

A STUDY ON THE EFFECT OF NON WOVEN FABRIC PROPERTIES ON THERMAL APPLICATIONS

Thirumurugan V, Sowmia. K, Maheshwaran & K. B, Tharani T L

*Assistant Professor, Department of Textile Technology, Bannari Amman Institute of Technology, Sathyamangalam,
Tamil Nadu, India*

Research Scholar, Bannari Amman Institute of Technology, Sathyamangalam, Tamil Nadu, India

Received: 11 Apr 2020

Accepted: 15 Apr 2020

Published: 25 Apr 2020

ABSTRACT

The needle punched nonwoven can be used as automotive interiors. The needle punched product can full-fill this purpose. This will be eco-friendly and also serves as an alternative material. The needled punched web is prepared with the three different compositions in order to find the best suitability of the purpose. The raw materials used are the cotton, kapok and recycled polyesters. Using all the three raw materials, it was made of three sheets of needle punched web with varying proportions. Later, these webs were tested for the thermal conductivity which can be served for automotive things, false ceiling, and roofing and also as a composite for the wall. The machine used to test the thermal conductivity is the Flat Plate Fabric Heat Retaining Instrument. The results were observed and studied.

KEYWORDS: *Needle Punched Web, Cotton, Kapok, Recycled Polyesters, Thermal Conductivity*