

LIGHTING

WITH BUILT-IN SPOTLIGHTS

www.teknosoluzioni.it



Hotel Sul Bacino
Massa Lombarda (RA)
www.sulbacino.it

USING THE BUILT-IN SPOTLIGHT SUPPORT BOXES

in false ceilings or directly into the masonry and in reinforced concrete

New patented lighting system, an exclusive of:

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tekno[®]
soluzioni

THE SPOTLIGHT SUPPORT BOX:

- useful for installation of built-in spotlights directly in reinforced-concrete and masonry ceilings and walls.
- excellent protection for traditional false-ceiling installations.
- easily installed by your own electrician using the special application system.
- especially in your homes, a new way to light up rooms.

BUT WHY HAVE BUILT-IN SPOTLIGHTS?

Illuminating the rooms of your home with built-in spotlights is a new way of seeing interior design, with original lighting effects. It's a way of getting the light where you want it, spreading warmth and beauty to all the objects it plays on. Spotlights fitted with dichroic bulbs give you the closest alternative to sunlight. By directing the lamp as you want you will get the right distribution, while each spotlight (max 50W) will reach out gently to every corner of the room but would not blind you in the process, a problem of traditional lighting.



The first effect is one of a relaxing sunny day, leaving you basking and even feeling better in yourself; your hair will get back its sheen, even your dinner will look as the most appetizing in that light, the taps in your bathroom will glisten more, your floors will shine back at you, shortly everything will just look sunnier. And let's not forget that with these dust-free spotlights, at least this bit of spring-cleaning will be just a memory.

All of these things, without taking away from the excellence of traditional spotlights typically mounted in department stores, are of most relevance in the home, where the spotlight alternative has always been limited and indeed rarely considered since there has been no available installation system.

JUST A WORD ABOUT THE COSTS: at first a built-in spotlight installation may seem a bit pricey; certainly the actual mounting stage is costlier than anything to do with traditional spotlight-light installation; but with time there is in fact a saving. These spotlights cost very little to replace, and overall costs are actually frequently lower than those of traditional lights.

AND WHAT ABOUT ENERGY CONSUMPTION?



Traditional dichroic spotlights have a 10% higher performance than typical incandescent bulbs.



Comparing like-for-like performance, new-generation dichroic spotlights, consume and heat up less by about 80% than the traditional, and have an average working life of up to 5000 hours.



You can save even more with low-energy bulbs, that may be a part of a lot of spotlights. The spotlight support box can also be fitted with 220 spotlights, with GZ10 dichroic bulbs, with no transformer needed.

Now thanks to the built-in spotlight support box and its application system the whole thing becomes a real possibility, and is available to any electrician; that is how you keep your customers satisfied!

Roberto Zerbini



The inventor of the spotlight support box

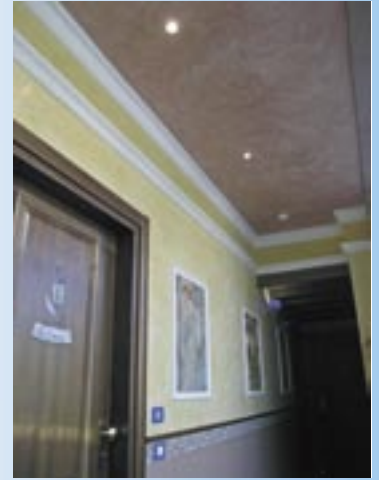
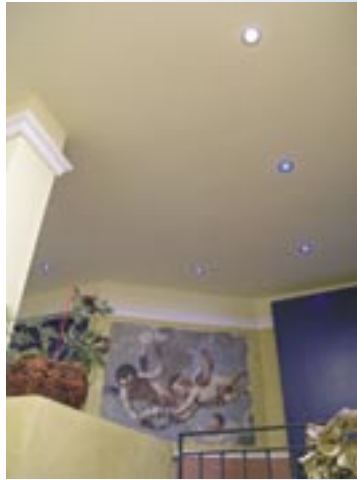
IN HALLWAYS AND STAIRWELLS

In small entrance-ways and corridors in general, the spotlights can really give useful strong low-directed lighting, with the floor-lit effect making small places seem bigger and less suffocating. They are particularly effective on staircases.

There is nothing more breath-taking than an illuminated staircase, with one spotlight per step or two. It would surely charm anyone who beholds it.

We suggest installing two spotlights in the ceiling one at the bottom and one on the top of the staircase; this has the effect of leaving the ceiling above the intervening stairs in low light, giving a less steep and narrow aspect to the actual staircase.

Article used in these images: TEKPF03



IN STORES AND OFFICES

Article used in these images: TEKPF05 e TEKPF06



Article used in this images: TEKPF04



IN LIVINGROOMS

These rooms can be magnificently and rationally lit by built-in spotlights if these are accompanied by diffused lighting for your moments of rest and relaxation.

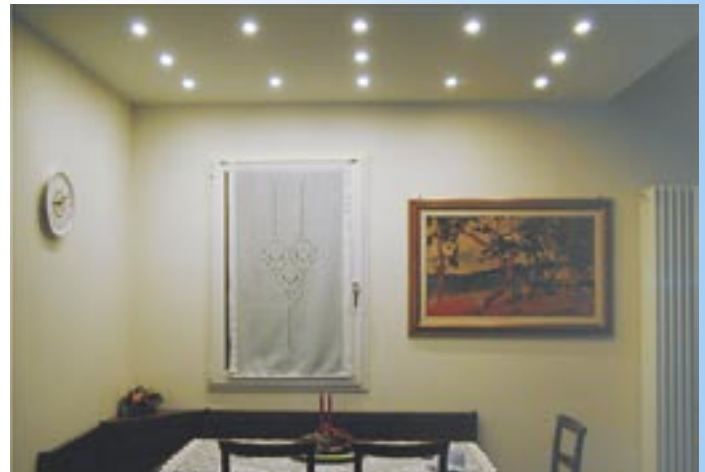
Article used in these images: **TEKPF03**



IN KITCHENS

There is nothing more appreciated than seeing the food that we are preparing. A sequence of spotlights over the cooktop or over the table is ideal to light up the room.

Article used in this image: **TEKPF04**



Article used in these images: **TEKPF03**

IN BATHROOMS

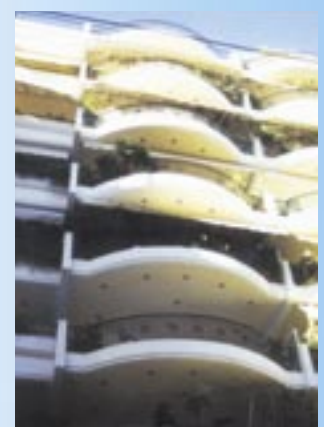
The spotlights are very easily and effectively installed in these rooms. All the rooms in our house can be fitted with built-in spotlights. With them, we can blend the light we want into the spaces we live in, room by room.



In garage



In the laundry room



In Terraces

Article used in this image: TEKPF03



IN BEDROOMS

If you are fans of this kind of lighting, you can have spotlights installed even in your bedrooms: - one after the other before the wardrobe and the room will turn out to be perfectly lit, one single spotlight over the bedside table can replace the abat-jour, a sequence of closely-installed spotlights before the window will make evening light shine like at dawn and ... you won't repent having installed spotlights even over the mirror. We recommend that you use a regulator in case you should "get up" at night.



IN BASEMENT RECREATION ROOMS OR IN MANSARDS

The limited height of these rooms often makes it particularly difficult to opt for proper lighting, which might indeed be too close at hand. Built-in spotlights can well be the ideal solution. One good tip: having many spotlights with low-powered bulbs is certainly better than having few spotlights with high-powered bulbs.



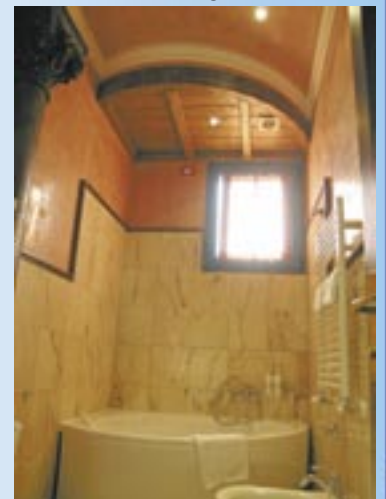
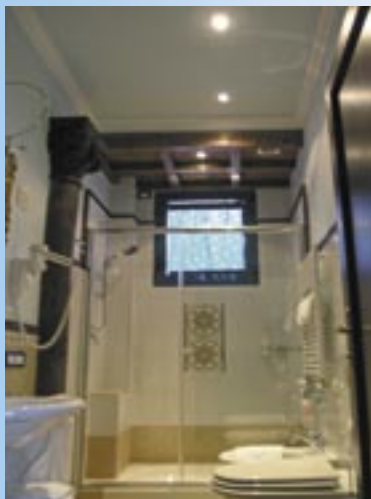
Article used in these images: TEKPF03

IN BATHROOMS

How much do we spend on making our bathrooms glisten and shine? Think of the cost of the taps, the tiles, the porcelain; think of the effort that goes into the daily wipe-down! We never really thought that a few built-in spotlights could have saved us half the work; nor that a low energy spotlight in the shower could have given us a proper light so that at long last we can see what we're doing.



Article used in these images: TEKPF03



Installation of the spotlights using the spotlight support box TEKPF03

These support boxes are appropriate for the following installation type:

- in false-ceilings or walls in masonry or reinforced concrete
- for round small/medium spotlights (from 50mm to 150mm)
- for which you know at least aproximatively the diameter
- When the coverage of the brick is made using plaster of about 1 cm thickness
- When the installation in reinforced concrete must be done at once or it is already finished
- It is possible to install them using the appropriate application system

THE SUPPORT BOX TEKPF03



**TEKPF03
LOW version**
Universal spotlight support box
h 83 x l 200 x p137 mm
to use in masonry and reinforced concrete.

Package 30pcs (h 37xl 59xp 39)



**TEKPF03/TA
HIGH version
with transformer holder**
Spotlight support box with transformer holder
The same functions as the TEKPF03A with possibility of inserting the transformer

Package 20pcs (h 47xl 59xp 39)

h 113 x l 360 x p137 mm



**TEKPF03A
High version**
Universal spotlight support box
h 113 x l 200 x p137 mm
to use in masonry and reinforced concrete

Package 30pcs (h 37xl 59xp 39)



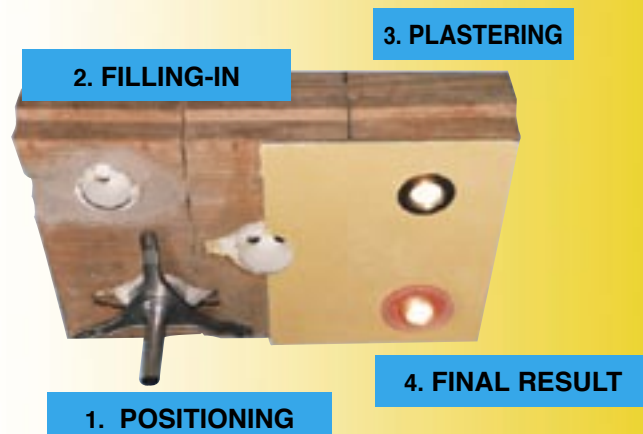
TEKPFAP/S
application system for box fitting
one centimetre away from the brick

unitary pack

DESCRIPTION - The universal spotlight support box type Tekno Soluzioni Art. TEKPF03, hole from 50mm to 103mm, is used as a holder for illuminating spotlights in the ceilings, walls of reinforced concrete

THE HEIGHT of these boxes and the related inside volume may be changed jointing the cover in different positions: standard and raised.

SOME IDEAS FROM OUR WORKERS



GENERAL RULES FOR INSTALLATION OF BUILT-IN SPOTLIGHTS



Mark off the electrical plant position of the spotlights.

If you choose to supply the spotlights with low-voltage, with a transformer for each group of spotlights (the most economical solution in large areas), keep to the following guidelines: find the point on the wall where the transformer box is to be installed. Install the low-voltage line to a suitable length (about 1.mmsq for each spotlight of 50 w.) do this no

longer than 10mts. Connect no more than 6 spotlights of 50w to each switch. In this situation, use the TEKPF03 box. Use this box even if you decide to supply the spotlights directly with 220v using the Gu10 low energy lamp.



If you decide to install the transformer inside the spotlight support box (optimum solution in large areas where it would be difficult to install it in another way) use the TEKPF03/T box which is ideal for this type of installation.



Once the box has been installed, insert the single transformer before installing the spotlight.

If the transformer used is of 100w, it is possible to start again from the same box with a short low-voltage line in order to supply another spotlight of 50W installed nearby in a normal TEKPF box.



Remember to use the correct cover to separate the lamp space from the transformer space, making sure that the wires are only coming out of the small hole made in the cover for this use.



Choose the diameter of the next spotlight to be installed. If you do not know the diameter, do as follows: find out, according to the dimensions of the area or to the tastes of the client if the spotlight will need to be small, medium or large and according to this, use diameter 63 for small

spotlights, 76 for medium spotlights and 96 for large spotlights. The large availability of spotlights of these dimensions on the market will allow the choice to be made after the work has been finished.

According to the chosen diameter, cut the box along its already-made dotted lines using normal electrician's scissors or, even better, those scissors usually used for pruning plants.



Choose the height of the box according to the depth of the spotlight to be installed, the box and the average dimensions (the most common). It is however possible to obtain a 3cm higher box by simply moving the cover higher. This will allow installation of spotlights up to 120mm in depth.



If, however, the spotlight to be installed is a small one, or the installation conditions require a container of a lower height, it is possible to cut the box along the indicated line and, putting the box in a lower position, will allow you to obtain a box which will be lower by 3cm compared to the traditional model, with a minimum height of only 8 cm.



You will find in out web site films of this type of installation, clicking on play on the page



www.teknosoluzioni.it/tecnico.html

INSTALLATION OF THE SPOTLIGHTS IN MASONRY CEILINGS OR WALLS

The new spotlight support box solves a long-standing problem for electrical installation operators, who frequently had been asked by their customers to install the spotlights without having a false ceiling installed. At best the job was expensive and difficult, at worst impossible because of the existence of construction norms regulating the minimum height of a ceiling.

The most difficult obstacles were:

- difficulty in getting hold of parts with the right diameter and grips for the spotlight arm springs (which in any case did not come up to CEE standards)
- difficulty for the operators to install them correctly, given the absence of the usual plaster on the ceilings, so that the final result was nearly always not quite right, leading installers to avoid using spotlights as much as possible.

The built-in spotlight support box completely solves these problems, and, with the help of the special application tool, opens the door to a new working system: ***the installation of the built-in spotlight support boxes in a home as a viable alternative or addition to traditional systems.***

- Use the universal spotlight support box.
- While marking off the electrical plant, position the spotlights in the centre of the brick.



- The builder will make the holes in the brick as precisely as possible so as not to complicate later plastering work.



- Choose the most appropriate spotlight diameter and cut the box along the marked fracture lines.



- Completely remove the box support which is not necessary in this type of installation.



- Possibly, though not necessarily, open a few of the ventilation holes on the box cover, to favour heat dispersion through the cavities in the mounting surface.



- Insert the box in the applicator and turn the pin to block it
- Position the tripod on the box and tighten the knob



- Using a common extensible pole for paint-rollers, or a builder's sprung perch or, even better, three provisional plugs in the slots, hold the assembly against the unplastered ceiling and keep it steady.



- The special configuration of the application system enables you to achieve a fast and precise positioning of the box at exactly 1 cm. from the brick, leaving enough space for the subsequent plastering.
- The use of more than one application system at the same time is recommended.



- Fix the box using polyurethane foam or quick-dry cement mortar, allow to dry before removing the application system, which can be re-used hundreds of times.



- Use polyurethane foam in small quantities. And it is advisable to apply it using the correct gun.



- The builder, who has previously made the hole in the brick, will then fill-in around the box before adding the final plaster.

INSTALLATION OF THE SPOTLIGHTS IN REINFORCED CONCRETE CEILINGS OR WALLS

During the phase of building design the spotlights can be positioned in reinforced concrete, before it is finalised. For example, the spotlights can be installed in stairwells between floors, or wherever the ceiling or floor is made specially to house the spotlights.



In this case as well, use the spotlight support box appropriately cut to the diameter of the hole and the support feet..



Nail the support box to the armour form in the place where the spotlight to be installed must be positioned.

Also fasten the box to the reinforcing rods and position the tubes for the electrical supply cables.



Before the drop, make sure any parts which should be protected from concrete penetration, such as tube-box connections, are sealed.

Wherever it is necessary for this type of installation, seal the crack between the box and the cover with silicone.



On removal of the form, the position of the spotlight hole can be identified by observing the two nails originally hammered in



And.....did you know that

Old-type tubes, which sometimes replaced the installation of spotlights, are dangerously inflammable and indeed do not now respond to the existing safety standards.



You will find in out web site films of this type of installation, clicking on play on the page

www.teknosoluzioni.it/tecnico.html



SPOTLIGHT SUPPORT BOX TEKPF04



Designed for installation in plasterboard, wooden false ceilings and any other material. For SMALL or MEDIUM SIZED SPOTLIGHTS (21 to 105 mm).

These boxes are used to apply a new culture of safety and durability, BECAUSE NOWADAYS THE SPOTLIGHTS ARE INSTALLED IN THE FALSE CEILINGS WITHOUT RULES and in a rough and insecure way, often giving rise to the following kind of unexpected things, often overlooked by manufacturers and installers:

- The connecting cables and the connecting terminals are often free to rely on metal parts of the false ceilings, NOT CONNECTED TO EARTH and so with a strong predisposition for short-circuits, indirect contact and DAMAGES BECAUSE OF THE JOULE EFFECT; that is why the use of the 220v GU10, lamps further worsens the jeopardy of the people using it.

- That way the bulbs are not protected and they are filled with dust and they overheat HAVING A DURATION OF USE LESS THAN NORMAL.
- The springs compress the spotlights in the plasterboard to the point that if you have to remove a spotlight for maintenance IT MAY EASILY RUIN THE PLASTERBOARD'S EDGE NEAR THE HOLE OF THE SPOTLIGHT, leaving then blemishes traces very difficult to fix.

More often, the ceilings are covered with INSULATION MATERIAL for thermal insulation, that is why the spotlights ARE CHOKING without having the necessary volume of air around them for the heat dissipation. This is causing blemishing dark halos around the spotlights, poor durability of the bulbs and the spotlight becoming opaque because of the overheating. When the hot spotlight is in contact with wood the impropriety and the danger are even more obvious.

The use of a support box, in the insulating material, specially designed to contain the spotlights and resistant to high temperatures, which interposes between the spotlight and the protecting structures surrounding the electrical connection it CONSTITUTES A SERIOUS STEP FORWARD FOR THE SAFETY AND FOR ALL THE RULES TO A GOOD INSTALLATION.

May be applied also through the spotlight hole, EVEN AFTER THE FALSE CEILING HAS BEEN CLOSED.



SPOTLIGHT SUPPORT BOXES TEKPF04

available in the following diameters

article	Ø Drilling (mm)	Ø inside (mm)	dimensions H x L x P (mm)
TEKPF04/21	24	21	76 x 24 x 24
TEKPF04/26	29	26	76 x 29 x 29
TEKPF04/30	33	30	76 x 33 x 33
TEKPF04/37	40	37	76 x 40 x 40
TEKPF04/44	47	44	76 x 89 x 49
TEKPF04/50	54	50	76 x 108 x 56
TEKPF04/57	60	57	76 x 120 x 62
TEKPF04/63	67	63	100 x 127 x 69
TEKPF04/70	74	70	110 x 134 x 76
TEKPF04/76	80	76	110 x 140 x 82
TEKPF04/83	86	83	110 x 146 x 88
TEKPF04/89	93	89	110 x 153 x 95
TEKPF04/96	99	96	130 x 159 x 101
TEKPF04/105	109	105	130 x 169 x 111
TEKPF04/T	54	50	152 x 52 x 52

TEKPF04T THE TRANSFORMER HOLDER

The transformer holder is available also for the installation in false-ceilings. This one is a part of the TEKPF04/T box which passes through the spotlight hole, starting from 50mm diameter. The transformer holder must be inserted through the hole having the transformer inside. It is possible at any moment to reverse the process for any kind of future maintenance of the transformer and related connections.



These boxes are made of nylon 6 glass loaded up to 30%, Class V0, glow wire 960°, for high temperatures produced by the spotlights (up to 130°)



Making the hole in the false ceiling

In this phase it is possible to insert the transformer holder

These boxes feature the possibility of inserting the cylindrical body into the cut-to-size hole



in order to then be secured to the false ceiling, jointing two hollow bodies used to seat the spotlight retaining springs



The result is a perfectly assembled box fitted for the inlet of the corrugated power supply tubes

It is ideal in order not to make a contact between the spotlight and the wood

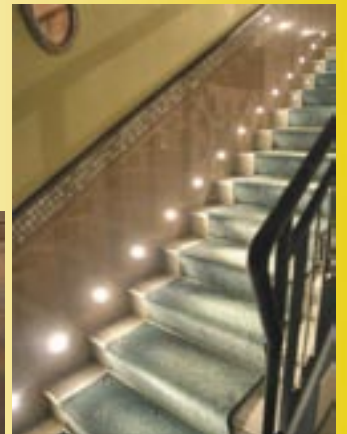


The box will thus protect the spotlight and the hole edge into the false ceiling, which would otherwise be easily subject to abrasions



THE SUPPORT BOXES TEKPF04 ARE ALSO PARTICULARLY INDICATED TO BE INSTALLED IN THE WALL OR IN THE FLOOR

Their small size, but also the lowest solicitation to the heat that in these situations is better dissipated upwards, it can be used in strict adherence with the body of the illuminating lamp:



This brand new system, unique of this kind it is exclusively and patented by Tekno Soluzioni SRL

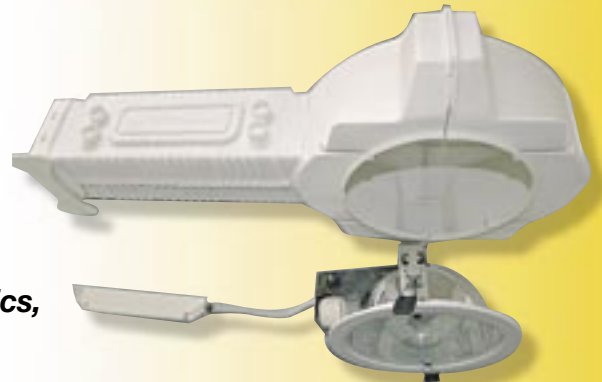
**Universal predisposition for spotlight installation,
for small, medium and large dimensions,
before even knowing the necessary diameter**

The new **TEKPF05 and TEKPF06** support boxes are the ideal solution when it is to be prepared the future installation of a built-in spotlight in any kind of building:

TEKPF05 until 15cm diameter



TEKPF06 until 24cm diameter



*(the two models have the same functional characteristics,
the only difference is their size)*

SPOTLIGHT SUPPORT BOX TEKPF05

**For medium spotlights (until 150mm diameter)
Low energy spotlights, metallic halogen and even hi-fi speakers**

TEKPF 05

Version without transformer holder



For spotlight diameters: ≤ 150 mm
Dimensions: h 135 x w 190 x d 280
Pieces per package no.: 10

TEKPF 05T SHORT

*Version with transformer holder
(electronic transformer 50/100 w)*



For spotlight diameters: ≤ 150 mm
Dimensions: h 135 x w 410 x d 280
Pieces per package no.: 10

TEKPF 05T

Version with transformer holder



For spotlight diameters: ≤ 150 mm
Dimensions: h 135 x w 540 x d 280
Pieces per package no.: 10

suitable for diameters below 150mm, round or squared, it is possible to insert the following universal grills that can be cut at the right diameter or at the right size of the spotlight.



TEKPF GRILL05 R
*universal accessory
for round spotlights*

For spotlight diameters:
17 to 145 mm
Dimensions: h 7 x \varnothing 150
Single pcs weight: 59 gr.
Pieces per package no: 10



TEKPF GRILL05 Q
*universal accessory
for square spotlights*

For spotlight sides:
18 to 98 mm
Dimensions: h 7 x \varnothing 150
Single pcs weight: 60 gr.
Pieces per package no: 10

THE SUPPORT BOXES TEKPF06

*For medium spotlights (5/210 mm or untill 240mm diameter)
Low energy spotlights, metallic halogen and even hi-fi speakers*



TEKPF06

Version without transformer holder

For spotlight diameters: ≤ 210 mm
Dimensions: h 140 x l 300 x p 360 mm
Pieces per package no.: 5



TEKPF06T

Version with transformer holder

For spotlight diameters: ≤ 210 mm
Dimensions: h 140 x l 650 x p 360 mm
Pieces per package no: 5

In order to use diameters beyond 210mm, round or squared, it is possible to insert the following universal grills that may be cut for the right diameter or for the right size of the spotlight to be installed.



TEKPF GRILLO6 R

*universal accessory
for round spotlights*

For spotlight diameters:
17 to 194 mm
Dimensions: h 7 x \varnothing 205
Single pcs weight: 122 gr.
Pieces per package no: 10



TEKPF GRILLO6 S

*universal accessory
for square spotlights*

For spotlight sides:
20 to 140 mm
Dimensions: h 7 x \varnothing 205
Single pcs weight: 124 gr.
Pieces per package no: 10

*For the use of spotlights having
the diameter beyond 210mm
there are available the following articles*



TEKPF06/220 (for their spotlights diameter of 220 mm)

TEKPF06/230 (for their spotlights diameter of 230 mm)

TEKPF06/240 (for their spotlights diameter of 240 mm)



The support box TEKPF06 can be equipped of a central support leg, which makes it resilient and thus can be trampled during the most intense phase of the construction.

The purpose of this brand new system, exclusive of Tekno Soluzioni srl, is to solve all the problems related to the installation of the box before the false ceiling is constructed.

In fact, despite the dimensions, our new Tekpfo6, 05 and 04

PASS THROUGH THE SPOTLIGHT HOLE

*and can therefore be installed AFTERWARDS,
when the diameter and position of the spotlights are known.*

METHODS OF APPLICATION OF THE TEKPF05 AND TEKPF06 SUPPORT BOXES IN REINFORCED CONCRETE OR MASONRY

Both TEKPF05 and TEKPF06 can be installed in reinforced concrete on the prior phase of the construction



In masonry and after that applied during the execution of the electrical plant. It can be also installed in the false ceiling even if it was already finished closed-up without having any predisposition inside.

All of that can be made before even knowing the type and the size of the spotlight to be installed.

appropriate for all round spotlights from 2cm to 21cm diameter and also for squared spotlights from 2cm to 14cm. So it is appropriate for 90% of the spotlights on the market.

The support box is a sturdy container, where a compensation grill can be applied, round or square, when the building is done.

The grill is composed by several concentric rings, which can be removed by cutting them using the electrician's scissors.

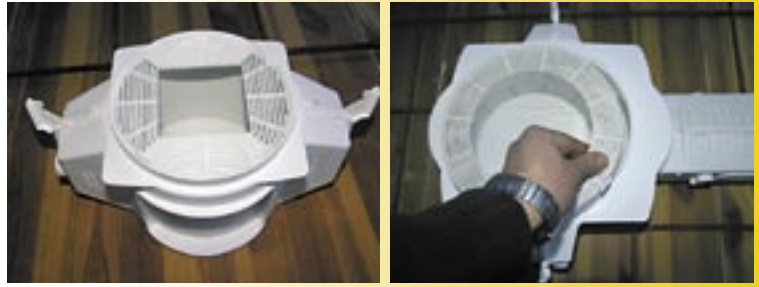
This way there is possible to change the diameter or the side by 0,7mm for each cut ring, still standing into the here above mentioned dimensions.



The remaining grill can be easily covered by the normal plastering, hiding it completely and generating the perfect hole for the spotlight to be installed.



The support boxes dispose of a large interior volume, which allows an excellent heat dissipation, even after an extended use of the installed spotlight. Moreover it is possible to intervene in time, in order to change the spotlight with another type or another dimension without trespassing the diameter of the used grill, related to the 05 or 06 model.



The TEKPF05 and TEKPF06 support boxes also exist in the versions with transformer holder.



That is why equipped with a roomy container, having aside the closing door, (*in this case remember to open the hole in the box set*) where the transformer and the electrical connections may find enough space to be housed, even if it has large dimensions (maximum extent possible: L 10,8 cm x H 7 cm x P 25 cm)



The spotlight support boxes may be connected one to another in order to achieve a true modular lighting system with spotlights equidistant between them, greatly facilitating the operations of laying during the construction. (vedi pag. 19)



So, using this product is the most available choice on the market because of its predisposal for the future installation of any kind of spotlights by type, by durability, by cost. This way it is finally possible to do a work in accordance with the best having a maximum flexibility.



For plasterboard false ceilings or other material

The main features of these spotlights that makes them unique compared to any products on the market IS THE POSSIBILITY OF BEING INSTALLED EVEN AFTER THE FALSE CEILING HAS ALREADY BEEN COMPLETED.

In fact, besides the convenience when a spotlight must be installed in the masonry where a built in box is required, it is known that the installation of a spotlight in the false ceiling is perfect if all the equipment, including power supply, is contained in a protection box; the dust and the choking of the fiberglass (where applicable) cause overheating of the lighting and of the bulb, causing aging and limited life.



The background art envisaged the use of boxes that would not fit through the hole, that is, that could be manually installed only during the false ceiling construction.

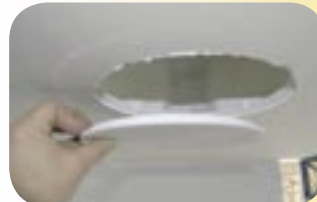
In the practice, often at the building site the exact position of installation of the spotlights is not known, and the diameters thereof are uncertain, too.

Also, the operator that makes the plasterboard very often works not aided by an electrician, with consequent difficulties in an operation that when performed before the false ceiling is closed, requires the continuous collaboration of the two professionals, and this is why our proposal provides even

THE UNIVERSAL DIAMETERS

reducing the prior choice to only two products (TEKPF05 and TEKPF06)

It is possible to make the support box universal for all diameters below 15cm (if the TEKPF05 is installed) and 21cm (if TEKPF06 is installed), using the appropriate compensation grill (such as described on the past pages)



The grill can be shaved from the normal putty and hide the plasterboard as a sequence of several concentric diameters, including square

At any moment, without knowing the required diameter in advance, the electrician can cut the grid and obtain a perfectly sized hole for the spotlight to be installed.

That system is universal in absolute and it is suitable as a solution of the predisposition of the spotlight in the plasterboard, FOR ALL TYPES OF SPOTLIGHTS ON THE MARKET: **because the universal grill may be shaved and therefore may be hidden in the false ceiling.**

N.B. TEKPF06 is also available for 220 – 230 – 240mm on request.

(However, for these versions the grills of compensation can not be applied)



Method for applying for boxes TEKPF05 and TEKPF06 IN PLASTERBOARD



Make the hole after having installed the false ceiling



Assemble the two halves into the hole



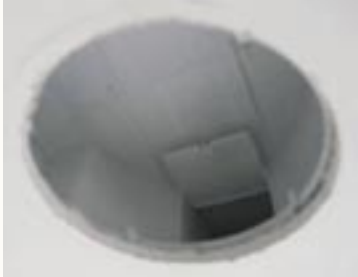
Assemble the transformer box



Assemble also the transformer holder



Insert the box into the hole and put it aside



Place the box close to the hole and check the transformer closing door



Open the lighting box into two halves



Fasten the box using standard screws for plasterboard at the marks on the box edge

Insert the two halves one at a time, putting them aside



Insert the power supply previously connected



Install the spotlight which will then be nicely seated



protected from dust and above all, from the insulating fiberglass, when applicable.

This is how it works for reinforced concrete and in masonry



- secure the box nailing it to the housing reinforcement, to the point where the spotlight will be installed



- ensure the box to the reinforcing bars, even tying it; pass the cables through the little holes especially made at each side of the boxes.
- If it is well done the using of fixing nails can be avoid.



- open the entrance hole of the alimentation corrugated tube(do not forget) and insert it in order to remain still



- pour the concrete and after that, disarming, we would find the 150mm hole, on the new realised ceiling.



- later, or when necessary, it could be possible to apply the compensation grids deciding the size of the holes and the sizes of the spotlights to be installed, cutting the grid to the necessary sizes



- A subsequent shaving with glue tiles or glue for normal plasterboard will allow hiding the remaining grill, leaving space for the perfect hole required.
Caution: Do not use lime plaster and cement directly on the grill, make always and firstly the shaving as a support

MODULAR LIGHTING SYSTEM

As already said for box models Tekpf05 and Tekpf06, the version may be supplied **WITH** transformer housing. Such housing is set up to be further extended with multiple units so as to obtain a complete horizontal modular lighting system, equally spaced, thus making the lighting system setup operations much easier simply by means of the necessary **TEKPFT** items (to be put at a distance of 33 cm from one another).



TEKPFT universal accessory



Dimensions:
h 140 x w 390 x d 130
Pieces per package no.: 10

HEAT RECOVERY

The sequence of TEKPFT elements, beyond defining the equidistance, also originates a conduit suitable for the accommodation of transformers, but also very useful for the dissipation of the heat produced by lighting.

In fact with the tube well done leads to the possibility of ventilating the modular lighting system with the **RECOVERY of the HEAT** dissipated by the lamps to heat the room.

For the first time, a system has been designed to perform at the same time two things that will extend the life of the lighting components, that is, reduce the risk of overheating and fire and **RECOVER THE HEAT EMITTED BY THE LAMPS** in the room, thus becoming an important source of recovery and energy saving.

Placing an aspirator at one of the two ends, we will get an air flow coming from the room that will cross the lighting system suitably made with the aid of the TEKPFT sequence, cooling lamps, spotlights and any transformers and coming out of the other end, returning the heat gathered into the USAGE ROOM.

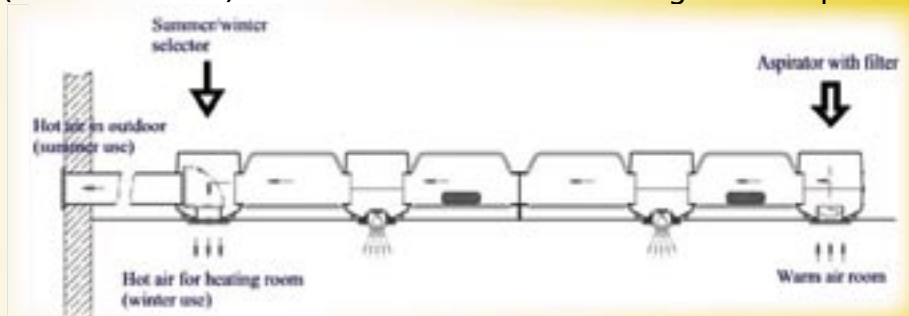
The placement of the ventilating unit (with inlet filter) and of the treated air outlet grid takes place

into the two boxes TEKPF06 or TEKPF05 located at the ends, which will thus be used not as spotlight supports but as component holders for the ventilation system with heat recovery.

A flow switch may be located into the outlet grid to direct the warm air outside the building through the special piping, for SUMMER USE.

This allows avoiding the further loading of the conditioning system with the heat dissipated by the lighting components, thus giving an important recovery source with energy saving.

This brand new and unique system is an exclusive and patented by Tekno soluzioni srl.



Important Note. When realizing out this modular system, embedded in a sequence the TEKPFT article, remember:



Do not install the door closing tray of the transformer holder



Open the bottoms of the pre fractured background of the TEKPFT

Questo per consentire di avere un condotto ovviamente non occluso.

SPECIFICATIONS common to all products

MATERIAL COMMONLY USED:

- Polypropylene, 30% glass charged
Class "HB" (glow wire 650°C), white colour,
operating temperature up to 120°C

AVAILABLE ON REQUEST:

- Polypropylene, 30% glass charged
Class "HB" (glow wire 850°C), white colour,
- Nylon, 30% glass charged
Class "VO" (glow wire 960°C), white colour,
operating temperature up to 130°C



On demand, boxes can be treated with REI application if they are to be installed in places where a peculiar fire resistance is required.



THE ORIGINS OF SPOTLIGHT SUPPORT BOXES

Spotlight support boxes were invented by an electrical system installer who, through the experience of his work, became aware of the practical lack that existed in the installation of built in spotlights.

The study and design of the smallest details with the practical on site experience led to the manufacture of these products, covered by several international patents and nowadays used by millions people all over the world.

Do you want to join them?



OUR SALES NETWORK



The spotlight support box is distributed all over the world through a network of agents and retailers. Contact us and we will tell you the easiest way to find our products.



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