GEOSYNTETICS FOR RISK MITIGATION AND PREVENTION

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ABSTRACT

Abstract: The development of engineering works under the concept of risk is focused towards the combination of threat and vulnerability. This can be understood in the probability that an adverse event can occur and what degree of damage this event can cause on a specific system [1]. In this scope, the use of geosynthetics in civil projects has evolved; from being a technical solution in pavement and subdrainage construction. Today, geosynthetics are being used as primordial elements in construction of retaining walls, slope protection, shore protection and enhancement of banks in rivers and coasts. This paper is intended to support the importance of these materials in infrastructure works. Its performance, advantages in construction processes and other required materials make it possible to design and develop structures and engineering solutions that aim to reduce the susceptibility of a system to a specific natural threat.

Keywords: Risk, vulnerability, threat, susceptibility, geosynthetics, mechanically stabilized earth walls, erosion control mats, geogrid, fabric form, geotextile tubes.

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