

System TWO Pre-Installation Guidelines

SPECIAL NOTE:

Installation and repair of this equipment should be performed by qualified persons only.

Medical Illumination International, Inc. does not warranty any damage occurring as a result of improper installation.

It is recommended that the installation manual be completely reviewed prior to installation.

Structural:

- The structural ceiling mount must be designed to support:
Vertical Load of 230 lbs and an
Off Center Moment of 600 ft-lbs.



A structural mount that does not meet these minimum conditions can cause serious injury and/or property damage.

- The supplied ceiling casting must be mounted level.
- The structural mount should meet all local building codes.
- The four mounting through holes for the ceiling casting sub-assembly should be 7/16" diameter. If these will be threaded holes, use hole size consistent with fastener being used.
- Using charts on subsequent pages, determine proper ceiling rod length.

Note: There are 6 standard length extension rods for different ceiling heights.

Note: Ceilings under 8 ½ feet do not require an extension rod and adapter.

Electrical:

- The System Two surgical lighting system be mounted should be wired in accordance with all applicable building codes. It can be mounted directly over a 4-0 junction box, or the input power supply conduit lines can be optionally attached to the Ceiling Casting directly.
- The supply circuit line must be as follows:
110-120 VAC 50/60 Hz, single phase, three wire, capable of supplying 420 watts @ 4 amperes.
- The power supply circuit must be in compliance with all applicable building codes.
- The light head switches secondary transformer power only. It is recommended that the System Two Surgical Lighting System is connected to its own supply circuit with integral circuit breaker.
- The circuit breaker will act as the supply main disconnect switch.



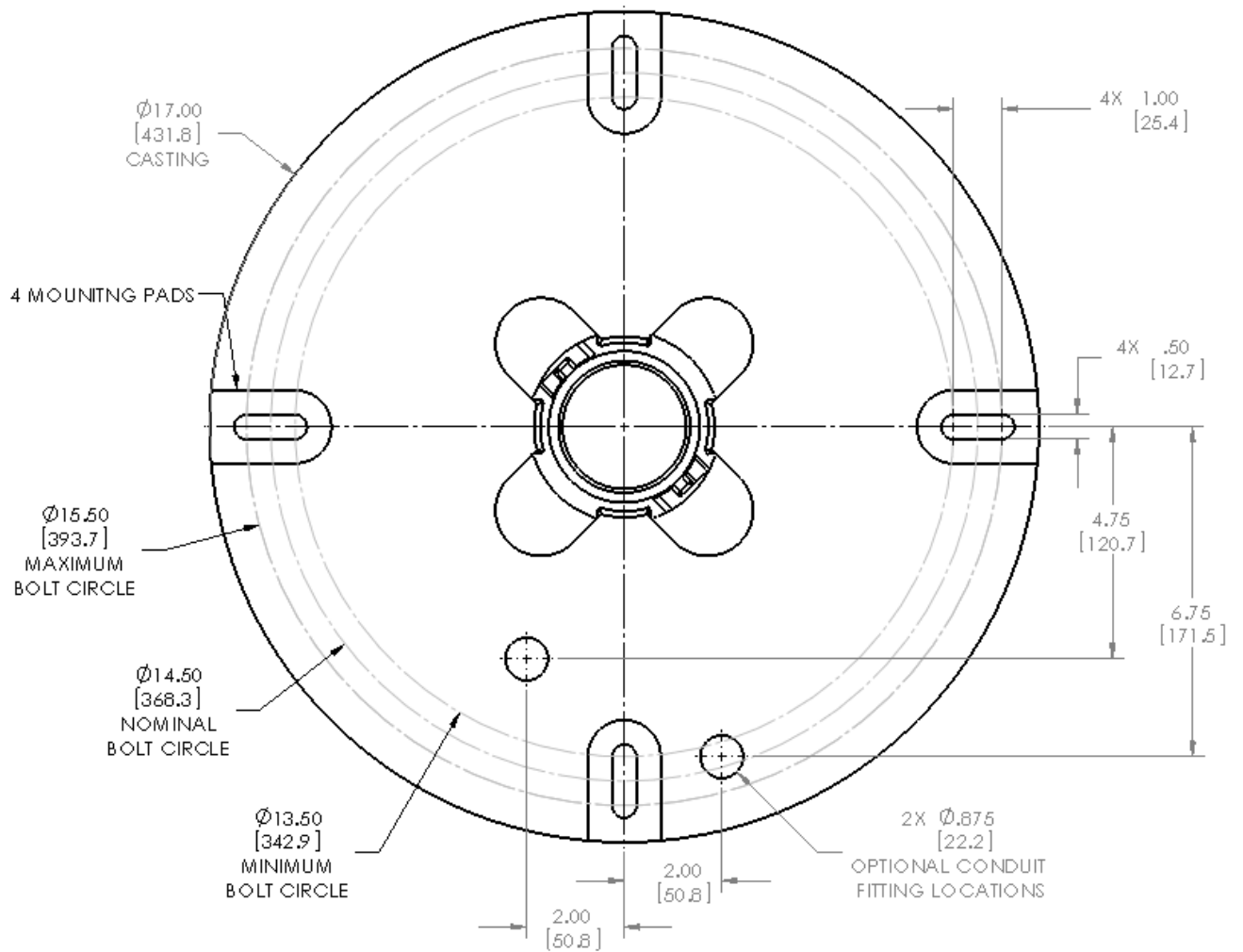
Failure to provide a circuit meeting these minimum standards or complying with local building codes can cause a shock hazard.

GENERAL INFORMATION

The ceiling mounted, orbital suspension arm system is offered in three basic arm configurations, Solo, Duo & Trio. There are then various light head, video camera and monitor arm configurations available to be mounted on the arms. The system is shipped in separate cartons. The ceiling casting assembly, hardware kit and this manual are in one carton. The arm assembly and ceiling rod/adapter assembly are in one carton. The head assemblies are each located in individual cartons.

To assist in installation, we recommend using a hoist or lift capable of reaching the ceiling height.. The packaging for the arm assembly is specifically designed so that the ceiling casting can be pre assembled on the arms and can all be lifted together to the mounting point.

Pre-Installation Guidelines



**Figure 1: Mounting Dimensions for Ceiling Casting (Top View)
[Dimensions with brackets are in millimeters]**

Ceiling Rod Calculation Solo Mount

Use the following table to select the correct length ceiling rod for your application (See Figure 2).

Ceiling Mounting Height	Ceiling Rod Length	"X" Value	"Y" Value	Head room to bottom of extension arm (y value-x value)
8' (2,4m)	N/A	18.25" (463,5mm)	96" (2,4m)	77.75" (1,974.8mm)
9' (2,7m)	9.4" (238.7mm)	27.65" (702.3mm)	108" (2,7m)	80.35" (2,040.8mm)
9' (2,7m)	13" (330.2mm)	31.25" (793.7mm)	108" (2,7m)	76.75" (1,949.4mm)
10' (3,0m)	19" (482.6mm)	37.25" (964.1mm)	120" (3,0m)	82.75" (2,101.8mm)
10' (3,0m)	25" (635.0mm)	43.25" (1,098.5mm)	120" (3,0m)	76.75" (1,949.4mm)
11' (3,3m)	31" (787.4mm)	49.25" (1,250.9mm)	132" (3,3m)	82.75" (2,101.8mm)
12' (3,6m)	43" (1092.2mm)	61.25" (1,555.7mm)	144" (3,6m)	82.75" (2,101.8mm)

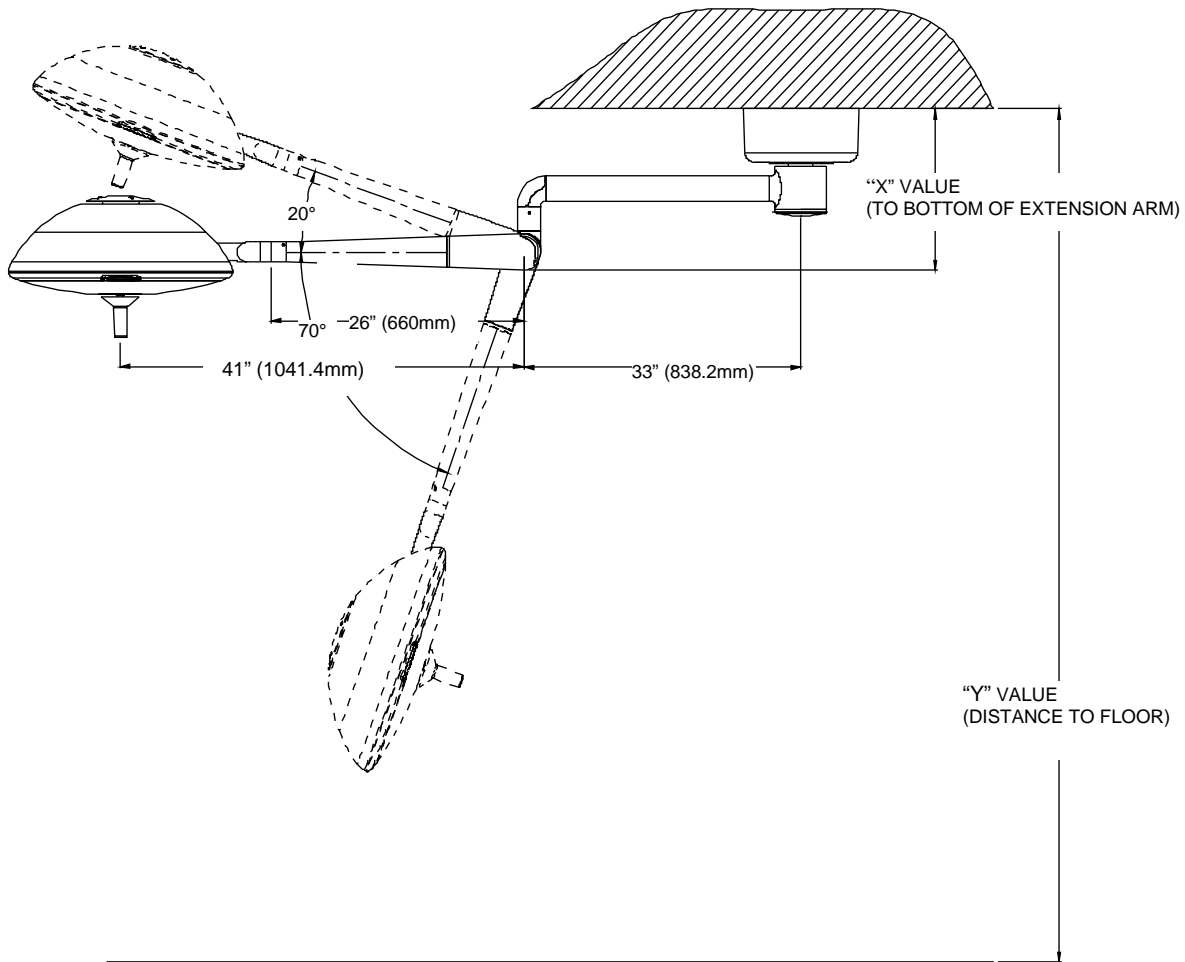


Figure 2: Ceiling Rod Calculation Solo Mount

Ceiling Rod Calculation Duo Mount

Use the following table to select the correct length ceiling rod for your application (See Figure 3).

Ceiling Mounting Height	Ceiling Rod Length	“X” Value	“Y” Value	Head room to bottom of extension arm (y value-x value)
8' (2,4m)	N/A	23.25" (590.5mm)	96" (2,4m)	72.75" (1,847.8mm)
9' (2,7m)	9.4" (238.7mm)	32.45" (829.3mm)	108" (2.7m)	75.55" (1,913.9mm)
9' (2,7m)	13" (330.2mm)	36.25" (920.7mm)	108" (2.7m)	71.75" (1,822.4mm)
10' (3,0m)	19" (482.6mm)	42.25" (1,073.1mm)	120" (3.0m)	77.75" (1,974.8mm)
10' (3,0m)	25" (635.0mm)	48.25" (1,225.5mm)	120" (3.0m)	71.75" (1,822.4mm)
11' (3,3m)	31" (787.4mm)	54.25" (1,377.9mm)	132" (3.3m)	77.75" (1,974.8mm)
12' (3,6m)	43" (1092.2mm)	66.25" (1,682.7mm)	144" (3.6m)	77.75" (1,974.8mm)

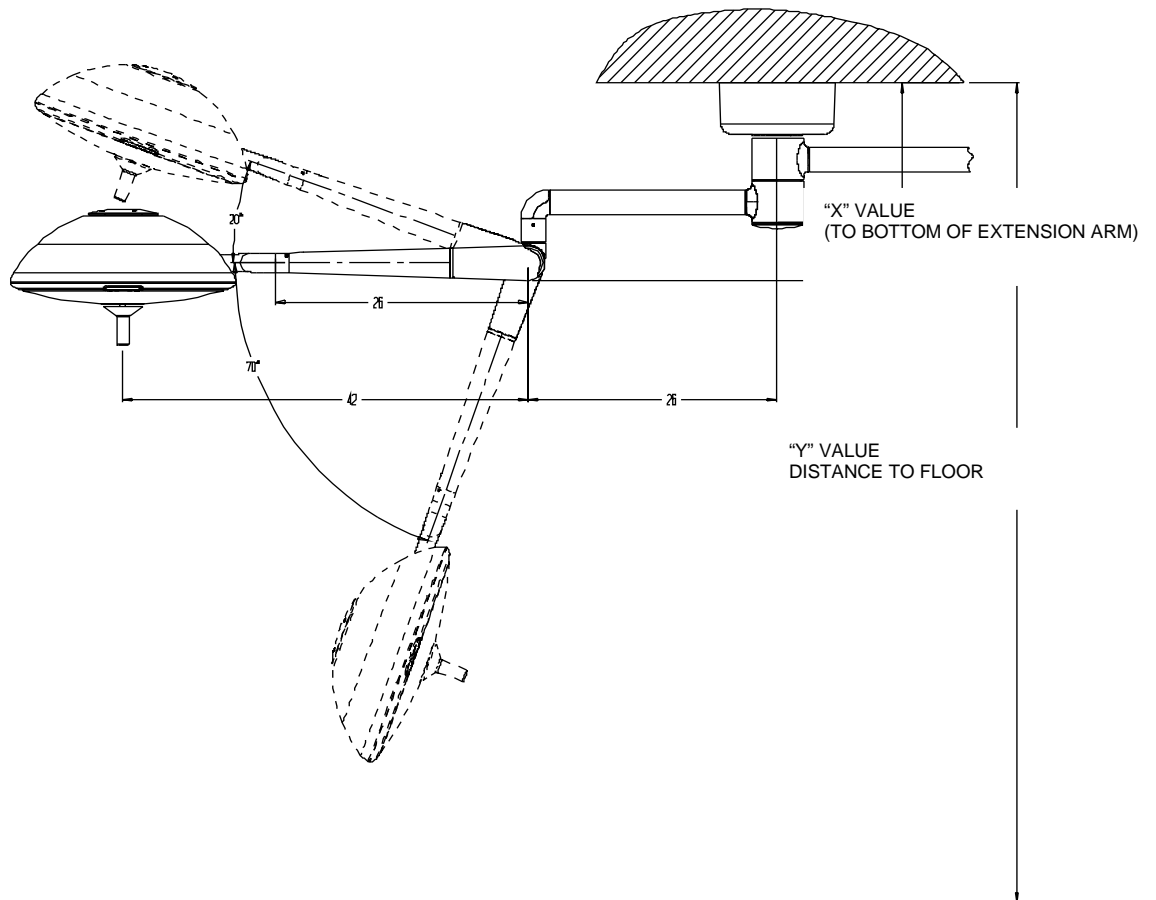


Figure 3: Ceiling Rod Calculation Duo Mount

Ceiling Rod Calculation Trio Mount

Use the following table to select the correct length ceiling rod for your application (See Figure 4).

Ceiling Mounting Height	Ceiling Rod Length	"X" Value	"Y" Value	Head room to bottom of extension arm (y value-x value)
8' (2,4m)	N/A	28.25" (717.5mm)	96" (2,4m)	67.75" (1,720.8mm)
9' (2,7m)	9.4" (238.7mm)	37.65" (956.3mm)	108" (2,7m)	70.35" (1,786.9mm)
9' (2,7m)	13" (330.2mm)	41.25" (1,047.7mm)	108" (2,7m)	66.75" (1,695.4mm)
10' (3,0m)	19" (482,6mm)	47.25" (1,200.1mm)	120" (3,0m)	72.75" (1,847.8mm)
10' (3,0m)	25" (635.0mm)	53.25" (1,352.5mm)	120" (3,0m)	66.75" (1,695.4mm)
11' (3,3m)	31" (787,4mm)	59.25" (1,504.9mm)	132" (3,3m)	72.75" (1,847.8mm)
12' (3,6m)	43" (1092,2mm)	71.25" (1,809.7mm)	144" (3,6m)	72.75" (1,847.8mm)

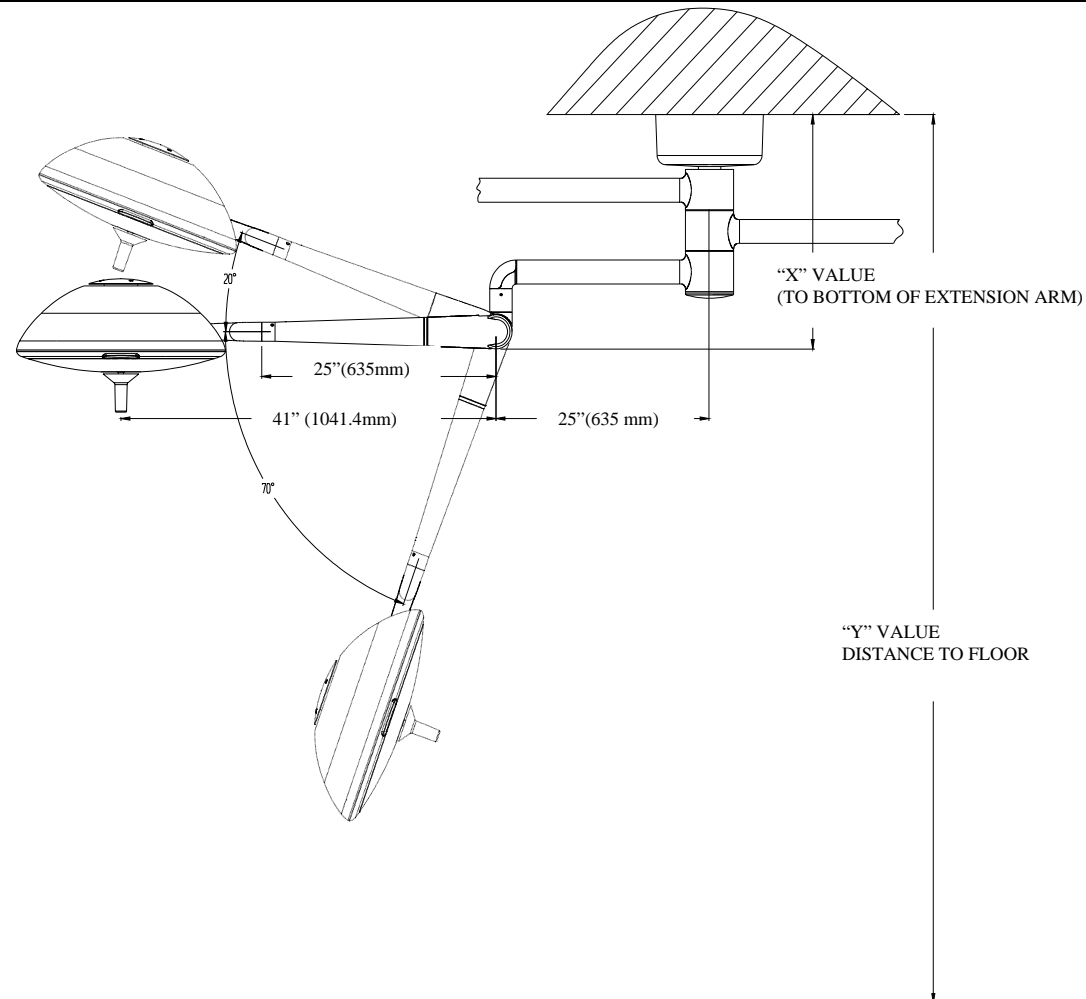


Figure 4: Ceiling Rod Calculation Trio Mount

**GENERAL INSTRUCTIONS FOR
DETERMINING CEILING ROD LENGTH**
(when ordering any ceiling mounted light)

IMPORTANT: Refer to the mounting instructions for the specified model to determine the weight and movement capabilities necessary for proper support.

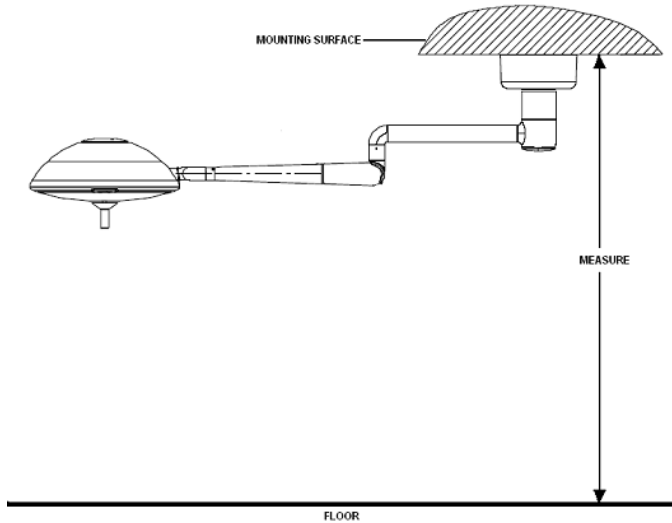


Fig 1

Measure the total distance using either inches or millimeters from floor to mounting surface as shown in Fig. 1

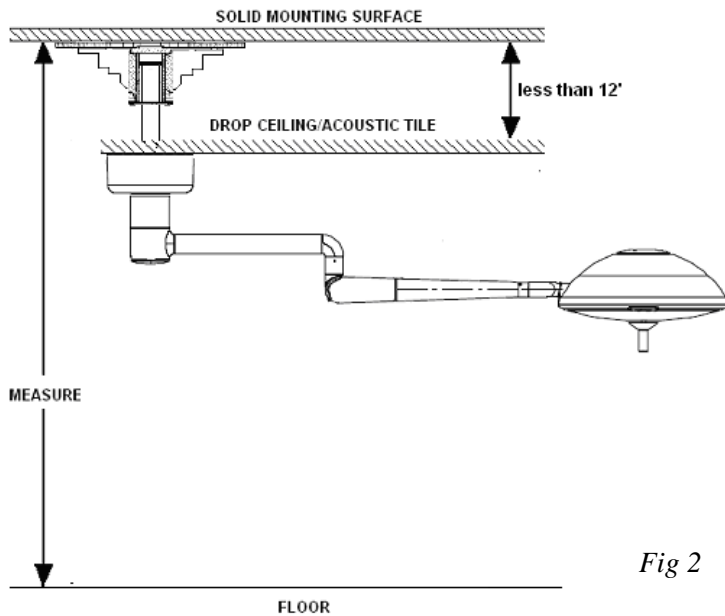


Fig 2

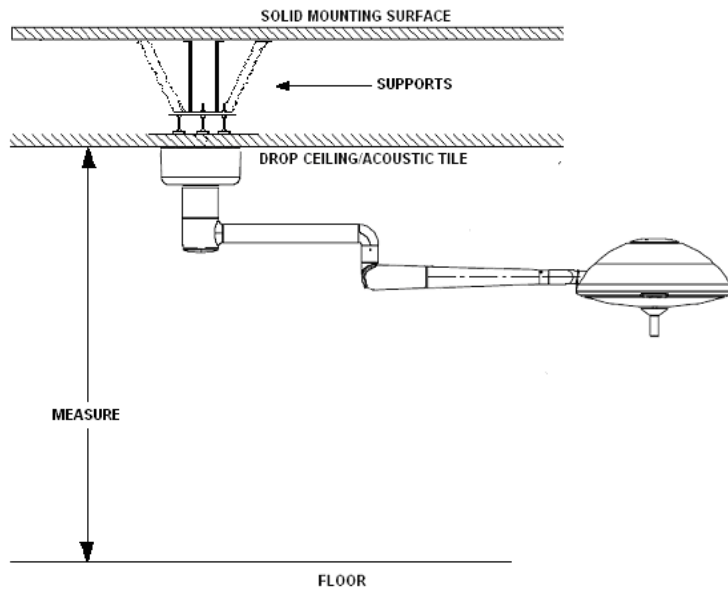
For facilities with acoustic tile “drop ceilings”, the light can be mounted in one of two ways:

A: If the distance between the solid mounting surface & the drop ceiling is not excessive and does not exceed 12 feet, the light may be mounted as shown in Fig. 2*

(more on next page)

* Note: An architect, structural engineer or contractor should be consulted directly regarding the details of ceiling mount installation. Medical Illumination cannot provide any direct guidance or recommendations beyond the pre-installation guidelines outlined in the product’s installation manual.

**GENERAL INSTRUCTIONS FOR
DETERMINING CEILING ROD LENGTH**
(when ordering any ceiling mounted light)



B: If the light will be mounted directly at the drop ceiling level, then structural supports can be mounted above the tile, and placed directly on the solid surface, to fully support the mounting.*

Standard ceiling rods are included with light orders at no additional cost.
Extended ceiling rods are available at an additional cost.

** Note: An architect, structural engineer or contractor should be consulted directly regarding the details of ceiling mount installation. Medical Illumination cannot provide any direct guidance or recommendations beyond the pre-installation guidelines outlined in the product's installation manual.*