

Design and Implementation of interactive woven floor covering for special uses

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Abstract:

In an age when people turn to technology to save our children's attention, including video games, TV, DVDs and tablets, it's worth knowing that their favorite playmate doesn't even require batteries, just pull out cars and toys for your child and enjoy watching them rediscover their creativity and imagination. On the new woven interactive play mat. The woven interactive floor covering represents a safer and more effective educational and guiding method. The woven interactive floor covering contributes to the development of the skills of people with visual impairments in their moving. As they are unable to go out on their own, they are forced to rely on others for their movement, which makes them restricted to freedom depending on the free time of others. In addition, the inability to learn to read and write in the usual ways, which calls for teaching these skills in unusual ways, the most important of which is the Braille method. The design of the woven floor covering with the cut and loop technology adds several touches represented in the flat, loop, and pile, and also allows reading the artwork. **Research problem** Floor covering is produced using traditional methods without linking the functional and aesthetic purpose for some special uses. Therefore, presenting a study for the design and production of floor covering with innovative applied methods achieve the need for the consumer is one of the important studies whose impact is reflected on some of the special uses of floor covering, as the function defines the type and shape of the design (with structural elements set). **Research objectives:** Access to an innovative aesthetic product that performs its functional role appropriately for special uses. **Significance:** Achieving the ability to read artwork and educational aids for children, the visually impaired, and the blind with floor covering. **In this work**, we designed an innovative woven floor covering for people with visual impairments using face-to-face carpets as cut and loop, Then verifying the effectiveness of carpets for people with visual disabilities by conducting a questionnaire for them and the ability to read Braille writing inside the carpet artwork.

Keywords:

Braille , Face to Face, Cut Pile, Loop Pile, Weave Flat

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