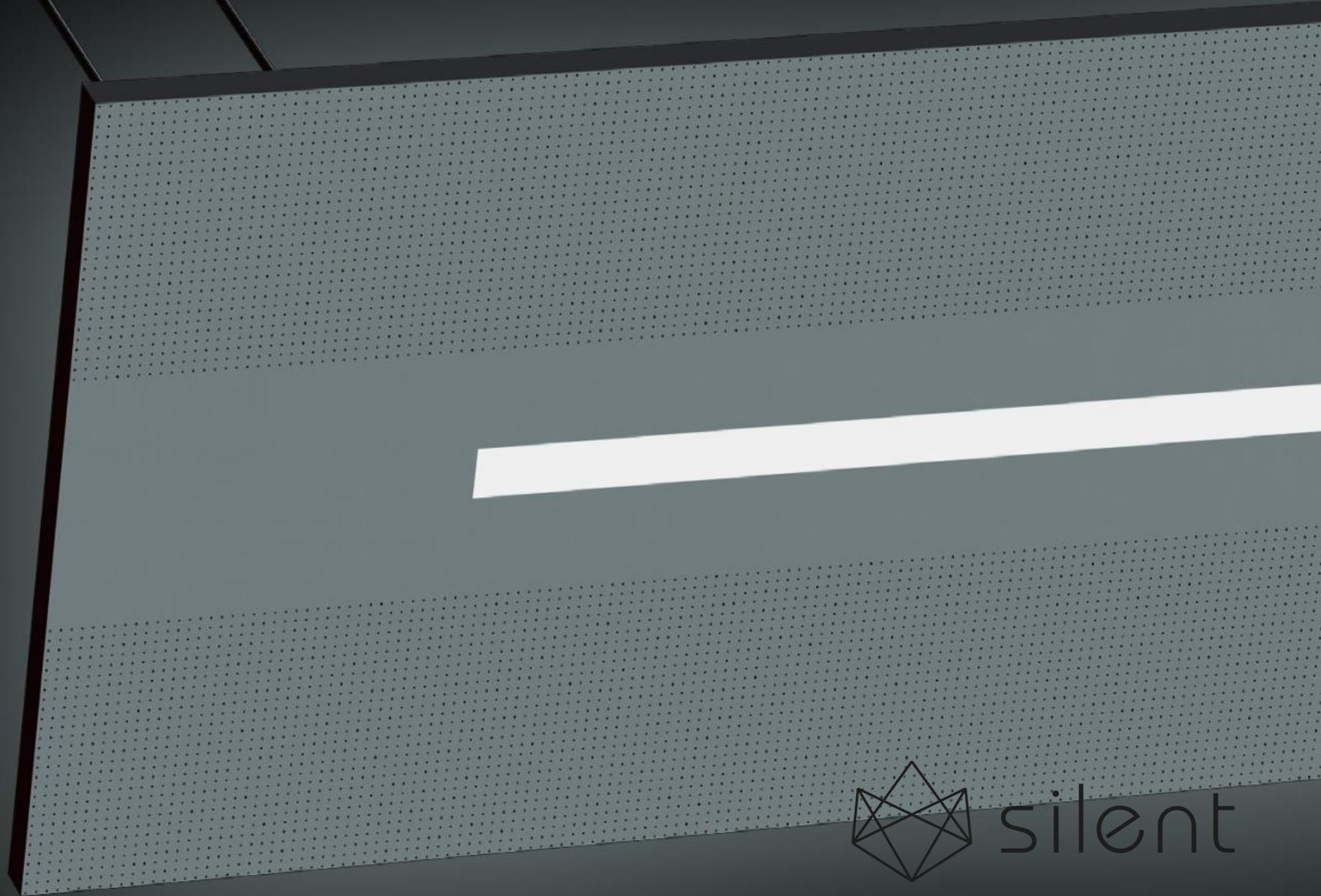


Silent SDMS

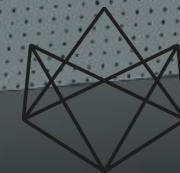
VIRTUAL
DAY
LIGHT

ULTRA
VISION

HUMAN
CENTRIC



LED lighting with advanced sound absorbing technology to minimize reverberation and create spaces of excellence



silent

Illumination made better

www.silent.design

Creating spaces of excellence with advanced acoustic technology

By utilising the latest LED lighting and acoustic sound absorbing technology, we can optimize the occupied space to allow people to perform at their best.



Why is sound reverberation time reduction important?

Reverberation time is a measure of how long sound stays present within a space after it is made. More specifically, reverberation time is defined as the time required for the level of sound in a room to drop 60 dB after the sound has stopped**.

If the reverberation time is too long and if the speaker does not speak slowly, a listener will actually hear sound from more than one word simultaneously. The result is a garbled sound that is not easily understood. On the other hand, if music is played within a space with a long reverberation time, the musical notes tend to blend together which is more pleasing than a dry dead sound. So the use of a space has a lot of bearing on what reverberation time is most desirable. **

So when we talk about reducing the reverberation time to comply to the standards we need to achieve a time of <math><0.5</math> seconds for primary school or small classrooms, and <math><0.8</math> seconds for secondary/larger school classrooms and offices

** Source: noiseengineers.com





Sound absorbing panels minimize reverberation time and make teaching and office spaces a better place to learn and work in.

Behind the perforated metal wings lies 50mm thick non combustable acoustic glass fibre sheets to minimize reverberation

Description: Stone wool slab with black glass fibre cloth on one side and grey glass fibre felt on the other side

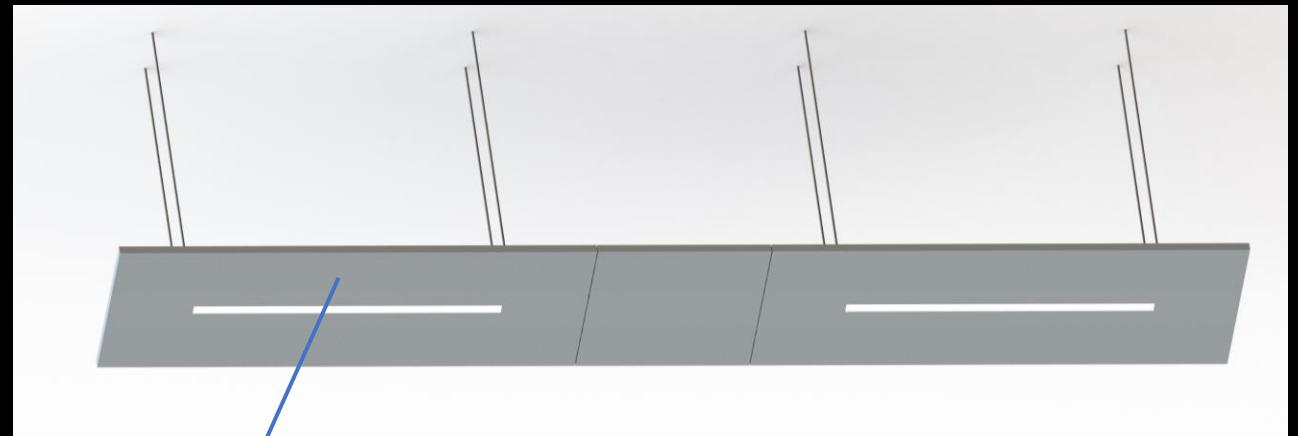
Nominal density: 80kg/m²

Fire properties: Euroclass A1 according to EN 13501-1

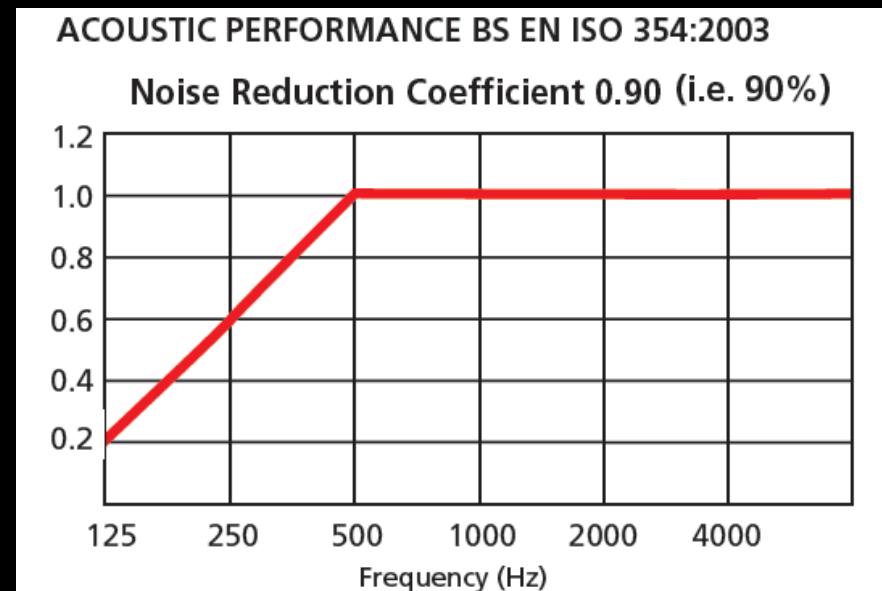
Thermal properties: Thermal conductivity 0.037 W/mK

Moisture properties: Water absorbtion <1kg/m²

Durability: Fire performance of mineral wool does not deteriorate over time or high temperature. The euroclass classification of this product is related to the organic content which cannot increase over time



50mm thick acoustic glass fibre material hidden behind the wings of the Sonus provide sound deadening to the space



Class A acoustic absorber at 50mm thickness



Well illuminated spaces with the Silent Sonus

By utilising the latest LED lighting technology we can bring running costs down and provide a more comfortable working environment.

We have many LED lighting options for the Sonus to light the space.

Along with 3000K and 4000K standard options we can also have a variety of super adjustable lighting technologies detailed in the next section.

A full range of emergency gear can be provided from standard 3 hour emergency packages, to Self Test, and DALI EM PRO automatic testing and reporting units.

Sensors and other services maybe also incorporated into the Sonus such as PIRS,, smoke detectors, speakers and cut outs for sprinklers.

Controls can be wired or use Casambi wireless controls which can be managed and operated from your phone

With the Silent Sonus we have the following LED options available:

Light sources: 3000K, 4000K, Virtual Daylight, Human Centric, and Ultra Vision.

Control options: DALI, Fixed output, 1-10v, Casambi

Rated lifetime : 50,000hours

Colour rendering: CRI>80 standard CRI>98 sunlike



The pinnacle of LED lighting technology- combining sunlike LED chips in both warm and cool colour temperatures to both give you full daylight spectrum but also changing colour temperature throughout the day fro better sleep at night, and better performance during th day.



By utilising the latest full spectrum LED lighting chips from Seoul semiconductors we can create a light spectrum that most closely resembles natural daylight for a more natural and energised light scheme



Using warm 2700K and cool 5700K LEDs in one light fitting we can combine them together to make a natural progression of colour temperature that follows the contours of the suns own colour temperature differences throughout the day. This enhances the bodies melatonin and supresses it at the right times of day to ensure you are energised at the right time and wind down when required. This means you should be able to get more sleep rather than you would being bombared by blue rich light al day.



Silent Sonus product specification

High performance combined LED and acoustic lighting with direct and indirect lighting distribution

Silent Sonus

Designed to meet sound regulations EN12464 as well as BB93 for schools. LEDs and drivers from either Philips or Tridonic means the Sonus is at the forefront of LED efficiency and proven lifetime abilities. Using a flush recessed optic with a microprism insert allows schemes with a UGR<19 to be achieved. With the direct and indirect lighting elements, the Sonus provides a uniform, well lit space. Going one step further along the LED evolution the Sonus can be supplied with Tunable white for human centric applications or sunlike full spectrum LEDs for a complete solution.

Size options

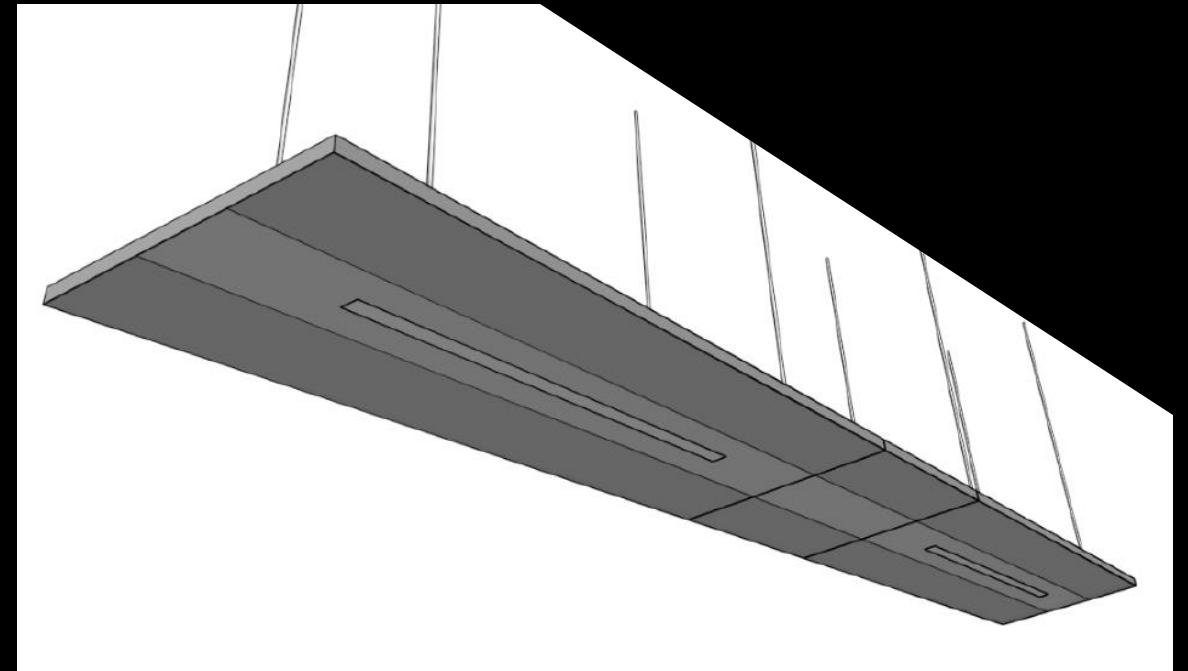
Standard sizes are 2400mm long and 1800mm long. The Sonus can also be made into a variety of custom sizes to suit the space. Nfil panels can be made from any length from 300mm to 1800mm long.

Acoustic performance

Incorporating 50mm thick fire proof acoustic panels into the wings of the Sonus along with micro perforated metal work allows the Sonus to meet the BS93 requirements of teaching spaces.

Control and integration

The ability of the Sonus to take most building services that require a round cut out is extremely helpful to the quick and efficient construction of the space. PIRS, speakers, fire alarm pieces and sprinklers can all be accommodated in the structure. Control can be wither wired with 1-10v, DALI or wireless with Casambi controls.



Installation

Plug and play installation is provided via 4, 5, or 6 pole plugs and T pieces to allow connection of other services and through wiring to the next lighting unit. This allows for extremely quick setup on site.

Standards

Fire protection Euroclass A1 for acoustic material.
Meets BB93 Acoustic design of schools standard.
Emergency lighting compliant with EN 60598-2-22

Applications

Primary Schools
Secondary Schools
Universities
Offices

Silent Sonus product specification

High performance combined LED and acoustic lighting with direct and indirect lighting distribution

LED performance

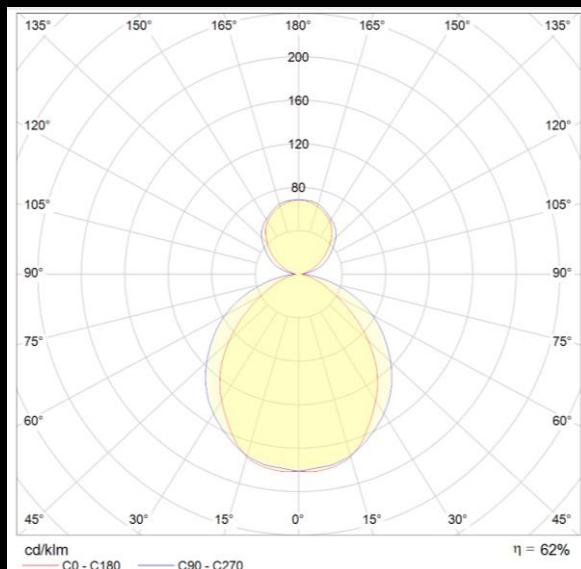
Lifetime 50,000 hours to L80
Output 5000-7500lm (38w to 61watts)
Efficiency of up to 134lm/w
Colour temperature 4000K as standard
Macadams <3
CRI>80 (CRI>98 for sunlike LEDs)

Materials / Finish

Main material: Aluminium raft frame powder coated with RAL 9016 brilliant white 20 % gloss.
Lighting element: Aluminium
Acoustic material: Stone wall sound absorbing material
Lighting optic: Acrylic

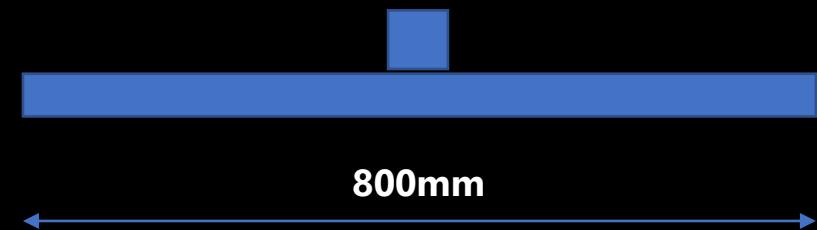
Installation / mounting

To be mounted via suspension wires supplied. 1.5m long as standard. Should be mounted a minimum of 300mm from the ceiling to allow acoustic panels to perform correctly.
Suspension wires are adjustable to allow the Sonus to be mounted level.

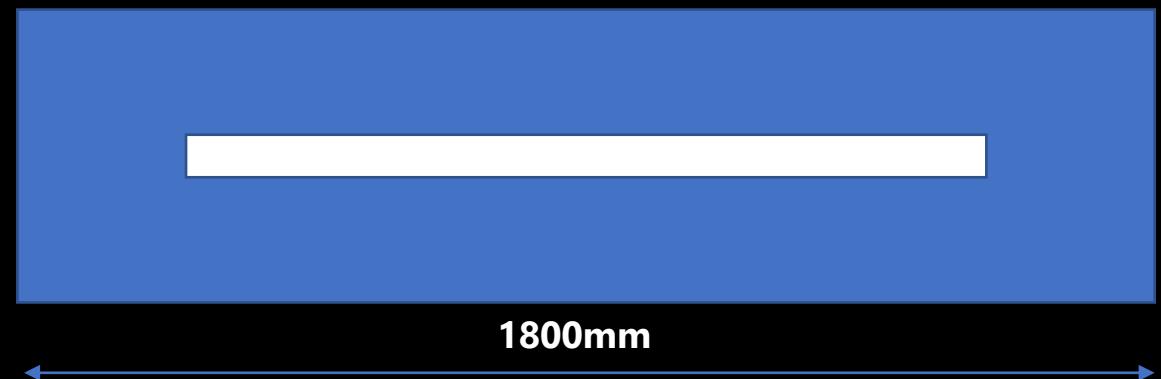


Polar curve diagram

Dimensions section view

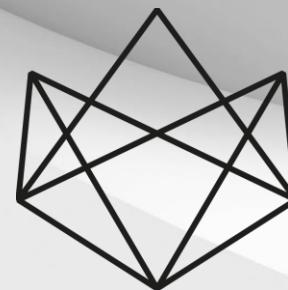


Dimensions top view



Order codes:

- SON** Silent Sonus light
- 180** Length in cm
- 4K** 4000K colour temp
- TW** Tunable white
- VD** Virtual Daylight
- UV** Ultra vision
- DALI** DALI control
- CAS** Casambi control
- FO** Fixed output (no dimming)
- EM** 3 hour emergency pack
- ED** 3 hour DALI emergency pack
- PIR** cut out for PIR
- CTM** Custom requirements for other services
- INF???** Infill length in cm



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