ABSTRACT

Investigation collapse the floor plates of building due to blasting load has been carried out by experts for over 50 years and continues to grow until now. The engineer should pay particular attention to the dynamic behavior of the plate due to blast loads. In this study, the authors will analyze the dynamic behavior of the floor plate of the building due to the triangular load step. Plates will be analyzed in the form of a rectangular plate is orthotropic which has a placement rigid on all four sides. Dynamic behavior floor plate of this explosion will be influenced by several factors, such as the position of the load and damping ratio. From the analysis done seen how the influence of factors on the dynamic behavior of the floor plate of the building due to load step triangular-shaped explosion. The dynamic behavior of the building floor plates include maximum deflection, moments and shear forces.

Keywords: Dynamic behavior of plates, orthotropic, rigid, maximum deflection, moment, shear force