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TITLE OF DIPLOMA THESIS:

SAFETY AND HEALTH IN DESIGNING AND CONSTRUCTING A PLAYGROUND

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ABSTRACT

This thesis's topic is related to the playground design and implementation in Greece and its objective is to be used by engineers and designers as a handbook in accordance with the appropriate specifications and the relevant European standards. Specifically in the first three chapters there is a general reference to the concept of playground and children's game, to ELOT, to European standards and legislation and gives the appropriate definitions for those involved in the topic to be on the same level of understanding. The following four chapters present the importance of a suitable site for a playground, emphasizing in its features and the way to select a location. Moreover, all the necessary data for the design and organization of a playground are provided. Extensive reference is made to the requirements of the materials and the necessary safety rules on playgrounds. An extensive reference is made to the most likely to cause an accident parts of the technical equipment and at its requirements. The maintenance of the playground, checking procedures from those in charge and the appropriate certifications, are presented in the eighth chapter. The ninth and tenth chapter shows the current state of playgrounds in Greece and lists results of studies concerning children's accidents. The thesis concludes by giving as an example a project of Municipality of Delta entitled "Maintenance and Rebuilding of City's playgrounds", and the technical specifications for the supply of urban equipment, playground equipment and safety flooring in the annex. Finally conclusions and recommendations are given aiming at the improvement both at the current state of playgrounds and at the way a new playground is designed and build.

KEYWORDS

playground, safety, equipment, standards, accidents