

# How It Works

Silver Eagle products are made with a unique, three-layer fabric that enables the wearer to exchange heat with cooling comfort. No chemicals, gels, cords, or refrigeration are required to activate the cooling process. Instead, Silver Eagle garments are submerged in water for a few minutes to absorb and distribute the optimal amount of water within its fibrous core.

Once the super-absorbent fibers reach maximum water capacity, no additional water can be absorbed. This allows you to enjoy ultra-lightweight cooling comfort without substantial weight or bulk while optimizing the evaporative properties of the fabric.

## Quick-dry, breathable outer shell

Moisture escapes through the quick-dry outer shell in the form of evaporation, carrying with it heat from the wearer's body.

## Super-absorbent fiber core

A specially blended combination of hydrophilic fibers and hydrophobic fibers work to absorb, trap, and distribute the optimal amount of water that is released over a period of time through evaporation.

## Water-resistant, thermally conductive inner

Coated with a durable, water-repellent finish, the inner lining keeps the wearer dry and comfortable, while transferring heat away from the body into the fiber core where it is

### ■ **Water Works with the Fabric**

Water activates the cooling process, charging the hydrophilic fibers of the fabric's middle layer with moisture. The hydrophobic fibers surround the charged fibers with air, creating an ideal environment for evaporation.

### ■ **Temperature-Control through Evaporation**

When in contact with the wearer's skin, heat passes from the body into the fabric. As the moisture in the fabric's core evaporates, heat is removed, cooling the surrounding area. The conductive lining continues to actively pull heat away while offering cooling relief to the wearer.

### ■ **Cooling Results**

Cooling is provided evenly throughout the entire garment and can continue to cool for up to eight hours. The combination of ambient temperature, airflow, and relative humidity will determine the power and length of evaporative cooling.

COOLER BY DESIGN™



## Proven Effective

- Minimizes increases in core temperature and preserves normal temperature range
- Restrains heart-rate elevation and thermal and cardiovascular strain
- Reduces level of dehydration by 21%
- Lowers skin temperature
- Increases level of endurance by 16.4%
- Improves perceived rate of exertion