

## STARFIELD CEILINGS - INSTALLATION

The installation of a Starfield Ceiling is not very hard but can be time consuming. An important item to consider before ordering the components is to verify access above the ceiling material in order to install the fibers. Before the material is ordered, determine the placement of the illuminator, the number of points per square foot and the length of the fiber tail required.

If the fiberhead is pre-made at the factory, which is highly recommended, it will arrive at the job site bundled and cable-tied for ease of handling. The first thing to do before beginning installation of the fibers is to have a qualified electrician install and wire the illuminator. As a rule, your illuminator will be placed on a shelf in a closet, along the top of a wall or in the center of the room secured to a structural beam. After the illuminator is installed, begin installing the fibers.

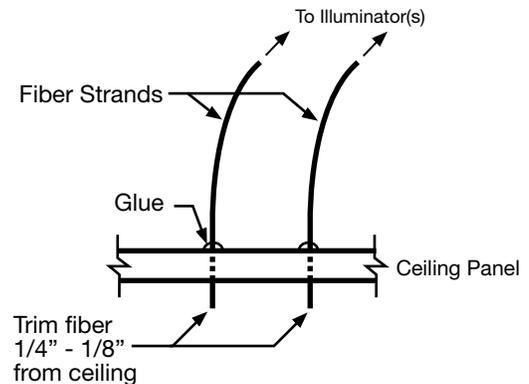
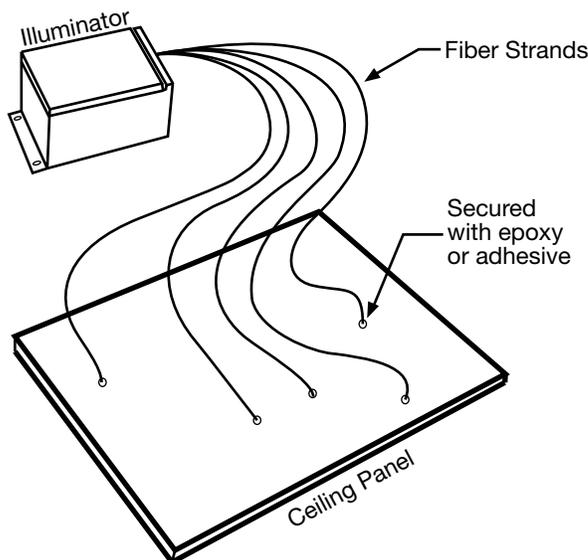
The following tools are needed for installation; a Dremel Tool, 3 sizes of drill bits (.75mm, 1mm, and 1.5mm), 30+ minute epoxy for fiber placement, scaffolding/ladders if required and two people to do the actual installation.

If access above the ceiling or a grid type ceiling is possible, begin by laying out the fiber around the room in the pattern that the fiber will be positioned. Start at the closest hole locations and work away from the illuminator. Two people are required so one can drill from below and the other, above the ceiling, can poke the fibers through the hole and epoxy the fibers in place. As the fibers are placed, the person doing the drilling should pull 3" to 4" of

fiber through the hole, exposing them through the ceiling. This allows the ceiling to be finished, mudded, painted, etc., without worrying about covering up the fibers.

For a drop down paneled ceiling remove the panels next to the area to be worked on, drill and place the fibers, then replace the panels while moving across the room. If working in drywall that is not yet installed, cut the drywall to size and do any test fitting required. Once the sheet of drywall is cut correctly, drill and place the fibers, making sure to leave adequate room around the perimeter for taping. Now lift and install the completed panel and continue on to the next one. If the ceiling has a crawl space with no means of panel removal, the same method is used with one person below drilling and one above placing fibers and securing with epoxy. As the fibers are placed, retain a few fibers in each area to use as fillers once the ceiling is completed to fill in any bare areas.

Once all of the fibers have been placed, the ceiling is finished and all are satisfied with the fiber placement & effect, clip the exposed fiber ends about 1/4" to 1/8" from the ceiling with a pair of snips. This will allow the ceiling to be repainted several times without losing the Starfield.



**SIDE VIEW**

## STARFIELD CEILINGS - PLANNING

Using fiber optics to create a starry night effect is a “spectacular” that sets a mood. This effect has been used very effectively for themed restaurants, amusement parks and residential applications like home theaters.

There are some guidelines that can be used, but we strongly suggest that you remember these are only guidelines. For specific application needs, we recommend that you contact the factory or your local Super Vision representative.

**EFFECT:** The primary effect is created by using three different fiber sizes and a rotating sparkle wheel to create a twinkling effect. The three fiber sizes mixed together provide the illusion of depth. Larger diameter fibers appear closer while the smaller diameters appear as distant stars.

**ENDGLOW Fiber Optics:** As a rule of thumb, for an average 8 to 12 foot high ceiling, use a 70/20/10 mixture of fibers. Additionally, for normal quantities of total points we use an average of 3 fibers per square foot. In this case, the first number is the smallest of the three sizes, the second is the next size up and the third is the largest of the three.

For reference, a ceiling with 500 square feet will have 1500 points and a 70/20/10 ratio mix.

Fiber Part No.	Description	Percentage	No. of fibers
12.0021	.75 mm fiber	70%	1050
12.0022	1.0 mm fiber	20%	300
SVPAF60	1.5 mm fiber	10%	150

At the other end of the spectrum, for a 40 foot high ceiling in a retail environment, it might be more appropriate to use larger sizes of fiber (.06 and/or change the fiber mix ratio to 60/20/20. we might go with the fiber sizes of .060mm, .080mm and .120mm and change the mix ratio to 60/20/20.

**NOTE:** Starfield ceilings are purely a decorative effect, they do not provide any task lighting.

**LIGHT SOURCES:** This is another area that is open to the parameters of each individual job. Super Vision manufactures light sources that are ideal for Starfield effects. The two recommended illuminators for Starfield ceilings are the sv750 and StarPro. The sv750 uses a 75 watt halogen lamp and provides for a very high number of fibers. The SV750 can hold 2500 – .75mm fibers. The StarPro Illuminator will hold the same number of fibers as the sv750 but has a much brighter lamp. The StarPro’s lamp is a 70 watt metal halide bulb and is used mostly in commercial applications or where long fiber runs or extra brightness is required.

To determine the number of mixed fibers that can fit into one SV750 fiber head contact the factory.

## Starfield Ceilings - Quoting

Information required to quote a Starfield ceiling:

1. What is the square footage?  
The standard rule is to use 3 points of light per square foot. **NOTE: length X width measurements are needed.**
2. Is the ceiling surface dome, flat or multi-level?  
This information must be obtained in order to determine your length of fiber.
3. Electrical placement and access to the illuminator.  
The best location for the light source is the center of the room with the fibers distributed out from there. However, electrical outlets are usually placed along the wall and not in the center of the room. The location of the light source is an important issue in determining how many light sources are needed and the length of the fibers. The fibers should be no further than 40’ from the light source.

You will see in the following example how these 3 items play an important role in the project.

**EXAMPLE:** Your room is 10 ft. X 50 ft.

The square footage of the room 10 X 50 = 500 sq. ft.  
500 square feet X 3 points of light per square foot = 1500 points of light

1500 points of light will be divided into the following mix:

Note: the following example is for a ceiling under 12 ft. tall

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12.0021	.75 mm fiber	70%	1050
12.0022	1.0 mm fiber	20%	300
SVPAF60	1.5 mm fiber	10%	150

Remembering that the light source should be no more than 40’ away from the farthest fiber and our room is 50’ long, we will divide the room into 2 equal 25’ sections for the light source placement (see below). We will place our light sources at the center of our 25’ sections and place the light sources on opposite sides of the room.