## ABSTRACT

## Noella Edelweiss (2018101020)

## DESIGN PLANNING AND MECHANICAL, ELECTRICAL, PLUMBING OF TANGERANG CITY GOVERNMENT BUILDINGS

Designing a building has its own stage and has completeness that must be fulfilled in order to achieve maximum results. Designing a building that is comfortable and safe for its residents also requires very careful consideration. One of the comfortable building design is to pay attention to the right laying and layout because part of the contents of the building will be messy and irregular if it has the wrong laying and consideration or not right. The biggest influence in the layout on the design that makes the building irregular is the placement of spaces that are not in accordance with the function of the building and the pattern of occupant activity, laying on objects such as mattresses, cabinets, tables and so on, laying on building structures such as columns, laving on ornaments such as doors, windows and so on, and what is usually not noticed by residents but can affect the comfort of residents is the placement in MEP systems (mechanical, electrical, and piping) such as towers, pipes, electricity, septic tanks, and so on. The MEP system (Mechanical, Electrical and Piping) is an electrical and water installation system that is always present in designing a building. This system is very important to help the occupants in carrying out activities in it. Sometimes the designer underestimates the design of the MEP system (mechanical, electrical, and plumbing) because the sources do not pay much attention to this, so that many buildings after being built undergo renovation or re-repair due to several problems such as being uncomfortable when occupied or used. Buildings in a good MEP design (mechanical, electrical, and plumbing) are buildings that have a long life because damaged and leaking channels can affect the durability of structures. materials and building materials.

*Keywords*: Design, Design, Building, Mechanical, Electrical, Plumbing, MEP (Mechanical, electrical, plumbing)