

Stretch Ceilings Fiber Optic LED Lights Data Sheet



Fiber Optic LED lighting

Fiber optic LED lighting combines LED technology with fiber optic cables to produce stunning, versatile illumination. This system is ideal for both functional and decorative applications, including interior decor, star ceilings, garden lighting, and commercial signage.

Advantages:

- **Durable:** Over 50,000 hours of continuous operation (exceeding 5 years)
- **Safety and Versatility:** Fiber optic cables are electrically insulated and generate no heat, making them safe for use in flammable areas, underwater, and outdoors.
- **Energy Efficiency:** Only the **LED** illuminator requires power, minimizing energy usage.
- **Customizable Lighting:** Options for monochrome or **RGB** lighting allow for tailored color and intensity settings via remote control.
- **Low Maintenance:** With the illuminator hidden and protected, the system is durable and requires minimal upkeep.

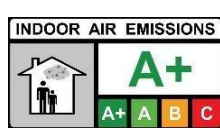
Specifications:

- LED Illuminator: 45W **RGB LED**, capable of producing a full color spectrum.
- Connection: Optical fiber connection via dam-tow screw.
- Dimensions: 263x190x80 mm.
- Power Source: 220 VAC with a schuko plug.
- Control: RF remote for color, intensity, and effects adjustment.
- Wavelength Range: 460nm-625nm.

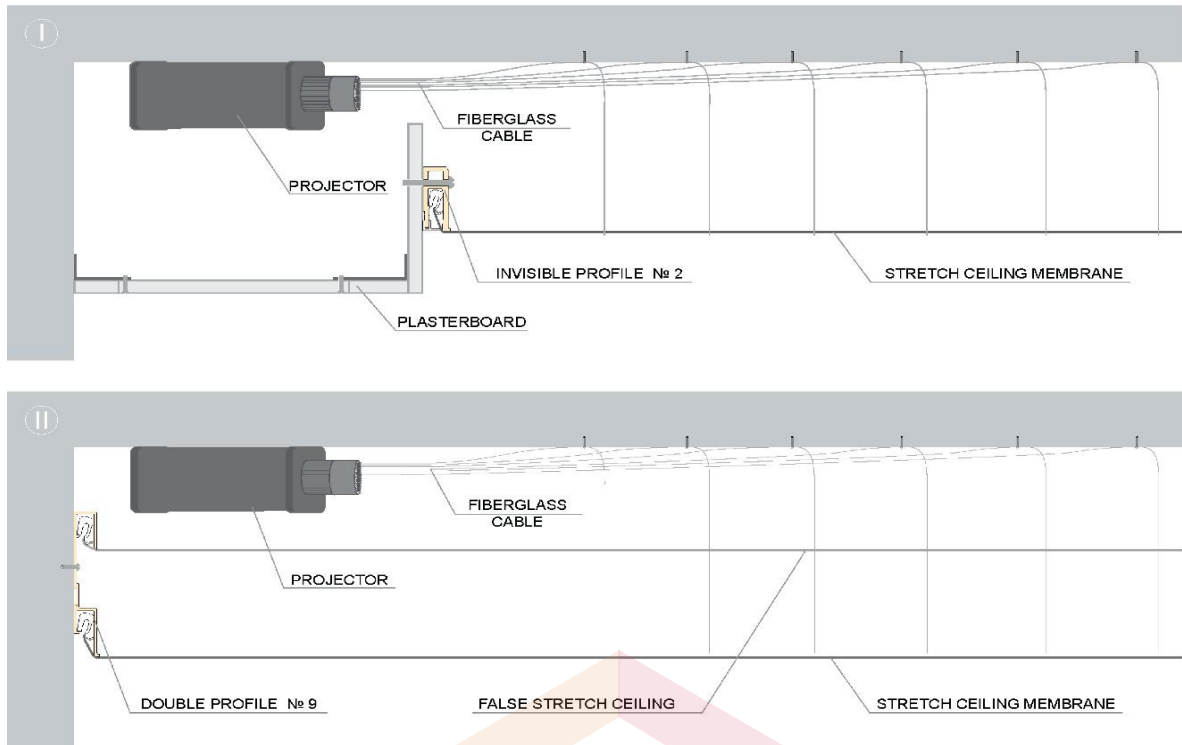


Note:

Standard complete sets consist of fiber optics cut to the specifications outlined in the table above and collected into a single loom, which can be easily attached to the projector. The diameter of each fiber optic is 0.75 mm, 0.50 mm and 0.37 mm. We also offer the capability to produce custom sets upon request, accommodating up to 700 fibers in a single loom with varying lengths.



THE SCHEME OF STAR EFFECT STRETCH CEILING



The Star effect uses fiber glass lighting technology, with light emitted by a projector connected to a fiber glass cable. This setup provides directional and ambient lighting often enhanced with decorative elements like crystals and lenses

Installation process

To install, the stretch ceiling membrane is perforated, and optical fibers are pulled through, glued on the reverse side and trimmed to leave 1-2 mm visible. Decorative end pieces are mounted with supporting items, with optical fiber directed to each crystal.

The effect is ideal for creating specific patterns like constellations. The design is transferred to an intermediate false ceiling sheet, perforated and fiber are inserted and glued leaving 5cm ends before stretching the main ceiling membrane

Note:

Using an LED projector with ultra bright LEDs instead of metal halide lamps, this setup is energy efficient, cool, silent and life span of 50,000 hours and twinkling effect is achieved through electronic modulation of LED brightness.

