

Textile Maintenance Education

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Understanding Thread Count in Hospitality Bed Linen

There is nothing so elemental as a good night's sleep; these days, however, the issue of what to sleep on has become somewhat perplexing. American consumers are increasingly familiar with phrases such as "thread count," "Egyptian cotton," and "combed cotton," but not everyone has a full understanding of what these terms mean, either in an absolute sense or relative to measuring comfort, quality, and value.

Think the definition of luxurious bedding is a high thread count? Think again.

The secret to selecting the best sheets is knowing which factors to consider. While thread count is a consideration, even more important is the quality of the cotton, the hand or feel of the fabric, the nature of the finishing, and the fashion.

Thread Count Basics

Thread count has become the buzzword in bedding—let's face it, it's gotten to be something of a status symbol, a "my sheets have more threads than yours" sort of thing.

So what exactly is thread count (tpi or threads per inch)? It is simply a measure of how many threads (yarns)—warp (lengthwise) and weft (widthwise)—are woven into one square inch of fabric. The thread count of "standard" cotton or muslin is around 150; good-quality sheets start at 180-thread count; and a count of 200 and higher is considered percale.

Thread count also has to do with the yarn construction and quality of the yarn. With finer yarns, like those produced with Egyptian cotton (see below), more can be woven into each square inch, producing a finer fabric.

As a practical issue, just how many yarns can fit into one square inch of fabric? While improvements in spinning and milling technologies have pushed up the numbers, thread counts above about 400 are something of a misnomer, generally entailing the use of a "plied" yarn—one that is produced by twisting together gossamer-fine threads. For marketing purposes it is not uncommon to count the twisted yarn as double and, for example, describe fabric with 250 individual four-ply yarns in a square inch as a 1,000-thread-count product. But according to accepted textile industry practices, while they may make incredibly soft and luxurious sheets, plied yarns do not multiply thread counts.

Don't Count on Thread Count Alone—Or, What "Egyptian Combed Cotton" Really Means

As previously stated, thread counts aren't the be-all and end-all when it comes to sheets that customers love to touch. Softness depends more on the quality of the fiber, which is why a 200-thread-count fine cotton sheet can have a softer "hand" or feel than a 400-thread-count sheet that uses an inferior grade of cotton or a twisted yarn. Fine linens begin with fine cotton, and the quality of the cotton depends on the lengths of the individual fibers, or staples—the longer the staple, the better the cotton. Longer staples can be combed finer to remove more small fibers, allowing the cotton to be spun into a finer-textured thread with more tensile strength, and woven into a softer, more lustrous fabric.

Many high-end sheet manufacturers use only Egyptian cotton, acknowledged as the best quality, longest-staple cotton in the world. Although historically it all came from Egypt, today "Egyptian" cotton is also produced in other countries. It still complies with the original Egyptian standards of quality, including a 1-inch to 2-inch staple, compared, for example, with Pima cotton's 1-inch staple.

That's the Egyptian part. Now about the combed ...

Once raw cotton is blended and cleaned, it is carded to remove any short staples and dirt that can cause yarn breakage in weaving. While carding will remove some 5 percent of the fibers, combing is much more thorough, removing a further 10 to 15 percent. This leaves the longest staples ready for spinning into yarn that is stronger and finer to the touch—yarn that will produce a high-quality fabric.

That being the case, any sheets can have a high thread count, but if they are not made of long-staple cotton, they are not going to be as refined. The best-quality cotton results in a stronger fabric with a smooth, soft hand.

And We're Not Finished Yet

Once it has been established that the sheet is woven with the very best cotton, what's next? Finishing processes have a lot to do with the way the bed linen feels. Some very high-ended sheet mills take extra care to remove treatments (sizing) used during weaving. This finishing process not only helps reduce wrinkling, it maintains the clarity or brightness of the color by preserving the cellulose core of the cotton and gives the fabric a smooth hand and silky, shimmering look.

The way in which fabric is woven also has an effect on its feel—cotton sateen sheets, for example, are softer than those with a classic linen weave. A satin weave has more warp threads on the top surface, resulting in a silk-like touch and appealing luster. Which is better? It's a matter of personal taste; some people prefer the crispness of a linen weave, others like the softness of the satin. Finally, there is the element of fashion. For sophisticated hoteliers who want to create a custom look with luxury linens throughout their operation, the use of an interior designer can result in fashionable designs, superior quality, and coordination of patterns and colors.

One thing should always be remembered when discussing these high thread count sheets. They were (are) intended primarily for the domestic market. They are designed and woven with fashion and color at the forefront. Despite what these same mills claim, there is little room in the commercial/institutional/hospitality markets where expense is concerned, for these items.

Hoteliers have been lead to believe that higher thread counts mean longer life, better quality perception and high-end fashion. The fact of the matter is 100% cotton 240 to 600 thread count sheeting is very fragile and delicate. It cannot be successfully processed in a commercial laundry setting short of setting up a separate area of the plant and treating it as a domestic product.

The results will be greatly reduced linen life, more rejects because of damaged edges and seams and disappointment with the laundry who is processing these items.

While some may tout thread count as the best way to choose bed linens, those in the know, know better: it takes more than thread count to make a beautiful sheet.