DATA CENTER

CEILING SOLUTIONS

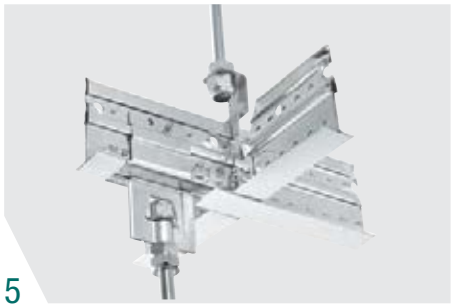
Inspiring Great Spaces®

Armstrong®
CEILING SOLUTIONS

Complete Data Center CEILING Solutions

Choose from a complete assortment of integrated ceiling systems to fit your data center needs for improved air flow management, load carrying capacity, and adaptability.

Whether you choose our new Prelude® XL Max™ suspension system, which provides maximum load carrying capacity via 3/8 inch threaded rod support and reconfigurable hanging clips for cable tray and electrical distribution, or our proven Clean Room™ ceiling system, Armstrong has the right ceiling solutions for your data center project.

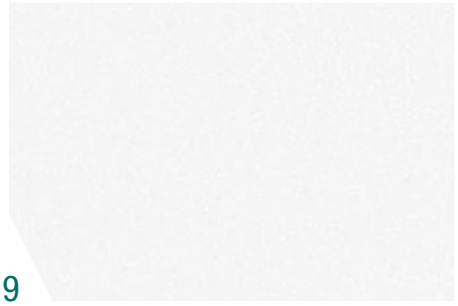


5 HOW THE NEW PRELUDE XL MAX SUSPENSION SYSTEM WORKS

6 PRELUDE XL MAX SUSPENSION SYSTEM WITH INTEGRATED LOAD CONNECTORS

8

CLEAN ROOM SUSPENSION SYSTEMS

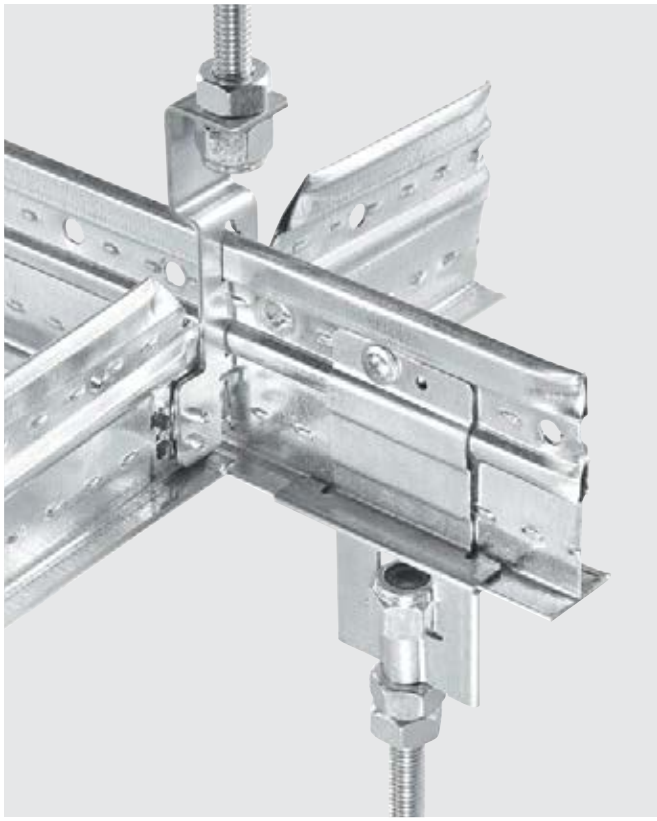


9

HIGH PERFORMANCE CEILING PANEL SELECTIONS

PRELUDE® XL MAX™

The Prelude® XL Max™ suspension system supports single point loads for cable trays, busways, and more.

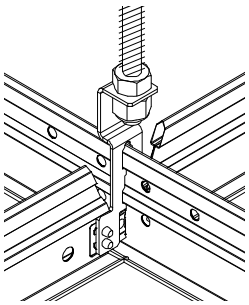


Integrated hanging clips allow connection to 3/8" threaded rod for flexible and reconfigurable overhead cable tray and electrical distribution without a separate strut channel system.

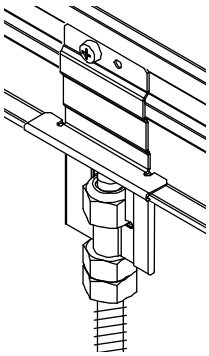
Load connector clips attach to the face of the suspension system to eliminate unsightly threaded rod penetrations through the ceiling plane to minimize unwanted air infiltration while improving access, cable tray layout options, and aesthetics.

HOW IT WORKS

IHC – Intersection Hanging Clip
Used to increase main beam to cross tee connection strength and carry the ceiling system with 3/8" threaded rod from structure



PMLC – Prelude® XL Max™ Load Connector
Used to support bus bars, cable trays, and other components with 3/8" threaded rod along the suspension system face



3/8" threaded rod to structure (4' O.C. or as required)

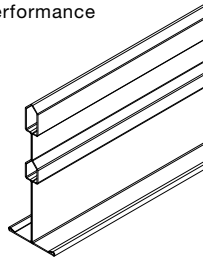
Main Beam

6" Max

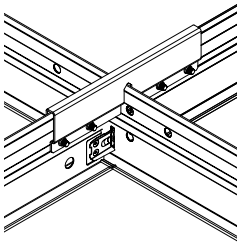
Cross Tee

Cable Tray (By others)

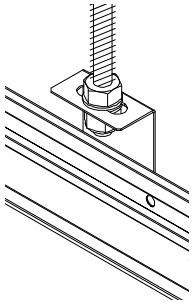
Prelude XL Max Main Beams and Cross Tees
15/16" face double bulb suspension system provides maximum load carrying capacity and Seismic D, E, F performance



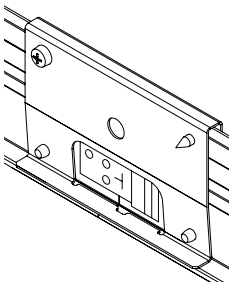
IJC – Intersection Joint Clip
Used when supporting load from a cross tee that isn't supported on both sides with the Intersection Hanging Clip



SHC – Supplemental Hanging Clip
Used to carry the ceiling system with 3/8" threaded rod from any route location along the main beam when plenum obstructions prevent use of the IHC Clip



TLMBS – Top Lock Main Beam Splice Clip
Locks two main beams together for a secure connection.
* Must be within 6" of an IHC or SHC



PRELUDE® XL MAX™

Exposed Tee System

UP TO 25% RECYCLED CONTENT

Calculate LEED contribution at armstrong.com/greengenie

LEED®

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

Prelude® XL Max™ with Ultima® item 1935 ceiling panels

KEY SELECTION ATTRIBUTES

Prelude XL Max 15/16" Suspension System

- 2' x 2' suspension system supports point loads up to 300 lbs. using 3/8" threaded rod and integrated hanging clips to provide:
  - Flexible and reconfigurable overhead cable tray and electrical distribution to meet client needs without a separate strut channel system
  - Eliminates unsightly threaded rod penetrations through the ceiling plane for improved access and aesthetics
  - Reduced ceiling penetrations help minimize unwanted air infiltration
- Suspension system meets ASTM C635, ASTM C636, ASTM E580, ICC-ES AC156 with Seismic D, E, F available
- Custom colors available to coordinate with Ultima® Create!™ ceiling panels
- Factory applied gasket option available
- 30-Year Limited System Warranty

TYPICAL APPLICATIONS

- Data Centers
- Laboratories
- Hospitals

For custom layout information and technical guidelines, contact TechLine℠ customer support at 1 877 ARMSTRONG.

VISUAL SELECTION / PERFORMANCE / PACKAGING

Item No.	Face Profile	Description	Dimensions (Inches)	Hanger Spacing* Lbs./Lin. Ft.	Fire Guard™	Seismic Category DEF	Pcs./ Ctn.	Lin. Ft./ Ctn.
Prelude XL Max				**4 Ft.**	Dots represent high level of performance.			
☐ **730145**	15/16"	12' HD Main Beam	144 x 15/16 x 2.44"	40.17	–	•	10	120
☐ **XL7345**	15/16"	4' Cross Tee	48 x 15/16 x 2.44"	40.17	–	•	30	120
☐ **XL7325**	15/16"	2' Cross Tee	24 x 15/16 x 2.44"	–	–	•	30	60
Molding								
☐ **SWA9878HRC**	7/8"	12' Structural Wall Angle	144 x 7/8 x 7/8"	–	–	•	12	144

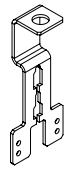
*Simple Span

ACCESSORIES

IHC – Intersection Hanging Clip – Used to increase main beam-to-cross tee connection strength and carry the ceiling system with 3/8" threaded rod from structure.

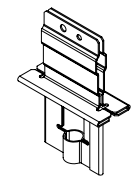
* Steel rivets not included

☐ **IHC** – 160 pcs
☐ **FZIHC** – 50 pcs



PMLC – Prelude XL Max Load Connector – Used to support bus bars, cable trays, and other components with 3/8" threaded rod from the suspension system face.

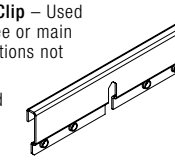
☐ **PMLC** – 100 pcs
☐ **FZPMLC** – 50 pcs



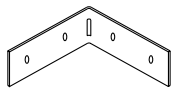
IJC – Intersection Joint Clip – Used at all cross tee-to-cross tee or main beam-to-cross tee connections not using an IHC Clip.

* Machine screws included

☐ **IJC** – 250 pcs
☐ **FZIJC** – 50 pcs



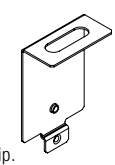
XTAC – Cross Tee Adapter Clip – Securely attaches cross tees or main beams to the structural wall molding around the perimeter of the ceiling installation.



☐ **XTAC** – 100 pcs
☐ **FZXTAC** – 50 pcs

SHC – Supplemental Hanging Clip – Used to carry the ceiling system with 3/8" threaded rod from any location along the main beam when plenum obstructions prevent use of the IHC Clip.

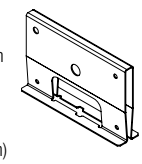
* Machine screws included



☐ **SHC** – 144 pcs
☐ **FZSHC** – 50 pcs

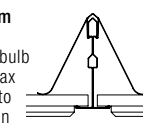
TLMBS – Top Lock Main Beam Splice Clip – Locks two main beams together for a secure connection.

10 pcs (included with item 730145 Main Beam)



☐ **FZTLMBS** – 50 pcs

PMHDC – Maximum Hold Down Clip – Attaches to the top bulb of the Prelude XL Max suspension system to hold ceiling panels in place; helps to prevent ceiling panel movement.



☐ **PMHDC** – 100 pcs
☐ **FZPMHDC** – 50 pcs

DATA CENTER
Ceiling Solutions

CLEAN ROOM™

Steel Grid Systems

30% STEEL 50% ALUMINUM RECYCLED CONTENT

Calculate LEED contribution at armstrong.com/greengenie

LEED®: 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

KEY SELECTION ATTRIBUTES

- Suitable for use in Class 5 or greater without hold down clips (Class 100 clean rooms as defined by ISO Standard 14644-1 (Federal Standard 209E) when used with Clean Room FL, Clean Room VL, Ultima® Health Zone™, and Optima® Health Zone™
- Seismic Rx® suspension system saves time and money; ICC-ES approach to installations (ESR-1308)
- Unique, integral gasket for better seal between panel and suspension system
- Integral main beam splice for easy connections and module control
- XL® staked-on end detail provides secure locked connection
- Rotary-stitched for additional torsion strength and installation
- 10-year limited warranty; 30-year with **HumiGuard® Plus**

TYPICAL APPLICATIONS

- Automotive and aerospace
- Computer rooms
- Hospitals
- Food processing facilities
- High tech manufacturing
- Data Centers
- Pharmaceutical facilities

VISUAL SELECTION / PERFORMANCE / PACKAGING

Item No.	Face Profile	Description	Route Spacing	Dimensions (Inches)	Hanger Spacing* Lbs./Lin. Ft.			Fire Guard™	Seismic Category DEF	Pcs./ Ctn.	Lin. Ft./ Ctn.
Clean Room Co-Extruded Steel (Gasketed)					2 Ft.	4 Ft.	5 Ft.	Dots represent high level of performance.			
☐ **ES7901**	15/16"	12' HD Main Beam	12" O.C.	144 x 15/16 x 1-11/16"	–	18.33	–	–	•	20	240
☐ **ES7940**	15/16"	4' Cross Tee	24" O.C.	48 x 15/16 x 1-11/16"	–	16.83	–	–	–	60	240
☐ **ES7920**	15/16"	2' Cross Tee	–	24 x 15/16 x 1-11/16"	60.83	–	–	–	–	60	240
	15/16"	**Other Sizes** Main beams L: 36" – 144" / Cross tees L: 6" – 144" / Route spacing 3" from ends, 6" thereafter								Varies	Varies
☐ **ES7801**		12' Hemmed Angle Molding		144 x 15/16 x 15/16"						30	360

MAXIMUM FIXTURE WEIGHT

Configuration A	Configuration B	Item No.	Fixture* A	Fixture* B	Planning Module A	Planning Module B	Hanger Spacing A	Hanger Spacing B	Maximum Weight A	Maximum Weight B
Main Beam to Main Beam – Drawing Key: Main beam (↑) Cross tee (···) Hanger wire (✦)										
		ES7901	24" x 48"		48" x 48"		48"		100.0 lbs.	
		ES7901	24" x 48"	12" x 48"	48" x 48"	48" x 48"	48"	48"	70.0 lbs.	100.0 lbs.
		ES7901	12" x 48"		48" x 48"		48"		69.0 lbs.	

Main beams tested as follows: EA7903 tested at 16.74 lbs./lin. ft. to 1/360 of 4' span.

* Fixtures weighing more than 56 lbs. should be independently supported. Fixture weight is based on single fixture only. For end-to-end fixtures or other configurations not shown, consult your Armstrong representative..

SELECTED SQUARE LAY-IN CEILING PANELS

ULTIMA® Health Zone™, ULTIMA® Create!™, CLEAN ROOM™ fine texture

UP TO **76%** RECYCLED CONTENT

Calculate LEED contribution at armstrong.com/greengenie

LEED® ✓ 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

ULTIMA® HEALTH ZONE™

- Smooth, clean, durable finish – Impact-resistant, Scratch-resistant, and Soil-resistant; safe for use with disinfectants
- Long-lasting water-repellency; Washable and Scrubbable
- Excellent sound absorption
- 30-Year Limited System Warranty against visible sag, mold, and mildew

ULTIMA® CREATE!™

- Create! panels are available in over 100 standard colors or any custom color! Digitally design your own original artwork and place your vision onto the ceiling plane in your design
- Suspension and Axiom® perimeter trim options available in coordinating standard and custom colors
- Excellent sound absorption – NRC 0.70 – 0.90
- Product is directional
- Custom samples available

CLEAN ROOM™ FL / VL

- Clean Rooms up to ISO Class 5 (Class 100)
- Durable – Washable, Scrubbable, Soil-resistant
- Non-directional visual reduces installation time and scrap
- 30-Year Limited System Warranty against visible sag, mold, and mildew

SELECTED SQUARE LAY-IN CEILING PANELS FOR DATA CENTER APPLICATIONS

PERFORMANCE Dots represent high level of performance.

Edge Profile	Item No.	Dimensions (Inches)	Acoustics NRC (UL Classified)	Acoustics CAC		Fire Rating	Light Reflect	Anti-Mold & Mildew BioBlock+	Sag Resist Humi-Guard+	Cerified Low VOC Emissions	Durability: Water Repel	Durability: Wash	Durability: Scrub	Durability: Impact	Durability: Scratch	Durability: Soil	Primary (Embodied) Energy Below 11MJ/SF	Recycled Content	Recycle Program Yes	Warranty† No. of Years
ULTIMA Health Zone																				
15/16" Square Lay-in	☐ **1935***	24 x 24 x 3/4" ☐	0.70 ●	38 ●	–	Class A	0.86 ●	●	●	●	●	●	●	●	●	●	●	High	●	30
☐	☐ **1938◆**	24 x 48 x 3/4" ▭	0.70 ●	38 ●	–	Class A	0.86 ●	●	●	●	●	●	●	●	●	●	●	High	●	30
ULTIMA Create! Square Lay-in																				
15/16" Square Lay-in	☐ **Z1935UC1_ _◆◆**	24 x 24 x 3/4" ☐	0.70†† ●	38 ●	–	Class A	–	●	●	●	●	●	–	–	–	●	–	High	●	30
☐																				
Clean Room FL Field Panel – Class 5 (Class 100)																				
15/16" Square Lay-in	☐ **1715**	24 x 24 x 3/4" ☐	0.55	35 ●	–	Class A	0.79	●	●	●	●	●	●	●	●	●	–	High	–	30
☐	☐ **1716**	24 x 48 x 3/4" ▭	0.55	35 ●	–	Class A	0.79	●	●	●	●	●	●	●	●	●	–	High	–	30
Clean Room FL Border Panel – Class 5 (Class 100)																				
15/16" Square Lay-in	☐ **1720**	24 x 24 x 5/8" ☐	N/A	35 ●	–	Class A	0.79	●	●	–	●	●	●	●	●	●	–	Std	–	30
☐	☐ **1721**	24 x 48 x 5/8" ▭	N/A	35 ●	–	Class A	0.79	●	●	–	●	●	●	●	●	●	–	Std	–	30
Clean Room VL Unperforated – Class 5 (Class 100)																				
15/16" Square Lay-in	☐ **868**	24 x 24 x 5/8" ☐	N/A	40 ●	–	Fire Guard™	0.80	●	●	●	●	●	●	●	●	●	–	Std	–	30
☐	☐ **870**	24 x 48 x 5/8" ▭	N/A	40 ●	–	Fire Guard	0.80	●	●	●	●	●	●	●	●	●	–	Std	–	30

* Create! colors available on item 1935 ◆ Item does not have painted edges †† Based on image/color coverage, NRC may vary slightly.
◆◆ Add two-letter color suffix to item when specifying or ordering standard Wood Looks items. (e.g., Z1935UC1 L C)

TAKE THE NEXT STEP

1 877 ARMSTRONG (276-7876)

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7:45 a.m. to 5:00 p.m. EST Monday through Friday

TechLine – Technical information, detail drawings, CAD design assistance, installation information, other technical services – 8:00 a.m. to 5:30 p.m. EST, Monday through Friday. FAX 1 800 572 8324 or email: techline@armstrongceilings.com

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