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TURKISH ARCHITECTS' VIEWS ON CONSTRUCTION AND DEMOLITION WASTE REDUCTION IN THE DESIGN STAGE

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Abstract

Waste is one of the main environmental problems of the twenty-first century. The construction industry plays a critical role in this problem. Reducing construction and demolition (C&D) waste to a minimum is crucial considering its negative impacts on nature, human health and economies. Determining designers' awareness levels about the fact that the majority of waste generated in all life stages of buildings are largely based on design-related decisions and this waste can be reduced in accordance with these decisions is significant. With this goal, a survey was conducted with 119 architects from small to medium and large-scale projects in Turkey. The data were analysed, assessed using Microsoft Excel, correlated using the statistics program and the results were discussed. Of the participants, 52% said that they are responsible for planning and guiding the waste reduction issues in their designs. Of the designers, 66% saw waste reduction as an important component of the design stage. The designers also emphasised that providing training about waste management, improving the waste separation techniques on construction sites, and allocating specialized sections for waste management in C&D contracts are important actions. At the end of the study, a set of recommendations and suggestions were provided to deal with the C&D waste issue in Turkey. The study recommends that architects should employ all the techniques discovered in the study to minimize materials waste in their projects. This study will, therefore, contribute to materials waste minimization both in the Turkish and global construction industries.

Key words: architects' views, C&D waste, designing out waste, waste minimisation

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