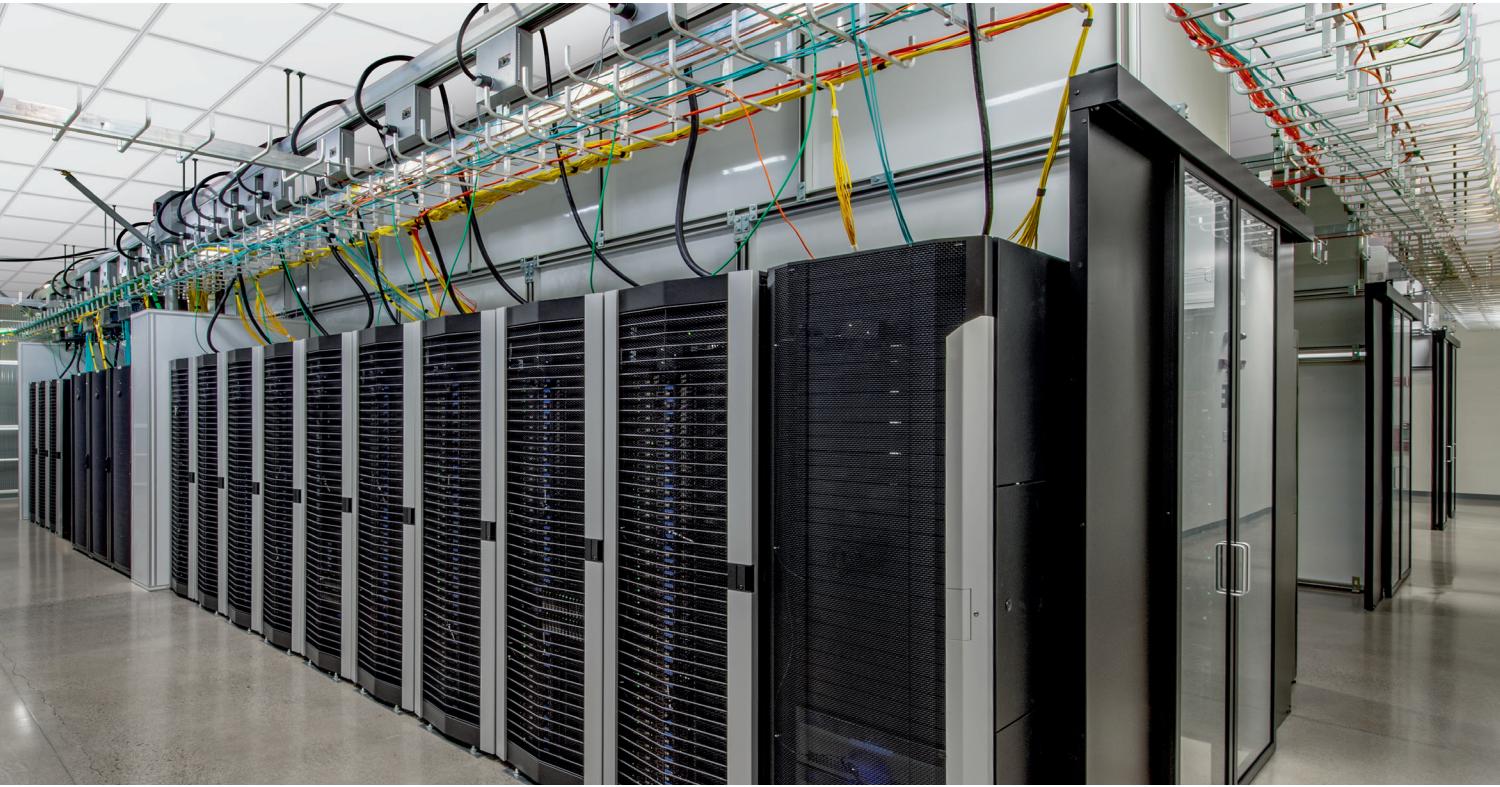




# DYNAMAX®

## Structural Aluminum Suspension System



DynaMax Structural Aluminum Suspension System

This fully accessible and flexible system allows you to support heavy point loads to provide a solution for various ceiling applications and requirements.

### KEY SELECTION ATTRIBUTES

- Ideal combination of a finished ceiling system with a structural solution
- Easy integration into a conventional grid system using AXTBC clip and DynaMax® boss channels
- Integrates seamlessly with select Armstrong® ceiling panels for a complete ceiling system solution
- Supports up to a 1,200 lb. point load rating using 3/8"-16 threaded rod at 48" x 48" connection points
- 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
- CNC override feature creates a tight fit minimizing air leakage between plenum and occupied space
- Fully accessible system allows for future expansion and upgrades

### For Data Center Applications

- 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; 30-Year Limited System Warranty
- X-Brackets provide attachment points for 48" x 48" suspension from building structure
- Now available with MetalWorks™ ceiling panels
- For custom layout information and technical guidelines, contact TechLine customer support at 877 276-7876

### TYPICAL APPLICATIONS

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

### COLORS

Standard



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

# DYNAMAX®

## Structural Aluminum Suspension System



Declare®

**LEED® LBC**  
ALUMINUM  
RECYCLED  
CONTENT

energy management	✓	✓	✓	✓	✓
construction waste mgmt.	✓	✓	✓	✓	✓
regional materials	✓	✓	✓	✓	✓
design for flexibility	✓	✓	✓	✓	✓
EPD	✓	✓	✓	✓	✓
recyclable/extended producer resp.	✓	✓	✓	✓	✓
biobased materials	✓	✓	✓	✓	✓

LOCATION DEPENDENT

recycled content	✓	✓
sourcing of raw materials	✓	✓
material ingredient reporting	✓	✓
low emitting/ materials	✓	✓
lighting quality	✓	✓
acoustics	✓	✓

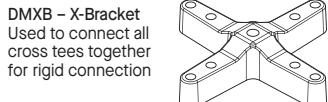
Well Building Standard™ (WELL)  
Living Building Challenge® (LBC)

## VISUAL SELECTION

Item No.	Description	Dimensions (Inches) H x W x L	PCS/ CTN	LF/ CTN
DynaMax® Structural Aluminum Data Center Suspension System	DM4301 Main Beam	144 x 2 x 2-3/8"	4	48
	DM4340 4' Cross Tee	48 x 2 x 2-3/8"	12	48
	DM4320 2' Cross Tee	24 x 2 x 2-3/8"	12	24
	DM4800 Perimeter Molding	144 x 2-1/8 x 2-1/2"	4	48

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

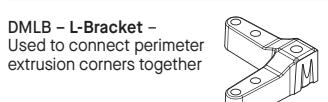
## ACCESSORIES



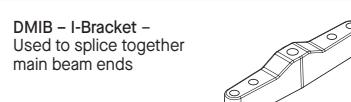
**DMXB** – 24 PCS  
Used to connect all cross tees together for rigid connection



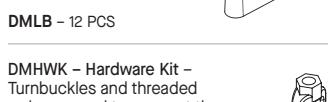
**DMTB** – 36 PCS  
Used to connect main beams and cross tees to the perimeter extrusion



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



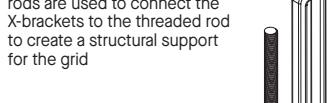
**DMIB** – 24 PCS  
Used to splice together main beam ends



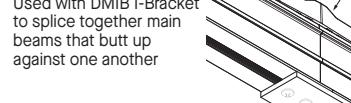
**DMHWK** – 12 PCS  
Turnbuckles and threaded rods are used to connect the X-brackets to the threaded rod to create a structural support for the grid



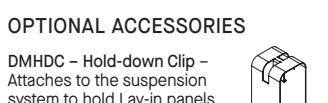
**DMBSP** – DynaMax Main Beam Splice Platet – Used with DMIB I-Bracket to splice together main beams that butt up against one another



**DM3FGSKT** – 108 LF/roll

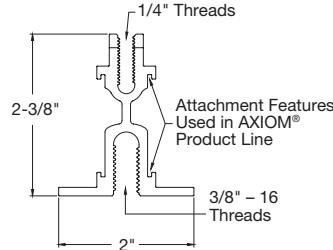


**DM8FGSKT** – 10LF/roll  
Main Beam and Cross Tee Field Gasket for DynaMax® Field Gasket option for DynaMax Main Beams and Cross Tees  
Perimeter Molding Field Gasket for DynaMax® Field Gasket option for DynaMax Perimeter Molding

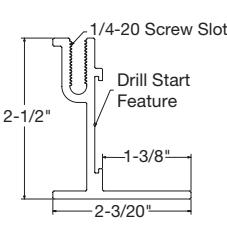


**DMHDC** – 100 PCS  
Attaches to the suspension system to hold Lay-in panels in place

## DETAILS



DynaMax Main Beam



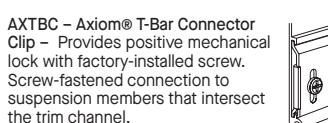
DM4800 Perimeter Molding

## LOAD DATA FOR DYNAMAX SUSPENSION SYSTEMS

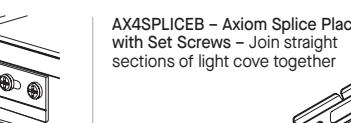
Member Span and Spacing (IN.)	48"	60"	72"
Maximum Allowable Uniform Area Load (LBS/SF)	75	48	33.3
Mid-Span Point Load @ L/360 Deflection (LBS)	320	200	140
Maximum Static Point Load (LBS)	1200	1200	1200
Turnbuckle Maximum Load to Structure (LBS)	1200	1200	1200

For additional load-carrying capability, ask your Armstrong® Rep about DynaMax® Plus Structural Grid System.

## NON-STRUCTURAL CEILING ADAPTER ACCESSORIES



**AXTBC** – 1 PC  
Provides positive mechanical lock with factory-installed screw. Screw-fastened connection to suspension members that intersect the trim channel.



**AX4SPLICEB** – Join straight sections of light cove together

**AX4SPLICEB** – 1 PC

# DYNAMAX®

## Structural Aluminum Suspension System



Declare.

LEED®  
WELL™  
LBC

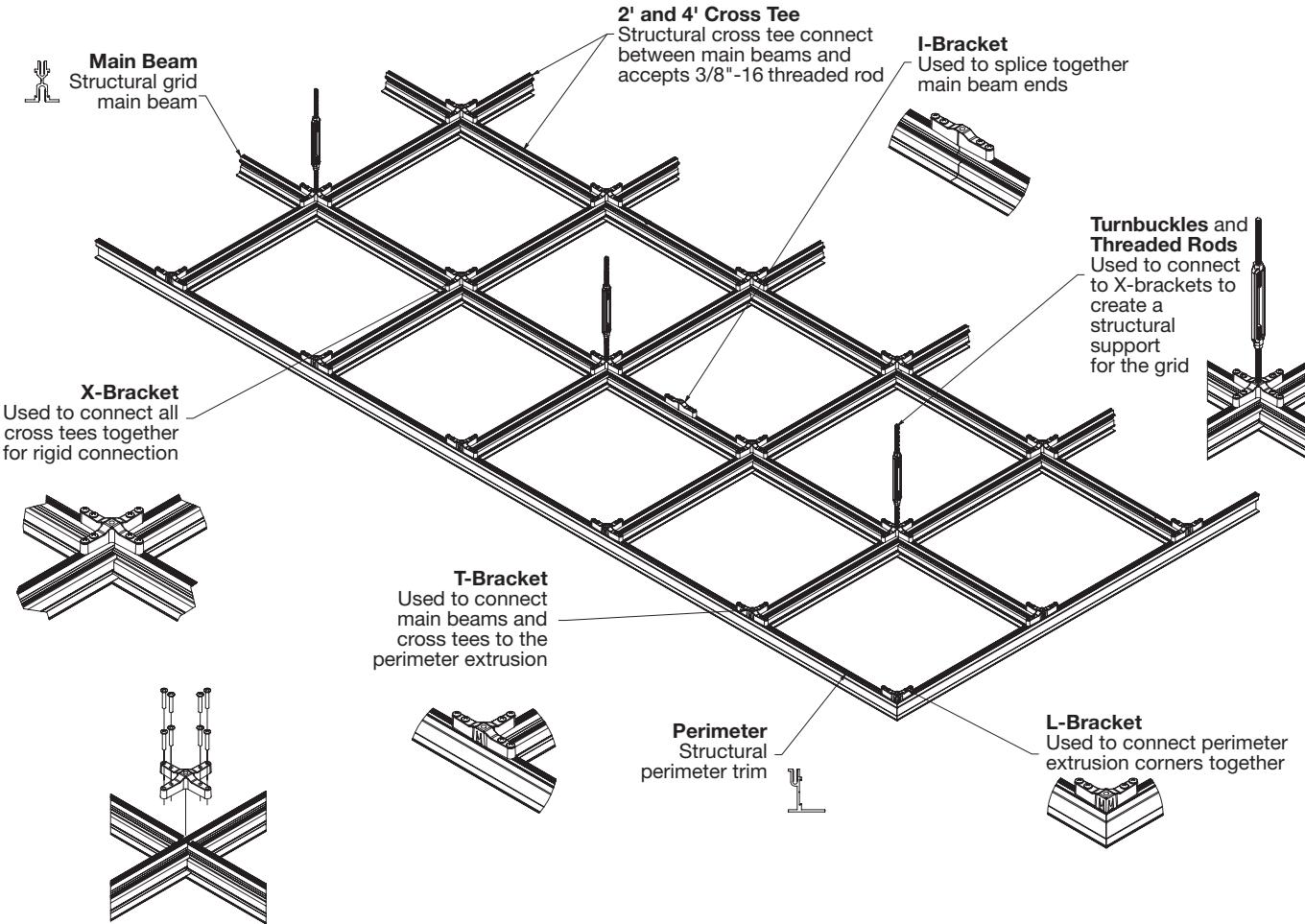
50% ALUMINUM  
RECYCLED CONTENT

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	

LOCATION DEPENDENT

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

### DYNAMAX® SUSPENSION SYSTEM INSTALLATION OVERVIEW



SUSPENSION SYSTEMS - DATA CENTERS

## DYNAMAX®

## Structural Aluminum Suspension System



Declare®

**LEED®**  
**WELL™**  
 energy  
management  
construction  
waste right  
regional  
materials

**50%**  
**ALUMINUM**  
**RECYCLED  
CONTENT**

 Calculate sustainability  
with Ecomedes  
[armstrongceilings.com/ecomedes](http://armstrongceilings.com/ecomedes)

LOCATION DEPENDENT

Well Building Standard™ (WELL)  
Living Building Challenge® (LBC)**CEILING PANELS**

Ceiling panels are specially sized and engineered for the DynaMax &amp; DynaMax® Plus suspension systems and must be used with the systems. These panels do not fit in other suspension systems.

Edge Profile

Item No.

Dimensions (Inches)  
H x W x L
**FINE FISSURED™ for DYNAMAX®**  
 Square Lay-in

4126	23-1/4 x 23-1/4 x 5/8"
4126BL (Black)	23-1/4 x 23-1/4 x 5/8"
4127	23-1/4 x 47-1/4 x 5/8"

4127BL (Black)	23-1/4 x 47-1/4 x 5/8"
----------------	------------------------

**CALLA® for DYNAMAX**  
 Square Lay-in

2896	23-1/4 x 23-1/4 x 1"
2896BK (Black)	23-1/4 x 23-1/4 x 1"

2897	23-1/4 x 47-1/4 x 1"
2897BK (Black)	23-1/4 x 47-1/4 x 1"

**DUNE™ for DYNAMAX**  
 Square Lay-in

4270	23-1/4 x 23-1/4 x 5/8"
4271	23-1/4 x 47-1/4 x 5/8"

**ULTIMA® for DYNAMAX**  
 Square Lay-in

1807	23-1/4 x 23-1/4 x 3/4"
1808	23-1/4 x 47-1/4 x 3/4"

**ULTIMA® AirAssure® for DYNAMAX**  
 Square Lay-in

1599	23-1/4 x 23-1/4 x 3/4"
1638	23-1/4 x 47-1/4 x 3/4"

**OPTIMA® PB for DYNAMAX**  
 Square Lay-in

3210PB	47-5/16 x 47-5/16 x 1"
--------	------------------------

Dots represent high level of performance.

Sound Absorption NRC + Sound Blocking CAC =	Total Acoustics <sup>1</sup> NRC + CAC	Articulation Class AC	Fire Performance Flame	Light Reflect Lightbulb	Mold & Mildew Protection Mold	Bio-Block	Hum-Guard+	Sag Resistant Sag	Certified Low VOC Emissions	Durability	Recycled Content	Recycle Program	30-Yr Warranty
0.55	35	N/A	N/A	Class A	0.82	•	•	•	Std	Std	•	•	
0.55	35	N/A	N/A	Class A	N/A	•	•	•	Std	Std	•	•	
0.55	35	N/A	N/A	Class A	0.82	•	•	•	Std	Std	•	•	
0.55	35	N/A	N/A	Class A	N/A	•	•	•	Std	•	•	•	
0.85	35	<b>BEST</b> 	170*	Class A	0.85	•	•	•	•	•	•	•	
0.85	35	<b>BEST</b> 	170*	Class A	N/A	•	•	•	•	•	•	•	
0.85	35	<b>BEST</b> 	170*	Class A	0.85	•	•	•	•	•	•	•	
0.85	35	<b>BEST</b> 	170*	Class A	N/A	•	•	•	•	•	•	•	
0.50	35	N/A	N/A	Class A	0.81	•	•	•	•	•	•	•	
0.50	35	N/A	N/A	Class A	0.81	•	•	•	•	•	•	•	
0.75	35	<b>BETTER</b> 	170*	Class A	0.88	•	•	•	•	•	•	•	
0.75	35	<b>BETTER</b> 	170*	Class A	0.88	•	•	•	•	•	•	•	
0.75	35	<b>BETTER</b> 	N/A	Class A	0.88	•	•	•	•	•	•	•	
0.75	35	<b>BETTER</b> 	N/A	Class A	0.88	•	•	•	•	•	•	•	
0.95	N/A	N/A	190*	Class A	0.88	•	•	•	•	•	•	•	

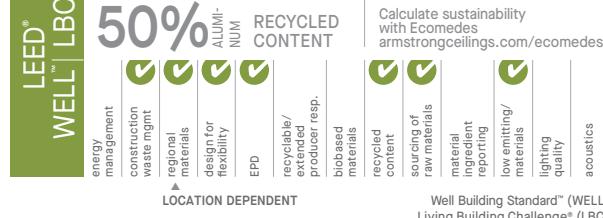
<sup>1</sup> Total Acoustics® ceiling panels have an ideal combination of sound absorption and sound blocking in one product.  
**GOOD** (NRC 0.60-0.65; CAC 35+) **BETTER** (NRC 0.70-0.75; CAC 35+) **BEST** (NRC 0.80+; CAC 35+)

# DYNAMAX®

## Structural Aluminum Suspension System



Declare.



### VISUAL SELECTION

Edge Profile	Perforation	Item No.	Dimensions (Inches)
METALWORKS™ for DYNAMAX®		new 6345W24L48M1WHA	23" x 47"

Square Lay-in  
 M1 (Unperforated)

6345W48L48M1WHA 47" x 47"

NRC with acoustical fluece	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	*	*	*	*

	new 6345W24L48M19WHA 23" x 47"
M19	0.70 *

6345W48L48M19WHA 47" x 47"

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.

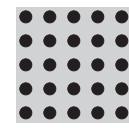
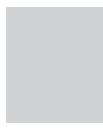
Painted



For custom options contact ASQuote,  
ASQuote@armstrongceilings.com

Whitelume (WHA)

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

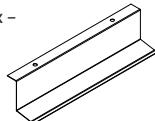


M1  
(Unperforated)

M19

### ACCESSORIES FOR METALWORKS LAY-IN CEILING PANELS

6483 – MetalWorks Lay-In Perimeter Hold-down Clip for DynaMax –  
Screw attaches to perimeter molding to hold the perimeter  
cut metalworks panels in place. 2 clips required per cut panel.



6483 – 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 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®

## Structural Aluminum Suspension System



Declare®

LEED® WELL™ LBC  
50% ALUMINUM  
RECYCLED CONTENT



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

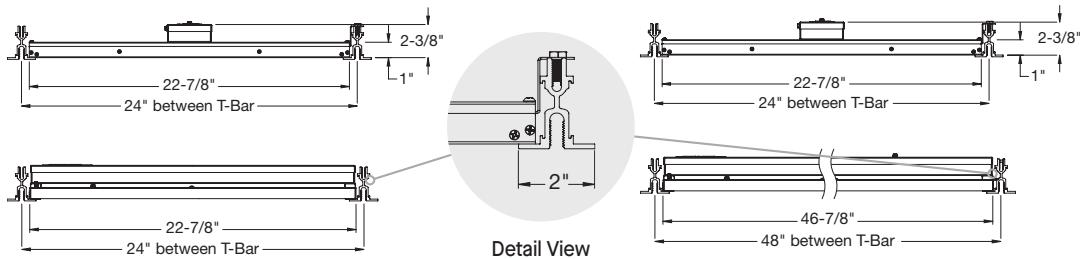


For compatible lighting details,  
visit [axislighting.com](http://axislighting.com)



TRAYFIT™ 2' x 2'

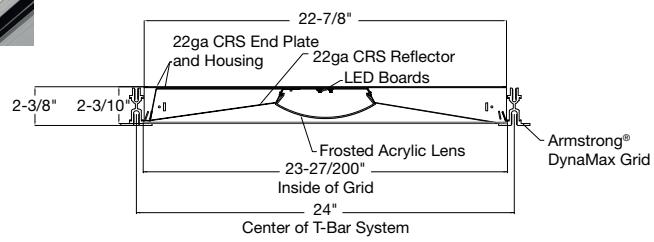
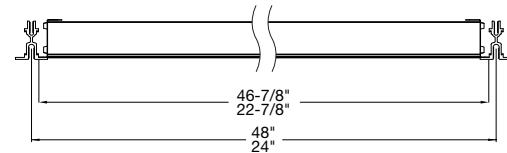
TRAYFIT™ 2' x 4'



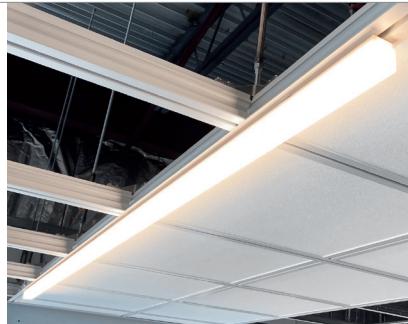
For compatible lighting details,  
visit [hew.com/products/PTDC](http://hew.com/products/PTDC)



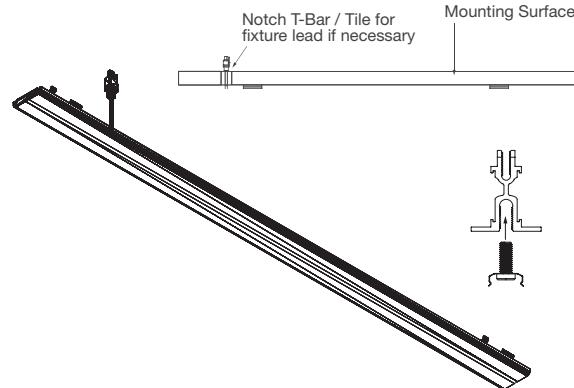
PTDC - Shallow Plenum LED Troffer  
for DynaMax® System



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



ZipTwo® Data Center Solutions



# DYNAMAX®

## Structural Aluminum Suspension System



Declare.

LEED® WELL™ LBC

50% ALUMINUM RECYCLED CONTENT

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

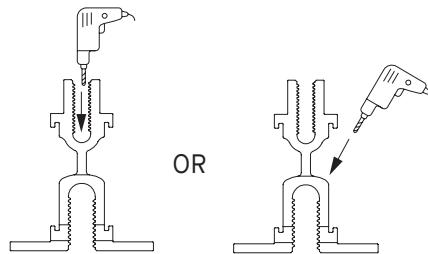
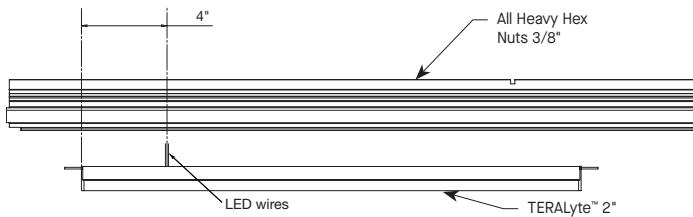
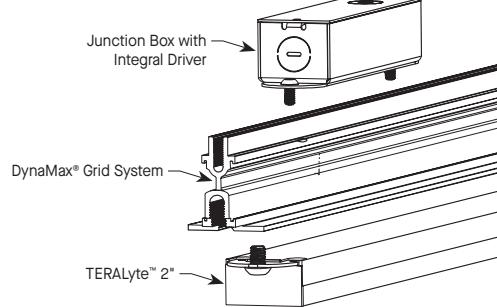
LOCATION DEPENDENT

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

### LIGHTING PARTNERS (CONTINUED)

JLC • tech

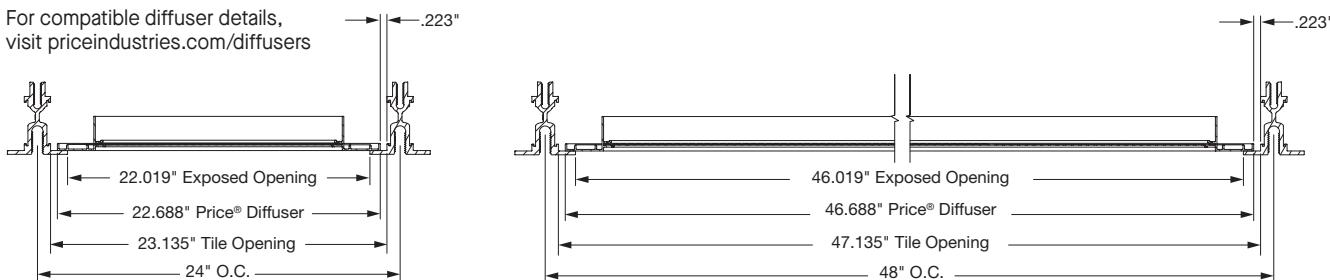
For compatible lighting details,  
visit [jlc-tech.com](http://jlc-tech.com)



### MEP PARTNER

**PRICE**®

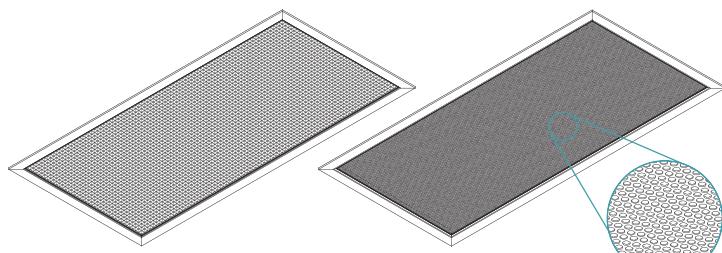
For compatible diffuser details,  
visit [priceindustries.com/diffusers](http://priceindustries.com/diffusers)



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®

## Structural Aluminum Suspension System



Declare.

**LEED® LBC**  
WELL™

**50% ALUMINUM RECYCLED CONTENT**

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

Calculate sustainability with Ecomedes  
[armstrongceilings.com/ecomedes](http://armstrongceilings.com/ecomedes)

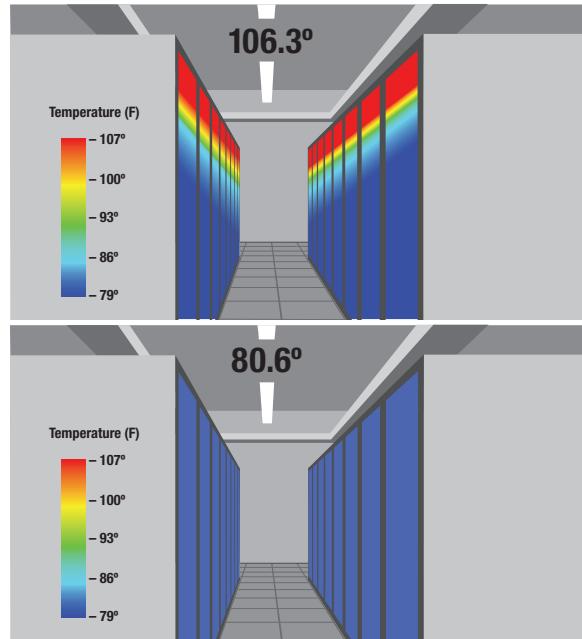
Well Building Standard™ (WELL)  
Living Building Challenge® (LBC)

DATA CENTER CONTAINMENT PARTNER

**SUBZERO**  
ENGINEERING  
A SENNECA COMPANY

For more data center containment details, visit [subzeroeng.com](http://subzeroeng.com)

## TEMPERATURE AND PRESSURE CONTROL ADVANTAGES



## PHYSICAL DATA

Material	Cross Tee/Main Beam Interface Override
Aluminum	
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' Grid 1.25 LBS/SF 2' x 4' Grid 0.94 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;
2896 - 1.0 LBS/SF; 10 PCS/CTN; 36 SF/CTN	93 SF/CTN

LEED® is a registered trademark of the U.S. Green Building Council; Declare® and Living Building Challenge® (LBC) are registered trademarks of the International Living Future Institute™; WELL™ and Well Building Standard™ are trademarks of the International WELL Building Institute; Axis logo and TRAYFIT™ are trademarks of Axis Lighting Inc.; H.E Williams logo is a registered trademark of H.E. Williams, Inc.; JLC-Tech logo and TERALYTE™ are trademarks of JLC-Tech, LLC; Price® is a registered trademark of Price Industries; Vode® and ZipTwo® are registered trademarks of Vode Lighting LLC; Subzero logo is a trademark of The Subzero Engineering Corporation; all other trademarks used herein are the property of AWI Licensing LLC and/or its affiliates. © 2024 AWI Licensing LLC

TechLine / 1 877 276-7876  
[armstrongceilings.com/datacenter](http://armstrongceilings.com/datacenter)  
BPCS-6273-424

**Armstrong**  
World Industries