

SOFTNESS

WHAT IS SOFTNESS?

Softness is a key attribute of apparel comfort, but isn't easily measured. It is a pleasing or agreeable tactile sensation that can bring feelings of ease and comfort, and can be described as smooth, supple or gentle – it is a state of satisfaction. The way we feel can be a determining factor in our

overall demeanour and well-being, and softness is a key property of how comfortable our clothes are.

If the apparel next to your skin is harsh or rough the level of comfort is lower and accordingly your overall well being and demeanour is affected.

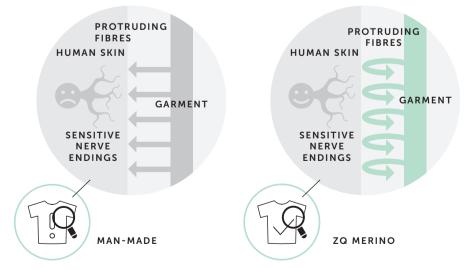
THE PROBLEM



Our skin is the largest organ of the human body - much of which is in direct contact with our clothing.

Many people think that the unpleasant scratchiness known as "prickle" is caused by wool clothing, but this isn't true. Fabric prickle is directly related to fibre diameter no matter what the fibre is.

FLEXIBILITY OF COARSE NON-MERINO VS. FINE MERINO



It has long been known that sensations of pinprick or prickle and itch are due to pain receptors in the skin, but it was thought unlikely that fabrics could stimulate these receptors and wool prickle was attributed to wool allergy. Research carried out at CSIRO's Division of Textile Industry and the Physiology Department of Monash University showed that it was fibre diameter and the lack of propensity to bend and yield that caused prickle and was not specific to fibre type.¹

THE SOLUTION

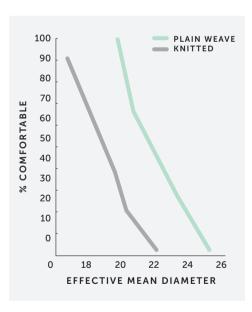
Wool fibres come in a range of fibre diameters, or fineness, and even the fleece from a single sheep will have fibres across a range. This means that only fibre from sheep that produce fine wools are comfortable and soft next to the skin.

ZQ Merino fibres used for next-to-skin apparel are made from ultra or superfine 17–19 micron, where one micron equals one millionth of a meter. For comparison, human hair is typically around 50 microns.



HUMAN HAIR SUPERFINE MERINO FIBRE 17–19µ

HOW DOES THIS WORK?





ZQ Merino fibres are so fine that when fabricated into a garment and in contact with the skin, they simply bend, meaning

there is no sensation of prickle, only softness and comfort.

Detailed studies have revealed almost identical skin comfort responses from wearers of fabrics constructed of differing fibre types but the same fibre diameter.²

Another important factor that influences how 'prickly' a fabric feels (other than fibre diameter) is

fabric construction. Knitted fabric, which is the primary construction used in next-to-skin Merino apparel, has been shown to have a much higher comfort factor associated with it than woven fabric constructed from fibres of the same diameter.



Wearing a ZQ Merino garment next to your skin gives a wonderfully soft and comfortable tactile experience. Once you try ZQ Merino, you'll never settle for anything less.

REFERENCES: 1. Garnsworthy R., Mayfield R., Gully R., Westermen R., Kenins P. (1985). Mechanisms in Cutaneous Sensations of Prickle and Itch Evoked by Fabrics. Proceedings of the 7th International Wool Textile Research Conference, Tokyo. 2. Naylor G.R.S., Phillips D.G. (1995) Skin Comfort of Wool Fabrics. Proc. 9th International Wool Textile Research Conference. 3, 203-209.