

SuperFlex™ LIGHTING



Customer Challenge:

Short deployment times and the ability to pack and quickly relocate are essential to the effectiveness of military operations like those in Iraq and Afghanistan. Softwall shelters are a key element of base camps, and currently require extensive setup for the hardened fluorescent lighting systems that go with them. These fragile glass lights contain toxic materials such as mercury and antimony that, if leaked, pose significant health risks. In addition, the lights are heavy and have trouble starting in the cold, creating logistical setbacks.

The Crosslink™ Solution:

With a new approach to light sources, Crosslink developed SuperFlex™, a flexible, durable and lightweight technology based on electroactive polymers.

The distinctive, flexible nature of Crosslink's SuperFlex makes it highly adaptable to customer needs and requirements. It is suitable for integration with a variety of materials, including textiles, composites, plastics and metals – a capability no alternative technology possesses.

For the softwall military shelters, thin Crosslink SuperFlex panels are semi-permanently attached to the tent walls, produce white light, and are powered by a standard AC source. The lighting can be collapsed and packed with the shelter, eliminating additional setup and teardown troops must currently perform. Additional benefits include:

- **Extreme Durability** - Panels remain lit in abusive environments, withstanding piercing, abrasion, twisting and compression. In addition, Crosslink SuperFlex is crushable, able to withstand nearly 1,000 crush cycles in the wringer test. Oftentimes, tent fabrics will fail before SuperFlex.
- **Traditional Screen Printing** – Crosslink's SuperFlex can be applied to substrates as a coating through traditional printing processes.
- **Variety of Colors and Sizes** – Specific colors, including white, blue, and green, can be engineered for function, safety, style and integration with graphical overlays. The size of coated materials can be as small as a cell phone button or as large as a billboard, depending on client needs.
- **Zero heat emissions** - Lights are cool to the touch.

