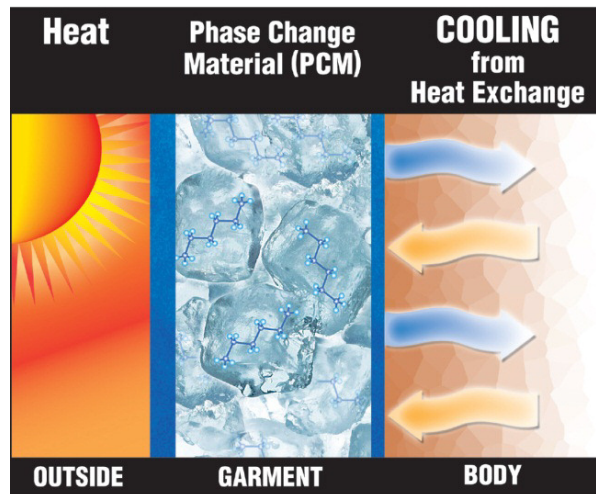


# How Phase Change and Evaporative Cooling Vests Work

## How does a phase change cooling vest work?

The simplest example of phase change is water. Water can exist in three phases: solid (ice), liquid (water), gas (water vapor or steam). When ice melts it changes phase. Phase change cooling vests utilize phase change inserts to absorb body heat as they change phase, keeping the wearer cool for several hours.

The inserts are chilled packs that are placed in pockets throughout the cooling vest. Phase change inserts can maintain comfortable temperatures (around 58°F) for long periods of time. Phase change is used in cooling vests, cooling bandanas, neckbands, hard hat inserts, and more.



## How does an evaporative cooling vest work?

Evaporative cooling works the same way that sweat does (without the smelly side effects). As water on your skin evaporates, it cools you off. Evaporative cooling apparel is extremely absorbent. Just soak in cold water, and in a minute or two, cooling polymers or cooling crystals absorb water. These cooling polymers / crystals hold water for hours. As the water evaporates it keeps you cool and can provide temperatures 15 to 20°F cooler than the ambient temperature. Evaporative cooling is used in cooling vests, cooling bandanas, cooling towels, hard hat inserts, baseball caps, and a wide range of other cooling apparel options.

