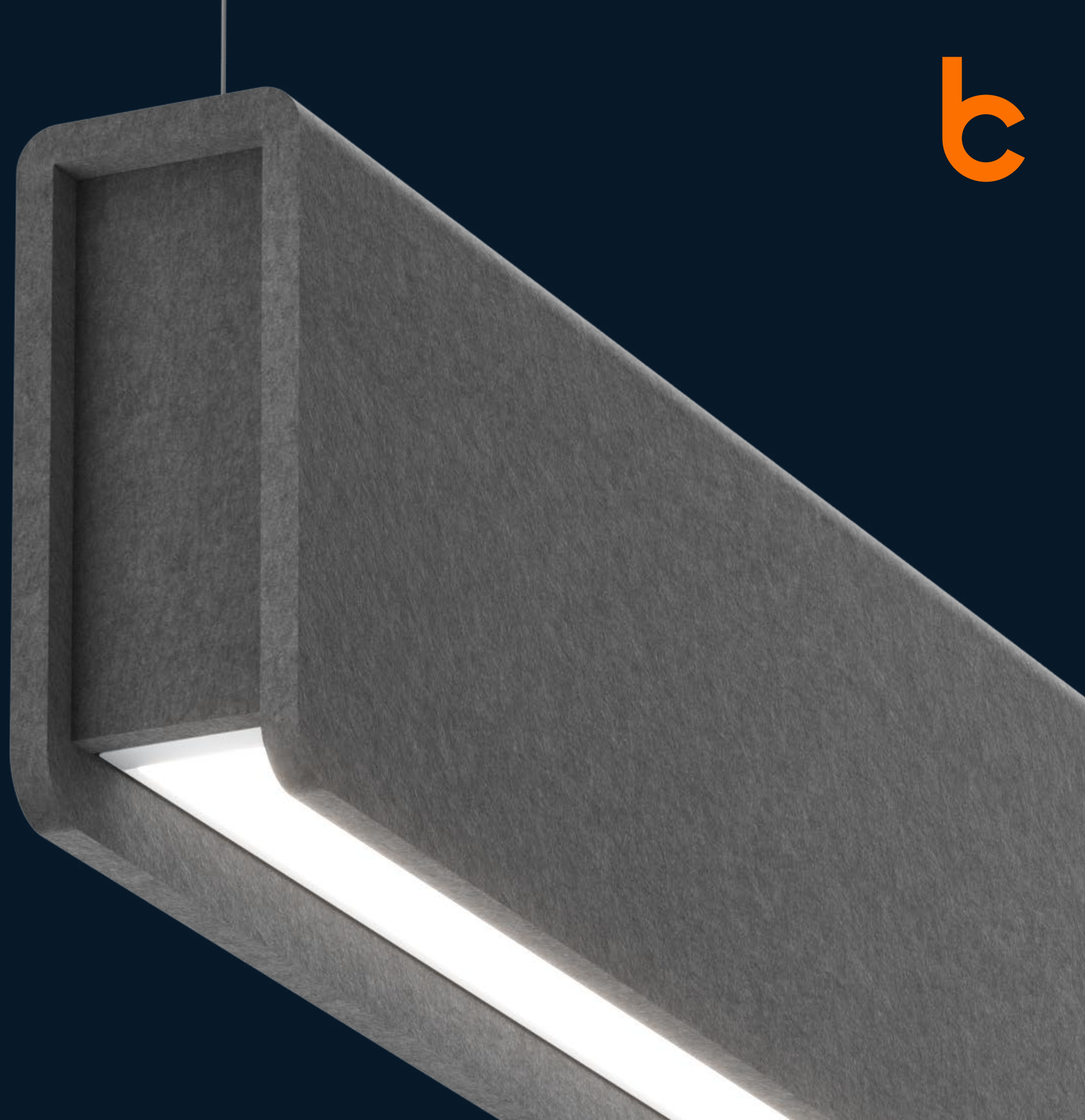
ACOUSTIC LIGHTING

SOUND & VISUAL COMFORT



ACOUSTIC LIGHTING

INTRODUCTION

Improve the sound quality of your space with acoustic lighting. Acoustic panels are designed to help absorb echo and reverberation associated with open concept spaces, exposed concrete, open ceilings, and large windows. Integrated into luminaires, sound absorbing panels are ideal for dampening noise pollution in open offices, meeting rooms, restaurants, and educational centers, while simultaneously providing illumination.

TECHNICAL SPECIFICATIONS

Composition: 100% Polyester Fiber

Recycled Content: Min. 75% post-consumer recycled materials (PET Bottles)

Thickness: ½" [12mm]

Density: 2400 gsm

Color Fastness: ISO 150 - B02:2014 5–6

Microbial Resistance:
ASTM (G21-15)
Growth Rating: 0 (No Growth)
Acoustic Panel does not promote the growth of mold and mildew

Material Safety and Environmental Protection Certification:
OEKO-TEX® STANDARD 100
GLOBAL RECYCLED STANDARD 4.0
GLOBAL GREENTAG CERTIFIED

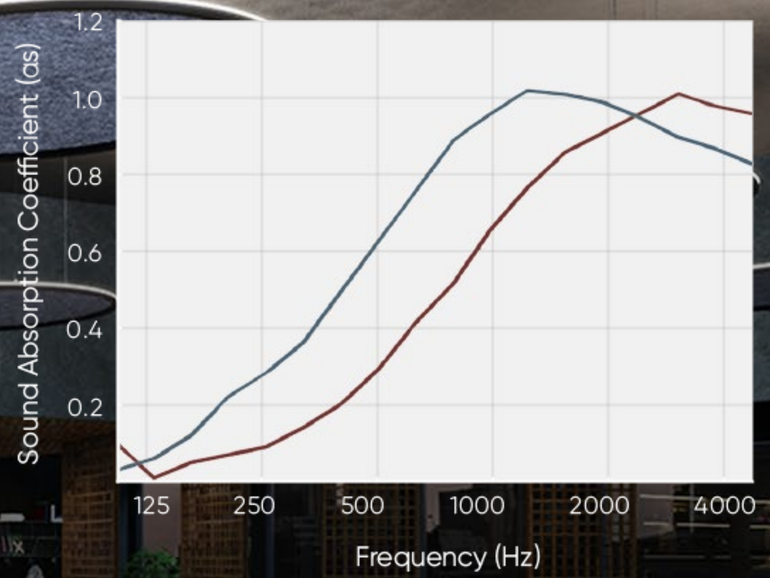
VOC Test Results:
Private Office – Wall – Pass
School Classroom – Wall – Pass
Single Family Residence – Wall – Pass
Private Office – Ceiling – Pass
School Classroom – Ceiling – Pass
Single Family Residence – Ceiling – Pass

Fire Ratings:
EN 13501-1:2018 | Class B-s1,d0
ASTM E84-2018 | Class A

ACOUSTIC PERFORMANCE

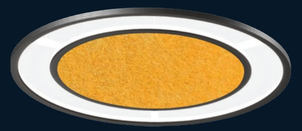
Engineered to effectively reduce reverberation and control echo noise in interior environments, Betacalco acoustic panels deliver superior sound management for modern spaces.

Frequency (Hz)	125	250	500	1000	2000	4000	NRC
½" [12mm]	0.05	0.10	0.30	0.65	0.90	0.95	0.45
½" [12mm] with 1" [25mm] air gap	0.05	0.30	0.60	0.95	0.95	0.85	0.70



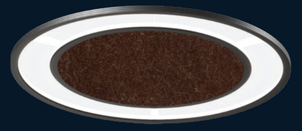
The graph displays third-octave sound absorption coefficients measured according to ASTM C423 standards in a certified reverberation room, providing reliable performance metrics for professional specification.

The Noise Reduction Coefficient (NRC) represents the arithmetic average of absorption coefficients at key frequency bands (250 Hz, 500 Hz, 1000 Hz, and 2000 Hz), rounded to the nearest 0.05 for industry-standard comparison.

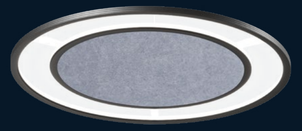


AP02 Citrus

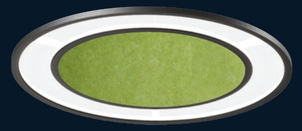
AP04 White



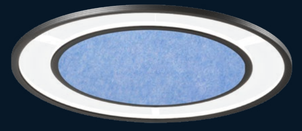
AP08 Red Coffee



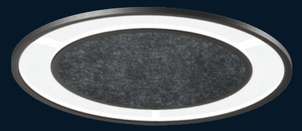
AP11 Light Gray



AP13 Apple Green

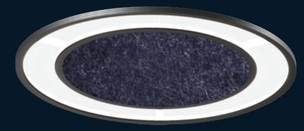


AP22 Blue



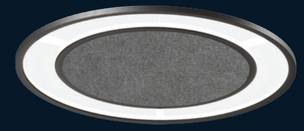
AP26 Sesame Gray

AP27 Black

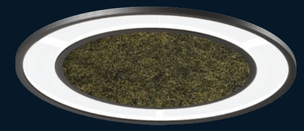


AP47 Navy Peony

AP60 Pure Red



AP73 Cloudburst



AP89 Douglas Fir

APW01 Oak

Custom options available to special order.

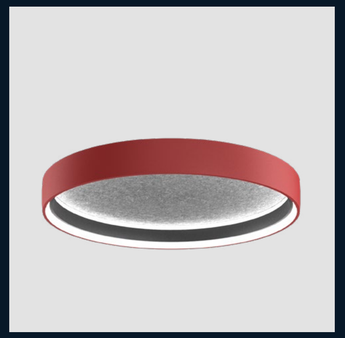
13 ACOUSTIC PANEL COLORS

CIRCLES

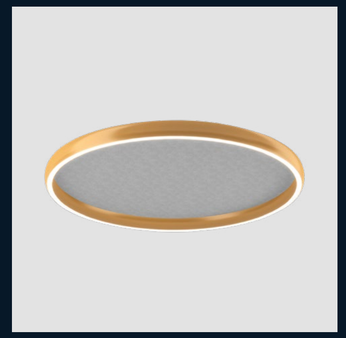
12 circular acoustic luminaires, each with varying diameters and light emission options, bring two-in-one functionality. For extra sound absorption, suspended non-illuminated panels are available with trims of 1″, 2″, and 4″ depths to complement luminaires.

NON ILLUMINAIRES
PANEL

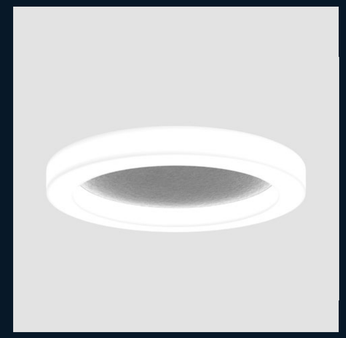
ACOUSTIC CIRCLES



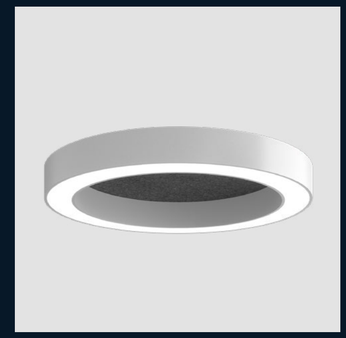
CERCHIO



MIDI ARC RING

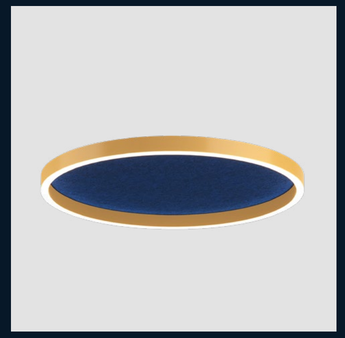


POLO

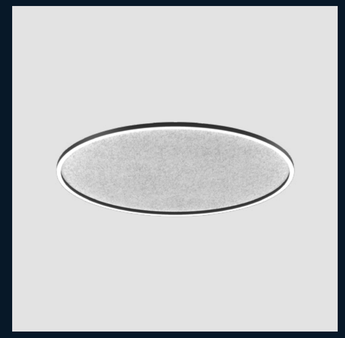


RING

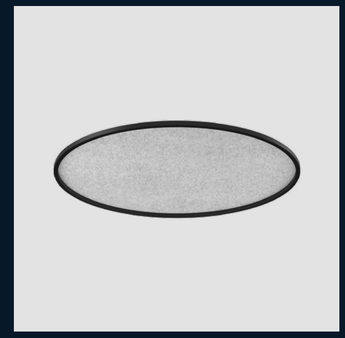
MICRO RING DE



MICRO RING II

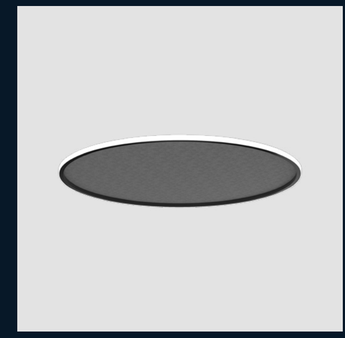


MICRO RING DIRECT



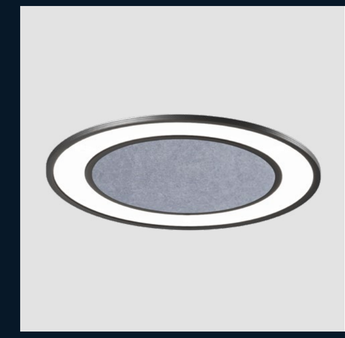
MICRO RING INDIRECT

MICRO RING SE INSIDE



MICRO RING SE OUTSIDE

OOOOH RING



RING BLADE

CERCHIO II

In high activity environments such as gyms and fitness centers, acoustic lighting dampens noise from equipment and music, and the sound-reflective surfaces of exposed ceilings.

MIDI ARC RING

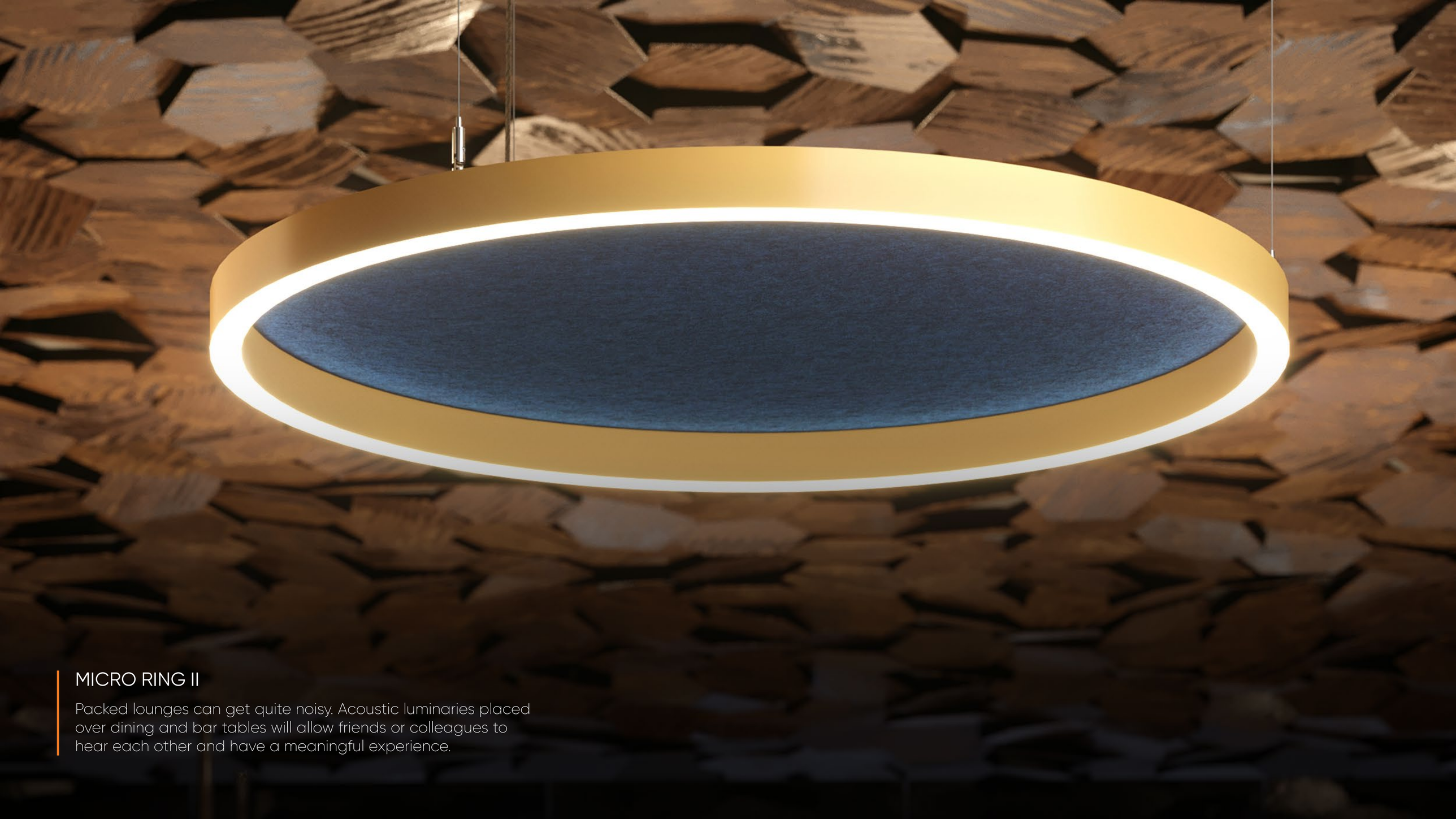
The clamorous sounds of hustling restaurant kitchens are amplified in open concepts, particularly with high ceilings and open ductwork. Acoustic luminaries suspended closer to standard ceiling heights will allow gourmets to consume the full dining experience.

POLO

The shoebox style typical of boardrooms, along with predominance of windows, makes it susceptible to high reverberation levels. Acoustic lighting offers space saving sound absorption with sleek aesthetics.

RING

Some workspaces require more privacy than others. Acoustic panels can reduce echo and contribute to the control of sound bleed.



MICRO RING II

Packed lounges can get quite noisy. Acoustic luminaries placed over dining and bar tables will allow friends or colleagues to hear each other and have a meaningful experience.

MICRO RING DE

Libraries are places of focus and calm, research and imagination. Dampening the ambient noise and echoes is essential for optimal productivity.

MICRO RING II

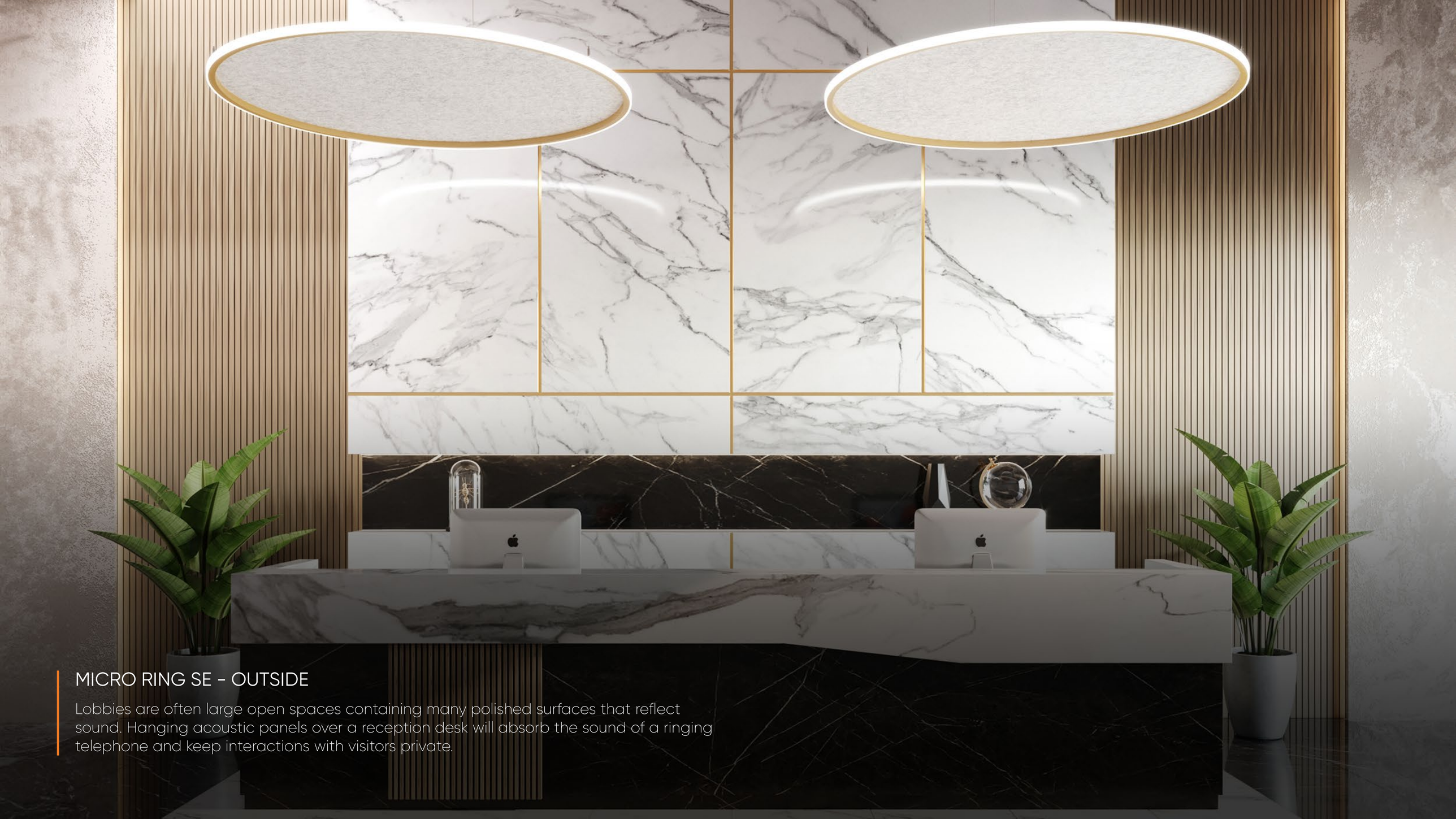
Packed lounges can get quite noisy. Acoustic luminaries placed over dining and bar tables will allow friends or colleagues to hear each other and have a meaningful experience.

MICRO RING INDIRECT

Indirect light combined with sound absorption can change the mood of an environment from functional to intimate.

MICRO RING SE – INSIDE

In web conferences, clarity of the speakers is crucial for effective communication and information assimilation. Combined acoustic panel with luminaire is an effective way to manage sound as well as maintain the minimalist aesthetics of a boardroom.



MICRO RING SE - OUTSIDE

Lobbies are often large open spaces containing many polished surfaces that reflect sound. Hanging acoustic panels over a reception desk will absorb the sound of a ringing telephone and keep interactions with visitors private.

OOOOH RING

Modern restaurants frequently incorporate industrial aesthetics with exposed concrete, glass, and polished surfaces that create excessive noise levels and diminish the dining experience. Strategic acoustic lighting over key dining and bar zones absorbs disruptive noise and reduces reverberation, maintaining the sleek visual appeal of the space while creating an acoustically comfortable environment with naturally flowing sound.

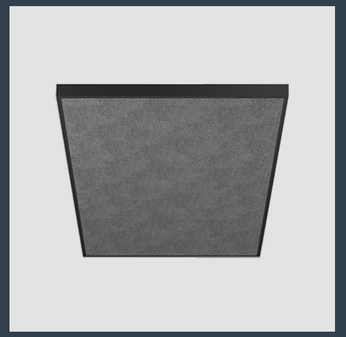
RING BLADE

Modern open-plan glass-enclosed meeting rooms prioritize visual openness but often create acoustically challenging environments that suffer from excessive echo and sound transfer that compromises meeting effectiveness. Strategically positioned acoustic lighting helps in both visible fidelity and in absorbing reflected sound for a comfortable meeting space.

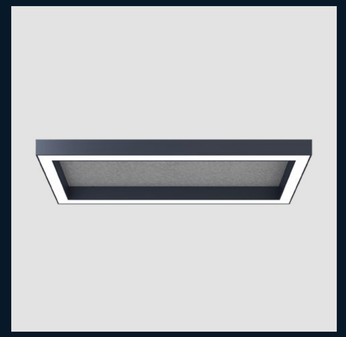
QUADS

Rectangular shapes blend well into ceilings. Several dimensions are available in the QUAD collection spanning up to 84″ in length. Suspended non-illuminated panels are available with trims of 1″, 2″, and 4″ depths to complement acoustic luminaires.

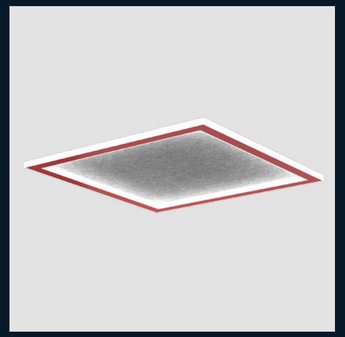
NON ILLUMINAIRES
PANEL



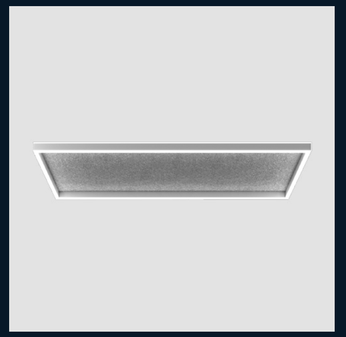
ACOUSTIC QUADS



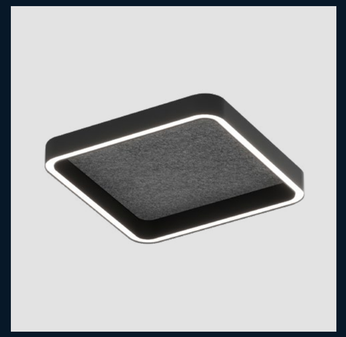
MACRO QUAD



MICRO QUAD DE



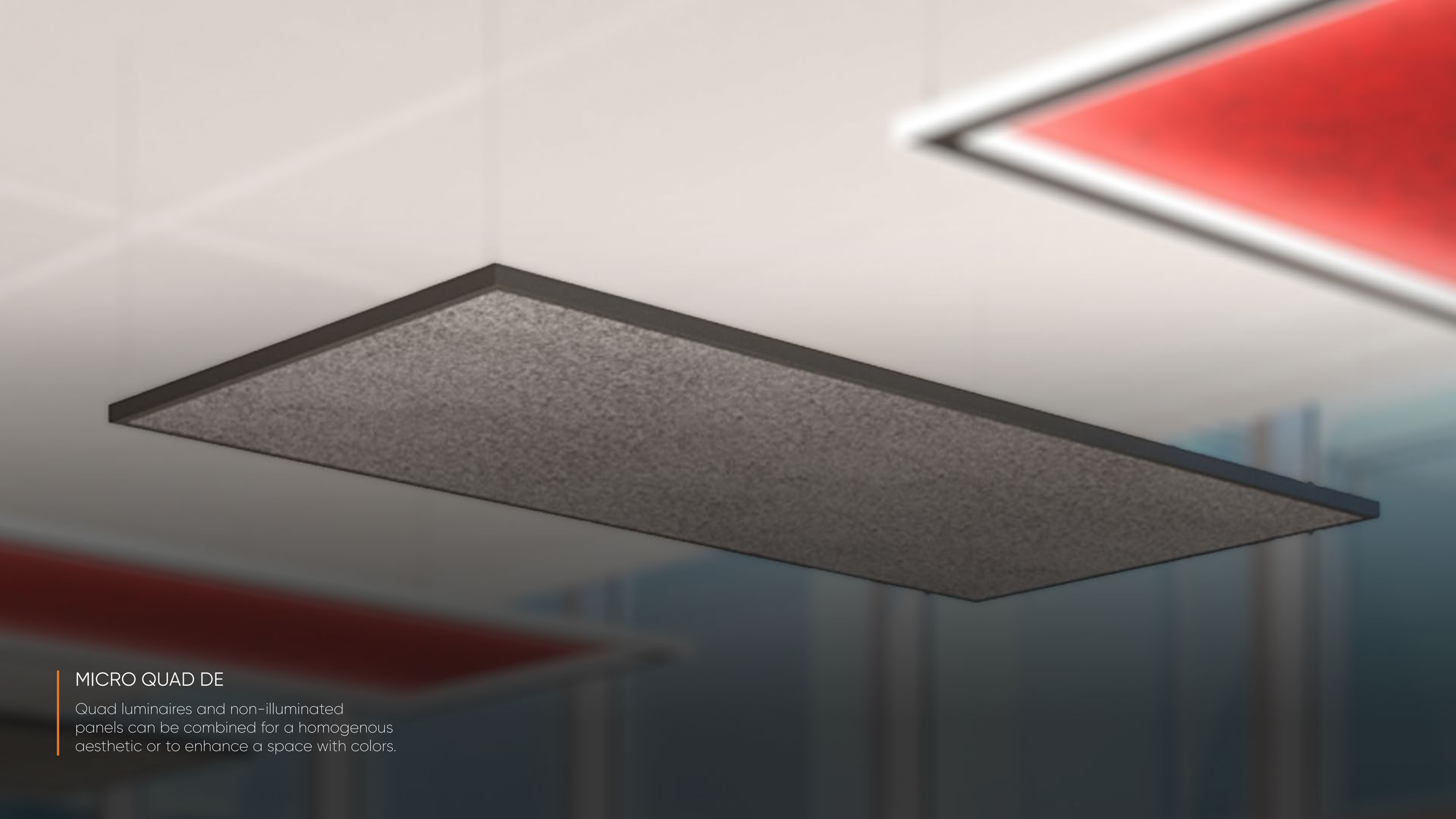
MICRO QUAD II



ENDLESS QUAD

MACRO QUAD

Macro Quad Acoustic brings a neutral form with a variety of lumen packages for versatility according to application.



MICRO QUAD DE

Quad luminaires and non-illuminated panels can be combined for a homogenous aesthetic or to enhance a space with colors.

MICRO QUAD II

The modern office is open and collaborative.
Acoustic panels can dampen remote noise
and improve communication within teams.

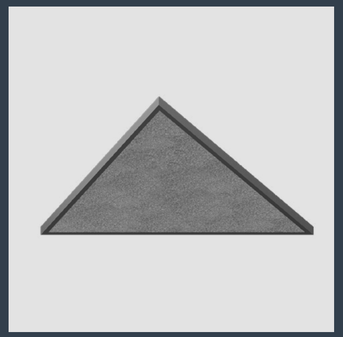
ENDLESS QUAD

Modern office lobbies with sleek materials like tile, glass, wood, and exposed ceilings create impressive visual impact but often suffer from harsh acoustics that make the space feel unwelcoming. Acoustic lighting fixtures positioned over key areas help absorb excessive sound reverberation, transforming the lobby into a comfortable, professional, and acoustically refined environment.

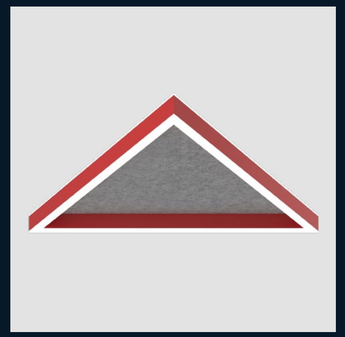
TRIANGLES

Triangular panels combined with MICRO TRIANGLE acoustic luminaire can create a dynamic aesthetic and complement asymmetric design elements. Suspended non-illuminated panels are available with trims of 1″ and 2″ depths to complement acoustic luminaires.

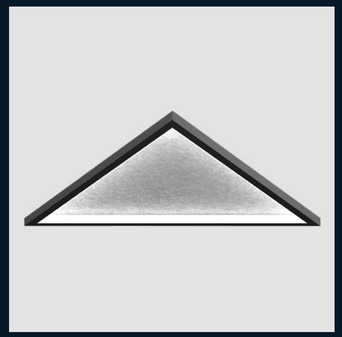
NON ILLUMINAIRES
PANEL



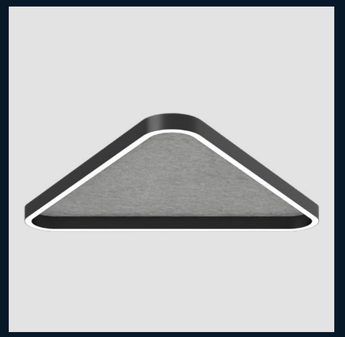
ACOUSTIC TRIANGLES



MICRO TRIANGLE II



MICRO TRIANGLE SE



FELIX

MICRO TRIANGLE II

The lobby is the first point of impression. Combining triangular lighting with sound absorbing acoustic panels is a powerful way to create an edgy and energetic aesthetic, while dampening the echoes typical of an active lobby.

MICRO TRIANGLE SE

Hours are spent in boardrooms, strategizing, planning and brainstorming. Acoustic lighting can create a more comfortable atmosphere, improving focus and allowing ideas to flow.

FELIX

Premium elevator lobbies feature luxurious hard materials, polished marble, metal accents, and minimal acoustical treatment, that create visual elegance but reverberant spaces that amplify footsteps, conversation, and mechanical elevator sounds into an echo-filled corridor. Acoustic lighting fixtures overhead absorb noise and create a serene, refined, and quiet transitional space befitting the upscale aesthetic.

ELLIPSE

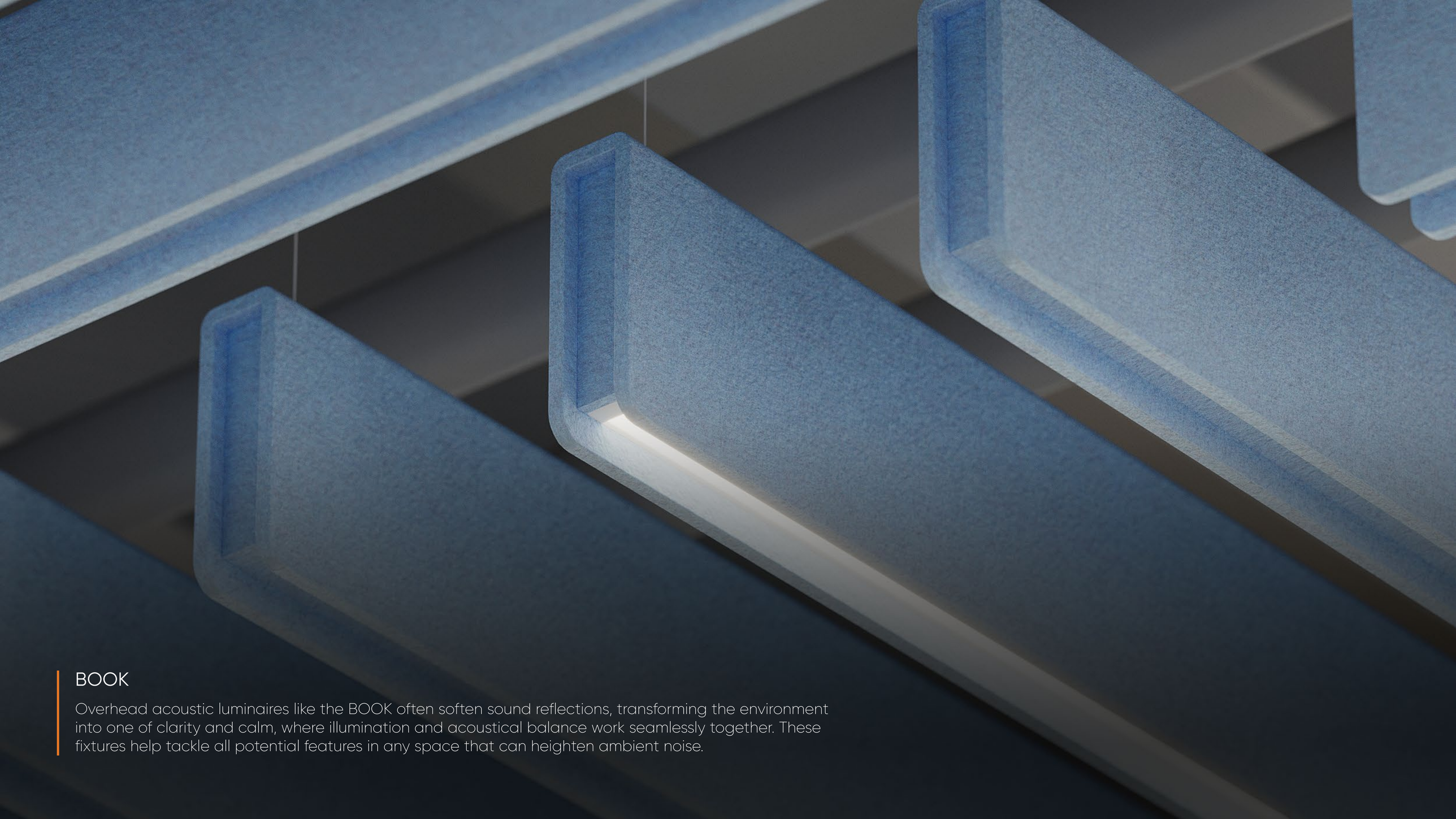
The graceful shape of the ellipse can warm a room. Micro Ellipse II Acoustic is available in lengths up to 84" with direct light only or direct/indirect light.

MICRO ELLIPSE II

MICRO ELLIPSE II combined with deep finishes for both acoustic panel and frame creates a warm office environment while making a statement.

LINEAR

The Book series combines high-performance lighting with acoustic panels and three optic options, perfect for well-lit, quiet spaces.



BOOK

Overhead acoustic luminaires like the BOOK often soften sound reflections, transforming the environment into one of clarity and calm, where illumination and acoustical balance work seamlessly together. These fixtures help tackle all potential features in any space that can heighten ambient noise.


Declare.

Declare.

Linear Series
BETA-CALCO INC

Final Assembly: Toronto, Ontario, Canada
Life Expectancy: 5 Year(s)
End of Life Options: Recyclable (99.6%), Landfill (0.4%)

Ingredients:

Aluminum; Small Electrical Components - RoHS Compliant[1]; Polymethyl methacrylate; Steel; Acrylonitrile-Butadiene-Styrene Copolymer; Iron; Carbonic acid, polymer with 4,4′-(1-methylethylidene)bis[phenol]; Copper; Manganese; Phenol, 4,4′-(1-methylethylidene)bis-, polymer with 2,2′-[(1-methylethylidene) bis(4,1-phenyleneoxymethylene)]bis[oxirane]; Silicon; Polyvinyl chloride; Magnesium; Antimony oxide (Antimony trioxide); Magnesium, [carbonato(2-)]hexadecahydroxybis(aluminum)hexa-; Tin, Organic; Tris(2-ethylhexyl) trimellitate; Titanium dioxide; Octadecanoic acid, calcium salt; Zinc; Phosphoric acid, 2-ethylhexyl diphenyl ester; Chromium, metallic; 1,3,5-Triglycidyl-s-triazinetrione; Methyl Ethyl Ketone; Titanium; Nickel (Metallic); 2-Methylimidazole; Carbon black; magnesium dioxide; Cyclohexanone

[1]LBC Temp Exception RL-002 - Small Electrical Components

Living Building Challenge Criteria:

I-13 Red List:
☐ LBC Red List Free
☐ LBC Red List Approved
■ Declared

% Disclosed: 100% at 100ppm
VOC Content: Not Applicable

I-10 Interior Performance: Not Applicable
I-14 Responsible Sourcing: Not Applicable

BET-0001

Original Issue Date: 2023

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Declare.

Decorative Series
BETA-CALCO INC

Final Assembly: Toronto, Ontario, Canada
Life Expectancy: 5 Year(s)
End of Life Options: Recyclable (99.7%), Landfill (0.3%)

Ingredients:

Aluminum; Small Electrical Components - RoHS Compliant[1]; Iron; Steel; Polyethylene Terephthalate; Glass, oxide, chemicals; Carbonic acid, polymer with 4,4′-(1-methylethylidene)bis[phenol]; Polyethylene; Brass; Poly[imino(1,6-dioxo-1,6- hexanediyl)imino-1,6-hexanediyl]; Siloxanes and Silicones, di-Me, Me vinyl, vinyl group-terminated; Manganese; Copper; Zinc; Silicon; Magnesium; Nylon; Siloxanes and Silicones, di-Me, di-Ph, vinyl group-terminated; Chromium, metallic; Polyvinyl chloride; Phenol, 4,4′-(1-methylethylidene)bis-, polymer with 2,2′-[(1-methylethylidene) bis(4,1-phenyleneoxymethylene)]bis[oxirane]; Titanium dioxide; Cyclotetrasiloxane; Nickel (Metallic); Antimony oxide (Antimony trioxide); Magnesium, [carbonato(2-)]hexadecahydroxybis(aluminum)hexa-; Polymethyl methacrylate; Tin, Organic; 1,3,5-Triglycidyl-s-triazinetrione; Titanium; nickel zinc; Silanol terminated polydimethylsiloxane; Molybdenum; Diisopropoxytitanium bis(ethylacetoacetate); Tungsten; Octadecanoic acid, calcium salt; Vanadium; Cobalt metal powder; Methyl Ethyl Ketone

[1]LBC Temp Exception RL-002 - Small Electrical Components

Living Building Challenge Criteria:

I-13 Red List:
☐ LBC Red List Free
☐ LBC Red List Approved
■ Declared

% Disclosed: 100% at 100ppm
VOC Content: Not Applicable

I-10 Interior Performance: Not Applicable
I-14 Responsible Sourcing: Not Applicable

BET-0002

Original Issue Date: 2023

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WHY DECLARE MATTERS

Every year, the building industry accounts for 39% of global carbon emissions, and the health impacts of the built environment are drawing increased scrutiny. In earning a Declare label for our linear and decorative line, we're joining over 200 manufacturers by responding to the market's demand for decreased emissions and increased transparency.

BETACALCO

Since 1941, we have held a passion for designing cutting-edge professional lighting that changes how spaces are illuminated while upholding the enduring principles of quality and craftsmanship.

Our objective is to work in lockstep with our clients by developing innovative products that meet their variegated design needs and comply with the latest energy and construction standards. Furthermore, our manufacturing infrastructure allows us to scale products and satisfy niche design requirements.

We use leading-edge wellness technologies including BIOS, Tunable White, and Dim to Warm; and employ open-source connectivity to intelligent control systems, including Power over Ethernet.

Our customer-centric approach to service and product design is the basis of our reputation and how we have become a key lighting supplier across the globe.

betacalco.com

sales@betacalco.com