

# **Product Specifications**

Light Engine: Mid-power LEDs; 80+ CRI and 90+ CRI
Output: Up to 1,070lm/ft; up to 103lm/W

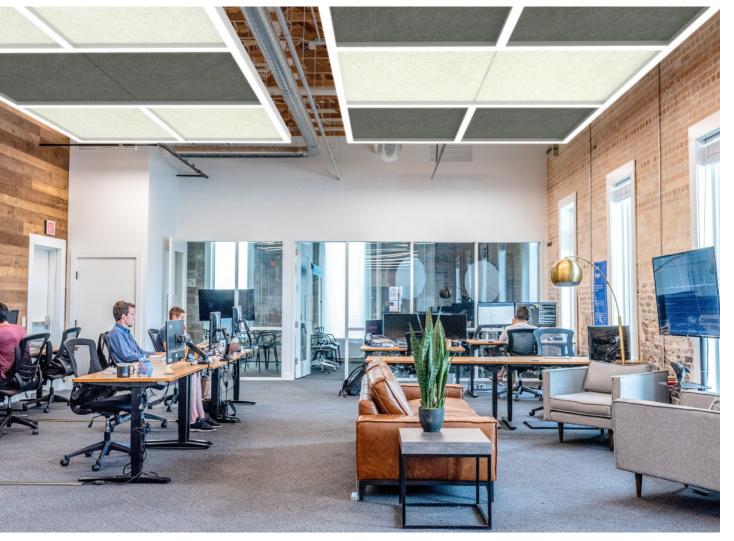
**CCT:** 2700K, 3000K, 3500K, 4000K, RGBW; 3-Step Binning

**BIOS LED** 

Shielding: LED Optimized White Lens, Microprism, Unlit Housing with Blank Cover

Mounting:Cable, Swivel Stem, Rigid Stem, Surface MountOptions:Dimming, Damp Location, In-Line Fuse, Emergency,

Standalone Unlit, Unframed Acoustic Panels



Rendering with rectangular configuration with Gunmetal and Pearl acoustic panel colors

## The Family Offering

M60 LED Shapes Acoustic is offered in multiple shapes and sizes to fit any space. Use individual luminaires or contact the factory for project-specific configurations.



### Triangle:

Available in 2', 3', and 4' segment lengths



#### Square:

2' x 2'  $3' \times 3'$ 

4' x 4'



### Rectangle:

2' x 3' 2' x 4'

3' x 4'

3' x 5'\* 3' x 6'\* 4' x 5'\* 4' x 6'\*

 $2' \times 7'*$ 2' x 8'\*

3' x 7'\* 3' x 8'\*

4' x 7'\* 4' x 8'\*

\*Multiple-piece acoustic panel configurations



#### Hexagon:

Available in 2', 3'\*, and 4'\* segment lengths

\*Multiple-piece acoustic panel configurations

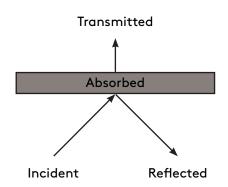
## Importance of Acoustical Luminaires

Sound absorbing luminaires go beyond the need for quality of lighting and extend into a world of sound control. With M60 LED Shapes Acoustic, expect the same quality of light and optical performance with the added functionality of sound absorption.

Use M60 LED Shapes Acoustic to provide an enjoyable audible experience and a visually striking space. Improve the architectural environment for occupants by reducing noise and sound reflecting surfaces. Not only do the acoustical luminaires absorb sound, but they elevate the overall look of the space with various shapes, materials, and colors. As open ceilings and sound reflecting surfaces have become more prevalent, there is more demand for luminaires like the M60 LED Shapes Acoustic. Provide excellent lighting and acoustic comfort all in one luminaire.

### Fundamentals of Acoustics

To understand the basics of acoustics, we'll use the graphic to the right. Sound waves that travel towards a reflecting surface are called the incident sound waves. When a sound strikes any given material, some of that sound will be absorbed, some will be transmitted through the other side, and some will be be reflected. The unabsorbed sound waves can become an echo or reverberation, both of which can only be mitigated with sound dampening materials. The 12mm PET felt acoustic panels used in the M60 LED Shapes Acoustic reduces echoes and reverberation within a space.



### Noise Reduction Coefficient (NRC)

The NRC of an acoustical material is the average of how absorptive it is at various frequencies. Usually, an NRC of 0 indicates perfect reflection and a value of 1 indicates perfect absorption. Although, depending on testing methodology, products can have an NRC greater than 1.

For example, an NRC of 0.90 means that 90% of the sound is absored and the other 10% is dissipated. The reverberation in a space is less with a higher NRC value.

M60 LED Shapes Acoustic has an NRC value up to 0.90 making it an industry leading acoustic felt luminaire. Complete acoustic test results can be found on our website.

Material	NRC
Marble	0.0
Drywall	0.15
Carpet	0.4
Ceiling Tiles	0.7
M60 LED Shapes Acoustic	0.90

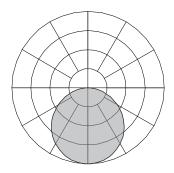
## Sound Absorption Average (SAA)

This single number rating is derived from measured values of sound absorption coefficients in accordance with ASTM C423. It provides an overall estimate of the sound absorptive property of an acoustical luminaire.

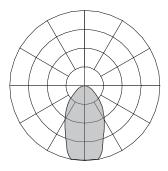
For ASTM C423 data and Apparent SAA values, contact the Selux factory or discuss with the project acoustician to validate effectiveness of the luminaire in the space.

## Optical Shielding

M60 LED Shapes Acoustic is offered with the highly efficient LED Optimized White Lens (LW) and the Clear Lens with Microprism (MI). These optical shieldings will provide an exceptional quality of light and are ideal for general architectural lighting applications.

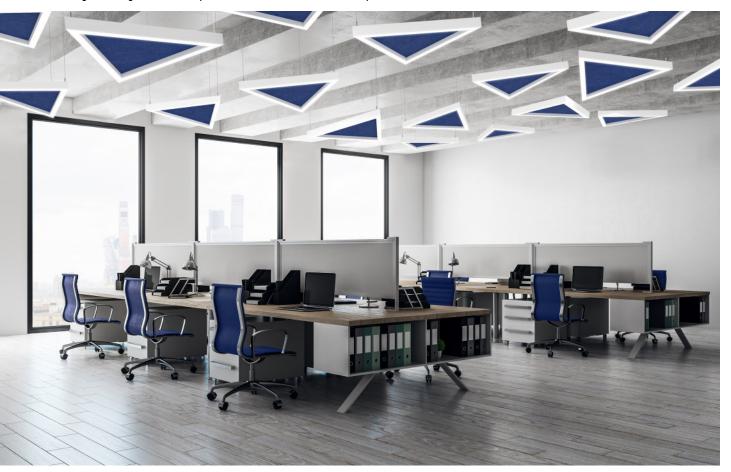


LW - LED Optimized White Lens (up to 102lm/W) Application: general illumination



MI - Clear Lens with Microprism (up to 119lm/W) Application: low glare, focused task illumination

Rendering with triangular M60 LED Shapes Acoustic fixtures with Cobalt acoustic panel color



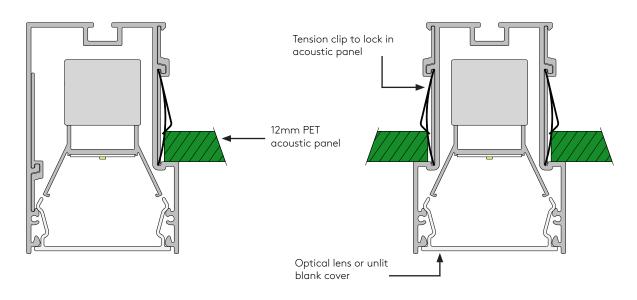
Built environments can retain sounds that are distracting and disruptive to work or relaxation. The indoor environment should be a place of comfort. Use the M60 LED Shapes Acoustic to significantly reduce sound reverberation.

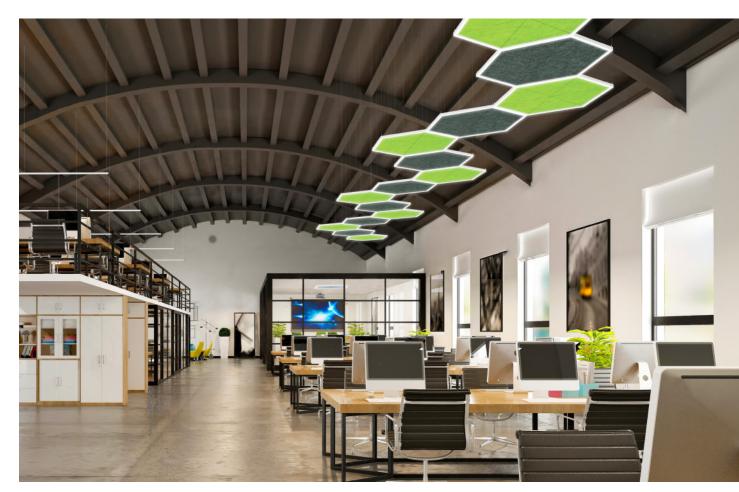
# The Design

Single-sided and double-sided housings allow for design flexibility and allow the designer to create clusters of acoustical panels and project-specific luminaire layouts, ultimately controlling noise in the space and unbeatable lighting quality.

Single-Sided Acoustic Panel Housing

**Double-Sided Acoustic Panel Housing** 





Rendering of hexagonal M60 LED Shapes Acoustic configuration with Pistachio and Emerald panel colors

### Acoustic Panels in M60

#### Single or Multiple-Piece

Due to material sizes, some shapes must come with multiple-piece acoustic panels.

**Triangles and Squares:** For 2′, 3′, and 4′ leg lengths, single piece panels will be provided.

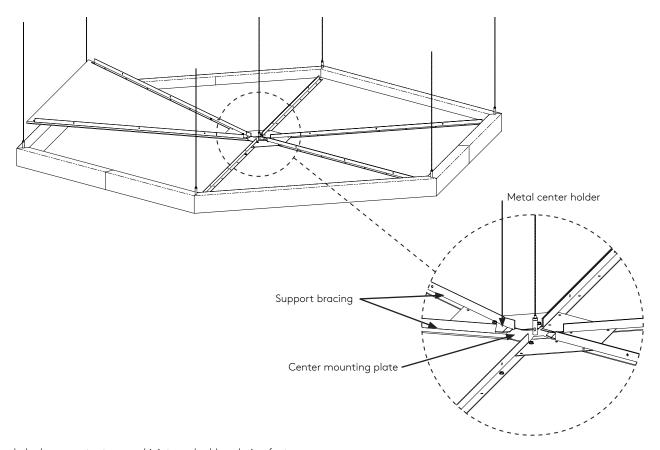
**Rectangles:** Any side larger than 4' will be made up of two square or rectangular pieces, evenly split in the middle.

**Hexagons:** For 2' leg lengths, single piece panels will be provided. For 3' and 4' leg lengths, six triangular pieces will be provided.

All joints of multiple-piece panels have a beveled edge which accentuates the joint and adds a design feature.

#### Multiple-Piece Installation

Fixtures requiring multiple-piece acoustic material will have support bracing and a metal center holder preinstalled from the factory. These fixtures include a center mounting plate that is hung, then the metal center holder of each section is slid onto the center mounting plate for support. Once the opposite end of the panel is laid into place on the extrusion ledge, the spring clip along with the metal center holder hold the panel in place. Once all panels are installed, the support bracings may be joined together.



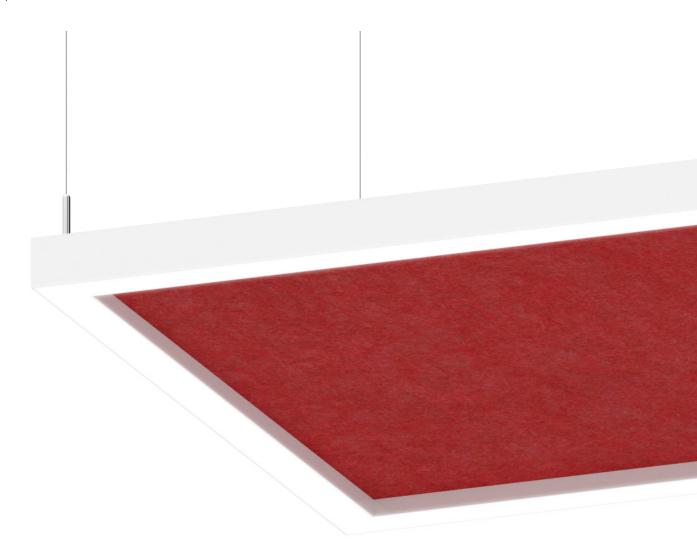
Beveled edge accentuates panel joints and adds a design feature

## Material and Testing

M60 LED Shapes Acoustic utilizes a high-performance acoustic panel for clear sound in any interior space.

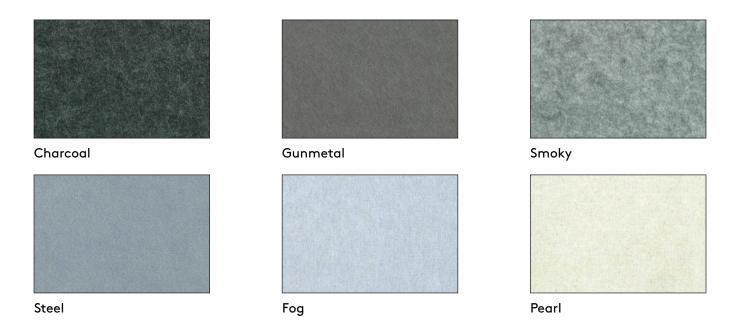
- Made from 100% polyester fiber with 60% recycled PET material
- 12mm (0.5") thick PET panels
- Noise Reduction Coefficient (NRC): up to 0.90 contributing to WELL™ Feature S04
- ASTM C423 tested
- Conforms to EN13501-1 Class B fire rating
- Easy care and maintenance
- 6 standard and 9 premium colors to choose from (more colors available on a project-specific basis)

\*Complete acoustic test results can be found on our website



Achieve WELL Building Standard® points and LEED credits by maximizing acoustic performance and comfort in the architectural environment.

## Standard Colors



## Premium Colors



Please consult factory for more color options. Lead times may vary for Premium Colors.

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