INTERNATONAL SYMPOSIUM

DEALING WITH DEFECTS IN BUILDING

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RELIABILITY OF SPECIFICATIONS AND DRAWINGS IN AVOIDING ACCIDENTS IN BUILDING

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The objective of this paper is to evaluate the potential accidents in building construction and performance caused by imperfections of related specifications and shop drawings. Some accidents are caused in the design procedure and may be avoided if proper revision and checking is performed. On the other hand the increase in cost and time caused by the additional work may not guarantee a perfect set of specifications and shop drawings. For these reasons it is convenient to evaluate how reliable, in terms of default-free execution, the normal set of specifications and of shop drawings.

The methodology adopted was to investigate a series of accidents obtained from lists provided by contractors, owners (public and private), designers and users. For that purpose, and considering the related difficulties in presenting defects in building by the contractors and designers, formal and informal surveys were carried out.

The types of accidents were classified according to the type of bulding like structure, infrastructure, equipments, finishings, etc. Then, the possible causes were investigated and the defects due to specifications and shop drawings were classified according to the degree of compliance or lack of information. Statistical studies were carried out using the data available and conclusions were drawn upon the probability that specifications and drawings imperfections could cause accidents. The costs and time necessary to provide the information missing were calculated and the design was investigated.