ABSTRACT

By doing a structural plan in building construction, especially the skills training building that composes the calculations in the city of tasikmalaya then it is expected that buildings that have been planned and taken into account can stand with a good level of structural security and in accordance with relevant standards that apply to the building in question.

The analysis applied to the structural elements of the building plan was carried out using the help of ETABS Software v.9.6.0 and guided by SNI 03-2847-2013 dimensional analysis and calculation are carried out on several structural easel structures, floor plates, not plates, beams, columns and shear walls, while for planning and calculation of reinforcement only carried out on beam and column structural elements.

Load and combination of charges, the quality of Fyan longitudinal steel is planned to be based on **SNI-1726-201 Article 4.2.2 Page 15 of 138** Workloads based on these guidelines consist of dead load (D), Live load (L), roof live load (L_r), wind load (W) and earthquake load (E). For material quality Roof frame structure uses steel material structural with steel quality Bj-41; Concrete beam and fc quality; Column and shearwall fc 400 Mpa and for reinforcing stirring fy 240 M.

The results of planning and calculating each structural element are : will be steel profiles double elbow with a size of 100x100x10 mm and 75x75x6 mm and for dimensions of easel frame roof structure with igording using a channel profile with a thickness of 190 mm and for a plate not 120 mm. Main beam (Bl-2) 400mmx550 mm with the main reinforcement n12 D19 and cross section Ø 10-150 mm. Column (K1) 725mmx725 mm with main reinforcement 24 D22 and stirrup 13-120 with tie stirrup (hoop) 4 pieces.

Keywords : Structure, Frame of Easel, Beams, Culumns