

THE APPLICATION OF THE MOST COMMON WORK CLOTHING MATERIALS IN CONSTRUCTION WORK

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The working environment and thermal conditions set great demands on the durability and functional properties of construction workers' work and protective clothing. The aim of this study was to investigate the application of the most common work clothing materials on general construction work and to study the effects on wear on their mechanical, protective and comfort properties.

Clothing ensembles, overalls and jackets were manufactured of six different Finnish-made fabrics for wear trials. Two of the fabrics were of 100 % cotton, three of polyester/cotton blends and one of polyamide/cotton blend. Altogether 96 outfits were made. The wear trials at the building sites lasted five months. Four occupational groups participated in the trials.

Visual examination and technical measurements were carried out on the materials to evaluate the effects on wear on the properties of the material. In addition, the wearers were interviewed about their opinions regarding the materials and the functional properties of clothing.

The satin fabric of 50/50 % polyester/cotton blend proved most suitable as work clothing material for general use, for employees working both outdoors and indoors. It is mechanically strong and comfortable in use. The filament-surfaced fabric of **46/54 %** polyester/cotton blend is a good choice in winter time, whereas in summer and for indoor work it is too impermeable.