ABSTRACT

Project Development Faculty of Medicine building was designed by using the method of Frame Building System, according to SNI 03-2847-2002 and SNI 03-1726-2002. The planned structure has 7 floors and is located in high seismic regions (Mataram).

Frame Building Systems is one of the gravity load system structure borne entirely by the space frame, while the lateral load to be shared by the space frame and shearwall. Space frames bear at least 10% of lateral load and the rest borne by shearwall. Because shearwall and space frames in Frame Building Systems is a unit structure, it is expected that both can experience the same lateral deflection space frame or at least able to follow the lateral deflection occurs.

From the analysis and calculation which have been done, the conclusion is that the top structure consists of thick floorplate and plate of roof 12 cm; shearwall dimension 40 cm; column dimension 60x60 cm; dimension of main beam 35x50 cm; dimension of divided beam 20x30 cm; stair with 17,5 cm of uptrade height and 30 cm of ontrade width; while on bottom structure got Ø 45 cm

Keywords: Frame Building Systems, Shearwall