

# Technology

*How do they work?*



## Thermal.

### The Theory of Keeping Warm.

**Sealskinz socks and gloves keep your hands and feet dry, which helps protect them from the cold.**

A primary mode for heat loss from hands and feet is conduction; the transfer of heat through a substance. This occurs because of the temperature difference between the body, the heat source, and the external environment, which is cold. Heat loss is slowed down by the clothing worn, which determines how far the heat has further to travel before it escapes. Air is a poor conductor of heat, and consequently a very efficient insulation material. Water conducts heat 24 times more effectively than air, and is therefore a poor insulator. **Sealskinz** products are waterproof, and so the spaces in the fabric are filled with air, not water. Heat loss is therefore slowed down much more effectively.



### SealSkinz performance.

The most effective way to keep hands and feet warm is to provide as much insulation material as possible, to slow down heat loss. The **Sealskinz** mid thermal sock has terry loops on the internal surface and incorporates a special hollow core polyester yarn. Both of these mechanisms are designed to trap as much air as possible.

To maximise thermal protection, the **Sealskinz** liner sock and liner glove are specifically designed to be worn under **Sealskinz** waterproof products. These products are made from Meraklon, a thermal yarn which traps air whilst being very lightweight. The liners are worn under the waterproof gloves and socks, where they will be protected from getting wet so that they trap air not water.

**[www.sealskinz.com](http://www.sealskinz.com)**

Email [professor@sealskinz.com](mailto:professor@sealskinz.com) if you have a technical question about a product from the SealSkinz range of waterproof socks and gloves