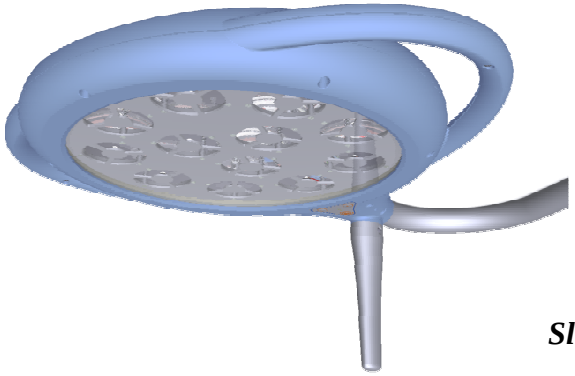
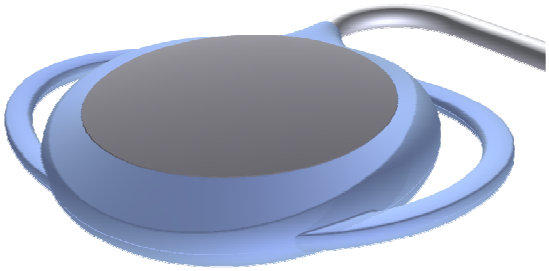
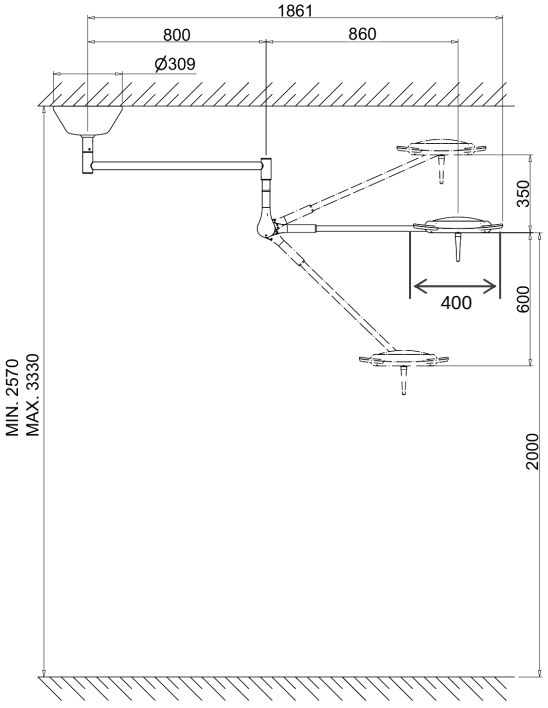


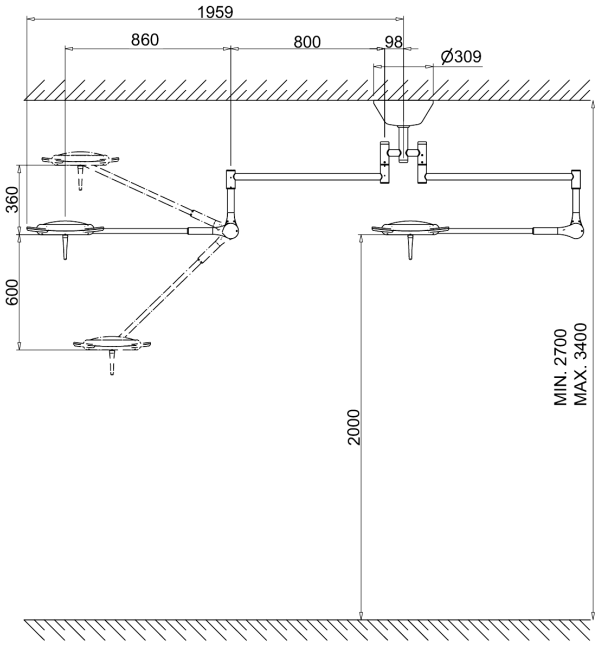


Slim

TECHNICAL DATA



SINGLE ceiling model [(1)]



DOUBLE ceiling model [(2)]

Performances at 1mt distance	
	Slim
Light intensity at 1m (Ec)	50klx
Color temperature (K)	5000
Color rendering index (CRI)	94
Luminous source	n°12Led x2W
Focusing	Fissa
Depth of light field	150 cm
Diameter of light field d_{10}	14 cm
Radiated energy (Ee)	119 W/m^2
Electrical data	
Primary voltage (Vac)	100÷240 V
Secondary voltage (Vdc)	24 V
Frequency	50/60 Hz
Power absorption	40 VA

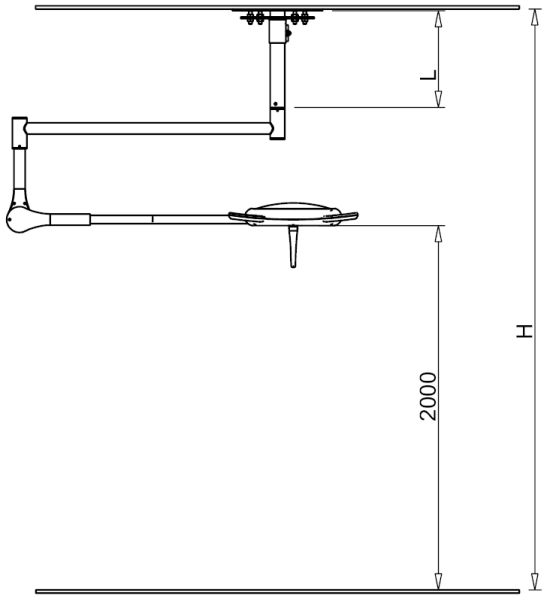
IMPORTANT
PROCEED WITH THE OPERATIONS OF TUBE CUTTING FOLLOWING THE TABLES REPORTED IN NEXT PAGE

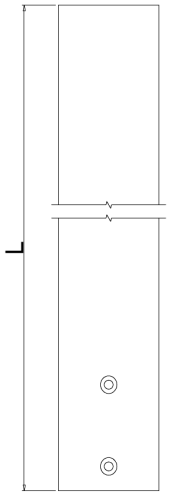
PROCEED WITH INSTALLATION AND TUBE DRILLING FOR THE APPLICATION OF SAFETY DOWEL AS REPORTED IN THE INSTALLATION MANUAL PROVIDED WITH THE PRODUCT

Note
(1) (2) in conditions of room heights less or greater that the indicated ones, or in presence of false-ceiling, contact customer service for an evaluation on the feasibility of the project.

ANCHORING TUBE LENGTH'S TABLES

Ceiling single

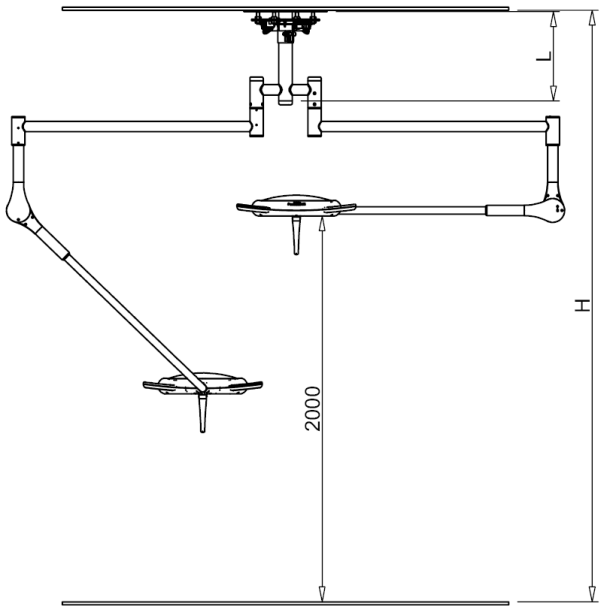


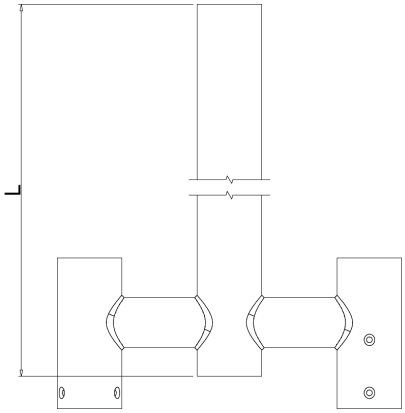


H [mm]	L [mm]
2570	200
2600	230
2650	280
2700	330
2750	380
2800	430
2850	480
2900	530
2950	580
3000	630
3050	680
3100	730
3150	780
3200	830
3250	880
3300	930
3330	960

Anchoring tube is provided with a standard length of 960mm, which allows the reaching of maximum installation height of 3330mm.

Ceiling double





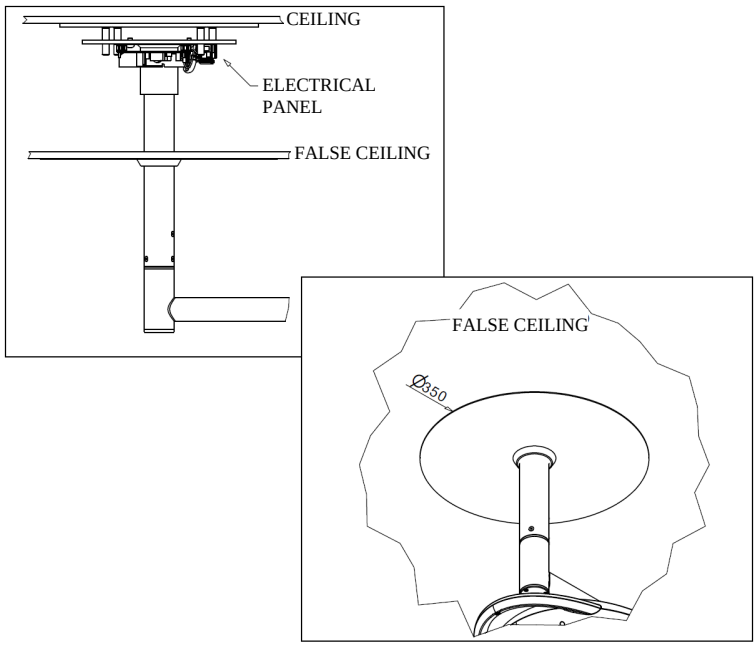
H [mm]	L [mm]
2700	300
2750	350
2800	400
2850	450
2900	500
2950	550
3000	600
3050	650
3100	700
3150	750
3200	800
3250	850
3300	900
3350	950
3400	1000

Anchoring tube is provided with a standard length of 1000mm, which allows the reaching of maximum installation height of 3400mm.

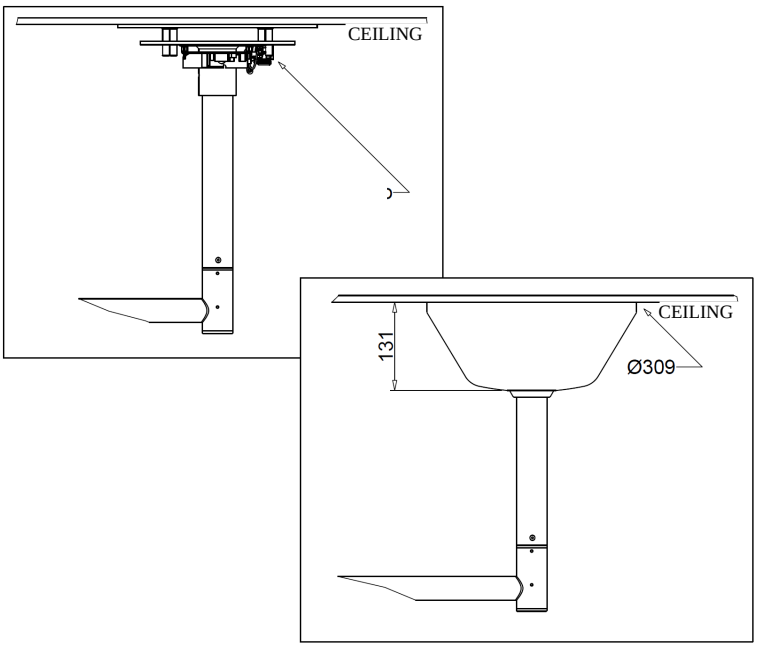
CEILING COVER

Depending on the installation conditions, together with the device, it is foreseen the provision of different types of ceiling cover.

- In the presence of a false ceiling, because the electrical panel remains housed in the space between the ceiling and the false ceiling itself, the device is commonly equipped with the flat disc cover.



- In case in which there is no false ceiling, the device is commonly equipped with the high cover, needed to house the electrical panel fixed to the ceiling plate.



Note
In the case of different needs with respect to standard furniture, it is possible require the desired cover indicating your choice directly on the order.
The requested solution will be in any case take under evaluation by technical personnel in order to verify its feasibility.

CEILING ANCHORING CHARACTERISTICS

- MECHANICAL ARRANGEMENT OF THE SITE

The building slab arrangement works to install the product must be carried out in a solid and safe way according to the standards by qualified personnel at total end-customer care.
By qualified personnel we mean, including but not limited to, the following professionals: Building Engineer, Surveyor, Building Contractor, duly registered with the Professional Register.

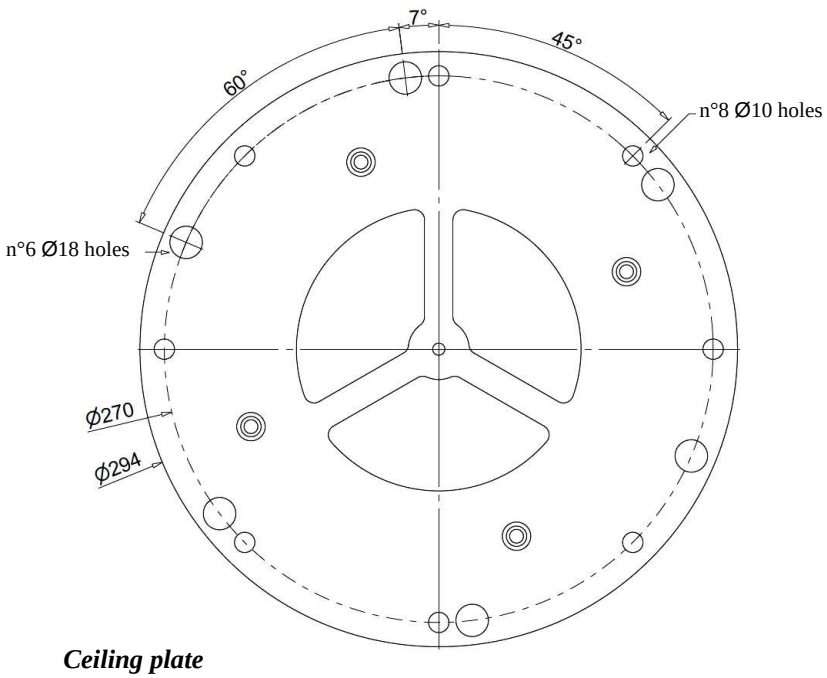
The slab must have a capacity of at least 300 Kg/m^2 and a thickness of at least 250 mm.
The installation site must be declared fit for use.

The process of mechanical anchoring of the ceiling plate must be carried out by determining in advance to which type of slab we are going to anchor the device and behaving accordingly; As a non-exhaustive example, we list some of the types of wall and related anchoring methodology:

Reinforced concrete	*Mechanical anchoring*: proceed with fixing of plate by n°8 mechanical anchors[(3)] carefully following the instruction given from the anchors manufacturer. *Chemical anchoring:* proceed with fixing of plate by n°8 chemical injection anchors[(3)] carefully following the instruction given from the anchors manufacturer.
Clay-cement mix	In this case it is compulsory to enclose the slab sandwich-like by the Product plate and the counter-plate. Plate and counter-plate must be enclosed to each other with steel threaded bars[(3)], blocked at each side ends by respective washers, nuts and lock nuts.

(3) allowed the use of anchors / threaded bars of size up to a maximum of M10 due to the diameter of the holes of the plate.

- HOLES PATTERN



Ceiling plate
(new version starting from S/N 2012102170293)

STATIC COMPLIANCE AND EXECUTION

Preliminary conditions for static compliance

The technical construction authorities must confirm in writing that they will comply with local and national guidelines and the following points.
The customer must keep the certification together with the product documentation and attach a copy to the order.

1. The installation site must be declared fit for use.
2. The technical construction authorities must first ascertain the most suitable method of anchoring to the type of ceiling present and take responsibility.
3. The slab must have a capacity of at least 300 Kg/m^2 and a thickness of at least 250 mm.
   Must also be considered any further loads anchored to the slab itself.
   The supporting slab should preferably be of clay-cement mix
4. Each of the six anchors must have a load resistance of at least 2000N (≈200kg).
   The permissible resistance can be determined according to the following points:
   - Information given from the anchors manufacturer
   - Quality of the supporting wall, for example the resistance of cement.
   - Displacement of all the anchors, with diminishing due to the distances given for the same

DECLARATION

Based on the above points, it is hereby certified that the static calculation and arrangement building works for the installation of the product, carried out at:

Customer name and address: _____

_____

were carried out in solid and safe way, according to the rule of art.

Engineer calculator name and address: _____

_____

Signature _____ **Date** _____

Executing works firm name and address: _____

_____

Signature _____ **Date** _____

IMPORTANT:
TECNO-GAZ S.p.A. declines all responsibility for any structural failure can occur over time.

- ELECTRICAL ARRANGEMENT OF THE SITE

The electrical system arrangement works of the site used as medical premises to power the Product must be carried out in a safe way according to the standards by qualified personnel.
By qualified personnel we mean, including but not limited to, the following professionals:
Electro-technician licensed to practise as electrician.

The electrical plant of the site in which will be carried out the installation, must complies with IEC 60364-7-710 (standards for electrical installations for rooms used for medical purposes), and the laws and / or regulations in force.

The electrical system must be certified by an electrician licensed to issue the conformity certificate.

The verification of the grounding circuit must be certified as required by the norms in force.

The electrical system shall provide the use of appropriate cables in reference to the electrical characteristics of the product to be supplied.

The electrical system must be provided with a fuse protection or magneto-thermal switch upstream the product, to avoid the risk of damage as a result of a failure and / or malfunction of the electricity network.

ELECTRICAL PLANT CONFORMITY

DECLARATION

Based on the above points, it is hereby certified that the electrical arrangement of the site, carried out at:

Customer name and address: _____

_____

were carried out in solid and safe way, according to the rule of art.

Engineer calculator name and address: _____

_____

Signature _____ **Date** _____

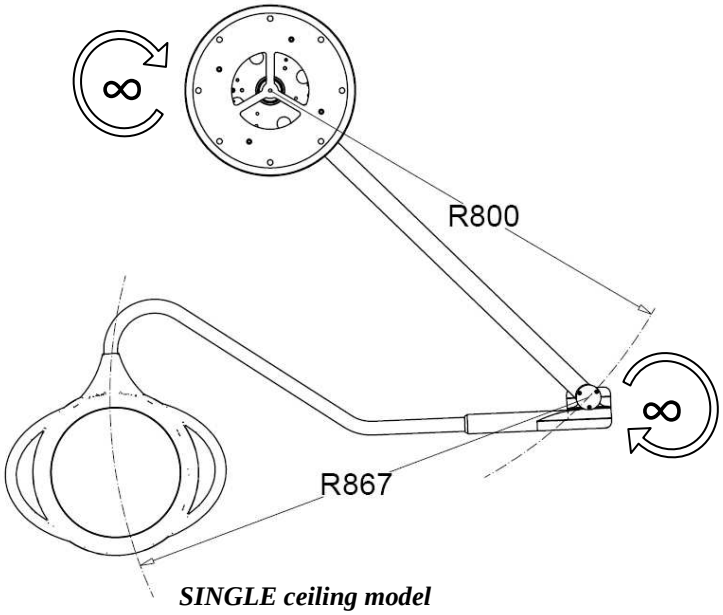
Executing works firm name and address: _____

_____

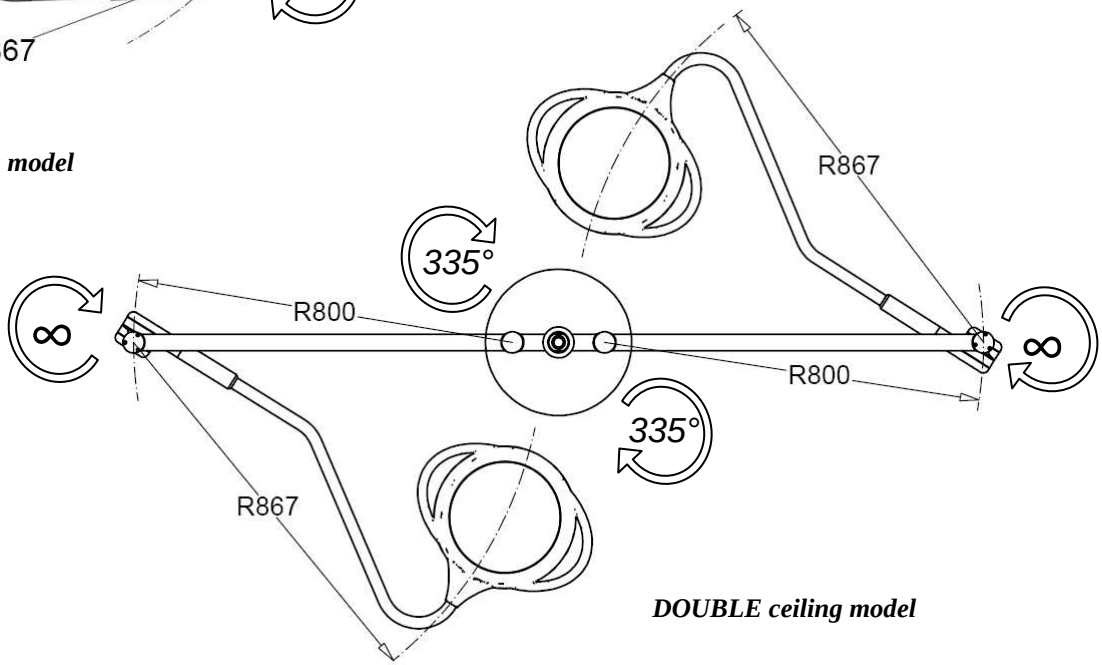
Signature _____ **Date** _____

IMPORTANT:
TECNO-GAZ S.p.A. declines all responsibility for any electrical failure can occur over time

OPERATIVE AREA OF PRODUCT

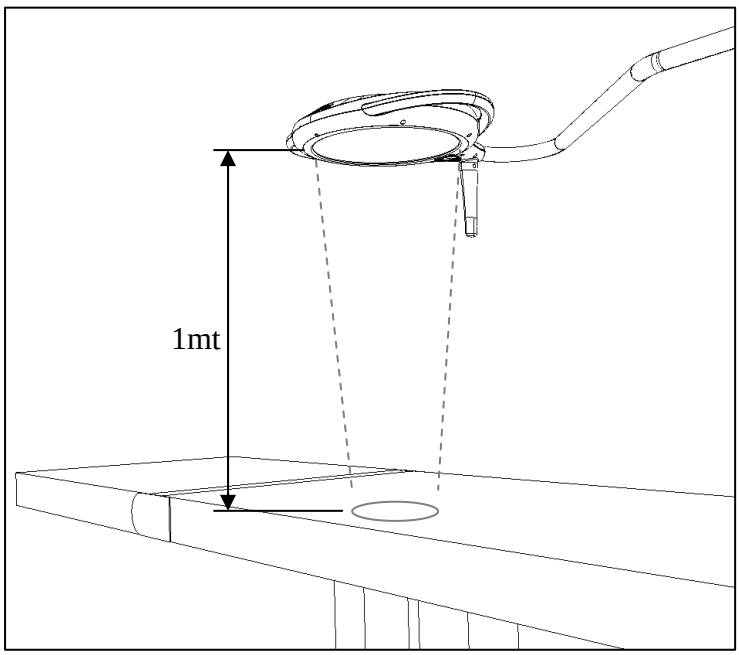


SINGLE ceiling model



DOUBLE ceiling model

WORKING DISTANCE



To obtain the optimization of the light intensity, it is recommended to use the product at the distance of 1m.

However, the product ensures a good light intensity even when used at a distance range between 80cm and 140cm

FIXING POSITION OFLAMP

For a functional use of device it is suggested to fix the product as shown in the following images:

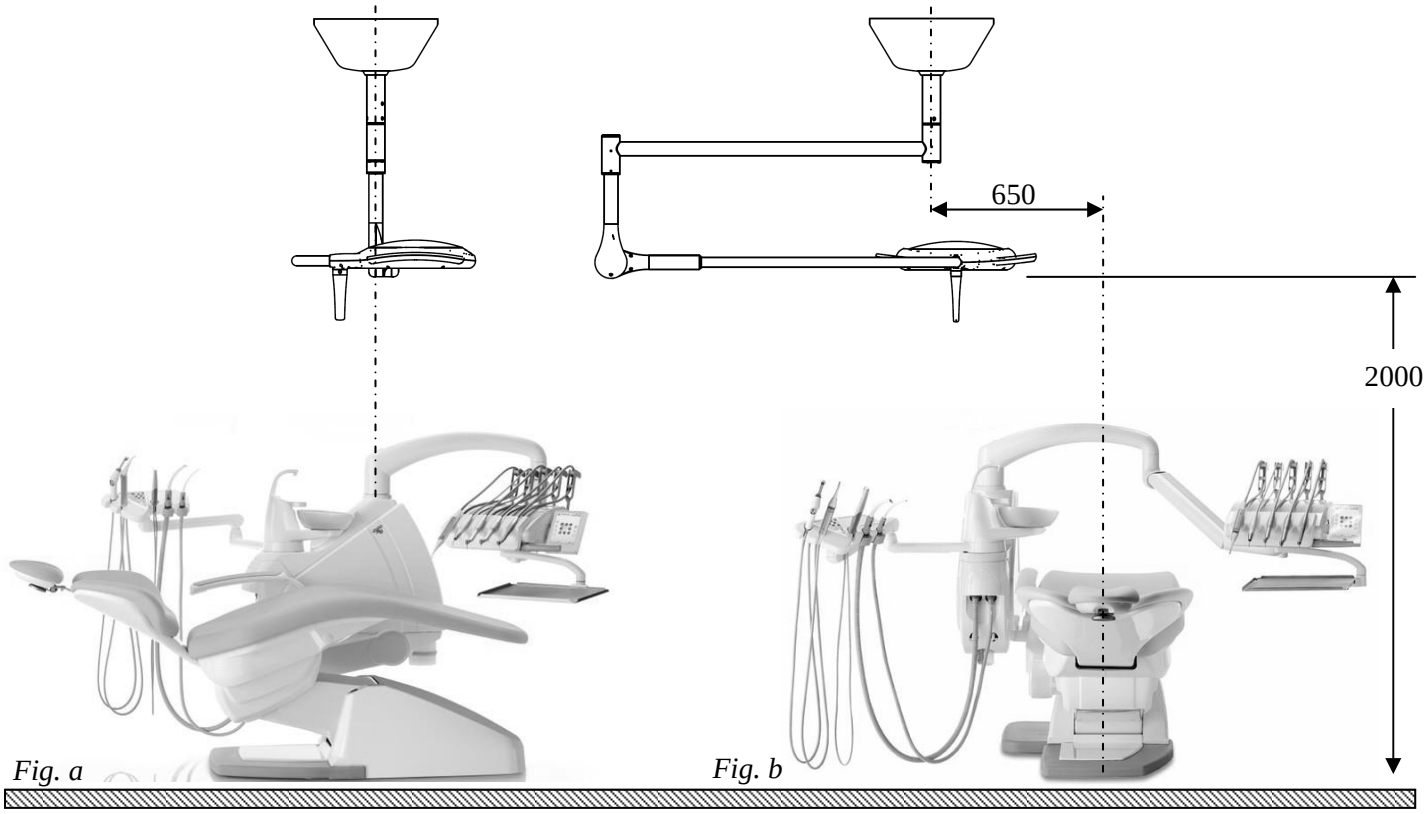


Fig. a *Fig. b*

Fix the ceiling plate so that the anchoring tube will be aligned on the plane passing through the seat of dental lamp (*Fig. a*) and at about 650mm from the longitudinal axis of the dental chair (*Fig. b*), [4][5].

[4] In the case that are present some obstacles that avoid the lamp fixing in the suggested position (for example like ceiling illumination systems), the choice of device fixing position is at total care of end user, considerino on site the possible solutions which allow the lamp to not interfere with the other devices.

POSITIONING OF LAMP

Use the device positioning it so that the horizontal arm remains spread toward the left side of patient, while the oscillating arm is facing toward the patient so that the cupola falls under the anchoring tube.
In this manner it is possible use the vertical oscillation and the two rotations of fork (α) and cupola (β) to light the interested area.