

SIMES

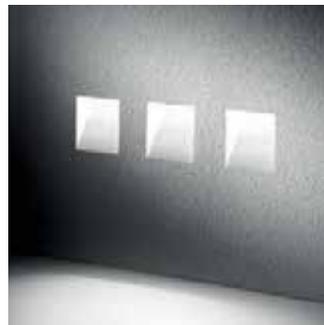
*The
structural
light*



Light becomes architecture



04 Brick Light



12 Ghost

In the new collection “**The Structural Light**” of SIMES, light integrates into the architecture so as to become itself a live material like stone, concrete and marble capable of perceiving and of living spaces in a functional and pleasant manner. The concept is the one of total and global integration with the context and the architecture. Light directly influences it, makes it full and perfect and “adds” whatever is needed to understand space. It becomes a material of impalpable invention and generates space by filling latter with its mass, by providing rhythm to the architecture and by transmitting new emotions and meanings. When lighting is thus studied and shaped around the organic architectural mold, light and material live together and communicate in unison the quality of the project and the creativity of the designer.

The interpretation of the “The structural Light” line is inspired by the new and interesting visions of architects and designers with international outlook to generate projects made with traditional materials that yet bring a totally new achievement.

Brick Light

Since ancient times the clay brick has accompanied the history of architecture until almost identifying itself with it. Even today it is one of the most used material for its high and multiple qualities in terms of static, insulation, lifespan, shape, texture, chromatic wealth. Especially nowadays where biocompatibility and environmental sustainability along with the requirements for environmental soundproofing have become essential, the brick stands out as one of the materials closest to earth.

In more recent times glass has given a concrete contribution to the solution of the relation between void and fullness, between light and shadow. With the development of the technology that exploited the amazing qualities, glass has become more and more a leading actor on the architectural scene: an inclusive structural material, thanks to processing, coating and connections.

The Brick Light project originates from the composition of these two elements, the material of glass and the shape of the brick: the research, and in a certain way the provocation of SIMES expresses its own interpretation in designing an element that has accompanied humanity in its constructive progress over the last 5000 years. Their main features are being kept unchanged till now. Brick light makes light becoming a structural element and through the shape of the brick it acquires its own materiality to define and to increase the value of the volumes of the architecture.

"...the architecture begins when you place two bricks carefully together..."
Ludwig Mies van der Rohe



The clay brick used in the Ziggurat of Ur, ancient Mesopotamia, III millennium BC

Lighting voids

The Ghost range of products represents a revolution in understanding light in relation to the materials of the architecture itself: light does not only unfold and bring out the features of space, but becomes mass itself.

When Ghost is off, the light vanishes and removes itself from the architecture. The light source integrates itself completely in the void until it disappears almost altogether. What is perceived is only the light and its effect on the surrounding space. Architecture becomes thus a shell of "dynamic" surfaces of voids and fullness of light that directly derives from the material, following the creative path the lighting designer had imagined.

Ghost brings total aesthetical integration between light and architecture. The integrated illumination easily blends itself with different environments and facilitates the job to aesthetically adapt the luminaires to the architecture and relate to the context. The envelope of the building is understood as a means of communication between the interior and the exterior and also as an active element reporting with the urban dimension. It is a surface open to new design expressions that will not only aim at constructing but also at exciting.

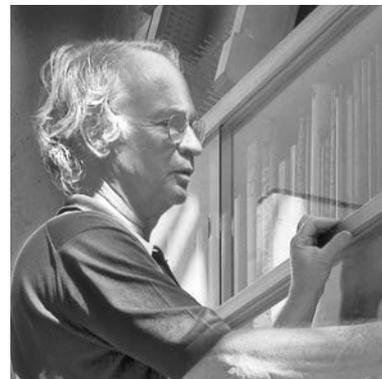
"The architecture is a fact of art, a phenomenon that elicits emotion outside of the problem of construction, beyond them. The construction is to take on, the architecture is to move."
Le Corbusier



Voids of day-light designed by Le Corbusier in the Chapel of Notre-Dame du Haut, Ronchamp, 1955

Paolo Rizzatto

Paolo Rizzatto, born in Milan in 1941, has graduated in architecture in 1965 at the Politecnico of Milan. In his Milan based office he works as a freelancer in the architectural field, interior design and design. In 1978 he has founded together with Riccardo Sarfatti the company Luceplan deepening his experience in the lighting design field. Since he became famous worldwide for his works designed starting in the seventies he has held courses and conferences in several universities. He has been awarded with many of the most prestigious national and international honors and prizes (among which 5 Compassi d'Oro) and his works are on show in the permanent collections of several museums and foundations. Rizzatto's design going from the scale of a city to the one of an object is marked by a constancy and a consistency that allowed him to draw a recognizable cultural course without running after trends nor vogue. His requalification project of the Darsena (Boathouse Project) in Milan is marked, as far as materials are concerned, by the use of exposed bricks that frames the floor of the docks, the masonry walls, the bank and containment walls. It is precisely by working on that theme and deepening the full capacity of the brick archetype's shape also in relation with the needs of illumination that the idea of the "Brick Light" came to life.



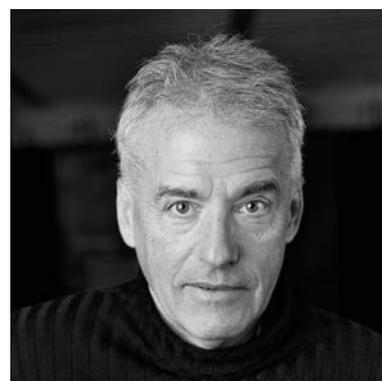
“

The Brick Light project uses the brick for its geometrical, basic form, form and solid glass generating transparency, reflection and diffusion. Brick light composes these features around the new opportunities provided by electronics and LED technology.

”

Marc Sadler

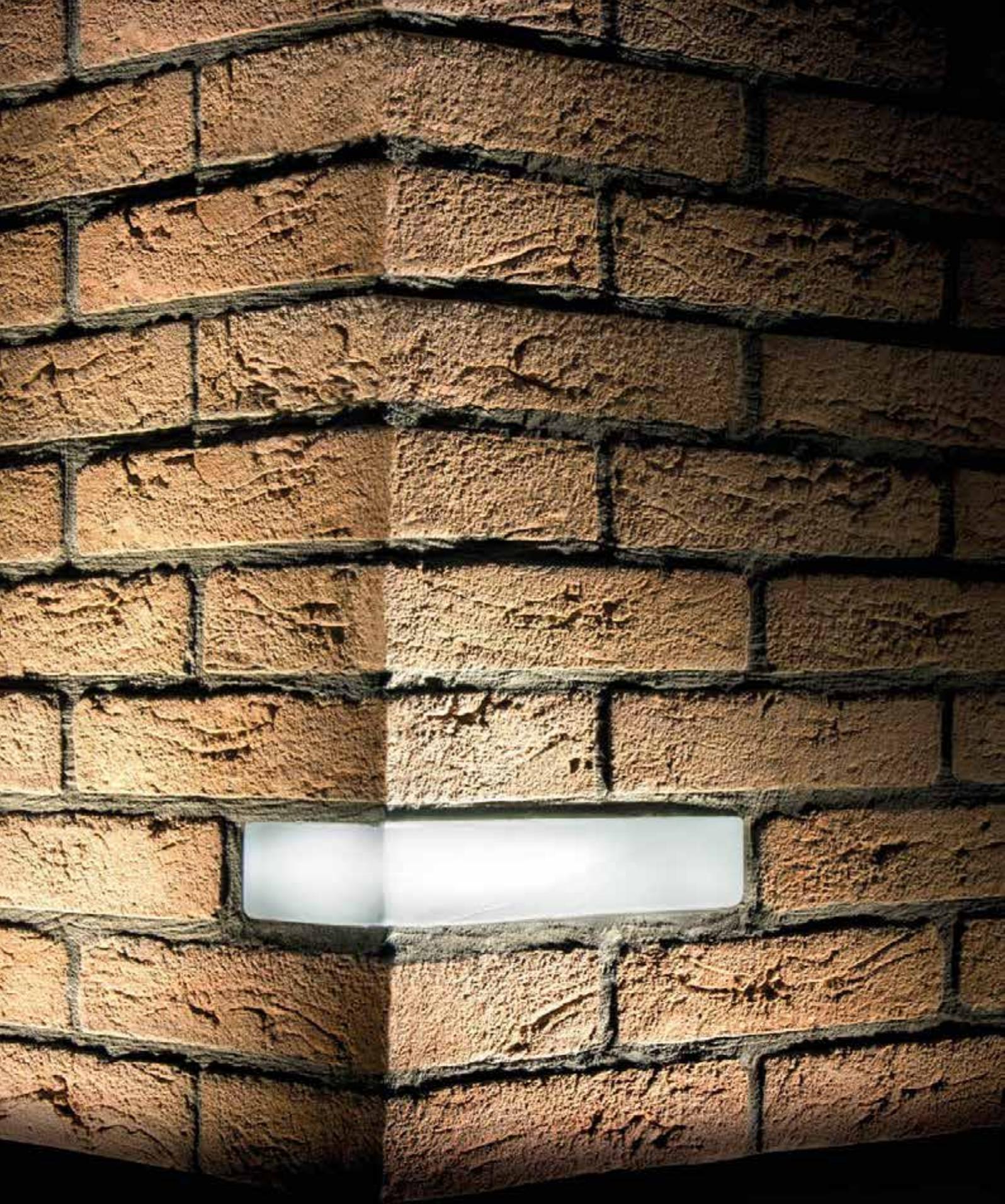
Marc Sadler was born in Austria with French origin and is now resident in Italy. One of the first graduates in "esthétique industrielle" at ENSAD Paris with a thesis on plastic materials, he pioneered the use of experimentation with different materials. The contamination between technologies become a distinctive aspect of his business. Citizen of the world (he lived and worked for many years in Europe, North America and Asia) and eclectic designer, he is now a consultant for furniture and lighting companies, as well as for large and small appliances, sports and other more technical fields. Four-time winner of the ADI Golden Compass (1994, 2001, 2008 and 2014), his career has been rewarded internationally for many times over the years.



“

The GHOST range works by subtraction rather than by addition: no lighting body is added to the structure of the building, on the contrary a void is created to be filled with light. The light that directly comes from the material and gets real in the creative path that the designer has imagined. Ghost, what we want is only light.

”





Design P. Rizzatto

Brick Light

Brick Light camouflages itself with the brick texture not only by taking on the form and the dimensions of the brick, but also by adopting the same modes of handling, assembly and installation thanks to its characteristics of resistance and manageability. The restrained and basic archetype form allows a perfect integration in walls. It is endlessly declinable and talks together with the rythm of the surfaces and appropriate lighting needs designed for integration with exposed brick surfaces such as:

*exterior and interior
flush with walls , recessed or protruding
on a flat masonry or curvilinear wall
concave or convex
at the centre or at an edge
isolated or arranged
at intervals or in a continuous line
free or according to a plan*

Its compact geometry and its adaptability to enter into and identifying itself with the masonry itself, along with the solid glass, make it performant in terms of maintenance, perishability over time and resistance against vandalism.

"I took the light and made it tangible..." James Turrell





Brick Light Recessed, surface mounted

Die-cast EN AB-47100 aluminium housing with high corrosion resistance. Diffuser made of acid-etched pressed glass.

Brick Light has been developed with reference to the standard Italian brick. Double powdered paint.

Protection class

IP65

Isolation class

CLASS III ⚡

Mechanical resistance of diffuser

IK 10

Compression resistance

Full brick 60N/mm²

BRICK LIGHT 100N/mm²

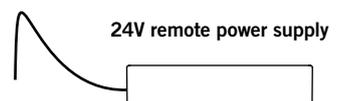
PATENT PENDING REGISTERED DESIGN

This product has been manufactured with hand crafted procedures, therefore small imperfections, subsidence of the glass surface, actual cracks and future, colour ripples and variations over time, are deliberately present and they are a feature of the glass, proving the hand-made manufacturing procedure.

For the latest technical information and product updates with LED technology please refer to the official website (www.simes.it)

Aluminium base colour:

White (code 01)



24V remote power supply

Luminaire hard wired with 5m single neoprene cable for installation in exposed brick walls or other construction materials in place.

With rechargeable battery



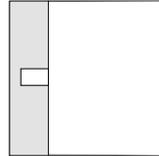
Luminaire operating on Lithium polymers fed Battery via a micro USB plug with a maximum power (battery version) of 8 hours to be used as a portable decorative luminaire for the exterior.

ON-OFF switch concealed at the bottom of the base and lateral three step (30% - 70% - 100%) dimming switch.

Supplied with Micro USB cable.

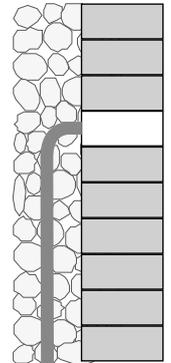
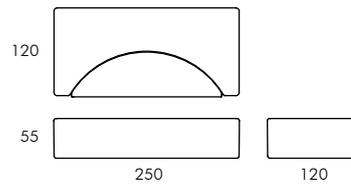
Power supply 230V available on request.

24V Recessed version for remote power supply



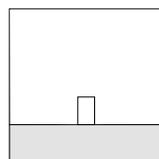
B.9000W

With MID-POWER led white **3000K**
 CR180 300lm
 Rated luminaire luminous flux 120lm
 Rated input power 2,5W **24V**
 Requires remote power supply
 230V/24V DC
 (type S.3402 or S.3407)



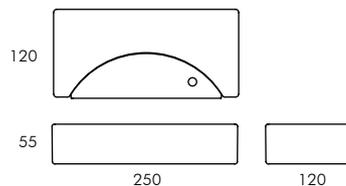
The product has been designed to be integrated and recessed in the wall like a true construction material.

Surface mounted version with rechargeable battery



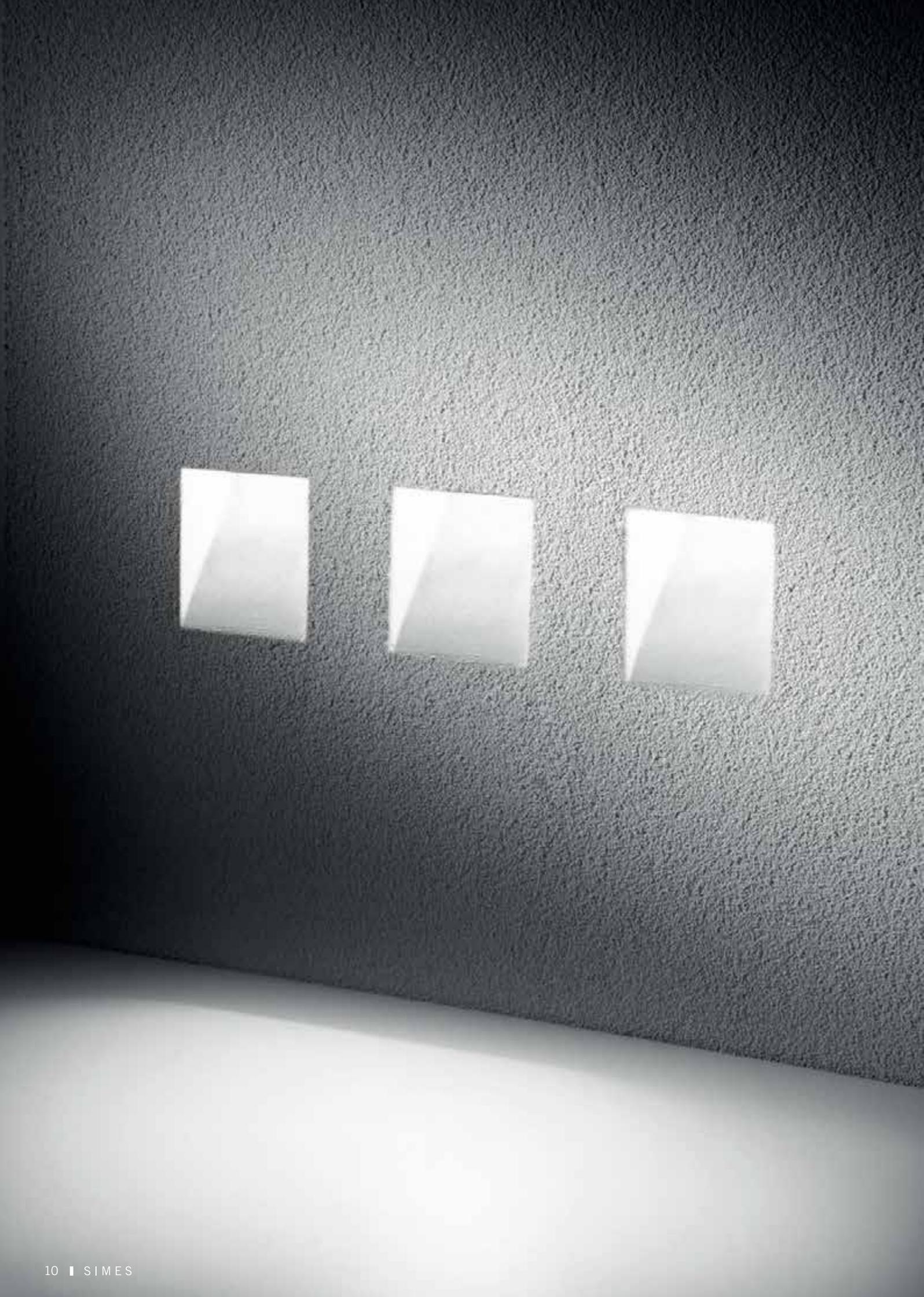
B.9005W

With MID-POWER led white **3000K**
 CR180 300lm
 Rated luminaire luminous flux 120lm
 Rated input power 2,5W
Dimmable (3 steps)
Luminaire operating on rechargeable lithium polymers fed battery.
Independent charge approx. 8 hours









Ghost

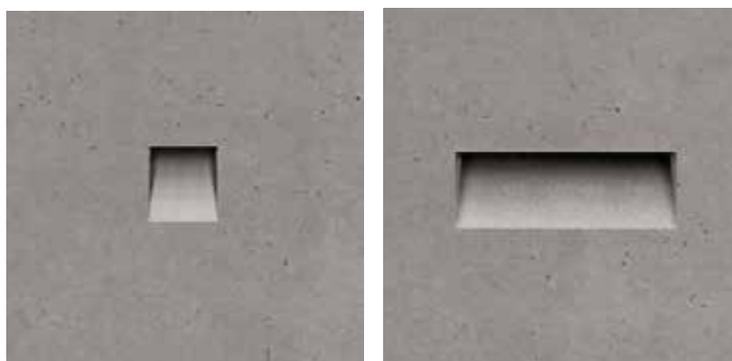
Design M. Sadler



For minimum
10 cm insulation
thick panel



For construction
material to be
plastered



For cast concrete

The Ghost range originates from a simple but revolutionary idea that thanks to a careful engineering became an industrial product: to create out-and-out luminous cavities inside the material and to conceal the lighting body as to make the light the only and unique player in the architecture. This concept which was initially conceived for cast concrete walls in place; now it comes in new innovative variants that turn it into a product suitable for many construction materials: insulation panels, brick walls, walls in cement conglomerate or other materials to be plastered.



reddot award 2016
winner

2016



2016



2016

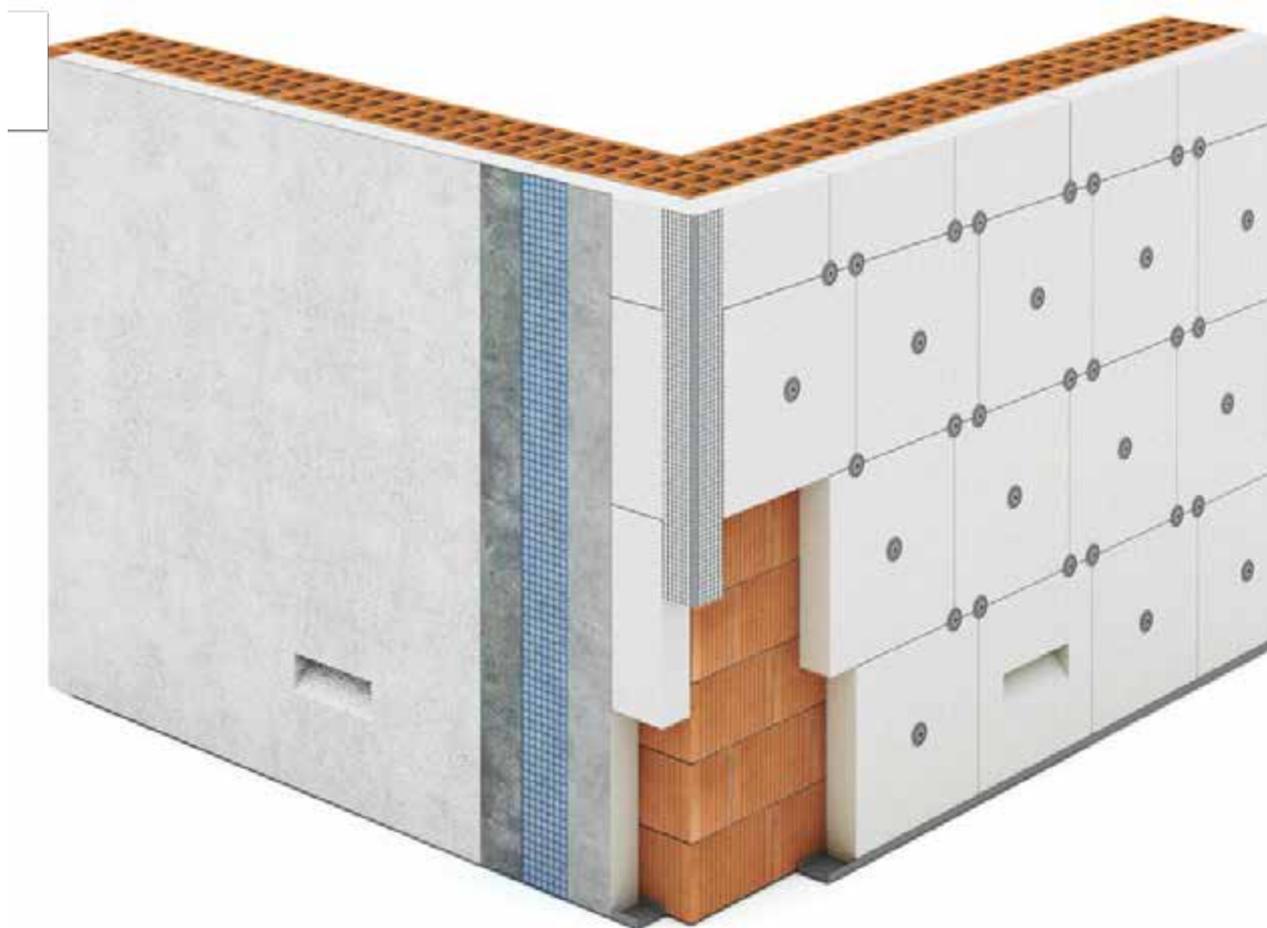


2017



www.simes.it/ghost

Ghost for insulation panel



Ghost for insulation panel may be installed inside the exterior insulating panel. The degree of insulation of the house will stay unchanged for it is manufactured of the same type of polystyrene insulation. Attention should be paid though to the positioning of the corrugated tube for electrification.

The height of Ghost for insulation panel has been designed to take on standard AED35 (50cm) insulating blocks while the thickness (10 cm) facilitates the integration in insulating panels with the same or greater thickness. The cavity is pre-finished and ready for painting.

After installation the finish of the wall will proceed as usual:

1. Lay the grid, first levelling;
2. Carve the grid at the Ghost's cavity;
3. Second levelling and possible whitening;
4. At the end of the work install the lighting body.

MICROGHOST SQUARE

Led circuit 24V Requires remote power supply.
The lighting element is hard wired with 3m cable.

CLASS III ⚡

GHOST HORIZONTAL

Led circuit 230V
Luminaire hard wired with single neoprene cable with fast connector.

CLASS I ⚡

Protection class

IP65

Mechanical resistance of diffuser

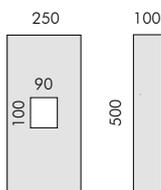
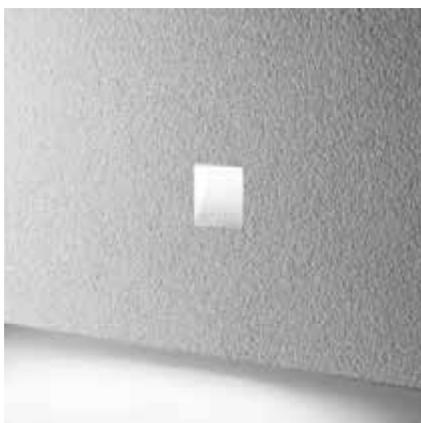
IK 06

Leds 4000K CR180 versions are available on request.

PATENT PENDING REGISTERED DESIGN

For the latest technical information and product updates with LED technology please refer to the official website (www.simes.it)

Microghost Square for insulation panel



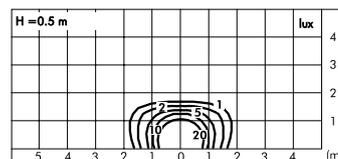
C.8130W

AE D35 polystyrene block with housings in polypropylene

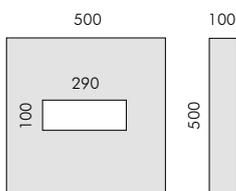
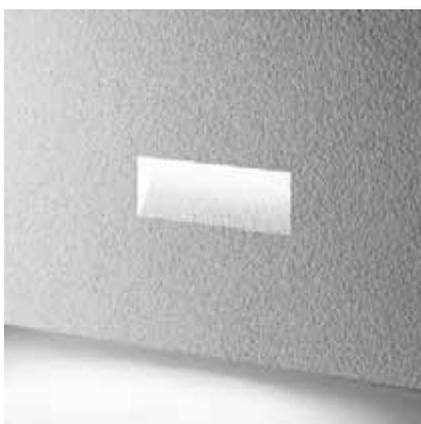
+

Lighting element with MID-POWER white led **3000K** CRI80 320lm
 Rated luminaire luminous flux 240lm
 Rated input power flux 4W **24V**

Requires remote power supply
 230V/24V DC
 (type S.3402 or S.3407)



Ghost Horizontal for insulation panel

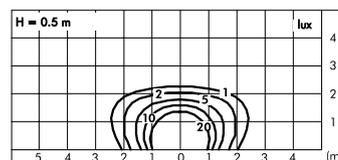


C.8122W

AE D35 polystyrene block with housings in polypropylene

+

Lighting element with MID-POWER white led **3000K** CRI80 880lm
 Rated luminaire luminous flux 490lm
 Rated input power flux 10W 230V



Product guide video

Ghost for construction materials to be plastered



Example 1
Erected wall in
place in clay
blocks



Example 2
Erected wall in
place in breeze
blocks

Ghost for breeze block application is easily applied in walls made of perforated bricks or cement conglomerate.

The product is designed to be wall mounted and completely integrated with the architecture of which it will take over the finish.

The cavity is pre-finished and ready for painting.

The procedure is as follows:

1. Plan the positioning of the corrugated tube for electrification;
2. Make a niche to insert the Ghost polystyrene block, paying attention to its aligning;
3. Lay the fixative grid that connects the cement conglomerate wall to the Ghost's polystyrene block;
4. Enclose the product in the wall, cut the grid at the Ghost's cavity and finish off;
5. Once the work is finished, the luminaire may be installed.

MICROGHOST SQUARE

Led circuit 24V Requires remote power supply.
The lighting element is hard wired with 3m cable.

CLASS III ⚡

GHOST HORIZONTAL

Led circuit 230V
Luminaire hard wired with single neoprene cable with fast connector.

CLASS I ⊕

Protection class

IP65

Mechanical resistance of diffuser

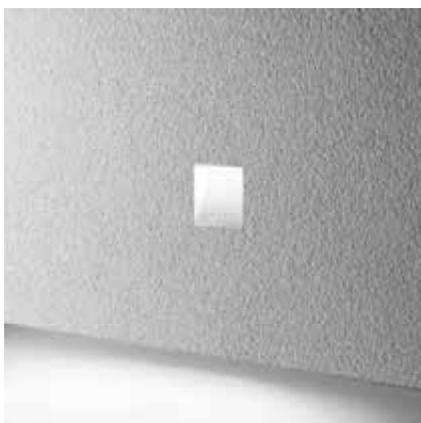
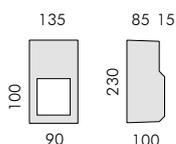
IK 06

Leds 4000K CR180 versions are available on request.

PATENT PENDING
REGISTERED DESIGN

For the latest technical information and product updates with LED technology please refer to the official website (www.simes.it)

Microghost Square



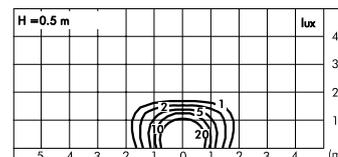
C.8230W

AE D35 polystyrene block with housings in polypropylene

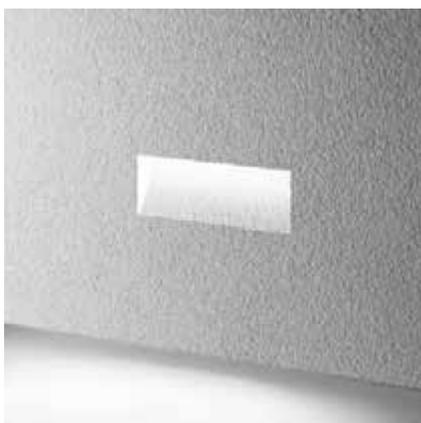
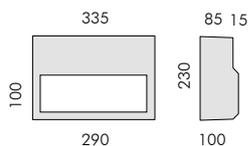
+

Lighting element with MID-POWER white led **3000K** CRI80 320lm
 Rated luminaire luminous flux 240lm
 Rated input power flux 4W **24V**

Requires remote power supply
 230V/24V DC
 (type S.3402 or S.3407)



Ghost Horizontal

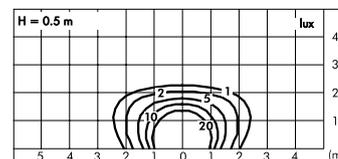


C.8222W

AE D35 polystyrene block with housings in polypropylene

+

Lighting element with MID-POWER white led **3000K** CRI80 880lm
 Rated luminaire luminous flux 490lm
 Rated input power flux 10W 230V



Product guide video

Ghost for concrete



Ghost is a **lighting void** that is obtained from a polypropylene housing anchored to the retaining panels before pouring the concrete.

Ghost is composed of two elements: the **housing** and the **lighting element**.

The housing is in polypropylene (in aluminium for LINEAR versions) and it consists of two complementary parts:
 - A jig (**1A**), which forms the housing, and is extracted together with the retaining panel after completing the casting and removing the anchor screws (**2**);
 - The housing (**1B**) that remains embedded inside the casting and houses the lighting element.

(The housing is supplied with bolts, locking system and stickers to be applied on the outside of the retaining panels so to secure a perfect alignment for multiple installations of each housing when pouring the concrete).

The cavity will have the finish obtained directly from the concrete cast.

The **lighting element (3)** in die cast aluminum is anchored to the casing (**1B**) through proper screws and it remains completely hidden into the void.

GHOST HORIZONTAL
 Led circuit 230V
 suitable for single cable gland and fast connector.

CLASS I ⊕

GHOST VERTICAL
 Led circuit 230V
 Hard wired with 6m cable
 CLASS I ⊕

MICROGHOST SQUARE
 Led circuit 24V
 Hard wired with 6m cable.
 CLASS III ⚡

MINIGHOST e GHOST SQUARE
 Led circuit 230V
 Suitable for single cable gland and fast connector
 CLASS I ⊕

GHOST LINEAR
 Led circuit 230V
 Hard wired with 6m cable
 CLASS II □

Protection class
 IP65

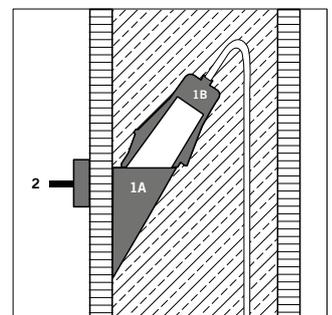
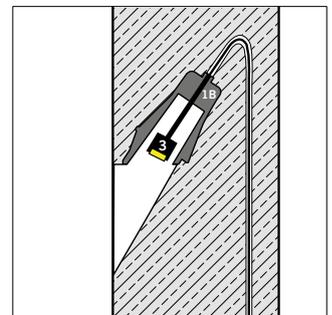
Mechanical resistance of diffuser
 IK 10

Leds 4000K CRI80 versions are available on request.

PATENT PENDING
REGISTERED DESIGN

Finishing:

Cast cement
 Suitable for armed concrete



Product guide video



Ghost Horizontal

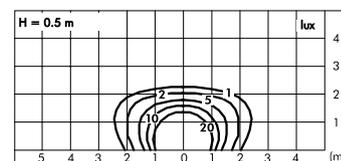


C.8022W

2 housings in polypropylene with locking system

+

Lighting element with MID-POWER white led **3000K** CRI80 880lm
 Rated luminaire luminous flux 490lm
 Rated input power flux 10W 230V



Ghost Vertical

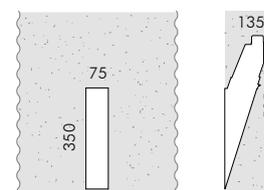
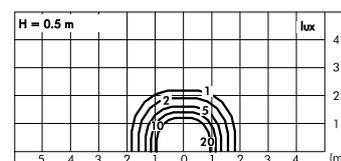


C.8024W

2 housings in polypropylene with locking system

+

Lighting element with MID-POWER white led **3000K** CRI80 800lm
 Rated luminaire luminous flux 612lm
 Rated input power flux 7,6W 230V



This product is manufactured on site during the concrete casting of the wall with hand crafted procedures; therefore, small imperfections caused by the low accuracy of the casting, subsidence of the concrete surface, actual and future cracks, colour ripples and variations over time, will be deliberately present and they are a feature of the concrete, proving the hand-made manufacturing procedure.

For the latest technical information and product updates with LED technology please refer to the official website (www.simes.it)

Microghost Square



C.8030W

2 housings in polypropylene with locking system

+

Lighting element with MID-POWER white led **3000K** CRI80 320lm

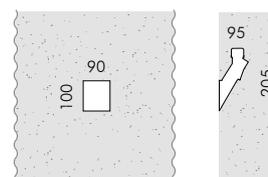
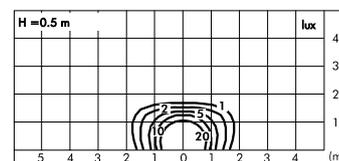
Rated luminaire luminous flux 240lm

Rated input power flux 4W **24V**

Requires remote power supply

230V/24V DC

(type S.3402 or S.3407)



Minighost Square



C.8028W

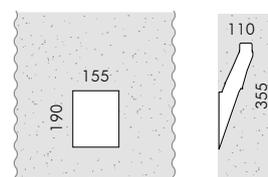
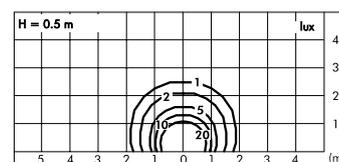
2 housings in polypropylene with locking system

+

Lighting element with MID-POWER white led **3000K** CRI80 490lm

Rated luminaire luminous flux 268lm

Rated input power flux 6W 230V



Ghost Square



C.8026W

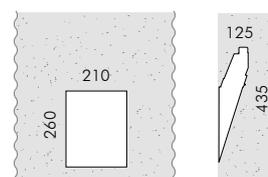
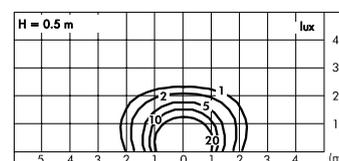
2 housings in polypropylene with locking system

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Lighting element with MID-POWER white led **3000K** CRI80 1150lm

Rated luminaire luminous flux 550lm

Rated input power flux 12W 230V





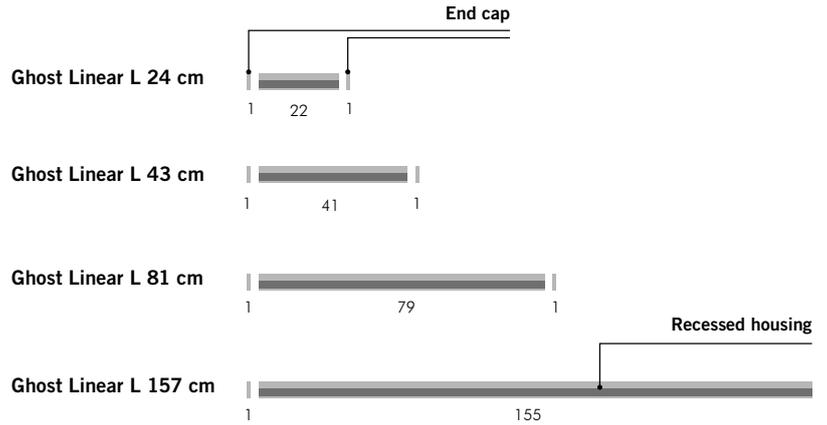
“Running” GHOST LINEAR CONTINUOUS LINE

All Ghost Linear versions may be connected to obtain continuous linear cavities. To fix the appropriate number of articles to achieve the length desired it is recommended to start with multiples of the longest versions and subsequently with the shorter ones as end pieces.

Taking the four standard sizes available in the catalogue any situation can be solved with a maximum run-out of 22 cm. The run-out may be divided at the beginning and at the end of the wall as a free space between the final part of the wall and the luminous cavity (take into consideration at least 5 cm as a free space).

To facilitate the operation use a drilling template available as an accessory for every Ghost Linear version. For each version used one only drilling template is required.

Consult a Structural Engineering company to have an appropriate framework and thickness of the wall calculated. Please keep in mind that the Ghost Linear in Continuous Line represents a linear continuous cavity of 9 cm deep.

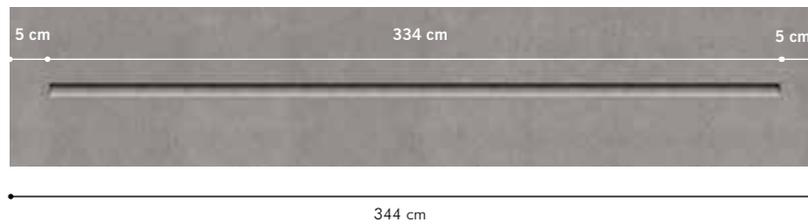


Example 1: WALL OF 344 cm

Continuous Ghost Linear of 334 cm + 5 cm gaps each end



- 1 cm (end cap) + (155 cm x 2) + 22 cm (recessed housings) + 1 cm (end cap) = 334 cm
- 344 cm (wall length) - 334 cm (total length of void) = 10 cm (total clear gap)
- 10 cm / 2 = 5 cm (deviation each end)

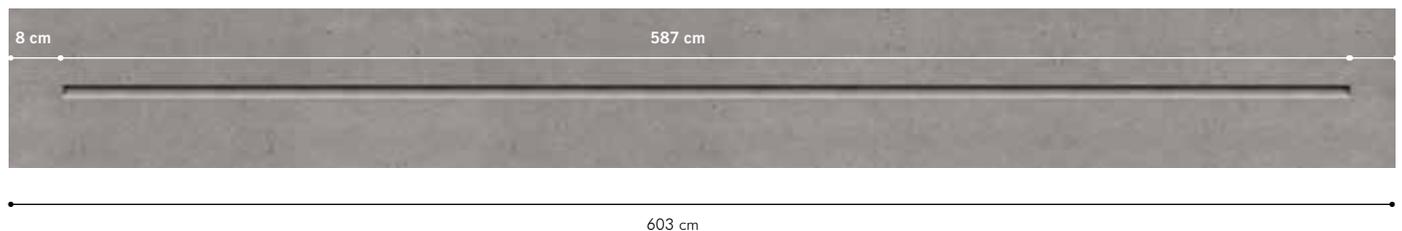


Example 2: WALL OF 603 cm

Continuous Ghost Linear of 587 cm + 8 cm gaps each end



- 1 cm (end cap) + (155 cm x 3) + 79 cm + 41 cm (recessed housings) + 1 cm (end cap) = 587 cm
- 603 cm (wall length) - 587 cm (total length of void) = 16 cm (total clear gap)
- 16 cm / 2 = 8 cm (deviation each end)



Product guide video





SIMES

luce per l'architettura

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