# APPLICATION



# star ceiling

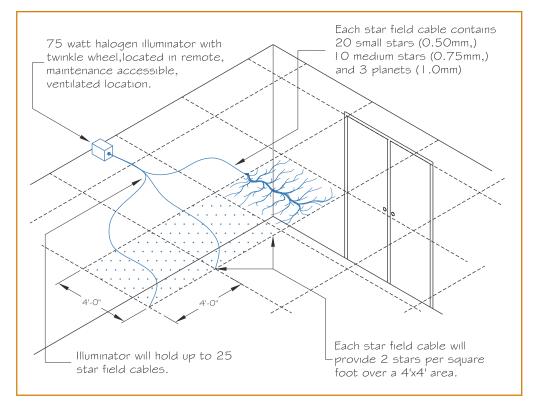
Cut Sheet #3113

TYPICAL APPLICATION MATERIALS

ILLUMINATOR: LGM75H

FIBER OPTIC CABLE: F-LF-SF-PM-33 (33 strands PMMA)

TERMINATION METHOD: DIY Harnessing (Hot Knife)



# **DESIGN CONSIDERATIONS**

- Density: VLT recommends the use of approximately 2-3 fibers per square foot, although this is highly subjective. In general, installations with fewer stars look more natural, while denser star placement creates a more extravagant look. Typically, lower ceilings (less than 10' high) require more stars per foot than higher ceilings (over 15' high.)
- Distribution: Star distribution in the real sky is very uneven.
   To create a natural looking star ceiling, vary the spacing by combining tightly clustered groupings of stars with areas of few or no stars. You may also wish to incorporate a denser "galaxy" grouping into your ceiling.
- When calculating fiber lengths, allow for an extra two foot service loop of cable per fiber run. This service loop will allow for slight changes in illuminator location or orientation, and also allows the cable to be re-harnessed in the future, if required.

#### INSTALLATION CONSIDERATIONS

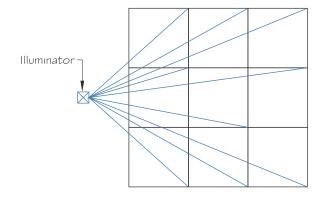
- 1. Minimum bend radius of the full Star Field Cable is 1". Minimum bend radius of the individual raw fibers is 1/4".
- 2. Fiber optic cable is not plenum rated. Please consult local codes to determine installation requirements.

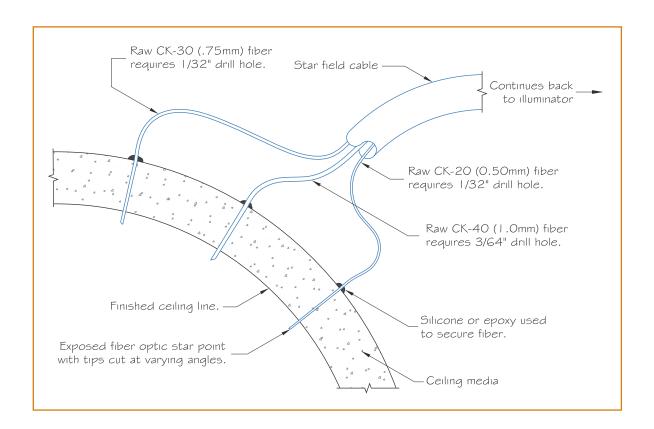
# INSTALLATION SEQUENCE

- 1. Pre-paint the ceiling.
- 2. Install the illuminator(s) in well-ventilated and maintenance accessible location(s).
- Route fiber optic cables to pre-determined locations (see Star Field Layout schematic). Any excess cable should be fastened into a coil with a 2'-0" diameter.
- 4. Working from above the ceiling, drill holes and insert the individual fibers. Fibers should protrude 2" 3" through the ceiling into the room.
- As you place the fibers, secure them above the ceiling with silicone or epoxy adhesive. Allow the adhesive to dry completely.
- 6. Lightly re-paint ceiling, painting over protruding fibers (optional)
- 7. With diagonal cutters, trim fibers to approximately 3/16" protrusion from ceiling. If you may want to paint the ceiling again in the future, leave fibers a little longer to allow for an additional trimming. Experiment with cutting at different angles to create a greater variety of star brightness.

# STAR FIELD LAYOUT

- Divide the Star Field ceiling into sections containing 33 fibers (star points).
- Each section will be lit using one Star Field Cable.
- To achieve 2 fibers per square foot, each section should be approximately 4'x4'.
- When measuring cable lengths for your layout, include enough slack to route your fiber around obstacles, and remember to include the two foot service loop for each fiber run.





#### NOTES: