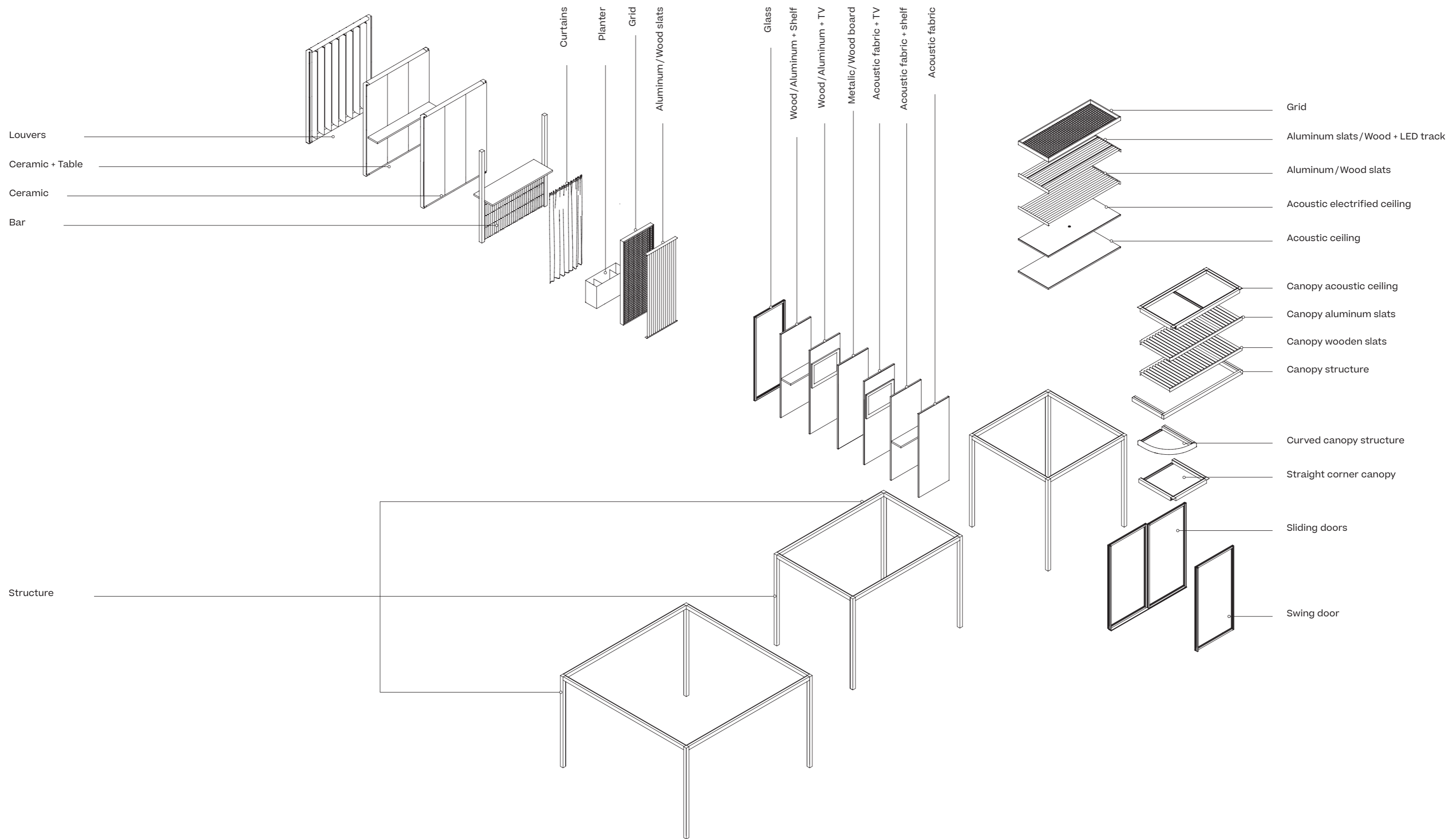


Pavilion M,  
by Kettal Studio

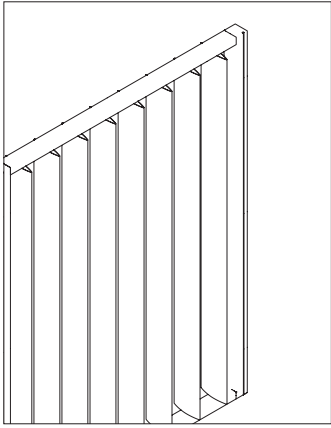
**kettal**

# Overview

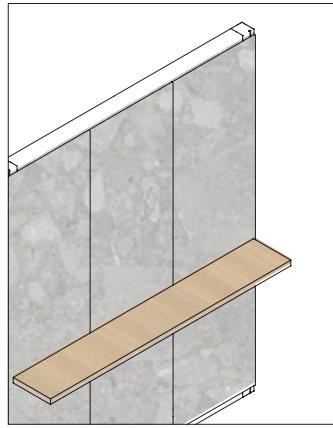


# Side panels

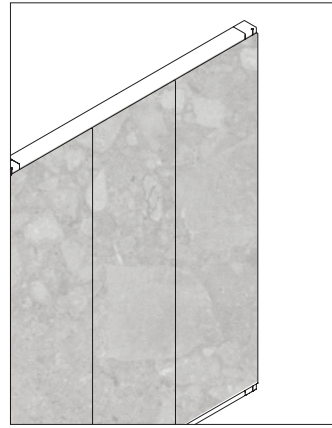
## Side panels



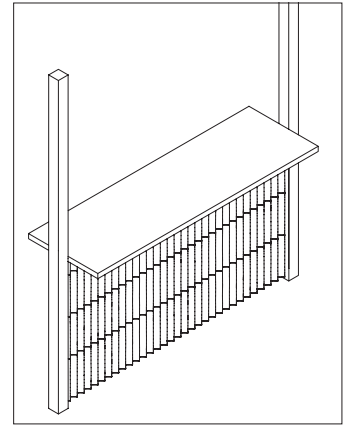
Louvers



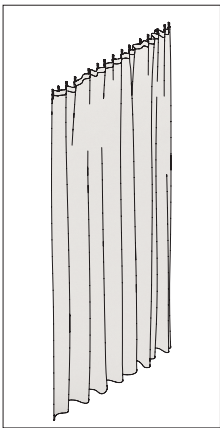
Ceramic + Table



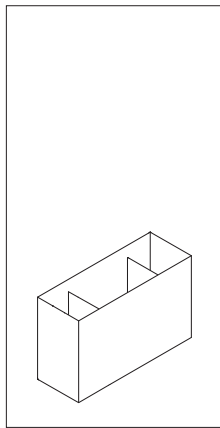
Ceramic



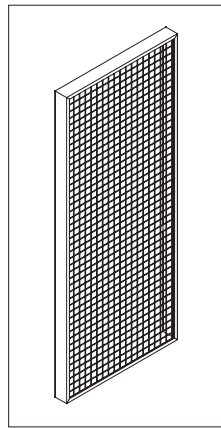
Bar



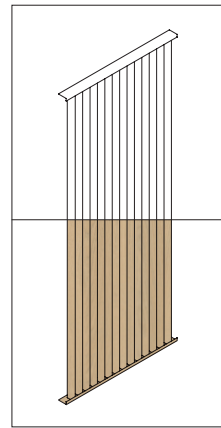
Curtains



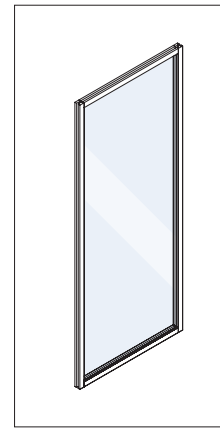
Planter



Grid



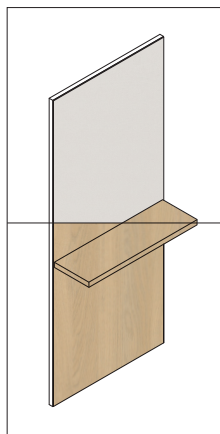
Aluminum/Wooden slats



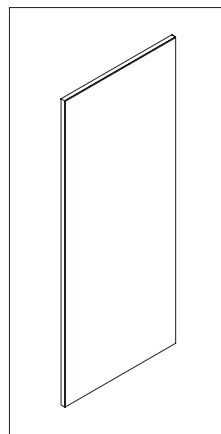
Glass



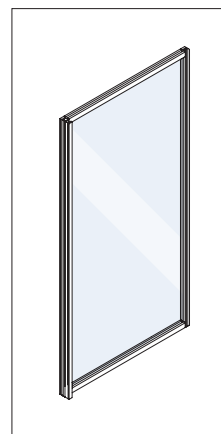
Acoustic fabric or wood



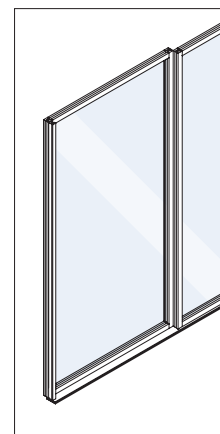
Acoustic fabric or wood with shelf



Metallic board



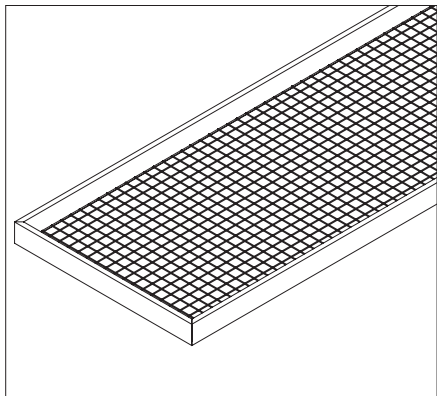
Swing door



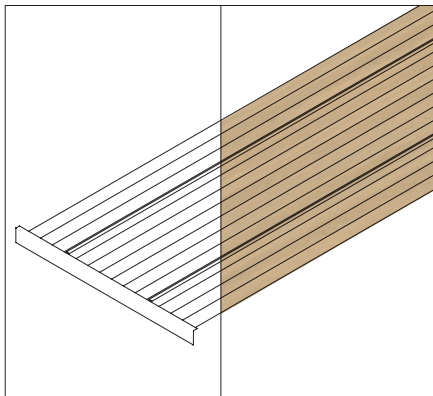
Swing door

# Ceiling & accessories

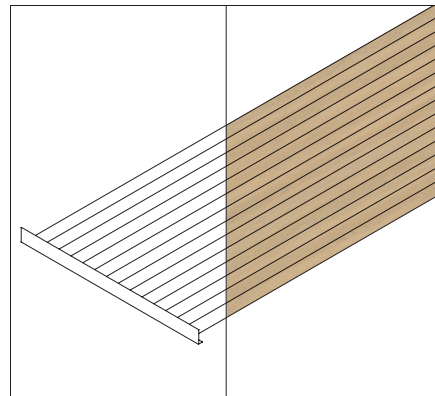
## Ceiling



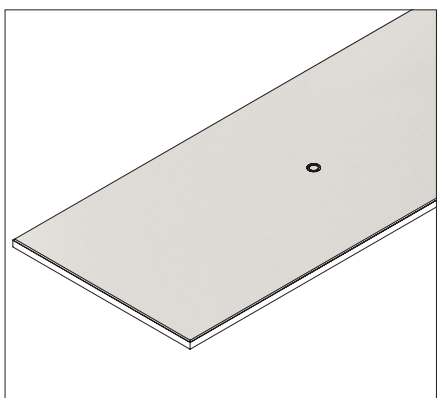
Grid



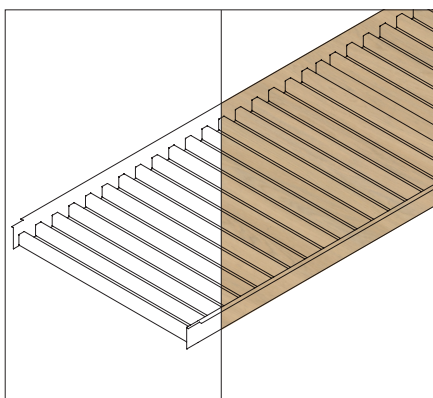
Aluminum or wooden slats with LED track



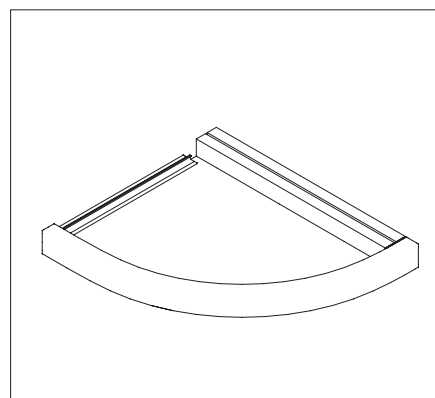
Aluminum or wooden slats



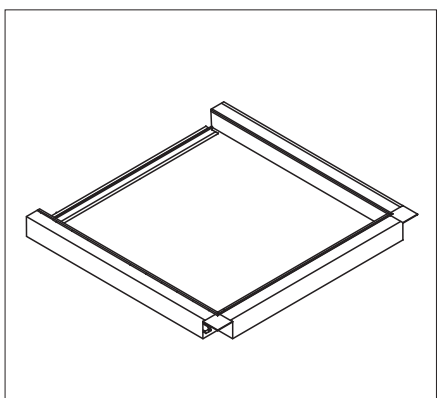
Acoustic electrified ceiling / Acoustic ceiling



Canopy aluminum slats or wooden slats



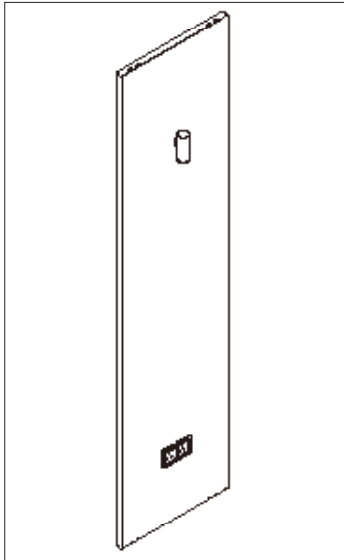
Curved canopy structure



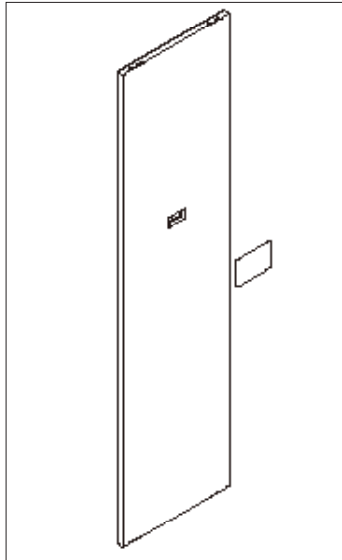
Straight corner canopy

# Ceiling & accessories

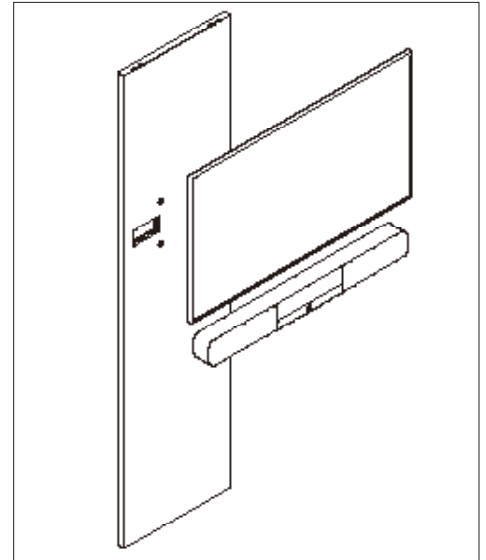
## Side accessories



Light and plug



Small display

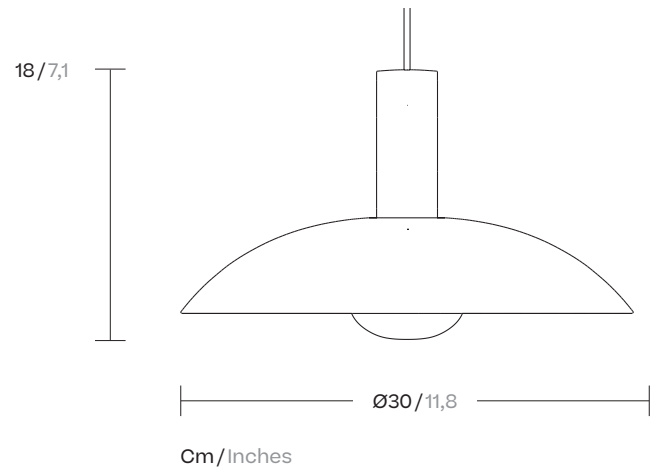


TV

# Lighting

## Dots pendant open

This suspended light is based on the Dots spotlight system. With its two open and closed diffusers, it directs most of the light downwards. By directing most of the light downwards, the shade is molded to illuminate spaces while protecting peoples' eyes from any direct glare. The matte white interior of the elliptical shade helps create a uniform light that is ideal for both directed and general ambient lighting needs.



# Lighting

## Dot pendant open

UL 1598 compliance certificate all internal electrical components.

### Maintenance

Clean the surface with a damp cotton cloth. Avoid direct contact with solvents and oxides. (text to be agreed)

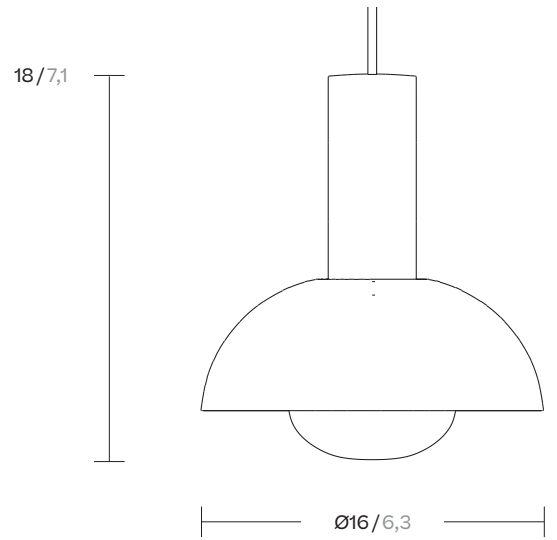
## Technical specifications

Codes	KS34-002-00 / KS34-001-00 / etc.
Variant	35 K
Maximum power (W)	8 W
Input voltage	100-240 V ~50/60 Hz
Nominal voltage (V)	24 Vdc
Weight (kg)	1.5 kg/m - 3.3 lbs/m
Light source	Integrated power supply
No. LEDs	8 LEDs
Protection type (IP)	IP 65
Dimmable	Casambi
Colour temperature (K)	3500 K
Luminous flux (lm)	900 lm
Luminous efficiency (lm/W)	115 lm/w
CRI	90 CRI
Service life (h)	IES TM21 L70 > 50,000 h
Applicable standards	UNE-EN 60598 / UNE-EN 55015 / UNE-EN 60529
Material	Aluminium / PMMA
Packaging (unit/volume)	1 u box (0.1 m <sup>3</sup> / 2.2 cu ft)
Energy efficiency class	A++
Power factor	0.90
Cable length	5 m
Indoor/outdoor use	Suitable for indoor and outdoor use
Guarantee	2 years

# Lighting

## Dots pendant closed

This suspended light is based on the Dots spotlight system. With its two open and closed diffusers, it directs most of the light downwards. By directing most of the light downwards, the shade is molded to illuminate spaces while protecting peoples' eyes from any direct glare. The matte white interior of the elliptical shade helps create a uniform light that is ideal for both directed and general ambient lighting needs.



Cm/Inches





# Lighting

## Dot pendant closed

UL 1598 compliance certificate all internal electrical components.

### Maintenance

Clean the surface with a damp cotton cloth. Avoid direct contact with solvents and oxides. (text to be agreed)

## Technical specifications

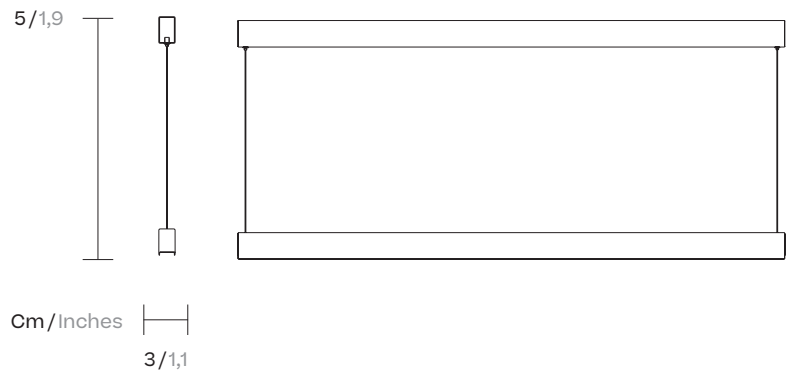
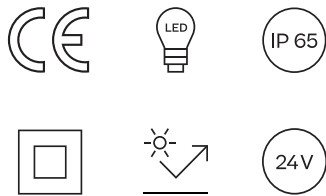
Codes	KS34-002-00 / KS34-001-00 / etc.
Variant	35 K
Maximum power (W)	8 W
Input voltage	100-240 V ~50/60 Hz
Nominal voltage (V)	24 Vdc
Weight (kg)	1.5 kg/m - 3.3 lbs/m
Light source	Integrated power supply
No. LEDs	8 LEDs
Protection type (IP)	IP 65
Dimmable	Casambi
Colour temperature (K)	3500 K
Luminous flux (lm)	900 lm
Luminous efficiency (lm/W)	115 lm/w
CRI	90 CRI
Service life (h)	IES TM21 L70 > 50,000 h
Applicable standards	UNE-EN 60598 / UNE-EN 55015 / UNE-EN 60529
Material	Aluminium / PMMA
Packaging (unit/volume)	1 u box (0.1 m <sup>3</sup> / 2.2 cu ft)
Energy efficiency class	A++
Power factor	0.90
Cable length	5 m
Indoor/outdoor use	Suitable for indoor and outdoor use
Guarantee	2 years

# Lighting

## LED Track Pendant

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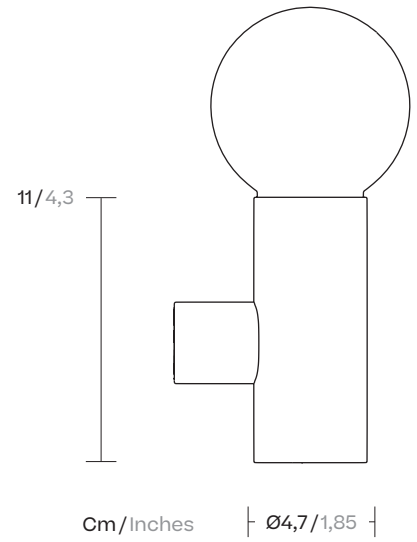
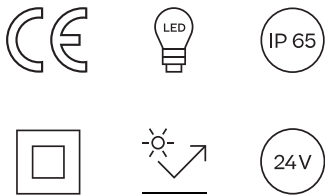
This system consists of a bar that combines direct or indirect light, suspended by two coaxial cables that provide support and the electrical wiring. Perfect for offices that require excellent light efficiency and visual comfort.



# Lighting

## Dots light ball up

The Dots wall luminaires feature LED light sources and project light above or below the horizontal plane for an authentic washlighting effect, ideal for selectively illuminating corners, specific spaces, facility corridors, as well as walkways, access routes, signs and so on.



# Lighting

## Dot pendant closed

UL 1598 compliance certificate all internal electrical components.

### Maintenance

Clean the surface with a damp cotton cloth. Avoid direct contact with solvents and oxides. (text to be agreed)

## Technical specifications

Codes	KS34-006-00 / KS34-003-00 / etc.
Variant	35 K
Maximum power (W)	5 W
Input voltage	100-240 V ~50/60 Hz
Nominal voltage (V)	24 Vdc
Weight (kg)	1.5 kg/m - 3.3 lbs/m
Light source	Integrated power supply
No. LEDs	14 LEDs
Protection type (IP)	IP 65
Dimmable	Casambi
Colour temperature (K)	3500 K
Luminous flux (lm)	650 lm
Luminous efficiency (lm/W)	98 lm/w
CRI	90 CRI
Service life (h)	IES TM21 L70 > 50,000 h
Applicable standards	UNE-EN 60598 / UNE-EN 55015 / UNE-EN 60529
Material	Aluminium / PMMA
Packaging (unit/volume)	1 u box (0.1 m <sup>3</sup> / 2.2 cu ft)
Energy efficiency class	A++
Power factor	0.90
Cable length	5 m
Indoor/outdoor use	Suitable for indoor and outdoor use
Guarantee	2 years

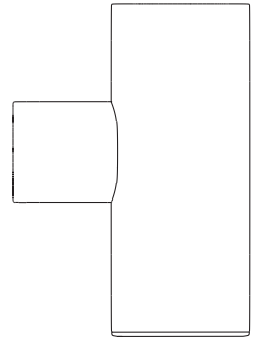
# Lighting

## Dots light down / up & down

The Dots wall luminaires feature LED light sources and project light above or below the horizontal plane for an authentic washlighting effect, ideal for selectively illuminating corners, specific spaces, facility corridors, as well as walkways, access routes, signs and so on.



11/4,3



Cm/Inches

∅4,7/1,85



# Lighting

## Dot pendant open

UL 1598 compliance certificate all internal electrical components.

## Maintenance

Clean the surface with a damp cotton cloth. Avoid direct contact with solvents and oxides. (text to be agreed)

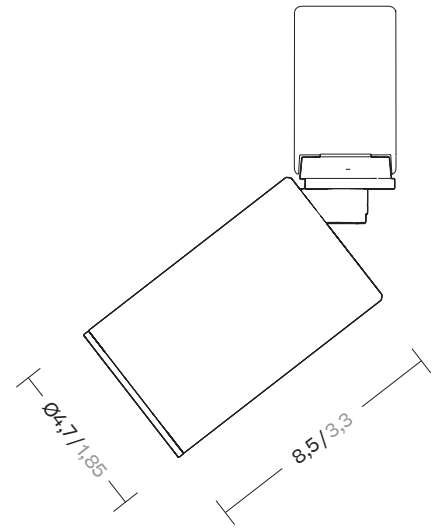
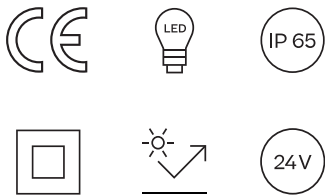
## Technical specifications

Codes	KS34-006-00 / KS34-003-00 / etc.
Variant	35 K
Maximum power (W)	5 W
Input voltage	100-240 V ~50/60 Hz
Nominal voltage (V)	24 Vdc
Weight (kg)	1.5 kg/m - 3.3 lbs/m
Light source	Integrated power supply
No. LEDs	14 LEDs
Protection type (IP)	IP 65
Dimmable	Casambi
Colour temperature (K)	3500 K
Luminous flux (lm)	650 lm
Luminous efficiency (lm/W)	98 lm/w
CRI	90 CRI
Service life (h)	IES TM21 L70 > 50,000 h
Applicable standards	UNE-EN 60598 / UNE-EN 55015 / UNE-EN 60529
Material	Aluminium / PMMA
Packaging (unit/volume)	1 u box (0.1 m <sup>3</sup> / 2.2 cu ft)
Energy efficiency class	A++
Power factor	0.90
Cable length	5 m
Indoor/outdoor use	Suitable for indoor and outdoor use
Guarantee	2 years

# Lighting

## Dots LED Track Articulated

Our surface-mounted range that uses an LED light source. This system is composed of linear LED strips mounted on aluminum extrusion micro-profiles of varying lengths. These light modules are combined with adjustable 360° Dots spotlights that are available with different beam optics.



Cm/Inches



# Lighting

## Dots LED Track Articulated

UL 1598 compliance certificate all internal electrical components.

### Maintenance

Clean the surface with a damp cotton cloth. Avoid direct contact with solvents and oxides. (text to be agreed)

## Technical specifications

Codes	A3DIL-TO2-10 / A3DIT-TO2-10 / etc.
Variant	35 K
Maximum power (W)	8 W/u
Input voltage	100-240 V ~50/60 Hz
Nominal voltage (V)	24 Vdc
Weight (kg)	2.5 kg/m - 5.5 lbs/m
Light source	Integrated power supply
No. LEDs	8 LEDs
Protection type (IP)	IP 65
Dimmable	Casambi
Colour temperature (K)	3500 K
Luminous flux (lm)	900 lm
Luminous efficiency (lm/W)	115 lm/w
CRI	90 CRI
Service life (h)	IES TM21 L70 > 50,000 h
Applicable standards	UNE-EN 60598 / UNE-EN 55015 / UNE-EN 60529
Material	Aluminium / PMMA
Packaging (unit/volume)	1 u box (0.1 m <sup>3</sup> / 2.2 cu ft)
Energy efficiency class	A++
Power factor	0.90
Cable length	1 m
Indoor/outdoor use	Suitable for indoor and outdoor use
Guarantee	2 years



# Lighting

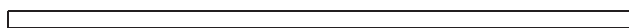
## LED Track Integrated

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An integrated LED lighting system that offers solutions suited to any type of installation. It provides pleasant and efficient visual comfort, combined with high-quality performance and aesthetics.



4,7/1,8 



Cm/Inches



# Lighting

## LED Track Integrated

UL 1598 compliance certificate all internal electrical components.

### Maintenance

Clean the surface with a damp cotton cloth. Avoid direct contact with solvents and oxides. (text to be agreed)

## Technical specifications

Codes	A3CIL-TO2-10 / A3CIT-TO2-10 / etc.
Variant	35 K
Maximum power (W)	22 W/m
Input voltage	100-240 V ~50/60 Hz
Nominal voltage (V)	24 Vdc
Weight (kg)	2.5 kg/m - 5.5 lbs/m
Light source	Integrated power supply
No. LEDs	240 LEDs/m
Protection type (IP)	IP 65
Dimmable	Casambi
Colour temperature (K)	3500 K
Luminous flux (lm)	2800 lm/m
Luminous efficiency (lm/W)	136 lm/w
CRI	90 CRI
Service life (h)	IES TM21 L70 > 50,000 h
Applicable standards	UNE-EN 60598 / UNE-EN 55015 / UNE-EN 60529
Material	Aluminium / PMMA
Packaging (unit/volume)	1 u box (0.1 m <sup>3</sup> / 2.2 cu ft)
Energy efficiency class	A++
Power factor	0.90
Cable length	1 m
Indoor/outdoor use	Suitable for indoor and outdoor use
Guarantee	2 years

# Lighting

## LED Track Curtain

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A recessed lighting system equipped with an LED light source. Specially designed for wall-washer lighting, the LED Curtain incorporates lenses to provide optimum light distribution. The LED Curtain range is available in different lengths which means it can be adjusted to suit any space, while its compact size facilitates simple integration within the Pavilion M system.



4,7/1,8



Cm/Inches



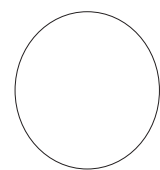
# Lighting

## Microdots

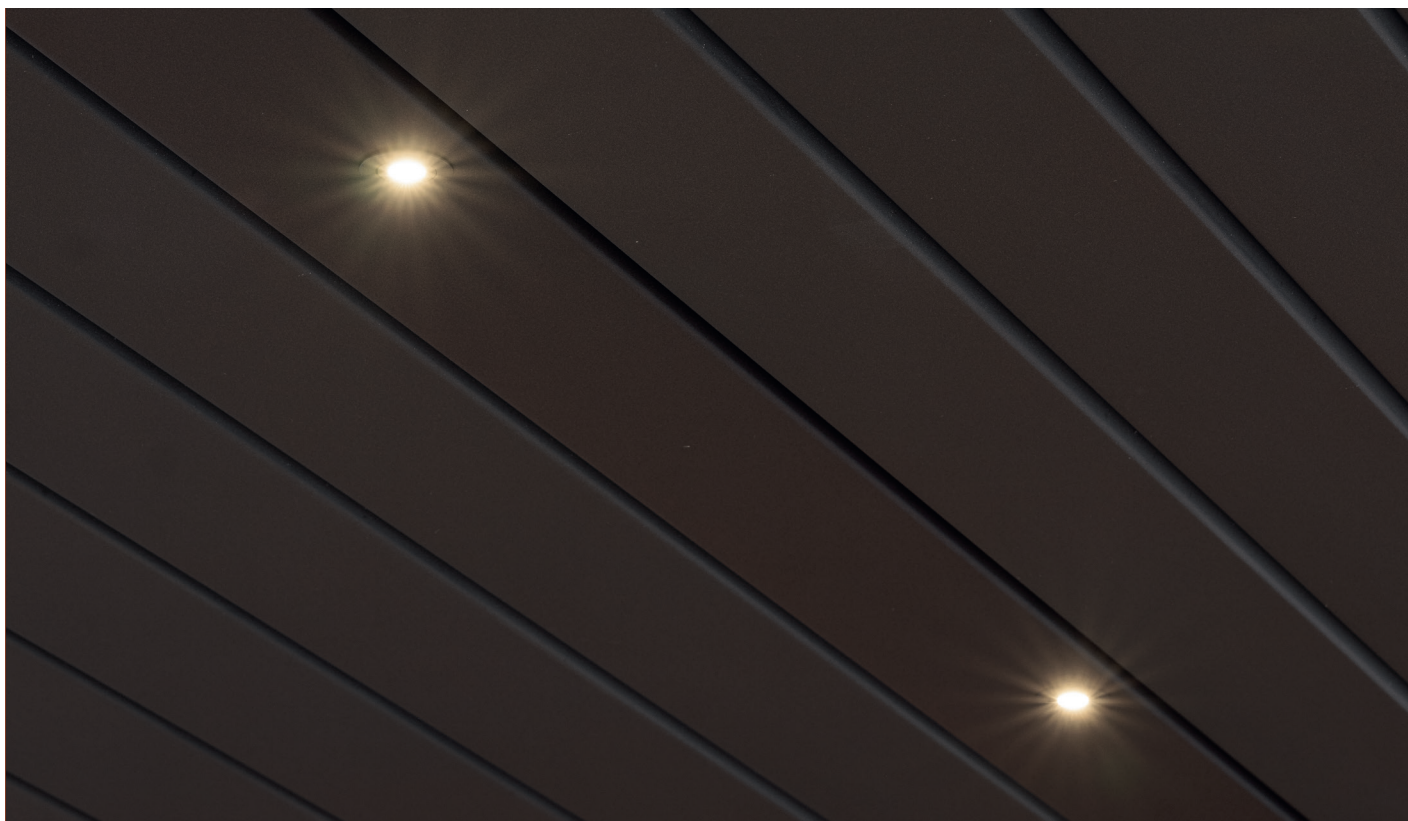
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4,7/1,8 



Cm/Inches



# Control management

A smart technology fully integrated. It's a fully integrated business space solutions that streamline workflows and resource management for smarter, more efficient workplaces. We work with the platforms that enables you to perform all your daily activities (calls, presentations, collaboration) in every one of your workspaces and manage them securely online.

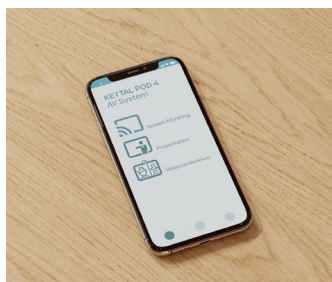
## Partners



## Personal



Touch Screen



Smartphone



Tablet

## Description

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- Compatible with Android and iOS mobile and tablet devices
- Domotic system can also be controlled by PC

## Key functions

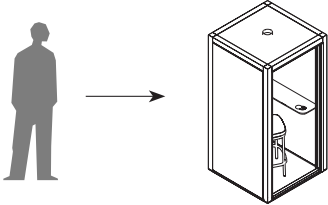
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- Audiovisual hardware
- Mirroring
- Videocalls
- Booking
- Ventilation control
- Light scenes

# Control management

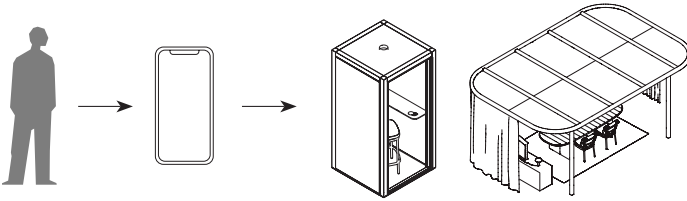
The Pavilion system allows 4 project layers depending on what the client prefers:

## A. Standard



Phone Booth STD (with Sensor or Sensor + Dimmer). It is not connected to any control / management system.

## B. Hub Basic — Control



Allows the connection of each Phone Booth and Pavilion M to a Management Software for the client.

This is achieved through a HUB (which is installed in the customer's building), which must be connected to the network and which interconnects all rooms and Phone Booths.



Energy saving and space utilization



Response to electricity demand



Timelines



Scene control



Lighting control



Alerts

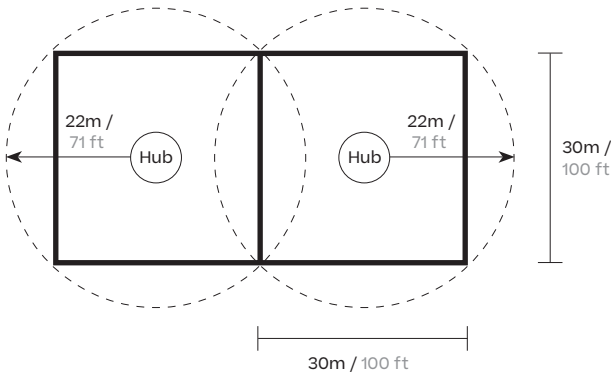
# Control management

## How to determine the number of Hubs per project

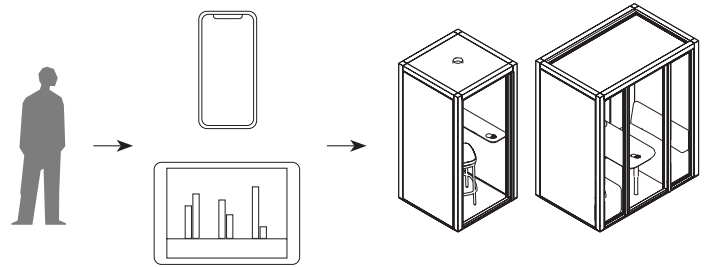
The number of Hubs per project should be studied based on the layout of the rooms and the project based on the following product specifications.

It is necessary to connect to the customer's network through the RJ45 connection provided by the Hub.

All wireless devices to be associated with the wireless hub must be within 22 m (71 ft) of the wireless hub and must be on the same floor as the hub.



## C. Hub Server Pro — Control + Management



Allows the connection of each Phone Booth and Pavilion M to a Management Software for the client.

This is achieved through a HUB (which is installed in the customer's building), which must be connected to the network and which interconnects all rooms and Phone Booths. In addition, a server must be installed to be able to manage all the data and activate the system's functionalities:

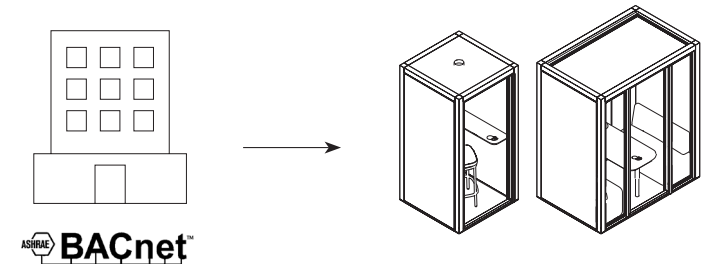
**Intuitive control:** See status, control lights and optimize your building quickly and efficiently with a graphical plan.

**Space optimization:** Improve building layout based on actual occupancy and usage information.

**Save energy** with a specific goal thanks to energy reports.

This project layer allows for much greater control and visualization of data.

## D. Hub Bacnet — Bacnet Integration



Allows the connection of each Phone Booth and Pavilion M to the building's BMS (Building Management System) system through the Bacnet IP protocol.

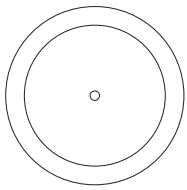
This is achieved through a Bacnet licensed Hub (which is installed in the customer's building), which must be connected to the network and which interconnects all rooms and Phone Booths.

# Control management

## System's basic information

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Operation through presence sensor:  
When the user enters, the lighting and ventilation are turned on. When the user leaves, after 15 minutes, both the lighting and the ventilation are turned off.



Wireless hub



Response to demand

Bacnet integration

API integration

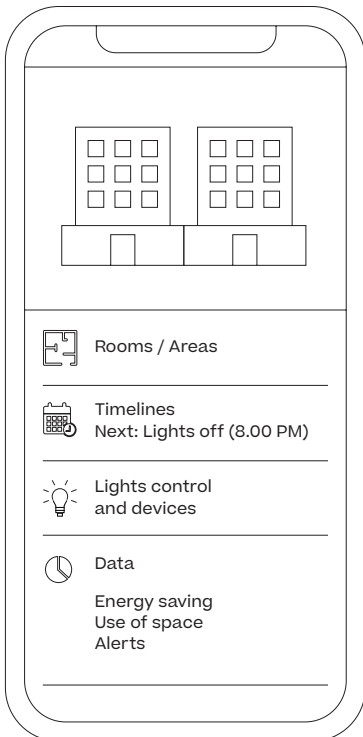
## Wireless controls and flexible sensors

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- Remote controls
- Presence and daylight sensors
- Lighting controllers
- Home appliance charge controllers
- Integrated luminaire sensors and control

## Easy to use Software

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## Communication protocols

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Communicate by RF with control components



Communicate over WiFi with smart devices



Communicate via Ethernet cable to the hub



# Security system

## Safety by design

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1. Isolated wired or wireless architecture that strictly limits the ability of the hub's Wi-Fi to be used to access the corporate network to obtain confidential information.
2. Distributed security architecture: each hub has its own keys.
3. NIST-recommended best practices for password security, including tampering with and using Scrypt.
4. AES 128 bit encryption for network communications.
5. HTTPS protocol (TLS 1.2) to secure connections to the hub in the wired network.
6. WPA2 technology to ensure connections to the hub in the Wi-Fi network.

## Third party validation

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1. Various external experts involved during the design process.
2. Penetration tests carried out by third parties to identify and correct potential vulnerabilities before installation.

## Monitoring and continuous improvements

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A dedicated security team is used to constantly monitor potential threats and, when required, submit security patches to update installed systems.

## Permanent support

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1. IT implementation guidelines
2. Guidance from our world-class 24/7 technical support organization with IT expertise, throughout the product lifecycle

# Monitor

## Key functions & features

- Samsung monitor
- Slim video monitor
- Plug & Play system
- 3 different Sizes
- Incredible 4K picture quality
- Intelligent UHD upscaling
- Dynamic crystal color
- Clean cable management
- Wi-Fi and Bluetooth built-in



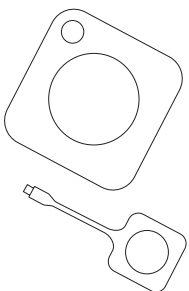
## Technical Specifications - Monitor

Model	QB43R	QB55R	QB75R
Type	43	55	75
Resolution	Edge LED BLU	Edge LED BLU	Edge LED BLU
Power Supply	UHD (3840 x 2160)	UHD (3840 x 2160)	UHD (3840 x 2160)

## Clickshare CX-20

Small room wireless presentation and conference system for PC / MAC or mobile devices.

It allows an easy, efficient and continuous user experience.



Clickshare CX-20 device

## Technical Specifications - Clickshare CX-20

Power Supply	110/220 V AC Standard
Power Consumption	Max. 24 W
OS	Windows 8/8.1/10. macOS 10.13 and later updates. Android v9 and later updates (ClickShare app) iOS 12 and later updates (ClickShare app)
Video Output	4K UHD (3840x2160), 30 Hz. HDMI 1.4b
Audio Output	USB, HDMI
Native protocols	Airplay, Google Cast, Miracast
Reach	Max. 30m (100 ft)
Certifications	FCC / CE
Net Conexion	LAN and WiFi

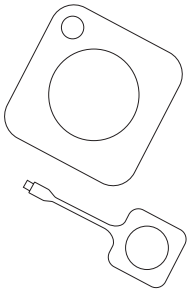
# Wireless system

## Clickshare CX-20

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Small room wireless presentation and conference system for PC / MAC or mobile devices.

It allows an easy, efficient and continuous user experience.



Clickshare CX-20 device

## Technical Specifications - Clickshare CX-20

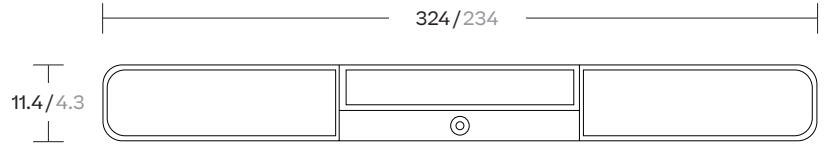
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Power Supply	110/220 V AC Standard
Power Consumption	Max. 24 W
OS	Windows 8/8.1/10. macOS 10.13 and later updates. Android v9 and later updates (ClickShare app) iOS 12 and later updates (ClickShare app)
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Audio Output	USB, HDMI
Native protocols	Airplay, Google Cast, Miracast
Reach	Max. 30m (100 ft)
Certifications	FCC / CE
Net Conexion	LAN and WiFi

# Soundbar & camera

## Creston bar

- 4K camera with 150° viewing
- Intelligent HD Camera - Digital autozoom intelligently detects the people in the room and frames them perfectly for an optimal view
- Surrounding audiosystem
- Full set of configurable
- Plug & Play - compatible with major computer OS platforms running any web conferencing software



## Technical Specifications

Camera model	Huddly HQ (mounted internally)
Image Sensor	12 megapixel Sony® IMX477 Type 1/2.3 CMOS sensor
Lens	High precision, ultra wide angle, six element aspherical glass lens
Field of View	150° diagonal 120° horizontal 90° vertical
Aperture	f/2.8
Processor	Intel® Movidius® Myriad® X VPU
Pan/Tilt/Zoom	3x
Autozoom	Yes
Dynamic Light Optimization	Auto-adjust light levels and white balance
Noise reduction	3D noise reduction
Scalling	Real-time scalling
People Counting	Yes
Video Output Resolution	HD 1080p at 30fps
Main Power	100-240 VAC, 50/60 Hz
Power Consumption	22W
Weight	15 lb (6.8 kg)

## Compliance

C, IC, UL 62368-1, CSA C22.2 62368-1, EN 62368-1, IEC 62368-1, FCC Part 15 Class B, ICES-003 Issue 5 Class B, EN55022:2010 Class B, AS/NZS CISPR22:2010 Class B, AS/NZS CISPR 22:2010 Class B, EN55024:2010, EN1000-3.2:2014, EN61000-3-3:2013, RoHS compliant

# Monitor & audiovisuals



# Room booking

## Key functions

- Booking management through Touch Screen
- Room reservation linked to your Calendar
- Management through third-party Cloud solution
- Room booking management from email

Installation: Installation can only be performed on a 7" screen acoustic or wood panel.

Wiring: The equipment is supplied by a POE RJ45 network cable provided by Kettal.

Settings: The control screen requires prior programming by Kettal to customise the screen with the client's data and link operation with the company's (client) calendar system. Screen installation is subject to the data provided by the client.

## Mail systems allowed



## Cloud solutions



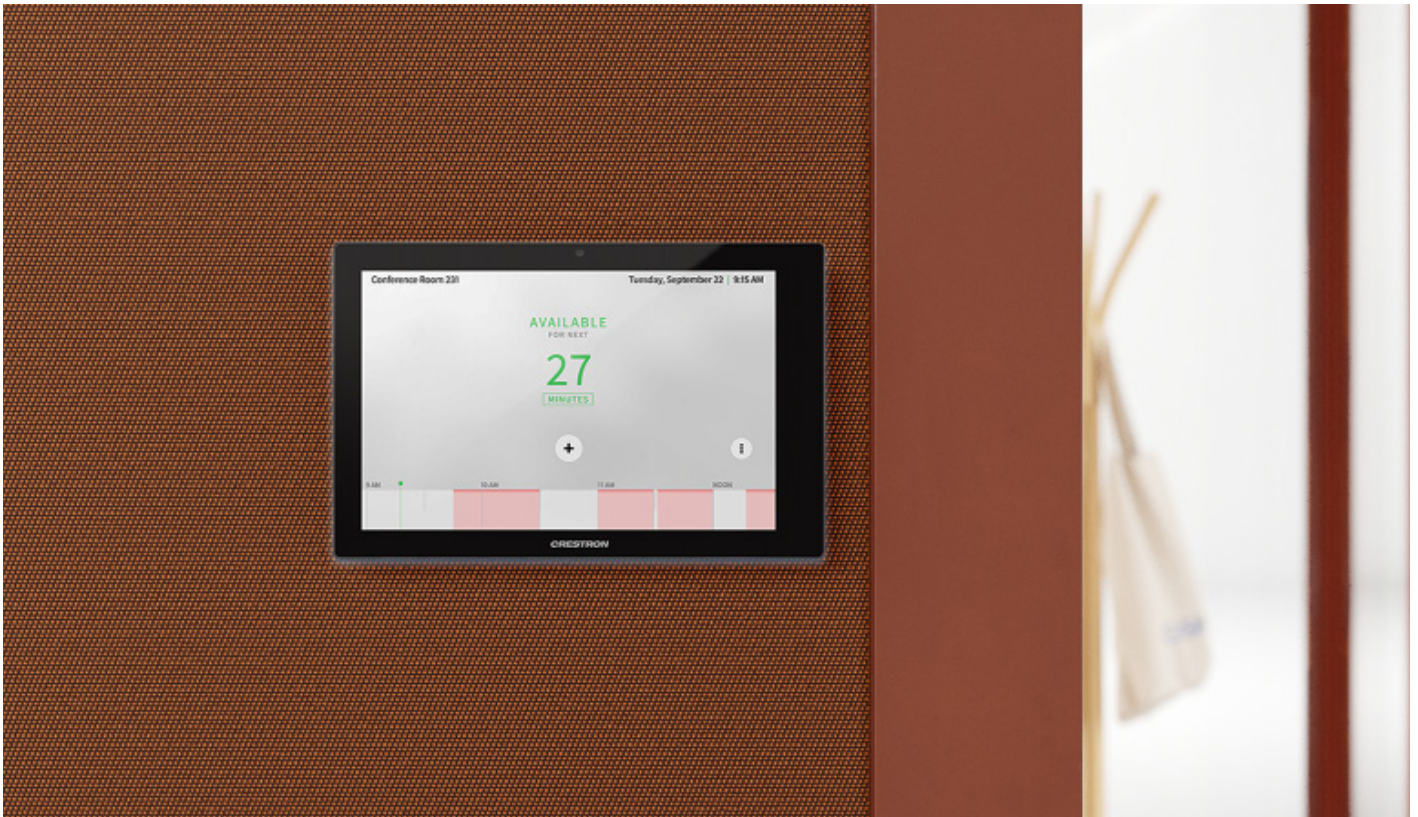
Secure endpoint



Cloud solution



Calendar



# Safety

## Key functions

---

- Smoke detection (\*)
- Sprinklers (\*)

(\*) For technical information see Product Specifications section

(\*) Kettal only provides roof adaptation for customer's sprinkler installation



Smoke detector

Sprinklers



# Wall mounted outlets

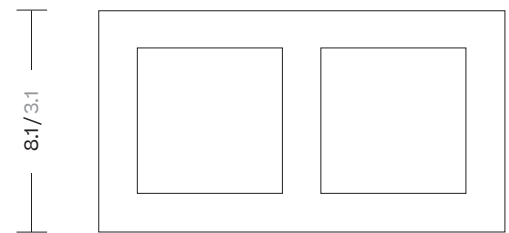
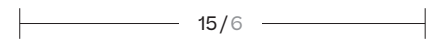
## Key functions

- Data Port
- HDMI
- Power Outlet
- USB
- Configurable
- Shatter-proof
- Flat design line

The outlets are mounted 325cm from floor to center and centered to the panel.

There are different combinations:

- Double plug
- Plug + Net
- Plug + USB A + USB C



cm/Inches



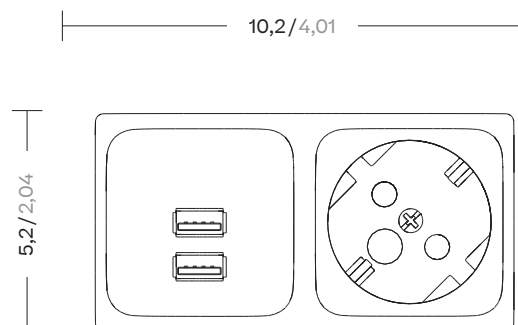


# Table mounted outlets

## Hardware

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- Simple design
- Power Connections
- USB
- Plug and outlet types (UK, FRA, US, SUI, AUS,...)



Pavilion M  
Acoustic side panels

**kettal**

# Acoustic plus

## Description

All our panels are tested to ensure they meet the required acoustic levels. We have tested some of the wall combinations to provide guidelines with regard to acoustic levels. Acoustic performance varies depending on the material selection for each wall.

The O glass version offers excellent acoustic performance, creating a comfortable and efficient working environment. It is based on 6+6 laminates with a soundproofing membrane to provide an impressive acoustic performance of up to 39dB. We also offer a range of solid wall options in fabric and wood. Many of these alternative wall options offer excellent acoustic performance properties. Our laminated panels not only provide additional acoustic performance, but also come in a range of colors. As a result, you can customize your Pavilion O to reflect your brand image or simply to create a bright office space. In addition, the eco-friendly panels reduce and control reverberated noise within the Pavilion, further enhancing the overall soundproofing performance.

## Key functions

- All materials meet the standard B-s2, d0.
- Anti memory acoustic foam
- Easy clean material
- Odor free and antimicrobial

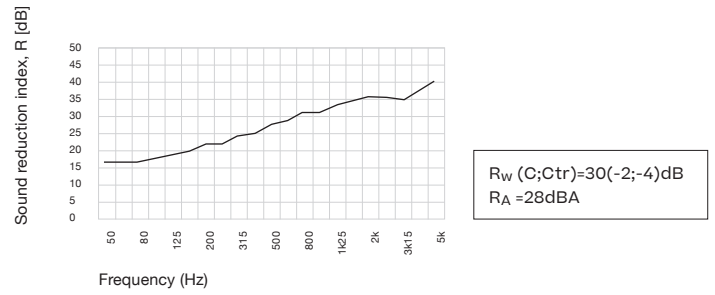


# Acoustic plus

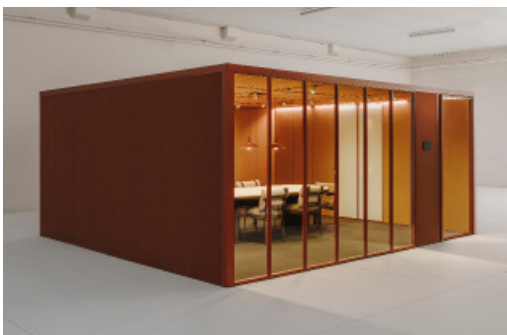
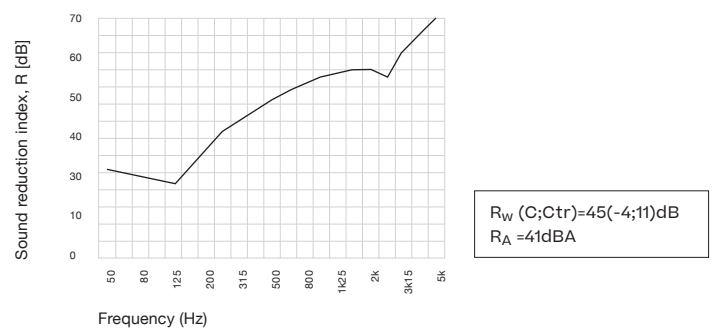
## Technical specifications



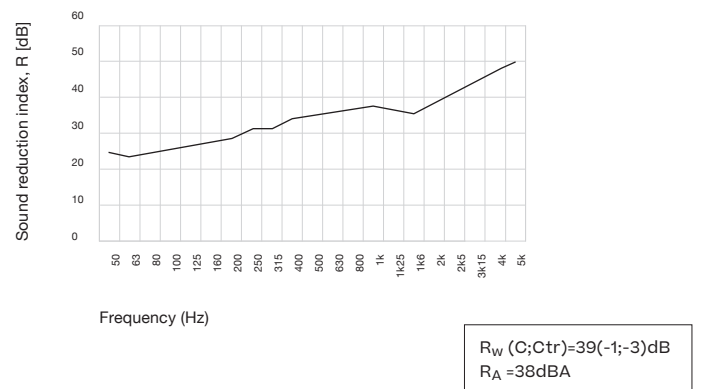
Ceiling Panel



Plus Wall Panel



Plus Acoustic Glass & Glass door



# Acoustic comfort

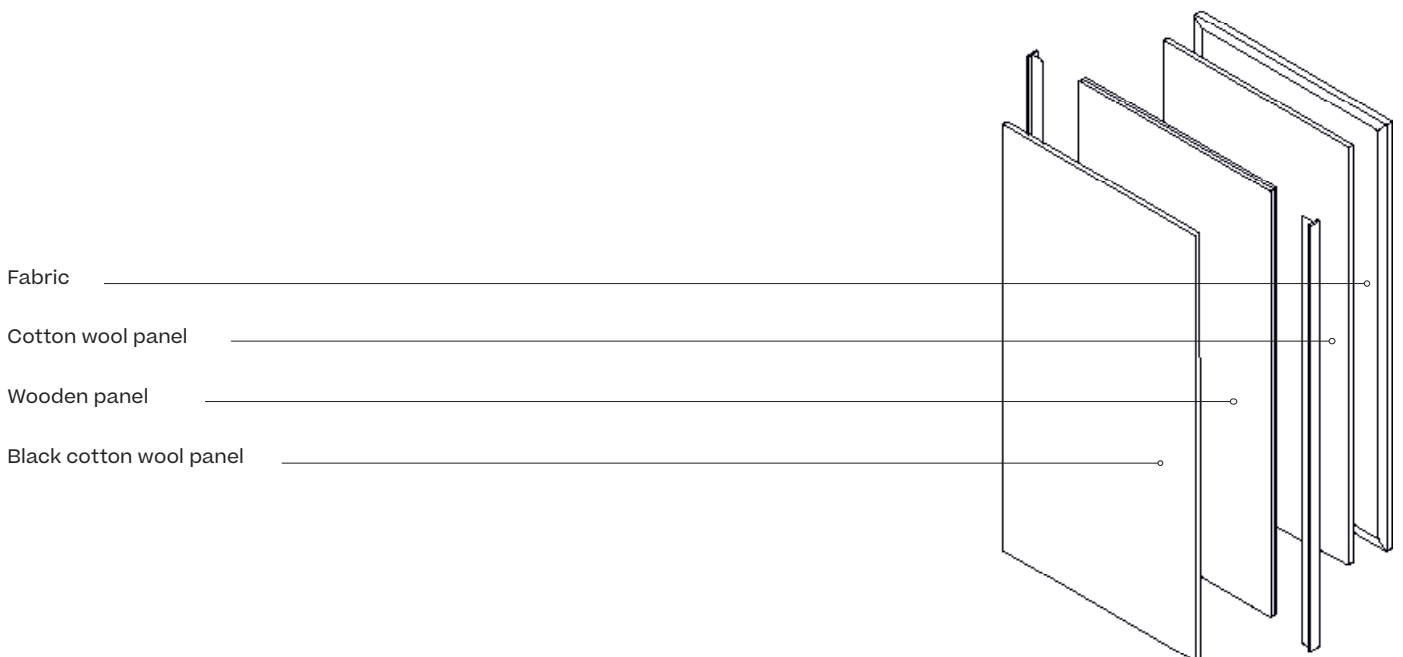
## Description

All our panels are tested to ensure they meet the required acoustic levels. We have tested some of the wall combinations to provide guidelines with regard to acoustic levels. Acoustic performance varies depending on the material selection for each wall.

The O glass version offers excellent acoustic performance, creating a comfortable and efficient working environment. It is based on 4+4 laminates with a soundproofing membrane to provide an impressive acoustic performance of up to 35dB. We also offer a range of solid wall options in fabric and wood. Many of these alternative wall options offer excellent acoustic performance properties. Our laminated panels not only provide additional acoustic performance, but also come in a range of colors. As a result, you can customize your Pavilion O to reflect your brand image or simply to create a bright office space. In addition, the eco-friendly panels reduce and control reverberated noise within the Pavilion, further enhancing the overall soundproofing performance.

## Key functions

- All materials meet the standard B-s2, d0.
- Anti memory acoustic foam
- Easy clean material
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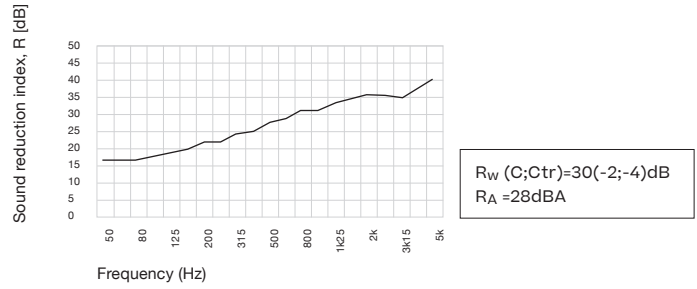


# Acoustic comfort

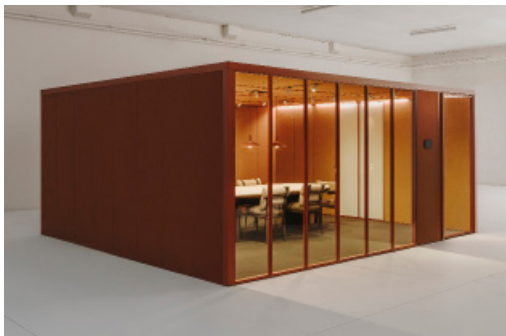
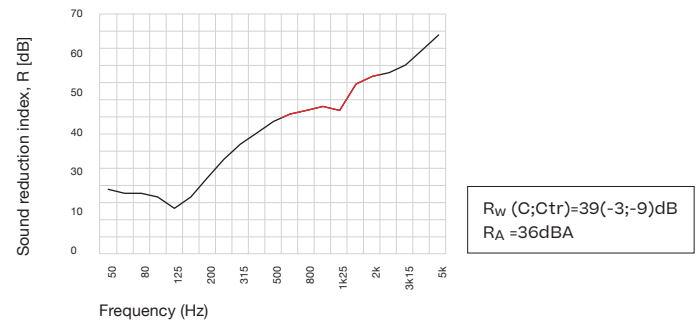
## Technical specifications



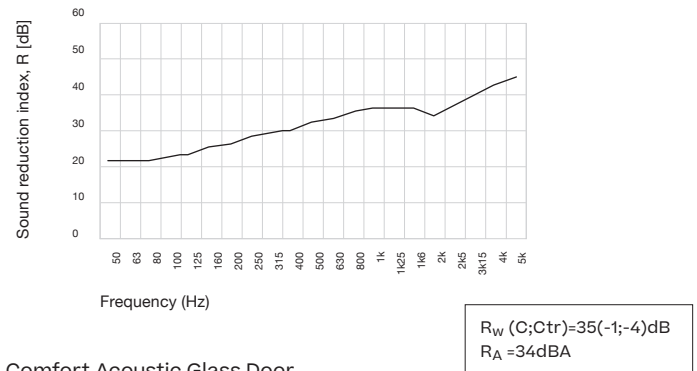
Ceiling Panel



Comfort Wall Panel



Comfort Acoustic Glass



Comfort Acoustic Glass Door



Pavilion M  
Aesthetics & materiality

**kettal**

# Materials

## Structural Aluminium

Extruded and hollow profiles of this alloy will be used to build up the structures of each booth.

This is a light and ductile alloy, with great strength and magnificent finishing characteristics. It is ideal for works that require high quality and perfect finishes.

It has excellent corrosion resistance, similar to that of stainless steel. Follows the UN-EN-AW 10204 3-1 regulation.

KETTAL uses 80% recycled aluminum in the extrusion of its profiles in order to reduce greenhouse gases, thus contributing to a more sustainable production of our customers' products.



Recyclable



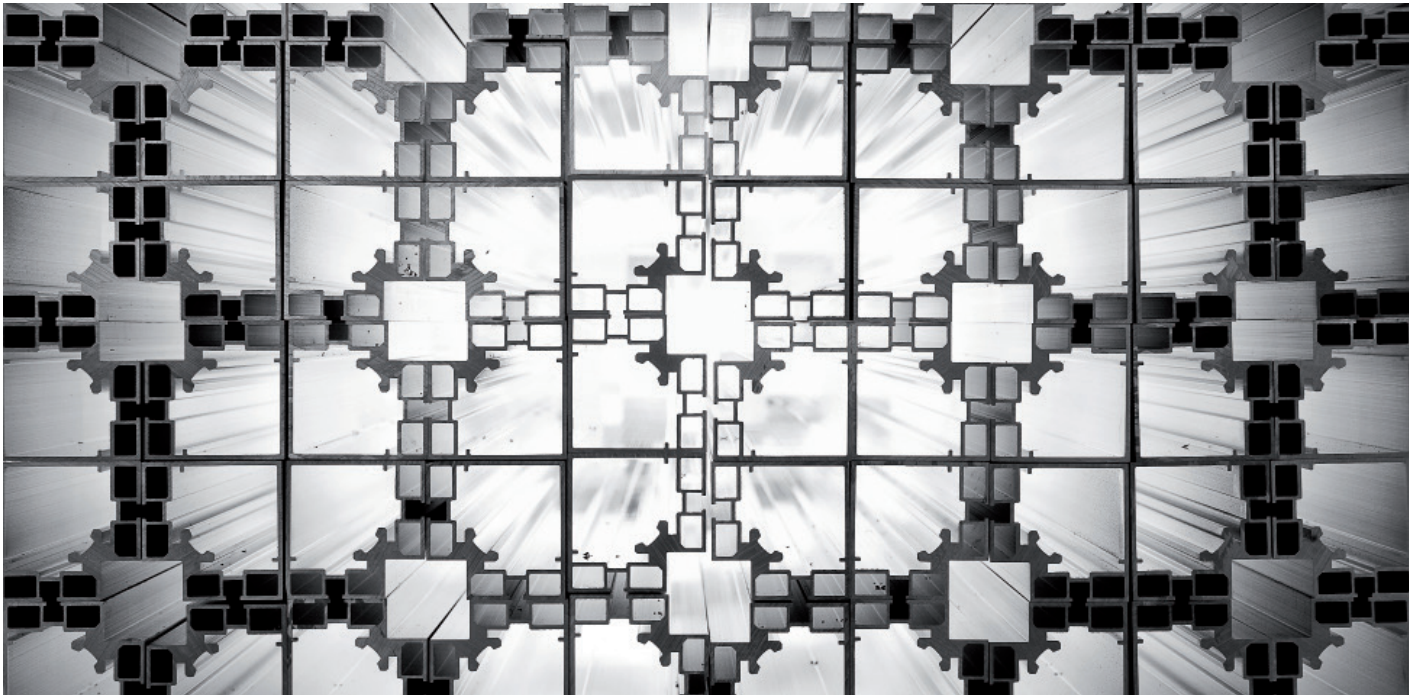
80% recycled



Local supplier

## Chemical composition (UN-EN 10204 3-1 Regulation)

%	Min. Máx.
Si	0.30 0.60
Fe	0.10 0.30
Cu	- 0.10
Mn	- 0.10
Mg	0.35 0.60
Cr	- 0.05
Zn	- 0.15
Ti	- 0.10





# Materials

## Technical wood

The technical wood is one of the main components to create the acoustic lateral panel and ceiling. 10mm fire-fighter. Complies with E1 regulation

The environmental product declaration is in accordance with ISO 14025 and EN 15804.

Comply with standards EN 622- 1, EN 622-5 and EN 14322. They are considered reliable products used as raw material for the construction and furniture industry.

Characteristics	Test	Units
Density	EN 323	kg/m3
Flexural strength	EN 310	N/mm2
Formaldehyde emission	EN 717-1	ppm
Reaction to fire	EN 13501-1	Euroclase
Absorption acoustic coefficient	UNE EN 13986:2006+A 1 :2015	α
Acoustic insulation	UNE EN 13986:2006+A 1 :2015	db
Biological durability	UNE EN 335	Clase de uso



Type 2  
From cradle to gate with options



Local supplier



Formaldehyde free



# Materials

## Soundproof Safety Glass

6 mm / 1 PVB / 6 mm

Soundproof safety glass, consists of two or more glass sheets joined by one or more Polyvinyl Butiral (PVB) films,

Direct acoustic isolation 39 dB.

If a laminated glass is broken, the PVB film retains a large part of the glass fragments, that is, the residual strength and the maintenance of the glazing are kept in the same place until they are replaced.

These glasses filter 99% of the UV rays and contribute to extend the life of curtains, rugs, fabrics, objects, etc., which are exposed daily to natural light.

It offers protection against a need for security and complies with the requirements of current norms and regulations, both for homes, shops or offices.

In case of breakage, the fragments remain attached to the sheet.

## Chemical composition

SiO <sub>2</sub>	69 - 74 %
Na <sub>2</sub> O	10 - 16 %
CaO	5 - 14 %
MgO	0 - 6 %
Al <sub>2</sub> O <sub>3</sub>	0 - 3 %
Others	0 - 5 %



Belgian supplier



Soundproof safety glass



# Materials

## Terrain Coatings

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Terrain Coatings are designed for aluminum profile coatings used in architecture and for other substrates where maximum outdoor resistance is needed.

It is a powder coating formulated with polyester resins and free of TGIC, pigments and additives. They offer excellent exterior durability with very good gloss retention and color stability.



Class A2



Polymerization  
at 160°



Local supplier



# Materials

## Terrain Coatings

Characteristics	Min.	Max.	Method
Baking time / temperature	24 to 150 °C / 75,2 to 302 °F	26 to 150 °C / 78,8 to 302 °F	Total time
Gloss at 60° angle	6	9	ISO 2813
Direct impact 12.5 mm	30		ISO 2813
Indirect impact 12.5 mm	30		ISO 2813
Cross-cut adhesion	0	0	ISO 2813
Erichsen Cupping test	5	11	ISO 2813
Bend test (Cylindrical Mandrel)		6	ISO 2813
Avg. Particle size	50	55	MALVERN
Particle size % < 100 MICRONS	80	95	MALVERN
Particle size % < 50 MICRONS	50	65	MALVERN
Particle size % < 10 MICRONS	4	8	MALVERN
Delta E colour		VISUAL	CIELAB
General appearance	Textured		NIZI-001

## Certificates



# Materials

## Kvadrat Relate Fabrics

Relate is a sophisticated twill weave upholstery textile designed by Patricia Urquiola made from Trevira CS, which has a soft hand resembling natural fibres.

The versatile palette for Relate comprises 35 colourways and expresses confident colour combinations by combining warm notes with closely related nuances.

Relate is suitable for contract and private use.

## Technical specifications

Composition	100% Trevira
Width	Approx. 140 cm
Weight per m <sup>2</sup>	Approx. 328/m <sup>2</sup>
Fire test	AS/NZS 3837 class 2, BS 5852 Crib 5, BS 5852 part 1 with treatment, DIN 4102 B1, EN 1021-1/2, IMO FTP Code 2010 Part 8, NF D 60 013, NF P 92 503 M1, NFPA 701, SN 198 898 5.2, UNI 9177 Classe 1, US 1 Cal. Bull. 117-2013, ÖNORM B1/Q1
Lightfastness	5-7 (ISO 1-8)
Shrinking	App 2%
Abrasion Martindale	80.000 Martindale
Wash load	Half
Pilling	4-5 (ISO 1-5)
Colour	Slight differences may occur
Produced in environment	Greenguard Certification <a href="http://www.greenguard.org">www.greenguard.org</a>

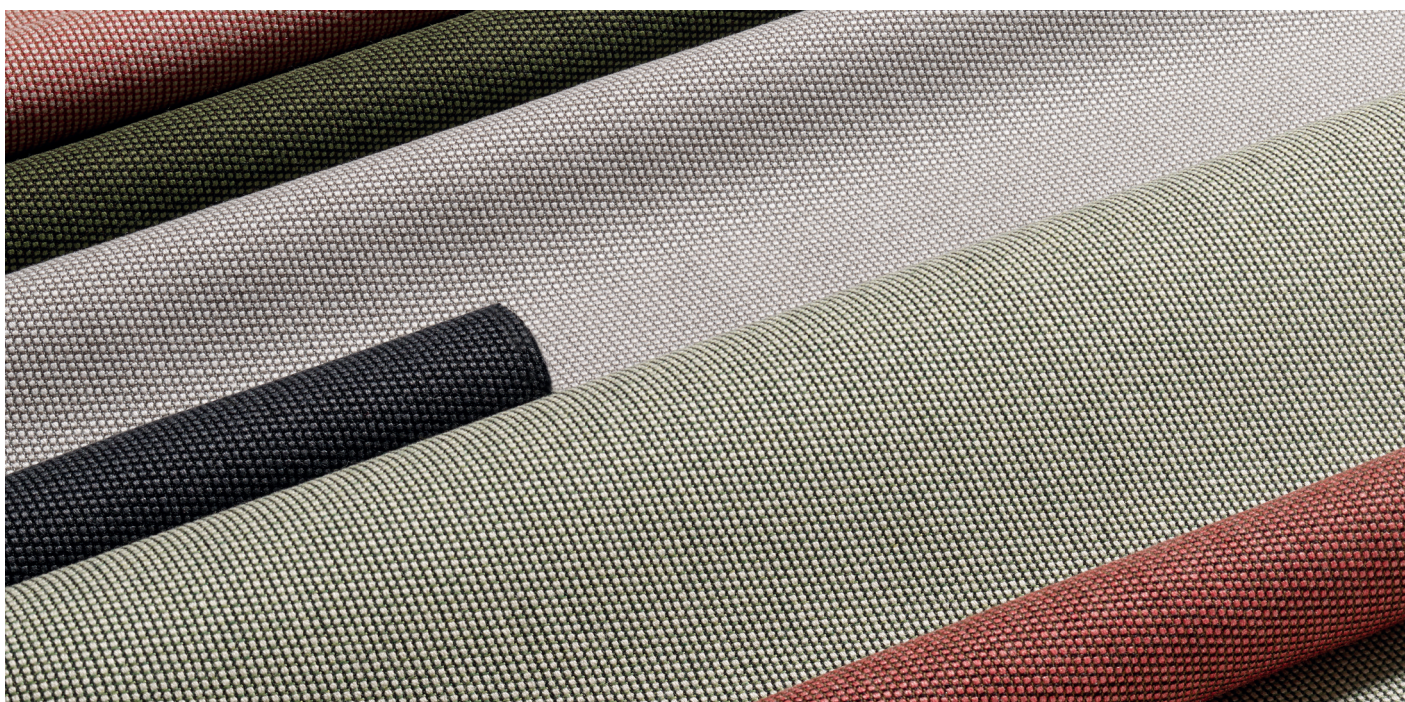


# Materials

## Terrain Fabrics

Tolerance ± 5%

Property	Value	Unit	Standard used
Weight	370	g/m <sup>2</sup>	UNE 40339
Resistance to surface wetting (Spray Test)	100	(max. 100)	UNE-EN ISO 4920
Oil repellency	6	(max. 6)	AATCC 118
Warp tensile strength	180	daN/5 cm	UNE-EN ISO 13934-1
Weft tensile strength	240	daN/5 cm	UNE-EN ISO 13934-1
Warp tearing resistance	21	daN	UNE-EN ISO 13937-2
Weft tearing resistance	29	daN	UNE-EN ISO 13937-2
Dimensional stability	± 0,5	%	UNE-EN ISO 5077
Colour fastness to artificial weathering	7-8	blue scale (8)	UNE-EN ISO 105-B04
Colour fastness to artificial light	7-8	blue scale (8)	UNE-EN ISO 105-B02
Colour fastness to chlorinated water (from pools)	5	(max. 5)	UNE-EN ISO 105-E03
Colour fastness to seawater	5	(max. 5)	UNE-EN ISO 105-E02
Abrasion resistance (Martindale)	50.000	cycles	ISO 12947-2
Abrasion resistance (Wyzenbeek)	15.000	double rubbs	ASTM D4157
Flame retardant	Class 1		NFPA 260
	Pass		IMO / CA TB 117 / EN1021-1 / BS5852-1 (S4)



# Materials

## Recycled Cotton Wool

1. Ecological Product. Bio-sustainable. 80% recycled and 100% recyclable.
2. Safe in its installation: It does not cause discomfort or itching as it is based on natural fibers.
3. Elastic product. Does not break when folding. Its modulus of elasticity compared to rock wool is: 7 times better.

It does not promote combustion. Fire classification: M1 Certified 09/32300075 and 76 + according to UNE 23721-90, EN 13501-1.

Frequency	Rockwool 4cm	Cotton 3cm
100	40,7	43,8
200	43,8	42
250	46,8	33,2
400	47,2	46,8
500	47,8	53,3
1000	54,4	54
1250	55,6	56,8
1600	56,6	57,5
2000	59,3	60,1
2500	61	61,2
3150	64,3	66
4000	66,1	68
GLOBAL	53 dBA	54,6 dBA



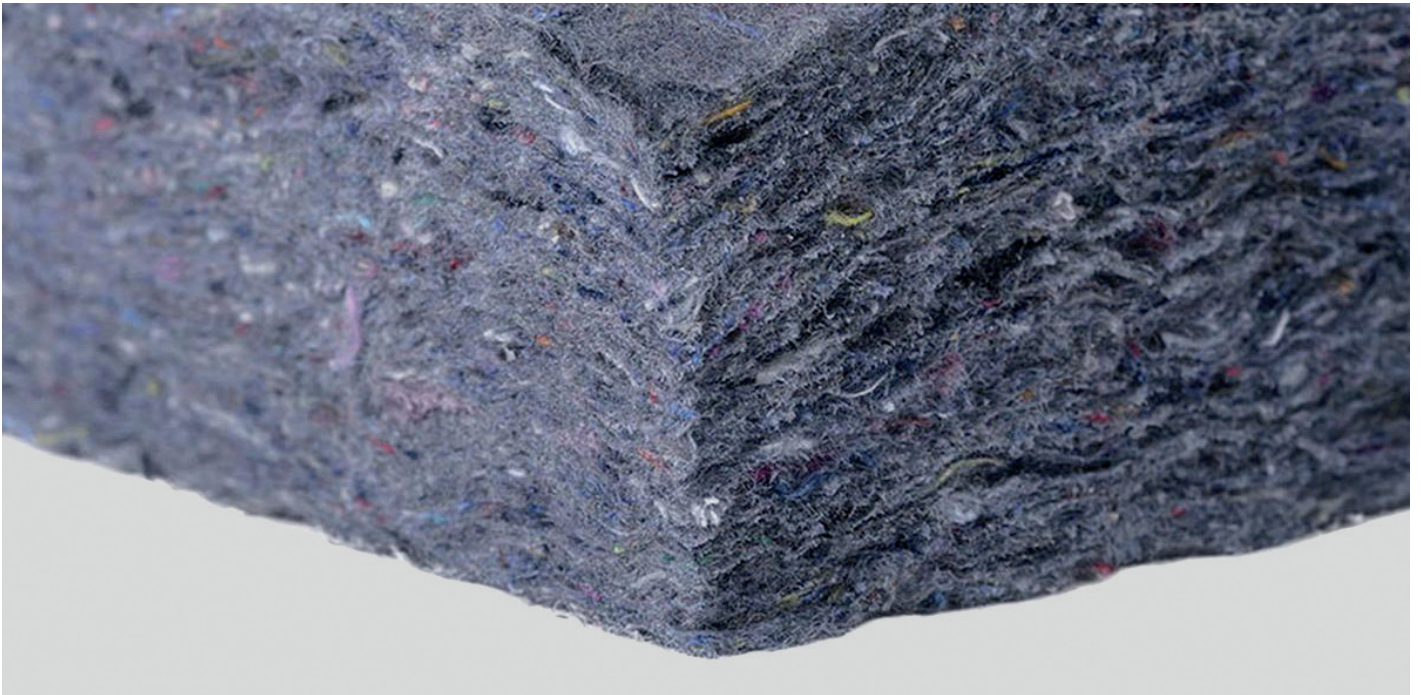
Type 2  
From cradle to gate with options



Local supplier



Recyclable



# Materials

## Soundproofing Membrane

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High-density, polymer-based, asphalt-free synthetic soundproofing membrane.

## Note

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No substances including in the LIST OF PROHIBITED SUBSTANCES in CRADLE TO CRADLE CERTIFIED PRODUCTS PROGRAM are used in the manufacturing of the product range Soundproofing Membrane so those substances are not expected to be on the final product.

## Restricted Substances (REACH Annex 17)"

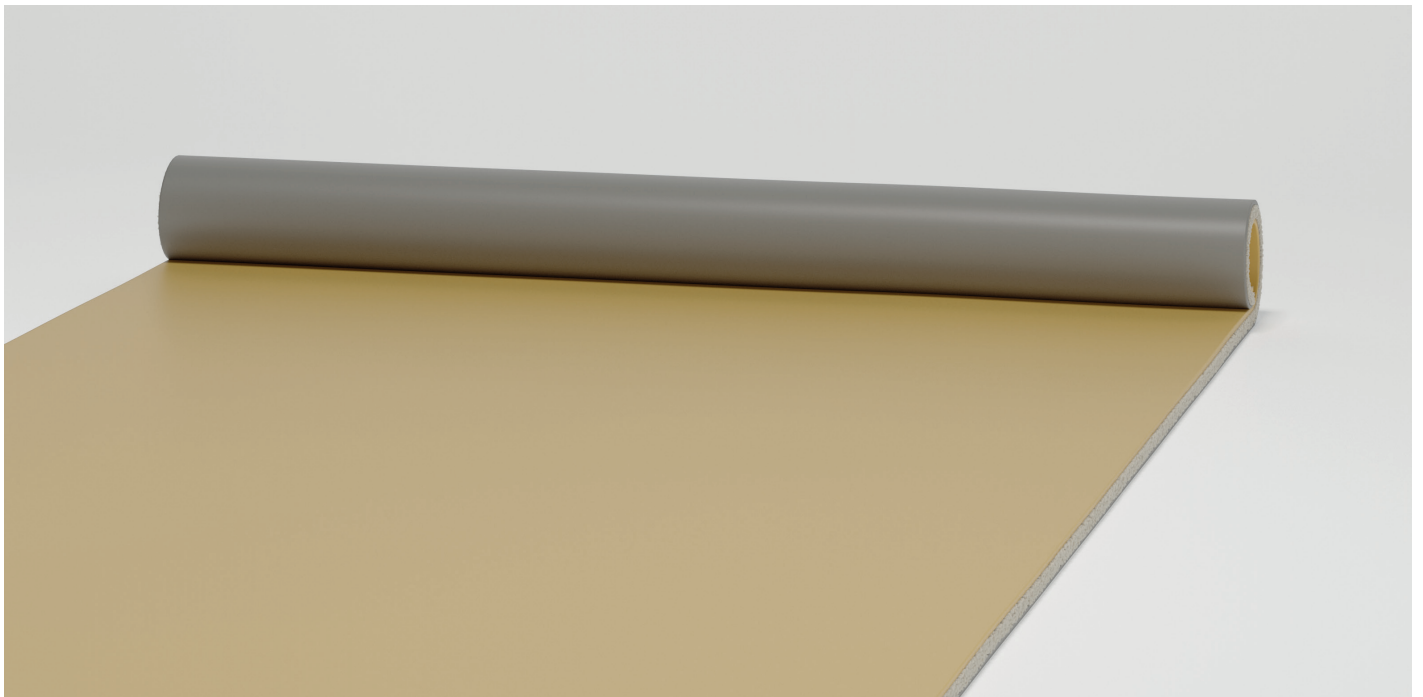
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The item(s) stated within section "2" of this declaration satisfy the requirements that are defined in Title VIII of Regulation (EC) No. 1907/2006 (REACH regulation ), including the restrictions listed in Annex 17 of REACH.

Link: <https://echa.europa.eu/substances-restricted-under-reach>



Local supplier






# Materials

## Soundproofing Membrane

Characteristics	Testing method	Tecsoundsy	Units
Density	-	2.010	kg/m <sup>3</sup>
Tensile strength	NT-67	>30	N/50mm
Elongation	NT-67	>500	%
Fold	EN 1109	-20	°C
Fire classification	UNE-EN 13501-1	Bs2d0	-
Resistance factor to water steam	UNE-EN 1931 met B	μ>1806	-
Water absorption (24h at 23°C)	1S062 met 1 NT74	0,003	%
Shore A hardness	NT74	30±10	

Regulation or protocol	Conclusion	Version of regulation of protocol
French VOC Regulation		Regulation of March and April 2011 (DEVL1101903D and DEVL1104875A)
French CMR components	Pass	Regulation of March and April 2011 (DEVL1101903D and DEVL1104875A)
AgBB/ABG	Pass	Anforderungen an bauliche Anlagen bezüglich des Gesundheitsschutzes (ABG), Entwurf 31.08.2017
Belgian Regulation	Pass	Royal decree of May 2015 (C-2014/24239)
Indoor Air Comfort®	Pass	Indoor Air Comfort 6.0 of February 2017
Indoor Air Comfort GOLD®	Pass	Indoor Air Comfort GOLD 6.0 of February 2017
Blue Angel (RAL UZ 132)	Fail	Low-Emission Thermal Insulation Material and Suspended Ceilings for Use in Buildings, October 2010
BREEAM International	Compliant	GN22 v2.2 (August 2017): BREEAM Recognised Schemes for VOC Emissions from Building Products
LEED v4 (outside U.S.)	Compliant	LEED v4 for Building Design and Construction (April 2015)

Pavilion M  
Technical data

**kettal**

# General data

## Power

---

Voltage Input: 100-240VAC (single-phase)  
Frequency Input: 50-60Hz  
Available system power: 16A (The electrical system is designed to support up to the right power)  
NETWORK line – RJ45 POE+

## Power protection

Each Pavilion M must be protected with:

- Differential magnet (30mA)
- Magnetotherm (16A)

It is the customer's responsibility to provide protection for the power lines.

## Power connection

Pavilion M has two power and network connection systems:

### 1. Connection through the base of the column

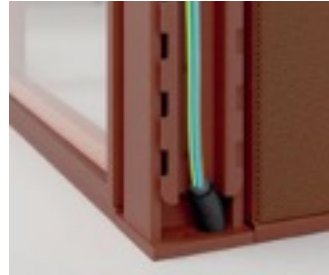


Illustration 1 - Power and data connection through column base

When:

If the client has a raised floor and prefers the room's power supply connection to be hidden.

How:

At the room base labelled "power supply and data input", Kettal will provide 5 metres of multicore cable (3G 2.5mm<sup>2</sup>) to connect the room to the power supply line provided by the client. The end of the above-stated multicore cable will be fitted with a (male) GST18i3 connector. For safe, quick connection, Kettal provides a female connector to attach to the client's cable that is of the same type as the connector in the room. A 5 meter RJ45 (male) CAT6A network cable is also supplied to connect the pavilion data system.

### 2. Connection through one side of a column



Illustration 2 - Power and data connection through column side

When:

If the client does not have a raised floor and needs a surface-laid connection to the pavilion, the client must select this type of connection for the room.

How:

The column selected as "power supply and data input" will have a (male) GST18i3 surface connector and a RJ45 CAT6A connector. The client must provide a power line up to that point. To make the connection, Kettal provides a (female) GST18i3 connector which the client must attach to their power cable to enable simple, quick connection to the pavilion. The customer must also reach that point with an RJ45 cable (male) to connect to the pavilion

# Technical data, Connector

## General data

Nominal current	20 A
Nominal voltage	250 V
Short-circuit voltage	4 kV
Canopy	Yes
Pollution degree	2
Mechanical coding	Code 1
Lockable	Self-locking (tool release)
Colour code	Black
Pin marking	L, N, PE
Canopy colour	Black

## Connection data

Cable diameter, max.	10.5 mm
Cable diameter, min.	6.5 mm
Solid conductor cross-section, mm <sup>2</sup> max.	2.5 mm <sup>2</sup>
Solid conductor cross-section, mm <sup>2</sup> min.	0.75 mm <sup>2</sup>
Stranded conductor cross-section, mm <sup>2</sup> max.	2.5 mm <sup>2</sup>
Stranded conductor cross-section, mm <sup>2</sup> min.	0.75 mm <sup>2</sup>
Endings per pin	1
Cable stripping	38.5 mm
Wire stripping	7 mm

## Material

Casing material	Polyamide
Halogen-free	Yes
Contact material	Cu-Zn
Heat load	0.089 kWh
Insulation components, continuous temperature	100°C



Illustration 3 - (female) GST18i3 connector for the client's power line

# Control

## PIR Sensor

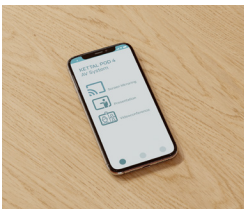
Using the established settings, the presence sensor (PIR) enables automatic control of lighting and ventilation.

Operation:

**Entry** – When a person enters the room in OFF state, all luminaires switch on 100% (ON state).

**Exit** – When the person leaves the room, the lighting and ventilation will switch to the OFF state after 15 minutes.

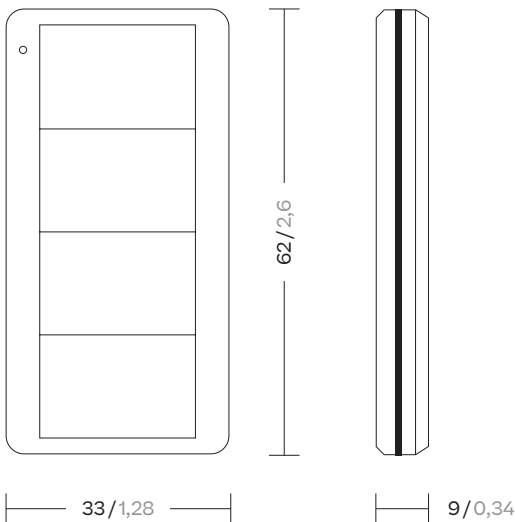
**Room in Use** – While the room is in use, the user can regulate the lighting from the button panel or the App (Only with HUB).



Smartphone



Tablet



4-channel Casambi button panel (dimensions)

A system for controlling room lighting using Wireless.

Pavilion M provides 2 ways of controlling lighting:

**1. 4-Channel button panel:** Each room has at least one 4-channel button panel. This accessory enables interaction with all luminaires.

**Location:** This item operates through the scenes pre-configured. Among other benefits, it does not need any wiring, so it can be placed anywhere in the room, even inside a piece of furniture (it can be fastened with an adhesive strip). The standard location will be at the column on the door side.

These configurations will come std from the Kettal's factory. in case of having a HUB, the client can modify them

**2. APP:** Each room and project has a standard setting that enables interaction with all luminaire groups (on, off and adjust)

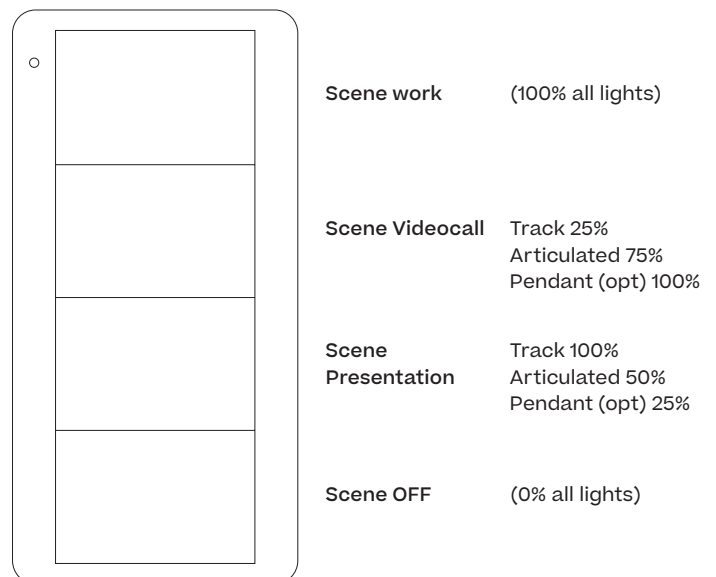
The settings programmed by Kettal enable the user to have an Administrator account.

### Administrator

Overall control of all the project's rooms from a central point. Possibility of modifying, deleting or adding scenes, routines, equipment, etc.

### User

Limited control of the rooms' functions. Possibility of turning on, turning off and adjusting separately the different lines in the room.



4-channel Casambi button panel (button description)

# Luminaire groups

## Luminaires

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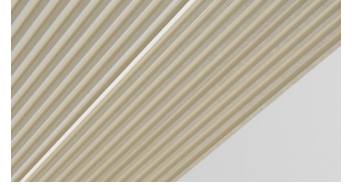
The luminaires will be grouped in a standard layout for control by Kettal if no instructions are given otherwise.

As a general rule, groups will be created consisting of: LED Track, Dot Track and Pendant.

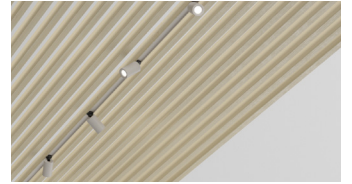
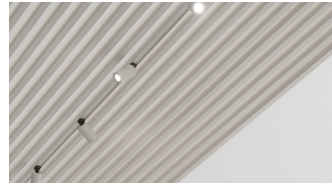
There will be one or more luminaire groups of this type, depending on room size. Each group will be identified by a generic photograph to show which type it belongs to.

If the client thinks it necessary, the images, names and luminaire groups can be modified with the Administrator account.

### LED Track



### Dot Track



### Pendant



# Videoconferences and presentations

All pavilions O can be equipped with videoconferencing and presentation equipment for performing any activity to professional standards.

All systems available in the Pavilion M are based on a BYOD (Bring Your Own Device) system. This means that users can use their own devices (laptops, tablets, smartphones ...) to benefit easily, securely and professionally from the room's amenities.

The equipment can be used with any operating system (Windows, iOS, etc.).

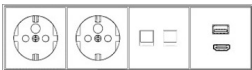
## Samsung monitor

Smart 4K monitor for professional use for presentations from an external device.



## Charging and data accessories on TV Panel:

All TV panels will be equipped with 4 accessories, which will be hidden once the monitor has been installed. These will consist of the following:  
 2 Power + Double Network (RJ45 CAT6A)  
 + USB/HDMI



Installation: Installation will be carried out on the Screen or Screen + SoundBar panel

## Smart Soundbar & Camera Crestron



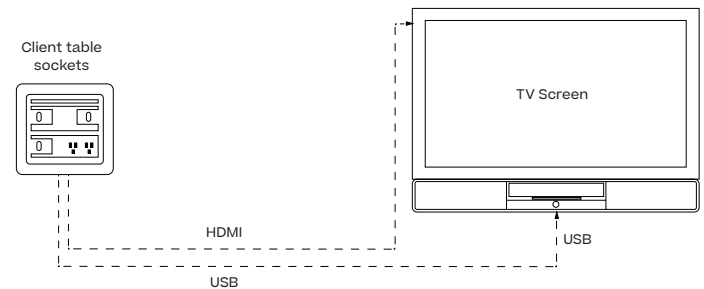
Illustration 5 - Crestron Soundbar & Camera

Connects the user's computer to the room's loudspeakers and camera via USB.

Installation: Installation will be carried out on the Screen + SoundBar panel.

Wiring: The equipment has enough cable length to power the equipment and enough USB cable to reach the central table, where the user's personal device will be located.

The necessary cables are provided by Kettal.

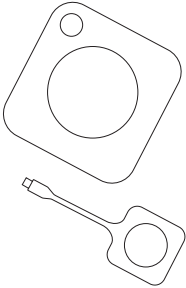


This wiring, shown in the image above, must be installed from the TV+SoundBar panel, through the client's raised floor, to where the equipment for controlling the peripheral devices must be located. Our pavilion does not have a raised access floor for routing cables.

If a raised floor is not available for routing the cables and the client wishes to have this equipment in the room, another solution must be found with the client for installing the cables or, alternatively, the Wireless system can be purchased.

# Videoconferences and presentations

## Wireless system CX-20



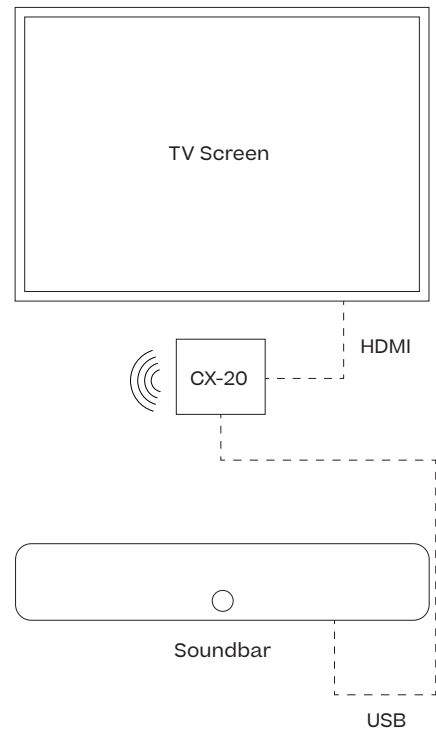
Clickshare CX-20 device

If the client prefers to make wireless connections with the room monitor and the soundbar and camera, they must buy this equipment.

Professional, quickly set-up presentation and videoconferencing system.

With this system, you can connect to the room's peripheral equipment (monitor, soundbar and camera, etc.) remotely, quickly and securely from your personal device (PC, MAC, smartphone or tablet), using any videoconferencing system.

In case the customer has only TV in their living room (without SoundBar), they can select the Barco C-5 equipment. This is best suited for presentation applications.



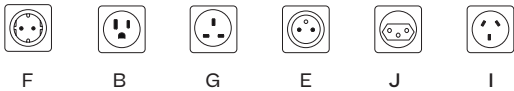


# Charging and data accessories

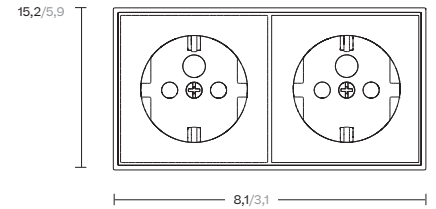
The panels can be equipped with:

## 2 x Power

- Voltage: 230 VAC 50 Hz (110VAC 60 Hz USA version)
- Settings adapted to country



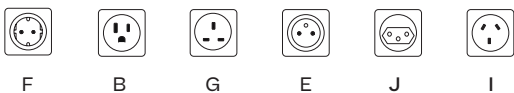
- Maximum power consumption per pavilion must not exceed 16 A
- Each socket can take up to 10 A



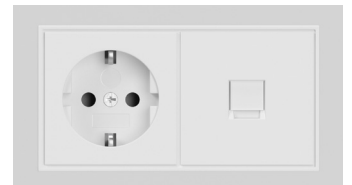
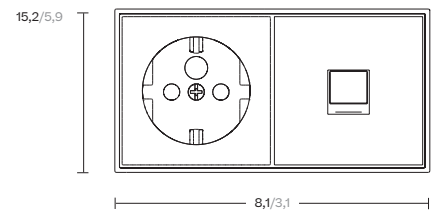
## Power + Network

### Socket

- Voltage: 230 VAC 50 Hz (110VAC 60 Hz USA version)
- Settings adapted to country



- Maximum power consumption per pavilion must not exceed 16 A
- Each socket can take up to 10 A



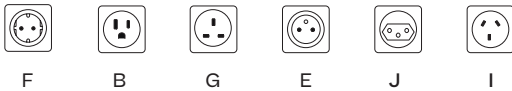
### Network socket

- Network connection RJ45 CAT6A
- 8-pin network connection

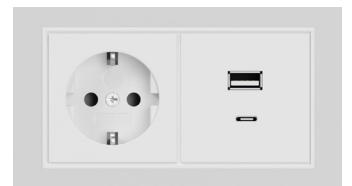
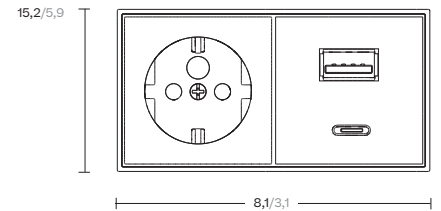
# Charging and data accessories

## Power + USB Charge (Type A and C)

- Voltage: 230 VAC 50 Hz (110VAC 60 Hz USA version)
- Settings adapted to country

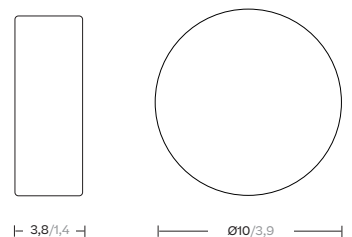


- Maximum power consumption per pavilion must not exceed 16 A
- Each socket can take up to 10 A USB charge
- Number of sockets 2
- 1 type A and 1 type C
- Maximum charging current 3000 mA
- Input voltage: 100-240 VAC 50/60 Hz



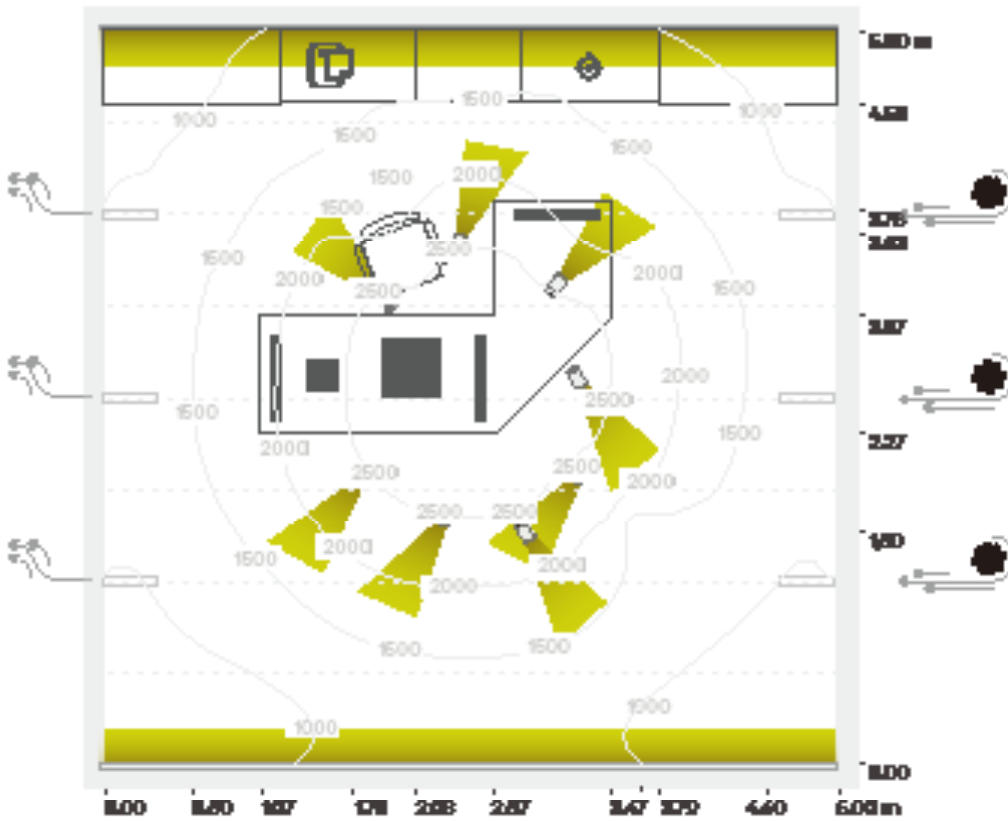
## Smoke detector

- Changeable insect protection
- Lithium battery with passivation protection
- Battery life: 12 years
- Processor technology with two sensors (smoke + heat)
- Maximum real alarm precision
- Suitable for kitchen use
- 88 dB alarm signal at distance of 3 m
- Measurements (Ø x H): 10 x 3.8 cm
- Detection range: up to 60 m<sup>2</sup> (depending on installation conditions)
- Optimal storage temperature: +10 ... + 35°C, <70% relative humidity
- User-friendly, large check/stop key (78 cm<sup>2</sup>)
- Magnetic fastening with mounting by glue or drill hole
- Compliant with strictest requirements of the vfdb 14-01 directive
- CE in accordance with EN 14604-2005/AC-2008
- TÜV Nord Cert (Kriwan no. 1772-CPR-150500)
- Colour: Alpine white



# Lighting simulation

Pavilion 4970X5570



UL 1598 compliance certificate all internal electrical components.

**Regulations:**

- UNE-EN 60598
- UNE-EN 55015
- UNE-EN 60529

**Maintenance**

Clean with a smooth cloth. Do not use ammonia products, solvents or abrasives.  
Pursuant to the legislation in force, this product is guaranteed for two years starting from the date of purchase.



Total (W)	355 W
Input voltage	100 - 240V
Frequency	50-60 Hz
Nominal voltage	24Vdc
Color temperature	3500K
Luminous efficacy	120lm/w
Luminous flux	43000lm
Lighting level	500lux (on a center table)
Average lifetime	50.000h L80B20
IRC	90
Light source	Built-in Light source
Materials	Aluminium body & PMMA diffuser
Dimming control	Casambi App