

## ASTM Proposed New Standard to Measure Thermal Properties of Textiles

Recently, the American Society for Testing and Materials (ASTM) has proposed a new international standard, ASTM WK43374, test method for measurement of thermal effusivity of fabrics using a guarded Modified Transient Plane Source (MTPS) Instrument. This test method will be useful in measuring the thermal effusivity of textiles which is the transient heat exchange between a fabric specimen and a heated surface, skin.

According to this textile standard, a low thermal effusivity rate indicates that a fabric is slow to absorb heat. This means a fabric with a low thermal effusivity would feel warmer to the initial contact and would be slower to transfer heat away from the body, keeping you warmer. On the other hands, a fabric with a high thermal effusivity quickly draws heat away from the skin on initial touch.

The new proposed standard is originally intended for apparel fabrics; however, it has the potential to be used for other household textiles, such as bed sheets and upholstery, as well as textiles in automobile in order to manage heat from body.

### **Link**

ASTM International News Releases

<http://www.astmnewsroom.org/default.aspx?pageid=3561>

ASTM Standards & Publications

<http://www.astm.org/DATABASE.CART/WORKITEMS/WK43374.htm>

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