

## Ceiling Mount Pre-Installation Guidelines

**This guide is a general overview of the mounting requirements, not full installation instructions. It is recommended that the full installation manual be completely reviewed prior to installation.**

**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 this installation manual be completely reviewed prior to installation.

Before installation, check to insure the following minimum conditions are provided:

Ceiling Mount	Weight: Lb	Moment: Ft Lb
Single Ceiling	70	215
Double Ceiling	115	350

← Recommended

Medical Illumination **strongly recommends** that the ceiling structure be designed to the weights and moments for the worst case (double ceiling). Designing for the heaviest model with the highest load/torque will provide adequate support for the heaviest, and will not significantly increase the cost of the lightest. The design margin will also allow for flexibility for future product upgrades.



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

- The ceiling structure must be strong enough to support the weight and rigid enough to constrain rotation to less than 0.1° at the ceiling casting.
- The equipment may be mounted directly over a 4-0 junction box. Input power supply lines should be wired in accordance with all applicable building codes.
- The supply circuit line must be as follows:  
100-240VAC, 50/60 Hz, single phase, three wire, capable of supplying 240 Watts @ 4A.
- The power supply circuit line must be routed and wired to the wire harness in compliance with all applicable building codes.



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

## Ceiling Structure Construction and Mounting

The Ceiling Mount system will experience various level of dynamic off center moment during regular use. Therefore, it is crucial that the ceiling structure to be strong enough to uphold the weight of the system and support the positioning arms and light head without deflection. The owner and/or owner's contractor has the final responsibility for the strength and rigidity of the ceiling structure. An inadequate ceiling may result in unintended drift and/or equipment damage.

Because the ceiling structure is the owner's responsibility, the design and construction recommendation shown below (see Figure 1. Recommended Ceiling Structure Construction) covers only one of the many possible alternatives that can be used. Medical Illumination highly recommends that the owner consult a structural engineer prior to designing and installing the ceiling structure.

### Recommended Ceiling Structure Construction Details

The illustrations below are suggested mounting schemes per 2001 California Building Code – Section 1632A: Anchorage and Seismic. For any other mounting scheme, please consult a structural engineer and/or professional contractor for the best solution for your situation. Installation and repair of this equipment should be performed by qualified persons only. Medical Illumination does not warranty any damage occurring as a result of improper installation.

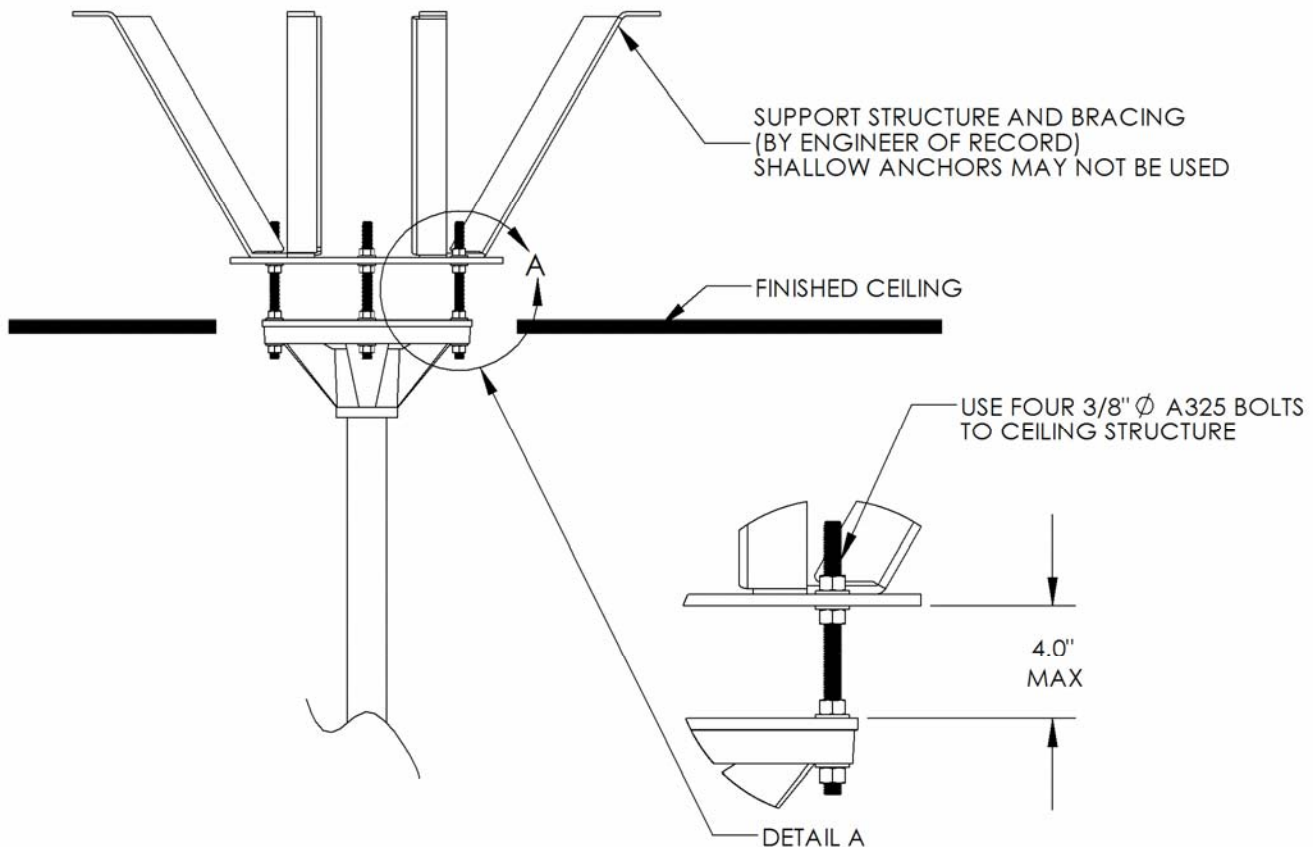


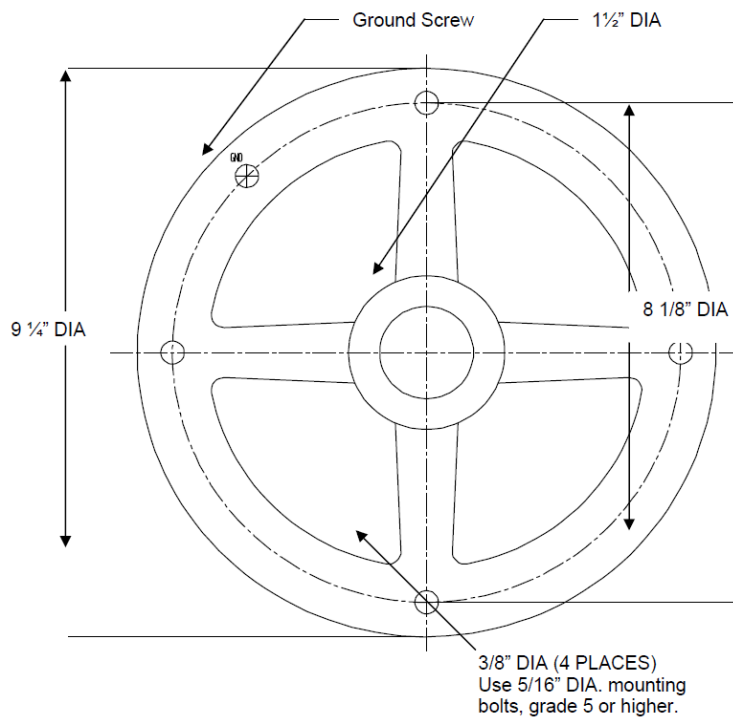
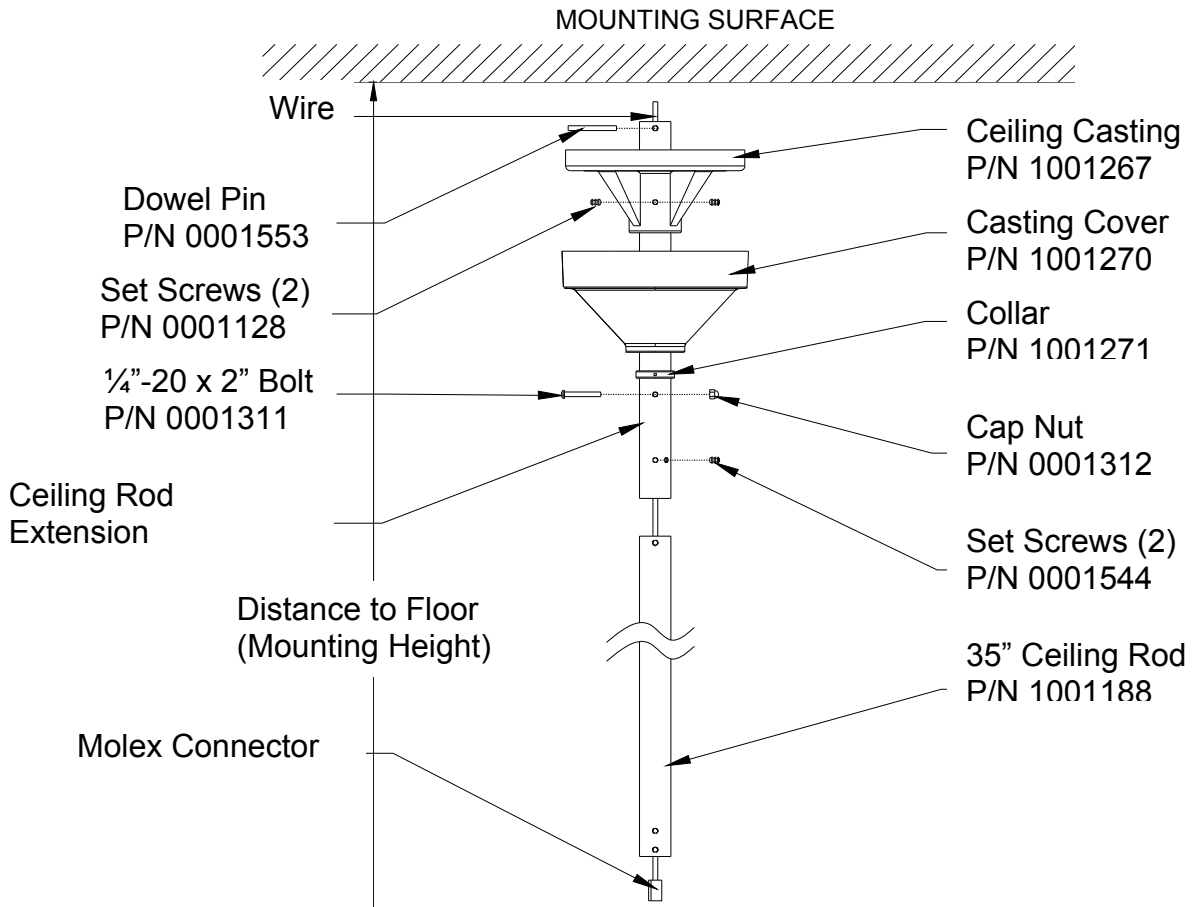
Figure 1. Recommended Ceiling Structure Construction

# Ceiling Structure Construction and Mounting



Improper fastening of the ceiling casting can cause serious injury and/or property damage.

## Extended Ceiling Mount Components



## Ceiling Calculation: Single Mount Dimensions

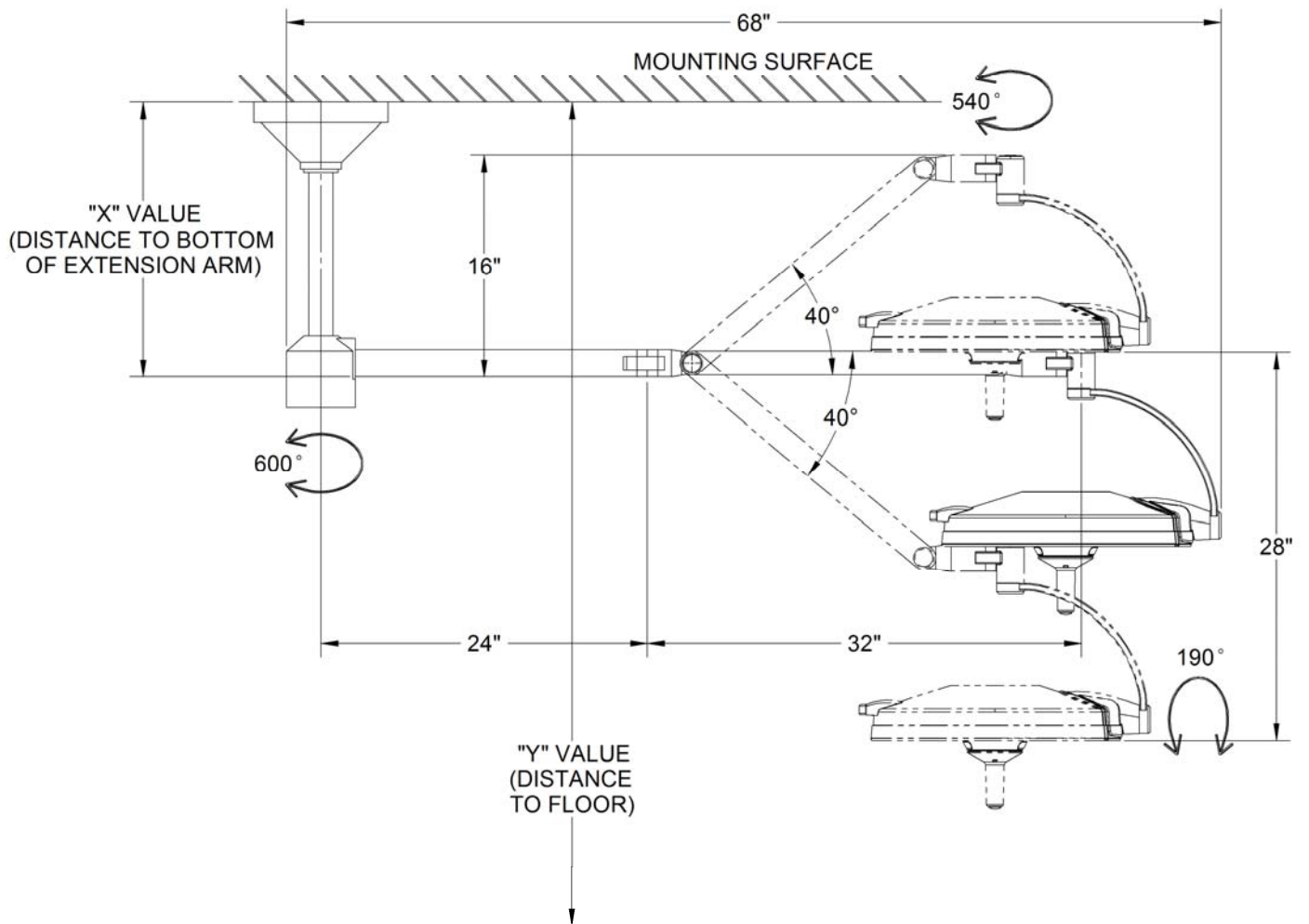


Use the following table to select the correct length ceiling rod for your application.

Ceiling Rod Calculation, Single Ceiling Mount

Ceiling Mounting Height (Y-Value)	Ceiling Rod Length	"X" Value	Head room to bottom of extension arm (y-value - x-value)
7'10" - 8'6"	16"	22"	6'2" - 6'11"
8'7" - 9'4"	25"	31"	6'2" - 7'0"
9'5" - 10'1"	35"	41"	6'2" - 6'11"
10'2" - 10'10"	44"	50"	6'2" - 6'11"
10'11" - 11'8"	53"	59"	6'2" - 7'0"
11'9" - 12'0"	63"	69"	6'2" - 6'6"
12'1" - 12'10"	67"	73"	6'2" - 7'0"
12'11" - 14'0"	77"	83"	6'2" - 7'3"

NOTE: Extended ceiling rod kits (44"+) for ceilings above 10'-1" are available at additional charge.



Single Ceiling Mount Ceiling Rod Calculation

## Ceiling Calculation: Double Mount Dimensions

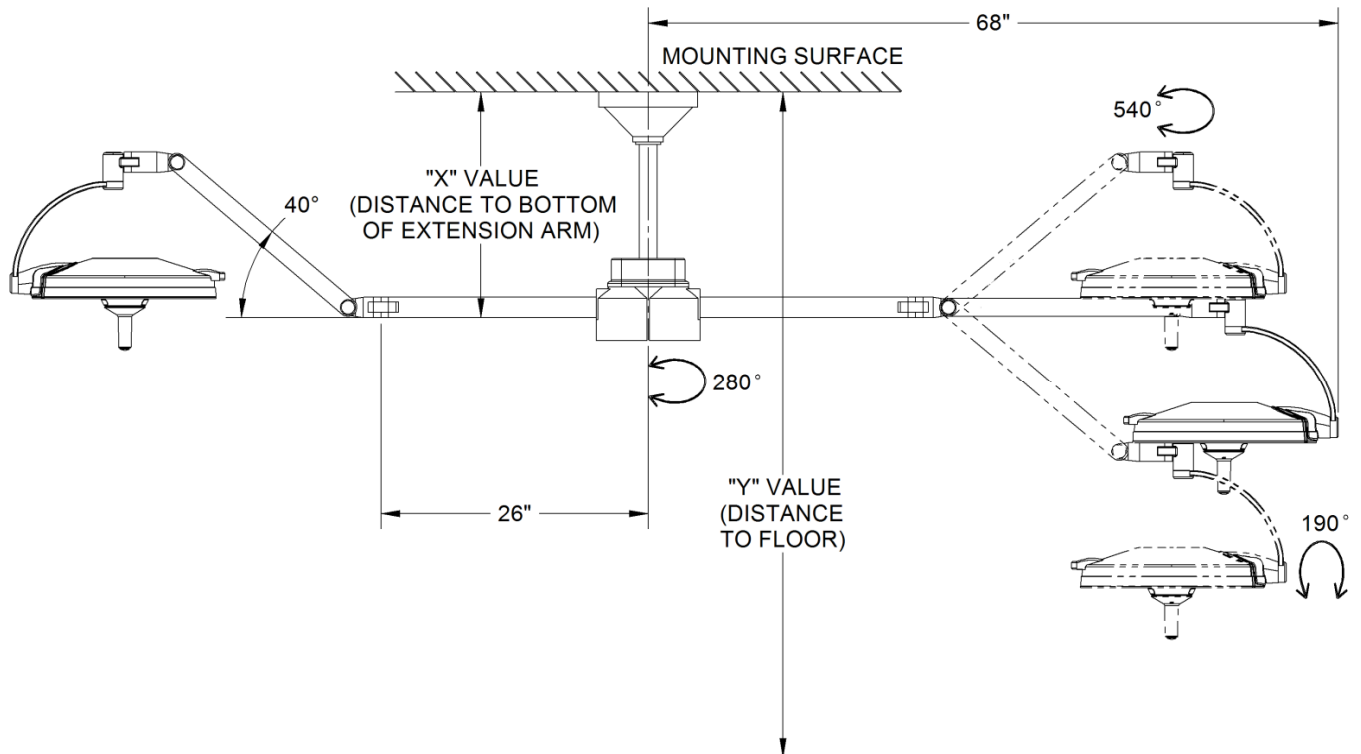


Use the following table to select the correct length ceiling rod for your application.

Ceiling Rod Calculation, Double Ceiling Mount

Ceiling Mounting Height (Y Value)	Ceiling Rod Length	"X" Value	Head room to bottom of extension arm (y-value - x-value)
7'10" - 8'6"	16"	23"	6'1" - 6'10"
8'7" - 9'4"	25"	32"	6'1" - 6'11"
9'5" - 10'1"	35"	42"	6'1" - 6'10"
10'2" - 10'10"	44"	51"	6'1" - 6'10"
10'11" - 11'8"	53"	60"	6'1" - 6'11"
11'9" - 12'0"	63"	70"	6'1" - 6'5"
12'1" - 12'10"	67"	74"	6'1" - 6'11"
12'11" - 14'0"	77"	84"	6'1" - 7'2"

NOTE: Extended ceiling rod kits (44"+) for ceilings above 10'1" are available at additional charge.



**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.

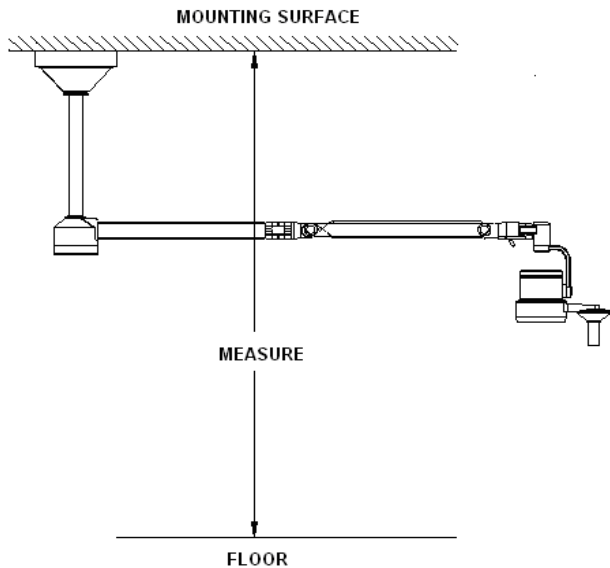


Fig 1

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

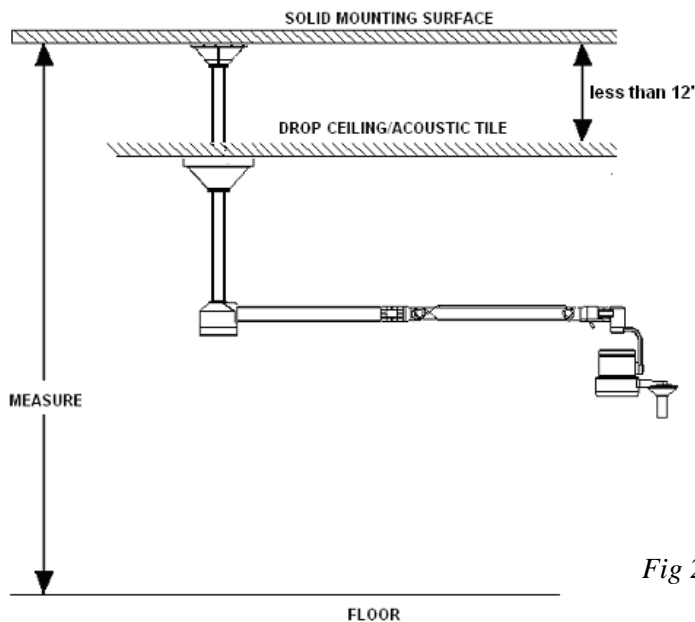


Fig 2

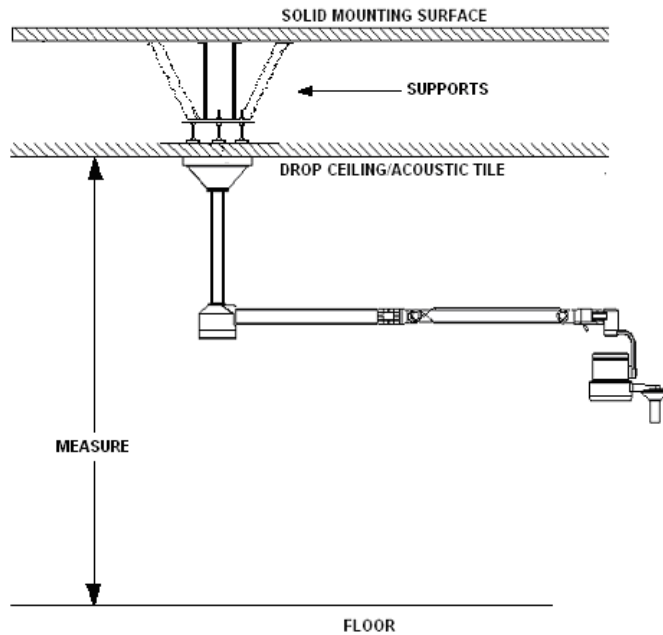
For facilities with acoustic tile “drop ceilings”, the light can be mounted in one of two ways:

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.*