



A R K T U R A

# Particle<sup>®</sup> Ion

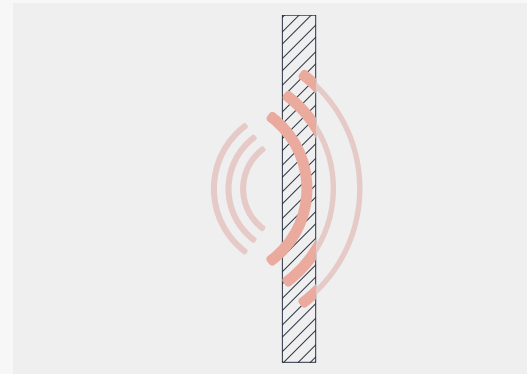


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Ceiling & Wall **Panels**

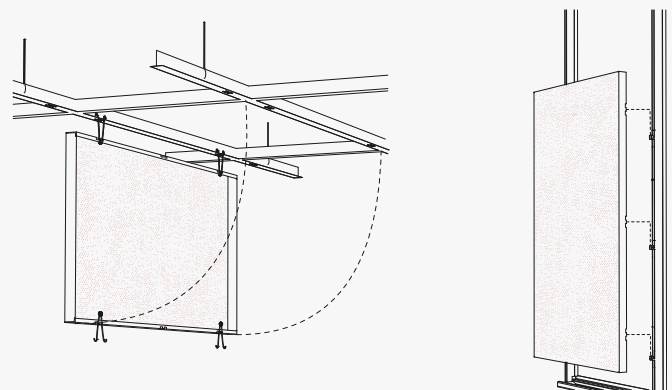
# Our Key Features

Ion's powder-coated aluminum torsion panels add eye-catching dimension to any space thanks to an active and engrossing pattern. To steal the show, add our integrated lighting backer or add acoustic comfort with our Soft Sound® backer.



## Reduce Noise & Enhance Acoustics

Particle® panels are preconfigured micro-perforated solutions designed with a dynamic array of criteria and effects in mind to provide a seamless result. Choose from our library of patterns to uniquely impact your project.



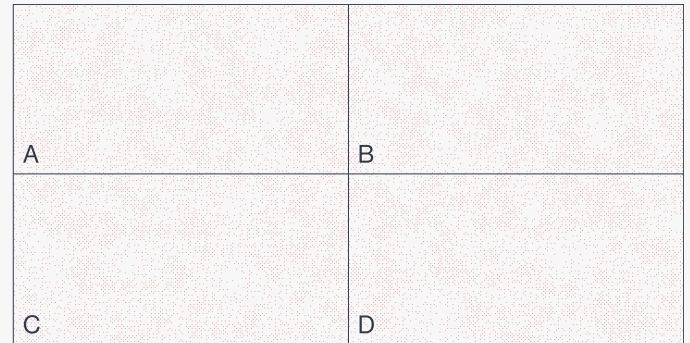
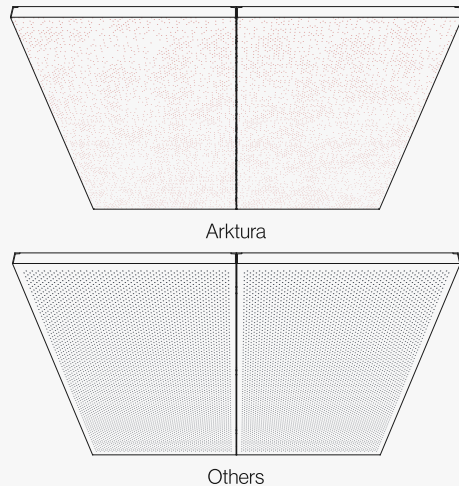
## Easy Installation & Access

Particle® panels offer easy install and access across walls and ceilings through quick torsion spring attachment to standard grid systems and a simple hook-on attachment to our Vertika® channel system.



Scan the QR or Click to  
Learn More about Particle®

## Our Key Features

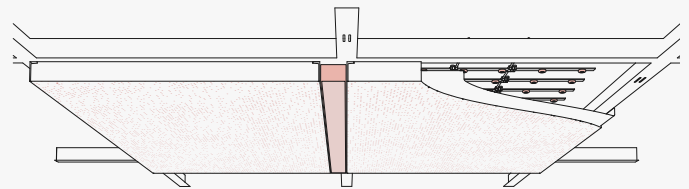


### Uninterrupted Pattern Across Panels

Achieve uninterrupted patterning across your space. Particle® patterns have perforations that wrap around the edges of each panel, concealing where patterns start and end, with more intricate micro-perforated patterning than most competitors.

### Preconfigured Solutions

Particle® panels are preconfigured micro-perforated solutions designed with a dynamic array of criteria and effects in mind to provide a seamless result. Choose from our library of patterns to uniquely impact your project.



### Superior Flatness & Strength

Particle® panels are manufactured from aluminum that is, on average, 50% thicker than others, which, in combination with our precision processes, results in unrivaled flatness.

### Integrated Lighting Options

Integrate illumination and lighting effects to your projects with Arktura's offering of lighting solutions such as InLine or Backlight.



# Inspiration



**Bring the Clouds Inside with Diffused Micro-Perforations**



**Unique Pattern of Micro-Perforations Add Subtle Texture**



**Easily Integrate Lighting and Illuminate Your Space**



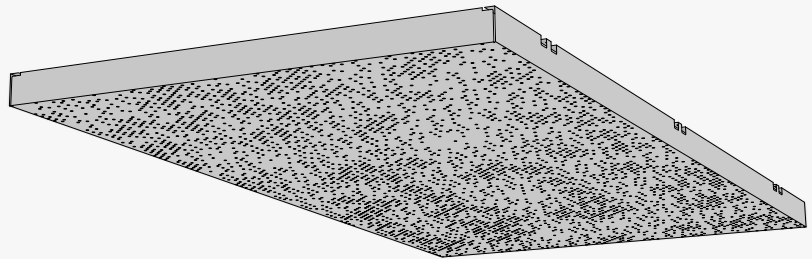
# Overview

- 1 Understanding the System
- 2 Optional Accessories
- 3 Available Finishes
- 4 Product Specifications

## 1 Understanding the System

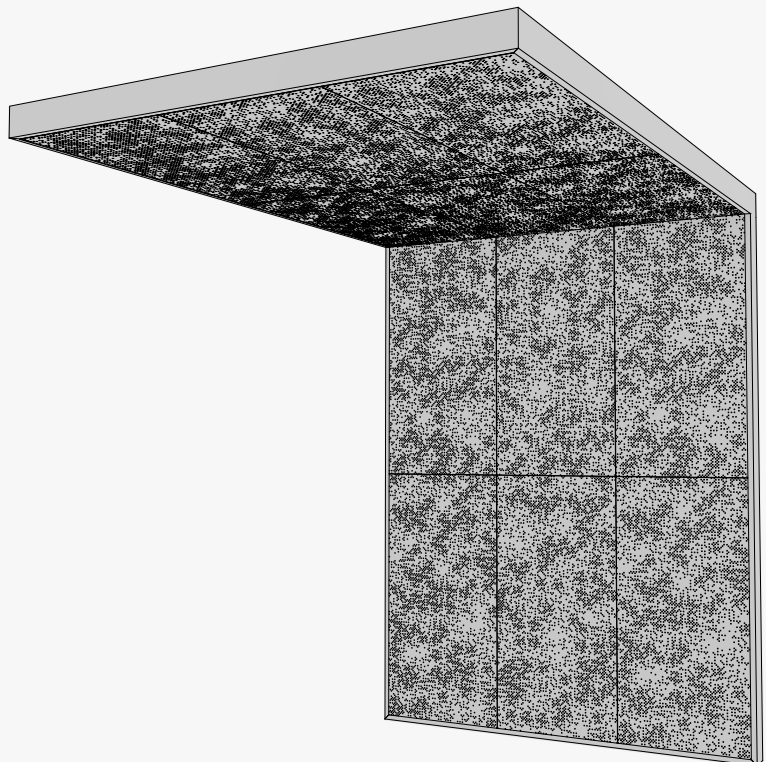
### Standard Panel

Particle® is a modular accessible aluminum panel system designed to work with torsion grid. Customization is available.



### Seamlessly Join Walls & Ceilings

Particle® easily transitions from one plane to another and around corners.



1 Understanding the System

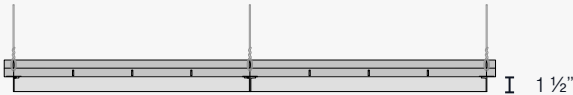
Understanding the Panel

The pattern surface is created using 4 unique tiles in a specific arrangement that minimizes visual repetition across your space.

- Panel A: 4% Open
- Panel B: 5% Open
- Panel C: 4% Open
- Panel D: 5% Open

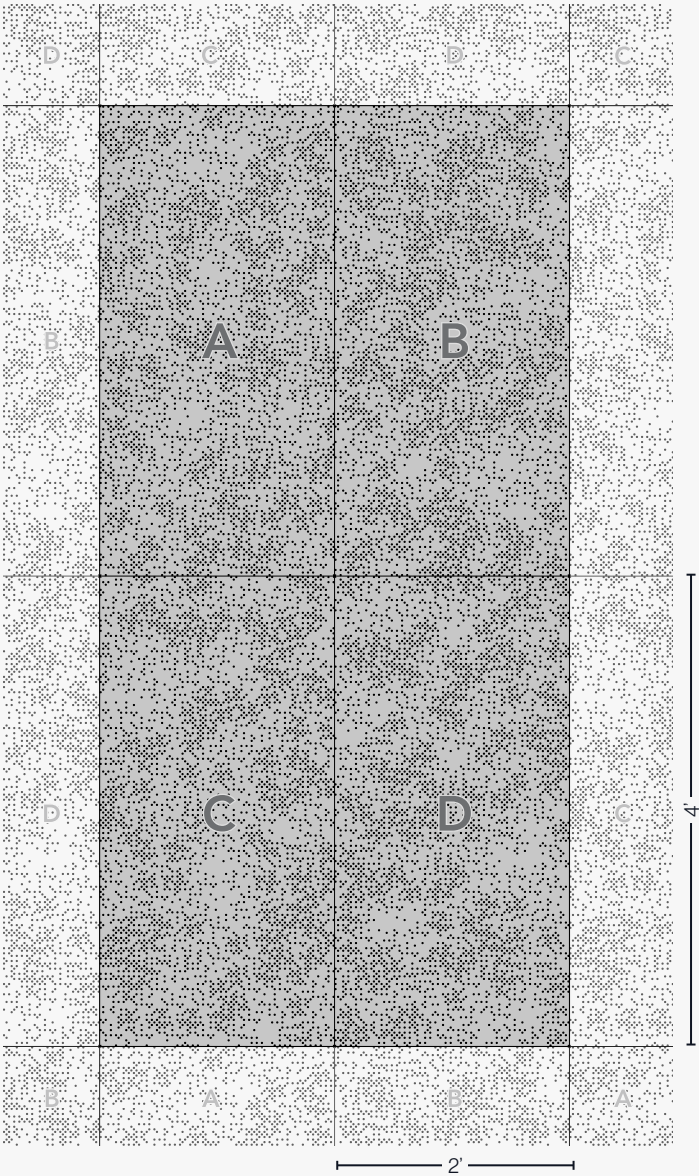
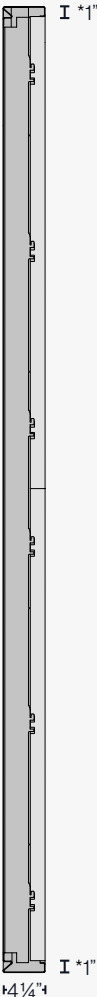
\* Vertika<sup>®</sup> Trim

Ceiling Section



Panel Configuration, Wall or Ceiling

Wall Section



⚠ All dimensions nominal.



# 1 Understanding the System

## Accessory Options - Ceiling

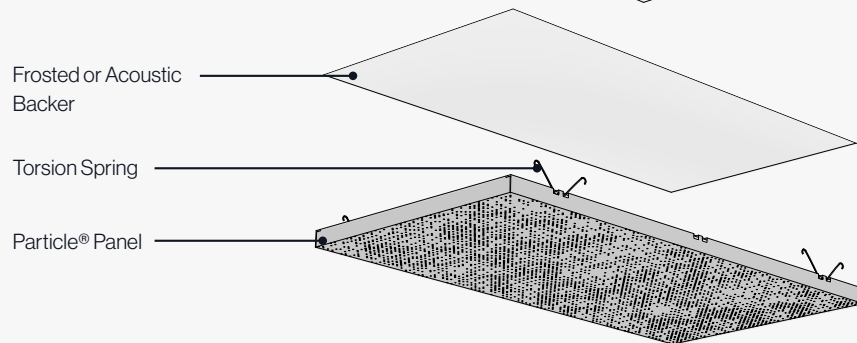
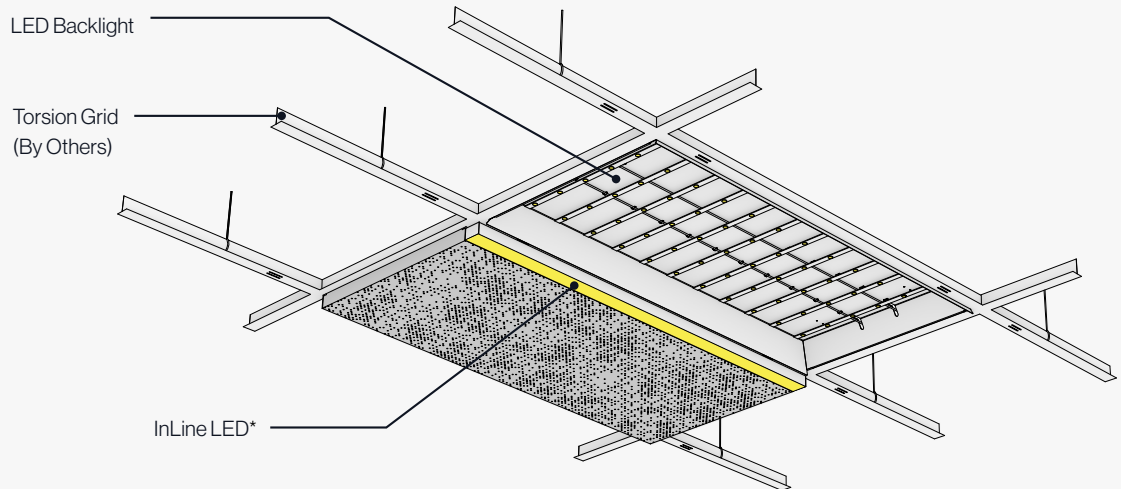
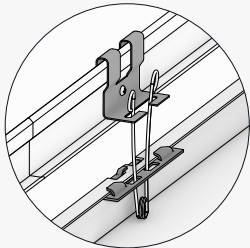
- Frosted light diffusing backer
- Non-woven acoustic fabric backer
- Backlight
- InLine downlight

*i* Check out our Configuration examples on PAGE 10.

\* A Specific Inline light panel is used to accommodate the width of the fixture within the 2' width.

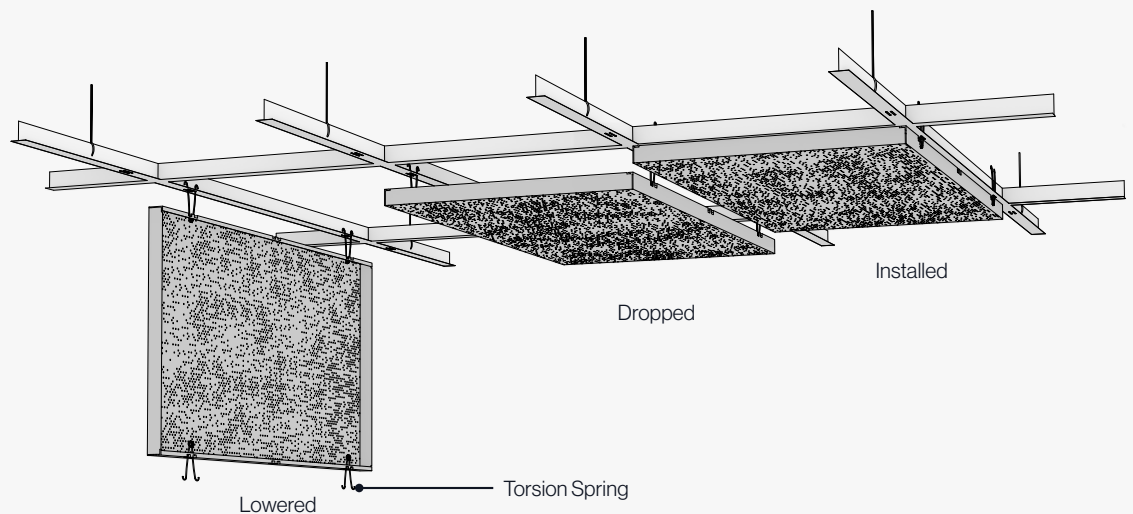
### Torsion Spring Adapter Clip

Interested in using standard t-grid? Use our Torsion Spring Adapter Clip.



## Attachment System - Ceiling

Torsion Spring clips allow for rapid install and easy access for maintenance above the grid post install.



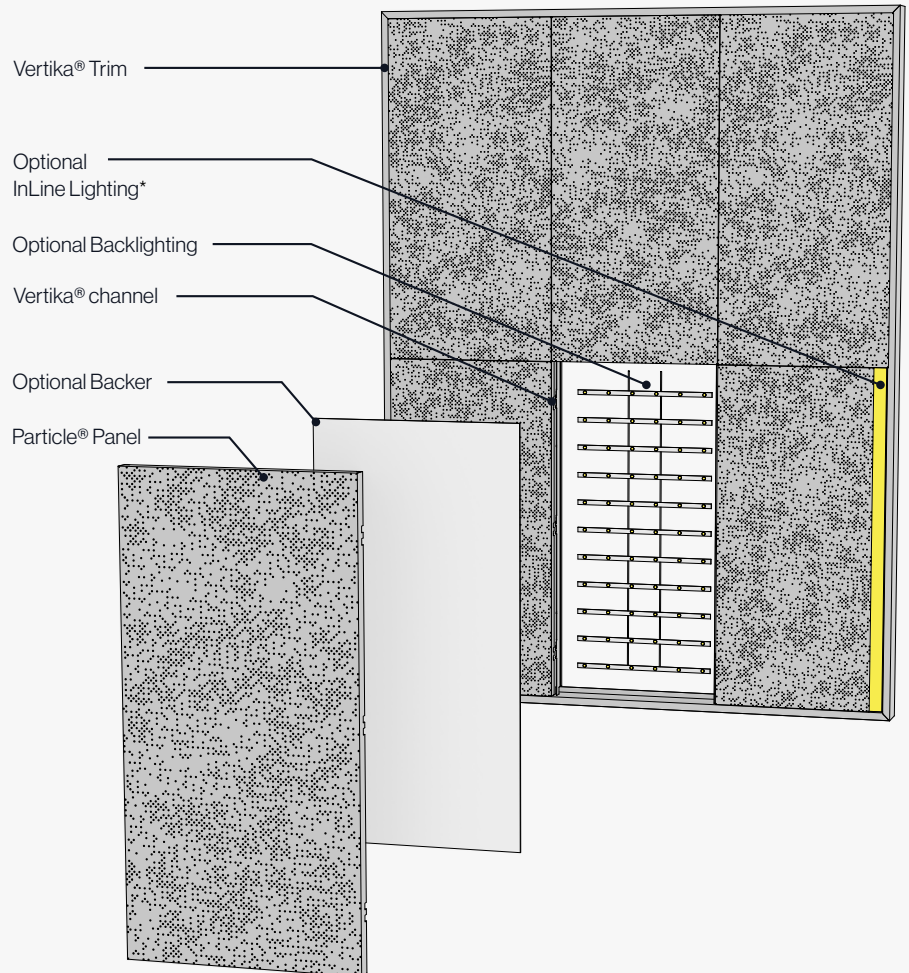
# 1 Understanding the System

## Accessory Options - Wall

- Frosted light diffusing backer
- 1/2" acoustic backer
- Backlight
- InLine light

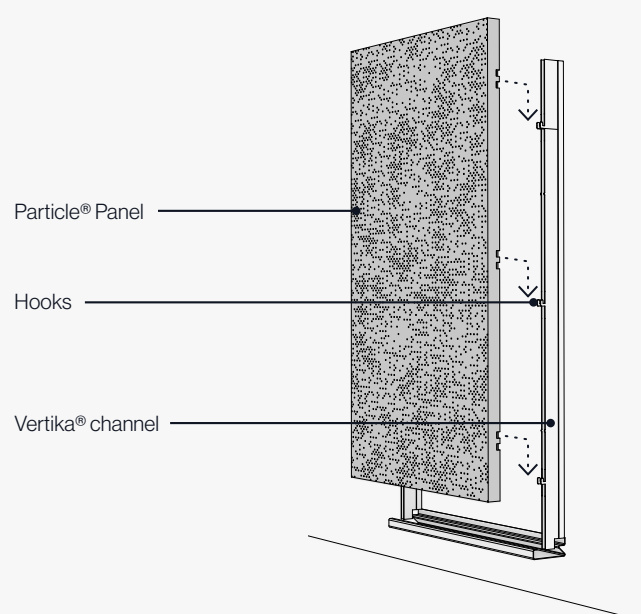
① Check out our Configuration examples on PAGE 10.

\* A Specific InLine light panel is used to accommodate the width of the fixture within the 2' width.



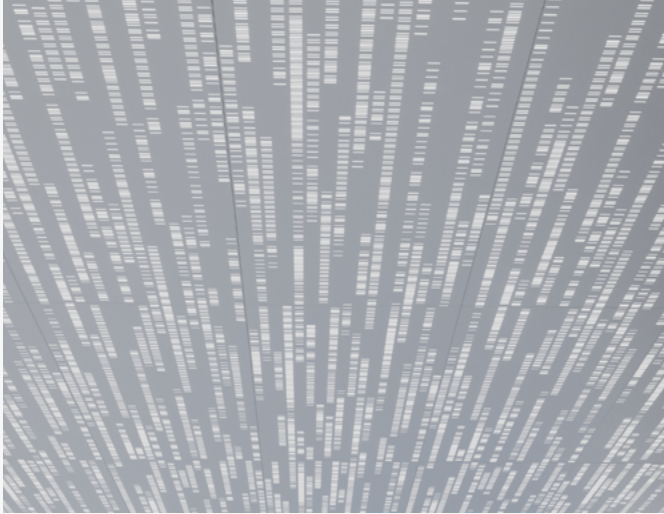
## Attachment System - Wall

Panels are easily installed or removed by sliding onto or lifting off from the system's Vertika® channel hooks.



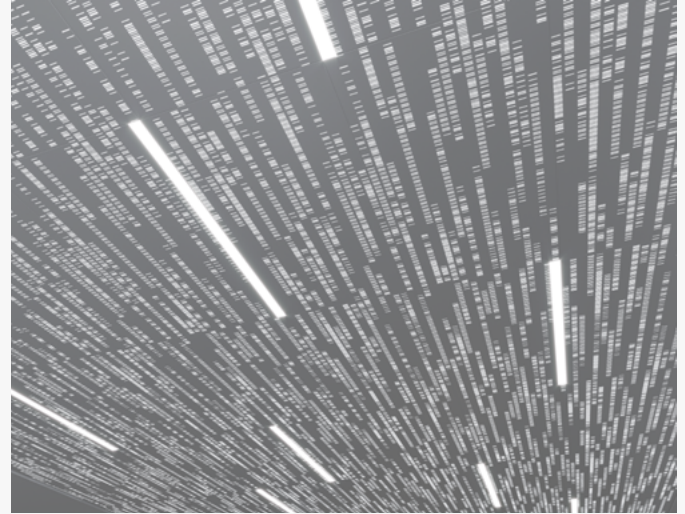
## 2 Optional Accessories

### Lighting



#### Backlighting

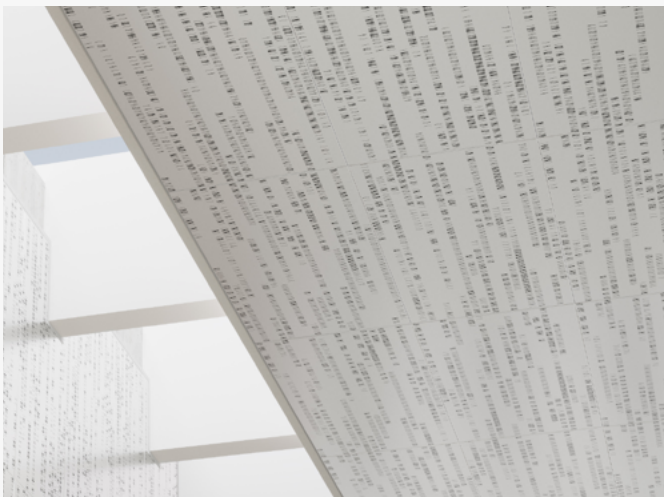
Arktura Backlighting allows you to fully illuminate your ceiling and wall panel installs, creating beautiful evenly lit surfaces. These fixtures are available in high and low output versions, both dimmable. See Backlighting specs details on PAGE 16.



#### InLine Lighting

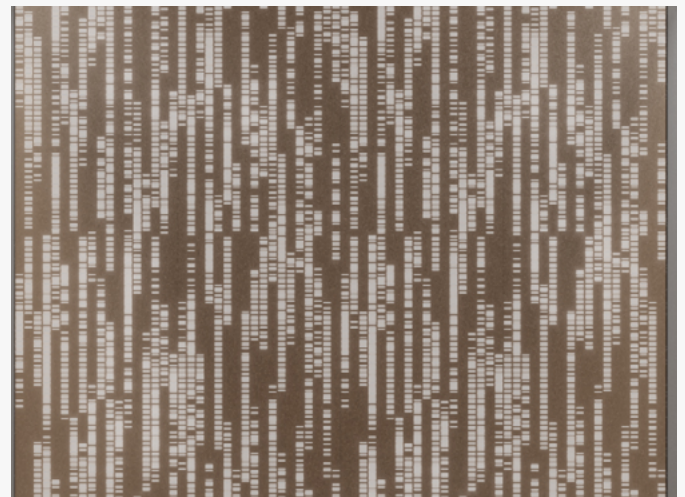
Our InLine Light sits flush with the face of the panels while conveniently attaching to the bottom of the grid. The fixture is available in 4' and 8' lengths. A special side-light Vapor® panel allows the light to straddle its 4' edge while staying within a 24" overall width. See Inline Lighting specs details on PAGE 18.

### Backers



#### Acoustic Backer

We offer various options of non-woven acoustic fabric panel inserts to achieve a variety of NRC ratings. Please refer to our True NRC® table of ratings.



#### Translucent Backer

Our proprietary light diffusing backers can be used to create a functional or decorative lighting effect in any space.

 Illustrative images. Patterns may not match the product.



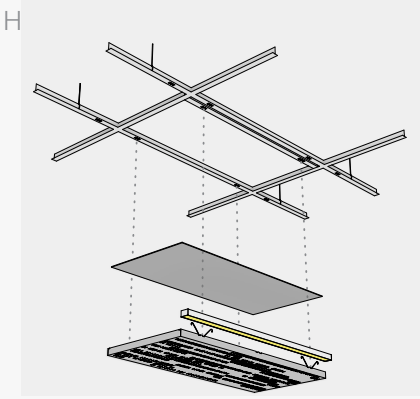
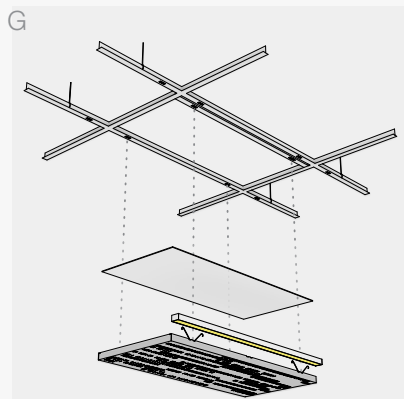
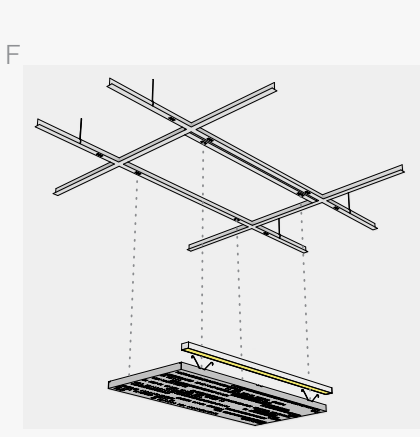
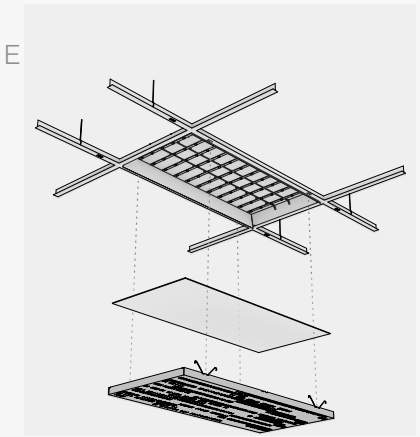
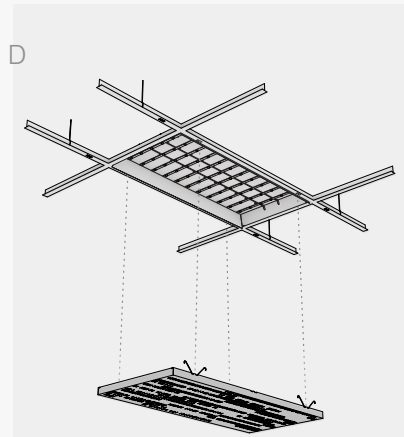
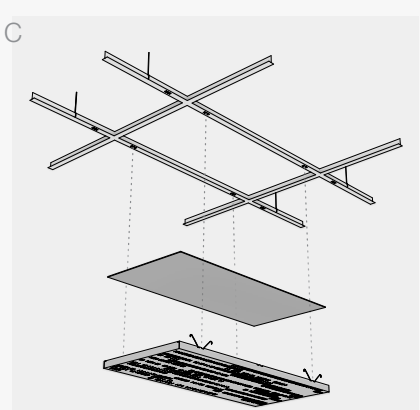
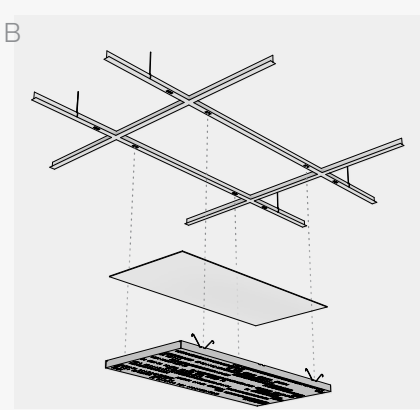
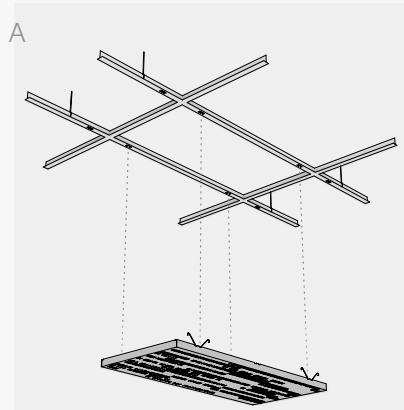
2 Optional Accessories

Possible Configurations

Refer to the chart and corresponding diagrams below for available configuration options.

|           | No Backer | Translucent Backer | Non-Woven Acoustic Backer |
|-----------|-----------|--------------------|---------------------------|
| No light  | A         | B                  | C                         |
| Backlight | D         | E                  |                           |
| InLine    | F         | G                  | H                         |

Looking to combine backlight with acoustic performance in the same panel? Check out our VaporSoft® line.

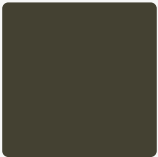
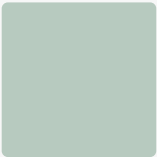
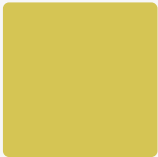
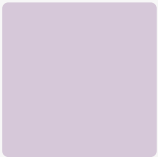
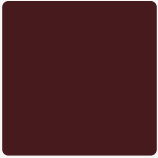
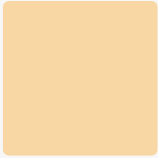
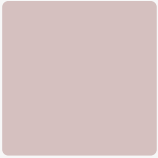


Illustrative diagrams. Patterns may not match the product.

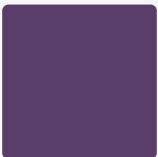
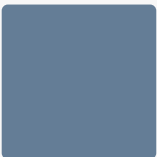
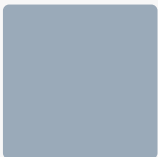
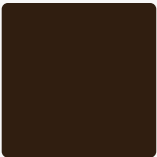
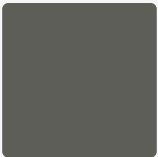
3 Available Finishes

Aluminum Panel

**Powder Coat**  
Standard Finish  
Inspired by our  
Vivids Collection

|                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |  |  |
| Seaweed<br>●                                                                      | Oasis                                                                             | Mint<br>●●                                                                        | Tropica<br>●●                                                                       | Moonwalk                                                                            |
|  |  |  |  |  |
| Berry                                                                             | Ruby<br>●                                                                         | Papaya<br>●                                                                       | Lemonade<br>●●                                                                      | Pismo<br>●                                                                          |

**Powder Coat**  
Standard Finish  
Inspired by our  
Elementals Collection

|                                                                                     |                                                                                     |                                                                                     |                                                                                       |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|   |   |   |   |   |
| Garnet<br>●                                                                         | Seaside<br>●                                                                        | Haze                                                                                | Seaglass<br>●                                                                         | Harvest                                                                               |
|  |  |  |  |  |
| Earthen<br>●●                                                                       | Cacao<br>●●                                                                         | Terra<br>●●                                                                         | Evergreen<br>●                                                                        | Basalt<br>●●                                                                          |

Available in:

- **AAMA 2604** Color
- **AAMA 2604** or **2605** Color

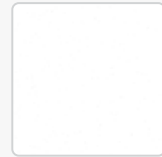
\*Non stock, fee **upcharge**

### ③ Available Finishes

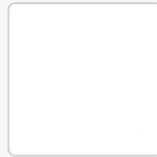
#### Aluminum Panel

##### Powder Coat

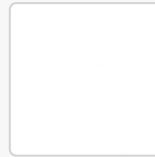
Standard Finish  
Inspired by our  
Essentials Collection



T-Grid White\*  
(Matte)



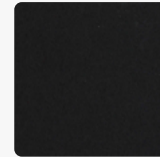
Arktura White  
(Matte)



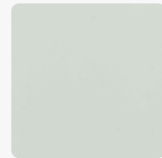
Brilliant White\*  
(Gloss)



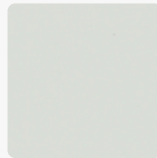
Silver Metallic  
(Semi Gloss)



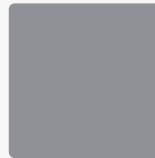
Jet Black  
(Matte)



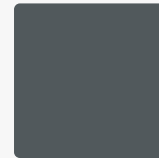
Aviator Gray  
(Gloss)



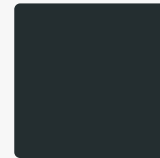
Aviator Gray  
(Matte)



Steel Gray



Shadow



Midnight



Coffee



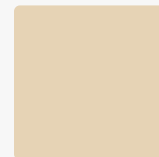
Raw Umber



Caramel



Sandstone



Oat



Sunflower\*



Torch



Spirit Red  
(Matte)



Redwood



Boysenberry



Azure\*



Blue Steel\*



Harbor Blue



Forest Green

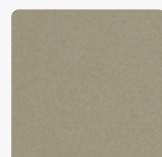


Hartford Green

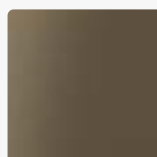


##### Powder Coat

Premium Metallic  
Finish



Chilled Champagne  
(Semi Gloss)



Sun Kissed  
Bronze

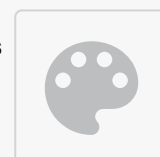


Burnished Bronze  
(Semi Gloss)



##### Custom Powder Colors

We offer premium non-stock RAL and custom color match options as well. Contact your sales rep for more information.



Non-stock  
Metallic



Non-stock  
RAL

Available in:

- AAMA 2604 Color
- AAMA 2604 or 2605 Color

\* Non stock, fee **upcharge**

\* This color was designed to pair with Armstrong color "WH" grid and trim.

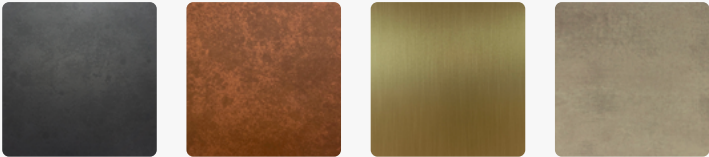


3

Available Finishes

Aluminum Panel - Pure+FreeForm & Powder Coat

Metallic Patinas \*  
Premium



HollywoodParisian RustHampton BrassVintage Nickel

Metal Powder  
Coat Color



SlateOxideGoldenrodPewter

Metallic  
Wood Texture \*  
Premium



Roma NoceRustic TimberAutumn CherryPearl White OakMiele Maple

Metal Powder  
Coat Color



MochaTerracotaGingerbreadFlaxFlax

\* Pure + FreeForm trims are only available for Wall application. If the installation has a transition between wall and ceiling, Powder Coating must be used.

ⓘ All premium and standard finishes shown are designed for interior specifications. Products may be specified for exterior use, and with alt treatments required by local code or facility, including custom color match or specialty finishes. Any changes to specification from interior standard or interior premium will result in a custom powder coat fee.

③ Available Finishes

Optional Translucent Backer

**Polycarbonate**

Available in interior and UV stable exterior options.



Frosted

Optional Acoustic Backer

**Non-Woven  
Acoustic Fabric**

Standard  
(0.27mm thick textile-like material)



White



Black

4 Product Specifications & Certifications

System Specs

|                                                     |                                                                              |
|-----------------------------------------------------|------------------------------------------------------------------------------|
| Panel Size (WxHxD)                                  | 2' x 4' x 1½"                                                                |
| Material                                            | Aluminum                                                                     |
| Openness in Plan                                    | 4%                                                                           |
| Fire Rating                                         | ASTM E84 - Class A                                                           |
| Acoustics (with optional non-woven acoustic backer) | True NRC® 0.50: Ceiling ; E-300 Method<br>True NRC® 0.55: Wall ; F-70 Method |
| Ceiling Attachment                                  | Torsion Grid (By Others)                                                     |
| Wall Attachment                                     | Vertika® Wall (Refer to Vertika® Brochure)                                   |
| Accessibility                                       | Torsion Spring Hinge                                                         |
| Trimmability                                        | Yes, per installation manual                                                 |
| Accessories                                         | Non-woven acoustic backer, Translucent Backer, Backlight, InLine Light       |

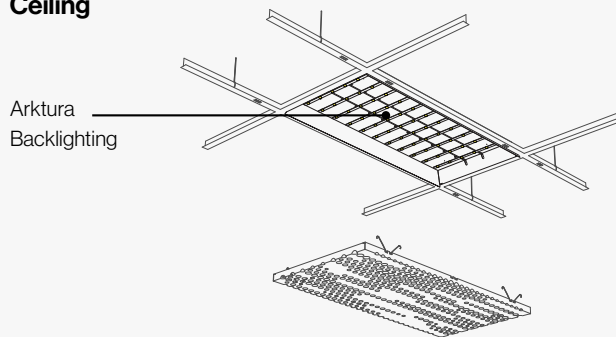
This product may be the subject of one or more patents or pending patent applications.  
See [www.arktura.com/intellectual-property](http://www.arktura.com/intellectual-property) for related patent information.



# Arktura Backlighting Specs

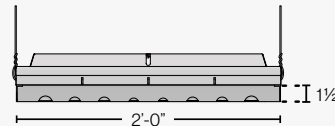
Available in dimmable low and high output variations, gives you the power to illuminate spaces and create dynamic visual effects.

## Ceiling

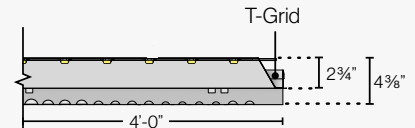


## Sections - Ceiling

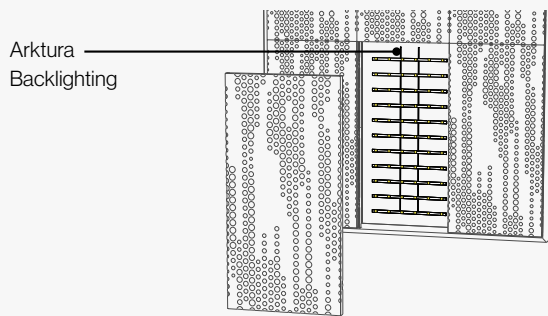
Front view



Side view



## Vertika<sup>®</sup> Wall

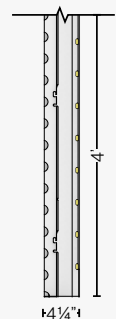


## Sections - Wall

Top view



Side view



## Specs

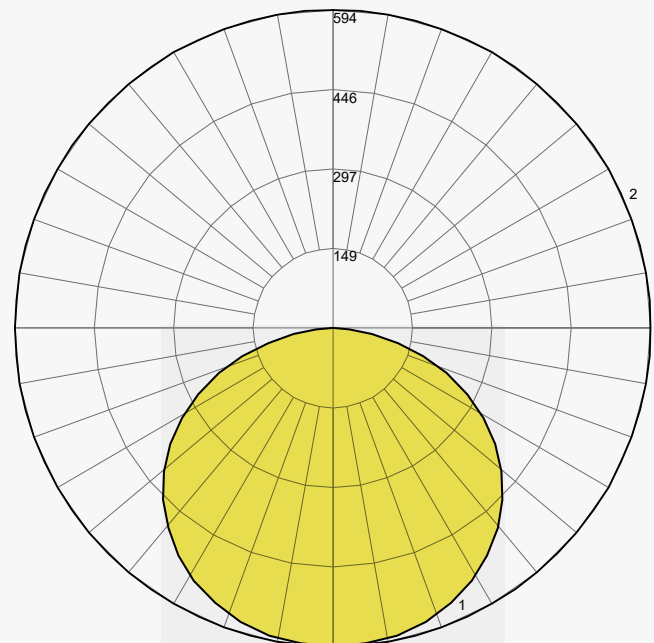
| Product Features      | Arktura Backlighting Eco 2x4 Panel                                         | Arktura Backlighting 2x4 Panel |
|-----------------------|----------------------------------------------------------------------------|--------------------------------|
| Power Consumption     | 18W 24VDC .75A                                                             | 65W 24VDC 2.7A                 |
| Delivered Lumens      | Please Reference Next Page for Specific Openness by Pattern                |                                |
| CRI                   | 90+                                                                        |                                |
| Color Temperatures    | 3000K, 3500K, 4000K                                                        |                                |
| Size (LxWxD)          | 24"x48"x3 1/4"                                                             |                                |
| Optics/Beam Angle     | 160° Batwing Lens Per LED                                                  |                                |
| Operating Temperature | -20C - +50°C (-4F - +122°F)                                                |                                |
| Dimming Options       | TRIAC/Phase, ELV, MLV, 0-10V, 1-10V<br>When Paired with Arktura LED Driver |                                |
| Emergency             | 50W Emergency Battery Kit AK-EB0001**                                      |                                |
| Cable                 | Factory Installed Plenum Rated CL3P Cable,<br>16AWG 10ft Whip              |                                |
| IP Rating             | IP64                                                                       |                                |
| Enviroment            | Suitable for Wet, Damp or Dry locations                                    |                                |
| Markings              | ETL Listed, Complies with UL 2108 & CSA<br>C22.2#250.13:2020 Ed.4+U1       |                                |
| Lifetime              | L70 - 50,000 hours                                                         |                                |
| Warranty              | 5 Years, Limited                                                           |                                |

## Photometric

Located At Horizontal Angle = 0, Vertical Angle = 0

# 1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)

# 2 - Horizontal Cone Through Vertical Angle (0) (Through Max. Cd.)



\* Represents a 40% Openness Pattern.

\*\* Emergency battery kit sold separately.

Illustrative images.

Patterns may not match the product.

# Arktura Backlighting % Open & Lumen Output

## Backlighting % Open & Lumen Output

| Product               | % Open | 18W Arktura Backlight<br>Eco Lumen Output | 65W Arktura Backlight<br>Lumen Output |
|-----------------------|--------|-------------------------------------------|---------------------------------------|
| Vapor® Cora           | 68%    | 1176                                      | 3361                                  |
| Vapor® Bloom          | 20%    | 400                                       | 1118                                  |
| Vapor® Breeze         | 23%    | 457                                       | 1276                                  |
| Vapor® Byte           | 6%     | 120                                       | 354                                   |
| Vapor® Cluster Dense  | 40%    | 759                                       | 2124                                  |
| Vapor® Cluster Sparse | 10%    | 203                                       | 577                                   |
| Vapor® Cumula         | 18%    | 362                                       | 1012                                  |
| Vapor® Element 605    | 6%     | 120                                       | 354                                   |
| Vapor® Element 3212   | 32%    | 621                                       | 1734                                  |
| Vapor® Element 3428   | 34%    | 656                                       | 1833                                  |
| Vapor® Frequency      | 10%    | 203                                       | 577                                   |
| Vapor® Liana          | 17%    | 342                                       | 959                                   |
| Vapor® Gradients      | 17%    | 342                                       | 959                                   |
| Vapor® Sky            | 19%    | 381                                       | 1065                                  |
| Vapor® Pixel          | 19%    | 381                                       | 1065                                  |
| Vapor® Syntax         | 6%     | 120                                       | 354                                   |
| Vapor® Trail          | 24%    | 476                                       | 1328                                  |
| Vapor® Shift X        | 53%    | 965                                       | 2723                                  |
| Vapor® Transit        | 10%    | 203                                       | 577                                   |
| Vapor® Bond           | 7%     | 141                                       | 410                                   |
| Vapor® Verve          | 14%    | 283                                       | 797                                   |
| Vapor® Dappled        | 34%    | 656                                       | 1833                                  |
| Vapor® Horizon        | 33%    | 639                                       | 1784                                  |
| Vapor® Radia          | 34%    | 656                                       | 1833                                  |

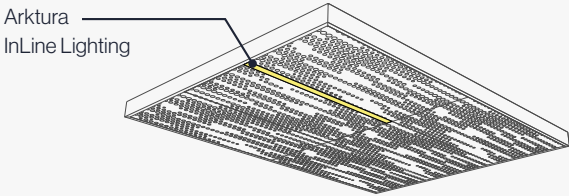
| Product                       | % Open | 18W Arktura Backlight<br>Eco Lumen Output | 65W Arktura Backlight<br>Lumen Output |
|-------------------------------|--------|-------------------------------------------|---------------------------------------|
| VaporSoft® Cluster Dense      | 40%    | 759                                       | 2124                                  |
| VaporSoft® Cora               | 68%    | 1176                                      | 3361                                  |
| VaporSoft® Trail              | 24%    | 476                                       | 1328                                  |
| VaporSoft® Cluster Sparse     | 10%    | 203                                       | 577                                   |
| Trace® Curved                 | 55%    | 994                                       | 2811                                  |
| Trace® Slide                  | 8%     | 162                                       | 466                                   |
| Trace® Skew                   | 62%    | 1095                                      | 3112                                  |
| Trace® Slant                  | 43%    | 808                                       | 2266                                  |
| Trace® Straight               | 54%    | 979                                       | 2767                                  |
| Particle® Ion                 | 5%     | 99                                        | 297                                   |
| Particle® Code                | 9%     | 182                                       | 522                                   |
| Particle® Phase               | 4%     | 78                                        | 241                                   |
| Particle® Fuse                | 4%     | 78                                        | 241                                   |
| Particle® Urban               | 10%    | 203                                       | 577                                   |
| Delta Drop® 2x4 Full Pattern  | 12%    | 241                                       | 653                                   |
| Delta Drop® 2x4 Half Pattern  | 7%     | 134                                       | 390                                   |
| Delta Drop® 4x4 Full Pattern* | 14%    | 538                                       | 1514                                  |
| Delta Drop® 4x4 Half Pattern* | 7%     | 268                                       | 779                                   |

\* Delta Drop® 4x4 shown with two Light Fixtures per panel.

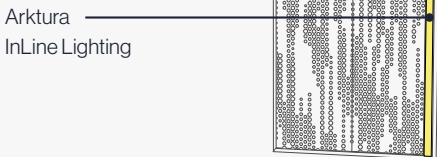
# Arktura InLine Lighting Specs

Makes it easy to seamlessly integrate linear lighting into the design of your paneling.

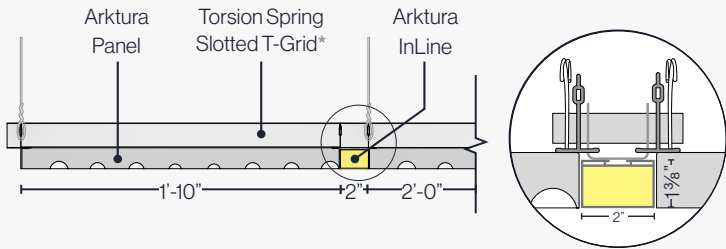
## Ceiling



## Vertika<sup>®</sup> Wall

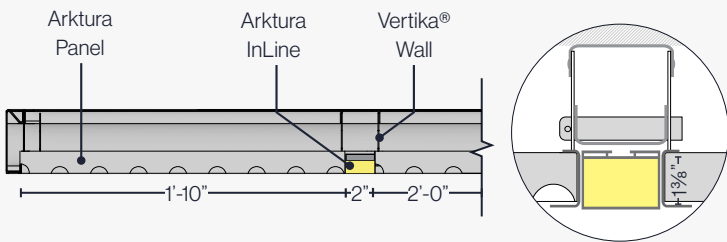


## Elevations - Ceiling



\*7301TS Prelude XL 12' HD Main Beam slotted for torsion spring.

## Top View - Wall



## Arktura InLine System

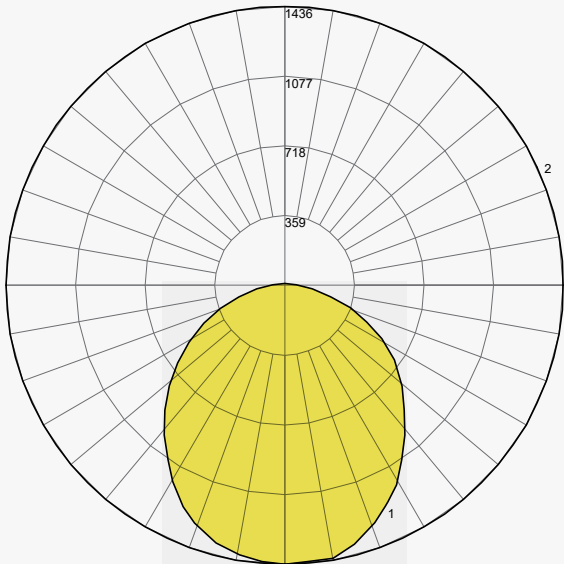
| Description |                              | W/ft | Fixture Watts | lm/ft | Fixture Lumens | LM/W* |
|-------------|------------------------------|------|---------------|-------|----------------|-------|
| 4 Foot      | Arktura InLine 3.5 W/ft - 4' | 3.5  | 14            | 349   | 1396           | 102   |
|             | Arktura InLine 5W/ft - 4'    | 5    | 20            | 525   | 2100           | 114   |
|             | Arktura InLine 7W/ft - 4'    | 7    | 28            | 614   | 2457           | 98    |
|             | Arktura InLine 10W/ft - 4'   | 10   | 40            | 1021  | 4084           | 110   |
| 8 Foot      | Arktura InLine 3.5W/ft - 8'  | 3.5  | 28            | 349   | 2792           | 102   |
|             | Arktura InLine 5W/ft - 8'    | 5    | 40            | 525   | 4200           | 114   |
|             | Arktura InLine 7W/ft - 8'    | 7    | 56            | 614   | 4914           | 98    |
|             | Arktura InLine 10W/ft - 8'   | 10   | 80            | 1021  | 8168           | 110   |

## Side - Length Options



## Photometric

Located At Horizontal Angle = 0, Vertical Angle = 0  
# 1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (0) (Through Max. Cd.)



## Universal Specs

|                        |                                                                      |
|------------------------|----------------------------------------------------------------------|
| CRI                    | 90+                                                                  |
| Color Temperatures     | 3000K, 3500K, 4000K**                                                |
| Operating Temperatures | -20C - +50°C (-4F - +122°F)                                          |
| Dimming Options        | TRIAC/Phase, ELV, MLV, 0-10V,<br>When Paired with Arktura LED Driver |
| Emergency              | 50W Emergency Battery Kit AK-EB0001 ***                              |
| Cable                  | Factory Installed Plenum Rated CL3P Cable,<br>18AWG 4FT Cable        |
| Enviroment             | Indoor Locations Only                                                |
| Markings               | ETL Listed, Complies with UL 1598 & CSA<br>C22.2#250.0:2021 Ed.5     |
| Lifetime               | L70 - 50,000 hours                                                   |
| Warranty               | 5 Years, Limited                                                     |

\* Efficiency at 3500K 90CRI

\*\* Consult factory for custom color temperatures.

\*\*\* Emergency battery kit sold separately.

Illustrative images.  
Patterns may not match the product.