Proceeding Book of ISESER 2019

O 106. WEIGHT ANALYSIS OF PLANE STEEL ROOFS

Abdullah Akyüz¹, Musa Hakan Arslan¹

¹Konya Technical University Faculty of Engineering and Natural Sciences, Department of Civil Engineering, Konya, Turkey

E-mail: abdullahakyuz14@gmail.com, mharslan@selcuk.edu.tr

ABSTARCT: In this study, the parameters affecting the weight of the plane steel roofs, which will be designed with steel, which is widely used in the world and in our country, are examined. In the light of current knowledge and experience, 6 parameters were determined and 192 different account models were created in order to see the effect of each of these parameters separately. These account models were analyzed by SAP2000 program and the weight values obtained were noted. According to the results, the effect of each parameter on the weight of the steel roofs was determined. In addition, the results obtained by the calculations were tried to be estimated with the help of intelligent systems and the results of these systems were investigated.

Keywords: Regulation on the Design and Construction Principles of Steel Structures, plane steel roofs, intellgigent systems, design loads for buildings, snow loads, wind loads