The shape of the building changed from time to time. Formerly the building is planned with a wide, empty land but with conditions increasingly narrow and supported by technological advances, especially in construction, the building is planned to form stratified. To build a high rise building takes a long time. With the technology available today, the building owner (Owner) only select materials which are faster completion, economical, and powerful for the main structure of the building. Because of the higher building and the longer the process is expensive. One alternative to the main structure of the material most often used for building a high level is a steel structure. The advantages of steel structures is to have high strength, uniformity and high durability, elastic, high ductility, and easier in the works. However, these materials also have limitations on care that is periodic, decreased strength due to the high temperature rise, and the problem of buckling which is a function of the slenderness of a cross-section.

The use of concrete components is still needed in the construction of buildings, such as the floor plate. Floor plates connected by steel beams using shear connector will produce composite structures. By using a composite construction in the design of a component structure was found to be obtained several advantages, among others, can reduce the weight of steel profiles are used, the high profile of the steel used can be reduced, increasing the stiffness of the floor, and can increase the service life span.

Regulations that are used in the modification of this plan using the latest legislation that is SNI 03-1729-2002 on
The results of the structural design of this building consists of a portal structure using composite beam by using a columns profile Kingcross 600.200.11.17, composite beams using wf 400.200.7.11. Structure connection is planned as a rigid connection using A-325 bolts of 92 ksi. Planning foundations using precast concrete piles with 40 cm and 30 cm diameters and 14 m length.

**Keywords:** steel structures, SNI, composite beams