

Acoustic Design Guide

Featuring: Celest Geometric Pendants





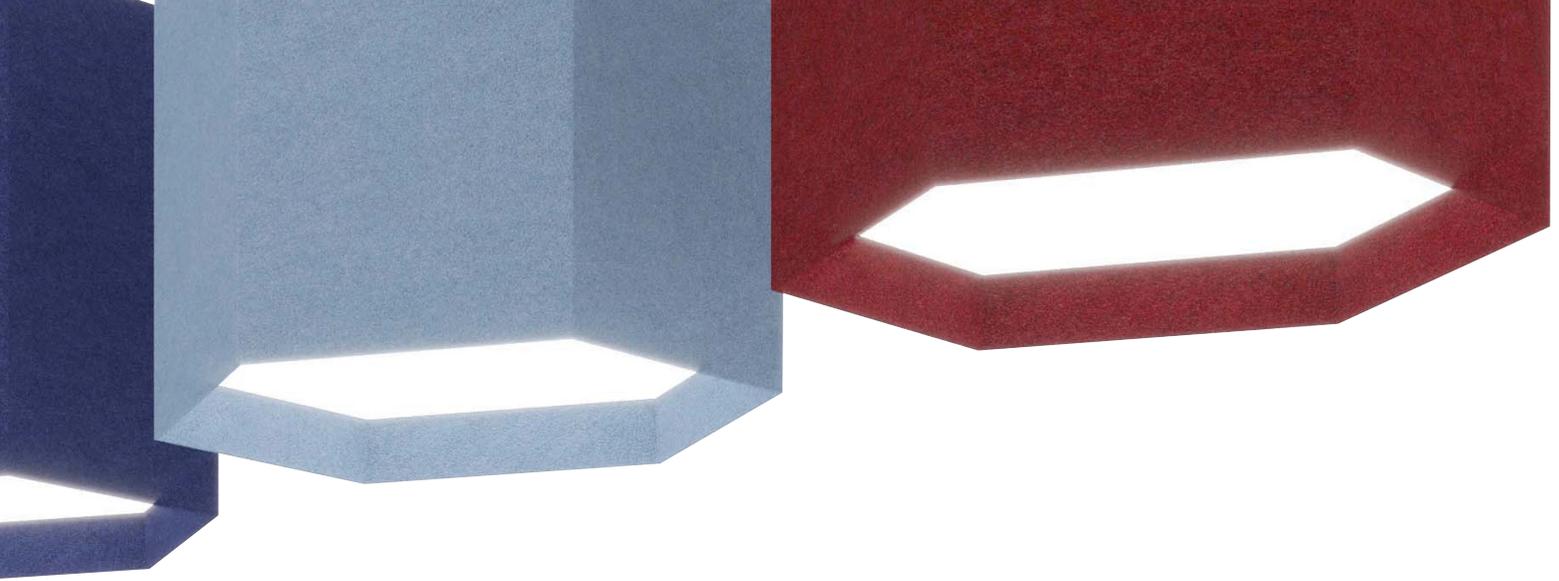
Acoustics

Technology and Calculations

Sound absorption can be expressed in terms of the percentage of energy absorbed compared with the percentage reflected. Every surface in a room absorbs some percentage of sound and reflects the rest. How much is absorbed depends on the surface material and the frequency of the sound. Most sounds cover a lot of frequencies. A **zero rating** means a material **absorbs 0%** of the sound energy that reaches the material and **reflects 100% back**. A **1.0 rating** means a material **absorbs 100%** of the sound energy that reaches the material and **reflects 0% back**.

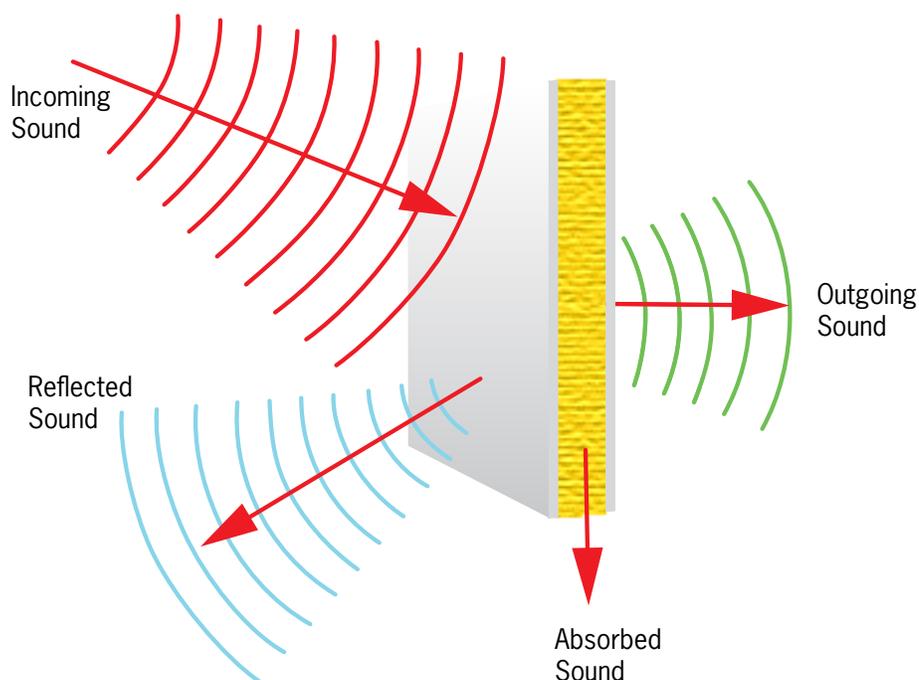
An acoustic material performance is measured using this NRC rating:





NRC (Noise Reduction Coefficient) is a measure of how much sound a surface absorbs across the range of typical human speech. Sabins (in ft^2 or m^2) is a measure of the equivalent area of an object were it made of a material that absorbed 100% of the sound that hits it; put simply $\text{sabins} = \text{real area} \times \text{NRC}$ and is a key part of any acoustic calculation.

Use our Acoustics Calculator to see the impact of acoustic material in your space at: [VisaLighting.com/visa-lighting-acoustic-calculator](https://www.VisaLighting.com/visa-lighting-acoustic-calculator)



Acoustics

Benefits



Reduces background noise



Clearer conversations



Improve peacefulness of the area



Improve the look of the room



Applications

Large Venue & Open Spaces

- Open Offices
- Lobby Atriums
- Theaters
- Auditoriums
- Conference Halls
- Cafeterias
- Libraries
- Sports Arenas



Celest

Acoustic Features Unique to Celest

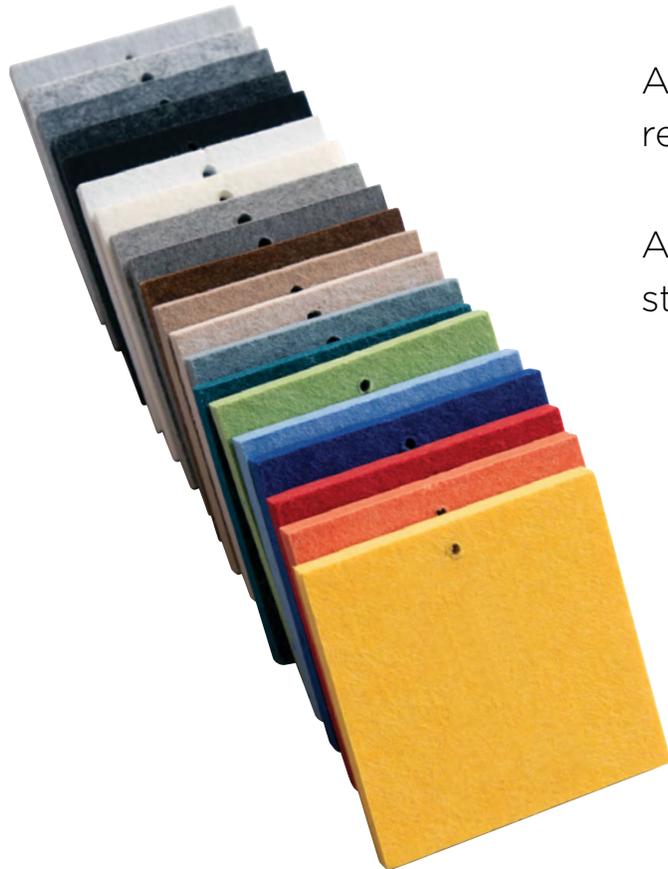
- Most acoustic-dampening light fixtures do not have enough surface area to make a real difference unless many fixtures are used. The Visa Lighting Celest pendants are large enough to provide significant acoustic effects without overloading a space
- The acoustic panels are applied to the sides of the geometric shapes providing multiple, large flat surface areas of sound dampening material
- The acoustic panels used within Celest products provide between 5.4 to 21.7 ft² sabins depending on the model. Adding more surfaces in a space with higher sabins values will decrease the sound reverberation time, leading to a quieter environment





Celest

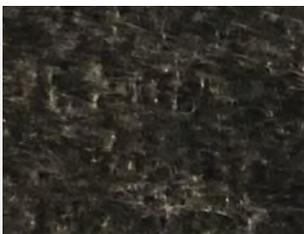
1/2" Acoustic Felt Colors



Acoustic dampening felt is 100% recyclable polyester (PET) material.

Acoustic panels meet fire resistant standard Class A (ASTM E-84).

Celest Standard Felt



SE
Slate



PE
Pewter

Celest Premium Felt

Contact factory for lead time
when ordering premium colors



BRK
Bark



CA
Cadet



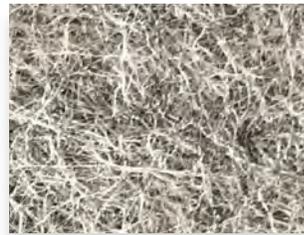
CHA
Chambray



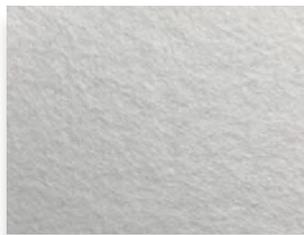
CO
Cobalt



EC
Ecu



FO
Fossil



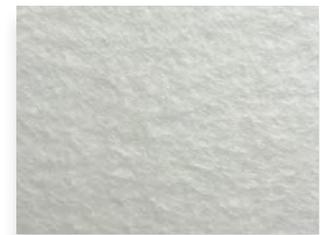
FS
Frost



GRS
Grass



GR
Griega



IV
Ivory



LI
Linen



MAL
Malachite



MA
Mandarin



OC
Ocre



SK
Sky



SM
Smoke



SUN
Sunshine



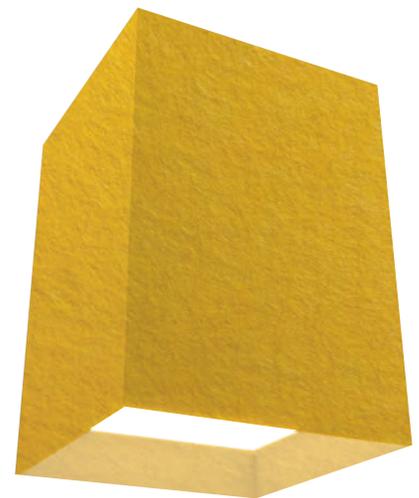
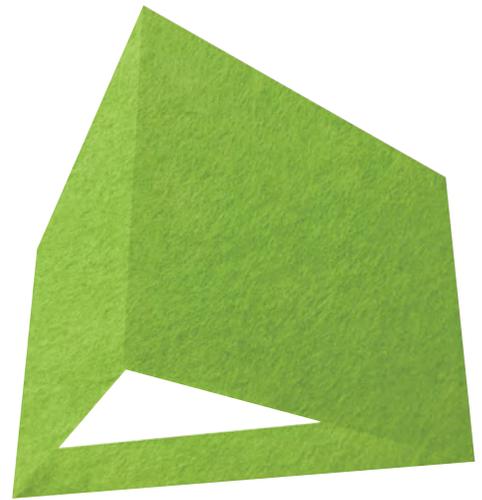
TA
Tar

Celest

Design & Construction

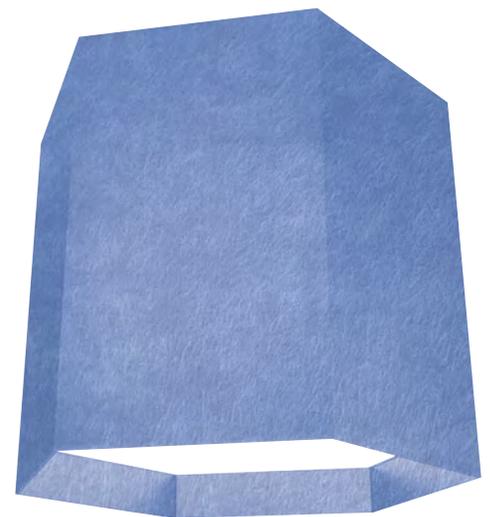
3 Geometric Shapes

- Triangle
- Square
- Hexagon



Panel Suspension and Assembly

- Inner luminous assembly suspended directly by stem, may be suspended and wired separately with outer panels installed later
- Outer panel assembly suspended via aircraft cables to stem collar
- Adjustable fittings concealed behind panels for height and levelling adjustment
- Panels are shipped disassembled for flat packing



Celest

Finishes and Materials

- Acoustic-dampening materials in a broad range of neutral and bright colors
- Also available without acoustic panels
 - 20+ standard powder coat finishes
 - Exclusive eco-friendly metal finishes
- Frosted acrylic top and bottom lenses
- For more information about our finishes visit visalighting.com/finishes



Celest

Eco-Friendly Design

- The Celest collection is constructed with highly recyclable and lightweight aluminum
- The acoustic dampening felt is 100 percent recyclable polyester (PET) material
- To reduce transportation costs and packaging materials, Celest is packed and shipped flat, and the panels can be easily attached on-site



Celest

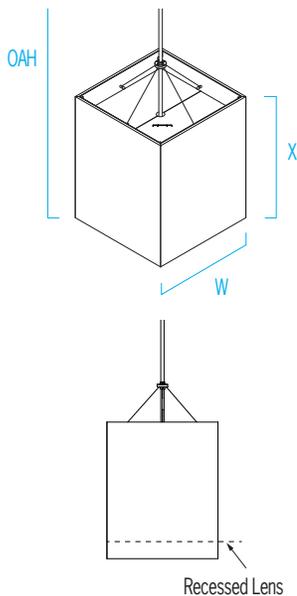
Models



Celest SQ

CP6100/CP6120	
X	48" (1219 mm)
W	35-1/8" (892 mm)
OAH	96" (2438 mm)
WT	<150 lb

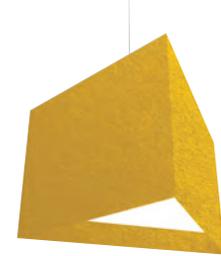
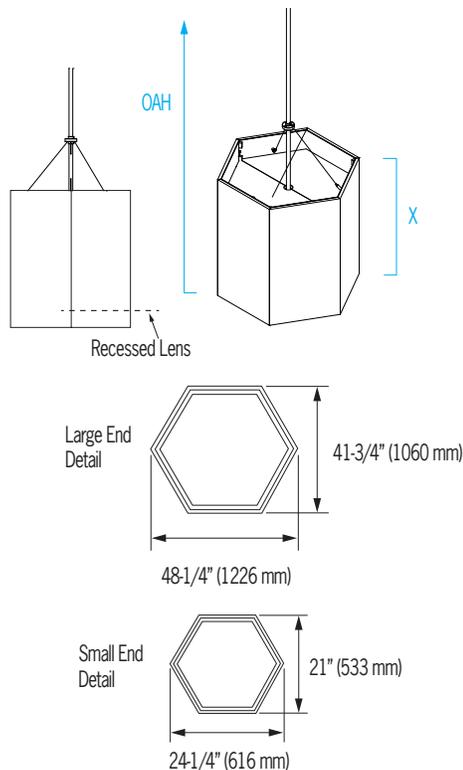
CP6106/CP6126	
X	26" (660 mm)
W	21-1/8" (537 mm)
OAH	72" (1829 mm)
WT	<50 lb



Celest HX

CP6102/CP6122	
X	48" (1219 mm)
OAH	96" (2438 mm)
WT	<150 lb

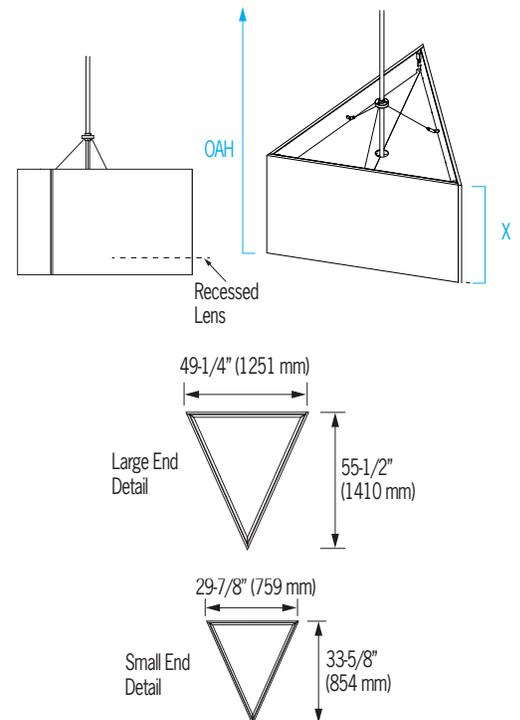
CP6108/CP6128	
X	23-1/2" (570 mm)
OAH	72" (1829 mm)
WT	<50 lb



Celest TR

CP6104/CP6124	
X	36" (914 mm)
OAH	96" (2438 mm)
WT	<150 lb

CP6110/CP6130	
X	18" (457 mm)
OAH	72" (1829 mm)
WT	<50 lb

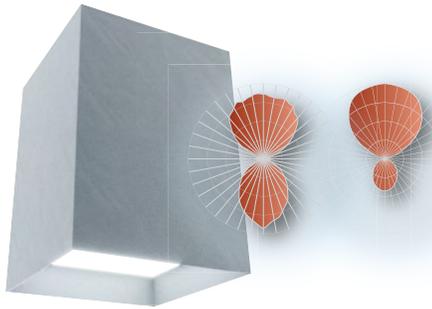


OAH is the distance (in inches) from the bottom of the fixture to the ceiling plane.

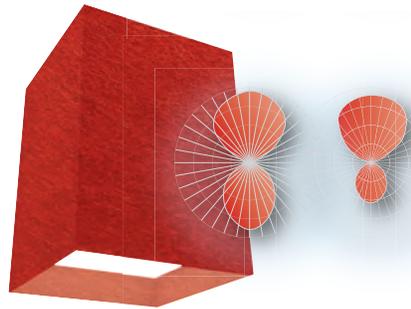
X = Body Height W = Width OAH = Overall Height WT = Weight

Celest

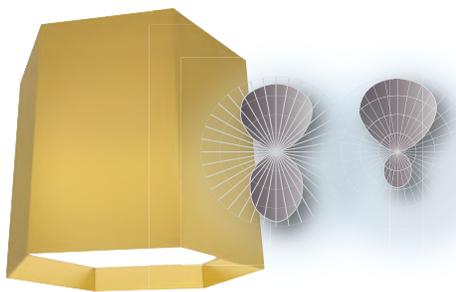
Lighting & Distribution



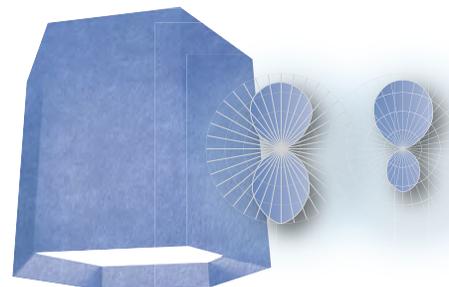
Celest Blade Silver Aluminum



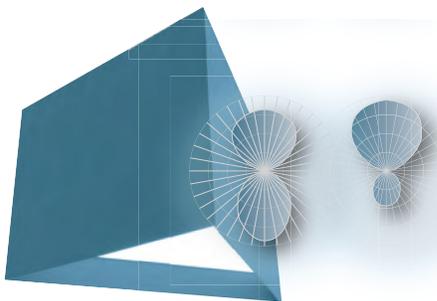
Celest Ocre Acoustic



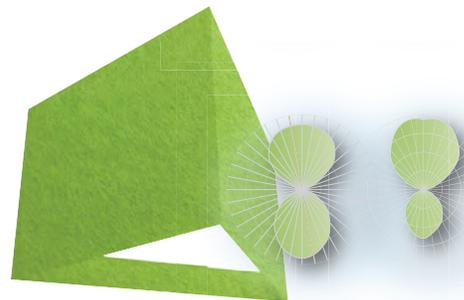
Celest Deoro Gold Aluminum



Celest Sky Acoustic



Celest Cove Blue Aluminum



Celest Grass Acoustic

- High and Low output uplight and downlight available in Semi-Direct (majority uplight) or Direct-Indirect (balanced uplight and downlight) distribution
- Uplight and downlight separately switched and dimmed (may be wired together)
- Large lenses for even illumination that is comfortable and glare free
- Color temperatures including 3000K, 3500K, and 4000K
- Minimum 80CRI, Optional 90+ CRI
- 0-10V dimmable to 1%
- Lumen Maintenance Rating L90 (reported) > 55,000

Celest

Customization

- Custom colors and finishes
- Mix and match panel colors
- Alternate control options
- Designed to be canvas-like — a blank slate for a designer's ideas
 - Logos, patterns, and other custom designs can easily be added
 - Shapes and perforations cut into the panels
 - Luminous and non-luminous cut-outs





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AC-Acoustic Design-Rev A-06072021

