

## The use of glass non-woven fabrics with cobalt polyester fluids In the production of partition walls and floors with high Resistance properties

Dr. Tarek Ahmed Mahmoud Abd Alla Rashed

Lecturer at industrial learning department - Faculty of Education – Helwan University

[Tarekahmedrashed1973@gmail.com](mailto:Tarekahmedrashed1973@gmail.com)

### Abstract

The problem of produce normally concrete is how this production is suitable suitable to Separated walls and grounds with good reinforced characters

This research **aims** to produce separated walls and grounds. The research studies the effect of deference layers of glass fabrics on strengths with deferent amount of polyester / cobalt liquids. Shedding light on the economic aspects after the proposed production operations.

**This research produce three groups of samples :**

- The first group : (samples of 1 kg polyester, added to ..) (3, 6, 9 layers of glass fibers)
- The Second group : (samples kg of polyester added to ..) (3, 6, 9 layers of glass fiber)
- The Third group : (samples kg of polyester added to ..) (3, 6, 9 layers of glass fibers)

### Research results:

- The research confirmed that the sample ( 1 Kg polyester / 6 layers glass fabrics ) is the best , in case of covering all sample area by polyester liquid inside and outside the glass fabric layers
  - The research confirmed that the sample ( 1 Kg polyester / 3 layers glass fabrics ) is the best , in case of covering all sample area by polyester liquid inside and outside the glass fabric layers
  - The research confirmed that the sample ( 1 Kg polyester / 9 layers glass fabrics ) is the best , in case of covering all sample area by polyester liquid partially inside and holly outside the glass fabric layers .
  - The research confirmed that the sample ( 1 Kg polyester / 9 layers glass fabrics ) is the best , in case of covering all sample area by polyester liquid partially inside and holly outside the glass fabric layers .
- \* The researcher believes that the First sample in the third group (¼ kg cobalt polyester / 3 layers of glass fibers) is considered the best sample due to its great advantage in stress, pressure, bending and stiffness. Considering the less glass fiber and the less cobalt polyester . it is considered economically sample.

### Key Words :

Glass fiber - polyester - partition walls - floors